

# Help to Save



## Defusing the pensions time bomb

James Barty



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# Executive Summary

When the Pensions Commission was established a little over a decade ago it was in recognition of the fact that a huge hole was developing in pensions provision in this country. The changes made to pensions subsequent to that and, in particular, the measures implemented by the current government have been a significant first step in closing that gap. Nevertheless, there is much more to do, particularly in the field of private pension provision, and this paper looks at what further steps need to be taken.

The challenge of providing enough income for retirement is a huge one, which is not confined merely to the UK with the impact of ageing populations being a major issue in all developed nations. In the UK, according to ONS estimates, the number of people aged over 65 is projected to increase from 17% of the population to 24% between 2012 and 2050. Those aged 85 and over are likely to see their proportion rise from 2% to 6%. Moreover, the ratio of those in work to those in retirement is expected to fall from 3.2 currently to less than 3 by 2050.<sup>1</sup> The strain that this will put on government finances, the NHS and long term care provision will be overwhelming unless people provide sufficiently for their own retirement income.

The government estimated that in 2012 some 40% (or 11 million) people between 22 and State Pension age would not save enough to meet the recommended replacement income for retirement.<sup>2</sup> A Prudential survey found that one in seven people were planning to rely entirely on the state pension in retirement.<sup>3</sup> Even of those saving into a Defined Contribution pension (which is now the main form of private pension saving) some 57% were not confident that they were saving enough for retirement.<sup>4</sup>

It is against this background that the government introduced the single tier state pension and auto-enrolment for private pensions.<sup>5</sup> The single tier pension eliminated the two tier scheme previously in force and made it easier to receive a full pension if you had left the labour force for various reasons (such as to raise a family). That pension was also more generous than the basic state pension with the expected payment to be above the current threshold for means tested support (currently £142.70). This is to be funded by higher personal and employer contributions. That change is a commendable one and will provide a base for pension provision in retirement. However, it can only be a base and it is vital that people supplement it to ensure they have a good quality of life in retirement but also that they and not the state can meet the bulk of their retirement needs. To put this in context under current projections the cost of pensions, long term care and pensioner benefits is projected to rise from 8.4% of GDP now to 12.4% of GDP by 2050.<sup>6</sup>

The problem, prior to the reforms, was that people were either not saving for their pensions at all or they were not saving enough. In part this is a function of

<sup>1</sup> Office for National Statistics, 2012 Pension Trends.

<sup>2</sup> DWP 2012, Estimates of the number of people facing inadequate retirement incomes.

<sup>3</sup> [www.pensionsworld.co.uk/pw/article/one-in-seven-will-retire-with-no-pension-12325381](http://www.pensionsworld.co.uk/pw/article/one-in-seven-will-retire-with-no-pension-12325381).

<sup>4</sup> [www.pensionsworld.co.uk/pw/article/dc-savers-fear-inadequate-pensions-12324911](http://www.pensionsworld.co.uk/pw/article/dc-savers-fear-inadequate-pensions-12324911).

<sup>5</sup> The government has also undertaken a significant reform of public sector pensions but that is outside the scope of this paper.

<sup>6</sup> Office for Budget Responsibility Estimates.

the decline of the Defined Benefit pension, where retirement income was linked to pay in work. These have simply become too expensive for employers to provide and slowly but surely they have been closed down. Indeed, the number of active members of such schemes<sup>7</sup> has declined to just 1.9 million currently. Many companies have switched to Defined Contribution Schemes, where the pension income is related to the amount saved into the scheme. The problem is that the amount saved into those schemes is often insufficient to generate the required retirement income.

The average pension pot is estimated by the Association of British Insurers to be just £36,800. At current annuity rates that is enough to generate a retirement income of just £1340. We estimate that for a person on average earnings (around £27,000) to generate the replacement income that is recommended, which is around £16,200, they would require around £240,000 assuming they receive the full single tier pension. The gap between where we are and where we need to be is huge.

The government's answer to this has been auto-enrolment. Here every company has to provide a workplace pension for their employees, with a minimum contribution of 8% between a band of £5,668 and £41,450. That 8% is made up of 4% personal contributions, 3% company contributions and 1% from the government in the form of a tax credit. All employees who earn more than £9,440 are automatically enrolled in the pension scheme. Employees can opt out, but, if they do so, they are automatically opted back in every three years.

The scheme came into force a little over a year ago and has had a very good start with over 90% deciding to remain in the system. A recent NEST survey found that some 61% of people intended to stay in the scheme<sup>8</sup> and 82% supported the idea of auto-enrolment, both significant improvements from before the scheme began. The initial roll out, though, was aimed at large employers and we fear that small employers will see a smaller take up, as they will likely be less well organised and less enthusiastic about the scheme. We are also concerned that over time the opt out rates will start to creep higher, particularly as people start to move between jobs.

Even more of a concern is that even with 8% contributions flowing into a pension on a regular basis people will not be able to save enough for their pensions. We look at a range of income levels from £12,500 to £51,500 and above. Using an 8% contribution ratio, a 3% real return and a 40 year contribution period only those on the lowest incomes were able to generate a sufficiently large pension pot to meet the targeted replacement income (and that was assuming they received the full single tier pension). For a person on average earnings and above they would need a contribution ratio of 14.5% or more to meet the target. Or put another way, using the 8% contribution rate, their pension pot was likely to be only around 55% of what they need to generate the target retirement income.

All of this was assuming that no lump sum was taken on retirement. Given that a 25% tax free lump sum is available to those retiring we would expect most to take it. The savings needed to generate the required retirement income on top of the lump sum would thus be even higher. A person on average earnings or above would likely generate only slightly more than 40% of the required pension pot in this case.

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<sup>7</sup> That is those still paying into the schemes.

<sup>8</sup> Automatic enrolment opt out rates: findings from research with large employers, August 2013.

Our numbers are supported by some recent work published by the Pensions Policy Institute.<sup>9</sup> They assumed an even longer contribution period of 48 years and found that a low earner would only have a 63% probability of achieving the targeted retirement income, with a median earner having a 49% chance and a high earner a 40% chance. In 25% of their simulations the retirement income was only 75% of the target.

If people opt out of the scheme for any length of time the odds of reaching the target start to fall sharply. A 7 year career break from 32–39 would be enough to cause the probability of meeting the target to drop from 49% to 34% for the median earner. For someone delaying starting a pension until 40 the odds of them reaching the target is just 5%!

The DWP has said that it does not want to raise the minimum contribution rate for fear of increasing the desire to opt out and has looked at schemes instead to incentivise higher contribution rates as incomes rise.

In our view the maths is such that contributions have to be dramatically higher. While it is possible that the current low level of annuity rates will rise as interest rates return to more normal levels the size of the required rise is unlikely to be achieved. Even if we assume that annuity rates rise by 25% from current levels we calculate that a 12% contribution rate would still be necessary for the average earner to hit his replacement income target.

We believe therefore that the DWP should look to phase in a rise to a 12% minimum contribution rate over a period of say 5 years. Using the same breakdown of contributions as now that would mean 6% from employees, 4.5% from companies and 1.5% from the government. To avoid opt out rates rising as contributions go up we believe there is no alternative than to make the scheme compulsory. We would only allow an opt out in the case where someone already has sufficient funds in their pension to meet the government's minimum income requirement (which is currently set at £20,000).<sup>10</sup> Australia's pension scheme, which has been pretty successful in part because it is compulsory is introducing a phased rise to a 12% contribution rate in an effort to ensure that people have sufficient funds to retire with.

For those who argue that compulsion is not normal in the UK we would point out that tax, national insurance contributions and education are all compulsory. A failure to save sufficient funds for your retirement risks the state (and therefore other taxpayers) having to pick up the bill. So opting out is not a free option it is a potential cost to the rest of society.

A rise in minimum contribution rates to 12% and making membership of a scheme compulsory is the main recommendation of this report. Without those two elements any pension scheme is likely to fail to meet its objectives but there are a number of other key areas where reform is needed.

The first of these relates to how the income is produced in retirement. At the moment there is a strong bias towards the purchase of annuities and we question whether this continues to make sense with annuity yields so low. Current legislation requires the first £20,000 of retirement income to either come from a pension scheme or from the purchase of an annuity. The idea behind this is to ensure that there is income available to a person throughout their retirement. The alternative, which is income drawdown from a still invested fund, runs the risk that the funds may be exhausted returning the potential burden of supporting the pensioner to the state.

<sup>9</sup> Pension Policy Institute: What level of pension contribution is needed to obtain an adequate retirement income? October 2013.

<sup>10</sup> There might be other opt outs should someone, for example, have a health issue such that they would be unlikely to reach retirement age, but in general the ability to opt out would be limited to those who already had sufficient saved for the pension requirements.

Yet with an annuity currently purchasing around £3650 of annual (inflation linked) income for a £100,000 pension pot the desirability of purchasing that annuity is debateable. Once the annuity is purchased the money that bought it is gone forever. In contrast the current dividend yield on the FTSE100 could deliver a similar amount of income with capital still intact. Equity income funds that invest in companies with strong dividend paying characteristics offer still better yields. While there is obviously a risk because equity markets can fall, we believe that risk can be reduced by limiting any drawdown to the yield on the fund. Any capital drawdown would only be used to replace reductions in dividends, which tend to be relatively rare, and over time tend to be recovered. Also if the fund in question is an income fund any companies cutting dividends are usually replaced with other companies still paying dividends.

The DWP has been looking at alternatives to merely buying annuities such as buying retirement income insurance or buying a pension builder. Both of these still involve buying annuity type products just in a different form, although they are a little more flexible.

We would urge the government to go further on two fronts. First we believe the government should shake up the annuity market by issuing annuity type government bonds, which retirees could buy instead of the normal annuities. That would give clarity on the interest rates that were available in retirement. Insurance companies and other pension providers could then offer products that would provide income after the bonds had expired. In this way you could break out the life insurance and interest parts of the annuity.

Second, we believe that the government should allow up to 50% of the minimum income requirement above the state pension element to come from a source other than annuities. That source would be in the form of an income drawdown from an equity or mixed asset fund (perhaps including corporate bonds or property as well). That investment would have to be a quoted and approved investment and we would limit the drawdown to the yield on that investment. That would give pension fund holders the chance to conserve their capital as well as receive an income.

We also think that much more attention should be paid to the asset allocation of pension funds. Many find this too difficult to deal with and the result is that employees just choose the default fund. Indeed, according to the NAPF some 72% of members of Defined Contribution Pension schemes are invested in the default fund. A lot of those funds are so called life style funds. These are relatively passive funds that start off in riskier assets and then gradually move the funds to “safer” (or at least less volatile) assets as retirement approaches.

That though leaves a lot to chance, primarily because the switching of assets tends to be automated regardless of market conditions. As we show in chapter 4 if you were lucky enough to have switched most of your equities into bonds ahead of the 2008 crash in equity markets you did well. If, however, you were just starting that switch as the crash began you did very badly, since you ended up selling your riskier assets after they had fallen substantially to buy safer assets which had risen almost as sharply and yielded much less than before the crisis.

The DWP has been looking at guarantees as a way of providing protection to a fund but these tend to be either expensive, like rolling annual guarantees, or of limited value, like guarantees of the nominal contributions to a pension fund. We

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think it would be better to encourage the development of outcome oriented funds. These tend to be more active in their asset allocation and would almost certainly have been sellers of equities in favour of bonds ahead of the 2008 crash, as equities had outperformed bonds by a factor of four in the 5 years to the end of 2007.

To achieve this may well require a shake up of the current structure of the UK pension fund industry. Defined contribution schemes are either contractual, with one employer giving options to his workforce or master trust funds, which offer a fund for multiple employers. We do not believe either of these currently have the scale to offer the type of funds we favour. We believe the DWP may have to encourage the development of Super Trusts of the kind advocated by the National Association of Pension Funds. These would, in effect, be private sector versions of NEST the government sponsored fund set up to enable small companies to provide pensions more easily. Such funds would be large scale funds similar to those in Australia, where the top 20 funds run 40% of all assets. These would have both economies of scale in terms of governance and fund management but also the scale to adopt more active asset allocation techniques.

We do not believe the government's desire for the development of Collective Defined Contribution schemes will prove to be attractive other than to save some Defined Benefit pension schemes that are currently in danger of shutting down.

Last but not least we urge the government to be careful on capping fees. We absolutely support the DWP in its efforts to clamp down on high historic fees, which do disadvantage some pension holders. It must make sure, however, that in doing so it does not restrict or exclude some higher charging but more actively managed funds. In particular some of the income funds which we think would be very useful for income drawdown in retirement might not be available should the DWP opt for a low cap. Accordingly, we support a cap at 1% rather than 0.75%.

The government has made some major progress towards closing the pension hole that exists in the UK but it has much further to go. A summary of our proposals is as follows:

1. Replace auto-enrolment with compulsory membership of a pension schemes for all those earning more than the tax free personal allowance.
  2. Increase the minimum contribution rate to 12% from 8% phased in over 5 years.
  3. Make the annuity market more competitive by issuing government annuity bonds. Individuals could buy their initial interest rate exposure from the government with insurers providing annuity insurance only for when this expired.
  4. Allow up to 50% of the minimum income requirement to be funded through non annuity products such as income drawdown. The drawdown should be limited to the yield on the relevant fund to limit the risk of fund exhaustion.
  5. Encourage a greater focus on asset allocation through the promotion of outcome oriented investment funds.
  6. Encourage the development of Super Trusts, which would be large enough to generate economies of scale, have a better diversification of assets and greater use of asset allocation.
  7. Cap fees at 1% not 0.75% in order to keep a wide choice of funds available to pension fund investors.
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# Introduction

The issue of an ageing population and its impact on the public finances is well known. It is not just a problem for the UK but almost every other developed world country. The obvious solution is to ensure that people save enough for retirement so that they can enjoy that retirement without being a burden on the state. Yet it is also the case that in most countries the pension system does not offer a solution to that problem. Either in the case of a number of European countries, the pay as you go pension systems that appear to offer sufficient income in retirement are severely underfunded or, as in the case of the UK, pensioners look set to have insufficient income. The latter tends to be a function of low contributions or insufficiently broad coverage. It is a challenge that all of these governments need to face. Most have either ducked the challenge or deferred it into the future by merely extending the retirement age. The UK government is to its credit trying to tackle these issues head on with its pensions reforms.

