House of Commons

Treasury Committee

Oral evidence: Office for Budget Responsibility Fiscal Risks & Sustainability, HC 553

Wednesday 13 July 2022

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Watch the meeting

Members present: Dame Angela Eagle (Chair); Rushanara Ali; Anthony Browne; Emma Hardy; Kevin Hollinrake; Siobhain McDonagh; Alison Thewliss.

Questions 1 - 90

Witnesses

I: Richard Hughes, Chair, Office for Budget Responsibility; Andy King, Member, Budget Responsibility Committee; Professor David Miles CBE, Member, Budget Responsibility Committee.

Examination of witnesses

Witnesses: Richard Hughes, Andy King and Professor David Miles CBE.

Q1 **Chair:** Welcome to the Treasury Select Committee today. We are going to be interviewing the OBR on its 2022 *Fiscal Risks and Sustainability* report. Welcome to all of you. Would you introduce yourself for the Committee, please?

Richard Hughes: Good afternoon. I am Richard Hughes, the chair of the Office for Budget Responsibility.

Andy King: I am Andy King. I lead on fiscal issues on the committee.

Professor Miles: I am David Miles. I lead on economic analysis and macroeconomics on the committee.

Q2 **Chair:** The press coverage of your report when it came out took a pessimistic line on what your report contains, and the headlines consisted of statements that the UK was not on a fiscally sustainable path. To what extent is that a reasonable thing for them to have said? Is it the case that a report such as this is always going to pessimistic?

Richard Hughes: That is a fair characterisation of the main conclusions of our report: that the public finances are, in the long run, on an unsustainable trajectory. When you run current trends through existing policy settings, you see that, over time, debt continues to rise from under 100% of GDP at the moment to over 250% of GDP by the time we get to the 2070s. You could also say that this has been the message of every fiscal sustainability report we have done since we started doing them back in 2011. The issue that we highlight in this report is that we are getting there much faster than we thought.

In our 2011 FSR, the one we did 10 years ago, we did not expect debt to reach 95% of GDP until the late 2050s. We have already got there in the space of a decade. The reason is that the 21st century has just turned out to be a much riskier period of time than we thought. Shocks have become bigger and more frequency, and Government have been responding much more actively to those shocks, which also adds to the fiscal costs of dealing with those shocks. It is also for that reason that we brought together the material that was usual in our fiscal sustainability report with the material in our fiscal risks report because, to understand the long-term trajectory of the public finances, you have to really think of those underlying trends alongside the shocks that can hit you along the way, as those trends materialise.

Q3 **Chair:** Without looking at the shocks that have hit us to date, which we all know about—Covid, Brexit, the war in Ukraine and the financial crash in 2008—could you outline some of those underlying trends that your report brings out? My reading of it was that those are the issues for future sustainability that we really have to tackle.

Richard Hughes: The underlying trends are a falling birth rate; the number of births has been falling over time. In this latest report, we revised down again our assumptions about the long-run birth rate from around 1.8 to just over 1.5. That saves you some money from the public finances in the near term because that reduces the cost of education and welfare. In the long run, that adds to your demographic pressures because you have a smaller working-age population that is supporting a population that is gradually ageing; people are living longer.

We slightly revised down our expectations for life expectancy in the long run, from about 96 down to about 92 years for somebody being born in the 2040s. That was not enough to offset the even bigger fall in the birth rate. This means that the demographic ratios—the ratio of people in old age versus the number of people of working age who are paying their taxes to support the services that they are consuming—gets worse. That is one of the reasons why the trajectory for debt is actually even steeper when you get to the end of that 50-year period, because you have an even worse demographic ratio between those of old age and those of working age.

Q4 **Chair:** Demography is the main thing, and its effect on public spending, particularly health spending. What assumptions do you make about the changing tax base, if any?

Richard Hughes: In general, we tend to assume that the tax burden stays roughly constant as a share of GDP. The big exception this time around is that there has been a big policy shift since the last time we did our long-term projections back in 2018, which is that the Government have decided to regulate petrol-driven vehicles out of existence by the mid-2030s. The Government currently collect around £30 billion in revenue from motoring taxes, both petrol duty as well as vehicle excise duty. That vanishes by the time we get to the middle of the century, and that loses the Government about 1.5% of GDP in tax revenue.

The Government have said that they intend to find some replacement for that. At the moment, there is no policy in place to do that, and so we just assume that that revenue disappears. That is another thing that adds to the pressure on public finances, which is that you are losing some tax take to pay for that older society when you get to the 2070s.

Q5 **Chair:** Are there any other losses to the tax base that you worry about, for example the offshoring of money and the fact that it is easier to evade wealth and ownership taxes than it is income taxes? Do you make any other assumptions, or do you just base it on what policy is at this moment?

Richard Hughes: We just base it on policy at the moment. We do not make any specific assumptions about increasing levels of avoidance or erosion of tax bases over time, beyond what you would see from the fact that the demographic profile of population is changing, so you have fewer taxpayers and fewer people paying tax, but not necessarily more people or corporations avoiding tax.

Q6 **Chair:** If we were to be more optimistic than the pessimists, you are saying that policy innovation or a switch in the tax base that would replace things like petrol and motoring taxes would actually make the situation look better.

Richard Hughes: It would. If it replaced petrol duty and vehicle excise duty in revenue terms, that could fill 1.5% of the gap in the public finances when you get up to the 2070s, but it is important to bear in mind that the gap out there is of the order of 10% or 11% of GDP, so there is a big gap to fill.

Q7 **Chair:** On climate change, have you made any assumptions about net zero and the very profound transition that has to be made, which has implications across the board for the way we do things in this country for the tax base as well? I am assuming that you are taking on board the net zero pledges and assuming that they are delivered. Could you let us know what the assumptions are about that?

Richard Hughes: Implicit in our forecasts is, as I said, the disappearance of fuel duty losing about 1.5% of GDP worth of revenue. We also knocked down the long-run level of productivity growth by about 0.25% of GDP to take account of the latest estimates from the Bank of England and others about what might be the cost of making the transition to net zero. That is offset by the fact that the Government have increased public investment as well since our 2018 forecast. That almost exactly offsets the consequences of the additional cost of getting to net zero because the Government are investing more. That adds more to the public capital stock and supports productivity.

In the end, those are offsetting effects that you do not end up seeing in our forecast. Had the Government not made the net zero pledge and just done the investment, that would have added a bit to productivity overall. We assume implicitly that the investment that needs to be done to get us to net zero is taken out of the existing public investment envelope. The Government increased public investment a lot in March 2020. We assume that some of that permanent increase in the level of public investment as a share of GDP is going to net zero projects to facilitate that transition.

We showed in our previous fiscal risks report what would happen if you added that investment on top of the Government's existing spending plans. Were the Government to consider net zero investment to be something additional to their current investment plans, that would make the trajectory more challenging, because they have to spend more money to get there.

Q8 **Chair:** The slower they are in spending money, the harder the transition is to achieve at the set time.

Richard Hughes: Yes, that is right.

Q9 **Chair:** What about trade? What assumptions have you made about what will happen with trade given that we have the uncertainties around our situation following Brexit?

Richard Hughes: In this report, the long-term growth outlook makes the same assumptions we have always had in our forecasts about a declining trade intensity of GDP for the UK over the next 15 years, falling by about 15% as a result of our departure from the European Union. One of the things we look at is whether, given rising protectionist trends elsewhere in the world, there is a possibility of an even more dramatic fall-off in global trade. It is a risk that is becoming increasingly apparent with tariff wars between the US and China, which has ended up implicating the EU and the UK.

In fact, global trade and investment flows peaked in 2007 and 2008 and have been falling off since then, so we do look at a scenario where you have a global tariff war and what that would do to our growth prospects. One of the worst scenarios that we generate for the long-term outlook for public finances is one where you have a global tariff war, which adds about 20% to tariff rates across countries and reduces the UK's long-run GDP growth level by about 5%.

Q10 **Chair:** Would you like to comment in general about what you think the major risks are? Looking 50 or 60 year into the future, there are always going to be very many things. If you wanted one major thing to be taken from the report you have produced for policymakers and a new, if similar, Government coming into being in the future in the next couple of months, what would you be saying to them?

