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# **An analysis of unisex annuity rates**

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**Pensions Policy Institute**



Women. Men. Different. Equal.  
Equal Opportunities Commission



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## EXECUTIVE SUMMARY

### Introduction

An annuity insures against an individual's pension savings running out because he or she lives longer than expected. The UK has a large annuity market worth over £6 billion a year, and growing. Nearly all annuities are bought on a gender specific basis; that is, the amount of monthly income received depends on whether the purchaser is a man or woman. Women receive lower monthly annuity payments than a man from the same amount of pension saving because annuity providers take into account the expectation that women will live longer than men. This study analyses the issues surrounding the compulsory use of unisex rates for all annuities in the UK, and the potential impact of such a change.

### The case for and against unisex annuities

There are arguments both for and against the introduction of unisex annuities. Their supporters argue that:

- Unequal annuity payments for the same size pension fund are discriminatory.
- Different life expectancies for women and men are irrelevant as there is considerable overlap in the ages at which most people die.
- Unisex annuities would increase women's retirement income.
- Gender is becoming less relevant to annuity pricing.

In contrast, opponents of unisex annuities argue that:

- Gender specific annuities are not discriminatory because women live longer than men and the total value of income received is equivalent.
- In any year, an insurer is more likely to be paying the annuity to a woman than a man who bought an annuity at the same age, making the age overlap irrelevant.
- Unisex annuities could reduce retirement income and could cost more.
- They could lead to higher costs in other areas of insurance if other rating factors were no longer used in annuity underwriting.

Neither side of the argument has been made conclusively, nor have they been quantified to assess whether, and by how much, they would benefit women and consumers in general. The one argument that has been used successfully elsewhere for compulsory unisex annuities is that they discriminate against women in a way that is illegal in employment law. In the USA and Canada, any annuity bought directly with the proceeds of an employer-sponsored Defined Contribution pension fund must be unisex because of this. If a similar approach was taken in the UK, unisex annuities would become compulsory for Defined Contribution occupational pension schemes,

currently representing up to one-third of the UK annuity market. Unisex annuities are also used within the state pension system in the UK and Sweden.

### **Potential impact of unisex ratings on annuity rates**

This research suggests that in a compulsory unisex pricing market, the best annuity rates are likely to be better than the current unisex rates available. They could settle between current male and female rates, around one quarter of the way below the male rate and three-quarters of the way above the female rate. As a result, the best rates could improve by up to 10 per cent for women, and worsen by up to 3 per cent for men. The best joint life annuities for men could fall by 1 per cent. These are the maximum changes expected, so they are not likely to be large.

However, 80 per cent of people have small pension funds worth less than £30,000. It is difficult for people with small funds to benefit from open market rates as most providers have a minimum fund value below which they will not accept a transfer, so the majority of people are likely to remain with their existing pension provider when purchasing an annuity. They will not, therefore, have access to the best rates. Women in this situation may see no change in annuity rates compared with today, while men could see a fall in rates of up to 13 per cent. Joint life annuities for men could fall by 4 per cent.

### **Potential impact on retirement income**

The research estimates the impact which unisex annuity rates could have on overall retirement income and the analysis suggests that they are unlikely to be of significant or widespread benefit. Fewer than one-quarter of pensioners have an annuity so only a minority of pensioners would see any change to their retirement income. Of those who could see a change, more than three times as many pensioners could see a lower income rather than benefit from a higher one. As well as men, this would include some wives and widows who were dependent on their husband's annuity. In addition, because annuity income makes up only a very small part of total retirement income for most pensioners, particularly low income pensioners who receive most of their income from the state, the average gains and losses would be small.

### **Conclusions**

The research suggests that there is no reason why compulsory unisex annuities could not be introduced. There is likely to be an initial adjustment period as the industry monitored trends and reassessed risk, where the costs of annuity provision could increase. But eventually, a competitive market would reduce these costs back towards market levels. However, the impact on overall retirement income would be small, and although annuities will become more widespread in future, the pattern of

benefits and losses is likely to remain similar to today. Even if all private retirement income came from annuities, most pensioners' incomes would change by significantly less than 10 per cent.

Overall, developments in annuity pricing are reducing the relevance of gender as a rating factor. Rather than introducing unisex rates it may be more beneficial to everyone, in particular those with smaller savings who are more likely to be women, to have access to better advice and a greater ability to shop around.

# 1 INTRODUCTION

## The annuity market in the UK

An annuity insures against an individual's pension savings running out because he or she lives longer than expected. The UK has a significant annuity market, worth over £6 billion a year, and growing.

The purchase of an annuity is currently compulsory for savings built up in a Defined Contribution occupational pension scheme, personal pension or stakeholder pension. There are many different types of annuity that can be bought, but the choice may be limited depending on the type of pension that is being used to buy the annuity (Table 1). The way in which an annuity is bought also depends on the type of pension an individual has. In an occupational pension scheme, it is often the Trustees of the scheme who are responsible for buying an annuity on behalf of the scheme member, and they may have specific arrangements with a particular provider. In personal and stakeholder pensions, the individual buys the annuity directly from either their pension provider, or an alternative annuity provider.

**Table 1 Annuity requirements in the UK**

| <b>Type of arrangement</b>  | <b>Type of contribution</b>   | <b>Type of annuity</b>   |
|---|---|--|
| Defined Contribution occupational pension<br><br>(annuity purchase often made by the scheme trustees on behalf of the individual) | State contribution through contracting-out: 'protected rights'<br><br>Employer/Employee contributions | Unisex annuity, including price indexation. If the pensioner is married, a joint-life annuity must be purchased<br><br>Contributions made in 1997 or later must be used to purchase an annuity with some price indexation, no other restrictions |
| Personal Pension / Group Personal Pension / Stakeholder Pension<br><br>(annuity purchase made directly by the individual)         | State contribution through contracting-out: 'protected rights'<br><br>Employer/Employee contributions | Unisex annuity, including price indexation. If the pensioner is married, a joint-life annuity must be purchased<br><br>Any annuity   |

Most annuities that are bought are on a single life basis, where payments are made until the annuity purchaser dies. Only 14 per cent of annuities bought are on a joint

life basis, where payments are based on the lives of two people, and continue until both die (though often payments are reduced after the death of the first person).

A pension fund can in theory be used to buy an annuity from any provider using an open market option. However, in practice, many individuals do not have access to the full range of annuities, or the best annuity rates that are available on the open market. This is because most pension funds used to purchase annuities are small; 80 per cent of funds are worth less than £30,000. With funds of this size, it is often difficult to get advice on the best options available, and the costs involved in switching providers can outweigh the potential gains from a higher annuity rate.

Nearly all annuities purchased are bought on a gender-specific basis – that is, the amount of income received from the annuity each month depends in part on whether the purchaser is a man or a woman. For a given amount of pension saving, women receive lower monthly payments from an annuity than would a man of the same age. This is because annuity providers take into account the expectation that women will receive their payments for longer, as on average, women live longer than men.

Unisex annuity rates would mean men and women of the same age receive the same annuity payments for the same purchase price. The only unisex annuities bought in the UK are for ‘protected rights’ pensions, which account for 3 per cent of the annuity market. The terms of protected rights products are prescribed by legislation because they are a substitute for the state second pension.

### **The aim of this paper**

The EOC has commissioned this research in order to provide an evidence base for future decision making. The research analyses the issues surrounding the compulsory use of unisex rates for all annuities in the UK, and the potential impact of such a change. The terms of reference for the research are shown in Appendix 1.

This paper first considers the arguments that have been made in the UK for retaining gender-specific annuity rates, and the arguments made for changing to a system of unisex annuity rates. Relevant lessons for the UK from unisex annuity regimes in other countries are considered as part of this analysis. To place these arguments in the right context, the paper then goes on to estimate the possible impact of a change to unisex annuity pricing and suggests by how much annuity rates would change if unisex pricing were made compulsory. The paper then attempts to assess how much difference a change to unisex annuity rates could make to the retirement incomes of both women and men, today and in the future. Finally, it examines whether gender

pricing is becoming a more or less important issue in the rapidly developing annuity market.

### **Methodology**

The first part of this paper is based on a critical appraisal of the literature on arguments for and against unisex annuities. These have been derived from a variety of sources, including academic articles, government consultation papers and industry and individual responses to the consultations.

Data from industry sources has been supplemented by a series of face-to-face and telephone interviews with a variety of annuity practitioners and experts. This helped to uncover some of the technical and market-based aspects underlying annuity pricing and shed more light on the likely market reaction if unisex pricing were imposed.

The potential impact on pensioners' incomes has been estimated using a simple economic analysis, based on a range of different individuals. The characteristics of these individuals have been made as realistic as possible, using information from the current pensioners' incomes distribution, and industry information on the type and size of annuities purchased both now and in the future.

### **The Pensions Policy Institute**

The Pensions Policy Institute (PPI) is an educational charity promoting the study of retirement provision through research, analysis, discussion and publication. The PPI takes an independent view across the entire pensions system. The PPI is funded by donations, grants and benefits-in-kind from a range of organisations, as well as being commissioned for research projects. To learn more about the PPI, see: [www.pensionspolicyinstitute.org.uk](http://www.pensionspolicyinstitute.org.uk)

## 2 ARGUMENTS FOR AND AGAINST UNISEX ANNUITY RATES

### Arguments for unisex annuities

Supporters of unisex annuities argue that:

- Unequal annuity payments for the same size pension fund are discriminatory.
- Different life expectancies for men and women are irrelevant as there is a considerable overlap in the ages at which most men and women die.
- Unisex annuities would increase women's retirement income.
- Gender is becoming less relevant to annuity pricing.

### Unequal payments for the same purchase price are discriminatory

To many people it appears inherently unfair that a woman can be offered a smaller annual payment than a man for an identical pension lump sum, even if the lump sum has been built up using exactly the same contributions.

In other parts of the pension system this does not happen. In the state pension system a woman could receive a higher overall payout than a man with an identical contribution record, because a woman would receive a pension for a greater number of years (once state pension ages are equalised between 2010 and 2020, a woman will receive the same state pension as a man with an identical contribution record). In a Defined Benefit occupational pension scheme a man and a woman with identical career and earning experience would receive identical annual benefits. This is because in both of these schemes men and women are 'pooled' together, and the relative risks of long life are shared among them. To the extent that women live, on average, longer than men, these schemes may be seen to subsidise women at the expense of men.

This cross-subsidisation does not occur when gender-specific annuities are used. Men benefit from having payments based on their own (shorter) average life expectancy, but women see smaller annual pensions as, on average, they are expected to be in payment for longer.

The European Commission and National Consumers Council have both argued that gender-specific annuities undermine the principle of equal treatment (EC, 2003; NCC, 2003). This argument is supported by the fact that in the USA and Canada, any annuity bought directly with the proceeds of an employer-sponsored Defined Contribution pension fund must be unisex. The rationale for this is that pensions (and annuities) provided by an employer must not, by law, discriminate on gender, under terms of employment.<sup>1</sup>

However, because annuitisation of pension funds is not compulsory in either country, few employer-sponsored schemes have annuity options. Fewer than 30 per cent of members of 401(k) plans (employer-run defined contribution pension arrangements<sup>2</sup>) in the USA have the option of purchasing an annuity (Brown, 2000). Consequently, in practice, very few unisex annuities are purchased. Of the 1.6 million life annuities in payment in the USA (Brown, 2000) only one-quarter were bought with the proceeds of work savings plans (ACLI, 2003).

If a similar approach was taken in the UK, taking the precedent from the USA or Canada, that an employer's pension scheme that paid a different pension to men and women because of different life expectancy was discriminatory, then unisex annuities would become compulsory for UK employer-sponsored schemes where annuity purchase is part of the scheme. This could affect Defined Contribution occupational pension schemes, but not group personal pension schemes or group stakeholder pension schemes, where the purchase of an annuity is not within the scheme. In this respect, group personal and stakeholder pensions and stakeholder pensions are really a collection of individual pension policies, rather than an employer scheme.

The precedent therefore exists for unisex annuity pricing in part of the annuity market in the UK, but not the whole market. Up to one-third of current annuity income may come from Defined Contribution occupational pension schemes.<sup>3</sup> This puts an upper bound on the potential for unisex pricing in the UK annuity market, *if* the USA precedent were to apply. The remaining two-thirds of the annuity market comes from individual pensions, including group personal pensions and group stakeholder pensions.

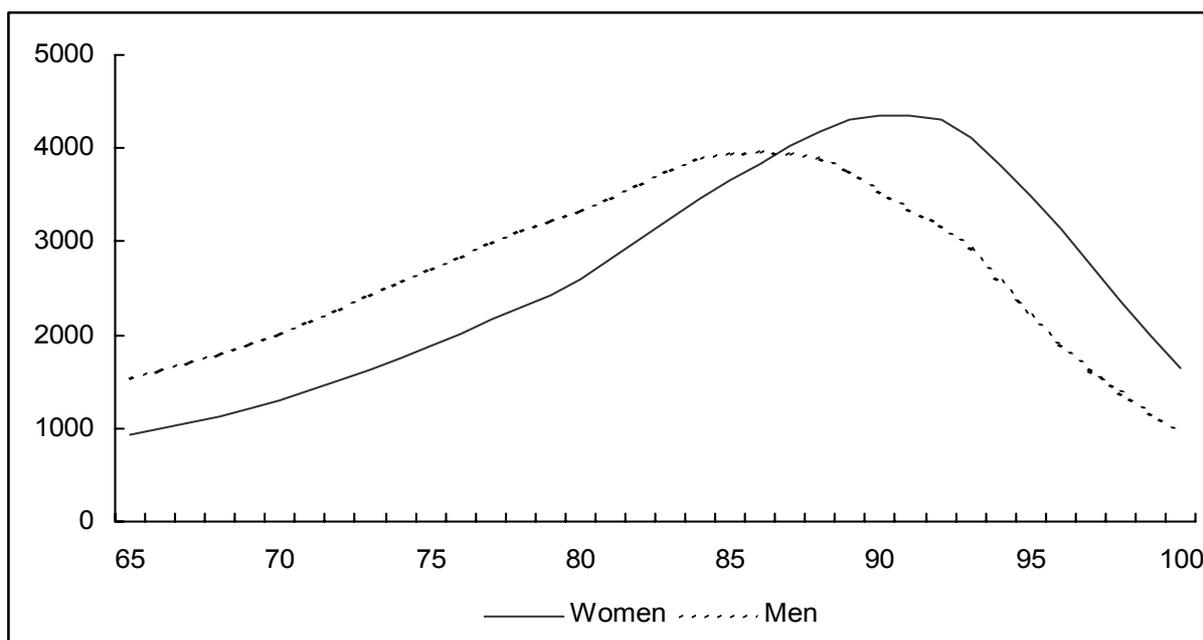
Annuitisation is compulsory in the UK, rather than voluntary as in countries with compulsory unisex rates. Valid discrimination arguments for occupational pension schemes may therefore be stronger in the UK than in other countries.

