Institute for Fiscal Studies

IFS Green Budget Chapter 3

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Outlook for the public finances

3. Outlook for the public finances

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Key findings

1 **The economic and fiscal outlook for this year has improved hugely since the March Budget**: our central projection is for borrowing in 2021–22 to be £180 billion, over £50 billion below the March Budget forecast. This striking reduction is driven by a boost to revenues from higher growth, alongside our assumption that departments will underspend by even more than the Office for Budget Responsibility (OBR) expects. Nevertheless, at 7.7% of national income, borrowing would remain extraordinarily high: since the Second World War, that level has only been reached during the financial crisis – and last year.

2 **Stronger economic performance is expected to be only partly persistent**: by the middle of the decade, Citi's forecast is for the economy to have returned closer to the path forecast in the March Budget, with the boost to real-terms growth fading out entirely. **But assuming that large tax rises announced in March and September go ahead and current spending plans are not topped up, they appear sufficient for borrowing to continue to run at least £20 billion a year below the March 2021 Budget forecast, and for the current budget to be in surplus from 2023–24.** Under our central scenario, borrowing in 2024–25 is £5 billion *lower* than forecast pre-pandemic as the tax rises announced in the March 2021 Budget more than offset the enduring economic impact of the pandemic on revenues.

3 Uncertainty around this central scenario continues to be extraordinarily high: **in Citi's optimistic scenario, where there is no long-term economic damage, we would expect the overall budget deficit to be eliminated for the first time since the turn of the millennium.** This would be driven by the Chancellor's relatively tight set of spending plans, combined with large tax rises and higher inflation. Even a more moderately optimistic scenario based on the

Bank of England's growth forecast could lead to borrowing in 2023–24 being as low as 1.7% of national income (or £44 billion), some 0.8% of national income (£19 billion) lower than our central scenario. Under these more optimistic scenarios, some of the planned tax rises would be less likely to go ahead, and spending plans would be more likely to be topped up.

4 **In a pessimistic scenario where a vaccine-resistant COVID variant forces further lockdowns, borrowing is forecast to still be 5.1% of national income by 2024–25, more than twice the level forecast pre-pandemic.** It would only take growth from now until 2025–26 to average around 3.2% a year, rather than the 3.7% a year in our central forecast, for there to be a £10 billion deficit on the current budget at the end of that period. Further tax rises and/or continued squeeze on some public spending would be likely to follow at some point if scenarios such as these came to pass.

5 Under Citi's central scenario, the tax rises set out by the Chancellor would, if implemented in full, be enough to **prevent debt from rising further beyond 2023–24 – but it would only start to fall very slowly and, at 89% of national income, would be 17% of national income higher in 2025–26 than it was pre-pandemic**. This additional debt has been effectively financed by increased deposits from commercial banks held by the Bank of England. This depresses debt interest spending, but also increases the exposure of debt interest spending to rises in interest rates.

6 Interest rates on government bonds have risen this year, with yields on 30-year bonds averaging 1.13% in September 2021 having averaged just 0.86% in January 2021. Alongside this, RPI inflation – which feeds directly into interest payments on index-linked debt – has risen from just 1.4% in the year to January 2021 to 4.8% in the year to August 2021. **This has pushed up debt interest spending such that we expect it will be around £15 billion a year higher than forecast in March.**

7 **Long-term challenges that were known prior to the pandemic are putting additional pressure on the public finances and will continue to grow over the longer term.** Were increasing costs for healthcare, adult social care and state pensions accommodated through higher borrowing, debt would be on an increasing, and indeed accelerating, path. The estimated direct fiscal impact of transitioning to a net-zero economy by 2050 makes this increase even steeper in the late 2020s, 2030s and 2040s, but that impact is expected to decrease over time. It seems unlikely that those pressures will be met by another dose of

austerity for other public services. **Given this, and the risks from much elevated debt, there will therefore be a strong case for further sizeable – and permanent – tax rises to be implemented in the second half of this decade.**

8 These long-term pressures, rather than the immediate consequences of the pandemic, are the drivers behind the tax rises announced by the Prime Minister last month. **If the new health and social care levy is to rise to meet future health and social care pressures then we estimate that its rate will need to more than double from 1.25% to 3.15% by the end of this decade.**

3.1 Introduction

Since the easing of the latest nationwide lockdown, the early economic data have been encouraging. There are signs of a strong recovery in consumer spending and the labour market, and with them government revenues. However, there remains substantial uncertainty over the speed and, more importantly in the longer term, the completeness of the recovery. Most forecasters continue to expect some degree of long-term economic damage, as some who lost their jobs do not find equally productive alternative employment (see Chapter 9 for a discussion of developments in the labour market), some firms that would otherwise have survived go to the wall, while other firms do not fully make up for investment decisions delayed during the pandemic. The severe disruption to face-to-face education and to exams will also have enduring impacts. As government support, including business loan programmes and the Coronavirus Job Retention Scheme (better known as furlough) are withdrawn, the extent of economic restructuring required, and the ease with which it can be achieved, will become more apparent.

The 'central' Citi/IFS forecast, which assumes that the government's tax and spending plans are kept to (unlike the scenarios in Chapter 2 which assume a further fiscal loosening), underlies the analysis in this chapter. It is more optimistic about growth, especially this year, than official forecasts at the time of the March Budget. This is partly a matter of timing: the boost to real-terms growth fades away by the end of the forecast period in 2025–26. But the large boost to nominal growth, which matters for the public finances, especially while income tax thresholds are frozen, is somewhat more persistent. While this is partly countervailed by higher debt interest spending – up by £14 billion this year relative to the March 2021 Budget forecast – we would expect the deficit to be £54 billion lower this year, and between £21 billion and £24 billion lower in subsequent forecast years.

To illustrate the extraordinarily wide range of uncertainty around this central forecast, Citi has presented two illustrative alternative scenarios. We describe and contextualise these scenarios in Section 3.2, and then set out in Section 3.3 what they would imply for the path of borrowing under current tax and spending plans.

In Section 3.4, we move on to consider the trajectory of debt under the three scenarios and examine the impact of recent increases in interest rates on government bonds on debt interest spending. To the extent that these reflect the improved growth outlook, they are far outweighed by higher tax revenues. However, further sizeable increases in interest rates would prove a challenge if not accompanied by stronger growth in the economy.

In Section 3.5, we look beyond the COVID-19 crisis and immediate recovery, at debt dynamics over the next 45 years, and the impact of rising costs of healthcare, adult social care and state pensions, as well as the estimated direct fiscal impact of the transition to net zero by 2050. Section 3.6 concludes.

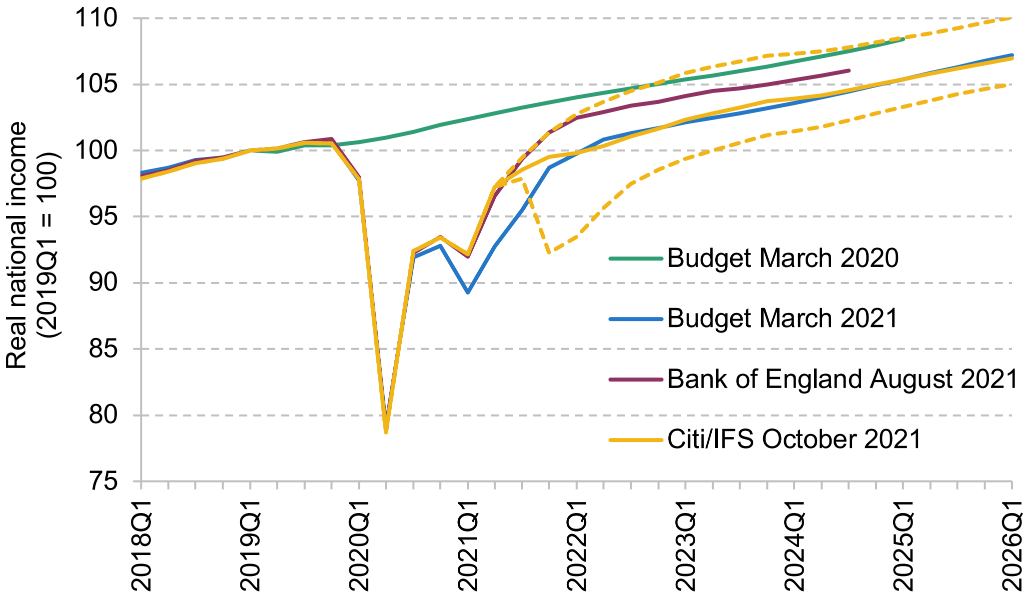
3.2 A faster recovery

With most restrictions on social contact and economic activity now lifted, most early economic indicators have painted a relatively optimistic picture of the recovery (see Chapter 2). Consistent with these encouraging early data, the central forecast has much higher growth in the short term in both real (Figure 3.1) and nominal (Figure 3.2) terms than the official Budget forecast back in March. In addition to the impact of good news on the economy's post-lockdown recovery since March, the difference between the Budget forecast and Citi's central scenario also reflects differences in their judgements of a range of other economic factors, such as the impact of Brexit.

The 'central' Citi forecast suggests that the economy will return to its real-terms pre-pandemic *size* by the spring of 2022, as did official forecasts at the time of the March Budget. The Bank of England's latest forecast is more optimistic and suggests that threshold will already be crossed by the end of this year.

