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***WHITHER UK ANNUITIES?  
WHY LIFETIME ANNUITIES SHOULD STILL BE PART OF  
GOOD FINANCIAL ADVICE IN THE POST-PENSION-  
LIBERALISATION WORLD***

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## Whither UK annuities?

### Why lifetime annuities should still be part of good financial advice in the post-pension-liberalisation world

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#### **Abstract**

*The UK government's 2014 Budget proposed major pension liberalisation for retirees from 2015, which will allow them to draw their pension savings in any form they choose at any time they choose from age 55 onwards. Until now, the majority of retirees have turned their pension pots into income by buying a lifetime annuity. However, annuity rates have fallen steeply over the last 25 years and 'annuity bashing' has become something of a national sport in the UK. Thus the proposed liberalisation looks politically astute by playing to popular sentiment, and some commentators have predicted that a huge permanent decline in the sale of lifetime annuities will result. Contrary to the dominant view, this paper argues that many lifetime annuities do in fact offer fair value for money and the protection against longevity risk is probably poorly understood by consumers. The fall in annuity rates has been due primarily to rising longevity, which does not reduce value for money, and post-crisis monetary policies, which although prolonged are not a permanent feature of the economy. While the types and features of annuities on offer may need to adapt, this much maligned financial product should ideally still play a key role in most people's retirement planning and in the free, impartial guidance for every retiree promised as part of the government's pension liberalisation package.*

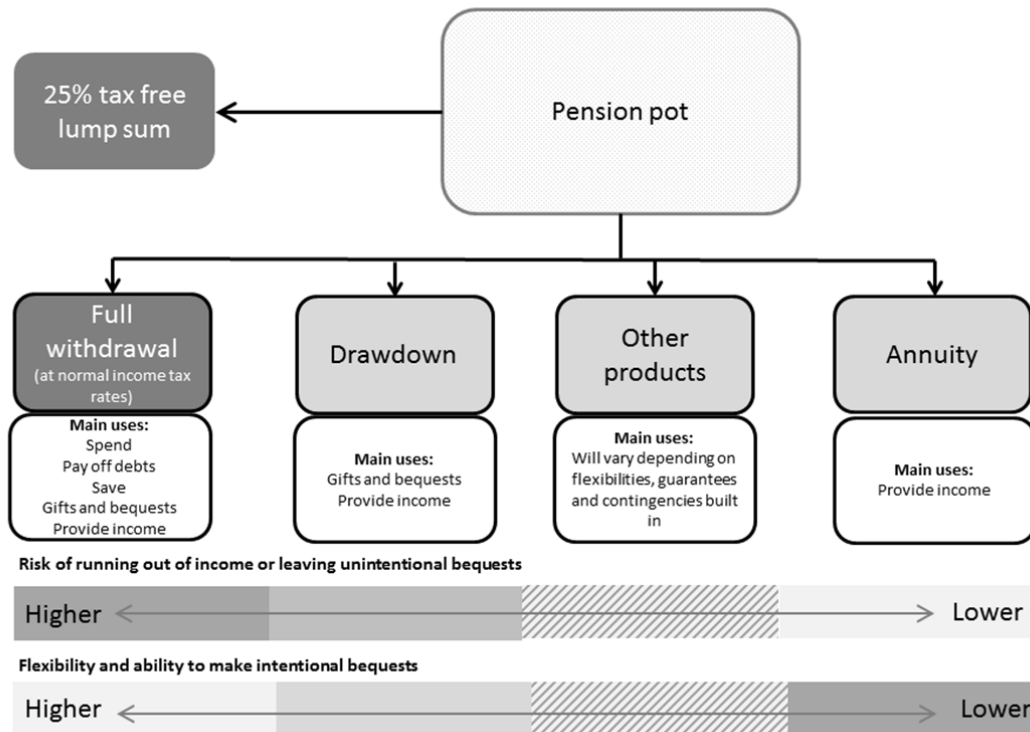
## Background

In its 2014 Budget, the UK government (HM Treasury, 2014) announced that from April 2015 its citizens entering retirement will no longer be steered towards using their tax-advantaged pension savings to buy a lifetime annuity (a financial product where a lump sum is exchanged for an income for life), or indeed to securing an income at all. Instead retirees will have complete freedom to draw out their savings whenever and however they like, provided they have reached at least age 55. This new pension liberalisation applies to all defined contribution (DC)-type pension savings. DC schemes are a type of pension arrangement characterised by an accumulation phase during which the individual builds up their own personal pot of savings and a decumulation phase, where these are used to buy or fund income in retirement, with the individual directly bearing the risks inherent in both phases. The key risks are: investment risk, being the risk that invested pension contributions do not grow enough to support the intended level of retirement consumption; inflation risk, whereby the intended retirement consumption fails to be achieved because the investment returns and/or income in retirement do not keep pace with price increases; and longevity risk, being the twin risk of either outliving the pot of savings or living on a lower income than necessary with a consequent unintentional bequest at death. This contrasts with defined benefit (DB) and hybrid arrangements, where some or all of these risks are borne by another agent (typically an employer or the State), giving the individual a more certain retirement outcome.

In the UK, a quarter of pension savings can be taken at the start of the decumulation phase as a tax-free lump sum and, under the liberalisation policy as originally announced, this option is to remain (HM Treasury, 2014, p19). It will be permissible to draw the remaining savings as one or more lump sums, as income or a combination of both, taxed at the individual's normal tax rates. This contrasts with the pre-2015 system, where lump sum withdrawals in excess of the tax-free sum would typically be taxed at a punitive 55 per cent rate.

