

How far away is the UK from fiscal sustainability?

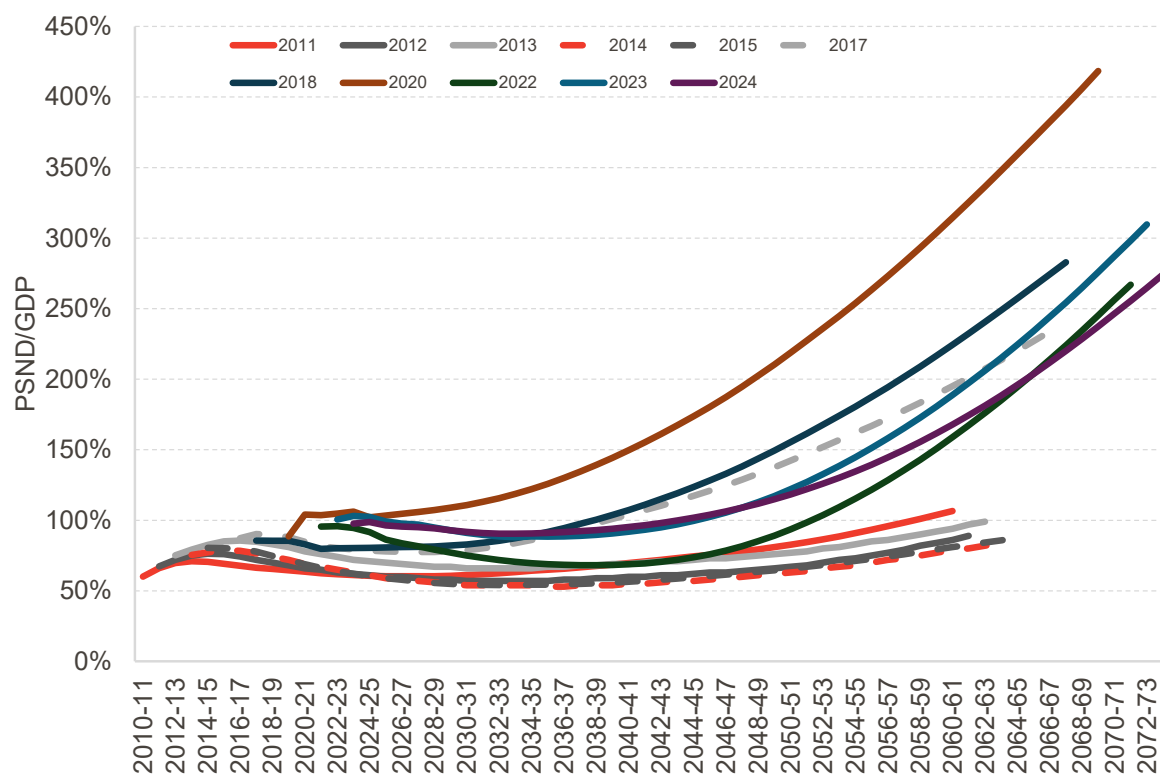
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6 January 2026

If you have been anywhere near the discussions about fiscal sustainability, the numbers look grim. From the first time the Office for Budget Responsibility published its [long-term projections in 2011](#), it has been clear that the ageing of the population – despite being obviously welcome news – will put significant pressure on the public finances. Health spending in particular is likely to drive pressure for further spending, meaning that without further increases in revenues, successive deficits would mean a build-up of debt at an exponential rate.

Some of the projections from that 2011 report would have appeared scary at the time, but seem benign to a fault given the current state of the public finances. The OBR's projection was for the debt-to-GDP ratio to hit 96% – the current level of debt – in 2056-57, and 107% by 2060-61.

Chart 1: Successive OBR long-term debt-to-GDP ratio projections



Source: OBR

The UK's deficit reduction was after the 2008 crisis – contrary to what many, including the government of the day, would insist – was actually incredibly gradual. It would take until 2015-16 for the deficit to be below 5% of GDP, which meant that the debt-to-GDP

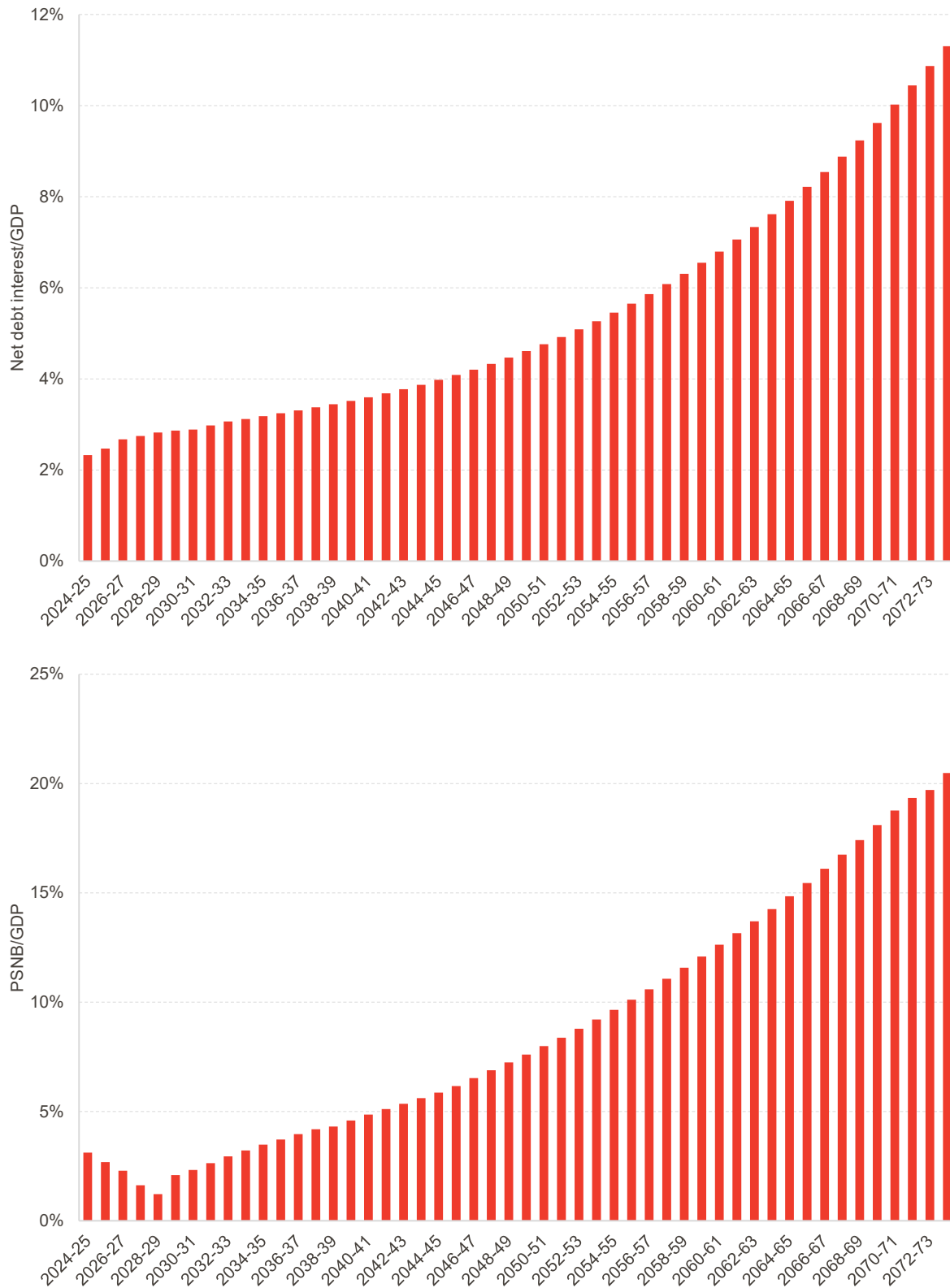
ratio went from 36% on the eve of the crisis to over 80% by the middle of the 2010s. And while it came down during the latter years of the 2010s, staying well below 3% of GDP, it has since returned to levels which are not sustainable in the long-term. Ignoring the pandemic as a one-off shock, the last few financial years have seen public sector net borrowing average 5% of GDP and not fall below 4.8%. With a much higher stock of debt and a dragged out return to fiscally sustainable deficits, it is little wonder that the OBR's subsequent projections have only become grimmer.

At the same time, the OBR moved to a much higher view of the path of health spending, driven not only by demographic factors but also by substantially higher cost pressures from lower productivity to technology and co-morbidities. September 2024's projections – prior to the Labour Government's first budget, so yet without the increase in borrowing announced in the Autumn of 2024 – had debt rising to 274% of GDP by the mid-2070s, or 324% if we assume a recession that adds 10 percentage points to the debt ratio every 10 years – roughly the average cost and frequency of recessions historically.

A mountain too far?

Faced with such a seemingly insurmountable challenge, it is easy to feel disheartened. Surely whatever we do, debt will explode? But if that is the case, why are financial markets so sanguine about it? UK Government debt is trading at higher yields than a few years ago, but it is still around 5% – surely not enough to capture what is a seeming inevitability that the UK will not be able to afford its repayments, which would go above 10% of GDP.

