## Fiscal sustainability report 2011: launch presentation

Good morning everyone. My name is Robert Chote, Chairman of the OBR. And I would like to welcome you to the launch of this, our first *Fiscal sustainability report*. We are very grateful to the Institute for Government for hosting us once again.

[SLIDE] As you know, the OBR was created last year to provide independent and authoritative analysis of the UK's public finances. To that end, in addition to the two medium-term fiscal forecasts that we produce each year, we also prepare an annual assessment of the longer-term health and sustainability of the public finances. This is our first stab at it.

The conclusions we reach are the collective view of the three members of the Budget Responsibility Committee: myself, Steve Nickell and Graham Parker. But we have of course relied on the hard work of the OBR's full time staff, as well as on the time and expertise of officials in many government departments, our advisory panel, and other experts, to all of whom we are very grateful.

We presented a draft of our conclusions to the Chancellor on June 30<sup>th</sup>, so he could decide whether there were any additional decisions that he wished us to take account of. There were not. We provided him with a copy of the final report 24 hours in advance of publication, in line with ONS pre-release rules.

I am pleased to report that we have come under no pressure from ministers, special advisers or other apparatchiks to change any of our conclusions. And a full log of all substantive contacts with ministers and their offices can be found on our website.

You have hard copies of the main report to take away with you. But there is also a supplementary document online that contains additional analysis, as well as the data underlying the charts.

So how do we assess long-term sustainability?

[SLIDE] Our approach is twofold:

• First, we look at the fiscal impact of past government activity, as reflected in the assets and liabilities on the public sector's balance sheet.

In doing so, we draw not just on the National Accounts measures with which we are all familiar – notably public sector net debt – but also the new Whole of Government Accounts that have been published for the first time today in summary and unaudited form. These consolidate the accounts of 1500 public sector bodies and present them in the same format as private sector company accounts.

 Second, we look at the potential impact of future government activity, by making illustrative 50-year projections of public spending, revenues and financial transactions, such as student loans.

These can then be used to make projections for measures of public sector net debt. We can then judge the sustainability of the public finances and quantify any future tax increases or spending cuts that might be needed to make them sustainable.

[SLIDE] There are four points I should make at the outset:

- First, the uncertainties surrounding any projections of spending and revenues over this long a time horizon are considerable. These are projections, not precise forecasts, and we show how sensitive they are to some of the judgements we make.
- Second, our goal is to judge whether the public finances are sustainable under current tax and spending policies. But in most cases these policies are not defined for the long-term and in some cases it is simply unrealistic to assume that you would maintain 'unchanged policy' for 50 years. In those cases, we have to decide and explain what a sensible definition of unchanged policy would be.
- Third, we assume that spending and revenues evolve over the first five years of the projections in line with the medium-term forecasts that we published at the time of the Budget. We are deliberately focusing on the long-term, so we have nothing new to say today about the short to medium term outlook for the economy or public finances. We do though illustrate how sensitive the long-term projections would be if the structural health of the public finances was to be stronger or weaker in 2015-16 than we forecast in March.
- Fourth, when we come to quantify any additional fiscal tightening that might be necessary, we are talking about potential changes beyond the end of this Parliament. Nothing we have to say today should be construed as a call for a bigger fiscal tightening over the next four years than is already implied by existing government plans. It is outside our remit to recommend how quickly future governments fill any fiscal gaps.

That said, let me now turn to what we can learn from the public sector balance sheet.

[SLIDE] The most familiar summary measure of the public sector balance sheet is public sector net debt, the difference between liabilities and liquid financial assets. Both this and the previous government have set medium-term targets for this measure, which was equal to £906 billion, 60 percent of GDP or £35,000 per household at the end of the last fiscal year. We forecast in March that PSND would rise to a peak of 70.9 of GDP in 2013-14 before falling back.

For some years the Treasury has also published a wider balance sheet measure called public sector net worth. This has the opposite sign (assets minus liabilities) and includes physical and illiquid financial assets, such as roads and shareholdings. At the end of 2009 PSNW stood at £138 billion, 10 per cent of GDP or £5,700 per household. We forecast in March that PSNW would turn negative this year, reflecting the large budget deficit being used for current spending rather than investment.

