Fiscal sustainability report 2018 and accounting for student loans

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Good morning everyone.

My name is Robert Chote, Chairman of the OBR, and I would like to welcome you to this briefing on our 2018 *Fiscal sustainability report*.

[SLIDE] Today offers an exceptionally rich diet for the fiscal gourmand. In addition to the FSR – which focuses as usual on the public sector balance sheet and the long-term outlook for the public finances – we are also publishing a working paper that looks at the way student loans are treated in the official public finance statistics and at the 'fiscal illusions' and perverse incentives that result from that. In addition, the Treasury is publishing its formal response to our 2017 *Fiscal risks report* and the ONS is publishing a paper on the public finance statistics, which includes its own discussion of different ways to treat student loans. Ours is a little heavier on the numbers.

[SLIDE] In my remarks today I am going to focus on two items from the menu:

- First, the long-term projections for the public finances, which include the impact of new population projections and recent policy developments, including last month's announcement on health spending.

- And, second, our student loans paper, where we argue that the current accounting treatment flatters their impact on the public finances and that the headline measure of the budget deficit would be higher under alternative approaches.

[SLIDE] So let me start with the long-term outlook.

In order to assess whether the public finances are on a sustainable long-term footing, we make projections of public spending, revenues, borrowing and debt over a 50-year horizon, based on current government policy – as best we can define it. Needless to say, there is huge uncertainty around the fiscal outlook over this long a time horizon. So these are illustrative projections rather than central forecasts. But they allow us to assess the impact of demographic and other long-term fiscal pressures, and to take proper account

of policy decisions whose full impact is only felt over many years – for example, the design of the state pension and student loan systems.

[SLIDE] Our fiscal projections are based on population projections from the Office for National Statistics, which are updated every two years. The latest are based on 2016 data and were published last autumn. The key demographic challenge they show is the UK's ageing population, which reflects increasing life expectancy, relatively low fertility rates and the retirement of the post-war baby boomers. As this chart illustrates, the ONS projects that the proportion of the population aged 65 and over will rise from 18 per cent in 2017 to 26 per cent in 2067, having risen from just 12 per cent in 1967.

[SLIDE] As a consequence, the UK confronts a rise in its old-age dependency ratio, defined here as the number of people aged 65 and over as a proportion of those aged 15 to 64. As you can see, ageing is common to most industrial countries and the UK is by no means the worst affected.

[SLIDE] There have been some significant revisions to the population projections since the 2014-based vintage we used last year, as this chart of the projected age distribution in 2067 shows. [SLIDE] Relative to that vintage, lower net inward migration and fewer births reduce the working-age population. And, as a result, the old-age dependency ratio rises more quickly, despite lower life expectancy reducing the expected number of older people. The population overall is now expected to reach 77.2 million in 2067, 4.6 million fewer than the ONS estimated in their previous projections.

[SLIDE] So why does an ageing population matter for the public finances? This chart shows how tax payments and the consumption of public spending vary by age. When people are young they consume quite a bit of health care, quite a bit of education, but don't pay much tax. In their middle years, they pay more tax, but consume less health care and education. And in their later years they pay less tax, but consume more healthcare and long-term care, as well as receiving larger welfare payments, mainly the state pension. So you can see that the public finances will come under increasing pressure as a bigger share of the population clusters towards the right hand side of this chart.

[SLIDE] The biggest source of long-term pressure on the public finances isn't demography, but our assumption that future governments will increase public spending over time to accommodate non-demographic cost pressures in the NHS. These arise from technological advances, relatively weak productivity

growth and the spread of chronic conditions. [SLIDE] Together with the ageing population, this implies that health spending will grow more quickly than the economy over our projection, as it has done on average over recent decades.

[SLIDE] As a result, our baseline projection shows health spending almost doubling from 7.1 per cent of GDP in 2017-18 to 13.8 per cent of GDP in 2067-68. [SLIDE] But, as you can see, these estimates are very sensitive to what you assume about the size of the non-demographic cost pressures. Unfortunately there is very little hard evidence to draw upon.