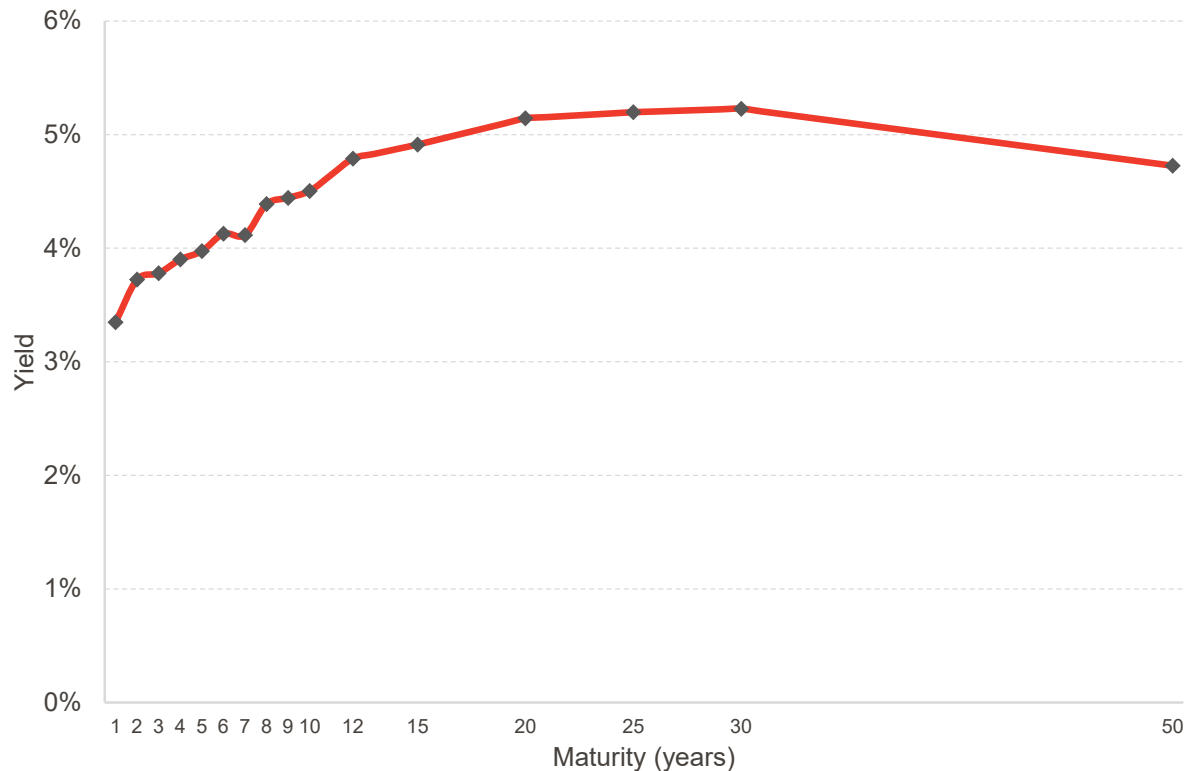
Chart 2: Net debt interest and public sector net borrowing in the OBR's projections



Source: OBR, FAI analysis

The deficit too would balloon to over 20% of GDP by the mid-2070s – far above anything that is sustainable as well. And this is not privileged information – it is published by the OBR every one to two years, and the results have broadly been the same since the outset. Which means we have a paradox on our hands. It seems incredible that anyone would buy 50-year gilts, let alone that they would be more expensive to buy than for the 15 and 20-year dated equivalents?

Chart 3: UK yield curve on 24 December 2025



Source: MarketWatch, FAI analysis

So what's going on?

There are four main arguments that can be made for this set of circumstances:

1. The projections really are the most likely scenario, but market agents have not taken account of them or have discounted them. This seems implausible and unsatisfactory: it essentially requires believing that sophisticated agents tasked with a lot of liquidity and a job of matching assets and liabilities have for decades behaved far from rationally. One should always be at the very least sceptical of ascribing irrational behaviour in such a grand scale.
2. The UK does face an impending fiscal crisis, but so does every other advanced economy, and therefore what matters is the UK's relative position. In this view, investors need some form of Government debt holdings for long-term hedging, in which case they are willing to buy these securities even though they are essentially unfulfillable in any meaningful way. But this is also unsatisfactory as an explanation: it implies a sort of nihilistic self-deception that denies market participants any real agency. No one is truly forced to buy 50-year-dated gilts – they could instead buy other assets that may not be perfect substitutes, but would be substitutes to some degree, such as shorter-dated assets. But remember that 50-year gilts are *more*, not less expensive than shorter-dated ones, which this explanation does not address.
3. The UK does face an enormous fiscal adjustment, but politicians and society will tackle it when they need to; or
4. A fiscal adjustment of some magnitude is needed, but is perhaps less severe than it appears in these projections.

Unpicking the OBR's long-term assumptions

Table 1: Summary of the OBR's long-term assumptions

Economy	Revenue	Spending
Labour productivity per worker grows at 1.5% a year	Tax thresholds increased in line with average earnings (productivity plus GDP deflator)	Demographic and other factors drive health spending
Higher migration variant of population projections	Essentially keeps revenue streams steady as a share of GDP, other than demographically affected tax bases (National Insurance Contributions)	Education and social care spending are driven by demographic factors
CPI inflation of 2% a year, GDP deflator inflation of 2.3% a year	One exception is fuel duty, which falls to essentially zero by 2050 as electric vehicles replace internal combustion engine cars	Welfare spending is driven by demographic factors and awards are increased in line with average earnings (plus an additional wedge for triple lock)
Labour share, employment rates unchanged		All other areas of spending are aligned with nominal GDP
State pension increases to 70 by the end of the period		
Interest rates 0.2ppt higher than nominal GDP growth		

Source: FAI summary of OBR assumptions

Indexation matters a lot

One of the features of the OBR's long-term model is that it essentially turns off fiscal drag.

Fiscal drag is a phenomenon through more of taxpayers' income is dragged into higher rates of tax. This happens when average earnings growth – over the long run, productivity growth plus inflation – is higher than threshold indexation, and is a product of the progressive nature of income tax rates. At UK Government level, there are three particularly powerful points of fiscal drag:

- The personal allowance (around £12,500), at which income moves from being taxed at 0% to 20%;
- The higher rate threshold (around £50,000), at which income moves from being taxed at 20% to 40%;
- And (although less so) the additional rate threshold, at which income moves from being taxed at 40% to 45%.

Fiscal drag has been turbocharged in recent years due to UK Government policy of keeping all thresholds frozen in cash terms. This has now been extended out to 2030-31, and will have meant that thresholds will not have changed for a full decade.

But while the cash freeze magnifies the effects of fiscal drag, it happens **even if thresholds are increased by inflation**, which is the default indexation mechanism.

The OBR, for their part, recognised this in their 2011 *Fiscal sustainability report*, stating that “*this definition of unchanged policy would result in the average tax rate rising steadily over time as people find more of their income falling into higher tax bands*” and that “[p]revious long-term analyses, including the Treasury’s Long-term public finance reports (LTPFRs), have recognised that this fiscal drag could not be assumed to continue indefinitely”.

A 15-year analysis then showed that assuming fiscal drag just like the OBR does within the medium-term forecast would have raised tax receipts by 2.3% of GDP – and that’s only a third of the timeframe that the long-term projections cover. Fiscal drag is very powerful over the long run.

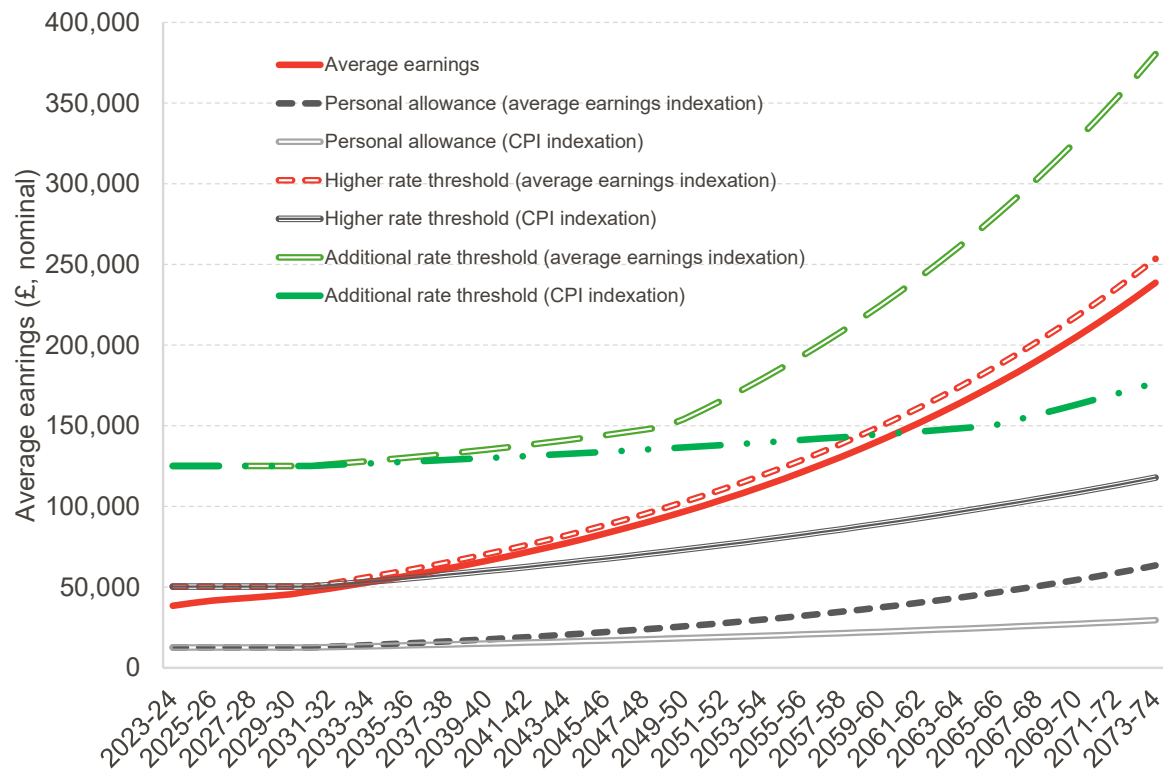
Is it really true that this cannot go on forever?

