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DEFUSING THE DEBT TIME BOMB:
Challenges and solutions

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About 2020 Vision

2020 Vision focuses on the future of the UK economy and identifies the key economic issues likely to face the next UK government.

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Summary

- The government's finances are currently on an unsustainable trajectory.
- Whilst current levels of government debt are below the levels seen in previous periods in history, accumulating such large levels of debt during a long period of peacetime is more or less unknown.
- Government debt figures do not include commitments to future spending either: governments do not account in the same prudent way that companies are required to account. An ageing population means that on unchanged policies the cost of providing age-related spending such as healthcare, pensions and social care will rise substantially over the next five decades, seeing overall debt on an upward trajectory.
- According to the government's own Office for Budget Responsibility (OBR) a permanent fiscal adjustment (tax increases and/or spending cuts) of 1.3 per cent of national income will be necessary from 2018/19 in order to ensure that the debt-to-GDP ratio falls to 20 per cent by 2063/64.
- However, the OBR figures make heroic assumptions about healthcare productivity and also assume that there will be a fiscal adjustment of 5.2 per cent of national income before 2018/19. In other words, spending needs to be cut by around 6.5 per cent of national income from now and for the foreseeable future to hit a government debt target of 20 per cent of national income by 2063/64. Such a measure will not create room to reverse recent tax increases.
- If more realistic assumptions about healthcare productivity, immigration and spending priorities are made, spending would need to be cut by 9.6 per cent of national income now and for the foreseeable future to

hit a debt target of 20 per cent of national income in 50 years' time. This is equivalent to about one quarter of all government spending or one half of all social protection spending. Other approaches to the analysis of the public finances reach similar conclusions.

- During its term of office, the government has taken action that has affected the long-term fiscal position detrimentally. Abolishing contracting-out of the state pension system, the implementation of the 'triple lock' on pension increases and ring-fencing health spending have been especially unhelpful.

- The government's long-term fiscal position would be improved by following a combination of the following policies:

  - Restricting state benefits in various ways, for example only linking the state pension to price increases, raising significantly the state pension age and introducing user-charges in healthcare.
  - Various forms of deregulation aimed at raising productivity and labour market participation.
  - Substantial pre-funding of pensions and healthcare.

Introduction

Politicians tell us that they are getting government debt under control. Yet the whole debate seems to assume that, when the government's cash deficit is finally gone, perhaps later this decade, we can sit back, relax and declare 'job done'.

This Briefing will show that nothing could be further from the truth. The UK's current government debt levels are especially alarming given the long period of peacetime we have experienced. The official public sector net debt (PSND) is 76.5 per cent of GDP, or 131.4 per cent of GDP including the impact of the financial interventions during the financial crisis (ONS 2014). PSND is projected by the government to peak at 78.7 per cent in 2015/16 (HMT 2014).

Yet these measures of debt are backward looking, and do not reflect the future promises that governments have made. Unlike a company, when a government makes a future spending commitment it does not count that as a liability or an increase in debt. The future spending commitments for governments on unchanged policies are huge and the debt levels described in the media are therefore just the tip of the 'debt iceberg' that the government faces.

Even assuming that the next government delivers the deficit reduction agenda outlined by the current government through to 2018/19, our ageing population means that, on current policies, our public finances are unsustainable in the longer term. The pay-as-you-go nature of the provision of pensions and healthcare means that the current working generation meets the cost of today's elderly and retired. With a shrinking relative size of the working population and higher demands for healthcare and pensions for an older population, the underlying fiscal position is unsustainable.

IEA research has estimated that, given future spending commitments, achieving long-term fiscal balance in the UK would require immediate tax rises maintained in the indefinite future of 14 per cent of GDP. This would be impossible to achieve, because such an increase in tax rates would lead to a fall in economic growth. Alternatively, spending cuts of around one quarter of all government spending or cuts of around one half of all health and social protection spending would be necessary. In other words, to balance the books, the government will have to renege on the commitments it has made to future generations.

