Office for
Budget
Responsibility

Fiscal sustainability report

July 2020

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Foreword

The Office for Budget Responsibility (OBR) was created in 2010 to provide independent and authoritative analysis of the UK's public finances. The *Budget Responsibility and National Audit Act* (*BRNA*) places a duty on us to publish an analysis of the sustainability of the public finances once a year, while the associated *Charter for Budget Responsibility* stipulates that once in every two years this should include "*long-term projections of the public finances*".

Since 2011 in each *Fiscal sustainability report* (*FSR*) we have presented 50-year projections of the public finances using our most recent five-year *Economic and fiscal outlook* (*EFO*) forecast as the starting point for assessing sustainability. That would not be sensible in the current circumstances, as the key forecast assumptions underpinning our most recent *EFO* (which accompanied the Budget in March) were finalised in mid-February, before the full impact of the pandemic was known – and before the various announcements of the unfolding policy response to date. This year's *FSR* therefore takes a different form: we set out three medium-term scenarios for the economy and public finances, we assess their implications for fiscal sustainability, and we discuss how the pandemic and policy response has altered our assessment of fiscal risks.

This report contains scenarios, not forecasts. As such, they have not been produced according to the requirements of the legislative and governance framework that governs our *EFO*s. That framework requires that we receive advance (and public) notification of the timing of the Budget (or 'fiscal event') and agreement on a timetable for the exchange of information between the OBR and the Treasury as our respective forecasts and policy measures develop. We notified the Treasury on 5 May of our intention to publish an *FSR* on 14 July, and asked if they wished to agree a similar governance process and timetable so that the *FSR* could take full account of all policy changes that would be announced before or alongside its publication. The Treasury chose not to do so, citing the fast-moving situation with regard to both the public health and policy environment.

We finalised the medium-term economic and fiscal scenarios on 26 June, incorporating our estimates of the impact of all policy measures announced by that date. On 30 June the Treasury announced that the Chancellor would be making a Summer Economic Update statement on 8 July. Following that announcement, we asked the Treasury to provide us with all relevant information on policy under development for the statement, as we are entitled to under the *BRNA Act,* so that we could discuss their fiscal implications as fully as possible in this report and in our presentation of it. The Treasury gave us an overview of planned policy measures on 3 July. We did not receive a draft or advance copy of the Treasury's document before its publication on 8 July.

On 2 July we provided the Chancellor with a summary of the final results and key messages from the report, excluding any reference we would be able to make to the 8 July statement. We provided a final copy of the report 24 hours prior to publication. At no point did we come under any pressure from Ministers, special advisers or officials to alter any of our analysis or conclusions.

The analysis and projections in this report represent the collective view of the independent members of the OBR's Budget Responsibility Committee. We take full responsibility for the judgements that underpin the analysis and projections, and for the conclusions we have reached. We have been supported in this by the full-time staff of the OBR, and by officials in many departments and agencies, to whom we are enormously grateful – especially in light of the difficult circumstances in which many of them have been working and the many pressures they have been under.

We would also like to take this opportunity, on behalf of everyone at the OBR, to thank NHS staff and all other key workers for their incredible efforts during this difficult time. Our remit requires us to focus on the economic and fiscal implications of the current crisis, but we are all too conscious that this is a first and foremost a crisis for public health and families' wellbeing.

We hope that this report is of use and interest to readers. Feedback would be very welcome to OBRfeedback@obr.uk.

Robert Chote Andy King Sir Charles Bean

The Budget Responsibility Committee

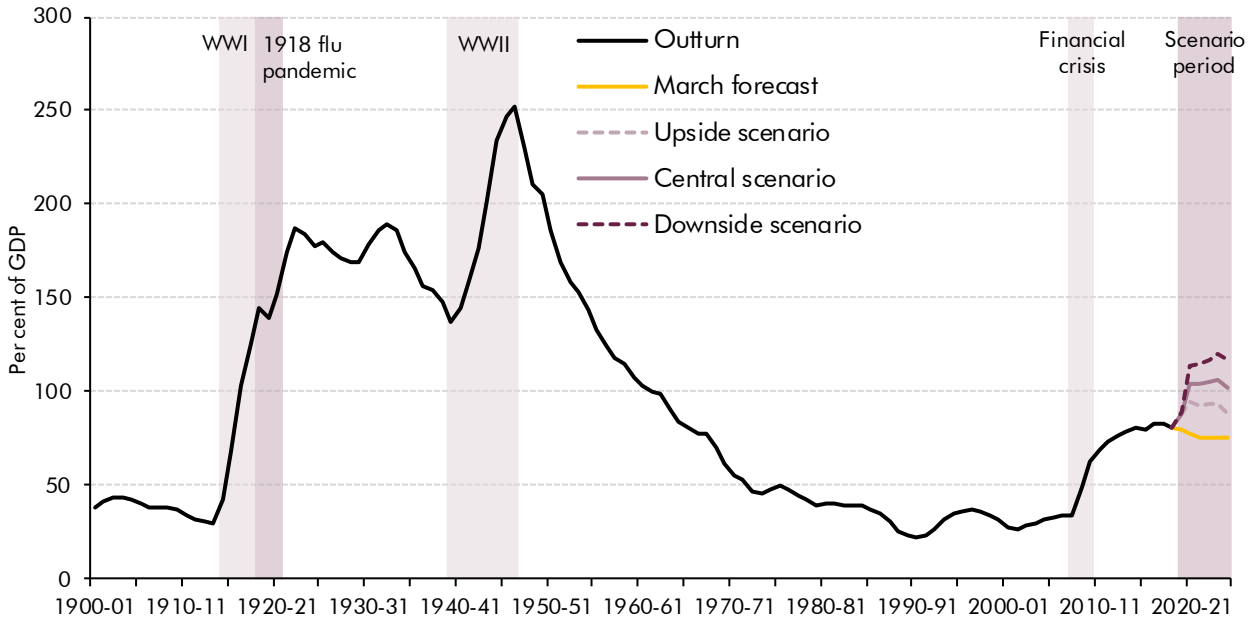
Executive summary

Overview

1 The coronavirus outbreak and the public health measures taken to contain it have delivered one of the largest ever shocks to the UK economy and public finances. Assessing fiscal sustainability in this context is challenging – it is difficult to predict what might happen from one month to the next, so projecting the fiscal position decades into the future might seem futile. But the pandemic has not displaced the long-term pressures that we typically focus on in our *Fiscal sustainability reports* (*FSRs*), although it has significantly changed the baseline against which their impact will be felt. To capture those changes, this *FSR* presents three potential scenarios ('upside', 'central' and 'downside') for the economy and the public finances over the medium term, assesses their implications for fiscal sustainability, and discusses how the pandemic and policy response has altered our assessment of fiscal risks.

2 The UK is on track to record the largest decline in annual GDP for 300 years, with output falling by more than 10 per cent in 2020 in all three scenarios (and contracting by a quarter between February and April). This delivers an unprecedented peacetime rise in borrowing this year to between 13 and 21 per cent of GDP, lifting debt above 100 per cent of GDP in all but the upside scenario. As the economy recovers, the budget deficit falls back. But public debt remains elevated, continuing to rise in the central and downside scenarios.

Chart 1: Public sector net debt: coronavirus scenarios versus March forecast



Source: Bank of England, ONS, OBR

3 That said, the outlook would have been much worse without the measures the Government has taken. These have provided additional financial support to individuals and businesses through the lockdown. They should also help to limit any long-term economic 'scarring', by keeping workers attached to firms and helping otherwise viable firms stay in business.

4 Our upside scenario assumes that long-term scarring is avoided, but in the central and downside scenarios it reduces output in the medium term by 3 and 6 per cent respectively. By 2024-25 the budget deficit falls back to close to our March forecast of 2.2 per cent of GDP in the upside scenario, but it remains higher – at 4.6 and 6.8 per cent – in our central and downside scenarios. This would represent structural fiscal damage of 2.4 and 4.7 per cent of GDP relative to our March forecast. None of the scenarios assume persistently lower *growth* in potential GDP, as was the case after the financial crisis and which would result in the loss of output and fiscal damage increasing over time. And they all assume that very low interest rates persist in line with market pricing, cushioning the fiscal blow. This helps stabilise public debt as a share of GDP after it has risen to a six-decade high.

5 The pandemic has hit the public finances at the end of two years during which fiscal policy has already been eased materially. This started in June 2018, when Prime Minister Theresa May announced a large NHS spending settlement, and was accelerated in Chancellor Rishi Sunak's Spring Budget this year. In it, he set out plans to borrow significant sums on an ongoing basis and merely to stabilise, rather than reduce, the debt-to-GDP ratio.

6 A key risk to this pre-virus fiscal strategy was that the highly favourable financing conditions the Government currently enjoys might not persist. In that event, the longer-term pressures from health costs and demography we routinely highlight would need to be faced against the background of greater upward pressure on the ratio of debt to GDP. In the short term, the pandemic has seen borrowing costs fall even further, which all else equal increases the scope for running a fiscal deficit while keeping debt stable as a share of GDP. But higher public debt also increases the sensitivity of the public finances to higher interest rates, increasing the risks from pursuing a fiscal strategy that assumes that financing conditions will remain favourable over the longer term. And having experienced a public health crisis on this scale, there are also likely to be pressures to devote a higher share of GDP to spending on the NHS and wider care services in the future, including on adult social care.

7 In the short term, the Government understandably remains focused on controlling the virus and reviving the economy. Indeed, on 8 July, the Chancellor announced a further package of measures that the Treasury said would cost *"up to £30 billion"* this year, in addition to which a further £32.9 billion of departmental spending was also disclosed. But at some point, given the structural fiscal damage implied by our central and downside scenarios, the longer-term pressures on spending, and the range of fiscal risks we identify, it seems likely that there will be a need to raise tax revenues and/or reduce spending (as a share of national income) to put the public finances on a sustainable path.

8 The Chancellor's latest measures were finalised and notified to us too late to be incorporated in our scenarios. They would have had a material effect had we been able to do so, but this would primarily affect the level of borrowing this year and the peak for public sector net debt, rather than the level of structural borrowing in the medium term.

9 The Government's *ability* to push the deficit ever higher rests in part on the credibility of the institutional framework that gives investors confidence that the value of the government bonds they purchase will not be deliberately eroded in the future. Its *willingness* to push the deficit higher points to an increased reliance on the use of fiscal policy in 'bad' times, which implies that debt will also need to fall more quickly in 'good' times to build up fiscal space. But the case for precautionary investment in fiscal space in good times runs directly against the encouragement to run larger deficits created by the favourable financing conditions. These conflicting pressures will no doubt figure in the Chancellor's deliberations as he designs the UK's sixth set of fiscal rules in 10 years to guide his Autumn Budget and beyond.

Economic scenarios

10 The coronavirus outbreak and the health measures put in place to address it have resulted in a very sharp economic contraction, leaving the UK on track to record its largest annual fall in GDP in 300 years. But the pace of the recovery and the extent of any long-term economic 'scarring' are both still highly uncertain. They will depend on: the course of the pandemic and the development of effective vaccines and treatments; the speed and consistency with which the Government can lift public health restrictions; the response of individuals and businesses as it does so; and the effectiveness of policy measures to protect viable businesses, foster new opportunities and sustain employment.

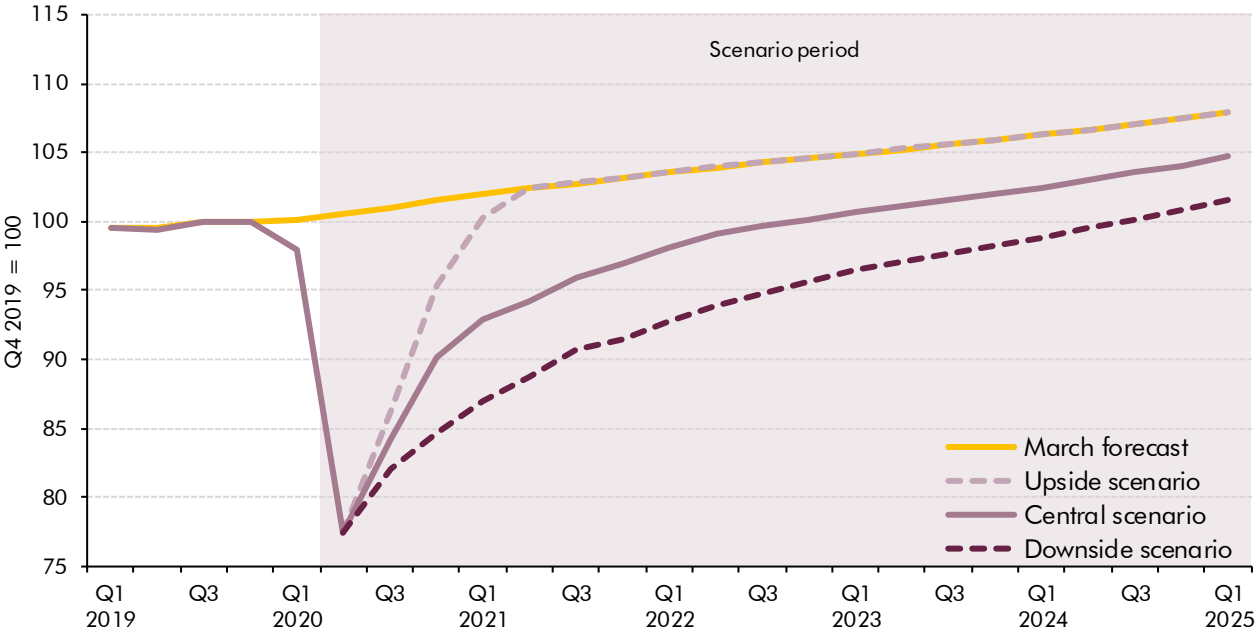
11 Given these uncertainties, we have constructed three economic scenarios upon which to base our assessment of the outlook for the public finances:

- In our **upside scenario**, activity rebounds relatively quickly, recovering its pre-virus peak by the first quarter of 2021, and there is no enduring economic scarring.

- In our **central scenario**, output recovers more slowly, regaining its pre-virus peak by the end of 2022. Cumulative business investment is 6 per cent lower than in the March forecast over five years, while unemployment and business failures remain elevated. Real GDP is 3 per cent lower in the first quarter of 2025 than in our March forecast.

- In our **downside scenario**, output recovers even more slowly, returning to its pre-virus peak only in the third quarter of 2024. This results in a more significant loss of business investment, more firm failures and persistently high unemployment as the economy undergoes significant restructuring. Real GDP is 6 per cent lower in the first quarter of 2025 than in our March forecast.

Chart 2: Real GDP scenarios versus our March forecast



Source: ONS, OBR

12 The sharp fall in output between the fourth quarter of 2019 and the second of 2020 – which we put at 23 per cent – is mainly the result of mandated and voluntary restrictions on business activity, while the temporary furloughing of employees has been heavily subsidised via the Coronavirus Job Retention Scheme (CJRS). This means that the immediate labour market consequences of lower output have been dominated by a fall in average hours worked. The Self-Employment Income Support Scheme (SEISS) also allows the self-employed to reduce hours worked as necessary without going out of business. This contrasts with the unemployment-heavy recessions of the early 1980s and 1990s, and the more even split between unemployment, average hours and productivity after the 2008-09 financial crisis.

13 Our three scenarios assume that employment was around 5 per cent lower in the second quarter than predicted in our March forecast – a shortfall of around 1.8 million people and consistent with an unemployment rate of around 9 per cent (though many are likely initially to be recorded as 'inactive' in official statistics). Total hours worked fall much faster and are 29 per cent lower than forecast in March, thanks largely to furloughing. This is concentrated among those on lower pay, so compositional effects temporarily raise productivity.

14 In all scenarios, prospects for employment and unemployment will depend heavily on what happens to furloughed workers once the CJRS is closed. We make broad assumptions about the proportion that subsequently move into unemployment rather than back to work – of 10, 15 and 20 per cent in the upside, central and downside scenarios. This means that unemployment continues to rise and employment to fall beyond the second quarter, despite output recovering somewhat. The unemployment rate peaks at 10 per cent in the third quarter of 2020 in our upside scenario; at 12 per cent in the fourth quarter in the central scenario; and at 13 per cent in the first quarter of 2021 in the downside scenario.

15 Beyond the near term, we assume some labour market scarring in our central and downside scenarios, but not in the upside. The unemployment rate therefore eventually returns to the 4.1 per cent we forecast in March in the upside scenario, but is 1 percentage point higher than that in the central scenario and a further 1 percentage point higher in the downside. In the central scenario, the level of productivity in the medium term is 2 per cent lower than in March and it is a further 2 per cent lower in the downside scenario.

16 Despite the substantial fall in nominal GDP this year, average earnings across the year as a whole rise in our upside and central scenarios, and fall by less than 2 per cent in the downside scenario. This is primarily because the CJRS subsidises the pay of employees who are producing no output. But average earnings growth in 2020 is weaker in all three scenarios than we forecast in March. It then rebounds in 2021 as people move off the CJRS and as output and hours recover, before returning to rates closer to those in our March forecast. The level of average earnings in the medium term is lower than in March in the central and downside scenarios, largely reflecting differences in the level of productivity.

17 The initial hit to GDP reflected both a large fall in supply (as businesses closed temporarily) and a large hit to demand (with households and firms unable or unwilling to spend). With the supply potential of the economy hard to interpret during a period of public health restrictions, we make no judgement about the evolution of the output gap other than to assume that it returns to zero by the five-year horizon. Reflecting this, the differences in the outlook for inflation against our March forecast largely reflect near-term movements in energy and utility prices. But over the medium term, in all three scenarios, the Monetary Policy Committee is assumed to bring CPI inflation back to target. The paths of CPI inflation and the GDP deflator are consequently the same in all three scenarios, though RPI inflation differs because of differences in the evolution of the housing market.

18 Cumulative nominal GDP growth between 2019-20 and 2024-25 falls short of our March forecast by 1.0 percentage points in the upside scenario, by 4.9 percentage points in the central and 8.5 percentage points in the downside. These shortfalls drive the paths for receipts in each scenario. The labour share of income rises very sharply in 2020 across all three scenarios (due to the support given to incomes from the CJRS and SEISS), then falls back equally sharply thereafter once the schemes close. Profits fall more sharply than GDP in 2020 before rebounding strongly in 2021, so that the share of profits in GDP is largely restored. The profile of the profits share is the same in all three scenarios.

19 The common story across these scenarios is one of public health measures greatly restricting consumption and production, while fiscal measures mitigate the associated falls in income – especially for households. As a result, there is a massive, but mostly temporary, increase in household saving this year. This is the primary counterpart to the massive rise in the budget deficit. But this does not mean that the fiscal support payments to individuals are all saved. Indeed, there will be very significant differences across households. For some households, income may not have fallen much, if at all, but their opportunities to spend have been greatly curtailed. For others, income may have fallen sharply (perhaps because they have lost their job) and they are forced to run down their savings (or take on debt) to maintain even a lower level of consumption. But the former group dominate in the aggregate.

Table 1: Key economic scenario variables

	Percentage change on a year earlier, unless otherwise stated					
		Scenario period				
	2019	2020	2021	2022	2023	2024
Central scenario						
Gross domestic product (GDP)	1.4	-12.4	8.7	4.5	2.1	1.9
CPI inflation	1.8	0.7	1.3	1.9	2.0	2.0
Employment (million)	32.8	31.3	30.9	32.2	32.6	33.0
Unemployment (million)	1.3	3.0	3.5	2.4	2.1	1.9
Unemployment rate (per cent)	3.8	8.8	10.1	6.9	5.9	5.3
Upside scenario						
Gross domestic product (GDP)	1.4	-10.6	14.5	1.9	1.3	1.4
CPI inflation	1.8	0.7	1.3	1.9	2.0	2.0
Employment (million)	32.8	31.6	32.5	33.2	33.3	33.4
Unemployment (million)	1.3	2.7	1.9	1.4	1.4	1.4
Unemployment rate (per cent)	3.8	7.9	5.6	4.0	4.0	4.1
Downside scenario						
Gross domestic product (GDP)	1.4	-14.3	4.6	5.4	3.3	2.5
CPI inflation	1.8	0.7	1.3	1.9	2.0	2.0
Employment (million)	32.8	31.2	30.4	31.7	32.3	32.6
Unemployment (million)	1.3	3.1	4.0	2.8	2.4	2.2
Unemployment rate (per cent)	3.8	9.1	11.6	8.1	6.9	6.3

Fiscal scenarios

20 In our central scenario, receipts in 2020-21 are £133 billion lower (thanks largely to a smaller economy) and spending is £135 billion higher (thanks to policy and higher unemployment) than we forecast in March. This lifts public sector net borrowing (PSNB) to £322 billion or 16 per cent of GDP, the highest peacetime level in at least 300 years. Once again, this excludes the cost of the measures announced by the Chancellor on 8 July.

21 The budget deficit roughly halves in 2021-22, then shrinks more slowly thereafter. But it remains above £100 billion in every year, and at £116 billion or 4.6 per cent of GDP in 2024-25, is still 2.4 per cent of GDP above our March forecast. In cash terms, spending quickly falls back close to the March forecast, but receipts remain well below it. As a share of GDP, spending remains higher because of the smaller economy, while the ratio of receipts to GDP is a little lower thanks to a modestly less tax-rich mix of activity.

22 Higher cash borrowing and a smaller economy push public sector net debt (PSND) above 100 per cent of GDP for the first time since the early 1960s in all years of the scenario. It falls in 2024-25, but only because loans under the Bank of England's Term Funding Scheme are repaid. It remains 27 per cent of GDP higher than in our March forecast.

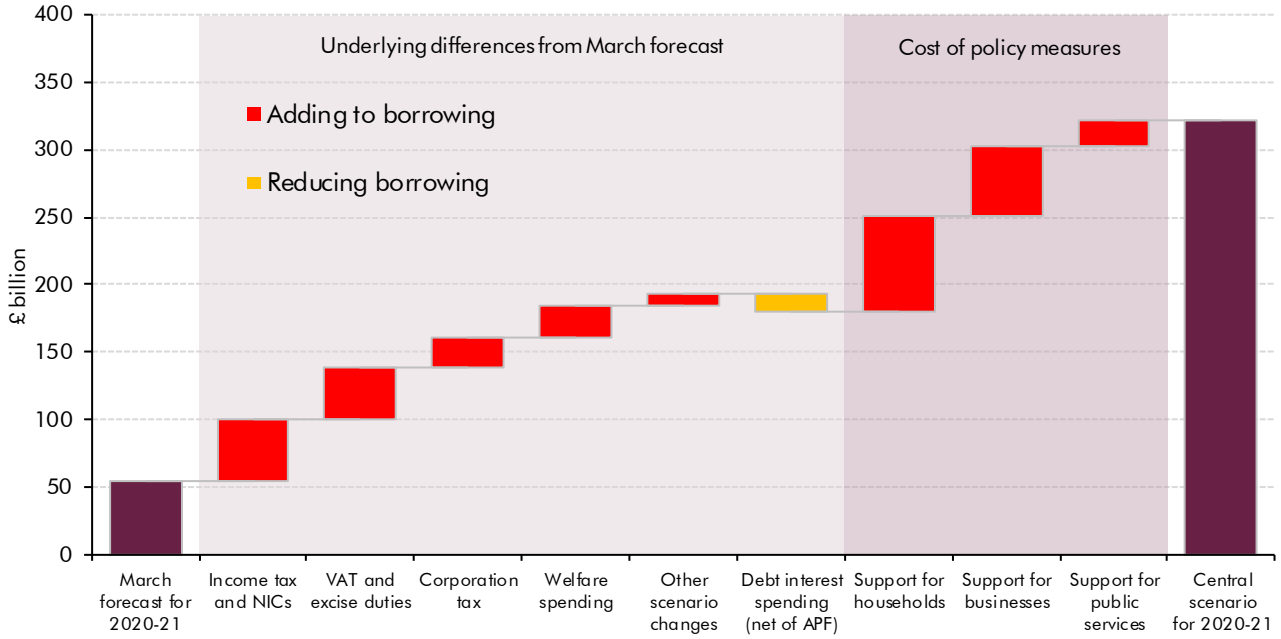
Table 2: Key fiscal aggregates: central scenario versus March forecast

	£ billion					
	Scenario period					
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Public sector current receipts	825	740	826	878	918	959
Total managed expenditure	881	1,062	980	1,010	1,042	1,075
Public sector net borrowing	57	322	154	132	123	116
Public sector net debt	1,806	2,205	2,361	2,497	2,629	2,632
	Difference from March forecast					
Public sector current receipts	-15	-133	-84	-72	-66	-63
Total managed expenditure	-5	135	3	-1	-3	-5
Public sector net borrowing	9	267	87	71	63	58
Public sector net debt	8	387	533	597	660	600
	Per cent of GDP					
Public sector current receipts	37.2	37.6	37.4	37.5	37.8	37.9
Total managed expenditure	39.8	54.0	44.4	43.2	42.9	42.5
Public sector net borrowing	2.6	16.4	7.0	5.6	5.1	4.6
Public sector net debt	88.5	104.1	103.6	104.7	106.1	102.1
	Difference from March forecast					
Public sector current receipts	-0.4	-0.3	-0.6	-0.8	-0.7	-0.6
Total managed expenditure	0.0	13.7	3.6	2.4	2.1	1.8
Public sector net borrowing	0.4	14.0	4.2	3.2	2.7	2.4
Public sector net debt	9.0	26.7	28.6	29.3	30.5	26.8

Public sector net borrowing

23 Chart 3 shows why the budget deficit is so much larger in 2020-21 than in our March forecast. Just under half the difference (£125 billion) reflects the consequences of the lockdown (mostly lower receipts and higher welfare spending, partly offset by lower debt interest spending), while just over half (£142 billion) reflects the fiscal policy response (in particular support for households via the furlough scheme and help for the self-employed). Most of the policy support is withdrawn this year, so the deficit is up on March thereafter largely because of the impact of weaker incomes and spending on tax receipts.

Chart 3: Sources of higher borrowing in 2020-21 in our central scenario



Source: OBR

The Government's policy response

24 Table 3 shows the effect of the Government policy decisions included in our central scenario against a baseline that includes their economic impact. (We normally show the cost of policy measures against a baseline that *excludes* their economic impact, but under current circumstances it would be impossible to estimate with any precision the scale of economic damage that would occur in the absence of any policy response.) This table does not include the cost of the further measures announced by the Chancellor on 8 July, which were finalised and notified to us too late to be included in our figures.

Table 3: Impact of Government policy decisions on net borrowing

	£ billion					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Effect of Government decisions	**3.6**	**142.2**	**-2.0**	**1.5**	**1.4**	**0.9**
of which:						
Public services spending	1.7	18.8	0.6	0.6	0.6	0.0
Employment support	2.3	62.2	-2.8	0.0	0.0	0.0
Business support: loans and guarantees	0.0	20.0	-0.1	-0.1	-0.1	0.0
Business support: tax and spending	-0.2	30.2	-0.2	0.1	0.0	0.0
Welfare spending measures	0.0	9.3	1.0	0.9	0.9	0.9
Other tax measures	-0.2	1.7	-0.5	0.0	0.1	0.1
Memo: Total effect in:						
Upside scenario	*3.6*	*129.3*	*-2.2*	*1.3*	*1.3*	*0.9*
Downside scenario	*3.6*	*166.1*	*-1.4*	*1.5*	*1.4*	*0.9*

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

25 These policies have a big impact in 2020-21 and a smaller one thereafter because some measures continue and some tax payments are made with a lag. The measures include:

- The **Coronavirus Job Retention Scheme (CJRS).** From March to June the CJRS paid employers a taxable grant worth 80 per cent of a furloughed employee's wage cost, up to a maximum of £2,500 a month, plus the associated employer NICs and the minimum auto-enrolment employer pension contribution on the subsidised wage. During this phase, employers could only claim support for workers that had been furloughed completely. From July to October the scheme is being scaled back by reducing the proportion of wage costs, NICs and pension contributions covered, but allowing furloughed workers to be brought back on reduced hours, with the grant contributing towards the remainder. The cost in 2020-21 is £47 billion.

- The **Self-Employment Income Support Scheme (SEISS)** is a taxable grant for the self-employed and members of partnerships, where income from these sources constitutes more than half of total income. The first payment is worth 80 per cent of average monthly profits in 2016-17, 2017-18 and 2018-19, up to a maximum of £7,500; for the second the rate is lowered to 70 per cent with a maximum of £6,570. The scheme is limited to those with annual trading profits not exceeding £50,000, and whose trade has been adversely affected by coronavirus. The cost is £15.2 billion in 2020-21.

- **Business support** measures. These include grants to small businesses, administered by local authorities, and a 12-month business rates holiday for eligible retail, hospitality, leisure and nursery properties. The Government also pledged up to £330 billion in guarantees to support the economy, covering several loan schemes and a reinsurance agreement with trade credit insurance providers. Take-up and the proportion of the guarantees called are both uncertain, but we assume a cost of £20 billion in 2020-21.

- Additional spending on **public services**, including for health services, local authorities, measures to support vulnerable individuals, supporting rail services, a grant to Transport for London and funding for the devolved administrations.

- **Welfare** measures. The biggest costs relate to the £20 a week increase in the standard allowance of universal credit and the basic element of working tax credit, plus higher local housing allowance rates in housing benefit and universal credit.

26 The Bank of England has also taken action, including additional gilt purchases, provision of cheap funding for banks that lend to the real economy and relaxing bank capital requirements. The main fiscal implications are indirect, via their effects on the economy (which we do not attempt to isolate). The additional quantitative easing also directly raises measured PSND (because the gilts are purchased from the private sector at a premium to their nominal value) and reduces debt interest payments to the private sector (because the gilts purchased are in effect refinanced at Bank Rate). And the new Term Funding Scheme adds £150 billion to PSND (because the loans are deemed illiquid so do not net off). The scenarios assume that £120 billion will be repaid after four years and the rest after six.

Receipts

27 Including the effect of policy changes, receipts in 2020-21 are 15.2 per cent lower than in our March forecast, a slightly larger shortfall than that in GDP. Receipts then recover, but by 2024-25 are still 6.2 per cent lower than our March forecast. The main differences are:

- **Income tax and NICs** are £43.5 billion lower in 2020-21, due mostly to lower employment and earnings. Medium-term economic scarring leaves receipts £27.6 billion lower than our March forecast in 2024-25.
- **VAT** is £32.4 billion lower in 2020-21, thanks largely to lower consumer spending, with purchases of items taxed at the standard rate hit harder than spending in aggregate. VAT receipts remain £14.1 billion below our March forecast in 2024-25.
- **Corporation tax** receipts are £20.3 billion lower in 2020-21, thanks to much weaker profits, plus much higher losses that can be used to offset past and future liabilities. Receipts remain £6.0 billion below our March forecast in 2024-25.
- **Fuel duty** receipts are £4.7 billion lower in 2020-21, reflecting the lockdown, with some persistence across the scenario due to the weaker path for economic activity.
- **Air passenger duty** is hit particularly hard due to the collapse in air travel. In 2020-21, receipts fall by nearly two-thirds and are £2.7 billion below our March forecast.
- Other significant shortfalls are seen in **business rates** (mostly due to the business rates holidays for some sectors), **capital gains tax** and **stamp duty land tax**.

Central government spending and local authorities' borrowing

28 The combined effect of the recession and the cost of measures generate a sharp rise in public spending in cash terms this year and an even sharper one as a share of GDP. This is dominated by the £132 billion cost of policy measures, but the 2.3 million fall in employment on average across the year adds £25 billion to welfare spending.

29 Partly offsetting these upward pressures, the scenario assumes a further £10 billion of underspending by departments on capital projects and business-as-usual hiring and procurement. Debt interest is also lower, despite a much higher stock of debt, because of lower interest rates and inflation, and the savings associated with more quantitative easing. Central government debt interest net of quantitative easing effects is £13.9 billion lower than our March forecast in 2020-21 and still £7.3 billion lower by 2024-25.

30 By 2024-25 spending is only marginally below our March forecast, with the effect of higher unemployment on welfare spending largely offset by debt interest costs remaining lower and by lower inflation across the period leading to lower benefit uprating.

31 Local authorities have faced considerable financial pressures due to the coronavirus outbreak, from the additional costs of providing services and reduced income from many sources. After accounting for the £3.2 billion of support already provided by central government, we have assumed that local authorities meet a remaining £6 billion shortfall this year by drawing on reserves. This raises their net borrowing by £6 billion relative to our March forecast. In practice the shortfall could be met in other ways, and indeed on 2 July the Government announced a further package of financial support for local authorities.

Public sector net debt

32 Net debt rises above 100 per cent of GDP in 2020-21 for the first time since 1960-61. It stays above 100 per cent across the period and is between 26 and 31 per cent of GDP higher than our March forecast. The lower path for nominal GDP raises the debt-to-GDP ratio in all years, but it is the increase in the cash level of debt that dominates (adding £600 billion to the stock of debt by 2024-25). The bulk of this increase is explained by the cumulative impact of higher borrowing. Quantitative easing and TFS loans also increase PSND markedly, though this effect declines in 2024-25 as TFS loans are repaid. Excluding the Bank of England, underlying debt rises steadily in all years due to continuing deficits.

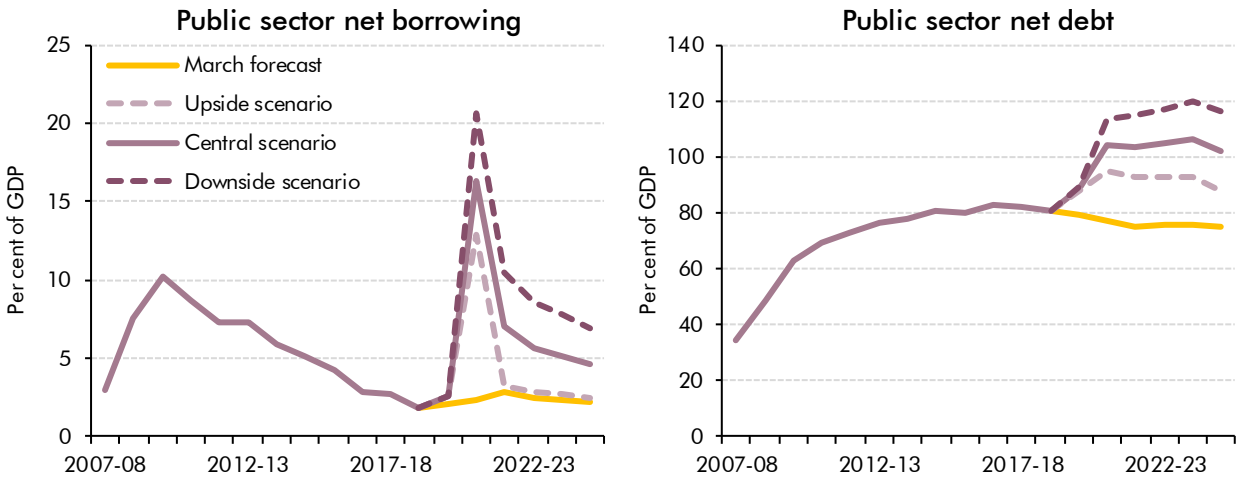
33 Despite the materially higher deficits in our central and downside scenarios than in our March forecast, the debt-to-GDP ratio only rises modestly from 2021-22 onwards (abstracting from the uneven effects of TFS loans). This is little changed from the modest declines in our March forecast. This reflects the fact that interest rates follow a much lower path in these scenarios than we assumed in March, so the gap between the interest rate on government debt and GDP growth (the 'growth-corrected interest rate' or 'R-G') is more favourable than it was then. This cushions the blow from higher non-interest deficits.

Comparing our upside, central and downside scenarios

34 The detailed bottom-up assessment of the fiscal implications of our central economic scenario provides the baseline for assessing how fiscal outcomes might differ in the upside and downside scenarios. The downside scenario assumes a greater intensity of various fiscal consequences, notably in respect of loan guarantees and the buoyancy of corporation tax.

35 Chart 4 shows how the three scenarios compare to our March forecast in respect of PSNB and PSND. In the upside scenario, the swift economic recovery delivers an equally swift return of borrowing close to our March forecast, so the higher profile for debt relative to March is largely explained by the 13 per cent of GDP deficit this year and the effect of quantitative easing and TFS loans. In the downside scenario, the deficit hits 21 per cent of GDP this year, and remains above 10 per cent next year and 6 per cent in 2024-25. Consequently, debt rises faster and remains higher than in our central scenario.

Chart 4: PSNB and PSND: scenarios versus March forecast



Source: ONS, OBR

Long-term fiscal sustainability

36 We normally base our long-term projections and assessment of fiscal sustainability on our most recent medium-term forecast – which in this case was at the time of the March Budget. But since that was quickly overtaken by events, in this *FSR* we have examined the sensitivity of our long-term projections to the different medium-term starting points provided by our three scenarios. The varying degrees of deterioration in the fiscal position they present come on top of a two-year period in which fiscal policy has already been eased significantly.

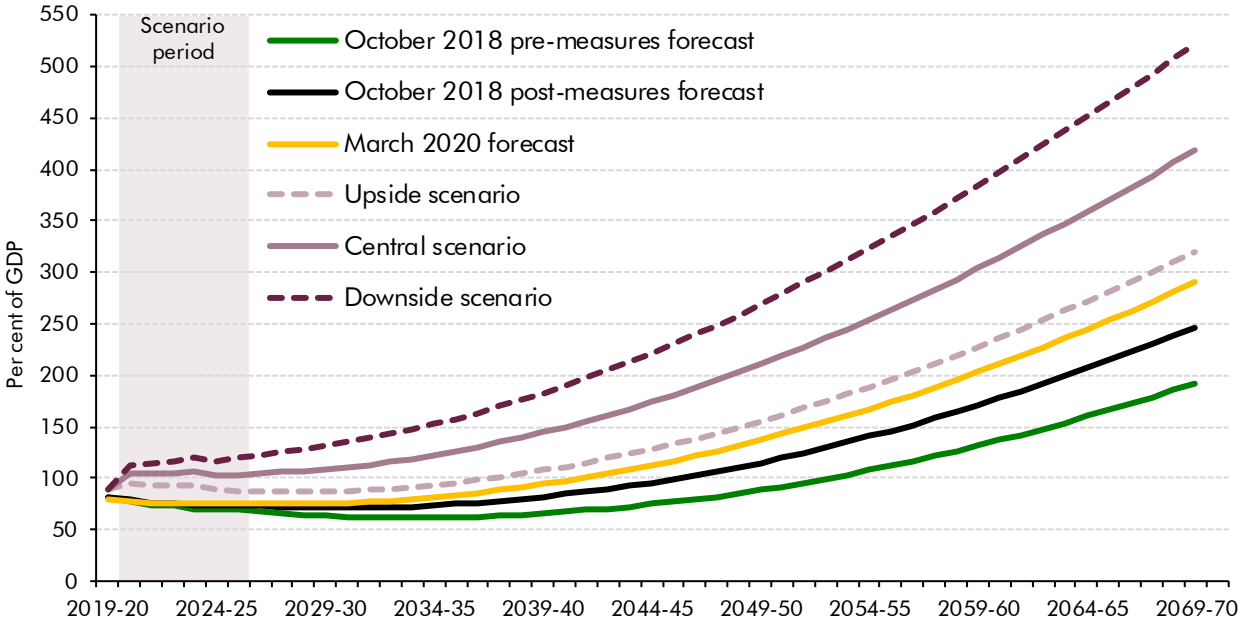
37 In November 2016, the Government set out a fiscal objective "*to return the public finances to balance at the earliest possible date in the next Parliament*". At no point thereafter did it look likely to meet that objective (though it was once within reach on a pre-measures basis). The goal was in effect abandoned following the spending settlement announced for the NHS in June 2018. That was followed by further sustained fiscal loosening in the March 2020 Budget. Together, these helped to raise our forecast for PSNB at the forecast horizon from a pre-measures surplus of 0.1 per cent of GDP in October 2018 to a post-measures deficit of 2.2 per cent of GDP in March 2020. (Part of the deterioration also reflects an improved statistical treatment for student loans.) In our scenarios, it is higher still.

38 Chart 5 illustrates the long-term paths for public sector net debt that follow from these pre-virus medium-term starting points and those implied by our three coronavirus scenarios. These have been produced using a simpler approach than we normally adopt in *FSRs*. They draw heavily on our 2018 *FSR* modelling, adjusted in places to take account of the ONS's subsequent 2018-based population projections and the assumption in our March forecast that net inward migration would be reduced by forthcoming migration regime changes.

39 In all cases the public finances would clearly be on an unsustainable path, with interest costs taking up an ever-larger share of GDP – a conclusion that has been common to all our *FSRs* to date. And while our upside scenario delivers a long-term path similar to that which we would have seen on the basis of our March forecast, the central and downside scenarios

show a materially worse picture thanks to larger primary deficits that are for the purposes of these projections assumed to be left unchecked. Addressing this via a decade-by-decade fiscal tightening would require around one-and-a-half times more tightening in our central scenario than it would have pre-virus, and around twice as much in the downside scenario.

Chart 5: Public sector net debt: long-term projections



Note: The October 2018 forecasts' 2024-25 jumping-off points are assumed to equal their 2023-24 medium-term horizon values.
Source: ONS, OBR

Reassessing fiscal risks

40 The higher paths for public debt and the budget deficit in our three scenarios illustrate the scale of the fiscal risks that have just crystallised as a result of the pandemic. A large shock such as this will have some implications for all sources of fiscal risk, even if only that each must now be managed in the context of different ongoing pressures and higher public debt. We focus here on what appear to us to be the most material changes.

Macroeconomic and financial sector risks

41 The economy has now experienced two 'once-in-a-lifetime' shocks in just over a decade. The budget deficit peaked around 10 per cent of GDP after the financial crisis and tops 15 per cent this year on our central scenario, whereas no previous post-war recession pushed it as high as 7 per cent of GDP. This may just be bad luck, but it could also indicate that very large shocks may be more common than we have previously assumed. If the periodic damage done to the public finances by such shocks is getting larger and more frequent, policymakers may need to re-evaluate what constitutes prudent policy during normal times.

42 In addition to what the pandemic might tell us about economic shocks, post-recession reassessments of potential output growth are common and there are several pandemic-related aspects worth noting. For example: some sectors – especially retail, hospitality and

travel – might be permanently affected; the virus is likely to have significant effects on people's expectations and behaviour (including their risk aversion having experienced particularly severe shocks); and the substantial rise in business indebtedness, which is likely to weigh on investment and innovation and to result in more business insolvencies.

43 Despite the near-unprecedented depth of the current recession, it has not to date seen fiscal risks crystallising via the financial sector. In part that reflects the additional loss-absorbing capacity that the banking system has built up over the past decade. But, perhaps more importantly, the Government has already opted to take on a large portion of the risk itself through its provision of financial support to individuals and businesses. Had it not done so, the banking system would probably have come under severe strain as loan defaults rose. It seems implausible that the financial sector could ever be totally resilient to extreme events such as a major pandemic, so the need for the state to act as an 'insurer of last resort' will remain. The Government's future fiscal strategy will need to take account of this risk.

Revenue risks

44 The largest risks to future revenues are those that affect the whole economy, as the sharp fall in receipts this year attests. But the pandemic will generate or exacerbate other risks:

- It seems highly likely that the economy will emerge from this crisis with a different **composition of output, expenditure and income** than would otherwise have been the case. This could affect the tax-to-GDP ratio even if the overall size of the economy is unaffected, because some activities are taxed more heavily than others.

- Some tax bases may remain subdued for some time. Similar **loss of buoyancy** was a feature of the years after the financial crisis – most notably in corporation tax, thanks to loss relief rules. Losses are likely to be more widespread now than they were then.

- There are risks around **tax debt and recoveries** – the overall value of tax that initially goes unpaid and then is subsequently repaid. Tax debt has spiked in recent months and some firms will inevitably go out of business before they can pay it off.

- The significant demands on HMRC in the current period could also lead to a **fall in compliance.** To illustrate the risk: with a 1 percentage point increase in the tax gap, receipts would be around £6 billion (0.3 per cent of GDP) lower this year.

Public spending risks

45 Primary spending in 2024-25 is already 1.8 per cent of GDP higher in our central scenario than in our March forecast, and 3.3 per cent higher in our downside scenario – largely because the economy is smaller rather than any new medium-term spending choices. But the pandemic may create several additional sources of pressure on public spending:

- Having experienced a public health crisis on this scale, there is likely to be pressure to devote a higher share of GDP to the **NHS and wider care services**, including adult social care, where proposals for reform have been pushed back repeatedly.

- Temporary measures to support individuals and businesses through the crisis are expected to cost £142 billion in 2020-21 in our central scenario. History suggests that some of these **temporary support measures could become permanent**.

- There are many other **individual risks** either created or exacerbated by the crisis. These range from the pressures on local authorities' finances to the risks posed by the historical link between high unemployment and future chronic health conditions.

Balance sheet and debt interest risks

46 The pandemic changes our view of several sources of balance sheet and debt interest risk:

- **Interest rate risks**. A key driver of the debt-to-GDP ratio is the 'growth-corrected interest rate'. This has drifted down over the past couple of decades, but the higher post-virus stock of public and private debt around the world could put upward pressure on the underlying ('natural') rate of interest at a time when GDP growth is still depressed.

- **Financing risks**. This year's huge cash deficit must be financed on top of a bulge in refinancing as debt incurred during and after the financial crisis matures. At present, the associated financing risks have been mitigated by additional quantitative easing and by the Government's access to an expanded (but as yet unused) overdraft facility at the Bank. But, further down the road, the higher level of debt relative to GDP could provoke a rise in risk premia, especially if investors doubt the Government's commitment to running a sustainable fiscal policy alongside continued low inflation.

- **Sensitivity to interest rate and inflation surprises**. Higher gross financing needs and a larger stock of debt in effect financed at Bank Rate (as a result of quantitative easing) mean that debt interest costs are now even more sensitive to these risks than pre-virus.

- **Real-world and statistical risks from balance sheet exposures**. The Government has increased its stock of explicit contingent liabilities, while implicit guarantees to some sectors of the economy could result in further fiscal support measures. And where support is accompanied by greater government control over the actions of those receiving it, there is a risk that those entities are reclassified to the public sector.

Policy risks

47 The fiscal policy challenge over the coming years is uncertain, but the deterioration in the fiscal position in our medium- and long-term scenarios, together with the various risks described above, could give rise to further future policy risks. Namely:

- Higher levels of public debt and lower interest rates relative to GDP growth mean that the **debt-stabilising level of primary borrowing** in the medium term is higher than in our March forecast. So the Government might be tempted to pursue fiscal objectives that allow it to accommodate higher borrowing over the medium term.

- If Bank Rate remains near to its effective lower bound, there could be greater **reliance on fiscal policy** in 'bad' times. If that were the case, debt would need to fall more quickly in 'good' times to prevent the debt-to-GDP ratio from ratcheting upwards.

48 If fiscal policy is looser in 'normal' times than would previously have been the case, public debt could be on a higher trajectory with a greater likelihood of ratcheting upwards. This would further increase the sensitivity of the public finances to balance sheet risks. But given the structural fiscal damage implied by our central and downside scenarios, and its implications for long-term sustainability, in almost any conceivable world there would be a need at some point to raise tax revenues and/or reduce spending (as a share of national income) to put the public finances on a sustainable path.

1 Introduction

Context

1.1 The coronavirus pandemic has not displaced the long-term pressures that we typically focus on in our *Fiscal sustainability reports* (*FSRs*), but it has significantly changed the baseline against which their impact will be felt. So we have adopted a different approach in this year's *FSR*. Chapters 2 (economy) and 3 (fiscal) lay out three medium-term scenarios that then serve as different starting points for our long-term sustainability analysis. We present the conclusions of that analysis in Chapter 4, but then devote more space than usual in Chapter 5 to the risks to sustainability posed by the shock.

1.2 Ordinarily the *FSR* would contain a discussion of the Whole of Government Accounts (WGA) – focusing on how its presentation of the public sector balance sheet compares with the National Accounts. The 2019-20 WGA has, however, been delayed by the pandemic.

1.3 The rest of this introductory chapter first describes the main conditioning assumptions underpinning our analysis and then outlines our approach at each step of the process.

Conditioning assumptions

1.4 Our most recent *EFO* was finalised in mid-February, before the full impact of the pandemic became clear. Even our initial *Coronavirus reference scenario*, published on 14 April, was based on relatively little information about the duration and intensity of the public health measures and their economic impact. The economic and policy assumptions underpinning the scenarios contained in this report therefore embody new information and judgements about the short- and medium-term impact of the pandemic and the accompanying policy measures, as well as extending our assessment to the long term.

1.5 As regards the coronavirus outbreak and the Government's policy response, the full lockdown came to an end in England on 13 May, but restrictions are only being lifted gradually and on condition that the spread of the disease remains under control.[1] There is therefore considerable uncertainty about what course the pandemic and the economy will take from here. To reflect these uncertainties, we present three possible scenarios: 'upside', 'downside' and 'central'. These have not been built up from particular assumptions about the course of the pandemic. Rather, we start with assumed profiles for output, so each scenario may be compatible with a range of health and behavioural outcomes.

[1] HM Government, *OUR PLAN TO REBUILD: The UK Government's COVID-19 recovery strategy*, May 2020.

Medium-term economic scenarios

1.6 Our initial reference scenario was based on two key simplifying assumptions: that the public health measures to slow the spread of the virus would be fully in place for three months and lifted progressively over the subsequent three; and that the economy would bounce back to its pre-virus level of activity, with no permanent 'scarring' of the economy over the medium term. We now know more about the initial phase of public health restrictions and have initial data on their effect on economic activity, so have refined our assumptions about the immediate economic impact of the pandemic and lockdown. We have also had more opportunity to consider possible alternative paths for the subsequent recovery and the likely extent of scarring in the medium term.

1.7 In Chapter 2 we use the three scenarios to illustrate different possible paths for the economy over the coming five years. Each incorporates the same initial fall in GDP, but then embodies different assumptions regarding the pace of the recovery and the degree of scarring. The central scenario has been produced using many of our usual economic forecasting tools, but should still be thought of as a scenario rather than a forecast of what is most likely to happen. In contrast, the upside and downside economic scenarios have been generated using the simplified technology we deploy in our *EFO* scenario analyses.

Medium-term fiscal scenarios

1.8 Changes in the medium-term fiscal outlook between *FSR*s tend to be a material source of change in our long-term fiscal projections, illustrating the importance of the 'jumping-off point' for analysis of fiscal sustainability. In Chapter 3 we use our three economic scenarios as a basis for three corresponding fiscal scenarios that draw out the possible implications of the pandemic for the budget deficit and the public sector balance sheet in five years' time.

1.9 The choice of scenarios allows us to show how – on current Government policy – the cumulative loss of GDP relative to the Budget 2020 path is the key driver of the increase in public debt, while the degree of medium-term economic scarring largely determines prospects for the structural budget deficit. The upside and downside scenarios are calibrated to be symmetrical around the baseline scenario in terms of their impact on potential output in the medium term, but their fiscal implications are somewhat asymmetric.

1.10 The central scenario has not been produced in the same way as our full *EFO* forecasts, which follow an iterative process of scrutiny and revision of tax and spending forecasts produced on our behalf by government departments using the outputs of our economy forecast. But we have used our disaggregated fiscal forecasting tools to supplement the simple ready-reckoning that underpinned our initial reference scenario. And we have drawn on the expertise of forecasters in different parts of government and on insights from several external bodies, in particular with respect to the near term. Reflecting the constraints under which we and departments are working, the process was, however, simplified where possible – for example, we did not consider all the very small lines of receipts and spending normally covered in an *EFO* and we took a simple top-down view of local government finances. The alternative scenarios were produced using our standard *EFO* scenarios tool.

Assessment of fiscal sustainability

1.11 The framework we use to assess fiscal sustainability has been described in the introductions to previous *FSR*s. We also detail the various assumptions needed to produce long-term fiscal projections. These include: choices about which ONS population projection to use and what that means for the State Pension age; assumptions about many economic variables over the long term; and prospects for non-demographic cost pressures in the health and adult care sectors. Chapter 4 outlines these assumptions more briefly than would normally be the case – and we have kept changes since our 2018 *FSR* to a minimum.

1.12 Our focus instead is on how the different medium-term fiscal positions implied by each of our three scenarios affect long-term sustainability. Public debt will be higher over the medium term than in pre-coronavirus forecasts, but what matters most for fiscal sustainability is what happens to the structural budget deficit. As one would expect, the worse the medium-term economic scarring and wider the medium-term structural deficit, the greater the challenge in ensuring long-term fiscal sustainability. Though this may seem obvious, it highlights how the pandemic has served to heighten the long-term challenges that we identified in previous *FSR*s, notably those of ageing and healthcare costs.

Fiscal risk assessment

1.13 In a normal *FSR* we would consider risks to fiscal sustainability via alternative long-term scenarios – varying assumptions about demographics or long-term health cost pressures, for example – and through the lens of provisions and contingent liabilities recorded in the WGA. We use our biennial *Fiscal risks reports* (*FRR*) to provide a deeper assessment of these and many other sources of fiscal risk. Given the uncertainty around medium-term prospects, we use Chapter 5 to assess fiscal risks within the framework that underpins our *FRR*s.