In the UK the pension system is something of a hybrid with a pay as you go system funding the state pension and the still relatively generous public sector Defined Benefit (where your pension is tied to your income) pension system. Public Sector Defined Benefit Schemes are in part funded by current pension contributions from public sector workers and part from the tax system. In the private sector the pay as you go state pension is, in theory, topped up by private pension provision. Defined Benefit pensions used to dominate in the private sector have become ever scarcer as market conditions and company finances have made them increasingly expensive to offer. As a result the private sector has seen a shift to Defined Contribution schemes (where your pension is a function of how much you save) with, often, smaller contributions into those schemes. Many in the private sector have fallen out of the private pension system altogether leaving them to rely on the state pension. Moreover, in the state pension system many were not even reaching the point where they could receive the full state pension (particularly women who had taken time off of work to raise children).

The problematic state of the UK pensions system has been a topic of concern for government dating back to 2002, when the government set up the Pensions Commission under Lord Turner. That Commission produced two reports in 2004 and 2005 identifying the substantial hole in the existing system and laying the ground for reform of both the state pension and private sector pensions. The coalition government has taken these proposals forward with the introduction of a higher pension age, the single tier pension to replace the current state pension and auto-enrolment in private sector pensions. These two steps represent a substantial attempt to tackle the problem of underprovisioning for pensions in the UK and the consequent risk of substandard income in retirement for far too many people.

Yet the government's moves to date can only represent a first step. The purpose of this paper is to assess the government reforms and ask what additional factors

the government needs to address if the UK's pension problem is to be dealt with once and for all. The focus here is on private pensions as we feel that is the area where most still needs to be done. The introduction of the single tier state pension at a higher rate funded by higher national insurance contributions has, we believe, gone a long way to creating a sensible and sustainable minimum floor for post retirement income. Nevertheless, the cost is still a large one at around 7% of GDP currently, rising to around 8% in 2060.<sup>11</sup> That cost will only spiral upwards if people do not save enough to supplement this single tier pension. Those who do not are likely to be much more dependent on the state for additional help for council tax, heating, health and long term care costs.

To put this into context prior to the changes made by the government the Pensions Commission had estimated that up to 11 million people were likely to be saving an insufficient amount to meet the suggested income replacement ratios in retirement.<sup>12</sup> As many as one in seven people were planning to rely solely on the state pension for retirement while some 57% saving into a Defined Contribution scheme did not think they were saving enough to meet their needs.<sup>13</sup>

So it is vital that auto-enrolment works.

The scheme began in October 2012 and to date has been considerably more successful than the government had hoped with more than 90% of people taking part in auto-enrolment, compared to expectations of around two thirds. To some extent these figures are likely to be overstating the eventual success of the scheme as people may well opt out over time and more importantly because the initial roll out has been targeted at bigger employers. We suspect that the percentages will drop as the roll-out moves to smaller employers, simply because they are likely to be less efficient in setting up schemes and encouraging their workers to join.

We will have to wait and see how that develops. There are problems though even if auto-enrolment does maintain its high take up rate because as the DWP acknowledge the 8% minimum contribution ratio is unlikely to be sufficient to meet the targeted income replacement ratios in retirement. In Chapter 3 we show how this is indeed likely to be the case. Using reasonable return assumptions we calculate that only those on the lowest incomes are likely to get near their replacement ratios even if we assume they contribute for 40 years. For those on average earnings or higher we estimate that the contribution ratio would likely have to be close to double the current minimum. The DWP have said they want to avoid compulsion but instead look at ways of automatically ratcheting up people's contribution ratios. We think that you might have to do both.

The DWP in their paper also plan to look at how to ensure better outcomes for pension holders, whether fees needed to be capped and how default funds could be improved. We examine these issues in Chapter 4. Generating better outcomes for pension holders divides into three main issues. First, how best to manage the assets to generate the highest income pot. Second how to limit the downside from external shocks and third how to get the best payout from the pension pot generated. A lot of focus from the DWP is on how to reduce costs, with the mooted cap on pension fund fees and how to share risk with the possibility of Collective Defined Contribution schemes seemingly favoured. We have our concerns on both areas, in particular whether the government proposals will achieve what they are aiming for. Bearing down too much on fees may restrict the type of funds available to consumers, potentially excluding some more

<sup>11</sup> The single-tier pension: a simple foundation for saving – DWP January 2013.

<sup>12</sup> Pension Commission Reports 12 October 2004, 30 November 2005.

<sup>13</sup> Surveys by the Prudential and Hymans Robertson (full links in chapter 1).

active funds that have delivered better income and returns in recent years. We also question whether Collective schemes can work more generally for Defined Contribution schemes or whether they are simply a route to transfer people out of a Defined Benefit Scheme that would otherwise be closed.

In addition we look at two areas often overlooked. The impact of asset management on the value of the eventual fund and how that fund should be converted into income. We argue there should be more focus on managing assets to meet liabilities. In that context we look at the current structure of the UK pensions industry and ask whether the government should look to develop larger super funds that can adopt more sophisticated asset management techniques. We also ask whether the current bias towards annuities to deliver pension income from a sum of money is the right solution when government bond yields are so low. We argue for a more flexible approach from the DWP.

The DWP is investigating other approaches but essentially they still result in buying annuities in one form or another. We argue that the government should allow people to use income drawdown to the equivalent of the dividend yield on the fund instead.

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# 1

## The UK Pension Hole

One achievement of the Coalition government that has largely gone unnoticed is its attempt to address the problems of private pension provision. In part, this has been due to the political noise generated in the area of public sector pensions where the government has been, rightly, trying to make public sector pension provision more affordable. Yet the changes in private sector provision have, arguably, been even more radical, with the introduction of auto-enrolment and minimum total contributions of 8% of income (from a combination of workers, employers and government).

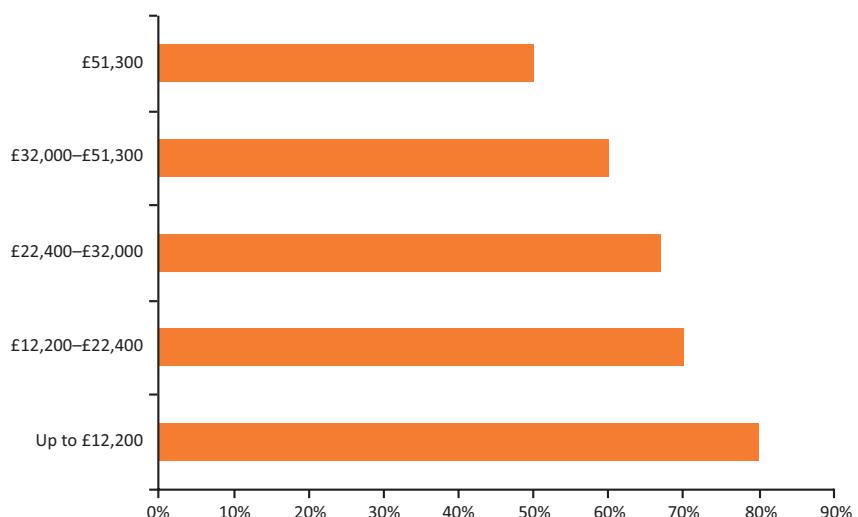
The importance of ensuring that there is more sustainable provision in both private and public sector pensions stems from simple maths associated with an ageing population. As the DWP point out in their paper *Reinvigorating workplace pensions*,<sup>14</sup> between 2012 and 2050 “the proportion of people aged 65 and over is projected to increase from 17% to 24%”. For those aged 85 and over the increase is even sharper from 2% to 6%, while the age support ratio (i.e. the number of people of working age to pensionable age) is expected to slip from 3.2 now to below 3 by 2050. And that is despite the planned increase in the State Pension Age.

If individuals do not save more to fund their own retirement the burden on the state will become increasingly intolerable. Prior to the reforms people were not saving enough to ensure that the government would not have to support them. The OBR<sup>15</sup> predicts that on current trends spending on pensions, long term care and pensioner benefits will total 12.4% of GDP in 50 years time from 8.4% now. That is a near 50% increase in government spending as a proportion of GDP on age related benefits. That is simply not sustainable and therefore the current and future governments will increasingly have to shift the burden of such provision back on to individuals.

The Pensions Commission outlined targets for the percentage of pre-retirement income that a pension should replace (known as a replacement rate). These vary from 80% for those earning up to £9,500 to 50% for those earning over £50,000. Updated to current levels this now means 80% for those earning up to £12,200, 67% for those earning between £22,400 and £32,000 (which captures those on average earnings) to 50% for those earning more than £51,300 (see Figure 1). These are the incomes that people will likely need to live on when they retire, allowing for the fact that expenditure falls somewhat in retirement compared to in work. At the moment the DWP estimates that a staggering 11 million people (or 40%) will not save enough to meet these targets.

<sup>14</sup> *Reinvigorating workplace pensions*, DWP, November 2012.

<sup>15</sup> Office for Budget Responsibility.

**Figure 1: Target replacement ratios by income**

This is reflective of a more general problem when it comes to savings. According to a Lloyds Bank study,<sup>17</sup> household saving in the UK is around 7% compared to closer to 10% in Germany. In money terms, that translates to an average pot of savings in the UK of just over £5000. The similar size pot in Germany is some £3600 greater, while in China it is almost four times higher. In part that reflects greater concern in China as to the likely level of state provision in retirement.

There is a large degree of complacency in the UK. The Prudential found in survey that around one in seven of all people retiring in 2013 intended to depend entirely on the state pension. The study also found that the average person retiring will rely on the state pension for some 36% of their income. Finally, and most disturbingly, it is estimated that nearly one in five of these pensioners will be below the poverty line.<sup>18</sup>

Even for those saving for retirement, most are not confident that they will have enough income. A study by Hymans Robertson<sup>19</sup> showed some 57% of people saving into a Defined Contribution pension were not confident that they were saving enough to deliver an adequate retirement income. Nearly a quarter of them said they were uncertain how much of their current salary they should allocate to their pension to have an acceptable standard of retirement.

It is perhaps not surprising that people are uncertain about how much to save since it is not a topic that is often discussed and the amounts required for a decent pension seem unrealistically large to many when taken in isolation. Indeed, Liberty SIPP calculated that merely to receive a pension of £10,000 per annum (over and above the state pension) a person would need a pension pot of more than £250,000.<sup>20</sup> For many saving such a sum is difficult to imagine. Indeed the average pension pot currently available on retirement in the UK is just £36,800 according to the Association of British Insurers. That would deliver a pension of just £1340 at current annuity rates,<sup>21</sup> a very small addition indeed to the state pension.

<sup>16</sup> Framework for the analysis of future pension incomes – DWP, September 2013.

<sup>17</sup> [www.lloydsbankinggroup.com/media/pdfs/LTSB/2012/0302\\_UKfamilies.pdf](http://www.lloydsbankinggroup.com/media/pdfs/LTSB/2012/0302_UKfamilies.pdf).

<sup>18</sup> [www.pensionsworld.co.uk/pw/article/one-in-seven-will-retire-with-no-pension-12325381](http://www.pensionsworld.co.uk/pw/article/one-in-seven-will-retire-with-no-pension-12325381).

<sup>19</sup> [www.pensionsworld.co.uk/pw/article/dc-savers-fear-inadequate-pensions-12324911](http://www.pensionsworld.co.uk/pw/article/dc-savers-fear-inadequate-pensions-12324911).

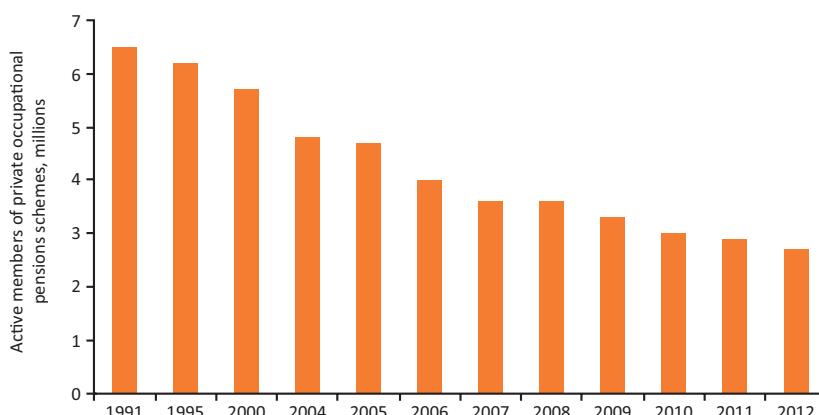
<sup>20</sup> Assuming the pension is index-linked.

<sup>21</sup> Here we have used single life, 5 year guarantee, RPI linked. Rates tend to move in response to changes in government bond yields so we have used an approximation of £3650 per annum for a £100,000 pension pot, based on rates shown by Hargreaves Lansdowne 14/10/13.

It is little wonder that so many people want to rely on their house as a form of pension. It is many people's hope that they will be able to downsize and extract equity to help them fund their post retirement lifestyle. Yet there is no guarantee that this will happen. Many households are already facing the prospect that they will not have paid off their mortgage by the time they retire, particularly if they have an interest only mortgage. The money saved by moving to a smaller house could easily be required to repay the outstanding mortgage. Moreover, with the Bank of England now explicitly mandated (through its Financial Policy Committee) to ensuring that housing bubbles are no longer tolerated there is a smaller chance that people will be able to generate enough saving from their home to fund a pension. Last but not least, any investment adviser worth his salt would tell you that relying on a single asset class to perform is not a particularly wise investment strategy – an observation borne out by recent UK and US experience that house prices do go down as well as up.

The problem of pension provision has been exacerbated in recent years by the demise of the Defined Benefit pension system in the private sector. Defined Benefit systems relate the pension that a person receives on retirement to the income they earn in work. Historically, the pension was based on the income earned in the final year or years of work – hence the term final salary pension. Many public schemes have operated on such a basis until very recently. The government, for example, is moving civil servants to a new career average scheme from 2015.<sup>22</sup> Even with these changes, Defined Benefit schemes are still attractive to the employee as they have clarity on how much they are likely to receive in retirement. However, in equal measure they have become increasingly unattractive to employers. This is a result of those employers<sup>23</sup> bearing all of the costs and liabilities.