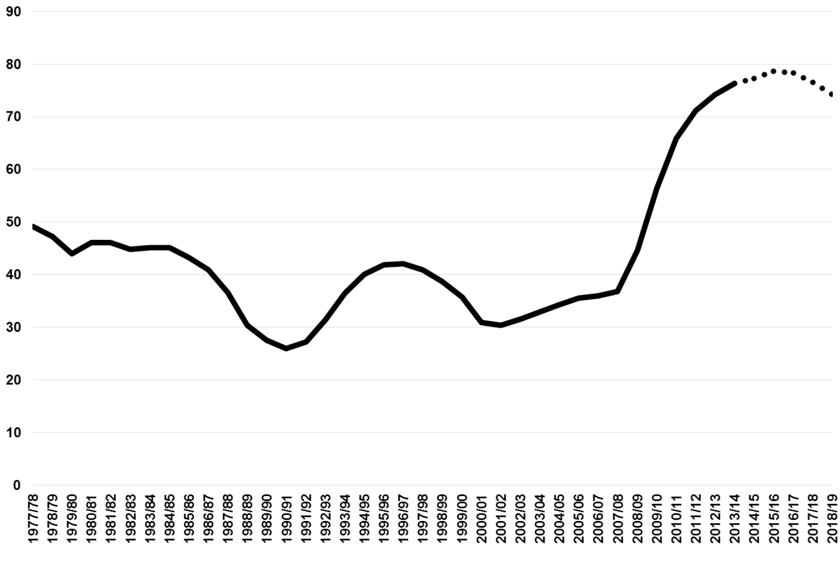
Using a different approach, the government's own Office for Budget Responsibility (OBR) estimates a fiscal gap today of around 6.5 per cent of national income in order for debt to hit a target of 20 per cent of GDP within 50 years. This is made up of both the 5.2 per cent of GDP worth of spending cuts or tax rises pencilled in between 2013/14 and 2018/19, and a further 1.3 per cent of permanent tightening from then onwards. Even these numbers look very conservative, however. They are based on the assumption that state pension age reforms are implemented by future governments, that the next government will be willing to remove the current ring-fence around NHS spending and that healthcare productivity growth will be much stronger than that historically observed.

The long-term fiscal headwinds thus necessitate significant spending reductions and reform. Policy solutions could take a number of angles, including changing eligibility to government-provided pensions or benefits-in-kind; measures to improve economic growth prospects and hence the tax base; and a move to pre-funded insurance systems for health and pensions.

Scale of existing liabilities

The UK's current stock of public sector net debt (excluding the impact of the financial interventions) stands at just under £1.3 trillion, or 76.5 per cent of GDP (ONS 2014). In the aftermath of the financial crisis and subsequent recession there has been a huge increase in public indebtedness, with the stock of debt more than doubling in absolute terms and increasing by more than 40 percentage points from a level of 36 per cent of GDP in early 2008 (see Figure 1).

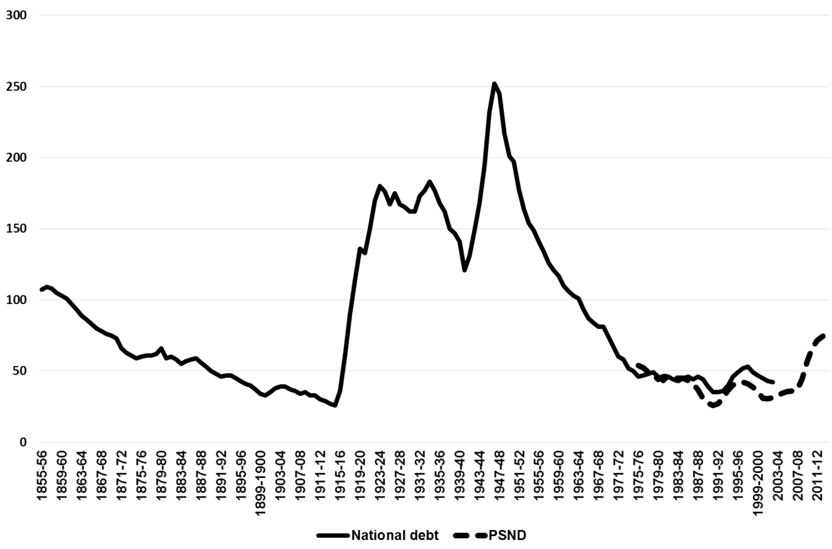
Figure 1: Public Sector Net Debt as a proportion of GDP (%)



Source: ONS (2013; 2014) and HMT (2014)

This level of debt is more or less unprecedented for peacetime. Of course, there have been periods after wars when the debt has been much higher, but these periods often saw a rapid decline in the debt-to-GDP ratio as spending was cut and growth returned. In the recent past, governments have been borrowing to meet current expenditure rather than to finance one-off events such as wars (see Figure 2).

Figure 2: National debt or Public Sector Net Debt asproportion of GDP



Sources: IFS (2012) and ONS (2014)

Including the effects of the financial interventions in relation to the banks, official debt levels are higher still – at £2.2 trillion or 131.4 per cent of GDP.

