Pensions: a reality check

Dave Treanor

April 2014

Pensions have become an increasingly contentious issue in recent years, resulting in strikes by a wide variety of public sector employees. Many of the traditional final salary schemes are closing to new members, and employees are expected to contribute more and retire later.

Private sector employees mostly in defined contribution schemes and personal pensions have seen annuity rates halved over the last twenty years, and have had to increase contributions, postpone retirement, or lower their pension expectations in consequence.

The latest pension legislation obliges almost every employee to join a pension scheme. A proposal announced in the 2014 budget removes the requirement to purchase an annuity. Is that a sensible suggestion? How should we decide?

People find pensions confusing. Few understand them, and a reputation for self-serving advice from the financial sector has left them mistrustful.

This article outlines the way pensions have changed since the 1940s and explains the reasons behind these changes, and what we might expect in future. It examines the choices we must make in providing for retirement and the way the different types of pension work, all in plain English.

Pensions for an ageing population

When the first state pension was introduced in 1909 for those over the age of 70 only one person in four was expected to reach that age, and for those that did the average life expectancy was about 9 years.

The biggest increase in life expectancy has been over the last 30 years since the 1980's when a man retiring at 65 was expected to live to 79 and a woman to 83. On average we now expect a man to live to 87 and a woman to 89. By the middle of the century these are expected to rise by at least another four years to 91 and 93 years respectively.

While we are living longer our children are spending more time in education before entering the job market. Consequently the proportion of people of working age is dropping.

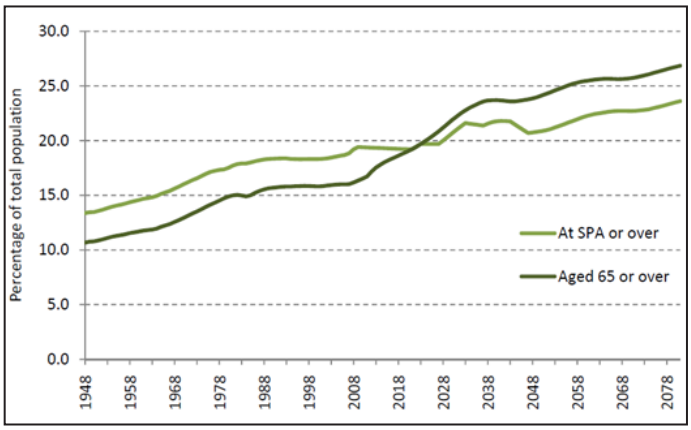

Fig 1: % of UK population aged 65+ & those past the state pension age [Data from IFS]

According to the **Public Sector Pension Commission** *'in 50 years' time it is possible that every person over 65 could be supported by just two people of working age, compared with four today, while there could be only one person of working age to support each dependent person (including children) overall'.*

This has been referred to as a 'ticking time-bomb'.

A longer retirement has to be paid for somehow. How much of this should be our individual responsibility, or borne by our employer, and how much should be paid by the state?

Let's begin with the state pension.

State pension

The Beveridge Report in 1942 envisaged an entirely self-funded insurance scheme to provide a flat-rate income in old age that would be just sufficient to lift the elderly out of poverty. This was to be funded through contributions paid during their working life, which would be calculated on an actuarially fair basis: the weekly amount paid would be calculated as sufficient to fully fund the proposed retirement pension, plus a little extra to finance the average expected incidence of sickness and unemployment.

Unfortunately this idealistic proposal fell at the first hurdle:

the post-war government could not afford to fund a similar level of pension to those older individuals who had suffered through the Great Depression and contributed to the war effort, but had not contributed to the National Insurance scheme. So instead of setting up and managing a fully funded National Pension Fund, they introduced a 'pay-as-you-go' system. The link between the amount paid in and the amount paid out was forever broken.

A variety of earnings related schemes have been introduced in the UK at various times since then (eg Graduated Retirement Benefit in 1960, SERPS in 1975, and the Second Tier Pension in 2002). These have left a legacy of obligations to existing pensioners based on promises made many years ago that cannot now be broken.

National Insurance Contributions are still viewed as paying for health and welfare, but are not ring-fenced in any way. They rise with earnings from employment, but only up to a certain level, and they don't apply to dividends or earnings from investments. They conveniently obscure the true level of income tax.

State and mandatory pensions received as % of average earnings

Greece	96%
Netherlands	88%
Luxembourg	87%
Denmark	80%
Austria	77%
Hungary	76%
Italy	65%
Portugal	54%
Sweden	54%
Norway	53%
France	49%
Canada	44%
Germany	42%
United States	39%
Japan	35%
United Kingdom	32%
Ireland	29%

Table 1: (OECD 2011)

Pensions in other countries are much more closely related to earnings: higher earners contribute more and receive more through schemes which are either government sponsored or compulsory. As a result the UK and Ireland have the lowest state pension as % of the income of all countries in the OECD, although in the Netherlands, Denmark, Hungary, Norway and Sweden this includes a mandatory private component.