**Figure 2: Decline in private defined benefit provision**



This has become increasingly problematic for private sector employers since the end of the 1990s. Until then, the assets that funded pensions (mostly equities) had been growing strongly and the assets that pension funds had to use to value their liabilities (and fund retirement), normally government bonds, still paid reasonable yields. That all changed after the tech crash of the early 2000s and became even

<sup>22</sup> [www.civilservice.gov.uk/pensions/reform/key-elements](http://www.civilservice.gov.uk/pensions/reform/key-elements).

<sup>23</sup> In the case of public sector pensions this means the taxpayer.

worse following the financial crash of 2008. Equity prices and bond yields both fell. While equities did recover sharply between 2002 and 2007, and have again done so again more recently, they have been a poor investment relative to bonds over the last 13 years. That moved many pension funds from a surplus (where their assets exceeded their liabilities) to a deficit. Those deficits in some cases were so large that they represented one of the biggest liabilities (in some cases the biggest) on a company's balance sheet. Since companies are legally obliged to reduce pension deficits, this meant that contributions had to rise to close the gap. With pension deficits often increasing most sharply at times of economic distress (since equities and bond yields both tend to fall in recessions) the timing of such increased contributions was often particularly difficult for companies.

As a result companies started to close these schemes to new members in order to reduce future liabilities. Of the 12.7 million employees with an occupational pension in 1997, 10.5 million were in Defined Benefit schemes. By 2011, although there were 12 million employees with employer pension provision, only 7.8 million of those were Defined Benefit.<sup>24</sup> The decline is even more dramatic if we consider that the number of active members of those schemes has fallen to just 2.7 million (see Figure 2). To illustrate the pace of decline post the tech crash, between 2000 and 2005 alone the number of Defined Benefit schemes with at least ten members dropped from 6500 to 2500 in the UK, a drop of some 60%. The Defined Benefit scheme for the private sector is very much on its way out.

Defined Contribution schemes have, in most cases, replaced Defined Benefit schemes. In these schemes the payout is related not to a person's salary but to the size of the pension pot that is accumulated. That, in turn, is a function of payments into the scheme (by both employer and employee) and the performance of the investments. If, for whatever reason, the pension does not perform as well as is hoped, it is the employee that bears the liability not the employer, normally through receiving a smaller pension. Contributions into a Defined Contribution scheme also tend to fall short of the amounts invested into Defined Benefit schemes. According to the ONS the average contribution rate in 2011 into a private Defined Benefit scheme was 4.9% for members (employees) and 14.2% for employers. For private Defined Contribution schemes the average for members was 2.8% and employers 6.6%. In other words total contributions in a Defined Contribution scheme were roughly half of those in a Defined Benefit scheme. Clearly, such a difference increases the chances of the eventual pension pot being insufficient to meet the requirements of the employee.

Notwithstanding the rise of the Defined Contribution scheme, total private sector membership of pension schemes in the private sector had fallen substantially overall. By 2011 there were just 2.9 million active members in private sector compared to 6.5 million in 1991. For the country as a whole membership of occupational pension schemes peaked at 12.2 million in 1997 (which represented some 46% of all such employees) and has now dropped to 8.2 million active members (or 28% of such employees).

All of which means there is a huge hole in pension provision in the UK. Given there was little prospect of individuals putting their own house in order (apathy is frequently the most quoted attitude to pensions in surveys) the government had to respond. It did so by introducing auto-enrolment under its White Paper *Reinvigorating workplace pensions*, which we examine in the following chapter.

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<sup>24</sup> Office for National Statistics, 2012, 2011 Annual Survey of Hours and Earnings.

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# 2

## The Government's Response

Recognising the large hole that was appearing in the provision for retirement in the UK the last Labour government set up the Pensions Commission in a 2002 Green Paper to look into the state of the UK pension system. The Pensions Commission produced two reports, the first analysing the challenges facing pension provision in the UK and the second recommending changes to meet these challenges. That first paper identified undersaving as a crucial problem, suggesting that some 9 million people were undersaving for retirement and 75% of Defined Contribution scheme members were making contributions “below the level required to provide adequate pensions”. The second paper and its recommendations resulted in the 2006 White Paper Security in Retirement. The key change from the perspective of private pension provision was the Paper’s proposal for auto-enrolment for private sector pension schemes with a targeted minimum contribution of 8% of income (split 4% personal, 3% employer, 1% tax relief). The legislation for this was introduced in the Pensions Acts of 2007 and 2008, which also established the Pension Accounts Delivery Authority, leading onto the creation of the National Employment Savings Trust (or NEST) which was to provide a low cost alternative to private pension provision aimed at small and medium sized companies. On the state pension side it also proposed simplifying the complicated state pension scheme and progressively extending the pension age to reflect changes in demographics. The state pension age will now rise to 67 starting in 2026, 68 in the 2030’s and 69 in the 2040s.

The coalition government built on and extended this through its White Paper Reinvigorating workplace pensions and the 2011 Pensions Act. This legislation brought in auto-enrolment starting in October of 2012 for all employees, with a minimum 8% contribution being applied to earnings between a band of £5,668 and £41,450<sup>25</sup> for the 2012/13 tax year. Under the scheme every employer is obliged to enrol their employees into a workplace pension scheme if they are earning more than £9,440 per year. These employees can opt out and if they do so in the first month of being enrolled they are treated as if they had never been enrolled. They will however be automatically re-enrolled after three years. This is to ensure that employees have to consider their pension position on a regular basis, so that inertia from an initial decision does not lead someone to be permanently opted out. Between £5,668 and £9,440, employees are not automatically enrolled but can opt in. For those earning below £5,668 they will have the right to join a pensions scheme and an employer must provide one for them if they ask.

There were also further changes to the state pension with the increase in the state pension age being brought forward to 66 by 2020 and 67 by 2028.

<sup>25</sup> Essentially representing the lower earnings limit and upper earnings limits for National Insurance contributions.

It also removed the default retirement age. Additionally the state pension was simplified by bringing in a single tier pension, eliminating the ability to have a supplementary state pension. The single tier pension will also be brought in above the current threshold for means tested support (currently £142.70), considerably higher than the current £110 per week for the basic state pension. It will require higher national insurance contributions from both companies and individuals who had previously contracted out, to compensate for the higher rate together with a longer period of contribution, increasing from 30 to 35 years.

The combination of these changes is a serious attempt to address the pension hole. A higher state pension, funded by larger contributions, made over a longer period, combined with a higher retirement age and a system of auto-enrolment for private pensions. The intention of this final piece in the jigsaw is to encourage all employed people to contribute to a pension and to have the right to a pension even if they are on low incomes. The principle of auto-enrolment is a good one as inertia is a major barrier in the field of pension saving. At 8%, with only 4% of this coming from employees, the bar has been set low enough to encourage people not to opt out.

In addition, the government understandably chose to stage the process of introducing workplace pension schemes to give employers time to set them up. Firms with 250 or more employees are being staged between October 2012 and February 2014. Employers with 50 to 249 employees will be staged between 1 April 2014 and 1 April 2015, while employers with less than 50 employees will be staged between 1 June 2015 and 1 April 2017. Finally new employers setting up business from 1 April 2012 up until 30 September 2016 will have staging dates between 1 May 2017 and 1 February 2018.

All of this seems a very sensible approach since this represents a major shift in the provision of workplace pensions – and there are bound to be teething problems. So far though, the process has been a success, with 1.6 million people already having been enrolled into the system, while just 9% decided to opt out. The latter figure is considerably smaller than expected, with the Government having predicted that up to a third might leave. Interestingly in a survey by NEST, 61% of people said they intended to stay in a workplace pension compared to 47% who said they would do in 2011. Also the number disagreeing with the idea of auto-enrolment dropped from 27% in 2011 to 18%.<sup>26</sup> A DWP survey<sup>27</sup> found that, amongst the employers surveyed, participation in a workplace pension had increased from 61% to 83%. Those companies without contractual enrolment saw the sharpest increase in participation, rising from 36% to 71%.

This underlines the importance of the automaticity of any pension system and also the advantage of inertia. Indeed, some 13% of people in the NEST survey said they had remained in their workplace pension because they had been “too busy” to opt out. It should be emphasised though that the success of the start of workplace pensions may well be flattered by the fact that the employers involved were the larger employers. As we move onto the next stage with smaller employers there has to be a good chance that the proportion of people entering into such pensions falls.

It has been noted in much research that smaller pension schemes have historically been associated with higher costs and less good governance.<sup>28</sup> In our view there is a high risk that smaller companies will not be as good at encouraging

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<sup>26</sup> See HR Magazine, 30 September 2013.

<sup>27</sup> Automatic enrolment opt out rates: findings from research with large employers August 2013.

<sup>28</sup> Enabling good member outcomes in work based pension provision – The Pensions Regulator January 2011.

their employees to enter into schemes as large employers. While NEST has been set up to give small companies an easier option for their employees it is not difficult to imagine smaller companies being less enthusiastic adopters of auto-enrolment with the obvious knock on effects in terms of opt outs.

While auto-enrolment is good because it forces people into a pension and means they have to opt out actively, there is still the ability to opt out. Given the size of the pension hole discussed in the previous chapter, we believe this is one area where the government could and should have gone further. Saving for a pension should be compulsory above a certain income level,<sup>29</sup> as in other countries like Australia, New Zealand and Singapore. An opt out should only be permissible if the employee can demonstrate that they have sufficient funds already in their pension fund to ensure that the state does not have to pick up the tab.<sup>30</sup> We would argue that this should be a minimum income requirement, which would likely be based on the replacement ratios suggested by the Pension Commission. That calculation could be made using some form of benchmark annuity rate.

While the government, and others, have suggested that compulsion is not normal in the UK (for example in voting) that is not really the case. Compulsion is, for example, completely normal in areas such as national insurance contributions, taxes or even education. Pension contributions should be thought of in the same way. Anyone opting out is creating a risk for the state by having a shortfall in his or her post retirement income. Given the survey evidence about how many people seem to be content to rely on the state and the rising cost of such support this needs to be limited as much as possible. It is not too late for the government to change its mind on this and this should be urgently considered ahead of the next round of auto-enrolment. If the system were to be made compulsory there would be no wiggle room for those who are less enthusiastic about the scheme.

**“Compulsion is completely normal in areas such as national insurance contributions, taxes or even education. Pension contributions should be thought of in the same way”**

## How much should we be saving? Is 8% enough?

While the initial 8% level for contributions seems sensible as a compromise to ensure that people are not prompted to opt out on the grounds for cost, we believe it falls far short of what is likely to be necessary if people are to save a sufficiently large pension pot by the time of retirement. To illustrate this point we examine below whether the target replacement ratios, discussed in the previous chapter, are likely to be achievable under the current auto-enrolment terms.

A crucial input into the feasibility of reaching such replacement ratios is the annuity rate. This is the rate that an insurance company will agree to pay someone for the rest of their life in exchange for a fixed sum. Since the payout is guaranteed the insurance companies have to invest in assets that will also guarantee to pay a certain level of income over a long period of time, generally 20 years or more in the UK given current mortality rates. The only real instruments to achieve this are government bonds. As a result of the falling inflation, and more recently the very low interest rates and quantitative easing that have followed the financial crisis, yields on these bonds have fallen

<sup>29</sup> As with auto-enrolment we would align the start of compulsory pension contributions with the tax free personal allowance.

<sup>30</sup> We would also make an exemption for people that were unlikely to reach retirement age because of illness.

sharply. A 20 year gilt yielded an average of 4.75% in 2007, before dropping to as low as 2.5% in 2012, although it has rebounded somewhat to around 3.3% currently. That drop in yields means an annuity will deliver only 70% of the income today that it would have done in 2007. Indeed, at current levels of annuity rates a £100,000 pension pot would yield around £3,650 on a single life with RPI indexation and a 5 year guarantee.<sup>31</sup>

The table below uses this annuity rate to calculate the size of pension pot that would be required to meet the Pension Commission's replacement ratios. We have used £12,500 as the starting point for pre-retirement income and then we have used mid points of the ranges they suggest until £51,500 which is the bottom of the top band (see Figure 1 for details). All amounts are rounded to the nearest £500. We have made the calculation using both the current state pension, currently £5728 per annum and the single tier pension that comes in after 2016, which is likely to work out at around £7420.

It is worth looking at both scenarios because going forward for the vast majority of people the single tier pension will be the maximum they will be able to receive from the government<sup>32</sup> if they retire at the normal retirement age. The government has said that it will pay the higher of the entitlement under the current system and under the single tier system. For a lot of people that means the likely bound is the state pension to single tier pension range, although it should be acknowledged that there will be a significant minority who will fall below that because they have failed to make sufficient contributions.

**Table 1: Replacement ratios and required pension pots**

Income level	Replacement ratio	State pension	Single tier pension
£12,500	70%	£83,000	£36,500
£17,000	67%	£155,000	£109,000
£27,000	60%	£287,000	£241,000
£51,500	50%	£549,000	£502,000

If we use the lower state pension as the basis for income at retirement, then even the person on the lowest income level, who would have more than two thirds of their replacement ratio met by that pension, will require a pension pot of some £83,000 to make up the difference. For someone on £27,000, which is close to average earnings in the UK they would require a pension pot of some £287,000. That is close to eight times the current average pension pot. For anyone on £50,000 or more the number moves to over £500,000.

The numbers improve if we use the single tier pension instead because of the greater contribution it makes to pension income. In this case those on the lowest income band would need a pension pot of £36,500 (close to the current average) rising to £109,000 for those on £17,000 and £241,000 for those on average earnings of £27,000. For those on £51,500 or more the improvement is smaller with a pension pot of £500,000 plus still required.