[SLIDE] This table draws together all categories of non-interest spending. [SLIDE] In addition to health, [SLIDE] spending on adult social care, state pensions and other pensioner benefits are also expected to rise as shares of GDP over the next 50 years, thanks to ageing and the triple-lock uprating of pensions, which is guaranteed for this Parliament only but which we assume remains in place over the full projection. [SLIDE] This more than offsets falls in spending on education, public service pensions and other, non-age-related, items as shares of GDP. [SLIDE] Taken in aggregate, total non-interest spending rises by 7.9 per cent of GDP to 44.6 per cent of GDP.

[SLIDE] While spending increases as a share of GDP, revenues are broadly flat. This depends crucially on our assumption that tax thresholds rise over the long-term in line with earnings rather than inflation, which is the default assumption over the medium term. This accords with experience, where policy changes tend over the long-term of offset gains from so-called ‘fiscal drag’.

As a result, the primary budget deficit – the gap between revenues and non-interest spending – increases from 0.3 per cent of GDP at the end of the medium-term horizon to 8.6 per cent of GDP in 50 years. This would reverse almost all the improvement in the primary balance that we expect between 2009-10 and 2022-23, the period of consolidation following the financial crisis.

[SLIDE] To move from a projection of the primary balance to a projection for public sector net debt, we need to include the impact of financial transactions that affect debt directly, notably student loans. This chart shows the increase in net debt that results as the stock of student loans increases and then repayments start to exceed new loans. The peak addition is 12.1 per cent of GDP in the late 2030s, falling back to 11.1 per cent by 2067-68. We will look at the treatment of student loans in net debt in more detail in a few minutes.

[SLIDE] Once we bring revenues, spending and financial transactions together, we can look at the outlook for public sector net debt. If the primary budget balance remained constant at 0.3 per cent of GDP beyond the medium-term horizon, net debt would decline slowly and sustainably, but not return to pre-crisis levels of around 40 per cent of GDP within our projection period. But if longer term spending pressures are left unaddressed the public finances would be on an unsustainable path, as in our baseline projection. After 50 years net debt would rise to the shares of GDP seen after World War Two and continue rising thereafter. In practice, policy would have to change to avert this.

The precise profile depends on the assumptions that underpin it. In the report we show its sensitivity to several of them, including [SLIDE] different estimates of non-demographic cost pressures and [SLIDE] population projections.

[SLIDE] Confronted by our baseline projection, if you wanted to achieve a 40 per cent debt to GDP ratio in 50 years' time, you could announce a once-and-for-all fiscal tightening of 5.2 per cent of GDP in 2023-24. But, as this chart shows, debt would still rise above that target over the even longer term. [SLIDE] More plausibly, you could announce an initially smaller but ultimately larger cumulative tightening of 1.9 per cent of GDP each decade – which would be sufficient to hit the 40 per cent debt-to-GDP ratio and remain below it thereafter. These figures are of course sensitive to the same assumptions as the variant projections for net debt.

[SLIDE] As you can see here, the outlook for net debt looks more threatening in this year's FSR than it did in last year's. So what has changed?

[SLIDE] As this table shows, the primary deficit is 1.3 per cent of GDP larger and net debt more than 40 per cent of GDP higher in 50 years' time than we projected last year. The reclassification of English housing associations to the private sector lowers debt slightly, while modelling changes and movements in our medium-term forecast push it up a bit. The new population projections push debt higher by about 9 per cent of GDP, thanks to the higher old-age dependency ratio. But the biggest movements come from policy.

Changes to long-term policy settings lower debt by more than 30 per cent of GDP. These include the Government's decision (in effect) to drop the Dilnot reforms to adult social care funding. (However the Government remains committed to a cap of some sort, so whatever replaces Dilnot could push spending and debt back up again). The Government has also tweaked the

terms of the state pensions 'longevity link', accelerating the pace at which we assume the State Pension Age will rise.

But these changes are dwarfed by the Government's announcement of extra funding for the NHS last month, which increases spending by around £20 billion in 2022-23, compared to what we would otherwise have assumed. This raises the jumping-off point from which we then assume that long-term cost pressures apply. By 2067-68, the announcement increases the primary deficit by 1.5 per cent of GDP and net debt by just under 58 per cent of GDP.