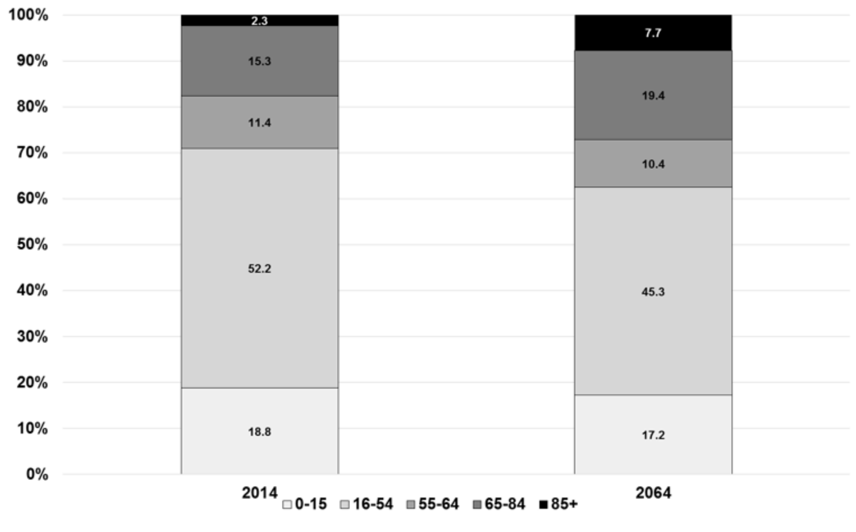
In 2010, the government set out plans which they believed would help to get the debt-to-GDP ratio back on a downward path by the end of this parliament given forecasts of UK growth (HMT 2010). Poorer than expected growth has meant that this ambition has been pushed back and debt levels relative to GDP are still estimated to be increasing until the end of 2015/16, peaking at 78.7 per cent of GDP (in comparison with a peak of 70.3 per cent in 2013/14 forecast in the June 2010 budget).

On current forecasts, the government hopes that it will have a primary budget surplus of 3 per cent of GDP by 2018/19, with a falling debt-to-GDP ratio in the years from 2015/16 (OBR 2013).

The problem going forwards

Even according to the central forecasts of the OBR, maintenance of broadly unchanged policies from 2018/19 onwards would lead to the debt-to-GDP ratio rising again from the mid-2030s. This is because the UK population is ageing. According to the UN Population Division, the ratio of those aged 65 and over to the population aged 15-64 will rise from 28.1 per cent in 2015 to 44.7 per cent in 2065 (OBR 2014). The proportion of the population aged 65 and over is forecast to jump from 17.6 per cent of the population in 2014 to 27.1 per cent in 2064 (see Figure 3).

Figure 3: UK population structure (in fifty years versus now)



Source: OBR (2014)

The government does not use proper accounting disciplines to ensure that there is provision for commitments made for future generations. If a company were to make a commitment to pay future pensions to its employees or to provide them with healthcare in old age, this would be a liability on its balance sheet. The company would need corresponding assets to meet this future liability or it would go out of business. In a similar way, families may save for future healthcare and pensions, building up a pool of assets in which they hold property rights. The capital represented by those assets (whether held in the UK or elsewhere) should increase productivity and provide returns which can fund the future pensions and healthcare and the assets themselves can be depleted over time.

However, when the government makes promises to pay for future pensions and healthcare, it puts no assets aside. It hopes that there will be enough children in the next generation to pay taxes to fund the commitments. This situation is inherently unstable given the dynamics of an ageing population. Improvements in longevity, increases in the costs of providing healthcare and reductions in the birth rate can lead to rising costs and a reduced tax base to finance those costs. Governments should face the same disciplines as any corporate entity and recognise commitments to future generations when they are made.[1]

Although the government does not put money aside to meet these future commitments, independent economists and the government's own OBR have made some attempts to measure the extent of the burden on future generations. This tends to be done in three ways:

1. We can compute the total liabilities that the government has committed itself to meeting. If that is done, most calculations produce a number that is about six or seven times the government's explicit debt figure (see, for example, Silver 2010).
2. We can project forward government spending and taxation and see how the gap grows over time on current policies – this is the method used by the OBR.
3. We can work out by how much taxes need to be increased or spending needs to be reduced in order to ensure that all debt is repaid and the government meets all its obligations over the indefinite

1 If governments are not willing to do this, they should make clear to the electorate that future health and pensions provision is contingent upon the size of the tax base. With regard to pensions in particular, this would effectively end the contributory principle.

future (or over, for example, two generations – around 60 years). The OBR also uses aspects of this method and it is the basis of inter-generational accounting (see Gokhale 2014).