So what level of savings would be required to build such pension pots? We have modelled a pension based on NEST levels of contributions (1.8% on the contribution plus a 0.3% annual management fee) and a 3% real gross return.<sup>33</sup>

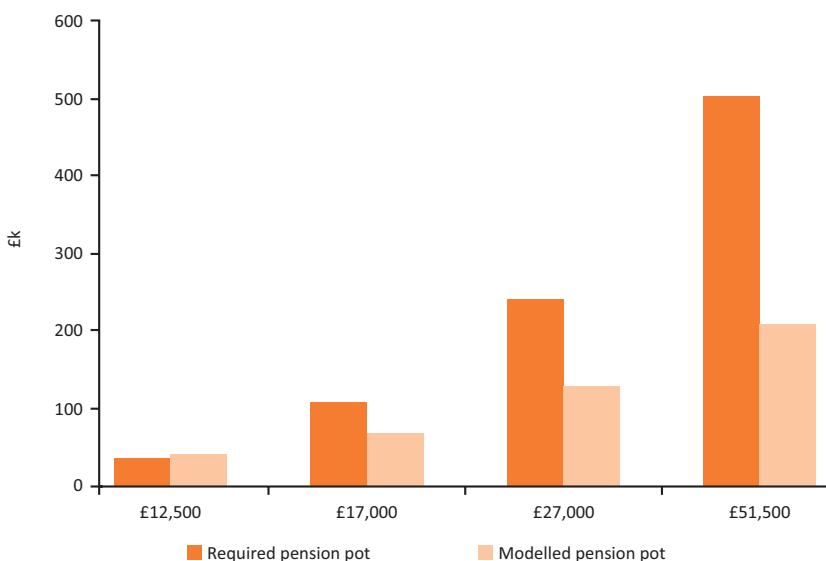
<sup>31</sup> Here we have used single life, 5 year guarantee, RPI linked. Rates tend to move in response to changes in government bond yields so we have used an approximation of £3650 per annum for a £100,000 pension pot, based on rates shown by Hargreaves Lansdowne 14/10/13.

<sup>32</sup> For those who have not contracted out but stayed in the supplementary scheme and have a pension entitlement above the single tier level the government will pay a supplement to make up the difference.

<sup>33</sup> The gross return is pre fees. The NEST fees are roughly equivalent to an annual management charge of around 0.45%, so that a

Such a rate of return is, we believe, reasonable given historical averages, and is often used in the pension industry as a benchmark rate of return. For a person on £12,500 per annum, assuming they saved for 40 years from the age of 28 then at the 8% contribution level, they would generate a pension pot of just under £40,000. That falls dramatically short of the required pension pot if they are only receiving the state pension. To attain the required pension pot of £83,000 they would have to either achieve a real return of more than 5.5% (unlikely) or raise their contribution rate to 16.5%, more than double the auto-enrolment rate. And this is assuming the person in question works the full forty years.

**Figure 3: Required and modelled pension pots by income**



Source: DWP and Policy Exchange estimates

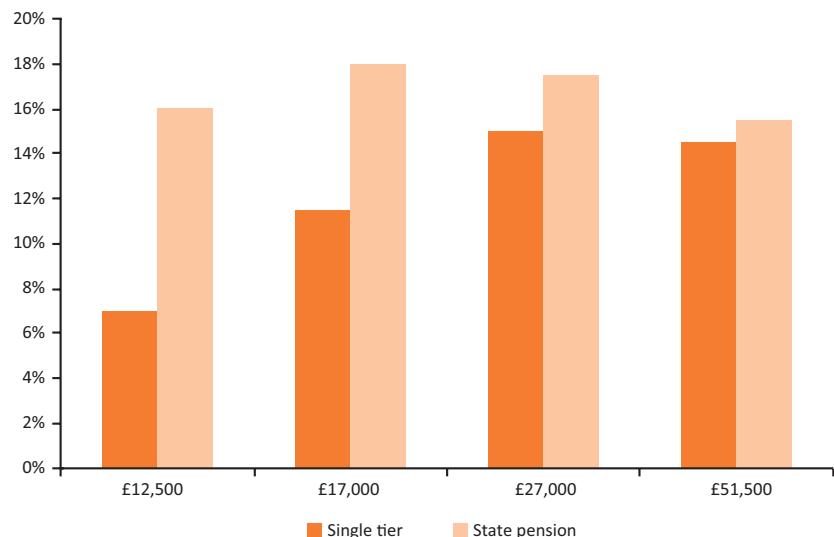
This underlines why the move to a more generous single tier pension is so important for low earners. Run the same calculations for using the single tier pension then the person in question can generate the required pension pot with a real return on their investment of 2.5%.

To underline why we think compulsion is necessary let us consider the case of someone who only saves for 30 years, i.e. from the age of 38 rather than our assumed 28. To reach the required replacement rate at a 3% real return, even with the single-tier pension would require a contribution rate of around 11%. Such is the power of compound interest. The earlier a person starts saving for a pension, and the longer they save for it, then the lower the level of contributions they can afford to have. Given that people may have periods when they are not in employment, either because they are unemployed or perhaps because they take time off to bring up children, it is vital that whenever someone is in employment that they are contributing to a pension.

The Pensions Policy Institute have done a similar analysis<sup>34</sup> where they calculate that opting out of a private pension between the age of 30 and 40 could reduce pension income by a third.

34 Pension Policy Institute:  
Closing the gap: the choices and  
factors that can affect private  
pension income in retirement –  
February 2012.

**Figure 4: Required contribution rates to meet target replacement ratios**



Interestingly the more you earn the higher your pension contributions need to be. This is because the state or single tier pension provides an increasingly smaller part of the replacement ratio. For a person on £17,000 to reach their required retirement pot they would need a contribution rate of 13%, assuming a single tier pension. With just the state pension that contribution ratio rises to a staggering 19%.

Those on higher incomes would need still higher contribution rates. For someone earning £27,000 (around average earnings) our calculations show that contribution rates of around 15.5% would be required with the single tier pension and 18.5% using the state pension. For those on £51,500 we assume that contributions are not capped at the upper band of auto-enrolment and that companies and individuals would continue to contribute above the threshold of £41,450. As a result with the state pension accounting for proportionately less of the replacement ratio contribution rates are slightly lower than at £27,000. We estimate them to be 15% and 16.5% for the single tier and state pension respectively.

Nevertheless, for those on average earnings or above, our calculations suggest that to generate a sufficient pension pot to meet the recommended replacement ratio on retirement they will need contribution rates of 15% or more, made over 40 years, with a 3% real return. And that is assuming no years of opt out.

The numbers can be improved if we move from an index linked pension to a nominal pension. Under such a scenario an annuity would pay out slightly more than £6,000 compared to the £3,650 we have used in the analysis for a single life. In other words you would receive a constant income in nominal terms but it would cease on the death of the person receiving the annuity. In other words a surviving spouse would not receive any income. On such an analysis a person earning £17,000 per annum would only fall slightly short of the required pension

pot assuming they receive the full single tier pension. Those on average earnings or higher would still fall short even using nominal annuities and the single tier pension, with an estimated pension pot of £130,000 using our assumptions compared to a required pension pot of around £146,000.

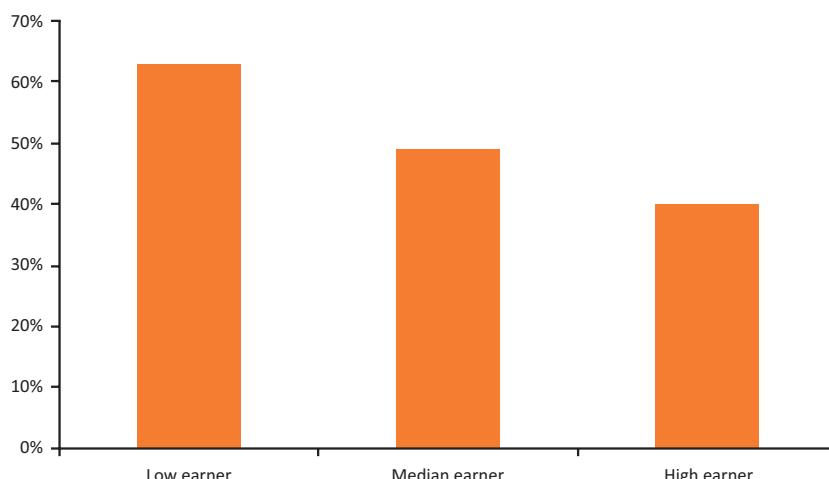
The calculation of the target replacement income is one that should be sustained over the entire period of retirement. Since in the case of a nominal income it declines in real terms from year one it does not really meet the requirement, which is why we have used the index-linked annuity. Also the nominal annuity in the analysis here is the most generous since it has no guarantee and no joint life cover, both of which most people would choose. While such an analysis is more generous to those on the lowest incomes even the highest annuity falls short for all those on average earnings or above.

Another point to make is that all of these calculations, both real and nominal, assume that the entire pension pot is used to buy an annuity. If an individual wished to take the option of a 25% lump sum for their pension, then the appropriate pension pot to meet the income replacement targets would be correspondingly higher.

Our analysis here is a static analysis, which for simplicity assumes a constant income and constant returns. It also assumes, as we note above, that all income is used to create an income stream in retirement. The order of the returns is vitally important to the eventual pension pot. Schroders carried out an analysis of the progression of two pension pots over two time historical time periods with almost identical average returns but different orders of return. In one case the final pot was 13.6 times final salary, whereas in the other it was just 9.1 times.

The Pensions Policy Institute (PPI), in a document published In October 2013,<sup>35</sup> undertook a slightly more sophisticated piece of analysis than ours by looking at different paths under a variety of different simulations. They also used age related incomes and assume that the replacement ratio related to income in the last ten years of retirement. They were slightly more generous in that they used a non-indexed single life annuity, which produces a higher initial income. Nevertheless, their results were strikingly similar to our own.

**Figure 5: Probability of reaching target replacement income**

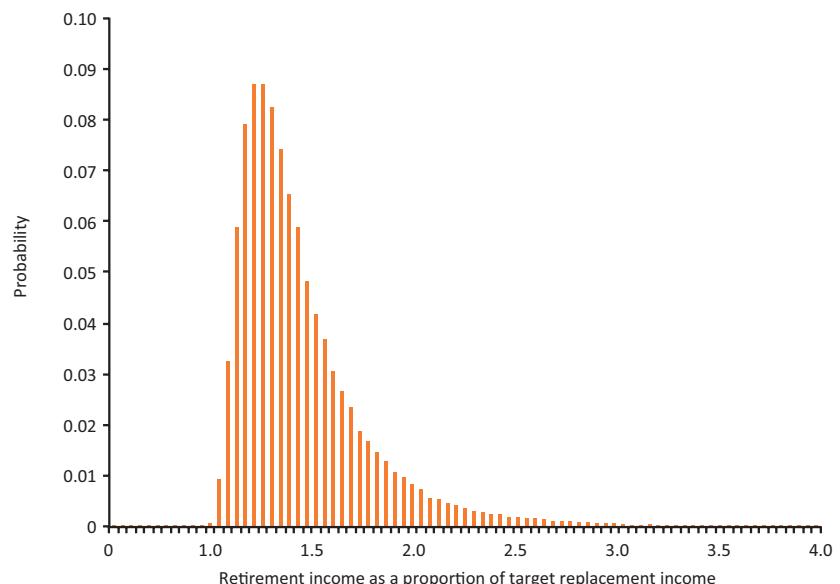


<sup>35</sup> Pension Policy Institute:  
What level of pension  
contribution is needed to obtain  
an adequate retirement income?  
October 2013.

In their analysis, the PPI assumed a low income individual earns at the 30th percentile of age specific economy wide earnings, median income individuals at the 50th percentile and higher earners at the 70th percentile. They are all assumed to start saving at 22 in 2016 and retire at the State Pension Age in 2064. Even including the Single Tier Pension their analysis concluded that, at the minimum 8% auto-enrolment contribution rate, a lower earner would only have a 63% probability of achieving the target replacement rate. Interestingly, if we include a 25% lump sum into our calculations then even the £12,500 cohort with a single tier pension would only generate 85% of the required pension pot at the auto-enrolment contribution level of 8%.

The figures, as per our analysis, were worse for higher earners. The median earner (similar to the £27,000 earner in our analysis) has a 49% chance of meeting their replacement ratio, while the high earner has only a 40% chance (see Figure 5). The worse outturn in their analysis for the higher earner is because they assume the upper ceiling does limit additional contributions above that level.

**Figure 6: Distribution of probability of reaching target replacement income**



Source: Pension Policy Institute

The PPI also looked at the probability of reaching various proportions of the target replacement income, based on the 8% contribution under auto enrolment, given different returns on the portfolio (see Figure 6). Interestingly in only 49% of the cases modelled did a person reach their target income. Even worse in 25% of the simulations the replacement income was less than 75% of the target.

The PPI also looked at the effect of taking a 7 year career break from 32 to 39 for median earners. This triggered a drop in the probability of attaining the required replacement ratio at the 8% auto-enrolment rate from 49% to 34%. Equally for those median earners who do not start saving until they are 40 the probability of them reaching the replacement ratio is just 5%! On the other side

of the coin delaying retirement until two years after the state pension age raises the probability of meeting the replacement ratio from 49% to 59%.

It is worth pointing out that one of the key reasons that it is so difficult to meet these replacement ratios at the moment is that annuity rates are so low, care of the low level of government bond yields. Those government bond yields obviously might rise, which would help solve the problem, but it cannot be guaranteed. Also it assumes that there are no adverse incidents like sustained low equity market returns such as those experienced since the year 2000. A 3% real return is not wildly optimistic with the FTSE 100 currently yielding 3.5%, but it does imply quite a high level of equity weighting as government bonds currently have a real yield of close to zero.

When you crunch the numbers in this way you can understand why Australia has decided not only to go down the route of compulsion but also, critically, to target a 12% contribution rate as well.

## Incentives for higher saving or compulsion? Which is the best route?

The DWP recognises that the 8% minimum contribution ratio is on the light side but has said that it has no intention of altering it at this point, in part because it argues that this may increase the chances of people opting out.<sup>36</sup> The DWP did examine the option of automatic escalation and specifically referenced Save More Tomorrow™. This is an automatic escalation scheme developed by Shlomo Benartzi and Richard Thaler, two behavioural economists.