But none of these central forecasts sees the economy returning to its pre-pandemic *growth path*. In other words, under each of these central forecasts, some of the growth lost during the pandemic is not recovered and the productive capacity of the economy is permanently smaller than it might have been, had the pandemic never happened. Indeed, it would be surprising if the enormous hit to activity through the pandemic did not lead to at least some persistent damage to economic output. In Citi's central scenario, despite the early improvement in growth, by 2025–26 the economy is expected to be the same size in real terms as forecast by the Office for Budget Responsibility (OBR) at the time of the March Budget.

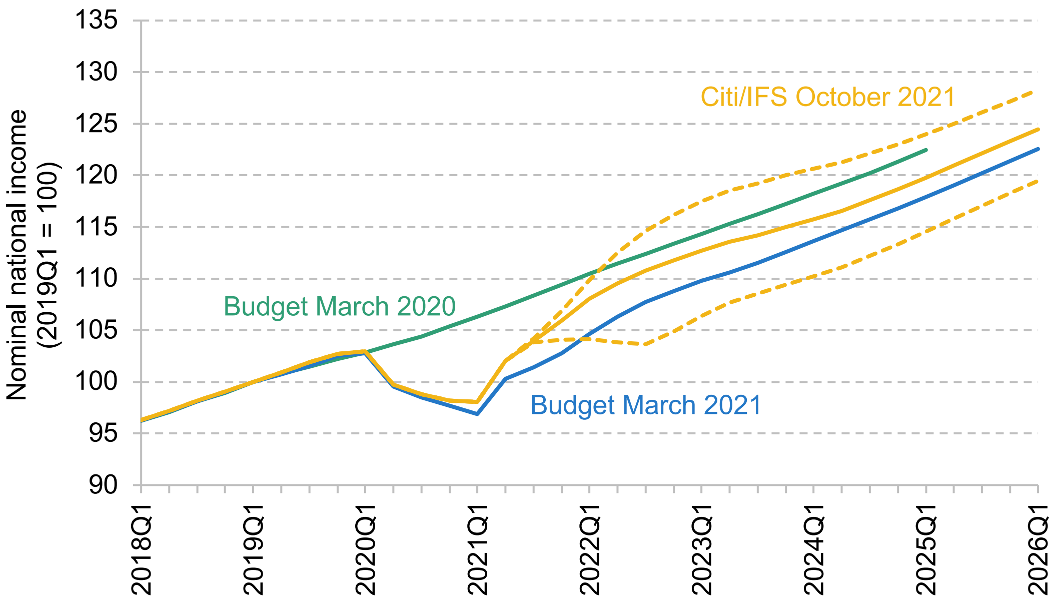
Figure 3.1. Forecasts for quarterly national income in real terms



Note: Four-quarter rolling averages are shown. Dashed lines indicate Citi's optimistic and pessimistic scenarios. Bank of England includes backcast.

Source: OBR's Economic and Fiscal Outlook, March 2020 and March 2021; Bank of England's Monetary Policy Report August 2021; Citi forecasts.

Figure 3.2. Forecasts for quarterly national income in nominal terms



Note: Four-quarter rolling averages are shown. Dashed lines indicate Citi's optimistic and pessimistic scenarios.

Source: OBR's Economic and Fiscal Outlook, March 2020 and March 2021; Citi forecasts.

But while real-terms growth is a better measure of overall economic well-being, nominal growth matters more for the public finances. This is driven by the fact that taxes are levied on nominal incomes (which is especially important when income tax thresholds, such as the personal allowance, higher-rate threshold and additional-rate threshold, are all set to be fixed in cash terms for several years) and on nominal consumer spending. At the same time, departmental spending plans are typically fixed in cash terms, although higher inflation can create pressure for these plans to be revised upwards. In consequence, higher nominal growth tends to improve the public finances whether or not it is underpinned by faster real-terms growth, because tax revenues tend to rise in response while departmental spending might not.

In nominal terms, the improvement in growth under Citi's forecast only partially fades away, leaving the cash size of the economy about 1½% bigger by 2025–26 in Citi's central scenario than forecast at the Budget in March. This implies the economy running just under 3% smaller in real terms than the official pre-pandemic forecast, with the gap in nominal terms just under 2½%.

Public finance forecasts are always subject to uncertainty, but this continues to be heightened by the pandemic. Huge uncertainty remains around the future trajectory of the virus in the UK and globally, as well as the extent to which changed patterns of work, consumption and investment will persist into the post-COVID future. How swiftly and smoothly the economy adjusts to these changes will be of crucial importance.

The wide range between Citi's two alternative scenarios illustrates this: in its optimistic scenario, where economic confidence is restored quickly and little or no restructuring is required, the real size of the economy does return to its pre-COVID growth path – and in nominal terms, which matters most for the public finances, it grows by even *more* than forecast pre-pandemic (due to higher economy-wide inflation). This may, unfortunately, not be likely to emerge, but is useful as a best-case benchmark. In contrast, in Citi's pessimistic scenario, a vaccine-resistant strain and renewed restrictions cause further damage to an economy which will need to adjust in a much more significant way to long-term changes in consumers' and firms' behaviour and, in the process, falls further behind the pre-pandemic growth path. Such a scenario may also be unlikely and we should certainly hope that it does not occur. But it will be prudent for policymakers to prepare for what action they would take were it to emerge.

3.3 Outlook for borrowing

In 2020–21, the latest out-turn data suggest that borrowing was £325.1 billion, which is £30 billion lower than the £354.6 billion forecast by the OBR in the March Budget. The improved outlook for the nominal size of the economy in the central and optimistic scenarios translates into higher revenues and lower borrowing going forwards.[1] Under Citi's central forecast, we expect borrowing to be £54 billion lower than in the March Budget this year, and between £21 billion and £24 billion lower (in cash terms) in subsequent forecast years. As long as spending plans are not topped up further, the large tax rises announced in March and September 2021 would be enough, under the central scenario, to outweigh ongoing weakness in the economy and higher debt interest spending, and push borrowing to £5 billion *below* the pre-pandemic forecast in 2024–25.

The key development that reduces borrowing relative to the March Budget forecast is that recent improvements in the economic outlook push up revenues (see Table 3.1). In addition, after departments underspent against planned limits by some £34 billion in 2020–21, we assume that the £55 billion 'COVID-19 Reserve' set aside for the current financial year will also only partially be spent, contributing to an additional £10 billion of underspend this year (on top of the £11 billion general underspend, and £4 billion additional COVID-related underspend already assumed by the OBR). Spending on the furlough scheme, and the Self-Employment Income Support Scheme, has also been substantially lower than forecast in the first few months of the financial year, which will contribute to lower spending over the year as a whole (although of course the scope for additional underspends ends with the expiry of these schemes).

Table 3.1. Changes in the borrowing forecast for 2021–22 (£ billion)

	Budget March 2021	Central scenario	Difference
Public sector net borrowing	234	180	–54
Revenues	819	873	53
Spending	1,053	1,053	–0.3
Of which:			
Debt interest	25	38	14
Underspend	15	25	10

Note: Debt interest is central government debt interest net of income from the Asset Purchase Facility.

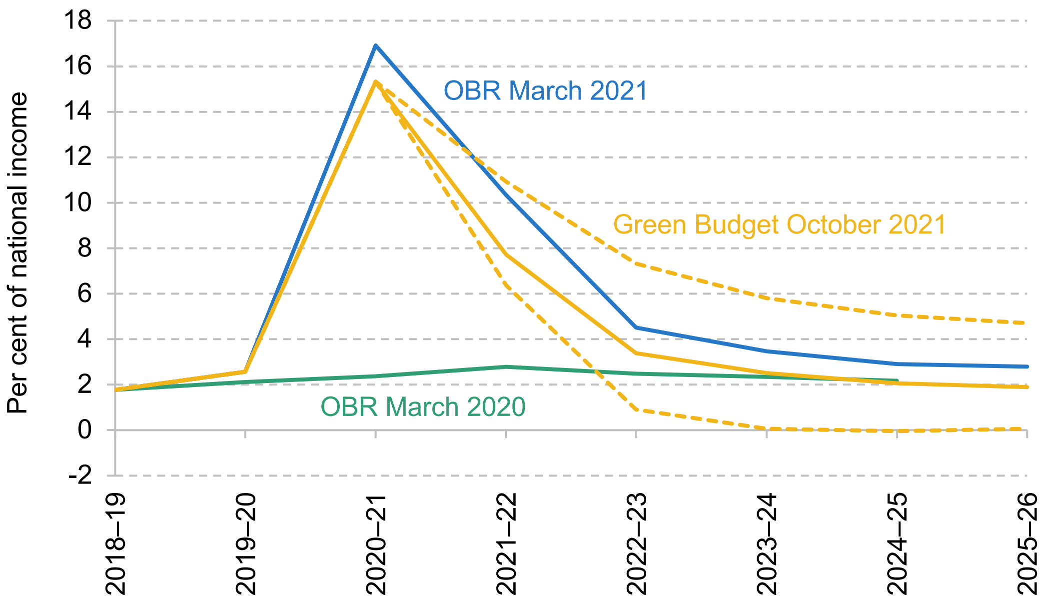
Source: OBR's Economic and Fiscal Outlook, March 2020 and March 2021; Citi forecasts; authors' calculations.