Richard Hughes: The main message is that, if we want to avoid ending up in that unsustainable position in 50 years' time, the first thing to do is to get ahead of these long-term trends that are gradually either eroding the tax base or adding to the cost pressures on public services, but the second is the importance of being alive to the risks along the way. That is maybe the most important lesson we have learned in the last 10 years, which is that big shocks really do happen. Chancellors do not get much of a break these days between recessions and shocks.

We have had a financial crisis, a pandemic and now an energy crisis, and all those things have proven particularly expensive because the Government have had to be so active in managing them. The Government nationalised the banking system, paid the wages of a third of working people during the pandemic. The Government are now paying for around half of the energy bills of British households. Those are all very big expensive fiscal interventions that deal with these kinds of shocks. If the last decade has been an augur of what future decades are going to look like, Chancellors need to aim off a lot when setting fiscal policy for the medium term, to make sure they have enough fiscal firepower to deal with those shocks along the way while they are also dealing with these longer-term trends.

Q11 **Rushanara Ali:** Good afternoon. I wanted to pursue the point around long-term fiscal trends and tax implications. In your report, you are saying, "Our long-term projections show debt rising to over 100% of GDP by 2052-53 and reaching 267% of GDP in 50 years if upward pressures on health, pensions and social care spending, and the loss of motoring taxes, are accommodated". That is a pretty scary set of challenges ahead.

In that context, and now coming back to the short term and immediate term, where there is a lot of debate around taxation, would a tax cut now be sustainable in the short term and then, of course, the medium term? What would be the appropriate trajectory for tax cuts in terms of timeframes that an incoming Prime Minister, and possibly even another new Chancellor, might have to think about if they were looking at these longer-term trends and implications?

Andy King: As you know, we do not give advice on what is appropriate, but the message you would take from the report is that there are a lot of pressures, both short-term risk-type pressures and long-term, slow-building pressures on the public finances. Over the past five years, we have seen the tax burden rise, or at least on a path to rise, and that has largely gone to pay for a larger health service and a more generous social care system, so the kinds of pressures that build over the long term.

Our report would say that, to maintain fiscal sustainability, either other parts of the public spending system would need to be cut back or taxes would need to rise. We have no view on the right policy levers, but that is the broad message for the report.

Q12 **Rushanara Ali:** If there was a need for tax cuts to rise, and we are already at that point where taxes have been raised, what would be the timeframe for that? What would be an appropriate timeframe to have tax cuts as well as tax rises?

Andy King: I am not sure we are in a position to say what is an appropriate timeframe. One of the reasons why the early part of our projections is better and debt is lower than in our 2018 projections is because the medium-term fiscal position has improved. It has improved because the Government have raised taxes in the aftermath of the pandemic by more than they have raised public spending. Tax cuts on their own would reduce or reverse some of that improvement in the medium-term fiscal position, so the fiscal position would be under greater pressure. Those are choices that are not really for us to comment on.

Q13 **Rushanara Ali:** The question is whether the current position is sustainable, in terms of tax rises and then a proposal, certainly with the previous Chancellor, to reduce taxes a bit later. Would that put the economy on a sustainable footing?

Andy King: Perhaps it is easier to think about this in terms of the medium-term fiscal headroom against the fiscal targets because long-term sustainability is about if you cut taxes, you will need to think about public spending or other taxes to maintain a fiscal position. In terms of our most recent forecast, we were looking at roughly £30 billion of headroom against the fiscal targets three years away from now. That is on the basis of taxes rising next year, taxes having risen in net terms this year.

Of that £30 billion of headroom, more than all of it is accounted for by tax rises that have either just taken effect or are taking effect next year. Taxes can be cut. That can be by reducing headroom against fiscal targets. It can be financed or balanced with public spending measures, or indeed fiscal targets change.

Richard Hughes: I will underscore the point that the central message of our report is that, if, in the long run, you want the public finances to remain sustainable, a fiscal tightening is what is required, of the order of 1.5% of GDP. That can be done either by spending cuts or by tax increases, but the central message of this report is that a loosening of fiscal policy is not going to improve the sustainability of the public finances; it would make it worse.

Q14 **Rushanara Ali:** I am not expecting you to comment on the current leadership contest, but we have candidates—one of them will be Prime Minister—almost all of whom are proposing very large tax cuts, anything ranging from £30 billion to £50 billion and so on. Come September, we are going to have a new Prime Minister. If the priority is to introduce tax cuts, is that going to present a challenge for inflation, given inflation is at the level it is at, or is it going to reduce inflation?

Professor Miles: It depends on what kind of tax cuts they might be. To the extent that they feed through quickly to expenditure, that would be happening in an economy that currently has pretty low unemployment and possibly near full employment level. There are some indications on the forward-looking consumer and investment sentiment indicators that the economy might be slowing, so it could be that the tax cuts, to the extent that they increase spending, come at a time when things would be slowing down anyway; therefore, that would have less of an effect on creating inflationary pressures.

Q15 **Rushanara Ali:** Could you give some more examples of where it would not be so problematic?

Professor Miles: Yes. Some of the consumer sentiment indicators have taken a pretty sharp downturn in the last month or so. Taken at face value, that might suggest that consumer spending will slow down a bit. There is plenty of talk out—I think it is only talk at the moment—about the economy possibly dropping into recession on the technical definition of a couple of quarters of GDP falling. Those are straws in the winds. I do not think one can feel confident about that as a central forecast, but, if that is the way the economy went, of course extra spending from a tax cut would be less inflationary than if you just carried on on the trajectory we have been on over the last few months, which has been growth in GDP, so it will depend a bit on what the momentum in the economy is.

Q16 **Rushanara Ali:** Does it depend on what you make the tax cuts on as well, and who gets the tax cuts?

Professor Miles: If you had an increase in spending on investment and it were to come through that route, ultimately that would be helpful in terms of the supply potential of the economy and increase the capital stock more than a boost to consumption expenditure. It would also depend a little on what the import content was. That is probably a bit different on different kinds of spending. The more it is directed towards domestic spending, the more it will boost domestic inflation pressure, so it will depend a bit on, if such a thing were to happen, the type of tax cut, the timing and the underlying momentum of the economy at that point.

Q17 **Alison Thewliss:** I have some further questions around the demographic challenges that are outlined in your report. Fewer births, lower migration and shorter lifespans are quite grim demographic prospects. I wondered if you could tell us a wee bit more about what the impact of that would be, both in the short term and the long term.

Professor Miles: If one defines the short term as the next couple of decades, in the context of a report that goes out to 2070, as has been noted, that combination, which sounds a bit grim, is fiscally quite helpful.

Fewer kids means less spending on education. Life expectancy is not rising as much as we had thought, which is actually somewhat helpful for spending on state pensions and also on health. One could describe it as a grim outlook but it is fiscally helpful for probably 20 years, or maybe a little more. Beyond that, as Richard said earlier, it starts to flip around and moves against one, because of the size of the labour force.

One of the big uncertainties is birth rates, which have fallen to historically remarkably low levels in the UK, not lower than in many other rich countries but very low. We assume that levels off at 1.6, way below the reproduction rate that reproduces the population in the absence of net migration. We assume that levels off, but it could follow the trajectory of Italy and keep on falling, getting down to 1.4 or 1.3, or move back up toward 2. That will make a huge difference, certainly for the longer term. There is great uncertainty there.

Q18 **Alison Thewliss:** Have you done any particular analysis around what is driving that particular fall in the UK? Is it things like the wider impact of the two-child limit in tax credits, universal credit and how people feel about having more than two children? Is it something like the cost of living and nursery provision and the perceived cost of that? What impact can any Government policies have in turning that around?

Professor Miles: I will hand over to Andy in a minute because I know he has thought about these things. I suspect that the cost of childcare is certainly a factor. Over a slightly longer horizon, in some ways, there is a positive story, which is that there are far greater job opportunities for women today than existed certainly 50 or 60 years ago, and quite probably 20 or 30 years ago. That is, in some ways a positive story.