The scale of the challenge – estimates from the OBR report

The OBR's annual *Fiscal Sustainability Report* seeks to examine the likely path of the UK's debt-to-GDP ratio over a 50-year horizon given the assumption of unchanged tax and spending policy (though assumptions are made about changes in some areas where announcements have been made – such as with changes in the state pension age), and assumptions about demographics and productivity growth. This is then used to estimate the UK government's 'fiscal gap' – a measure of the extent of spending decreases or tax revenue increases necessary today to achieve given debt levels in the long-term.

Their central estimate of the likely path of debt is for the debt-to-GDP ratio to fall to 53 per cent of GDP by the mid-2030s before increasing thereafter to 84 per cent of GDP by 2063/64.[2] There would be an overall worsening of the fiscal balance (increase in deficit/reduction in surplus) of 4.7 per cent over the period from 2018/19 to 2063/64. However, three things should be noted. Firstly, as discussed below, the assumptions on which this is based are somewhat heroic. Secondly, the starting point for the projection is 2018/19 - assuming a huge reduction in the deficit over the five years from 2013/14 which may not occur. Thirdly, by 2063/2064, even given these assumptions and the starting point for the projections, the government would be running deficits in the long term that would be unsustainable.

The main increases in spending under the OBR's projections are in the areas of health (rising from 6.4 per cent of GDP in 2018/19 to 8.5 per cent

2 See OBR (2014) for more details.

in 2063/64); long-term care (1.2 per cent to 2.3 per cent of GDP); and the state pension (5.8 per cent to 7.9 per cent).

Using these assumptions the OBR estimates that the immediate and permanent increase in taxes or decrease in spending needed in 2018/19 to achieve a debt-to-GDP ratio of 40 per cent by 2063/64 would be 0.9 per cent of GDP. For the debt-to-GDP ratio to be 20 per cent of GDP by 2063/64 would require an immediate fiscal tightening of 1.3 per cent of GDP in 2018/19. These numbers appear small but, as noted, they are highly sensitive to assumptions.

To get to the starting point of the OBR's projections from 2018/19, a fiscal adjustment (tax increases or spending reductions) of 5.2 per cent of GDP is required. The most accurate way to interpret the OBR's figures is therefore as follows: in order to have a national debt of 20 per cent of GDP by 2063/64, we need spending cuts of 5.2 per cent of GDP to be implemented over the next five years, followed by immediate and sustained spending cuts of a further 1.3 per cent of GDP from 2018. These numbers are roughly additive so, approximately, to keep the public finances on track in the long-term, we need a more or less immediate and sustained reduction in government spending of 6.5 per cent of GDP – around £112 billion. This is roughly equivalent to either scrapping entirely all current transfers to pensioners, including the state pension, or ending all NHS spending.

Because of the power of compounding, the long-term OBR debt projections are sensitive to the state of the public finances in 2018/19. If the next government were unable or unwilling to deliver the proposed deficit reduction path outlined and the primary balance was worse than anticipated by 1 percentage point in 2018/19, then net debt would be expected to rise much higher to 130 per cent of GDP by 2063/64.

The OBR's unjustified optimism

The debt projections and fiscal gap estimates are sensitive to a number of assumptions and depend on the scenarios chosen:

- **Healthcare productivity:** the most important and controversial assumption in the OBR's analysis is that for healthcare productivity growth. The OBR assumes that healthcare productivity grows at the same rate as the rest of the economy – even though they acknowledge that productivity in the sector has risen by only about 1 per cent a year on average between 1979 and 2010. Assuming healthcare productivity grows at only 1 per cent going forwards raises healthcare spending to 14.4 per cent of GDP by 2063/64, and public sector net debt to 205 per cent of GDP. This would mean that an additional fiscal adjustment (reduction in government spending) of 2.6 per cent of GDP would be needed in 2018/19 in order to meet the debt targets set out by the OBR. In other words, to get the debt-to-GDP ratio down to 20 per cent by 2063/64 would require a permanent and immediate reduction in government spending of around 9.1 per cent of GDP from today – cuts of £157 billion or 23 per cent of all current spending in 2014/15. This is equivalent to committing to cut all spending to pensioners, abolish tax credits and renege on public sector pensions in payment.
- **The composition of government spending to 2018/19:** the starting point for spending on those areas that are strongly affected by demographics (such as health and education) is important in determining the debt path in the future. The government has planned for further spending restraint between 2015/16 and 2018/19, and the OBR assumes that this would be proportionate across all departments. However, if health and education spending continue to be protected, this worsens the fiscal projection as the population ages. This would imply a further fiscal adjustment of 0.3 per cent of national income in order to meet the debt projections of 40 per cent or 20 per cent of GDP by 2063/64.
- **Immigration:** over a 50-year horizon, the debt path is influenced by the degree of net migration. The higher the net migration, the lower the debt level. The OBR assume net inward migration of 105,000 per year. Reducing this to the 'high tens of thousands' (90,000 a year, roughly the aim of current government policy) would increase the spending reductions necessary to meet the debt targets by 0.2 per cent of national income.