[SLIDE] Under normal circumstances our long-term projections begin from the end of our previous medium-term forecast. But the health announcement is so large that we have made an exception this year. This chart shows the net giveaways and takeaways in the three fiscal statements since our last FSR. They show the typical pattern of near-term giveaways followed by a promised consolidation at the end of the horizon. [SLIDE] The health announcement turns this into a pattern of large and increasing giveaways at the end of the horizon.

[SLIDE You will recall that the Prime Minister said the health package would be paid for by a "Brexit dividend, with us as a country contributing a little more" – but gave no more detail than that. Neither was the announcement accompanied by a detailed reform package explaining how the money would be used to drive improvements in efficiency.

The provisional analysis that we published after the 2016 referendum vote – which we will revisit when there is a firm and detailed withdrawal agreement – suggests that Brexit is more likely to weaken the public finances than strengthen them over the medium term, via its effect on the economy and tax revenues. But there will of course be savings from the direct contributions to the EU budget that we will no longer have to make.

We estimated in our March forecast that the UK would have contributed £13.3 billion to the EU budget in 2022-23 if we remained a member. We expected £7.5 billion of that potential saving to be spent on the withdrawal settlement in that year leaving £5.8 billion to be spent on other things. That would in principle cover a little under 30 per cent of the extra health spending announced for that year, but that ignores other Brexit-related calls on those savings, including commitments the Government has already made on farm support, structural funds, science and regulatory bodies, and possible

continued contributions to the EU budget. While we await more detail, we have assumed here that the extra spending on health adds to total spending and borrowing and is not absorbed elsewhere.

[SLIDE] So how does the health package measure up against the cost pressures that we assumed the NHS would face over the medium term?

This slide shows our baseline projection for UK-wide health spending over the next 10 years, excluding last month's announcement. The Government's previous plans implied that health spending would fall from 7.1 to 6.8 per cent of GDP over the next four years, after which we assume it would rise as demographic and non-demographic cost pressures are accommodated thereafter. [SLIDE] But what if those pressures were accommodated from today? We estimate that spending would rise to 7.7 per cent of GDP in 2022-23, implying a shortfall on previous plans of 1 per cent of GDP or £23 billion. [SLIDE] The June announcement closes most of that gap, taking spending to 7.6 per cent of GDP and leaving a shortfall of 0.1 per cent or just under £3 billion.

It may seem paradoxical that spending money to address the immediate cost pressures in the NHS makes the long-run fiscal position more challenging. But you can think of the announcement as crystallising one of the risks that we identified in the *Fiscal risks report* last year, namely that the previous stated spending plans for health would prove politically unsustainable.

In effect, the Government has now chosen to accommodate most of the cost pressures we assume over the next five years, having not previously planned to do so. This implies a higher quality and quantity of health provision than we would otherwise expect, creating greater fiscal pressure if future governments seek to maintain or improve on those higher service levels further into the future. It is important to remember that accommodating cost pressures in this context does not mean just holding service levels constant, as some of those pressures arise from the wish to use new and better technology more widely.

[SLIDE] So let me briefly summarise the long-term picture:

- First, the public finances are likely to come under increasing pressure, thanks primarily to an ageing population and cost pressures in health.

- Second, those pressures are common to most industrial countries.

- Third, the outlook has deteriorated since last year, thanks in part to a less favourable demographic outlook, but mostly to last month's substantial and as-yet unfunded increase in planned health spending.

- Fourth, the outlook will depend on a number of live policy choices:
    - What to do about adult social care funding;
    - What to do about triple lock uprating of the state pension; and
    - How to finance all or part of last month's health package.

- Finally, once those choices have been taken, further policy action is still likely to be necessary to get the public finances onto a sustainable path. And the more areas of spending that this and future governments decide – explicitly or implicitly – to keep stable or increase as a share of GDP, the more they will need to cut other spending or increase taxes.

[SLIDE] So now let me turn to our second topic for today: the accounting treatment of student loans and the 'fiscal illusions' that this creates. And I will be focusing mostly here on the impact of the current loan system in England.

Student loans are an important part of any assessment of the health of the public finances. The loan book is large and growing rapidly, with net outlays forecast to reach £20 billion by 2022-23. The value of the outstanding loan book is set to rise to around 20 per cent of GDP by the 2040s.

But capturing the impact of student loans in measures of the public sector deficit and debt is not straightforward, because the full impact of any particular cohort of loans takes more than three decades to fully work through – and meanwhile the impact of later cohorts is layered on top.

