

Fiscal Forecasting in a Risky World

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Thank you, Kevin, and thank you to the SPE for organising, in the midst of a tumultuous year, this opportunity for Robert, me, and the whole staff of the OBR:

- to reflect on everything the Office has achieved in its first decade; and
- to think, with the aid of the OECD's evaluation and insights from this seminar, about where we take this important institution next.

As the concluding speaker and the person with the daunting task of succeeding Robert as Chair of the OBR next month, I have the equally daunting task of talking about how I see the future and the OBR's role in it.

I have chosen as the title of my talk, Fiscal Forecasting in a Risky World, because I believe that the single biggest challenge facing those of us in the economic forecasting business is how to cope with the uncertainty that is now so manifestly a part of all of our lives.

In it I want to touch upon three themes:

- First, how the economic landscape has changed in the decade since the OBR and most other fiscal councils were established.
- Second, why a greater appreciation for, and understanding of, risk is central to the work of the OBR in the environment in which we now operate.
- Third, how the OBR is adapting its activities and outputs to deliver on its mandate in this new and riskier world.

[Slide 2]

But let me start from the beginning.

As Robert highlighted in his presentation, the OBR, like most fiscal councils, was established in the aftermath of the 2008 financial crisis.

And while most of these institutions were born out of that crisis, their mandates reflected the preoccupations of the economics profession during a preceding era which, in hindsight, turned out to be one of extraordinary macroeconomic stability.

Specifically, the main problems that plagued fiscal policymaking in advanced economies in the decade leading up to the global financial crisis in 2008 were:

- First, over-optimism regarding the trend rate of economic growth, which resulted in governments misjudging the cyclical position of their economies and running excessively loose fiscal policies during good times.
- Second, creative accounting on the part of governments aiming to meet the letter, but not the spirit, of the fiscal rules they had set themselves

- Third, myopia and short-termism in the face of longer-term fiscal pressures such as an aging population and rising healthcare costs.

And the tasks given to these new independent bodies reflected these preoccupations and therefore focused on coming up with unbiased estimates of:

- First, the medium-term path of the economy and public finances with a particular focus on estimating potential growth, the cyclical position of the economy, and the structural deficit;
- Second, the likelihood of meeting the government's fiscal rules, which increasingly included some structural component; and
- Third, the long-run sustainability of public finances over a 30, 50, or even 100-year horizon

However, the successful conduct of such analysis presumes, among other things,

- a relatively predictable trend rate of growth;
- an ability to distinguish supply from demand and the gap between them;
- a stable relationship between the economy and government finances;
- and, finally, that the government has a set of fiscal rules it is actually trying to meet at the time.

Now the OBR's mandate includes all of these responsibilities. And, like other fiscal councils, we have been grappling with how to deliver on them in the context of an extraordinary economic shock which has called into question all of these presumptions.

However, the OBR was also given, back in 2016, a new and relative unique responsibility to analyse and report on fiscal risks – defined as factors that drive fiscal outturns to differ from their initially forecast values.

This is a responsibility shared only by our older sister organisation the Dutch Central Planning Bureau, although a number of finance ministries, including those in Finland and South Africa, produce their own reports on fiscal risks.

The OBR has so far published two Fiscal Risks Reports in 2017 and 2019 which have been praised by outside bodies such as the IMF and today by the OECD as the most comprehensive of their kind.

And in this final session focusing on the future of the OBR, I want to talk about why this new and relatively novel element of our mandate is critical to achieving our core objectives of:

- understanding of the state of the economy,
- analysing the sustainability of the public finances, and
- supporting effective fiscal policymaking in these highly uncertain times.

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The first reason I believe that both fiscal councils and finance ministries need to think more about risk is that the environment in which we produce forecasts and make policy has changed dramatically over the last decade.

Specifically, we have gone from a decade of unprecedented economic growth and stability, the so-called 'Great Moderation', to a decade of unprecedented economic sluggishness and volatility bookended by two of the largest economic shocks in peacetime – the global financial crisis in 2008 and coronavirus outbreak in 2020

As you can see from this table, which divides UK economic history into what the Bank of England terms 'GDP cycles':

- The period from the mid 1990s to the late 2000s saw not only a relatively high rate of GDP growth but an extraordinarily low standard deviation in that rate of growth.
- By contrast, the period since 2008 has witnessed not only the lowest average growth rate but also the highest peacetime volatility in output – at least since the 18th century when the British economy was mainly agrarian and therefore subject to the vagaries of the weather and almost certainly a bit more measurement error than today.

