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CHANGE

How far and how fast?

Public debt after
the pandemic

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June 2020

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Executive Summary

- While the economy is in a “Great Pause” to contain the coronavirus pandemic, tax revenues will be significantly lower and government spending significantly higher. This has led to extremely high budget deficits in the short term: The ONS reported a higher level of government borrowing in April 2020 than in the whole of the previous financial year. The result will be a much higher level of national debt than was expected just a few months ago. The aim of much of this spending is to try to prevent the permanent economic damage that would be caused by what would otherwise have been a wave of bankruptcies and mass unemployment.
- In itself, this higher debt does not endanger the long-term sustainability of the public finances. If the government were to run budget deficits at the level planned in the March budget after the pandemic, debt will fall fairly rapidly as a share of national income. Even if debt doubles as a share of national income during the pandemic, it would fall back to below 100 per cent of GDP by around 2040. Moreover, as interest rates on government debt are at historic lows, debt interest payments will account for a smaller share of tax revenues in the future than they did last year. There is consequently no need to run large budget surpluses to repay the additional debt caused by the acute phase of the crisis.
- There are two big risks to the public finances going forward, however. First, the economy may never fully recover from the pandemic: Some capacity may be lost permanently. If this is the case, tax revenues will be permanently lower than they would have been, and budget deficits structurally larger.

Under plausible assumptions of a permanent reduction in economic capacity of between 3 per cent and 7 per cent, without any policy action, debt would start rising again and only stabilise at levels of more than 100 per cent of GDP. But here too, at current low interest rates even historically high levels of debt would pose no affordability problem, with debt service costs remaining at record lows.

- The picture changes radically, however, if interest rates begin to return to historical norms. The other major risk to the public finances is therefore that higher debt levels leave the public finances more vulnerable to increases in global interest rates. If interest rates started to rise from 2025 to reach these levels by 2040, the government's ceiling on the debt interest to revenue ratio of 6 per cent would swiftly be breached and debt service costs would be on a path to exceed post-war records substantially.
 - What does this imply for fiscal policy within the current parliament? First, it is clear that the debt incurred during the acute phase of the crisis, even in the worst-case scenario, is not a major concern and limiting permanent economic damage should be the priority. Second, given the low cost of servicing additional debt and limited prospects of this changing any time soon, the government should err on the side of removing support for the economy slowly during the recovery phase, rather than removing it too quickly and risking long-term damage to both the economy and the public finances. Third, once the economy has returned to its potential, it would be unwise to tolerate a high debt ratio on an ongoing basis without setting a long-term path to bringing it down.
 - The government's current fiscal rules do not allow enough flexibility to follow these principles. In the absence of a very rapid recovery, they would require the government to rapidly tighten fiscal policy that would damage confidence and undermine the recovery. The government is committed to running a current budget surplus (that is, tax revenues exceeding day-to-day spending) within three years.
- The scale of tax rises or spending cuts would be between £35 billion and £100 billion in today's terms if there was long-term damage to the economy of the magnitude we consider. However, the scale of long-term economic damage remains unclear and other forecasters have been less pessimistic: The Bank of England projects that the long-term damage to the size of the economy will only be about 1 per cent, while estimates from the IMF, NIESR and HM Treasury's panel of independent forecasters are towards the lower end of the range we consider.
- A more flexible fiscal framework would allow policy to respond more optimally. TBI's "all-weather" fiscal framework would allow fiscal tightening to wait until the economy was operating at close to its full capacity and the scale of long-term damage had become clear, minimising the risk of fiscal retrenchment exacerbating economic scarring. But it would also set a prudent multi-decade path to ensure fiscal sustainability. Our framework would also allow additional investment in the near term to take advantage of low interest rates – the government could invest 20 per cent more than it is currently restricting itself to – but would force the government to rein investment back in if interest rates started to rise again.
 - If there is need for fiscal tightening once the recovery is complete, tax rises seem inevitable after a decade of spending cuts that have left public services ill-prepared for the pandemic. But the government should also seize this opportunity for reform. On the spending side, the government should build on the lessons learned during the lockdown period, particularly around the digital delivery of services. And alongside raising revenue, tax changes should seek to address anomalies in the current tax system, increasing taxes on activities that are relatively undertaxed currently, such as capital gains and self-employment, and on bases that are less responsive, such as land and property.

Introduction

A “Great Pause” is underway in the UK economy and many others around the world as certain industries are closed or forced to operate at reduced capacity while social-distancing restrictions are in place to control the Covid-19 pandemic. This is severely reducing tax revenues, while government spending is much higher than normal as the National Health Service requires additional resources to cope with the virus, and compensation schemes have been introduced for those who have lost work. This has started to show in the monthly public finance figures: Tax receipts were down 42 per cent on the previous year in April 2020, and spending 52 per cent higher. Most notably, payments for the Coronavirus Job Retention Scheme in April 2020 totalled £10.5 billion in the first month alone. As the scheme will run at least until the end of October, the ultimate cost of the scheme is likely to be many times this amount. The pandemic will thus lead to much higher government deficits in the short term and much higher levels of the national debt than were expected even a few months ago.

Yet it is not all bad news for the public finances. Yields on government debt have fallen to historic lows despite huge increases in the amount of debt issued, partly helped by the Bank of England’s asset purchase programmes. The ongoing cost of this additional debt is therefore small, so long as interest rates remain so low. Low interest rates also mean that the debt will “melt away” over time: Even if debt is rolled over, it will still shrink relative to national income, and servicing costs on existing debt will account for an ever-smaller share of tax revenues.

What does this all mean for the public finances, however? Although it is clear that debt levels are going to jump significantly, how much they will increase and whether this is sustainable remains uncertain. This will then determine the extent to which fiscal consolidation is necessary after the economy has recovered. In this briefing, we examine what would happen to the public finances under various stylised scenarios and discuss what policy response would be appropriate in each case.

We begin by setting out different scenarios for how the economy might evolve over the next few years depending on how long social-distancing requirements have to be in place, and we consider the likely

implications of these for levels of deficits, government debt and debt servicing costs. We then consider how these are affected by varying assumptions about how much of the damage to the economy from the pandemic is permanent and on the interest rate the government has to pay on its debt, before turning our attention to how policy should respond. We examine the implications of the government’s fiscal rules before outlining how a more flexible framework could allow a more optimal response. Finally, we briefly consider how fiscal tightening should be enacted.

Economic scenarios

One key uncertainty is how long the Covid-19 pandemic will last. This will determine how long parts of the economy have to remain closed and how long emergency measures such as the Job Retention Scheme have to remain in place. We consider three different scenarios for the severity of the recession, which are based on analysis by the Resolution Foundation. A description of these scenarios is as follows, with detailed information on GDP growth in each scenario in Table 1 below:

- In the **3-month** scenario, the outbreak is controlled by the end of June, and social-distancing measures are brought to a close at that point. From this point on, a policy of “test, track, trace and isolate” allows the economy to return to near-normality. The economy operates at 30 per cent below capacity for the three months it is in lockdown, but does not immediately bounce back to full capacity when this is over. This is consistent with what has happened in China, and is similar to the impact of the SARS outbreak in 2003. The economy bounces back relatively quickly in 2021, but there is still some long-term economic damage.
- In the **6-month** scenario, the pandemic takes longer to bring under control, or there is a second outbreak later in the year that requires a further lockdown. Again, the economy operates at 30 per cent below capacity during the six-month lockdown period and does not bounce back immediately afterwards. Recovery takes longer in this scenario, with the economy remaining below capacity in 2021, and the scale of long-term economic damage is larger.