[1] We decompose the change in the fiscal forecast between the March 2020 and March 2021 Economic and Fiscal Outlooks into changes due to nominal GDP, the stock market, debt interest and discretionary policy measures and scale these impacts according to Citi's current macroeconomic forecast and changed interest rate expectations. For more details, see box 4.1 of Emmerson and Stockton (2020).

In the current financial year (2021−22), we would expect revenues to reach £873 billion in the central scenario, just 4.2% below the pre-pandemic Budget forecast, compared with £819 billion, or 10% below the pre-pandemic forecast, that the OBR forecast back in March. In the optimistic scenario, revenues even reach £902 billion, shrinking the gap with the pre-pandemic forecast further to just 0.9%. In contrast, in the pessimistic scenario, more lingering economic damage depresses revenues to £810 billion, 11% below the pre-pandemic forecast and similar to the OBR's March Budget forecast.

Pushing borrowing up instead of down, debt interest spending is now forecast to be £14 billion higher in 2021–22 than forecast in the March 2021 Budget. This is driven by the increases in interest rates on government bonds seen since the Budget was finalised. If correct, this would make debt interest spending £1 billion higher than under the pre-pandemic forecast for 2021–22, and would be despite it coming in £11 billion lower than forecast pre-pandemic in the previous financial year. Compared with the large improvements in the fiscal position from stronger nominal GDP, greater underspend, and stronger-than-expected growth in revenues since April, this would be a more modest change.

Figure 3.3. Forecasts for borrowing (% of national income)



Note: Dashed lines indicate Citi's optimistic and pessimistic scenarios.

Source: OBR's Economic and Fiscal Outlook, March 2020 and March 2021; Citi forecasts; authors' calculations.

Table 3.2. Forecasts for borrowing (£ billion)

	OBR Budget forecasts		Green Budget October 2021		
	March 2020	March 2021	Central	Optimistic	Pessimistic
2019−20	47.4	57.1	57.1	57.1	57.1
2020−21	54.8	354.6	325.1	325.1	325.1
2021−22	66.7	233.9	180.2	151.2	246.3
2022−23	61.5	106.9	82.4	22.9	168.4
2023−24	60.2	85.3	63.2	1.4	138.4
2024−25	57.9	74.4	53.1	–1.2	125.2
2025−26		73.7	50.7	1.6	121.4

Source: OBR's Economic and Fiscal Outlook, March 2020 and March 2021; Citi forecasts; authors' calculations.

Figure 3.3 shows the forecasts for borrowing pre-pandemic, at March 2021's Budget and in Citi's three scenarios. The equivalent £ billion figures are shown in Table 3.2. In all three scenarios, borrowing falls sharply over the next three years from last year's peacetime record. In the central scenario, borrowing in 2024–25 falls £5 billion *below* the level forecast pre-pandemic, 0.9% of national income – or £21 billion – below that forecast in the March 2021 Budget.

This is despite some lingering weakness in the economy – though less than in the Budget forecast back in March – weighing on borrowing, along with higher debt interest spending. These factors are outweighed by the consolidation measures announced by the Chancellor in the last year – in particular in the March 2021 Budget. The package of measures announced in September raises spending on health and social care by an average of £14 billion a year, whilst increasing National Insurance contributions – in the form of the new health and social care levy – and dividend tax by around the same amount, and is thus borrowing-neutral. Additionally, the announcement made later on the same day – that the triple lock on pensions would for one year be suspended and temporarily replaced by a double lock[2] – reduces spending on state pensions by an estimated £2 billion relative to having retained the triple lock.

Table 3.3 sets out the estimated total impact of discretionary policy measures since March 2020 on borrowing – both the large loosening through the pandemic, and the subsequent

[2] Under the triple lock, state pensions increase by the highest of 2½%, inflation and the growth in average earnings. Under the double lock, this list excludes earnings growth, which is elevated by average earnings bouncing back post-pandemic, especially with many employees coming off the furlough scheme and returning to full pay.

consolidation. The emergency fiscal response to the pandemic was heavily skewed towards spending, with a total of £329 billion committed across 2019–20, 2020–21 and 2021–22 to support businesses, households and public services. Tax cuts played, in relative terms, a minor role in the emergency response, peaking at £25 billion of cuts in 2021–22. At least on current plans, none of this additional spending is to be permanent. Indeed, even after additional spending on health and social care was announced in September, departments' day-to-day spending totals in 2023−24 and 2024−25 are still set to be around £3 billion lower than what was planned pre-pandemic.

From April 2023, large tax rises are also planned. The March 2021 Budget was the biggest tax-raising Budget since Lord Lamont's Spring Budget of 1993. An increase in the main rate of corporation tax from 19% to 25% in April 2023 is expected by the government to raise around £17 billion by 2025−26. And on income tax, a four-year cash freeze in both the personal allowance and the higher-rate threshold is expected to raise £8 billion by 2025−26.

Under the central scenario, these tax rises and cuts to previous spending plans (assuming they are delivered) are sufficient to outweigh the impact of the ongoing weakness in the economy and higher debt interest spending. This would deliver a modest but growing current budget surplus by 2023–24 (Figure 3.4 and Table 3.4), whilst the March Budget forecast that the current budget deficit would only be brought close to zero two years later. This is chiefly thanks to the enduring improvement in the forecast for nominal growth. This would mean that this year, the Chancellor could meet the previous fiscal target of forecast current budget balance three years into the future, with some headroom. For a discussion of fiscal targets, see Chapter 4.

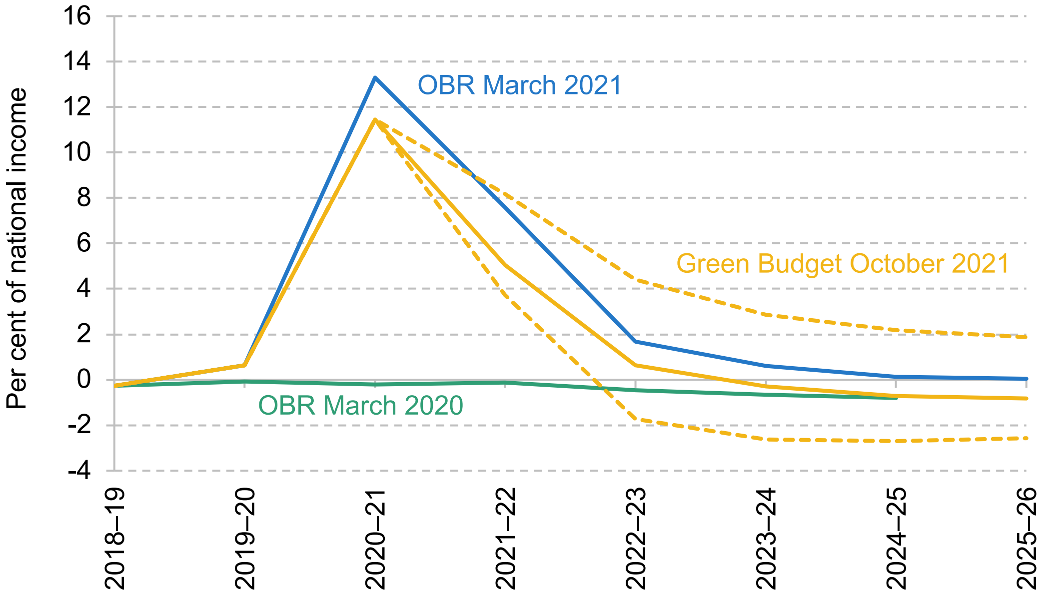
Table 3.3. Borrowing and the impact of measures announced since March 2020 (£ billion)

	Borrowing	Effect of loosening (adds to borrowing)		Effect of tightening (reduces borrowing)	
		Spending increases	Tax cuts	Spending cuts	Tax rises
2019−20	57	2	0	0	0
2020−21	325	250	19	2	0
2021−22	180	77	25	3	8
2022−23	82	13	9	14	14
2023−24	63	10	1	17	24
2024−25	53	12	1	18	37

Note: Direct effects only, nominal terms. Where an increase and cut are reported for the same year, these happened at separate fiscal events/announcements.

Source: OBR's Economic and Fiscal Outlook, March 2020, November 2020 and March 2021.

Figure 3.4. Forecasts for the current budget deficit (% of national income)



Note: Dashed lines indicate Citi's optimistic and pessimistic scenarios.

Source: OBR's Economic and Fiscal Outlook, March 2020 and March 2021; Citi forecasts; authors' calculations.

Table 3.4. Forecasts for the current budget deficit (£ billion)

	OBR Budget forecasts		Green Budget October 2021		
	March 2020	March 2021	Central	Optimistic	Pessimistic
2019–20	–1.7	14.0	14.0	14.0	14.0
2020–21	–4.9	278.8	243.0	243.0	243.0
2021–22	–2.7	171.8	118.0	89.0	184.1
2022–23	–11.7	40.0	15.5	–44.0	101.5
2023–24	–16.7	15.2	–7.0	–68.7	68.2
2024–25	–21.2	3.2	–18.1	–72.4	53.9
2025–26		0.9	–22.1	–71.2	48.6

Source: OBR's Economic and Fiscal Outlook, March 2020 and March 2021; Citi forecasts; authors' calculations.