Our overall judgement is that, whatever these forces have been, it is not obvious that they are about to be reversed. Therefore, the most neutral, and we thought the most plausible, assumption was to assume that the birth rate or fertility rate levels off from where it is right now.

Andy King: Just to add on the specifics of your question, I have not seen anything empirically linking the welfare policies to birth rates. I did see a study that looked at it and that did not find that effect. Cross-country studies hint that childcare costs are an issue, but the trends that David was talking about seem to the be the stronger ones, such as families starting later because of better employment opportunities for women.

Q19 **Alison Thewliss:** If this is something that is related in some way to Government policy here as compared to what other countries do, is that a trend that the Government should be looking to try to turn around, given what you are saying about 15 years hence and it not being about the short term but that long-term impact?

Andy King: What we can say is, fiscally, it has the effect of saving money while the children are children, but, ultimately, it adds to the pressure of an ageing population. In terms of whether the Government should try to do something, that is a policy choice that is not really for us to have a view on.

Q20 **Alison Thewliss:** In terms of looking at life expectancy at birth, there has been a chart that has been doing the rounds on Twitter today with OECD figures. It showed quite the divergence between Ireland and the UK around life expectancy at birth in 2020. Is there something particularly different to what Ireland has been doing to what the UK has been doing that has been driving that change in life expectancy?

Richard Hughes: It is not something that any of us have revised on, I am afraid, but we can perhaps get back to you on that question.

Professor Miles: May I ask which way the data goes?

Q21 **Alison Thewliss:** Life expectancy at birth for Ireland is much better than it is for the UK. Your figures suggest that life expectancy here is also being impacted. I wonder if there is something in particular that you have noticed that has been driving that reduction in life expectancy?

Professor Miles: No. I would be interested to look into it though.

Richard Hughes: Let us get back to you on that.

Q22 **Alison Thewliss:** Moving to net migration particularly, there is a pretty clear impact of Brexit in your assumptions that net migration will be materially lower as a result of the policy choice on Brexit. What would the long-term fiscal sustainability impact be of maintaining net migration at the level of 205,000 per year, which is still assumed in the ONS population projections, rather than the 129,000 you assume?

Richard Hughes: One of the things we have to do for the purposes of these projections is choose an assumption about the long-run rate of migration. It has been particularly challenging in the past few years, partly because there has been a change in migration regime, partly because we have had a pandemic that closed the border for a period and partly because the data, as a consequence of the way in which the ONS has collected the data, has been disrupted. It has been very hard to judge, at any moment in time, whether a reading you have on the level of migration is a predictor of the future, is catch-up migration from a period that was lost before or reflects the Government's new migration regime, which is either letting more or fewer people in than you thought in the past. We show two variants for future migration levels in chart 4.18 on page 156.

In producing our forecasts, the only major deviation we had from the ONS's projections was to assume a lower level of net migration per year, of around 129,000, which is what has been included in our medium-term forecasts for some time now. Were we to take the ONS's assumption, which is slightly higher at 205,000 a year, you get a lower trajectory for debt, which rises to just over 200% of GDP rather than over 250% of GDP by the end of the forecast period. Migration makes a material difference to that trajectory, but, in the end, it is a level-shift down and a slightly shallower trajectory, but still, ultimately, an unsustainable one, even with that higher level of net migration.

Q23 **Alison Thewliss:** It would be fair to say that migration is an economic good in this context.

Richard Hughes: It is a fiscal good in the sense that migrants tend to come to the country of working age; they work and pay taxes; sometimes they go home, and so, in that sense, they become less of a burden on the public finances later on in life. That gets picked up in the projections that we provide. It is important to also bear in mind, though, that lots of migrants stay here, make a life, have children and become part of the resident population. In that sense, they get baked into future levels of population, and it is for that reason that it does not make an enormous difference to the trajectory in the long run, but it does make a material one.

Q24 **Alison Thewliss:** Have you done much analysis about the impact of migration on different parts of the UK? There is lots of talk about the tourist industry having fewer people coming in to help support that. Is there an impact of migration in particular sectors of the economy that has an effect?

Richard Hughes: We have not done for the purposes of these projections because they are done at a very macro, UK-wide level. It is something that has come up in the course of doing our medium-term forecasts for the Budget, which is limits on migration creating labour shortages and bottlenecks in particular sectors. It was a particular issue with lorry drivers last year. One of the things that has contributed to the tightness of the labour market, which David alluded to, is that there are possibly, in some sectors, difficulties in getting skilled workers into particular jobs.

I should really stress that the data that we have at the moment on migration is very poor. The numbers could be north of the 200,000 that the ONS has assumed based on the latest data that we saw back in June, but we are hoping for better data out of the ONS in the coming months.

Q25 **Alison Thewliss:** Finally, do you have an idea of what level of migration would be required to stabilise the size of the working age population, all other things being equal?

Richard Hughes: I would not want to hazard a guess, but I would say it is very large and quite possibly larger than anything that we have seen in the UK in the recent past. I do not think we have ever had a number that levels out the debt-to-GDP ratio through migration alone. It would be a very large number.

Q26 **Kevin Hollinrake:** On your net migration assumption of 129,000 a year, the numbers for June 2021 were 239,000. Why would you forecast a number that is half that? That is half anything we have seen in recent years.

Richard Hughes: The ONS itself, in its projections, had a number that was below the latest outturn figure. Implicit in the number that we use is, in essence, trying to understand what the steady-state effect of the Government's migration regime is likely to be over a 50-year period. Implicit in that is an assumption that, first, as I said, we do not want to jump off any latest ONS bit of data because the numbers have been so volatile in recent months and, secondly, an assumption that some of that migration is catch-up migration from people who could not come here during the pandemic and are now finally taking up a job or reuniting with families in ways they could not during the pandemic, so you expect a bit of a surge as people do that.

Thirdly, one has to make a judgment here about what the Government's migration regime is designed to achieve. Our sense was that it was not designed to achieve the levels of migration that were reflected in the ONS numbers in June, which were over 200,000.

Q27 **Kevin Hollinrake:** You think the Government's policies would be about a 50% reduction in net migration.

Richard Hughes: In the end, we stuck with the assumption that we made when the policy was introduced back in March 2020.

Q28 **Kevin Hollinrake:** That is interesting. Just on your forecast in terms of your baseline projection for debt as a proportion of GDP, you are currently saying, by 2060, you have 200% of GDP, roughly, on baseline or a bit lower than that. Am I right in saying that only a year or two ago your central prediction was 400% of debt to GDP at that point in time? It was a much higher number, was it not?

Andy King: When we did the report in the middle of the worst of the pandemic, we had a worse medium-term fiscal position. We were expecting a greater degree of medium-term economic scarring from the pandemic. At that time, we presented three scenarios and tried to stress that one could not be confident about any of them, particularly because we were three months into a pretty unprecedented economic situation. That is one of the reasons why, in this report, we focused very much on comparing what we have now with what we had in 2018 when we did a full exercise of preparing long-term projections. You are right: we did have some very high numbers in the 2020 report.

Q29 **Kevin Hollinrake:** That is purely because of the pandemic, which, effectively, pushed those numbers so high. Where would those numbers had been in 2019?

Andy King: We do it every other year.

Q30 **Kevin Hollinrake:** What was it in 2018, roughly?

Andy King: Not dissimilar, so higher but not massively higher.

Q31 **Kevin Hollinrake:** Do you mean it was higher than the current figure?

Andy King: Yes.

Q32 **Kevin Hollinrake:** That is a huge difference, going from 400% to 200%, based upon what was happening, potentially, over a very short period of time. We did not know where Covid was going, of course.

Andy King: Yes. One of the things it illustrates is that what assumption you make about the first five years—we call it the jumping-off point—really matters. One of the big improvements between 2018 and 2022 is that the medium-term fiscal position is stronger due to the tax rises being greater than the spending increases.

Q33 **Kevin Hollinrake:** Are you able to set out in writing to us what the difference in your prediction today is from 2018, because that would be a more like-for-like position, in terms of whether the position is deteriorating or improving in terms of where the debt will be by 2060.