The long-term projections are meant to illustrate the public finances under unchanged policy. Average earnings indexation is not current policy, so by definition it cannot be unchanged policy.

This leaves us with a much more realistic conclusion that fiscal drag is built into the system *by design* and that normal income growth raises tax rates over time. If we consider a long-enough period of time, this can have severe consequences, as chart 4 shows. Average employee earnings, rather than being just below the higher rate threshold, would end up above the additional rate threshold.

This would be a radical reshaping of the income tax system, going from a marginal rate on the average income of 20% to 45%. And yet it is what is implied by the default indexation mechanism.

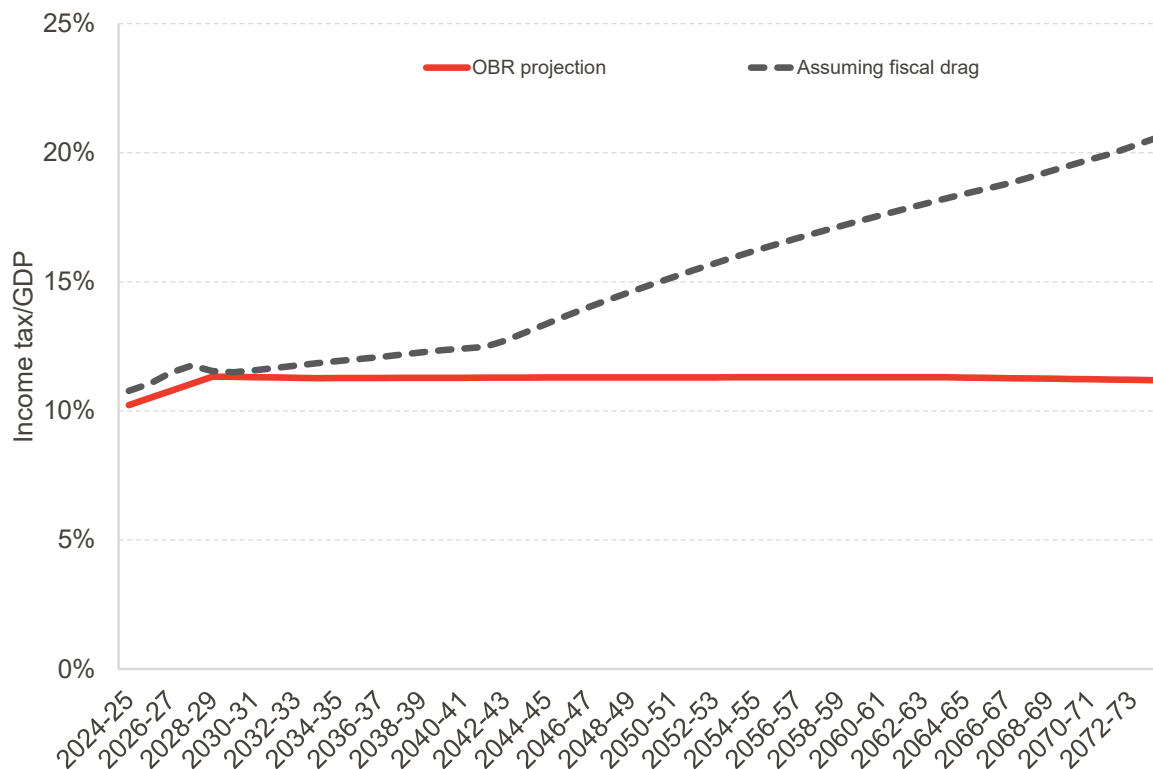
Chart 4: Projected average earnings and thresholds under CPI and average earnings indexation



Source: OBR, FAI analysis

How much more depends on assumptions about income distribution, but a plausible scenario based on the OBR's 2024 baseline could see income tax being around 21% of GDP in 50 years' time – or about 85% higher than it is today just from fiscal drag.

Chart 5: Income tax receipts up to 2073-74 with and without fiscal drag



Source: OBR, FAI analysis

It bears repeating – this is just a product of the current default uprating mechanism.

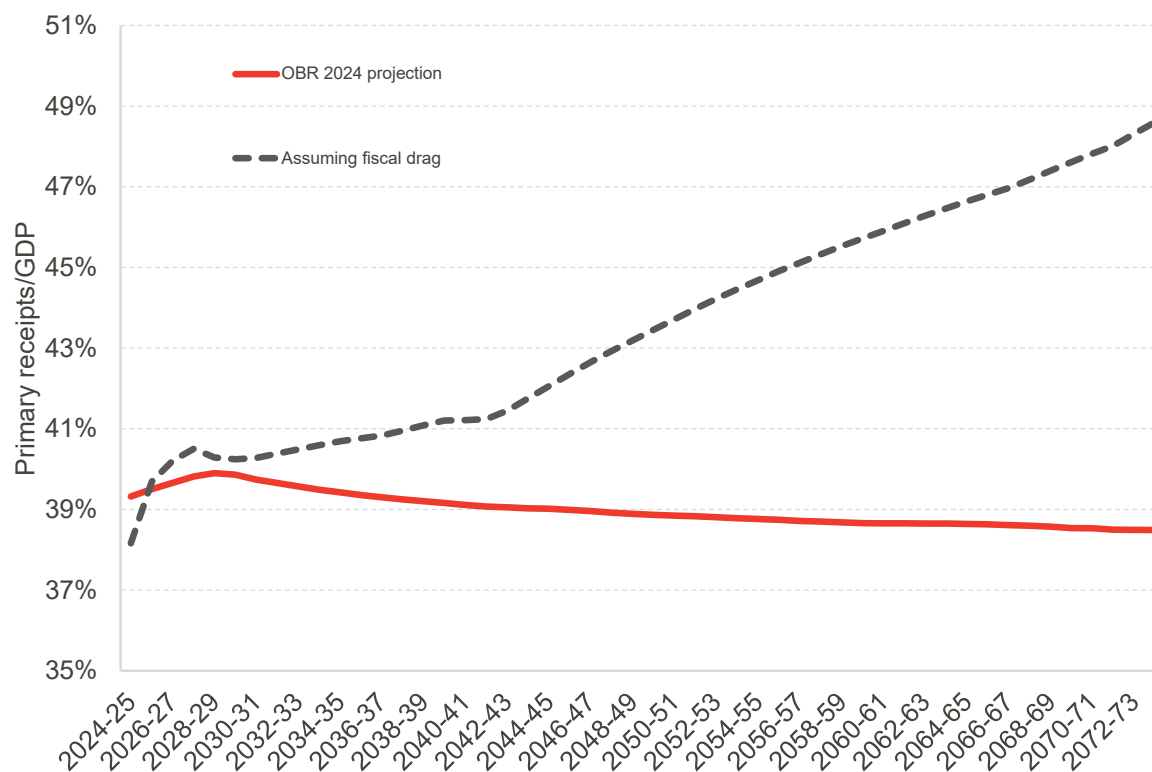
If we allow for fiscal drag – which is built into the system – taxes will go up significantly over time

The OBR’s 2024 projections – as indeed all its previous projections – have tax revenues falling slightly over time as a share of GDP. This is because of a smaller share of the population being of working age, thus reducing National Insurance Contributions, while the remaining taxes remain broadly constant as a share of national income. A further c.1% of GDP fall has recently been incorporated to account for the loss of fuel duty due to the electrification of the vehicle fleet.

But if we account for fiscal drag, the reality is significantly different: primary receipts (that is, excluding interest and dividend receipts) as a share of GDP would instead rise from 40.2% in 2029-30 to 48.6% in 2073-74.

This would be an increase of 8.4% of GDP, or £250 billion a year in today’s terms. This is of course a huge increase – but remember that fiscal drag is baked into the system. An increase of this magnitude is what would happen in the absence of changes to government policy.

