## Fiscal sustainability report 2012: launch presentation

Good afternoon everyone.

My name is Robert Chote, Chairman of the OBR. And I would like to welcome you to the launch of our second *Fiscal sustainability report* – our annual publication looking at the health of the public sector balance sheet and the long-term sustainability of the public finances. We are very grateful to the Institute for Government for hosting us once again.

[SLIDE] As you know, the OBR was created in 2010 to provide independent and authoritative analysis of the UK's public finances. The conclusions we reach in this report are the collective view of the Budget Responsibility Committee, but we have of course relied enormously 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 28th, so he could decide whether there were any additional policy decisions he wished us to take account of, and there were not. We provided him 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 or others to change any of our conclusions.

So how do we assess fiscal sustainability in this report?

## [SLIDE] Our approach is twofold:

- First, we look at the impact of past government activity, as reflected in the assets and liabilities on the public sector's balance sheet. In doing so, we look at National Accounts measures and also at the Whole of Government Accounts, which consolidate the accounts over 1000 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 significant financial transactions. These

can then be used to make a 50-year projection for 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] Before turning to the numbers, 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, so we have to decide and explain what a sensible definition would be.
- Third, we assume that spending and revenues evolve in line with the medium-term forecasts we published at Budget time over the first five years. So we have nothing new to say today about the short to medium term outlook for the economy or the public finances. We do though illustrate how sensitive the long-term projections are to the end point of the medium term forecast.
- Fourth, when we come to quantify any additional fiscal tightening that might be necessary, we are talking about potential changes above and beyond the five-year consolidation plans that are already in the pipeline. Nothing we have to say today should be construed as a call for a bigger fiscal tightening over this period than is already implied by existing Government plans.

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

[SLIDE] The most familiar summary measure 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 roughly £1,000 billion, 66 percent of GDP or £39,000 per household at the end of the last fiscal year. We forecast

in March that PSND would rise by about another 10 per cent of GDP by 2014-15 before falling back as the budget deficit shrinks.

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. At the end of 2010 this was very close to zero. We forecast in March that it would fall to a trough of minus 21 per cent of GDP in 2014-15, reflecting the fact that the large budget deficits we predict over the next couple of years will be used primarily to finance current spending rather than to invest in new public sector assets.

[SLIDE] This chart shows that the deterioration in the outlook over the past year has been bigger for PSNW than it has been for PSND. This is because liabilities are valued at market prices for PSNW but redemption value for PSND, and bond prices have risen sharply over the year.

[SLIDE] So how does this look in comparison with other countries? Precisely comparable data are not available, but if we look at the IMF's latest forecasts for general government net debt in 2016 we are about a third of the way down the advanced country league table for indebtedness. [SLIDE] But if we look at how their forecasts have changed over the past year, the UK has seen one of the largest deteriorations.

Commentators often criticise the use of PSND (and, implicitly, PSNW) as an indicator of fiscal health, because it excludes payments that we know the government will have to make in the future as a result of actions it has taken in the past. But we can use the balance sheet information in the Whole of Government Accounts to shed more light.

[SLIDE] The WGA are prepared under commercial accounting rules and have a broader coverage than PSND and PSNW. They include illiquid and physical assets, public service pension liabilities, PFI commitments and provisions for expected future costs, as well as noting contingent liabilities. In this report we draw on the unaudited summary accounts for 2010-11, which have been published today. The boundary of WGA has been extended since last year to include the Bank of England and London & Continental Railways, but not the publicly owned commercial banks. The accounts for 2009-10 have been restated on the same basis,

so that when we compare the two years in the FSR we are comparing like with like.

So what do we learn?

[SLIDE] Let me start with public service pensions. Liabilities on the WGA balance sheet include the present value of all future public service pension payments arising from past employment. These totalled £960 billion or almost 64 per cent of GDP at the end of March 2011. This is £175 billion or 14 per cent of GDP lower than a year ago.

As we highlighted last year, these figures move around not just as a result of changes in the expected flow of pension payments, but also as a result of changes in the discount rate used to convert that flow into a one-off upfront sum. For reasons that are not immediately intuitive the discount rate used for this purpose is linked to the interest rate at which financially healthy companies can borrow on the bond market.

About £69 billion of the fall in liabilities in 2010-11 reflects an increase in the real discount rate adjusted for RPI inflation. £126 billion reflects the Government's decision to uprate pensions in payment by CPI rather than RPI (which usually rises more quickly). Moving from RPI to CPI also further increases the real discount rate. Other factors have a partially offsetting effect, increasing the stock of liabilities by £20 billion.