- In the **12-month** scenario, social distancing measures have to be maintained for longer until a vaccine or treatment is available. The economy does not remain in lockdown for the whole 12 months in this scenario – lockdown measures are turned on and off as required as a result of several waves of the disease – so the long-term economic damage is less than twice that incurred in the 6-month scenario. Nevertheless, it is still more damaging overall, and the economy takes longer to recover, remaining below potential until 2025.

Table 1 – Economic growth scenarios considered

	3-month scenario	6-month scenario	12-month scenario
Real GDP growth			
• 2020–21	-10.0%	-20.0%	-24.0%
• 2021–22	+12.5%	+12.0%	+3.8%
• 2022–23	+1.4%	+12.0%	+7.8%
• 2023–24	+1.3%	+1.3%	+7.8%
• 2024–25	+1.5%	+1.5%	+7.8%
Long-run impact on GDP	-3%	-5%	-7%

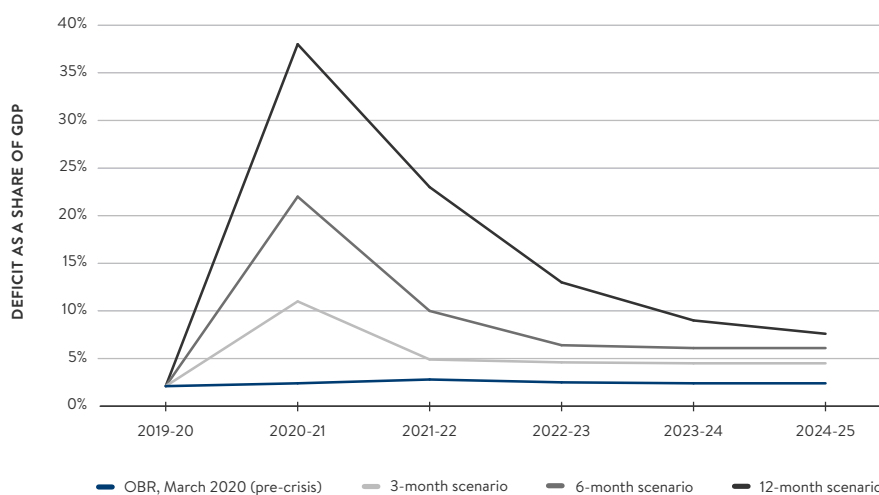
Source: TBI calculations based on Hughes et al., (2020).³

Debt will rise quickly in the short term under all scenarios

The Resolution Foundation's analysis shows budget deficits at unprecedented levels for peacetime in the short term in all three scenarios (Figure 1). Although national income falls very substantially, government borrowing compensates households for much of the income losses. Deficits are larger the longer the crisis continues as support mechanisms need to be extended, and longer periods of social distancing keep parts of the economy closed. A relatively rapid bounce-back and

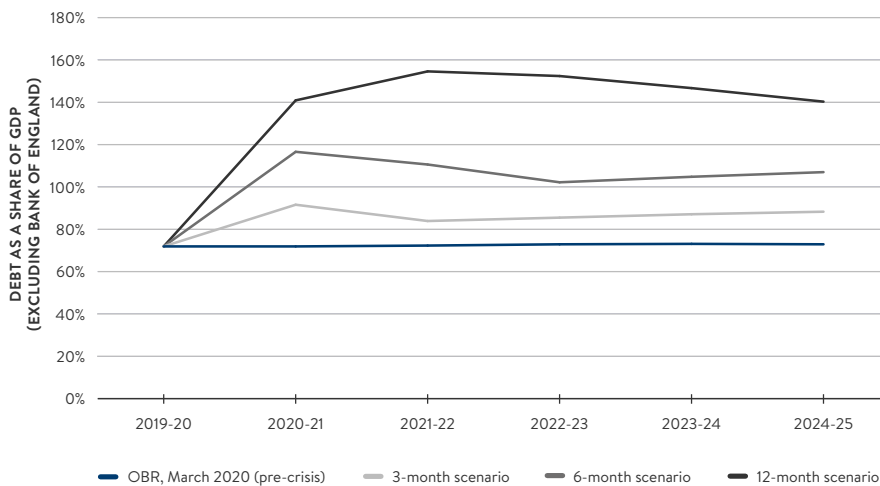
the unwinding of special support schemes such as the Job Retention Scheme lead to budget deficits falling relatively rapidly in the short term, however.⁴ These deficits in the next few years lead to a big increase in the national debt in 2020–21. As a share of national income, debt then falls in 2021–22 in the 3- and 6-month scenarios as the economy recovers, but in the 12-month scenario, debt as a share of national income does not peak until 2021–22 as the recovery is slower.

Figure 1 – Under all scenarios, budget deficits are very large in the short term



Source: TBI calculations based on Hughes et al., (2020).⁵

Figure 2 – The pandemic leads to a big increase in the national debt in all scenarios



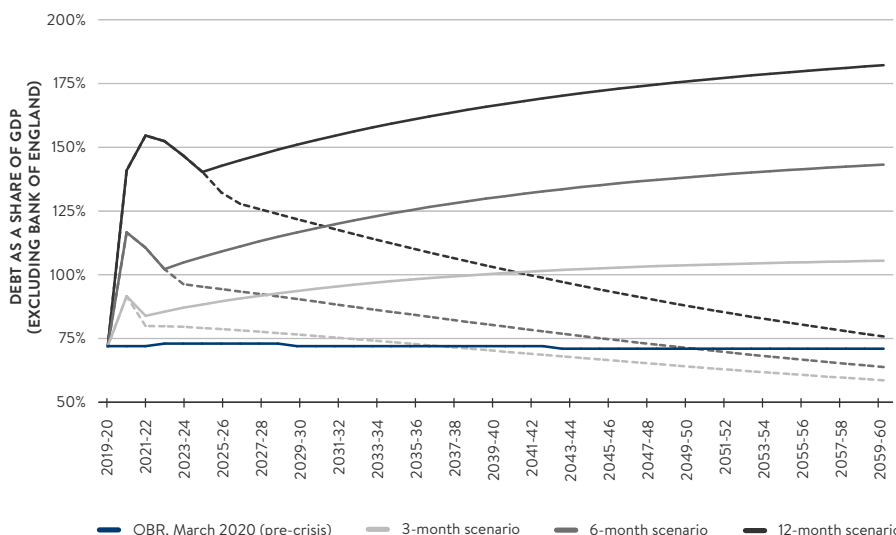
Source: TBI calculations based on Hughes et al., (2020).⁶

But whether damage is permanent is more important in the long term

What happens after the initial shock has passed, though? If there were no long-lasting damage to the economy from the pandemic – that is, if GDP in 2025 and subsequent years was no lower than the OBR expected in March – debt levels would fall rapidly without any changes to planned tax and spending plans (Figure 3, dotted lines).⁷ By 2030, debt excluding Bank of England measures would be close to pre-crisis levels under the 3-month scenario, below 90 per cent of GDP under the 6-month scenario and 115 per cent of GDP in the 12-month scenario. In each scenario, the national debt stabilises at just below 60 per cent of GDP; remarkably,

a lower level than under the pre-crisis scenario. This follows from the equally remarkable result that debt interest payments are lower because gilt rates are roughly half the level that was expected at the March budget (0.9 per cent vs 0.4 per cent). (In this section, this extremely low level of interest rates is assumed to continue into the future indefinitely in all scenarios.) Lower interest rates allow the government to run a smaller deficit without lowering spending or increasing taxes as a share of national income. In short, then, the debts incurred during the acute phase of the crisis are no cause for concern if the economy bounces back.