Chart 6: Primary receipts until 2073-74 assuming fiscal drag and otherwise OBR assumptions



Source: OBR, FAI analysis

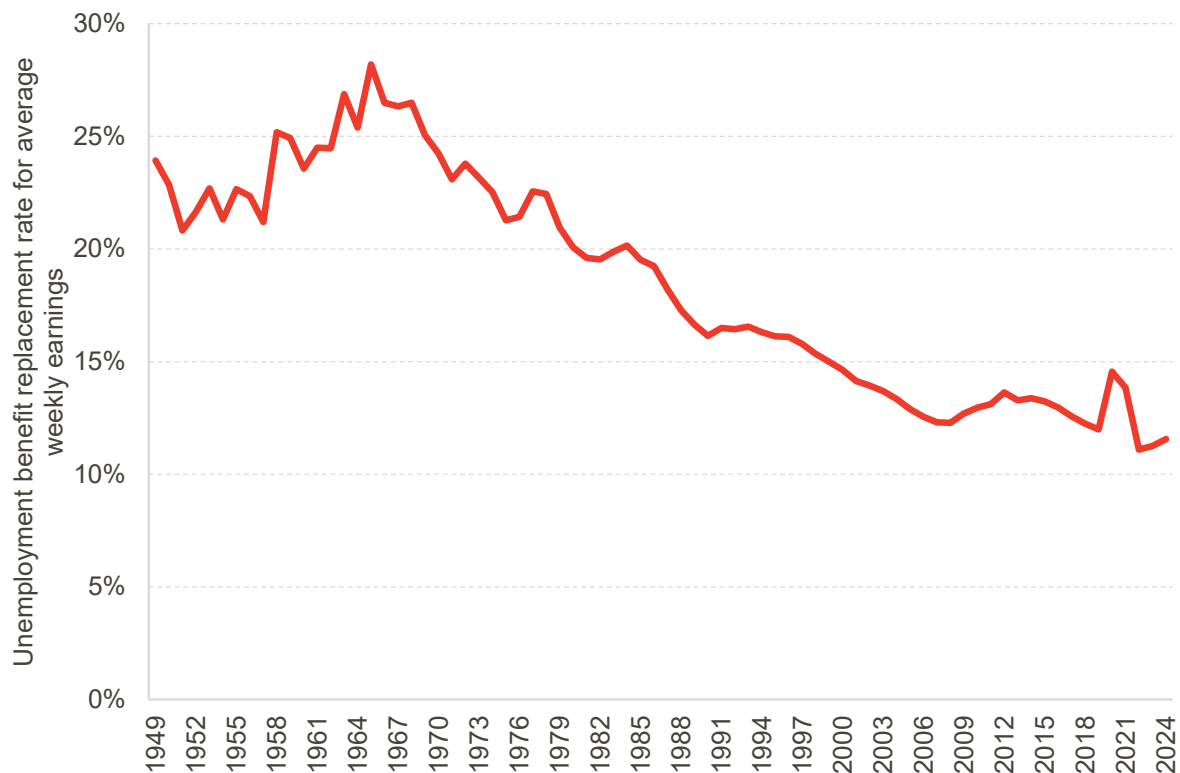
Indexation doesn't just affect taxes – it matters for spending too

Welfare spending in particular is indexed annually, and this is another area where the OBR's assumption has a large effect.

Again, looking back at the original FSR in 2011, the OBR state that “*uprating working-age benefits in line with prices rather than average incomes over the long term would see the value of those benefits shrinking steadily relative to the living standards of the bulk of the population.*” This is the reasoning for using average earnings as the default indexation mechanism.

There's no disputing that income replacement provided by benefits would decline over time if indexation were to be done only in line with prices. But that's exactly what has been happening for the past 50 years. Apart from the state pension, welfare payments are uprated with price inflation, which has been much lower than earnings growth. This is why the income replacement rate from unemployment benefits, for example, has fallen from 28% in 1965 to just 12% today.

Chart 7: Unemployment benefits¹ as a share of average weekly earnings



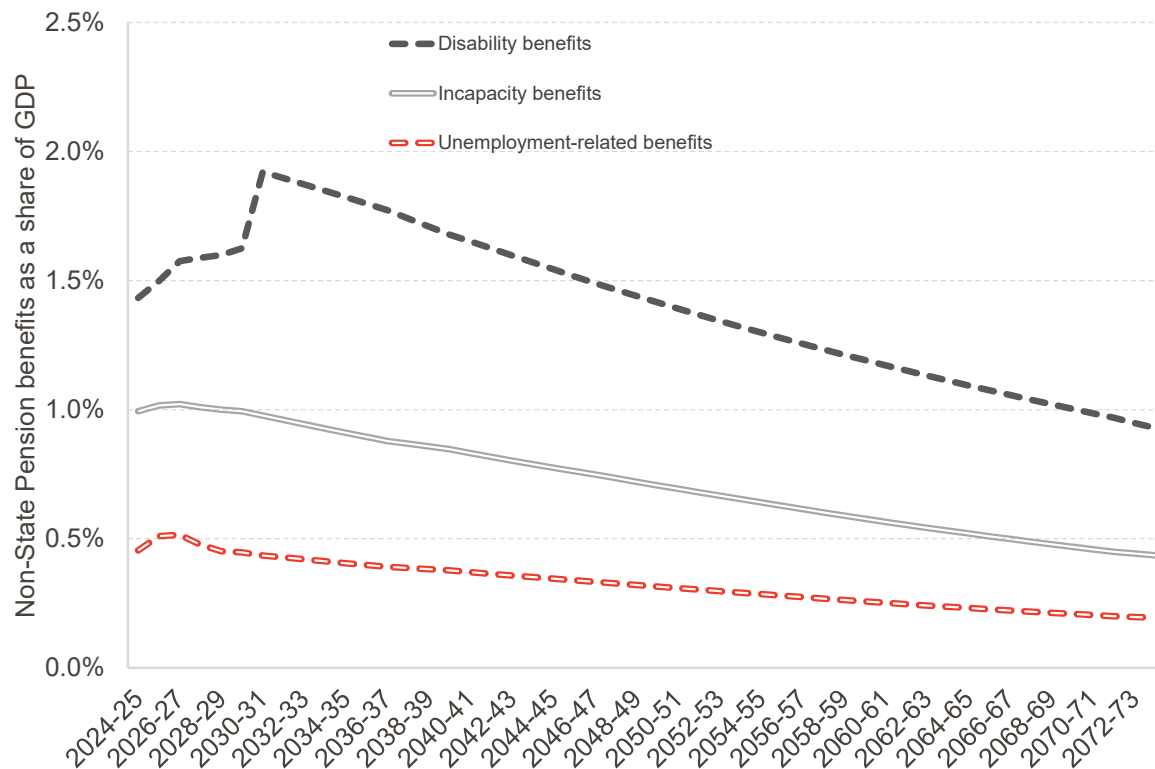
Source: FAI calculations using data from DWP, Bank of England, OBR, ONS

The erosion of welfare spending as a share of average earnings is a feature, not a bug of the default indexation mechanism, and it is pretty hard to argue why it shouldn't be taken as the basis for unchanged policy, even if leads to some stark conclusions. On the contrary – uprating benefits by average earnings would seem a pretty large change in policy.

The implication is that assuming CPI indexation over the long-run would mean falling spending on welfare other than the state pension – even after accounting for a higher disability rate from people living longer.

¹ Specific unemployment benefits separate from other benefits no longer exist since non-contributory jobseeker's allowance was replaced by universal credit. This calculation uses the standard rate of UC as the analogous benefit, and includes the additional £20/week pandemic boost to the standard rate.

Chart 8: Non-state pension welfare spending projections as a share of GDP under CPI uprating



Source: FAI calculations using OBR and ONS data

Among welfare spending, only the state pension would continue to rise as a share of GDP. This is because unlike other benefits, the state pension is (a) explicitly linked to average earnings through the triple lock and (b) the triple lock ratches it up due the 2.5% floor in annual indexation.

Combined with an increasing number of people of pensionable age – even after accounting for the projected rises in the state pension age – spending on state pension would rise from 5% of GDP today to over 8% by the mid-2070s.