Where, post-2015, an individual decides to draw savings as income, they could opt to use current products which are chiefly lifetime annuities and income drawdown. With a lifetime annuity, the pension pot is exchanged irrevocably for a promised income for life; the promise is backed mainly by fixed-interest investments. Under income drawdown, the bulk of the pension pot remains invested, usually with a substantial proportion in equities, and ad hoc or periodic withdrawals are made to provide an income stream whose amount may vary. The UK government expects pension liberalisation to stimulate the development of new products as well. Other UK government policy initiatives and experience in other countries suggest the form that some of these products might take. Some may occupy a middle space between traditional DC and DB pensions – a space that the UK government has called 'defined ambition' (DA) and which offers the individual more certainty of retirement outcome than pure DC but falls short of the fixed promises of DB arrangements (DWP, 2013). Reversing its earlier views (DWP, 2009, p12), the government has signalled that it now favours large-scale multi-employer collective DC (CDC) schemes in this middle space (Prime Minister's Office, 2014, pp35-37). In CDC schemes, there is a target pension with a cross subsidy between either members of the whole scheme or members of particular cohorts within the scheme, so that returns are smoothed both over time and between members. However, unlike DB schemes, the target pension may be cut and/or member contributions raised when faced with adverse financial, economic and/or demographic conditions. Other new products are likely to offer retirement incomes that can start, or flex upwards, on the occurrence of specified events, such as the individual needing care (Commission on Funding of Care and Support, 2011, p40), their pension savings running out or, as is common in the USA, on reaching a specified older age (Turner and McCarthy, 2013). These newer products may be based on deferred annuities, drawdown, and other more innovative strategies.

These decumulation options under the new pension liberalisation proposal are summarised in Figure 1, which highlights the trade-off between income security and flexibility and between using pensions to address a single financial goal – income in retirement – and the somewhat riskier strategy of using these savings to address multiple goals.



**Figure 1: Options under DC pension liberalisation**

Until Budget 2014, apart from the tax-free lump sum, most retirees had to draw their pension savings as income. The exceptions were those with small pension pots (up to £18,000 in total before 27 March 2014, or individual pots up to £2,000), who could draw the whole as a lump sum, and those with pension pots large enough to bring their retirement income up to a minimum secure level – requiring pension savings of around £300,000 or more (HM Treasury, 2014). These limits have been relaxed somewhat post-Budget in anticipation of the 2015 liberalisation. With the average (mean) pension pot being £35,600 and median only £20,000 (ABI, 2014), the vast majority of people have had little choice but to buy an annuity. As a result of this near-compulsion, the UK annuity market had grown to be the largest in the world with annual sales in 2013 of nearly £12 billion (ABI, 2014).

Immediate reactions to Budget 2014 suggested that pension liberalisation would cause a huge fall in the market. For example: Legal & General predicted that annuity sales will halve (Cumbo, 2014); shares in annuity specialists fell on the day of the Budget - Just Retirement by 40 per cent (Selby, 2014) and Partnership Assurance by 55 per cent (Watt, 2014); a month later, MGM Advantage, a specialist annuity provider, announced it was cutting its staff by a third (Sells, 2014). Certainly, annuity sales have fallen markedly following the Budget announcement. This may reflect consumers

temporarily deferring their retirement decisions until 2015; but possibly the pundits are correct in suggesting that this marks the start of a permanent shift away from what seems to have become a very unpopular product.

### **The trend in annuity rates**

It's not difficult to see why retirees have become disenchanted with annuities. Over the last 25 years, annuity rates have fallen significantly meaning that individuals now have to build up a much greater pension pot if they are to retire at the same age as previously on the same nominal income. For example, taking as an indicator the standard level annuity for a single man aged 65, the rate has fallen from £1,537 per year for each £10,000 invested at the end of 1990 to £570 a year by end 2013 (Burrows, 2014). Put another way, an individual who wanted to start retirement with a nominal income of £10,000 would have needed a pension pot of £65,000 in 1990 but over £175,000 by 2013.

Unsurprisingly then, 'annuity bashing' has become something of a national sport in the UK in recent years. Press comments such as *'the awful value offered by annuity providers'* (Somerset Webb, 2014) are commonplace. Shortly before Budget 2014, the UK regulator, the Financial Conduct Authority (FCA, 2014) published a damning review of the industry, suggesting that providers could be making supernormal profits from consumer failure to shop around adequately when buying annuities. A small survey by the Financial Times (Gray, 2014) backed this up, reporting profit margins of around 6 to 8 per cent for annuity providers selling on the open market (i.e. to consumers who must by definition be shopping around) but 13 to 15 per cent for providers selling annuities mainly to their existing customers. The FCA (2014) also found that consumers with small pension pots were likely to be offered poor annuity rates and little choice of provider. Altman (Treasury Committee, 2014, Question 274) has commented that: *'the average annuity and the annuity that most people would have been buying that they had been rolled into from their existing pension provider now represents such poor value it is difficult to imagine the value worsening. The estimates that I have made ... would require the purchaser to live well into their 90s before they got any more than their own fund back'*.

On the face of it, these views seem at odds with the contention in this paper that annuities could in fact be delivering fair value for money. However, if the nature of lifetime annuities and the determinants of annuity rates are unpacked, a more nuanced interpretation emerges.

### **The longevity problem**

Individuals and households have many goals in later life, not least perhaps leaving bequests to the next generation. However, a primary goal for most individuals when they reach the decumulation phase of retirement planning is how maximise income while ensuring that the income lasts for as long as they need it, in other words until death. What makes this planning challenging is that the date of death is unknown.