Current thinking on the state pension is that it should be sufficient to cover the essentials so that nobody starves or is unable to keep warm in winter.

A more generous flat-rate pension to everyone becomes very costly. It had risen from 1.5% of GDP in 1948 to 5% by 1980 as the number of qualifying pensioners went up. The Thatcher government then removed the link to earnings, and over the next 20 years it got squeezed down to levels that left some pensioners in real poverty. The Labour government responded by targeting help to the poorest pensioners through Pension Credits that also took account of housing costs (rent or mortgage interest). But this created a poverty trap so that those that were prudent and saved for their own pension were little better off unless they managed to build up quite a substantial pension pot. No amount of 'taper relief' or 'savings guarantees' could entirely overcome the disincentive to saving. By 2011 the number of people in private pension schemes had fallen by a third from a peak fifty years earlier, leaving half of employees in the UK without one.

Occupational and private pensions are now expected to bridge the gap between what someone might earn during their working life and their pension in retirement, with the state pension providing a safety net.

As a first step towards making these mandatory the 2008 Pensions Act required almost all employers to automatically enrol their staff into a private pension scheme. This process will be completed by 2018 when every employee (with few opt outs) must be enrolled and paying at least 8% of any earnings between the lower and upper limit (which are £5,558 and £41,450 in 2014) into a pension fund, of which at least 3% must be from the employer.

The 2013/14 **Pensions Bill** introduces a 'Single Tier' pension that gradually replaces the Basic State Pension (BSP) and all earnings related pensions (eg SERPS & Second Tier). Those with fewer than 35 years of National Insurance contributions (or equivalent credits) receive a reduced amount pro-rata. All existing state pension rights will be gradually phased out.

The state pension age rises to 67 by 2028, eight years earlier than previously prescribed, and will be reviewed every five years. The guiding principles for these **reviews** are that people should spend less than a third of their lives in retirement and that on average all people should spend a similar proportion of their lives receiving a state pension. So it will automatically continue rising as average life expectancy increases.

The result will be a state pension that has the following characteristics:

- It is 'contributory' in that to fully qualify a pensioner has to have made 35 years National Insurance (NI) contributions, and below that it is paid pro-rata. NI credits are available to the unemployed or sick, or those caring for their children or someone who is sick or disabled.
- It is a flat-rate pension, so that everyone that qualifies receives the same amount without means testing. This is expected to be around £144 per week, which is 28% of median weekly earnings for those in full time employment (£517 in 2013). This is above the level at which a single person household is judged to be in poverty, which was £119 per week in 2008/9 and would be about £127 now given the 7% rise in average earnings since then. The same universal principle applies to additional benefits such as winter fuel payments, TV licences for those over 75, and free access to local public transport.
- It is not earnings-related, although those entitled to more under previous schemes to which they belonged will have the extra amount protected.
- It is redistributory: contributions are at least partially

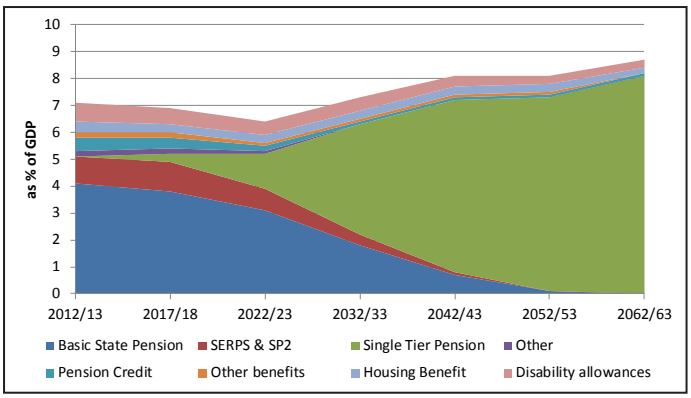

Fig 2: Growth in the cost of state pensions and benefits to the elderly (DWP)

related to earnings, so it includes an element of wealth distribution, although the fact that the wealthy tend to live longer to some extent cancels this out.

- It is paid to individuals: unlike previous pensions there is no transfer of rights between husband and wife, both of whom must qualify.
- It rises with earnings: annual increases in the state pension will be governed by a 'triple lock' so they cannot fall below 2.5%, or the rate of inflation measured by CPI, or the growth in average earnings.

Universal benefits are inevitably more expensive than those targeted at those most in need. An increasing proportion of national income will be spent on the state pension and remaining means tested benefits to the elderly, rising to almost 9% of GDP over the next fifty years.

For a detailed examination of the implications of the single tier pension see **Pension Trends** published by the Office for National Statistics (ONS).