The idea behind the scheme is that people are happy to increase the amount they save as they earn more. In this scheme, the employee signs up to an increase in their contribution rate whenever they get an increase in salary. The amount of the increase in contribution as a proportion of the salary increase is agreed in advance and is automatic each time the employee receives a salary increase. The ratchet stops once the contribution rate reaches a pre-agreed set level. The employee can also opt out at any point. The plan works because of inertia. Once people opt into the plan they rarely opt out. In the trial firm where they tested the scheme 78% of those joined the scheme with 80% remaining through to their fourth pay rise. The average saving rates for those signed up in the scheme increased from 3.5% to 13.6% over a 40 month period. The scheme has proved very popular in the US where Defined Contribution schemes (known as 401(k)) have increasingly replaced Defined Benefit schemes. By 2009, some 59% of large companies in the US used some form of automatic escalation.

Such an approach is a sensible one as people are more likely to step up their contributions as time goes on if the increase is an automatic one. However, the step up needs to come quite quickly as the early years of saving, in any pension scheme, are vitally important as illustrated above. The reluctance of the DWP to raise the minimum contribution rate is understandable but finding a method to raise contributions one way or another is a necessary next step. We would like to see an automatic escalation built into the auto-enrolment system where a proportion of any increase in pay has to be allocated to a pension contribution until pension contributions reach a higher rate. Given the calculations above we have a lot of sympathy for the Australian target of 12%.

<sup>36</sup> Reinvigorating Workplace Pensions, November 2012.

It is possible that the DWP could target different contribution ratios for different levels of incomes given that at lower incomes the single tier pension would contribute a larger amount of the replacement ratio and there is obviously less disposable income to save. Indeed, this would seem to be a sensible approach.

For those on average earnings and above, though, we believe a 12% contribution rate should be targeted. Not all of this needs to come from the employee and we would suggest that the current ratios for the 8% contribution are rolled up for a 12% contribution. That would imply 6% from the employee, 4.5% from the company and 1.5% from the government.

**“There is a risk, of course, that driving pension savings higher will cause other forms of saving, such as ISA’s to suffer and potentially overall saving is little changed”**

Obviously this would need to be phased in to make it as affordable as possible. Nevertheless, given how quickly people need to accelerate their pension saving we would suggest that a period of around 5 years would not

be unreasonable. That would mean an increase of 0.4% per year for an employee and the increase could be subject to a sufficient rise in income to ensure that only those with rising incomes have to increase their contributions. We think such a ratcheting up is feasible but again would require some form of compulsion to avoid people dropping out as the impact on their disposable incomes increased.

The government’s reforms have definitely been a good start and as a result the pension hole, which has been widely identified, has started to close. The single tier pension will at least provide a base level of income for people to live on in retirement. The changes in the state pension age and higher contributions will help hold down the cost in the near term, but government spending on pensions still accounts for around 6% of GDP. That is before benefits, health and care costs. The more people can save for retirement the more this will reduce the burden on the government of providing for these services. To that end it is vital that auto-enrolment works and in our view the government has to go further in both making such membership compulsory and raising the level of contributions.

There is a risk, of course, that driving pension savings higher will cause other forms of saving, such as ISA’s to suffer and potentially overall saving is little changed. This was highlighted by the Pensions Commission when favouring auto-enrolment. Our counter is that because retirement appears so distant most people tend to undersave for their pensions. Other forms of saving tend to be more precautionary, that is to have a reserve for a rainy day. This saving, we suspect, is sticky enough not to be damaged too badly by higher pension contributions. Of course, the extra saving will need to come from somewhere and we need to be careful particularly at a time when the economic recovery is still far from being established. It is for that reason that we favour phasing in the rise in contributions to limit the impact.

In sum we believe the government has to go further to close the pension hole. Auto-enrolment at current levels of contributions will not provide sufficient savings to meet people’s income requirements in retirement. We therefore recommend that the government ends the ability to opt out and makes the scheme compulsory.<sup>37</sup> We also recommend that the minimum level for contributions be raised from 8% to 12%, phased in over a period of 5 years. Then, and only then, can the government, and more importantly future pensioners, be confident that incomes will be sufficient in retirement.

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<sup>37</sup> Our only exception would be for people who can demonstrate they have already saved enough into their pension fund to meet the minimum income requirement.

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# 3

## Major Issues Still to be Addressed

Compulsion and higher contributions are key ingredients to ensure that auto-enrolment will achieve its objectives. While they are absolutely vital, they are not the only issues of importance in the pension debate. First, we need to consider the issue of how income is generated in retirement, which at the moment primarily comes from annuities. With current annuity rates so low pension pots have to be proportionately higher to generate the right level of income in retirement. Government rules mandate that a minimum pension income of £20,000 has to be generated before alternatives such as a drawdown can be considered. Does this still make sense in a time of very low bond yields?

Second, there is the issue of how to protect a pension from volatility in markets? As we will show below market volatility can do enormous damage to the value of a pension. Traditionally in a Defined Benefit scheme this risk was taken by the employer, now it is taken by the employee. The DWP has looked at this issue asking whether there could be burden sharing with employers, or other employees. The latter is known as a Collective Defined Contribution scheme. We are unsure whether either can be a solution. The main current alternative, lifestyle funds, transition employees to “safer” assets, such as government bonds, as they near retirement. These have major flaws in them too, not least in that the transition tends to be automatic and not responsive to market events. We ask whether more active asset allocation to target an outcome oriented.

Third, we need to consider fund structure. Defined Benefit funds often had economies of scale that enable better governance and lower fees. They should also have been beneficiaries of the freedom to asset allocate although for a number of reasons this was not always successful. The governance and efficacy of small employer based pension schemes has been questioned in a number of quarters and NEST is to some extent a response to allow companies to default into a larger fund, where economies of scale are possible. There have also been master trust funds set up in the UK with the objective of trying to garner these economies of scale. These may or may not succeed, it remains to be seen. The real question is whether the UK has gone down the right route with a fragmented approach or whether it might be better to look at the Australian approach of developing competing super funds.

Finally, there is the issue of fees. This is often the easiest area for politicians to pick on because higher fees will impact on returns and the offer of lower fees, funded from the profits of investment managers, makes for good politics.

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Unfortunately it can also make for bad economics if it drives more appropriate but higher cost products out of the market. The recent Office of Fair Trading Report made interesting reading and they certainly highlight some room for improvement in fees charged on historic funds and the DWP have clearly taken that into account in their proposals to cap fees. We would rather see any fee cap set at the upper end, i.e. 1%, which would prevent abuse but also allow a broad choice of funds.

### Income in retirement – relying on annuities only is too restrictive

The way a pension pot is transformed into income is rather inelegantly called decumulation, being the reverse of the accumulation phase. Under current government rules in the decumulation phase an individual needs to have a minimum income of £20,000 per annum<sup>38</sup> before they can start to drawdown on their remaining pension assets. To qualify for the minimum income requirement the pension payments “must be guaranteed for life and, in general, not be one that can reduce from one year to the next”.<sup>39</sup> HMRC outlines five general types of pension that may be counted towards this requirement:

1. State pension
2. Scheme pensions
3. Dependents’ scheme pension
4. Lifetime annuities
5. Dependents’ lifetime annuities

The state pension is relatively straightforward, it will be the current state pension or from 2016 whatever a person receives under the single tier pension. A scheme pension is paid from a registered pension scheme and is either an annuity from that scheme or a payment, which is not an annuity and has at least 20 people receiving it.

For those with Defined Contribution schemes such as those under auto-enrolment, that means that the gap between the state pension and the £20,000 minimum income requirement has to be met from an annuity. If we use the single tier pension as our assumed state pension as we did in the previous chapter then the annuity has to generate a little over £12,500 to meet the requirement. Based on the assumed single life, RPI indexation with a 5 year guarantee (which we used in chapter 3) this would require a pension pot of more than £340,000. To put that into context using auto-enrolment contributions of 8%, over 40 years, with a 3% real return, a person would have to be earning in the region of £62,000 per annum to reach such a sum.

Of course a person could opt for no indexation on their annuity and that would generate a much higher initial income figure for the calculation of the minimum income requirement. Even so we calculate that a pension pot of around £200,000 would still be required. Using the same method as before that would mean a person having an income of around £40,000 per annum to reach such a pot. However, the risks of not index linking a pension are real, just 2% inflation over 20 years (a period over which a pension might be expected to last) would lead to a cumulative increase in prices of close to 50%.

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<sup>38</sup> Known as the minimum income requirement.

<sup>39</sup> [www.hmrc.gov.uk/manuals/rpsmanual/rpsm09103600.htm](http://www.hmrc.gov.uk/manuals/rpsmanual/rpsm09103600.htm).

Bear in mind too that our calculations assume that no tax free lump sum is taken. If a person takes a 25% lump sum (as most people would as it is tax free) then the required pension pots and incomes have to be correspondingly higher. This means that, under current rules, the vast majority of people will be forced to use all of their pension pot (post lump sum) to buy an annuity.

The government has sought to improve the rates of annuity on offer by encouraging people to look beyond their existing pension provider for the annuity. In the past, some of the “in-scheme” annuity offers fell short of the best rate in the market. The ABI has sought to deal with this by launching a compulsory Code of Conduct on Retirement Choices in March of 2012. That code prohibits providers from sending out application forms for annuities in the information pack on their pensions. It also requires the provider to engage the customer to ensure they understand how they can generate income in retirement and what the options are. In particular they are required to encourage the customer to obtain competing quotes.

This definitely helps at the margin, and if someone is forced to buy an annuity it makes sense to ensure that they get the best possible rate for it. Nevertheless, as the DWP note in their paper *Reinvigorating workplace pensions* “buying a lifetime annuity at the point of retirement may not always be the best option for people”. The main alternative is income drawdown, where an individual draws income from his pension pot, which normally remains invested and therefore benefits from potential further investment gains. The DWP argues that “a substantial fund value is needed to make income drawdown cost-effective and there is a risk to retirement income if investment returns are poor and the level of income is reduced below what an individual had planned – the income is not guaranteed as with an annuity.”

While it is true that an annuity does give a guaranteed nominal income, it produces a rather modest income for a large pension pot. If you want a guaranteed real income, which requires inflation protection, then the income is even smaller. Bear in mind that a £100,000 pension pot currently produces approximately a little over £6,000 per annum of nominal income or £3,650 per annum of inflation protected income.

The market for annuities has recently been heavily criticised by the Financial Services Consumer Panel<sup>40</sup> saying that product complexity had increased and that many were as a result making poor choices. It also said there was a tendency to take the annuity offered by the existing insurance company and that fees in some cases were too high. At the moment the rate of annuity offered is a function of the insurance companies view on your likely life expectancy as well as the level of rates. We think there is a case for splitting those two elements.

The easiest way to do that is to take the rate element out of the equation. Since insurance companies use government bonds to hedge their interest rate exposure in selling an annuity the government could, and we believe, should offer an annuity type product. At the moment the vast majority of government bonds offer a yield over a period of time, with the principal repaid at maturity. So, for example, £1,000 invested in a 10 year gilt yielding 3% would see a coupon of £30 per year paid with the £1,000 repaid after ten years.<sup>41</sup> What the government could offer instead would be a bond that pays a higher coupon over the ten year period but with no principal repayment at the end. Such a bond would generate

<sup>40</sup> Annuities: Time for Regulatory Change, December 2013.

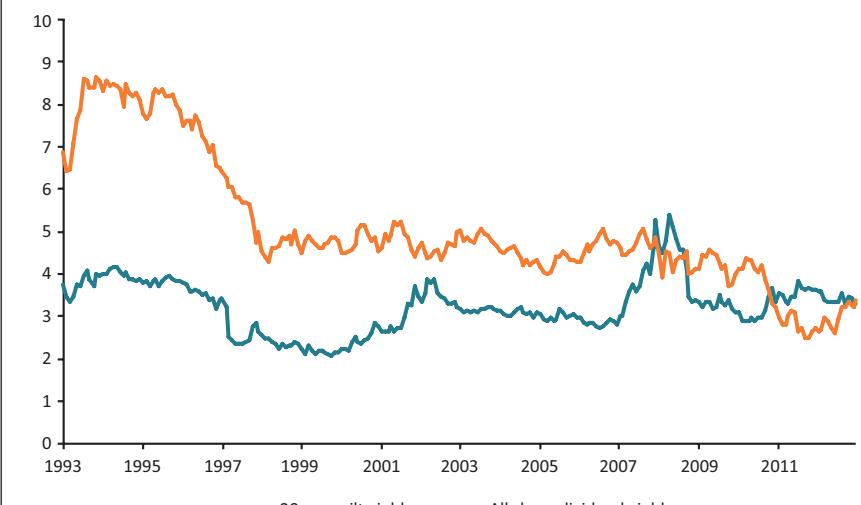
<sup>41</sup> In practice many gilts pay their coupon semi-annually, so there would be two coupon payments, but we have simplified for illustrative purposes here.

the guaranteed income in retirement and the government could of course offer an index-linked equivalent too.

In such a market a person could buy a bond for say 20 years and ask insurance companies to quote for an annuity to come into effect after the bond expired. That would split the vast majority of the interest rate risk from the life risk. Insurance companies could still offer shorter annuities but consumers would have a clearer idea if that represented a good offer or not. We would suggest that the government offer such bonds in 10, 15, 20 and 25 year maturities and the insurance industry could price the products accordingly for the subsequent risk. Such bonds could be offered through National Savings for individuals or through the gilt market for insurance companies that were seeking to hedge their annuity risk. Either way it would make the market much more transparent.

Unlike an annuity such an instrument would not fall to zero on death but would form part of the estate so that a retirees dependents could receive the remainder of the income from the bond. The alternative would be for insurance companies to pay a premium to receive the bond on death providing a supplement to the retirees income.

**Figure 7: Government bond and dividend yields**



### Income drawdown should be considered as an alternative to annuities

Even if this resulted in higher returns in buying an annuity you have used all your capital (aside from any lump sum that is taken). In contrast if the fund is invested instead in income bearing equities, then the pension holder can take the income and still have capital left. That is particularly important today when we are in the rare time of equity markets yielding more than government bonds. This has not happened for more than 50 years and therefore there has to be some consideration of the impact of this on pension choices. The DWP at the moment seem to want to err on the side of caution in protecting the income element of the fund: however, that may mean a significantly worse outcome for the pensioner.