Figure 2 shows the expected distribution of deaths for UK men and women aged 55, 65, 75, 85 and 95 in 2014. The chart is based on predicted cohort probabilities for these groups derived from official period life tables for the population as a whole (ONS, 2014a). While period life tables give a snapshot in a particular year for all age groups (i.e. with diverse years of birth), cohort tables track the experience of a given cohort (sharing the same year of birth) year after year and so take into account predicted improvements in mortality. For example, starting with the probability,  $q_{65}$ , of dying at age 65 in 2014, the cohort table is constructed by taking  $q_{66}$  in 2015,  $q_{67}$  in 2016, and so on. The published life tables stop at age 100 and so, in this study, probabilities for ages 101 to 120 have been roughly

estimated assuming a steady geometric decay. Based on the cohort table, the probability for each cohort of dying at each age,  $x$ , was calculated as the cumulative year-by-year probability of surviving until age  $x$  multiplied by probability of dying aged  $x$ . Mathematically, this can be expressed as :

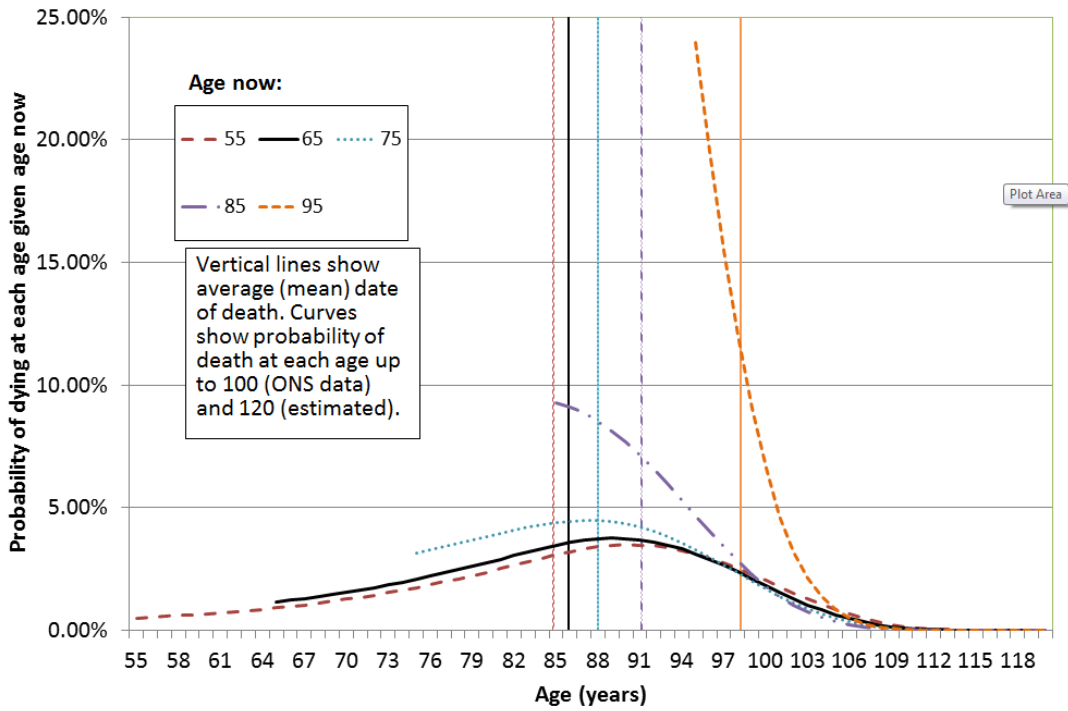
$${}_{t|1}q_x = q_{(n+t)} \prod_{i=n}^{n+t-1} (1 - q_i) \quad [1]$$

where  ${}_{t|1}q_x$  is the probability of dying in the year when age  $x$  is reached having survived for  $t$  years since the starting age,  $n$ , and  $(1 - q_i)$  is the probability of surviving each one-year period included in  $t$ .

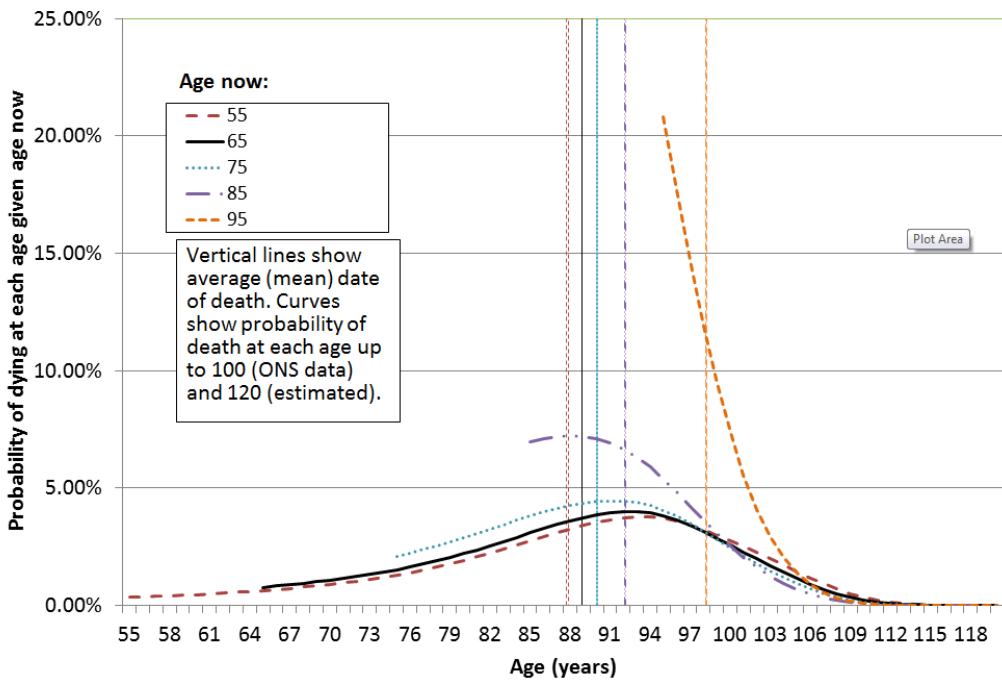
The difficulty for individuals is that (excepting cases of terminal illness) they cannot know with any certainty where on the curve for their age cohort their own death will lie. Consider, for example, the cohort of men aged 65 in 2014 (the solid black line in Figure 2). The mean and median ages of death are both around 86, while the most common age of death (mode) is 89. However, by definition, most people are not average. An unfortunate 1.2 per cent of the cohort will not live until 66, while 6.7 per cent can expect to beyond age 100. An individual might look to the ages at which their parents died as a rough guide to their own date of death, but this takes no account of the increasing longevity from one cohort to the next because of medical advances and so on. It is also unlikely that an individual will have sufficient knowledge of their parents' lifestyles to know whether their own habits are comparable and so could be contributing to longevity in a similar or divergent way. Results from the UK Wealth and Assets Survey (ONS cited in Crawford and Tetlow, 2012) suggest that over half of individuals currently don't think about how many years they might spend in retirement and, of those that do, men tend to underestimate their remaining lifespan by around two years and women by four years.