1.14 As ever, macroeconomic risks, including those to the 'growth-corrected interest rate' (a key driver of public sector debt), look to be the most material sources of fiscal risk, together with the policy risk that as a result of the pandemic the Government concludes that it should spend a permanently higher proportion of GDP on public services (notably health and social care). They are overlaid by a host of specific revenue, expenditure and balance sheet risks. Moreover, they supplement, rather than replace, the risks to the public finances we identified in our 2019 *FRR*, including those relating to Brexit and climate change.

2 Economic scenarios

Introduction

2.1 This chapter:

- outlines the **three scenarios** we use to illustrate plausible paths for the UK economy, and sets out the context in relation to the pandemic;
- lists our **conditioning assumptions** for fiscal and monetary policy, and for asset prices;
- describes the trajectories for **real GDP**, including the recovery paths and scarring;
- discusses the implications for the **labour market** and for **inflation**; and
- outlines the profiles for **nominal GDP**, which is the key driver of the outlook for the public finances, and for the **property market** and **sectoral net lending**.

Scenarios and context

Uncertainties and the three scenarios

2.2 The coronavirus outbreak and the steps taken by the Government to contain it have generated what is likely to be the sharpest annual contraction in UK output in three hundred years. There is, however, considerable uncertainty about how the economy will evolve from here on. That stems not only from uncertainty regarding the course of the pandemic and the speed with which effective vaccines and treatments become available, but also from uncertainty about the pace of the recovery and the extent of the long-term reduction in output ('scarring') arising from bankruptcies and necessary changes in the organisation of businesses. Moreover, these facets are likely to be interrelated, with an early and lasting defeat of the disease facilitating a rapid recovery and a return to something approaching the pre-virus state. Alternatively, slow progress in tackling the disease is likely to result in a sustained disruption to economic and social life, slowing the recovery and necessitating long-lasting changes in the structure and operation of the economy.

2.3 To reflect these uncertainties, we present three – out of many – possible economic scenarios. We do not seek to build these up from particular assumptions about the course of the pandemic. Rather, we start with assumed profiles for output, so each scenario may be compatible with a range of health and behavioural outcomes. Each scenario incorporates the same initial fall in GDP witnessed between February and April (as reported by the ONS in the provisional monthly data published on 12 June), but then embodies different assumptions regarding the pace of the recovery and the degree of long-term scarring:

- In our **upside scenario**, activity rebounds relatively quickly, recovering its pre-virus peak by the first quarter of 2021, and there is no scarring. This scenario is essentially an updated version of the reference scenario that we published in April and would require a very rapid resolution of the threat from the virus.[1]

- In our **central scenario**, output recovers more slowly, regaining its pre-virus peak by the end of 2022. This might be consistent with an effective vaccine or treatment taking around a year to deliver, but also with a faster resolution of the health threat but greater persistence in its economic consequences. Cumulative business investment is 6 per cent lower than in the March forecast, while unemployment and business failures remain elevated. Real GDP is 3 per cent lower in the first quarter of 2025 than in our March forecast.

- In our **downside scenario**, output recovers even more slowly. That might be consistent with the indefinite maintenance of strong social distancing measures as the virus becomes endemic and without an effective treatment. This would result in a more significant loss of business investment, more firm failures and persistently high unemployment as the economy undergoes significant restructuring. Real GDP is 6 per cent lower in the first quarter of 2025 than in our March forecast.

2.4 These scenarios are intended to provide a plausible range of outcomes against which the implications for the public finances can be assessed, but there is no good basis for forming a judgement as to their relative likelihood. In particular, we would not claim that the central scenario is the most likely of all possible outcomes. The upside scenario is probably about the best that can be hoped for, but even worse outcomes than the downside scenario are certainly possible (discussed further in paragraph 2.24).

2.5 We have drawn on evidence regarding the economic impact of previous epidemics in calibrating our three scenarios. As noted in our initial reference scenario, much of the economic damage typically results from the restrictions imposed by governments to control the disease, rather than the effects of the disease itself. Analysis of the 1918 flu pandemic has found the outbreak reduced GDP per capita by around 6 per cent in a typical affected country.[2] Research on previous epidemics regarding the speed of economic recovery suggests that on average it takes three years to regain the initial level of GDP,[3] with firms suffering reduced profitability and employment, and heightened corporate debt.[4] Finally, there is some evidence that fast and aggressive action tends to be less economically damaging in the long run than a more cautious approach.[5]

[1] OBR, *Commentary on the OBR coronavirus reference scenario,* 14 April 2020.
[2] Barro, R.J., Ursúa, J.F. and Weng, J., 2020. *The coronavirus and the great influenza pandemic: Lessons from the "spanish flu" for the coronavirus's potential effects on mortality and economic activity* (No. w26866). NBER.
[3] Leslie et al., 2020. "Long haul lockdown: Three scenarios for the impact of coronavirus on the UK economy".
[4] Ma, C., Rogers, J.H. and Zhou, S., 2020. Global economic and financial effects of 21st century pandemics and epidemics.
[5] Correia, S., Luck, S. and Verner, E., 2020. Fight the Pandemic, Save the Economy: Lessons from the 1918 Flu. Federal Reserve Bank of New York, Liberty Street Economics (March 27).

Key assumptions and judgements

Fiscal policy since March

2.6 The Government has announced a series of policy measures since March that are designed to support public services, household incomes and business finances. As we describe in Chapter 3, our central scenario assumes that they will cost £142 billion in 2020-21, contributing to the budget deficit hitting 16 per cent of GDP. (This excludes the additional measures announced by the Chancellor on 8 July, too late to be included.) The direct support they provide for private sector incomes means that those incomes fall considerably less than private sector output and expenditure. The Government is in effect operating as an 'insurer of last resort' and the measures should help keep otherwise viable businesses in operation and allow workers to stay attached to firms, limiting long-term economic scarring that would both harm future living standards and increase the structural budget deficit.

2.7 As regards the direct contribution of government spending to GDP, we have assumed that:

- **Government consumption** (broadly equivalent to departmental resource spending) is the same in cash terms across all three scenarios. It is unchanged from our March forecast in all but three respects. First, we have incorporated the announced increases in departmental spending up to, but not including, the 8 July statement. Second, we assume that this will be partly offset by disruption to non-virus-related hiring and procurement plans. Third, real government consumption will be affected by the decline in measured output in education and health (see Table 2.1). From 2021-22 onwards, government consumption follows the same path as it did in our March forecast.

- **Government investment** (broadly equivalent to departmental capital spending) is hit by disruption in the construction sector this year, and so it contracts by 8 per cent in 2020, compared to the expansion of 2 per cent that we expected in March. In all three scenarios, though, this disruption ceases to have an effect by the middle of 2021 and, from this point, the path of government investment follows our March forecast.

Monetary policy and asset prices since March

2.8 The Monetary Policy Committee (MPC) has cut Bank Rate twice since March, taking it down from 0.75 to 0.1 per cent. It has also increased the stock of corporate and UK government bond purchases – 'quantitative easing' – by £300 billion to £745 billion. Our scenarios assume that Bank Rate will follow the path implied by sterling forward interest rate markets on average over the 10 days to 21 May. On this basis, Bank Rate edges down to 0 per cent in 2021 before rising gradually to just 0.2 per cent by the first quarter of 2025. It remains well below the flat 0.75 per cent upon which we conditioned our March forecast.

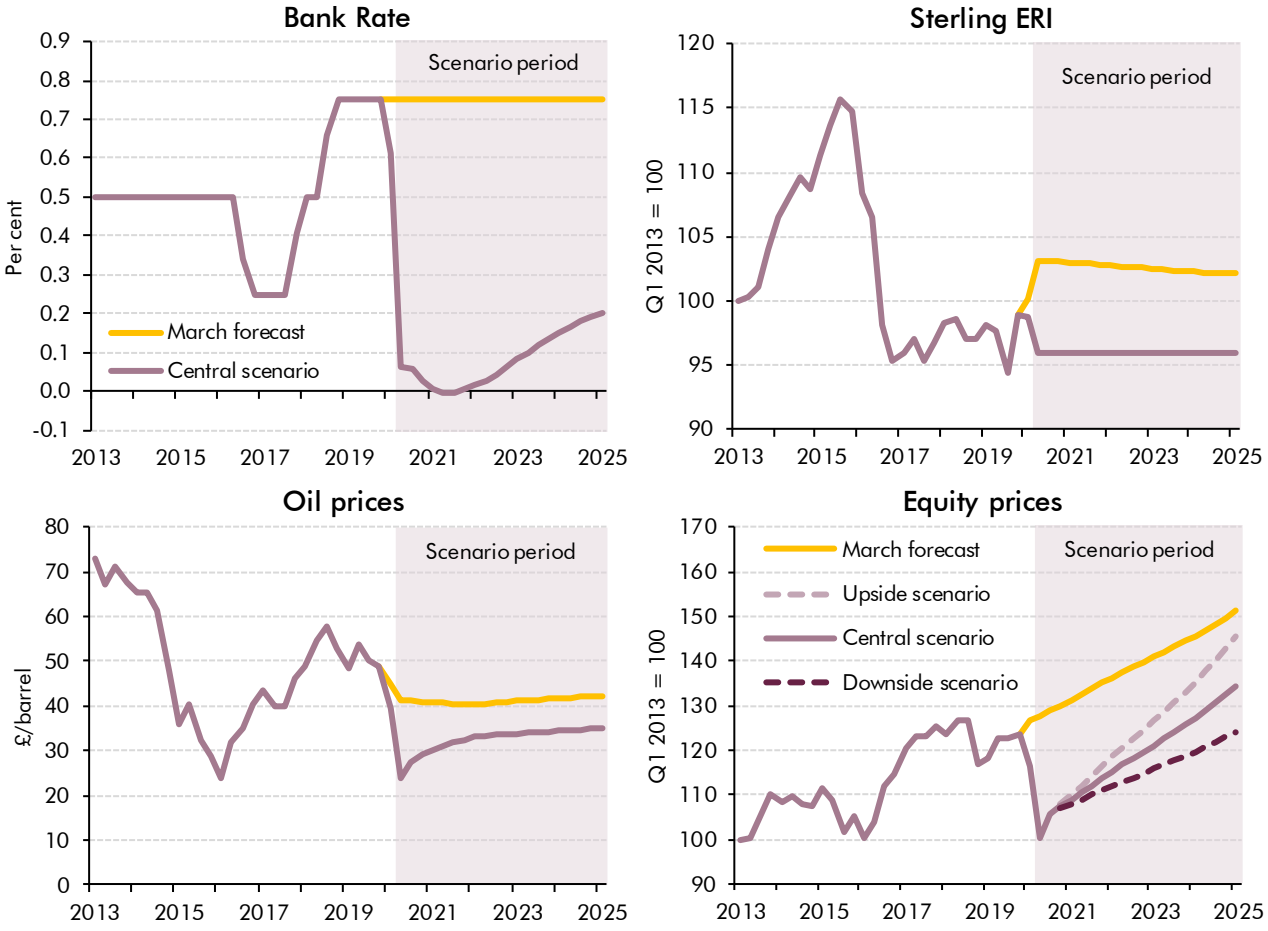
2.9 The sterling effective exchange rate has been volatile so far this year, falling by 2.4 per cent on 23 March alone – the day of the Government's lockdown announcement. Our scenarios are all based on the effective exchange rate remaining flat at its 10-day average, which is 6 per cent weaker on average than we assumed in March.

2.10 Oil prices fell very sharply in the initial phase of the outbreak, as demand plummeted and Russia and Saudi Arabia engaged in a brief price war. As countries have eased lockdowns, prices have recovered somewhat. Based on the same 10-day average of the forward curve, sterling oil prices are assumed to be 21 per cent lower on average in all three scenarios than our March forecast, with prices stabilising at around £34 a barrel from 2022 onwards.

2.11 Based on the experience of past recovery phases, our central scenario assumes that equity prices partially recover the shortfall relative to our March forecast caused by the sharp drop so far this year. But they remain 11 per cent below our March forecast at the scenario horizon. By the same point, equity prices are only 4 per cent lower in the upside scenario, whereas the remain 18 per cent lower in the downside scenario.

2.12 Chart 2.1 shows the paths for Bank Rate, the sterling effective exchange rate, oil prices and equity prices in our scenarios and how they compare to our March forecast. For all but equity prices, the same assumptions are employed in all three scenarios.

Chart 2.1: Market-derived scenario assumptions



Note: The central, upside and downside scenario paths have the same assumptions for Bank Rate, sterling ERI and oil prices.
Source: Bank of England, Datastream, OBR

Assumptions about the UK's departure from the EU

2.13 We retain the same assumptions regarding Brexit as in our March 2020 *Economic and fiscal outlook* (*EFO*). Following the UK's exit from the EU on 31 January 2020, the current transition period is assumed to continue until the end of 2020, in line with the EU (Withdrawal Agreement) Act. During this period, the trading relationship between the UK and the EU is assumed not to change. Thereafter, the UK is assumed to move in an orderly fashion to a new trading arrangement with the EU – with the effect broadly consistent with the terms of a conventional free trade agreement. It is possible that the transition period will end without a new trade deal in place, so the UK could revert to trading with the EU on WTO rules.[6] That would pose downside risks to short- and medium-term growth prospects on top of the economic challenges created by the pandemic.

Real GDP scenarios

The initial impact on GDP

2.14 The lockdown measures imposed in mid-March caused output to fall sharply. The ONS's initial estimate was that GDP fell 6 per cent in March and a further 20 per cent in April.[7] As Table 2.1 shows, the impact varied dramatically across sectors. Accommodation and food services fared the worst, with output falling by 92 per cent between February and April. Conversely, output in public administration was little changed.

2.15 To estimate the path of GDP for the rest of the second quarter we have drawn on high-frequency data – including the ONS Business Impact of COVID-19 Survey (BICS), card spending data and the Bank of England's monthly Decision Maker Panel (DMP) – to estimate how much activity has recovered since restrictions began to be eased. We have cross-checked this against sectoral estimates based on the Government's proposals to lift restrictions, taking into account information such as the share of key workers in each industry, those able to work from home, and input-output linkages between sectors.

2.16 This suggests that the trough in output occurred in April – approximately 25 per cent below February – and the recovery began in May. In all three scenarios, we assume GDP in June will be 20 per cent below its level in February. This gives a fall in GDP of 21 per cent in the second quarter, following the 2 per cent fall estimated by the ONS for the first quarter.

[6] Chapter 10 of our 2019 *Fiscal risks report* set out some external estimates of the long-run impact of trading with the EU under WTO rules and explored some of the potential channels through which an abrupt change in trading relationship might affect the economy and public finances.

[7] On 30 June the ONS revised down its estimate of growth in Q1 from -2.0 to -2.2 per cent, including an indicative contraction in March of 6.9 per cent. This data was received after our economic scenarios had been closed. The ONS will provide a new monthly GDP profile in its May GDP release on 14 July.

Table 2.1: Change in output, monthly outturn

Sector	Per cent	
	February to April change in GDP	Weight in whole economy value added
Accomodation and food services	-92	2.8
Other services	-48	3.5
Construction	-44	6.1
Education	-43	5.8
Transportation	-38	4.2
Administrative and support	-36	5.1
Wholesale and retail	-34	10.5
Manufacturing	-28	10.2
Human health	-23	7.5
Professional, scientific and technical	-21	7.6
Information and communication	-15	6.6
Energy and water	-13	3.4
Finance and insurance	-6	7.2
Agriculture	-6	0.7
Real estate	-3	14.0
Public admin and defence	0	4.9
Total	**-25**	**100.0**

2.17 There is always uncertainty around initial GDP estimates because they are based on incomplete information, but the degree of uncertainty is particularly large at present. As a result, these early estimates could be revised heavily, as often happens around economic downturns. More important now, though, are the challenges in estimating GDP when many firms have closed temporarily and so may not have responded to surveys. Responses to the ONS business surveys used to compile initial GDP estimates fell by between 5 and 15 percentage points compared to March and April last year. Revisions may be larger than normal as a result, particularly for some sectors such as construction where response rates have been lowest and firms were asked in April to fill out the form electronically for the first time. Furthermore, the initial estimates for some sectors – such as finance – are entirely based on forecasts, and such forecasts are likely to be less accurate at present. There have also been challenges capturing output in the public sector due to the closure of schools and the reallocation of resources undertaken by the NHS to deal with the outbreak.[8]

The path of recovery through 2020

2.18 From July, the path of output diverges across our three scenarios (Chart 2.2):

- In the **upside scenario**, the recovery maintains its pace and output ends the year just 2 per cent below its pre-virus peak and 3 per cent below a monthly interpolation of our March forecast. This would require the relatively swift ending of most official restrictions (and no subsequent re-imposition), as well as a willingness of people to return to normal economic and social life quickly. Broadly speaking, that was the

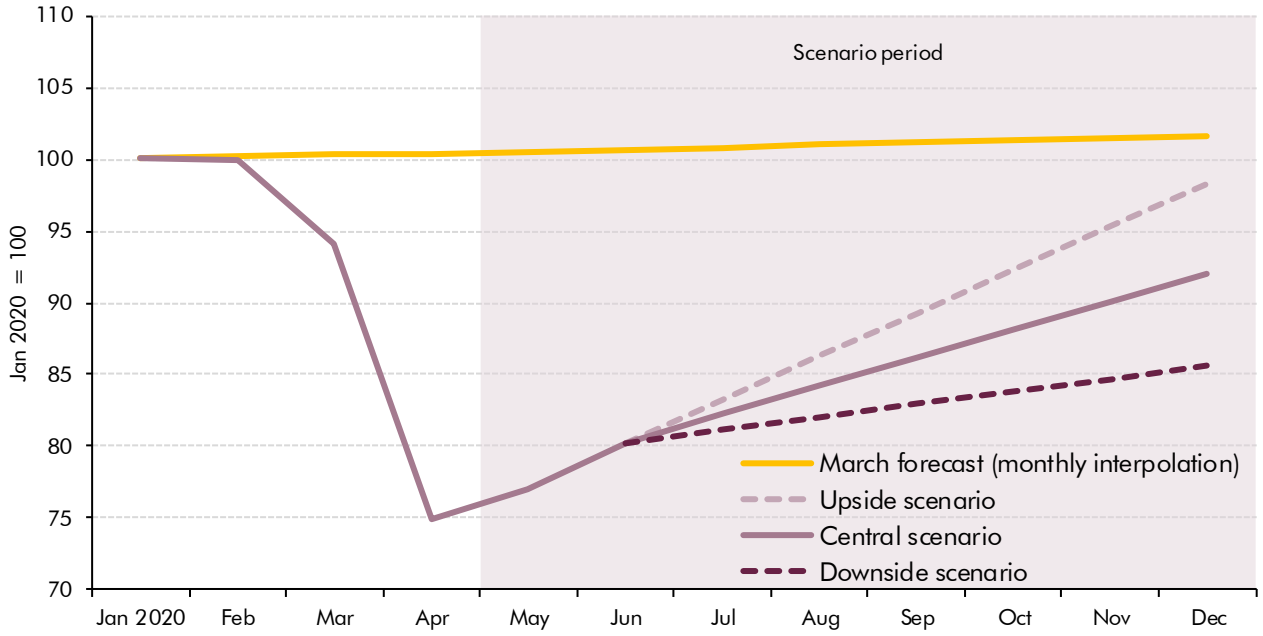
[8] ONS, *Coronavirus and the effects on UK GDP*, 6 May 2020 and ONS, *Coronavirus and the impact on measures of UK government education output,* 13 May.

consensus view of businesses polled as part of the Bank of England's Decision Maker Panel back in April.[9] Output falls by 11 per cent in 2020 as a whole.

- In the **central scenario**, output recovers more slowly, and by the end of the year is still around 8 per cent below its pre-virus peak and 9 per cent below the March forecast. GDP falls by 12 per cent in 2020. This would be consistent with hesitancy on the part of people to return to normal patterns of economic behaviour even as lockdown measures are eased materially further in early July.

- In the **downside scenario**, the recovery is even slower and at the end of 2020 output is around 14 per cent lower than it was before the crisis struck and 16 per cent below the March forecast. Output contracts by 14 per cent in 2020. This slower recovery is more consistent with the Bank of England's Decision Maker Panel survey in May and firms' expectation for sales to be around 18 per cent lower at the end of 2020 than they would have been in the absence of the virus.[10] It might also be consistent with lockdown measures being re-imposed to some degree, though not with a second wave of infections later in the year necessitating the re-imposition of a full lockdown.

Chart 2.2: Monthly real GDP in 2020: scenarios versus March forecast



Source: ONS, OBR

2.19 To put our scenarios for 2020 in context, the OECD in its latest *Economic Outlook* predicted a drop in UK output of 12 per cent in its 'single-hit' scenario and of 14 per cent in its 'double-hit' scenario.[11] The IMF's latest *World Economic Outlook* predicts that UK GDP will fall by 10 per cent in 2020.[12] Both institutions stressed the uncertainty around these figures.

[9] Bank of England, *Decision Maker Panel*, April 2020.
[10] Bank of England, *Decision Maker Panel*, May 2020.
[11] OECD, *Economic Outlook, Volume 2020 Issue* 1, June 2020.
[12] IMF, *World Economic Outlook Update*, June 2020.

Longer-term scarring effects

2.20 Economic shocks can sometimes permanently impair the level or rate of growth of potential output. This 'scarring' (or 'hysteresis') can come about through a variety of channels, including reduced investment, the loss of firm-specific or human capital due to business failures or sustained unemployment, or the dragging effect of higher debt on productivity growth. The degree of scarring on this occasion will be affected by how quickly the virus can be brought under control, the pace of the economic recovery, and the effectiveness of policy measures in keeping workers attached to firms and viable firms in business. Many of the Government's measures have been designed expressly to minimise avoidable scarring.

2.21 Our upside scenario assumes a short-lived rise in unemployment, that the business investment lost during lockdown is recovered afterwards, and that business failures are limited. Consequently, it assumes scarring is negligible and output follows the path assumed in our March forecast beyond the near term. The central and downside scenarios both assume some scarring, with output at the five-year horizon lying 3 and 6 per cent below our March forecast in our central and downside scenarios respectively. Broadly, this is the result of three factors: a longer-lasting rise in unemployment; permanently forgone business investment, which reduces capital deepening and productivity growth; and business failures that result in capital scrapping and the loss of intangible capital. The size of the scarring effect is highly uncertain given the difficulties in predicting how the economic disruption in any given scenario would feed through these various channels. Nevertheless, they are in line with external estimates,[13] and it seems reasonable to believe that the longer output remains below its pre-crisis level, the greater such effects are likely to prove.

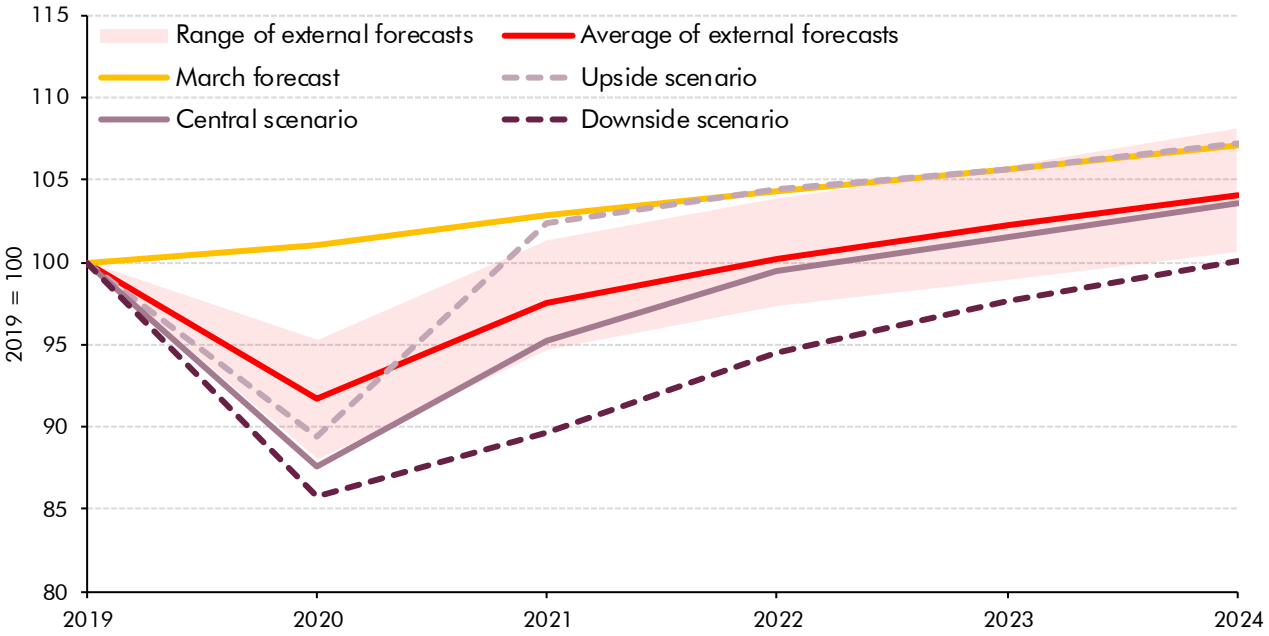
2.22 Over a five-year horizon, our scenarios span a range of outcomes that is broader than the latest range of external forecasts compiled by the Treasury. Chart 2.3 shows that:

- In the **upside scenario**, output returns to its pre-virus peak in the first quarter of 2021 and then follows the path we expected in March from the second quarter onwards. This results in GDP growth of 15 per cent in 2021. Growth then ranges between 1 and 2 per cent thereafter, and there is no scarring.
- In our **central scenario**, output recovers more gradually, reaching its pre-virus peak at the end of 2022. This results in growth of 9 per cent in 2021 and 4 per cent in 2022. Output at the end of the scenario is 3 per cent lower than we expected back in March.
- The recovery is even more sluggish in our **downside scenario**, with GDP not attaining its pre-virus peak until the third quarter of 2024. Growth is 5 per cent in both 2021 and 2022, and output is 6 per cent below the March forecast at the scenario horizon.

2.23 The latest external forecasts compiled by the Treasury includes several that expect some degree of scarring, and others where output in 2024 is the same as the consensus in February. The bottom of the range of forecasts is that output in 2024 is approximately 7 per cent below the February consensus, similar to the shortfall in our downside scenario.

[13] J. Portes, 'The lasting scars of the Covid-19 crisis: Channels and impacts', *VoxEU,* June 2020 and R. Hughes et al, *Doing more of what it takes,* Resolution Foundation, May 2020 and C. Lenoel & G. Young, *Prospects for the UK Economy*, *National Institute of Economic and Social Research*, April 2020.

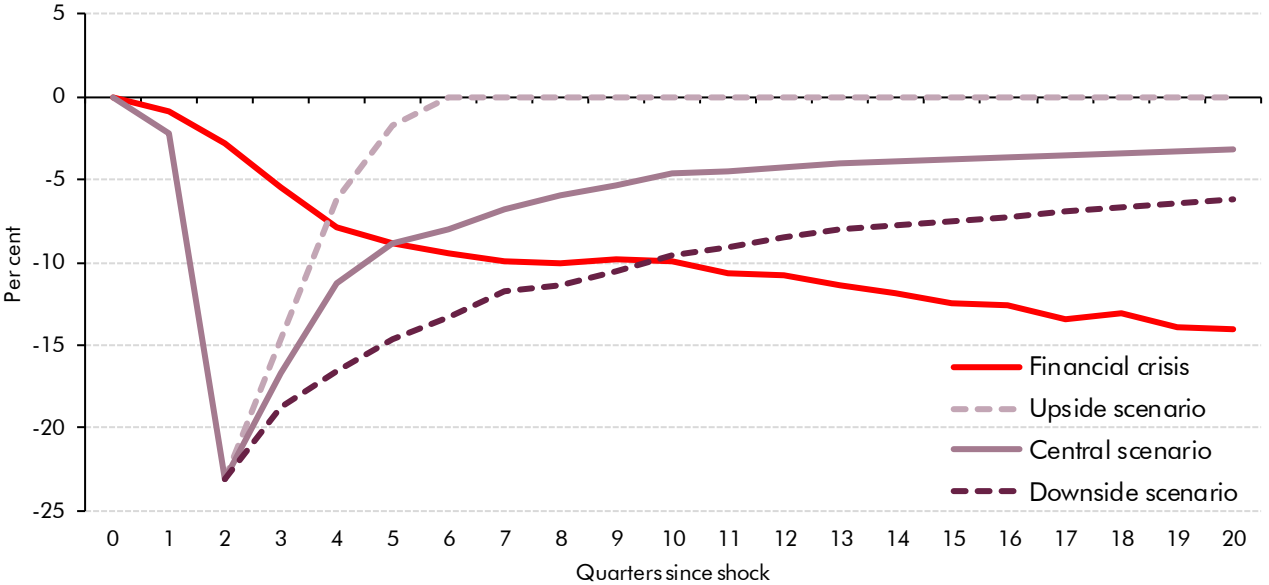
Chart 2.3: Medium-term real GDP: scenarios versus March and external forecasts



Source: HM Treasury, OBR

2.24 Although the expected shortfall in economic output in the downside scenario is significant, it is by no means a worst-case scenario. To put it into context, Chart 2.4 compares the real GDP shortfalls in our scenarios (relative to our March forecast) with the larger shortfall that followed the financial crisis (relative to the Treasury's Budget 2008 forecast). It shows that real GDP in early 2013 was 14 per cent lower than the Treasury had predicted back in March 2008. Moreover, the post-financial crisis shortfall continued to increase, as GDP growth repeatedly disappointed relative to that pre-crisis forecast. This metric is key to understanding the structural fiscal impact of an economic shock.

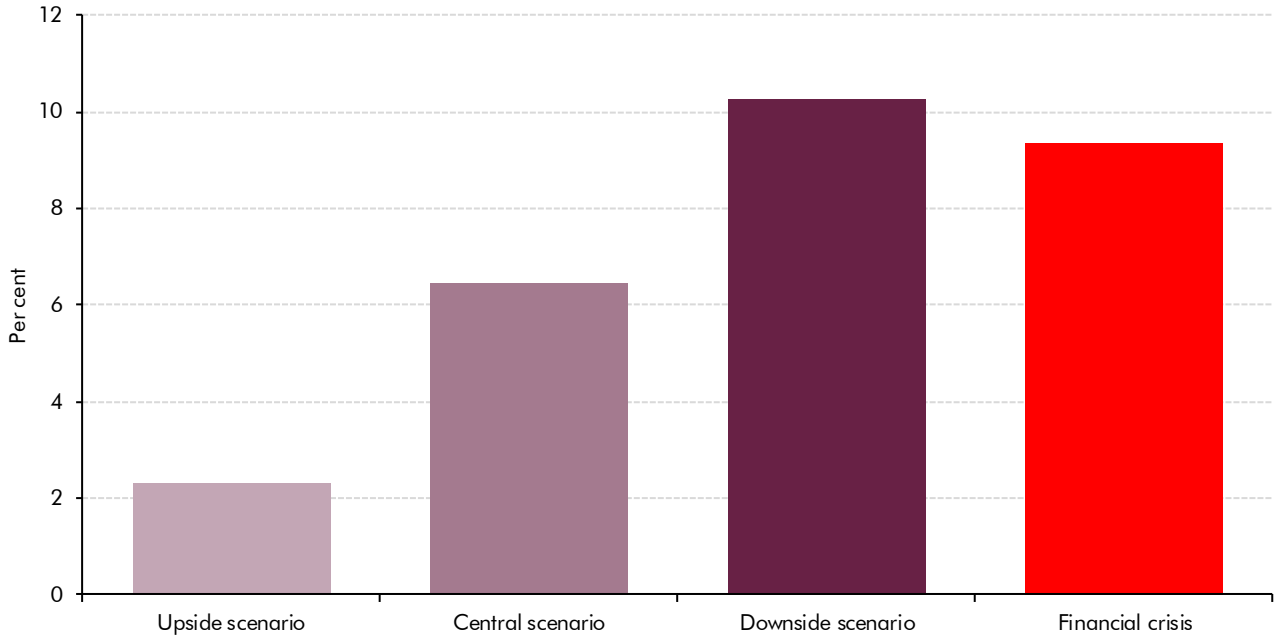
Chart 2.4: Real GDP shortfalls relative to pre-shock forecasts



Note: The 'shock' refers to the first quarter in which GDP contracted. For the central, upside and downside scenarios, it is Q1 2020 and for the financial crisis, it is Q2 2008.
Source: ONS, OBR

2.25 The very different trajectories for the real GDP shortfall against forecast between our scenarios and the financial crisis means it is also useful to compare the cumulative shortfalls in GDP. Chart 2.5 depicts forgone cumulative output expressed as a fraction of cumulative GDP for each scenario and the post-financial crisis outturn. Relative to the same pre-shock baselines, the five-year cumulative shortfall in our downside scenario is actually larger than that which followed the financial crisis. That reflects the much greater shortfall at the start of the period, which outweighs the greater shortfall at the end following the financial crisis. This metric is helpful in understanding how public debt is affected by a shock – in particular the component of the rise in public debt that reflects the subsequent shortfalls in tax receipts.

Chart 2.5: Cumulative shortfall in GDP: scenarios versus financial crisis



Source: ONS, OBR

Expenditure composition

Private consumption

2.26 Our scenarios assume that private consumption fell by 25 per cent in the second quarter. This is likely to reflect especially large lockdown-related falls in spending on clothing, transport, recreation, culture and hospitality. This is broadly consistent with the industry estimates of GDP shown above and is informed by ONS retail sales figures. It is also consistent with timelier measures of consumer spending, such as card and online payment data, which – according to a range of sources – fell by around 25 to 50 per cent in April, but which have since recovered somewhat.[14]

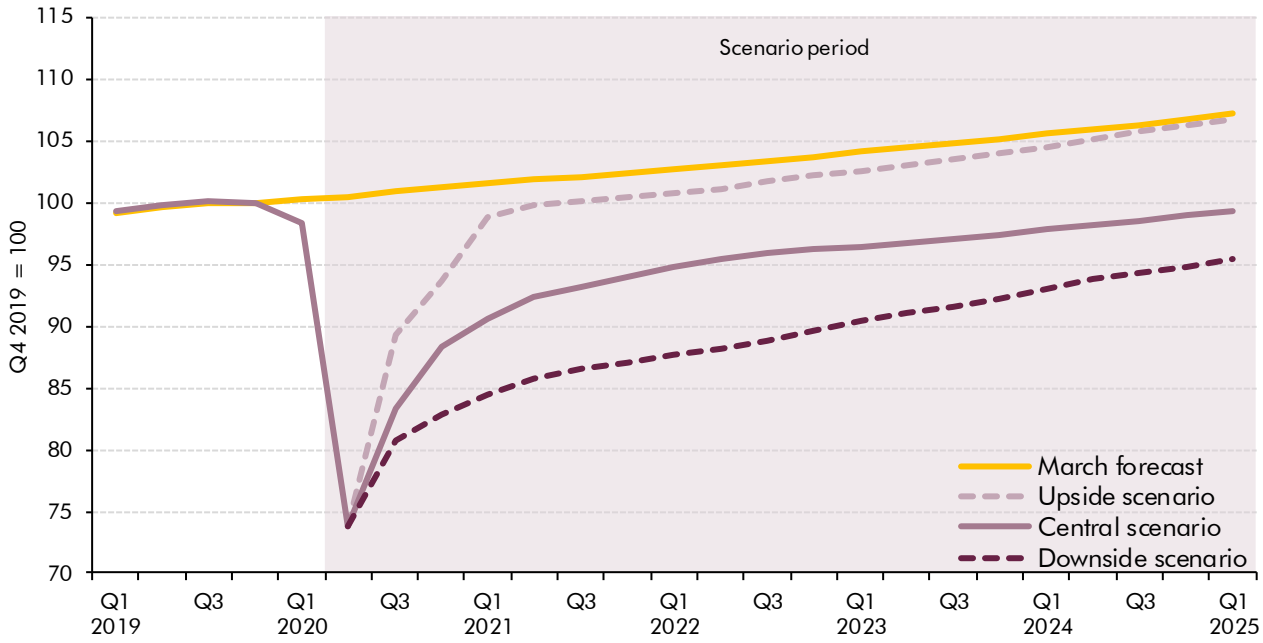
2.27 In our upside scenario, a quick return to normal economic conditions is associated with a relatively swift recovery in consumer spending, just 6 per cent below its pre-virus peak at the

[14] S. Hacioglu, D. R. Känzig & P. Surico, 'Consumption in the time of Covid-19: Evidence from UK transaction data', *CEPR discussion paper series 14733*, May 2020 and Barclaycard, *Consumer spending declined 36.5 per cent in April, yet some retailers continued to see growth despite social distancing*, 13 May 2020.

end of this year and regaining its pre-virus path by the middle of 2021 (Chart 2.6). In this scenario, only approximately 3 per cent of cumulative consumption is forgone relative to our March forecast. Our upside scenario is consistent with consumer spending returning to levels close to that which we expected in March, and so consumption as a share of private sector demand is less than 1 percentage point lower by the end of the scenario.

2.28 The recovery in consumer spending is slower in the central scenario, and even more so in the downside scenario, reflecting slower growth in household incomes, higher unemployment and a greater reluctance to spend. In both these scenarios, consumption as a share of private sector demand is significantly lower – by over 2 percentage points in both cases – than we forecast back in March. In the downside scenario, consumption does not return to its pre-virus peak at all, finishing 5 per cent below that level, and 11 per cent below the level we forecast in March. Cumulative consumption is also 12 per cent lower than we expected in March. In our central scenario, consumption does regain its pre-virus peak by the scenario horizon, but it remains 7 per cent below the level we forecast in March, with 8 per cent of cumulative consumption in our March forecast foregone.

Chart 2.6: Real private consumption: scenarios versus March forecast



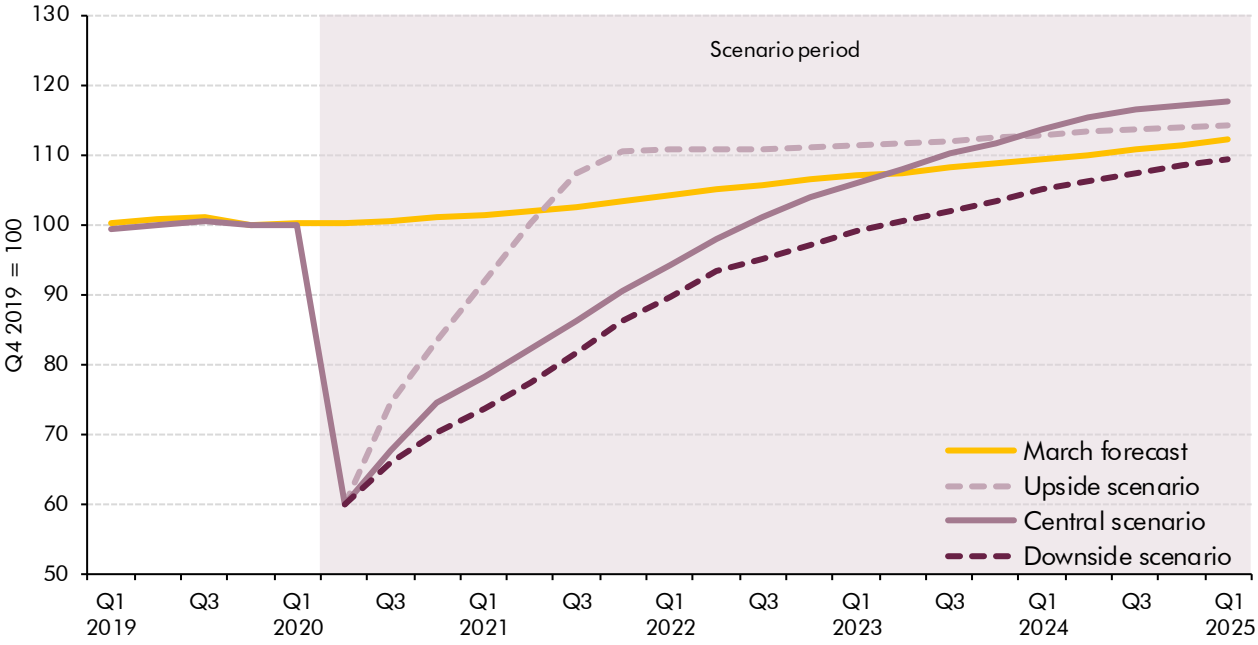
Source: ONS, OBR

Business investment

2.29 Consistent with surveys of firms, particularly the Bank of England's Decision Maker Panel, our scenarios assume business investment will have dropped by 40 per cent in the second quarter. Thereafter, the path differs markedly. The recovery is swift in the upside scenario, rebounding by 24 per cent in the third quarter and regaining its pre-virus peak by the second quarter of 2021 (Chart 2.7). Beyond this point investment rises above the level we forecast in March, as projects that were put on hold this year are subsequently restarted. The scenario assumes that cumulative business investment over the whole period will be the same as in March, implying no long-term reduction in productivity from capital shallowing.

2.30 By contrast, continued disruption and uncertainty about how the virus will affect economic activity in the future weighs on investment in both the central and downside scenarios. In the central scenario, only around a fifth of the forgone investment is made up by the scenario horizon, meaning that by then cumulative business investment is 6 per cent lower than we expected in March. In the downside scenario, none of the lost business investment is recovered and cumulative business investment is 10 per cent lower over the whole period.

Chart 2.7: Real business investment: scenario versus March forecast



Source: ONS, OBR

Net trade

2.31 The pandemic has shifted the global economic landscape. With more than 10.5 million cases recorded worldwide at the time of writing, nearly every country has been affected. Many governments have imposed lockdown measures to contain the virus, resulting in restrictions on travel and a substantial fraction of economies being shut down. This has caused a marked decline in world output and trade. In the first quarter, the IMF estimated that world trade volumes fell by 3.5 per cent on an annual basis and world output by 2 per cent. It projects that output will decline by 5 per cent and trade by 12 per cent in 2020.[15]

2.32 We have assumed that the combination of these global developments and the sharp drop in UK domestic spending this year will have a similar impact on both UK exports and imports, leaving net trade largely unchanged from our March forecast. For simplicity, net trade is assumed to follow the same path in all three scenarios.

[15] IMF, *World Economic Outlook Update*, June 2020.

Labour market scenarios

2.33 The sharp fall in output in the second quarter is mainly the result of mandated and voluntary restrictions on business activity, while the temporary furloughing of employees has been heavily subsidised via the Coronavirus Jobs Retention Scheme (CJRS). This means that the immediate labour market consequences of lower output are dominated by a fall in average hours worked. The Self-Employment Income Support Scheme (SEISS) should also allow the self-employed to remain in business despite the limitations on the hours they may be able to put in. This contrasts with the unemployment-heavy recessions of the early 1980s and early 1990s, and the more even split between unemployment, average hours and productivity that was seen during the recession that followed the financial crisis. As the support schemes come to an end, however, a more normal pattern is likely to reassert itself.

2.34 Labour market developments are particularly important for the public finances. This reflects both the initial consequences of the huge difference between the taxes raised from a person in employment and the welfare spending costs incurred should that person lose their job, as well as the knock-on implications for their spending and the wider economy.

The initial impact on the labour market

2.35 As with GDP, we have drawn on a range of indicators to judge how the initial economic shock of the lockdown has affected the labour market. These include the official ONS data as well as various administrative data sources and survey evidence. It is clear from these sources that the shock to the labour market has been very large, but there is less coherence across the different indicators than there is for output.

2.36 The latest indicators as of 3 July suggest that:

- **Employment has fallen**. The single-month Labour Force Survey (LFS) estimates (as opposed to the headline three-month average) show a fall in employment of 454,000 between January and April, taking the employment rate down 0.9 percentage points. HMRC's real-time information (RTI) from the PAYE tax system recorded a fall in employee numbers of 403,000 over that period, and a further 94,000 in May alone. The Bank's DMP survey for May reported that firms expect employment to fall 6 per cent in the second quarter as a whole, equivalent to around 2 million job losses.

- **Unemployment has risen**. New claims for universal credit (UC) rocketed as the lockdown took effect. DWP's daily management information shows that 3.2 million claims were made between 16 March and 23 June, 2.2 million more than would have been the case if they had continued to be made at the pace in the first two weeks of March. The claimant count measure of unemployment jumped by 1 million in April and a further 529,000 in May. But the LFS reported no change in the headline rate of unemployment in the three months to April at 3.9 per cent. The single-month estimate showed unemployment *falling* by 38,000 between January and April, taking the rate down by 0.1 percentage points. In part this is likely to reflect the official International Labor Organization (ILO) definition of unemployment, which requires people classified

as such to have searched for work in the past month. Given the difficulties of searching for work during lockdown, together with the sharp fall in vacancies, it seems likely that falls in employment will be associated with a rise in measured inactivity among those who do not (but in effect *cannot*) meet the ILO unemployment definition. The ILO measure is therefore likely to understate 'true' unemployment during the lockdown. But as the lockdown eases and the labour market revives, one would expect such 'discouraged workers' to start looking more actively for work.[16]

- **Measured inactivity has risen**. The single-month LFS data confirm that the fall in employment between January and April has been associated with rising inactivity, which increased by 562,000 and took the rate up by 1.0 percentage points.

- **Millions have taken up the CJRS and SEISS**. As of 28 June, 9.3 million jobs had been furloughed via the CJRS and 2.6 million self-employed people had made a SEISS claim. Individuals can be furloughed from more than one part-time job, so we assume that an average of 8.4 million employees will be on the CJRS across the second quarter as a whole (around 30 per cent of all employees). This is broadly consistent with survey evidence from the ONS BICS and the Bank's DMP survey on the share of workers furloughed. It is also broadly in line with the LFS, which shows that around 5 per cent of employees have a second job. Unlike the CJRS, the SEISS does not require recipients not to work, so the average hours and output of any self-employed person in receipt of the SEISS need not have fallen to zero.

- **Average and total hours worked have fallen very sharply**. As expected, the largest labour market effects have been seen in hours worked. The LFS recorded an 8.7 per cent drop in total hours worked in the three months to April versus the three months to January. The equivalent figure for GDP was a fall of 10.4 per cent. Experimental weekly data show average hours in the final week of April were down 23 per cent on the first two weeks of March. Among full-time employees the drop was 20 per cent, for part-time employees it was 29 per cent, and for the self-employed 39 per cent.

- **Earnings growth has turned negative**. The LFS recorded a 0.9 per cent year-on-year fall in average earnings in the single-month data for April. HMRC's RTI data recorded a fall of 0.4 per cent over the same period. Its timelier measure of median earnings fell 0.8 per cent in the year to April and 1.8 per cent in the year to May.

Labour market assumptions for the second quarter of 2020

2.37 Bringing all these indicators together, our three scenarios assume that employment will be around 5 per cent lower in the second quarter than in our March forecast – a shortfall of around 1.8 million people. If that translated entirely into higher unemployment, it would be consistent with an unemployment rate of around 9 per cent, though as noted it will take time for this to be reflected in the ILO measure of unemployment.

[16] The ONS will face a further challenge due to lower response rates for its surveys, which it intends to address using different imputation methods. See ONS, *Coronavirus and the Effects on Labour Market Statistics*, 6 May 2020.

2.38 What matters for our fiscal projections is whether a person is working or not, rather than whether they satisfy the ILO definition of being unemployed. So we do not try to project the near-term path of headline unemployment in our scenarios. Rather, our measure of the unemployment rate should be thought of as including discouraged workers too. This should be borne in mind when comparing our scenarios with official data releases on unemployment, especially for the second quarter.

2.39 Average hours worked by furloughed workers fall to zero. We assume that furloughed workers worked shorter hours than the workforce as a whole, so average hours worked overall fall by around 24 per cent in the second quarter.[17] Taken together with the fall in employment, total hours worked fall by 28 per cent (to be 29 per cent lower than forecast in March). If the fall in total hours assumed in the second quarter were to have come entirely through higher unemployment rather than through the CJRS/SEISS-supported drop in average hours worked, the unemployment rate would have risen to around 35 per cent.

2.40 As the drop in total hours worked in the second quarter is greater than the 21 per cent fall in GDP, overall productivity on an output-per-hour basis rises by around 10 per cent. This is assumed to reflect compositional effects, with the drop in total hours concentrated among those on lower pay – consistent with the sectoral composition of the output shock and with the low average subsidy per furloughed job recorded in the CJRS administrative data. It is also consistent with IFS and Resolution Foundation analysis that shows those who have ceased to work are more likely to be those in lower income deciles.[18] The compositional boost outweighs the productivity losses resulting from those still in work adopting a less efficient mode of working, such as working from home while looking after children. In contrast to hourly productivity, productivity on a per-worker basis falls dramatically in the second quarter – by 16 per cent – thanks to the fall in average hours. But that is more than explained by the CJRS. Productivity per non-furloughed worker rises by 17 per cent.

2.41 Chart 2.8 shows how changes in total hours worked and output per hour contributed to the peak-to-trough fall in output during the past three UK recessions and compares that with what is assumed in our scenarios. The relative contributions this year are more like those in the 1980s and 1990s recessions than in the post-financial crisis recession, but for very different reasons. The earlier recessions saw unemployment rise faster than output fell. In this recession it is average hours that have borne the immediate brunt of the shock. But since that reflects temporary government support, the more important issue for the labour market is what happens after those schemes have been closed.

[17] Data for the costs of the CJRS suggests that employers have concentrated their use of the scheme on furloughing employees whose pre-virus jobs involved significantly fewer hours and/or lower hourly pay than the average of all employees. This seems to be true even when controlling for the higher propensity to furlough jobs in sectors with lower average pay. It is also possible that a disproportionately large number of people have been furloughed from more than one part-time job. We discuss these issues in Chapter 3.

[18] R. Blundell, R. Joyce, M. C. Dias & X.Xu, *COVID-19 and Inequalities,* IFS, June 2020, and T. Bell, N. Cominetti & H. Slaughter, *A New Settlement for the Low Paid,* Resolution Foundation, June 2020.

Chart 2.8: Output, hours and productivity: scenarios versus previous recessions

Source: ONS, OBR

Labour market developments beyond the second quarter

Employment and unemployment

2.42 Each scenario assumes that the number of workers on the CJRS will decline broadly in line with the recovery in output until the scheme closes in October 2020. This leaves more people on the CJRS at that point in our downside scenario (5.1 million) than in the central and upside scenarios (4.6 and 4.2 million respectively). But in all three, prospects for employment and unemployment will be heavily influenced by what happens to furloughed workers once the CJRS is closed. There is limited evidence on which to draw here. A survey conducted for the Resolution Foundation found that 11 per cent of furloughed workers are confident that they will be laid off when the scheme closes and a further 14 per cent thought that was fairly likely.[19] Some have argued that job losses could be even greater. For example, Professor Paul Gregg of the University of Bath suggests that "*there will be an intensely concentrated volume of job shedding in September*"[20] (ahead of the scheme closing in October due to statutory requirements relating to large-scale redundancies).

2.43 Our scenarios invoke some broad assumptions on the proportion of those on the CJRS that move into unemployment, rising from 10 per cent in the upside scenario (roughly the minimum suggested by the Resolution Foundation survey) to 15 per cent in the central scenario and 20 per cent in the downside. So unemployment continues to rise and employment to fall beyond the second quarter, despite output recovering. In our upside scenario, the unemployment rate peaks in the third quarter at 9.7 per cent, and employment recovers relatively quickly alongside output. In our central scenario, the rate

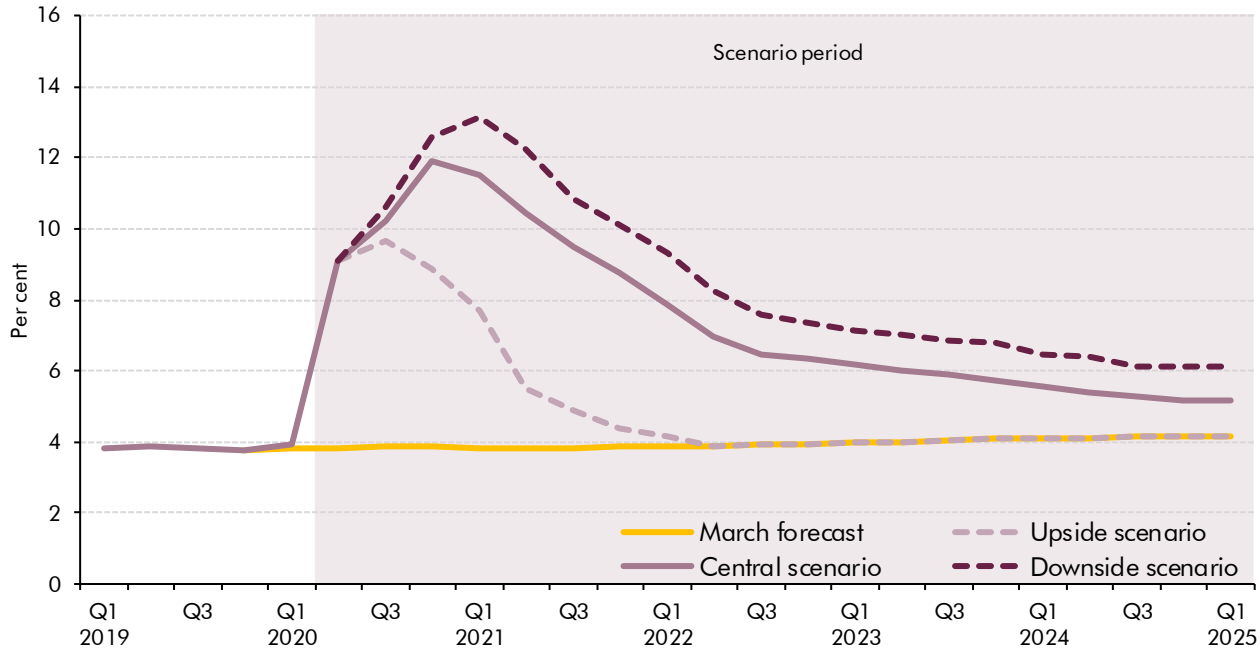
[19] Cominetti, N., Gardiner, L. and Slaughter, H., *The Full Monty: Facing up to the challenge of the coronavirus labour market challenge*, Resolution Foundation, June 2020.
[20] Gregg, P. *Unemployment: The Coming Storm*, UCL blog, 17 June 2020.

peaks in the fourth quarter– as the CJRS ends – at 11.9 per cent. And in our downside scenario, it continues to rise until the first quarter of 2021 when it peaks at 13.2 per cent.