The reason for the very low levels of annuity payouts is that insurance companies use government bonds as the source of income for annuities. Those yields are historically very low at the moment. Long dated gilts (UK government bonds with lives of 20 years or more) yield around 3.2–3.4%, around half a percentage point above the current rate of inflation. Even worse, index linked bonds actually have negative yields currently, which means they will pay less than the rate of inflation going forward. In contrast, the FTSE 100 has a dividend yield of 3.6%. Since dividends normally grow in real terms, it is not unreasonable to assume that the real return on equities going forward should be 4% or better.

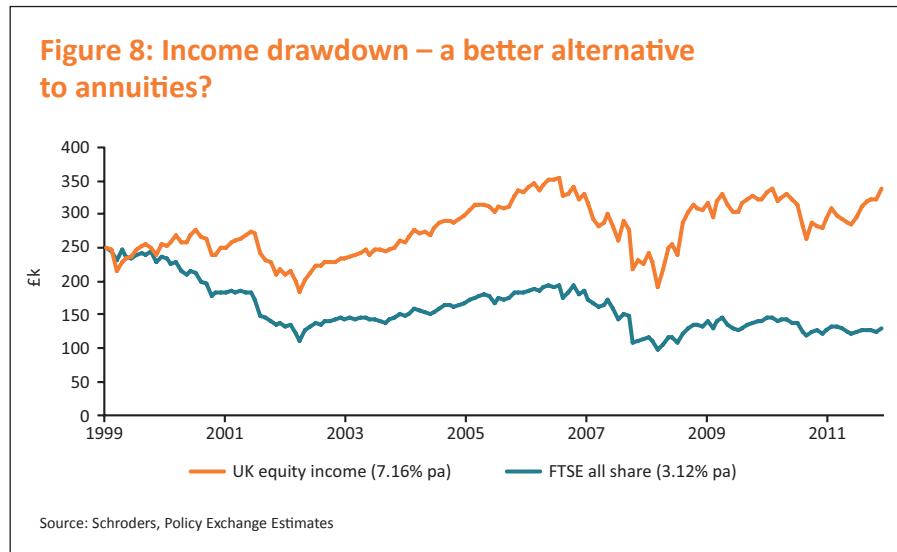
To illustrate the importance of yield we have used some analysis carried out by Schroders using the FT All Share and its own UK Equity Income fund, which favours dividend paying stocks. They then looked at the performance of those funds assuming a 5% drawdown over the period from 2000 to 2012. This was not a great period for equity markets as there was the Tech crash of the early 2000s and the financial crash of 2008. The UK All Share index including dividends returned 3.12% with an average yield of 3.19%, whereas the Income fund returned 7.16% with an average dividend yield of 3.88%. In times when equity markets suffered then the value of the fund did indeed dip before recovering. If we assume a £250,000 pot and a 5% drawdown (of the initial amount) then that yields a £12,500 income, roughly equal to the amount that would be required to meet the government's minimum income requirement. Even at the end of this terrible period for equity markets the income fund would be worth £338,400 having paid out the 5% per annum. The All Share fares less well, dropping to a little under £129,000 so a person adopting this approach and using this type of fund would have eaten into their capital as a result.

The worse outcome for the All Share fund stems from its initial poor performance post the tech crash from 2000–2002. Falling equity prices and the lower yield meant that the fund had become very depleted by the time equity markets stopped falling. Indeed, the initial £250,000 had dropped to little more than £100,000, which compares to close to £200,000 for the equity income fund. The latter performed better in part because of the composition of the fund was more defensive and therefore less vulnerable to equity losses, but also because it had more dividend income to pay the distribution. The subsequent equity market gains were much more powerful for the income fund than the all share fund as a result.

These were UK funds, but many pension funds are invested globally so we replicated the simulation using the MSCI World Index and the MSCI World High Dividend Index. Using the same assumptions \$250,000 would fall slightly to \$195,780 with the high income fund and to \$71,906. Less good than for the UK equivalents but it shows the superiority of income funds for drawdown purposes.

The poor performance of the non high income funds highlights the concern of the DWP about losses from equity market volatility but it should be highlighted this was a very poor period for equity markets. If you have sufficient dividend yield though, the fund is much more robust. The reason is simple you live off the dividends and not the capital. Since companies are very reluctant to cut dividends, except in extremis, then there tends to be a stable dividend stream to pay the income. By choosing something like an income fund then you are requiring the fund manager to choose dividend paying stocks and thus even if a company stops

paying a dividend, like the banks post the financial crash, the fund manager will switch into other dividend paying stocks.



One way in which the DWP could allow people to substitute equity type funds for annuities would be to limit the cash extraction to the yield of the fund.<sup>42</sup> In other words given the equity income fund had an average yield of 3.88% it would require a fund not of £250,000 but around £322,000 to fund a £12,500 a year drawdown. In this case the capital would only be eaten into to replace any fall in the yield paid on the fund. Over time this should be self-correcting since dividends tend to rise at or above inflation.

The advantage for the pension holder is that they still have access to their funds and should the funds rise over time, they could access their capital as well. Even in that period of poor returns from 2000–2012 the equity income fund increased in value by some 35%. That money would be available to the pension holder whereas with an annuity the capital all goes.

If we consider a better period for equity markets as Schroders did for 1988–1999, then the advantage of an equity fund over an annuity becomes even more obvious. Over this period, the All Share returned 15.8% per annum and the equity income fund 14.6%. Even paying out 5% per annum, a £250,000 fund would have grown to more than £1 million if invested in the FTSE All Share and to a little more than £900,000 for the equity income fund. Given we have just experienced two of the worst bear market periods for equities since World War II, the odds favour a period of better returns, albeit perhaps not as good as from 1988–1999.

Forcing people to invest all of their pension pot into an annuity to reach the minimum income requirement appears overly cautious and potentially costly to the pension holder from our perspective. Government policy cannot remain unchanged when market conditions have moved so much.

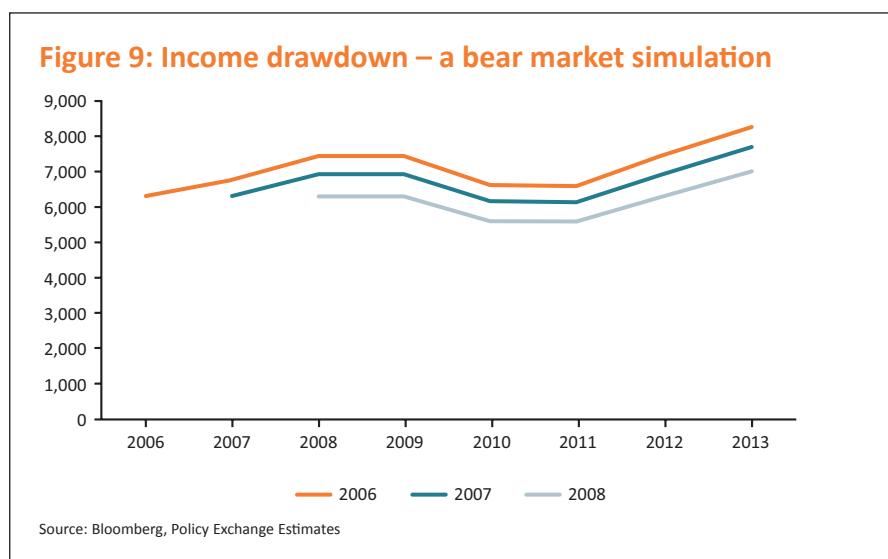
If the DWP wanted to remain cautious, it could still demand that half of the income over and above any state pension that is needed to meet the minimum income requirement should come from an annuity, allowing the pension holder to use drawdown for the rest of the money. It could in addition limit the

<sup>42</sup> The government does now allow an option known as capped drawdown which can be taken instead of an annuity. The rate of drawdown is limited to 100% of the equivalent annuity rate on the pension fund, with a review every three years. This does allow the fund to be invested in something other than annuity and the drawdown to increase if the fund increases. That is an improvement on insisting on annuities but relating it to the annuity rate rather than the yield on the fund still constrains the pension holder to the adverse yields on annuities.

drawdown to the dividend yield of the fund in question, which as we noted above would likely markedly reduce any impact on capital.

Another option would be to limit the income drawdown to the yield on the fund as it evolves over time, including both rises and falls. That would mean that capital could not be drawn upon to support the pensioner's income and that the pensioner would have to bear any variability in income. Still should the DWP take our suggestion of half the income over and above the state pension coming from annuities then the pensioner would have around 2/3 of their income in a source of funding that would not vary with the equity market.

We have examined what would have happened to a pensioner who had merely taken the dividend yield on a fund invested in the FT All Share Index. We look at three groups those who started to draw their pension at the start of 2006, 2007 and 2008 respectively. We assume all of them would invest in a fund to give them a drawdown income of around £6300 in the first year. The path of their income is shown in the figure below. Given that the equity market dropped by 45% from peak to trough the hit to their income from the equity crash is reasonably modest. This is because the dividend payment is reasonably stable. Yes dividends did fall but it was reasonably modest.



As we reset the yield annually the worst year for the investors ends up being 2011 as the lagged effect of the cuts in dividends came through. Even so the 2006 pensioner still received an income in 2011 of a little over £6600 or around 5% above their initial income drawdown. The 2007 pensioner fares a little worse with his income dropping to £6140 a drop of 2.5% from their initial income drawdown. Even the 2008 pensioner, who could not have invested their pension at a worse time, only sees an 11% drop in their pension income. If we assume that the other two-thirds comes from stable sources then the total drop in their income might be of the order of 3%. The resilience of the dividend payments cushions the shock to income.

Because they do not drawdown from the fund the income of the 2008 pensioner is back above £6300 per annum by 2012 and by 2013 has reached almost £7000. And that is despite having invested just ahead of the worst bear

market in equities since the Second World War. The 2007 pensioner sees his income climb to around £7675 per annum, an increase of close to 22% from the start of his pension. The 2006 pensioner now has an income drawdown of £8275, an increase of more than 31%.

If we look at the capital value of the funds, the 2006 pensioner would have had to invest £218,750 to get his £6,300 of income. Not only are they drawing a much higher income by now the value of their fund has risen to more than £300,000. The 2007 pensioner initially had to invest £222,600 and their fund is now worth £246,500. Even the 2008 pensioner also has seen his fund rise from £197,000 to £233,500. So not only are they receiving higher incomes now than when they started to invest they have more capital. If this is possible having experienced a major bear market then clearly even better returns are possible in a more normal period.

Should the DWP not change its stance on this then many pension holders could be forced to buy expensive annuity policies and have a lower standard of living in retirement than is necessary. Is this really the target of a government that has put so much effort into pension reform? Of course this could all change should bond yields rise to higher levels again but the policy needs to be flexible to allow for changes in market conditions.

DWP is considering other forms of deferred income accumulation. Retirement income insurance is where a fund holder, towards the end of their contribution period, purchases each year an insurance to guarantee a minimum level of income in retirement. At retirement the fund holder draws down from their fund with the insurance kicking in only if the fund reaches zero. There is also something called a Pension Income Builder, where a portion of contributions is used to buy a deferred annuity and the remained invested in a collective pool of risk seeking assets. Those assets would aim to provide indexation of the annuity. Either system though still involves buying a form of annuity and therefore bond related returns, regardless of whether those returns are attractive or not.

We firmly believe the DWP should amend its policy to give pension fund holders more flexibility and in particular more access to income drawdown from equity or mixed asset (potentially including corporate bonds or property) funds. Funds would need to be approved to avoid funds being designed to have a higher yield which simply resulted in capital depletion. If the drawdown was restricted to the yield on the fund then we believe pensioners could have a steady income and access to their capital, particular if that capital increases due to investment performance.

### Asset allocation – are default funds providing the right type of protection?

Asset allocation and fund choice are often ignored or played down when pensions are analysed, often put in the bucket marked “too difficult to deal with”. In part this is a function of the belief in many quarters in efficient markets, with the ability to beat markets consistently regarded as either impossible or restricted to a few like Warren Buffet who play by different rules. That does not mean that sensible asset allocation cannot add value to a fund.

A recent piece by Alan Brown, Senior Adviser at Schroders<sup>43</sup> looks at this issue and concludes that much of the problem in the Asset Management industry is that

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<sup>43</sup> Dynamic Asset Allocation and Fund Governance, April 2013.

it targets returns relative to an asset based benchmark, such as the FTSE 100, and not a liability based benchmark, such as the amount you will need to fund your pension. As the paper highlights targeting an asset benchmark assumes our risk appetite does not change, whereas, in reality it does (or should) change markedly. When you are young and just starting to pay into your pension you can afford to invest in more volatile assets because you are a long way from retirement and your pension pot tends to be relatively small. The older you are and the more you progress towards retirement the less true this is.

Yet the evidence is that the large majority of people rarely change their fund choice after the initial decision, even if their risk preferences have changed. This means that while the fund might have been the right one at the outset, it is unlikely to be the right one at a later stage. That reflects both the high degree of inertia by individuals with regard to their pensions, which in turn is partly a function of a lack of understanding of the issues involved in choosing a fund.

To some extent, the industry has dealt with this through the provision of default funds. It is estimated that across all workplace Defined Contribution schemes some 72% of members invest via the default fund.<sup>44</sup> According to the NAPF,<sup>45</sup> default fund assets currently represent 70% of Defined Contribution workplace scheme assets today but are likely to increase in size going forward, with some projections suggesting more than 80% of assets will be in such schemes in ten years time.

The NAPF puts default funds into two broad brackets – lifestyle or lifecycle funds and alternative style funds. Lifestyle funds have grown in popularity over the last ten years or so in an attempt to deal with the fact that individuals will naturally want to de-risk as they approach retirement. Often a lifestyle fund will be a combination of four funds, with the combination changing depending on the distance to retirement. In the early stages, known as the growth phase, the funds are predominantly in equity or higher risk funds. As they get closer to retirement (starting normally some 10–15 years beforehand) the funds will be gradually switched into lower risk assets. This is normally done automatically according to what is known as a glidepath. What this means is that assets are gradually re-allocated to ensure that by the time of retirement the pension allocation is predominantly in “less risky assets”, often government bonds.