There is no precedent for unisex annuity pricing for voluntary individual annuities in the private market, even in those countries where there are some unisex annuities in other parts of the market (for example, the UK, US, Canada and Sweden). However, if the EU council directive implementing the principle of equal treatment between women and men in the access to and supply of goods and services is adopted, unisex rates would apply to all annuities, both employer-sponsored and individual.

**Life expectancy**

Despite the fact that on average women are expected to live longer than men, for individual men and women there is a significant overlap in the ages at which they die. Figure 1 highlights this overlap. Although more men than women are expected to die at each age before age 87, 61 per cent of men and 46 per cent of women are expected to die before reaching this age.

**Figure 1 The number of men and women from a population of 100,000 aged 65 in 2004 expected to die at each subsequent age**



Note: Based on GAD 2002-based population projections

This has been interpreted as implying that there is very little difference in the life expectancy of most men and women. The USA Supreme Court used this overlap in death ages to rule that paying a lower-rate annuity to a woman, even though she might die at the same time as a man who receives a higher rate, is discriminatory in the context of an employer-sponsored pension scheme (Campbell and Munnell, 2002).

**Unisex annuities would increase women’s retirement income**

Women tend to have lower pension income than men, making them more susceptible to poverty, especially in old age. Differences in retirement income are largely due to differences in experiences during working life. Women are more likely than men to have low earnings, more likely to work part-time, more likely to be not in paid employment while they care for children or the elderly, and less likely to be making regular contributions to a private pension (Curry, 2003a). There is a very strong link

in the UK pension system between working (and earnings) and pension income (Curry, 2003b).

Women are further disadvantaged (relative to men in an otherwise similar position) by lower annuity rates. An increase in women's annuity rates would lead to a direct increase in retirement income for women who buy an annuity. Further, the low annuity rates on offer to women may currently deter many women from taking out private pensions (EOC, 2002 and 2003; Age Concern and Fawcett Society, 2003). If women feel they get a poor deal on annuities they may not save in a pension at all, reducing the potential level of future retirement income.

### **Gender is becoming less relevant to annuity pricing**

Competition in the UK annuity market has driven a number of different factors, other than gender, to be used to set different annuity rates. This fact has been used to support an argument that gender need not be a factor in annuity pricing as it is anyway becoming less relevant (McDonald, 2003; Women's Budget Group, 2003; Age Concern and Fawcett Society, 2003; National Assembly of Women, 2003).

There are a number of other factors used in the pricing of annuities, and these are likely to become more important in future (ABI, 2003a). Annuity rates depend on the size of the pension fund that is being used to purchase the annuity. Larger funds generally attract a lower annuity rate. This is because large funds are usually accrued by wealthy individuals, who are more likely to be in a high social class. People of higher social class have a higher life expectancy (O'Connell, 2003), so someone with a large fund would receive less income per £10,000 of pension fund than someone with a small fund. Some annuity providers vary rates by up to 15 per cent, depending on the size of the fund.<sup>4</sup>

Enhanced annuities are available to people with different lifestyles, socio-economic group, occupations, smoking behaviour, health levels (impaired life annuities offer better rates for people with medical conditions that reduce life expectancy) and geographic location (for example post code is used in conjunction with other occupational information).<sup>5</sup> For example, an annuity for a woman who has smoked could be 20 per cent better than a conventional female annuity from the same provider. For a woman with lung cancer, the annuity could be more than four times as high as a conventional female annuity.<sup>6</sup>

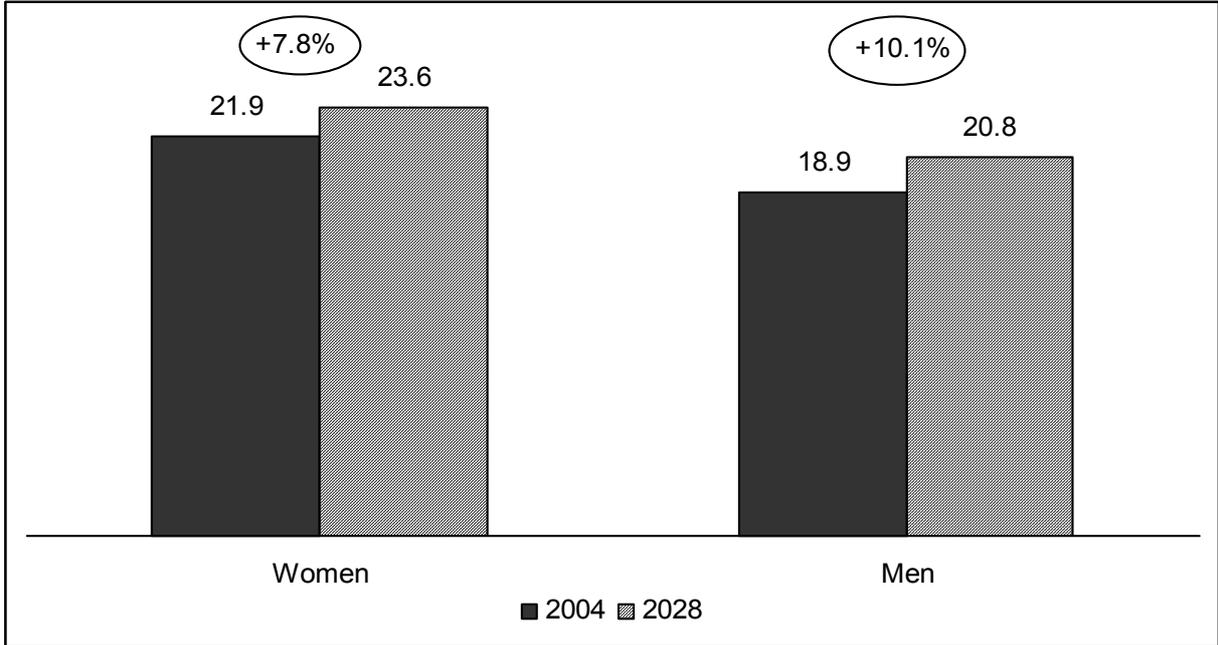
Currently less than 10 per cent of the annuities bought each year are enhanced or impaired life annuities, though this has the potential to increase to 40 per cent over the next 10 years (ABI, 2003a). People with larger pension funds, who find it easier

to shop around for annuities, are more likely to buy enhanced or impaired life annuities (see Chapter 4 for more details).

As these factors are used more often, the impact of gender alone on rating reduces in significance. Some of these factors, such as lifestyle or occupation, may be indirectly picking up gender differences. For example, a specific annuity for builders would be available mostly to men, while an annuity for nurses would be more likely to be bought by women. Other factors, such as postcode, are not closely linked to gender.

Gender differences in life expectancy are also expected to be less important in future. While life expectancy is increasing for both men and women, it is increasing at a faster rate for men (Figure 2). Changes in life expectancy appear to be feeding through into a narrowing difference between male and female annuity rates. Between January 2002 and December 2003, the difference between male and female rates reduced by more than 2 per cent.<sup>7</sup>

**Figure 2 Average number of years left to live at age 65 for people reaching 65 in 2004 and 2028, UK**



Note: Based on GAD 2002-based population projections

The flexibility to underwrite annuities based on individual characteristics is not used in Defined Benefit (DB) schemes. While some DB schemes do offer some flexibility in cases of ill-health (for example, enhancing pension payments in the case of early retirement through ill-health), DB schemes do not increase payments for those with

specific medical conditions, or in the way that enhanced annuities do, for example, for smokers.

### **Arguments against unisex annuities**

Opponents of unisex annuities argue that:

- Gender-specific annuities are not discriminatory because women are expected to live longer than men, and the total value of income received is equivalent.
- The overlap in the ages at which most men and women die is therefore irrelevant, because in any year, an insurer is more likely to be still paying the annuity to a woman than a man who bought the annuity at the same age.
- Unisex annuities would reduce retirement income for men and women.
- If less information can be used to price annuities then they will cost more.
- A move to unisex pricing could be the ‘thin end of the wedge’, ending the use of other rating factors in annuity underwriting.
- Unisex pricing for annuities could lead to higher costs for women in other areas of insurance.

### **Women live longer than men**

One counter-argument to the discrimination case for unisex annuities is that annuity rates should be calculated to give equal *values* over expected lifetimes. But because women live longer than men on average, so the *income* will be less in each period.

An annuity is an insurance product, similar to life insurance or car insurance. In general, the price of insurance depends on the risks involved. Someone who is at high risk of claiming pays a higher premium. In terms of an annuity, this means that people who are likely to live longer receive a lower annuity for a given lump sum pension amount. An obvious example of this is that younger people receive lower annuity rates than older people.

Women do live longer than men, on average (Figure 2). Even if the gap between them is closing, there is still expected to be a difference in life expectancy in future. Therefore the insurer expects to pay an annuity to a woman for a longer period of time than they would do to a man of the same age. So insurers offer women a lower annuity rate than men. For example, while a man aged 65 buying an annuity with a pension fund of £50,000 could receive a monthly payment of £316, a woman in the same situation could only receive £289.<sup>8</sup>

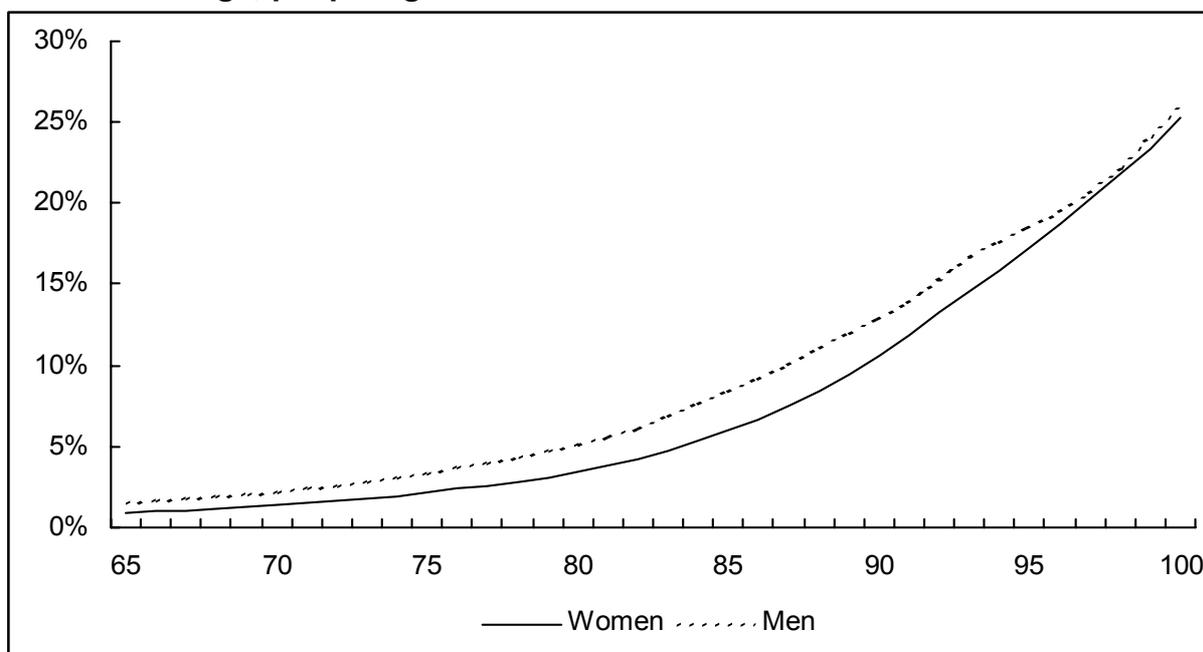
In pure economic terms, a woman should not be made worse-off financially over her lifetime by the current system of gender-specific annuities. Although the amount received by a woman in each year is less than that received by a man, over their

'expected' lifetimes they receive the same, as the woman receives her annuity payments for longer. For example, for a man retiring at age 65 in 2004 average life expectancy is just under 19 years, and for a woman of the same age life expectancy is just under 22 years (Figure 2). If the man received £316 a month, and the woman £289 a month, and both had average life expectancy, the value of the payments received by the man would be £57,664, whereas the value received by the woman would be £58,227.<sup>9</sup>

**The overlap in the ages at which men and women die is not relevant**

The other counter-argument to the case for discrimination is that, all other things being equal, a woman has a lower probability of dying in any year, compared to a man of the same age (Figure 3).

**Figure 3 The probability of dying in the next year for those reaching each age, people aged 65 in 2004**



Note: Based on GAD 2002-based population projections

This means that the overlap in the ages at which most men and women die (Figure 1) is not relevant for setting annuity rates. In each future year the insurer is more likely to still be paying the annuity to a woman than a man who bought the same annuity at the same starting age. Paying an annuity to a woman has a higher *expected* cost than paying an annuity to a man, irrespective of when she actually dies.

**Unisex annuity rates would make men and women worse off**

As well as increasing some women's retirement income, opponents of unisex annuities point out that the introduction of unisex annuity rates would also reduce men's retirement income. This would lead to a fall in the household income of those married women, or widows, for whom the male income is the sole or major income.

Further, while supporters of unisex annuities argue that low annuity rates for women discourage the take-up of private pensions, it can also be argued that having to buy any annuity deters both men and women from taking out private pension provision (Watson Wyatt, 2004).

**If less information can be used to price annuities then they will cost more**

The argument has also been made that a unisex annuity market would be likely to increase the costs of all annuities compared to a market in which gender-specific rating was used.<sup>10</sup> A broader pooling of risk increases the uncertainty faced by annuity providers, as they have less information about the individuals they are insuring. A higher risk would need to be covered by a higher return, in order to continue to attract capital to back annuities. An uncertainty margin in annuity products would be needed to retain capital in the market.<sup>11</sup>

An uncertainty margin would mean that annuity rates, after a change to compulsory unisex pricing, would be higher than just the average of male and female rates, weighted by the amount of annuity income purchased by men and women. This would mean that the amount paid out in retirement income would reduce, leaving all annuity purchasers worse off in retirement.

Unisex pricing would mean that in practice an insurer would expect to make a profit if a man buys an annuity product (because he would be expected to die earlier than the age the price is based on), and to make a loss if the purchaser is a woman. This is likely to lead to providers deliberately targeting men instead of women, through marketing strategies, or by using proxy measures such as occupation. So even if rates were unisex, women may find it harder to access the most competitive rates if providers do not market to them. Indirect gender pricing could therefore limit the size of any additional uncertainty premium.