2.44 Beyond the near term, we assume some labour market scarring in our central and downside scenarios, but not in the upside scenario. The unemployment rate therefore returns to the 4.1 per cent we forecast in March in the upside scenario, but is 1 percentage point higher than that in the central scenario and a further percentage point higher in the downside one.

2.45 Chart 2.9 shows how these assumptions come together to form our medium-term unemployment scenarios. In contrast to output, they are not symmetrical until late in the period. This reflects our assumption that a rapid resolution of the health crisis in the upside scenario would reduce the need for reallocation of labour across sectors, allowing employment to recover relatively quickly, whereas structural change in the context of continuing uncertainty would slow the recovery in both our central and downside scenarios.

Chart 2.9: Unemployment rate: scenarios versus March forecast



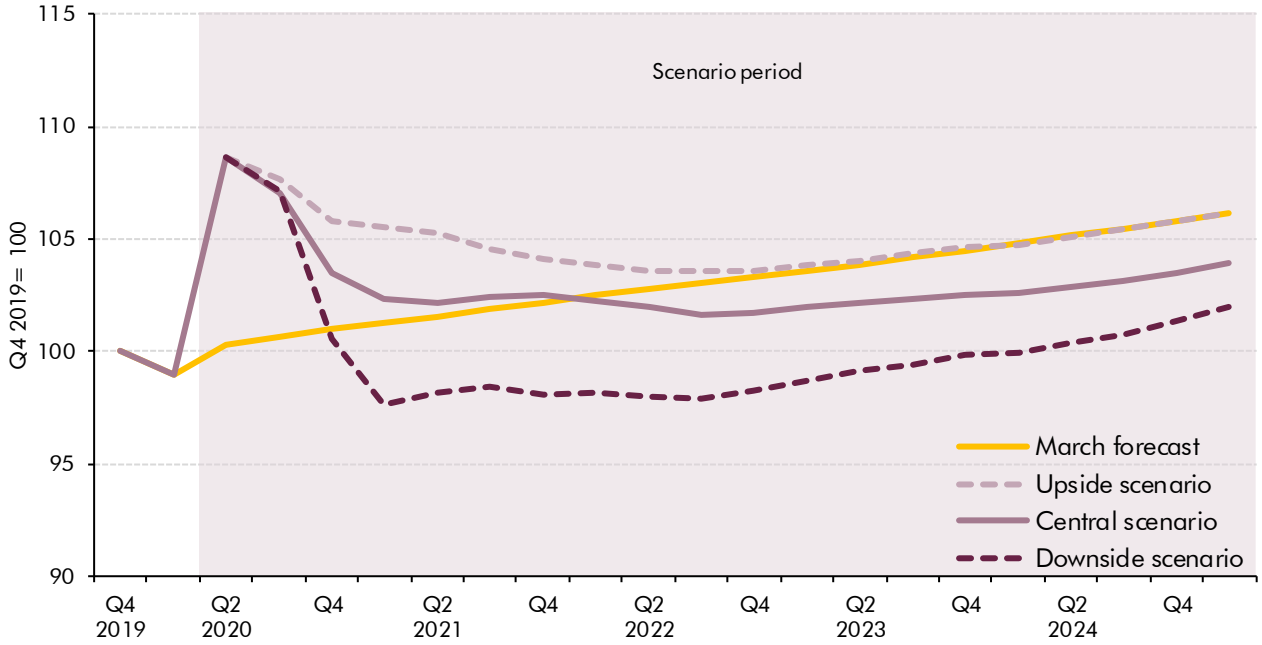
Source: ONS,OBR

Productivity

2.46 Following the compositional boost to output per hour in the second quarter, all three scenarios assume that this effect reverses and productivity falls back as the labour market adjusts to the shock and to the closure of the CJRS and SEISS. Beyond these near-term fluctuations, we assume some scarring of productivity in our central and downside scenarios, but not in the upside scenario. In the central scenario, output per hour falls below our March forecast as lower investment and business failures weigh on productivity. In the downside scenario, productivity lies further below the March forecast, reflecting even greater lost investment and business failures than in the central scenario. In the upside scenario, it broadly returns to the March forecast path in 2022 and remains on that path thereafter.

2.47 The mechanisms by which productivity is scarred include 'capital shallowing' – the effect of lower cumulative business investment on the stock of capital per worker. This accounts for roughly a quarter of the shortfall in productivity relative to our March forecast in both the central and downside scenarios. The rest is implicitly accounted for by lower total factor productivity (TFP). In reality, some of the TFP shortfall would also reflect capital scrapping as a result of business failures or faster depreciation of the remaining capital stock due to the adoption of new – and less efficient – modes of operation as result of the virus. But effects of this sort are unlikely to be picked up in the official capital stock statistics, so would instead show up in measures of TFP.

Chart 2.10: Output per hour: scenarios versus March forecast



Source: ONS, OBR

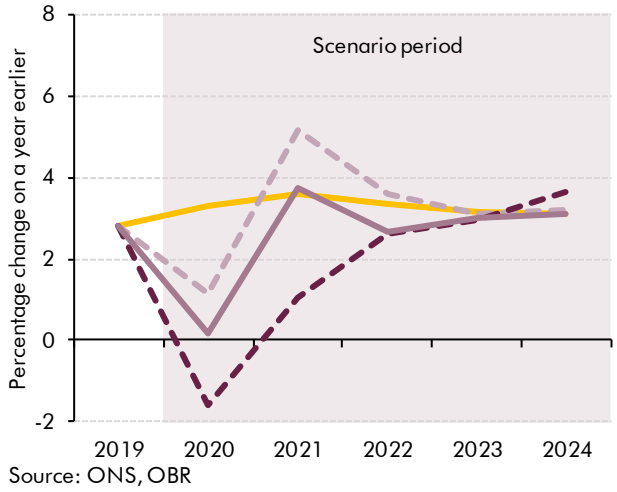
Earnings

2.48 Despite the substantial fall in nominal GDP that is in prospect for 2020, average earnings across the year as a whole still rise in our upside and central scenarios, and fall by less than 2 per cent in the downside scenario. This is largely a consequence of the CJRS subsidising the pay of employees that are producing no output. The scenarios assume that few of those on the CJRS will look for alternative work, which might otherwise have depressed wage growth. Earnings growth turns negative in the middle of 2020 in all three scenarios.

2.49 Average earnings growth in 2020 is nonetheless weaker in all three scenarios than we forecast in March. CJRS payments replace a maximum of 80 per cent of an employee's earnings (and less from August onwards). But the ONS BICS suggests that 68 per cent of employees have had their pay topped up by their employer. The scenarios also assume that average pay rises for those still in work are lower than they would otherwise have been.

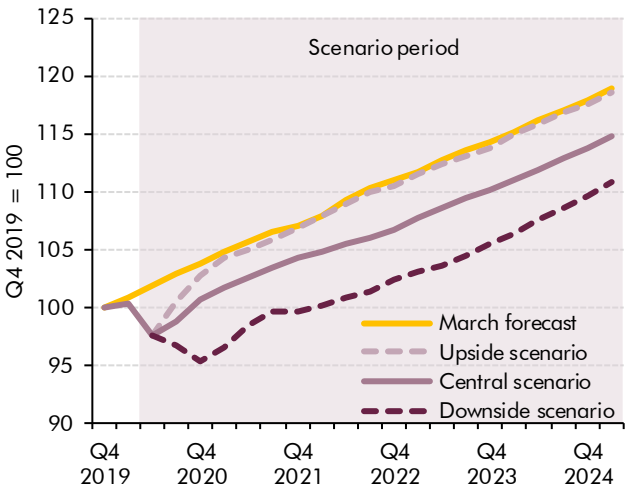
2.50 Earnings growth rebounds in all three scenarios in 2021 as people move off the CJRS and as output and average hours worked recover, eventually returning to rates closer to those in our March forecast. As regards the level of average earnings, the differences between the scenarios largely match those for productivity. In the upside scenario, average earnings return to close to the level in our March forecast by 2021, but in the central and downside scenarios they remain lower throughout and end the scenario 3 and 7 per cent lower than in our March forecast respectively.

Chart 2.11: Average earnings growth



Source: ONS, OBR

Chart 2.12: Average earnings level



Inflation scenarios

The output gap and coronavirus

2.51 The output gap – the level of current output compared to potential output – is a measure of the scope for purely cyclical growth and a determinant of the underlying pressure on inflation. As such, it normally plays a central role in the construction of our economic forecasts. In addition, we also use the output gap to split government borrowing into its structural (i.e. persistent) and cyclical (i.e. temporary) components. Though hard to measure,[21] it is a useful conceptual device when dealing with a general shock to either demand or supply, for instance during the recession that followed the financial crisis.

2.52 At the current juncture, however, the output gap is not particularly useful for assessing either underlying inflationary pressures or the state of the public finances. The lockdown has directly reduced both demand and supply, and to different degrees in different markets. As the lockdown measures are eased, so supply and demand are likely to recover at different rates, and those rates are likely again to differ across markets. Consequently, even though output is clearly below its long-run sustainable level, that tells us little about the scope for cyclical growth in the short term or about inflationary pressures. In our scenarios, we have not therefore attempted to split the movements in output into contributions from potential output growth and from movements in the output gap. We do, however, think it reasonable

[21] See Murray, J. OBR *Working paper No.5: Output gap measurement: judgement and uncertainty*, 2014.

to assume that by the scenario horizon output is back in line with potential (so the actual budget deficit at that point coincides with the structural budget deficit).

The initial impact on inflation

2.53 Before the coronavirus shock hit, underlying inflationary pressures appeared broadly consistent with meeting the 2 per cent target in the medium term. Our March forecast assumed that this would remain the case, thanks to well-anchored inflation expectations and the output gap remaining small. As already noted, the initial hit to GDP as a result of the lockdown reflected both a large fall in supply (as businesses closed temporarily) and a large hit to demand (with households and firms unable or unwilling to spend). Although some markets may have been in excess demand and others in excess supply, our scenarios assume that the overall balance probably did not change that much. As a result, the differences between our inflation profiles and our March forecast largely reflect near-term movements in energy and utility prices as a result of movements in the price of oil.

2.54 Consistent with that judgement, CPI inflation fell from 1.8 per cent in January to 0.5 per cent in May, while RPI inflation fell from 2.7 to 1.0 per cent. But the ONS has noted the challenge it faces measuring inflation during the lockdown, having to rely on imputing prices when the usual quotes are unavailable (for instance because stores are shut).[22]

Prospects for inflation beyond the near term

2.55 As the economy recovers, supply and demand should both rise. Our scenarios make no particular assumption about the balance between the two, other than that they are broadly in balance after five years. Given the heterogeneity in the recovery of demand and supply across markets, the implications for inflation would in any case not be straightforward. The scenarios therefore assume that as items become available again and energy price movements unwind, CPI inflation rises back to target.

2.56 In other words, as usual we assume that the Bank's MPC will be successful in setting policy so as to bring inflation back to target over the medium term. In principle, that might require different paths for Bank Rate and quantitative easing across our three scenarios, but because we are not able to assess how the imbalances between demand and supply differ, it is impossible to say exactly how. Instead, we assume that broadly the same path for monetary policy suffices to bring inflation back to target over the medium term, and moreover that those settings are embodied in the prevailing yield curve.

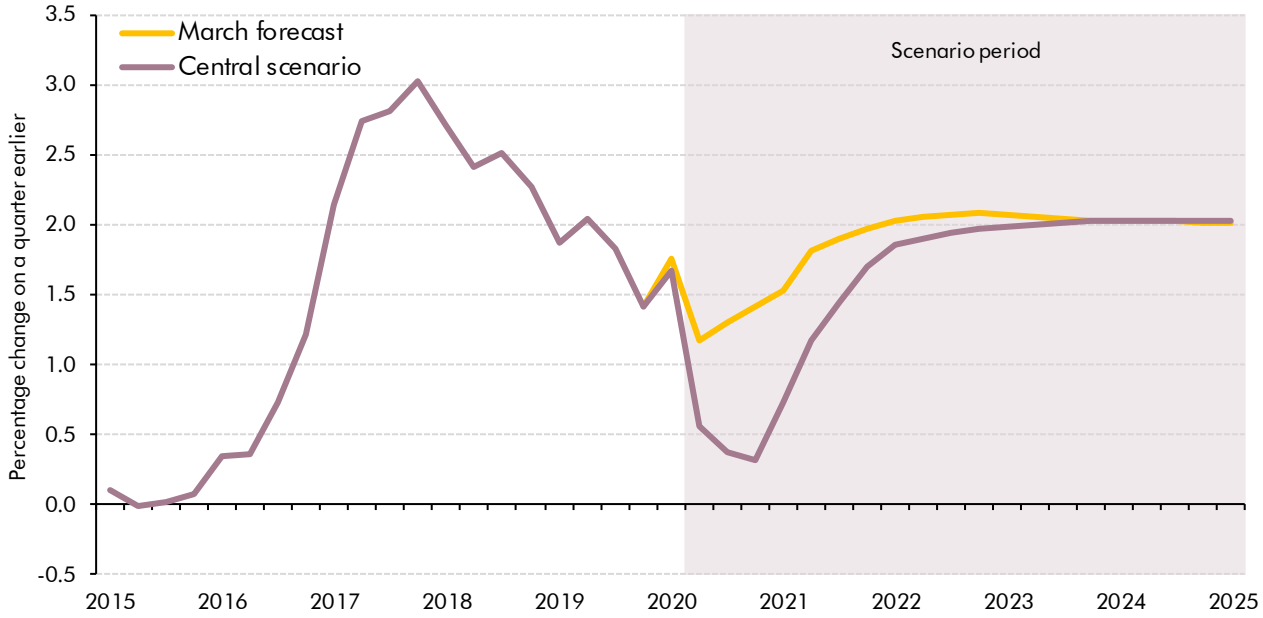
2.57 The paths of CPI inflation and the GDP deflator are thus the same in all three scenarios, as are the paths for monetary policy and (implicitly) for the output gap. However, RPI inflation differs reflecting assumptions about the evolution of house prices and transactions.

[22] ONS 2020 *'Coronavirus and the effects on UK prices'* 6 May 2020.

CPI inflation

2.58 Chart 2.13 shows the path for CPI inflation. The path this year and next is materially lower than our March forecast. The drop from 1.7 per cent in the first quarter of 2020 to 0.6 per cent in the second quarter is partly driven by Ofgem lowering its energy price cap in April and by the recent falls in oil prices. Inflation falls close to zero in the second half of 2020, but then rises next year as the effect of lower energy prices drops out of the annual figures. CPI inflation returns to the 2 per cent target around the end of 2022.

Chart 2.13: CPI inflation: scenarios versus March forecast



Note: The central, upside and downside scenario paths for inflation have the same assumptions.
Source: ONS, OBR

RPI inflation

2.59 RPI inflation falls more quickly than CPI inflation in our scenarios, reflecting lower house prices (which affect the housing depreciation component of RPI and are discussed below), alongside lower interest rates and housing transactions (both of which affect the mortgage interest component of RPI). In the central and downside scenarios, the wedge between RPI and CPI inflation becomes negative in the near term, which would be the first time that has happened since 2009. It then rises in line with the recovery in the housing market. Even in the upside scenario, the wedge is smaller in the near term than in our March forecast.

The GDP deflator

2.60 Our scenarios assume that GDP deflator inflation rises from 1.8 per cent in 2019 to 2.7 per cent in 2020, largely due a sharp rise in government consumption deflator inflation related to higher cash spending growth and the measurement of health and education output (discussed in paragraph 2.7). This is only partly offset by lower consumer price inflation.

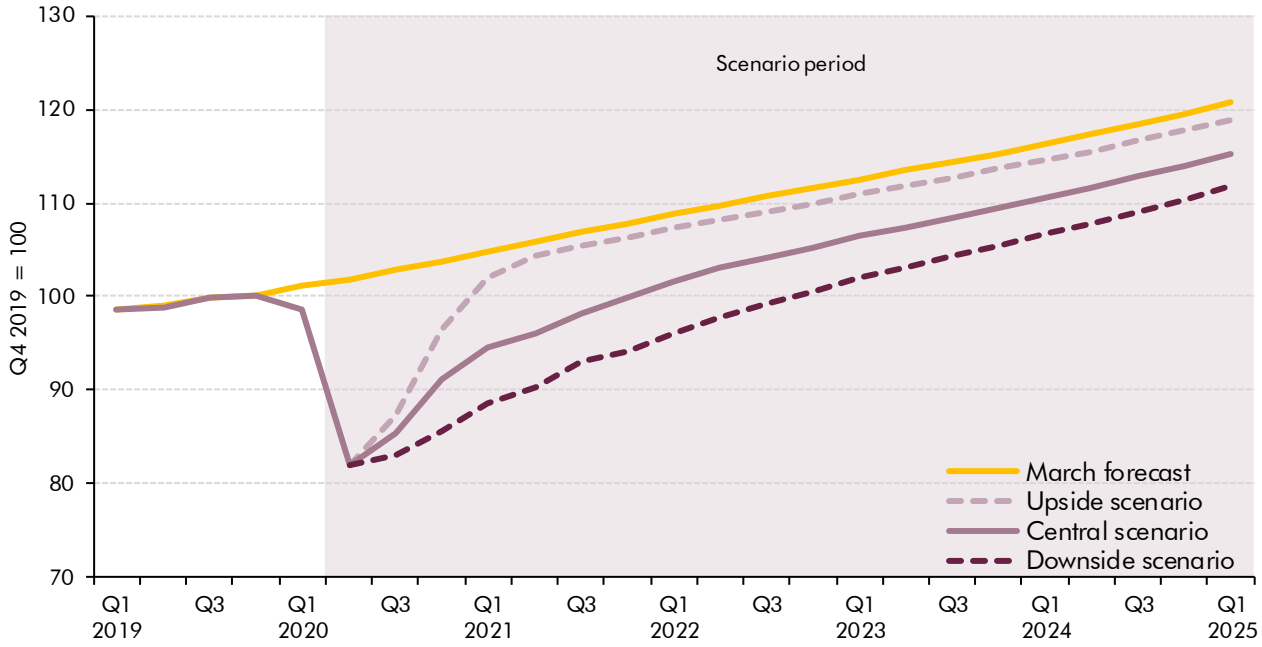
2.61 GDP deflator inflation falls back rapidly to zero in 2021, largely because the government consumption deflator falls back from its temporary high. It then returns to around 2 per cent

by the scenario horizon as government consumption deflator inflation normalises and consumer price inflation returns to target. In level terms, the GDP deflator is 1.5 per cent lower in 2024 than we forecast back in March.

Nominal GDP scenarios

2.62 Given the assumptions for real GDP and the GDP deflator described earlier in the chapter, our scenarios each show sharp falls in nominal GDP this year (by 8.3, 10.1 and 12.0 per cent in the upside, central and downside scenarios respectively). That compares to growth of 3.1 per cent in our March forecast and the fall of 2.7 per cent recorded in 2009, the only previous post-war occasion when nominal GDP fell. Cumulative nominal GDP growth between 2019-20 and 2024-25 was 19.0 per cent in our March forecast. This falls to 18.0 per cent in the upside scenario, 14.2 per cent in the central and 10.5 per cent in the downside. These shortfalls drive the paths for receipts in our corresponding fiscal scenarios.

Chart 2.14: Nominal GDP: scenarios versus March forecast



Source: ONS, OBR

Income composition of GDP growth

2.63 Labour income in 2020 falls by 0.6, 2.4 and 4.5 per cent in the upside, central and downside scenarios respectively, but these figures would be 7.1, 8.9 and 11.0 per cent without the support to incomes provided by the CJRS and SEISS. The schemes help push the labour share of income up very sharply in 2020, from where it falls back similarly sharply in 2021 once they are closed. Non-oil, private non-financial profits fall more sharply than nominal GDP in 2020 in all three scenarios, down by 18.3, 19.9 and 21.6 per cent in the upside, central and downside scenarios respectively. Profits grow strongly in 2021, so that the profits share of GDP largely recovers, moving broadly in line with nominal GDP thereafter. For simplicity, we have assumed the same profit share profile in all three scenarios.

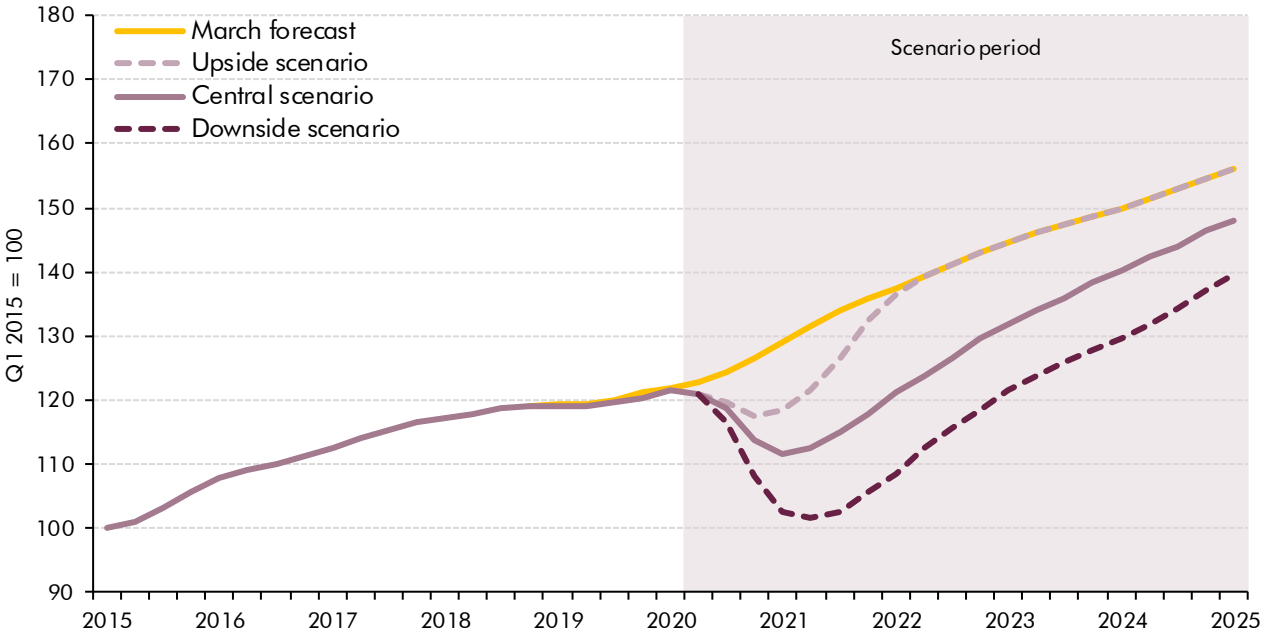
Property market

The housing market

2.64 House price inflation had already slowed prior to the onset of the pandemic and recent indicators suggest it has fallen further since then. Given that so few housing transactions took place during the lockdown, the ONS has paused production of the official house price index. Lenders' price indices will also be based on smaller samples than usual but continue to be published. The Halifax measure has fallen in each of the past three months, whereas the Nationwide measure increased in March and April before falling sharply in May.

2.65 Chart 2.15 shows the house price assumptions in each scenario, which reflect the different paths for labour income. In the upside scenario, house prices recover relatively quickly and return to the level in our March forecast. They remain around 5 per cent lower at the scenario horizon in our central scenario, and about 10 per cent lower in the downside.

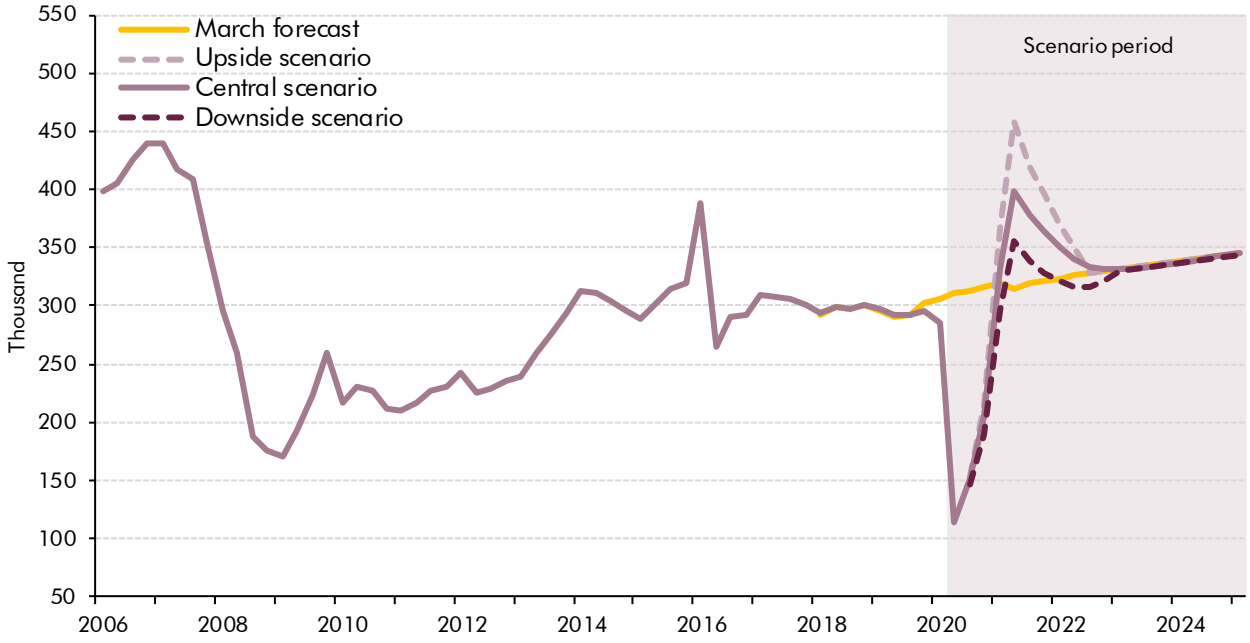
Chart 2.15: House prices: scenarios versus March forecast



Source: ONS, OBR

2.66 Residential property transactions fell very sharply in April and May, to around half the level seen between January and March. Restrictions on activities relating to house purchases were eased on 13 May, and we assume that transactions will rebound over the second half of the year and into 2021. This leaves transactions in 2020 around 40 per cent below our March forecast. Our central scenario assumes that around half the lost transactions return over the next two years, and that the lockdown-related pause in housebuilding reduces housing supply. These two factors mean that the total number of transactions over five years are around 4 per cent lower than we forecast in March. That rises to 8 per cent in our downside scenario, while the upside scenario assumes all the initial hit this year is made up.

Chart 2.16: Residential property transactions: scenarios versus March forecast



Source: HMRC, OBR

Commercial property

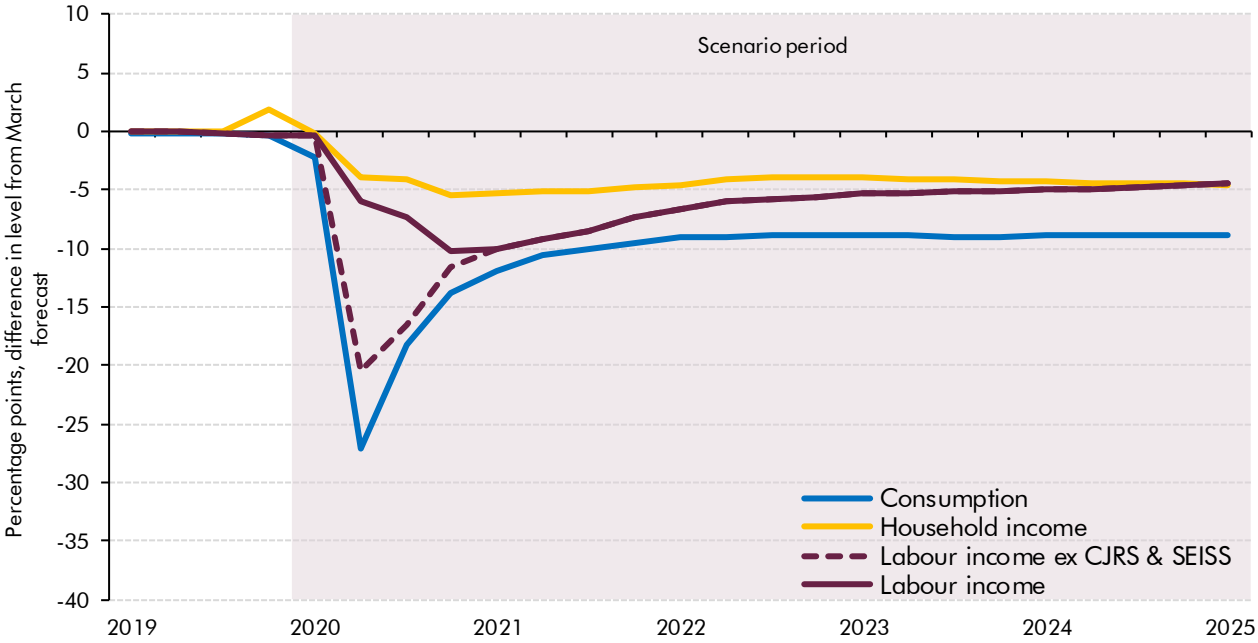
2.67 Commercial property is likely to be more adversely affected than residential property by the structural economic changes brought about by the pandemic. In our central scenario, commercial property prices are assumed to fall by 13.8 per cent in 2020-21 and to rise slowly thereafter, leaving them 5.5 per cent lower at the scenario horizon than in our March forecast. Commercial property transactions are also weaker.

Sectoral net lending

2.68 For our central scenario only, we have produced an indicative path for household disposable income and the saving ratio, as well as paths for overall sectoral net lending. These are a consequence of (rather than an input into) our fiscal projections, but they do provide a perspective on how the pieces of the scenario fit together.

2.69 Chart 2.17 shows how the shortfall in household disposable income in our central scenario relative to March compares with the shortfalls in labour income (with and without CJRS and SEISS payments) and consumption. Labour income excluding the CJRS and SEISS payments is significantly lower in 2020, though not quite as much as consumption, while the shortfall in household disposable income is smaller than in labour income including those payments, as households also pay less tax on their income and wealth and receive higher benefits.

Chart 2.17: Household finances: central scenario versus March forecast



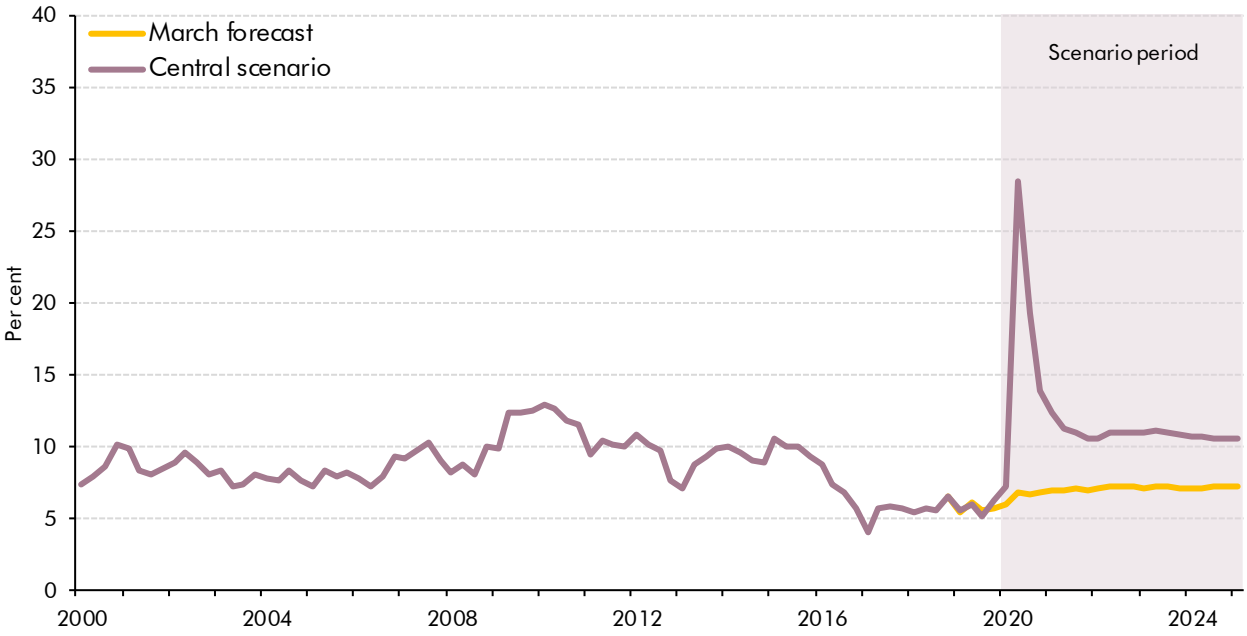
Source: OBR

2.70 The smaller shortfall in household income relative to consumption means that a key feature of our scenarios is a massive increase in household saving in 2020 (Chart 2.18). In essence, this reflects the joint outcome of the restriction of consumer spending as a result of the lockdown and the support to household incomes provided by the CJRS and SEISS. In our central scenario, the household saving ratio rises to 28 per cent in the second quarter of 2020, almost double the historical peak of 15 per cent in the second quarter of 1993. It then falls back to more normal levels by mid-2021, although it remains above our March forecast in the medium term in part reflecting higher precautionary saving.

2.71 It is important to understand that this outcome does not mean that CJRS and SEISS payments are all being saved at the individual level. Instead, there will be very significant differences across households. For some households, income may not have fallen much, if at all, but their opportunities to spend have been greatly curtailed. For others, income may have fallen sharply (perhaps because they have lost their job) and they are forced to run down their savings (or take on debt) to maintain even a lower level of consumption. But the former group dominate in the aggregate, causing the saving ratio to rise sharply. In part this is because the income losses associated with job losses and furloughing appear to be concentrated among those on lower pay, while higher income households, who save more in normal times, have seen their discretionary spending fall sharply.[23]

[23] See, for example, Brewer M. and Gardiner, L., *Return to spender: Findings on family incomes and spending from the Resolution Foundation's coronavirus survey*, June 2020.

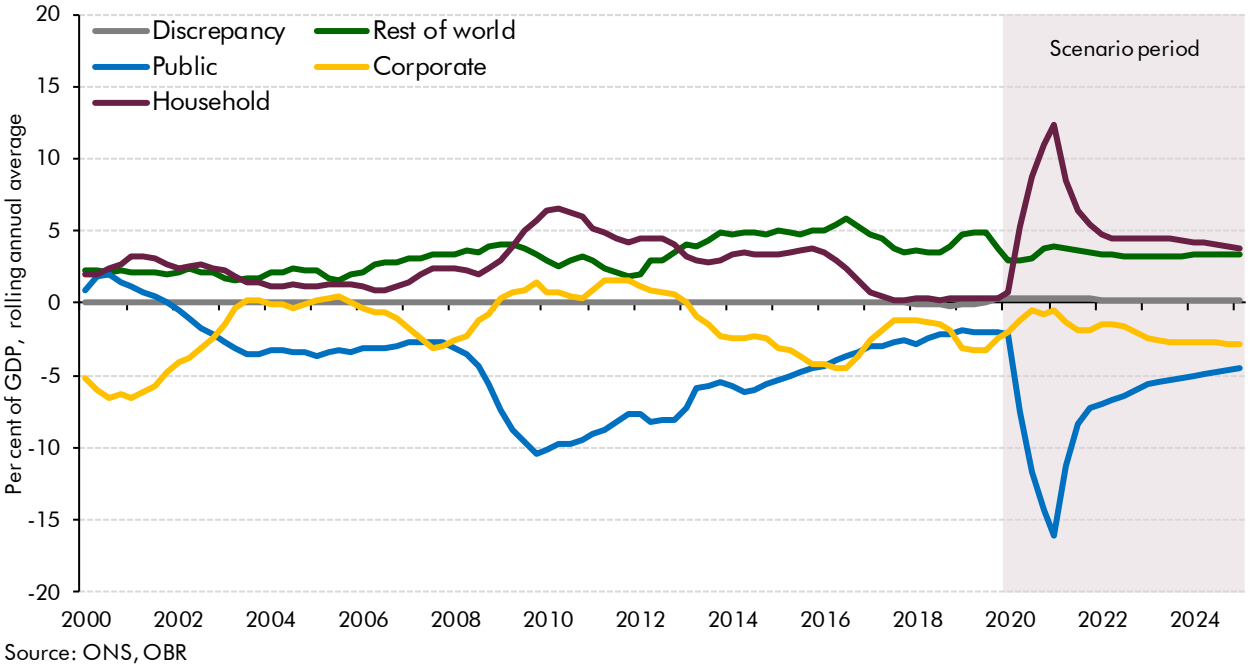
Chart 2.18: Household saving ratio: central scenario versus March forecast



Source: OBR

2.72 Finally, Chart 2.19 shows how the high household saving ratio fits into the broader framework of sectoral net lending. The household financial surplus rises to historically high levels in the first couple of years, which provides the primary counterpart to the large increase in government borrowing. This reflects the substantial transfer of resources from government to households (including the CJRS payments that flow through companies). Corporate profits fall sharply, but so does business investment, resulting in only modest shifts in the corporate sector balance. The rest of the world surplus is little changed from our March forecast since the scenario assumes that imports and exports will be affected equally.

Chart 2.19: Sectoral net lending in our central scenario



Source: ONS, OBR

Detailed summary of our economic scenarios

Table 2.2: Detailed summary of the central scenario

	Percentage change on a year earlier, unless otherwise stated					
	Outturn	Scenario period				
	2019	2020	2021	2022	2023	2024
UK economy						
Gross domestic product (GDP)	1.4	-12.4	8.7	4.5	2.1	1.9
GDP level (2019=100)	100.0	87.6	95.2	99.5	101.6	103.5
Nominal GDP	3.3	-10.1	8.9	6.6	4.2	4.0
Nominal GDP level (2019=100)	100.0	89.9	97.9	104.3	108.7	113.0
Expenditure components of GDP						
Domestic demand	1.6	-12.4	8.8	4.6	2.4	2.2
Household consumption[1]	1.1	-13.9	7.7	3.3	1.4	1.5
General government consumption	3.5	-1.6	8.4	2.1	1.9	2.2
Fixed investment	0.6	-23.4	16.0	13.9	7.2	4.9
Business	0.6	-24.4	11.6	17.7	9.7	6.1
General government[2]	1.4	-8.1	20.2	7.6	1.8	1.2
Private dwellings[2]	0.1	-30.9	22.5	10.5	5.5	4.6
Change in inventories[3]	0.2	0.8	-0.1	0.0	0.0	0.0
Net trade[3]	0.0	0.1	-0.2	-0.2	-0.4	-0.3
Balance of payments current account						
Per cent of GDP	-3.8	-3.9	-3.6	-3.4	-3.4	-3.4
Inflation						
CPI	1.8	0.7	1.3	1.9	2.0	2.0
RPI	2.6	1.3	1.1	3.0	3.3	3.1
GDP deflator at market prices	1.8	2.7	0.0	2.0	2.1	2.0
Labour market						
Employment (million)	32.8	31.3	30.9	32.2	32.6	33.0
Productivity per hour	0.0	5.0	-2.1	-0.5	0.3	0.8
Wages and salaries	3.5	-3.2	1.4	6.8	4.2	3.7
Average earnings[4]	2.8	0.2	3.7	2.7	3.0	3.1
LFS unemployment (% rate)	3.8	8.8	10.1	6.9	5.9	5.3
Household sector						
Saving rate	5.7	17.2	11.3	10.9	11.0	10.6
House prices	1.1	-0.7	-3.8	9.6	7.8	6.1
Property transactions (000s)	1,177	753	1,472	1,355	1,333	1,360

[1] Includes households and non-profit institutions serving households.

[2] Includes transfer costs of non-produced assets.

[3] Contribution to GDP growth, percentage points.

[4] Wages and salaries divided by employees.

Table 2.3: Detailed summary of the upside scenario

	Percentage change on a year earlier, unless otherwise stated					
	Outturn	Scenario period				
	2019	2020	2021	2022	2023	2024
UK economy						
Gross domestic product (GDP)	1.4	-10.6	14.5	1.9	1.3	1.4
GDP level (2019=100)	100.0	89.4	102.4	104.4	105.7	107.2
Nominal GDP	3.3	-8.3	14.7	4.0	3.4	3.4
Nominal GDP level (2019=100)	100.0	91.7	105.3	109.4	113.1	117.0
Expenditure components of GDP						
Household consumption[1]	1.1	-11.1	12.5	1.6	1.8	2.1
Fixed investment	0.6	-21.2	26.0	8.6	2.2	2.1
Business investment	0.6	-20.5	29.2	8.1	0.9	1.4
Inflation						
CPI	1.8	0.7	1.3	1.9	2.0	2.0
RPI	2.6	1.3	1.7	3.6	3.0	2.9
Labour market						
Employment (million)	32.8	31.6	32.5	33.2	33.3	33.4
Productivity per hour	0.0	5.7	-0.4	-1.2	0.6	1.0
Wages and salaries	3.5	-1.3	7.0	5.2	3.3	3.3
Average earnings[2]	2.8	1.2	5.2	3.6	3.1	3.2
LFS unemployment (% rate)	3.8	7.9	5.6	4.0	4.0	4.1
Household sector						
House prices	1.1	0.2	4.1	12.2	4.7	3.8
Property transactions (000s)	1,177	765	1,640	1,378	1,337	1,366

[1] Includes households and non-profit institutions serving households.

[2] Wages and salaries divided by employees.

Table 2.4: Detailed summary of the downside scenario

	Percentage change on a year earlier, unless otherwise stated					
	Outturn	Scenario period				
	2019	2020	2021	2022	2023	2024
UK economy						
Gross domestic product (GDP)	1.4	-14.3	4.6	5.4	3.3	2.5
GDP level (2019=100)	100.0	85.7	89.7	94.5	97.6	100.1
Nominal GDP	3.3	-12.0	4.8	7.5	5.4	4.6
Nominal GDP level (2019=100)	100.0	88.0	92.2	99.1	104.5	109.3
Expenditure components of GDP						
Household consumption[1]	1.1	-15.9	2.4	3.1	3.1	2.9
Fixed investment	0.6	-24.3	13.9	13.6	6.2	4.5
Business investment	0.6	-25.9	7.8	17.5	7.9	5.6
Inflation						
CPI	1.8	0.7	1.3	1.9	2.0	2.0
RPI	2.6	1.2	0.5	2.9	3.4	3.1
Labour market						
Employment (million)	32.8	31.2	30.4	31.7	32.3	32.6
Productivity per hour	0.0	4.3	-5.6	0.0	1.2	1.3
Wages and salaries	3.5	-5.3	-2.7	7.5	4.4	4.1
Average earnings[2]	2.8	-1.6	1.1	2.6	3.0	3.6
LFS unemployment (% rate)	3.8	9.1	11.6	8.1	6.9	6.3
Household sector						
House prices	1.1	-2.4	-11.7	10.4	9.6	6.7
Property transactions (000s)	1,177	734	1,317	1,274	1,331	1,356

[1] Includes households and non-profit institutions serving households.

[2] Wages and salaries divided by employees.

3 Fiscal scenarios

Introduction

3.1 In Chapter 2 we presented three scenarios for how the economy might recover from the lockdown imposed to combat the spread of coronavirus. This chapter examines the possible fiscal implications of those scenarios. Given the resource intensity of our usual bottom-up fiscal forecasting approach, we have done this by focusing on the central scenario, which has been ready-reckoned at a disaggregated level, supplemented with detailed bottom-up modelling of key issues and overlaid with some additional assumptions. From there, we have ready-reckoned the results for the upside and downside scenarios relative to the central one. The chapter therefore focuses on the results of the central scenario and the assumptions that underpin it while providing a higher-level summary of the upside and downside scenarios.[1] These are intended to provide a plausible range of outcomes, but there is no good basis for forming a judgement as to the probability of each. In particular, we would not claim that the central scenario is the most likely of all possible outcomes.

3.2 The chapter:

- outlines the **policy response** so far from the Government and the Bank of England;
- examines the implications of our central economic scenario for **public sector receipts**, **central government expenditure**, **borrowing by local authorities and public corporations** and **financial transactions**, including asset sales and lending schemes;
- combines these to show the key **fiscal aggregates** in our central scenario and compares them with our March forecast and the financial crisis; and
- summarises our **upside and downside fiscal scenarios**.

The authorities' policy responses

3.3 The lockdown imposed on the economy to contain the virus has been accompanied by many Government and Bank of England measures to support individuals and businesses through the crisis. In this section we quantify their fiscal implications against the baseline of our central scenario, which already incorporates their economic consequences. This differs from our standard approach, which is to evaluate what would happen to the public finances absent any policy measures, then add the direct cost of measures relative to that 'pre-measures baseline', and finally incorporate any indirect effects on the public finances from

[1] The central scenario will also replace our April reference scenario as the basis against which we monitor the monthly public finances data. Monthly profiles consistent with the central scenario will be made available on our website.

their wider economic impact. Such an approach would not be fruitful in the present circumstances given the near-impossibility of quantifying the immense economic damage that would have been inflicted had the authorities not provided any support.

3.4 We have undertaken a relatively light-touch scrutiny process with the relevant parts of government to generate these policy costings. They reflect our assumptions and judgements, which are not necessarily shared by the Treasury or other departments. Where possible we have cross-checked our estimates against those presented by other bodies. We have also made some assumptions about how new policies will be recorded in the official data, which are subject to uncertainty until the ONS has decided how they should be recorded.

3.5 We have focused exclusively on the coronavirus policy response, so have not included estimates of other new policies announced since March, which will be reflected in our next full forecast. This includes the new customs tariff schedule (announced on 21 May) that will come into effect next year after the end of the Brexit transition period, and new eligibility rules for EU students from the start of the 2021-22 academic year (announced on 23 June).

3.6 We have also not included any measures announced after 26 June. This includes those announced in the Chancellor's Summer Economic Update on 8 July, which were finalised and notified to us too late to be included in our scenarios. As described in Box 3.1, the Treasury estimates that these will cost "*up to £30 billion*". In addition, the Treasury announced that it "*has so far approved £48.5 billion of additional expenditure on public services*", of which £32.9 billion had not previously been announced. The new measures and the newly disclosed public services spending would have had a material effect on our scenarios had we been able to incorporate them, but they would primarily affect the level of borrowing this year and the path for public sector net debt over the medium term, rather than the level of structural borrowing at the scenarios' five-year horizons.

Box 3.1: The Chancellor's 8 July 'Summer Economic Update'

On 8 July, the Chancellor announced further measures to support the economy as the lockdown is eased. The Treasury described these as costing "*up to £30 billion*". We were not notified in sufficient time to incorporate them into our scenarios, so will return to them in due course.

The Treasury categorised the measures under four headings:

- A '**Job Retention Bonus**' that offers employers a one-off payment of £1,000 *"for every furloughed employee who remains continuously employed"* to the end of January 2021 (subject to conditions). The Treasury shows a maximum cost of £9.4 billion if it were to be claimed in respect of every furloughed job. The actual cost is likely to be rather lower.
- A '**supporting jobs**' package of labour market interventions. The largest is an initial £2.1 billion fund for a new 'Kickstart Scheme' of work placements for universal credit (UC) recipients aged between 16 and 24. The actual cost will depend on the level of take-up, and the Chancellor indicated that the cost will not be capped. The package also includes £1 billion of additional funding for DWP, which includes doubling the number of UC work coaches. The Treasury's estimated cost for this package is £3.7 billion.

- A '**protecting jobs**' package to support the hospitality and accommodation sectors, and 'attractions'. This includes a temporary cut in the rate of VAT from 20 to 5 per cent that will apply from 15 July to 12 January 2021. Under the 'Eat Out to Help Out' scheme, the Government will in effect pay half of diners' bills (up to £10 per head) at participating establishments on selected days in August. The Treasury estimates this package will cost £4.6 billion. In practice, expenditure will depend on how consumers respond.
- A '**creating jobs**' package composed of spending on infrastructure, 'green' investment and a stamp duty holiday. The latter increases the nil-rate band for residential stamp duty land tax transactions from £125,000 to £500,000 from 8 July to 31 March 2021. Its cost is subject to the wider economic uncertainties around house prices and transactions. The infrastructure package largely represents the bringing forward of previously announced spending commitments, so it reprofiles, rather than increases, expenditure over the medium term. The Treasury estimates this package will cost £12.5 billion.

Bank of England policy decisions

3.7 The Monetary and Financial Policy Committees of the Bank of England (the MPC and FPC) have both taken action to support the economy since the pandemic took hold in the UK – including additional gilt purchases, provision of cheap funding to banks that lend to the real economy and relaxing bank capital requirements. The main fiscal implications of these actions are indirect via their effects on the economy, which we do not attempt to isolate in these scenarios. But some also have direct effects on the public finances via the assets and liabilities that they create on the public sector balance sheet and the associated financial flows within the public sector and between the public and private sectors. These are shown in Table 3.1, with respect to effects on public sector net borrowing and net debt:

- **Quantitative easing.** The MPC has increased its open-market purchases of UK government and corporate bonds by £300 billion – to a total of £745 billion – financed by the issuance of central bank reserves. The direct fiscal implications are to increase public sector net debt (because the gilts are purchased from the private sector at a premium to their nominal value), but to reduce net debt interest spending (because the purchased gilts are in effect refinanced at Bank Rate).

- **Term Funding Scheme (TFS).** The MPC has launched a new TFS, with additional incentives for small and medium-sized enterprises. It offers commercial banks 4-year funding at interest rates at, or very close to, Bank Rate, subject to various criteria. Funding related to government-guaranteed Bounce Bank Loans is available on 6-year terms. We have assumed that £150 billion will be provided, with £120 billion repaid after four years and the rest after six (and therefore beyond the scenario horizon). This adds to public sector net debt because the TFS loans are deemed to be illiquid assets and therefore do not net off. The likelihood of any fiscal cost being incurred is remote.

Table 3.1: Direct effects of Bank of England policy changes on the public finances

	£ billion				
	Scenario period				
	2020-21	2021-22	2022-23	2023-24	2024-25
PSNB impact of Bank of England decisions	**-6.0**	**-7.3**	**-6.7**	**-6.1**	**-5.5**
of which:					
Asset Purchase Facility	-6.0	-7.3	-6.7	-6.1	-5.5
PSND impact of Bank of England decisions	**131.6**	**187.9**	**181.2**	**175.5**	**49.8**
of which:					
Asset Purchase Facility	45.0	37.9	31.2	25.5	19.8
Term Funding Scheme	86.6	150.0	150.0	150.0	30.0

Note: The Term Funding Scheme does not impact borrowing. This table uses the convention that a positive sign implies an increase in PSNB (and is therefore a loss to the Exchequer).

Government policy decisions

3.8 Table 3.2 presents our estimates of the cost of the Government's interventions that have been factored into our central scenario. The total cost between 2019-20 and 2024-25 is £147.6 billion, with £142.2 billion of that falling in 2020-21. Employment support measures – the coronavirus job retention scheme (CJRS) and the self-employed income support scheme (SEISS) – account for £61.7 billion (42 per cent) of the total, while the two business support categories account for £49.6 billion (34 per cent). The total cost falls to £134.4 billion in the upside scenario and rises to £172.2 billion in the downside scenario. This variation largely relates to differences in the assumed costs of loan guarantees.

Table 3.2: Effect of Government decisions on the budget balance

	£ billion					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Effect of Government decisions	**3.6**	**142.2**	**-2.0**	**1.5**	**1.4**	**0.9**
of which:						
Public services spending	1.7	18.8	0.6	0.6	0.6	0.0
Employment support	2.3	62.2	-2.8	0.0	0.0	0.0
Business support: loans and guarantees	0.0	20.0	-0.1	-0.1	-0.1	0.0
Business support: tax and spending	-0.2	30.2	-0.2	0.1	0.0	0.0
Welfare spending measures	0.0	9.3	1.0	0.9	0.9	0.9
Other tax measures	-0.2	1.7	-0.5	0.0	0.1	0.1
Memo: Total effect in:						
Upside scenario	*3.6*	*129.3*	*-2.2*	*1.3*	*1.3*	*0.9*
Downside scenario	*3.6*	*166.1*	*-1.4*	*1.5*	*1.4*	*0.9*

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

Public services spending

3.9 The bulk of the Government's additional spending on public services incorporated in our scenarios was contained in the £14.5 billion package of measures announced on 13 April. Larger additional amounts were subsequently disclosed on 8 July, as noted in Box 3.1.

3.10 The amounts included in Table 3.3 can be grouped as:

- **Spending on health services and vulnerable people.** The largest single item is £6.6 billion on health services.

- **Funding for local authorities and the devolved administrations**. This includes £3.7 billion to support local authorities' finances and £2.4 billion of Barnett consequentials from the various other spending measures. It does not include the funding related to business grants and business rates measures discussed later in this chapter.