Richard Hughes: That is the report you have in front of you, in that much of the long-term fiscal chapter tries to enumerate what the different factors are that have driven the different endpoint. Part of it is a better starting point, but then other big parts of it are this lower birth rate and the fact that, ultimately, you have an older population being supported by a smaller working-age population due to the falling birth rate and loss of revenues.

Q34 **Kevin Hollinrake:** Are you saying your numbers are bang on what they were in 2018? What was your prediction for 2060 in 2018, and what is it today?

Richard Hughes: Our prediction for 2060 in 2018 was around 250% of GDP. That has now come down to about 200% of GDP in our latest forecasts for net debt.

Kevin Hollinrake: That is an improved position

Richard Hughes: Much of that is the fact that we have a higher tax take by the jumping-off point, by the mid-2020s, and so you have a lower deficit starting out.

Q35 **Kevin Hollinrake:** That is despite the fact that your predictions about losing fuel duty and stuff is a worse position.

Richard Hughes: Yes.

Andy King: If 2070 is acceptable, there is a table, 4.13 on page 152, that breaks it down. The projection is 20% of GDP lower in this report than it was in 2018 at that horizon. That is a small number when we are thinking about 50 years ahead. Any number of factors were big enough on their own to explain that, and then the largest of the offsetting factors, as you rightly point out, is the loss of fuel duty.

Q36 **Kevin Hollinrake:** Moving on to defence spending, the Government, as you will know, have committed to an increase in budget for defence; it is 2.5% by the end of the decade. Is that sustainable?

Richard Hughes: So far as we understand it, the UK's only formal commitment is to the NATO benchmark of 2%. The Prime Minister made an announcement in Madrid, but it was characterised as an extrapolation of where the Government's current investment plans would take them by the time we get to 2030. It gets you to about 2.5% of GDP. That would add around £12 billion to spending over that period.

When you look at this in the round and look at all the other pressures on the public finances, this clearly takes you even further north of anything approaching sustainability. It has been the case that, pretty much since 1945, fall in defence spending has been a source of fiscal benefit to Chancellors. We used to spend around 10% of GDP on defence at the end of the Korean War. That fell to 2% by the time you got to the period after the fall of the Berlin Wall, so Chancellors have relied on that extra fiscal room for manoeuvre from falling defence spending to allow them either to expand the welfare state or keep the tax burden down. If defence spending is now going to be added to the list of things that are going in the other direction, that just makes the challenge more difficult for Chancellors.

In these numbers that you see in front of you, we do not have defence spending going up to 2.5% of GDP. In one of our scenarios, we have it going up as a share of GDP. That only makes the fiscal challenges more difficult.

Q37 **Kevin Hollinrake:** The UK has been proud of its record as being NATO's second-largest spender on defence. Against Germany's plans, we could even go higher than that. It could be something like £18 billion or £19 billion.

Richard Hughes: That is right. Germany has committed, since the Russian invasion of Ukraine, to getting to the NATO target of 2% of GDP, but, obviously, its GDP is about 40% bigger than ours. If we wanted to remain the largest absolute spender in NATO in Europe—obviously, the US is the largest absolute spender in NATO—we would have to take our spending up to either 2.5% or 2.8% of our own GDP, depending on what exchange rate you use. That would cost an additional £12 billion to £19 billion, in today's terms, to get there.

Q38 **Kevin Hollinrake:** All of that would impact upon where we are going to be in 2060, if we continue to do that in terms of increased taxation or reduction in spending elsewhere.

Richard Hughes: It would add to the challenges that you already have from demographic pressures and other things.

Q39 **Kevin Hollinrake:** There is a number of different areas of spending now that we ringfence. International aid is one of them, this is another and now we have done a health and social care levy. Are these good things to do in terms of hypothecations? Has that caused extra pressure in terms of balancing the books?

Richard Hughes: Ironically, it makes our jobs as forecasters a lot easier because you just tag more things to GDP. It makes the job of being a Chancellor more challenging because it limits your room for manoeuvre to deal with risks and pressures as they arise because so much of your spending is just locked in as a ratio to something. It can also lead to perverse outcomes, because GDP goes up and down for all sorts of reasons, including recessions, including because of inflation. Those are not necessarily thing that you want driving your levels of spending anyway.

Q40 **Kevin Hollinrake:** Is the money we have given to Ukraine, which I think is something like £4.2 billion in different areas—£1.5 billion of military aid and £2.8 billion of humanitarian aid—defence spending or foreign aid? What should it be classified as?

Richard Hughes: As we understand, it is a mixture of those things. We have not seen a breakdown, but, as we understand it, some of it is defence support, some is humanitarian support and some is diplomatic.

Q41 **Kevin Hollinrake:** Does the military aid we sent, which is about £1.5 billion roughly, count as defence spending in your book?

Richard Hughes: I should say that we have not looked at this in detail, and we do not generally track what would be booked against defence spending versus overseas aid versus other things, so it is not something we are experts on.

Q42 **Kevin Hollinrake:** They different pots, are they not? It is important, in terms of knowing where you are spending your money and where it is coming from, that we know how that will be classified.

Richard Hughes: Yes, to the extent that it counts towards defence spending or the Government's overseas aid target.

Q43 **Kevin Hollinrake:** Yes. Who will determine that? Will it be the Government or you?

Richard Hughes: What counts as overseas aid is determined by the OECD. There is a Development Assistance Committee of the OECD that decides the boundaries and definition for overseas aid. The definition of defence spending is determined by NATO.

Kevin Hollinrake: Others will tell us how that money is to be classified.

Q44 **Anthony Browne:** I want to follow up on some of the issues you were raising on the demographic crunch. One of the things you did not touch on was the retirement age. That has gone up and will continue going up. I assume you have factored that in because changing the retirement age has a very profound impact on the age-dependency ratio because you are obviously increasing the number of people working and reducing the number of people retired at the same time. I was wondering how you factored that in. It is a far more profound impact than the immigration rates.

Andy King: The ratios that we have been talking about are simple ratios of above and below 65, but both the economic and fiscal projections are based on the state pension age moving as legislated and then as committed to a few years ago, after the first pension age review. On the economy side, we assume that, basically, raising the state pension age increases labour market participation for those who are now below the state pension age, which is what we have seen in the past.

On the fiscal side, the state pension spending projection uses the parameters from the system as the state pension age rises. Our projections are based on legislated pension age rises to 67, which is coming soon, and then the rise to 68 according to the one-third-of-life longevity link, as it was set out after the first state pension age review. That is currently being reviewed again. The second review is ongoing.

Q45 **Anthony Browne:** I do not know if you estimated this or can estimate it. What changes to the pension age would bring more fiscal stability? I realise there are lots of other factors, as you have touched on, like losing vehicle excise and petrol duties and so on. If you changed pension age more, presumably it would help, because the fiscal impact of it is so profound.

Andy King: The way the policy is set up at the moment with what used to be called the longevity link, although I am not sure if that is still the title—a third of adult life, on average, should be spent in receipt of the state pension—essentially means that changes in life expectancy, so extending life expectancy, mean that a third of the burden is felt by pensioners and two-thirds of the burden is felt fiscally. The policy is set. You could reframe that policy, so that, essentially, all life expectancy gains were put through the state pension age so that state pension spending did not rise.

Q46 **Anthony Browne:** You would not win a lot of votes for that.

Andy King: It is not a matter for the OBR to comment on either. The parameters here are, if someone is living longer, the public spending consequences, in terms of the state pension, are quite simply how close to the life expectancy you draw the line for when eligibility for the pension comes in.

Q47 **Anthony Browne:** I am absolutely not recommending this, for the record, but if you went above that one-third/two-thirds and increased the pension age beyond that, presumably you would help bring the fiscal demographic crunch under control.

Andy King: It would contribute to it, but it is not the largest source of pressure. The largest source of pressure by far is health spending. Demographics affect health spending, but demographics are not the largest effect. Actually, it is not a simple relationship. Essentially, health spending is highest in one's last years of life, regardless of how old you are, and the really big pressures on health spending are non-demographic. They are essentially the fact that, in health, unlike most other sectors, technological advances tend to increase costs rather than reduce them. Governments tend to accommodate that because, of course, everyone relies on healthcare.