Risks from alternative economic scenarios

As with growth, the range of uncertainty around the central scenario (as illustrated by the two alternative scenarios) is very wide. In the optimistic scenario, a combination of a very strong economic recovery especially in nominal terms, tight spending plans and substantial tax rises pushes forecast borrowing in 2024–25 2.2% of national income *below* what had been forecast pre-pandemic (Figure 3.3). This would be sufficient to eliminate the overall deficit for the first time since 2000–01. That said, were such a scenario to emerge, we might well expect some of the planned tax rises not to go ahead and for spending plans to be topped up.

Even if real-terms growth followed the Bank of England's August forecast – i.e. if the growth rate fell between those in the central and optimistic scenarios – with no other changes, borrowing would be forecast to be running 1.2% of national income lower than in the central scenario in 2022–23 and 0.8% lower in 2023–24, and 2.3% and 1.7% of national income below the March 2021 Budget forecast in those same two years.

In sharp contrast, in the pessimistic scenario, a very incomplete recovery would keep borrowing elevated at around 5% of national income in the middle of this decade: twice the post-war average. Borrowing could not be sustained at that level indefinitely: a further combination of tax rises and spending cuts at some point would be required. It would only take average growth to average around 3.2% a year over the next five years, rather than the 3.7% a year in our central forecast, for there to be a £10 billion deficit on the current budget in 2025–26.

Looking at the current budget, in the optimistic scenario under current stated policy, we would expect a substantial surplus of at least 2.6% of national income from 2023–24 (which would be the largest since 1971–72), and a deficit of 2.9% dropping to 2.2% in 2024–25 and 1.9% in 2025–26 in the pessimistic one. But again, were a scenario similar to the optimistic one to emerge, we might expect some planned tax rises to be cancelled and/or spending plans to be topped up. Indeed, under the optimistic scenario, all of the tax rises announced in the March 2021 Budget could be reversed and we would still be on course for a substantial current budget surplus from 2023–24 onwards. Conversely, under the pessimistic scenario, the £28 billion package of tax rises would need to be nearly tripled for a current budget surplus to be forecast for 2025–26.

Risks from policy change

Our forecasts – and the Citi economic forecasts used in this chapter – make a number of assumptions about government policy. In particular, they assume that stated tax policies are implemented and that the totals announced for the Spending Review are kept to. In practice, there are risks around both of these assumptions.

On the revenue side, our forecasts – following the OBR – take the government's stated policy of uprating fuel duty in line with inflation as given. However, fuel duty has now been frozen for 11 successive years, casting serious doubt on the seriousness of the commitment to return to indexation after just one more year. If rates of fuel duties are frozen for a further four years, this would reduce revenues by around £3 billion, and bring the total cost of cuts and freezes to fuel duties since 2010, relative to an alternative of RPI indexation, up to £14 billion a year.

A further risk relates to the tax rises announced in the March 2021 Budget. As stated above, the rise in corporation tax from 19% to 25% in April 2023 is forecast to raise £17 billion by 2025–26. On income tax, a four-year cash freeze in both the personal allowance and the higher-rate threshold is expected to raise £8 billion by 2025−26. Were, for example, the freezes in the income tax personal allowance and higher-rate threshold to run for three rather than four years, this would reduce revenues by around £2 billion a year from April 2025 onwards.

On the spending side, there are a number of risks related to NHS spending and to public service spending more generally. These are addressed in detail in other chapters: Chapter 6 shows that the NHS may be facing a funding shortfall of £5 billion by 2024–25, while Chapter 5 puts pandemic-related spending pressures on education and public transport at around £3 billion a year over the next three years and also shows that day-to-day departmental spending is still £3 billion below pre-pandemic plans in 2024–25.

There will be pressure on overseas aid spending as well. In the November 2020 Spending Review, the government reduced the overseas aid budget from 0.7% of national income to 0.5%. However, it has also claimed that 'this is a temporary measure and the Government are committed to the 2015 Act and to spending 0.7% of GNI on ODA once the fiscal situation allows' and that a return to spending 0.7% of national income will happen when 'on a sustainable basis, we are not borrowing for day-to-day spending and underlying debt is falling'.[3] In our central scenario, the current budget deficit is eliminated by 2023–24. By the following year, the surplus would be sufficient to return to spending 0.7% of national income on overseas aid, spending roughly an additional £5 billion. However, with debt still elevated, it could be that the government would hold off increasing aid spending until a later year. And, were aid spending to be increased, it is also unclear whether that would add to borrowing or whether it would be met from within existing spending totals.

[3] For more details, see https://www.gov.uk/government/news/changes-to-the-uks-aid-budget-in-the-spending-review and https://hansard.parliament.uk/commons/2021-07-12/debates/c8f3bb2c-50f2-4b61-9cf2-3af0b47ed89a/WrittenStatements.

Table 3.5. Funding the rising cost of health and adult social care in the latter half of the decade

	Healthcare	Adult social care	Total	Levy increase, percentage points *(rate in 2023–24 = 1.25%)*
2026–27	£3.2bn	£0.5bn	£3.7bn	0.4
2027–28	£6.5bn	£1.0bn	£7.5bn	0.7
2028–29	£9.9bn	£1.3bn	£11.2bn	1.1
2029–30	£13.3bn	£1.7bn	£15.0bn	1.5
2030–31	£16.8bn	£1.9bn	£18.7bn	1.9

Note: Costs in today's (2021–22) terms on top of their level in 2025–26. Levy increase assumes public sector employers are compensated for the increase in employer contributions, as was the case in the initial package announced in September 2021, and that revenues from the levy grow in line with long-run average earnings growth.

Source: Authors' calculations using OBR's Fiscal Sustainability Report, July 2020, and HM Government's 'Building back better: our plan for health and social care', September 2021.

Finally, the costs of funding health and adult social care are projected to continue to increase as the population ages and increasing numbers of people live with multiple chronic conditions. The longer-run projections on this are set out in Section 3.5. But this is not just a problem for the distant future: these pressures are growing now, and are expected to continue to do so over the rest of this decade. Table 3.5 shows that by 2030–31, these additional pressures are estimated to total about £18½ billion on top of their level in 2025–26. Again, it is not clear whether these are to be met and, if they are, how they are to be financed. One option might be for the new health and social care levy to rise to meet these costs. If this is to happen, and assuming (as was the case in the September 2021 announcement) that it is also increased by enough to compensate other public services, then this would imply a further increase of 1.9 percentage points in the health and social care levy (and on dividend tax), more than doubling the total levy on employees, employers and the self-employed from its currently planned rate of 1.25% to 3.15% by 2030−31.

3.4 Outlook for debt and debt interest spending

Comparing the Citi central scenario with the March 2021 Budget forecast, the improvement in the economic outlook leads to a lower level of underlying net debt throughout the forecast period. However, the economic improvement is insufficient to reduce debt quickly as a share of national income whilst debt interest spending also becomes more burdensome. Debt is forecast to peak at 90% of national income in 2023–24, but to fall only gently in the following two years, by a total of 1.2 percentage points of national income (Figure 3.5). The COVID crisis would thus have added 17% of national income to debt. While large, this is much less than the 39% of national income increase (from 34% to 73%) that occurred over the course of four years between 2008 and 2012, during and immediately following the financial crisis.

Box 3.1. The Bank of England's contribution to public sector net debt

When politicians and analysts talk about fiscal policy, they will often refer to 'underlying' debt. This usually means debt excluding the contribution of the Bank of England.

The Bank of England's activities contribute to public sector net debt through its purchases of government gilts and (to a much smaller extent) corporate bonds in the context of quantitative easing, and through its two Term Funding Schemes which offer loans to firms to support the economy in the wake of the 2016 referendum (the TFS) and the COVID-19 pandemic (the TFSME, or Term Funding Scheme for small and medium enterprises).

Through its programme of quantitative easing, the Bank of England buys gilts – essentially IOUs issued by the government – from financial institutions and in return credits them with central bank reserves. Reserves are deposits on which interest is paid at Bank Rate that commercial banks hold at the Bank of England.

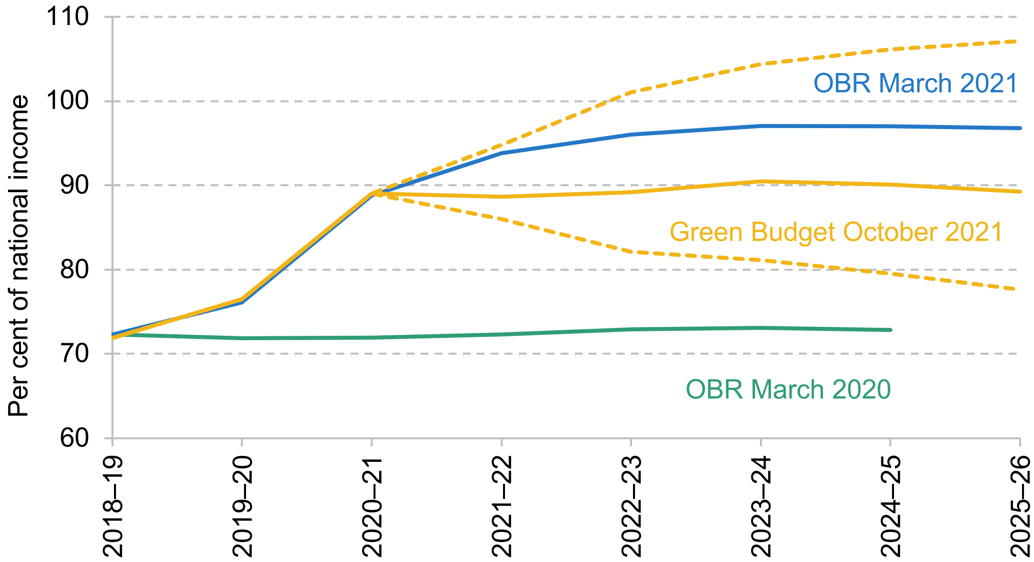
Any difference between the value of the reserves issued to purchase the gilts (the gilts' market value) and their redemption value (the amount the government promises to pay) contributes to public sector debt. Since this part of public sector debt is not the direct result of the government's choices around spending and tax, it is often appropriate to focus on debt excluding the Bank of England when evaluating the fiscal situation.