Pensioner incomes

The low level of the state pension makes those in the UK more dependent on private pensions than comparable countries in Europe and elsewhere.

But many have other sources of income, including from savings and investments, some of which can be held within tax shelters. These began with the TESSAs introduced in 1990 and have continued since 1999 as ISAs.

According to figures published by the **Department of Work and Pensions** the average weekly income of single pensioners in 2010/11 was £296, and for pensioner couples was £610. Real incomes of pensioners, net of inflation, had risen by 50% over the preceding 17 years.

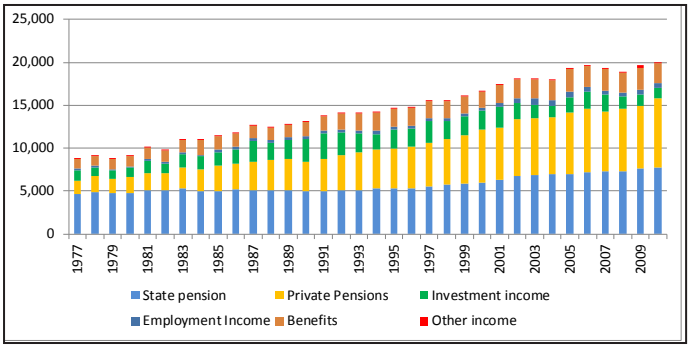

Fig 3: Sources of income for average retired household at 2010 prices (ONS)

As a result almost all (92%) pensioner households earned more than half the average income for equivalent sized households, and three-quarters earned more than 70% of average incomes.

Austerity measures introduced by the coalition government following the election in 2010 largely protected pensioners. Those reaching pension age today are from the baby boomer generation who benefited from rising standards of living over the last fifty years. During that time the number of people owning their own homes increased by almost 250%, and house prices increased by a factor of 60, leaving many pensioners very much better off than their parents, or their children.

But averages do not tell the whole story. We should also look at the distribution of income and wealth. Those renting their homes will have gained nothing from the growth in house prices, and will have seen their rents rise by similar amounts. A basic state pension that is adequate for pensioners who have repaid the mortgage on their home will not be enough for those paying rent. Many of these are now caught in a poverty trap, dependent on housing benefit to supplement their pensions.

To make matters worse 63% of pensioners renting privately and 61% of those in social housing fall into the bottom 40% by income compared with only 34% of retired households that own their own home.

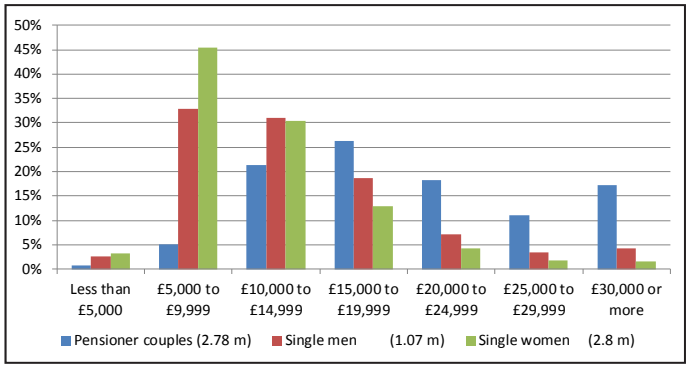

Fig 4: Distribution income of pensioners from all sources (DWP)

Private pensions

Membership of private pensions rose following the war, reaching a peak in 1960. At that time they were almost all 'Defined Benefit' schemes which entitled the member to a pension related to their salary. Employers had the option to make membership compulsory for their staff.

The Social Security Act 1986 put an end to compulsion, making membership of occupational schemes voluntary. At the same time it promoted a move towards 'Defined Contribution' pension schemes where a fund is built up

with contributions from the member and/or the employer, incentivised by tax relief. The pension paid is related to the returns on the assets in which members' funds are invested, through purchase of an annuity after retirement.

The number in occupational pension schemes fell from 10.7 million in 1991 to 8.2 million in 2011. 88% of members in 2011 belonged to defined benefit schemes (7.2 million), most of whom worked in the public sector (5.3 million). The rest (0.9 million) were in defined contribution schemes.

One explanation for the decline is that in competing for talent in the jobs market companies find it more cost-effective to offer higher salaries than enhanced pensions. Similarly when comparisons are made between public and private sector pay, these often fail to take adequate account of the added value of pension and similar benefits.

As well as occupational pensions, there are about 5.3 million that purchase their own personal pension plans from an insurance company through a mix of regular payments and lump sum payments. Some employers encourage this and may even match their contributions, so that the distinction between private and workplace pensions can get blurred.