Q48 **Chair:** Is that also about healthy lives and issues such as obesity, exercise and all those things as well?

Andy King: Yes. That is a very important part of non-demographic pressures. Healthy life expectancy has been rising more slowly than total life expectancy; therefore, the period in ill health has been growing. Our projections assume, essentially, that half of the improvement in life expectancy will be in good health and half in ill health. It is moderately pessimistic or moderately optimistic.

Q49 **Chair:** If you could positively change that ratio, that would have a big impact on the overall sustainability.

Andy King: It is not huge relative to some of the others, but it does change it, particularly in terms of issues of co-morbidities; more than one health issue is often expensive for the health service.

Q50 **Chair:** That is perhaps obesity or smoking leading to heart disease, et cetera.

Andy King: Precisely, yes.

Q51 **Anthony Browne:** Can you measure or estimate how much of the physical crunch that you see coming is related to obesity?

Andy King: Not from the way we have put the numbers together. We base our numbers on a study that the NHS did, I think six or seven years ago now, of a single year where they looked at what the demographic and non-demographic pressures on their budget were across different interventions. It is not something that we do. I do not know whether an organisation like the Health Foundation has looked at specific conditions and their contribution to this growth in health spending.

Q52 **Anthony Browne:** The rise of obesity is leading to a greater fiscal crunch down the line. Is that the shorthand of what you are saying?

Andy King: Yes, and diabetes and other issues. As I say, there are examples where technology adds to costs, such as the use of stents.

Q53 **Anthony Browne:** Yes, absolutely. Sometimes there are reduced costs in new technologies.

I also have some other questions on fossil fuel—or hydrocarbon, as the industry calls it—price shocks. You have quite an extensive analysis of that. We have had a huge increase in hydrocarbon prices in the last year, largely as a result of the way in Ukraine. What do you see as the fiscal impact of that, and is it just a short-term impact? Obviously, we do not know what energy prices will do in future.

Professor Miles: Yes. We modelled two potential scenarios, both of which are pretty grim, to be honest. One is a further sharp spike in both gas and, to a slightly lesser extent, oil prices coming at the end of this year that then reverses itself as you move through next year. It is significant because today's oil price is around $100 a barrel, maybe even marginally under it. We assume that there is a spike that goes up to about $147 or so, so it is 50%. Gas goes from today's price, which is around 300 pence a therm, to more than double—up to about 700 pence.

This sounds a bit apocalyptic, but, on the gas side, at some point over the last couple of months gas prices have been at that level, not sustained but just for a few days. This spike scenario could potentially be caused by an almost complete cut-off of supply of gas from Russia to Europe. That is a temporary spike but a very sharp one, and that generates, not surprisingly, very significant higher inflation.

We assume it comes through it at the end of this year, and that really reflects household energy prices and petrol prices during the course of 2023. It would mean that, instead of inflation probably falling back next year from a peak of 10% or 11% at the end of this year, which seems a plausible forecast at the minute is that, basically, it stays there. You have another year of nearly 10% or 11% inflation for much of next year. Not surprisingly, given the impact of oil and gas price shocks have been already in the economy, you get a bit more of that, so GDP and real disposable income get hit and consumer spending is lower.

Higher inflation adds to debt interest costs because of inflation-proof bonds getting uprated, and that costs a lot on the interest side, so it is a hit to GDP and the fiscal position. Borrowing could be £30 billion higher. It is temporary, but it is pretty bad for the best part of a year. If that then reverses, so the prices go back to where they would have been anyway, it is a very unpleasant, short, sharp shock, and GDP, disposable income and such will then go back to where they were, so very bad for, potentially, a year.

The other scenario is one in which oil and gas prices, unlike what is projected by the futures curve, which continue to show oil and gas prices falling back over the next couple of year from where they are now, fall as per our central forecast, it is quite likely that the inflation rate in the UK will drop back down quite markedly.

In our other energy price shock scenario, we suppose that does not happen, things just do not fall back and gas prices stay at the high levels we have seen recently—maybe even a bit higher in the case of oil—and, because it is not a big spike and is just a failure to fall back, it does not do as much damage on the inflation front. Of course, it hangs around for many years. We estimate that has an impact on productivity and GDP because companies have to switch to other production techniques or some companies just find it is not sustainable to carry on with permanently higher oil and gas prices. We have run that through the models. It knocks about 2% off GDP for as long as processes stay at that level.

The damage in any one year is less, but, cumulatively, over the next four or five years, it is still pretty tough, and it knocks about 2% off GDP for as long as prices stay at that level. In a sense, the results are obvious. If you get big further increases in oil and gas prices, it does significant damage both to the economy and the fiscal position. It is absolutely not a central forecast. Our central forecast is to use the futures curves, and things get better on the futures curve so the prices drop back. It is a risk scenario. We do not consider it a miniscule risk that something like this happens.

Q54 **Anthony Browne:** I have run out of time, but I just want to ask one other question. Is there anything that the Government can actually do to protect the UK from the fiscal risk of future energy price spikes? In particular, would increasing the prevalence of renewable energy such as offshore wind or nuclear power help?

Professor Miles: Yes. Over the longer term, that has the scope to help greatly, both on net zero and hitting those targets but also insulating yourself from these kinds of shocks that have just hit us from outside. We talk a little bit about this in the chapter on energy. The tricky thing with renewables is, in some sense, they are cheap and you do not have to rely on what happens in global commodity markets, but you do have to rely on the sun, wind and tides. You may have to invest a lot in storage technology because you cannot rely on the weather.

There is a question there about whether that spending on storage technology can come largely from the private sector or whether the Government are going to have to spend quite a lot of money because the incentives are not there in the private sector to invest in it. You are right: that is, ultimately, of course, the way, along with nuclear, to reduce the sensitivity to oil and gas prices for sure.

Q55 **Kevin Hollinrake:** The *Financial Times* wrote in an article on 9 June, "Rishi Sunak blamed for losing £11 billion in servicing UK Government debt". Is the basis of that article accurate? NIESR was saying they should fund the QE through gilts with longer maturity rather than short-term ones. Was that fair or not?

Andy King: We have talked to the Committee, and we have done a lot of work on the way quantitative easing changes the nature of interest rate risk for the public finances. Basically, around a quarter of the debt is sensitive to bank rate, which can change overnight, so interest rate risks can feed through to the public finances very quickly. Whether it was a consequence of our work or not, there were quite a few proposals made over time about how the public finances might be insulated from this risk.

My reflections on the various proposals are that they involve very large interventions because QE is very large. They came with, potentially, knock-on effects on the economy or on other parts of what the public sector does. One of the knock-on effects that stood out for us was that some of the proposals, essentially, worked by levying a large tax on the banking system, which is essentially withholding the interests paid on reserves, which would have consequences either for bank lending or for incentivising lending to go to non-regulated non-banks, which comes with potential financial stability risks.

The other knock-on effect was that those that, essentially, tried to extend the maturity of bank reserves seemed to amount to tightening monetary policy. If the Treasury was to get involved with that, that might not sit easily with the independence of the Bank of England.

In terms of whether, hypothetically, the Treasury could hedge against the exposure to bank rate, I suppose that is true. In practical terms, could it swap several hundred billion pounds worth of anything without changing market prices and causing other effects? I am less sure. As we always say, the OBR is not here to comment on the merits of policy, but, when I used to sit in the Treasury, I would have worried about some of these things if these proposals were coming across my desk.

Q56 **Kevin Hollinrake:** Basically, you would say that is pretty unfair. I will read it out again: "Rishi Sunak blamed for losing £11 billion".

Professor Miles: If I understand what NIESR was arguing, it seemed to be, at the risk of being unfair to NIESR, that if you had known what was coming down the road, i.e. a situation where people expected the Bank of England to be raising interest rates, but it has only begun to think that, really, since the back end of last year and particularly since the invasion. If you had somehow known it in advance and could have cleverly issued some longer-dated gilt yields, you would have been in a better position today and you might have made some money. That is like saying, "If you have known the future, could you have done something better?" Yes, we could all do that.