Thus, there is no reliable way for an individual to make use of the information in Figure 2. As Figure 3(a) shows, the individual could aim to run their pension savings down to zero by the average life expectancy of the group; this would produce a relatively high income but also a high risk of running out of income before death. Another option, as shown in Figure 3(b), would be to eke out the pension savings until a high age, such as 100 or beyond; but this entails a high risk of dying earlier and so leaving an unintentional bequest, meanwhile living on a less than optimal income. While the individual cannot solve this puzzle alone, Yaari (1965) showed that insurance could. When the pension savings of many individuals are pooled, the insurer can pay out an income approaching that in Figure 3(a) because the remaining savings of those who die earlier than average subsidise the continuing income for those who die later (the mortality subsidy). Thus, insurance in the form of annuities provides a way – even the only way (Blake, 2001, p.1) – to maximise retirement income.

Despite this strong case for annuities as insurance against outliving one's savings, experience in the USA and most other parts of the world where annuitisation is optional is that few retirees choose to annuitise their retirement savings, a conundrum dubbed the 'annuity puzzle' (Brown, 2007). A key question for the UK is: once retirees are freed from near-compulsory annuitisation, will they also shun annuities?



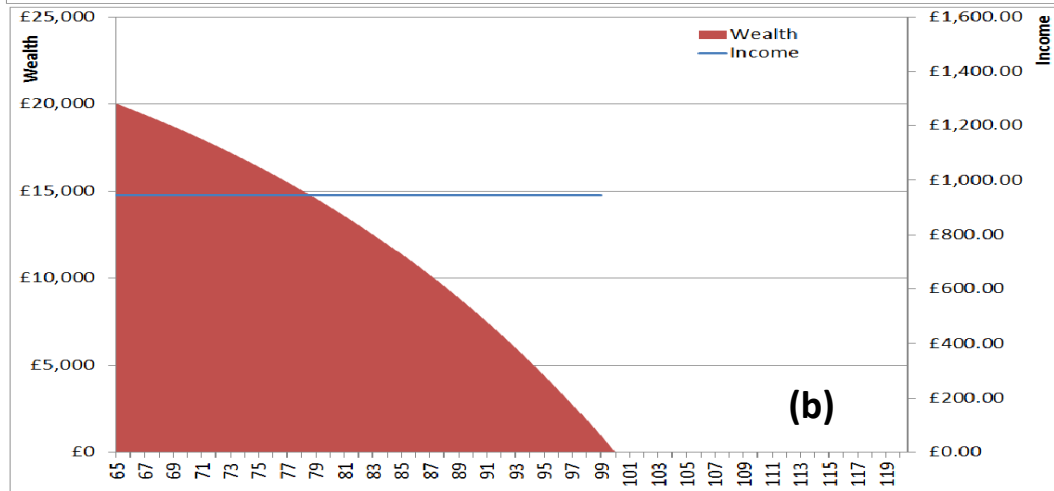
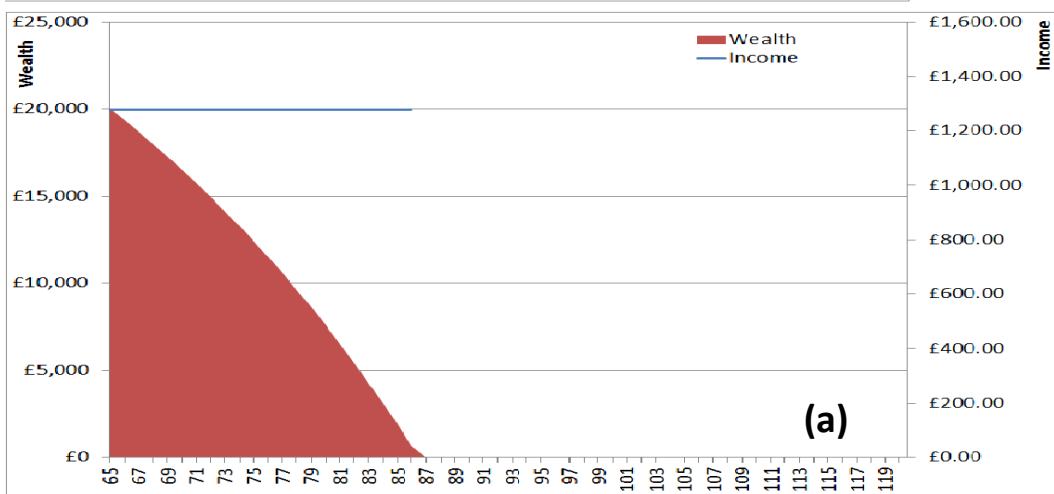
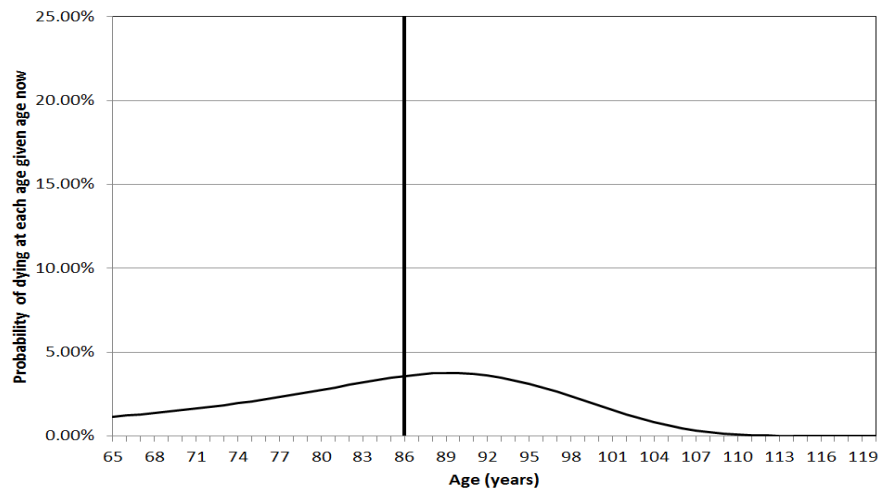
(a) Men