Annuity rates can be adjusted quickly to new information, such as changes in life expectancy or interest rates. As providers build up information on their unisex client base, they will be able to adjust rates to reflect more accurately the proportion of annuity business with men and women respectively. The ability of underwriters to

adjust to new information also means that any additional uncertainty premium would also reduce over time.

### **Unisex annuities could be the ‘thin end of the wedge’**

Supporters of unisex annuities have argued that the recent increase in the use of other rating factors has meant that gender is less important in annuity pricing. However, opponents argue that a unisex regime could lead to similar discrimination arguments being used to prevent these other factors being available to use in annuity pricing.

Such factors may include health conditions, or occupational ratings. The use of these factors is generally helpful to people who are in ill health or have been on low incomes (such as manual workers). While unisex annuities benefit women, who are disadvantaged in the pension system more generally, the extension of the same argument could hurt most those people who have been disadvantaged in ways other than gender.

Further, if using gender (either directly or indirectly) is ruled as discriminatory, would using age also become an issue in future under age discrimination legislation? While the Age Discrimination legislation due to be introduced in 2006 will only apply to employment, it is possible that future legislation could also apply to goods, facilities and services. If change is made on the grounds of gender, it could set a precedent for age.

The loss of age as a rating factor would almost certainly lead to a substantial increase in annuity rates and a fall in the total amount of retirement income as providers assume annuities are purchased as early as is possible (to avoid the very real problem in this case of adverse selection<sup>12</sup>), and individuals purchase early to avoid losing out.

### **Unisex pricing could increase costs for women in other insurance products**

The ‘thin end of the wedge’ argument against unisex annuities has also been extended to the implications for other insurance products. If gender is not allowed for annuities, would it be allowed for rating other insurance products, such as motor insurance and life insurance? For example, if gender could not be used to rate life assurance, a rate between the current levels for men and women would reduce the cost of life assurance for men, but increase the costs for women. In motor insurance, unisex premiums could increase costs for women by around £100 a year (ABI, 2003b).

**Summary**

In summary, there are counter-balancing arguments making the case for and against compulsory unisex annuities in the UK. Neither side of the argument seems to have been made conclusively. The one argument that has been used successfully elsewhere for compulsory unisex annuities is that they discriminate against women – even though there are doubts about the economic logic for this argument. As annuitisation is compulsory in the UK, rather than voluntary as in countries with compulsory unisex rates, valid discrimination arguments may be stronger in the UK.

However, if a similar case of discrimination were to be successful in the UK, the precedent applies only for occupational pension schemes, which would amount to at most one-third of the current annuity market. This would increase over time.

The arguments that have been made for and against unisex annuities have not been quantified to show whether, and by how much, they would benefit women and consumers in general. This quantification is crucial. If there is a clear benefit for women, with no risk of loss, then making the case for unisex annuities is obvious. If instead there is little benefit for anyone, and some risk of loss for women and consumers in general, then there would be doubts over whether unisex annuities are really a priority.

### 3 ANNUITIES IN THE UK, USA, CANADA AND SWEDEN

Before looking in detail at the extent to which annuity rates might change on a switch to compulsory unisex pricing, and how much impact this could have on women's and men's retirement income, it is useful to consider the annuities market in a number of countries. Specifically, we focus on the use of unisex annuities in the UK, Sweden, the USA and Canada (see Appendix 2 for additional information).

Unisex annuities are used in different parts of the pension system in different countries. In the UK and Sweden, unisex annuities are used within the state pension system while in the USA and Canada, unisex annuities are used as part of the framework for the provision of employers' pension schemes. Unisex annuities are also used in some parts of the pension systems in Poland and France.<sup>13</sup>

#### **Unisex annuities in state pension systems**

In both the UK and Sweden, unisex annuities are used within the state pension system. In the UK, unisex annuities are used for protected rights pension funds. Although these are run by private pension providers, they have been built up using rebates paid by the Government to replace entitlement to SERPS and State Second Pension. As the benefits provided by protected rights funds are replacing a state benefit, the Government has legislated to ensure that the income provided by the protected rights fund is similar to that of the original benefit. Protected rights are converted to an income using a unisex annuity rate, and with the benefit increasing each year in line with inflation.

In Sweden, funds built up in the compulsory state scheme are converted into an annuity at the date of retirement. The funds are collected by the Government, which in turn provides an income stream based on the annuity rate it has set for that particular generation of pensioners. The rate adjusts automatically with unisex life expectancy, and annuities can be single or joint, level or indexed. An annuity purchase is compulsory for part of the state pension, but part can be paid out using programmed withdrawals instead of an annuity (similar to income drawdown arrangements in the UK). Unisex annuities are used in Sweden to promote *egalitarian solidarity within cohorts*, by partially compensating for the lower pensions of women (ECC, 2003b).

#### **Unisex annuities as part of employers' pension schemes**

In the USA and Canada, any annuity bought directly with the proceeds of an employer-sponsored Defined Contribution pension fund must be unisex. The rationale for this is that pensions (and annuities) provided by an employer must not

discriminate on gender, under terms of employment. However, because annuitisation of pension funds is not compulsory in either country, few employer-sponsored schemes have annuity options. Consequently, very few unisex annuities are purchased. Of the 1.6 million life annuities in payment in the USA (Brown, 2000), only one-quarter were bought with the proceeds of work savings plans (ACLI, 2003). In 2002 only 360,000 annuities are in payment in Canada, and not all will have come through employer-based schemes.<sup>14</sup>

A similar argument could be used for the use of unisex annuities in employer-sponsored pension schemes in the UK. If such an approach was taken, that an employer's pension scheme that paid a different pension to men and women because of different life expectancy was discriminatory under existing labour market legislation, unisex annuities could become compulsory for employer-sponsored schemes where annuity purchase is part of the scheme. This could affect Defined Contribution occupational pension schemes, but not group personal pension schemes or employer-sponsored stakeholder pension schemes, where the purchase of an annuity is not within the scheme.

### **Unisex annuities are not used for pensions based on individual contributions**

Unisex annuities are generally used for a specific purpose. In state (and compulsory) pension systems, they help fulfil a social welfare role of redistribution. Where there is a strong link to an employer, unisex annuities provide a cross-subsidy to help pensions to be treated as deferred wages in an employment relationship, in a similar way to Defined Benefit schemes.

With voluntary individual pension arrangements, it can be argued that there is no obvious need for redistribution, or a link between pension and pay. Where these arrangements exist in the UK, USA, Canada and Sweden, all annuity arrangements are left to the private market to provide, with no restriction on the use of gender to determine the appropriate annuity level.

### **Summary**

Unisex annuities are often used for pensions provided by the state, including in the UK, to redistribute income. In the USA and Canada, unisex annuities are also used where there is a link between an employer and a pension, to avoid gender discrimination in the labour market. This might set a precedent for the UK, for defined contribution occupational pension schemes. None of the countries examined uses unisex annuities for individual pensions (which, in a UK context, includes group personal pensions and group stakeholder pensions).

## 4 THE POTENTIAL IMPACT OF UNISEX PRICING ON ANNUITY RATES

Rates in a compulsory unisex annuity market would be very different from the unisex rates available today. The current unisex rates are written in a small, unrepresentative and uncompetitive part of the market. Unisex annuities are currently only available for 3 per cent of the annuity market,<sup>15</sup> that is, protected rights pensions.<sup>16</sup> As well as being unisex, annuity rates for protected rights pensions have to offer indexation, and have to provide a widow's pension where the purchaser is married. This is very different from most annuities purchased. Only 6 per cent of annuities purchased are indexed annuities, and only 14 per cent have a widow's pension (Stark, 2002). The relative difference between single life and joint life annuity rates, and how this would be affected by a switch to unisex rates, is discussed later in this chapter.

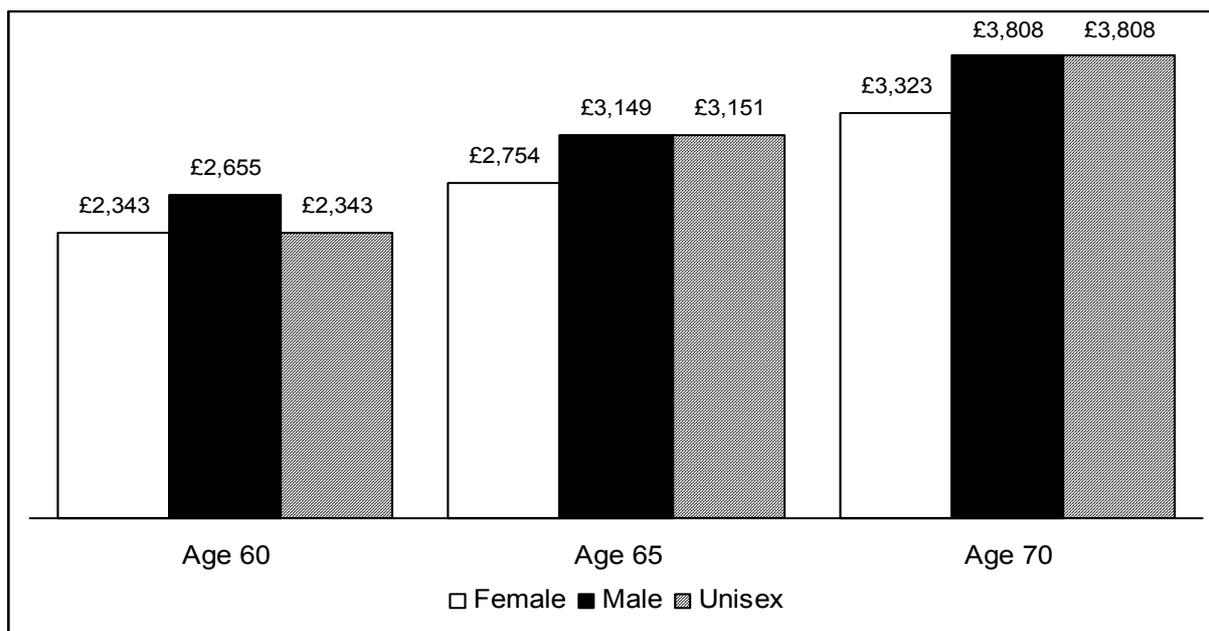
Providers may not be pricing protected rights unisex annuities accurately, or changing rates as frequently as they would if all business was written on a unisex basis. Protected rights funds also tend to be relatively small in value, and often come attached to a larger pension fund where there is no restriction on the type of annuity purchased. The unrestricted rate on the larger pot would be more important in securing the business, and so command more of the underwriter's attention.

The market for large annuities (£30,000 purchase price or above) is relatively transparent, with price comparisons for different types of annuity (such as level, indexed, single-life, joint-life) readily available. There is not such a competitive market in unisex annuities. For example, unisex rates are not available on most annuity broker websites, and are not on the FSA comparative table website.<sup>17</sup> So some unisex rates available today appear to be poor value. For example, the best unisex rate available for a woman aged 60 should logically be higher than the best female rate, but they are exactly the same (Figure 4).

However, at ages 65 and 70, the best unisex annuity rates are the same as a male annuity rate. This is 14 per cent higher than the comparable female rate. This could be because most protected rights annuities bought at age 60 are bought by women, and most at older ages are bought by men.

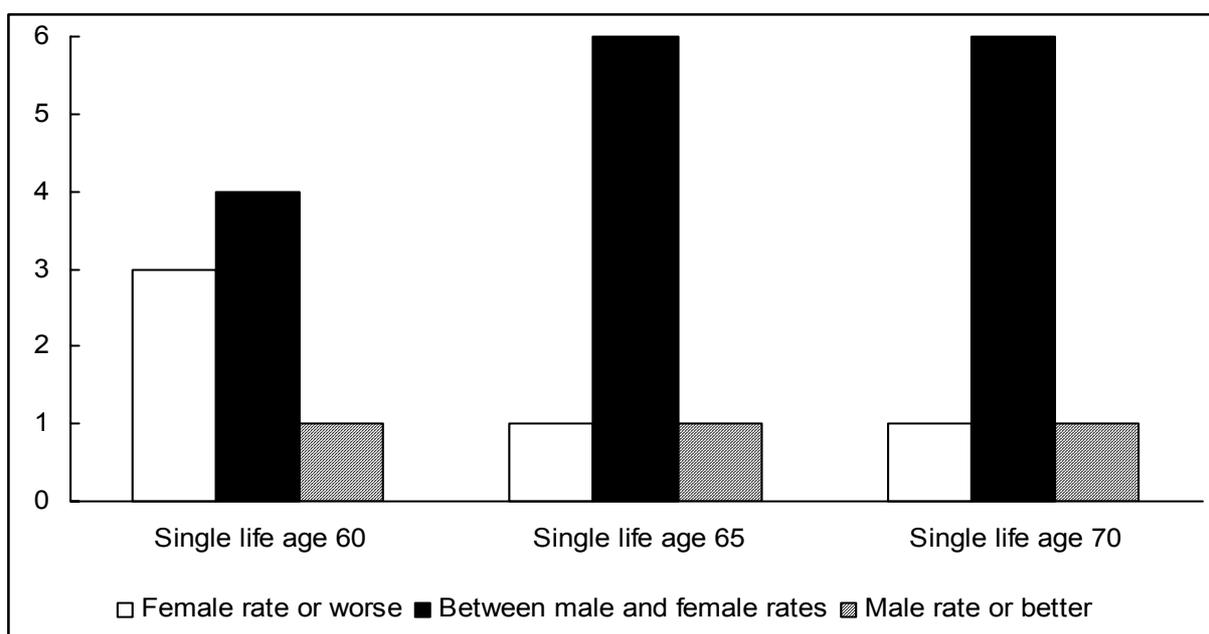
This suggests that there will not be one uniform adjustment in rates across the market if unisex annuities became compulsory. The final rate offered will continue to depend on the age at which the annuity is purchased, and the relative numbers of men and women buying annuities at that particular age.

**Figure 4 The best unisex, male and female annuity rates available**



Note: Figures provided by The Annuity Bureau, based on a purchase price of £50,000 for a single-life, LPI annuity, as at 26/02/04.

**Figure 5 Number of providers by position of unisex rates**



Note: Figures provided by The Annuity Bureau, based on a purchase price of £50,000 for a single-life, LPI annuity, as at 26/02/04.<sup>18</sup>

Different providers have different strategies for setting unisex annuity rates, and some follow different strategies for annuities bought at higher ages. Out of eight large annuity providers offering annuities at age 60: three offer unisex rates that are the

same as, or worse than, the equivalent female rates; four have unisex rates between the relevant male and female rates; and one has unisex rates as high as male rates.