So Government action has helped bring the liability down. We already know that the real discount rate based on CPI will edge down from 2.9 per cent to 2.8 per cent in next year's WGA, so there will be an increase in the public service pension liability arising from that effect, all other things being equal. But it will be a small one.

This sensitivity to the discount rate is an important reason not to be mesmerised by these big present value liability figures. It is more helpful to look at the expected flow of future pension payments, which also include expected payments arising as a consequence of future employment. And I will come to that in a few moments.

[SLIDE] A second concern with the National Accounts balance sheet measures is that they include only a small proportion of the liabilities arising from Private Finance Initiative contracts. In March 2011 public sector net debt included a little over £5 billion of liabilities for future PFI capital payments. At the same date just under £32 billion were on the WGA balance sheet. This figure is up 13 per cent on the previous year, reflecting new contracts and additional capital commitments on previous deals. The present value of PFI servicing costs has risen by a similar amount. The total capital liability on and off both balance sheets has also risen, but less sharply, to around £37 billion. If all these liabilities were on the National Accounts balance sheet, PSND would be about £32 billion or 2.1 percent of GDP higher than it is now.

[SLIDE] The public sector's liabilities in WGA also include provisions for future 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, which are hard to predict.

These provisions totalled a little over £102 billion in 2009-10. Over the subsequent year £24 billion of new provisions were added, £12 billion were used – less than the £15 billion expected in last year's WGA – and £6 billion were removed from future years being thought unnecessary. So that leaves us with a £6 billion net increase over the year to £108 billion. £4 billion of the increase comes from nuclear decommissioning and £2bn from likely clinical negligence payments. The accountants expect £12 billion of the provisions to be used during 2011-12.

[SLIDE] Contingent liabilities are costs that the public sector may incur, but where the accountants think the probability is less than 50 per cent – although not insignificant. The widening of the WGA boundary to include the Bank of England means that £165 billion of contingent liabilities have been removed because the Treasury's guarantee for the Bank of England's Special Liquidity Scheme is now consolidated out of the accounts. But, looking at the restated figures, we see that other contingent liabilities have increased by about £8 billion over the year to almost £50 billion. Half this rise reflects an increase in the estimated amount of tax collected by HMRC that is being challenged in the courts, but where the taxman expects to win.

Contingent liabilities represent a risk to the public finances that we need to keep a close eye on. It is striking that there are some significant further increases already in the pipeline – another £5 billion of tax payments facing legal challenge, £15 billion of corporation tax at risk

from oil field decommissioning, and up to £20 billion of government guarantees for the credit easing schemes announced last November. In his recent Mansion House speech, the Chancellor also announced that the Government plans to do more to support investment in housing and infrastructure through the use of new government guarantees. By definition, no individual cost is expected to materialise – but as the total mounts the risk of a future hit to the public finances increases.

[SLIDE] Provisions and contingent liabilities are useful risk indicators and they underline the fact that the WGA as a whole is a useful contribution to the transparency of the public finances. But the public sector balance sheet alone cannot tell us all we need to know about fiscal sustainability.

If you were to take PSND, PSNW or the WGA at face value, you might conclude that the government was bust. But 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, perhaps most importantly, they exclude the public sector's most valuable financial asset – its ability to levy future taxes. So, while stocks of assets and liabilities are interesting and helpful, if you are really interested in fiscal sustainability then go with the flows.

And so let me turn now 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 crucial over this time horizon. Our analysis is based on population projections prepared every two years by the Office for National Statistics. This year's FSR uses 2010-based projections, which show more inward migration, lower life expectancy for today's elderly, higher life expectancy for future newborns, and a bigger population than the 2008-based figures we used last year. But the big picture remains the same: past increases in life expectancy and falls in fertility rates, combined with the demographic bulge created by the baby boom, imply an ageing population, and this has fiscal costs.

The ONS scenario 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.

[SLIDE] On the economy, we assume that output per worker grows by 2.2 per cent a year in the long term, in line with historical trends. We assume that CPI inflation is in line with the Bank of England's target and that the GDP deflator grows by 2.5 per cent a year.

[SLIDE] When defining 'unchanged policy', our key decision is what to assume about the uprating of tax allowances and working age benefits. Over the medium term the Treasury 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. 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 rather than prices beyond 2016-17, which would keep revenues and benefit costs broadly constant as a share of GDP, other things being equal. Assuming price up-rating would increase revenues by 2.6% of GDP and reduce welfare costs by 1.6% of GDP by 2031-32, giving an unduly flattering impression of the fiscal outlook.