- **Transport-related spending.** The largest element is the 23 March announcement that rail franchise agreements were to be suspended for six months. Train operating companies (TOCs) were given the opportunity to transition onto 'Emergency Measures Agreements'. These transfer all revenue and cost risk to the Government, while the TOCs continue to run day-to-day services for a pre-determined management fee. This costs £4.4 billion, of which £0.4 billion is from the loss of rail franchise premia and £0.5 billion from Barnett consequentials. The costing assumes that passenger numbers and train services recover broadly in line with GDP in our central scenario. There is considerable uncertainty around all these estimates. The ONS is provisionally recording payments to the TOCs as subsidies paid by central government, ahead of a formal classification assessment.[2] Also included under this heading is £2 billion of capital spending on cycleways and walkways, and £1 billion for Transport for London.

- **Spending for schools and charities** amounts to just under £2 billion.

3.11 The Government has made several other, smaller spending announcements since our March forecast that we have not included – for example, the £10 million Fisheries Response Fund. It is not clear whether these will be funded from within existing spending envelopes or represent additional costs. This will be considered in the round for our next full forecast.

[2] Our estimates of revenue and costs have been informed by the Office of Rail and Road's *UK rail industry financial information 2018-19*. We have not included the effect of any cost-saving measures that the TOCs might introduce.

Table 3.3: Costings for public services spending measures

		£ billion					
		Estimate	Scenario period				
	Head	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Health services	Spend	0.0	6.6	0.0	0.0	0.0	0.0
Clinically vulnerable people	Spend	0.0	0.9	0.0	0.0	0.0	0.0
Devolved administrations[1]	Spend	0.0	2.4	0.0	0.0	0.0	0.0
Local authorities[1]	Spend	1.6	2.1	0.0	0.0	0.0	0.0
Rail franchise suspension	Tax/Spend	0.1	3.7	0.0	0.0	0.0	0.0
Transport for London	Spend	0.0	1.0	0.0	0.0	0.0	0.0
Cycling and walkways	Spend	0.0	0.3	0.6	0.6	0.6	0.0
Schools 'catch-up' package	Spend	0.0	1.0	0.0	0.0	0.0	0.0
Additional funding for charities	Spend	0.0	0.8	0.0	0.0	0.0	0.0
Public services spending		**1.7**	**18.8**	**0.6**	**0.6**	**0.6**	**0.0**

Note: This table uses the convention that a positive sign implies an increase in PSNB (and is therefore a loss to the Exchequer). Breakdowns between tax and spend for individual measures, and between resource and capital DEL and AME are provided in our online policy monitoring database.

[1] This is just the local authority and devolved administration funding that relates to the measures in this table. Those relating to Government policy decisions on business grants and business rates are shown later in this chapter.

Employment support measures

3.12 We estimate that the CJRS and the SEISS will cost £62.2 billion this year, net of income tax and NICs payments on the amounts received. There is considerable uncertainty around this estimate, with a little over half that amount having been claimed so far.

Table 3.4: Costings for employment support measures

		£ billion					
		Estimate	Scenario period				
	Head	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Coronavirus job retention scheme	Spend	2.5	52.0	0.0	0.0	0.0	0.0
	Tax	-0.2	-5.0	0.0	0.0	0.0	0.0
	Total	2.3	47.0	0.0	0.0	0.0	0.0
Self-employed income support scheme	Spend	0.0	15.2	0.0	0.0	0.0	0.0
	Tax	0.0	0.0	-2.8	0.0	0.0	0.0
	Total	0.0	15.2	-2.8	0.0	0.0	0.0
Employment support		**2.3**	**62.2**	**-2.8**	**0.0**	**0.0**	**0.0**
Memo: Total CJRS effect in:							
Upside scenario		*2.3*	*45.7*	*0.0*	*0.0*	*0.0*	*0.0*
Downside scenario		*2.3*	*48.5*	*0.0*	*0.0*	*0.0*	*0.0*

Note: This table uses the convention that a positive sign implies an increase in PSNB (and is therefore a loss to the Exchequer). Breakdowns between tax and spend for individual measures, and between resource and capital DEL and AME are provided in our online policy monitoring database.

Coronavirus job retention scheme

3.13 The CJRS was initially announced by the Government on 20 March. The period it covers was extended by one month on 17 April, then on 12 May a further three-month extension was announced, alongside changes to the terms of the support and the date on which it would be closed.[3] These announcements have resulted in five phases for the scheme's operation:

- **From 1 March to 30 June** the CJRS paid employers a taxable grant worth 80 per cent of a furloughed employee's wage cost, up to a maximum of £2,500 a month, plus the associated employer NICs and the minimum auto-enrolment employer pension contribution on the subsidised wage. During this phase, employers were only able to claim support for workers that had been furloughed completely.[4] Employers cannot pay furloughed employees less than the 80 per cent subsidy, but they are free to top up their employees' wages to previous levels, which many have chosen to do.

- **From 1 July**, only employees that had been furloughed for at least three consecutive weeks during the first phase remain eligible for the scheme, making 10 June the effective cut-off point for new claims. From 1 July employers have the flexibility to bring furloughed workers back on reduced hours, with the Government covering the costs of furloughed hours on the same terms as during the initial phase.

- **From 1 August**, the Government will no longer cover the cost of employer NICs and pension costs. The subsidy for wage costs is unchanged.

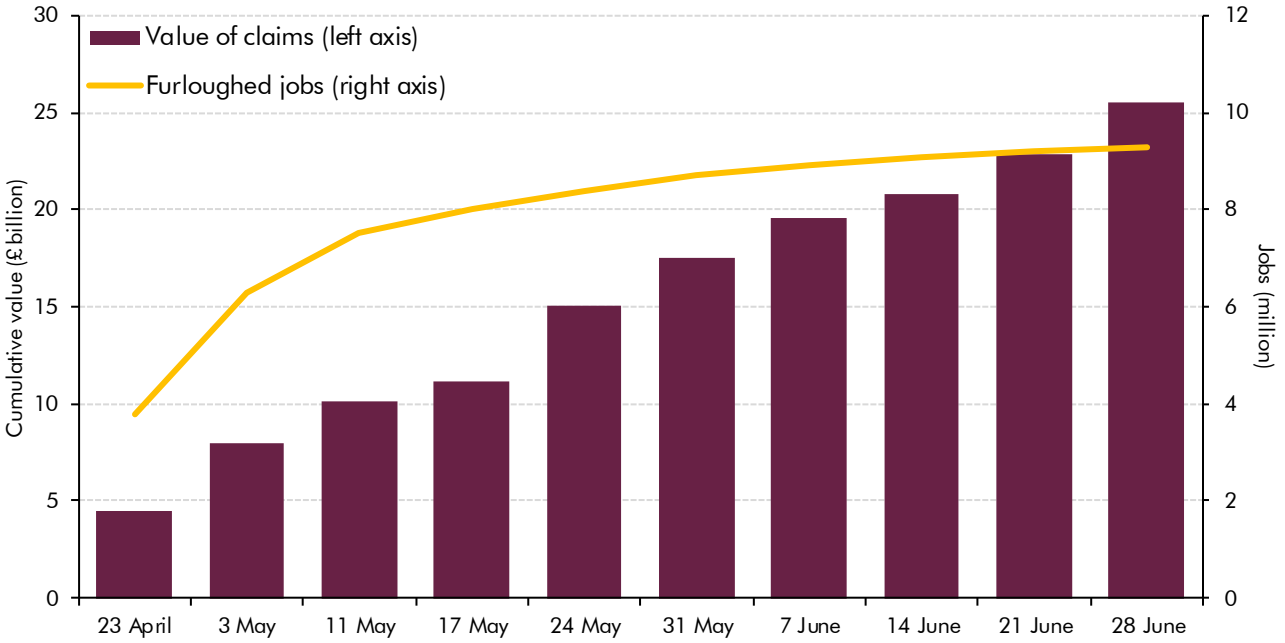
- **From 1 September**, employers will need to cover at least 10 per cent of an employee's gross pay (up to £312.50), as the wage subsidy element is reduced to 70 per cent.

- **From 1 October to 31 October**, employers will need to cover at least 20 per cent of an employee's gross pay (up to £625), as the subsidy is reduced to 60 per cent of wages.

3.14 The cost of the CJRS is determined by the number of jobs that are furloughed and for how long, plus the average subsidy per job per time period. From 1 July onwards, the proportion of each job's hours that are furloughed matters too. Chart 3.1 shows that as of 28 June, 9.3 million jobs had been furloughed at a cost of £25.5 billion, implying an average subsidy per job of £2,740. This represents around a third of all jobs (as recorded on HMRC's RTI system). In total, 1.1 million employers have made use of the scheme.

[3] The full details of how the CJRS will operate during the extension period were published on 29 May.
[4] The scheme is open to all UK employers though there are some restrictions around the eligibility of employees: claims can only be made in respect of furloughed employees that were employed on 19 March, and who were also on an employer's PAYE payroll on or before 19 March and for whom an accompanying real-time information (RTI) submission had been made to HMRC by that date.

Chart 3.1: Weekly number of furloughed jobs and aggregate claim value



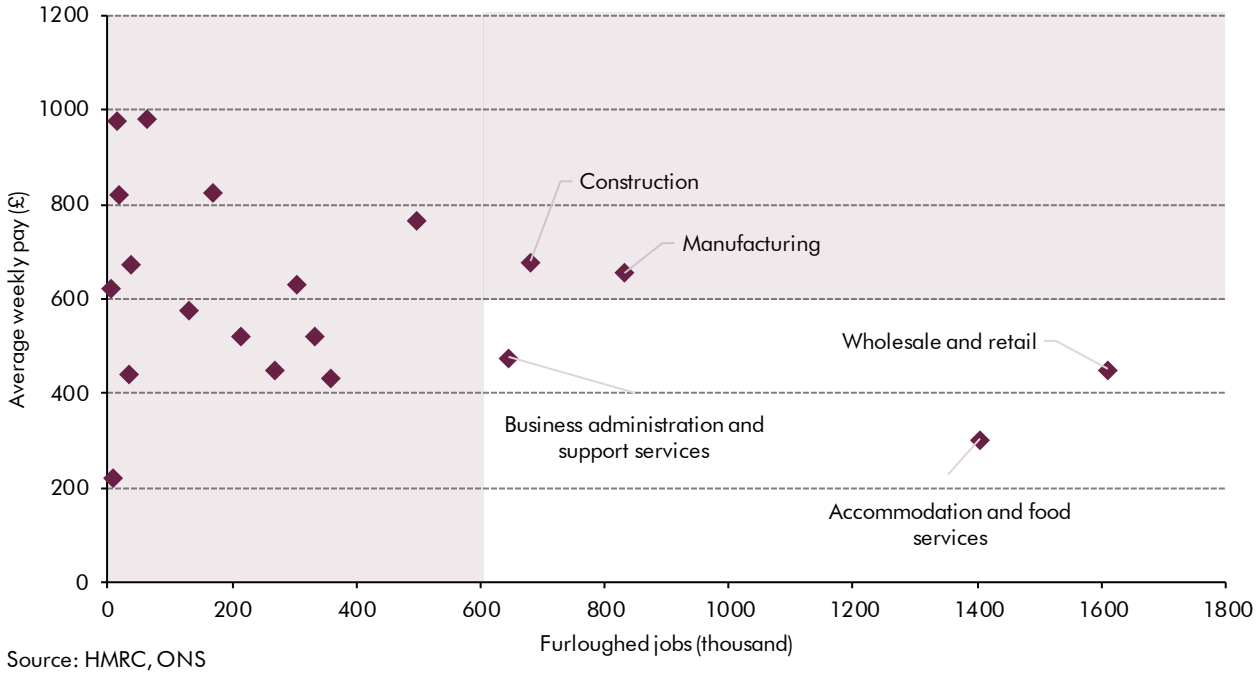
Source: HMRC

3.15 HMRC's weekly outturn data and some provisional HMRC analysis of administrative data suggest that the average subsidy per furloughed job is relatively low. The average claim to date is estimated to cover somewhat more than two months, translating to an average subsidy per job per month of around £1,200. This implies that the average pre-virus weekly gross pay of the jobs that have been furloughed so far is around £320 – much closer to the median wage of part-time workers than for full-time workers in 2019.[5] This suggests that employers have mainly furloughed workers whose pre-virus jobs involved working fewer hours and/or at lower hourly pay than the typical employee.

3.16 This seems to be true even when controlling for the higher propensity to furlough jobs in lower-paying sectors. Chart 3.2 plots the number of furloughed jobs in each sector against a measure of pre-virus average weekly pay in that sector.[6] 42 per cent of furloughed jobs are in three sectors with relatively low pay: the wholesale and retail, accommodation and food services, and business administration and support services sectors that were hit particularly hard by the lockdown. Pre-virus pay in the construction and manufacturing sectors, which each account for over 600,000 furloughed jobs, was closer to the median.

[5] The ONS Annual Survey of Hours and Earnings for 2019 reported median earnings of £585 a week for full-time employees versus £197 a week for part-time employees.
[6] Weekly pay taken from the Annual Survey of Hours and Earnings for 2019.

Chart 3.2: Numbers of CJRS claims and average pre-virus pay by sector



Source: HMRC, ONS

3.17 Another potential cause of the low average subsidy per job might be that a disproportionately large number of people have been furloughed from more than one part-time job, which would raise the average subsidy per individual relative to the observed average per job. This should ultimately be verifiable from HMRC's administrative data.

3.18 Table 3.5 sets out the steps involved in estimating the net cost of the CJRS in our central scenario, which has been informed by the latest weekly claims data and aligned to the labour market assumptions in our central economic scenario. To do so we have used a volume figure that attempts to align with the LFS definition of employees rather than the RTI measure of employments reported in HMRC's weekly data. The cost is derived from:

- **The number of furloughed individuals.** This averages 8.4 million a month between March and June, just under a third of all employees, which accords with survey evidence from the ONS and the Bank of England. It is fewer than the 9.3 million jobs reported in HMRC's published statistics as we assume that some individuals will have been furloughed from more than one part-time job.[7] From July we assume that the number of furloughed workers declines broadly in line with the recovery in output, so that it falls to 4.6 million in October when the scheme closes. Strictly speaking the link between output and CJRS usage should be with respect to the proportion of total hours furloughed rather than the number of employees, so as part-time furloughing becomes possible we would expect to see higher numbers of employees affected but for fewer hours per week. This does not materially affect our cost estimate, as it would have only modest effects on the amount of tax paid on furloughed wages.

[7] The Labour Force Survey reports that around 5 per cent of employees have a second job. We have assumed that a somewhat higher proportion of individuals whose jobs have been furloughed via the CJRS will be in that position.

- **The pre-virus average monthly salary of those furloughed** is relatively low at just over £1,400. This reflects claims made to date, as discussed above. Applying the 80 per cent policy parameter (reduced to 70 per cent in September and then 60 per cent in October) allows us to calculate the average subsidised wage. We then add the cost of employer NICs and auto-enrolment pension contributions (from March to July), which raises the average gross subsidy to £1,200 a month until July, before dropping progressively to £848 a month by October. We assume a quarter-month cost for March, linked to when the full lockdown was imposed.

- **The gross cost of the CJRS** is simply the number of employees furloughed multiplied by the average subsidy per individual. This peaks at £10.9 billion in April before falling every month thereafter, initially due to the fewer number of furloughed employees and then to reduced generosity. The total cost of the subsidy is £54.7 billion, with the cost related to March recorded in 2019-20 in the public finances data. Employers can backdate claims, so HMRC does not yet have final outturn statistics for earlier months.

- **Some of the gross cost of the subsidy is offset by tax paid on the subsidised wages**. We estimate that around 10 per cent of the cost of the scheme relates to income tax and NICs payments, so returns directly to the Exchequer. This relatively low effective tax rate reflects the low average pay of those being furloughed, which in many cases is close to the income tax personal allowance and the NICs lower threshold. This figure will be affected by the distribution of claims by size, not just the average claim size.

Table 3.5: Coronavirus job retention scheme: central scenario cost estimate

	Million, unless otherwise unless stated							
	Estimate	Scenario period						
	2019-20	2020-21						
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Employee numbers								
All employees	28.0	27.1	27.0	26.8	26.7	26.5	26.3	26.0
Number of furloughed individuals	8.4	9.1	8.5	7.6	5.8	5.4	5.0	4.6
Proportion furloughed (per cent)	30.0	33.6	31.5	28.3	21.8	20.4	19.0	17.7
	£, unless otherwise stated							
Monthly salaries								
Average pre-virus monthly salary	1,413	1,413	1,413	1,413	1,413	1,413	1,413	1,413
Proportion of wage subsidised (per cent)	80	80	80	80	80	80	70	60
Average subsidised wage	1,130	1,130	1,130	1,130	1,130	1,130	989	848
Effective NICs and auto-enrolment rate (per cent)	6.2	6.2	6.2	6.2	6.2			
Average gross cost of subsidy	1,200	1,200	1,200	1,200	1,200	1,130	989	848
Proportion of month affected (per cent)	25	100	100	100	100	100	100	100
Effective average subsidy	300	1,200	1,200	1,200	1,200	1,130	989	848
	£ billion							
Gross cost								
Gross monthly cost	2.5	10.9	10.2	9.1	7.0	6.1	4.9	3.9
Cumulative gross cost 2019-20	2.5							
Cumulative gross cost 2020-21		10.9	21.1	30.2	37.2	43.3	48.2	52.1
Cumulative gross cost	**2.5**	**13.4**	**23.6**	**32.7**	**39.7**	**45.8**	**50.8**	**54.7**
	£ billion							
Tax receipts								
Effective tax and NICs rate (per cent)	9.5	9.5	9.5	9.5	9.5	10.1	10.1	10.1
Monthly tax and NICs receipts	-0.2	-1.0	-1.0	-0.9	-0.7	-0.6	-0.5	-0.4
Cumulative tax receipts	**-0.2**	**-1.3**	**-2.2**	**-3.1**	**-3.8**	**-4.4**	**-4.9**	**-5.3**
Cumulative net cost	**2.3**	**12.2**	**21.4**	**29.6**	**35.9**	**41.4**	**45.9**	**49.4**

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

3.19 Table 3.6 compares the gross cost of the CJRS across our three scenarios. They differ by less than might be expected because just under half the total cost has already been incurred.

Table 3.6: Comparison of CJRS costs in the upside, central and downside scenarios

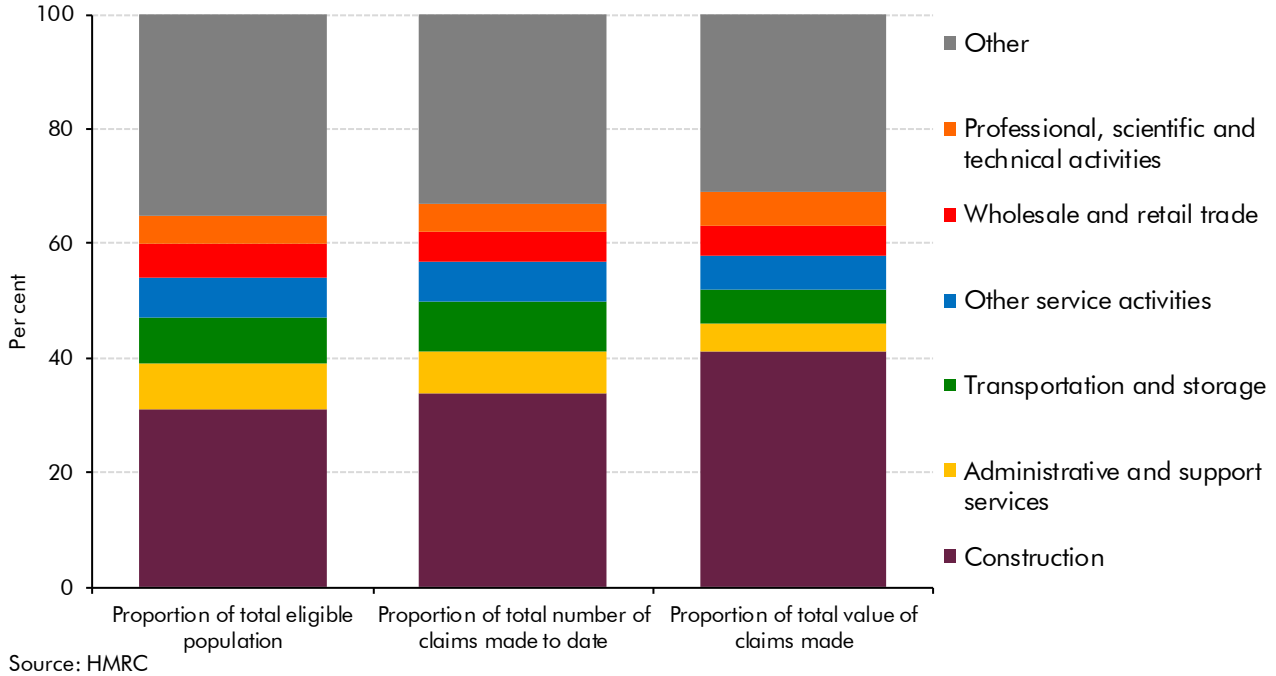
	£ billion, unless otherwise unless stated							
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Upside scenario								
Number of furloughed individuals (million)	8.4	9.1	8.5	7.6	5.4	5.0	4.6	4.2
Cumulative gross cost	**2.5**	**13.4**	**23.6**	**32.7**	**39.2**	**44.9**	**49.5**	**53.1**
Central scenario								
Number of furloughed individuals (million)	8.4	9.1	8.5	7.6	5.8	5.4	5.0	4.6
Cumulative gross cost	**2.5**	**13.4**	**23.6**	**32.7**	**39.7**	**45.8**	**50.8**	**54.7**
Downside scenario								
Number of furloughed individuals (million)	8.4	9.1	8.5	7.6	6.1	5.7	5.4	5.1
Cumulative gross cost	**2.5**	**13.4**	**23.6**	**32.7**	**40.0**	**46.5**	**51.9**	**56.2**

Self-employed income support scheme

3.20 The SEISS is a taxable grant for the self-employed and members of partnerships. It was initially announced on 26 March as a single instalment payment covering three months, and worth 80 per cent of average monthly profits in 2016-17, 2017-18 and 2018-19, up to a maximum of £7,500. On 29 May the Chancellor announced that 13 July would be the closing date for the first grant, but also that the scheme would be extended to include a second grant worth 70 per cent of average monthly profits and capped at £6,570 in total. Eligibility for both grants requires that annual trading profits do not exceed £50,000, that more than half of recipients' total income is derived from self-employment, and that recipients' trade has been adversely affected by coronavirus. As of 28 June, 2.6 million claims have been made, totalling £7.7 billion (an average claim of just under £3,000).

3.21 HMRC's statistics for claims made up to 31 May show that by number and by total value the construction sector has been the largest source of claims. But as Chart 3.3 shows, that is a simple reflection of the sector accounting for a large share of those eligible to claim. Indeed, the six largest sectors make up around two-thirds of the eligible population, the number of claims and the total value claimed. There has been little correlation between the take-up rates by sector and the average value of claims – a relationship that might have been expected and that largely holds across the benefits and tax credits systems.[8]

Chart 3.3: SEISS claims by sector to 31 May



Source: HMRC

3.22 Table 3.7 shows how the gross and net costs of the SEISS have been estimated. We assume that the number of claims for the first grant will rise to 2.8 million as final claims are made. With the average payment assumed to be £2,900, the first grant costs £8.1 billion. For the second grant we have simply scaled the cost down in line with the reduced generosity,

[8] See Figure 4.2 and the associated discussion in our *Briefing Paper No.6: Policy costings and our forecast*, March 2014.

giving a figure of £7.1 billion. We estimate that just under 20 per cent of the £15.2 billion of total expenditure will return to the Exchequer in additional income tax and NICs. But since this will be paid via self-assessment, this boosts receipts in 2021-22.

Table 3.7: Self-employed income support scheme: central scenario cost estimate

	£ billion, unless otherwise stated	
	First three-month grant	Second three-month grant
Cost		
Number of claimants (million)	2.8	2.8
Average award (£)	2,900	2,538
Gross cost	8.1	7.1
Cumulative gross cost	**8.1**	**15.2**
Tax receipts		
Effective tax and NICs rate (per cent)	18.4	18.4
Tax and NICs receipts	-1.5	-1.3
Cumulative tax receipts and NICs	**-1.5**	**-2.8**
Cumulative net cost	**6.6**	**12.4**

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

Business support: loans and guarantees

3.23 On 17 March, the Government pledged £330 billion in guarantees to support the economy. Following subsequent announcements, this now covers several loan schemes and a reinsurance agreement with trade credit insurance providers. As discussed in Chapter 5, the £330 billion figure is not a good guide to the likely fiscal costs, which will depend on both the take-up of the guarantees and the proportion that are eventually called.

3.24 There are three main guaranteed loan schemes, all of which are open for an initial six-month period, but with the potential to be extended. They are:

- **Coronavirus business interruption loan scheme (CBILS)**. The CBILS provides support to smaller businesses, with financing of up to £5 million. The Government provides the lender with a partial guarantee (80 per cent) against the outstanding loan balance and will also pay any interest and lender-levied fees for the first 12 months. The CBILS was launched on 11 March. Changes were introduced on 3 April to speed up access to smaller loans under the scheme, including removing the requirement for normal underwriting practices to be followed so that lenders could be prevented from requesting personal guarantees on loans under £250,000. Personal guarantees on loans above this are limited to 20 per cent of any amount outstanding after recoveries.

- **Coronavirus large business interruption loan schemes (CLBILS)**. The CLBILS provides support to mid-sized and larger businesses with financing of up to £200 million, depending on their turnover. The Government provides the lender with the same partial guarantee (80 per cent) against the outstanding balance of the finance. The CLBILS was launched on 3 April, with the maximum loan increased from £50 million to £200 million on 26 May. Companies seeking loans and revolving credit facilities over £50 million cannot pay cash bonuses, award pay rises to senior management or

pay dividends or buy back their own shares until the facility is repaid. Restrictions prevent CLBILS debt from being subordinated to companies' other obligations. The CBILS rules around personal guarantees also apply to this scheme.

- **Bounce Back Loan Schemes (BBLS)**. The BBLS provides support to all businesses, so long as they are not already in receipt of CBILS or CLBILS facilities, with loans of up to £50,000. The Government provides the lender with a full 100 per cent guarantee against the outstanding loan balance, and has sought to make the loans as easy as possible to access by minimising lenders' usual underwriting checks. The Government also covers the first 12 months of interest payments and the borrower does not have to make any repayments during that period. It was launched on 4 May.

3.25 Table 3.8 compares various features of the three loan guarantee schemes.

Table 3.8: Summary of the main business support loan schemes

	CBILS	CLBILS	BBLS
Eligibility	Annual turnover less than £45 million. Business would be viable were it not for the pandemic. Not classed as a "business in difficulty" on 31 Dec 2019.	Annual turnover more than £45 million. Business would be viable were it not for the pandemic.	Business of any size. Not classed as a "business in difficulty" on 31 Dec 2019.
Finance	Up to £5 million in the form of loans, overdrafts, invoice finance, asset finance.	Up to £200 million in the form of loans, overdrafts, invoice finance, asset finance.	From £2,000 up to 25% of a business' turnover. Maximum £50,000.
Finance terms	Loans and asset finance up to 6 years; overdraft and invoice finance up to 3 years.	3 months to 3 years.	6 years – early repayment allowed
Guarantee	Partial – 80%. Guarantee fees for lender.	Partial – 80%. Guarantee fees for lender.	Full – 100%. No guarantee fees for lender or borrower.
Interest and other	Interest set by lender after initial 12 months. Government will make a Business Interruption Payment (BIP) to cover the first 12 months of interest payments and lender-levied charges.	Interest set by lender.	2.5% per annum. Government will make a BIP and borrower does not have to make any repayments for the first 12 months.

Note: The schemes are available to all sectors except credit institutions, insurance companies (but not including insurance brokers), and public sector organisations, including state-funded primary and secondary schools. Companies can only access one of these schemes or the Covid Corporate Financing Facility.

3.26 Table 3.9 shows that as of 28 June, over a million facilities had been approved, with the BBLS accounting for 95 per cent of them. The average loan size differs hugely across the schemes – rising from around £30,000 for the BBLS, to £210,000 for the CBILS, and £6.4 million for the CLBILS. Despite their small average size, the overall value of loans approved is also dominated by the BBLS, which so far make up around 70 per cent of the total. Since this scheme involves the most generous guarantee terms and the least stringent checks by lenders, it is likely to generate the largest fiscal costs and risks of all the schemes.

Table 3.9: Government-guaranteed loan schemes as at 28 June

	CLBILS	CBILS	BBLS	Total
Number of completed applications	745	104,569	1,186,006	1,291,320
Number of approved facilities	359	52,275	967,321	1,019,955
Approved facilities (per cent)	48	50	82	79
Value of loans approved (£ billion)	**2.3**	**11.1**	**29.5**	**42.9**
Average loan value (£ million)	6.41	0.21	0.03	0.04

3.27 The fiscal costs associated with these schemes will depend on four factors: the value of loans outstanding; the proportion of loans that default; the amounts recovered by lenders in those cases (which determines the 'loss given default'); and the proportion of the remaining loss that is guaranteed by government.

3.28 Table 3.10 details the assumptions underpinning our estimates of the cost of each scheme in each of our three scenarios. This is a simple top-down exercise around which there is clearly considerable uncertainty at each step. The key assumptions are:

- **Value of loans.** Over the initial six-month period that the schemes are open, we assume £76 billion of lending across the schemes, with £53 billion of that through the BBLS. This is simply twice the total value that had been approved by 14 June – the latest figure available when we closed the numbers used in these costings.

- **Default rates.** Evidence from two schemes in place during the financial crisis – the Small Firms Loan Guarantee and Enterprise Finance Guarantee – shows that three years after issuance around 30 per cent of loans had resulted in defaults.[9] These schemes guaranteed up to 75 per cent of outstanding loan balances, so share some similarities with the new schemes – though less so with the BBLS, which has features that might be expected to result in even higher default rates. We have therefore assumed that 40 per cent of BBLS borrowers will ultimately default, but assume much lower default rates of 10 per cent for CBILS and CLBILS loans, as companies using those schemes are likely to be larger and more creditworthy than those using the BBLS, and lenders are performing more underwriting checks before approving facilities.

[9] London Economics report for the British Business Bank, *Economic impact evaluation of the Enterprise Finance Guarantee (EFG) scheme*, November 2017. See also Department for Business, Innovation and Skills, *Economic evaluation of the Enterprise Finance Guarantee (EFG) scheme*, February 2013.

- **Loss-given-default rates.** Drawing on the same evidence from the financial crisis, the default rate by value might be expected to be around half the default rate by volume. We have therefore assumed a 50 per cent loss-given-default rate for CBILS and CLBILS loans, but 75 per cent for BBLS loans, where no repayments are due for the first 12 months and it is likely that a higher share of approved facilities will have been drawn.

- **Fiscal loss rate**. This represents the fiscal cost of the guarantees and is the product of assumed default and loss-given-default rates, and the proportion of losses that are covered by the guarantees. In our central scenario these vary from just 4 per cent for CLBILS and CBILS loans, up to 30 per cent for BBLS loans, resulting in an average across the schemes of 13 per cent and a total cost of £16.9 billion. Fully 95 per cent of the fiscal cost is related to BBLS loans. We illustrate the potential non-linearity in the costs associated with these schemes by assuming the fiscal loss rate in the upside scenario is half that in the central one, but is twice as high in the downside scenario.

Table 3.10: Total fiscal cost of the guaranteed loan schemes

	£ billion, unless otherwise stated			
	CLBILS	CBILS	BBLS	Total / Average
Estimated value of loans approved over 6 months	3.5	20.2	52.7	76.4
Default rate (per cent)	10	10	40	20
Loss-given-default rate (per cent)	50	50	75	58
Guarantee (per cent)	80	80	100	
Central scenario				
Fiscal loss rate (per cent)	4	4	30	13
Fiscal cost of write-offs	**0.1**	**0.8**	**16.0**	**16.9**
Upside scenario				
Fiscal loss rate (per cent)	2	2	15	6
Fiscal cost of write-offs	**0.1**	**0.4**	**8.1**	**8.6**
Downside scenario				
Fiscal loss rate (per cent)	8	8	60	25
Fiscal cost of write-offs	**0.3**	**1.6**	**31.8**	**33.7**

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

3.29 The ONS has determined that the CBILS and the CLBILS should be classified as 'standardised guarantee schemes'.[10] This means that the public sector balance sheet will include provisions for expected calls over the lifetime of these schemes, with that expected cost accrued as spending as loans are issued. This means the lifetime cost of the guarantees shown in Table 3.10 hit PSNB in 2020-21, whereas the cash cost of write-offs would be expected to take place over several years as borrowers default and lenders call on the guarantees. Guarantee fees and business interruption payments made by government are also recorded as revenue and spending respectively, at the time they occur.

[10] Pending a classification decision from the ONS, our scenarios assume that the BBLS will be treated as a 'standardised guarantee scheme' too. This remains an area of uncertainty and we recognise that some differences exist between BBLS and the other guarantee schemes which could affect its classification.

3.30 The other three lending and guarantee schemes are:

- **Covid Corporate Financing Facility (CCFF).** The CCFF is a joint Treasury and Bank of England lending facility designed to support large firms whose cash flow has been disrupted. Firms can issue short-term debt in the form of commercial paper that the Bank will purchase. The Treasury indemnifies the Bank against any associated losses. To be eligible a company must "*make a material UK contribution*", be rated investment grade as of 1 March, not be a public body, and not have accessed one of the other loan schemes. The scheme is initially open for 12 months. As of 1 July, £17.6 billion of commercial paper (net of redemptions) had been purchased. Our central scenario assumes no fiscal costs from this scheme, while our downside scenario assumes a £1 billion cost, split evenly between 2020-21 and 2021-22.[11]

- **Future Fund.** The Future Fund provides government loans to UK-based companies ranging from £125,000 to £5 million, subject to at least equal funding from private investors in the past five years. If companies are unable to repay the funding, government loans will convert to equity. The Government initially committed funding of £250 million, but outturn data show that this amount has been surpassed. As at 28 June, the Future Fund had approved £320.6 million of convertible loans to 322 businesses. The Government has said that it will expand the scheme, but that it is keeping the scale of investment under review.[12] Our costing was based on the initial allocation of £250 million and a fiscal loss rate of 30 per cent over three years. Even with greater take-up of the scheme than we have assumed, any write-off costs would be small relative to those associated with the larger loan guarantee schemes.

- **Trade credit insurance (TCI).** TCI covers business-to-business transactions, protecting suppliers in the event that a buyer defaults on payment. The Government reports that £171 billion of business activity was insured as of April 2020. The measure provides up to £10 billion of reinsurance cover to trade credit insurers. It is open for nine months, from 1 April to 31 December, with the potential to be extended. The Government will cover 90 per cent of the cost of claims and insurers the remaining 10 per cent. Our costing assumes a loss rate equal to one tenth of the fall in GDP in our central scenario, guided by Government analysis of TCI losses during the financial crisis and data from the Association of British Insurers. This gives a cost of £1.7 billion in our central scenario (and £0.8 billion in the upside and £2.8 billion in the downside). Pending an ONS decision, we assume this will be classified as expenditure in the public sector finances, recorded at the time the indemnified event occurs.

[11] The ONS has provisionally determined that the commercial paper should be treated as a central government liquid asset and so will net off in the calculation of PSND.
[12] British Business Bank, *'Future Fund Extended to UK companies from accelerator programmes outside the UK'*, 30 June 2020.

3.31 Table 3.11 sets out five-year costings for the measures discussed in this section.

Table 3.11: Costings for business support loans and guarantees

		£ billion					
		Estimate	Scenario period				
	Head	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Coronavirus business interruption loan scheme (CBILS)[1]	Spend	0.0	0.8	-0.1	-0.1	-0.1	0.0
Coronavirus large business interruption loan scheme (CLBILS)[1]	Spend	0.0	0.1	0.0	0.0	0.0	0.0
Bounce back loan scheme (BBLS)	Spend	0.0	17.3	0.0	0.0	0.0	0.0
Covid corporate financing facility (CCFF)	Spend	0.0	0.0	0.0	0.0	0.0	0.0
Future fund	Spend	0.0	0.0	0.0	0.0	0.0	0.0
Trade credit insurance	Tax/spend	0.0	1.7	0.0	0.0	0.0	0.0
Business support: loans and guarantees		**0.0**	**20.0**	**-0.1**	**-0.1**	**-0.1**	**0.0**
Memo: Cash profile of write-offs (all schemes)		*0.0*	*4.8*	*4.5*	*3.4*	*2.5*	*1.7*
Memo: Upside scenario costings							
BBLS		*0.0*	*9.4*	*0.0*	*0.0*	*0.0*	*0.0*
CBILS and CLBILS		*0.0*	*0.5*	*-0.1*	*-0.1*	*-0.1*	*0.0*
Trade credit insurance		*0.0*	*0.8*	*0.0*	*0.0*	*0.0*	*0.0*
Total upside scenario costings		***0.0***	***10.7***	***-0.1***	***-0.1***	***-0.1***	***0.0***
Memo: Downside scenario costings							
BBLS		*0.0*	*33.1*	*0.0*	*0.0*	*0.0*	*0.0*
CBILS and CLBILS		*0.0*	*1.9*	*-0.1*	*-0.1*	*-0.1*	*0.0*
Trade credit insurance		*0.0*	*2.8*	*0.0*	*0.0*	*0.0*	*0.0*
CCFF		*0.0*	*0.5*	*0.5*	*0.0*	*0.0*	*0.0*
Total downside scenario costings		***0.0***	***38.3***	***0.4***	***-0.1***	***-0.1***	***0.0***

Note: This table uses the convention that a positive sign implies an increase in PSNB (and is therefore a loss to the Exchequer). Breakdowns between tax and spend for individual measures, and between resource and capital DEL and AME are provided in our online policy monitoring database.

[1] For CBILS and CLBILS, guarantee fees paid by lenders are revenue for government and are recorded in AME as they have been classified as non-market fees by the ONS. No guarantee fees are paid under BBLS.

Business support: tax and spending measures

3.32 There are a handful of further tax and spending measures designed to support businesses that are incorporated in our scenarios. The costings are set out in Table 3.12. They include:

- **Business grants**. The Government is funding business grant schemes that are being administered by English local authorities and the devolved administrations. The Small Business Grant Fund allows eligible small businesses in England to claim grants of £10,000. The Retail, Hospitality and Leisure Grant Fund provides grants of £10,000 or £25,000 depending on a property's rateable value.[13] Our estimate of the cost of these schemes is based on the amounts already transferred from central government to local authorities and the devolved administrations. The grants apply to approximately 1 million properties. As of 28 June, local authorities in England had paid £10.6 billion of the allocated funding to over 860,000 businesses.

[13] Eligibility rules for the Small Business Grant Fund include the requirement that hereditaments fall under the small business rate relief or the rural rates relief schemes. The higher £25,000 Retail, Hospitality and Leisure Grant is available to those with a property whose rateable value is not less than £51,000.

- **Business rates relief**. This provides a 12-month full business rates holiday for all eligible properties in the retail, hospitality, leisure and nursery sectors.[14] Local authorities have estimated that the additional reliefs will cost £9.5 billion in England, with a further £1.3 billion estimated for the rest of the UK (as set out in Table 3.15). Business rates are a deductible expense against corporation and income tax liabilities, so this measure increases taxable profits (or reduces losses). This raises corporation tax and self-assessed income tax receipts by £0.7 billion. Our costing also includes £1.8 billion of Barnett consequential funding for the devolved administrations.

- **VAT payment deferral**. The Government announced that VAT payments that were due between 20 March and 30 June could be deferred until not later than 31 March 2021. We have assumed that £38 billion of VAT will be deferred. As of 12 June, HMRC estimates that half a million business payments had been deferred with a value of £27.5 billion. Some deferred amounts will never be paid because some firms will fail between now and the end of the financial year. In our central scenario we assume that the rate of non-payment of VAT liabilities will be 5 per cent (and 2½ per cent and 10 per cent in the upside and downside scenarios respectively). This lowers receipts by £1.9 billion in the central scenario (and by £0.9 billion in the upside and £3.8 billion in the downside). It is highly likely that many affected businesses will negotiate time-to-pay (TTP) arrangements with HMRC, enabling them to smooth out the cashflow impact of the VAT payment when it is eventually due. (The scaling up of TTP was announced in the March Budget, and its use will shift receipts across multiple years. TTP might also act to delay any non-payment, but the cost would still accrue back to 2020-21.)

- **Self-assessment tax payment deferral**. This allows taxpayers to defer the July payment-on-account for self-assessed income tax and Class 4 NICs to the January 2021 final self-assessment deadline. Once again, we assume that some deferred payments will not ultimately be paid due to unincorporated businesses failing (or other factors). We have assumed that 90 per cent of July payments on account (£11.8 billion) will be deferred and that the rate of non-payment will be 10 per cent in the central scenario at a cost of £1.2 billion. The upside and downside scenarios assume non-payment rates of 5 and 20 per cent respectively, giving costs of £0.6 billion and £2.4 billion. The uncertainty around TTP arrangements applies equally to this measure, though as self-assessed income tax is recorded on a cash basis in the public finances, any non-payments that take place in future years will affect the yearly profile of the costing.

- **Statutory sick pay rebate**. At the Budget the Government announced that employers with fewer than 250 employees would be able to reclaim up to two weeks of statutory sick pay (SSP), worth £95.85 a week. This is available in respect of employees who are unable to work because they have coronavirus symptoms, because they are shielding or because they or someone they live with is self-isolating. The Chancellor announced that this could cost over £2 billion, based on all eligible employees receiving two

[14] This is regardless of their properties' rateable value. It replaces previously announced retail discounts for 2020-21, including the 50 per cent retail discount for properties with a rateable value below £51,000 (announced in 2019) and the 100 per cent retail discount for properties with a rateable value below £51,000, and extended to include hospitality and leisure (announced at the March Budget).

weeks of SSP and all employers reclaiming the full amount. The subsequent announcement of the more generous CJRS is likely to have significantly lowered take-up – employers can claim both SSP and CJRS, but they cannot do so for the same employee at the same time. We assume that claims will ultimately be made in respect of 10 per cent of the 11.5 million potentially eligible employees. Assuming each claim covers a full two-week period, this gives a cost of £0.2 billion. Our downside scenario assumes that take-up will be 50 per cent at a cost of £1 billion, on the basis that more claims might be made beyond the point at which the CJRS closes.

Table 3.12: Costings for business support: tax and spending measures

		£ billion					
		Estimate	Scenario period				
	Head	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Business grant schemes[1]	Spend	0.0	14.8	0.0	0.0	0.0	0.0
Business rates relief[1]	Tax/Spend	-0.2	12.2	-0.2	0.1	0.0	0.0
VAT payment deferral	Tax	0.0	1.9	0.0	0.0	0.0	0.0
Self-assessment tax payment deferral	Tax	0.0	1.2	0.0	0.0	0.0	0.0
Statutory sick pay support	Spend	0.0	0.2	0.0	0.0	0.0	0.0
Business support: tax and spending		**-0.2**	**30.2**	**-0.2**	**0.1**	**0.0**	**0.0**
Memo: Upside scenario costings							
VAT payment deferral		*0.0*	*0.9*	*0.0*	*0.0*	*0.0*	*0.0*
Self-assessment tax payment deferral		*0.0*	*0.6*	*0.0*	*0.0*	*0.0*	*0.0*
Memo: Downside scenario costings							
VAT payment deferral		*0.0*	*3.8*	*0.0*	*0.0*	*0.0*	*0.0*
Self-assessment tax payment deferral		*0.0*	*2.4*	*0.0*	*0.0*	*0.0*	*0.0*
Statutory sick pay support		*0.0*	*1.0*	*0.0*	*0.0*	*0.0*	*0.0*

Note: This table uses the convention that a positive sign implies an increase in PSNB (and is therefore a loss to the Exchequer). Breakdowns between tax and spend for individual measures, and between resource and capital DEL and AME are provided in our online policy monitoring database.

[1] Includes devolved administration funding.

Welfare spending measures

3.33 Table 3.13 shows the largest contributors to the estimated £13 billion cost over five years of the Government's welfare spending measures:

- **A temporary £20 a week increase in the standard allowance of universal credit (UC).** This applies to all claimants, not just new ones, during 2020-21. The drop in employment in our central scenario results in the UC caseload rising to 5.3 million on average across the year. Some claimants will receive only part of the increase, but others will no longer have their award tapered, so for the purposes of this costing we have simply multiplied the caseload by £20 a week giving a cost of £5.5 billion.

- **A temporary £20 a week increase in the basic element of working tax credits (WTC).** We take a similar approach to the costing of this measure as with the UC one. The drop in employment in the central scenario means that fewer people are eligible for WTC than assumed in our March forecast (although many will move to claiming UC).

- The largest of the other welfare measures is an **increase in local housing allowance (LHA) rates to equal the 30th percentile of an area's market rents**. This raises UC or housing benefit awards for eligible private renters. The Government has not specified LHA rates policy beyond this year, so we assume that they rise in line with CPI inflation (consistent with the Government's default uprating assumption applied in our medium-term forecasts). The cost also reflects the path of employment in our central scenario.

- The remaining measures include the **temporary relaxation of the minimum income floor for UC** (the assumed level of income that reduces awards for some self-employed claimants), as well as **several measures relating to the operation of the benefits and tax credits systems**. DWP's recovery of benefit overpayments and debts was paused for three months. A range of health and job assessments and sanctions were also temporarily relaxed. And HMRC has announced that most tax credits claims will be renewed automatically this year, and also that those working reduced hours due to coronavirus or because they have been furloughed by their employer, will not have their tax credits payments affected if they are still employed or self-employed.

3.34 Table 3.13 also presents the estimates used in our upside and downside scenarios, which have simply been scaled up or down in line with differences in employment.

Table 3.13: Costings for welfare spending measures

		£ billion					
		Estimate	Scenario period				
	Head	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Increase weekly universal credit by £20	Spend	0.0	5.5	0.0	0.0	0.0	0.0
Increase weekly working tax credit by £20	Spend	0.0	1.5	0.0	0.0	0.0	0.0
Other welfare measures	Spend	0.0	2.3	1.0	0.9	0.9	0.9
Welfare spending measures		**0.0**	**9.3**	**1.0**	**0.9**	**0.9**	**0.9**
Memo: Total effect in:							
Upside scenario		*0.0*	*8.6*	*0.8*	*0.8*	*0.8*	*0.8*
Downside scenario		*0.0*	*9.6*	*1.0*	*0.9*	*0.9*	*0.9*

Note: This table uses the convention that a positive sign implies an increase in PSNB (and is therefore a loss to the Exchequer). Breakdowns between tax and spend for individual measures, and between resource and capital DEL and AME are provided in our online policy monitoring database.

Other tax measures

3.35 Table 3.14 sets out costings for several other tax measures. These include:

- **Off-payroll working: one-year delay to the extension to the private sector**.[15] This Budget 2018 anti-avoidance measure targets off-payroll workers in the private sector who work through an intermediary, such as a personal service company, that results in them paying less tax and NICs than they would if they were directly engaged. The measure moves the burden of responsibility for determining whether existing rules

[15] This measure also affects off-payroll workers in the voluntary sector.

apply to the engager rather than the intermediary. Its introduction has been delayed by a year to April 2021. We have simply shifted the profile of the estimates used in our March 2020 forecast back a year. In reality, the costs will differ because some engagers will have anticipated the measure before it came into effect, while the economic shock will have affected the tax base.

- VAT: earlier introduction of the zero rate on e-publications. In the March Budget, the Government announced that VAT on e-publications was to be reduced from the standard to the zero rate from 1 December 2020. This has been brought forward to 1 May 2020. The cost simply pro-rates the implied monthly cost in the original costing.

- Import duty: exemption for medical products. Eligible state, charitable and philanthropic organisations and their suppliers have been exempted from paying customs duty and import VAT on specific medical items sourced from outside the EU from 30 January until 31 July 2020. The bulk of the cost of this measure relates to customs duties as import VAT is typically deducted as an input tax by the importers that supply the NHS. Domestic VAT is still charged on onward supplies to the NHS. The costing uses past trade data and there is uncertainty over how well these will proxy for the level of imports during the period covered by the measure.

- VAT: zero rate on personal protective equipment. On 30 April the Government announced a temporary zero rate of VAT on personal protective equipment (PPE) for protection from infection, as defined by Public Health England, with effect from 1 May to 31 July 2020. There are several uncertainties relating to this costing, including precisely identifying eligible PPE expenditure during the relevant period and the level of domestic supply. The value of eligible PPE subject to this relief has been approximated using trade data. (On 3 July, the Government announced that this measure would be extended to 31 October. This came too late to be included in our scenarios.)

- VAT reverse charge in the construction sector: further 5-month delay. This Autumn Budget 2017 measure introduces a domestic VAT reverse charge to combat supply chain fraud in the construction sector. In September 2019 the Government announced that its introduction was to be delayed from October 2019 to October 2020. It has now pushed it back further to March 2021.

Table 3.14: Costings for other tax measures

		£ billion					
		Estimate	Scenario period				
	Head	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Off-payroll working: one-year delay to the extension to the private sector	Tax/spend	-0.2	1.3	-0.5	0.0	0.1	0.1
VAT: earlier introduction of the zero rate on e-publications	Tax	0.0	0.1	0.0	0.0	0.0	0.0
Import duty: exemption for medical products	Tax	0.0	0.1	0.0	0.0	0.0	0.0
VAT: zero rate on personal protective equipment	Tax	0.0	0.1	0.0	0.0	0.0	0.0
VAT reverse charge in the construction sector: 5-month delay	Tax	0.0	0.1	0.0	0.0	0.0	0.0
Other tax measures		**-0.2**	**1.7**	**-0.5**	**0.0**	**0.1**	**0.1**

Note: This table uses the convention that a positive sign implies an increase in PSNB (and is therefore a loss to the Exchequer). Breakdowns between tax and spend for individual measures, and between resource and capital DEL and AME are provided in our online policy monitoring database.

3.36 There are several smaller measures that we have not yet costed but whose combined cost will be modest. These will be incorporated in our next full forecast. They include:

- **Immigration health surcharge: exemption for overseas staff in the NHS**. On 21 May the Government reversed its earlier opposition to calls for this exemption by announcing that affected overseas staff in the NHS would no longer be liable to pay this tax on individuals from non-EEA countries coming to live in the UK for more than six months. It is currently £400 a year and is due to rise to £624 a year from October.

- **Visa fees: free 1-year extension for healthcare workers**. Eligible healthcare workers whose visa is due to expire between 31 March and 1 October 2020 will benefit from a free 1-year extension to their visa. Certain family members will also be eligible. The Government estimates that 3,000 healthcare workers and their families will benefit.

- **Help-to-buy equity loans: interest holiday**. The Government announced a 3-month payment holiday for help-to-buy equity loan holders who might be struggling to meet interest payments. This is likely to affect a relatively small number of loan holders.

- **Lifetime ISA: reduced penalty rate for early withdrawal**. Early withdrawals from a lifetime ISA for anything other than purchasing a first home or transferring to a pension fund attract a penalty charge. This measure reduces the penalty rate from 25 to 20 per cent from 6 March 2020 to 5 April 2021, so that only the Government top-up is lost rather than savers forfeiting some of their own savings too.

- **HMRC late payment penalties and interest**. In the March Budget the Government announced that these would be waived "*where a business experiences administrative difficulties contacting HMRC or paying taxes due to COVID-19*".

Devolved administrations' spending measures

3.37 The devolved administrations have made their own spending decisions, partly funded by the Barnett consequentials of the measures announced by the UK Government that are described above.[16] These are set out in Table 3.15.[17]

Table 3.15: Devolved administration spending

	£ billion
Scottish Government spending	**4.0**
of which:	
Business support grants	1.2
Non-domestic rates reliefs	1.0
Health and social care	0.6
Community support fund	0.4
Additional support for small businesses and the self-employed	0.2
Other measures	0.7
Welsh Government spending	**2.5**
of which:	
Grants for businesses and charities	0.9
Health and public services	0.8
Economic resilience fund	0.4
Non-domestic rates relief	0.3
Other measures	0.1
Northern Ireland Executive spending	**1.6**
of which:	
Allocated to departments	1.0
Rates support	0.4
Centrally held purposes	0.2

Public sector receipts

3.38 In our central economic scenario, the recession and the tax measures described above deliver a sharp fall in receipts in the first part of 2020-21. Receipts recover thereafter, in line with the rebound in activity, but remain permanently lower than in our March forecast. This section first sets out what the latest data tell us about the extent of the initial shock to receipts, and then describes our central scenario and how it differs from the March forecast.