(b) Women

**Figure 2 Distribution of deaths for (a) men and (b) women given selected ages now**

Cohort probabilities derived from ONS (2014a) UK period qx principle protection



**Figure 3 Income and wealth without annuitisation**

**(a) Run wealth to zero by average (mean) age of death**

**(b) Run down wealth to age 100**

Based on male aged 65 with life expectancy in 2014 from ONS (2014a) UK cohort ex principle protection. Assumes wealth invested and earns 15-year gilt return from Bank of England (2014).



## Value for money

As with any insurance product, decisions about whether or not to buy are likely to be strongly influenced by price. One way of assessing the value for money offered by an annuity is to look at the extent to which it is 'actuarially fair'. An annuity is defined as actuarially fair if its expected discounted present value (*EDPV*) equals the price paid. To calculate the *EDPV*, the discounted value of the total annuity payments to a person dying at each age is worked out and then each of those totals is multiplied by the probability of dying at that age. The sum of these probable payouts gives the *EDPV*. Mathematically, this can be expressed as:

$$EDPV = \sum_{i=n}^t A_i \cdot {}_t|q_i \quad [2]$$

where

$$A_i = \sum_{j=n}^i \frac{a_j}{\prod_{j=n}^i (1+r_j)} \quad [3]$$

where  $A_i$  is the cumulative discounted payout from the annuity from purchase at age,  $n$ , to age of death,  $t$ ;  ${}_t|q_i$  is the probability of surviving to exactly age  $t$ ;  $a_j$  is the nominal payout each period and  $r_j$  is the discount rate for each period.

If the *EDPV* equals the price paid then its ratio to price will be 1. This ratio is commonly called the Money Worth Ratio (MWR) and is a standard way of evaluating annuities. In practice, the ratio will normally be less than 1 since the insurer incurs costs including normal profit. If there is a lack of effective competition, the insurer might also be making supernormal profit, in which case the MWR could be substantially less than 1. Individuals should be willing to buy the annuity, provided the gap between the *EDPV* and the annuity price does not exceed the value they place on the insurance element of the annuity – in effect this gap can be thought of as the premium for the longevity insurance.

The calculation of *EDPV* is heavily dependent on both the chosen discount rate and assumptions about life expectancy. Following the method used by the World Bank in its 1999 comparative survey of annuities (James and Vittas, 1999), in this present study, probabilities have been based on cohort life data as described in the previous section and the discount rate is the term structure for UK government bonds (gilts) (Bank of England, 2014). The results of calculating the MWR in this way are shown in Tables 1 and 2. Table 1 shows results based on the average best three standard (i.e. non-enhanced) annuity rates available in February 2014 and Table 2, based on the worst rate. Annuity rates were sourced from Moneyfacts (2014, p.38).

**Table 1: Value for money of UK annuities and effective premium charged, February 2014 – best three rates**

	Age at which annuity purchased				
	55	60	65	70	75
Average of best 3 annuity rates [1] £pa/£10,000	£447	£495	£557	£630	£745
<b><i>MWR (decimal) and effective premium (%)</i></b>					
Men, standard life expectancy [2]	0.9237 7.63%	0.9152 8.48%	0.9013 9.87%	0.8543 14.57%	0.8126 18.74%
Men, High life expectancy variant [3]	0.9590 4.10%	0.9505 4.95%	0.9354 6.46%	0.8854 11.46%	0.8406 15.94%
Women, standard life expectancy [2]	0.9828 1.72%	0.9874 1.26%	0.9859 1.41%	0.9526 4.74%	0.9235 7.65%
Women, high life expectancy variant [3]	1.0158 -1.58%	1.0208 -2.08%	1.0187 -1.87%	0.9832 1.68%	0.9516 4.84%

[1] Sourced from Moneyfacts (2014). Standard ie non-enhanced annuity rates, single-life level without guarantee, monthly paid in advance.