Chart 9: Projections of welfare spending under CPI uprating other than State Pension (triple lock)



Source: FAI calculations using OBR and ONS data

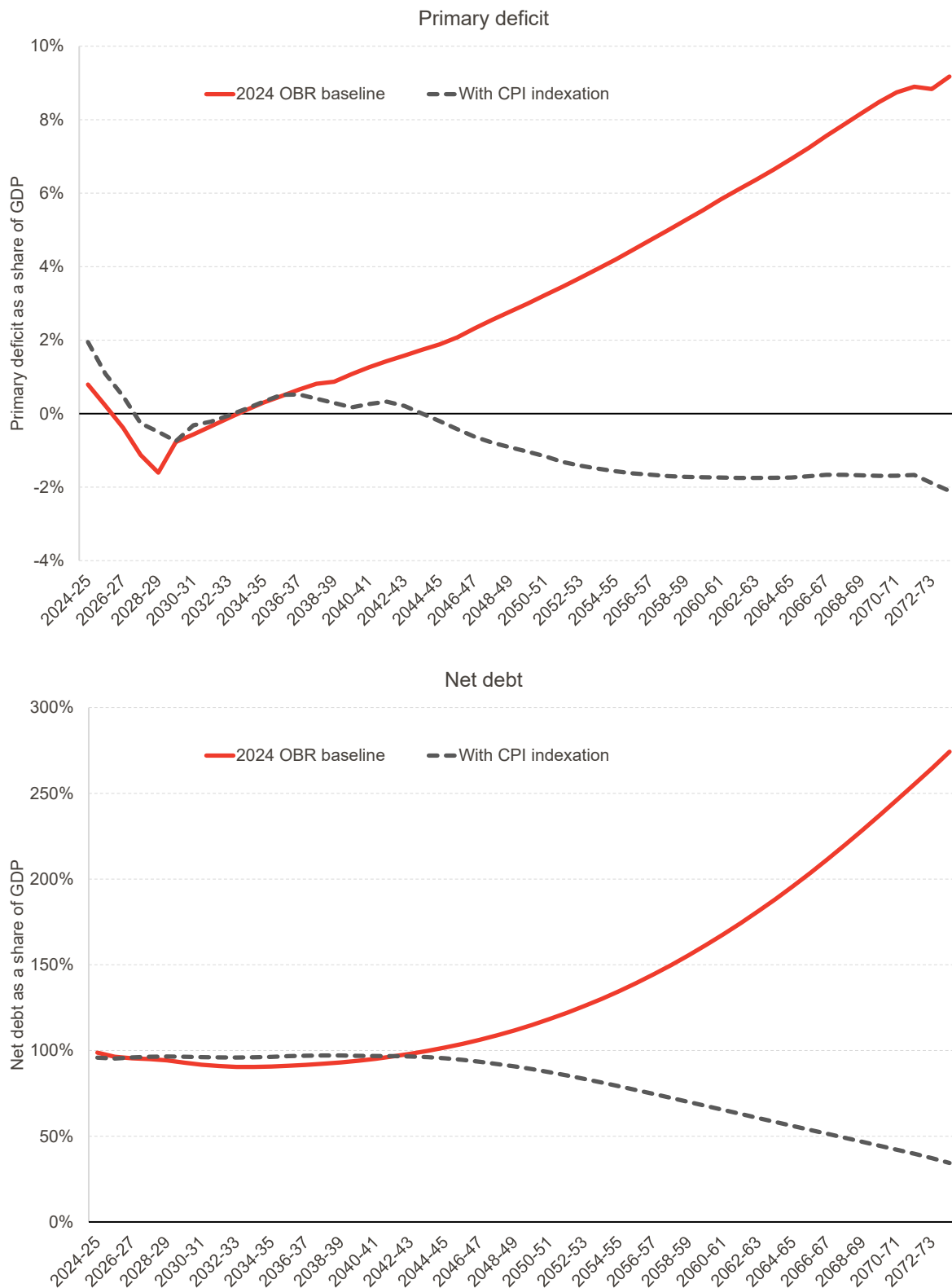
Accounting for actual policy on indexation improves the picture, but also reveals how crucial productivity growth is

There are two main effects, then, of accounting for the government’s actual policy on indexation:

- Tax receipts are likely to be significantly higher than in the OBR’s long-term projections;
- Spending on welfare is likely to be lower than in the OBR’s long-term projections.

When we combine this with the OBR’s remaining assumptions from their 2024 projections, the improvement in the projections is remarkable, as it cumulates over decades. Instead of running a growing primary deficit that reaches 9% of GDP by 2073-74, CPI indexation means a balanced primary budget by the mid-2040s and a surplus thereafter. Debt no longer increases exponentially to 270% of GDP, but rather declines smoothly to under 40% by the mid-2070s.

Chart 10: Long-term primary deficit and debt projections in the 2024 OBR baseline and allowing for CPI indexation



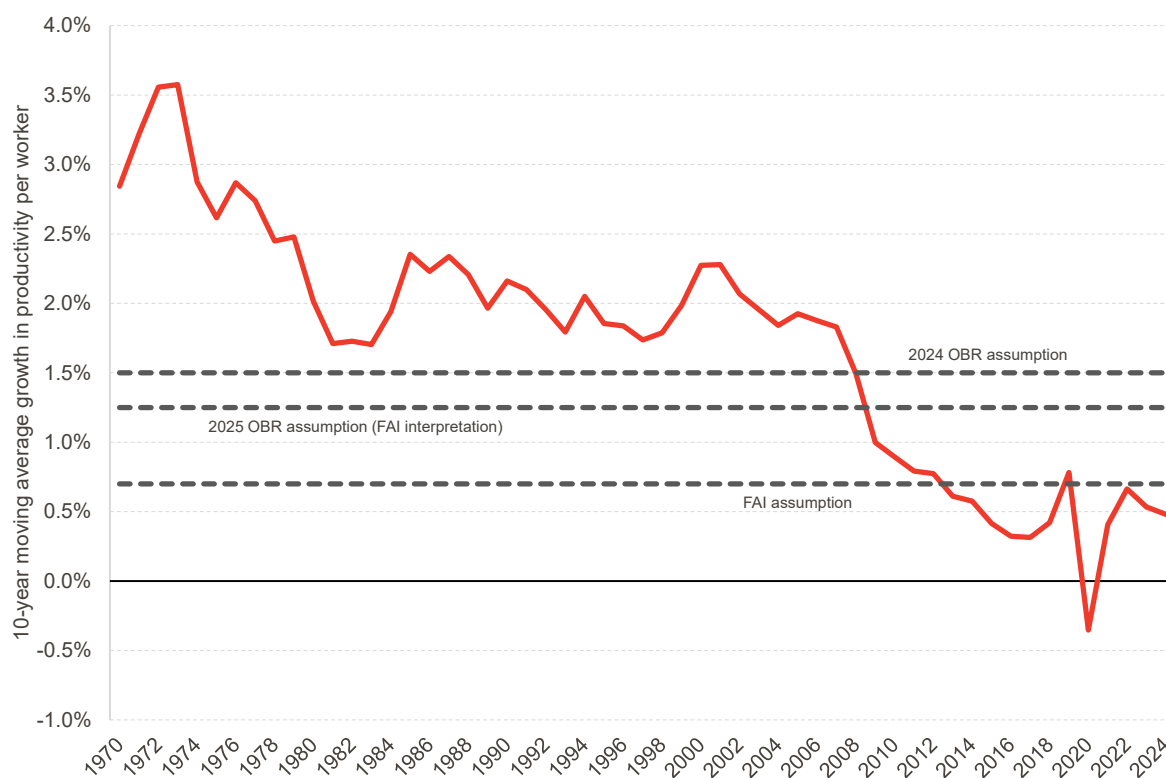
Source: OBR, FAI calculations

However, this does not mean that there aren't any underlying fiscal problems. The turbocharged fiscal drag effect itself is a product of the OBR's long-term assumption of productivity of 1.5% growth a year.²

That 1.5% assumption is already lower than the pre-2008 average, and represents a downgrade in 2017 from the OBR's original 2% assumption. The [OBR recognised this is in their 2025 productivity review](#), in which they revised their medium-term productivity growth assumption by 0.25 percentage points.

Assuming this is the size of the overall downgrade by the OBR in their long-term assumptions, this would mean assumed growth of 1.25% a year – significantly lower, but still well above the average since the Financial Crisis. Outturn growth has been more like 0.5% a year. Our assumption is 0.7%, which already allows for higher growth from increased capital investment plans and supply-side reforms announced by the current UK Government.

Chart 11: 10-year moving average growth in productivity per worker since 1970



Source: ONS, FAI analysis

The lower productivity assumptions have large effects on the projections. The OBR's 2025 assumption would mean debt stabilising rather than falling over time. But the (in

² The OBR's 2024 long-term projections included a Brexit effect of 0.2% lower growth until the mid-2030s, thereafter reverting to 1.5% growth a year.

our view, more realistic) assumption of 0.7% growth a year would mean debt back on an unsustainable path.

This would be compounded by using what seems to be a more realistic assumption of what is known as ‘R-G’, or the growth correct interest rate on debt: the OBR use 0.2%, but current market rates point to something in the region of 1%. Including this higher R-G bring us back into a world of debt projections similar to the OBR’s 2024 baseline.