If we make more realistic assumptions about healthcare productivity, the composition of government spending and immigration, the reduction in government spending from 2018/19 that could be necessary to ensure a national debt of 20 per cent of national income in 2063/64 would be 4.4 per cent of national income. This would be in addition to the reduction of 5.2 per cent between now and 2018/19 to take us to the starting point of the OBR's forecasts. The total immediate and permanent spending cuts necessary so that public sector net debt will be 20 per cent of GDP by 2063/64 would therefore be around 9.6 per cent of GDP – equivalent to £168 billion this year.

When expressed as a proportion of national income, these figures do not look especially large. However, if we express the necessary adjustment as a percentage of current government spending, the total adjustment necessary to ensure a sustainable national debt of 20 per cent of national income in 50 years' time is 25 per cent. That is equivalent to cutting social protection spending (health, welfare and pensions) by half.

These particular assumptions have been highlighted because, in the first case, the assumption made by the OBR is completely at variance with historical experience and, in the second and third cases, at variance with the government's own policy. It is also worth noting that the OBR assumes that productivity per worker per hour will grow by 2.2 per cent, in line with the long-run average. Productivity growth may or may not return to this level, but it should be borne in mind that the recent productivity performance of the UK economy has been especially poor. Finally, it should be noted that these fiscal adjustments are necessary just to hit the debt target – they will not allow recent tax rises to be reversed.

The scale of the debt challenge – inter-generational modelling

Research published by the IEA in 2014 looked at the international scale of implicit government debt. Gokhale (2014) used sophisticated inter-generational modelling and developed results that were quite consistent with those of the OBR. What is remarkable about Gokhale's work is that it demonstrates that, internationally, the problem varies little from country-to-country – though there are some countries, such as Sweden (which has removed a lot of the longevity risk from its state pension system) and Estonia that are in a better position. Countries have different demographic problems, different levels of state pension and different levels of state health provision. However, nearly all are in long-term fiscal crisis.

The headline numbers in relation to the UK in the publication suggested that for the UK to achieve long-term fiscal balance with no debt 50 years from the projection point (2010) the following options would be available:

– Increase taxes by around 14 per cent of national income (this would be ineffective given that such an increase would reduce national income growth and potentially make the fiscal position worse).

– Cut total government spending by around one quarter.

– Cut all health and social protection spending by over one half.

Some of these cuts have already been made since 2010 and some policies (such as the proposed rise in the state pension age) will reduce government spending going forwards. Adjusting for these factors produces a broad consistency with the OBR numbers though the underlying assumptions and methodology are completely different.

Policy decisions in this parliament that have improved or worsened the debt path

The government has made a number of policy decisions in this parliament, some of which have improved and some of which have worsened the debt trajectory. It is worth noting these because the absence of proper government accounting means that it cannot be assumed that future governments will take a policy approach that will not worsen the situation over the coming generation whilst possibly reducing explicit government borrowing numbers.[3]

Policies which have improved the debt path

– Committing to an overall **reduction in the primary fiscal deficit** of 10.1 per cent of GDP between 2009/10 and 2018/19.
– Committing to **future increases in the state pension age** and outlining that state pension age will in future be increased in line with life expectancy. Overall, the effect of this policy is forecast to reduce state pension spending as a proportion of GDP by 0.9 per cent in 2063/64 and help to reduce public sector net debt in 2063-64 by 17 per cent of GDP (OBR 2014).

3 A number of Central and Eastern European governments, for example, have taken assets of private pension schemes onto the government's balance sheet thus reducing government debt. However, they have replaced private sector pension rights with future government pension rights which do not appear on the government's balance sheet.

– **Reforms to public sector pensions**, including uprating pensions in payment by CPI rather than RPI, are estimated to reduce annual spending by around 0.5 per cent of GDP by 2063/64.