It is hard to see any patterns in these rates. This may reflect differences in attention given to the small unisex market today. In a competitive market with compulsory unisex annuity pricing, these differences are likely to be ironed out. The result is likely to be that if made compulsory, unisex annuity rates should be better value than many of the unisex rates available today.

In a compulsory unisex market, the competitive rate is likely to settle between the male and female rate. Although there may initially be an additional uncertainty margin, as providers build up books of unisex annuity business, unisex rates are likely to reflect eventually how much of their business is sold to men and how much to women.

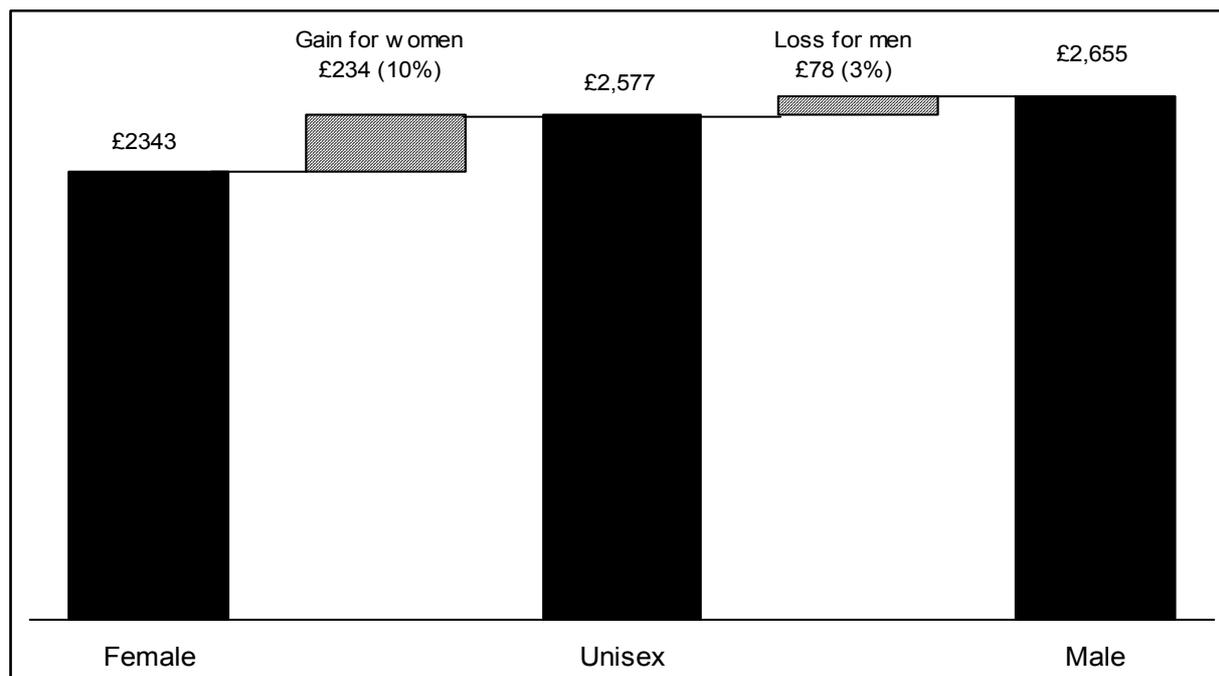
Currently, around one-quarter of annuity purchasers are women,<sup>19</sup> and this proportion is not expected to change significantly over the next ten years.<sup>20</sup> As women generally have smaller pension funds than men,<sup>21</sup> women make up less than one-quarter of the value of the annuity market. A settled, competitive market unisex annuity rate might therefore be expected to be, at worst, roughly one-quarter of the way between the current male and female rates. In other words, the rate would settle one-quarter of the way below the male rate and three-quarters of the way above the female rate.

The difference between male and female annuity rates varies between providers, depending on their view of the relative differences in life expectancy. Some providers might adjust rates by more or less than estimated here. Equally, other types of annuities (such as level or guaranteed period annuities), or annuities bought at different ages, may see different changes in rates if they are bought by more or less women. But a change of around one-quarter in the rates is likely to give a good guide to the order of magnitude of any change. If the best rates for men and women available in the current open market converged to a rate approximately one-quarter of the way between them, there could be an increase in women's annuity income of around 10 per cent, and a reduction in men's annuity income of around 3 per cent (Figure 6).

A woman without an annuity of her own, but with a partner who does have an annuity would see her partner's annuity income reduce under unisex rates compared to the gender-specific regime. If her partner buys a single-life annuity, the drop in income could be 3 per cent (Figure 6).

There is likely to be less difference in the change in joint-life annuity rates than in single life annuity rates. This is because the joint-life rate also depends on the life expectancy of the partner, which would attract a better rating on a unisex basis. This would offset some of the fall in the initial rate. At age 65, the best joint life annuity rate is currently around 12 per cent lower than the best single life annuity rate for a man.<sup>22</sup>

**Figure 6 Gains and losses with a unisex annuity rate**



Note: Based on a rate one-quarter of the way between the current best male and female annuity rates. Figures provided by The Annuity Bureau, based on a purchase price of £50,000 for a female, single-life, LPI annuity at age 60, as at 26/02/04

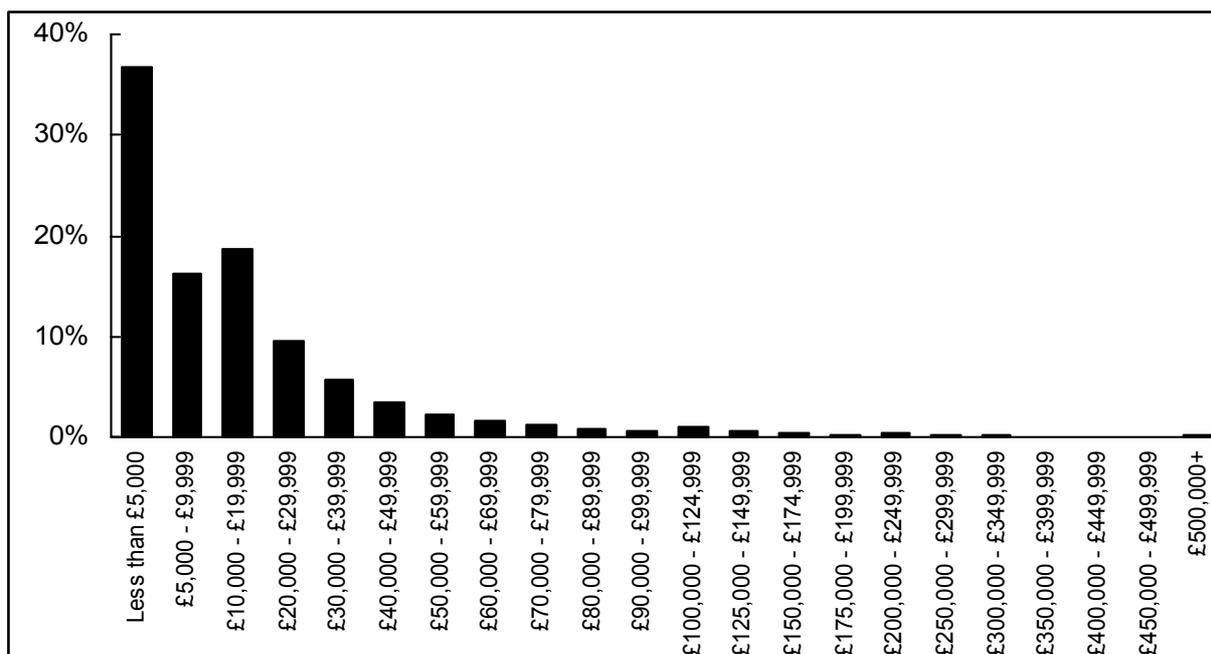
On the best open market rates, a man buying a joint life annuity at age 60 may see a fall in rates of around 1 per cent from a change to a unisex regime.<sup>23</sup> This would reduce the gap between the best joint life and single life rates to around 15 per cent.

Most women and men have small pension funds (Figure 7). People with small pension funds find it difficult to benefit from open market rates as most providers have a minimum fund value below which they will not accept a transfer. The gains from finding a better rate for a fund worth less than around £30,000 are often outweighed by the costs of providing advice and administering the transfer.<sup>24</sup>

Most men and women with small pension funds (80 per cent of current annuity purchasers), are likely to remain with their existing pension provider when purchasing an annuity. Under these circumstances, unisex rates are not likely to be as good as

the best in the market, as many pension providers are not major annuity providers. Unisex rates for these people may therefore not be any better than the female rates that are offered today. This could mean that annuity income for women would not change, but men’s annuity income could fall by 13 per cent (Figure 6). Joint life rates could fall by 4 per cent.

**Figure 7 The proportion of pension funds used to buy an annuity by size of fund, 2003**



Note: ABI statistics

**Summary**

This chapter has estimated the extent to which annuity rates might change on a switch to compulsory unisex pricing for all annuities. The best annuity rates in a compulsory unisex market are likely to be better than the unisex rates available today, and could settle around a quarter of the way between current male and female annuity rates.

This means that the best annuity rates may improve by 10 per cent for women, but worsen by 3 per cent for men. Women relying on their partner’s annuity could be worse off by around 3 per cent. The best joint life annuities for men could fall by 1 per cent, less than single life annuity rates.

However, up to 80 per cent of annuity purchasers may not have access to the best rates. Women in this situation may see no change in annuity rates compared with today, whilst men may see a fall in rates of up to 13 per cent. Joint life annuities for men could fall by 4 per cent.

## 5 THE POTENTIAL IMPACT OF UNISEX PRICING ON CURRENT RETIREMENT INCOME

In order to look at the impact of a change to unisex annuity rates, annuity income is re-estimated in this chapter, using the changes in annuity rates estimated in Chapter 4. A range of estimates is given which depend on the assumptions made about the change in annuity rates if unisex rates were made compulsory. At the top of the range (highest income) is the change in retirement income if the annuity was purchased on the open market, assuming that rates settled one-quarter of the way between the current rates for men and women. The other end of the range (lowest income) assumes that the annuity is not bought on the open market, but at an uncompetitive rate from the purchaser's existing pension provider. This is based on the current female annuity rate.

### How the quantification has been carried out

To estimate the impact of compulsory unisex annuities, the PPI has:

- Defined a number of individuals with income characteristics representative of recently-retired pensioners. For each group, there are examples representing the highest, middle and lowest quintile<sup>25</sup> of incomes. Six types of individuals are considered:
  - single women;
  - single men;
  - couples who have purchased a single life annuity;
  - couples who have purchased a joint life annuity;
  - widows who have income from a joint life annuity;
  - widows who have income from a joint life annuity, but before the switch to compulsory unisex annuities had income from a partner's single-life annuity.
- Estimated how many pensioners there are of each type in the current recently retired population. This is unlikely to change significantly in the next five years.
- Identified the possible amount of annuity income within the total income of each type of individual. The annuity income is that separately identified as personal pension income plus a high-end estimate of the occupational pension income that is from Defined Contribution rather than Defined Benefit schemes.<sup>26</sup>
- Re-calculated the annuity income on the basis of introducing unisex annuity rates now to the recent-retirees. A range of estimates is given which depend on

the assumptions made about the change in annuity rates if unisex rates were made compulsory.

- Re-calculated total retirement income with the new annuity amounts, and compared it to that before the change to compulsory unisex annuity pricing for the different types of pensioner.
- Estimated the possible impact of compulsory annuity pricing in future (Chapter 6). This reflects any expected changes in the numbers of pensioners of each type, and the relative importance of annuity income, especially because of the trend away from Defined Benefit occupational schemes and the rise of Defined Contribution schemes.

Estimates are based on data from the Pensioners' Incomes Series 2001/02, produced by the Department for Work and Pensions. Specifically, we have used information on the incomes of recently retired pensioners, who are men aged 65 to 69 and women aged 60 to 64. This group of people is broadly representative of those who will be approaching state pension age in the next five years.

The Pensioners' Incomes Series does not identify annuity income separately. However, it does identify personal pension income, and we have assumed that all of this comes from annuities. However, annuity income can also come from occupational pension schemes, so we have adjusted estimates of the number of people with annuities, and the average amount received in annuity income to take account of this. The method of adjustment is explained further in the text below.

The estimates produced in this report show the impact on people with a broad range of levels of annuity income and total retirement income. Some pensioners will be in more extreme situations than those represented (such as a very large annuity income but little other income), and may see a greater change in retirement income than that shown in the examples. Others will have less annuity income, and so see smaller changes in retirement income. However, the examples are likely to cover the vast majority of annuity purchasers.

### **How many pensioners could be affected**

There are currently 1 million recently retired pensioner couples and 600,000 single recently retired pensioners (350,000 women and 250,000 men) and 15 per cent of recently retired pensioners have personal pension income (DWP, 2003). Using estimates from the Pensioners' Incomes series on the number and proportion of men, women, single pensioners and pensioner couples with personal pension

income, these pensioners can be divided into different groups according to family status and whether or not they have personal pension income.

Some pensioners will have annuity income from DC occupational pension schemes. If, as assumed in the estimate of income from DC occupational pensions, 10 per cent of occupational pensioners had income from a DC rather than DB pension, a further 5 per cent of all recently retired pensioners would have annuity income.<sup>27</sup> Whether an annuitant buys a joint-life or single life annuity if they are in a couple can be estimated using survey information; 14 per cent of all annuities bought are joint-life (Stark, 2002). For simplicity, only men are assumed to buy joint-life annuities.

Annuities can be bought at any time up to the age of 75. Some recently retired pensioners will not yet have a personal pension income, but will have funds that will be used to buy an annuity at a later date. Although almost two-thirds of people buying annuities do so the same year that they retire, up to one-fifth of people wait longer than 3 years (Stark, 2002). The calculations take account of the numbers who defer buying an annuity and assume that, as an upper limit, the proportion of the recently retired pensioner cohort with annuity income increases from 20 per cent to 25 per cent by the time they reach age 75. These assumptions allow estimates of the number of recently retired pensioners in different groups to be made (Table 2).

**Table 2 Estimated number of recently retired single pensioners and pensioner couples with different types of annuity**

| <b>Group</b>   | <b>Number in group</b> |
|--|------------------------|
| Single women without annuities   | 325,000                |
| Single women with annuities  | 25,000                 |
| Single men without annuities   | 175,000                |
| Single men with annuities  | 75,000                 |
| Couple without annuities   | 650,000                |
| Couple – male single life annuity  | 200,000                |
| Couple – female single life annuity  | 100,000                |
| Couple – joint-life annuity<br>(where the woman could receive a widow's pension) | 50,000                 |
| <b>Total</b>   | <b>1,600,000</b>       |

Note: PPI estimates using information from DWP (2003) and Stark (2002). The figures show the number of single pensioners and the number of couples and are rounded to the nearest 25,000.