For the central scenario, Figure 3.6 decomposes the increase in the debt-to-GDP ratio in 2024–25[4] between the pre-pandemic Budget forecast and the current central scenario into policy measures, the impact of lower economic growth throughout the period, and other factors. Three-fifths of the increase – 11.6% of national income – is explained by the large emergency measures last year and this, with only 2.8% counterweighed by tax rises in the later years of the forecast (shown by the blue bar). Over a third of the increase is explained by lower growth adding to borrowing through lower revenues (and, to a lesser extent, higher spending – e.g. on benefits), with smaller parts explained by the denominator effect (i.e. the fact that the same cash

[4] We choose that year since it is the last one for which an official pre-pandemic forecast is available to allow for a direct comparison.

debt in 2024–25 will represent a larger share of a smaller national income) and additional debt interest spending.

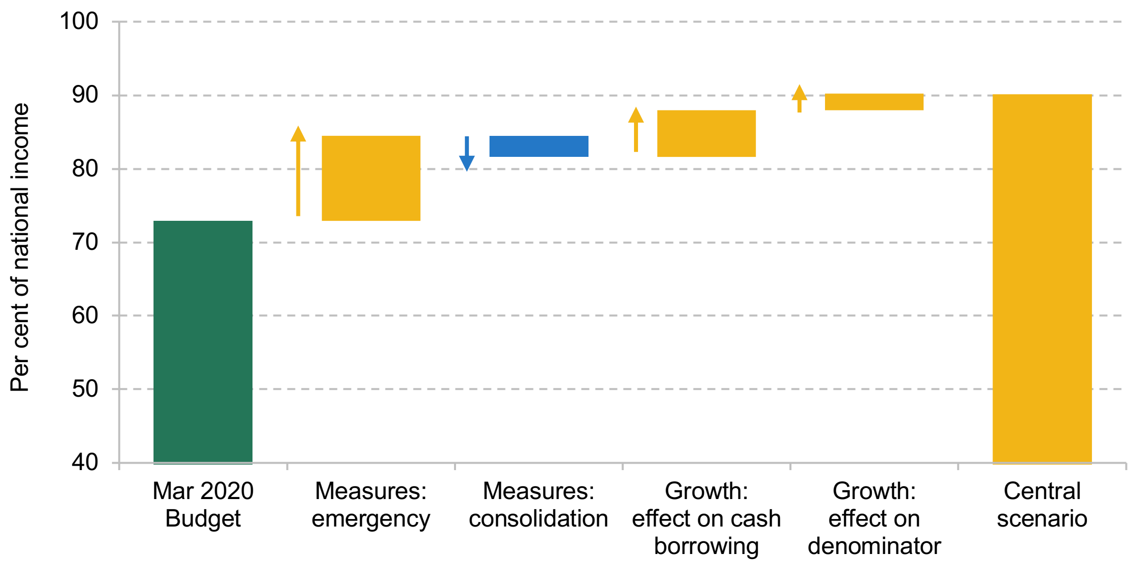
Figure 3.5. Forecasts for debt



Note: Dashed lines indicate Citi's optimistic and pessimistic scenarios. Debt is net debt excluding the Bank of England.

Source: OBR's Economic and Fiscal Outlook, March 2020 and March 2021; Citi forecasts; authors' calculations.

Figure 3.6. Sources of increased debt-to-GDP ratio in 2024–25



Note: Debt is net debt excluding Bank of England.

Source: OBR's Economic and Fiscal Outlook, March 2020, November 2020 and March 2021; Citi forecasts; authors' calculations.

The pattern shown in Figure 3.6 contrasts with the large increase in public sector net debt arising as a result of the financial crisis and associated recession, where much less of the increase in debt was due to the fiscal stimulus package and much more of the increase was due to the denominator effect (Chote, Emmerson and Tetlow, 2009, figure 3.4). There are two key drivers of this difference. First, the emergency fiscal support since March 2020 has been much bigger than what was implemented in response to the financial crisis, in part due to substantial increases in day-to-day spending on public services – most obviously the NHS – but also because of a bigger increase in spending on working-age benefits (Emmerson, 2020; IFS Taxlab, 2021). Second, the financial crisis was associated with both weak real growth and much lower-than-expected inflation, whereas higher inflation following the pandemic means the drop in nominal national income (the denominator) is less than the drop in real output.

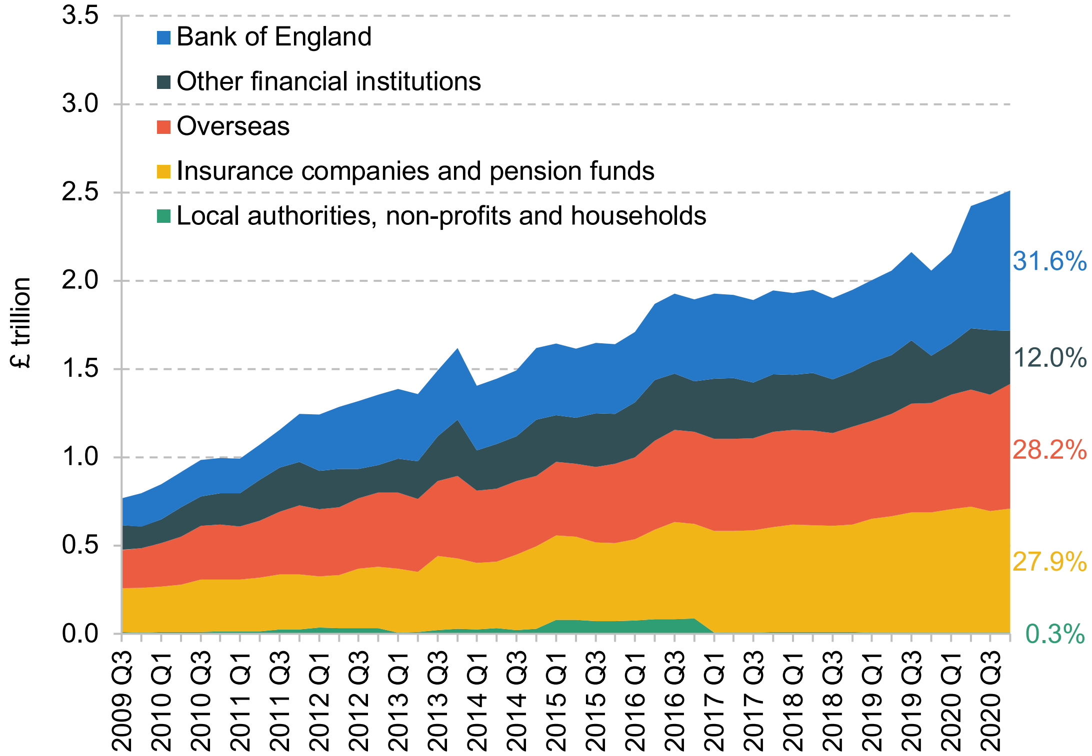
How is government debt financed?

Public sector debt is held in the form of government bonds, or gilts. Figure 3.7 shows that overseas investors (including foreign central banks) and insurance and pension funds have steadily increased their holdings of gilts since 2009. The Bank of England's holdings have also increased gradually during that period. They then increased sharply during the COVID-19 crisis, when the Bank essentially absorbed all newly issued UK government debt: between March 2020 and May 2021, the Debt Management Office issued £431 billion of debt, net of redemptions, while the Bank of England voted to purchase an additional £460 billion of gilts via quantitative easing.