Recent developments

3.39 The initial effects of the lockdown and policy response were visible in March 2020 cash receipts, which were 5 per cent down on a year earlier – largely due to firms deferring VAT payments. But the full effect of the lockdown was clearer in April and May receipts, which

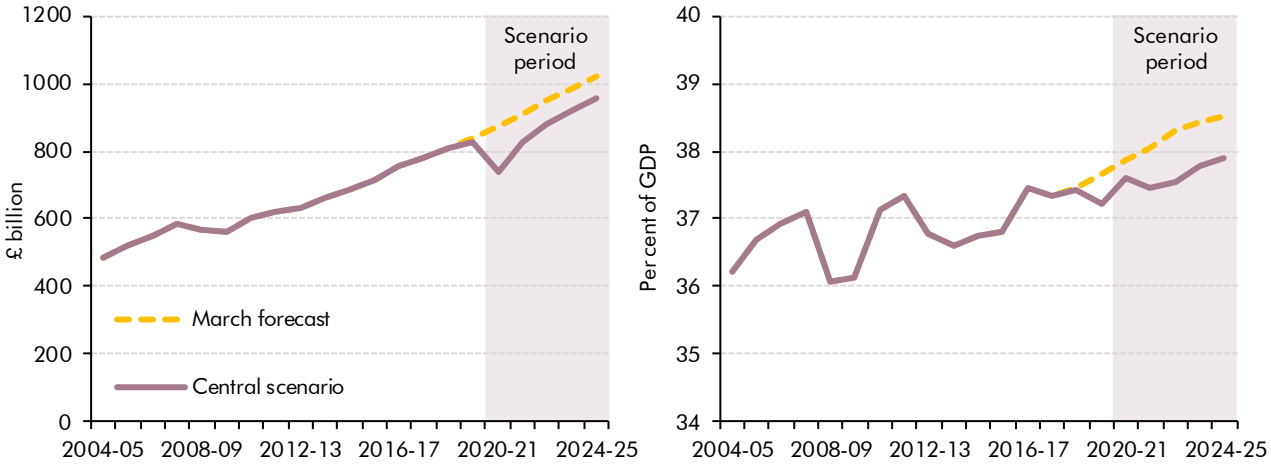
[16] The latest published figures for the Barnett consequentials are close to £3.6 billion for Scotland, around £1.9 billion for Wales and £1.4 billion for Northern Ireland, though these are based on the initial estimated cost of policies and are therefore subject to revision. Revisions may also follow if the UK Government decided to fund measures from re-prioritised rather than additional spending. These figures do not include the Barnett consequentials of additional spending announced on 8 July in the Chancellor's Summer Economic Update.
[17] The net public finance impact of these decisions, for example the Barnett consequentials and the changes to non-domestic rates, is included in our earlier tables. Some spending is funded by reprioritising existing plans and drawing down reserves.

together were down 43 per cent on last year. The receipts fall so far this year has been a little less steep than assumed in the monthly profiles we published in May, with income tax and NICs receipts performing less badly than assumed as employee earnings held up.

Summary of the central scenario

3.40 In our central scenario, receipts fall 10 per cent year-on-year in 2020-21. This is less than the fall in nominal GDP, which results in a small rise in the receipts-to-GDP ratio in 2020-21. This partly reflects the composition of GDP – labour income fares better than other components of national income, so income tax and NICs receipts rise as a share of GDP. It also reflects council tax and various imputed items that hold up in cash terms despite the fall in nominal GDP. The receipts-to-GDP ratio then falls in 2021-22, as these effects unwind. The ratio rises gently thereafter, reflecting both fiscal drag from a pick-up in earnings growth and an assumed reduction in the utilisation of corporation tax loss reliefs.

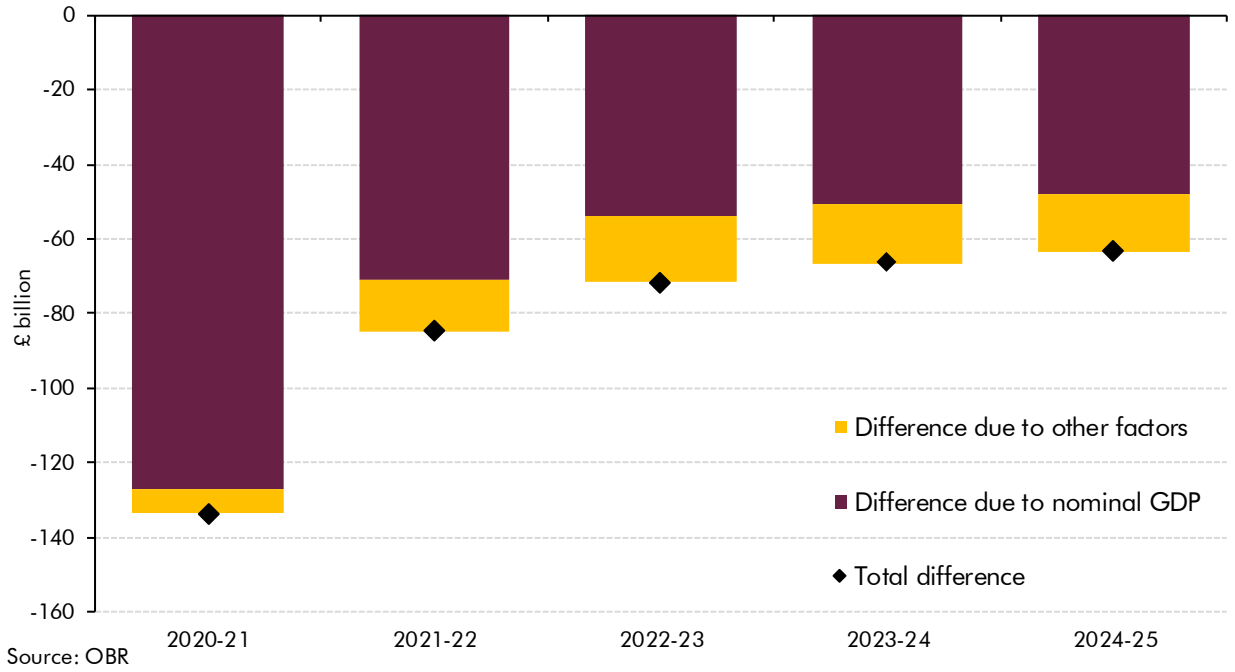
Chart 3.4: Receipts: central scenario versus March forecast



Source: ONS, OBR

3.41 Receipts in 2024-25 are 6.2 per cent lower than our March forecast (a shortfall of £63 billion). As Chart 3.5 shows, this is largely explained by the 4.7 per cent shortfall in nominal GDP, but also by the 0.6 percentage point decline in the receipts-to-GDP ratio. The latter effect is mainly due to changes in the composition of income and expenditure, where both the profit and consumption shares of nominal GDP are lower throughout the scenario. In addition, the lower level of real earnings reduces fiscal drag relative to our March forecast, lowering the average effective tax rate on wages and salaries.

Chart 3.5: Central scenario receipts shortfall versus our March forecast



Source: OBR

3.42 Table 3.16 details our central scenario for individual receipts lines, while Table 3.17 shows how each differs from our March 2020 forecast.

Table 3.16: Current receipts

	£ billion					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Income tax	195.3	182.4	196.3	208.2	218.6	229.2
National insurance contributions	144.2	131.7	142.9	153.0	159.9	167.0
Value added tax	133.7	108.2	129.5	137.9	142.2	146.6
Onshore corporation tax	49.5	36.8	43.1	49.9	55.4	60.1
Oil and gas revenues	0.6	0.4	0.6	0.6	0.6	0.4
Fuel duties	27.6	22.8	26.5	29.2	30.0	30.6
Business rates	31.2	20.3	32.2	33.3	33.9	35.2
Council tax	36.6	37.2	39.1	40.3	41.6	42.9
Capital gains tax	10.0	10.5	7.6	10.1	11.1	12.4
Inheritance tax	5.2	5.4	5.2	5.3	5.7	6.2
Stamp duties	16.1	11.6	16.6	17.3	18.9	20.7
Tobacco duties	9.7	9.0	8.7	8.7	8.7	8.6
Alcohol duties	11.7	10.9	11.7	12.2	12.7	13.2
Air passenger duty	3.4	1.3	3.7	3.8	3.9	4.1
Other taxes and receipts	150.1	151.8	162.4	167.9	175.0	181.8
Current receipts	**824.8**	**740.3**	**826.3**	**877.7**	**918.2**	**958.9**

Table 3.17: Current receipts: central scenario versus March forecast

	£ billion					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Income tax	0.1	-25.1	-21.0	-19.2	-17.9	-17.4
National insurance contributions	-1.2	-18.5	-14.1	-11.0	-10.4	-10.1
Value added tax	-2.9	-32.4	-16.4	-13.1	-13.7	-14.1
Onshore corporation tax	-4.5	-20.3	-15.8	-11.6	-8.3	-6.0
Oil and gas revenues	-0.2	-0.3	-0.2	-0.3	-0.4	-0.6
Fuel duties	-0.1	-4.7	-1.6	-1.3	-1.1	-1.0
Business rates	0.0	-11.2	-1.2	-1.0	-1.1	-1.1
Council tax	0.3	-0.7	0.0	0.0	0.0	0.0
Capital gains tax	0.0	-0.9	-5.1	-4.1	-4.6	-4.7
Inheritance tax	0.0	-0.1	-0.6	-1.1	-1.0	-0.9
Stamp duties	-0.1	-5.8	-1.9	-2.8	-2.5	-2.1
Tobacco duties	1.0	0.0	-0.1	-0.1	-0.1	-0.1
Alcohol duties	-0.4	-0.9	-0.7	-0.6	-0.6	-0.6
Air passenger duty	-0.4	-2.7	-0.5	-0.6	-0.7	-0.7
Other taxes and receipts	-6.3	-8.8	-5.3	-4.8	-4.1	-3.9
Current receipts	**-14.5**	**-132.6**	**-84.5**	**-71.5**	**-66.5**	**-63.4**

Income tax and NICs

3.43 PAYE income tax and NICs receipts from employee salaries are £40.9 billion lower in 2020-21 than in our March forecast. With the central scenario assuming some long-term economic scarring, average earnings are lower across the next five years. This is the main driver of the £27.6 billion shortfall relative to our March forecast in 2024-25 (Table 3.18).

Table 3.18: Income tax and NICs: central scenario versus March forecast

	£ billion				
	Scenario period				
	2020-21	2021-22	2022-23	2023-24	2024-25
March forecast	357.7	374.4	391.4	406.9	423.7
Central scenario	314.2	339.3	361.2	378.6	396.1
Difference from March	**-43.5**	**-35.1**	**-30.2**	**-28.3**	**-27.6**
of which:					
Economy scenario assumptions	-34.7	-36.1	-29.3	-27.5	-26.8
Other assumptions and policy measures	-8.9	0.9	-0.9	-0.8	-0.8

3.44 Cash PAYE receipts have fallen sharply since the start of the lockdown (down 14.9 per cent on a year earlier in April and May combined). This reflects both falls in total pay and a significant rise in the non-payment of liabilities. Receipts have fallen less sharply than assumed in our initial reference scenario. In part that reflects total pay falling less sharply than assumed, but real-time information (RTI) data also suggest that those on higher pay – who are also more highly taxed – have been less affected than those on lower pay.

3.45 Our central scenario assumes that employee numbers continue to fall until the first quarter of 2021, with some of those currently furloughed losing their jobs once the CJRS ends. It also assumes that bonus payments will be around 30 per cent lower than in 2018-19.[18] And it follows the approach taken by the ONS in the official data by assuming that 7 per cent of identifiable PAYE non-payments will not be recovered, with the remaining 93 per cent accrued as normal and paid at a later date. The profile of these subsequent payments affects the path of net debt (via cash receipts), but not net borrowing (via accrued receipts).

3.46 Self-assessment (SA) income tax receipts are £2.5 billion lower in 2020-21 than in our March forecast. Thereafter, they are between £4 billion and £6 billion lower.

3.47 SA receipts in 2020-21 largely relate to 2019-20 liabilities, which largely pre-date the pandemic. But receipts are nevertheless lower than in our March forecast. The deferral of July 2020 payments on account until January 2021 is assumed to lower cash receipts by £1.2 billion, as some of the deferred amounts are never paid. A first payment on account for 2020-21 liabilities is also due in January 2021. This would normally be based on the previous year's liabilities but, given the size of the shock to incomes, it is likely that some will ask to reduce their payments. This takes a further £1.4 billion off receipts in 2020-21.

3.48 The drop in 2020-21 SA liabilities will largely affect 2021-22 receipts given payment lags. The largest hit is from dividend income, which the scenario assumes will fall by 26 per cent and take £3.5 billion off receipts in 2021-22. Some listed companies may reduce or pause dividend payouts, but much of the drop in dividend income will reflect lower profits at smaller incorporated businesses whose owners largely pay themselves via dividends. Reductions in self-employment income (despite the SEISS), rental income and savings income (due to lower interest rates) all reduce receipts further.

VAT

3.49 VAT receipts in 2020-21 are £32.4 billion (23 per cent) lower than in our March forecast. Receipts recover thereafter but remain well below that forecast – by £14.1 billion (9 per cent) in 2024-25. (The scenario does not incorporate the cost of the temporary measure described in Box 3.1.) As Table 3.19 shows, most of this shortfall reflects the weaker path for consumption, while in the first two years the scenario also assumes a lower share of spending on standard-rated goods. For example, new car sales, which are subject to the standard rate, have fallen sharply (by 70 per cent on a year earlier in the second quarter[19]).

3.50 In the short term, cash receipts will also be affected by the path of VAT debt, which is assumed to rise by a similar proportion to that seen during the financial crisis, but then to fall back relatively quickly as it did then. This implies almost three times the level of VAT debt in 2020-21 as was assumed in our March forecast. As described in Box 3.2, the scenario assumes that 5 per cent of the additional debt goes unpaid. The same non-payment rate is applied to the payments deferred under the Government's deferral policy.

[18] Complete data on 2019-20 bonuses are not yet available.
[19] SMMT Vehicle Data, June 2020 Overview.

Table 3.19: VAT: central scenario versus March forecast

	£ billion				
	Scenario period				
	2020-21	2021-22	2022-23	2023-24	2024-25
March forecast	140.6	145.9	151.0	155.8	160.7
Central scenario	108.2	129.5	137.9	142.2	146.6
Difference from March	**-32.4**	**-16.4**	**-13.1**	**-13.7**	**-14.1**
of which:					
Economy scenario assumptions	-17.9	-14.3	-13.1	-13.7	-14.1
Standard-rated share of spending	-12.3	-2.1	0.0	0.0	0.0
Policy measures	-2.2	0.0	0.0	0.0	0.0

Corporation tax

3.51 Onshore corporation tax receipts in the scenario are £20.3 billion lower in 2020-21 (36 per cent) than in our March forecast. This shortfall diminishes over the scenario, leaving receipts down by £6.0 billion (9 per cent) in 2024-25. As Table 3.20 shows, across the period:

- Just over half the shortfall reflects the **weaker tax base**, with company profits much lower than assumed in March. Financial company profits are particularly hard hit, reflecting higher loan defaults and lower interest rates. We assume that it takes three years for financial company profits to return to their pre-virus share of GDP.

- The remaining half of the difference reflects a much weaker effective tax rate. In the event of a trading loss, firms can utilise a range of **loss reliefs** to reduce their past and future taxable liabilities, including across other members of a qualifying trading group. The extent to which firms generate these losses and the rate at which reliefs are utilised is extremely uncertain (see Chapter 5). Our scenario assumes that the stock of trading losses available to use trebles on last year – a sharper rise than the doubling in the financial crisis, reflecting the larger fall in GDP. A third of these additional losses lower receipts in 2020-21, with progressively smaller amounts used in subsequent years.

3.52 The impact of greater use of loss reliefs is partly offset by the impact of much weaker business investment this year, which reduces the use of capital allowances (which can also be offset against trading profits to reduce taxable liabilities).

Table 3.20: Onshore corporation tax: central scenario versus March forecast

	£ billion				
	Scenario period				
	2020-21	2021-22	2022-23	2023-24	2024-25
March forecast	57.2	58.9	61.4	63.6	66.0
Central scenario	36.8	43.1	49.9	55.4	60.1
Difference from March	**-20.3**	**-15.8**	**-11.6**	**-8.3**	**-6.0**
of which:					
Economy scenario assumptions and policy measures	-10.6	-6.8	-6.0	-5.4	-4.8
Utilisation of loss relief	-9.8	-9.0	-5.6	-2.9	-1.2

3.53 Our central scenario assumes that oil and gas revenues are lower in every year, by £0.4 billion on average relative to our March forecast – an overall reduction of around 50 per cent. This reflects lower oil prices and lower production, partly offset by the effects of sharp cuts to expenditure which, all else equal, improves companies' profits.

Fuel duties

3.54 Our central scenario assumes that fuel duty receipts in 2020-21 fall by 17 per cent on a year earlier, leaving them £4.7 billion below our March forecast. This largely reflects the impact of travel restrictions during the lockdown period, which reduced motor vehicle traffic by more than half on average during April and May. This effect reduces as the lockdown is eased. Car traffic is disproportionately hit relative to vans and lorries, which means that the average measured fuel efficiency of overall traffic falls temporarily, limiting the receipts loss relative to the sharp fall in total mileages. We have assumed some persistent effects beyond 2020-21, reflecting the weaker path for the economy. But as discussed in Chapter 5, there are risks around the scenario from possible future structural changes to vehicle use.

Alcohol duties

3.55 In our central scenario, alcohol duties in 2020-21 are £0.9 billion (8 per cent) lower than in our March forecast, but receipts recover by the end of the scenario to just £0.6 billion (5 per cent) lower than March. Initially, much of the hit is due to the loss of on-trade sales (i.e. in pubs and restaurants) due to lockdown restrictions. This is partly offset by higher off-trade sales (i.e. from supermarkets and other shops). In the second half of the scenario, receipts remain slightly lower due to lower consumer expenditure. But should some degree of social distancing persist – either due to restrictions or to changes in people's preferences – there is potential for a further hit to on-trade sales and perhaps to receipts overall.

Air passenger duty

3.56 Our central scenario for air passenger duty is lower than our March forecast in all years. In 2020-21, receipts fall by two-thirds on a year earlier to just £1.3 billion (£2.7 billion below our March forecast). This reflects the collapse in flights taken so far in 2020 as travel restrictions have been imposed. Receipts recover by the end of the scenario to £4.1 billion, but remain £0.7 billion (15 per cent) lower than in March. Several large airlines have announced heavy job losses and reduced orders for new aircraft, indicating that they expect a long-lasting reduction in demand for flights.

Business rates

3.57 Business rates in 2020-21 raise £11.2 billion less than we forecast in March. The shortfall in future years is smaller at around £1 billion a year. The effect in 2020-21 is almost entirely due to the business rates holidays for various sectors described earlier in the chapter. Lower CPI inflation means that the business rates multiplier rises more slowly than in our March forecast. And our scenario also assumes a modest hit to the tax base, consistent with the relatively small effect observed during the financial crisis.

Capital gains tax and inheritance tax

3.58 Relative to our March forecast, our scenario assumes a shortfall in capital gains tax receipts from 2021-22 onwards that averages £4.6 billion a year. This primarily reflects the large fall in equity prices at the onset of the pandemic that is only partially unwound.

3.59 Inheritance tax receipts are also lower than our March forecast in all years. This reflects lower equity and house prices, which reduce the number of estates liable for inheritance tax as well as the average amount of tax paid per liable estate. This is countered slightly by the higher numbers of deaths in 2020-21 adding to the number of estates. The net effect of these assumptions leaves the number of estates liable lower than in our March forecast.

Stamp duties

3.60 Stamp duty land tax (SDLT) receipts are lower than our March forecast. The hit is greatest in 2020-21, reflecting the large fall in property transactions during the lockdown, after which they rebound. But they remain lower than our March forecast throughout the period thanks to lower house prices. (The scenario does not incorporate the cost of the temporary stamp duty holiday described in Box 3.1.) Commercial property receipts are affected more than residential receipts, as the pandemic lowers the demand for office and retail space.

Other taxes and receipts

3.61 Other material differences between our central scenario and our March forecast include:

- **Council tax** has been adjusted in line with the assumptions about local authority net borrowing described later in this chapter. It is lower in 2020-21 than in our March forecast, reflecting the likely increase in the numbers eligible for relief on their bills.

- **Vehicle excise duties** are assumed to be £0.4 billion a year lower than in our March forecast. That reflects both much weaker car sales this year, as well as lower RPI inflation, which reduces the assumed duty rate in future years.

- **Interest and dividend receipts** includes the interest income on the government's financial assets, among them student loans and bank deposits. With short-term interest rates close to zero throughout the scenario, this lowers receipts by an average of £1½ billion a year relative to our March forecast. In addition, RBS, like other banks, will not be paying a dividend this year. This lowers receipts by £0.8 billion in 2020-21.

- Our scenario assumes that the **gross operating surpluses of public corporations** are lower by £0.6 billion a year on average, as we have assumed that they will decline in line with the weaker path for nominal GDP.

- Most **other small taxes** (such as landfill tax and the aggregates levy) are also assumed to fall in line with nominal GDP.

Box 3.2: Non-payment of tax liabilities in our scenarios

Many businesses are struggling to meet their usual tax payment schedules and are seeking instead to delay those payments. There are three ways this may happen:

- **Deferral policies**. Companies can defer VAT due between 20 March and 30 June until the end of the tax year. The July 2020 payment-on-account for self-assessment income tax can be deferred until January 2021. Some deferred tax will not be repaid.
- **Other authorised deferrals**. In agreement with HMRC, taxpayers in financial distress can defer payments not covered by the deferral policies. These are subject to a payment plan being agreed through HMRC's time-to-pay service, which is being scaled up.
- **Unauthorised tax debt**. Some taxpayers will delay payments without having first agreed that with HMRC. This seems to have been quite widespread early in the lockdown.

In theory, the impact of non-payment of tax liabilities depends on four factors:

- The **initial value of unpaid or deferred tax** – i.e. the gap between liabilities and cash receipts that is generated via the three sources outlined above. In some cases, this is far from straightforward to estimate. For example, it can take several years for annual corporation tax liabilities to be finalised, in part because losses can be carried back.
- The **extent to which deferred sums are eventually paid**. Our central scenario deploys three rates of ultimate non-payment. For PAYE income tax and NICs we use 7 per cent, as the ONS has in the public finances data based on evidence from recent years. Elsewhere we assume non-payment rates of 5 per cent where tax streams cover all sizes of firms and 10 per cent where they are likely to be dominated by small and medium-sized firms, for which we would expect firm failures and ultimate non-payment to be higher.[a]
- **When the remaining payments are subsequently made**. From a fiscal sustainability perspective, the timing of payments between years is not critical. However, it is likely that the longer payments are deferred, the higher the proportion will be that goes unpaid.
- **The statistical treatment of tax debt and its repayment**. In some cases, the ONS has adjusted accrued tax revenue consistent with an assumption that debt will be repaid in the year in which the liability is generated (or a proportion of it will). These adjustments are only possible with quality, timely data, and to date only the PAYE and VAT data have been adjusted in this way. This makes significant revisions to accrued tax data more likely than usual and it may take many years for the recorded data to be finalised

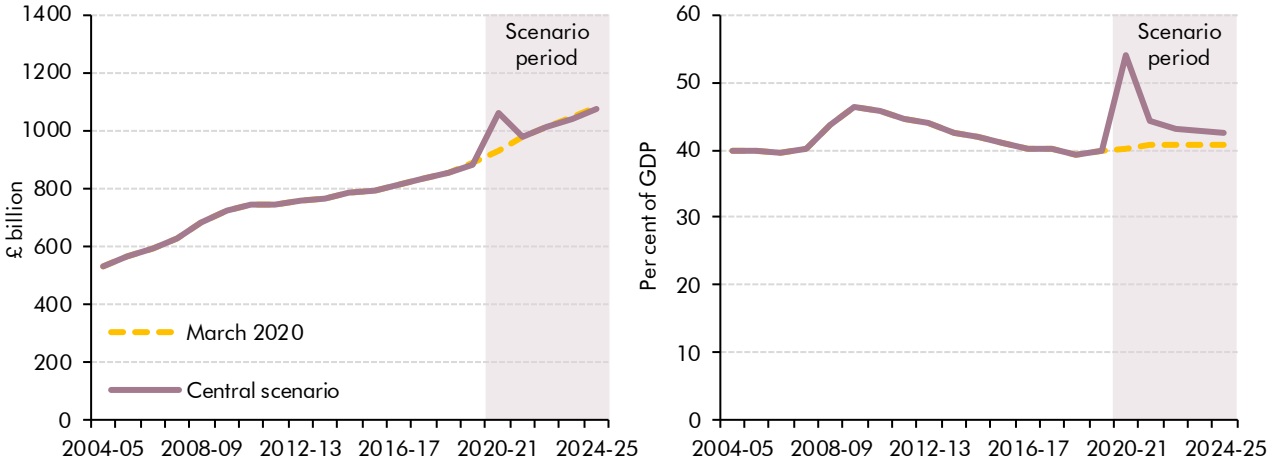
Our scenarios parcel these factors together in the light of recent cash receipts data to generate plausible, if highly uncertain, estimates of how non-payment of tax liabilities affects receipts this year and beyond. In many cases, notably for corporation tax, it is unlikely that we will ever fully understand the contribution of each component to the fall and subsequent rebound in receipts.

[a] The US Congressional Budget Office reports that the Joint Committee on Taxation has estimated that $200 billion of payroll taxes deferred under coronavirus legislation will generate a $12 billion net loss, implying a non-payment rate of 6 per cent. Letter from Phillip Swagel, Director of the Congressional Budget Office to Senator Rick Scott, 5 June 2020.

Public sector expenditure

3.62 The sharp economic contraction combines with costly spending measures to deliver a sharp rise in public spending in cash terms this year, and an even sharper one as a share of GDP. In our central scenario, spending reaches 54 per cent of GDP this year, its highest level since 1945-46. It falls back almost as sharply next year as time-limited policy measures expire and the economy continues to revive. In cash terms, spending returns to levels similar to those in our March forecast, but the shortfall in output over the medium term leaves spending higher as a share of GDP throughout the scenario.

Chart 3.6: Total managed expenditure: central scenario versus March forecast



Source: ONS, OBR

3.63 In the following sections we focus mostly on central government expenditure rather than the broader public sector measure (total managed expenditure or TME). Almost all of the spending differences between our central scenario and our March forecast occur within this aggregate. It will also facilitate our monitoring of the monthly ONS public finances data.

Central government expenditure

Recent developments

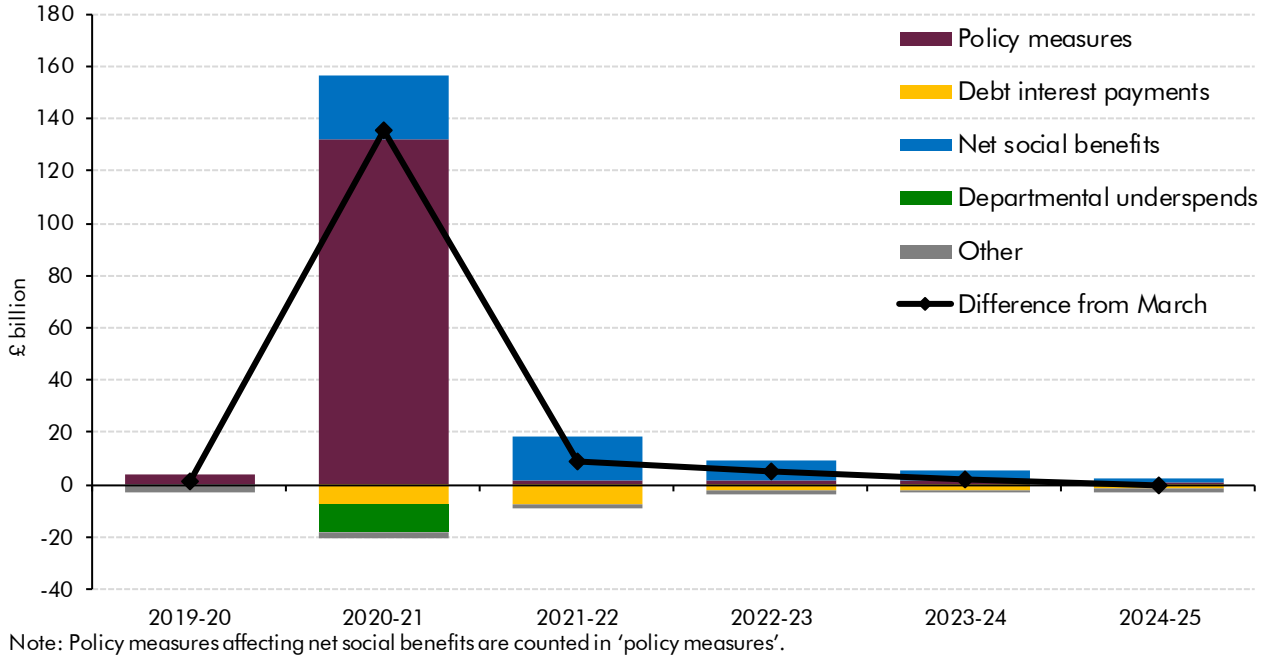
3.64 Central government spending was ramped up quickly in March in response to the crisis, including grants to local authorities to finance some business support measures. It has continued to rise very sharply in April and May, thanks to the initial costs of the CJRS and SEISS, plus additional departmental spending, further grants to local authorities and the sharp increase in claims for universal credit. The rise to date has largely tracked the monthly profiles we published in May, although these data will be very susceptible to revision.

Summary of the central scenario

3.65 In our central scenario, central government spending rises 21 per cent in 2020-21 relative to 2019-20, jumping from 36.6 to 49.8 per cent of GDP. This mainly reflects the £132 billion cost of coronavirus policy measures on top of the 11 per cent drop in nominal GDP. The 2.3 million fall in employment on average across the year adds £25 billion to welfare spending (shown here within the slightly broader 'net social benefits' measure) – primarily on universal credit. Partly offsetting these upward pressures, the scenario assumes a further £10 billion of underspending by departments on capital projects and business-as-usual hiring and procurement, plus an £8 billion reduction in debt interest spending.

3.66 Spending falls 8 per cent in 2021-22, as most policy costs are confined to 2020-21. From there, it drifts slowly back towards our March forecast as higher welfare spending is broadly offset by lower debt interest spending. The relative importance of these various factors to the differences between our central scenario and our March forecast is illustrated in Chart 3.7.

Chart 3.7: Central government spending: central scenario versus March forecast



Note: Policy measures affecting net social benefits are counted in 'policy measures'.
Source: ONS, OBR

3.67 Table 3.21 details our central scenario for the main components of central government spending, while Table 3.22 shows how each differs from our March 2020 forecast.

Table 3.21: Central government expenditure: central scenario

	£ billion					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Central government expenditure	**809.9**	**980.8**	**903.0**	**927.9**	**956.1**	**985.6**
of which:						
Debt interest payments		36.8	40.4	43.9	43.8	43.5
Net social benefits spending		255.6	246.4	247.5	256.8	266.4
Other current expenditure		585.0	513.0	528.0	541.5	557.7
Net investment spending		73.1	72.0	76.1	80.5	83.3
Depreciation		30.4	31.3	32.4	33.5	34.8

Table 3.22: Central government expenditure: central scenario versus March forecast

	£ billion					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March forecast	808.4	845.1	893.9	922.8	954.1	986.2
Central scenario	809.9	980.8	903.0	927.9	956.1	985.6
Difference from March	**1.5**	**135.7**	**9.1**	**5.0**	**2.0**	**-0.5**
of which:						
Debt interest payments		-7.9	-7.2	-2.5	-2.0	-1.7
Net social benefits spending[1]		33.6	17.3	8.2	4.5	2.0
Other current expenditure[1]		98.0	-0.9	-0.3	-0.1	-0.6
Net investment spending		12.0	-0.1	-0.2	-0.3	-0.2
Depreciation		0.0	0.0	0.0	0.0	0.0

[1] March forecast restated for the switch from housing benefit to universal credit, which switches spending from central government grants to local authorities (in other current expenditure) to net social benefits – consistent with the public finance statistics and the treatment in our central scenario.

Central government debt interest spending

3.68 Central government gross debt interest spending is lower than our March forecast in all years. The difference reflects lower interest rates and, in the early years in particular, lower RPI inflation. These effects outweigh the impact of higher cash borrowing, in part because that additional borrowing is itself financed at such low interest rates. As Table 3.23 shows, adding in the savings from lower Bank Rate and the £300 billion increase in gilt purchases by the Asset Purchase Facility (APF) takes debt interest net of APF savings even further below our March forecast – by £13.9 billion in 2020-21, diminishing to £7.3 billion in 2024-25.

Table 3.23: Debt interest spending: central scenario versus March forecast

	£ billion				
	Scenario period				
	2020-21	2021-22	2022-23	2023-24	2024-25
Central government debt interest, net of APF					
March forecast	34.5	37.8	37.9	37.3	36.7
Central scenario	20.6	23.4	28.6	29.2	29.5
Difference from March	**-13.9**	**-14.5**	**-9.2**	**-8.1**	**-7.3**
Central government debt interest					
March forecast	44.7	47.6	46.5	45.9	45.2
Central scenario	36.8	40.4	43.9	43.8	43.5
Difference from March	**-7.9**	**-7.2**	**-2.5**	**-2.0**	**-1.7**
of which:					
Interest rates	-1.7	-4.1	-5.1	-5.2	-5.2
Inflation	-6.5	-4.7	0.6	0.9	0.7
Financing	-0.2	1.0	1.4	1.7	2.1
Other factors (including outturn)	0.5	0.6	0.6	0.6	0.6
Asset Purchase Facility					
March forecast	-10.2	-9.8	-8.6	-8.6	-8.5
Central scenario	-16.2	-17.0	-15.3	-14.7	-14.0
Difference from March	**-6.0**	**-7.3**	**-6.7**	**-6.1**	**-5.5**
of which:					
Interest rates	-5.7	-6.6	-6.0	-5.7	-5.4
Additional quantitative easing	-0.3	-0.6	-0.7	-0.4	-0.1

Net social benefits spending

3.69 Spending on net social benefits in our central scenario is £33.6 billion higher than our March forecast in 2020-21, with the difference diminishing progressively thereafter. These differences are dominated by welfare spending thanks to higher caseloads and policy measures, with public service pensions spending differing due to inflation uprating only.

3.70 As Table 3.24 shows:

- The largest difference comes from the weaker **labour market** in our central scenario, which raises spending on universal credit (UC) and its predecessor benefits in the legacy welfare system significantly in 2020-21 and by diminishing amounts thereafter.
- **Policy measures** cost £9.2 billion in 2020-21 (in particular the £20 a week boost to UC and tax credits basic awards) and much smaller amounts thereafter (as more generous local housing allowance rates are not set to be reversed next year).[20]
- **Other differences** are small by comparison. These include the effects of the triple lock, which are modest relative to our March assumptions but do ratchet spending higher as a share of GDP (as discussed in Chapter 5). We have also reflected the effects of

[20] The cost of policy measures within central government net social benefits spending is fractionally less than the overall cost of welfare policy measures reported in Table 3.2 because some costs in respect of housing benefit will appear as local authorities' spending in the official statistics (funded by additional grants from central government to local authorities).

higher mortality this year on state pensions spending (assuming around 60,000 excess deaths over the year as a whole and correspondingly fewer in subsequent years).[21]

Table 3.24: Net social benefits spending: central scenario versus March forecast

	£ billion				
	Scenario period				
	2020-21	2021-22	2022-23	2023-24	2024-25
March forecast	222.0	229.1	239.3	252.3	264.4
Central scenario	255.6	246.4	247.5	256.8	266.4
Difference from March	**33.6**	**17.3**	**8.2**	**4.5**	**2.0**
of which:					
Employment/unemployment	24.5	19.4	9.6	6.6	4.3
Policy measures	9.2	0.7	0.6	0.6	0.6
Inflation	0.0	-1.7	-2.5	-2.7	-2.8
Earnings	0.5	-0.1	0.3	0.2	0.2
Triple lock on state pensions	0.0	-0.5	0.5	-0.1	-0.3
Excess mortality	-0.6	-0.4	-0.3	-0.2	0.0

3.71 There are large uncertainties around this scenario. One potentially important uncertainty relates to UC, where higher spending reflects lower employment in our central scenario than we predicted in March. As we discuss in Chapter 2, the ILO measure of unemployment has not risen yet, although claimant count unemployment, which includes relevant UC cases plus those on jobseeker's allowance, has more than doubled from 1.2 million in February to 2.8 million in May. It is possible that some of the fall in employment assumed in our scenario could manifest itself in higher inactivity (where average awards can be higher and duration of claims can be longer) instead of unemployment. We also discuss broader welfare spending risks in respect of chronic health conditions in Chapter 5.

3.72 One broader consequence of the surge in UC claims is what it will mean for the continuing rollout of the new system over the coming years. The number of individuals on UC now stands at 5.3 million,[22] up 75 per cent since March and higher than our March forecast assumed for any point in the next five years. Many new UC claimants will have transferred from legacy benefits and tax credits due to a change in circumstances (such as losing a job). This will affect the future rollout of UC. For example, it should leave fewer individuals to be transferred at DWP's behest under managed migration. But the demands of managing a higher caseload could also mean there is less capacity to migrate those remaining cases.

Other current spending

3.73 Other current spending is largely comprised of departmental resource spending. It includes grants to local authorities, plus some other items managed via AME in the Treasury's spending control framework. Relative to our March forecast, spending is significantly higher in 2020-21, reflecting the £105.7 billion cost of Government policy measures under this heading (notably the CJRS and SEISS, public services spending, small business grants and

[21] This figure relates to excess deaths among those over the State Pension age. The vast majority relates to excess deaths already recorded in outturn data for the period to 29 May. There is considerable uncertainty over how this will evolve in the rest of the year, and the simplifying assumption that excess deaths this year will translate into fewer deaths in the next four years (as opposed to a different period).
[22] Figures relate to 'People on Universal Credit', *DWP Stat-xplore*, May 2020.

the cost of compensating local authorities for the effects of business rates measures). Much of the additional spending described in Box 3.1, which was notified to us too late for inclusion in our scenarios, would probably fall under this heading too.

3.74 Other scenario assumptions provide a modest offset. Departments' day-to-day spending budgets are assumed to be underspent by £5 billion more than in our March forecast, as the lockdown makes it harder to meet existing recruitment and procurement plans. The scenario also assumes a £3 billion lower cost of R&D tax credits in 2020-21 as the economic shock hits R&D spending to the same extent as it hits business investment more broadly. Beyond 2020-21, differences from our March forecast are small.

Net investment spending

3.75 Net investment spending includes what might be thought of as conventional public capital spending, plus grants to other sectors to finance their capital spending and items such as the upfront accrual of future student loan write-offs. Overall, this spending in 2020-21 is £12.0 billion higher than our March forecast. That is more than explained by the £16.9 billion accrued cost of future calls on loan guarantees assumed in the scenario (as discussed in paragraph 3.28). Partly offsetting that, the scenario assumes that departmental capital spending will fall short of plans by an additional £5 billion relative to the underspending we assumed in March – broadly in line with the fall in construction sector output that we assume in the scenario, with some catch-up activity later in the year. This category of spending will also be affected by the announcements discussed in Box 3.1.

Local authorities and public corporations

3.76 Table 3.25 sets out our central scenarios for borrowing by local authorities and public corporations and how they differ from our March forecast. For local authorities, borrowing is materially higher this year, but little different thereafter. For public corporations, differences are small. (The large 2019-20 difference in local authorities' borrowing relative to our March forecast largely relates to the business support measures that are being administered locally, where some grants from central government to finance them were received in March but the associated payments to businesses were made in April or later.)

Table 3.25: Local authorities' and public corporations' net borrowing: central scenario versus March forecast

	£ billion					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
Local government net borrowing						
March forecast	10.7	10.9	8.9	8.8	9.0	8.7
Central scenario	5.4	16.9	9.4	9.2	9.5	9.1
Difference from March	**-5.3**	**6.0**	**0.5**	**0.4**	**0.4**	**0.4**
Public corporations net borrowing						
March forecast	-2.6	-1.9	-7.2	-1.9	-0.9	-4.5
Central scenario	-3.7	-1.9	-6.0	-1.4	-0.9	-4.0
Difference from March	**-1.1**	**0.1**	**1.2**	**0.5**	**-0.1**	**0.6**

Local authorities' net borrowing

3.77 Local authorities have faced considerable financial pressures due to coronavirus. On the expenditure side, these include additional costs in providing social care services and administering public health measures. On the revenue side, council tax and business rates are likely to see greater non-payment than in previous years, while more households will also be eligible for council tax reduction schemes. Income from sales, fees and charges, which makes up a large proportion of the revenue of many authorities, has been hit hard by the lockdown. And while council tax and business rates arrears may well be recovered in due course, loss of parking fees or leisure centre revenue will in large part not be.

3.78 We have taken a top-down approach to local authorities' net borrowing in the scenario. Local Government Association analysis drawing on surveys carried out by the Ministry of Housing, Communities and Local Government points to an estimated budget shortfall of around £6 billion in 2020-21 thanks to lower income and higher spending, after factoring in the £3.2 billion of support already provided by central government at that point. There is naturally considerable uncertainty around this figure and new survey results are due soon.

3.79 Our scenario uses this estimate and assumes that the shortfall is met by local authorities drawing on reserves, which raises borrowing by £6 billion relative to our March forecast. It is unlikely that this would be the precise mechanism by which borrowing would be affected, given the availability of non-earmarked reserves and their distribution across authorities. In practice a shortfall could be met in other ways. One possibility is that central government could provide further grant funding, which would have the same effect on public sector net borrowing, but would switch it from local authorities to central government. Relative to the assumptions in our scenario, this has already happened to an extent with an announcement of further support on 2 July. It is also possible that local authorities could cut spending in response to reduced income, reducing the impact on the public sector deficit.

Public corporations' net borrowing

3.80 Public corporations' net borrowing is slightly higher in our central scenario than we predicted in March. This reflects several offsetting factors:

- Operating profits of the **Asset Purchase Facility** (APF) are transferred to the Treasury, so they mostly reduce central government net borrowing. But APF flows do reduce public corporations' borrowing when sums are retained to cover refinancing costs (by £1.9 billion in 2020-21 and by £0.3 billion in 2023-24 relative to our March forecast).

- We have reflected the changes in spending and borrowing in 2020-21 in **Transport for London**'s Emergency Budget, which lowered capital spending but increased the amounts that would be drawn down from reserves.[23] The net effect of these changes increases public corporations' net borrowing relative to our March forecast.

[23] *Finance update - TfL Funding agreement and Emergency Budget*, Transport for London, June 2020.

- The scenario assumes that public corporations' **gross operating surplus** will move with nominal GDP, which increases net borrowing by an average of £0.4 billion a year.

- Spending by the **Pension Protection Fund** in respect of the liabilities of insolvent firms' pension schemes is £0.2 billion a year higher in our central scenario than in our March forecast. This is equivalent to assuming the cost of taking on such schemes will be around 50 per cent higher than we assumed in March. (Our downside scenario assumes the cost will be double that assumed in March, up £0.5 billion a year.)

Financial transactions and valuation effects

3.81 The higher path for PSNB in our central scenario than in our March forecast contributes to a materially higher path for public sector net debt (PSND). But financial transactions – which affect debt directly, without an equivalently sized effect on borrowing – are also sharply higher than our March forecast predicted. This raises the path for PSND further. Valuation effects are uneven across years, both in levels and relative to our March forecast.

Recent developments

3.82 Our scenario assumes that financial transactions and valuation effects add £76.7 billion to the year-on-year change in PSND in 2020-21, compared to a reduction of £23.8 billion in 2019-20. In the first two months of the year, financial transactions have already added £40.1 billion to net debt, largely due to the combined effect of TFS loans (£11.8 billion) and gilts purchased by the APF (£17.7 billion). Over the year as a whole, our central scenario assumes that TFS loans will add £42.9 billion and APF gilt purchases £52.5 billion.

Summary of our central scenario

3.83 Table 3.26 shows that financial transactions add to PSND in all years except 2024-25. Table 3.27 shows these effects are initially higher than in our March forecast but then sharply lower in 2024-25. The path and differences from March are both dominated by Bank of England schemes. In particular, the Bank's new TFS adds materially to the change in PSND this year. The assumed repayment of TFS loans in 2024-25 then reduces PSND sharply. Valuation effects, especially those related to the buying and selling of gilts for more than their face value, raise PSND relative to our March forecast in 2020-21, mainly due to purchases by the APF. Thereafter, selling gilts above par lowers PSND relative to March.

Table 3.26: Financial transactions and valuation effects

	£ billion				
	Scenario period				
	2020-21	2021-22	2022-23	2023-24	2024-25
Financial transactions	**61.2**	**12.3**	**7.3**	**8.6**	**-102.1**
of which:					
Government net lending	11.2	10.6	10.8	7.6	7.0
Sales or purchases of financial assets	0.0	0.0	-9.0	-2.1	-2.5
Bank of England Term Funding Scheme	42.9	0.0	0.0	0.0	-120.0
Cash flow timing effects	7.1	1.7	5.5	3.1	13.5
Valuation effects	**15.5**	**-10.2**	**-2.9**	**0.2**	**-11.6**

Table 3.27: Financial transactions and valuation effects: central scenario versus March forecast

	£ billion				
	Scenario period				
	2020-21	2021-22	2022-23	2023-24	2024-25
Financial transactions	**90.7**	**72.6**	**-3.5**	**2.2**	**-114.9**
of which:					
Government net lending	-1.6	-1.0	-0.7	0.1	0.1
Sales or purchases of financial assets	10.5	3.5	-4.9	1.4	0.8
Bank of England Term Funding Scheme	86.6	63.4	0.0	0.0	-120.0
Cash flow timing effects	-4.8	6.7	2.1	0.7	4.2
Valuation effects	**21.4**	**-12.8**	**-3.2**	**-2.5**	**-3.0**

Government net lending to the private sector

3.84 Differences between our central scenario and our March forecast for government lending to the private sector are modest. They are dominated by how our central scenario for the housing market is assumed to affect the Help to Buy scheme up to 2022-23. In summary:

- **Help to Buy** outlays are assumed to be lower in the remaining years that the scheme is open to new lending (up to 2022-23). Fewer housing completions reduce the number of loans issued, while lower house prices reduce their average value. Lower house prices also reduce repayments of existing loans, slightly offsetting the lower outlays.

- Lower inflation reduces **student loan outlays** because the tuition fee cap is linked to RPIX inflation. We have not made any assumptions about how the Government's temporary cap on student numbers, or wider behavioural responses to the pandemic by prospective students, might affect the amount of loans issued. (Nor have we incorporated the Government's announced changes to eligibility for EU students.)

Sales or purchases of financial assets

3.85 Our central scenario assumes that all the major financial asset sales that were included in our March forecast are delayed by two years. In addition, for RBS share sales the scenario assumes that those delayed sales will raise less due to the falls in the share price since we closed our March forecast. As of 12 June, it was down by almost half from that base. Financial asset sales reduce PSND because they exchange an illiquid asset for a liquid one, so cumulatively the delays and lower proceeds add £11.4 billion to PSND over five years.

Bank of England Term Funding Scheme

3.86 The Bank of England has launched a new TFS with additional incentives to provide credit to small and medium-sized enterprises. Our scenario assumes that TFS loans will reach £150 billion, somewhat larger than the £127 billion reached under the first TFS. It further assumes that all these loans are extended in 2020-21 (the scheme remains open until April 2021) and that all existing TFS loans (including those due in 2021-22) are rolled over into

the new scheme. TFS loans generally have a four-year term, but that can be extended to six years for amounts up to the amount of Bounce Back Loans a participant has extended. We assume that this will apply to £30 billion of TFS loans, so £120 billion is repaid in 2024-25.

Cash flow timing effects

3.87 Cash flow timing effects, which reconcile when spending and receipts are recorded in PSNB and PSND, differ from our March forecast by uneven amounts across years: lower in 2020-21, but higher by varying amounts thereafter. Abstracting from the uplift on index-linked gilts (for which there is an offsetting valuation effect) the main differences relate to:

- **Guarantees** on loan schemes and trade credit insurance where the expected cost of guarantees being called is recorded upfront in PSNB but the cash impacts will be spread over several years. This reduces PSND by £13.8 billion in 2020-21 (offsetting around 75 per cent of the addition to accrued spending), and by diminishing amounts thereafter as cash payments catch up with the accrued figure. There is considerable uncertainty over both the scale and timing of these guarantee-related payments.

- The **amortisation of gilt premia** adds between £1.6 billion and £3.2 billion a year relative to our March forecast, reflecting the larger gilt premia described below.

- Differences in **accruals adjustments from taxes** reflect both normal payment lags associated with weaker tax liabilities in our central scenario, as well as the impact of tax deferral policies. The net effect of these assumptions relative to our March forecast is relatively small. (In Chapter 5 we discuss risks and uncertainties around our scenario assumptions in respect of the non-payment of tax liabilities.)

Valuation effects

3.88 Differences between our central scenario and March forecast for valuation effects add a material amount to PSND in 2020-21, but reduce it by smaller amounts thereafter:

- **Gilt premia** arise when gilts are sold at DMO auctions at prices in excess of the face value of the bonds being issued. These lower PSND in all years relative to our March forecast. This reflects the combination of more gilts being sold (due to larger budget deficits) and at higher prices (the corollary of lower interest rates).

- **APF gilt premia** occur when the APF pays more than the face value of the gilts that it purchases. They add £51.0 billion to PSND in 2020-21 relative to what was assumed in our March forecast, reflecting the £300 billion expansion of quantitative easing.

- A weaker pound raises the value of the UK's **foreign currency reserves**, especially in 2020-21. This increases the amount that nets off PSND.

Deficit and debt aggregates

3.89 This section combines our central scenarios for receipts, expenditure and financial transactions to show how the public finances fare overall.

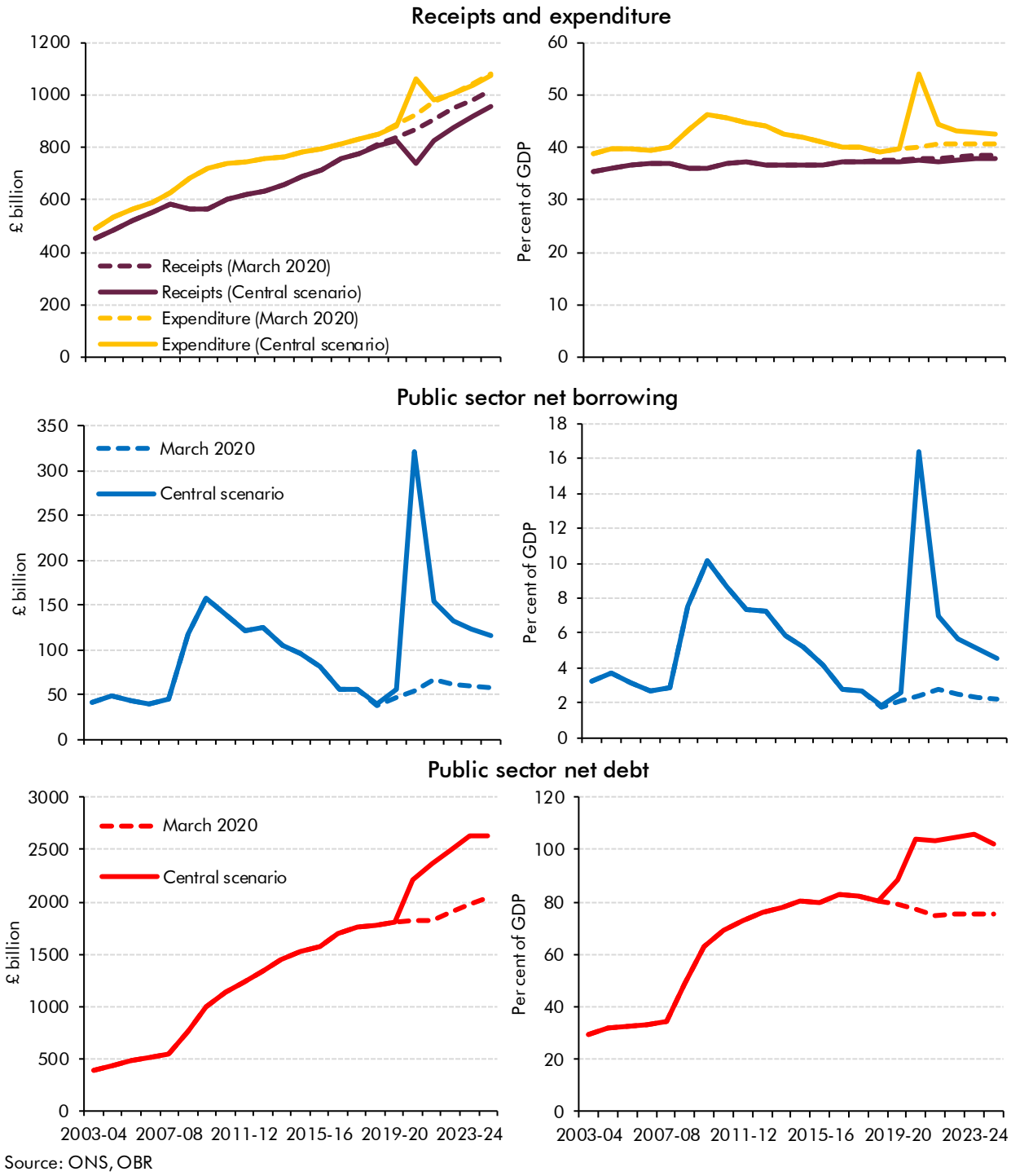
3.90 Chart 3.8 summarises our central scenario and compares it with our March forecast:

- **Receipts** fall sharply this year in cash terms, but not as a share of GDP (which falls sharply too), whereas **spending** rises sharply this year in cash terms and therefore even more so as a share of GDP. Thereafter, spending falls back close to the March forecast in cash terms, while receipts remain below it throughout. And spending remains higher as a share of the smaller economy, while the receipts-to-GDP ratio is modestly lower.