**Annuity income within total income**

Income from personal pensions currently plays a small role in pensioners' incomes. Only 15 per cent of recently retired pensioners currently have any income from a personal pension. Only 2 per cent of the average recently retired single pensioners' income and 5 per cent of the average recently retired pensioner couple's income is derived from personal pensions (DWP, 2003).

To examine how important annuity income is to pensioners in more detail, further analysis was carried out. Individual examples are based on the levels of income at different points in the income distribution of recently retired pensioners in 2001/02, derived from the 2001/02 Pensioners' Incomes (PI) Series (DWP, 2003). The income of recently retired pensioners<sup>28</sup> has been used, as they are more likely to have annuity income, and will have incomes more comparable to those reaching state pension age today than all pensioners.

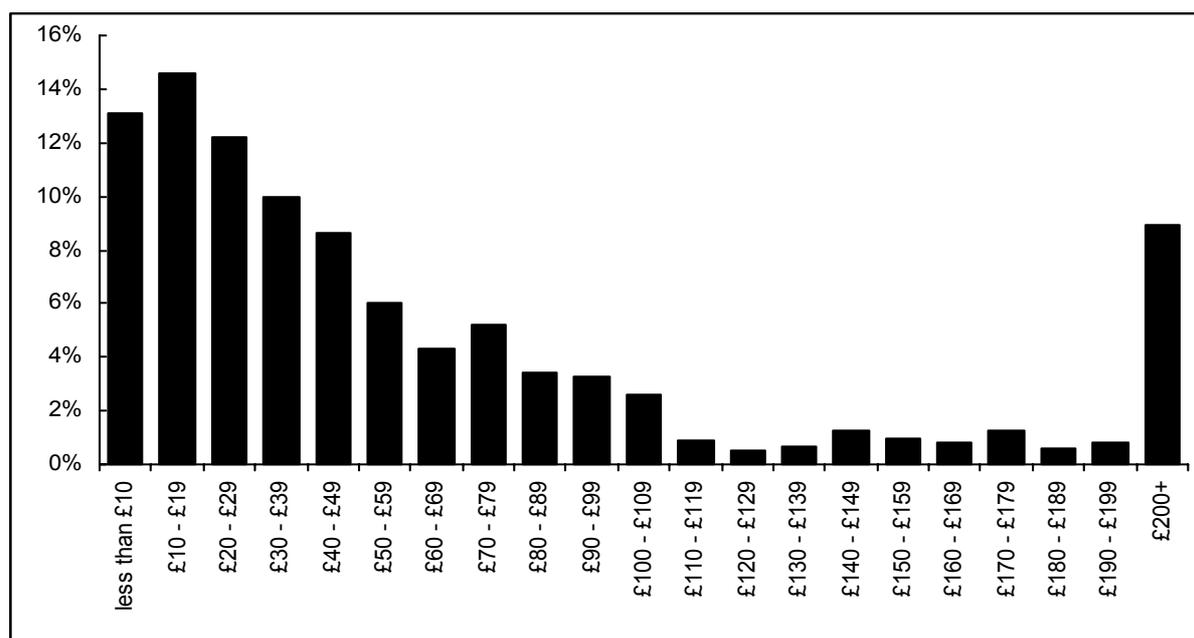
Of those recently retired pensioners who do have income from personal pensions, most have small amounts of income, but a minority have large amounts. This follows on from the distribution of pension funds available for annuity purchase. Most people have small 'pots' with 70 per cent of people buying an annuity having a fund of less than £20,000 and less than 4 per cent over £100,000 (Figure 7). A fund of £20,000 would buy an annuity of around £26 a week.<sup>29</sup> This means that even if people have income from personal pensions, it is likely to be a small amount. The average amount of personal pension income is £89 per week, but half of pensioners who have some personal pension income have less than £45 per week (Figure 8).

In the PI Series, annuity income is only separately identified if it comes from personal pensions.<sup>30</sup> Any other annuity income is recorded as part of a wider income component. For example, annuity income from a Defined Contribution occupational pension scheme is recorded alongside income from a Defined Benefit occupational pension scheme as occupational pension income. Most annuity income is currently derived from personal pensions. Most occupational pension income is from Defined Benefit schemes and so not explicitly provided through an annuity.

Income from Defined Contribution occupational pensions is likely to be low. Although in recent years the number of companies offering Defined Contribution (DC) pension schemes instead of DB schemes has risen substantially, it will take a number of years for this to feed through into a large number of workers having DC occupational pension schemes, and even longer for this to feed through in to a substantial proportion of overall retirement income. Even today, after rapid growth in DC schemes, only 10 per cent of current working-age occupational pension scheme

members belong to DC schemes (around 0.9 million, of which between 0.3 million and 0.4 million are women) (GAD, 2003). Therefore, fewer than 10 per cent of past members of occupational schemes (now pensioners) would have been in DC schemes. As DB schemes generally are closing only for new entrants (most likely to be younger workers) but staying open for continuing employees (most likely to be older workers), it will take even longer for this to feed through to a substantial proportion of overall retirement income.<sup>31</sup>

**Figure 8 Weekly personal pension income, 2001/02**



Note: All pensioners with a personal pension income. Based on data from the Pensioners' Incomes Series 2001/02 (DWP, 2003)

On this basis, assuming that 10 per cent of current occupational pension income comes from annuities is a high-end estimate. It will overstate both the proportion of pensioners receiving DC pensions, and the amount that pensioners actually receive in this form of income. Even at the highest income levels, the *average* amount received in annuity income from personal pensions is relatively low, as few recently retired pensioners receive any income from annuities. Using the average amount of annuity income received in each part of the income distribution would under-estimate the importance of annuity income to those who have annuities. The average is significantly reduced by the number of pensioners who have no annuity income.

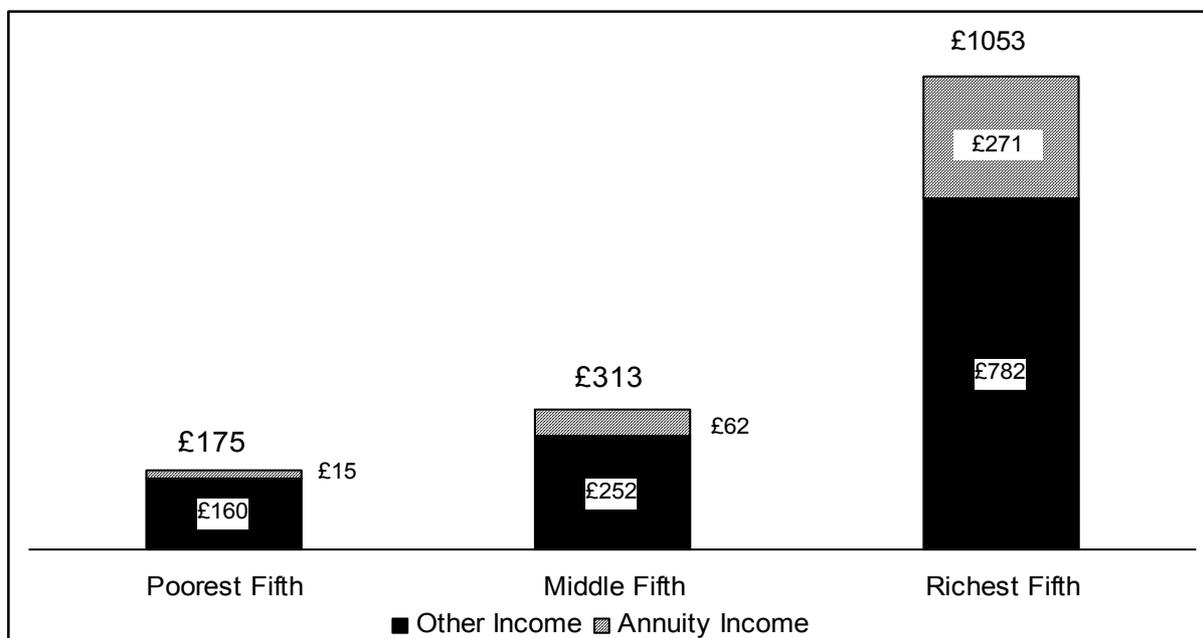
The annuity income used in the examples has been derived from the distribution of personal pension income, adjusted to take account of income from DC occupational pensions. It has been assumed that annuity income is distributed in a similar way to total income. Pensioners in the bottom fifth of the income distribution are assumed to

receive the lowest 20 per cent of personal pension incomes, while the richest fifth of pensioners have the highest 20 per cent of annuity incomes.

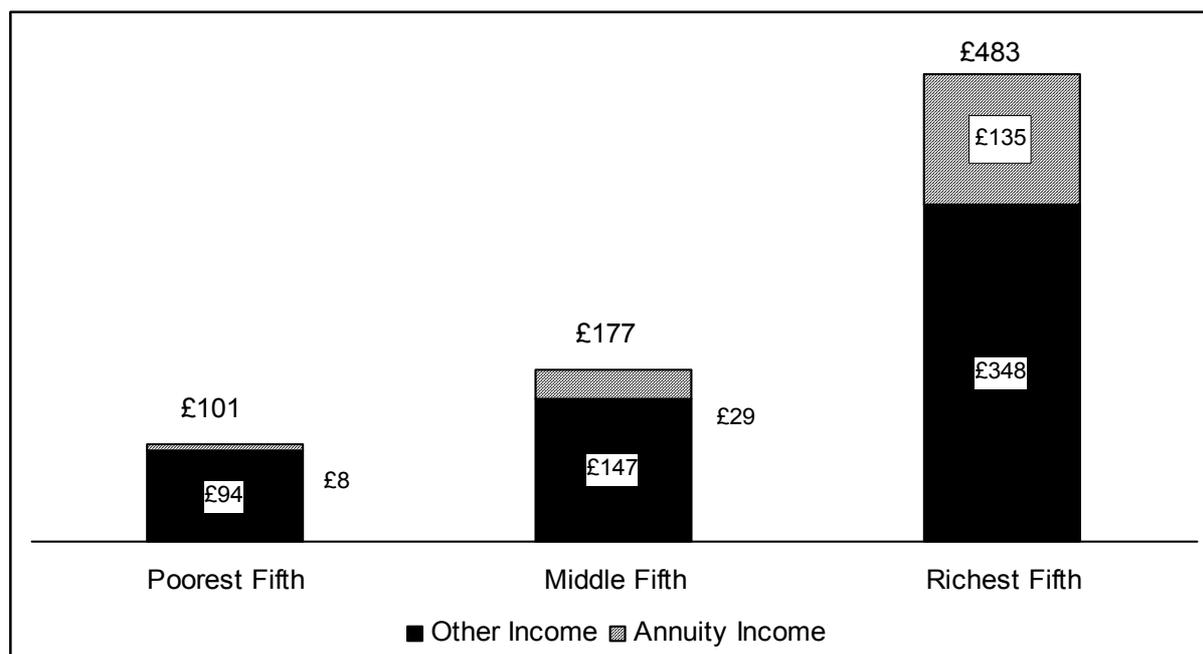
This derived distribution is likely to overstate the importance of annuity income at the bottom of the income distribution, and understate its importance at the top. This is because, in general, higher income individuals are more likely to have annuity income, even if it is only a small part of their overall income. The estimates produced using this simplified derivation will overstate the gains to women pensioners, who are more likely to be towards the bottom of the income distribution with the smallest annuities. The estimates show the largest likely impact.

The individuals used are assumed to have the same total income as the averages in the poorest, middle and richest quintiles for single pensioners and for pensioner couples. They are then assumed to have personal pension income at the corresponding level in the personal pension income distribution, adjusted for singles and couples. On average, personal pension income for recently retired pensioner couples who have personal pensions is twice as high as the comparable figure for single pensioners. The figures used in the examples have been adjusted to take account of this difference.

**Figure 9 Gross weekly income of pensioner couples, by component**



Note: PPI illustrative examples based on data from the Pensioners' Income Series 2001/02 (DWP,2003)

**Figure 10 Gross weekly income of single pensioners, by component**

Note: PPI illustrative examples based on data from the Pensioners' Income Series 2001/02 (DWP, 2003). Examples of men and women are based on the same income levels. This simplification is unlikely to significantly alter the estimated outcomes.

To look at the impact of a change to unisex annuity rates on widow's incomes, individual widow's incomes have been constructed based on the PI data for couples. Widows are assumed to inherit 75 per cent of the benefit income from the couple (to allow for some inheritance of second-tier pensions and potential entitlement to income related benefits), all of the investment income and other income, but no earnings. Half of occupational pension income is assumed to be inherited. The resulting incomes are similar to those faced by single pensioners (Figure 11).

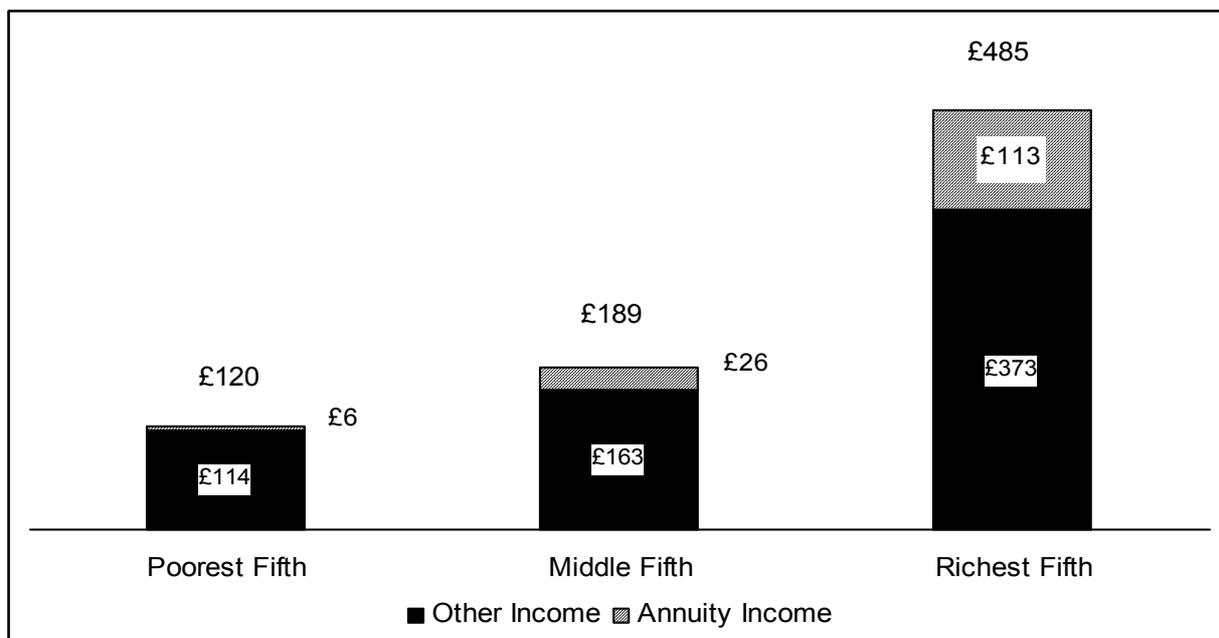
### **Total retirement income with the new annuity amounts**

As highlighted above, annuity income is generally only a small component of overall income, particularly for low income pensioners who receive most of their retirement income from the state. This means that any change in most pensioners' total retirement income following a change in annuity rates would be limited.