Figure 3 – If the size of the economy is permanently reduced, debt stabilises only at a high level



Note: dotted lines represent scenario where the economy fully recovers the ground lost during the pandemic. Solid lines represent scenario where economy is permanently smaller as described in the text.

Source: TBI calculations based on Hughes et al., (2020) and Office for Budget Responsibility (2020).⁸

However, things are more complicated if the economic damage from the pandemic is permanent. A significant reduction in economic potential will affect tax revenues and increase budget deficits in the future. Using evidence from previous recessions, the Resolution Foundation estimates that the economy will be between 3 per cent and 7 per cent smaller on a permanent basis than had been expected pre-crisis.⁹ This is more pessimistic than other forecasters – the Bank of England’s latest coronavirus scenario involves a long-term scarring effect of only 1.5 per cent of GDP,¹⁰ whereas the IMF’s central estimates,¹¹ NIESR’s¹² and the average of HM Treasury’s panel of forecasters¹³ are towards the lower end of those of the Resolution Foundation.

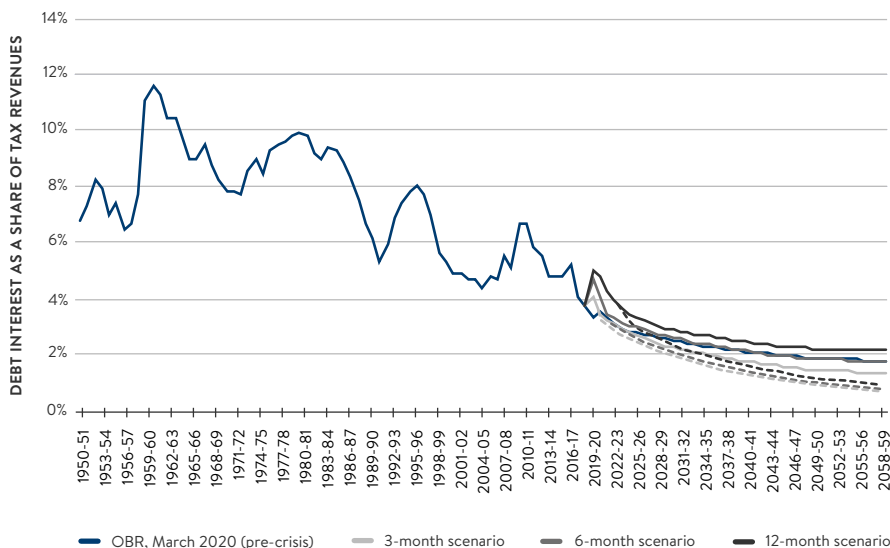
A result from an Office for Budget Responsibility (OBR) working paper¹⁴ that a 1 per cent reduction in the size of the economy leads to an increase in the deficit of 0.7 per cent of GDP in the absence of any policy action¹⁵ would suggest that the pandemic would increase the deficit as a share of national income by between 2 per cent and 5 per cent in the absence of any further policy changes beyond those announced in the March budget.¹⁶

We see this in Figures 1 and 2: Rather than falling back to the deficit level anticipated by the OBR in March, deficits remain elevated at 4.5 per cent, 6 per cent and 7.5 per cent of GDP in the 3- 6- and 12- month scenarios respectively compared to the level around 2.5 per cent expected by the OBR.

In all three scenarios, public debt continues to grow as a share of national income after the economy returns to its (reduced) full capacity level. If this were to continue in the long term, the national debt would stabilise at levels much higher than those observed today (Figure 3, solid lines), reaching levels of between 100 per cent and 200 per cent. Interestingly even with these very high levels of debt, debt interest accounts for a lower proportion of tax revenues than it did in 2019–20, and much lower than it did between the 1960s and 1980s: by 2030, no more than 3 per cent in all scenarios (Figure 4). In the longer term as older debt with higher yields is refinanced, this falls to less than 2 per cent in all scenarios, well below the threshold announced in the March budget of 6 per cent at which the government has said that it would start to act to reduce the debt-GDP ratio.¹⁷

Whether it would be fair to continue with previous policies in these circumstances is more questionable. Much of the additional debt incurred after the pandemic would be to pay for current spending that benefits current taxpayers, which may be considered to unfairly burden future generations at the expense of current ones. Although it might be considered fair to ask future taxpayers to pay to service debt incurred to deal with the impact of the pandemic, or to pay for investments that they themselves will benefit from, it is less clear that the same is true of debt incurred to pay for day-to-day spending in more normal economic times. For this reason, most fiscal frameworks have a requirement for a current budget balance or a restriction to prevent deterioration in public sector net worth (see below).

Figure 4 – If interest rates remain low, debt interest burden continues to fall despite high debt



Source: TBI calculations based on Hughes et al., (2020) and Office for Budget Responsibility (2020).¹⁸

Nevertheless, if the government were to choose not to take action in these circumstances, even in the worst-case scenario debt remains affordable – and in fact becomes substantially more affordable – in the years ahead just as long as interest rates remain at their current historic lows. In the next section, we explore what happens if interest rates were to return to more historically normal levels.

What happens if interest rates rise?

The biggest risk to the sustainability of the public finances lies in the cost of borrowing. The government is currently able to borrow very cheaply: 10-year gilt rates are currently below 0.3 per cent. This is not normal. Data from the OBR show that gilt rates have on average been in line with the rate of nominal GDP growth historically (expected to be 3.5 per cent a year in the future; 2 per cent inflation plus 1.5 per cent real growth).¹⁹ If gilt rates were to increase gradually to this level after 2025 (see assumptions in Box 1), debt servicing costs would start to increase, and without fiscal tightening measures, the public finances would move onto an unsustainable path (Figure 6, dotted lines).

In this scenario, the 6 per cent threshold for debt interest payments as a share of tax revenues would be breached at some point in the 2030s (Figure 5, dotted lines) and would go on to reach record levels. Debt interest payments would increase by 9 per cent of national income between 2030 and 2060 in the 12-month scenario, equivalent to £200 billion a year in today's terms. Clearly, this would not be sustainable.

To stabilise the debt-GDP ratio at its 2030 level in this scenario would require both immediate fiscal tightening and ongoing reductions in primary expenditure or increases in taxes to cover rising interest payments. In the 3-month scenario this would amount to 1.2 per cent of national income (£28 billion in today's terms) immediately plus 2.2 per cent of national income (£50 billion in today's terms) over subsequent decades, in the 6-month scenario 2 per cent (£46 billion) immediately and then 2.9 per cent (£67 billion), and in the 12-month scenario 2.6 per cent (£60 billion) immediately and then 3.6 per cent (£83 billion).