[2] Calculated using data from ONS (2014a) UK period qx principle protection.

[3] Calculated using data from ONS (2014a) UK period qx high variant protection.

**Table 2: Value for money of UK annuities and effective premium charged, February 2014 – worst rate**

	Age at which annuity purchased				
	55	60	65	70	75
Worst annuity rate [1] £pa/£10,000	£402	£445	£499	£573	£679
<b><i>MWR (decimal) and effective premium (%)</i></b>					
Men, standard life expectancy [2]	0.8313 16.87%	0.8233 17.67%	0.8070 19.30%	0.7775 22.25%	0.7403 25.97%
Men, High life expectancy variant [3]	0.8631 13.69%	0.8550 14.50%	0.8375 16.25%	0.8058 19.42%	0.7658 23.42%
Women, standard life expectancy [2]	0.8845 11.55%	0.8882 11.18%	0.8827 11.73%	0.8669 13.31%	0.8413 15.87%
Women, high life expectancy variant [3]	0.9142 8.58%	0.9183 8.17%	0.9121 8.79%	0.8947 10.53%	0.8669 13.31%

[1] Sourced from Moneyfacts (2014). Standard ie non-enhanced annuity rates, single-life level without guarantee, monthly paid in advance.

[2] Calculated using data from ONS (2014a) UK period qx principle protection.

[3] Calculated using data from ONS (2014a) UK period qx high variant protection.

The choice of data used in the calculations in the tables warrants some explanation. The calculations are based on the purchase of a level annuity (single life, without guarantee, monthly paid in advance), not because this is the most suitable product for supporting consumption throughout retirement - an inflation-linked annuity would better match that need - but because level annuities are the most commonly purchased type of annuity in the UK, accounting for some 87 per cent of sales by volume (ABI cited in House of Commons Library, 2014, p.4). In the first three-quarters of 2013, only 6 per cent of purchasers bought an escalating annuity which would include both inflation-linked versions and those escalating at a fixed rate (Ibid). Bear in mind, too, that these published annuity rates are those available to consumers who shop around – the unpublished rates offered by providers to their

existing customers are often lower: the FCA (2014, p.10) found that 80 per cent of retirees could get a better rate by shopping around.

Turning to life expectancy, the data used here are for the population as a whole, whereas insurers will base annuity rates on data for their own customer base. Individuals purchasing annuities tend to have higher life expectancy than the population as a whole (James and Vittas, 1999, pp. 6, 11; Cannon and Tonks, 2005, p.59). This can be seen by comparing the life tables for the population as a whole with annuitant life tables. One plausible reason is that the people who can afford to save for retirement are more likely to have higher incomes and as discussed in ONS (2014b, p.3), several studies have found an association between longevity and income deprivation. As already discussed above, UK legislation already allows small pension pots to be taken wholly as cash and this may be most relevant and attractive to low-income individuals who have been able to save little and can also expect a large proportion of their income to be replaced in any case by their state pension. Cannon and Tonks (2005, pp.62-73) review a range of other theories to explain higher annuitant life expectancy but a discussion of these is outside the scope of this present paper. The key point is that, using population rather than annuitant life data is likely to underestimate longevity and so *understate* the actual MWR. To make some adjustment for this, Tables 1 and 2 include MWRs calculated not just on the standard life expectancy data for the population as a whole, but also the ONS's high variant projections which are likely to be closer to annuitant life data.

Choosing the gilt yield curve as the source of discount rates is consistent with a highly risk averse consumer looking for income certainty – the type of individual for whom an annuity would be ideally suited. The alternative to buying an annuity for this individual could be to buy a series of gilts of varying terms to redemption from short to long that would deliver a secure income. Even so, this theoretical do-it-yourself consumer would not be able to remove longevity risk since the UK government does not issue any type of longevity bond (and there would of course also be explicit transaction costs for the gilts which have not been factored into the discount rate).

A noticeable feature of Table 1 is that in some cases the MWR is greater than 1, meaning that the annuity consumer is getting more than value for money. This is consistent with the findings in other studies (James and Vittas, 1999; Cannon and Tonks, 2006, p5). Moreover, a value of MWR greater than 1 does not suggest that the insurer is making a loss. Although, from the consumer perspective, it seems valid to discount using gilt rates since this is a likely alternative choice for a risk averse retiree, insurers do not in fact usually back their promise to pay the annuity income entirely with gilts. Coatesworth and Dimitriou (2013) found that in 2011 AAA assets (largely gilts) account for between 3 and 43 per cent of assets backing annuities for a sample of providers. Other assets typically comprise corporate bonds, mortgages and mortgage-backed securities which offer higher yields than gilts (which have delivered historically low returns due to the monetary policies adopted since the 2007 global financial crisis). What this suggests is that annuities are not in fact quite as low risk as consumers may generally assume. However, ultimately (since they are insurance products) 90 per cent of the promises under UK annuities are backed to an unlimited extent by the Financial Services Compensation Scheme (FSCS, undated) in the event that an insurer defaults. In addition, the European Solvency II regulations, now due to come into effect in January 2016 (European Insurance and Occupational Pensions Authority (EIOPA), undated), should strengthen the level of reserves held to the extent that an insurer's assets do not already reasonably match the annuity liabilities (EIOPA, 2013). Experts (for example, Joannes, undated) have predicted that Solvency II may cause a worsening in rates of around 10 per cent (which would reduce the MWR figures shown in the tables). However, to the extent that Solvency II is already anticipated, some shift in asset allocation may already be reflected in annuity rates on which the tables are based.