At the same time that the government was accumulating a large amount of debt to fund the COVID-19 emergency response, the cost of servicing that debt fell to record lows. This was a continuation of a long-term trend that has seen interest rates on UK government debt – and that of governments in other advanced economies around the world – fall across short, medium and long durations (Figure 3.8). These are rates on conventional gilts, i.e. ones that are not indexed to inflation. The UK's Debt Management Office (DMO) also issues index-linked gilts that pay out interest relative to the growth in the Retail Prices Index (RPI). Yields on these gilts have also been running at extremely low levels. For example, on 22 September 2021, the DMO auctioned £350 million of gilts that run to 2056 at a yield of RPI *minus* 2.3%.[5]

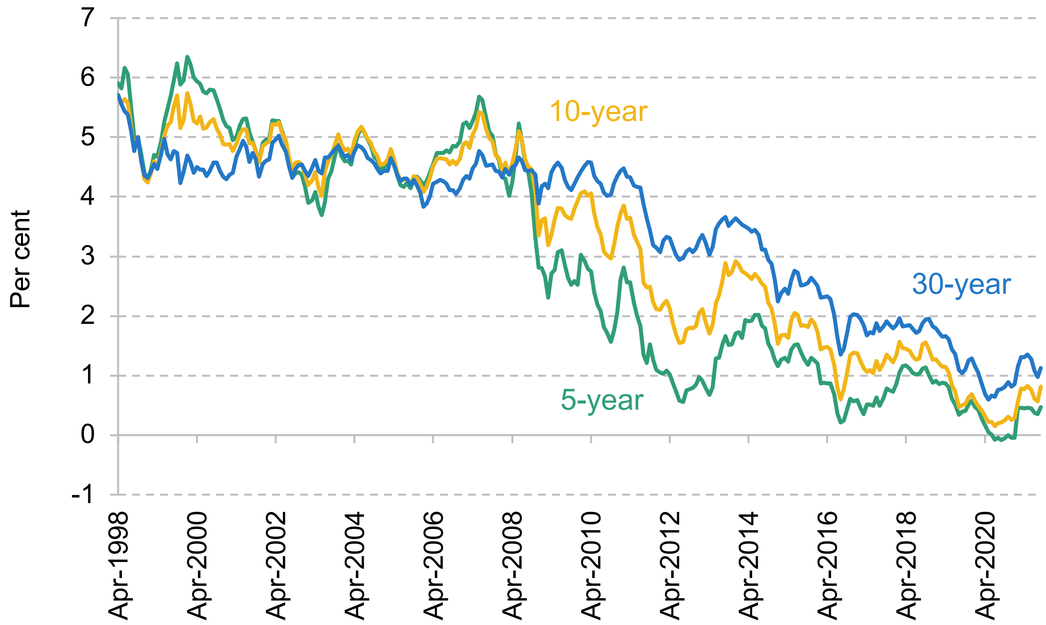
[5] Source: https://www.dmo.gov.uk/data/gilt-market/.

Figure 3.7. Holders of gilts over time



Source: Debt Management Office, Quarterly Reviews.

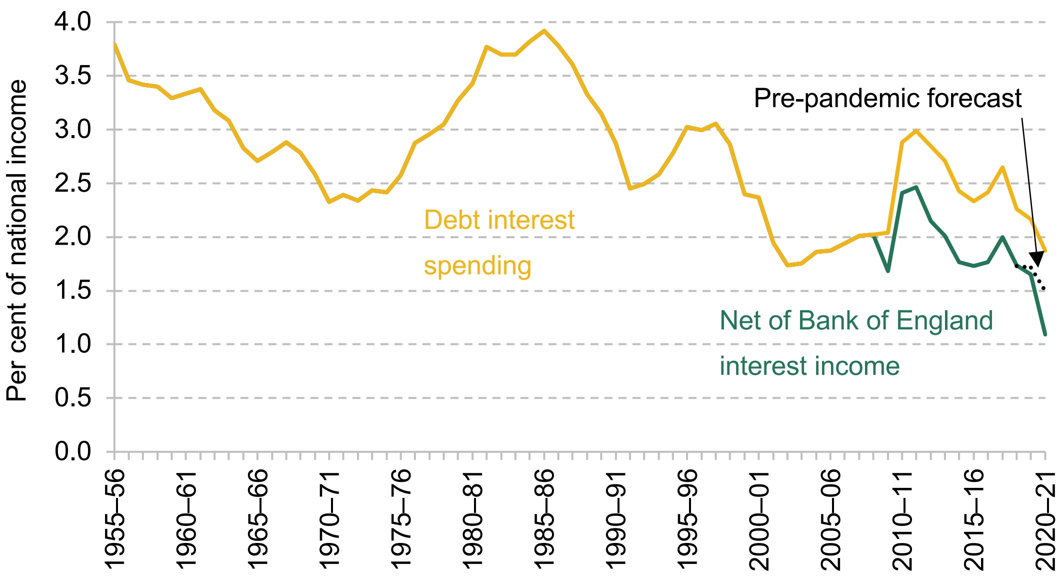
Figure 3.8. UK gilt rates over time



Note: Simple averages of the close-of-business redemption yields for each month of the prevailing benchmark gilts.

Source: Debt Management Office, historical average daily conventional gilt yields.

Figure 3.9. Debt interest spending over time



Note: Central government debt interest spending. This is not the measure of debt interest used to measure performance against the fiscal target stated in the Conservative Party manifesto.

Source: Office for National Statistics, series NMFX and MU74; OBR's Economic and Fiscal Outlook, March 2020.

In addition to worldwide falls in interest rates on safe assets, the expansion of quantitative easing led to a further reduction in debt interest spending. This is because quantitative easing effectively allows the government to borrow at the interest rate paid on central bank reserves, which is set at the contemporaneous Bank Rate (currently 0.1%) and is even lower than the interest rates on government bonds, which – as shown above – are themselves already at historically low levels.

This means that despite the huge amounts that the government has borrowed during the pandemic, and despite the fact that underlying government debt rose by 17% of national income between 2018–19 and 2020–21, the UK government spent *less* on debt interest over the last two years than it spent in 2018–19 and than had been forecast under pre-pandemic plans (Figure 3.9). We should not lose sight of this astonishing fact.

However, things are changing. Alongside an improvement in the near-term economic outlook, interest rates have started to rise since the beginning of 2021. For example, in January 2021, the average gilt yield on a five-year gilt was –0.05% while even on a 30-year gilt it was just 0.86%. By September 2021, these had risen to 0.47% and 1.13%, as shown in Figure 3.8. Alongside this, RPI inflation – which feeds directly through to debt interest spending through the 28% of

UK government bonds that are index-linked – has also picked up.[6] In the year to January 2021 the RPI grew by just 1.4%, while over the year to August 2021 this had risen sharply to 4.8%. This rise in the RPI has been a key driver of debt interest spending over the first six months of 2021–22 running £4.7 billion (20.5%) above that forecast for this period by the OBR in the March 2021 Budget.[7]

In Citi's central scenario, debt interest spending in the current financial year, to next March, will be £1 billion higher than anticipated in the pre-pandemic forecast in March 2020, and £14 billion higher than forecast at the March 2021 Budget. But it is worth stressing that this increase is far outweighed by a £53 billion improvement in revenues: an increase in interest rates that accompanies an improvement in the growth outlook is always likely to be associated with an overall reduction in government borrowing.

In addition to making government debt cheaper to finance, quantitative easing also shortens the delay between any increase in interest rates, and a noticeable increase in debt interest spending by the government. UK government gilts have an average remaining duration of around 15 years, which is a long average duration by international comparison (OECD, 2021). This means that, in principle, debt will only mature – and need to be refinanced – slowly.

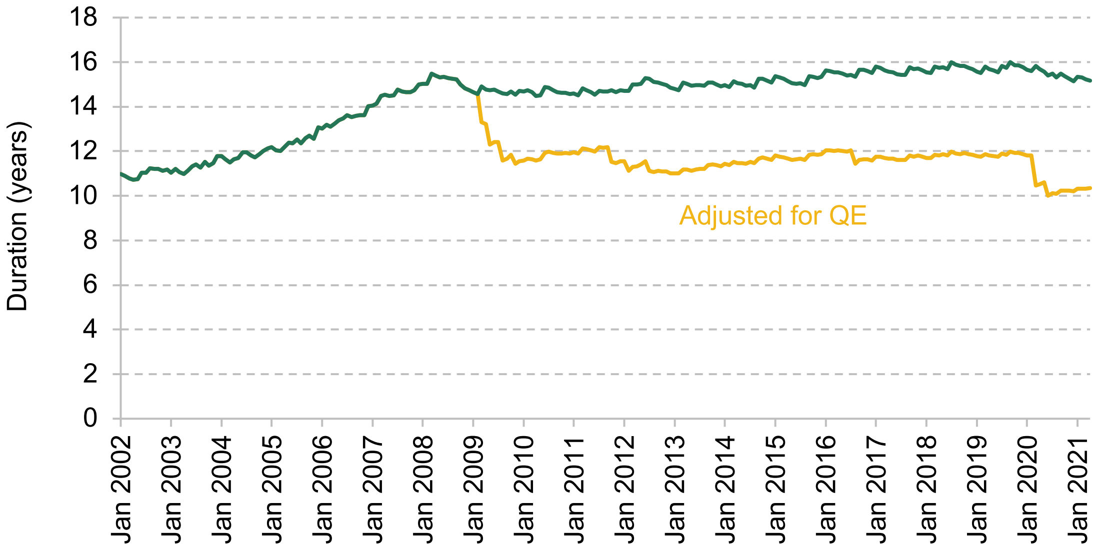
However, the effective cost of financing gilts held by the Bank of England through quantitative easing is not the interest rate on the bond, but the cost of the reserves the Bank creates to fund its purchases. This cost is Bank Rate, which can – and does – change with immediate effect. As shown in Figure 3.10, our calculations suggest that prior to the pandemic (in February 2020) the impact of this was effectively to reduce the average remaining duration of gilts by 24% from 15.6 years to 11.8 years. However, as of April 2021, the expansion of the programme of quantitative easing has increased this reduction to 32%, from 15.2 years to 10.3 years.

While Bank Rate is low, the Bank of England could choose not to pay interest – or pay a lower interest rate than Bank Rate – on some or all of the reserves that commercial banks hold ('tiering'), as has been suggested by some commentators. This is currently done by the European Central Bank and the Bank of Japan. As demand for reserves is high, this could be done while still being able to finance the asset purchases set by the programme of quantitative easing. This might no longer be the case in a situation where Bank Rate needed to rise. If Bank Rate were to rise before the quantitative easing programme had been unwound, this could mean that it would not be possible to have a policy of paying lower than Bank Rate on some reserves.