Annuity income has been recalculated on the basis of introducing unisex annuity rates now to recent retirees. Two scenarios are used for the new unisex rates, as described in the last chapter. The first is that in a competitive market, rates should settle one-quarter of the way between female and male rates, closest to the male rate. This would produce a 10 per cent increase for women's annuity rates, a 3 per cent fall for men's and a 1 per cent fall in joint life annuity rates. The second (producing lower income) is that the buyer does not have the opportunity to shop

around for a competitive rate, and the actual rate obtained is no better than current female rates. This would be no change for women’s annuity rates, a fall of 13 per cent in men’s rates, and a 4 per cent fall in joint life rates. Table 3 shows the income changes for the different example individuals. Figures are rounded to the nearest 1 per cent.

**Figure 11 Gross weekly income of widows, by component**



Note: PPI illustrative examples based on data from the Pensioners' Income Series 2001/02 (DWP,2003). Totals may not sum due to rounding.

The largest income change is for men with large annuities who only attract a poor rate (at the current women’s levels). Only the richest women pensioners see gains of 3 per cent, assuming they can transfer to the best rate available. Most single women are likely to be in the lower quintiles.

Gains for couples where the woman provides the annuity income follow a similar pattern to that seen for single women. Changes for couples with joint life annuities are much smaller, reflecting the smaller change in joint-life rates.

Widow’s incomes see little change, as they are based on half of the annuity income from a joint-life annuity. Where the change in rates leads to a change in annuity purchase from single-life to joint life, widow’s income can be substantially improved. However, this is at the cost of reduced income for the couple, before widowhood. A pensioner couple in the top quintile could have retirement income up to 7 per cent lower with a unisex joint life annuity, compared to a male single life annuity. If they bought a unisex single life annuity, the fall in retirement income could only be as high

as 3 per cent, so the cost of choosing a joint life rather than a single life annuity is as much as 4 per cent. But with a joint life annuity a surviving widow could see income increase by almost one-quarter.

**Table 3 Change in total retirement income from a switch to unisex rates**

|  | Per cent         |                 |              |
|--|------------------|-----------------|--------------|
|  | Poorest quintile | Middle quintile | Top quintile |
| <b>Single pensioner</b>  |                  |                 |              |
| Male   | -1 to -*         | -2 to -1        | -4 to -1     |
| Female   | 0 to 1           | 0 to 2          | 0 to 3       |
| <b>Pensioner couple</b>  |                  |                 |              |
| Single life male annuitant   | -1 to -*         | -3 to -1        | -3 to -1     |
| Single life female annuitant   | 0 to 1           | 0 to 2          | 0 to 3       |
| Joint life male annuitant  | -* to -*         | -1 to -*        | -1 to -*     |
| <b>Surviving widow, joint life annuity</b>   |                  |                 |              |
| Change in widow's income   | -1* to -*        | -2 to -*        | -3 to -*     |
| <b>Surviving widow, switch from single to joint life annuity (personal pension only)</b> |                  |                 |              |
| Change in initial payment  | -2 to -1         | -5 to -3        | -7 to -4     |
| Change in widow's income   | 5 to 5           | 14 to 16        | 27 to 30     |

Note: \* denotes less than 0.5 per cent

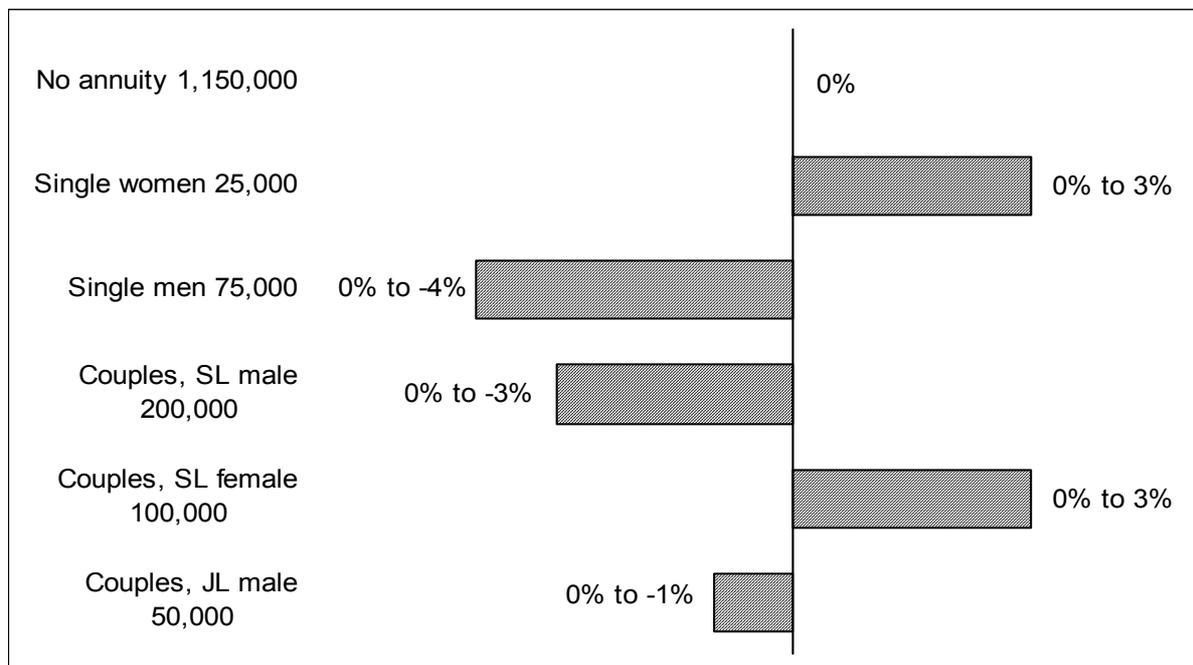
The pattern of changes in retirement income is summarised in Figure 12. It shows that a move to a unisex annuity regime is unlikely to bring about a significant change in retirement income for most pensioners.

This pattern of winners and losers arises because:

- Fewer than one-quarter of pensioners have an annuity. 15 per cent of recently retired pensioners already have income from annuities and a further 5 per cent may have annuities from occupational pensions. However, annuities do not have to be purchased until age 75, so there will be some pensioners who do not have annuity income yet but will have in the future. By the time all of today's recently retired pensioners reach age 75, one-quarter of them may have bought an annuity. The remainder do not have personal pensions or income from a DC scheme.
- Most single women pensioners with annuities could see retirement income increase by less than 3 per cent. Single women pensioners gain from the switch

to unisex annuity rates, while single male pensioners lose out. But twice as many single men have income from annuities as single women.

**Figure 12 Illustrative changes in total retirement income and numbers affected after a move to unisex annuities**



Note: PPI estimates based on data from DWP (2003). SL = single life, JL = joint life. Numbers are based on the 1.6 million recently retired pensioners and each group is rounded to the nearest 25,000. It shows the number of pensioner couples and single pensioners who are affected, rather than the number of individual pensioners. Recently retired is within 5 years of state pension age, 65-69 for men and 60-64 for women. A recently retired couple is where the head is aged 65-69.

- Pensioner couples could have retirement income up to 3 per cent lower. Couples are more likely to have more income from personal pensions than single pensioners. And in around three-quarters of couples with annuity income it is the husband who buys the annuity.<sup>32</sup> However, as with single pensioners, most pensioner couples could see small changes in retirement income, often less than 2 per cent. Only the richest pensioner couples, with the largest annuities worth more than £250 a week could see retirement income changing by 3 per cent. This would require a pension fund of £170,000, in the highest 1 per cent of pension funds.<sup>33</sup> Couples buying joint-life annuities could see smaller changes in their retirement income, of up to 1 per cent.
- Widows could see retirement incomes fall by around 1 per cent. Widows receiving income from a unisex joint life annuity could see a reduction in total

income of around 1 per cent compared to the income from a joint life annuity before compulsory unisex annuities.

- If compulsory unisex rates led to the husband buying a joint life annuity rather than a single life annuity, then the widow's income could be up to one-quarter higher. However, there would still be a difference between single and joint life annuity rates of around 15 per cent in a unisex regime, so choosing a joint life instead of a single life annuity could reduce retirement income by up to 8 per cent. Given this initial drop in income for the pensioner couple, it is unlikely that a change to unisex annuities would, by itself, lead to a significant change in the proportion of joint-life annuities bought.
- Lower income pensioners see smaller changes in their retirement income than higher income pensioners. This is because a smaller proportion of their income comes from annuity income, and more comes from the state. Women pensioners are therefore more likely to see smaller changes in retirement income, as they tend to have smaller annuities and lower retirement income.

It should be noted that this analysis overstates the potential benefits and potential losses from unisex annuities for those on means-tested benefits. If income from an annuity is reduced (for men) or increased (for women), this will have a knock-on impact on entitlement to Pension Credit (PC), and other means-tested benefits such as Housing Benefit (HB) or Council Tax Benefit (CTB), especially for those with relatively low income levels. In future, this could extend to most pensioners at some point during their retirement.<sup>34</sup>

Any increase in annuity income is unlikely to be enough to lift women above PC levels. Even if some gain enough to be lifted above the PC level initially, they are likely to fall back below PC levels later in their retirement as the PC level increases rapidly over time.

For those that remain on PC, the gain in retirement income from a higher annuity income will be offset by lower PC payments, and also lower HB and CTB if applicable. For every £1 increase in annuity income for a single female pensioner or widow, who was entitled to PC, there would be a reduction in PC of 60p. If she were also entitled to HB and CTB, her total income would increase by only 9p for every £1 of additional annuity income.

However, the losses from lower annuity rates for men would be offset by higher PC, CTB and HB payments. If a single male pensioner or pensioner couple with a single

life annuity were entitled to PC, for every £1 of income that was lost through a switch to unisex annuities PC would increase by 60p. If he were entitled to HB and CTB as well, the combined increase in benefits would be 91p.

This offset has not been taken into account in the analysis in this chapter, as it is not clear from the original data how much state pension income is derived from means-tested benefits.

### **Summary**

This chapter quantified the impact unisex annuity pricing could have on women's and men's retirement income and suggests that unisex annuities are unlikely to be of significant or widespread benefit. Following a change to unisex annuity pricing it is estimated that:

- Fewer than one-quarter of pensioners would see any change to their retirement income.
- More than three times as many pensioners could see a lower retirement income as benefit from a higher one.
- The average gains and losses would be small.
- Some wives and widows would receive lower income.

This pattern arises partly because changing to a unisex pricing regime will not change most annuity rates significantly, as shown in the last chapter. It is also the case that annuities form a small proportion of retirement income for most people.

## 6 THE POTENTIAL IMPACT OF UNISEX PRICING IN FUTURE

Annuities are expected to become a more important part of retirement income for more people. There are a number of factors that will determine the pattern of annuity purchase in the future.

- **The total amount of annuity income bought is expected to increase 10 per cent a year over the next 10 years** (ABI, 2003a).<sup>35</sup> This is largely due to a combination of a larger number of people retiring (as the baby-boom generation reach their 60s) and the availability of personal pensions to this particular group, after their introduction in 1988.
- **The number of people purchasing a pension annuity could increase to around 400,000 per year by 2012.** In 2002 around 250,000 people purchased an annuity.<sup>36</sup>
- **One-third of people with personal pensions likely to be retiring in the next 10 years are women.**<sup>37</sup> There could therefore be between 100,000 and 150,000 women a year buying annuities by 2012, compared to between 50,000 and 100,000 today. One-third of people buying an annuity are likely to be women, as compared to one-quarter today.
- **Only 10 per cent of women likely to retire in the next 10 years currently have personal pensions.** It will still be the case that a minority of women pensioners buy an annuity.<sup>38</sup> Almost twice as many are likely to rely on annuities bought by partners.
- **It will take a number of years for the change in employer schemes from DB to DC to feed through so that a large number of workers are in a DC scheme.** In 2000, less than 10 per cent of occupational pension scheme active members (0.9 million) belonged to a DC arrangement. As DB schemes generally are closing only for new entrants (most likely to be younger workers) but staying open for continuing employees (most likely to be older workers) it will take even longer for this to feed through in to a substantial proportion of overall retirement income.

Using these indicators, the distribution of recently retired pensioners by family types and annuity types can be re-estimated for 2012 (Table 4).<sup>39</sup>

**Table 4** Estimated number of recently retired single pensioners and pensioner couples with different types of annuity, 2012

| Group  | Number in group  | Impact of unisex annuity rates |
|--|------------------|--------------------------------|
| Single women without annuities   | 325,000          | No change                      |
| Single women with annuities  | 50,000           | Gain                           |
| Single men without annuities   | 200,000          | No change                      |
| Single men with annuities  | 75,000           | Lose                           |
| Couple without annuities   | 650,000          | No change                      |
| Couple – male single life annuity  | 225,000          | Lose                           |
| Couple – female single life annuity  | 150,000          | Gain                           |
| Couple – joint-life annuity (where the woman could receive a widow's pensions) | 75,000           | Lose                           |
| <b>Total</b>   | <b>1,750,000</b> |                                |

Note: PPI estimates using information from DWP (2003) and Stark (2002) based on growth factors from ABI (2003a) and PPI analysis. The figures show the number of single pensioners and of couples. Figures are rounded to the nearest 25,000.

In 20 years from now annuity income may have a larger influence on retirement income. If trends in occupational pension provision continue, a majority of occupational pensioners may eventually have at least part of their occupational pension income from an annuity. However, the impact on retirement income from a change to unisex annuities is still likely to be small. A large proportion of retirement income is still likely to be provided by the state (Curry, 2003a).

By 2050, the proportion of income from annuities is likely to be higher still, as people starting work today have less access to Defined Benefit occupational pension schemes than previous generations. But, even if all retirement income other than state pension income were derived from annuities (a massive overstatement of the likely reality) the richest women pensioners might only gain 9 per cent in retirement income, and the richest men pensioners might lose 11 per cent<sup>40</sup> (Table 5). As today, most men and women would see a much smaller change in their retirement income. It is still likely that women would have lower retirement income than men, and so be in the lower income quintiles rather than higher.

