## **2021 Fiscal Risks Report**

# Transcript of Presentation by Richard Hughes, Chair, Office for Budget Responsibility

# 6 July 2021

# 1. Opening slide

## 2. Introduction

- Good morning everyone and welcome to this online presentation of our 2021 Fiscal Risks Report. Thank you for joining us.
- I am going to take you through the highlights of the report and then we'll go into an online question and answer session. My slides and speaking notes will be on the website at the end of this event.
- If you would like to ask a question at any point, please use the Q&A feature, and Charlie, Andy, and I will try to answer as many as possible. Please give your name and institution.

# 3. Background on the Fiscal risks report

- Let me start by providing some background on this report which differs in nature from our biannual forecasts.
- The OBR was first tasked with producing a Fiscal Risks Report in 2015 as part of the Government's efforts to improve the surveillance of potential threats to its fiscal plans in the aftermath of the financial crisis.
- A few other countries including the Netherlands and Finland produce similar reports. But the
  UK is unique in outsourcing its production to an independent body as a means of ensuring
  objectivity and transparency in the identification and evaluation of risks.
- Our first two biennial FRRs in 2017 and 2019 took an encyclopaedic approach to cataloguing the universe of potential threats to the public finances.
- Between them they identified 97 different fiscal risks ranging from nuclear decommissioning to a No Deal Brexit.
- But since our last report, the UK and the world experienced the largest peacetime economic and fiscal shock in over three centuries.
- Like most, but admittedly not all, economic forecasters we didn't see coronavirus coming. A global pandemic was not on our list of 97 risks.

- That said, the stress test included in our 2017 report did presage the roughly 30 per cent of GDP rise in government debt resulting from the pandemic, albeit as a result of a different combination of shocks.
- This underscores the value and importance of exploring the implications of major shocks to the public finances, even if their precise nature, timing, and magnitude is uncertain.
- With that goal in mind, this edition of the FRR departs from the encyclopaedic approach of the past and focuses instead of three large, and potentially catastrophic, sources of fiscal risks.
- The first is coronavirus itself. Chapter 2 of the report looks back at the fiscal impact of the pandemic in historical and international context. It also considers the potential legacy of the pandemic for the public finances over the medium and long term. And it concludes by drawing a set of lessons from the pandemic for how forecasters and policymakers should approach other potentially catastrophic fiscal risks.
- Chapter 3 looks ahead to the fiscal risks posed by climate change, and the economic and fiscal implications of alternative paths to meeting the Government's legislated goal of reducing net greenhouse gas emissions to zero by 2050.
- And with the pandemic having pushed the UK government's debt above 100 per cent of GDP for the first time since the 1960s, Chapter 4 considers the fiscal risks presented by a change in the cost of that debt by exploring alternative scenarios for the future path of interest rates, inflation, and growth.
- But because the other 97 risks identified in previous FRRs have not gone away just because one major risk has crystallised, Chapter 5 of the report provides an update on how these other risks have fared over the past two years.
- While all of the analysis and conclusions we present here are our own, in preparing this
  report we benefitted enormously from the advice and support of officials in the Treasury,
  Bank of England, other Government Departments, the Climate Change Committee and
  experts across a range of universities and think tanks.
- And none of this would have been possible without the tireless efforts of OBR staff, for which Andy, Charlie, and I are enormously grateful, particularly at the end of such a demanding 16 months.

# 4. Is the world becoming a risker place?

But having faced two 'once in a century' economic shocks in just over a decade, in the form
of the 2008 financial crisis and 2020 coronavirus pandemic, we start out by asking the more
general question of whether the world is becoming a riskier place for those managing the
public finances.

- And while the arrival of two major economic shocks in quick succession does not necessarily
  constitute a trend, there are several reasons to believe that advanced economies are
  increasingly exposed to large, and potentially catastrophic, risks.
- First, while the threat of armed conflict appears to have diminished in the first part of this century (at least in comparison with the beginning of the last one), the past twenty years has seen an increase in the frequency and severity of other major risks events such as episodes of extreme weather and outbreaks of infectious diseases.
- This appears to reflect a combination of
  - o an increase in *man-made* risks (such as climate change and cyberattacks)
  - coupled with growing numbers of people living closer to the sources of natural risks (such as floodplains and isolated ecosystems)
  - and deepening global interconnectedness which allows risk factors (be they biological or computer viruses) to be quickly transmitted between countries.