- As a consequence, the **budget deficit** spikes to £322 billion (16 per cent of GDP) in 2020-21 – by far the highest peacetime deficit in at least 300 years. It falls back sharply in 2021-22, then more slowly thereafter, but remains above £100 billion in every year of the scenario. At 4.6 per cent of GDP in 2024-25, it remains 2.4 per cent of GDP (and £58 billion) above our March forecast.

- **Public debt** is significantly higher in cash terms thanks to higher borrowing and to the effects of Bank of England schemes. Taken together with the smaller economy, the debt-to-GDP ratio rises above 100 per cent of GDP for the first time since 1960-61, where it remains. By 2024-25 it is 26.8 per cent of GDP above our March forecast.

Chart 3.8: The public finances: central scenario versus March forecast

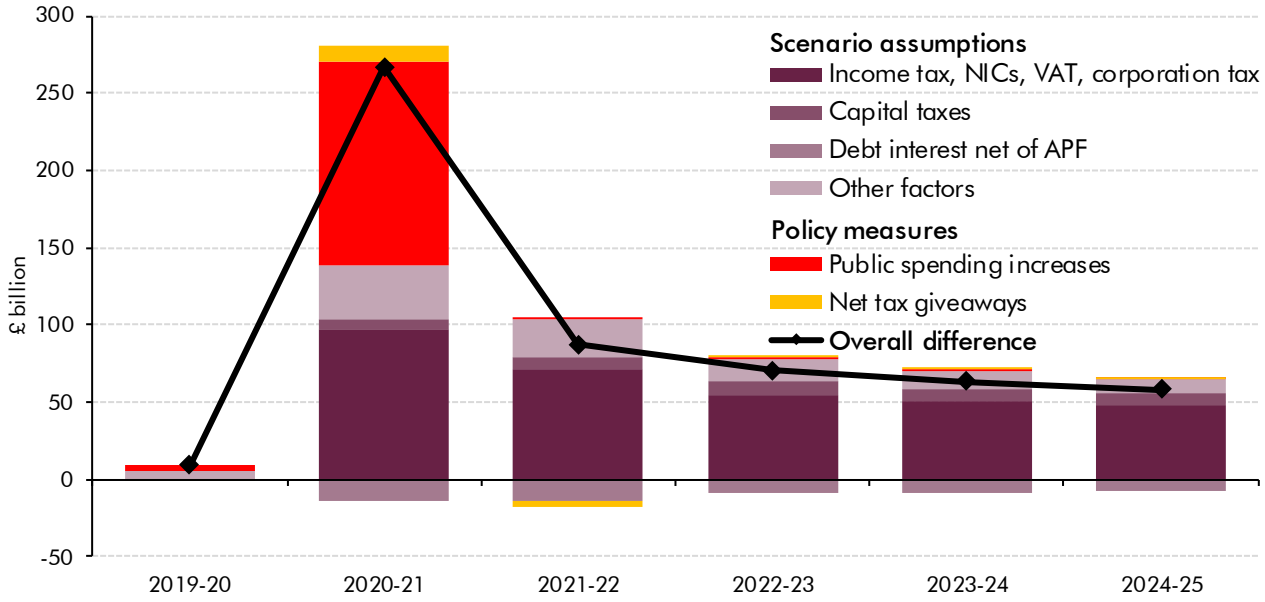


Source: ONS, OBR

Public sector net borrowing

3.91 Chart 3.9 shows the sources of higher borrowing relative to our March forecast. The difference peaks this year at £267 billion, thanks both to the £142 billion cost of policy measures (mostly public spending, with the CJRS the largest single intervention) and the consequences of the lockdown for receipts (£122 billion). Other factors, such as the welfare spending cost of lower employment, also add materially to borrowing. From 2021-22 onwards the difference is largely down to the effect of weaker tax bases on receipts, especially the four largest: income tax, NICs, VAT and corporation tax. Within public spending, higher welfare spending is largely offset by lower debt interest spending.

Chart 3.9: Sources of differences in PSNB: central scenario versus March forecast



Note: In 2019-20, 'Other factors' reflects all non-policy-related differences, including both scenario assumptions and new outturn data.
Source: ONS, OBR

3.92 Table 3.28 details the differences that underlie Chart 3.9. As regards scenario assumptions, income tax and NICs are the largest sources of difference. By 2024-25, these two tax heads explain almost half the difference relative to our March forecast. VAT and other excise duties are also materially weaker throughout. The cost of policy measures in 2020-21 is dominated by the employment support package, which accounts for over two-fifths of the cost, and business support measures (taking loan guarantees and other measures together), which account for a third of the cost. But most of the interventions are time-limited to this year, leaving only small effects on borrowing from 2021-22 onwards.

Table 3.28: Public sector net borrowing: central scenario versus March forecast

	£ billion					
	Estimate	Scenario period				
	2019-20[1]	2020-21	2021-22	2022-23	2023-24	2024-25
March forecast	47.2	54.8	66.6	61.5	60.2	57.9
Central scenario	56.6	322.0	153.7	132.0	123.3	116.0
Difference	**9.4**	**267.2**	**87.1**	**70.6**	**63.1**	**58.0**
Underlying differences	**5.8**	**125.0**	**89.1**	**69.1**	**61.7**	**57.1**
of which:						
Income tax and NICs		45.7	38.5	30.1	28.2	27.5
VAT and excise duties[2]		38.7	19.3	15.7	16.2	16.6
Corporation tax[3]		21.3	16.1	11.9	8.7	6.6
Capital taxes		6.9	7.5	8.0	8.2	7.7
CG debt interest net of the APF		-13.9	-14.5	-9.2	-8.1	-7.3
Welfare spending		24.5	17.1	8.1	4.5	2.0
Other receipts changes		9.8	6.5	5.8	5.1	5.0
Other spending changes		-7.9	-1.5	-1.3	-1.0	-0.9
Effect of Government decisions	**3.6**	**142.2**	**-2.0**	**1.5**	**1.4**	**0.9**
of which:						
Public services spending		18.8	0.6	0.6	0.6	0.0
Employment support		62.2	-2.8	0.0	0.0	0.0
Business support: loans and guarantees		20.0	-0.1	-0.1	-0.1	0.0
Business support: tax and spending		30.2	-0.2	0.1	0.0	0.0
Welfare spending measures		9.3	1.0	0.9	0.9	0.9
Other tax measures		1.7	-0.5	0.0	0.1	0.1
Memo: Central scenario before effect of decisions	*53.0*	*179.8*	*155.7*	*130.6*	*121.9*	*115.0*

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

[1] Breakdowns by individual tax or spending area between policy and underlying differences in 2019-20 are not available as a result of updates for outturn estimates.

[2] Excise duties refer to fuel duties, alcohol duties, tobacco duties and air passenger duty.

[3] Includes oil and gas revenues.

Public sector net debt

3.93 Table 3.29 presents our central scenario for PSND and breaks down differences from our March forecast. The debt-to-GDP ratio is 28 per cent of GDP higher on average from 2020-21 onwards (and is significantly higher in 2019-20 too thanks to the use of an end-March-centred denominator that includes the sharp fall in GDP due to the lockdown). The lower path for nominal GDP raises the debt-to-GDP ratio in all years, but it is the increase in cash debt that dominates. PSND is £387 billion higher in 2020-21, rising to £600 billion higher in 2024-25. In all years, the bulk of the increase is explained by higher cumulative deficits. The Bank's expanded quantitative easing and its new TFS also increase PSND markedly, though this effect diminishes in 2024-25 as loans extended by the TFS are repaid. Other impacts are smaller by comparison and overall reduce PSND relative to our March forecast.

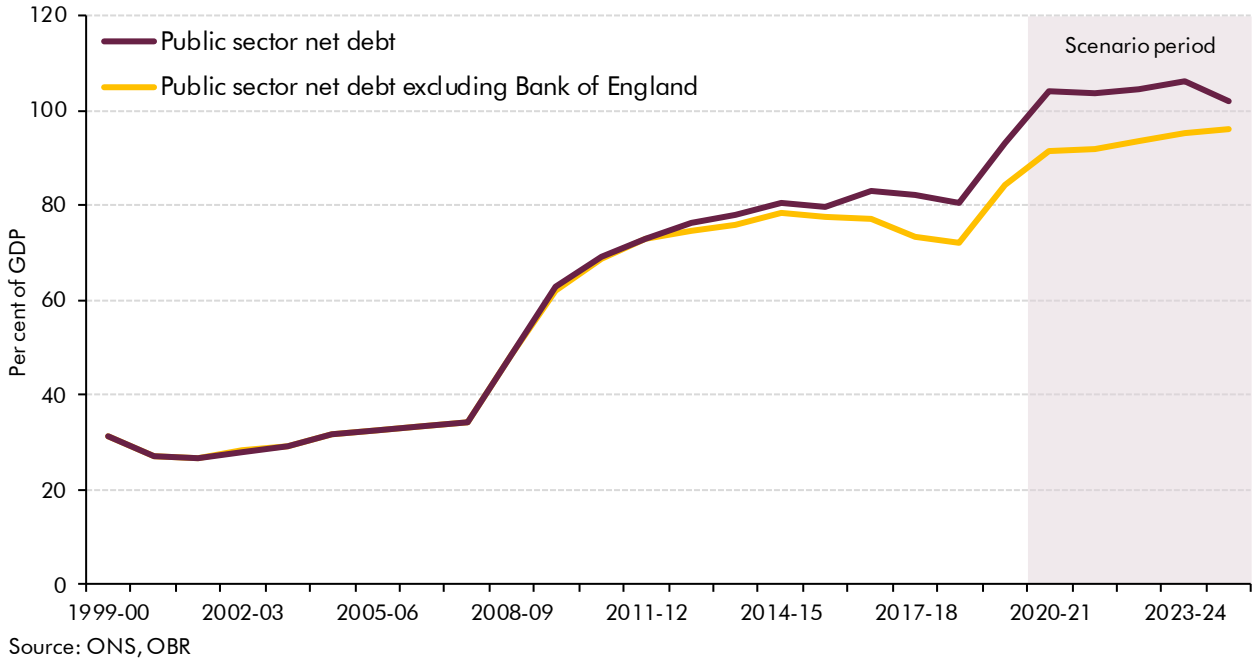
Table 3.29: Public sector net debt: central scenario versus March forecast

	Per cent of GDP					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
March forecast	79.5	77.4	75.0	75.4	75.6	75.3
Central scenario	88.5	104.1	103.6	104.7	106.1	102.1
Difference	**9.0**	**26.7**	**28.6**	**29.3**	**30.5**	**26.8**
of which:						
Difference in nominal GDP[1]	8.7	7.0	4.4	3.8	3.4	3.1
Difference in cash level of net debt	0.4	19.6	24.2	25.5	27.1	23.7
	£ billion					
March forecast	1,798	1,818	1,828	1,900	1,970	2,032
Central scenario	1,806	2,205	2,361	2,497	2,629	2,632
Difference in cash debt	**8**	**387**	**533**	**597**	**660**	**600**
of which:						
Underlying differences	**8**	**258**	**402**	**461**	**520**	**457**
Public sector net borrowing	6	131	220	289	351	408
Bank of England: Term Funding Scheme	0	87	150	150	150	30
Bank of England: APF gilt premia	0	51	51	51	52	51
Other	2	-10	-19	-29	-32	-32
Effect of Government decisions	**0**	**128**	**131**	**136**	**140**	**142**
Public sector net borrowing	4	146	144	145	147	148
Cash flow timing effects and other	-4	-17	-13	-10	-7	-5

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

3.94 Chart 3.10 shows the path of PSND including and excluding the uneven impact of the Bank of England schemes. Excluding their effects, after the initial surge the upward path for the debt-to-GDP ratio is much smoother and continues throughout the scenario period (rather than reversing in the final year), reflecting the continuing high levels of borrowing.

Chart 3.10: Public sector net debt including and excluding the Bank of England

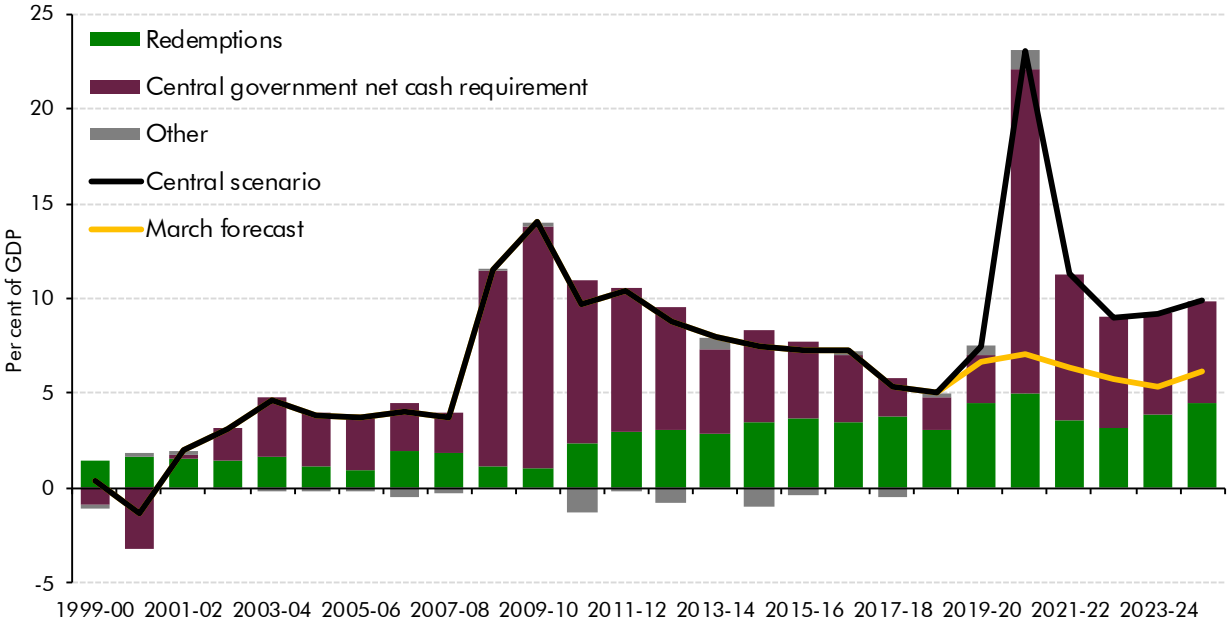


Source: ONS, OBR

Financing

3.95 Chart 3.11 illustrates the financing challenge the Government faces in our central scenario. Including refinancing gilts that mature, the Government would need to issue debt worth more than 23 per cent of GDP in 2020-21 – far higher than at any point during or after the financial crisis. Continuing high cash deficits and redemptions (including some short-term gilts that have already been issued this year) means that the gross financing requirement remains elevated in future years. Over the full five years the Government would need to issue debt totalling £1.4 trillion or 12 per cent of cumulative GDP.

Chart 3.11: Gross financing requirement: central scenario versus March forecast



Source: DMO, OBR

Upside and downside fiscal scenarios

3.96 In Chapter 2 we describe an upside scenario in which the economy bounces back faster than in the central scenario and there is no longer-term economic scarring, and a downside one in which the recovery is slower and scarring is greater. In this section we describe the results of our upside and downside fiscal scenarios, then compare all three scenarios with what happened to the public finances following the financial crisis a decade ago.

Additional fiscal scenario assumptions

3.97 For most lines of receipts and spending, these scenarios have been produced by starting from our central scenario and using ready-reckoners that assume linear relationships with the appropriate determinants. And those determinants have largely been scaled linearly with features of the economic scenarios described in Chapter 2. In this section we therefore only describe areas where we have made non-linear assumptions in one or both scenarios. Policy-specific assumptions in these scenarios were detailed earlier in the chapter.

3.98 For several items, we have assumed that the upside scenario is half as bad as the central, while the downside is twice as bad, introducing some non-linearity into the modelling. This includes: non-payment rates for accumulated PAYE debt and the tax deferral measures; the hit to financial company profits; the medium-term loss of fuel duty receipts; and the loss of commercial SDLT receipts. Similar assumptions have been applied to some policy costings.

3.99 Other non-linear assumptions and those not driven by determinants include:

- **Utilisation of loss reliefs affecting corporation tax receipts** is lower in the upside scenario' reflecting a smaller rise in losses this year that are then used more quickly as more profits are generated that can be relieved. The downside scenario assumes that proportionally more losses are generated and that a higher share of them are carried forward to use against future profits. This would extend beyond five years.

- For **air passenger duty** in the downside scenario, receipts take a year longer to recover and there is a 25 per cent reduction in air travel relative to GDP (compared to 10 per cent in the central scenario). In the upside scenario there is a full recovery by the end of 2020-21 with no change in the propensity for air travel is assumed.

- For **alcohol duty**, the downside scenario assumes that on-trade sales take a year longer to recover, reaching 75 per cent by the end of 2021-22. Thereafter, there is a 25 per cent structural reduction in on-trade sales, which is fully offset by an increase in off-trade sales. In the upside scenario receipts recover fully by the end of 2020-21.

- **Local authority net borrowing** is £3 billion lower than our central scenario in the upside scenario and £3 billion higher in the downside scenario.

- **Transport for London** assumptions are the same in the central and upside scenarios, but the downside scenario assumes further additions to borrowing in 2021-22.

- **Medium-term DELs** are unchanged in cash terms from our March forecast, so vary as a share of GDP due to the different paths for nominal GDP in each scenario.

- **Major financial asset sales** are delayed by one year in the upside scenario, as opposed to two years in the central and downside scenarios. In addition, the downside scenario assumes that no RBS share sales take place over the next five years.

3.100 We have not changed the assumed number of excess deaths in either scenario. Most of those assumed in the central scenario have taken place already, so the upside scenario would be unlikely to differ greatly. But if the downside scenario were to be associated with a large second wave of cases, as in the 1918 flu pandemic, deaths would be higher.

Upside and downside scenario results

3.101 Chart 3.12 summarises the results of the upside and downside fiscal scenarios relative to our central scenario and our March 2020 forecast. It shows that:

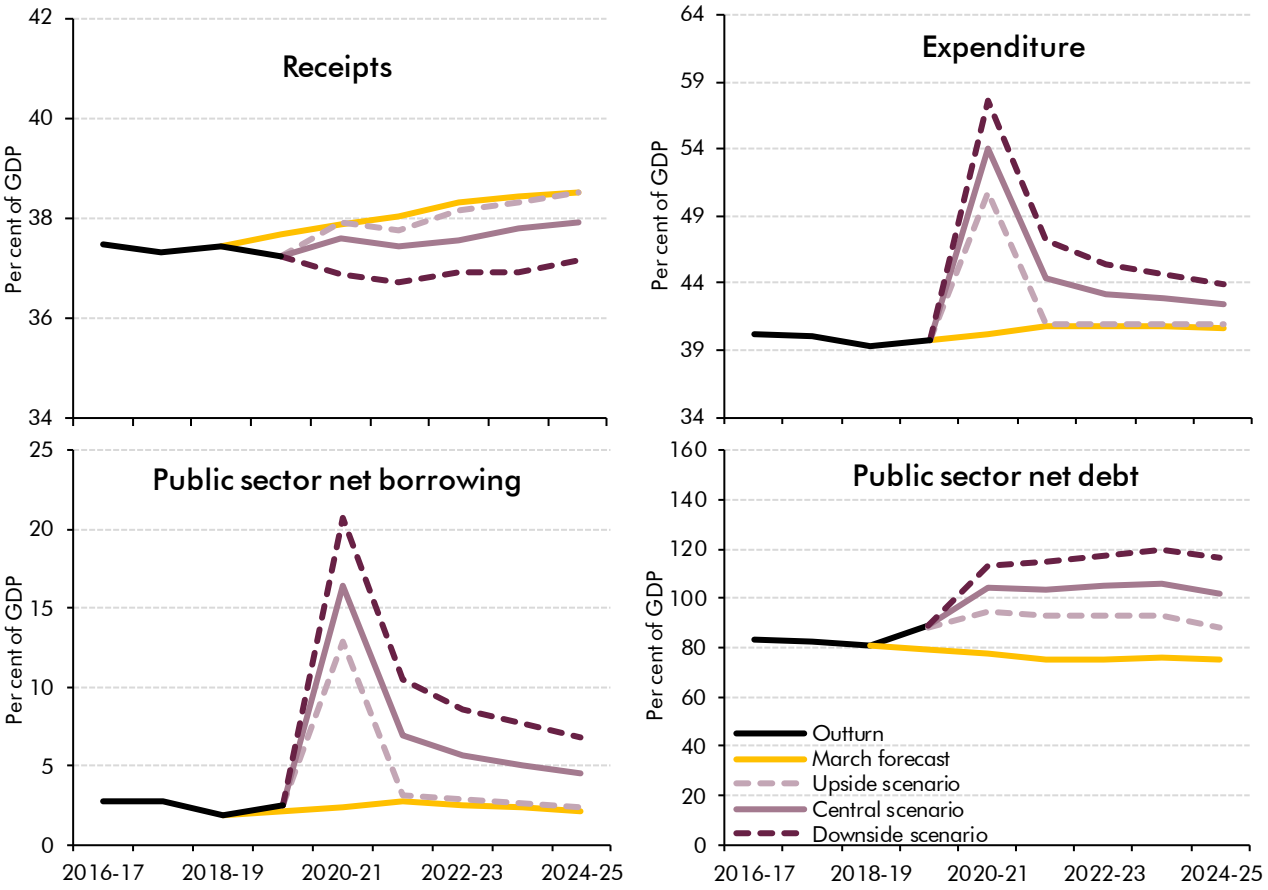
- In 2020-21 the **receipts-to-GDP ratio** rises in the central and upside scenarios, but falls in the downside scenario. As in our central scenario, the rise in the upside scenario reflects the labour share of nominal GDP rising, in part supported by the CJRS. The underlying weakness in other tax bases is also less pronounced in the upside scenario. The ratio falls back in 2021-22, again reflecting movements in the labour share. A sharper fall in corporation tax receipts, reflecting assumptions about loss reliefs and financial company profits, helps to explain the drop in the receipts-to-GDP ratio in 2020-21 in the downside scenario. The ratio remains lower throughout reflecting a lower consumption share of GDP and a lack of fiscal drag due to slower real earnings growth. In the upside scenario the receipts share dips, but this is temporary and by 2024-25 it recovers to the same level as in our March forecast.

- The effects of the upside and downside scenarios on the **spending-to-GDP ratio** are distributed relatively symmetrically around the central scenario because they are dominated by differences in the nominal GDP denominators. In each scenario, spending peaks at more than 50 per cent of GDP in 2020-21, then falls back sharply. Despite higher public debt in both scenarios – very much so in the downside one – debt interest spending remains lower than our March forecast throughout. That reflects the lower interest rates and expanded quantitative easing common to each of them.

- Given these receipts and spending profiles, **public sector net borrowing** in 2020-21 spikes to 13 per cent of GDP (£263 billion) in the upside scenario and 21 per cent of GDP (£391 billion) in the downside scenario. It drops back close to our March forecast in the medium term in the upside scenario, but remains at 6.8 per cent of GDP in 2024-25 (4.7 per cent of GDP above our March forecast) in the downside scenario.

- In all three scenarios **public sector net debt** rises sharply in 2020-21, reflecting higher borrowing and the fall in GDP. Subsequently, debt remains relatively stable as a share of GDP in the central and upside scenarios, as low interest rates relative to nominal GDP growth deliver favourable debt dynamics that broadly offset additions to debt from continuing budget deficits. Debt continues to rise relative to GDP in the downside scenario, but only gently thanks again to favourable debt dynamics. In all scenarios the drop in PSND in 2024-25 reflects TFS loans being repaid.

Chart 3.12: Key fiscal aggregates: scenarios versus March forecast



Source: ONS, OBR

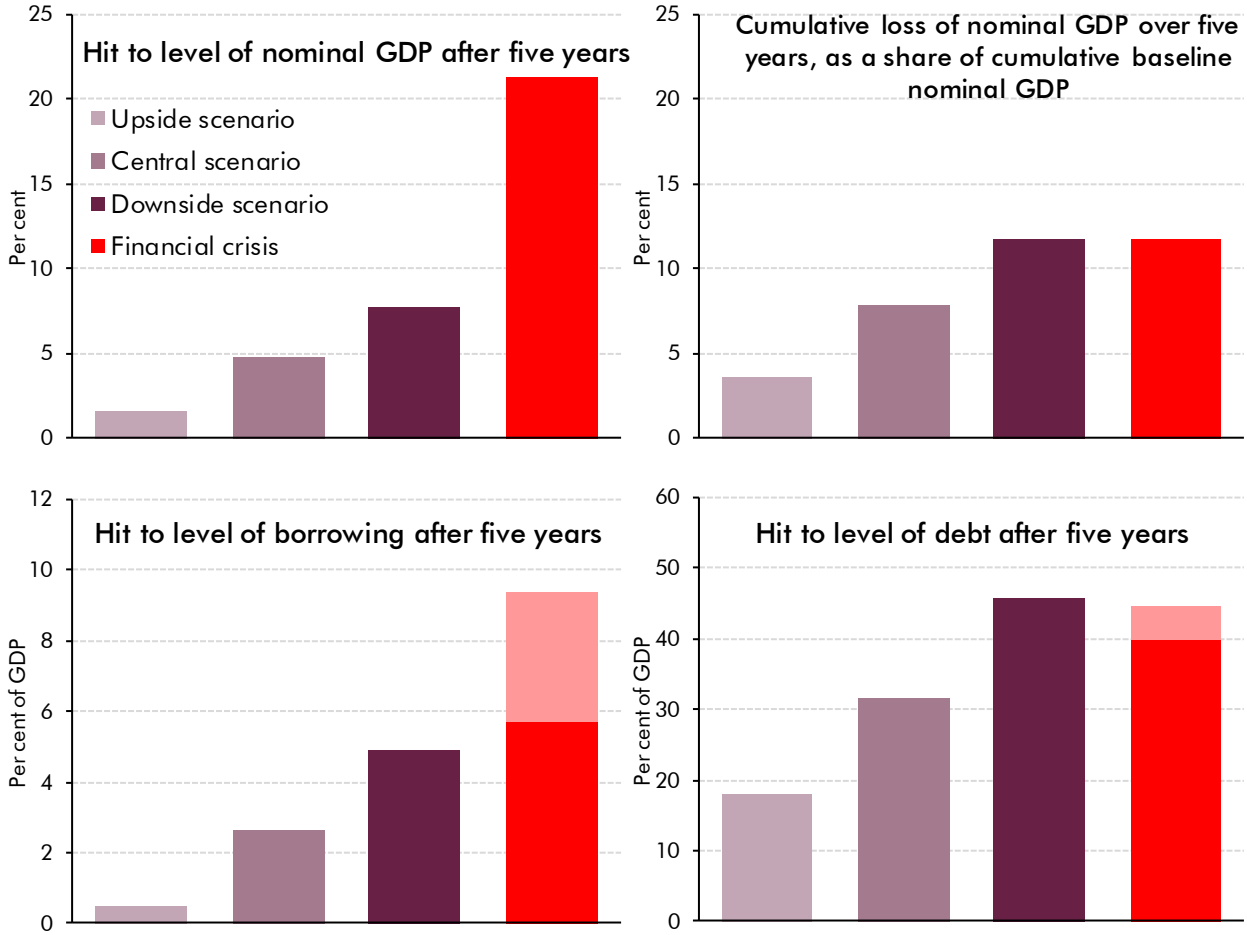
Comparison between our scenarios and the financial crisis

3.102 How does this all compare with the what we saw after the financial crisis just over a decade ago? Chart 3.13 compares the economic and fiscal consequences assumed in our three scenarios (relative to our March 2020 forecast) with the shortfalls seen in the outturn data following the financial crisis (relative to the Treasury's March 2008 Budget forecast). On the economy side, we focus on nominal GDP, which is more important for understanding the behaviour of the public finances. On the fiscal side, we look at five-year changes in borrowing and debt (rather than their levels) to abstract from the many statistical changes to both nominal GDP and fiscal metrics that have happened since 2008.

3.103 The top-left chart shows that the shortfalls in nominal GDP assumed in the final year of our scenarios are all smaller than the post-financial crisis experience (as described in Chapter 2 in respect of real GDP). As one might expect, the extent to which the budget deficit increased (in the bottom-left chart) shows the same pattern, but only once post-crisis fiscal consolidation measures are removed (the additional borrowing in shaded red). This provides the more meaningful comparison with our scenarios, which only factor in current policy and not any future decisions that might be taken to address large continuing deficits.

3.104 The cumulative deterioration in nominal GDP (in the top-right chart) matters most for the level of public debt, in part due to its effect on cumulative tax receipts over these five-year periods. On this metric, our downside scenario is of a similar magnitude to the experience of the first five years after the financial crisis. (The profiles of the cumulative shortfalls differ markedly, with our scenarios assuming a large initial shortfall followed by progressively smaller ones thereafter – in contrast to the continuously rising shortfall that followed the financial crisis.) Again, as one might expect, the rise in the debt-to-GDP ratio (in the bottom-right chart) follows a similar pattern to the cumulative loss in nominal GDP.

Chart 3.13: Economic and fiscal deteriorations: scenarios versus financial crisis



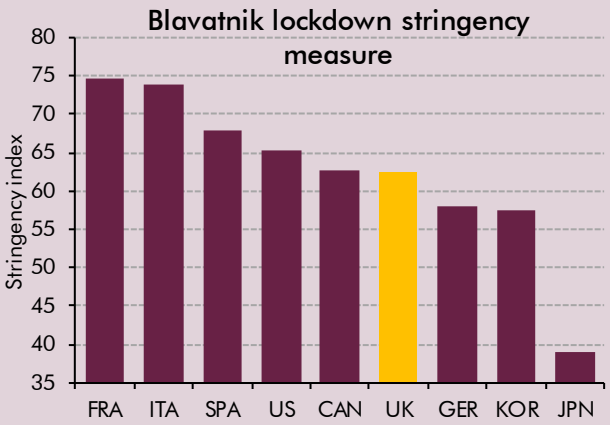
Note: These estimates use forecasts from March 2020 and Budget 2008 as a baseline. The fiscal estimates compare the rise in borrowing and debt in our scenarios (and the outturn data) to these baselines. The shaded area reflects the direct impact of post-Budget 2008 fiscal consolidation using the IFS' *Fiscal response to the crisis* dataset.
Source: IFS, ONS, OBR

Box 3.3: The economic and fiscal impact of the pandemic around the world

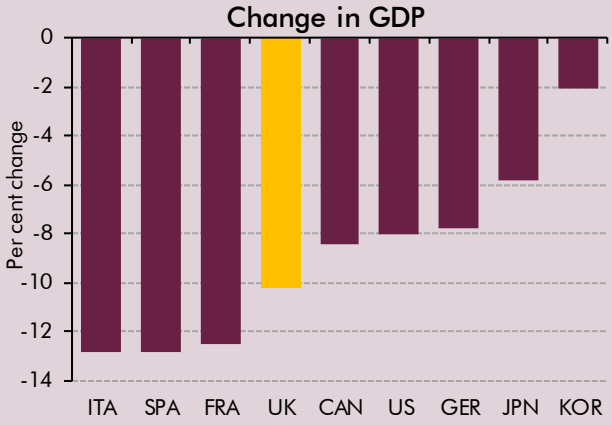
The coronavirus pandemic has hit the economies and public finances of all countries around the world. Lockdown measures have been imposed to control the outbreak and fiscal support has been provided to individuals and businesses. How has the UK fared relative to other major advanced economies? Chart A plots four indicators that tell the high-level story of lockdowns and their consequences in the G7 economies plus Spain and South Korea.

The top-left panel plots the average reading between March and June of the Blavatnik School of Government's stringency index, which measures the intensity of lockdown policies that restrict people's activities. On this measure, the lockdown here has been of about average intensity.

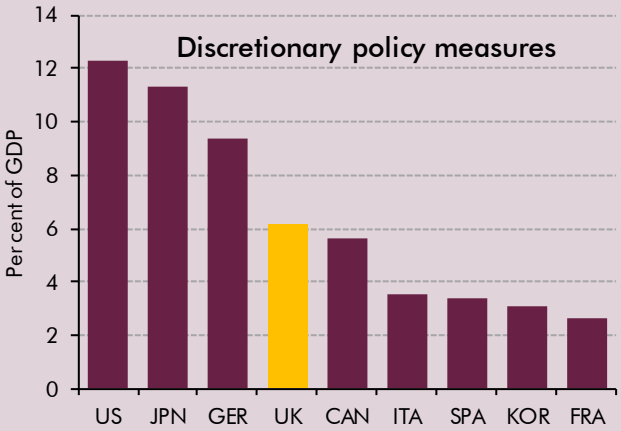
Chart A: Pandemic-related indicators and forecasts for selected major economies



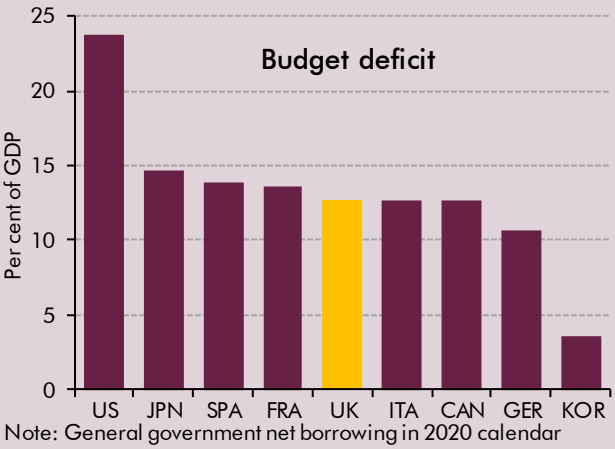
Note: Average from 1 March 2020 to 30 June 2020.
Source: BSG



Note: Change in 2020 calendar year.
Source: IMF



Note: Direct cost in 2020 calendar year.
Source: IMF



Note: General government net borrowing in 2020 calendar year.
Source: IMF

The top-right panel plots the IMF's forecasts for the drop in real GDP in 2020 from its June 2020 *World Economic Outlook* (*WEO*). It shows how the depth of a country's recession is closely correlated with the intensity of its lockdown. The exception to this is South Korea, where the lockdown has been of similar intensity to that in Germany, but a much milder recession is predicted. The IMF expects the UK's recession to be relatively deep given the intensity of our lockdown, which could be because our economy is so services oriented and these sectors have

been more severely affected by lockdown policies and consumers' responses to them. The depth of the UK recession predicted by the IMF is similar to that in our upside economic scenario.

The bottom-left panel shows the IMF's estimates of these countries' 'above-the-line' fiscal policy responses (i.e. excluding guarantee-type interventions). There is little correlation between scale of policy response and the depth of the predicted recession. There are several possible explanations for this. First, all else equal, countries with more powerful automatic stabilisers need to rely less on discretionary policy. This seems to be borne out, with the policy response particularly large in the US and Japan, where automatic stabilisers are weaker, and smaller in France, with its relatively generous social safety net. The German policy response is unusually large for a country with more powerful automatic stabilisers. Second, causation runs both ways: the deeper the shock, the greater the need for policy to respond; but also, the larger the policy response, the greater the extent to which the economy will be cushioned from the full force of the shock.

The bottom-right panel shows the IMF's WEO forecasts for budget deficits this year. This combines the cost of discretionary policy measures with the IMF's view of the broader fiscal consequences of recessions on public spending and tax revenues. On this measure, the IMF's predictions for the UK are reasonably in line with other countries facing large recessions. The US stands out on this measure thanks to both the scale of the discretionary policy response there, but also the much higher deficit it was expected to run prior to the pandemic hitting.

Fiscal determinants used in the scenarios

3.105 Tables 3.30, 3.31 and 3.32 document the assumed paths for various fiscal determinants used in our three fiscal scenarios. They are presented as they would be in an *EFO*, but we would stress the degree of uncertainty around them in the present circumstances.

Table 3.30: Determinants used in the central scenario

	Percentage change on previous year, unless otherwise specified					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
GDP and its components						
Real GDP	0.5	-13.3	11.8	3.7	1.9	2.0
Nominal GDP[1]	2.2	-11.1	12.1	5.9	4.0	4.1
Nominal GDP (£ billion)[1,2]	2,215	1,968	2,207	2,337	2,430	2,529
Nominal GDP (centred end-March £bn)[1,3]	2,041	2,118	2,279	2,384	2,478	2,579
Wages and salaries[4]	3.5	-5.8	5.0	6.3	3.8	3.8
Non-oil PNFC profits[4,5]	1.4	-19.9	13.6	6.7	4.4	4.5
Consumer spending[4,5]	2.4	-13.3	9.0	5.1	3.5	3.6
Prices and earnings						
GDP deflator	1.8	2.6	0.1	2.1	2.0	2.0
RPI	2.6	0.9	1.5	3.2	3.2	3.1
CPI	1.7	0.5	1.5	1.9	2.0	2.0
Average earnings[6]	2.7	-0.1	4.2	2.6	3.0	3.2
Triple-lock' guarantee	4.0	2.5	5.0	2.7	3.0	3.1
Key fiscal determinants						
Employment (million)	32.9	30.6	31.3	32.3	32.7	33.0
Financial and property sectors						
Equity prices (FTSE All-Share index)	3,979	3,464	3,701	3,899	4,097	4,320
HMRC financial sector profits[1,5,8]	1.2	-40.0	20.0	20.0	20.0	2.0
Residential property prices[9]	1.2	-3.3	0.4	9.7	7.2	5.9
Residential property transactions (000s)[10]	1,165	800	1,491	1,336	1,338	1,368
Commercial property prices[10]	3.9	-13.8	0.9	2.6	1.5	2.0
Commercial property transactions[10]	-6.8	-23.7	20.3	3.7	1.9	2.0
Oil and gas						
Oil prices ($ per barrel)[5]	64.2	37.3	38.4	40.8	41.6	42.5
Oil prices (£ per barrel)[5]	50.1	30.1	31.4	33.3	34.0	34.7
Gas prices (p/therm)[5]	34.7	20.4	32.9	33.6	34.2	34.9
Oil production (million tonnes)[5]	51.7	50.0	46.5	43.3	40.3	37.6
Gas production (billion therms)[5]	13.2	12.7	12.0	11.2	10.4	9.7
Interest rates and exchange rates						
Bank rate (%)	0.7	0.0	0.0	0.1	0.1	0.2
Market gilt rates (%)[11]	0.7	0.3	0.4	0.4	0.5	0.6

[1] Non-seasonally adjusted.
[2] Denominator for receipts, spending and deficit forecasts as a per cent of GDP.
[3] Denominator for net debt as a per cent of GDP.
[4] Nominal. [5] Calendar year.
[6] Wages and salaries divided by employees.
[7] Adjusted for timing effects.
[8] HMRC Gross Case 1 trading profits.
[9] Outturn data from ONS House Price Index.
[10] Outturn data from HMRC information on stamp duty land tax.
[11] Weighted average interest rate on conventional gilts.

Table 3.31: Determinants used in the upside scenario

	Percentage change on previous year, unless otherwise specified					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
GDP and its components						
Real GDP	0.5	-9.6	14.7	1.4	1.3	1.5
Nominal GDP[1]	2.3	-7.4	15.0	3.6	3.3	3.5
Nominal GDP (£ billion)[1,2]	2,215	2,052	2,360	2,444	2,525	2,614
Nominal GDP (centred end-March £bn)[1,3]	2,052	2,276	2,403	2,484	2,568	2,665
Wages and salaries[4]	3.5	-2.2	8.7	4.5	3.2	3.4
Non-oil PNFC profits[4,5]	1.4	-18.3	19.7	4.1	3.5	4.0
Consumer spending[4,5]	2.4	-10.5	13.8	3.5	3.8	4.2
Prices and earnings						
GDP deflator	1.8	2.6	0.1	2.1	2.0	2.0
RPI	2.6	0.9	2.3	3.5	3.0	2.9
CPI	1.7	0.5	1.5	1.9	2.0	2.0
Average earnings[6]	2.7	1.6	5.0	3.6	3.0	3.2
'Triple-lock' guarantee	4.0	2.5	6.8	3.8	3.1	3.2
Key fiscal determinants						
Employment (million)	32.9	31.3	32.8	33.2	33.3	33.4
Financial and property sectors						
Equity prices (FTSE All-Share index)	3,979	3,477	3,780	4,052	4,327	4,644
HMRC financial sector profits[1,5,8]	1.2	-30.0	20.0	20.0	4.0	4.0
Residential property prices[9]	1.2	-0.9	8.5	9.9	4.2	3.9
Residential property transactions (000s)[10]	1,165	846	1,644	1,340	1,344	1,373
Oil and gas						
Oil prices ($ per barrel)[5]	64.2	37.3	38.4	40.8	41.6	42.5
Oil prices (£ per barrel)[5]	50.1	30.1	31.4	33.3	34.0	34.7
Gas prices (p/therm)[5]	34.7	20.4	32.9	33.6	34.2	34.9
Oil production (million tonnes)[5]	51.7	50.0	46.5	43.3	40.3	37.6
Gas production (billion therms)[5]	13.2	12.7	12.0	11.2	10.4	9.7
Interest rates and exchange rates						
Bank rate (%)	0.7	0.0	0.0	0.1	0.1	0.2
Market gilt rates (%)[11]	0.7	0.3	0.4	0.4	0.5	0.6

[1] Non-seasonally adjusted.
[2] Denominator for receipts, spending and deficit forecasts as a per cent of GDP.
[3] Denominator for net debt as a per cent of GDP.
[4] Nominal. [5] Calendar year.
[6] Wages and salaries divided by employees.
[7] Adjusted for timing effects.
[8] HMRC Gross Case 1 trading profits.
[9] Outturn data from ONS House Price Index.
[10] Outturn data from HMRC information on stamp duty land tax.
[11] Weighted average interest rate on conventional gilts.

Table 3.32: Determinants used in the downside scenario

	Percentage change on a year earlier, unless otherise specified					
	Estimate	Scenario period				
	2019-20	2020-21	2021-22	2022-23	2023-24	2024-25
GDP and its components						
Real GDP	0.5	-16.7	9.8	4.8	2.9	2.6
Nominal GDP[1]	2.3	-14.6	10.1	7.0	5.0	4.7
Nominal GDP (£ billion)[1,2]	2,215	1,892	2,083	2,228	2,339	2,449
Nominal GDP (centred end-March £bn)[1,3]	2,028	1,994	2,159	2,287	2,392	2,510
Wages and salaries[4]	3.5	-9.4	2.8	6.9	3.7	4.4
Non-oil PNFC profits[4,5]	1.4	-21.6	9.4	7.6	5.6	5.1
Consumer spending[4,5]	2.4	-15.4	3.7	4.9	5.2	5.0
Prices and earnings						
GDP deflator	1.8	2.6	0.1	2.1	2.0	2.0
RPI	2.6	0.7	0.9	3.2	3.3	3.1
CPI	1.7	0.5	1.5	1.9	2.0	2.0
Average earnings[6]	2.7	-3.1	3.0	2.5	3.0	3.9
'Triple-lock' guarantee	4.0	2.5	2.5	2.5	2.9	3.8
Key fiscal determinants						
Employment (million)	32.9	30.4	30.8	32.0	32.4	32.7
Financial and property sectors						
Equity prices (FTSE All-Share index)	3,979	3,451	3,623	3,751	3,877	4,017
HMRC financial sector profits[1,5,8]	1.2	-50.0	20.0	20.0	20.0	20.0
Residential property prices[9]	1.2	-6.8	-6.6	11.9	8.4	6.9
Residential property transactions (000s)[10]	1,165	745	1,342	1,283	1,338	1,363
Oil and gas						
Oil prices ($ per barrel)[5]	64.2	37.3	38.4	40.8	41.6	42.5
Oil prices (£ per barrel)[5]	50.1	30.1	31.4	33.3	34.0	34.7
Gas prices (p/therm)[5]	34.7	20.4	32.9	33.6	34.2	34.9
Oil production (million tonnes)[5]	51.7	50.0	46.5	43.3	40.3	37.6
Gas production (billion therms)[5]	13.2	12.7	12.0	11.2	10.4	9.7
Interest rates and exchange rates						
Bank rate (%)	0.7	0.0	0.0	0.1	0.1	0.2
Market gilt rates (%)[11]	0.7	0.3	0.4	0.4	0.5	0.6

[1] Non-seasonally adjusted.
[2] Denominator for receipts, spending and deficit forecasts as a per cent of GDP.
[3] Denominator for net debt as a per cent of GDP.
[4] Nominal. [5] Calendar year.
[6] Wages and salaries divided by employees.
[7] Adjusted for timing effects.
[8] HMRC Gross Case 1 trading profits.
[9] Outturn data from ONS House Price Index.
[10] Outturn data from HMRC information on stamp duty land tax.
[11] Weighted average interest rate on conventional gilts.

4 Long-term fiscal sustainability

Introduction

4.1 Our biennial *Fiscal sustainability reports* (*FSR*s) typically explore the question of fiscal sustainability from two perspectives: first, the latest public sector balance sheet position, as captured in the National Accounts produced by the Office for National Statistics and the Whole of Government Accounts produced by the Treasury; and second, our own detailed long-term fiscal projections, which build on our most recent medium-term forecast. Given the unusual circumstances posed by the coronavirus outbreak and policy response – and the delay to the publication of this year's Whole of Government Accounts – in this chapter we take a different approach, providing a broad-brush assessment of how the evolution of the medium-term fiscal outlook over the past two years is likely to have affected long-term sustainability and the challenges that might pose for policymakers.

4.2 This chapter therefore:

- Reviews the evolution of the **medium-term fiscal outlook** since mid-2018, when Prime Minister Theresa May announced a large new spending settlement for the NHS. It compares medium-term outlooks since then with the scenarios set out in Chapter 3. (These do not reflect the cost of additional measures announced on 8 July, which would raise the paths for debt, but make little difference to medium-term deficits.)

- Applies a simplified set of **long-term fiscal projections** to the various jumping-off points captured by different points in the evolution of the medium-term outlook, showing how the overall primary deficit and composition of public spending influence our results.

The medium-term fiscal outlook

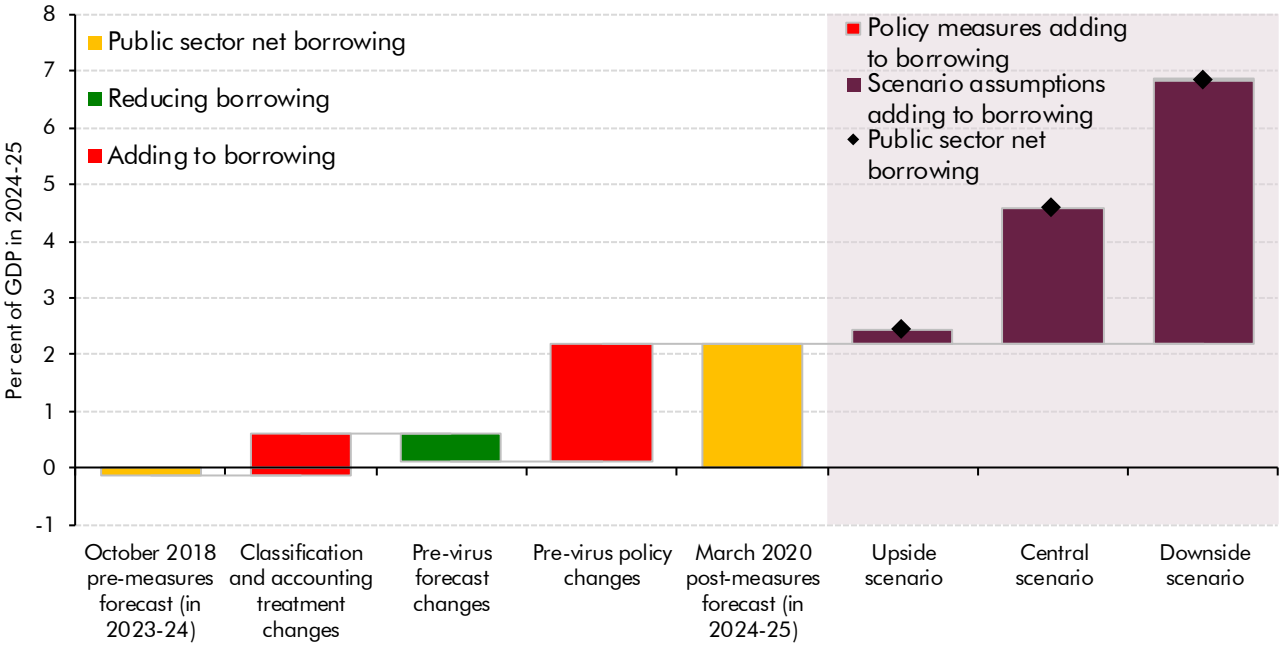
Public sector net borrowing

4.3 In November 2016, Chancellor Philip Hammond used his first Autumn Statement to set out new fiscal rules and an overarching fiscal objective "*to return the public finances to balance at the earliest possible date in the next Parliament*". At no point thereafter did it look likely that this objective would be met. A balanced budget was at one point within reach – in our October 2018 pre-measures forecast – but by then the goal had in effect already been abandoned in favour of the more generous spending settlement for the NHS announced by Prime Minister May in June 2018 (and therefore reflected in our post-measures forecast).

4.4 As Chart 4.1 shows, the sustained fiscal loosening delivered by that NHS settlement – plus the further sustained loosening in Chancellor Rishi Sunak's first Budget in March 2020 –

explain most of the deterioration in the medium-term fiscal position between our pre-measures October 2018 forecast (of a 0.1 per cent of GDP surplus) and our post-measures March 2020 forecast (a 2.2 per cent of GDP deficit). An improved statistical treatment for student loans, which treats the significant fraction that is expected eventually to be written off as spending rather than lending, raised borrowing as well. So too did other classification changes, whereas changes to our underlying fiscal forecasts reduced it. The coronavirus pandemic has further worsened the outlook. The projected deficit in 2024-25 in our upside, central and downside scenarios stands at 2.4, 4.6 and 6.8 per cent of GDP respectively.

Chart 4.1: Evolution of our medium-term PSNB forecasts versus scenarios



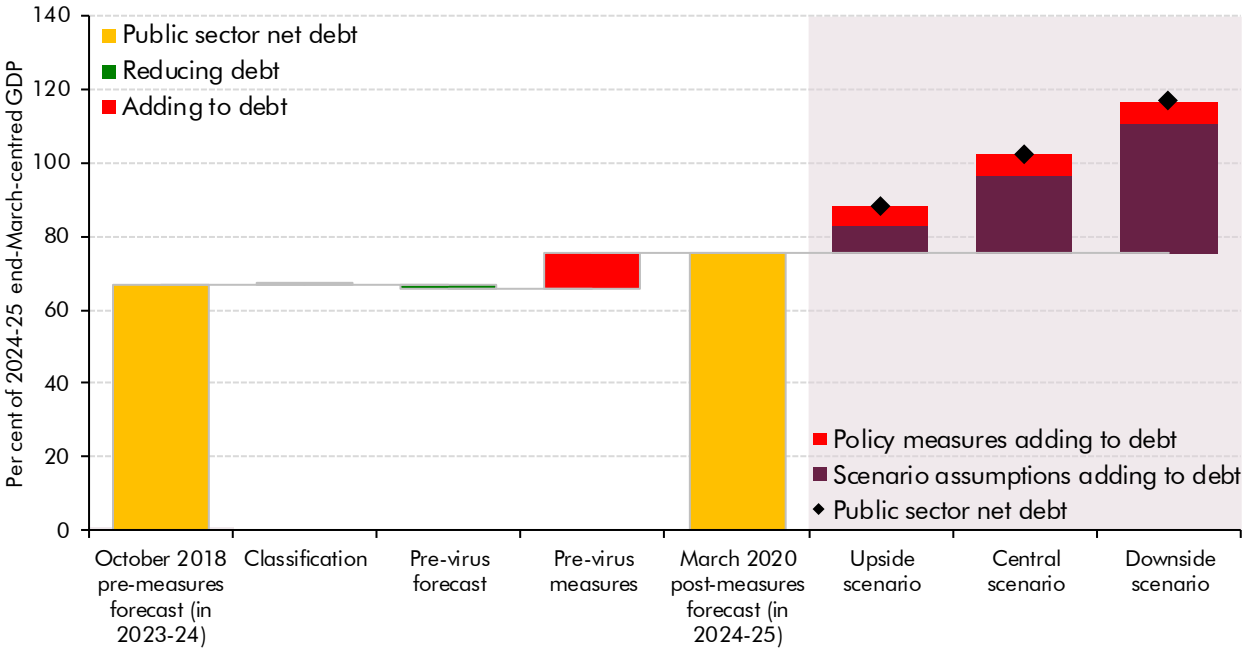
Source: OBR

Public sector net debt

4.5 Chart 4.2 shows the evolution of our pre-virus forecasts for public sector net debt (PSND) and how they compare with our coronavirus scenarios. These projections are not affected by the new accounting treatment for student loans, which only affected accrued spending.

4.6 Upward revisions between October 2018 and March 2020 were more modest than if policy changes had been the only factor, because their impact was cushioned by various classification and underlying forecast changes to both cash debt and nominal GDP. Higher cumulative borrowing in all scenarios – plus lower nominal GDP in the central and downside scenarios – then leave debt materially higher in the medium term.