Table 1 shows that, for the best annuity rates, the MWR at all ages for women and at ages 55 to 70 for men is greater than 0.8500. Cannon and Tonks (2006, p5) state that the usual range for the value for MWR is 0.85 to 1.05, with up to 0.12 accounting for costs, and that results within this range do not suggest an excessive mark-up by the provider. By contrast, Table 2 shows that the worst rates, in most cases, offer poor value for money to men, the exceptions being men with higher-than-average life expectancy aged 55 or 60. Even the worst rates generally deliver value for money to women, with the exception of those with standard life expectancy aged 75.

Taking the two tables together, the results suggest consumer detriment to those male annuity purchasers who end up on the worst rates, but otherwise a product that is generally delivering value for money. The findings tend to support the UK policy focus on encouraging annuity consumers to shop around and switch providers in order to get the best annuity rates (ABI, 2012; Financial Conduct Authority, 2014), but do not suggest that consumers should be shunning annuities across the board on the basis of value for money, even though annuity rates are low.

### Why annuity rates are low

The major determinants of annuity rates are life expectancy and long-term interest rates. For example, a simple linear regression of UK level annuity rates for a 65-year-old man against a benchmark 15-year gilt rate and cohort life expectancy using monthly data over the period 1991 to 2013 explains 97 per cent of the variation in the annuity rate (see Table 3).

**Table 3 Regression of level annuity rate [1] against long-term gilt rate and life expectancy, 1991-2013**

		<b>Gilt rate [1]</b>	<b>Life expectancy [2]</b>
R <sup>2</sup>	0.971 F(2,274)=4657.648 p<0.001		
Standard coefficient (β)		0.484 p<0.001	-0.519 p<0.001

[1] Data from Burrows (2014). ). Level annuity rate without guarantee for 65-year old man.

[2] Data from ONS (2014a). Cohort life expectancy for attained age 65 in each year. Monthly data extrapolated by assuming constant compound rate of change between annual data points.

A fall in annuity rates associated with increasing life expectancy does not equate to a fall in value for money, rather it represents a spreading of value over a longer period. Moreover, to the extent that rising cohort longevity increases uncertainty about individual longevity, there may even be an increase in the value of the insurance that the annuity provides.

A fall in interest rates affects all types of saving, not just annuities. UK long-term gilt rates, along with the rate of return on other assets, have been driven to particularly low levels since the global financial crisis that started in 2007 through the monetary policies adopted by the Bank of England. In the normal way, the Bank sets its base rate which then ripples through the money and bond markets to determine the general level of interest rates across the economy. In March 2009, the Bank's base rate was reduced to 0.5 per cent, considered to be the zero lower bound in the UK – in other words, the point at which conventional, interest-based monetary policy becomes ineffective because nominal base rates cannot be reduced below 0 per cent. To continue exerting downward pressure on interest rates, the Bank of England adopted the unconventional monetary policies of quantitative and qualitative easing. These entailed direct buying of gilts and commercial bonds from banks and other

agents, pushing up the prices of these assets and so forcing their yields lower. Investors, with surplus cash from the Bank's purchases, similarly turned to buying other higher-yielding assets and through this process the downward pressure on interest rates filtered through the wider asset markets. These policies, which aimed to stimulate real investment (fixed capital formation by firms) and ease pressure on borrowers, may have averted a more prolonged recession and even financial collapse, so in that sense it could be argued that annuity purchasers have, along with everyone else, benefited from these monetary policies. However, the cost of these policies does fall more heavily on savers than other citizens, with the former suffering a prolonged period of low interest rates. While most savers can hope to see some future recovery in the return from their capital, what distinguishes lifetime annuities is the locking into a level of interest rates at the point of purchase with no possibility of benefiting later should interest rates recover. Annuitants who have exchanged their capital for annuity income in recent years are now permanently locked into those low rates. Therefore lifetime annuities are unattractive as an investment during periods when interest rates are low, which may outweigh the value placed on the longevity insurance. A policy solution could certainly be to allow greater flexibility in the timing of annuity purchase, but such a policy should not lose sight of the need to address longevity risk.

### **Perceived value**

Other research questions whether annuity purchasers place any value at all on the longevity insurance inherent in lifetime annuities. In particular, Brown et al (2008), puzzled by annuity aversion in the USA, set out to test whether a framing effect could be the explanation. They argued that valuing annuities in terms of the MWR is to view them through a consumption frame, focusing on what can be spent throughout the remaining life course. By contrast, if individuals are using an investment frame, the focus will be on rate of return and investment risk, but not longevity risk. Brown et al neatly explain this by considering a two-period example. In Period 1, the individual invests wealth,  $W$ , while in Period 2 he or she consumes the whole proceeds. If the individual invests in a bond with return  $r$ , the amount available for consumption is  $W(1+r)$ . If the individual invests in an annuity, the amount available for consumption is  $W(1+r)(1-q)$  where  $q$  is the probability of dying before Period 2. Thus, viewed through an investment frame, the annuity now looks to be more, not less, risky than direct investment in a bond, because there is a risk of not living long enough to receive the proceeds of the annuity, while the bond will pay out regardless.

Brown et al tested for the existence of this framing effect by surveying a sample of 1,342 people aged 50 and over, who were divided into groups each of which was asked to choose between options described in different ways. They found that while respondents asked to choose between options using the consumption frame favoured the concept of annuities, those whose options were described using an investment frame placed a neutral or negative value on the insurance aspect of an annuity. Based on these results, Brown et al queried why providers fail to market annuities using a consumption frame. They suggested a number of reasons, for example: the disjoint it would create with the accumulation phase where the emphasis is firmly on investment return; the cost and complexity of converting consumers from that investment frame to a consumption frame once they reach the point of retirement; the risk that the effort involved in converting consumers would not be rewarded if they then switched to other lower cost providers; and the way in which commission systems in the USA favour the sale of investment-oriented products (as they also have until recently in the UK).