Q57 **Kevin Hollinrake:** Yes, so this was a bit wise after the event, you might say.

Professor Miles: I think so, yes.

Q58 **Kevin Hollinrake:** Why does the UK have a higher proportion of its debt linked to inflation than other countries.

Richard Hughes: This was a decision first taken in the 1980s. It was partly because it was cheap. It was cheap at the time. If you sell inflation insurance alongside your debt, obviously it is going to be cheaper because people like inflation insurance. It was also an attempt to try to build up and provide an asset to what is still a large defined benefit pension system and insurance sector that like index-linked assets on their balance sheets to book against inflation-linked liabilities in the forms of pensions and insurance policies. It was an attempt to cater to a market for which there was simply an appetite.

These things then grew and grew into what has turned out to be a very large stock, around a quarter of our overall debt stock, which is much bigger than what you see in other OECD countries; I think Italy is the second-largest issuer of inflation-linked debt, and theirs is only around 10% of their total debt stock last time I checked. It is something that started out as a way of trying to foster a market, and then that market grew very quickly and the Government kept feeding it with more supply.

Q59 **Kevin Hollinrake:** Again, it might be a case of being wise after the event, but would it be better, seeing how things have gone now, to reduce our level of debt that is linked to inflation?

Richard Hughes: It is definitely not for us to say. It is just for us to highlight the consequences of that for the risks to the fiscal outlook, which is that it is not as straightforward to say in the UK as other countries, "We can just inflate away our debt", because so much of our debt is indexed now to inflation. That as an option for dealing with all the sustainability challenges that we have talked about is even less appealing in a country like the UK compared to any other country. Obviously, the inflation tax is not a good way of dealing with your fiscal situation in any case, but it is particularly not advantageous for a UK Chancellor compared to a finance Minister in another country.

Q60 **Kevin Hollinrake:** In your long-term projection, you are expecting gilt rates to rise, but, in your *Fiscal Risks and Sustainability* report, you admit that market expectations are lower than your expectations. Why is that? Are you being a bit pessimistic?

Andy King: The key variable for us doing long-term projections is the difference between the interest rate and the growth rate. It is not either of them in isolation. It is how they relate to each other. To date, we have always assumed this number of +0.2 that is a long-term historical average. The range over history is very wide, and it is a relatively neutral assumption. It means that the drivers of the long-term projections are things like health services and pensions.

We highlight the difference between the market rates and what we have assumed because this is an important risk. We run the projections with different assumptions, which show that if we kept interest rates a full percentage point lower, public finances would still be on an unsustainable path. Even if we kept them at a much more favourable rate in the medium term, they would still be on an unsustainable path over the longer term.

One of the things I have always worried about is that if we were to use the market interest rate, our own growth rate assumption would just be what if the market is telling us that it expects growth to be much weaker for much longer if we misinterpret a favourable interest rate relative to growth rate as just an unfavourable growth outlook.

Q61 **Kevin Hollinrake:** Just to touch on inflation finally, Charles Goodhart, when he gave evidence to the Committee was fairly pessimistic about inflationary pressures. He felt that, effectively, we have outsourced our labour costs to China, which are might cheaper, and that will not be as easy to do in the future, so inflationary pressures will be a more permanent feature of the global economy. Is there a risk that we are underestimating where interests rates are going to be in the medium and longer term?

Professor Miles: There is a risk, no doubt about it. Coming back to the previous question, right now, real interest rates that the UK Government are paying when they issue long-term debt are remarkably low. They are about -1.5%, so the UK Government can lock in borrowing in real terms at a negative interest rate over long horizons. Our central assumption is, essentially, that that situation does not last and that the real interest rate gradually moves up. In some ways, we have built in a Charles Goodhart-type assumption into the central forecast, around which there are good and bad risks. It may be that something that has now persisted for a few decades, which is the UK Government being able to borrow at negative real interest rates, persists a lot longer.

As Andy just said, it does not bail you out because you are probably still on, ultimately, an unsustainable path, but it is certainly a better path if that happens. Our central forecast has a flavour of the Charles Goodhart view on real interest rates.

Q62 **Siobhain McDonagh:** My questions are about the economic impact of Covid and long Covid. The ONS estimates that 2 million people in the UK were experiencing self-reported long Covid at the beginning of June. In your latest forecasts, you assume scarring to the economy of 0.6% of GDP due to lower labour force participation as a result of long-term sickness. Are you ascribing that shortfall in participation to cases of long Covid?

Professor Miles: Certainly part of the hit that we have already seen to the labour force in the UK looks like it is related to long-term sickness. Part of that, I have no doubt, is a long Covid phenomenon. You are right to point it out. The statistics of that ONS survey are really pretty grim reading, in terms of how many people are self-reporting that they have long Covid. Of the 2 million, something like 400,000, 20%, say they have had symptoms for two years or more. This looks like it is a long-term issue for the UK.

Quite what the impact is on the labour force is a bit tricky to work out, partly because I think I am right in saying that a high proportion of the people who report long Covid had underlying health issues already. A significant proportion, though certainly not all of them, are above 55 to 60. How much the very large number of people who are reporting long

Covid has been responsible for the decline in the labour force is a bit tricky to work out. We have done some work on that and some decompositions, and we think that probably a larger part of these 600,000-odd people that you, in some sense, have lost is not sickness-related, although the sickness-related bit is definitely significant. It may be 200,000 or 250,000-odd of the 600,000. People deciding to retire early not for health-related issues is quite a big factor, and there is a more temporary factor: people staying in higher education, which is obviously not a Covid-related phenomenon.

What is worrying about the ONS survey that you reported is that, if you go back a year, that 2 million number was 1 million. If you go back six months, it was 1.5 million or thereabouts, I believe, so the number of people who are saying they have long Covid is not flattening off. In other words, there are not some people dropping off as new people become infected and have symptoms that last longer than 12 weeks. At the moment anyway, it seems to be just going up and up. It may level off at some point.

One of the risks we highlight in the report is about if, at the end of this year or maybe early next year, as you go through the winter, there is a new variant of Covid that escapes vaccines, generates a lot of people getting pretty ill and becomes another boost to, down the road, how many people have long Covid. It is absolutely a risk. We have some of it in there in our Covid scarring assumption, which knocks 2% off GDP, a chunk of which is illness and people who do not or cannot come back into the labour force. It is pretty concerning to look at those numbers.

Q63 **Siobhain McDonagh:** Could the symptoms of long Covid have a material impact on productivity as well as participation?

Professor Miles: Yes. It is conceivable through several different routes. Long Covid, thankfully, does not yet seem to have a very substantial impact on young people, but, if it has an impact on their parents, that is in itself disruptive to education; it is difficult to get kids to school. There are also interruptions to people's ability to work that could last for six months, a year or a couple of years. They all miss out on training, so it is certainly conceivable that, as well as having the impact on the labour force, it affects the productivity of those people who get it and partially recover.

Q64 **Siobhain McDonagh:** Have you made any assessment of the circumstances under which increased health spending aimed at treating or preventing long Covid could be beneficial for the public finances and the economy in the long term?

Professor Miles: The honest answer to that is that we have not tried to put in feedback that says, "If you spend more, this is what it might do to the labour force or productivity", so I would have to say that is not a piece of modelling we have done. It is interesting. I suspect other people have, and we should certainly look into that.

Q65 **Siobhain McDonagh:** Would a decrease in labour force participation force companies to invest in capital to offset labour shortages?

Professor Miles: That is conceivable. It partly depends on some factors we have talked about earlier today about migration and whether that is a safety valve in some sense for shortages of the domestic labour force. It seems a natural reaction in a market economy that, if there are shortages of labour and wages are rising, that increases the attractiveness of switching to more capital-intensive forms of production, so it seems entirely plausible.