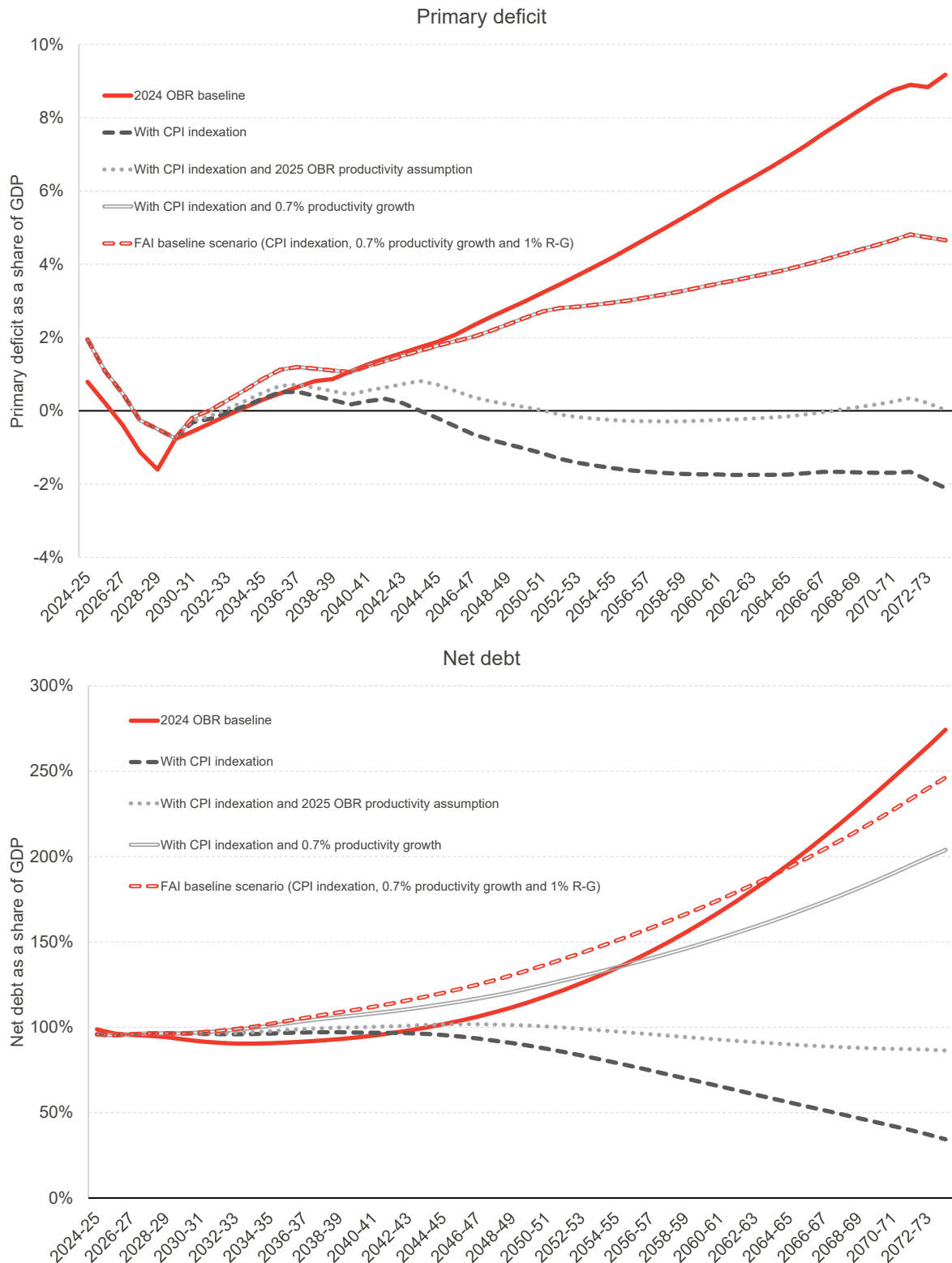
This allows us to compile what we’ll call the FAI baseline scenario, which has indexation of tax thresholds and welfare spending with CPI, 0.7% productivity growth a year and R-G of 1%. This is the set of projections against which we will measure options to close the fiscal gap opened by the underlying projected state of the public finances.

Table 2: Summary of the FAI’s baseline long-term assumptions

Economy	Revenue	Spending
Labour productivity per worker grows at 0.7% a year	Tax thresholds increased in line with CPI inflation	Demographic and other factors drive health spending
Higher migration variant of population projections	Fiscal drag significantly increases tax receipts for income tax and slightly reduces National Insurance Contributions	Education and social care spending are driven by demographic factors
CPI inflation of 2% a year, GDP deflator inflation of 2.3% a year	Fuel duty, which falls to essentially zero by 2050 as electric vehicles replace internal combustion engine cars	Welfare spending is driven by demographic factors and awards are increased in line with CPI inflation (except for state pension, which is uprated by average earnings plus an additional wedge for triple lock)
Labour share, employment rates unchanged		All other areas of spending are aligned with nominal GDP, except for defence and climate
State pension increases to 70 by the end of the period		
Interest rates 1ppt higher than nominal GDP growth		

Source: FAI summary of OBR assumptions

Chart 12: Long-term primary deficit and debt projections accounting for different productivity assumptions



Source: OBR, FAI calculations

What would it take to bring the public finances back onto a sustainable path?

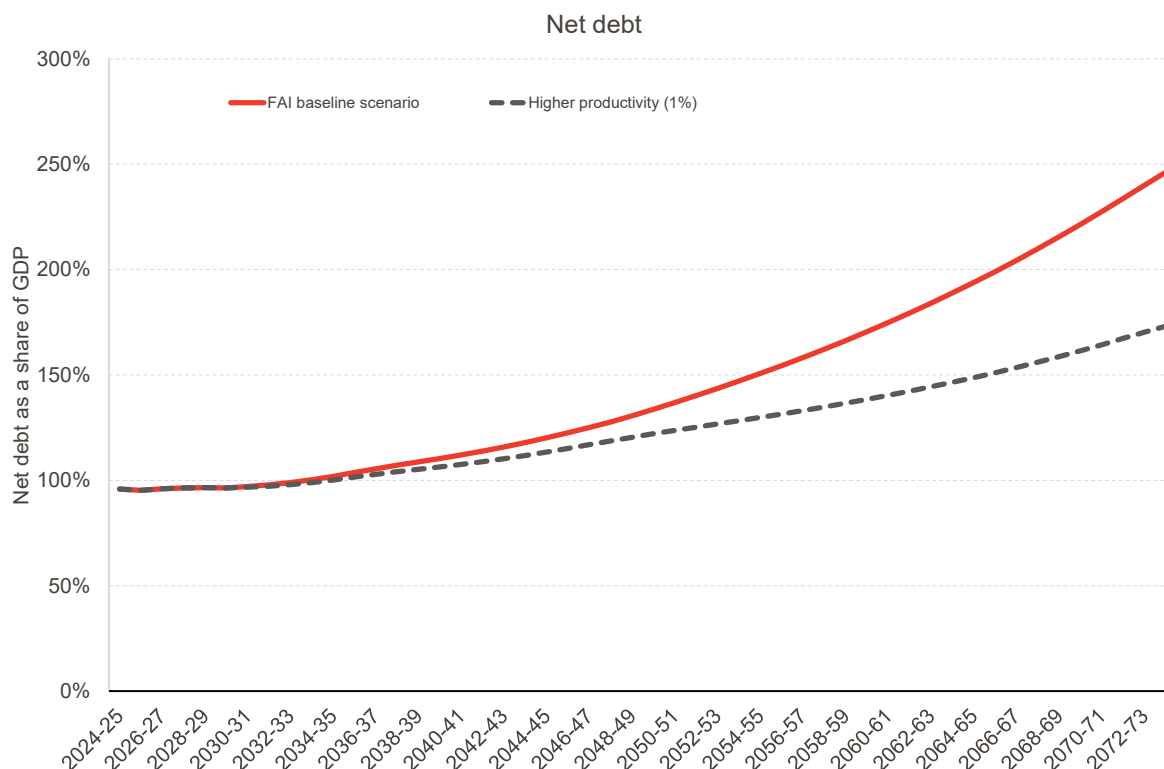
Higher productivity growth would help immensely. Just as reducing the growth figures assumed by the OBR meant the projections looked unsustainable (see chart 12), so does raising productivity make it easier to solve the sustainability challenge.

All else equal, the magic number for productivity growth is around 1.25% - this is how much productivity would have to grow a year to roughly stabilise the level of debt at around 100% of GDP. This is, of course, exactly our interpretation of the OBR's long-term assumption after the $\frac{1}{4}$ percentage point downgrade in their productivity review.

But note chart 11, which shows just how far away the current economic performance is from that level of growth. 1.25% might well be below the historical average pre-financial crisis, but it's still 2.5 times the rate achieved in the last 10 years. It might happen, but it would be unwise to plan on the basis that it will.

But even a smaller improvement to, say, 1% a year would help, even if it is far from enough. Debt would still be on a rising path, but less so: it would shave off around 70% of GDP of debt by 2073-74, through a combination of a smaller primary deficit and a smaller stock of debt to pay interest on.

Chart 13: Long-term debt projections in the FAI baseline and with 1% productivity growth per year



Source: FAI calculations

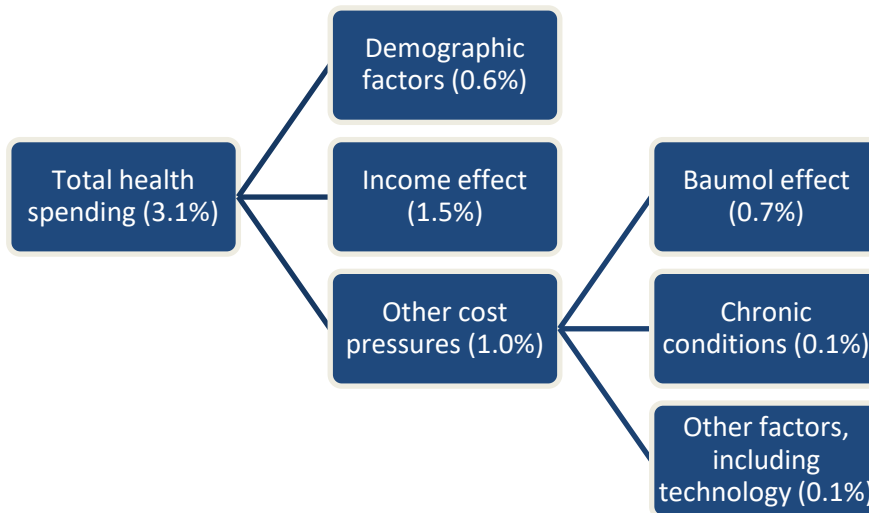
The path of health spending is also key

Health spending is the ultimate driver of most of the spending pressures in these projections. In 2016, the OBR revised its view of health spending.³ It had always factored in the ageing of the population, but starting in 2016 it accounted for a broader set of ‘non-demographic pressures’.