[Turning to the value of the basic state pension, we assume that this rises in line with the Government's 'triple guarantee', in other words by the largest of earnings growth, CPI inflation or 2.5 per cent each year. Past history – which may be a far from perfect guide – suggests this will average earnings growth plus 0.26 percentage points each year. So by 2061-62 the triple guarantee increases the cost of the basic state pension by 0.6 per cent of GDP, relative to pure earnings indexation.

[SLIDE] For spending on public services and tax revenues, in our central projection we assume that these remain constant per capita as shares of GDP beyond the end of the medium-term forecast, adjusting only for the age composition of the population. This chart shows how consumption of age-related public services and tax payments varies by age. When people are young they consume quite a bit of health care, then quite a bit of education, but they don't pay much tax. In the middle years they

pay more tax but consume less health care and education. And in later years they pay less tax but consume more health care and long-term care. So you can see why the public finances come under pressure as more of the population clusters in the right hand side of the chart.

As I will discuss later, there is a strong argument to say that upward pressure on health care spending will be greater than this simple view of unchanged policy suggests. And that could have big consequences.

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 public spending other than on debt interest rising from 35.6 per cent of GDP in 2016-17 to 40.8 per cent by 2061-62, an increase of 5.2 per cent of GDP or roughly £80 billion a year in today's terms.

As you can see the main upward pressures are from health care, state pension costs and social care. As regards social care, the Government set out its response to the Dilnot Commission yesterday, but as the White paper makes clear some key financial parameters of the proposed new system remain to be decided so we are not in a position to cost it yet.

[SLIDE] These upward pressures are partially offset by a fall in gross public service pension payments from 2.2 per cent of GDP in 2016-17 to 1.3 per cent in 2061-62. This compares to a smaller fall from 2 per cent to 1.5 per cent last year. Higher spending at the beginning reflects a lower GDP forecast; lower spending at the end reflects the post-Hutton pension reforms announced last year, as well as the additional cuts to the public sector workforce implied by last November's decision to pencil in additional cuts in public services spending from 2015-16.

In the report we also look at the cumulative impact of all the current government's reforms in 2061-62. The decision to increase pensions in payment by CPI rather than RPI saves 0.4 per cent of GDP and the post-Hutton reforms save 0.1 per cent of GDP. The increase in employee contributions reduces the net cost by a further 0.1 per cent of GDP. This reinforces the fact that public service pension costs are alleviating long term pressure on the public finances rather than exacerbating it.

Now let me turn to revenues.

[SLIDE] Demographic factors will have less impact here than on spending as a share of GDP, as older people continue to pay tax but do not contribute as much to GDP. Revenues are projected to rise from 37.3 per cent of GDP in 2016-17 to 38.2 per cent in 2061-62, an increase of 0.9 per cent of GDP or £14 billion in today's terms.

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 of our report contains a detailed discussion of non-demographic factors that might also affect some revenue streams over the long term.

[SLIDE] We have halved our projections for North Sea Oil and gas revenue in 2040-41, reflecting lower production, lower prices and higher capital expenditure. But the change is small as a share of GDP, so we stick to our view last year that receipts from oil and gas, transport taxes, tobacco duty and some environmental taxes could fall by about 2 per cent by the 2030s.

This year we also discuss how globalisation could put downward pressure on corporation tax receipts (as overseas tax rates fall) and VAT receipts (as falling prices for manufactures reduce the amount people spend on goods subject to the standard 20 per cent rate). But these pressures are harder to quantify with any confidence. The bottom line is that future governments are likely to need replacement revenue simply to keep the tax burden constant, let alone to meet the costs of ageing. These pressures 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 budget balance, which moves from a surplus of 1.7 per cent of GDP at the end of our medium term forecast to a deficit of 2.6 per cent by 2060. In effect, demographic factors gradually unwind some of the fiscal tightening that the Government is currently embarked upon.

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 that results as the stock of student loans increases and then repayments start flowing in. We assume that the average fee loan per student is £7,000 and that fees and maintenance loans rise with earnings over the long term. Under this scenario the addition to net debt peaks at 6.1 per cent of GDP in the early 2030s, falling back to 4.4 percent by 2060-61. This figure is slightly higher than last year as we now capture loans issued by the devolved administrations.

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 2016-17 at a surplus of 1.7 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 2.6 per cent of GDP as in our central projection, PSND would be 89 per cent of GDP (£1.4 trillion in today's terms) and rising in 2061-62.

[SLIDE] As I mentioned earlier, we assume in our central projection that spending per capita on public services remains constant as a share of GDP beyond 2016-17, only adjusting for the ageing population. But, as we noted last year, it is not clear that this is the most realistic interpretation of unchanged policy for health spending in particular.