6 This 28% figure is for 2019−20. Note that the index-linked share of gilts not owned by the Bank of England is greater, because it only purchases conventional (non-index-linked) gilts.

7 Source: https://obr.uk/docs/September-2021-PSF-commentary.pdf.

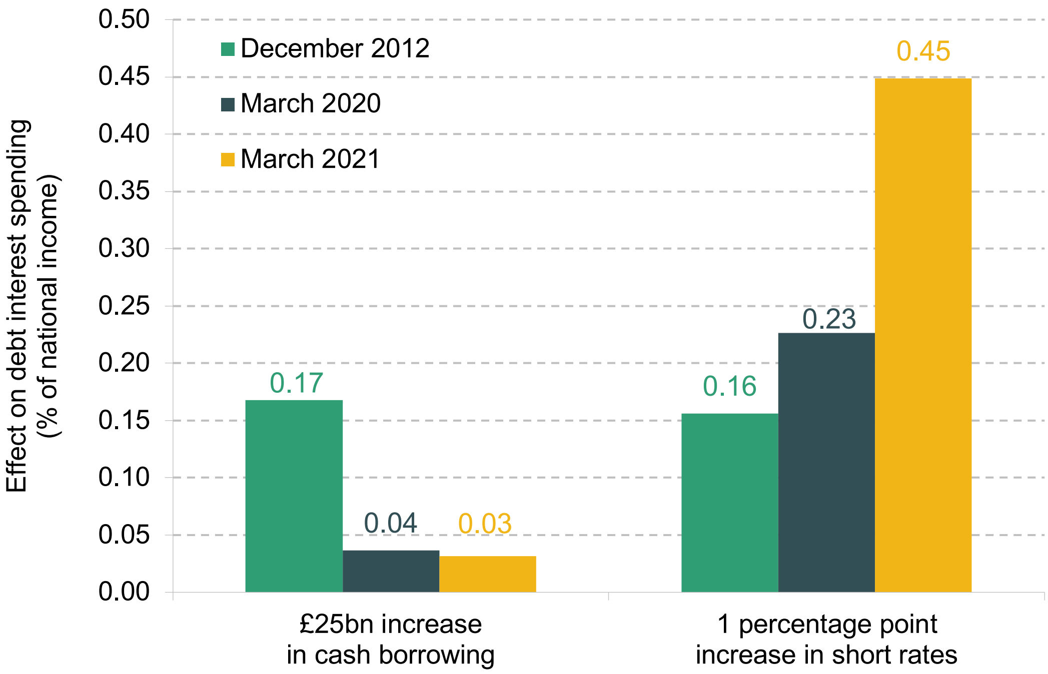
Figure 3.10. Estimated impact of quantitative easing on the effective duration of gilts over time



Note: Weighted remaining duration (time to redemption) shown. Adjusted series treats gilts held in the Asset Purchase Facility as having a remaining duration of zero. Excludes Treasury bills and non-sterling issues.

Source: Authors' calculations using the Heriot-Watt British Government Securities Database.

Figure 3.11. Sensitivity of debt interest spending to borrowing and rate rises



Note: Shows impact in last forecast year.

Source: OBR's Economic and Fiscal Outlook, November 2020 and March 2021.

Another way to show the extent to which the government is able to borrow cheaply at the moment, but that debt interest spending is also more sensitive to changes in interest rates, is to show how the OBR's ready reckoners for debt interest spending have changed over time. This is shown in Figure 3.11. In December 2012 – when gilt rates were higher (as was shown in Figure 3.8) – £25 billion of extra borrowing each year would push up debt interest spending after four years by an estimated 0.17% of national income (£4.0 billion in today's terms). By March 2020 this had fallen by three-quarters to just 0.04% of national income (£0.9 billion), and by March 2021 it had fallen slightly further to just 0.03% (£0.7 billion). In other words, debt interest spending has become less sensitive to additional borrowing over time, as you would expect when interest rates had fallen.

Turning to the sensitivity of debt interest spending to increases in rates of borrowing, back in December 2012 a permanent 1 percentage point (or 100 basis points) increase in rates would push up debt interest spending in four years' time by 0.16% of national income (£3.7 billion in today's terms). By March 2020 this had increased slightly to 0.23% of national income (£5.4 billion). But by March 2021 this had risen to 0.45% of national income (£10.5 billion) – an increase of 180% on the responsiveness estimated in December 2012. Debt interest spending has thus become much more sensitive to changes in interest rates.

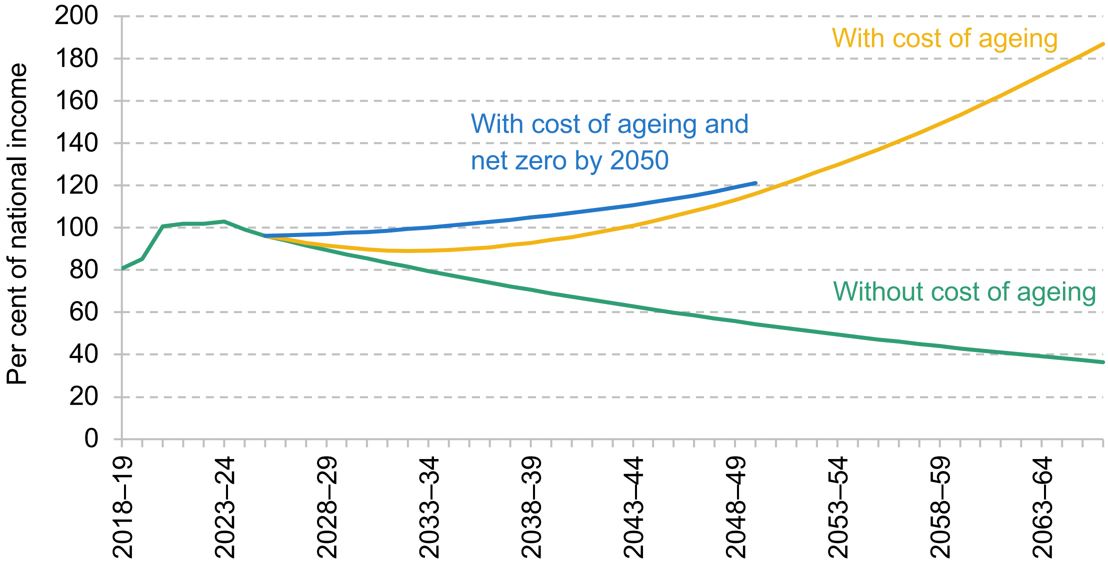
An increase in interest rates that is not accompanied by an improved outlook for growth would be much more burdensome for the public finances. In our central scenario, debt interest spending is forecast to be £14 billion higher than in the March 2021 Budget forecast. This is still more than compensated for by £53 billion higher revenues. But if interest rates increased further, without a corresponding increase in growth and revenues, the outlook for the public finances would be much more challenging.

3.5 The long-run trajectory of debt

When considering the UK's long-term fiscal situation, the one-off increase in debt during the COVID-19 crisis is less significant than the future trajectories of growth and interest rates, and the policy choices the government makes around taxes and spending. These choices will need to be made in response both to unexpected challenges that arise and to known ones (where perhaps the most obvious are population ageing and the transition to a net-zero economy).

Figure 3.12 shows different illustrative trajectories for debt. For each of them, the starting point is the central scenario set out above. We use a set of broad-brush assumptions: that the effective interest rate on government debt remains unchanged from 2025–26 onwards, and that growth in nominal national income is constant at the 3.9% per year projected by the OBR in its July 2020 Fiscal Sustainability Report. This would be slightly better than the very muted growth performance after the financial crisis and before the onset of COVID-19, but still much lower than the longer-term post-war average. Of course, in reality, growth and interest rates will not stay constant. However, these trajectories are not intended to be precise forecasts. Instead, they illustrate the underlying dynamics of debt given today's starting point, and the scale of long-term challenges.

Figure 3.12. Illustrative long-term debt trajectories with and without cost pressures of ageing and the net zero transition



Note: Shows headline debt (including Bank of England). Central scenario until 2025–26. Thereafter, primary balance and effective interest rate are assumed constant. 'With cost of ageing' assumes that increases in spending on healthcare, adult social care and state pensions are fully accommodated through higher borrowing. 'With cost of ageing and net zero by 2050' additionally uses the OBR's 'central' public sector share scenario for spending, plus its net revenue effects.

Source: OBR's Fiscal Sustainability Report (July 2020) and Fiscal Risks Report (July 2021); authors' calculations.

The green line shows projected debt under the assumption that primary borrowing (i.e. borrowing before net debt interest spending) remains constant beyond 2025–26, at 0.4% of national income. One way to think of this scenario is that it is what might be expected were future governments to meet the costs of any pressures on revenues or spending with tax rises or spending cuts elsewhere. In this scenario, debt is on a falling path and returns to its pre-COVID level in the early 2030s, but only comes close to the level seen before the financial crisis (34% of national income in 2007–08) at the very end of the forecast horizon.