This tends to be linked into the need to buy an annuity at retirement. After all since annuities are in effect funded by purchases of government bonds it makes sense to have the pension fund increasingly invested in such assets to reduce the risk that markets will move in such a way (either equities falling or bond yields falling) as to reduce the amount of annuity income a person would receive in retirement.

The NAPF refers to alternative style funds as such because they are alternatives to Lifestyle funds. They are mostly target date funds (which target a certain date for retirement and manage the funds accordingly) but also include ‘outcome oriented’ default funds, risk based funds and funds which offer Liability Driven Investment (LDI). To some extent, it is a little odd to group these together as we would regard target date funds to be close to lifestyle funds, whereas outcome oriented and LDI funds go down a different direction of managing the funds so

**“The evidence is that the large majority of people rarely change their fund choice after the initial decision, even if their risk preferences have changed”**

<sup>44</sup> “DC market intelligence 2013”  
– Spence Johnson.

<sup>45</sup> NAPF Default Fund Design  
and Governance in DC Pensions,  
September 2013.

as to achieve a desired outcome, which involves more active asset allocation than either a Lifestyle or a Target Date fund.

Why asset allocation and fund choice is so important comes down to the difference between what are known as time-weighted returns and money-weighted returns. In time-weighted returns, the return in every period of time is given equal weight, whereas money-weighted returns weight each return by the amount of money it acts on. This is vitally important in pensions saving, because the amount of money the return acts on is dramatically different at the start of saving for a pension and at the end of the pension saving process when you approach retirement. In short, a 5% change in the value of the fund just before you retire is likely to have a much bigger impact on your eventual pension pot than a 5% change in the value of the fund in your second year of pension saving. This is a function of the fact that the pot is bigger and that the fund has less time to normalise after a shock when a person is close to retirement.

Schroders has calculated, for example, that using plausible assumptions about investment and savings a 1% change in the return on your fund in the first 20 years of pension saving is broadly equivalent to a 1% change in contributions. In other words you can broadly offset a 1% drop in returns with a 1% change in contributions. In the second twenty years of the pension, because you are operating on a much larger pension pot, a 1% change in returns requires a 6% change in contributions to offset it.

This, in part, is why lifestyle funds migrate their assets towards less volatile assets as a person approaches retirement. This also comes with risks though. First, it is mechanical and, as such, a person could find themselves at the early stage of the glidepath when there is an adverse shock. As markets take time to recover from such shocks the fund will be switching from riskier to safer assets when the tradeoff between those assets has worsened.

Let us consider, for example, someone who starts a fifteen year glidepath at the end of 2007, just before the financial crisis really got underway. We assume prior to the glidepath kicking in that 80% of the portfolio is in equities (the FTSE All Share) and 20% in gilts. We have kept the asset allocation simple for ease of analysis and have ignored contributions as they would be overwhelmed by the market movements in this analysis. We assume that the glidepath is such that over fifteen years this allocation will invert so that 80% is allocated to bonds and 20% to equities.

As the glidepath begins just before the start of the equity bear market the portfolio is still heavily invested in equities and sustains significant losses. By end February of 2009 the portfolio has lost 27.7% of its value, which compares to 28.8% if there had been no glidepath at all. So the glidepath provides very little protection in the early stages and because it is automatic the fund gets switched out of equities into bonds at a poor time. Indeed, by the time that equities had recouped their losses, in October 2010, the bond proportion had increased to more than 31%. Equities since then have risen by around 35% and bonds by 15%. Equally by the time bond yields troughed in the spring of this year (when 15 year yields were just 2.2%) the proportion of the fund invested in bonds had risen to more than 40%, since when equities have outperformed bonds by 10%.

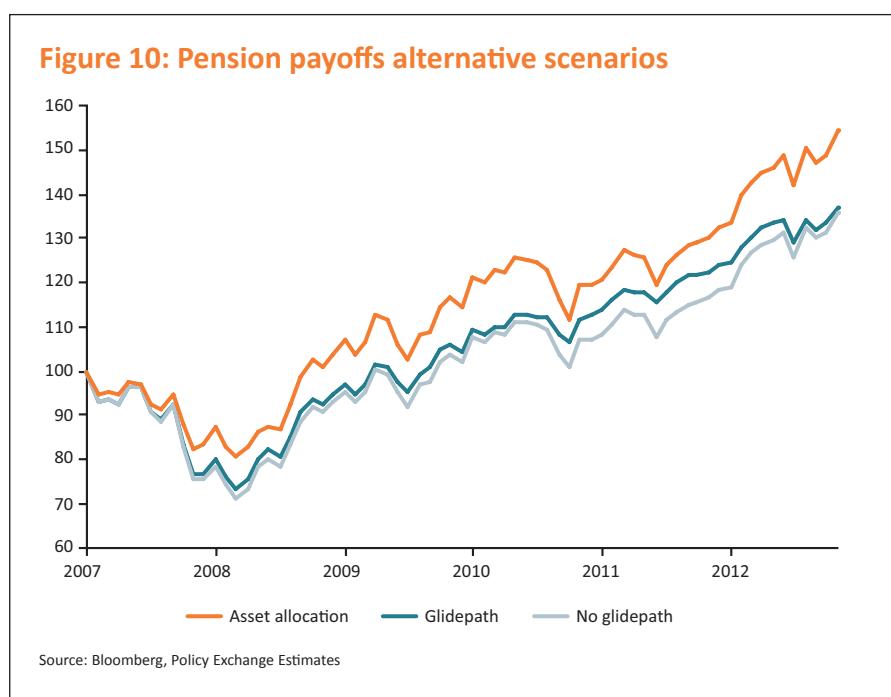
To underline the point about how little protection the glidepath provided in these circumstances, a 100% equity portfolio and a continued 80/20 equity bond

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split generated almost identical returns, at 35.25% and 35.95% respectively vs 36.75% for the glidepath.

We also ran a similar simulation for pensions that would have started their glidepath ten years and fifteen years ago to see how different they would be. The ten year ago glidepath had a bond weighting of 36% by the end of 2007 but still lost some 24% of its value by February 2009, just four percentage points less than the fund that started its glidepath just before the crisis. The fund whose glidepath started fifteen years ago did fare significantly better with a peak to trough decline of just under 12%, which reflected the fact that the equity portion was already down to 44% at the start of the crisis.

What this emphasises is that it is the asset allocation at the time of any shock that is really important. We modelled a cautious asset allocation of 60% equities and 40% government bonds at the end of 2007, which shifted back to 80% equities and 20% government bonds at the end of June 2009, i.e. 3 months after equity markets had troughed. That portfolio experienced a peak-to-trough decline of slightly less than 20% but then rebounded sharply with the recovery in equities to deliver an overall return of just over 54%, or around one and half times the return on the glidepath portfolio (see Figure 10 below).



In our view, this argues strongly in favour of outcome oriented funds. Given the substantial outperformance of equities between the end of 2002 and the end of 2007 an outcome oriented fund would likely have had a much higher weighting in bonds and less than equities than a traditional pension fund. The FT All Share total return was up 104.7% over that five year period vs a 24.5% return on bonds. That would have led to a significant rebalance back towards safer investments. The subsequent fall in bond yields would then have acted to increase the likely liability of the pension (because lower bond yields require a bigger pension pot to generate the same post retirement income). Together

with the rise in bond weightings, this would likely have triggered a reallocation to equities as bond yields fell, thereby allowing the fund to benefit from the recovery in equity markets.

The DWP's discussion of asset allocation has been limited. In the Reinvigorating workplace pensions paper the discussion was mostly around guarantees, which would limit the downside from a negative market shock. There are two types of guarantee. The first protects the fund on an ongoing basis and the second merely protects the value of the nominal contributions to the fund. The first is much more effective in insulating the fund from market volatility but it is also expensive and can eat into the returns of the fund. The reason is that such a guarantee requires the purchase of regular put options to protect the portfolio, most of which would expire worthless. The OECD<sup>46</sup> did an analysis of such a guarantee and calculated that it would cost around 39 basis points (0.39%) per annum, which would be the equivalent of 20% of contributions.

A second product is cheaper product with the cost estimated by the OECD at around 6 basis points or just 1.24% of contributions made. However, such a product would likely provide only very rudimentary protection even in the event of a market collapse. Indeed, in the recent DWP paper<sup>47</sup> it was acknowledged that the likelihood of the guarantee being exercised over a long period of saving was close to zero. The other alternative discussed in the paper is a mid-term guarantee, which would look to protect the funds generated in the first half of a pension fund's life. As with all such automatic options though, it becomes a matter of chance whether the guarantee is being purchased at a good time or not. Consider for example a fund that would have purchased such a guarantee at the end of Q1 2009 just after the financial market crash. The guarantee would be almost worthless at any point other than when it was bought and it would likely have been expensive to purchase at that time since the cost of such options tends to rise at times of market stress.<sup>48</sup>

This is why asset allocation is so important, as well as outcome oriented investing. If a portfolio had performed particularly well, such as in the 2002–2007 period, the fund manager could look to de-risk it relative to its benchmark either by buying a put option to limit the downside or making an allocation into safer assets. The timing of the purchase of such guarantees is crucially important. A one year put option bought at the end of 2007 would have protected the equity element of the portfolio from a decline of some 30%. Equivalent options bought at the end of 2002, 2003, 2004, 2005 and 2006 would have expired worthless.

We believe the government should devote far more attention to this issue and encourage individuals and those providing pensions to think about outcome oriented investing. It is undoubtedly more complicated but it is a major factor in the outcome for a person's pension.

## Defined Ambition pensions and Collective Defined Contribution Schemes

In its recent discussion paper, Reshaping workplace pensions for future generations,<sup>49</sup> the DWP asked whether Defined Ambition pensions could provide an alternative to Defined Contribution and Defined Benefit pensions. Defined Ambition (DA) pensions would like Defined Benefit (DB) target a retirement income. However, unlike in a DB scheme the burden of any shortfall in meeting

<sup>46</sup> Organisation for Economic Co-operation and Development, 2012, "The Role of Guarantees in Retirement Savings Plans".

<sup>47</sup> Reshaping workplace pensions for future generations, November 2013.

<sup>48</sup> Indeed, it is interesting to note that Warren Buffet actually chose the middle of the financial crisis to sell such long term options. See [www.warrenbuffett.com/warren-buffett-looks-at-mispricing-long-term-options/](http://www.warrenbuffett.com/warren-buffett-looks-at-mispricing-long-term-options/).

<sup>49</sup> DWP November 2013.

the target would not fall entirely on the employer. Some of this is aimed at prolonging the DB schemes that are currently in existence by removing the compulsion to index or to provide spouses' benefits. Another alternative would be to convert the Defined Benefit into a lump sum like Defined Contribution on exit from the scheme or retirement.

These may encourage companies to continue with schemes but, as we saw at the start, the landscape has now tilted firmly in the direction of DC schemes and our focus will be here. The DWP mentions a number of options in their paper such as targeted income schemes or with profit pension schemes that provide a minimum investment growth, with additional returns dependent on the performance of the fund. It also discussed guarantees, which we have analysed above.

The main area of focus though seemed to be Collective Defined Contribution (CDC) Schemes. These have been successful in countries like the Netherlands and Denmark and feature risk-sharing between members. They also tend to offer cost certainty for the employer.

In these schemes the employer pays a fixed amount of contribution and the risk is then shared between members. For example in the recent financial market crisis, which hit the value of the Dutch funds, contributions of current members were raised and retired members saw their pensions cut by an average of 1.9%.<sup>50</sup> The idea is that all members share the burden of an unanticipated shock not just those approaching retirement. As the fund is collective that can potentially allow it to remain in riskier assets for longer than a typical DC scheme. Due to the larger size there are also potential economies of scale.

For these reasons the DWP is reputedly keen on CDC schemes. However, it is worth remembering that in any such scheme members have to be prepared to share the risks of poor returns. That is fine when the schemes have been up and running for a long time as in the Netherlands. Even so while the Dutch schemes do not have to be compulsory the schemes can apply for such compulsion and 80% of all occupational scheme members are covered by mandatory sector wide pension funds. Employers can opt out but only if they provide a pension scheme with benefits of at least an equivalent level.

We think such schemes are likely to need to be compulsory. If they are not, then there would be an incentive for younger employees to opt out in the event that additional contributions are required to make up for a short fall. There is also a risk that the targeted incomes in a CDC are expected to be delivered regardless of market conditions. The Dutch decision to impose a pension cut was highly controversial and probably could only have been implemented after a crisis as severe as the recent one.

In the UK there is the additional problem that these schemes do not currently exist. In which case the question arises as to how they could be started. It is perhaps not difficult to see some Defined Benefit schemes being converted to CDC to save them from closing altogether, since in such circumstances there will likely already be a pool of employees across age groups contributing to the pension. Starting a scheme from scratch (for example to coincide with auto-enrolment) strikes us as likely to be difficult, as it would need to gain buy in from all employees, regardless of whether they were just starting to contribute to their pensions or nearing retirement.

<sup>50</sup> See Professional Pensions Online, 13/5/2013.

## Super funds in the UK?

One of the key problems with the current UK Defined Contribution system currently has is its lack of scalability. Defined Contribution pensions require the purchase of annuities to meet the minimum income requirement because there is no ability to share the risks of retirement, as there is in CDC schemes. Equally, there are issues with economies of scale both from a governance and fund management perspective. There is also the issue that outcome oriented investing is much more difficult at an individual level than it is on a full fund level, simply because of the time and cost involved.

Then there is the issue of pension pots. Auto-enrolment requires companies to set up a pension scheme but these are likely to differ from employer to employer. This means that, as people move jobs, there are likely to be small pension pots that have been accrued as a result. Indeed, the DWP estimates that, by 2050, the number of dormant pension pots worth less than £2,000 will increase to over 12 million.<sup>51</sup> The DWP is looking to implement a pot follows member model, so that when a person moves to a new employer their pension will follow them. While this is very sensible, it is going to increase costs for employers as pensions are regularly ported across.