Commentators often criticise the use of PSND (and, implicitly, PSNW) as an indicator of fiscal health, because it excludes payments that the government will have to make in the future as a result of actions it has taken in the past – notably public service pension and PFI payments. We can now use Whole of Government Accounts to shed more light here, as the WGA has broader coverage of the public sector balance sheet.

[SLIDE] For example, the public sector's liabilities under the WGA include the net present value of all future public service pension payments arising from past employment. These totalled £1,133 billion or almost 80 per cent of GDP at the end of March 2010, up more than £330 billion on a year earlier.

Almost £260 billion of this increase had nothing at all to do with changes in the prospective size of public service pension payments. Instead it reflected a fall in the so-called 'discount rate' used to convert the flow of future payments into a one-off upfront sum – it is in effect a measure of how much less we value a pound next year than a pound this year. The discount rate used here dropped from 3.2 to 1.8 per cent between the two dates, because it is linked to the real yield on high quality corporate bonds, which also fell over the year. In the 2010-11 WGA the discount rate will rise back to 2.9 per cent, pushing the pension liability back down again.

This illustrates why one should be wary of these big liability figures. They are very sensitive to the type of discount rate used and then to changes in that rate. To further complicate matters, different parts of the WGA use different discount rates.

[SLIDE] A second concern is that only a small proportion of the liabilities arising from Private Finance Initiative contracts are on the public sector's balance sheet in the National Accounts. In March 2010 public sector net debt included a little over £5 billion of liabilities for future PFI capital payments. At the same date just under £30 billion were on the WGA balance sheet. The total of all on and off balance sheet PFI capital liabilities was around £40 billion or just under 3 per cent of GDP. So if we put all these liabilities on the balance sheet, PSND would be about £35 billion or 2.5 percent of GDP higher.

[SLIDE] The public sector's liabilities in WGA also include £105 billion of provisions for costs that are not certain to be incurred, but where the accountants think the probability is greater than 50 per cent. The biggest item here is nuclear decommissioning costs.

The WGA does not include an additional £207 billion of contingent liabilities on its balance sheet, although they are set out in notes to the accounts. These are costs that the accountants think have a *less* than 50 per cent chance of materialising. By far the biggest items here are £175 billion of government guarantees and other undertakings to help stabilise the financial sector.

[SLIDE] The publication of WGA is a welcome boost to the transparency of the public finances and they will become increasingly useful as historical data build up. But the public sector balance sheet alone cannot tell us about fiscal sustainability.

Balance sheet measures look only at the impact of past government activity. They do not include the present value of future spending that we know future governments will wish to undertake, for example maintaining health, education and welfare provision. And, just as importantly, they exclude the public sector's most valuable financial asset – its ability to levy future taxes. So we should not overstate the significance of the fact that the main balance sheet measures now show the public sector's liabilities outweighing its assets. Stock measures are certainly helpful, but if you are interested in fiscal sustainability then go with the flows.

So let me turn to our flow analysis.

To make long run projections of spending, revenues and financial transactions, we need to make assumptions about future demographic and economic trends, and about how we choose to define 'unchanged' policies.

[SLIDE] Demographic trends are a key driver of our sustainability analysis, as they are of similar studies in other countries. Past increases in life expectancy and falls in fertility rates, combined with the demographic bulge created by the baby boom, mean the UK will have an ageing population. The fact that people are living longer, and longer in good health, is obviously welcome. But an ageing population does create fiscal costs.

Our analysis is based on the population projections produced every two years by the Office for National Statistics. The scenario of theirs that we use for our central projections has the proportion of the population aged 65 and over rising from 17 per cent this year to 26 per cent in 2061. It also has net inward migration averaging around half its recent levels over the long term. In the document we show how our projections would be affected if the population structure was older or younger, or if net inward migration remained closer to the levels we have seen in recent years.

[SLIDE] On the economy, we assume that the output per worker grows by 2 per cent a year in the long term, in line with the average of the past 50 years. But we test the sensitivity of the projections to rates of 1.5 and 2.5 per cent as well. We assume that CPI inflation is in line with the Bank of England's 2 per cent target and that the GDP deflator grows by 2.7 per cent a year.