A key challenge in the decades covered by this projection are the rising costs of health and adult social care, and state pensions. One important driver of increasing costs is the ageing of the population through rising life expectancy at older ages, reductions in the birth rate and lower immigration. On average, people need more healthcare and social care at older ages, and the healthcare they need also tends to be more expensive. In addition to this, healthcare costs have tended to rise over time independently of demographic change. One reason is that new medical technologies and drugs – while of course delivering many benefits – are often expensive, at least initially. Another reason is that more people are being treated for chronic conditions (notably diabetes and dementia), with an especially sharp increase in the number of people being treated for multiple chronic conditions at the same time. These are all trends that are expected to continue, and to continue to drive up care costs (Charlesworth and Johnson, 2018).

The green line effectively assumes that the rising cost of healthcare, adult social care and state pensions either is simply not accommodated at all (e.g. state pension indexation is made less generous or rising care needs go unmet by the state) or is offset by tax rises or spending cuts in other areas. If, in contrast, the government chose to meet those pressures and fund them through higher borrowing, the yellow line in Figure 3.12 shows that debt would be on a rising – and even accelerating – path. In practice, such a scenario would be unlikely to be allowed to emerge, as tax rises or spending cuts would be needed to demonstrate prudent stewardship of the public finances and prevent a loss of confidence in the UK as a borrower, with a corresponding unwelcome increase in the cost of borrowing.

We now turn to the direct fiscal cost of the transition to net zero,[8] a challenge with very different dynamics over the period from those of the rising costs of healthcare, social care and pensions just discussed. The illustrative trajectory shown by the blue line in Figure 3.12 combines the fiscal impact of both of these long-term challenges. In addition to the rising cost of healthcare, social care and pensions just discussed, this includes two aspects of the fiscal impact of the transition to net zero. The first is the negative impact of decarbonisation on some tax bases – for example, revenues from fuel duties will dry up as fewer and fewer vehicles with combustion engines remain on the roads. In addition, this debt trajectory assumes that the government shoulders a share of the cost of transitioning to net zero in different sectors. This share is based on the OBR's 'central' public sector share scenario (Office for Budget Responsibility, July 2021, table 3.2). For example, this would see the government bearing just 6% of the costs of the decarbonisation of cars, but 44% of the cost of decarbonising residential buildings and 64% of carbon emissions removals during the 2020s, 2030s and 2040s. Over time, these costs to the public sector are increasingly countervailed by increasing revenues from carbon taxation, reducing the direct fiscal impact of the transition. But without offsetting tax rises or spending cuts, this would lead to debt rising even faster over the next 30 years, with the net zero transition adding more than 12% of national income to debt in the late 2030s.

[8] The full fiscal impact of the net zero transition will depend crucially on its effects on the trajectory of national income until 2050 and beyond, which is a fascinating question entirely beyond the scope of this chapter.

Clearly, this scenario represents only one of a wide range of possible ways of funding the net zero transition. Policymakers may choose to fund a greater or smaller share of transition costs, at different points in time. In the OBR's 'high' public sector share scenario, the state shoulders a greater share of these costs, especially towards the end of the transition, with the impact on government spending nearly 70% greater than in the central scenario in the late 2040s. Under proposals recently set out by Labour (Reeves, 2021), the government would spend an additional £28 billion a year for eight years on investment related to environmental protection, which is more than the amount the OBR assumes would be spent in 2025 even under the 'high' public sector share scenario. This might imply that the state takes an even more active role in funding the net zero transition. In contrast, in the OBR's 'low' public sector share scenario, the private sector is assumed to shoulder more of the costs of transition. As a result, spending is more than 60% lower than in the central scenario in the early 2040s. Similarly, the impact on carbon-related tax bases is uncertain and its size and timing may differ from the broad-brush, central scenario presented in Figure 3.12.

Of course, even in 'normal' times – absent large shocks such as pandemics and financial crises – economic growth is not smooth, as the illustrative trajectories in Figure 3.12 suggest. Instead, cyclical recessions happen irregularly but frequently, with the OBR estimating that the chance of a recession in any five-year period is about one in two.[9] Recessions can have a 'ratchet effect' on debt, in that the debt burden rises by more, relative to trend, during and immediately after a recession than it falls during an expansion. The economic downturns of the early 1980s, 1990s and 2000s added between 4 and 10 percentage points to the ratio of debt to national income within two years, compared with a continuation of the trend before that. This suggests that if policymakers aim to reduce debt over the long run in order to preserve 'fiscal space' – the capacity to sharply increase debt to respond to a crisis such as the COVID-19 pandemic – a more rapid pace of consolidation during economic expansions is required. As discussed in Chapter 4, this would require having lower borrowing (or bigger surpluses) in good, and potentially just normal, years.

3.6 Conclusion

The success of the vaccine roll-out in the UK and encouraging early indicators on the recovery in consumer spending, the labour market and government revenues have led to an upwards revision in most economic forecasts. In the short term, our analysis (based on Citi's central forecast used for our public finance calculations which assumes that the government's

[9] In its most recent Fiscal Risk Report, the OBR cautions that 'the world may in fact be becoming riskier' and this probability and/or the typical impact of recessions may have increased (Office for Budget Responsibility, July 2021, p. 212).

tax and spending plans are kept to – unlike the scenarios in Chapter 2 which assume a further fiscal loosening) suggests that borrowing this financial year could be 2.6% of national income (£54 billion) lower than official forecasts suggested at the time of the March Budget – a very large improvement in such a small space of time. In this context, however, it is worth noting that the latest estimate is that borrowing in the last financial year (2020–21) is almost £30 billion lower than was forecast in the March 2021 Budget.

Some of this 'windfall' for the Chancellor looks likely to prove temporary: in the latter part of the forecast, the improvement in economic performance vis-à-vis the March forecast is smaller. Our forecast is that borrowing in 2024–25 will be 0.9% of national income, or £21 billion in cash terms, below the March 2021 Budget – and £5 billion *lower* than forecast pre-pandemic as the tax rises announced in that Budget more than offset the enduring economic impact of the pandemic on revenues. However, as shown in Table 3.6, it is noticeable that the central forecast is for both revenues and spending to be slightly higher than forecast pre-pandemic.

Uncertainty around this central forecast remains even more substantial than is typically the case. Delivering current budget balance by the end of the forecast period will depend on something close to our central scenario (or better) materialising. Under currently stated plans for taxes and spending, the Chancellor could deliver a modest but growing current budget surplus in the latter three years of the forecast. However, this would require that substantial increases in income tax and corporation tax that have been announced are actually implemented. Uncertainty in the economic outlook means it is possible that growth and, with it, revenues come in much more strongly than under our central scenario. Though were this to emerge it might be more likely that some of the planned tax rises are not actually implemented.

Table 3.6. Forecast for receipts, spending and borrowing in 2024–25 (£ billion)

	OBR Budget forecasts		Green Budget October 2021		
	March 2020	March 2021	Central	Optimistic	Pessimistic
Current receipts	1,022	994	1,037	1,084	981
Total managed expenditure	1,080	1,069	1,091	1,082	1,106
Borrowing	57.9	74.4	53.1	–1.2	125.2

Source: OBR's Economic and Fiscal Outlook, March 2020 and March 2021; Citi forecasts; authors' calculations.

The new spending totals, once you account for higher spending on health and social care after September's announcement, appear relatively tight. They make no allowance for pandemic-related spending pressures on areas other than the NHS, and leave little headroom to deal with negative economic surprises or the spending pressures that existed prior to the pandemic. Were the economy to recover much more strongly than under our central scenario, it would not be surprising if spending plans were topped up. A return to current budget balance, and falling public sector net debt, is also – at least under stated government policy – intended to trigger a return to spending 0.7% of national income on overseas aid, which would be an increase of around £5 billion a year on top of the current spend of 0.5% of national income.

Since the beginning of the year, interest rates on government bonds have started to rise, with yields on 30-year bonds averaging 1.13% in September 2021 having averaged just 0.86% in January 2021. Alongside this, RPI inflation – which feeds directly into interest payments on index-linked debt – has risen from just 1.4% in the year to January 2021 to 4.8% in the year to August 2021. Although interest rates remain very low by historical standards, these changes are set to have a non-trivial impact on debt interest spending over the forecast period, with our central forecasts suggesting it will be around £15 billion a year higher than forecast in March. This increase in interest rates reflects growing optimism about the economic recovery, and since the same improvement in the economic outlook that drives up interest rates also drives up government revenues, the net effect is to reduce borrowing. However, further increases in interest rates *not* accompanied by a stronger outlook for growth and revenues remain a risk, especially while debt is high and, owing to the large share held by the Bank of England via its quantitative easing programme, while interest rate rises feed through to spending quickly.

Difficult decisions loom not just on the immediate COVID recovery, but also when it comes to facing pre-existing long-term challenges. Notably, if increases in the cost of healthcare, adult social care and state pensions over the next decades are not funded through tax rises or cuts to other spending, debt would be on an increasing and accelerating path that would at some point prove unsustainable. Even in the near future, meeting rising health and social care costs through further increases in the health and social care levy would require this to more than double from its planned rate of 1.25% to 3.15% by 2030.

While the fiscal impact of the transition to a net-zero economy, at least on current plans and commitments, has a very different trajectory – public sector costs occur primarily in the near future, and in the longer term are increasingly outweighed by revenues from carbon taxation – both developments combined will put significant pressure on the public finances in the 2030s and 2040s, even if the COVID crisis leaves few economic or fiscal scars. Given the risks from much elevated debt, and the known future pressures on the public finances, once the economic recovery is secured then, absent a willingness to deliver another dose of austerity for many public services, there will likely be a strong case for further sizeable tax rises to come in the second half of this decade.

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