This kind of fiscal tightening would be politically very challenging, which underlines the dangers of becoming too complacent about high public debt levels today. In the short term, much higher debt presents no problem, but it would be unwise to operate on the assumption that this will always be the case.

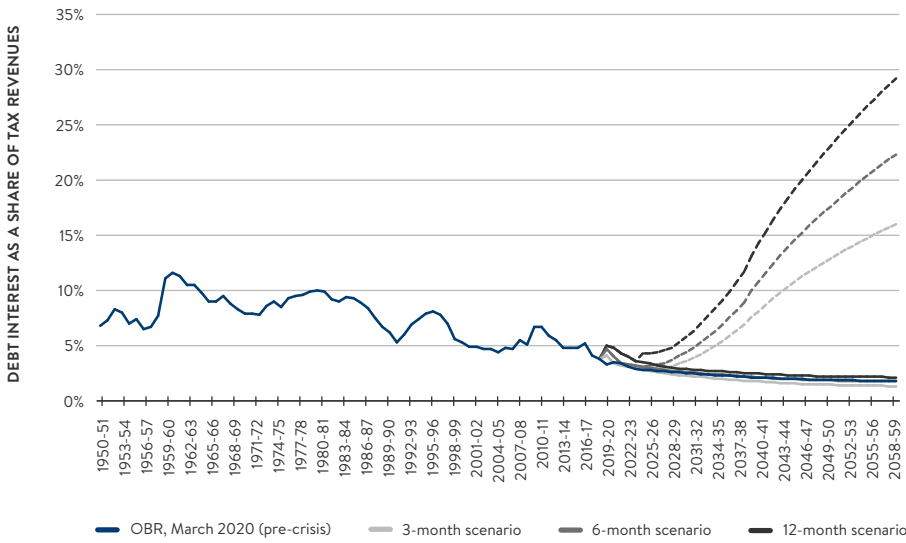
Box 1 – Debt interest assumptions

In our initial analysis, we assumed that interest rates on government debt remained at a fixed level into the indefinite future – 0.4 per cent in our post-coronavirus scenarios, and 0.9 per cent in our pre-coronavirus scenario. New debt issued after 2020–21 carries this rate, as do gilts that expire and need to be refinanced. Amounts for planned gross debt issuance for 2020–21 to 2024–25 are taken from the OBR March Economic and Fiscal Outlook, and the redemption schedule for debt after this date is taken from the Debt Management Office. Existing debt is assumed to carry an average interest rate of around 2 per cent irrespective of redemption date. When we come to examine a case where gilt rates start to increase from 2025 onwards, this becomes somewhat more complicated. The assumptions we make in this case are as follows:

- Gilt rates increase gradually from 0.4 per cent to 3.5 per cent between 2025–26 and 2040–41.
- One-third of debt issued in 2020–21 and subsequent years is issued for three years, one-third for 10 years and one-third for 20 years. This corresponds to the roughly equal split between short-, medium- and long-dated gilts.²⁰ Thus, it takes 20 years for an increase in interest rates to fully filter through into debt interest payments. In reality, some gilts are issued for 50 years or more, so our assumption does slightly accelerate this impact.
- Gilt rates do not vary by length of issuance; i.e. the yield curve is flat. Currently, longer-dated gilts have slightly higher yield than shorter ones.

When debt servicing costs increase, in our “no-response” scenario, this is added to the deficit; i.e. we assume that other items of spending and tax revenues are unaffected.

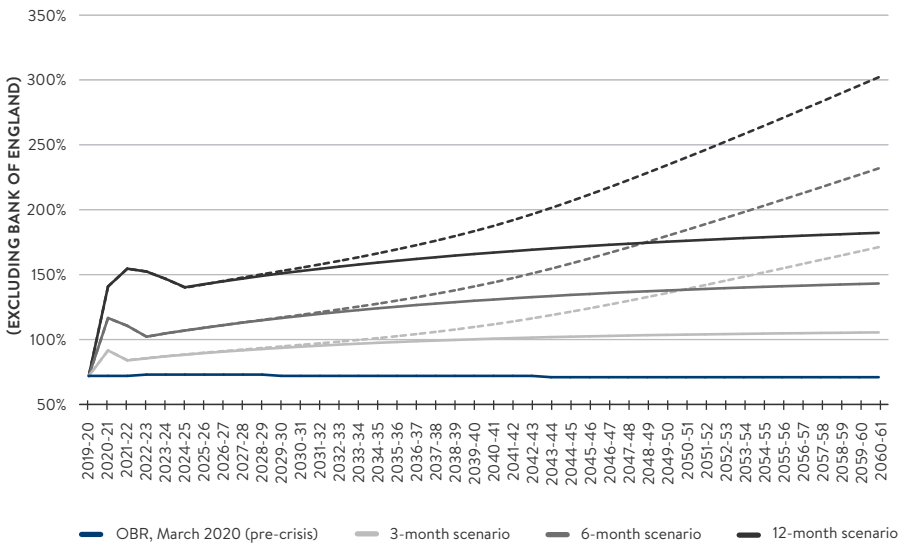
Figure 5 – Higher interest rates would increase debt servicing costs very quickly



Note: Solid lines refer to scenario where gilt rates remain at 0.4 per cent; dotted lines refer to scenario where interest rates increase as described in Box 1.

Source: TBI calculations based on Hughes et al., (2020), Office for Budget Responsibility (2020) and Debt Management Office.²¹

Figure 6 – With higher interest rates, debt would also keep rising as a share of national income



Note: Solid lines refer to scenario where gilt rates remain at 0.4 per cent; dotted lines refer to scenario where interest rates increase as described in Box 1.

Source: TBI calculations based on Hughes et al., (2020), Office for Budget Responsibility (2020) and Debt Management Office.²²

How should the government respond?

We have seen in the previous section that the cost of additional debt is limited given that interest rates on government debt are so low, but that the cost of long-term damage to the economy is large. This suggests that it is better to err on the side of delaying any fiscal tightening that may need to occur rather than tightening prematurely in a way that might leave output lower and unemployment higher for longer and potentially exacerbate the long-term economic damage.

At the same time, we have also seen that some fiscal tightening would be likely and indeed desirable if the pandemic did reduce the size of the economy on a permanent basis due to the long-term risk of interest rate normalisation.

What does this analysis mean for the management of the public finances in this parliament? There is certainly a strong case for delaying fiscal tightening until the economy fully recovers, but then gradually lowering debt as a share of national income to insure against the risk of interest rates rising again. Fiscal rules are intended to provide more concrete policy guidance that both ensures long-run fiscal sustainability and allows borrowing to stabilise the economy in response to shocks. This section examines how the government's current fiscal rules would call for policy to respond to the different scenarios we have set out, and compares the consequences of the government's rules with those of alternative rules that we have previously advocated.

The government's fiscal rules would require rapid fiscal tightening if damage were permanent:

In the March budget, the government set three fiscal rules:²⁴

- To balance the current budget by the third year of the forecast period
- To keep public sector net investment below 3 per cent of GDP on average across the five-year forecast period
- If debt interest payments exceed 6 per cent of revenues, to act to ensure that the debt-GDP ratio is falling

We have already seen that the debt interest threshold would not be breached any time soon under any of the scenarios examined. Interest rates are so low that it would take a long period of both higher debt and higher interest rates for this threshold to be triggered. This rule therefore seems unlikely to provide a constraint on policy for many years to come. If the size of the economy in the long-run were unaffected, the other rules would be met also as nothing would have changed for future years compared to what was expected in March (though additional taxes would be required for any higher current spending that was considered necessary to deal with gaps in public spending that have been highlighted by the pandemic).