Chart 4.2: Evolution of our medium-term PSND forecasts versus scenarios



Source: OBR

Determinants of fiscal sustainability

4.7 For the simplified long-term projections set out in the next section, we need to consider more than just net borrowing and net debt at the end of the medium term. As regards debt dynamics, the crucial variables are the primary balance (i.e. the difference between non-interest spending and receipts) and the difference between the effective interest rate paid on government debt and nominal GDP growth (the 'growth-corrected interest rate' or 'R-G').

4.8 In the demographically-driven approach we take to producing long-term projections, we are also interested in the size and composition of spending (and to a lesser extent receipts). In particular, spending on health and adult social care is assumed to rise over the long term relative to GDP as a result of ageing and other cost pressures, as does state pension spending (though it is sensitive to how the 'longevity link' affects the State Pension age).

4.9 Table 4.1 sets out the relevant fiscal variables at the medium-term horizon for each forecast and each scenario. It shows how public spending was raised as a share of GDP in the pre-virus forecasts thanks to successive policy decisions, with the first step focused on health spending and the second in other areas (notably public investment). In our central scenario, spending is higher still as a share of GDP across all the key categories, largely thanks to nominal GDP being lower at the scenario horizon. With receipts also a little lower as a share of GDP, this leaves a substantially larger primary deficit. But 'R-G' is even more negative than assumed in our March forecast thanks to a much lower effective interest rate paid on the larger debt stock outstanding at the scenario horizon. The key source of variation in the upside and downside scenario results is the different paths for nominal GDP.

Table 4.1: Selected fiscal aggregates at the medium-term horizon

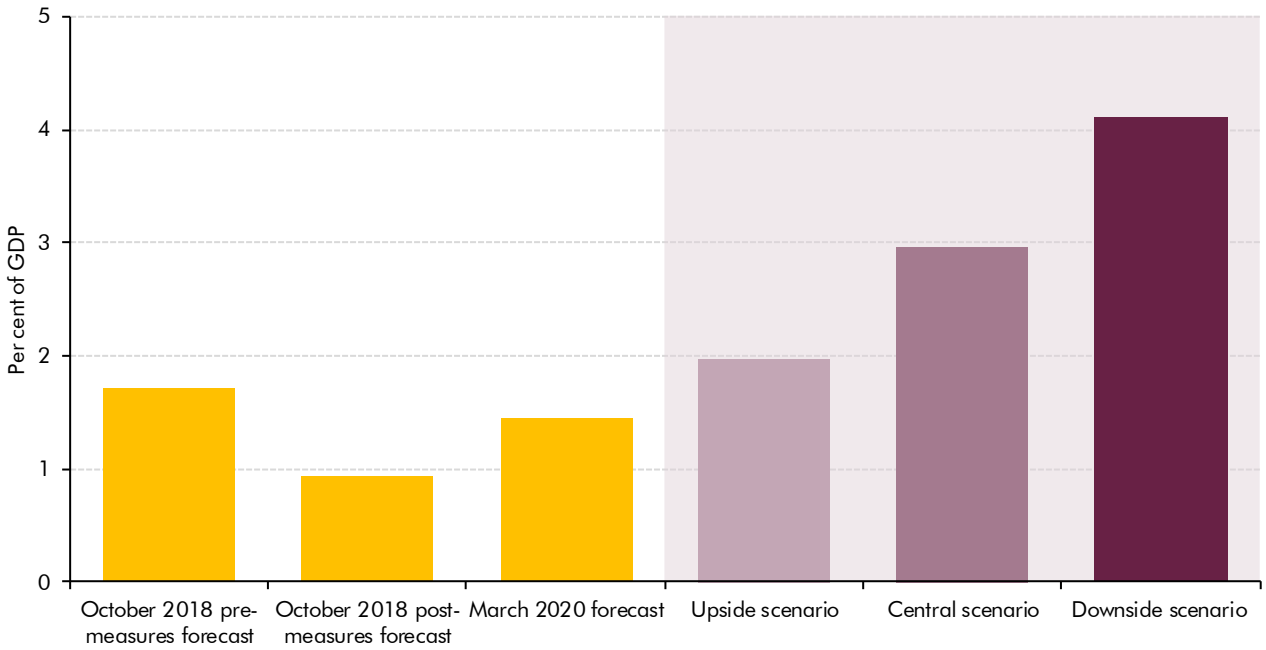
	Per cent of GDP (unless otherwise stated)					
	Restated October 2018 pre-measures forecast	Restated October 2018 post-measures forecast	March 2020 forecast	Upside scenario	Central scenario	Downside scenario
Primary receipts (a)	36.7	36.9	37.2	37.3	36.6	35.8
Primary spending (b)	35.9	37.0	38.3	38.9	40.3	41.7
of which:						
Health	6.8	7.6	7.8	7.9	8.2	8.4
Adult social care	1.3	1.4	1.4	1.4	1.4	1.5
State pensions	4.6	4.7	4.7	4.9	4.9	5.0
Other primary spending	23.2	23.4	24.5	24.8	25.8	26.8
Primary deficit (c = b - a)	-0.8	0.1	1.1	1.6	3.7	5.9
Net interest spending (d)	1.4	1.5	1.1	0.8	0.9	1.0
Public sector net borrowing (e = c + d)	0.7	1.6	2.2	2.4	4.6	6.8
Public sector net debt	70.3	73.7	75.3	88.0	102.1	116.6
R-G (percentage points)	-1.6	-1.5	-2.2	-2.7	-3.2	-3.9

4.10 Armed with medium-term assumptions about the primary balance, public debt and 'R-G', we can calculate the debt-stabilising deficit under each scenario and how it compares with our pre-virus forecasts. (The calculations abstract from the uneven path of debt at the end of the scenarios as Term Funding Scheme loans are repaid.) Chart 4.3 shows that in our central scenario the Government could run a primary deficit of 3.0 per cent of GDP and still keep the debt-to-GDP ratio constant at its more elevated level. (But the primary deficit is still 0.7 per cent of GDP larger than the debt-stabilising level in the final year of our central scenario.) In the upside scenario the Government could run a primary deficit of 2.0 per cent of GDP, while in the downside scenario that rises to 4.1 per cent of GDP.

4.11 The differences across the scenarios reflect differences in both the debt-to-GDP ratios and in nominal GDP growth at the scenario horizon. As a matter of arithmetic, it is 'easier' to stabilise debt in the scenarios than in our March forecast because the debt-to-GDP ratio is being stabilised at a higher level (so more bonds need to be issued just to keep up with the rise in nominal GDP) and 'R-G' is even more negative.[1] But, of course, holding debt at a higher level, and relying on unusually favourable debt dynamics to keep it stable, would leave the public finances more sensitive to a variety of risks, as we discuss in Chapter 5.

[1] In the absence of stock-flow adjustments, the debt-stabilising primary balance, $dspb_t$, is equal to the debt-to-GDP ratio in the previous period, d_{t-1}, multiplied by a term that accounts for interest rates (R_t) and GDP growth (G_t). Formally, $dspb_t = [(R_t - G_t) / (1 + G_t)] d_{t-1}$.

Chart 4.3: Debt-stabilising primary deficits at forecast and scenario horizons



Source: OBR

Box 4.1: Performance against the Budget 2020 fiscal rules

At Budget 2020, the Chancellor was guided by three fiscal rules that had featured in the Conservative Party's 2019 election manifesto: for the current budget to be at least in balance by the third year of the forecast period; for public sector net investment to average no more than 3 per cent of GDP over the five-year forecast period; and to revisit fiscal plans if debt interest exceeds 6 per cent of revenue for a sustained period. Our pre-virus forecast showed all three rules being met, with a tiny margin against the maximum investment rule, a small one against the current budget rule and a large one against the debt-interest-to-revenue ratio rule.

Table A shows how those assessments would differ under our three scenarios. It shows that:

- The **current budget rule** would be missed in the central and downside scenarios, by margins ranging from 2.5 to 5.3 per cent of GDP. That reflects the hit to cash receipts in 2022-23 and the effect of weaker nominal GDP on the spending-to-GDP ratio. In the upside scenario it would be met by a smaller margin than in our March forecast.
- The **maximum investment rule** would be missed in all scenarios as the weaker path of nominal GDP raises the ratio of spending to GDP – particularly at the start of the period.
- The **debt-interest-to-revenue-ratio rule** would be met comfortably in all three scenarios despite higher debt-to-GDP ratios, thanks to much lower effective interest rates. Indeed, the margin by which the rule is met is larger in all three than it was in our March forecast as a result of the very low interest rates that markets expect to persist in the coming years. We look at the risks posed by adverse interest rate movements in Chapter 5.

Table A: Performance against the Budget 2020 fiscal rules

		Per cent of GDP		£ billion	
		Scenario	Margin	Scenario	Margin
Current budget rule: Current budget balanced by 2022-23[1]					
March post-measures forecast	Met	-0.5	0.5	-11.7	11.7
Central scenario	Not Met	2.5	-2.5	58.8	-58.8
Upside scenario	Met	-0.2	0.2	-3.9	3.9
Downside scenario	Not Met	5.3	-5.3	117.1	-117.1
Investment rule: Public sector net investment no more than 3 per cent on average					
March post-measures forecast	Met	2.9	0.1		
Central scenario	Not met	3.3	-0.3		
Upside scenario	Not met	3.1	-0.1		
Downside scenario	Not met	3.6	-0.6		
Debt-interest-to-revenue ratio: Interest costs no more than 6 per cent of revenue					
March post-measures forecast	Met	3.5	2.5		
Central scenario	Met	2.7	3.3		
Upside scenario	Met	2.6	3.4		
Downside scenario	Met	2.9	3.1		

[1] A negative value means the current budget is in surplus.

Long-term fiscal projections

4.12 In this section we take each of the medium-term starting points represented by our selected past forecasts and our three coronavirus scenarios and apply a consistent set of long-term fiscal projections to them. These use a simpler approach than in our standard *FSR* long-term modelling, so it is important to stress that their value lies in what they tell us about the difference between these projections rather than the precise level that each of them reaches.

Key assumptions

4.13 We have built long-term projections of the primary balance in each variant using just five lines of non-interest public spending and receipts, with each projected forward in line with an assumed percentage change in the share of GDP spent or raised:

- **Primary receipts.** In a normal *FSR*, demographic assumptions are applied where relevant – for example, because pensioners do not pay NICs on employment income. The effect of these assumptions is very small relative to those we make about public spending. We have therefore simply projected receipts from each starting point in line with the percentage change in the primary-receipts-to-GDP ratio in our 2018 *FSR*.

- **Health and adult social care spending.** These two items together are the most important drivers of our long-term fiscal projections, owing to our assumption that non-demographic cost pressures are accommodated alongside the effects of ageing on the demand for these services. We have used a similar method based on *FSR* 2018 growth rates to project forward from each starting point, but have also rescaled these lines to account for new population projections released in October 2019.

- **State pensions spending.** This is the next most important driver of our long-term projections, reflecting the continued ageing of the population, although this effect is tempered by the Government's 'longevity link' that in effect shares the fiscal cost of improved life expectancy across successive generations by raising the State Pension age. We have used an equivalent approach to that taken for health and adult social care spending to project the cost of state pensions over the long term.

- **Other non-interest public spending.** This includes some spending that is demographically driven in our standard *FSR* modelling – such as education and public service pensions – and some that is not – such as defence spending. As with receipts, movements in items of spending under this heading are small relative to those in health and pensions spending. We have therefore used the same approach as we have for primary receipts to project this spending from the different starting points.

4.14 To complete the fiscal picture we also need to project net interest spending, which is driven by two factors: first, stocks of financial assets and debt and the interest and inflation rates applied to them; and second, financial transactions (such as lending to the private sector), which are largely driven by the issuance and repayment of student loans.

4.15 Our latest long-term economic assumptions were described in Annex B of our March 2020 *Economic and fiscal outlook* and are reproduced in Table 4.2. These included a material downward revision to our long-term productivity and GDP growth assumptions. That has significant implications for the long-term outlook for living standards, but in the framework used in this chapter it does not affect the long-term fiscal picture because everything is modelled as a share of GDP. This means that a lower path for real GDP implies a lower path for public spending in real terms, but not as a share of GDP. Consistent with the approach we set out in March, all three scenarios assume that interest rates stabilise at their assumed long-term levels 15 years beyond the scenario horizon.

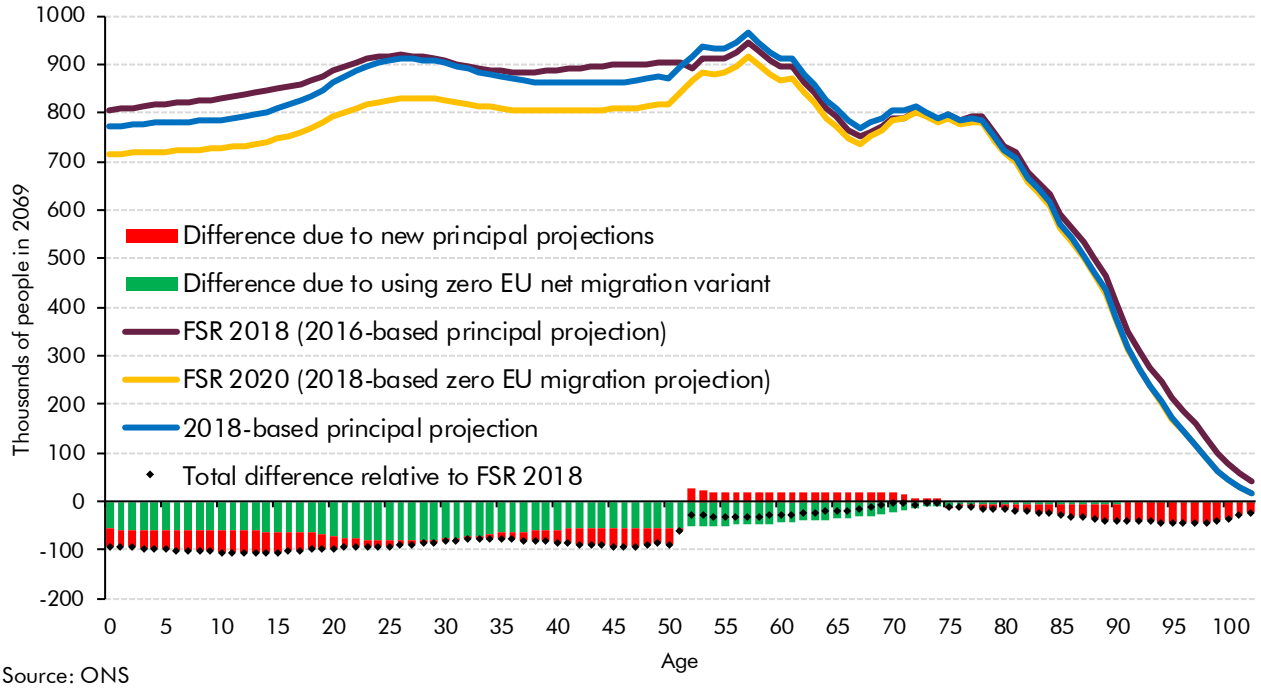
Table 4.2: Long-term economic determinants

	Annual growth rate, unless otherwise stated	
Labour productivity	1.5	OBR assumption
Prices and earnings		
Average earnings	3.8	Sum of labour productivity and GDP deflator
Public sector earnings	3.8	Assumed to grow in line with private sector
GDP deflator	2.3	Constant from end of forecast
CPI	2.0	Constant from end of forecast at inflation target
RPI	2.9	CPI inflation plus 0.9 percentage points
RPIX	2.8	CPI inflation plus 0.8 percentage points
'Triple lock'	4.2	Average earnings plus 0.36 percentage points
Interest rates (per cent)		
Gilt rate	4.1	Nominal GDP growth plus 0.2 percentage points
Bank Rate	4.1	Nominal GDP growth plus 0.2 percentage points
Employment		
Workforce growth	0.05	OBR assumption
Memo: Average real GDP	*1.5*	*Sum of labour productivity and employment*
Memo: Average nominal GDP	*3.9*	*Sum of real GDP and GDP deflator*

4.16 In normal circumstances, one of the key pieces of news since our 2018 *FSR* would be the updated ONS population projections that were released in October 2019 and our decision to use a different variant to underpin our medium-term forecasts. We have made simple top-down adjustments to our projections for spending on state pensions, health and adult social care to reflect these changes, but have not modelled them in full.

4.17 Chart 4.4 shows how the latest ONS principal population projections compare with the 2016-based vintage at the horizon of our long-term projections, and then how the 'zero EU net migration' variant compares with the latest principal one. The ONS revisions included lower fertility, reducing the number of children; higher net inward migration, increasing the number of working-age adults (though that was ultimately outweighed by lower fertility); and higher mortality, reducing the number of older adults. Our decision to switch from the principal variant to the 'zero EU net migration' variant then reduces migration by 36,000 a year, with the effect of slower population growth concentrated among those of working age.

Chart 4.4: Revisions to population age structure in the latest ONS projections



Source: ONS

Public finance projections to 2069-70

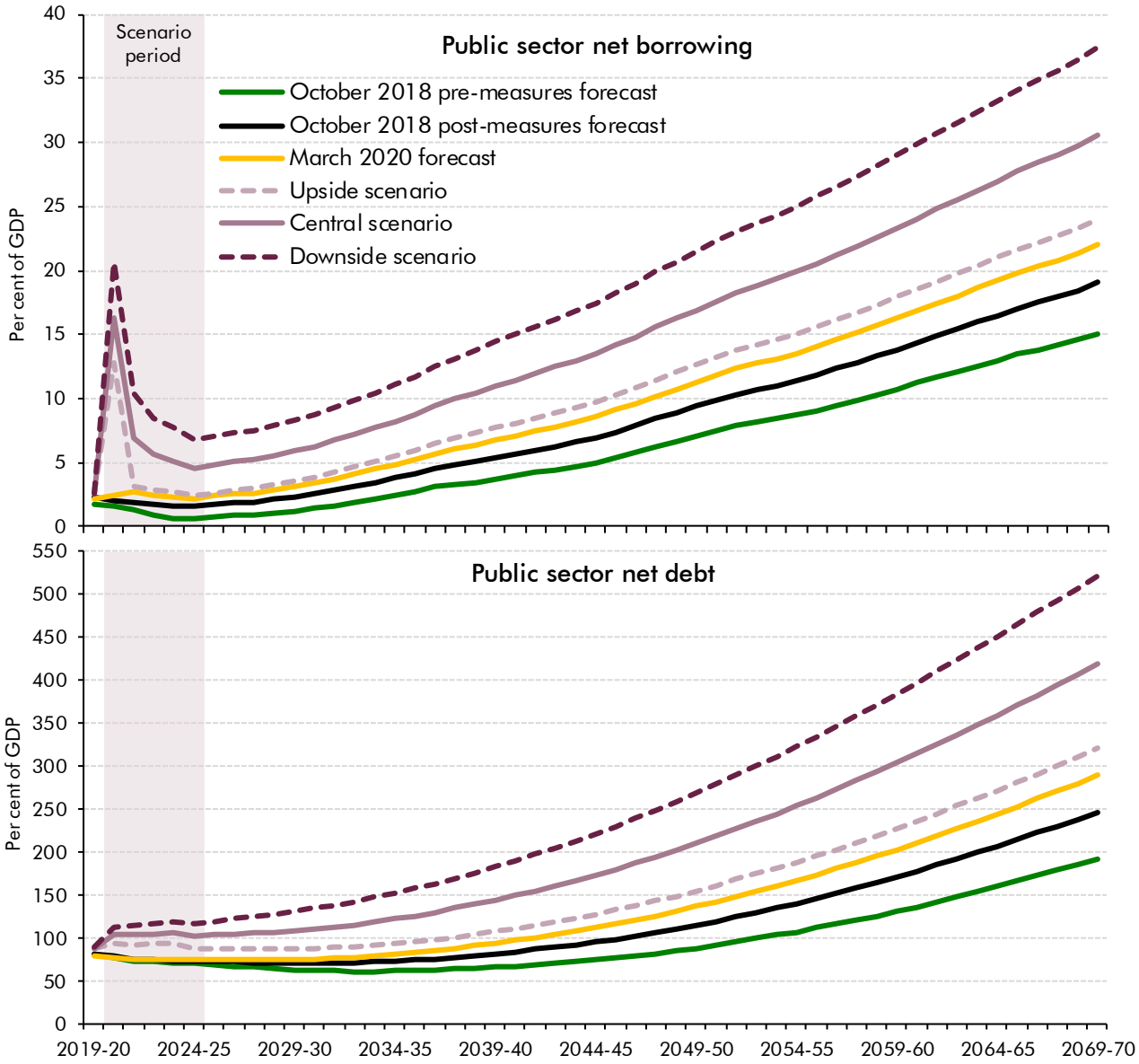
4.18 Using the simplified methodology and assumptions set out above, we have projected the public finances forward to 2069-70 (our usual 50-year horizon) from each of the medium-term starting points. Table 4.3 summarises the results.

Table 4.3: Long-term fiscal projections

	Per cent of GDP					
	October 2018 pre-measures forecast	October 2018 post-measures forecast	March 2020 forecast	Upside scenario	Central scenario	Downside scenario
Primary receipts (a)	36.5	36.7	37.0	37.1	36.4	35.6
Primary spending (b)	43.5	45.3	46.7	47.5	49.1	50.7
of which						
Health	12.4	13.9	14.2	14.4	14.8	15.3
Adult social care	1.9	2.0	2.1	2.1	2.2	2.2
State pensions	6.5	6.5	6.6	6.8	6.9	6.9
Other primary spending	22.7	22.8	23.9	24.2	25.2	26.2
Primary deficit (c = b - a)	7.0	8.6	9.7	10.4	12.7	15.1
Net interest spending (d)	8.1	10.4	12.3	13.6	17.8	22.2
Public sector net borrowing (e = c + d)	15.1	19.0	22.0	24.0	30.5	37.4
Public sector net debt	192	247	290	320	418	522

4.19 Chart 4.5 illustrates the long-term paths for PSNB and PSND that follow from each medium-term starting point. In all cases the public finances would clearly be on an unsustainable path, with net interest spending taking up an ever-larger share of GDP – a conclusion that has been common to all our *FSR*s to date. And while our upside scenario delivers a similar long-term path to what we would have seen on the basis of our pre-virus March forecast, the central and downside scenarios show a materially worse picture thanks to larger primary deficits that are for the purposes of these projections assumed to be left unchecked.

Chart 4.5: Public sector net borrowing and debt projections



Note: The October 2018 forecasts' 2024-25 jumping-off points are assumed to equal their 2023-24 medium-term horizon values.
Source: ONS, OBR

A summary indicator of fiscal sustainability

4.20 In reality, no government could attempt to run the public finances along the paths implied by these scenarios for any length of time without running into financing difficulties. At some point, policies would need to change in order to bring the public finances onto a non-explosive trajectory. There are many ways a government could seek to do that, but we typically think about progressive adjustments to the flow of public spending and taxes over an extended period. We illustrate this by looking at the extent to which the primary balance would need to improve, decade by decade, to return the debt-to-GDP ratio to a particular level – using 75 per cent, close to the level in our March 2020 forecast, for this purpose.

4.21 Chart 4.6 shows how this measure of the long-term fiscal challenge has evolved:

- Using the medium-term jumping-off point implied by our **October 2018 pre-measures forecast**, the required decade-by-decade tightening was just 1.0 per cent of GDP (£22 billion in 2019-20 terms). That relatively modest figure reflected the overall budget surplus, but also a much lower level of health spending that had already proved politically unsustainable and would no doubt be even less so post-coronavirus.

- The **Budget 2018 fiscal measures**, dominated by the June 2018 NHS settlement, raised the decade-by-decade tightening by 0.5 per cent of GDP (£10 billion).

- **Other pre-virus changes to borrowing** are more than explained by the Budget 2020 fiscal measures. Together they raised the required tightening by a further 0.4 per cent of GDP (£8 billion). (The degree of medium-term discretionary easing in Budget 2020 was greater than that in Budget 2018, but its implications for long-term fiscal sustainability were less stark because it was focused in areas of spending that history suggests are less susceptible to demographic or other cost pressures.)

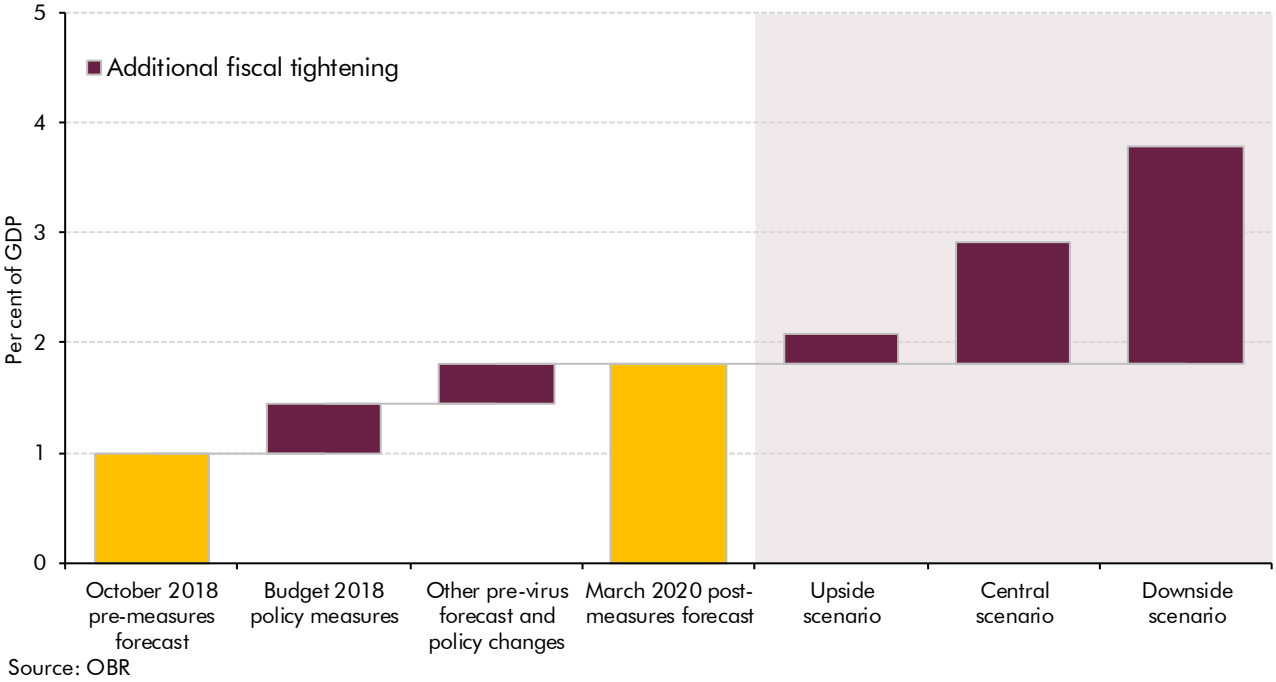
- In our **upside scenario,** the required tightening would be similar to that implied by our pre-virus March forecast, thanks to the similar jumping-off point for the primary deficit.

- In our **central scenario,** the required tightening rises by a further 1.1 per cent of GDP (£24 billion) relative to the March 2020 baseline to 2.9 per cent (£64 billion). That reflects the medium-term economic scarring that it assumes and its implications for the primary deficit. The scenario does not assume any changes to medium-term spending on health and adult social care – a key source of policy risk discussed in Chapter 5.

- In the **downside scenario,** the required tightening would be more than twice as large as the March 2020 baseline due to the materially higher medium-term primary deficit.

4.22 The large differences between our three scenarios illustrate the degree of uncertainty around long-term sustainability analysis that flows from different assumptions about the medium-term starting point. This uncertainty overlays the many sources of long-term uncertainty that we typically explore in our *FSR*s.

Chart 4.6: Decade-by-decade tightening to reach a 75 per cent debt-to-GDP ratio by 2069-70



Source: OBR

Conclusion

4.23 Our assessment of long-term fiscal sustainability depends on where the public finances start from at the end of the medium term and the path we expect them to take thereafter. In this chapter we show how the starting point has evolved over the past couple of years:

- The period between mid-2018 and early 2020 was marked by **discretionary decisions to loosen fiscal policy on the part of successive Prime Ministers and Chancellors**, raising public spending – particularly on health care and capital projects – and financing that with borrowing rather than higher taxes. Those decisions weakened the fiscal position relative to the path it would otherwise have taken. (Although the impact would be offset to some degree if the additional spending were to raise potential GDP growth.) That path was already highly uncertain thanks to the continuing puzzle of weak underlying productivity growth, overlaid by the uncertain nature and economic consequences of Brexit-related policy changes that are still being negotiated.

- The period since early 2020 has seen the economy and public finances subject to **the coronavirus pandemic** and its adverse, albeit uncertain, medium-term implications. These worsen fiscal sustainability, while simultaneously adding a new layer of uncertainty on top of those that already clouded the outlook for the public finances.

4.24 Amidst all this uncertainty, one conclusion seems clear. This and future governments will face a huge challenge in judging when and how public spending and tax policy levers should be pulled to place the public finances on a sustainable path.

5 Reassessing fiscal risks

Introduction

5.1 The higher paths for public debt and the budget deficit in the fiscal scenarios described in Chapters 3 and 4 provide a graphic indication of the scale of the fiscal risks that have just crystallised as a result of the coronavirus. But the pandemic has also affected future risks to the public finances, insofar as they must now be managed against the backdrop of both higher public debt and probably also a lower path for potential output. In this chapter we explore how our assessment of fiscal risks has changed because of the pandemic.

5.2 The chapter follows the structure used in our *Fiscal risks reports* (*FRR*s). It discusses:

- Whole-economy risks emanating from the **macroeconomy** and the **financial sector**.
- Specific fiscal risks associated with **revenues** and **non-interest public spending**.
- Risks to the **public sector balance sheet** and associated risks to **debt interest spending**.
- Risks associated with **policy choices** over the short and medium term.

5.3 We consider both new risks and those altered by the pandemic, looking at both the shock unfolding this year and the uncertainties surrounding the 'new normal'.

Macroeconomic risks

5.4 Macroeconomic risks can usefully be classified under three headings: cyclical (short-term disturbances); structural (longer-term trends); and compositional (affecting individual sectors or activities). Elements of all three figure at the present juncture:

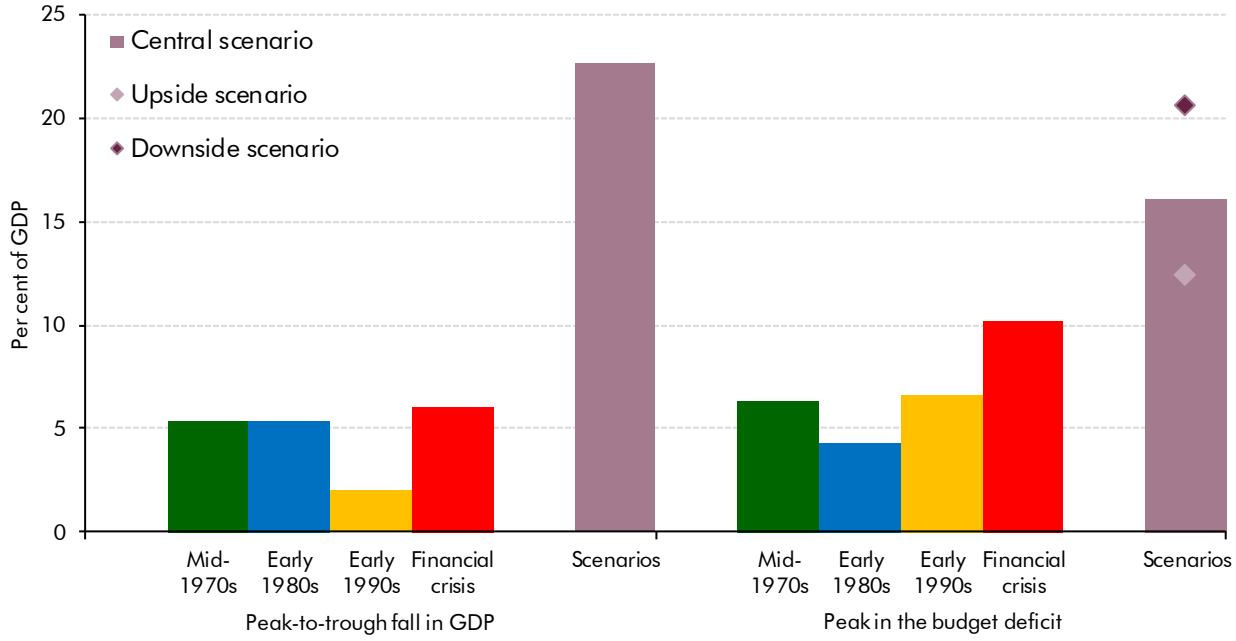
- From a **cyclical** perspective, periodic recessions are inevitable and policymakers should recognise that when setting policy during normal times. Our 2019 *FRR* noted that the chance of being in recession at some point in any given five-year period is around one in two. That risk has clearly crystallised. But on this occasion the drop in output has been unusually abrupt and large, as well as emanating from an unusual source.
- From a **structural** perspective, the path of potential output is likely to be permanently lower following the pandemic. That is reflected to differing degrees in our central and downside scenarios, but there is much uncertainty around the magnitude of the effect.
- From a **compositional** perspective, the make-up of output, employment and spending are all likely to be affected by the pandemic, possibly permanently.

Near-term economic prospects

5.5 Chapter 2 discussed some of the uncertainties surrounding the pace of the recovery, as well as the mechanisms leading to more persistent scarring of potential output. As we discussed in our 2019 *FRR*, it is often difficult to judge what is happening to potential output during a recovery, with estimates of spare capacity often being heavily revised well after the fact. That is especially true at the present juncture, where lockdown has significantly depressed both demand and supply. By extension, it will also be difficult to form a judgement regarding the structural fiscal position at each point through the recovery phase – something we have not attempted in our fiscal scenarios in Chapter 3. This poses challenges for policymakers, for example in judging the 'fiscal space' the Chancellor has to support the economic recovery.

5.6 From a fiscal risks perspective, the salient fact is that the economy has now been subject to two 'once-in-a-lifetime' shocks in just over a decade. The budget deficit peaked at around 10 per cent of GDP after the financial crisis and may well top 15 per cent this year, whereas no previous post-war recession had even pushed it as high as 7 per cent of GDP (Chart 5.1). This may just be bad luck, but it could also indicate that economies today are more prone to very large shocks than we have previously assumed. All else equal, if the inevitable periodic damage done to the public finances by such shocks has become larger or more frequent, then policymakers may need to aim for lower levels of borrowing and debt to run a prudent fiscal policy during normal times.

Chart 5.1: Post-war recessions and their fiscal consequences



Source: ONS, OBR

Potential output and structural economic change

5.7 Post-recession reassessments of potential output growth are not unusual, but there are several pandemic-related aspects worth noting:

- First, an early vaccine or effective treatment would allow most activities to resume much as they were before the virus – broadly consistent with our upside scenario. But a long (and possibly indefinite) wait would mean that **some sectors – especially retail, hospitality and travel – might be permanently affected**. (The Resolution Foundation has suggested that workers in affected sectors would have to move sectors at twice the pace that followed the financial crisis to avoid high and lasting employment losses.[1])

- Second, even with an early vaccine or treatment, the virus is still likely to have **significant effects on people's expectations and behaviour**. As the scale and frequency of future shocks are unknown, people's expectations will tend to put more weight than before on the risk of particularly severe shocks.[2] That is likely to lead to a lower risk appetite and a desire for greater financial resilience and lower indebtedness.

- Third, even with an early vaccine or treatment, **people may be reluctant to return to their old shopping habits**, and businesses may want to reduce their exposure to possible disruption to their supply chains by repatriating activities. So some restructuring of the economy is likely even in our upside scenario, and will inevitably be more pronounced in the central and downside scenarios.

- Fourth, there has already been a **substantial rise in business indebtedness**, which can be expected to rise further during the early stages of the recovery. This is likely to weigh on investment and innovation, as there is substantial evidence that highly indebted firms are less likely to invest in physical capital and R&D.[3] It is also likely to lead to a period of higher insolvencies. The experience of the financial crisis suggests that this can lead to premature scrapping of capital and lower productivity as job-specific skills are lost. The IMF estimates that if the pandemic is contained slowly, destruction of one per cent of the capital stock would reduce productivity growth temporarily by around a quarter of a percentage point.[4]

5.8 Our fiscal scenarios illustrate the possible consequences for the public finances if potential output were to follow an even weaker path than we have assumed. There is a 3 per cent difference in the level of real GDP at the scenario horizon between each of the scenarios, which translates into roughly an additional 2 per cent of GDP increase in the budget deficit. And if productivity *growth* were to slow persistently, repeating the experience of most advanced economies over the past decade, the fiscal challenge would be greater still.

[1] Resolution Foundation, *The Full Monty: Facing up to the challenge of the coronavirus labour market crisis*, 2020.
[2] Kozlowski, J. et al., *Scarring Body and Mind: The Long-Term Belief-Scarring Effects of COVID-19*, 2020.
[3] Li, M., & Simerly, R., 2002, *Environmental dynamism, capital structure and innovation: An empirical test*, and O'Brien, J., *The capital structure implications of pursuing a strategy of innovation*, 2003.
[4] International Monetary Fund, *World Economic Outlook: The Great Lockdown*, 2020.

Financial sector risks

5.9 Historically, financial crises rank second only to wars as the source of the largest shocks to the public finances. The late 2000s financial crisis resulted in large rises in public debt in most advanced economies, with the headline measure in the UK rising from 34 to 69 per cent of GDP in just three years. In addition, the Government nationalised several financial institutions and took controlling stakes in others, which at its peak added a further 94 per cent of GDP to public debt if the balance sheets of those institutions are included.

5.10 The current recession is set to be much deeper than any in the modern era, but it has not to date seen fiscal risks crystallising via the financial sector. In part that reflects the additional loss-absorbing capacity that the banking system has built up over the past decade. But perhaps more importantly it is because the Government has already opted to take on a large portion of the risk itself through its provision of unprecedented financial support to individuals and businesses. Had it not done so, it seems likely that the banking system would have come under very severe strain as loan defaults rose, despite its improved resilience. Some of the associated fiscal risks remain as yet uncrystallised, in the form of the state guarantees on loans and trade credit insurance.

5.11 The Bank of England's May 2020 *Interim Financial Stability Report* (*iFSR*) judged that the core banking system had proved resilient to market stresses.[5] But strains had been greater in other parts of the financial system. The *iFSR* noted that the coronavirus shock had initially prompted an abrupt and extreme "*dash for cash*" that "*exposed a number of vulnerabilities that amplified market reactions*". It also emphasised that these vulnerabilities continued to pose threats and that they could resurface again in the future.

5.12 Coming out of the crisis, the public and business sectors will be more highly leveraged than they were going into it, which could trigger the need for further intervention. This in turn could hinder the Government's ability to shrink its own balance sheet. More than a decade after the financial crisis, the Government is still not fully rid of the assets of Northern Rock and Bradford & Bingley and it still retains most of its Royal Bank of Scotland shareholding.

5.13 Given the size and nature of the current recession, heavy state intervention has been necessary to limit its effects on individuals and businesses and, as a by-product, its effects on the financial system. It seems implausible that the financial sector could ever be expected to be totally resilient to extreme events such as a major pandemic, so the need for the state to act as an 'insurer of last resort' will remain. The Government's future fiscal strategy will need to take account of this risk.

[5] Bank of England, *Interim Financial Stability Report*, May 2020.

Revenue risks

5.14 The largest risks to future revenues are those that affect the whole economy, as the sharp fall in receipts this year attests. Our *FRR*s also document many risks specific to particular revenue streams that could be realised in any given state of the economy. When these crystallise they affect the tax-to-GDP ratio. The coronavirus pandemic has implications for many of them, as well as raising some important new ones. Among these we highlight:

- The **medium-term changes to the structure of the economy** that pose macroeconomic risks could also present revenue-specific ones, which might weigh on some tax bases.
- The possibility of **persistent adverse effects on the buoyancy of some revenue streams**, over and above the medium-term scarring of tax bases – notably for corporation tax.
- Several sources of risk around the timing and extent of **non-payment of liabilities**.

5.15 To these we could add any number of risks and uncertainties around the revenue-specific assumptions that underpin the three scenarios set out in Chapter 3. For example, how the shock will affect different parts of the distribution of various tax bases, especially where those are particularly concentrated (such as income tax or stamp duty land tax), or how the accelerated digitalisation prompted by the lockdown will affect tax bases.

Risks to tax bases from changes to the structure of the economy

5.16 Structural changes to the real economy and financial markets can generate movements in the tax-to-GDP ratio even if the overall size of the economy is unaffected, because some activities are taxed more heavily than others. It seems highly likely that the economy will emerge from this crisis with a different composition of output, expenditure and income than would otherwise have been the case. For example, the shift in consumer spending from physical to online retailers has accelerated; the propensity for business interactions to take place remotely rather than in person has increased; and the desire to take flights for business or leisure purposes may have been permanently reduced. At the same time, the indirect effect of the crisis on oil prices could hit prospects for North Sea oil and gas. And the UK Government, like many others, is seeking to promote a 'green recovery' from the lockdown recession, for example by investing in low-carbon infrastructure.

5.17 The overall effect on the tax-to-GDP ratio of reduced spending or activity in one area will always depend on what people or businesses do instead. So with that caveat in mind:

- **Households' spending habits could be permanently altered by the pandemic**. If more people choose to work from home rather than in an office, this could lower receipts (such as fuel duties, which accounted for 1.2 per cent of GDP in revenue last year). But if people who previously took public transport choose to drive to work instead, this would shift spending to more tax-rich items (thanks to the associated VAT and fuel duty). If people do not return to restaurants, cafes, pubs and bars in the same volumes as pre-virus, and instead consume more food and drink bought from shops, this would

lower receipts due to the zero rate of VAT applied to many of these purchases (VAT from restaurant and similar sales was worth 0.3 per cent of GDP in 2018-19).

- **Business property use could change materially**. Survey evidence points to lower expected demand for retail and office space compared to industrial space over the next 12 months.[6] That would be consistent with the pandemic accelerating trends towards online shopping and for more office-based employees to work in future from home. Conversely, should some degree of social distancing be required permanently, the need for greater space per employee could lift demand for office space. If the net effect of such changes were to reduce the rental value of commercial property, it would hit property transaction tax receipts (worth 0.2 per cent of GDP last year) and, potentially more materially, business rates (1.4 per cent of GDP, roughly half of which comes from offices and retail property).[7] But to the extent that reduced demand for town centre retail and office space led to more conversions to residential use, receipts could be boosted due to the associated rise in property prices.

- **The aviation industry has been particularly badly affected by the pandemic**. Air passenger duty (APD) raised 0.2 per cent of GDP last year, but receipts were down 94 per cent in the first two months of this year. Unless the economy returns to normal quickly – as in our upside scenario – air travel is unlikely to return to its pre-virus path in the next five years: APD receipts in 2024-25 are still 15 per cent below our March forecast in the central scenario and 36 per cent below in the downside scenario. These figures are, of course, hugely uncertain, and will depend on the duration of travel restrictions and how preferences for flying have been affected. More broadly, travel destination choices will also depend on what happens in other countries. And since UK residents spend more abroad than overseas visitors spend in the UK, a global increase in 'staycations' could increase UK spending and tax revenues. Business travel could also be curtailed if the lockdown-enforced switch to meeting remotely persists.

- **Oil and gas revenues could be hit by the fallout from the pandemic**. Oil and gas prices have recovered somewhat, but remain below levels assumed in our March forecast. A period of sustained low oil and gas prices could hit production and revenues permanently if more expensive fields become uneconomic. One study estimates that around a third of the production at an oil price of $60 a barrel would be uneconomic at $35 a barrel.[8] Oil and gas revenues have dwindled in recent years, averaging only around £1 billion a year across our March forecast.

- **On unchanged tax policy, accelerating the transition to a carbon-neutral economy during the recovery phase would weigh on the tax-to-GDP ratio**. For example, a more fuel-efficient vehicle stock would reduce fuel duties and vehicle excise duty. Of course, this effect could be mitigated over time if tax policy is changed so as to raise more revenue from the expansion of carbon-neutral activities.

[6] *UK Commercial Property Market Survey*, Royal Institution of Chartered Surveyors, 2020 Q1.
[7] In theory, the three-yearly business rates revaluation process should compensate for changes in rental values to keep total revenue unchanged, but that could prove politically challenging if that required higher effective tax rates on average to maintain revenue.
[8] Kemp, A. and Stephen, L., *How will coronavirus affect the UK's oil and gas industry?*, Economics Observatory, 26 June 2020.

Persistent adverse effects on the buoyancy of revenue streams

5.18 The tax-to-GDP ratio will also be at risk if effective tax rates on particular tax bases were to remain subdued for extended periods. Loss of buoyancy was a feature of the years after the financial crisis – most notably in corporation tax, thanks to loss relief rules. Tax bases that are linked to asset prices – particularly capital gains tax (CGT) – are also at risk.

5.19 Many companies will currently be building up losses that can be used to offset past or future liabilities via loss reliefs. This could reduce the amount of corporation tax paid for an extended period. The financial crisis provides only limited guidance on this, since losses then were concentrated in the financial sector and were often far in excess of amounts that could be used to offset past liabilities, so many were carried forward depressing receipts for many years. Indeed, corporation tax receipts from financial companies (including the bank surcharge that was brought in in 2016-17) were still lower in 2018-19 than at their peak in 2006-07 (0.5 versus 0.7 per cent of GDP). Restrictions on loss relief brought in since the financial crisis would, all else equal, lead to a shallower but longer hit from losses carried forward. But, given the nature of the shock, our scenarios assume that a greater proportion of losses will be carried back to offset past profits, causing receipts to fall more sharply in 2020-21, but then to recover more quickly, than was the case a decade ago.

5.20 There are two main sources of uncertainty around our assumptions: the volume of losses generated, and how and when they are used to claim loss relief. The hit to receipts this year could easily be several billion pounds more or less with different, but still plausible, assumptions. If losses were greater than assumed, and more of them were carried forward rather than back, then receipts could be depressed well beyond our five-year horizon.

5.21 The sharp falls in equity prices this year will hit CGT receipts for an extended period. In our central scenario, they are a third lower than our March forecast on average from 2021-22 onwards, but recover their pre-virus cash level within the scenario period. After the financial crisis, it took eight years for receipts to surpass the level they had reached in 2008-09, despite the stock market exceeding its pre-crisis peak during 2013. So it is possible that CGT receipts could recover more slowly even if asset prices recover as assumed.

5.22 One tax risk we have explored in successive *FRR*s is from incorporations – when people choose to work via their own company rather than as a more heavily taxed employee or unincorporated self-employed business. Our 2017 *FRR* estimated that this would reduce receipts by £3½ billion in 2021-22. One feature of the present crisis has been that these individuals were largely ineligible for the Government's income support schemes. This might prompt some to reconsider whether the tax benefits of incorporation are worth the loss of some safety net benefits revealed by the crisis. The Government has also signalled that it will look again at the lower National Insurance rates paid by the self-employed relative to employees, which could further affect the ways that people choose to work. If more people chose to work as employees and fewer as self-employed or as owner-managers of incorporated businesses, the effective tax rate on labour income would rise.

Non-payment of tax liabilities

5.23 Tax gaps – the difference between amounts actually paid and the liability that should be due from a given tax base – cause the tax-to-GDP ratio to fluctuate. Our scenarios assume that the overall tax gap will be higher than in our pre-virus forecast. Relative to the assumptions underlying the scenarios (see Box 3.2), different amounts of non-payment and subsequent repayments are possible. And reduced compliance activity could also lower receipts.

5.24 Different forms of non-payment are already a significant issue across many tax heads. For example, cash payments of onshore corporation tax in April and May were 40 per cent below our April reference scenario assumptions, even though it incorporated a sharp drop in profits. So there are clearly risks to the assumptions in our latest scenarios for the value of tax that initially goes unpaid and how much is subsequently repaid. In recent years, around 10 to 12 per cent of firms have gone out of business each year, and it remains to be seen how much this rate will rise as a result of the crisis. The failure rate of firms that decided to go into tax debt could clearly be higher still. To illustrate the scale of the risk, our central scenario assumes that £3.8 billion is lost through non-payment of liabilities, while our downside scenario assumes £7.5 billion is lost. But losses could be materially higher than even this downside figure. That said, any such losses should be a 'one-off' cost rather than permanently lowering the tax-to-GDP ratio through structurally higher non-payment rates.

5.25 As regards compliance risks to the tax gap, coronavirus is clearly placing significant demands on HMRC. These could well crowd out the time that its task forces can devote to recently announced compliance policies as well as to business-as-usual activities. This could result in less tax being raised from policy measures than we assumed in March and more being lost elsewhere. By way of illustration, if this were to result in a 1 percentage point rise in the tax gap, receipts would be around £6 billion (0.3 per cent of GDP) lower this year.

Primary spending

5.26 Primary spending is that on everything other than debt interest. It is spending over which governments have some direct control – for example, via what they choose to spend on a public service like health care or the way they structure eligibility for welfare payments.

5.27 Based on current policy to the extent that we have been able to reflect it, primary spending in 2024-25 is already 2.0 per cent of GDP higher in our central scenario than in our March forecast, and 3.3 per cent higher in our downside scenario – largely because the economy is smaller rather than any new medium-term spending choices. But the pandemic may create several additional sources of pressure on public spending:

- Upward pressures on **health and adult social care spending** were among the top medium- and long-term fiscal risks in both our previous *FRR*s. Having experienced a public health crisis on this scale, there is likely to be pressure to devote a higher share of GDP to spending on the NHS and wider care services in the future, including on adult social care, where proposals for reform have been pushed back repeatedly.

- Risks associated with **measures brought in to support individuals and businesses through the crisis**. These range from shorter-term risks around fraudulent claims to medium-term policy choices about the scope and nature of the social safety net, including the possibility that some temporary support measures become permanent.

- The many other **individual risks** either created or exacerbated by the crisis. These range from the pressures on local authorities' finances to the risks posed by the historical link between high unemployment and future chronic health conditions.

Health and adult social care spending

Our previous risk assessment

5.28 In our 2019 *FRR*, we identified health spending as the largest – and most likely – source of long-term risk to fiscal sustainability, reflecting demographic and other pressures (such as the cost-raising nature of technological advances, the labour intensity of health care provision and the rise in chronic conditions affecting the population). We also saw a high probability that health spending would outstrip existing government plans in the medium term, reflecting the propensity of governments to top up NHS budgets periodically. But we lowered our assessment of the likely fiscal impact of that medium-term risk relative to our 2017 *FRR* assessment because of the large boost to spending announced in June 2018, which suggested that the risk had largely crystallised for the time being.

5.29 Adult social care represents a similar source of fiscal risk, with demographic and other cost pressures raising demands for spending and governments announcing periodic top-ups to strained budgets. The funding system itself is a source of fiscal uncertainty as governments have recognised that reform is necessary but have been unwilling to decide how. We raised the probability of medium-term spending risks crystallising in our 2019 *FRR* assessment in the light of successive delays to a planned green paper on what should replace the shelved Dilnot reforms. The Conservative Party's 2019 manifesto stated that "*We will commit to urgently seek a cross-party consensus in order to bring forward the necessary proposal and legislation for long-term reform.*" No such proposals have yet been tabled.

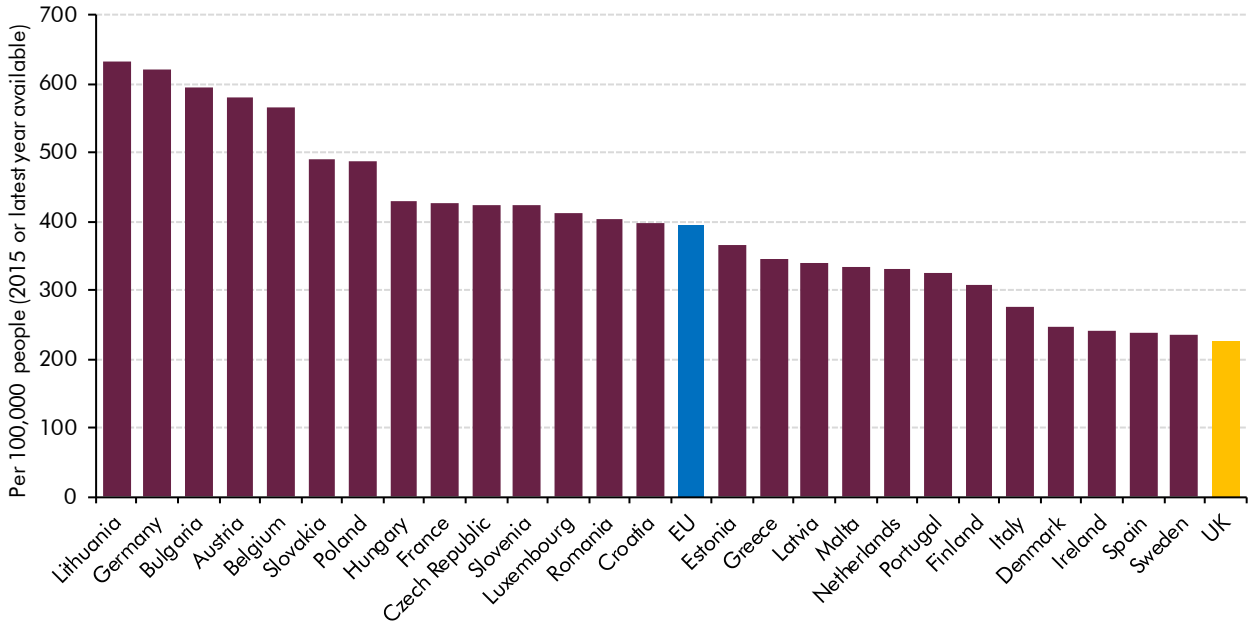
Possible consequences for medium-term spending pressures

5.30 It seems highly likely that, following the pandemic, the electorate will expect higher spending per person on health and adult social care. This raises the likely impact of a medium-term fiscal risk – that the Government chooses to meet such expectations – to which we already attributed a high probability. Spending more as a share of GDP on components of public spending that history suggests tend to grow faster than the economy as a whole would in turn pose a greater long-term risk to sustainability.