If the PC is still in place in 2050, and has been uprated in line with earnings as assumed in government projections, between 65 per cent and 80 per cent of pensioners could be eligible for PC (Curry and O'Connell, 2003: 30). Changes in

annuity income would not lift many pensioners clear of the PC, but gains and losses would be offset by changes in PC payments for most pensioners.

**Table 5** Change in total retirement income from a switch to unisex rates, assuming all occupational pension is from annuities

|                              | Per cent         |                 |              |
|------------------------------|------------------|-----------------|--------------|
|                              | Poorest quintile | Middle quintile | Top quintile |
| <b>Single pensioner</b>      |                  |                 |              |
| Male                         | -2 to -1         | -4 to -1        | -10 to -2    |
| Female                       | 0 to 2           | 0 to 3          | 0 to 8       |
| <b>Pensioner couple</b>      |                  |                 |              |
| Single life male annuitant   | -2 to -1         | -6 to -1        | -11 to -3    |
| Single life female annuitant | 0 to 2           | 0 to 5          | 0 to 9       |
| Joint life male annuitant    | -1* to -*        | -2 to -1        | -3 to -1     |

### Summary

Although annuities will become more widespread in future, the pattern of benefits and losses is likely to remain similar to those seen today. Even if all private retirement income came from annuities, most pensioners' incomes would change by significantly less than 10 per cent.

## 7 OTHER FACTORS AFFECTING FUTURE ANNUITY RATES

The case for unisex annuities should be seen in the context of other changes in the market that would tend to diminish the importance of gender as a rating factor. This section looks briefly at some of those other changes.

### **Enhanced annuities**

Enhanced annuities are offered to people with a particular lifestyle or characteristic that would on average change their life expectancy relative to people who do not have that characteristic. For example, smoking, manual work and (more recently) living in certain areas have all been identified as associated with lower life expectancy, and so annuity rates can be priced for higher income. In 2002, almost 10 per cent of the money used to purchase pension annuities was used to buy enhanced or impaired life annuities. As many as 40 per cent of people buying annuities may qualify for an enhanced or impaired life annuity over the next 10 years (ABI, 2003a).

Enhanced annuities offer much more scope for women to improve their annuity rates than unisex pricing does. An annuity for a woman with recent, but not spreading, lung cancer, is more than four times higher than the best standard female annuity, whereas the best male standard annuity is only 13 per cent higher.<sup>41</sup> As enhanced and impaired life annuities are underwritten on other individual characteristics, they are less directly gender related; an impaired life annuity rate, for example, is based on the estimated life expectancy of the individual. These types of annuity should still be available in a unisex annuity market.

### **Annuity alternatives**

Limited period annuities (LPA), and an annuity alternative called an alternative secured income (ASI) are recent government proposals (DWP and IR, 2002; IR, 2003) that may be on offer from 2005. An LPA lasts for a fixed length of time (for example, 5 years), so there is likely to be less difference in the rates available between men and women. LPA's and an ASI may also be more attractive to people who do not expect to live for a long time, and who want to keep pension assets outside of a traditional annuity. If they prove most attractive to 'impaired lives', the pricing will reflect that. This would mean that there would be a smaller difference in rates for men and women than exists for conventional annuities.

### **Increasing longevity**

Further increases in life expectancy (Figure 2) would lead to annuity rates falling further. This could accelerate the demand for specialised annuities, income

drawdown, or the LPA and ASI products. It will also mean that the difference between male and female rates will be less important in £ per week terms for the same purchase price. Changes in life expectancy do appear to be feeding through into a narrowing difference between male and female annuity rates. Between January 2002 and December 2003, the difference between male and female rates reduced by more than 2 per cent.<sup>42</sup>

### **Better access to advice**

Women could benefit from better access to advice on shopping around for an annuity. Shopping around for the best annuity rate yields a better annuity rate than a switch to unisex pricing. For example, the worst standard annuity rate for a woman is nearly 40 per cent lower than the best, while the best male rate is only 13 per cent higher<sup>43</sup> than the best female rate. However, people with larger pension funds are best able to take advantage of better annuity rates and shopping around for the best rate is generally only possible through an adviser, as most annuity providers do not sell directly to the public. In reality, the cost of advice makes small pension funds unattractive to advisors, and can also more than offset any increases in the annuity rate. Many providers will not take in a transfer for a small fund. A typical target fund size for the provision of advice starts at £50,000<sup>44</sup> whereas 90 per cent of annuities are sold with fund sizes smaller than this (Figure 7), so most people buying annuities are doing so with little or no advice.

There is no evidence from the last few years that the average size of funds used to buy an annuity is increasing.<sup>45</sup> Lower long-term investment returns would reduce the growth of pension funds,<sup>46</sup> so even if contributions increased, there would be little increase in the average size of pension funds with which to buy an annuity at retirement.<sup>47</sup> If investment returns are significantly higher than expected, there may be more growth in the average size of pension funds used for annuity purchase, and so more people may be able to afford advice.

Women are more likely to have a smaller pension fund than men,<sup>48</sup> so it is even more difficult for women to get the best annuities available. The smaller size of the pension funds held by women arises from fewer years in work, at lower pay, with less access to occupational and other pension schemes (Curry, 2003b).

It is therefore important for everyone to be advised on their options when buying an annuity, so that they shop around for the best rate. It is even more important for women. It is unlikely that most women will have large enough funds to easily find individual advice in the current market place, suggesting a different type of advice, or structure of providing advice, is needed.

### **Taking small funds as a lump sum**

Women could also benefit from extending the use of a lump sum as an alternative to annuity purchase for small pension funds. Currently any pension fund (after deduction of the tax-free lump sum) that would pay out less than £260 a year can be taken as a lump sum (subject to a tax charge) without the need to buy an annuity. This limit is currently more beneficial to women than men, as the higher annuity rates faced by woman mean than larger pension funds can be commuted. A woman with a pension fund of less than around £3,750 would get less than £260 a year, which can thus be taken as a lump sum. A man can only take a lump sum if his fund is less than around £3,500.<sup>49</sup>

The purpose of an annuity - to insure against an individual's money running out because he or she lives longer than expected – hardly operates when the amount of income is so small. Commuting the income and taking the fund as a lump sum seems sensible and of practical value. Under government proposals (IR, 2003) the limit will change to any lump sum that is worth less than 1 per cent of the proposed £1.5 million lifetime limit (£15,000). (2004 budget) So it could be possible to take pension funds worth less than £15,000 as a lump sum rather than being used to buy an annuity. This will cover around two-thirds of all annuities purchased (Figure 7).

The limit as currently proposed will apply to each individual pension fund, so that someone with two pension funds each worth less than £15,000 would be able to commute them both (i.e. take them both as a lump sum). However, to reduce the possibility of an individual planning their pension saving in such a way that they can take as much money as possible in lump sum payments rather than having to convert their fund into an annuity, the Inland Revenue may alter the current proposal and allow lump sum payments only where the sum of *all* pension funds is worth less than 1 per cent of the lifetime limit. As women tend to have smaller pension funds than men, commutation of small pension funds is more likely to be of benefit to women than men.

### **Summary**

Developments in annuity pricing are diminishing the relevance of gender as a rating factor. This may mean that, compared to a policy of unisex pricing, women could benefit more from, for example, better access to any advice on shopping around for an annuity and extending the use of a lump sum as an alternative to annuity purchase for small pension funds.

## 8 CONCLUSION

This paper has examined the possible implications of introducing compulsory unisex annuities in the UK. Although many arguments have been made for and against the introduction of compulsory unisex annuities, neither case has been made conclusively.

The decision whether or not introduce compulsory unisex annuities in the UK therefore depends crucially on the potential impact on the annuity market, and on retirement incomes today and in the future.

Our analysis suggests that there is no reason why compulsory unisex annuities could not be introduced. There is likely to be an initial adjustment period, as the industry monitored trends and re-assessed risks, where the cost of annuity provision increases. But eventually the market would collect enough information to allow a competitive market to reduce these costs back towards current levels.

However, the impact on overall retirement income from compulsory unisex annuity rates would be small. More people would see lower retirement income, and not even all women who have annuities would see higher incomes. Many women with annuities would not have access to competitive annuity rates, and might not get a better deal than today. Lower male annuity rates would also lead to wives who rely on their husband's income seeing lower income in retirement.

This is because the number of people with annuities is low and the average size of annuities is small. This is likely to remain the case, even over the next 50 years as annuities grow in importance.

Therefore, if unisex annuity rates were to be implemented, it should be understood that these will not be of significant benefit to women. It is likely that more pensioners would see a lower retirement income than higher, including some women who depend upon their husband's pension in retirement.

## **APPENDIX 1                      TERMS OF REFERENCE**

The aims of the study were to:

- Explore the experience of countries which have introduced unisex annuity rates and identify any lessons for the British situation.
- Assess the likely industry response to the introduction of unisex annuities in Britain, in the light of those countries that have equalised annuity rates.
- Investigate the likely impact on the levels of annuity rates and the extent to which women would benefit, or men lose out, as a result of the changes.
- Explore how effective unisex annuities would be in raising women's income in retirement over time.

## APPENDIX 2 INTERNATIONAL COMPARISONS

This appendix describes the use of unisex annuities in the UK, the USA, Canada and Sweden.

### **Annuities in the UK<sup>50</sup>**

For all money purchase pensions (personal pensions, group personal pensions, defined contribution occupational pension schemes), purchase of an annuity is compulsory by the age of 75 with at least 75 per cent of the fund (25 per cent can be taken as a lump sum). A range of different types of annuity can be purchased, with choices between single or joint-life, level or indexed (also called increasing), with or without a guarantee period, and more recently annuities linked to investments. There are few restrictions on the type of annuity that has to be bought with most pension funds, and approximately 97 per cent<sup>51</sup> of annuities that are purchased are written on a gender-specific basis.

Unisex annuity rates are compulsory for 'Protected Rights' pensions. These are pensions derived from the contracted-out rebate received in place of SERPS/S2P benefits. These funds must be used to buy a unisex annuity that increases in line with inflation,<sup>52</sup> and with a survivor's benefit if the individual is married. During 2003, there were over 300,000 annuities bought with pension funds in the UK.<sup>53</sup>

### **Annuities in the USA**

The USA pension system is a mixture of unfunded state pension provision, and voluntary occupational and private tax incentivised savings. The state-funded Old Age, Survivors and Disability Insurance (OASDI) operates on a pay-as-you-go, earnings-related basis, based on work history (higher earners receive higher benefits). In addition, a means-tested flat-rate pension is payable to people aged 65 and over.

The USA also has a well developed voluntary, funded, pensions and savings sector. Private pensions can be arranged on either an employer or an individual basis. In 2000, 48 per cent of the civilian work force had employer-sponsored pensions (Campbell and Munnell, 2002). Historically, many employer-sponsored arrangements have been Defined Benefit (DB) schemes, but an increasing proportion of workers are becoming covered by Defined Contribution (DC) arrangements, and in particular 401(k) plans (employer-run defined contribution pension arrangements<sup>54</sup>). While in 1984 only 10 per cent of active participants in employer-sponsored plans were in 401(k) plans, by 1997 this had increased to 35 per cent (Campbell and Munnell, 2002).

Annuitisation is not mandatory in employer-sponsored plans. However, where annuities are bought by employer-sponsored plans they must use unisex annuity tables. This is because the Supreme Court held that employer sponsored plans are subject to title VII of the Civil Rights Act of 1964, which prohibits sex discrimination by employers with regard to the terms of employment. There were two separate decisions for this: *City of Los Angeles Dept of Water & Power v Manhart*, 435 US 702 (1978) and *Arizona Governing Committee v Norris*, 463 US 1073 (1983). The basis was that the Act requires fairness to individuals, and different treatment may not be based on generalizations about a class (here, the longer life expectancy of women), even if true. The Supreme Court ruled that because any individual women may die before any individual man, average life expectancies of men and women as a whole should not be used to predict how long an individual will live (Campbell and Munnell, 2002). These rulings cover DB and DC arrangements, including 401(k) plans where annuities (or withdrawal of benefits as an income) are part of the plan. However, in reality most 401(k) plans pay out lump sum payments, and few even offer an annuity option. Over 70 per cent of 401(k) plan participants do not have an annuity option as part of their plan (Brown, 2000).

Since 1974, individuals have been able to contribute to an Individual Retirement Account (IRA). IRAs are defined contribution arrangements (similar to UK personal pensions), and in 2002 42 million households (40 per cent of the total) in the USA owned an IRA (Munnell, 2003). Lump sum payments from 401(k) plans can also be transferred in to an IRA.<sup>55</sup> There is no mandatory annuitisation in the USA for IRAs. Individuals decide whether or not to purchase an annuity or withdraw funds in other ways (including as a lump sum). Where annuities are purchased from an IRA, they are normally bought on a gender-specific basis.

Because of the choice of whether or not to buy an annuity, insurers are at risk of adverse selection – those likeliest to live longest are most likely to buy an annuity. This makes annuities more expensive than they would be in a compulsory market. As a consequence, relatively few annuities are bought in the USA, and most are not on a unisex basis. There were 1.6 million life annuities in payment in 1998 (Brown, 2000). Around one-quarter of annuities are purchased using a work-based plan (ACLI, 2003).

### **Annuities in Canada**

Canada has a flat-rate, citizenship based state Old Age Security pension. This is supplemented by a compulsory earnings-related Canada Pension Plan (and a similar Quebec Pension Plan covering Quebec). Both of these operate on a pay-as-you-go

basis. The state pension system is supplemented by voluntary employer-sponsored and individual private pension saving.

Employer-sponsored provision is arranged through Registered Pension Plans (RPPs)<sup>56</sup> and 40 per cent of paid workers are covered by an RPP. Although over half of RPPs are Defined Contribution schemes, these are generally small, private sector schemes. Over 90 per cent of RPP members are in Defined Benefit arrangements (Disney and Johnson, 2001). In Defined Contribution RPPs, an annuity must be bought, unless an employee dies or leaves with short service, in which case a lump sum payment is allowed. Alternatively, the pension fund can be transferred temporarily to a Life Income Funds (LIF) or locked-in retirement income fund (LRIF - similar to income drawdown arrangements in the UK), but these must be converted into an annuity by age 80.