Richard Hughes: The puzzle to date is that we have not seen very much of it so far because investment has been flat for years. Despite the very tight labour market and despite lower levels of participation in the labour force, you have not seen businesses compensating for that yet in business investment. That may just reflect the fact that we are still operating in a very volatile environment. There is still a lot of uncertainty about the future. Businesses are not sure about the return they would get on those investments, so they are still holding off.

Q66 **Rushanara Ali:** I have a completely different subject, trade wars. What is the overall message that you want to convey to Parliament in your discussion of trade wars within the *Fiscal Risks and Sustainability* report?

Richard Hughes: The main message that we wanted to convey in doing the scenarios about geopolitical tensions spilling over into the economic sphere and the risks of trade wars is that, historically, the UK has been a very open economy and benefitted greatly from being an open economy that trades with the rest of the world. An expansion in global trade and global investment has really driven productivity growth over the course of the last 70 years. When you look at trends in trade policy and trends in trade flows, we may have already reached a turning point in terms of global economic integration.

As I mentioned, cross-border flows of goods and services and investment peaked in 2007-08 and have fallen back somewhat since. People thought that might have been a temporary phenomenon from the global financial crisis in 2007, but it has carried up until the present and through the pandemic. Were that to go into reverse, there is a risk that the world as a whole loses the gains it has made from better division of labour, specialisation and diffusion of ideas across borders that comes with cross-border trade and investment.

The UK in particular, as an economy that has traditionally been very open, is especially vulnerable to a reversal in global economic integration because we rely so much on trade in goods and, in particular, in trade in services and access to other countries' markets to sell our services.

Q67 **Rushanara Ali:** You are not mentioning a specific trade war. Did you have an EU response to the UK's changes to the Northern Ireland protocol in mind when you were considering this section of your report?

Richard Hughes: We were not making any prediction about the outcome of our discussions concerning the future of the Northern Ireland protocol. It is the case that the EU has initiated infringement proceedings against us for not fully implementing it, and possible remedies that it could resort to as part of those proceedings would be the imposition of either fines or reconsidering the trade and co-operation agreement that guarantees our tariff-free trade with EU markets. We designed our trade war scenario on a paper done by the World Trade Organization in 2019, which was before these discussions came up. It was meant to illustrate the general risks associated with countries imposing trade barriers on each other.

Q68 **Rushanara Ali:** Yet 46% of our trade is with the EU, so should you not be thinking more about the Northern Ireland protocol, especially at the moment? Again, just in terms of context and not necessarily, of course, for you to comment, there are references to trade wars with the EU by certain people in the leadership camps of the people trying to be Prime Minister in the Conservative party. The context of thinking about trade wars for the UK seems to be much closer to home rather than China-US-type trade war scenarios and so on.

Richard Hughes: Risks of trade come from a lot of directions. One could be from the EU. The United States has already put tariffs on UK steel exports as part of the general imposition of trade restrictions they put both on the EU when we were a member state as well as on China and the rest of the world. The general message we were trying to get across is that, worldwide, there have been movements in trade policy towards greater restrictions and, more generally, also a slowdown in the removal of those restrictions. We have not had a World Trade Organization round for over a decade. The move towards general movements toward multilateral trade liberalisation seems to have slowed and partly gone into reverse.

Q69 **Rushanara Ali:** Just to pursue the point about the EU and the Northern Ireland protocol and the risk of the EU introducing tariffs on UK exports, would that constitute a trade war of the same size as that within your hypothetical analysis then?

Richard Hughes: It is certainly something that could have a material effect on the UK economy. In the trade war that we modelled in the long run from countries imposing tariffs, the percentage-point increase in tariffs was around 20%, and that reduced the UK’s GDP in the long run by about 5%, assuming that trade war carries on for a period of 15 years and those trade restrictions are not reversed. If a consequence of our dispute with the EU over the Northern Ireland protocol was a reconsideration of the trade and co-operation agreement and the reimposition of some kind of tariff restrictions, that would also have a material effect on our trade with the EU.

Q70 **Rushanara Ali:** Just so I have understood this, the material effect of a trade war with the EU would be what percentage?

Richard Hughes: I am not in a position to predict what kind of infringement the EU would consider us to have made or what kind of remedies it might seek to impose if it considers that to be the case. I guess, if you wanted to get an up-to-date figure for the value of tariff-free trade with the EU based on the work that we did a few years ago and based on the work the Government did looking at different models for UK-EU trade defaulting to WTO terms for UK-EU trade, so ending up trading with the EU on the same terms we trade with the rest of the world, including with the addition of whatever our most favoured nation tariff restrictions would be, the UK's long-run GDP could be reduced by around 2% compared to the trade and co-operation agreement we have in place now.

That was on the basis of an assumption that the TCA has had its effect already. Defaulting to WTO rules would increase those effects by around 2% of GDP.

Q71 **Rushanara Ali:** It would be 2% on top of what has already happened.

Richard Hughes: That is if we ended up trading on WTO terms.

Q72 **Rushanara Ali:** You touched on the tariffs and quotas imposed by the US on the UK already under the Trump presidency, and it has only been partially altered by the Biden presidency. Have the impacts on the economy already fed through or should we expect any further impacts?

Richard Hughes: Those changes are not something we took specific account of in our forecasts because they affect only the steel industry, and so they have a relatively small impact. UK steel production is a relatively small part of the UK economy, so they were not of a magnitude to be fed into our wider macroeconomic projections. You would need a much broader set of trade restrictions, of the sort we have been talking about in this report, to have that kind of material effect on our forecast.

Q73 **Rushanara Ali:** I have a broader question around the globalisation agenda. We have seen a lot of emerging signs of barriers and a shift in terms of trends towards openness, and globalisation has become much less fashionable. There are good reasons for that. On the other hand, free trade has enabled hundreds of millions of people to be lifted out of poverty and so on. What are the big challenges going forward, given the pressures that different economies face and geopolitical pressures that are pushing countries towards more protectionism in order to create more resilience, which is understandable?

What should we be looking to do as a country, because we have those tensions here around making sure that we are able to employee people within our own borders while not reducing our ability to be open and trade? The tensions are there. How should we be thinking about these things in terms of the long run?

Richard Hughes: There may be two things. One is, within countries, to weigh up the costs and benefits of these decisions about imposing trade restrictions. As you say, these decisions always come with a compelling rationale, in national security terms, economic security terms or environmental terms, when we are talking about imposing restrictions on countries that do not have plans in place to reduce their carbon emissions.

These things can be justified in and of themselves, but it is also important to consider alongside those the economic consequence for the countries involved and to weigh up the costs and benefits in the round rather than just look at them from a national security perspective or just look at them from an environmental perspective. It is important to understand what you are losing in terms of economic benefits from the associated trade.

The second real challenge that the whole world has is that the World Trade Organization is struggling to be an effective institution for enforcing multilateral trade agreements and resolving international trade disputes for all sorts of geopolitical reasons. It is striking how much the momentum in the reduction of trade restrictions over time has just stalled since the Doha round of the WTO failed. It is just because there seems to be much less momentum behind these kinds of initiatives than there used to be in the past.

Q74 **Emma Hardy:** I am not going to ask if you have been watching "The Undeclared War", but you might be aware it is to do with cyberattacks, which is what my questions focus on. First, what is the overall message you want Parliament to take from your analysis of cyberattacks?

Richard Hughes: The main message is that this is a growing risk, and it can be easier for us to understand risks that have materialised before, such as recessions and financial crises. We are getting more used to understanding how pandemics work, but cyberattacks are becoming increasingly frequent, but, so far, we have seen relatively few that have very big economic effects. In the recent past, we have seen a number of very big cyberattacks such as the NotPetya, WannaCry and Solarwinds attacks, which have cost economies billions and Governments millions. They are a classic area where small investments in preparedness can help avoid very large costs when these attacks actually take place.

Q75 **Emma Hardy:** Your report points to a large number of cyberattacks being directed at the UK. As you say, the likelihood is increasing, but would it not be more realistic to model a number of smaller-scale cyberattacks taking place in a single year rather than one large, hopefully more unlikely attack?