[SLIDE] In judging what we mean by 'unchanged policy', the key decision is what we assume about the uprating of tax allowances and working age benefits. In setting out the cost of policy changes in this area, the Treasury's Budget Red Book assumes that they rise in line with prices unless the government states otherwise.

This may be defensible over a five year horizon, but it is implausible over 50 years because earnings tend to rise more quickly than prices. It would imply that allowances and benefit rates would fall steadily relative to average living standards. People would find more and more of their incomes taxed at higher rates and that the relative living standards of those on benefits would fall.

For this reason we assume that allowances and benefit rates rise with earnings beyond 2015-16, which would keep revenues and benefit costs broadly constant as a share of GDP, other things being equal. Price up-rating would increase revenues by 2.6% of GDP and reduce welfare costs by 1.6% of GDP by 2030-31, giving an unduly flattering impression of the fiscal outlook.

[SLIDE] Another judgement is what to do about the assets that the Government says it would like to sell. We do not include the potential receipts from these in our central projection, nor the associated loss of future income that people often forget about. In line with the *Charter for Budget Responsibility*, we will include them when the Government states what it will sell, how it will sell it and when it will sell it with sufficient clarity to quantify the effect with reasonable accuracy. We do though discuss the potential implications of asset sales in one of online annexes.

[SLIDE] A final and important judgement is how we define 'unchanged policy' for spending on public services like health. In our central projection we assume that per capita health spending rises in line with per capita GDP. But because health care is relatively labour intensive, you might think it more realistic to assume that productivity growth will be slower than in the rest of the economy while wage rates have to keep pace. In that event governments would have to increase health spending as a share of GDP to keep health care output growing in line with the rest of the economy. To reflect this, we show a scenario in which 'unchanged policy' is defined as increasing per capita health spending by 3 per cent a year in real terms rather than 2 per cent.

So, having made all these assumptions, what are our results?

[SLIDE] Most of the action takes place on the spending side. Our central projection shows spending other than on debt interest rising from 36.3 per cent of GDP in 2015-16 to 41.7 per cent by 2060-61, an increase of 5.4 per cent of GDP or roughly £80 billion in today's terms.

The main pressures are from age-related spending:

- Health spending rises from 7.4 to 9.8 per cent of GDP. If health spending rose by 3 per cent a year in real terms, this would add a further 5.3 per cent of GDP to spending by 2060-61;
- State pension costs increase from 5.5 to 7.9 per cent of GDP. We assume
  that the so-called 'triple guarantee' means that the value of the Basic
  State Pension rises by earnings growth plus 0.2 percentage points a year
  on average;
- And social care costs rise from 1.2 to 2 per cent of GDP in 2060-61. The
  trend is in line with the projections of the Dilnot Commission, although
  the numbers are not directly comparable. We have not pre-judged how
  the Government will respond to Andrew's report.

These pressures are partially offset by a fall in gross public service pension payments from 2 to 1.4 per cent of GDP. This reflects the decisions to up-rate pensions in payment by CPI rather than RPI, the current pay freeze and planned workforce reductions. These projections are very similar to those in the Hutton Report and have not made any assumptions about the implementation of his recommendations.

[SLIDE] This chart shows how these pension costs break down between current and future pensioners and employees. Roughly speaking, the liability that I referred to when talking about the balance sheet is the present value of the two darkest bands at the bottom – future payments to current pensioners and future payments to current employees based on past employment.

Now let me turn to revenues.

[SLIDE] Demographic factors will have less impact here than on spending. Revenues are projected to rise from 37.6 per cent of GDP in 2015-16 to 38.5 per cent in 2060-61, an increase of 0.9 per cent of GDP or £13 billion in today's terms. The biggest increase is in capital taxes, which are projected to rise from 1.2 to 1.8 per cent of GDP. More than half this rise comes from inheritance tax.

Long term fiscal sustainability analyses tend to assume that revenues are constant as a share of GDP or (as in our central projection) that they move only in line with demographics. But Chapter 4 contains a detailed discussion of non-demographic factors that might also affect some revenue streams over the long term.