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In terms of the scale of the economic shocks we have faced in the last 12 years, as the time series of GDP growth on this slide illustrates, over the course of the 20th century the UK saw annual real GDP fall by 5% or more on only three occasions:

- After the First World War and the 1918 flu pandemic
- During the Great Depression in the 1930s; and
- After the Second World War in the late 1940s.

However, in the first two decades of this century, we have already experienced two such shocks in 2008 and again in 2020.

So in this new and apparently riskier economic environment, thinking about

- where these shocks can come from;
- how they affect the economy and public finances; and
- what kind of legacy they leave behind

has to become a central part of the role of independent forecasting bodies like the OBR.

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A second reason that we need to think more about risk as fiscal forecasters is that governments are playing an increasingly active role in insuring economic actors against these risks.

We saw this in the bailing out of the banks in 2008 which accounted for a substantial share of the initial increase in gross public debt during the financial crisis.

We have also seen it more recently, and in even more dramatically, in the furlough scheme and government guaranteed loan schemes designed to insulate people and firms from the economic disruption associated with coronavirus and the public health restrictions required to contain it.

These fiscal policy interventions are unprecedented both in their scale (being between two and five times the fiscal stimulus announced in the wake of the financial crisis), but also in their complexity - increasingly taking the form of not only conventional tax reliefs and spending programmes, but also more complex loans, equity injections, and guarantee schemes.

These latter financial transactions and contingent liabilities are not always well captured in conventional measures of government borrowing and debt, but nonetheless can expose the government balance sheet to potentially significant economic losses.

Based on the data published by the IMF for G20 countries back in June, the average value of this support provided via financial transactions and other 'off budget' measures was almost twice as large as the conventional 'on budget' tax and spending support that had been extended by that date.

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A third reason why we need to think more about risk is that the combination of unusually large economic shocks, and the more active role of government in mitigating their impacts, has left a larger and more lasting impact on the public finances than past recessions.

This chart of government borrowing and debt since 1900 shows that while borrowing was relatively volatile throughout the post-war years, debt still steadily declined thanks, in part, to relatively high average real growth and inflation.

By contrast, the financial crisis and coronavirus shocks have driven step changes in the level of government debt which leave the public finances more vulnerable to the next potential shock.

So, understanding the interplay between economic shocks and the government's policy response is vital to assessing not just near-term fiscal prospects but also long-run fiscal sustainability and resilience.

And it is therefore entirely right that this year's Fiscal Sustainability Report focused on the near-term impact of the virus as a fundamental determinant of the long-term health of the public finances

So, let me now turn to the question of what needs to change in the way we perform our function as the government's official forecaster to reflect the riskier world in which we now seem to live.

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First, we need to try to understand the complex relationships between risk factors, the economy, and the public finances. Some may say this is a fool's errand and that no one could have anticipated the kinds of shocks we have faced over the past decade.

But I see more reasons for optimism than fatalism in this regard.

And one reason why I believe that we can chart this new and more dangerous economic landscape is that another of our sister fiscal councils, the Congressional Budget Office in the US, did just that more than a decade ago.

Fifteen years ago, in 2005, the CBO did a study at the request of Senate Majority Leader Bill Frist, who was himself a medical doctor, of the potential economic consequences of an avian flu pandemic.

The report did an impressive job of estimating the potential economic shock generated by a somewhat different virus for the US economy at around 4½ percent in the year of the outbreak compared with the 5.8 percent reduction in US GDP in 2020 as a result of coronavirus implied by the latest OECD outlook.

However, as this chart shows, which maps the predicted sectoral impact of that disruption in the US against the actual distribution of losses wrought by coronavirus in the UK, the CBO study was also impressively accurate in its predictions of the likely sectoral pattern of the shock which has been concentrated in hospitality, tourism, retail, and to a lesser extent manufacturing and construction.

So, guided by the more foresighted among our elected officials and taking full advantage of the capabilities of our economic modellers, it is possible to think about where future shocks may come from and how they might propagate through our economies and public finances.

But as forecasters, it's not enough just to understand these shocks from a modelling perspective, we need to find ways of communicating the uncertainty associated with them to policymakers and the public.