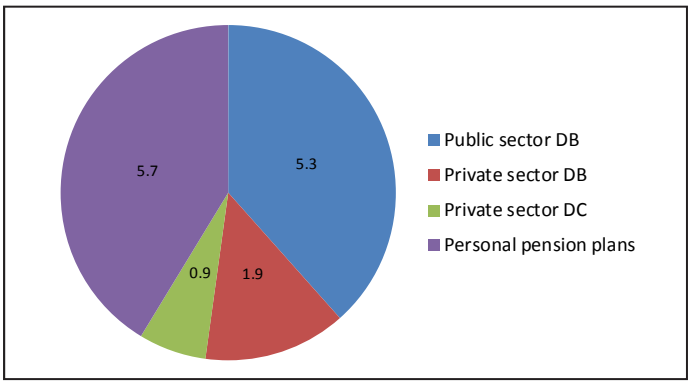

Fig 5: Membership by type of pension (Occupational Pension Schemes Survey)

Defined Benefit (DB) pensions

In a defined benefit scheme pension benefits are related to the employee's length of service and salary (usually either their final salary, or a measure based on their career average salary, or final few years). The percentage of salary acquired for each year's service is known as the 'accrual rate'.

The fund is managed by a board of trustees. For social housing organisations this is usually **The Pensions Trust**. After retirement pension payments are indexed for inflation using CPI, except where another measure was contractually agreed. Schemes commonly include an element of life-insurance, and the transfer of some benefits to a spouse or partner.

The number of active members of occupational pensions in the private sector has fallen since 2004, with most of the decline coming from defined benefit schemes.

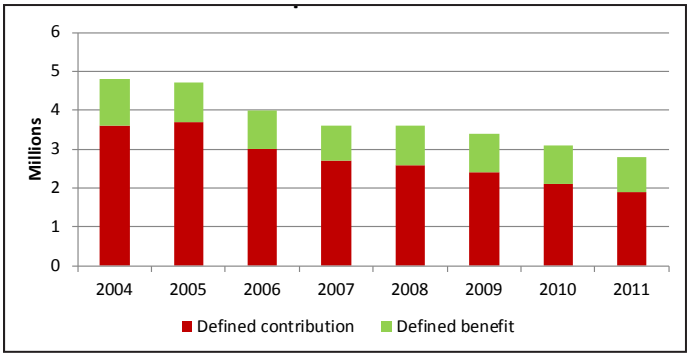

Fig 6: Decline in occupational pensions (Occupational Pensions Schemes Survey)

This is a consequence of the cost to companies in funding this kind of pension which rose from around 11% of salary in the 1950s to 25% in 2004. The change from RPI to CPI as the measure for indexing pensions for inflation has now reduced that back to about 21% of salary.

The rising costs are due to a number of factors:

1. Increased life expectancy means pensions have to be paid for longer
2. Investment returns on bonds and equities have fallen over the last ten years
3. Wage inflation puts up the final salaries on which defined benefits are most commonly based
4. Legislation to protect pensioners requires companies to make pension liabilities explicit and declare any shortfall in the assets held in their pension funds. There are proposals to tighten these requirements to improve the likelihood that schemes remain solvent in a more stressful economic environment.
5. Pension Protection Fund levy, the size of which is related to the security of each fund and acts like an insurance policy protecting members where their scheme goes bust.

Employers have responded to these costs in a variety of ways. Increasingly they are closing schemes to new entrants, with new employees being enrolled into a defined contribution scheme. Only 16% of schemes were open to new members in 2011 compared with 36% in 2007.

In some cases existing members have their accruals frozen with no further increase in the percentage of salary to be paid from future service (6% of remaining DB schemes in 2011). Some provide incentives for members to transfer out, either with enhanced valuations, or by offering a larger pension that is no longer indexed to inflation. Others have sold their liabilities to insurers.

Schemes that remain open have taken measures to ensure that assets in the fund match their increasing liabilities. These can include increasing contributions from employee and/or the employer, raising the retirement age, reducing the accrual rate from future employment, or basing it on salary over a longer period so they are less vulnerable to

final salary. Members' existing rights are generally protected, but future rights are not.

Where a shortfall remains, it may have to be made up by a special additional transfer of assets into the fund from the employer, or the pledging of contingent assets such as guarantees purchased from third parties. Pension fund liabilities are an increasingly important factor in valuing shareholdings.

The remaining defined benefit schemes are almost all either in the public sector, or with very large companies that have more than 10,000 employees.