## 5. Are governments more exposed to risks?

- As countries' exposure to catastrophic risks increases, so do the associated risks to their public finances.
- This is because such risks are not only more disruptive to the economies that generate governments' revenues, but also because they are more likely to overwhelm private insurance mechanisms, forcing governments to step in as insurer of last resort.
- As can be seen from this chart of the evolution of UK government debt since the turn of the century, the triggering of this insurer of last resort function can have dramatic and lasting consequences for the government's finances.
- Indeed, of the 80 per cent of GDP increase in public debt since the turn of the century, two thirds of that rise occurred in just four years at the height of the financial crisis in 2008-09 and coronavirus pandemic in 2020-21.
- So it's no exaggeration to say that any understanding of the fiscal history of the 21<sup>st</sup> century needs to start from an understanding of major crises and their consequences for the public finances.

## 6. Coronavirus economic impact

- With that in mind, let me turn to our evaluation of the economic and fiscal legacy of the coronavirus pandemic.
- The pandemic brought about the largest and most synchronised peacetime shock the world economy has faced since the Great Depression of the 1930s.
- While few countries escaped its economic consequences, the UK was hit harder than most, suffering the second deepest recession among advanced economies after Spain.

- The relative severity of the downturn in the UK is likely a consequence of several factors, including:
  - First, the fact that the UK was relatively hard hit by the virus itself, suffering some the highest rates of infections, hospitalisations, and deaths in 2020.
  - Second, and related, the UK spent more time under stricter public health restrictions than most other advanced economies last year.
  - Third, the UK was more economically vulnerable to the pandemic due to the relatively large share of social consumption in our output.

# 7. Coronavirus fiscal rescue packages

- Reflecting its outsized impact on the UK economy, the pandemic also imparted an
  extraordinary shock to the UK's public finances, with borrowing reaching a peacetime high
  of around 15 per cent of GDP in 2020-21, the second highest deficit among 35 advanced
  economies.
- Unlike during the financial crisis, whose fiscal impact was concentrated on the receipts side
  of the budget, the vast bulk of the increase in borrowing during the pandemic was due to
  discretionary increases in government spending.
- The UK government's coronavirus rescue package was the second largest in the G7 after the
  US, and it was heavily skewed toward spending on healthcare compared with rescue
  packages in other countries.
- As you can see from the green blocks on this chart, we spent three times more on support to the health sector during the pandemic than the average advanced economy.

## 8. Health system capacity in OECD countries

- The relatively large scale of the UK's fiscal policy response to the pandemic is also likely to be a consequence of a number of factors including:
  - First, the UK economy and health services being relatively hard hit by the pandemic itself requiring a more fulsome fiscal response.
  - Second, as shown on this slide, the UK entered the pandemic with relatively little spare capacity in the health service, with fewer acute and intensive care beds per capita than the average OECD country. So more capacity had to be 'bought in' to cope with the demands of the pandemic.
  - Third, the UK's pre-pandemic system of working age welfare offered relatively low income replacement rates for those falling out work. This meant that a more generous temporary income insurance system (in the form of the furlough scheme)

had to be rapidly bolted on to the existing Universal Credit regime to prevent many households suffering large falls in income while temporarily away from work.

# 9. Coronavirus legacy spending

- A relatively rapid economic recovery, coupled with the withdrawal of this pandemic-related fiscal support, is expected to generate a sharp fall in borrowing over the next few years and enable the Chancellor to meet his objectives of balancing the current budget and getting debt falling by the middle of this decade.
- But there are significant risks to the Government's medium-term fiscal plans from the legacy of unfunded pressures that the pandemic may leave behind for public services.
- Governments always enter Spending Reviews with pressures that exceed the amounts the Treasury wishes to allocate. But going into the next Spending Review this autumn, these pressures look particularly challenging.
- We estimate that the Government could face around £10 billion a year in pandemic legacy pressures in just three areas. These include:
  - £7 billion of unfunded pressure on the NHS from the need to pay for standing test and trace and revaccination programmes; the consequences of the pandemic for individuals' physical and mental health; additional spare capacity to cope with possible future infectious disease outbreaks; and to deal with the backlog of 3.5 million elective treatments built up during the pandemic.
  - They also include around £1 billion per year for catch-up schooling for pupils who
    have missed out on between two and three months of education during the
    pandemic.
  - And another £2 billion per year to fill the holes in the fareboxes of the railways and Transport for London left by the collapse in passenger numbers over the last 18 months, which remain 50 per cent below their pre-pandemic levels.
- And this is by no means an exhaustive list. There are pandemic-related backlogs in the courts too. And that's before looking at the cost of returning overseas development spending to 0.7 per cent of national income or reforming adult social care.
- Choices made at the Spending Review and the Budget will determine the extent to which
  these pressures are absorbed, or whether they end up hitting borrowing, taxes, or other
  spending programmes.