## **The implications for pre-retirement advice**

A key component of the UK government's 2014 Budget pension proposals is that pension liberalisation will be accompanied by a guarantee that '*individuals approaching retirement will receive free and impartial face-to-face guidance to help them make the choices that best suit their needs*' (HM Treasury, 2014, p.3 ). This was misleadingly described in the Budget speech itself as being '*offered free, impartial, face-to-face advice*' (Osborne, 2014) and has been the subject of debate since. The muddled terminology belies a deeper confusion about retirees' needs and the feasibility of meeting them.

The analysis above underscores how essential it is for guidance or advice to help consumers understand the nature of longevity risk and how to protect against it. In addition, a number of other related issues need to be resolved if the guidance or advice is to be effective:

**When will guidance be offered?** Retirement is becoming increasingly flexible so that it may become harder to identify a single period that can appropriately be identified as 'approaching retirement'. Given that individuals will be free to draw their pension savings in as many tranches as they choose, guidance may be needed more than once.

**Is it the case that individuals 'will receive' or will be 'offered' guidance?** In some complex areas of financial planning, notably equity release (where capital tied up in home ownership is converted to cash lump sums or income without moving home), FCA rules require that all retail consumers receive advice unless they are defined as 'high net worth' customers or refuse the advice in writing (FCA, 2014, rules MCOB 8.6A.1 and 8.6A.4). A pension pot and a home are the two largest assets that most individuals will ever own and both are designed to meet essential needs (consumption in retirement and shelter), so the parallel of withdrawing wealth from a pension pot and wealth from housing are close. There are many common decision points, for example, the risk of choices now limiting options later, the interaction of the tax and benefit system with the choices made, and the possible availability of alternative courses of action to resolve whatever need has prompted the intention to withdraw wealth (for example, paying off debts, coping with disability, and so on). So there would seem to be a strong case for applying similar rules to pension liberalisation decisions.

**Will guidance be sufficient?** The distinction between guidance and advice has been described by, for example, Thoresen (2008 p45). Typically, guidance is non-specific, in the sense that it does not relate to an individual's particular circumstances (only to a group of people in situations similar to those of the individual), does not advocate a particular course of action (suggesting only the range of options that people in such a situation might typically or sometimes consider) and does not recommend the purchase, sale or alteration of particular regulated products (which would include pension plans, annuities, drawdown products, and so on) from particular providers. It seems likely that many, if not most, individuals approaching retirement would need to be directed to an authorised financial adviser for regulated advice, which begs the question whether guidance has a role at all beyond signposting to sources of authorised advice.

**Who will deliver the guidance?** The government's consultation document states: '*We will introduce a new duty on pension providers and schemes to deliver this "guidance guarantee"*'. This might be a duty to ensure that guidance is made available rather than a requirement that providers deliver the guidance themselves. Clearly, it would be difficult to accept that the guidance is 'impartial' if it came from providers who may stand to profit from retaining the customer rather than suggesting that better products are sought elsewhere. However, the ABI (2012) *Code of conduct on retirement choice* maybe gives some indication of the way in which providers could be made to deliver guidance that

explains the options to existing customers as a separate exercise from marketing the provider's own products. The government announced a £20 million fund to explore the guidance initiative and get it up and running (HM Treasury, 2014, p3), so presumably other options, such as guidance being provided by existing impartial bodies such as The Pensions Advisory Service or Money Advice Service will be considered.

**Can the advice really be described as 'free'?** It seems inevitable that, if the duty to ensure that guidance is delivered falls on providers, then the cost will ultimately be passed on to consumers through the charges for retirement products. This sits uneasily alongside the recent Retail Distribution Review reforms which, since 1 January 2013, have required that the cost of regulated advice be transparent and separate from product charges (Financial Services Authority, 2012).

## Conclusions

While retirees' long-term response to the new pension liberalisation from 2015 and the form of any guidance is as yet uncertain, it is clear that annuities can offer good value for money based on the MWR, while nonetheless being *perceived* as a poor investment. Therefore, an important facet of any guidance given to individuals approaching retirement will be assessing their level of risk aversion and, if it is high, making sure that they understand the protection that an annuity product offers against longevity risk. This requires a shift in the way advice is framed, away from an investment frame, to a consumption frame, and represents a significant financial education challenge. This is not to say that annuity products are the right choice for everyone. Other strategies and products may be more suitable for those with higher risk tolerance, greater resources and/or a desire to leave bequests. Similar, those with low resources who can expect a high level of pre-retirement income to be replaced by their state pension may sensibly derive greater benefit from taking cash lump sums rather than pension, especially if their pension pot is small. Individuals with debts, such as an outstanding mortgage, may find that the reduction in after-tax spending from paying off the debts outweighs the loss of pension income by taking cash to fund the repayment, especially if their life expectancy is standard or poor. Moreover, those who have impaired health or unhealthy lifestyles and who would currently choose an enhanced annuity may be better off taking cash. Nonetheless, given the huge risk that uncertain longevity poses for retirees, there is a strong case for retaining annuity products in the mix of options. The results in this paper also confirm that there is a substantial gap between the MWRs for the best annuities and the worst, underlining the ongoing importance of policies encouraging, or even requiring, retirees to shop around for the best value annuities.

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