But if there were permanent damage to the size of the economy from the pandemic of the scale envisaged by the Resolution Foundation,²⁵ quite substantial fiscal tightening would be required to ensure that the current budget balanced within three years. The OBR forecast a current budget surplus of just 0.8 per cent of GDP in its latest pre-crisis forecast,²⁶ so to meet this target would require tax rises or spending cuts of between £35 billion in the 3-month scenario to around £100 billion in the 12-month scenario in relatively short order. This risks leaving output lower and unemployment higher for longer and causing more damage to the long-term capacity of the economy.

Of course, it is highly unlikely that the government would choose to follow its fiscal rules in these circumstances for these reasons. In the 6-month scenario, it would require a similar pace of fiscal consolidation to that which occurred after 2010 to balance the current budget within three years, and considerably faster in the 12-month scenario. More likely, yet another set of fiscal rules would be consigned to the scrapheap. This demonstrates the weakness of fiscal rules that require deficit targets to be hit within short time frames. But not knowing how the government would respond generates considerable uncertainty, undermining the purpose of having fiscal rules in the first place and reducing confidence among taxpayers and investors. As we set out below, our own fiscal framework offers a better approach to the situation.

Our all-weather fiscal framework provides a different way out:

On 21 February, TBI published an “all-weather” fiscal framework “that could give voters and market participants confidence about the long-term orientation of policy while allowing the necessary flexibility to respond more optimally to both cyclical and secular slowdowns.”²⁷ The coronavirus pandemic puts this claim to a very rigorous test. The framework has four components:

- **A long-term target for government debt:** The chancellor would articulate an intention to reach a specified level of debt-to-GDP in the long run. This would be translated into the implied baseline deficit limit by the OBR.
- **A real-time debt affordability test:** The baseline deficit limit would be adjusted to reflect the affordability of additional borrowing, being higher when (as at present) the long-term cost of borrowing over 10 years is lower than the sustainable growth rate of the economy.
- **An escape clause:** During a downturn when output was more than 1 per cent below its potential level, the rules would not apply to allow active counter-cyclical policy to stabilise the economy.
- **A net worth goal:** To encourage a focus on investment, public sector net worth would have to increase over five years (in other words, the value of public assets must rise more quickly than that of public debt).

The TBI fiscal framework would thus allow some breathing space in the immediate post-crisis period when the extent of long-term damage to the economy is less clear. Fiscal policy would be allowed to support the economy until it was at full capacity. (The same is true of other proposed fiscal rules that have a similar escape clause when interest rates are at their zero lower bound, when monetary policy cannot act to offset fiscal tightening, see for example Hughes et al., 2019).²⁸ The costs of leaving fiscal tightening too late in terms of higher debt servicing costs are likely to be much smaller than the costs of tightening prematurely, which could lower output and increase unemployment.

But once the likely scale of the long-term damage to the economy from the pandemic had become clear and the economy was close to operating at full capacity, there would be a need for some fiscal tightening to prevent public sector net worth declining. Since this rule is very similar to the government’s requirement for the current budget to balance – borrowing to pay for net investment in infrastructure has a neutral impact on net worth, whereas current spending does not produce an offsetting asset – a similar amount of fiscal tightening would ultimately be required as under the government’s fiscal rules.

The government would then have to choose a long-run target level for the debt-GDP ratio. The OBR forecast in March that debt would stabilise at 75 per cent of GDP,²⁹ suggesting that the government would be comfortable with this as a long-run level. But there are arguments for choosing a higher level – at 100 per cent of GDP, debt interest payments would still account for less than 10 per cent of tax revenues (the level that the Labour Party proposed as a maximum in the 2019 general election manifesto, and suggested by the Resolution Foundation)³⁰ even if gilt rates returned to their long-run average level – or a lower one. The government’s fiscal rules also suggest that they do not want interest costs to exceed 6 per cent of tax revenues, which would require a debt-GDP ratio of 65 per cent in the long run if they believed that gilt rates would eventually revert to the rate of nominal GDP growth.

Whatever long-term target was chosen, however, current very low interest rates would allow higher investment spending. If the long-term debt target were 75 per cent of GDP and gilt rates were 0.4 per cent, the adjusted deficit limit would be about 3.6 per cent of GDP.³¹ Thus, in the short term at least, our fiscal framework would allow the government to exceed its limit on public sector net investment of 3 per cent of GDP by about 20 per cent to take advantage of low interest rates. The crisis may well have affected views of the type of investment that should be undertaken – upgrading fibre broadband networks, cloud storage, software and data infrastructure might now be seen as more important than roads and railway lines (Bennett and Innes, 2019)³² – but it is important to realise that this flexibility exists.

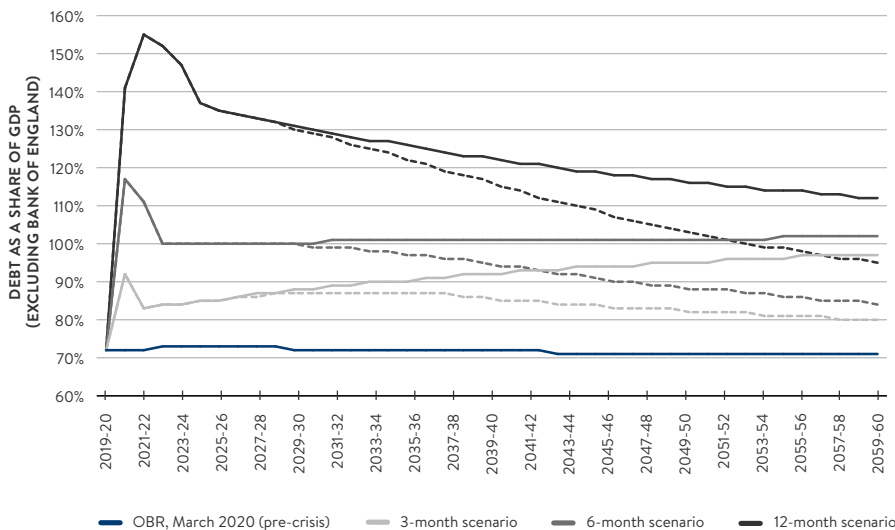
Under our all-weather fiscal framework with the assumptions outlined above, if interest rates remained at these historically low levels, debt would stabilise at around 100 per cent of GDP in all scenarios (Figure 7, solid lines). This may seem counterintuitive if the long-term target for debt was 75 per cent of GDP, but this simply follows from the adjustment to the deficit limit to take account of debt financing costs.

The rationale for allowing higher debt when interest rates are low is that it would be possible to take action in good time if interest rates were to start rising. If interest rates were to start rising from 2025 to reach 3.5 per cent by 2040 as described in Box 1 above, the adjusted deficit limit would gradually reduce from 3.6 per cent of GDP to 2.6 per cent over this period. This would put the debt-GDP ratio on a downwards path (Figure 7, dotted lines)

and prevent debt financing costs from rising too high (Figure 8, dotted lines). Although the government's limit for debt interest costs of 6 per cent of tax revenues would be exceeded in each scenario at some point in the late 2030s or early 2040s, by this point gradual fiscal tightening would have been occurring for at least a decade, and the debt-GDP ratio would already be on a downward path well before this level of debt interest payments was reached.