[SLIDE] This chart shows the initial net outlays and subsequent net repayments for the 2017-18 cohort of loans in raw cash flow terms. Over the life of the loans, repayments exceed outlays by £2 billion, but – when you take into account the cost of financing – outlays exceed repayments by almost £10 billion.

[SLIDE] The Office for National Statistics compiles the UK's public finance statistics in accordance with the European System Accounts 2010 or ESA10. Under these rules, student loans are treated like conventional loans despite the fact that repayments are linked to the borrower's income (currently set at

9 per cent of earnings above £25,000 a year) rather than the amount they owe, and any debt outstanding after 30 years is written off. Indeed, only 30 per cent of new full-time students are expected to pay their loans off fully. Despite charging a relatively high interest rate – for some borrowers as high as RPI inflation plus 3 per cent – this implies a significant public subsidy. Another unusual feature is that the government periodically sells off tranches of the loan book.

Unfortunately, the accounting treatment required by ESA10 does not record these transactions in a way that captures well their underlying impact on the public finances. Fiscal illusions arise over both the size and timing of the transactions recorded. And this can create perverse incentives – notably to sell the loans before the write-offs start, even if this offers poor value for money.

The ONS has confirmed today that it is looking at potential alternative accounting treatments with its Eurostat colleagues. We argue in our working paper that it should be possible to improve on the current accounting treatment, but that there are pros and cons for every alternative.

[SLIDE] So how are student loans treated under the current rules? There are four transactions that can potentially be captured: extension of the loans, capitalising of interest, cash repayments and write-offs. Cash-based aggregates – like public sector net debt – capture the extension of the loan and the cash repayments. Accruals-based measures – like public sector net borrowing and public sector net financial liabilities – capture the capitalisation of interest and the write-offs. The other transactions simply swap one asset for another.

[SLIDE] This chart shows the impact of the 2017-18 cohort of loans on public sector net debt and its accruals equivalent public sector net financial liabilities. Net debt rises sharply as the loans are extended and then declines as the repayments come in. Net financial liabilities gradually fall as the interest on the loans capitalises – creating a larger asset for the government – and then rise sharply as the write-offs diminish its value. Once the write-offs are complete, both balance sheet measures show a £2 billion balance sheet improvement – the difference between the loan principal and the total repayments. [SLIDE] But, as I mentioned a moment ago, if we take into account the cost to the government of financing the loans, it makes a loss of almost £10 billion on this single cohort. Neither measure gives a terribly satisfactory picture at any given moment in time – net debt undervalues the loans; net financial liabilities overvalues them.

[SLIDE] Having illustrated the principles of the treatment with a single cohort, we can now look at the impact of the whole loan book. Net debt deteriorates steadily while new loans exceed repayments, settling down at an increase of about 9 per cent of GDP. Conversely, net financial liabilities improve while newly capitalised interest exceeds write-offs, settling down at a reduction of around 9 per cent of GDP – two balance sheet measures painting very different pictures. [SLIDE] Take financing costs into account and the deterioration in net debt more than doubles while the improvement in net financial liabilities is more than offset.

What of public sector net borrowing, the headline measure of the budget deficit and the one the Government currently targets? [SLIDE] In complete contrast to the pattern of cash flows – big outlays followed by small repayments – [SLIDE] the accruals-based deficit is reduced by around £1 billion a year for 30 years as interest on the loans accrues, but then increases by up to around £14 billion a year once the write-offs start and the accounts finally recognise a cost that was incurred decades earlier.

[SLIDE] Scale this up to all cohorts and we find that the loan programme reduces net borrowing by amounts rising to around 0.8 per cent of GDP by the mid-2040s, when the large write-offs start. The write-offs then reduce the improvement to around 0.4 per cent of GDP, but never eliminate it as the fiscal illusions from later cohorts are larger than those unwinding from earlier ones. [SLIDE] If you take the government's financing costs into account the deficit shows an increase of around 1 per cent of GDP by 2067-68.

[SLIDE] So what happens when the government sells part of the loan book, giving up the right to future repayments in exchange for an up-front cash sum?