Policies which have worsened the debt path

– **The triple-lock on pensions**, introduced in 2010, will increase the nominal value of the state pension by the higher of CPI inflation, average earnings or 2.5 per cent each year. It would see pension spending rise as a share of GDP if earnings growth were higher than nominal GDP growth or if both earnings and GDP growth were low relative to CPI inflation (as we have seen in recent years). The OBR has previously estimated that keeping the triple-lock in place over the long-term will raise pension spending by 0.9 per cent of GDP by 2062/63 (OBR 2013).

– **The Dilnot reforms to social care** will see the state provide more support to those with care needs, and is expected to increase spending by 0.3 per cent of GDP by 2063/64.

– **The ring-fencing of healthcare spending** during this parliament has contributed to a higher debt trajectory.

– **Nationalisation of the Royal Mail pension fund** saw the government take over the assets of the fund, use them to pay off debt and grant promises of government pensions to the workforce instead – worsening the public debt trajectory.

– **Abolition of contracting out of the state pension** will mean people are no longer able to opt out of part of the state pension scheme and make private pension provision instead. Such people will pay higher national insurance contributions in the short term (thus raising tax revenues today) but the government will pay higher pensions to them in the future (thus raising government commitments).

Solutions

There are many ways that governments might seek to defuse the debt time-bomb. Solutions broadly fit into three categories: 1) changing eligibility for existing state benefits and benefits-in-kind – especially for pensions and healthcare; 2) improving the growth prospects of the economy; 3) fundamental reform of pensions and healthcare.

Eligibility for pensions and healthcare

– **Raising the state pension age (SPA)**: the most obvious means of changing eligibility for the state pension comes from raising the age at which people are eligible to receive it. As outlined above, the government has already brought forward increases in the SPA which have lowered the forecast debt path. Increasing the state pension age not only reduces the expected cost of future state pension payments, but also shifts outwards the distribution of ages at which people retire, increasing the tax base. Reductions in the level of the state pension (especially from the government's proposed level of the flat-rate pension to be introduced in 2016) would also be welcome. Particularly helpful in the long term would be a commitment to link increases in the state pension only to increases in prices.

– **Expanding charging for medical services**: imposing some pricing or charging for some aspects of healthcare might reduce demand in some areas – lessening the degree of 'universality' of the current model. It would also encourage a greater degree of self-funding.

Improving growth prospects for the economy

- **Supply-side policies to raise productivity**: a rise in productivity will raise the tax base and reduce the relative burden of future spending commitments. Current policy, however, reduces the extent to which this is helpful as pensions spending will be linked to wage increases and, implicitly, to productivity. The Baumol effect[4] also suggests that health care costs may rise in line with the productivity of the economy as a whole – which is borne out by experience.
- **Policies to raise labour force participation of those aged over 55**: despite rising life-expectancy, the UK's employment rate for 55-59 year old men has fallen from over 90 per cent in 1968 to 80 per cent in 2008 (Sahlgren 2014). In part this is due to government policies which encourage early retirement and impose the costs on others. The decision to raise the state pension age is a step in the right direction in reversing this trend, but could go further and faster. Evidence also suggests that employment protection legislation and age discrimination laws can act to encourage early retirement. Exemptions from employment protection legislation for those close to state pension age may be beneficial.

Fundamental reform of pension and healthcare provision

- **Pension reform:** the state pension could be replaced by compulsory, private defined-contribution pension arrangements – similar to those introduced by the Australian Labour government in 1992.
- **Health reform:** the government could adopt a fully-funded compulsory healthcare insurance system.

Such fundamental reforms would be welcome and will benefit future generations whilst preventing future implicit debt being incurred. However, they would make little difference to the existing situation because the debt which has been analysed in this paper has already been incurred as a result of commitments already made.

4 As productivity in the economy as a whole improves, labour becomes more expensive thus raising costs in those parts of the economy in which productivity tends not to improve because of the inherent nature of the service provided.

Conclusion

The long-term impact of an ageing population presents a significant fiscal challenge to the UK. Very significant spending restraint will be required in the next parliament and beyond in order to get public sector debt levels back to a sustainable level. Direct cost-saving measures such as changing eligibility or the generosity of pensions and healthcare provision would relieve the pressure somewhat. However, an ageing population will inevitably mean more resources being diverted towards healthcare and pension spending. Rather than imposing crippling tax burdens on the working population to maintain the status quo provision, fundamental reform of pensions and healthcare is desirable.

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