This demonstrates two further advantages of our fiscal framework – adjustment begins as soon as interest rates start to rise rather than waiting until an arbitrary level of debt interest payments is reached, and this adjustment can occur more gradually. Moreover, in each case the debt interest to revenue ratio remains below 10 per cent and in line with historical norms.

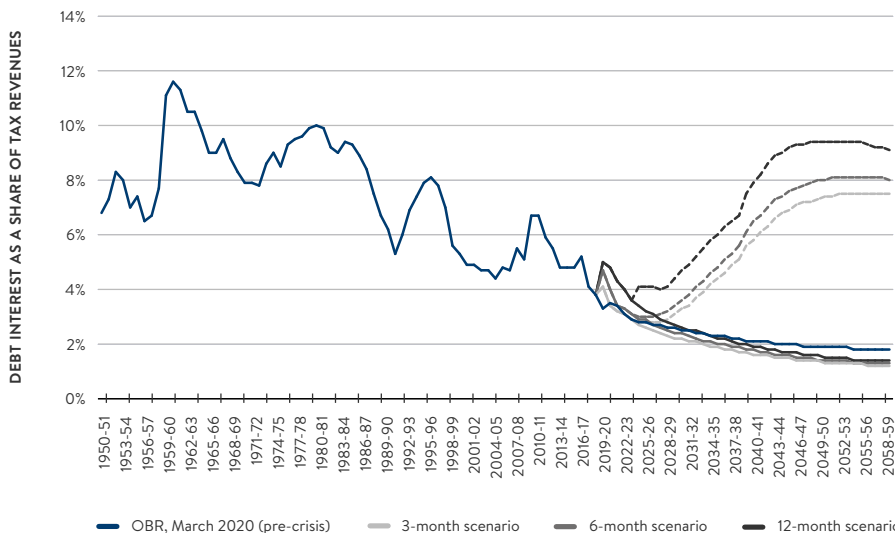
Figure 7 – Under our fiscal framework, higher interest rates force lower deficits and debt



Note: Solid lines represent scenario where gilt rates remain at 0.4 per cent throughout, dotted lines where they gradually increase to 3.5 per cent between 2025–26 and 2040–41.

Source: TBI calculations based on Morgan and Mulheirn (2020), Hughes et al. (2020), Office for Budget Responsibility (2020) and Debt Management Office.³³

Figure 8 – This prevents debt interest payments from rising too high



Note: Solid lines represent scenario where gilt rates remain at 0.4 per cent throughout, dotted lines where they gradually increase to 3.5 per cent between 2025–26 and 2040–41.

Source: TBI calculations based on Morgan and Mulheirn (2020), Hughes et al. (2020), Office for Budget Responsibility (2020) and Debt Management Office (various).³⁴

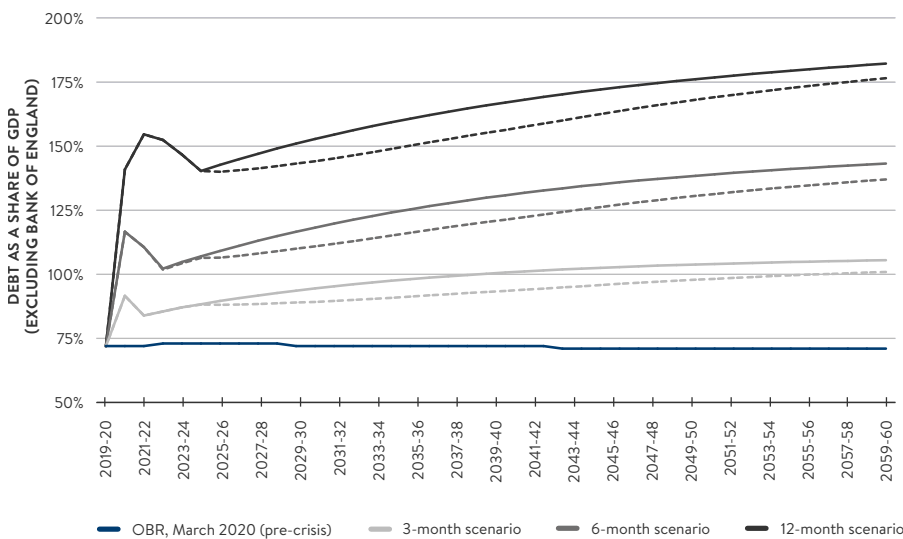
To summarise, there is little risk to the long-term sustainability of the public finances so long as interest rates remain low. But that’s probably an unwise bet to make. We will need to take precautions once the economy is back to full strength, and rein in the debt-GDP ratio, even if that doesn’t mean aiming for levels of debt similar to those we saw before 2008. So how?

Higher inflation as a way out?

In view of the high level of debt locked in at low interest rates, policymakers might be tempted to increase the inflation target to “inflate the debt away” as an alternative to tightening fiscal policy.

At most, however, this would only reduce debt levels temporarily. Assuming real gilt rates remained unchanged (i.e. gilt rates increase in line with the increase in inflation), the lower value of existing debt relative to the size of the economy is eventually offset by higher interest rates on new debt, which leads to higher deficits and thus debt levels gradually increasing without further policy action. If the Bank of England’s inflation target were raised to 4 per cent in 2025 (Figure 8, dotted lines), debt would increase more slowly in the subsequent decade as a share of GDP, but would then increase more quickly again and eventually end up at the same level as if inflation had remained at 2 per cent.

Figure 9 – Higher inflation does not significantly reduce debt for very long



Note: Dotted lines represent scenario where inflation rises to 4 per cent in 2025–26 and remains at this level; solid lines represent baseline scenario with inflation at 2 per cent. No fiscal tightening in either scenario.

Source: TBI calculations based on Morgan and Mulheirn (2020), Hughes et al. (2020), Office for Budget Responsibility (2020) and Debt Management Office (various).³⁵

Why is higher inflation not more effective at reducing debt levels relative to national income? First, around a quarter of debt consists of index-linked gilts (Debt Management Office, 2020).³⁶ Higher inflation immediately increases the interest rate on this debt, so there is nothing to be gained as far as this portion of the national debt is concerned. Second, as we have seen, interest rates are so low that the burden of

debt repayments would be very small and falling even without higher inflation. Since gilt rates are below the rate of nominal GDP growth – that is, the numerator of the debt-GDP ratio grows more slowly than the denominator if debt is rolled over – the additional debt generated during the pandemic will simply “melt away” without any need for higher inflation to help it on its way.

What form should fiscal tightening take?