Setting aside the effects of demographic changes, under our central assumption the output of health care will only rise in line with the output of the rest of the economy if productivity growth rates are the same – we assume 2.2 per cent a year in the long term But productivity growth in health care has averaged only around 0.8 per cent a year since 1979 on one reasonable estimate. If it stayed that way then you would need to increase real health spending by 3.6 per cent a year to keep health care output rising in line with output in the rest of the economy.

[SLIDE] If you were define 'unchanged policy' in this way, then this would add 7.5 per cent of GDP to health spending by 2061-62 and take the debt to GDP ratio well over 200 per cent of GDP.

[SLIDE] Returning to the central projection, how has the picture changed since last year's FSR? It looks somewhat less threatening – the primary deficit is projected to be 0.6 per cent of GDP lower and public sector net debt 20 per cent of GDP lower in 2060-61 than we thought last year.

Two thirds of this improvement reflects a slightly stronger position at the end of our medium term forecast and one third reflects a slightly smaller deterioration in the budget balance thereafter.

As regards the medium term, the underlying health of the public finances looks weaker than it did a year ago, largely reflecting the fact that the outlook for potential GDP looks weaker. But this deterioration (combined with other more favourable forecasting changes) has been more than offset by policy changes, notably the decision to announce additional public services spending cuts from 2015-16. The net result is that the primary budget surplus is currently forecast at 1.7 per cent of GDP at the end of the medium term horizon compared to 1.3 per cent last year – and this improvement is locked into the projections.

In addition, the new population projections reduce the age-related deterioration in the budget balance over the remaining 45 years of the projections by 0.2 per cent of GDP relative to last year.

[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 primary surplus at the end of the medium term forecast was to be smaller;
- If the population structure was to be older;
- If productivity growth was to be slower, or;

• If long-run interest rates were to be higher relative to long run economic growth rates.

If net inward migration was higher than in our central projection, the fiscal outlook over our chosen horizon would improve. This is because inward migrants are more likely to be of working age than the rest of the population. So we avoid the cost of educating them and some will leave before we have to finance them in old age. But to the extent that inward migrants choose to remain in the country into old age, higher inward migration postpones the fiscal pressures rather than avoiding them.

So, if future governments were to be confronted by the pressures set out in our central projection, what might they need to do to return the public finances to a sustainable position?

[SLIDE] This depends on what we mean by a sustainable position. Most formal definitions are based on 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 2.6 per cent of GDP (£39 billion in today's terms) from 2017-18 onwards.

This approach may be theoretically rigorous, but the infinite time horizon limits its practical relevance. More realistically, people judge 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. (The government does not have a long-term target for the debt-to-GDP ratio and so we use this purely for illustration.)

Under our central projection, you would need a permanent tightening of 1.1 percent of GDP (£17 billion in today's terms) starting in 2017-18 to hit the 40 per cent target. This is down from 1.5 per cent of GDP in last year's FSR. This figure rise to 4.4 per cent of GDP if health spending was raised 3.6 per cent a year in real terms.

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. For example, to hit the 40 per cent target you could raise taxes or cut spending by 0.4 per cent of GDP in 2017-18 and each subsequent decade rather than by 1.1 per cent once and for all.

[SLIDE] The choice of timescale affects how debt would behave in the run-up to the target date. This chart shows how the debt ratio moves to 40 per cent with a one-off adjustment, while this one [SLIDE] shows it moving there with an initially smaller but ultimately larger decade-by decade adjustment.

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 summary conclusions:

First, the ageing of the population is likely to put pressure on the public finances, primarily as a result of upward pressure on public spending.

Second, there are a number of non-demographic factors that could put further pressure on health spending and erode tax revenues.

Third, it is important to recognise that there are huge uncertainties around the scale of the challenge and the UK is certainly not alone in confronting it. But that should not be used as an excuse for ignoring it.

Fourth, policy action over the past year and the new population projections have somewhat eased the pressures since last year.

Fifth, we need to keep an eye on the risks to our projections, including growth in off-balance-sheet and contingent liabilities. The Government does not have enormous room for manoeuvre against its fiscal rules and if it wishes to boost investment then it is obviously attractive to do so in a way that does not add directly to public sector debt.

But we should remember the lessons of PFI, where off-balance sheet financing may on occasion have undermined confidence in the management of the public finances more than transparent debt financing would have done. Observers sometimes felt that it was being chosen because of its accounting treatment rather than because it was the most effective way to deliver assets at the best value for money.

It is not for us to recommend which types of investment and which delivery mechanisms the Government should choose. But I am sure they will be keen to demonstrate that whichever ones they do choose have been chosen for good reasons.