# 10. Coronavirus economic legacy

 But perhaps more important for the long-term sustainability of the public finances than these legacy pressures on public services is the lasting impact of the pandemic on the economy.

- Our last two forecasts have included a range of scenarios for the long-run economic
  consequences of the pandemic. These range from an upside scenario in which potential GDP
  returns to its pre-pandemic path and a downside scenario in which 6 per cent of output is
  permanently lost as a result of coronavirus.
- Our central forecast assumes 3 per cent scarring of potential output, which puts us fairly
  close to the consensus of independent forecasts for GDP in the medium term, even if our
  most recent forecast appears to have been too pessimistic about the initial post-lockdown
  rebound in output in the first part of this year.
- Evidence to date on the potential degree of long-run scarring has been mixed. There has been some upside news on the paths of both GDP and investment, but against that there has been downside news on net outward migration over the past year.
- And this month saw the beginning of the withdrawal of government support through the
  furlough scheme, although it will not be fully closed until the end of September. While the
  numbers on furlough have fallen from a peak of around 9 million in April of last year, over
  2½ million people, or around 9 per cent of payrolled employees, were still receiving
  government support in May of this year.
- We will be reviewing our judgment about the long-run supply consequences in our forecast for the autumn budget once government support is fully withdrawn and we have a clearer picture about the underlying strength of the post-pandemic economy.

## 11. Climate change

- Having reviewed how the UK economy and public finances weathered the coronavirus pandemic in Chapter 2, Chapter 3 looks ahead to the challenges, choices, and trade-offs involved in dealing with another major global threat – that of climate change.
- As fiscal risks, pandemics and climate change share several characteristics in common:
  - There is a high degree of uncertainty about their timing and associated costs.
  - They are characterised by tipping points beyond which those costs can begin to escalate dramatically.
  - They require a society-wide effort to resolve within a given country.
  - But they are also both global in nature and beyond the capacity of any single country to solve unilaterally.
- Humanity has already emitted enough greenhouse gases into the atmosphere to take global temperatures to 1 degree Celsius above pre-industrial levels. And on existing policies, we are on track for temperature rises of up to 3 degrees – or even more if irreversible tipping points are crossed.

• To keep the increase in global temperatures to the 1½ to 2 degree limit set in Paris six years ago, global CO<sub>2</sub> emissions need to be reduced to zero by the middle of this century – a goal that is increasingly being embodied in national targets and laws around the world, including here in the UK.

# 12. Climate change and the path to net zero

• While the UK accounts for an admittedly small share (just 1 per cent) of global greenhouse gas emissions, we have made significant progress in reducing our own carbon footprint, cutting emissions by 44 per cent since 1990 – more than any other G7 country.

# 13. Contributions to cutting UK CO<sub>2</sub> emissions

- However, phasing out of coal-fired power plants accounted for more than half of this reduction in emissions over the last 30 years.
- And getting the rest of the way to the Government's legislated target of net zero emissions by 2050 will require a much broader effort to decarbonise the rest of power generation as well as transport, industry, and domestic and commercial heating.

## 14. Whole economy cost of reaching net zero

- To understand the economic implications of this transition, we have drawn on the scenarios
  prepared by the Climate Change Committee for the whole economy cost of reaching net
  zero by 2050 and separate Bank of England scenarios for the path of total output consistent
  with that goal.
- In some sectors of the economy, such as transport shown here in green, decarbonisation pays for itself as improvements in battery technology drive the lifetime cost of electric vehicles below those of petrol driven cars.
- But in other areas, such as the replacement of household gas boilers with zero carbon alternatives (shown here as part of the yellow bars), there are significant net costs which society will need to bear if it is to successfully decarbonise.

#### 15. Fiscal costs of reaching net zero

- The fiscal implications of making the transition to net zero partly depend on which of these costs the state choses to take on.
- In our report we assume that the government picks up about a quarter of the whole economy cost of the transition, including about 45 per cent of the cost of decarbonising buildings which make up the bulk of the *gross* cost to the public sector of around £350 billion over 30 years which is about 0.4 per cent of GDP a year if we start now.

## 16. Fiscal opportunities on the way to net zero

- However, the *net* fiscal cost of the transition to net zero also depends on what happens on revenue side of the ledger.
- And climate change presents both threats and opportunities to government receipts.
- At risk are the 1½ percent of GDP worth of revenue that the government currently collects in fuel duty and vehicle excise duty shown here in green.
- With the sale of petrol driven cars banned from 2030, these revenues are almost certain to disappear as people shift to driving electric vehicles that don't pay these taxes.
- The key revenue opportunity presented by climate change is the opportunity to tax carbon emissions more heavily as a means of encouraging the adoption of zero carbon technologies.
- As shown in the yellow bars, this has the potential to raise a roughly equivalent amount of revenue but on a declining profile as the economy decarbonises.
- But the front-loaded profile of net carbon revenues could help the government to defray some of the upfront investment costs shown on the previous slide.