Public sector pensions

Most public sector pensions are 'pay-as-you-go', sometimes referred to as 'unfunded', the cost of which is met each year by taxpayers. Others, such as the local government pension scheme, use contributions to buy assets in a pension fund which should be large enough to meet future pension commitments. These are described as 'funded' schemes. Most nationalised industries have funded schemes, as do the universities.

	staff joining since	Pension age	Salary basis	Accrual rate	lump sum (x annual pension)	Employee pays as % salary	Liability in 2009 (Billions)
Armed forces	before 2005	55	Final	1/69	3	nil	91.0
		55			3	nil	
Civil service	before 2002	60	Final	1/80	3	1.5	115.7
		60	Final	1/60	option	3.5	
	2007	65	Average	1/43	option	3.5	
NHS	before 2008	60	Final	1/80	3	5 to 8.5	199.5
		65	Final	1/60	option	5 to 8.5	
Teachers	before 2007	60	Final	1/80	3	6.4	168.6
		65	Final	1/60	option	6.4	
Totals							574.8

Table 2: Unfunded public sector pensions

Table 2 lists the largest unfunded public sector pension schemes using data from a 2010 National Audit Office **report**. These four schemes represent almost 80% of unfunded public sector pension liabilities in the UK. The annual cost of meeting these pension commitments was expected to rise from £25.4 billion in 2010 to £79 billion in 2060 at 2010 prices, a real terms increase of over 300%. This was due to a combination of growing numbers of public sector employees retiring each year, rising salaries on which the pension entitlements are based, and increased life expectancy in retirement.

The Public Sector Pensions Commission put the problem quite starkly in a **report** in 2010, asking why the majority of the workforce should be expected to pay through their taxes to support pensions that they cannot afford for themselves.

The Labour government set out to reform public sector pensions and introduced higher employee contributions and various other changes summarised in Table 2. Over the ten years from 1999/2000 employee contributions almost doubled from £2.8 billion to £4.4 billion (at 2008/9 prices).

In 2011 the Coalition Government accepted the recommendations of a **report by Lord Hutton** commissioned by the previous government. The 2013 Public Services Pension Act introduced reforms linking the pension benefits for public service workers to average salary rather than to final salary, and linking the Normal Pension Age (NPA) to the State Pension Age (SPA) for the four largest schemes:

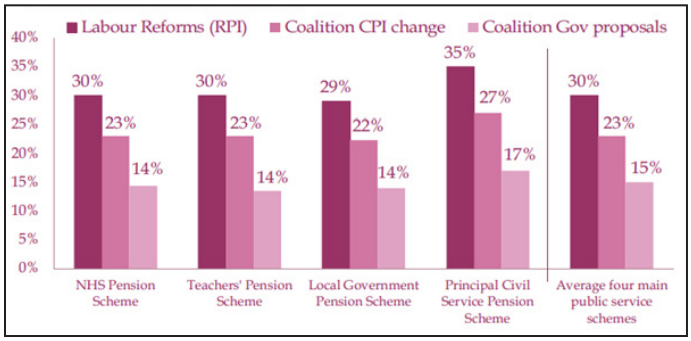

Fig 7: Impact on the average value of the four main public service pension schemes of recent reforms (PPI)

NHS, Teachers, Local Government and the Civil Service, and increasing the average contributions to be made by scheme members. The Government's reforms also cover the uniformed services (Police, Fire Service and Armed Forces) although the proposals are slightly different for these schemes, where a retirement age of 60 is proposed.

The Pensions Policy Institute analysed these reforms in a very informative **report** published in May 2013 and concluded that they reduce the cost to the taxpayer across the four largest schemes from an average of 23% of salary to 15%. This compares with Defined Contribution schemes in the private sector in which the employer's contributions are typically around 7% of salary. Of this reduction, 3% was from changing the accrual rate and basing it on career average salaries, 3% came from raising the pension age to the state pension age, and the rest came from increased employee contributions. The change to career average salaries means that the impact on relatively low-paid staff

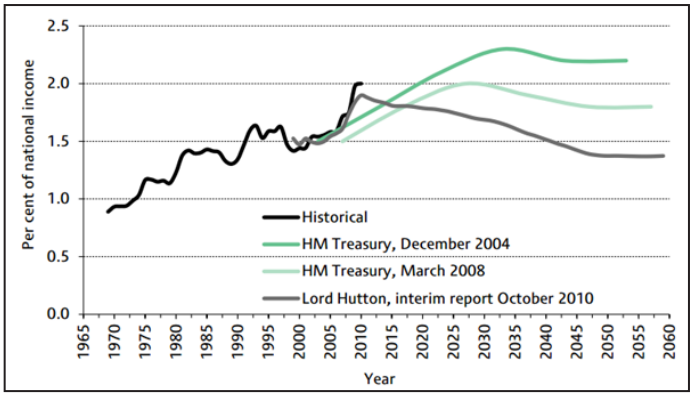

Fig 8: Growth in cost of public sector pensions as % of GDP (IFS using ONS data)

is much less than on the high-flyers, and reduces the bias that favoured those longest in the scheme.