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Since the early 1990s, forecasters have used fan charts, informed by historical forecast errors, to try to communicate the degree of uncertainty around their central forecasts. This was an approach first adopted in the UK by the Bank of England in its Inflation Reports in the late 1990s. And fan charts were enthusiastically embraced by the OBR in its Economic and Fiscal Outlooks from 2010 onwards.

The problem with this approach is that these fan charts are, on the whole, calibrated based on forecast error data from the same period of extraordinary economic stability I discussed at the start and therefore understate the true extent of uncertainty we actually face today. In the case of the OBR's fan charts for government borrowing, the dataset goes back only to 1988 when the Treasury first started producing 5-year fiscal forecasts.

The problem with relying on the recent past as a guide for the degree of uncertainty in future can be seen from this chart which shows the fan chart around the OBR's March 2020 EFO forecast for public sector net borrowing against the OBR's latest central scenario for borrowing published in the July Fiscal Sustainability Report.

You can see that, for this year 2020-21, the forecast level of borrowing is well outside even the 99 percent confidence interval based on historical forecast errors

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A better way to capture the degree of forecast uncertainty at the moment is to rely on scenarios which vary the key risk factors to the economic and fiscal outlook. These risk factors include the course of the coronavirus outbreak and the nature of the public health response. This was the approach used to generate the three scenarios included in the OBR's July FSR.

But they also include the outcome of the ongoing negotiations regarding the UK's future trading relationship with the European Union which, at least for the moment, remains uncertain.

So, in our November Economic and Fiscal Outlook we will be looking at alternative scenarios for both the coronavirus outbreak and the Brexit negotiations, as well as their interaction, so long as their course remains uncertain.

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A third and final challenge for the OBR in this new and riskier world is how to support the government in its efforts to develop policies that mitigate the impact of these shocks and keep Parliament and the public informed of their evolving cost.

This is a particular challenge in the context of the current crisis as:

- First, policy is being developed, announced, and refined in real time rather than being packaged up and presented in the context of a fiscal event such as a Budget and alongside an updated OBR forecast.
- Second, the economic context is rapidly changing, so there is not a stable baseline against which to measure the cost and impact of policies as they are announced.
- Third, the policies are themselves designed to affect economic behaviour. This means that understanding so-called 'second round' or behavioural effects is especially important to getting both the cost of the policy and the forecast itself right.

So, rather than wait for a fiscal event to fulfil its obligations to scrutinise and report on the cost of government policy, the OBR has instead worked with the Treasury, on a more or less continuous basis, to analyse and report on the fiscal cost and economic impact of the various support measures it has announced since March.

This interaction is important both to ensure that the government's policy is informed by the best estimates of its likely behavioural effects and to ensure that Parliament and the public have an up-to-date and complete picture of how their money is being deployed.

This slide illustrates, on the left-hand side, the OBR's successive estimates of the cost of the fiscal policy response to the coronavirus outbreak. It shows not only the unprecedented scale of that response but also how those costs have evolved over the course of the outbreak, growing from 5 to over 9 per cent of GDP in this financial year. And the Chancellor has today announced further measures which we will take into account in our next EFO forecast in mid-November.

These economic rescue measures are unprecedented not only in their scale but also in their complexity. So, another role for the OBR and other fiscal councils is to help their parliaments and citizens to understand how their resources are being deployed to support different groups and sectors within the economy.

Perhaps the most complex of these policies are the government-guaranteed loan schemes whose net cost to the Exchequer depends, as illustrated in the chart on the right-hand side, on a range of assumptions about things like default rates, cash recovery rates in the event of default, and loss-sharing between the lender and the government. A number of these assumptions are, themselves, a function of the duration of the outbreak and severity of public health restrictions – underscoring the need to keep their costs under constant review.

So let me conclude by saying that I hope I have persuaded at least some of you, in the wake of two 'once in a lifetime' economic shocks in less than a generation, that understanding, analysing, and reporting on fiscal risks needs to be put at the core of what the OBR and other fiscal councils do.

The OBR is uniquely fortunate in already having this as an integral part of its legal mandate since 2016 and has already produced ground-breaking work in the area of fiscal risk analysis and disclosure.

And as we look toward the November Economic and Fiscal Outlook, we will be further refining our analytical and reporting tools to help government, Parliament, and the public to understand the range of potential scenarios for the economy and design policy responses that are resilient to a variety of possible futures.