# 17. Net debt impact of reaching net zero

- Putting both direct investment costs and revenue impacts together with the indirect effects
  of decarbonisation on the economy, we arrive at an overall profile for the net fiscal cost of
  getting to net zero emissions by 2050.
- Based on a scenario in which the UK ramps up both carbon taxes and investment from the mid-2020s, making the transition to net zero by 2050 adds about 20 per cent of GDP to government debt over the next 30 years – slightly less than the pandemic is expected to add in just two.
- The bulk of that cost come from the loss of fuel duty as a source of revenue (shown in yellow), followed by government support for investments in zero carbon technologies (shown in red). These costs are only partly offset by the additional revenues that come from taxing carbon more heavily (shown in blue).

#### 18. Alternative fiscal scenarios toward net zero

- Of course, this is only one scenario for reaching net zero and arguably quite an optimistic
  one in which governments around the world act decisively in this decade to put their
  emissions on a steeply declining trajectory.
- We therefore model a range of alternative scenarios reflecting different choices about the timing of the transition, its impact on the productivity of the economy, and the fiscal policy choices made along the way.

- On the extreme left we can see that there is one scenario in which the transition to net zero
  can actually save the government money if investment costs are funded within, rather than
  on top of, existing spending plans and declining revenues from fuel duty are replaced with
  another tax on motoring such as a road user charge
- On the extreme right is a scenario in which the government delays taking action until the 2030s and has to manage a more hurried and costly transition to net zero and misses out on five years of carbon tax revenues. The price of this delay is a doubling in the total fiscal cost of the transition.
- In between, we illustrate the fiscal implications of alternative assumptions about the impact of decarbonisation on the underlying productivity of the UK economy.
- And, of course, the cost of any of these scenarios for reaching net zero pale in comparison
  with the fiscal consequences of unmitigated climate change which, in the absence of any
  offsetting fiscal action, could push government debt well above 200 per cent of GDP by the
  end of the century.

#### 19. Government debt and interest rates

- Having considered two major fiscal risks, one of which has and one of which could add 20
  per cent of GDP to the government's stock of debt, our fourth chapter looks at what might
  happen to the cost of that debt.
- Government debt is both the product of fiscal risks that have crystallised in the past and a source of fiscal risks that could crystallise in future. And the threat that it poses to the fiscal outlook depends crucially on the future path of interest rates.
- Over the past four decades, the amount that the Government spends every year to service its debt has fallen fourfold from 3.8 per cent of GDP in 1980 to 0.9 per cent in 2020, despite the debt-to-GDP ratio more than doubling from 40 to 100 per cent in that time.
- This reflects the downward drift in global interest rates to historically low levels, both in absolute terms and relative to the growth in GDP.

## 20. Explaining the fall in global interest rates

- Whether the government's current stock of debt is sustainable in the long run depends on the extent to which the factors that have driven borrowing costs to these historical lows over the past thirty years are likely to keep them low over the next thirty.
- As this slide shows, explanations for the decline in real interest rates are varied and include a
  mixture of long-run trends like demographic change combined with possibly more
  temporary factors like a slowdown in global productivity growth.
- And there is sufficient reason to believe that at least some of these trends could be reversed to justify a detailed exploration of their fiscal implications.

#### 21. Composition of UK gilt investors

- And independent of when or how much global interest rates might change in the coming
  years, three developments over the past two decades have made the UK public finances
  more sensitive to any changes in borrowing costs.
- First and foremost, debt is three times higher than it was in 2000, so, all else equal, a given change in the cost of debt will have three times the impact on public spending now than it did 20 years ago.
- Second is the growing share of UK gilts in foreign hands which has risen from around 10 per cent in the late 1980s to almost 30 per cent today.
- This growing reliance on foreign buyers renders the UK government more susceptible to sudden changes in sentiment on the part of these investors who, unlike domestic pension funds, are under no regulatory obligation to invest in sterling assets to match their sterling liabilities.