It might make sense instead to have the employee choose the fund and then the new employer just pay into that fund. This would be similar to the SuperAnnuation funds and, in particular, the MySuper funds that are run in Australia. Here the employee can choose the fund (provided it is offered by his employer) and they can aggregate previous super funds that they have collected at former employers with their current one. Clearly, if you can just choose the same fund then that makes life so much easier.

Another interesting factor in the Australian market is the economies of scale in the super funds. The larger funds have been able to use economies of scale to reduce fees and importantly diversify assets. In many cases this has enabled them to invest in alternative asset classes, such as property, hedge funds and infrastructure. Interestingly, the largest 20 super funds run 40% of all the super money held in Australia.<sup>52</sup>

The UK has seen the introduction of Master Trusts which can offer auto-enrolment for many companies rather than a company setting up its own scheme with a direct supplier (known as a contract based pension). These are potentially easier for employers to join but there have also been some concerns about the governance of such schemes. Indeed the recent Office for Fair Trading enquiry argued for independent governance of such schemes, so that if necessary the governors can change scheme provider. This is potentially an issue for insurance and fund management companies that have set up such trusts.

The NAPF has argued that the UK should instead try to develop Super Trusts.<sup>53</sup> It argues that such trusts should be “high-quality, large scale, not-for-profit, multi-employer schemes (offered on a regional, sectoral or national basis) managed by expert boards of trustees whose responsibility would be to put the interests of members first.” The NAPF argue that it would be similar to NEST but with less state involvement.

We have a lot of sympathy for their views and think that such Super Trusts would likely offer a better solution to many of the issues raised by the DWP that favour Collective Defined Contribution Schemes. In particular such Super Trusts

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<sup>51</sup> [www.dwp.gov.uk/docs/small-pots-automatic-transfers-impact-assessment.pdf](http://www.dwp.gov.uk/docs/small-pots-automatic-transfers-impact-assessment.pdf).

<sup>52</sup> [www.superguide.com.au/how-super-works/top-20-largest-super-funds](http://www.superguide.com.au/how-super-works/top-20-largest-super-funds).

<sup>53</sup> NAPF Enabling good member outcomes in work based pension provision April 2011.

should have better governance, economies of scale (including lower fees) and an ability to diversify into different asset classes. A Super Trust would also be much better placed to provide an outcome oriented investment strategy. The one area that would not be addressed is risk sharing over the time of retirement but as we have argued above we are unconvinced that there will be sufficient enthusiasm for CDCs to achieve this anyway.

Certainly these would offer an alternative to the current fragmented nature of the pension system. Critics of the idea suggest that the Master Trust approach may well eventually generate large funds as economies of scale will favour the winners over the losers. The problem, of course, is that some employees will likely suffer while the winners emerge from the pack.

### Fees – not as important as you might think

The Office for Fair Trading study on workplace pensions<sup>54</sup> discussed fees without actually recommending a cap but did highlight the issue of higher fees for old schemes or people who had left schemes. The DWP has said that it will look at bringing in a cap of between 0.75% and 1% on fees. The gap between some of the very high fees, in some cases exceeding 2% on older pension funds, and the current market of around 0.5–0.75% is quite significant and we support such fees being brought down. Indeed, the OFT enquiry found that some 186,000 pension pots of £2.65bn worth of assets are subject to an annual charge of more than 1%.

Calculating how much you can save from lowering fees tends to be quite simple and attracts good headlines but that is not the whole story. If fees are driven too low then the type of products that might be offered to consumers might start to be more restricted to more basic products. Offering low fees on tracker funds makes sense, and is entirely possible, but funds with more active manager styles tend to charge more. For example, the standard annual management fee on the Invesco Perpetual UK Equity Pension Fund currently run by Neil Woodford is 1.25%.<sup>55</sup>

That fund has delivered markedly better performance than tracker funds over a prolonged period of time with lower volatility. Moreover, as we highlighted above income funds may well be more appropriate for pensions, particularly in the run up to and after retirement if income drawdown is an option. Equally the type of funds we have discussed above that have more active asset allocation or are outcome oriented will likely be more expensive to run and therefore invest in.

As we showed above asset allocation can be vitally important to the performance of a pension fund. Having a very low fee for example on an equity tracker is all well and good but if the fund drops 40% in line with the equity market as in 2008/9 it is little consolation if you are paying a smaller fee. In our view the government should opt for the top end of any cap but it should also ensure that this relates to the overall cost of a fund not to individual products. An investor might then be able to mix more expensive equity type products or asset allocation products with cheaper products for index trackers or government bonds.

The government is right to bear down on excessive fees for legacy products but it must ensure that, in doing so, it does not prevent people from investing in the most suitable funds.

<sup>54</sup> Defined Contribution workplace pension market study 2013.

<sup>55</sup> [www.hl.co.uk/funds/fund-discounts,-prices--and-factsheets/search-results/i/invesco-perpetual-uk-equity-pension-net-class-4a-accumulation](http://www.hl.co.uk/funds/fund-discounts,-prices--and-factsheets/search-results/i/invesco-perpetual-uk-equity-pension-net-class-4a-accumulation).

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# 4

## Conclusions and Proposals

The UK has a massive hole in its pensions provision and that this represents a very real threat to the sustainability of the government's finances in the medium term. The figures are sobering with the proportion of people over 65 expected to rise from 17% to 24% by 2050 and those over 85 projected to rise from 2% to 6%. The number of people of working age supporting those in retirement is expected to drop from 3.2 now to below 3 over the same time period. Government reforms to the pension system, in raising the retirement age, reforming public sector pensions, bringing in the single tier state pension and introducing auto-enrolment are major steps forward in meeting this challenge. Yet much more must be done if future pensioners are to be comfortable in retirement and the UK's public finances are to be sustainable.

This paper has focused on the private sector side of the pension reforms. Radical reform was completely necessary with some 11 million people unlikely to save enough for their retirement<sup>56</sup> and the old style Defined Benefit pension system in terminal decline. The Prudential study that we highlighted in chapter 2 showed one in seven people intending to rely entirely on the state pension in retirement, with the average person relying on the state pension for more than one third of their retirement income. It estimated that nearly one in five of these pensioners would be below the poverty line. A different survey<sup>57</sup> found that more than half of those saving for pensions were not confident that they were saving enough.

As we highlighted above the decline in Defined Benefit schemes left a hole that Defined Contribution Schemes were failing to fill. Too few people were enrolled and many of those enrolled were not saving enough. So the decision to introduce auto-enrolment, with every employer required to offer a pension to their employees was a big step forward. The minimum 8% contribution level (made up of 4% personal, 3% employer and 1% government) was also a good start. Making people automatically enrol and forcing them to opt out if they did not want to contribute was exactly the right approach given the large degree of inertia involved in pension decision-making. Indeed, in a survey 13% of people enrolled in a scheme said they had been "too busy" to opt out! Encouragingly too the process has seen a higher than expected take up rate, with just 9% opting out in the initial roll out. Those figures though were likely flattered by the fact that larger employers dominated the early stages of the roll out. We fully expect opt out figures to increase as time goes on and more small employers are brought into the fold.

Even if the current high rates of inclusion are maintained though, we do not believe that the system as it stands can close the pension hole that exists. In our simulations we find that even assuming 40 years of contributions at 8%, with

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<sup>56</sup> DWP estimate.

<sup>57</sup> [www.pensionsworld.co.uk/pw/article/dc-savers-fear-inadequate-pensions-12324911](http://www.pensionsworld.co.uk/pw/article/dc-savers-fear-inadequate-pensions-12324911).

3% real return on investment, a person on average earnings would fall markedly short of the pension pot they need to generate the Pension Commission's targeted replacement income.<sup>58</sup> Indeed, we calculate that they would need to raise their contribution rates to between 14.5% and 15.5% if they were to meet these requirements. It is not just our analysis that reaches these conclusions. The Pensions Policy Institute estimated that a person on median earnings only had a 49% chance of meeting their replacement ratio using the auto-enrolment contribution level of 8%.

Part of this is a function of the current low levels of annuity rates, which determine how much income a given pension pot can generate. These may well rise as interest rates rise in the future but the DWP cannot rely on this and to close the gap the rates would have to almost double. While this is not impossible, it is not something the DWP can count on. In our view this means that contribution levels simply have to be higher and probably closer to the 12% currently being introduced in Australia.

While the DWP has looked at a number of ways to incentivise such an increase, we believe the only real route is compulsion. The more contribution rates rise, the higher the likelihood that people will simply choose to opt out. For sure the rise in contribution rates can be phased in but we need to make sure people stay in the schemes as this happens.

The maths is simple, the current system will not be sufficient. We believe the DWP should at the earliest opportunity move from auto-enrolment to compulsion and should announce a phasing in of higher contribution rates, targeting 12% as the minimum contribution. This would be split 6% employees, 4.5% employers, 1.5% government in line with the current system. We advocate this happening over a five year time period, subject to each individual having sufficient additional income to fund the increase. The UK's saving for pensions is in such a perilous state that delaying is simply not an option.

This is the single most important thing the government can make to improve the state of private pension provision in the UK, but it is not the only thing.

Currently, all income over and above the state pension up to £20,000 per annum has to come from either a Defined Benefit type pension scheme or through the purchase of an annuity. As we have highlighted, the current low level of government bond yields means that annuity rates are very low by historical standards. While it is understandable that the DWP wants certainty of income, given that any shortfall might have to be eventually made up for by the state, it also needs to adjust its guidance depending on market conditions. The fact that government bond yields are barely positive in real terms and below the dividend yield on equities for the first time in over 50 years suggest that they are not a particularly attractive long term investment. Yet, by forcing people to buy annuities, the DWP is, in effect, forcing them to buy low yielding government bonds (because this is how the insurance companies fund the annuities).

The money used to purchase an annuity is no longer available to a pensioner. Yet should they purchase an equity fund, with a solid dividend yield, not only is the original investment available but they can benefit from any rise in the value of the fund. Of course equities can go down as well as up so the risk is higher. One way we suggest dealing with this potential hazard is to limit any income drawdown from an equity fund to the income implied either by the starting yield on the fund. That would limit any use of capital to supplementing any reduction in

<sup>58</sup> The income a person is expected to need to live on in retirement.

dividends paid from the fund. Since companies are very reluctant to cut dividends we feel that risk is relatively modest, particularly if we are looking at such a fund over a 15–20 year period. The alternative would be to limit the drawdown to the yield of the fund as it evolves over time. This would be self-regulating to a degree as dividend yields tend to go up in falling markets and down in rising markets. In this case the pensioner would absorb the volatility of the fund.

Our recommendations are twofold. First, the government should make the annuity market simple and more competitive by issuing annuity type bonds, which retirees can purchase directly rather than through an insurance provider. This would give clarity on the interest rates that are available. Insurance companies can then provide annuity insurance for people once their bonds have expired. In doing this the government would be clearly splitting the interest rate and life element of the annuity product. It would provide more clarity for the individual and reduce the risks of overcharging.

Second, to ensure that annuities are not the only option on retirement the DWP should make the minimum income requirement rules more flexible (at no cost to the Exchequer). We believe it should allow up to half of the requirement over and above the state pension to be taken in the form of income drawdown should the pension holder so wish. Such income drawdown would be limited to the income implied by the starting dividend yield of the fund or it could be limited to the actual dividend yield of the fund as it evolves over time.<sup>59</sup>

One factor too often overlooked in the performance of a pension is the asset allocation. Many people find this too difficult to deal with and choose the default fund. Indeed, according to the NAPF, some 72% of members of Defined Contribution Pension schemes choose the default fund. Too often there is limited or no active asset allocation in such funds to protect the pension holder from downside in their portfolio such as happened in the equity market crash of 2008 and 2009. Indeed, so called LifeStyle funds have been the predominant choice in recent years. These do move the asset allocation of the fund from riskier assets to safer assets as a person approaches retirement, but they do so in a very gradual way. They provide only limited protection to a portfolio, unless a person is very close to retirement and the bulk of the assets have already been switched to safer funds.

While the DWP has looked at guarantees as a way of providing protection against sharp swings in markets the most effective of such products requires regular purchases which can significantly impact on the overall return of the portfolio. The OECD calculated that the purchase of an annual guarantee could use up as much as 20% of the contributions into a portfolio.

Much more attention should be given to outcome oriented funds that would adjust asset allocation more frequently should one asset class outperform another. Since severe equity market declines overwhelmingly tend to be preceded by periods of strong performance, such funds would, very likely, have seen a rebalancing away from equities towards safer assets ahead of the decline. Indeed, in our simulation, an asset allocation switch around the financial crash (a simplification to what might have happened in such a fund) markedly outperformed a lifestyle fund.

We believe the DWP should encourage the development of funds with more active asset allocation or ones that are more outcome oriented. To do so would require far larger funds than are currently generally available in the UK. To this end, we would support the NAPF's proposal to create or at least encourage the development of Super Trusts. These would be large funds, with likely better governance and economies of scale. They would also be able to invest in alternative assets like infrastructure and hedge funds due to their scale.

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<sup>59</sup> To a degree this would depend on whether the government wanted the pensioner to be certain of a given level of income or to protect against declines in the value of the fund.

Such an approach is more likely to succeed than an attempt to build Collective Defined Contribution funds similar to those in the Netherlands, which the DWP seems inclined to support. Those funds involve risk sharing between generations, which is likely to be very difficult to build from scratch. We see such funds as alternatives to the closing down of Defined Benefit funds rather than as a way to develop Defined Contribution schemes in the aftermath of auto-enrolment.

Finally we urge the government not to impose too low a cap on fees, believing it should adopt the 1% rather than 0.75% cap.<sup>60</sup> While it is politically appealing to appear to be saving consumers money there is a risk that the government will start to exclude more actively managed funds which might be more suitable for pension fund investing. A low fee cap would push people towards cheaper funds which have less flexibility and could be more vulnerable to market movements. We would also argue that any cap should apply to the entire pension fund not the individual funds within it, to allow some space for more active funds.

<sup>60</sup> Or a 0.75% cap with the option to charge more if the rationale were explained.



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