The objective was to stop public service pensions taking an increasing proportion of tax receipts, and bring the costs back to sustainable levels matching growth in the economy. This cost had risen substantially since the seventies when it was less than 1% of GDP. By the year 2000 it had risen to 1.5% and without reform would have reached 2% by 2010. Changes listed in Table 2 and introduced by 2008 made significant savings but would have left it rising to 1.9% by 2019 before falling back to about 1.7% over the next fifty years.

Indexing annual pension increases to the CPI instead of RPI reduced the long term cost to 1.1% of GDP. The new measures in the 2013 Act mean it should fall back to 0.8% of GDP by 2065. Linking the retirement age to the state pension age should remove a major cause of of escalating costs, enabling them to be kept under control in the longer term.

Defined Contribution (DC) pensions

A 'pension fund' is built up with contributions from the member and/or their employer on which they get tax relief. The fund is usually managed by an insurance company or a pensions trust. Investments in the fund are tax free on the money earned and any capital growth. There are limits on the total size of pension fund on which anyone can claim tax relief (£1.5 million in 2013, reducing to £1.25 million in 2014), and the amount in relation to their income on which they can claim tax relief in any one year (£50,000 in 2013).

When they need the income for their retirement the pensioner buys an annuity with their share of the assets built up in the pension fund, which pays them a pension for the rest of their life. They can choose a less generous pension on which the amount is increased each year by a fixed percentage or the CPI, or where part of it is passed to a nominated dependent on their own death. Those with higher mortality risk due to health or lifestyle may benefit from higher annuity rates reflecting their reduced life expectancy.

The 2014 budget removed the obligation to purchase an annuity, allowing a member to choose how much to withdraw from their pension fund once they reach the minimum retirement age (55). They can take up to 25% tax fee, but the rest is taxed in the same way as earned income.

All the investment and longevity risks and consequences of inflation are carried by the employee, whereas on a defined benefit pension these are borne by the employer.

One of the few advantages of a defined contribution scheme is its portability: when they change employer a member can retain ownership of their part of the pension fund, or have it valued and transferred to another pension fund.

Employees that are not already enrolled in a suitable pension scheme must now be automatically enrolled into a scheme by their employer. They can opt out, but will then be re-enrolled after three years if they are not in a qualifying scheme.

This will ensure that almost all employees have a private pension. The minimum contribution is 8% of earnings between £5,668 and £41,450, of which at least 3% must come from the employer. It will not be fully phased in until 2018.

Pension fund performance

Pension funds are sometimes criticised for charging excessive fee, which are taken on the full amount invested each year irrespective of fund performance. How well do pension funds perform?

In October 2002 what was left of my pension following the demise of Equitable Life was split between two pension funds: Friends Provident, and Norwich Union (which became Aviva). Thereafter I made regular monthly payments into both for 8 years up to October 2010.

Using financial modelling we can analyse the contributions to both funds and compare their performance net of fees with the FTSE 100 Index, and with inflation measured by the CPI. This analysis takes full account of when each payment into the fund was made, relating it to the daily FTSE Index and the CPI for that month. The only payments out were the transfer value of each fund in October 2010.

The Friends Provident fund gave an annual rate of return (IRR) net of all management and other fees of 4.48% compared with a return of 3.63% if the same contributions had been invested in a perfect FTSE tracker, or 2.54% if they had been increased by the CPI. So the Friends Provident fund grew by CPI + 1.94%.

The Norwich fund gave an IRR of 5.46% compared with 3.95% for the same investments in a FTSE tracker, or 2.57% if they had been inflated by the CPI. So the Norwich fund grew by CPI + 2.89%.

This is not an entirely fair comparison of Friends Provident with Norwich, because the latter had a small initial amount and much larger monthly contributions. But it is to the credit of both funds that even after fees, they beat the FTSE 100 index by a significant margin.

In practice tax relief has a huge impact on the real benefits of investing into a pension fund, particularly for higher rate tax payers. For someone paying tax at the basic rate the actual cost of every £1 paid into their pension is currently 80p. For a higher rate tax payer it is 60p. Consequently real rates of return for a basic rate tax payer would have been 9.87% on the Norwich and 8.45% on the Friends Provident

fund. For anyone paying tax at the 40% rate, the real rate of return would be 13.55% on the Norwich fund, and 12.81% for Friends Provident.

Not all pension funds performed this well: we also made regular monthly payments into a pension fund with NPI, the returns on which barely kept pace with inflation and were so poor after six years that we moved it to Friends Provident.

Pension statements can be quite misleading. They are inclined to provide pages of irrelevant paperwork forecasting the payments that might be received on retirement, all of which is pure speculation. None of them provide the most meaningful measure of their own performance, which is the annual rate return (IRR) on the investment calculated on the present transfer value of the fund and all payments made into it, net of fees and management charges.