Under the OBR’s methodology still in use, demography accounts for only around a fifth of the total growth in health spending. The rest is driven by higher incomes being assumed to lead to higher demand for health, as well as other cost pressures, including the Baumol effect. This is an empirical regularity that productivity growth in health (and other labour-intensive services) tends to lag that in other areas of the economy; but retaining and recruiting staff requires wage increases above productivity growth in the sector, making health relatively more expensive over time.

³ See https://obr.uk/docs/dlm_uploads/Health-FSAP.pdf (accessed 30 December 2025).

Chart 14: Decomposition of the long-term annual real-terms growth rate in health spending assumed by the OBR



Source: OBR

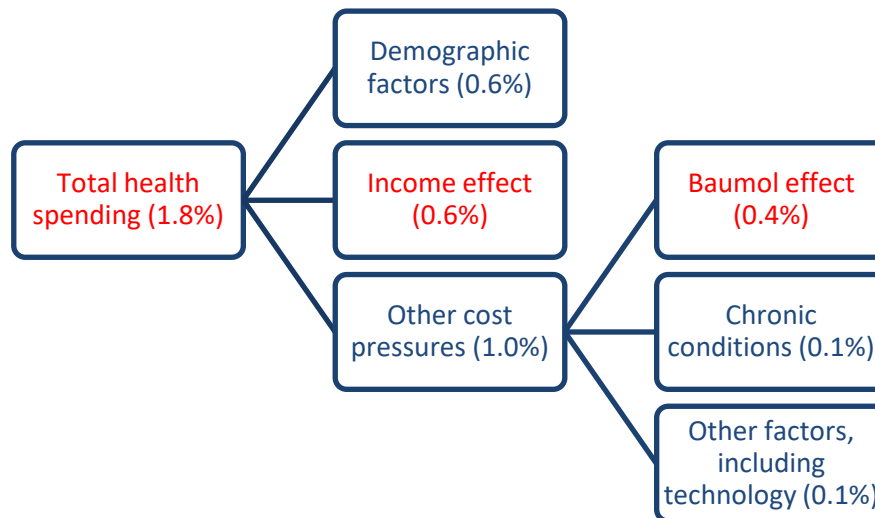
But what would chart 14 look like under different assumptions? The first change is to incorporate lower productivity growth as assumed in our baseline, which in this scenario mechanically slows the growth in demand for health.

We also change the OBR's assumption that all additional demand for health spending is met by the government. Instead, we use the long-term average of 80% of health spending being government-financed. Under these assumptions, the income effect comes down from 1.5% to around 0.6%.

There is then a question as to how big the assumed Baumol effect should be. It's clear it exists, but there is empirical uncertainty surrounding its size. And in the UK in particular, the role of the government is active – the NHS is a near-monopsony (single buyer market), giving it considerable agency in the size of this effect.

If the government managed to bear down on the size of the Baumol effect, this could make the sustainability challenge less daunting. In our lower health spending scenario, we assume it is halved relative to the OBR assumptions.

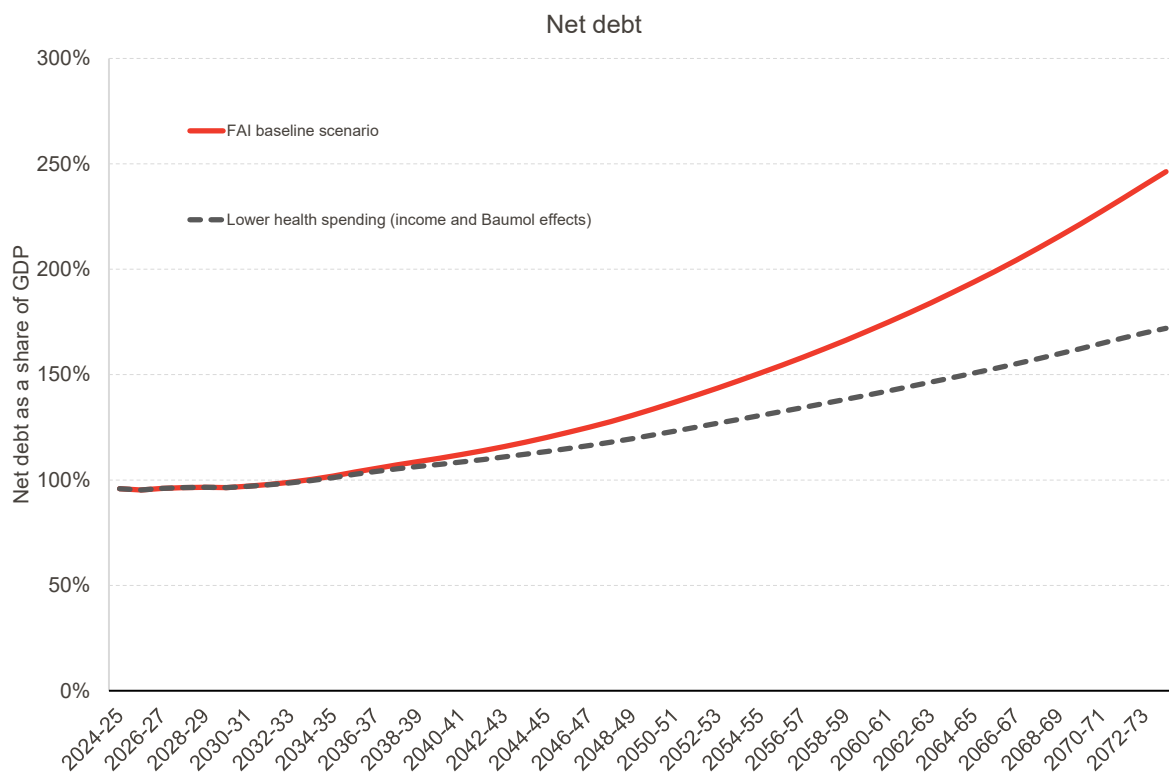
Chart 15: Alternative assumptions from our lower health spending scenario



Source: OBR, FAI

Again, this slowing of growth in health spending would not solve the problem on its own, but it would improve the situation considerably. It would bring debt down by around 75% of GDP relative to our baseline projection – roughly the same size of effect as the higher productivity scenario.

Chart 16: Long-term debt projections in the FAI baseline and with 1% productivity growth per year