Net debt drops immediately by the sale price, with the improvements from future repayments forgone. But net financial liabilities increase, because the government exchanges a loan asset recorded at its nominal value for a smaller cash sale price. Sales of the loan book have no direct impact on net borrowing, with any discount to the nominal value recorded as a holding loss that does not affect the deficit. The build-up of never-to-be-paid interest that has lowered the deficit before the sale is never unwound, breaking the cardinal rule that cash treatment and accruals treatment should eventually be equal. The fact that no write-off will ever be recorded cements the fiscal illusion in place.

As the Treasury Select Committee has noted:

"The policy of selling off student loans prior to their write-off allows the Government to spend billions of pounds of public money without any negative impact on its deficit target at all, creating a huge incentive for the Government to finance higher education through loans that can be sold off."

The government argues that it is sensible to sell assets that have "achieved their original policy objective". But we estimate that the Government's current plan to sell £12 billion of Plan 1 (i.e. pre Browne Review) loans up to 2020-21 will deprive it of £23 billion of future repayments. If we include the knock-on effects on debt interest spending that would rise to £28 billion. The TSC has noted that the Government's value-for-money case for these sales discounts the future repayments more heavily than when they are recorded in DfE's accounts, by using the rate specified in the Treasury's Green Book project appraisal guidance. The loans may have "achieved their original policy objective", but it is not immediately obvious what public benefit offsets the cost imposed on the taxpayer by selling them on these terms.

[SLIDE] So the current accounting treatment flatters the impact of student loans on the public finances and creates a perverse incentive to sell them, even at a loss. But what alternative approaches might be better?

In an ideal world, the accounting treatment would:

- Record expected losses up-front;
- Only record income that the government is likely to receive;
- Respect the convention that cash and accruals estimates converge; and
- Remove perverse incentives to sell the loan book.

[SLIDE] In our paper, we look at five alternative approaches, each with pros and cons:

- First, you could argue that that student loans are not loans in any meaningful sense and treat the outlays as spending and the repayments as tax. This is relatively easy to implement, but overstates the long-term cost in the early years and would make a return to a grants-based system look much less costly than it actually would be.

- Second, you could avoid recording interest that will never be repaid. This approach requires cash repayments to be divided into principal and

interest, which is not straightforward, and still leaves the impact of write-offs on the measured deficit far in the future. It merely scales down the current illusions.

- Third, you could treat loans that will be repaid as loans and those that won't be as grants. Alas this attractive hybrid approach has practical difficulties. Estimating the up-front grant element requires judgements about the behaviour of the cohort over its 30-year life. These will be proved wrong by outturn data and will also change when economic assumptions and scheme parameters change. In light of this, the ONS might need to restate past data in significant ways. It could also introduce some perverse behavioural incentives.

- Fourth, you could ignore the terms of the loans and focus on how much they actually cost the government. This would have the attraction of recording the estimated subsidy upfront, but would be a significant departure from the conventional recording of the public finances.

- Finally, you could take a commercial accounting approach, discounting future cash flows to create a net present value. This means estimates would be sensitive to the choice of discount rate. And it is very difficult to accommodate discounted cash flows in the National Accounts.

[SLIDE] What quantitative difference might these approaches make – or at least the ones that could be incorporated in the National Accounts? This chart shows the estimated impact of the student loan programme on PSNB under the different approaches. As you can see, all of them paint a less flattering picture than the current approach. The second approach, which reduces the interest receipts recorded, still shows the programme having a positive fiscal impact and therefore does not really deal with the spending illusion.

Of the others, the hybrid method (for all its difficulties) is perhaps the most promising for our purposes – which is not to say that the ONS should or will necessarily adopt it or that we should focus on that measure alone. It shows the student loan programme increasing the deficit by around 0.2 per cent of GDP overall and more in the early years.

What does that suggest about the size of the fiscal illusion in the near term? [SLIDE] This chart shows the impact of student loans on the deficit under the current treatment and under the hybrid method. Moving from the former to the latter to remove the fiscal illusion would increase the measured deficit by around 0.7 per cent of GDP or £15 billion a year in today's terms. This is roughly equal to the margin by which the Chancellor was meeting his fiscal target in 2020-21 in our most recent forecast. If the ONS made such a change, the Government would have to decide whether to change the target or accept that it is now going to be harder to hit.

With that, we are happy to take your questions.