## [SLIDE] We look at:

- income tax, where revenues would increase if income growth is skewed toward the top of the income distribution, as over the past 20 years;
- transport taxes, where greater fuel efficiency could reduce revenue;
- North sea revenues, which are projected to decline as production falls;

- some environmental taxes, where revenues look likely to rise; and
- tobacco duty, where revenues would fall if consumption continues falling.

Taken together, revenue from these sources could fall by up to 2 per cent of GDP over the next thirty years. So future governments are likely to need replacement revenue simply to keep the tax burden constant, let alone to meet the costs of ageing. Remember that these trends are not included in the central projection.

[SLIDE] Bringing together the revenue and non-interest spending projections, you can see from this chart that the gap between them gradually widens over the decades as spending increases more quickly than revenue as a share of national income.

[SLIDE] Take one away from the other and we have the primary balance, which moves from a surplus of 1.3 per cent of GDP at the end of our medium term forecast to a deficit of 3.2 per cent by 2060. In effect, demographic factors gradually unwind some of the fiscal tightening that the Government is currently embarked on.

In order to move from a projection of the primary balance to a projection for public sector net debt, we also need to include financial transactions that affect debt directly, notably student loans.

[SLIDE] This chart shows the increase in public sector net debt from this source as the stock of loans increases and then repayments start flowing in.

As in our March forecast, we assume that the average fee loan is £7,500. We show two alternative projections, with fees and maintenance loans rising with prices or with earnings over the long term. If they were to rise only with prices, then the additional income to universities would fall over time in terms of the number of people they could employ with it. Under the earnings scenario the addition to net debt peaks at 4.3 per cent of GDP (£63 billion in today's terms) in the early 2030s, falling back to 3.3 percent or £49 billion by 2060-61.

Offa announced yesterday that the average fee level, after taking into account waivers and other potential financial support from universities, is likely to be around £7,900. We have estimated the impact of an average fee loan of £8,000, and this only increases the peak addition to debt by 0.2 per cent of GDP.

So now, if we bring together revenues, spending and financial transactions, we can look at the outlook for public sector net debt.

[SLIDE] If the primary balance remained constant from 2015-16 at a surplus of 1.3 per cent of GDP, then net debt would be eliminated in the late 2050s.

[SLIDE] If, thanks primarily to demographics, the primary balance moved to a deficit of 3.2 per cent as in our central projection, PSND would be 107 per cent of GDP (£1,575 billion in today's terms) and rising in 2060-61.

[SLIDE] And if future governments were to raise per capita health spending by 3 per cent a year in real terms then PSND would be roughly twice as high as that. Both this and the central projection would be unsustainable.

Running big budget deficits may be a sensible way to help boost activity when private spending is unusually depressed, but if the deficit and debt increased in this way over the longer term, we might well expect this to reduce national saving, raise interest rates and crowd out investment, reducing GDP and exacerbating the fiscal problems. Historical correlations suggest that if deficits evolve as in our central projection, this could reduce GDP by 1 per cent and increase the debt-to-GDP ratio by 2 to 3 per cent of GDP. Needless to say, historical correlations are not necessarily a good guide to the future and financial markets could react more forcefully to perceptions of the long term trends.

[SLIDE] As I said at the outset, given the time horizon involved, there are significant uncertainties around all our projections. So in the report we present a number of alternative projections based on different assumptions about ageing, productivity growth and migration.

Broadly speaking, the outlook would be worse if the population turned out to be older or productivity growth lower than in our central projection, or if long-term interest rates turned out to be higher relative to long term growth rates.

If net inward migration was higher than in our central projection, the fiscal outlook over our horizon would improve. This is because immigrants are more likely to be of working age than the current population. But if they stay in the country until they reach old age, then this effect will erode as they pay less in tax and consume more health, long-term care and pensions.

So, if they were to be confronted by these pressures, what might future governments need to do to return the public finances to a sustainable position?

[SLIDE] This depends on what exactly we mean by a sustainable position. Most formal definitions are based on the notion of solvency, the ability of the government to meet its formal obligations. The so-called 'inter-temporal budget constraint' requires governments to raise enough revenue to pay for all their non-interest spending and to service and eventually pay off all their debts over an infinite time horizon. We estimate that the government could expect to satisfy this constraint if it announced a one-off and permanent tax increase or spending cut of a little over 3 per cent of GDP (£45 billion in today's terms) from 2016-17 onwards.