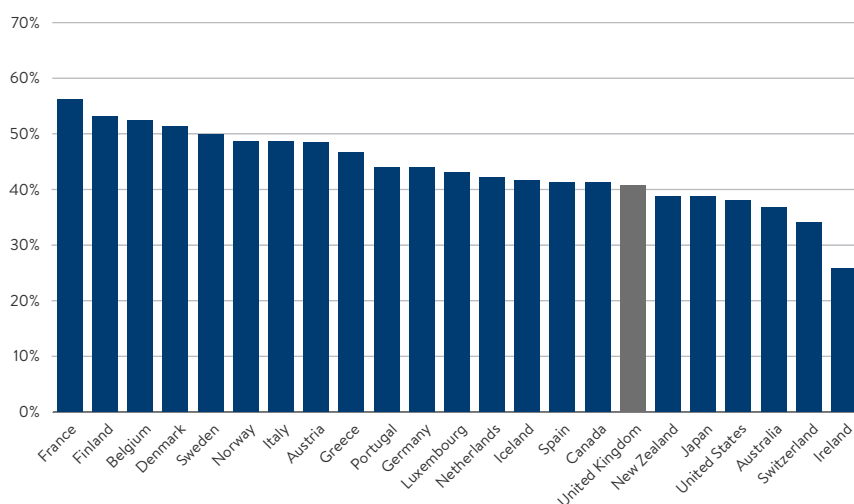
Since some degree of fiscal tightening would be desirable in the medium term to prevent the national debt rising too high and public sector net worth declining if the coronavirus pandemic does do permanent damage to the economy, the question would then arise as to which taxes would be increased or which areas of spending would be reduced.

Scope for reducing public spending over the next few years seems limited. In the past few decades, increased spending on health and pensions has been offset by spending a lower share of national income on other areas (Crawford and Johnson, 2011),³⁷ but this strategy now seems to have run out of road.

Over the past ten years, most government departments have seen big reductions in spending: Outside of international development and health, departments' budgets are less in real terms than they were in 2010–11 (Crawford and Zaranko, 2019)³⁸

and it was already clear that additional resources would need to be provided to fill gaps in these areas before the pandemic – all departments saw increased budgets in 2020–21 following Spending Round 2019. Moreover, spending on health and social care already appeared inadequate before the pandemic, with falling numbers of elderly people receiving care (Bottery and Babalola, 2020)³⁹ and health spending only just keeping up with demographic pressures (Stoye and Zaranko, 2019).⁴⁰ Shortcomings in the ability of the social care system to prevent coronavirus outbreaks and unpreparedness for a pandemic in the NHS have only exacerbated these concerns. Moreover, public spending in the UK is well below the level in other Western European countries (Figure 10) and in line with those of other English-speaking countries. In the long run, we would expect spending on health and education to rise, not fall, partly as a result of an ageing population (Office for Budget Responsibility, 2018)⁴¹, and partly because demand is likely to rise as incomes increase over time.

Figure 10 – Public spending in the UK is low relative to other Western countries (% of GDP, 2018 or latest year)

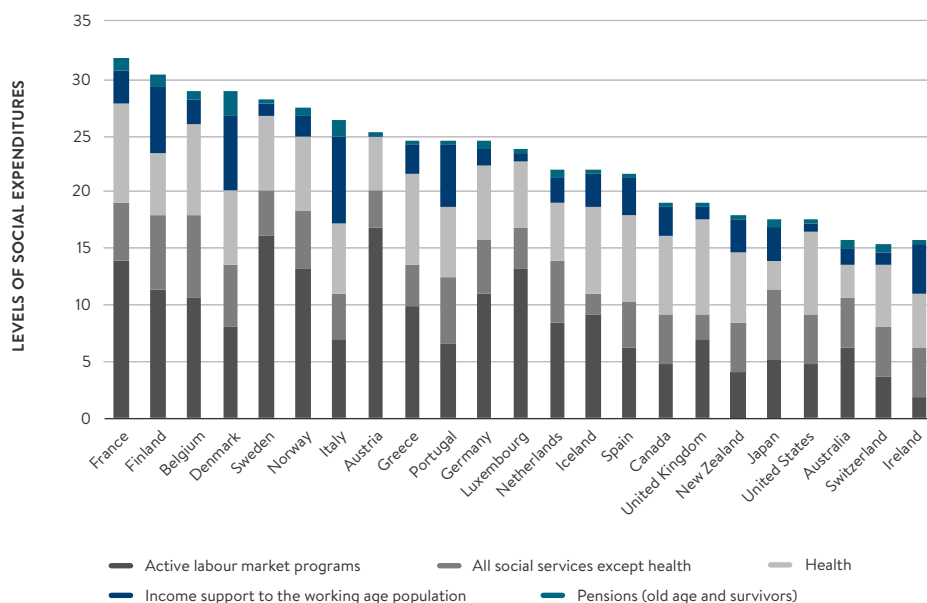


Source: OECD (2019).⁴²

Reducing social security benefits would be another way of reducing government spending, but again the scope for doing so seems limited. The generosity of the social security system for those of working age has been significantly reduced over the past decade (Bourquin, Keiller and Waters, 2019)⁴³, and increases in the generosity of benefits that have been introduced during the pandemic that are supposed to be temporary may prove hard to reverse. State pensions and pensioner benefits have not been affected as greatly, but attempts to cut their

generosity risk undermining the great progress that has been made in reducing pensioner poverty, particularly as future cohorts of pensioners are likely to have lower entitlements to state and private pensions than those who have recently retired (Hood and Joyce, 2013).⁴⁴ Moreover, spending on cash transfers in the UK is not high relative to other developed countries: Again, the UK's spending on cash transfers is in line with that of other English-speaking developed countries and below that of most other Western European countries (Figure 11).

Figure 11 – Levels of social expenditures are low relative to those of other Western European countries (% of GDP, 2016 or latest data)



Note: Data for Australia, New Zealand and the United States refer to 2016, otherwise they refer to 2015. Income support to the working-age population refers to spending on the following SOCX categories: incapacity benefits, family cash benefits, unemployment and other social policy areas. Other social services refer to services for the elderly, survivors, disabled, families, housing and other social services.

Source: OECD (2019).⁴⁵

These constraints will almost certainly force policymakers to look at tax rises if permanent damage to the economy reduces tax revenues, and to pay for additional spending on health and social care, the need for which has been highlighted during the pandemic. But rather than simply increasing tax rates across the board, we should take this opportunity to correct the anomalies in the tax system and increase taxes on activities that are relatively undertaxed – for example, self-employment and capital gains (Advani and Summers, 2020)⁴⁶ – or which are less responsive to higher taxes, such as land and property. In future work, we will develop a tax strategy for the 2020s that takes into account the need to raise revenue but also deals with these anomalies.

At the same time, if people are asked to pay higher taxes, they will rightly demand that this money is spent as effectively as possible. Higher taxes should be accompanied by a comprehensive programme of public sector reform, building on the lessons learned during the lockdown period, particularly around the digital delivery of services (Macon-Cooney, 2020).⁴⁷

Conclusions

The partial shutdown of our economy and additional spending on compensation measures for those who have lost their jobs and income will lead to extraordinarily high budget deficits in the UK, potentially for some time. This will lead to a substantial increase in the size of the national debt.

How much debt will increase remains unclear. In this paper, we have considered scenarios where the national debt excluding Bank of England interventions increases from around 72 per cent to between 90 per cent and 140 per cent of GDP. The range of these estimates shows how much uncertainty remains about how long social distancing and business closures will be required. Finding a vaccine or therapeutic treatment for Covid-19 early would enable a swift return to normality and might even lead to a rush of additional spending among those who have been able to keep working throughout the crisis. On the other hand, if it takes longer than expected to develop a vaccine or treatment and there is a second wave of infections, large parts of the economy will be shut down for much longer, and short-term budget deficits and debt levels will be much higher.