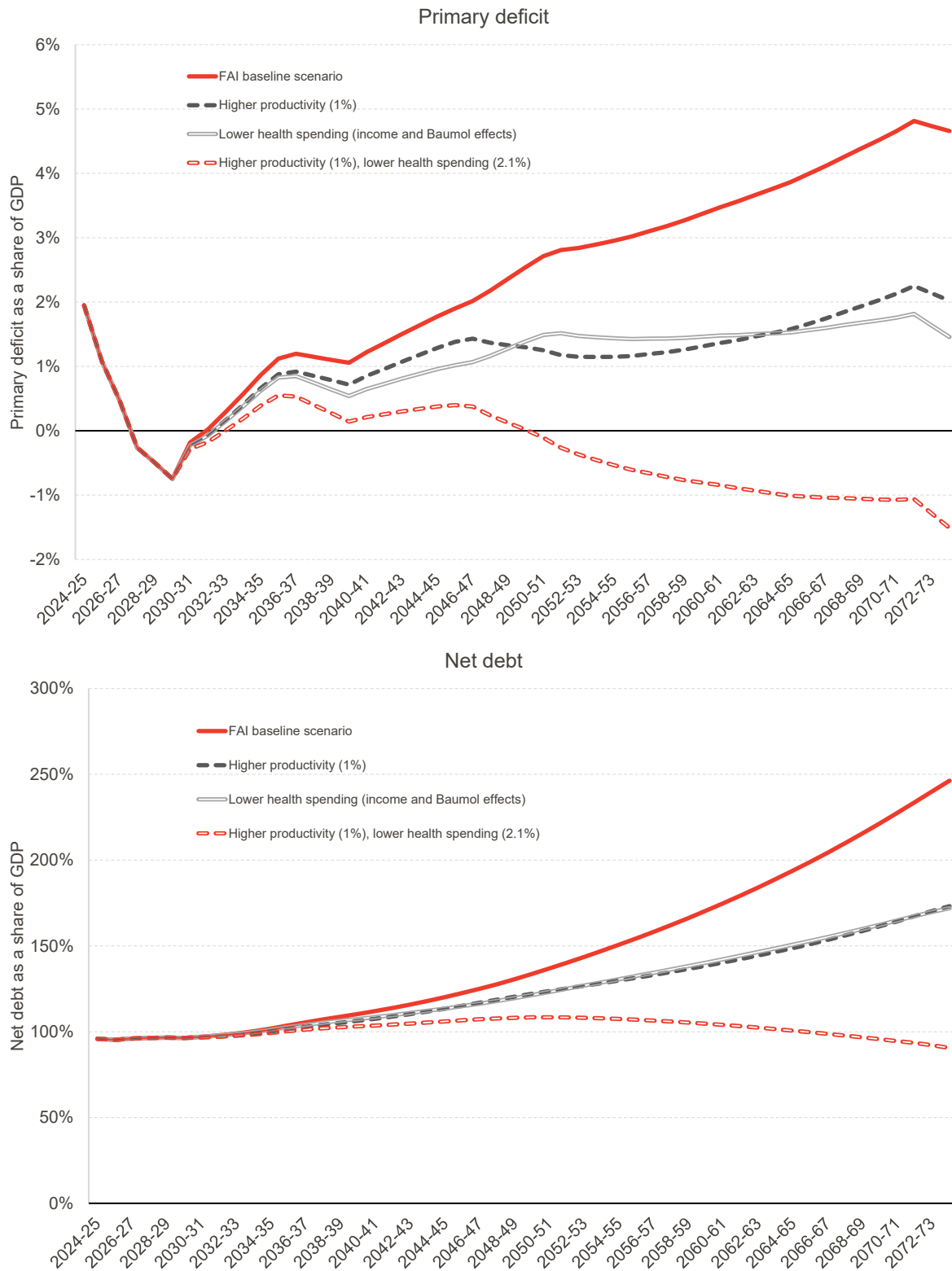


Source: FAI calculations

Put together, higher productivity growth and lower health spending would be enough to broadly solve the sustainability issue

This is true even after accounting for the mechanical impact of higher productivity growth on the demand for health. The primary budget would hover around balance until 2050, at which point it would turn into a significant surplus. Debt would stay essentially at the current level throughout, falling slightly by the end of the projection period.

Chart 17: Long-term primary deficit and debt projections under different scenarios for productivity growth and health spending



Source: FAI calculations

This is essentially good news: what seems an unsurmountable problem requires small changes to be solved. This is because these changes cumulate over time, making them more powerful. Neither changing the path of health spending nor raising productivity are easy, but they should not be beyond the wit of government.

What about tax rises?

So far, we haven't talked about tax policy decisions, which could very well be used as a way of combating the fiscal sustainability challenge. Of course, this is above and beyond the tax increases delivered through fiscal drag shown in chart 6: taxes are already projected to go up significantly in the 'do nothing' scenario.

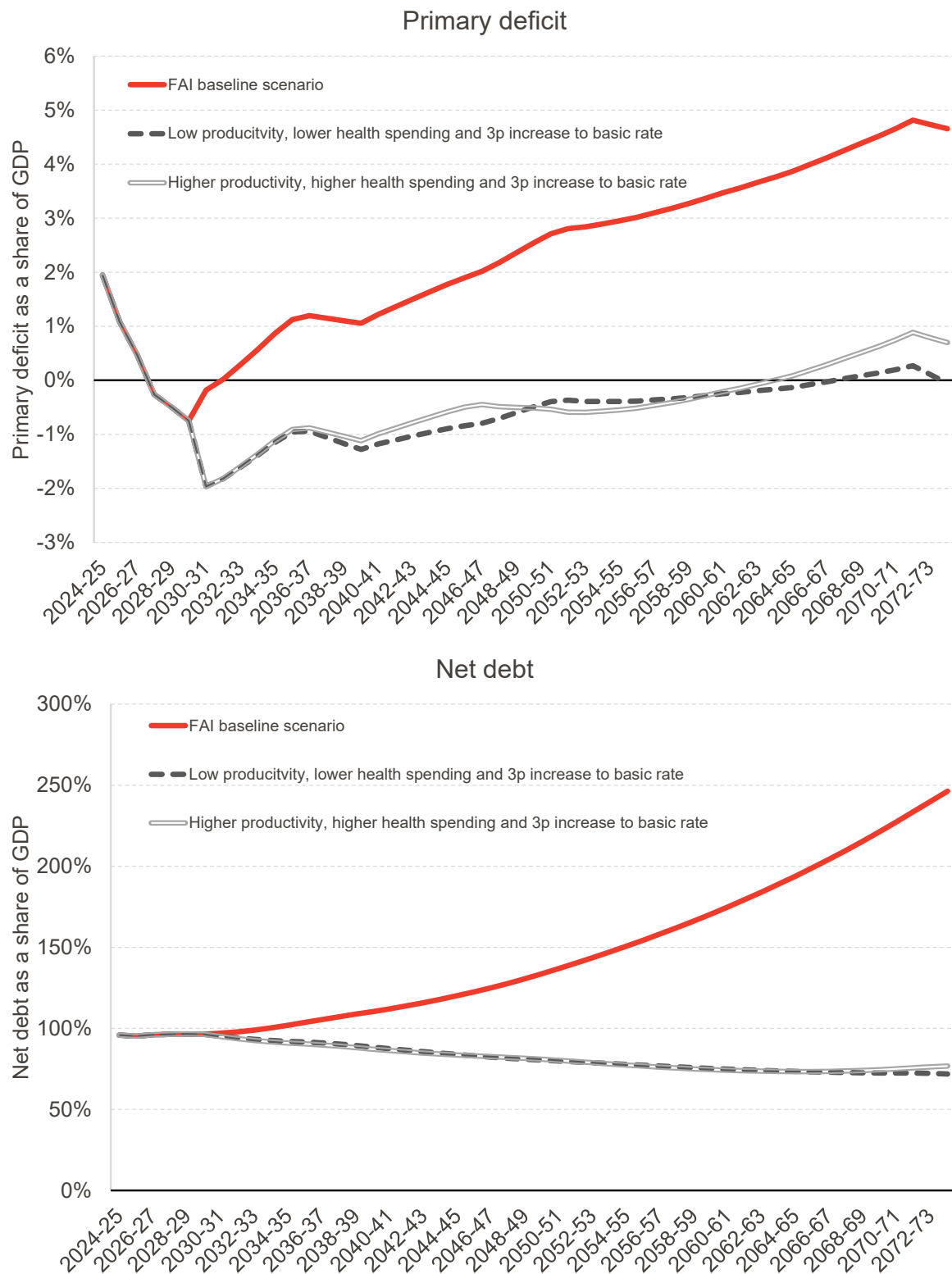
But with thresholds doing so much of the work, the changes in headline rates necessary to make the public finances sustainable are rather modest.

In fact, increasing the basic rate of income tax at UK level by 3p in the pound means sustainable public finances with **either:**

- Low productivity growth (0.7%, as in the original scenario), provided the UK Government bears down on the Baumol effect that increases cost pressures; **or**
- Higher health spending (2.6% a year in real terms) without bearing down on cost pressures or the income effect, provided productivity growth increases to 1% a year.

In short, an increase in headline income tax rates would make only one of the two solutions described before (higher productivity growth and health spending control) necessary to achieve sustainability. This is considerably less daunting than the initial problem appeared.

Chart 18: Long-term primary deficit and debt projections under different scenarios for productivity growth and health spending when allowing for a 3p increase in the UK basic rate of income tax



Source: FAI calculations

To answer the initial question: fiscal sustainability is less far than it might initially appear

This does not mean that the OBR's conclusions are wrong: there really is a fiscal issue over the long run if nothing is done, and debt would be on an explosive path.

But our conclusions are that the drivers of these changes differ from what appears in the OBR's projections. The OBR's model essentially turns off both fiscal drag and the erosion of welfare spending relative to average earnings. But both of those policies are the default mechanism over the long run, and they have a large effect on the projections.

Instead, what we find is that it's other OBR assumptions – productivity growth and interest rates – that remain too optimistic, **even after the recent productivity review**. When we account for those, an even after allowing for CPI rather than average earnings indexation, debt is still projected to rise to over 200% of GDP in 50 years' time.

But once we take this lower indexation path into account as the baseline – the 'do nothing scenario, given current government policy – the changes needed to put the public finances on a non-exploding debt path are rather smaller than they appear in the OBR projection. And it's because a large increase in taxes is already baked in over the long term **by design**. Only two of the following three appear to be necessary:

- Modestly raising productivity growth, to around 1%;
- Moderately bearing down on health spending growth through non-demographic cost pressures;
- A small increase the basic rate of income tax, to the levels of the late 1990s (23% instead of the current 20%).

Of course, these are only illustrative projections, but our objective is to move the conversation beyond a place where it seems like perpetually rising debt is destiny. There are challenges, and solving the debt sustainability issue will require government action – be it through improving productivity growth, tackling non-demographic costs in the health service or raising taxes.

But this hopefully serves a starting point on the move away from fatalism and towards a more productive conversation about the different paths available to the UK Government.

But this is and will remain a **knife-edge problem**: small changes cumulate over time to have dramatic effect, and can lead to either a steady downward path for debt or an unsustainable explosion.

The good news is that this means the change needed is not as substantial as it might initially appear. But the narrow window for a sustainable debt path also means that it needs continual monitoring and adjustment if economic conditions change.