This approach may be theoretically rigorous, but the infinite time horizon limits its practical relevance. More realistically, people judge the action necessary to achieve sustainability by asking what needs to be done to achieve a particular debt-to-GDP ratio at a particular date – the so-called 'fiscal gap' approach.

So, for example, we can ask what would be needed to ensure that debt is back at its pre-crisis level of 40 per cent of GDP at the end of our 50-year horizon. It is important to point out that the government does not have a long-term target of this sort and so we use it purely for illustration.

Under our central projection, you would need a permanent tightening of 1.5 percent of GDP (£22 billion in today's terms) starting in 2016-17 to hit the 40 per cent target. This would rise to 3.9 per cent of GDP if health spending was raised 3 per cent a year in real terms. The fiscal gap depends crucially on the structural health of the public finances at the end of our medium-term forecast. If the structural budget balance was 1 per cent of GDP weaker or stronger in 2015-16 than we predicted in March, then the necessary fiscal tightening would be larger or smaller by the same amount.

The fiscal gap is usually defined as the size of the one-off permanent adjustment necessary to hit the target. But of course governments need not – and probably would not – make the whole adjustment in one go. There are an infinite number of ways in which governments could time the fiscal tightening necessary to close a particular fiscal gap. For example, to hit the 40 per cent target you could raise taxes or cut spending by 0.5 per cent of GDP in 2016-17 and each subsequent decade rather than by 1.5 per cent once and for all.

The choice of timescale affects how debt would behave in the run-up to the target date. To illustrate this, assume that the government wanted to ensure that net debt in 2060 was no higher than the 70 per cent of GDP that we predicted in March it would peak at in two years time. [

SLIDE] This could be done with a one-off adjustment of 0.8 per cent of GDP, which would bring debt down to around 45 per cent in the 2030s before it began to rise again. [SLIDE] Or it could tighten by 0.3 per cent of GDP each decade, which would mean that debt fell only to 55 per cent. [SLIDE] Or, in principle, it could keep net debt exactly stable at 70 per cent for the whole period. This would actually allow a fiscal loosening in the early years, but a much bigger tightening at the end.

The choice of path would depend in part on a value judgement about how the burden of adjustment should be shared between different generations – notions of inter-generational fairness. And of course the pace of any adjustment would almost certainly be influenced by the expected reaction of financial markets.

[SLIDE] So let me finish with some brief conclusions:

First, the decision to publish Whole of Government Accounts is a welcome addition to the transparency of the public finances and it will be even more useful when we have a run of historical data. We now have better estimates of public service pension liabilities, the size of PFI commitments, provisions and contingent liabilities.

Second, although balance sheet measures are useful and informative, they are of limited value as a guide to fiscal sustainability. This is because they are

fundamentally backward looking and we need to look forward to the potential impact of future government spending, revenues and financial transactions. Even WGA does not include the government's ability to tax as an asset.

Third, the long-term outlook for the public finances is driven in large part by demographics. The fact that we are living longer is welcome, and certainly preferable to the alternative. But the ageing of the population imposes fiscal costs, notably the likely need for higher spending on health, long-term care and pensions.

Fourth, if future governments accommodate these demographic pressures on spending, they are likely to have to tax more or spend less elsewhere to keep the public finances on a sustainable path. But this does not necessarily mean increasing the size of the already substantial fiscal tightening planned for this Parliament. This is a familiar story in many industrial countries

Fifth, any projections over a 50 year horizon are surrounded by considerable uncertainty. The size of the fiscal gap that needs to be filled will depend on the structural health of the public finances at the end of our medium term forecast, future productivity growth, future population and migration trends, the relative size of long-term growth rates and long-term interest rates, and by how much governments feel the need to increase per capita spending on health to compensate for potentially weaker productivity growth than in the rest of the economy.

In interpreting this analysis, policymakers should be aware of all these uncertainties. But they should not use them as an excuse for failing to think about the long-term fiscal consequences of their actions. Thank you.