Locked-in pension funds (including RPPs) have to use unisex rates to calculate annuity payments, as outlined in Section 27 of the Pensions Benefit Standards Act 1985. This section explicitly outlaws sex discrimination and advocates the use of unisex annuities.<sup>57</sup>

For individuals not covered by RPPs, Registered Retirement Savings Plans (RRSPs) are available. These are individual contracts between individuals and providers. Annuity purchase is not mandatory and a life annuity can be bought but a guaranteed (limited period) annuity may be purchased instead. Funds from an RRSP can also be placed in a Registered Retirement Income Fund (RRIF), from which funds can then be withdrawn at any time, which is then taxed as income. The fund must have been converted into an annuity or RRIF by age 71. Unlike locked-in funds, annuity purchases from RRSPs or RRIFs are not made on a unisex basis. In 2002, only 360,000 life annuities were in payment in Canada.<sup>58</sup>

### **Annuities in Sweden**

Sweden has a mixed (pay-as-you-go and funded) state pension system, consisting of two pillars (Palmer, 2000). The first pillar is the Income Pension, a contributory (16 per cent of pensionable income), earnings related pay-as-you-go pension, which is run as a Notional Defined Contribution scheme. The second pillar is the Premium Pension, a contributory (2.5 per cent of pensionable pay) funded Defined Contribution. The two pillars are under-pinned by a Guaranteed Pension, a flat-rate minimum pension for those with no or little earnings related pension. All compulsory pension contributions are paid in to the Pensions Payment Agency (PPA), and from there contributions to funded schemes are paid to nominated fund managers (or into a default fund if not manager is nominated).

There is no fixed retirement age. Benefits can be drawn from age 61, or can be postponed indefinitely. Income and Premium Pensions can be claimed separately. Funds built up in both the Income Pension and the Premium Pension are converted into an annuity at the date of retirement. The state provides the annuities for both the notional, and the funded annuities. The funds (notional and actual) are collected by the Government, which in turn provides an income stream based on the annuity rate it has set for that particular generation of pensioners. The rate adjusts automatically with unisex life expectancy, and annuities can be single or joint, level or indexed. While annuity purchase is compulsory for the Income Pension, the Premium Pension can be paid out using programmed withdrawals instead of an annuity, similar to the income drawdown arrangements in the UK.

Employers offer (voluntary) occupational pension schemes, based on collective agreements. Around 90 per cent of workers are members of occupational schemes, and the four largest schemes cover 80 per cent of the workers. The majority of members belong to Defined Benefit arrangements, but there has been an increasing shift to Defined Contribution schemes. In 2000, occupational pensions accounted for 14 per cent of total pension income (ECC, 2003).

There is also private individual pension provision in Sweden. In 2001, almost 2 million people made contributions to individual pension arrangements, representing 50 per cent of those aged 15-64. Individual pensions contributed 5 per cent to total pension income in 2000 (ECC, 2003).

There are no specific regulations governing annuity purchases made with the proceeds of Defined Contribution and individual pension arrangements, which can be taken as a lump sum, or used to buy any type of annuity.<sup>59</sup>

## **GLOSSARY**

### **401 (k) Plan**

A defined contribution pension scheme offered by employers in the USA, and named after the tax code which defines it. Employers must offer to match initial employee contributions, and the funds can be accessed before retirement in certain circumstances. At retirement, the fund can be taken as a cash amount, or used to purchase an annuity.

### **Adverse selection**

Where a person with one risk profile is more likely to take out insurance (or buy an annuity) than a person with a different risk profile. For example, in an annuity market, adverse selection occurs where people who are likely to live longer than average buy annuities, while people who are likely to live shorter than average do not buy them.

### **Annuity**

An insurance product that pays an income from the date of purchase until the date of death. An annuity insures against an individual's money running out because he or she lives longer than expected.

### **Defined benefit (DB)**

A DB pension scheme will provide a pension that is expressed as a proportion of earnings - for example  $1/60$  - for each year of membership. Earnings are usually based on an individual's salary at, or close to, retirement, but can also be an average across the length of time spent working.

### **Defined contribution (DC)**

A DC pension scheme is based on contributions that are invested on behalf of the individual. At retirement the pension will depend on the accumulated fund and the annuity rates available at that time.

### **Enhanced annuity**

An annuity that offers a preferential rate to people who may be at higher risk of living for a shorter period of time than the average. Smokers, or people in certain occupations or certain parts of the country may be able to get enhanced annuities.

### **Guaranteed annuity**

An annuity that will continue to make payments for a minimum period of time (usually 5 or 10 years) or to make the remaining minimum payments as a lump sum to the annuitant's estate.

### **Impaired life annuity**

An annuity that offers a preferential rate to those with health problems who have a higher risk of living for a shorter period of time than average. Qualifying health conditions include cancer, diabetes and high blood pressure.

### **Income drawdown**

An alternative to an annuity where the pension fund remains with the pensioner, as long as certain amounts of income are taken each year. This allows pensioners to retain some control over the investment of the fund, to take flexible income amounts, and to pass on the fund to dependants if they die. Under current legislation, the pension fund must be converted to an annuity before age 75.

### **Indexed annuity**

An annuity that pays an increasing amount every year, depending on the increase agreed with the provider. This can be a fixed rate each year, say 3 per cent, or linked to increases in the cost of living.

### **Investment-linked annuity**

An annuity where the amount paid out each year depends on the performance of the underlying assets, such as stocks and shares. The income from the annuity can go down as well as up.

### **Joint life annuity**

An annuity based on the lives of two individuals (often a husband and wife). The annuity pays a certain level of income when both individuals are alive, and then a reduced level of income for the rest of the surviving partner's life.

### **Level annuity**

An annuity that pays out the same amount each payment, throughout the life of the annuitant.

### **Limited period annuity**

An annuity that only pays for a set period of time, such as 5 years. At the end of the period, another annuity can be purchased.

### **Occupational pension**

A pension scheme organised by an employer on behalf of its employees. Only employees of the organising employer(s) can join the scheme, and active membership ends when the employee no longer works for the employer. These are different from group personal pensions (GPPs) and group stakeholder pension arrangements, which are separate arrangements made between an individual and a pension provider, facilitated by an employer.

**Open Market Option (OMO)**

Holders of individual personal pensions have the right to buy an annuity from a provider different to their personal pension provider. This is known as the open market option.

**Pension Credit**

Pension Credit (PC) is a means-tested benefit introduced in October 2003. PC combines a Guarantee Credit for those aged 60 and above, with a Savings Credit for those aged 65 and above. The Savings Credit provides an additional amount related to how much other income is being received on top of the level of the full amount of Basic State Pension.

**Personal Pension**

Personal pensions are arranged by an individual - contributions are invested and at retirement the accumulated fund will be used to purchase an annuity. Instead of offering an occupational pension scheme, an employer may arrange to pay into a group personal or stakeholder pension on behalf of their employees. These are a collection of individual arrangements, but charges may be reduced by arranging a number of plans together.

**Private pension**

Any pension that is not provided by the state, including occupational pensions, personal pensions and stakeholder pensions.

**Protected Rights**

A pension fund that has been built up using contracted-out rebates paid by the government. These funds must be used to buy a unisex annuity, with statutory indexation requirements.

**Single life annuity**

An annuity that is based on the life on one individual. Payments last until that individual dies.

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## ENDNOTES

<sup>1</sup> See Appendix 2 for detail on the unisex annuity regimes in the UK, US, Canada and Sweden.

<sup>2</sup> See Glossary for further information.

<sup>3</sup> PPI estimate based on data from the Pensioners' Incomes Series 2001/02 (DWP, 2003), assuming a maximum of 10 per cent of all occupational pension income comes from Defined Contribution schemes - this is likely to be an overestimate.

<sup>4</sup> From PPI interviews with industry experts.

<sup>5</sup> The Annuity Bureau.

<sup>6</sup> Figures provided by The Annuity Bureau, based on a purchase price of £50,000 for a female, single-life, LPI annuity, as at 26/02/04.

<sup>7</sup> ABI estimates, based on the top 3 male and female rates available for a person aged 65, based on a purchase price of £10,000.

<sup>8</sup> Based on information taken from the FSA's Comparative Tables ([www.fsa.gov.uk/tables](http://www.fsa.gov.uk/tables)) as at 4 March 2004. The figures refer to the best rate available on an unrestricted basis for a single life, level annuity with no guarantee taken at age 65, with a purchase price of £50,000. ©The Financial Services Authority.

<sup>9</sup> PPI calculation of the present value at age 65 of future annuity income, discounted by 3 per cent per year.

<sup>10</sup> A point made in more than one of the PPI interviews with industry experts.

<sup>11</sup> Britannic Retirement Solutions closed to new business on 10 November 2003, citing the low return on capital available in the annuities market.

<sup>12</sup> See Glossary.

<sup>13</sup> These countries were not studied in this analysis.

<sup>14</sup> Canada Life and Health Insurance Association.

<sup>15</sup> PPI estimate, from interviews with industry experts.

<sup>16</sup> See Glossary.

<sup>17</sup> [www.fsa.gov.uk/tables](http://www.fsa.gov.uk/tables).

<sup>18</sup> The 8 companies represented are Canada Life, Clerical Medical, Friends Provident, GE Life, Legal and General, Norwich Union, Prudential and Standard Life. Figures for Norwich Union are based on an RPI linked annuity.

<sup>19</sup> PPI estimate, based on the number of recently retired pensioners with personal pension income from the Pensioners' Incomes Series 2001/02 (DWP, 2003).

<sup>20</sup> PPI analysis of the Family Resources Survey 2001/02, based on the population aged 45-60.

<sup>21</sup> Although there is no definitive data concerning pension fund size by gender, median personal pension income for recently-retired women in receipt (£24 a week) is around half of that for men (£53 a week). Some of this difference will be due to the age of annuity purchase and the impact of female annuity rates, but some can be explained by a lower initial lump sum.

<sup>22</sup> Based on information taken from the FSA's Comparative Tables ([www.fsa.gov.uk/tables](http://www.fsa.gov.uk/tables)) as at 8 March 2004. The figures refer to the best rate available on an unrestricted basis for a level annuity with no guarantee taken at age 65, with a purchase price of £50,000, and a wife age 62. ©The Financial Services Authority.

<sup>23</sup> PPI estimate based on a difference between male and female joint life rates of around 4 per cent. Annuity figures provided by The Annuity Bureau, based on a purchase price of £50,000 for a joint-life, LPI annuity at age 60, as at 26/02/04.

<sup>24</sup> From PPI interviews with industry experts.

<sup>25</sup> One quintile is 20 per cent, so the bottom quintile of the Pensioners' Incomes Series represents the 20 per cent of pensioners with the lowest incomes.

<sup>26</sup> This assumption also overstates the possible annuity business subject to compulsory annuity rates if the precedent from the US and Canada were applied in the UK. The precedent does not apply to voluntary individual business, which is the majority of business assumed here to be affected. The analogous business in the UK (DC employer-sponsored) is likely to be less than one-third of all annuity business, whereas the calculations assume that all annuity business is subject to unisex rates.

<sup>27</sup> Please see discussion below 'Annuity income within total income'. 10 per cent is likely to be an overestimate. No allowance is made for overlap between those with a DC occupational pension and a personal pension.

<sup>28</sup> Recently retired is within 5 years of state pension age, 65-69 for men and 60-64 for women. A recently retired couple is where the head is aged 65-69.

<sup>29</sup> Based on information taken from the FSA's Comparative Tables ([www.fsa.gov.uk/tables](http://www.fsa.gov.uk/tables)) as at 8 March 2004. The figures refer to the best rate available on an unrestricted basis for a level annuity with no guarantee taken at age 65, with a purchase price of £20,000. ©The Financial Services Authority.

<sup>30</sup> It is assumed that all personal pension income comes from annuities, although in reality some may come from income drawdown.

<sup>31</sup> See PPI Briefing Note 2: The shift from DB to DC.

<sup>32</sup> PPI estimate based on data from DWP (2003).

<sup>33</sup> PPI estimate based on buying a single-life, level annuity at age 65.

<sup>34</sup> By 2025 it is estimated that between two-thirds and three-quarters of pensioners could be entitled to Pension Credit. (Curry and O'Connell, 2003).

<sup>35</sup> Assuming that contributions to pension funds remain at the same proportion of average earnings as they do now.

<sup>36</sup> Calculation for the PPI by Watson Wyatt, broadly consistent with ABI (2003a).

<sup>37</sup> PPI analysis of the Family Resources Survey 2001/02, based on the population aged 45-60.

<sup>38</sup> PPI analysis of the Family Resources Survey 2001/02, based on the population aged 45-60.

<sup>39</sup> This assumes no change in the proportion of annuities that are joint life.

<sup>40</sup> This estimate also overstates the impact, by assuming that the gain or loss in annuity income from unisex pricing in future is the same as would be expected today. Given the increased use of

underwriting and trends in life expectancy, future gender-specific rates may be closer together than such rates are today (see Chapter 4).

<sup>41</sup> Figures provided by The Annuity Bureau, based on a purchase price of £50,000 for a female, single-life, LPI annuity, as at 26/02/04.

<sup>42</sup> ABI estimates, based on the top 3 male and female rates available for a person aged 65, based on a purchase price of £10,000.

<sup>43</sup> Figures provided by The Annuity Bureau, based on a purchase price of £50,000 for a female, single-life, LPI annuity, as at 26/02/04.

<sup>44</sup> From PPI interviews with industry experts.

<sup>45</sup> ABI Quarterly Long-Term Business Statistics.

<sup>46</sup> Although many projections suggest that future investment returns will be lower there is still considerable uncertainty as to the size and pattern of future investment returns FSA (2003).

<sup>47</sup> ABI (2003a) projects significant growth in the aggregate amount spent on annuities over the next 10 years, but no change in the average size of annuities.

<sup>48</sup> Although there is no definitive data concerning pension fund size by gender, median personal pension income for recently-retired women in receipt (£24 a week) is around half of that for men (£53 a week). Some of this difference will be due to the age of annuity purchase and the impact of female annuity rates, but some can be explained by a lower initial lump sum.

<sup>49</sup> PPI calculations, based on single life, level annuity with no guarantee at age 65.

<sup>50</sup> PPI (2003) provides a detailed overview of the UK pension system.

<sup>51</sup> PPI estimate, based on interviews with industry experts.

<sup>52</sup> Up to a certain limit - 3 per cent if the rebates were paid before 1997, and 5 per cent if after 1997.

<sup>53</sup> ABI Quarterly Long-Term Business statistics.

<sup>54</sup> See Glossary for further information.

<sup>55</sup> In fact a large proportion of funds held in IRAs is believed to be rolled over from employer sponsored plans (Munnell, 2003).

<sup>56</sup> Details of the private pension sector are based on OECD (1995).

<sup>57</sup> The Act can be downloaded from [www.laws.justice.gc.ca/en/P-701/](http://www.laws.justice.gc.ca/en/P-701/)

<sup>58</sup> Canada Life and Health Insurance Association.

<sup>59</sup> PPI discussions with a Swedish Life Insurance company.