It is a mystery why the financial regulator does not require them to provide this figure every year. There should be a statutory requirement to provide an annual statement giving the annual rate of return since the policy was first taken out, and the annual rate of return over the year just completed. It would be helpful to provide the same information net of inflation measured by the CPI, and a market comparison, such as against the FTSE 100 index.

Despite the massive growth in house prices over that same period an investment in buy-to-let would have been far less profitable, due largely to the favourable tax treatment of pension funds. My own investment in buy-to-let flats gave a return of 7.38% over a very similar period, and that was before allowing for tax on the capital gain. Others may have done better.

Annuities

A defined contribution or personal pension builds up a pension fund. Until recently a pensioner was required to use their fund to purchase an annuity so as to provide them with a pension income. Since the 2014 budget that has been made entirely optional.

	Age				
	55	60	65	70	75
Single life, level, no guarantee	£4,926	£5,411	£6,065	£6,895	£8,089
Single life, level, 5 year guarantee	£4,920	£5,399	£6,039	£6,835	£7,943
Single life, RPI, 5 year guarantee	£2,433	£2,916	£3,534	£4,263	£5,377
Single life, 3% escalation, 5 year guarantee	£3,040	£3,489	£4,126	£4,946	£6,117
Joint life 50%, level, no guarantee	£4,658	£5,093	£5,627	£6,287	£7,229
Joint life 50%, 3% escalation, no guarantee	£2,777	£3,161	£3,663	£4,355	£5,332

Table 3: Annuity rate table (Hargreaves Lansdown)

Table 3 illustrates the typical options available on annuities and the cost which depends on their age at the time of purchase.

- Single life means the pension is paid to the purchaser only and will not continue to be paid to their spouse following death.
- Joint life 50% means 50% of the income is paid to a spouse following death of the purchaser. Different percentages are available up to 100%, and the cost depends on the age differential of the spouse.
- Level means the income will not be increased over time.
- RPI or CPI means the pension rises with inflation as measured by the Index.
- 3% escalation means the pension rises by 3% every year.
- Guarantee means the pension will be paid for the specified period even if the purchaser dies during that time. Guarantee periods of up to 10 years are available.

Up to 25% of the value of a pension fund can be withdrawn tax free at any time after the age of 55. Money can also be transferred between pension funds, or into a Self-Invested Pension Fund (SIPP) without paying tax.

No tax is paid on the contributions into a pension fund, or on earnings from investments while they are retained in the fund. But all income paid out from a pension fund is subject to income tax, just like any other income. This limits the amount of money it is sensible for those below the 40% tax threshold (currently about £32,000) to withdraw from a pension fund in any year.

Those whose income is expected to remain above this threshold in the long term would not face additional tax by taking all of their money out at once unless this raised their income to more than £150,000, taking them into the 45% tax band. But any earnings from investing that money would no longer be tax free unless they were held within an ISA. Each person can move up to £15,000 into an ISA every year.

Otherwise the choice is between leaving the money in a pension fund and withdrawing income from it year by year, or purchasing an annuity. How should we judge which is the better option?

This is not a simple calculation. Many people underestimate the benefits of purchasing an annuity. Financial modelling can provide some answers, enabling us to make a more rational choice. A free pension calculator for doing this can be downloaded from **http://treanor.co.uk/blog/PensionCheck.xls**

There are a number of factors to take into consideration, each of which is uncertain:

1. Life-expectancy
2. The rate of return on investments in the fund (net of tax)
3. Future rates of inflation during retirement

By purchasing an annuity these risks are pooled with all the others insured under the same policy, reducing the risk each of us carries personally. In many cases the companies managing pension funds are the same as those selling annuities. When they sell an annuity they guarantee us an income for life, and carry the investment risk. Anyone that leaves their fund with them and withdraws income as they need it carries these risks themselves.

With an annuity those that die earlier than expected subsidise those that die later. It will not matter to them personally because they are dead, but it might reduce the money they can pass on to their children. The risk for those living longer without an annuity is that their pension pot runs dry, and they are left with nothing more than their state pension which should be enough to keep them in food and warmth, but not much else.

The **ONS** publish life expectancy tables that show how many years a man or a woman at any age should expect to live, on average. Those with clearly identified health problems might expect to die younger, and some will live much longer. An insurance company selling annuities might assess average male life expectancy as illustrated by the blue line in Fig 7 below.