Richard Hughes: To some extent, that is the situation we are already in. 39% of UK businesses have reported being subject to some kind of cyber breach in the last year or so, according to UK authorities. There are hundreds of major incidents already every year. That is being managed within companies, by cybersecurity professionals and Government Departments that are affected.

The attacks that have had much bigger economic consequences have been characterised by being orchestrated by state actors, those that have targeted critical national infrastructure, as was the case with the attacks on Ukraine but also ones you have seen happening in the US. These can often have significant unintended consequences, so it is difficult to predict quite where these attacks end up because they feed through computer networks.

The most notorious example was the NotPetya attack, which was targeted at the Ukrainian Government but ended up disrupting the Maersk shipping line's logistical software because it just happened to use the same software to manage its own computer systems. That actually disrupted the flow of world trade because Maersk is one of the biggest shipping companies in the world. Even attacks that are narrowly scoped and designed to affect particular companies or countries can spread around the world if they can manage to spread through computer systems.

Q76 **Emma Hardy:** You mentioned about state actors being behind some of these attacks. Where are they coming from?

Richard Hughes: According to the National Cyber Security Centre, Russia and North Korea are most often behind the larger cyberattacks that we have seen, including those that have affected the UK.

Q77 **Emma Hardy:** You used the Cambridge Centre for Risk Studies as a case study of a cyberattack on the UK power grid but then stated that an attack on this scale is unlikely. Why did you use that one as a case study?

Richard Hughes: We were trying to illustrate a classic tail risk, so something you do not expect to happen in any given year or decade but something which, were it to happen, could be highly disruptive. In recent years, what we have seen in terms of attacks that would prove to be the most disruptive economically, is that you cannot target just one company. One company's activities can be disrupted, but unless they are like Maersk, which manages a huge share of global shipping, they will not have much of an impact even on a national economy, let alone the global economy. If you can disrupt a bit of infrastructure that the rest of the economy depends on, you can have a much wider economic effect. There is evidence that the more malicious actors in this space are targeting national infrastructure as a way of trying to get those kinds of effects.

Q78 **Emma Hardy:** Would a more realistic case study have been the attack we had on the Irish health service in 2021? Are we more likely to see something like that here?

Richard Hughes: It is possible. Certainly, one of the most damaging attacks we saw here disrupted the NHS's booking software and so disrupted the provision of health services. The issue is that those were somewhat costly for the Government concerned at the time but possibly posed less disruption to the wider economy, because they disrupt the activity of the health service for a short period but do not disrupt wider economic activity. We were trying to get to the kind of attack that could be the most disruptive to the largest number of people at a given point. Something that attacked a piece of national infrastructure that everyone depends on, such as the energy grid, made the most sense.

Q79 **Emma Hardy:** In the future, will the OBR incorporate cyberattacks into forecasts? What would that look like and what would we see?

Richard Hughes: The best thing we can do for now is these kinds of exercises where we just illustrate the possible economic consequences of these kinds of attacks, the sorts of disruption they can generate as a way of illustrating the scale of the risk. We do not want to get too much into the futurology space of predicting cyberattacks in a particular year on a particular sector, because that would probably give a slightly misleading view of what our central forecast is. In every forecast, we try to emphasise that you always need to not only look at the central forecast but be cognisant of these tail risks, be they pandemics, cyberattacks or energy prices ending up much higher than you think, as a way of making the case for looking at and managing these kinds of risks more actively so that they do not materialise.

Q80 **Emma Hardy:** It is quite shocking that 39% of businesses have already had a cyberattack, so your expectation is these are not going away and that they are going to continue and that we will see large attacks.

Richard Hughes: They are on a steeply upward trend. The issue is just to make sure that the disruptive effect they have is as little as possible when they do take place.

Q81 **Emma Hardy:** Your report draws parallels with the cyber insurance market and that of the terrorism insurance prior to Pool Re. Has the OBR done any further modelling and analysis to understand the longer-term impacts of implementing an equivalent to Pool Re for cyberattacks?

Richard Hughes: We have not. We wanted to point to the parallels of cyberattacks growing in cost and severity. It looked a lot like the terrorist insurance market after 2011. The price of cyber insurance nowadays is escalating very dramatically and potentially becoming prohibitive for some businesses. That was the same sort of situation that you saw in the market for terrorism insurance, both after the Northern Ireland bombings in Canary Wharf but then also after 9/11 in the US. Because these kinds of risk became so difficult to cost and potentially so systemic, the market just broke, and Government had to step in.

Q82 **Emma Hardy:** Are you expecting the same for cyberattacks insurance?

Richard Hughes: We do not know, but, if you look at what has happened to the price of getting cyber insurance, it has escalated dramatically in the last few years as the number of attacks have increased.

Q83 **Emma Hardy:** Can you foresee in the near future a situation where people cannot afford this and the Government are going to have to step in with something?

Richard Hughes: It is a risk that both the Government and the market need to look at. We have certainly seen that happen in other insurance markets, both for terrorism and pandemic insurance.

Emma Hardy: That is a bit grim. Thank you very much.

Q84 **Chair:** We started on a pessimistic note and we will close on a grim one, but, before we do, I just wanted to ask you a few questions about your own capacity. The Civil Service has been asked to plan for scenarios where 90,000 civil services are removed. Has that washed up on your shores? Have you been asked to do the same?

Richard Hughes: We have been given a three-year budget allocation that goes from 2023 up to 2024-25, and that was confirmed last month. That sees a nominal cut in our budget from £4.3 million down to £4.1 million by 2024-25, but we have full autonomy about how we deploy those budget cuts across our budget. We expect to need to make some reduction in our headcount over that period to live within that falling budget, but we will make our own decisions about what that means for our headcount.

Q85 **Chair:** How big is your headcount? Is it about 30 or something?

Richard Hughes: We are 43.4 at the moment in full-time equivalents.

Q86 **Chair:** What were you when you were set up in 2016?

Richard Hughes: In 2016, I think we were 17 people.

Q87 **Chair:** You have been asked to do quite a lot more in the intervening years.

Richard Hughes: Including this report that we do on fiscal risks and sustainability, we provide a service to the Welsh Government to support them with their own budget process. We work with the devolved Administrations, so our remit has expanded considerably in that period, and our workforce has increased as a consequence.

Q88 **Chair:** Do you think it is appropriate for the OBR's budget to be set by the Treasury, given that the OBR is meant to be an independent organisation directly almost commenting on the Treasury? There has been a behind-the-scenes comment that the last Chancellor, if I can put it that way, was pretty upset with your Budget documents.

Richard Hughes: He did not raise any of those issues with me. We are an outlier in the sense that our budget is set by the Executive, but we are dually accountable to Government and to yourselves for our own appointments as well as for our work, so that makes us somewhat unusual in the constitutional setup of fiscal councils. Heretofore, we have been resourced to provide the services that you see in front of you. Over the next three years, I think we have the resources that we need to do that.

Q89 **Chair:** You are content with the current management and budgeting arrangements.

Richard Hughes: It is not for me to comment on the—

Q90 **Chair:** I am asking you whether you are content. It is not for you to make a decision on how they might change, but, if you were worried about your independence being affected, perhaps, by a hostile Treasury, say if one emerged, now is the chance for you to subtly say something about it.

Richard Hughes: I am confident that we have the resources with the three-year budget that the Treasury has given us to continue to provide the services that we provide you in terms of reports, accountability and follow-up. We are unusual in that our budget is set unilaterally by the Executive. The OECD sets out principles for fiscal councils, which state that the parliament should play some role in the determination of the resourcing of fiscal councils. We are unusual in the UK in that that is not the case.

Chair: I am sure Parliament would love to take on roles that ought to be allocated to it to ensure independence, but that is just my personal opinion. Thank you very much for what has been a very interesting session. It is not often that we manage to look 50 years ahead in the frenetic day-by-day parliamentary timetables that we have. The comments that you have made have reinforced the need for policymakers and politicians to ensure that they look through the near-term smoke and mirrors and look to the long term. Certainly, your report helps us do that.

We are looking forward to a note from you about the life expectancy questions, but I think that is the only extra thing that you committed to during the evidence session. I would like to thank all of you for giving us such clear evidence today.