#### 22. Sensitivity to interest rate change

- A third factor that has increased the sensitivity of UK public debt to future interest changes
  has been the maturity transformation wrought by the Bank of England's quantitative easing
  operations.
- By swapping relatively high interest but long-dated gilts for low interest but shorter maturity central bank reserves, the net result of these operations has been to reduce the median maturity of the consolidated liabilities of the public sector from seven years to just two since QE began in 2008, as shown in the red line in the chart on the left hand side
- The consequence for the public finances is that twice as much of the cost of any increase in interest rates would be felt in the first year rather than being spread out over time, as shown by the dark green bars on the right hand chart.
- Indeed, with debt three times higher and twice as much of any interest rate rise being felt the first year, a 1 per cent rise in interest rates would now raise government's debt servicing costs by 0.5 per cent of GDP in the first year compared with less than 0.1 per cent of GDP in the early 2000s.

## 23. Scenarios for the cost of public debt

- The consequence of this heightened sensitivity of the government debt stock to changes in borrowing costs are illustrated in the second part of Chapter 4 which looks at alternative paths for key macroeconomic variables including interest rates, inflation, and growth.
- What is striking about these scenarios is the difficulty of reducing the debt burden via changes in any of these variables. In the 21<sup>st</sup> century, the government would struggle to

- either grow out of or inflate away its stock of debt because any permanent change in these variables is quickly reflected in the interest paid on most of its existing stock of liabilities.
- And shorter debt maturities also render the public finances more vulnerable to more
  extreme scenarios such as a loss of investor confidence in which rising interest rates and
  debt feed each other in a self-reinforcing spiral which pushes debt servicing costs to
  prohibitive levels.

## 24. Update on other fiscal risks

- Finally, while this report focuses on three large and looming threats to the public finances, the array of other fiscal risks highlighted in previous FRRs have not evaporated in the meantime.
- So the final chapter of our report provides an update on this long list of other risks.
- And, what this update demonstrates is that when it comes to fiscal risks, when it rains, it
  pours with the coronavirus shock triggering a cascade of other risks including the pensions
  triple lock, the rescue of private train operators, and an outflow of EU migrants.
- Indeed, of the 97 fiscal risks previously identified, 38 have somehow been affected by the pandemic, including around 70 per cent of those that have crystallised and 80 per cent of those that have increased since 2019.
- However, one area that has proven remarkably resilient in the face of the coronavirus shock
  has been the financial sector. This likely reflects both the fact that the banking sector
  entered the pandemic much better capitalised than in 2008 and the fact that the
  government stepped in aggressively to underwrite the supply of credit with £75 billion
  worth of loan guarantees and other financial support.

# 25. Lessons for dealing with other catastrophic risks

- So what lessons can we draw from this analysis for how we forecast and manage the public finances in what appears to be an increasingly risky world?
- The report identifies ten lessons, of which I will just highlight the following five:
- First, catastrophic risks are real and may have become more frequent. Just two decades into
  this century, advanced economies have now experienced two 'once in a century' economic
  shocks. And increasing economic and financial interconnectedness may make future shocks
  both more frequent and more severe.
- Second, while it is difficult to predict when they will materialise, it is possible to anticipate
  their effects. Pre-pandemic modelling by institutions like the US CBO and the World Bank
  provided a clear indication of how economies might be affected by a global pandemic, even
  if such work attracted little attention from policymakers. So forecasters like ourselves need
  to place greater emphasis on analysing potentially catastrophic risks like climate change and

sovereign debt crises, as well as communicating their consequences to policymakers and the public.

- Third, there are advantages to preventing or halting processes that involve rapidly escalating costs. Pandemics, climate change, and public debt dynamics are all subject to feedback mechanisms and tipping points that put a premium on acting early. We saw over the last 18 months how countries that acted quickly to contain the domestic spread of coronavirus experienced fewer deaths, shallower recessions, and earlier economic recoveries. And our modelling of the dynamics of climate change suggests that early decisive action to tackle carbon emissions could halve the overall fiscal cost of getting to net zero.
- Fourth, when investing in risk prevention, governments tend to fight the last war. The tightening of financial regulations after 2008 helped prevent the pandemic from triggering another financial crisis. But post-crisis fiscal consolidation also cut advanced country expenditure on preventative health programmes. And dealing with post-pandemic fiscal pressures may hamper governments' efforts to invest the relatively modest sums needed to avoid the much greater cost of unmitigated climate change.
- Fifth, in the absence of perfect foresight, fiscal space may be the single most valuable risk management tool. Throughout its history, the UK has relied on its ability to borrow large sums quickly to respond to major economic and security threats. Faced with an array of major economic and fiscal risks, policymakers must trade off making significant investments in the prevention of specific potential threats with preserving sufficient fiscal space to respond to those risks that they did not anticipate or could not prevent.
- And with that parting thought, I'll conclude my presentation, and Charlie, Andy, and I will look forward to your questions.