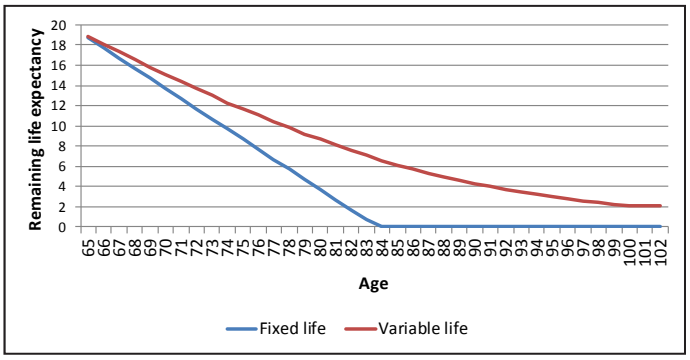

Fig 9: Life expectancy for an average male (ONS)

Those choosing not to pool their life expectancy risk with an annuity face an additional problem that is not quite so easy to grasp: the older they get, the longer they can expect to go on living. Aged 65 a typical man would expect to live for another 19 years and die aged 84. But if they are lucky enough to reach 84, they will then have a life expectancy of another 7 years, to 91. And at 91 they could expect another 4 years to 95, and so on. Had they pooled this risk, it would be entirely offset against those that died earlier than 84. This is illustrated by the red line in Fig 7 below.

The need to make provision for these extra years reduces the annual amount a 65 year old male pensioner could safely withdraw from their pension pot if they want to maintain their income protected from inflation for the rest of their life. It comes down from £6,482 pa to £3,977 for each £100,000 in their fund.

The other assumptions required for this calculation are the future rate of inflation, and rate of return on investments, which is usually specified in relation to inflation. The Bank of England is tasked with holding inflation measured by the CPI within 1% either side of a 2% target. So that is the rate most forecasters assume in their financial models.

Age	Man	Woman
55	3,386	3,341
60	3,643	3,587
65	3,977	3,902
70	4,422	4,322
75	5,045	4,902
80	5,972	5,753
85	7,489	7,114

Table 4: Sustainable annual drawdown per £100,000 in a pension fund at 2% return net of inflation

My own analysis of the performance of pensions held by Friends Provident and Norwich Union over eight years from 2002 indicated a rate of return of around 2.5% above CPI (ie CPI + 2.5%, or 4.5% assuming CPI at 2%).

Insurers tend to back annuity liabilities by investments in bonds (government bonds, corporate bonds and mortgages) rather than equities. Consequently annuity rates are strongly influenced by the expected performance of bond markets. These in turn are influenced by interest rate expectations. Returns on bonds tend to be a little lower than equities, but are a less volatile.

Those reaching pension age are advised to invest more cautiously in recognition of their increased dependence on investment income. So it might be wise to forecast lower investment returns of around 4%, or 2% above CPI, although nobody really knows, and advisers have a wide range of opinions.

Table 4 shows the annual income it should be reasonably safe to withdraw for every £100,000 in a pension fund for men and women at different ages, assuming a return on investment after inflation of around 2%.

These are the levels of pension income that should be compared with the best available annuity rates in judging whether to buy an annuity or draw income from a pension fund. They compare quite favourably with the annuity rates in Table 3.

Investment returns net of all fees would have to fall to below 1.3% above CPI before the annuity became a better buy, although it does have the significant added benefit of being guaranteed.

Buy-to-let

There have been a number of suggestions that allowing people to withdraw all the money from their pension funds instead of buying an annuity will result in a rush to invest in buy-to-let. This is very misleading. Nobody would be better off withdrawing their pension funds to invest in this way: the figures do not stack up.

To begin with, for every £100,000 they invested they would need to take between £125,000 and £167,000 out of their pension fund, depending on how much was taxed at the higher 40% rate.

Gross returns on rent are usually around 5% of value, rising at most to 6% in areas with low house prices. Net rents are typically 30% to 35% lower after repairs and maintenance and all the other costs associated with letting. Once the fees and other additional costs in purchasing a property are included few would achieve better than a 2.5% rate of return on their investment before tax. Once tax on withdrawing the money from their pension fund, and tax on the net rent income are taken into account it makes no sense at all.

The confusion arises because there are about 1.5 million people who chose to invest in buy-to-let instead of paying into a pension fund. Most of them only own one property, the mortgage on which was largely paid out of net rental income. By the time they stop work after perhaps 20 years the rent that barely paid the mortgage in the early years will have increased to give them a decent income for their retirement. House prices have gone up by an average of 240% in the last 20 years, so they could also choose to sell up and invest the profits after paying capital gains tax to give them an income. That is a totally different proposition.

It is the increase in value of the property over many years that makes buy-to-let profitable not the rental income in the first ten or more years following the investment. For more detail on this topic see **Investing in buy-to-let**.

The Author in Association with LandlordZONE®

Dave Treanor recently retired as managing director of **M3 Housing** and secretary of the **National Housing Maintenance Forum**. He wrote **Housing Investment Appraisal** for the National Housing Federation, and developed financial appraisal systems widely used by housing associations. Prior to that he spent many years working with housing cooperatives.

LandlordZONE®
Rental Property Knowledge