5.31 Both demand and unit cost drivers seem likely to place upward pressure on spending over the medium term. One source of additional demand is likely to be the desire to maintain a greater margin of spare capacity and stockpiles of equipment and treatments as a contingency against health crises of the type experienced this year. Health spending in the UK is somewhat higher than the OECD average, but on some metrics (such as per capita

numbers of physicians, hospital beds, and MRI and CT scanners) the UK is well below average.[9] Pre-virus, the UK had the fewest acute care beds per person in the EU (Chart 5.2). Moreover, in some scenarios, the number of interventions per person would also be higher if Covid-19 were to become endemic and/or it exacerbated other conditions.[10]

Chart 5.2: Acute care hospital beds per 100,000 people in EU Member States



Source: World Health Organization, Regional Office for Europe

5.32 We might also expect the unit cost of health and adult social care provision to be higher in future as a result of the pandemic, over and above the costs that would be associated with maintaining larger contingency capacity. For example:

- **Pay for healthcare workers.** In our 2019 *FRR* we noted that health spending growth since 2010-11 had been slow by historical standards thanks largely to pay restraint, but that there is a limit to how long pay increases for healthcare workers can be held below those in the wider economy without damaging recruitment and retention. The additional pressures that have been placed on NHS staff through this crisis could also increase political pressure to raise pay by more than is currently planned.

- **Pay for social care workers.** Low pay is widespread in the social care sector, where around half the workforce is paid the National Living Wage.[11] In September 2019, the Government announced its ambition to increase the NLW to two-thirds of median earnings by 2024, which would raise the unit cost of social care services even in the absence of coronavirus. But the Government might come under pressure to increase funding for the sector such that pay can rise beyond the legal minimum for more social care staff given the experience of coronavirus in care homes this year.

[9] OECD Health Statistics 2019.
[10] See, for example, Karjalainen, H., Economics Observatory, *How will the Covid-19 crisis affect the NHS?*, 29 May 2020.
[11] Skills for care, *Pay in the adult social care sector*, September 2019.

- **Increased use of agency staff.** The NHS could face increased staffing costs if the strain on the workforce from dealing with the pandemic increases the number of staff temporarily absent or that leave the profession altogether. This would exacerbate any pressures associated with the new migration regime. The NAO has previously highlighted a significant risk that the need to deliver more services will lead to the use of more expensive agency staff, increasing unit costs and weighing on productivity.[12]

- **Clinical negligence.** The majority of the multi-billion-pound cost of clinical negligence claims against the NHS each year relates to maternity cases, but coronavirus could be a new source of future claims. Indeed, NHS Resolution has introduced a new scheme to meet liabilities arising from the special healthcare arrangements put in place in response to the pandemic, including those with private sector providers and organisations supporting testing arrangements.[13] The cost is extremely uncertain.

5.33 The Health Foundation, King's Fund and Nuffield Trust also identified some potential sources of productivity gains as a result of the pandemic, which could partially offset these likely costs. They note that "*the crisis has brought innovation, cooperation and an appetite to permanently change the way services work*" and that "*Necessity has driven some of the fastest innovations, such as rapid discharge from hospital and digital consultations*".[14]

Adult social care funding reform

5.34 The combination of additional future pressures and the high proportion of coronavirus deaths that have occurred in care homes is likely to increase pressure on the Government to grasp the nettle of adult social care funding reform. In May 2020, the House of Lords Economic Affairs committee wrote to the Chancellor proposing a funding model that the Health Foundation and King's Fund estimate would cost an additional £7 billion a year.[15] The Chancellor's response noted that this proposal came "*at a time when the vital work done by the sector is at the forefront of the public's minds*".[16] He said that cross-party talks to find a consensus on the way ahead would "*take place at the earliest opportunity in light of the current circumstances*" and that "*The Government will then bring forward a plan for social care for the longer term.*" But no specific time frame was given.

Short-term spending risks

5.35 As well as these medium-term pressures, there may still be material risks of higher spending in 2020-21. Indeed, the Chancellor's 8 July Summer Economic Update disclosed that the Treasury has "*approved £31.9 billion of support for health services*" so far this year, far in excess of the total for all additional public services spending incorporated in our scenarios.

5.36 In the event of a second wave of coronavirus cases this winter, additional funding would presumably be required again. In addition, a backlog of postponed non-urgent procedures

[12] National Audit Office, *NHS financial sustainability*, 18 January 2019.
[13] NHS Resolution, *NHS Resolution launches new indemnity scheme to support NHS coronavirus response*, 3 April 2020.
[14] Health Foundation, The King's Fund and the Nuffield Trust, *Joint letter to the Health and Social Care Select Committee*, 14 May 2020.
[15] Lord Forsyth of Drumlean, Chairman of the Economic Affairs Committee, *Letter to the Chancellor of the Exchequer*, 26 May 2020.
[16] Chancellor of the Exchequer, *Letter to Lord Forsyth of Drumlean, Chairman of the Economic Affairs Committee*, 5 June 2020.

has built up over recent months, which might require agency staff or private sector capacity to address. And it is possible that further additional funding could be allocated to social care providers. In a recent survey of directors of such providers, 96 per cent stated that this would be needed beyond the funding that has already been provided.[17]

Temporary support measures

5.37 Temporary measures to support individuals and businesses through the crisis are expected to cost £142.2 billion in 2020-21 in our central scenario (which excludes the cost of the additional measures announced by the Chancellor on 8 July). This estimate is highly uncertain, so one risk to the public finances is simply that they cost more or less than that. Some measures – for example, increases in the generosity of some benefits and the one-off 'Covid Summer Food Fund' for poorer families – may be politically difficult to reverse. More generally, the scale of support this year – especially via the CJRS and SEISS – may lead to heightened expectations that similar measures will be invoked in future downturns.

Coronavirus job retention and self-employment income support schemes

5.38 The CJRS is the single largest policy measure, costing £47 billion in 2020-21 in our central scenario. The Chancellor has announced that the scheme will end on 31 October. There are clearly risks around the cost of the scheme as currently designed, given its magnitude, but the greater risks are probably related to what happens as its generosity is scaled back and it is then withdrawn. If this were to be associated with larger rises in unemployment than we have assumed, there would no doubt be calls for its extension and for more generous terms to be restored. If such changes were to be made, the cost could quickly rise into the tens of billions of pounds. Alternatively, if a significant flow of people from furlough into unemployment were seen as evidence of necessary structural economic change, the Government might feel the need to provide additional support to affected businesses to maintain employment or to help affected individuals find alternative employment. Evidence of this can already be seen in the post-CJRS 'Job Retention Bonus' announced on 8 July.

5.39 More generally, the sheer scale of the CJRS and SEISS support – and the speed with which they were designed and delivered – is likely to raise public expectations about the scope for financial support in the face of future shocks. And, when tens of billions can be found for these schemes, this and future Governments may find it more difficult to draw the line on what is affordable in any given case – as the recent free school meals episode illustrates. This is one manifestation of a broader policy risk discussed later in the chapter.

Working-age benefits

5.40 The Government has temporarily increased the generosity of the welfare system to support people losing jobs or income as a result of the lockdown. The measures cost £9.3 billion this year in our central scenario, with the largest cost being the £20 a week uplift to the basic payments in universal credit and working tax credits. This and most other such measures are due to be reversed next year. In our central scenario, this takes £1,000 a year

[17] Association of Directors of Adult Social Services (ADASS), *ADASS coronavirus survey 2020*, 11 June 2020.

from the incomes of 6.9 million individuals. But, as we highlighted in our December 2019 *Welfare trends report (WTR)*, measures that create cash losers – like this return to pre-virus benefit and tax credit rates or the reintroduction of the minimum income floor for self-employed claimants – have in the past frequently been reversed, delayed or diluted.

5.41 Even with the temporary increases in generosity, universal credit is still much less generous than the CJRS. The Resolution Foundation estimates that the median fall in income for individuals whose jobs have been furloughed via the CJRS was 9 per cent, compared with 47 per cent for those who lose their jobs and claim universal credit.[18] Our central scenario assumes that around 1.3 million people will flow from furlough into unemployment rather than back into work. This could prompt calls for increased generosity in universal credit (as well as for more spending on active labour market policies).

5.42 Increased fraud and error poses an additional risk that we have not attempted to quantify in our scenarios. Conditionality checks and health assessments have been paused at the same time as generosity has been increased. And the National Crime Agency has reported that it has already identified fraudulent claims against DWP. Moreover, the sharp rise in legitimate new claims and the challenges for DWP in processing them might lead to more errors being made. The net cost of error in respect of legitimate claims seems more likely to be recovered over time than the cost of deliberate fraud, so the latter is likely to be the greater fiscal risk.

Business support measures

5.43 The Government has provided £27 billion of fiscal support to businesses via grants and business rates holidays, and has guaranteed £43 billion of lending to date (on which the Treasury will pay the interest this year). Risks around the costs of these interventions are largely confined to the guarantees, which are discussed later in the chapter. But, as with the welfare and employment income measures, fiscal support for business is largely confined to 2020-21, so businesses will face higher costs from next April. This could prompt calls for support to be extended – for example if some sectors are still coping with reduced revenues due to continuing requirements for social distancing.

5.44 History provides many examples of temporary business support measures in effect becoming permanent. One is the doubling of small business rates relief for a year in the March 2010 Budget, which was then extended a year at a time until finally being made permanent in Budget 2016. Another is vehicle excise duty rates for HGVs, which have been frozen since Budget 2001, when they were reduced in in the wake of the fuel protests.

5.45 As with the CJRS, the sheer scale of the support provided this year might also generate expectations of similarly prompt and generous support in the event of future adverse shocks. This could alter business behaviour, prompting them to operate in ways that are less resilient in the expectation that the Government will step in should things go badly wrong.

[18] Resolution Foundation, *This time is different – Universal Credit's first recession*, May 2020.

Other primary spending risks

5.46 There are several other potential sources of primary spending risk worth noting. The scale of any one in isolation is unlikely to be large relative to the sources of risk discussed elsewhere in this chapter, but if several were to crystallise together they could pose a material fiscal risk, and in any event they will need to be managed in the context of those other risks. A non-exhaustive list of risks created or exacerbated by the pandemic would include:

- Our central scenario assumes that **departments will underspend their budgets** in 2020-21 by £10 billion more than assumed in our March forecast, as the lockdown hits construction projects and business-as-usual hiring and procurement plans. Should the Government be more successful in spending to plan than we have assumed, borrowing could be several billions of pounds higher – even accounting for the associated boost to the economy that would come from the higher spending.

- **Local authorities' finances** could come under greater pressure than we have assumed, leaving them unable to meet statutory obligations without additional funding from central government. Indeed, they may not be able to meet even the pressures assumed in our scenario solely via reserves since those are not evenly distributed across authorities. Local authorities' commercial property investments could pose particular financial risks that we have not considered in the scenarios – as rental income is hit by tenants' cashflow problems or if commercial property returns fall materially due to structural changes in the economy. Our central scenario assumes £6 billion is drawn down from reserves in 2020-21 to maintain spending in the face of lower income, with no further effects beyond that. It is difficult to put a figure on the scale of potential risks in this area – or the extent to which they overlap with those associated with adult social care spending discussed above – but they could also be in the billions of pounds.

- The Government has intervened heavily in the provision of **transport services**, temporarily taking over the operation of rail franchises and providing additional funding for TfL and bus services. This could increase calls for the renationalisation of rail and bus services, which would have significant immediate fiscal implications. Further funding for TfL could prove necessary if its fare income remains depressed. The Government has so far not extended financial support to the aviation sector beyond time-to-pay arrangements to defer tax payments, but several countries have provided multi-billion-pound loans to bail out carriers.

- Tuition fees accounted for around half of **universities'** income in 2018-19 (£20 billion), with overseas students accounting for around a third of that fee income (£7 billion).[19] The IFS has noted that if there were no new international students this academic year, universities would lose around 10 per cent of their total income, while that would rise to 17 per cent if existing international students did not return either.[20] Meanwhile, many universities have borrowed heavily over the past decade to fund expansion and

[19] Higher Education Statistics Agency, *What is the income of HE providers?*
[20] Britton, J., Drayton, E. & van der Erve, L., *Drop in international students would imperil university finances*, IFS Briefing Note, April 2020.

the Universities Superannuation Scheme continues to run a deficit. The spending risk posed by further financial support could run to several billion pounds.

- Historically, high unemployment has been linked with subsequent increases in the prevalence of **chronic health conditions**. In addition to raising demand for health spending, this could also raise the cost of the incapacity and disability benefits systems – an effect not included in our scenarios. One study finds that the prevalence of chronic health conditions rises by roughly 2 percentage points for every 1 percentage point fall in the employment rate.[21] Given the fall in employment in our central scenario, that would imply around 1 million more people suffering chronic health conditions in the future – leaving aside any direct coronavirus effect. Assuming relatively low take-up of benefits among them (as implied by analysis in our January 2019 *WTR*), the associated risk to welfare spending could be around £4 billion a year.

- In our central scenario the **triple lock** raises state pension spending in 2024-25 by £6.0 billion more than if the pension were raised in line with CPI inflation, £3.2 billion more than if it were just linked to earnings, and £1.8 billion more than under a 'double lock' based on just inflation and earnings (thanks to the 2.5 per cent floor biting this year). These figures equate to between 0.1 and 0.2 per cent of GDP. This illustrates the fiscal risk posed by the triple lock's upward ratchet and its propensity to exacerbate demographic spending pressures over the long term.

- Unemployment is likely to be materially higher for several years, which has already prompted the Government to increase spending to support people back into work through **active labour market policies**. The Chancellor's Summer Economic Update included up to £3.7 billion of additional funding for 'supporting jobs', including a £2.1 billion 'Kickstart Scheme' funding work placements for young people and £0.9 billion to double the number of Jobcentre Plus work coaches. Given the uncertain outlook for unemployment, there will clearly be risks around the costs the Treasury has presented.

- The **Pension Protection Fund (PPF)** is a levy-funded entity that takes over the defined-benefit pension schemes of companies that fail. The scheme aims to be financially self-sufficient by 2030. Since its inception, the PPF's investment and levy income has typically exceeded its outgoings. But in 2011-12, in the aftermath of the financial crisis, the PPF added £0.5 billion to public borrowing, as it recorded £1.2 billion in public spending taking on the pension liabilities of failed companies. Our downside scenario assumes an additional £½ billion a year cost of taking on such liabilities relative to our March forecast, but considerably higher figures would be possible in some scenarios.

- The fiscal frameworks agreed with **devolved administrations** were not designed with an economic downturn of this scale or type in mind. Our central scenario simply assumes that their spending responds proportionally to UK Government DEL spending. But the devolved administrations have fewer, and more limited, tax, reserves and borrowing

[21] Janke, K. et al, *The impact of COVID-19 on chronic health in the UK*, 13 April 2020.

levers than the UK Government. The Scottish and Welsh Governments have both called for greater financial flexibility in light of the crisis.[22]

- **Legal claims**. With increased government activity – especially in the NHS and welfare system – plus new and large policy measures being introduced quickly, the risks from legal challenges that result in additional future spending have clearly increased.

Balance sheet and debt interest risks

5.47 The Government has used the public sector balance sheet extensively to absorb the economic and fiscal consequences of the pandemic. Most obviously, the deficit rises to 13, 16 and 21 per cent of GDP this year in the upside, central and downside scenarios respectively, while public debt is between 13 and 41 per cent of GDP higher than in our March forecast by 2024-25. The Government has also issued tens of billions of pounds worth of loan guarantees, while the Bank of England's balance sheet has expanded through additional asset purchases, a new Term Funding Scheme and purchases of commercial paper from larger companies (on behalf of the Treasury). This will leave the consolidated public sector balance sheet larger and riskier than when we reviewed it in our 2019 *FRR*.

5.48 Overall, the public sector has incurred liabilities at a faster rate than it has acquired assets, with the current budget deficit hitting 13 per cent of GDP in our central scenario. So net liabilities have increased sharply too. Despite this, our scenarios show debt interest spending lower than in our March forecast, so debt interest risks have yet to crystallise.

5.49 The pandemic has generated several new or changed sources of balance sheet and debt interest risk that can be grouped under the following headings:

- **Interest rate risks**. A key driver of the debt-to-GDP ratio is the gap between the interest rate on government debt and GDP growth (the 'growth-corrected interest rate' or 'R-G'). This has drifted down over the past couple of decades, but the higher post-virus stock of public and private debt around the world could put upward pressure on the underlying ('natural') rate of interest at a time when GDP growth is still depressed.

- **Financing risks**. This year's huge cash deficit must be financed on top of a bulge in refinancing as debt incurred a decade ago after the financial crisis matures. But the associated financing risks are mitigated by the additional quantitative easing being undertaken by the Monetary Policy Committee (MPC), and by the Government's access to an expanded (but as yet unused) overdraft facility at the Bank of England.

[22] The Scottish Cabinet Secretary for Finance has stated that "*I believe we need greater flexibility on capital-to-resource switches, reserve carry-over and resource borrowing, and the potential to unwind any negative consequentials and tax and social security reconciliations over a longer time period.*" Similarly, the Welsh Finance Minister has argued that "*Our capacity and our ability to get money to the frontline has been constrained by the rigid financial rules imposed by the UK Government. Easing the rules on the way we manage our budget and the amount we can borrow will free up much-needed resources for the front lines in this crisis.*"

- **Sensitivity to interest rate and inflation risks**. Higher gross financing needs and a larger stock of debt in effect financed at Bank Rate (as a result of quantitative easing) means that this key risk identified in previous *FRR*s has been exacerbated by the crisis.

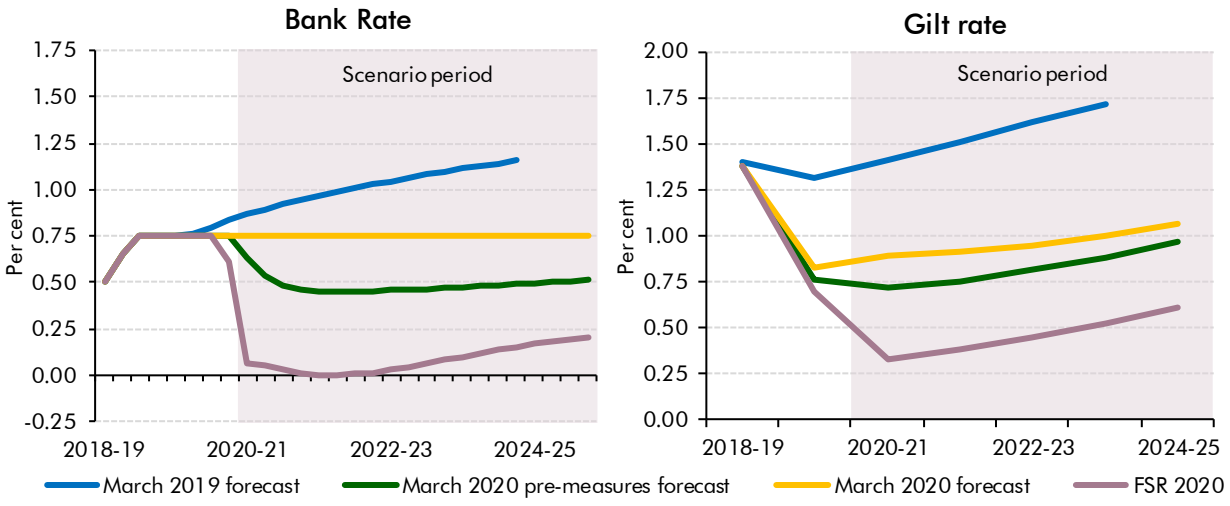
- **Real-world and statistical risks from balance sheet exposures**. The Government has increased its stock of explicit contingent liabilities by guaranteeing billions of pounds of lending and trade credit insurance. Implicit guarantees to some sectors of the economy could result in further fiscal support measures. And where support is accompanied by greater government control over the actions of those receiving it, there is a risk that those entities are reclassified to the public sector by the ONS.

Interest rate risks

5.50 Risks to fiscal sustainability from interest rates should be considered alongside risks to growth. When the effective interest rate and growth rate shift to the same extent, and in the same direction, R-G is unchanged with little effect on fiscal sustainability. But shocks that raise the effective interest rate relative to GDP growth increase spending and debt faster than GDP, threatening fiscal sustainability.

5.51 As Chart 5.3 shows, the latest market expectations are consistent with interest rates rising only very gradually from next year onwards, and not returning to the levels that markets expected back in March. Taken together with the GDP growth rates assumed in our scenarios, this reduces R-G in 2024-25 from -2.2 percentage points in our March forecast to between -2.7, -3.2 and -3.9 percentage points in the three scenarios. As we showed in Chapter 4, the combination of higher debt and these more favourable levels for R-G mean that the debt-to-GDP ratio can be stabilised at its higher levels while running large primary deficits. But the primary deficit in the final year of our central scenario is still 0.7 per cent of GDP larger than the debt-stabilising level, and only a modest adverse shift to the still historically favourable R-G in our March forecast would roughly double that gap.

Chart 5.3: Market expectations for Bank Rate and gilt rates at selected times



Note: Gilt rates are the weighted average interest rate on conventional gilts.
Source: OBR

5.52 Over the long term, the most important changes in real interest rates are associated with changes in the unobservable natural rate of interest. One recent study finds that major pandemics have often been associated with a subsequent decline in rates of return.[23] The authors studied 15 major pandemics during the past 700 years and find that this reaches "*its nadir about 20 years later, with the natural rate about 150 basis points lower than had the pandemic not taken place*". They attribute this to the adverse impact on investment of labour scarcity as a result of high mortality, together with higher savings as result of elevated uncertainty. Thankfully, though, the mortality rate from coronavirus is far lower than that in previous pandemics (for the Black Death, for instance, it was around a half).

5.53 Of rather more significance is the substantial accumulation of public and private debt in many countries because of the pandemic and the accompanying policy interventions. Companies are likely to seek to repair their balance sheets quite quickly after the pandemic is over. But governments are unlikely to wish to bring their debt down as rapidly, instead spreading some of the fiscal costs of the pandemic across future generations. The higher global stock of public debt can be expected to put upward pressure on the natural rate of interest over the medium and long term, though that effect may be obscured initially if savings are temporarily boosted, and investment depressed, due to heightened uncertainty.

5.54 Given that the natural rate of interest had fallen to unusually low levels even before the pandemic, one might expect there to be more scope for future increases than falls. So, while the risks of modest changes relative to current market assumptions might be reasonably balanced over the short term, over the long term the risks seem more clearly skewed to the upside. We explored these risks in our 2019 *FRR*, noting that R-G had been subject to quite large and persistent swings over the long run of history and that it was presently relatively low. It would therefore be unwise for governments to bank on that remaining so indefinitely.

5.55 Beyond movements in the natural rate, the effective interest rate on government debt is also affected by changes in risk premia. These emerge – often quite suddenly – when investors suspect the government is unable or unwilling to service its debt obligations. Moreover, risk premia are more likely to rise when growth prospects deteriorate. Other things equal, a higher debt-to-GDP ratio makes it costlier for the government to service its debt and thus raises the incentive to default (either explicitly through non-payment or implicitly by engineering unexpected bouts of higher inflation). Risk premia therefore tend to rise as the debt-to-GDP ratio rises – though often in a highly non-linear fashion. Happily, so far the UK Government has had relatively little difficulty in selling its debt and the risk premium on UK debt is low. But it would be unwise to assume that that must always be the case.

5.56 Our scenarios show the crisis leaving the debt-to-GDP ratio roughly three times the level it was before the financial crisis and at the sorts of levels that have sometimes been associated with fiscal crises in other countries. For instance, a recent IMF study finds 16 out of 35 advanced economies had fiscal crises from 1980 to 2016. Public debt was among the most important predictors of these episodes, with the chance of a crisis increasing "*substantially*

[23] Jorda, O., et al., *Longer-run economic consequences of pandemics*, April 2020, CEPR Discussion Paper.

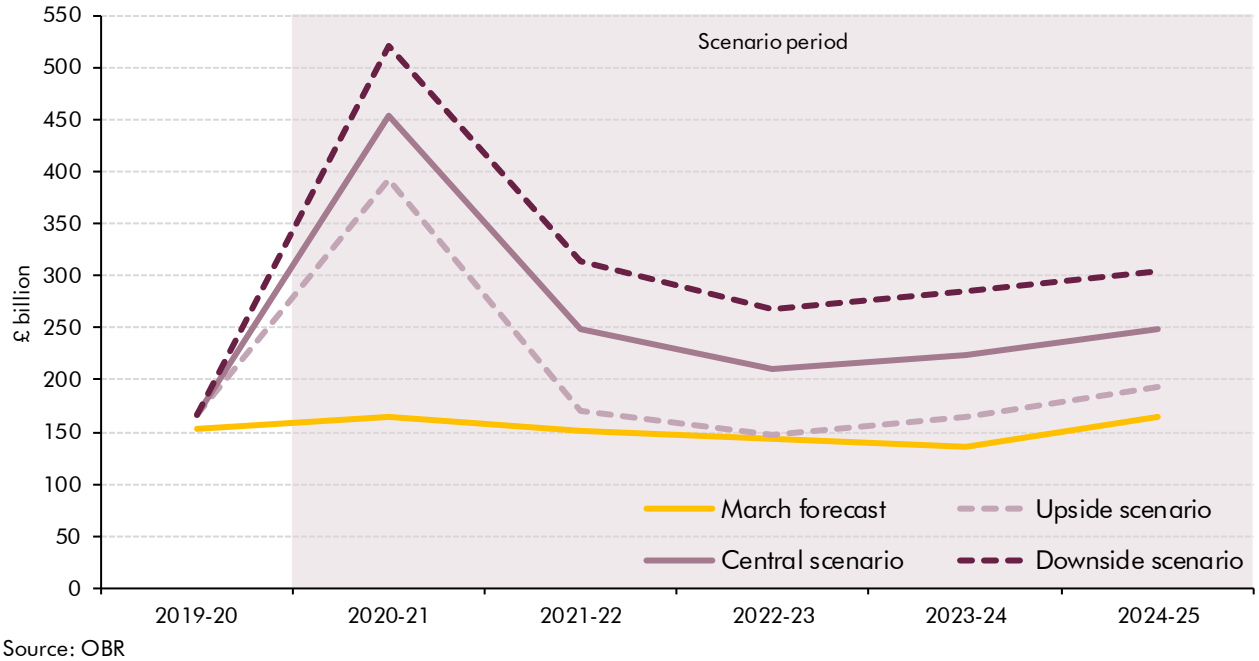
once debt is around 70 percent of GDP".[24] This signals the importance for governments of maintaining a credible strategy for ensuring that the public finances are kept sustainable over the long term and institutional frameworks that are appropriately supportive of that.

5.57 Policymakers have other ways to influence the real return on the public debt too, and higher levels of debt make these more tempting. Governments can attempt to hold interest rates lower than they would otherwise be, for instance by requiring financial institutions to hold large quantities of public debt (known as 'financial repression'). Similarly, unanticipated inflation erodes the real value of that part of the debt stock that is denominated in nominal terms, i.e. excluding debt that is index-linked, as is a significant fraction of UK debt. But permanently higher inflation will lead to a corresponding rise in inflation expectations and in the required yield on new issues of conventional debt. So the scope for higher inflation to erode the real value of debt depends heavily on its maturity structure: where debt is mostly short term, there is little scope to reduce the debt burden in this fashion.

Financing risks

5.58 The central government net cash requirement (CGNCR) measures how much cash the Debt Management Office (DMO) needs to raise from financial markets to finance any spending or other outlays not covered by taxes and other receipts. On top of that, the DMO has to roll over existing debt as it matures, so gross financing needs exceed the CGNCR. Chart 5.4 shows how our scenarios compare with our March forecast in terms of gross financing. In 2020-21, financing ranges from £393 billion to £521 billion across the scenarios (between £229 billion and £357 billion higher than our March forecast). And by 2024-25, gross financing remains between 19 and 86 per cent higher than our March forecast.

Chart 5.4: Gross financing requirement: scenarios versus March forecast



Source: OBR

[24] Badia, M., et al., *Debt is not free*, IMF Working Paper, January 2020.

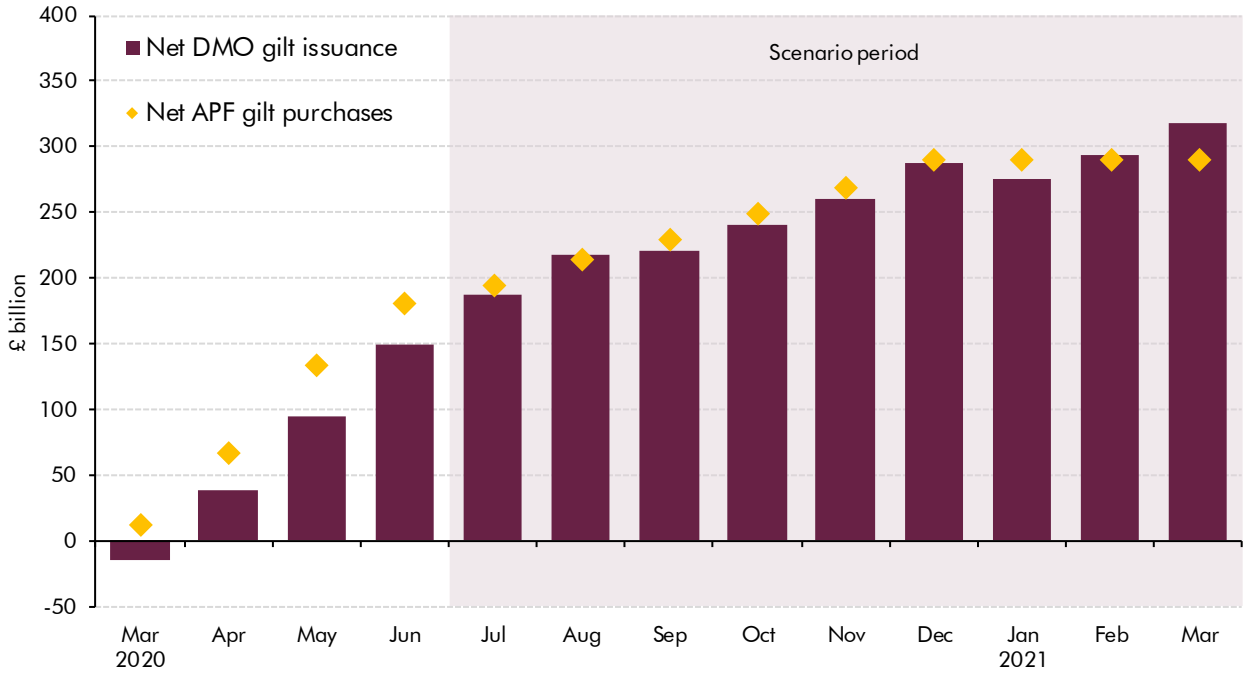
5.59 A huge rise in gilt issuance raises the possibility that risk premia spike – or, at the extreme, that the DMO might not be able to find buyers for all the debt that must be issued. There has been no sign of that yet, with market interest rates lower now than before the crisis struck and most gilt auctions heavily oversubscribed. Three factors are likely to have contributed to the relative ease with which financing has been raised:

- First, and most importantly, **gilt investors accept the rationale for temporarily sharply higher borrowing** – a readily observable economic shock to which the appropriate response is to allow public debt to rise – and are correspondingly willing to finance it. But this also rests in part on the credibility of the institutional framework that gives investors' sufficient confidence that the value of the purchased debt will not be eroded.

- Second, the Bank of England has been buying gilts as part of its programme of **quantitative easing**. By the end of June it had purchased £3.0 billion more gilts than the DMO had issued so far in 2020-21. As Chart 5.5 shows, a monthly interpolation of our central scenario for the full year would imply that net DMO issuance and net APF purchases – i.e. excluding those related to redemptions – will be roughly equal.

- Third, to meet investors' demands, gilt sales have been more heavily concentrated at **shorter maturities** than is usual in the UK.

Chart 5.5: DMO gilt issuance and Bank of England gilt purchases net of redemptions: outturn and central scenario for 2020-21



Source: Bank of England, Debt Management Office, OBR

5.60 In mid-March, as global financial conditions tightened significantly, conditions in the UK gilt market deteriorated. On 19 March, the MPC stepped in, announcing that it would expand its asset purchase programme by £200 billion and that it would complete those purchases as soon as was operationally possible. Gilt market conditions quickly improved and all gilt auctions have continued to see investor demand exceed the amounts being sold. Nonetheless, the DMO will need to sell a considerable quantity of gilts in the remainder of the financial year – £254 billion in our central scenario alone – so there is a risk that some future auctions may not go as smoothly as has so far been the case.

5.61 Beyond 2020-21, financing risks could increase if the factors that have so far prevented their crystallisation were no longer operative. For example, quantitative easing might not continue to be as supportive of financing conditions as it has been to date. At its June meeting, the MPC authorised an additional £100 billion of gilt purchases "*in order to meet the inflation target in the medium term*". It added that "*With liquidity conditions having stabilised, purchases could now be conducted at a slower pace than during the earlier period of dysfunction.*" In our central scenario, this leaves the Bank's gilt purchases roughly in line with the DMO's issuance. But if inflationary pressures were to rise sharply, then the MPC would need to tighten policy to meet the inflation target and that might include reducing the pace of asset sales or (as the Governor has intimated) selling gilts to partially unwind the stock of quantitative easing. The Treasury has extended the Ways and Means facility – in effect, its overdraft at the Bank of England. It has yet to call upon that additional borrowing capacity, but it means it has a backstop in the event of temporary financing problems.

5.62 Beyond the uncertain outlook for quantitative easing, the other mitigating factors could be less supportive too. As discussed in the previous section, investors could demand a higher risk premium on gilts in the future if the credibility of the institutional framework were to come into question. And while issuing more short-dated debt reduces the risk of failed auctions this year, it comes at the expense of increasing rollover risk in future years.

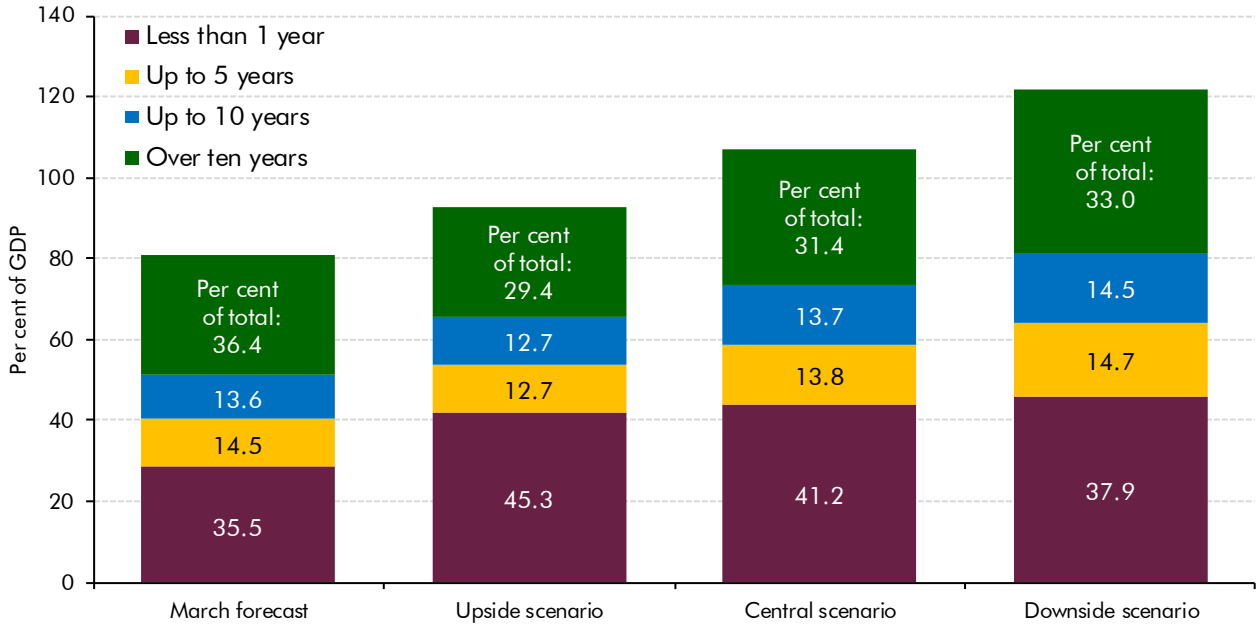
Sensitivity to interest rate and inflation risks

5.63 Our *FRR*s have shown how the public sector balance sheet has become more sensitive to interest rate and inflation risks relative to the position prior to the financial crisis. This has been caused both by the larger stock of debt relative to GDP and by the larger share of that debt for which costs are either directly linked to inflation (via index-linked gilts) or to short-term policy rates (via the effects on the consolidated public sector balance sheet of quantitative easing). The prospect of much higher government borrowing over the next five years than previously expected, plus the expansion of quantitative easing by £300 billion to £745 billion, increases the sensitivity of the balance sheet to both risks even further.

5.64 Chart 5.6 shows the size and maturity structure of government debt in 2024-25 in our March forecast and in our three scenarios. Debt is higher than March even in our upside scenario and is progressively more so in the central and downside scenarios. The Bank's additional gilt purchases increase the proportion of those larger debt stocks that is in effect financed at Bank Rate, relative to what we assumed in March. On top of this, the issuance of an unusually large proportion of short-dated gilts (i.e. of less than 5-year maturity) so far

in 2020-21 (24 per cent of the total issued in April, May and June versus just 7 per cent in 2019-20 as a whole) has lowered the average maturity of gilts. So debt interest spending is more sensitive to both policy and market interest rate movements: while the overall debt stock is 13, 27 and 40 per cent higher than our March forecast in the upside, central and downside scenarios respectively, the stock of debt of less than 5-year maturity (including the Bank reserves that finance quantitative easing) is 31, 39 and 47 per cent higher.

Chart 5.6: Debt by maturity in 2024-25: scenarios versus March forecast



Source: Debt Management Office, OBR

5.65 Higher issuance of index-linked debt in our scenarios increases the stock as a share of GDP, but this is tempered by higher gilt premia (reducing the nominal stock) and lower inflation reducing the uplift to that stock. In our central scenario the share rises to 20.0 per cent of GDP in 2024-25 from 18.4 per cent in our March forecast. This increases the sensitivity of debt interest spending to inflation surprises. In the downside scenario the proportion is higher still at 22.4 per cent, but in the upside scenario it is a little lower at 17.5 per cent.

5.66 Chart 5.7 shows the sensitivity of debt interest spending to changes in gilt rates, short-term interest rates, RPI inflation and the CGNCR in the final year of our central scenario and in our previous two March forecasts. It shows that debt interest spending has become:

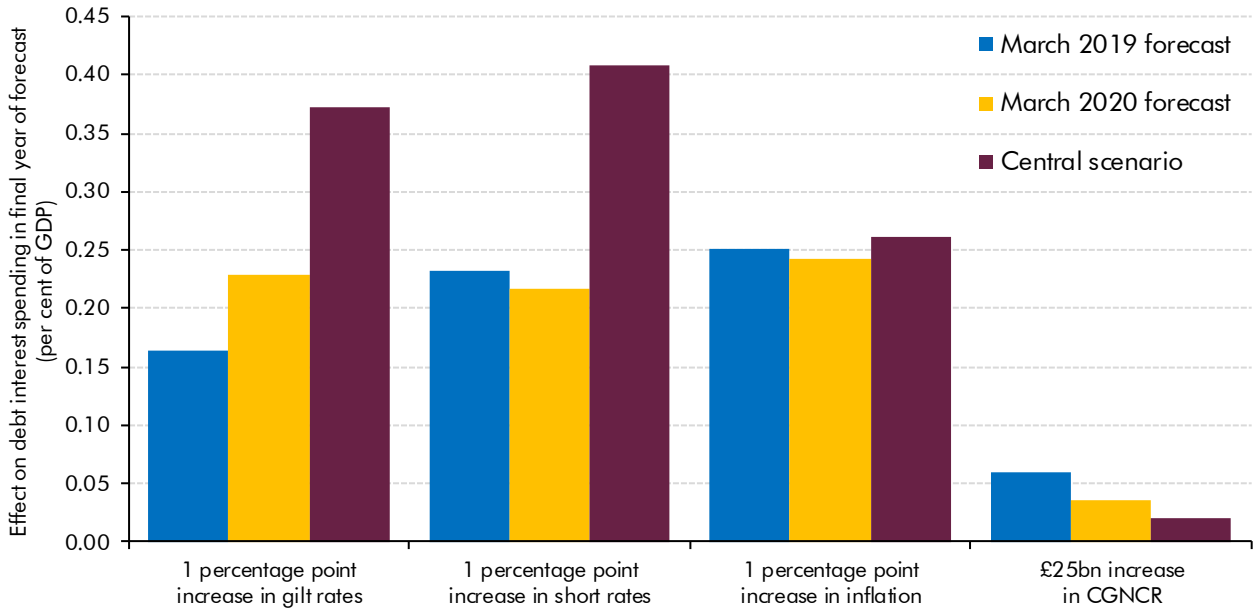
- More sensitive to changes in **gilt rates**. This reflects increased gilt issuance to finance higher borrowing over the next five years. The Treasury's need for net cash financing over a five-year horizon had already increased from £189 billion in our March 2019 forecast to £344 billion in our March 2020 one. That rises further to £602, £910 and £1,210 billion respectively in our upside, central and downside scenarios.

- More sensitive to changes in **short rates** – the interest rate paid on the Bank of England reserves that finance the APF's purchase of gilts, as well as Treasury bills issued by the government. This reflects the expansion of quantitative easing described above.

- Slightly more sensitive to **retail price inflation**. This reflects a larger stock of index-linked debt as a share of GDP. Our scenarios assume lower RPI inflation than predicted in our March forecast, so this larger stock is less costly to finance. But there are material risks around this, with some commentators highlighting the risk of increased inflationary pressures as we emerge from this crisis – for instance, from excess demand if stimulus is not withdrawn sufficiently as the economy recovers.[25]

- Less sensitive to changes in **cash borrowing**. This reflects lower interest rates. Debt interest spending is more sensitive to changes in all the above rates, but our scenarios assume that those rates remain at lower levels over the next five years than was the case in March (as is priced into markets). That means that a given amount of additional borrowing would attract a lower servicing cost than was the case in our March 2020 forecast (and lower still than in our March 2019 and previous forecasts).

Chart 5.7: Debt interest ready reckoners: central scenario versus recent forecasts



Note: All increases are assumed to take effect at the beginning of the first year of the forecast and continue until the final year.
Source: Debt Management Office, OBR

Real-world and statistical balance sheet risks

5.67 The pandemic has reminded us how governments ultimately stand behind large parts of the economy in times of trouble. In addition to the direct fiscal costs of providing exceptional support for individuals and businesses and the indirect ones arising from the recession, the Government could be exposed to some broader fiscal risks via its explicit guarantees on some activities and implicit commitments to support some parts of the economy. If these

[25] Goodhart, C. and Pradhan, M., *Future imperfect after coronavirus*, VOX article, 2020.

risks crystallise, the public sector balance sheet – in both a real-world and a statistical sense – could expand by more than has been assumed in our scenarios.

Explicit guarantees

5.68 In previous *FRR*s we have highlighted guarantees as a source of fiscal risk because they are not typically recorded in statistical measures of the balance sheet and they do not affect spending and borrowing unless they are called. The Government pledged £330 billion in guarantees to support the economy on 17 March, though the Chancellor stressed that he would increase this figure if necessary.[26] It covers several business loan schemes, where the Government will meet some or all of a lender's losses in the event of a borrower defaulting, and a reinsurance agreement with trade credit insurers (as described in Chapter 3).

5.69 The fiscal costs and risks entailed by these guarantees will be determined by the extent to which the schemes are used and the guarantees are called upon. The £330 billion figure is unlikely to be a good guide to this. Our central scenario assumes a total fiscal cost of £20 billion from defaults across all the schemes. This rises to £39 billion in the downside scenario, which assumes significantly higher loss rates. These figures are both based on £76 billion of lending through the commercial bank schemes and up to £10 billion in trade credit reinsurance guarantees. That may look pessimistic, given that there were no calls on the larger volume of financial sector guarantees and indemnities deployed during the financial crisis (around £480 billion in 2009-10).[27] But this is because most guarantees this time are on loans to smaller businesses, where default rates are higher in normal times and can be expected to be much higher following this recession.

5.70 The main fiscal risk from the guarantee schemes is that they cost more than our scenarios assume. That could be because more loans are issued than we have assumed or because loss rates per pound of guaranteed lending are higher. The former seems more likely than the latter, particularly relative to our downside scenario, which assumes very high loss rates on the large volume of 'bounce back loans'. That said, this scheme does look particularly risky from a fiscal perspective since the Government has provided lenders with a 100 per cent guarantee and has sought to make the loans as easy to access as possible.

5.71 The loan guarantee schemes create a statistical risk too. The ONS has determined that two of them should be classified as 'standardised guarantee schemes', whereby expected losses are recorded as spending and on the government's balance sheet when the loans are issued rather than when the losses occur. This contrasts with the treatment of most pre-virus guarantees. It will be difficult to estimate the future costs that should be recorded upfront, so there could be large future adjustments or revisions as more information emerges.

[26] On 17 March, at a Downing Street news conference, the Chancellor stated: "*And if demand is greater than the £330 billion I'm making available today, I will go further and provide as much capacity as required*".
[27] Government press release, *Credit Guarantee Scheme closes*, November 2012.

Implicit guarantees and classification risks

5.72 Governments are often perceived to provide implicit backing to certain sectors of the economy, the failure of which would be expected to prove politically unacceptable. The UK Government lists 13 sectors as contributing 'critical national infrastructure'.[28] These include transport, energy and finance. Other sectors, such as universities or housing associations, provide services of a quasi-public nature that the Government might choose to support should providers find themselves in financial difficulties. These include transport, energy and finance. Other sectors, such as universities or housing associations, provide services of a quasi-public nature that the Government might choose to support should providers find themselves in financial difficulties.

5.73 The still-evolving policy response to this crisis raises the likelihood and potential impact of two types of fiscal risk in this area. First, that more direct fiscal support is provided to some of these sectors. Second, that such support either reveals or changes the nature of government control of entities in the sector, prompting the ONS to reclassify them from the private to the public sector (as has happened in the past with housing associations).

5.74 Possible sources of fiscal risk through announcements of future fiscal support include:

- The Government's Future Fund provides convertible loans of up to £5 million to start-ups. If the loans are unpaid after three years, then they will be converted to an equity stake for government. Some have suggested that this type of **debt-for-equity swap** could be used more broadly in the future to facilitate corporate deleveraging – and in particular as a means of dealing with guaranteed loans that default. This would convert a publicly guaranteed private sector asset financed by the private sector into a public sector asset financed by public debt. The value of these equity stakes could then rise or fall depending on the financial success of the company. There would be an associated classification risk should any equity stakes be large enough or come with sufficient other controls to reclassify the company in question to the public sector. This might be particularly true of the very small companies using bounce back loans.

- **Support for individual firms** through 'Project Birch'. In May 2020, the Treasury provided the Financial Times with some details of a bailout plan to rescue individual companies whose failure would "*disproportionately harm the economy*".[29] The Treasury would not provide us with further information, given the commercially sensitive nature of the project. Commentators have pointed to industries such as aviation, aerospace, steelmakers and carmakers as potential beneficiaries of such support. Indeed, on 2 July the Government provided an emergency loan to Celsa, a steel company.[30] Depending on its nature, such support could prompt reclassifications.

- The trade credit reinsurance scheme could prompt calls to extend this type of cover to other areas of **insurance**, such as business interruption insurance or travel insurance.

[28] Centre for the Protection of National Infrastructure, *Critical National Infrastructure*, 2020.
[29] Financial Times, *'Project Birch' plan to bail out stricken UK companies*, 24 May 2020.
[30] Government news story, *Government agrees support package to UK steel company*, 2 July 2020.

5.75 Possible sources of increased reclassification risk as a result of the pandemic include:

- Our scenarios assume that **Bounce Back Loan Scheme guarantees** will be treated as 'standardised guarantees' – as the ONS has decided should be the case for the other two guarantee schemes. But the BBLS differs from those schemes in several respects, with no guarantee fees paid by lenders, no additional credit screening required by lenders, no tangible collateral required from borrowers or payments for the first year, and, of course, the full guarantee on loan losses. The extent to which the Government has set these terms, and carries the associated risk, could argue for treating them as public sector loans administered by banks rather than bank loans with a government guarantee. That said, it is still banks that finance them, and that will receive interest on them, which would argue against such a position. Neither treatment would alter the underlying fiscal risk, but the former would make the scheme more transparent on the public sector balance sheet.

- The temporary suspension of **rail** franchise agreements saw the Government taking on all revenue and cost risk associated with operating the train network. This is initially for six months, but there is uncertainty around what happens subsequently.

- There is a risk that any additional support to **universities** comes with strings attached that increase government control of their activities to an extent that prompts their re-classification from private to public sector entities.[31] As we have noted in previous *FRR*s, the sector is already heavily regulated and investors in universities' debt clearly view them as having the implicit backing of government in the event of financial distress.

Policy risks

5.76 Our 2019 *FRR* discussed how policy choices can also represent a source of fiscal risk, for example: when fiscal rules are revised to accommodate adverse forecast revisions; when policy responds asymmetrically to good news versus bad; or when announced policy is frequently revised. The fiscal policy challenge over the coming years is uncertain, but the deterioration in the fiscal position in our medium- and long-term scenarios, together with the various risks described in this chapter, could give rise to further future policy risks.

5.77 One set of risks relates to the reduced pressures to contain public spending and the heightened incentive to finance that spending through borrowing rather than taxation. As we showed in Chapter 4, the combination of higher levels of public debt and a highly favourable outlook for 'R-G' means that the debt-stabilising level of borrowing in the medium term could be quite high – ranging from 2.0 to 4.1 per cent of GDP across the three scenarios. So the Government might be tempted to set new fiscal rules that allow it to accommodate higher spending via higher borrowing over the medium term. That would leave it more exposed in the event of a rise in sudden rise in 'R-G', for instance if investors started to doubt the Government's ability or commitment to meeting its future debt payment obligations in a non-inflationary fashion.

[31] The Government's 4 May announcement of support for the sector stated that if the measures proved insufficient, any further actions "*will come with attached conditions*", without specifying what they might be. See Department for Education and Department for Business, Energy and Industrial Strategy, *Press release: Government support package for universities and students*, 4 May 2020.

5.78 Another set of risks relates to the adoption of a more active use of fiscal policy in response to future shocks, given the precedent set by the aggressive support programmes put in place this year and the likelihood that Bank Rate will remain near its effective lower bound for several years. All else equal, that implies a larger impact on public debt for a given shock than before. But an increased reliance on the use of fiscal policy in 'bad' times implies that debt will also need to fall more quickly in 'good' times to build up the requisite fiscal space. Were that not to happen, then the debt-to-GDP ratio would instead tend to ratchet upwards. But the case for precautionary investment in fiscal space in good times runs directly against the pressures to run larger deficits created by favourable assumptions about R-G.

5.79 These risks are set against the backdrop of the already looser fiscal plans that were set out in the Spring Budget. The current legislated fiscal targets (which had been put in place in 2016) were in effect abandoned in favour of less stringent ones from the Conservative manifesto. (The statutory 'fiscal objective' of balancing the budget in the mid-2020s had in effect already been jettisoned in the October 2018 Budget.) On this basis, the Government planned to borrow significant sums on an ongoing basis and merely to stabilise, rather than bring down, the debt-to-GDP ratio. As we noted at the time, this strategy was rooted in the assumption that borrowing costs will remain low (as market participants presently believe, but which is by no means guaranteed). Even these rules were set to be reviewed ahead of the Autumn Budget, so there is clearly the prospect of even looser ones to follow.

5.80 This leaves us with the prospect of fiscal policy being looser in normal times than would previously have been the case, and that the fiscal cost of economic shocks could be greater than it was pre-virus. That would place public debt on a trajectory that was both higher and with larger periodic steps up, which in turn would further increase the sensitivity of the public finances to the various balance sheet risks described earlier in the chapter. In particular, the fiscal risks posed by adverse changes in the paths for growth or interest rates relative to the unusually favourable current position are greater when the debt-to-GDP ratio is higher.

5.81 The size of the state and the composition of the public sector balance sheet is for politicians and the electorate, not the OBR, to decide. And the immediate concern for government will naturally be repairing the damage done to the economy by the lockdown. But given the structural fiscal damage implied by our central and downside scenarios, in almost any conceivable world there is at some point likely to be a need either to raise some taxes or to reduce some existing spending commitments to accommodate new ones (for example in health and social care) and to put the public finances onto a sustainable long-term path.

Index of charts and tables

Chapter 5 Reassessing fiscal risks