In itself though, we have seen that this additional debt will do little to affect the long-term sustainability of the public finances. With interest rates on government debt so low, total debt servicing costs are forecast to account for a lower share of tax revenues than they did last year. Moreover, if the government continued to run deficits at the levels planned before the pandemic, debt-GDP ratios would fall relatively quickly, below 100 per cent of GDP by around 2040.

Risks remain to the public finances, however. It is likely that the pandemic will cause some permanent damage to the economy, reducing tax revenues. In the worst-case scenario we examine, the national debt could reach levels of up to 200 per cent of annual GDP. How much permanent economic scarring there will be is far from clear though, and it is unlikely to become so for years to come, but minimising it is the central task of economic policy during the acute and recovery phases of the crisis.

The chancellor recognises this. In his evidence to the House of Lords Economic Affairs Committee on 21 May, he said that “we will have increased debt as a result of the interventions this year, but in the medium term what will matter is the size of our economy. What kind of structural deficit, or not, are we looking at as a result of any scarring that might have happened?”⁴⁸

Nevertheless, our analysis shows that even such a historically high debt stock would be a relatively light burden given the current low interest rates. With limited prospects of this changing any time soon, it would be better for the government to err on the side of removing fiscal support only once the recovery is complete, rather than removing it too quickly and risking long-term damage to both the economy and the public finances.

But higher debt levels are not without risk as the public finances would then become very sensitive to changes in interest rates on government borrowing. A return to more historically normal interest rates on government debt would swiftly put the public finances on an unsustainable path. Consequently, while we should take advantage of low interest rates now, we should be careful not to become complacent about their future path and it would be unwise to tolerate too high a debt-GDP ratio on an ongoing basis.

In this context, the government’s current fiscal rules appear too restrictive in the short term and could undermine the recovery by requiring rapid fiscal tightening to balance the current budget. In the worst-case scenario we examine, where social distancing has to be in place for a long period of time and there is a substantial hit to the economy of 7 per cent of national income, to balance the current budget would require tax rises or spending cuts of nearly £100 billion in today’s terms in short order. Such a swift fiscal tightening risks leaving output lower and unemployment higher for longer, and might potentially exacerbate any long-term damage to the economy.

We argue that our “all-weather” fiscal framework⁴⁹ provides a better blueprint for the years to come:

- First, decisions on the scale of fiscal tightening should wait until the extent of damage to the economy has become clear and the economy is operating at close to its potential output. The costs of acting too late – additional debt that will have to be serviced at very low interest rates – are small relative to the costs of premature tightening, which could leave output lower and unemployment higher for longer.
- In the medium term, the current budget should balance – but so long as interest rates remain low, there is scope for additional borrowing to fund public sector investment.
- If interest rates start to increase, borrowing should gradually reduce to prevent debt servicing costs rising too high and put debt on a downward trajectory towards a long-term target.

In the current circumstances, following a decade of austerity that has led to threadbare public services and left the country unprepared for a pandemic, tax rises are likely to form the lion’s share of any fiscal adjustment required. But it will also be important to take this as an opportunity to reform both the tax system and the delivery of public services to ensure that revenue is raised in the most efficient way, and that taxpayers receive value for money in exchange for larger contributions.

Endnotes

Endnotes

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2 Hughes, R. et al. (2020) 'Doing more of what it takes: Next steps in the economic response to coronavirus', Resolution Foundation, <https://www.resolutionfoundation.org/publications/doing-more-of-what-it-takes/>.

3 Hughes, R. et al. (2020) 'Doing more of what it takes: Next steps in the economic response to coronavirus', Resolution Foundation, <https://www.resolutionfoundation.org/publications/doing-more-of-what-it-takes/>.

4 Note that this partly arises because GDP falls significantly in 2020–21 before bouncing back rapidly in 2021–22, so the deficit appears particularly large as a share of GDP in 2020–21 but then shrinks in 2021–22.

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7 In these scenarios, the economy grows more quickly between 2021–22 and 2025–26 and is the same size in 2025–26 as was expected by the OBR at the time of the March budget.

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15 This arises because most public spending is set in cash terms and so becomes a larger share of national income if GDP is lower. With total government spending around 40 per cent of GDP, spending increases mechanically by about 0.4 percentage points (ppts). But lower national income also reduces tax revenues as a share of GDP as the tax system is progressive, and increases entitlements to means-tested benefits. Helgadottir et al. (2012) estimate that tax revenues as a share of GDP fall by 0.2ppts for every 1 per cent fall in GDP, and spending on social security benefits and debt interest increases by 0.1ppt.

16 In other words, spending levels announced in the March budget for 2021–22 and onwards are maintained, but there are no further changes to public spending or taxation after that point. Note that this is different from the assumption of Hughes et al., (2020), who assume that the government does not go ahead with the additional spending announced in the March budget.

17 Office for Budget Responsibility (2020) 'Economic and fiscal outlook: March 2020' (CP 230), <https://obr.uk/download/economic-and-fiscal-outlook-march-2020/>.

18 Hughes, R. et al. (2020) 'Doing more of what it takes: Next steps in the economic response to coronavirus', Resolution Foundation, <https://www.resolutionfoundation.org/publications/doing-more-of-what-it-takes/>; Office for Budget Responsibility (2020) 'Economic and fiscal outlook: March 2020' (CP 230), <https://obr.uk/download/economic-and-fiscal-outlook-march-2020/>.

19 Office for Budget Responsibility (2017), 'Fiscal risks report - July 2017' (CM 9459), <https://obr.uk/download/fiscal-risks-report-july-2017/>.

- 20** HM Treasury (2020) ‘Debt management report 2020–21’, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/871876/03032020_DMR_off-sen_v2_FINAL_with_jpegs_v2.pdf.
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- 23** See Morgan, J. and Mulheirn, I. (2020) ‘Whatever the weather: future-proof budget rules’, Tony Blair Institute for Global Change, <https://institute.global/policy/whatever-weather-future-proof-budget-rules>.
- 24** See Office for Budget Responsibility (2020) ‘Economic and fiscal outlook: March 2020’ (CP 230), <https://obr.uk/download/economic-and-fiscal-outlook-march-2020/>.
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- 26** Office for Budget Responsibility (2020) ‘Economic and fiscal outlook: March 2020’ (CP 230), <https://obr.uk/download/economic-and-fiscal-outlook-march-2020/>.
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- 30** See Hughes, R. et al. (2019), ‘Totally (net) worth it: The next generation of UK fiscal rules’, Resolution Foundation, <https://www.resolutionfoundation.org/publications/totally-net-worth-it>.
- 31** The baseline deficit limit is $75\% \times 3.5\% = 2.6\%$. This is then adjusted by the ratio of future potential output growth (FPO) to real financing costs (RFC), both compounded over ten years to give an adjusted limit of $2.6\% \times 1.16/0.891 = 3.6\%$.
- 32** See Bennett, A. and Innes, K. (2019) ‘Economic infrastructure for the internet era’, Tony Blair Institute for Global Change, <https://institute.global/policy/economic-infrastructure-internet-era>.
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