

**PENSION SCHEMES ACT 1993**

**REBATES AND REDUCED RATES OF  
NATIONAL INSURANCE CONTRIBUTIONS  
FOR MEMBERS OF CONTRACTED-OUT  
SCHEMES**

**Consultative note by the Government Actuary**

**August 2000**

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## 1. INTRODUCTION

1.1 The Pension Schemes Act 1993 makes provision for members of pension schemes who are contracted-out and the sponsoring employers, and those with appropriate personal pensions, to pay reduced rates of National Insurance contributions or to receive payments from the Inland Revenue ("rebates"). Separate provisions apply in relation to membership of salary-related contracted-out schemes ("COSRS"), to membership of money purchase contracted-out schemes ("COMPS"), and to membership of appropriate personal pensions ("APPs"). By membership of a contracted-out pension arrangement, employees give up all or part of their rights to "additional pension" (the state earnings-related pension, "SERPS", soon to be reformed by the introduction of the state second pension) as described below.

1.2 The same Act requires reconsideration of rates of rebate and/or reductions in National Insurance contributions at intervals of not more than five years. The Government Actuary is required to report to the United Kingdom Parliament on "changes ... in the factors ... affecting the cost of providing benefits of an actuarial value equivalent to that of the benefits, which ... are forgone by or in respect of members of salary-related contracted-out schemes". Similar requirements apply for other types of contracted-out arrangement.

1.3 In March 1996 my report on the draft orders setting out rates of reductions in National Insurance contributions and rebates for the current quinquennium, covering the period April 1997 to April 2002 (GAD1996) was laid before Parliament by the then Secretary of State for Social Security, along with the relevant draft orders (DSS1996a, DSS1996b, DSS1996c) and his own report (DSS1996d). An interim report covering the period April 1999 to April 2002 (GAD1998) was laid before Parliament in March 1998, along with the relevant draft orders (DSS1998a, DSS1998b) and the then Secretary of State's report (DSS1998c). The relevant sections of the Pension Schemes Act 1993 require such orders to be made at least one complete tax year before they come into effect. It is anticipated, therefore, that the Secretary of State for Social Security will wish to lay before Parliament draft orders affecting the rates of reduction in National Insurance contributions and rebates to apply from April 2002 until April 2007 before April 2001. My reports on "the cost of providing benefits of an actuarial value equivalent to the benefits ... forgone" for each type of contracted-out arrangement will need to be laid before Parliament at the same time.

1.4 This consultative note aims to set out my views on "the factors ... affecting the cost of providing benefits of an actuarial value equivalent to that of the benefits ... forgone" by members of all types of contracted-out pension arrangements. Where appropriate, factors which are considered to differ for different types of contracted-out arrangement are considered separately. The key factors to be considered are:

- economic, ie
  - rates of investment return after retirement relative to price increases, and
  - rates of investment return before retirement relative to earnings increases;
- demographic (principally mortality assumptions); and
- the level of expenses incurred by contracted-out arrangements.

1.5 There are no formal questions to be answered, but comments on all aspects of the note are welcome, and should be made, by **31 October 2000**, to:

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1.6 Additional copies of this consultation document are available from the Government Actuary's Department, contact details as above, or can be downloaded as a .pdf file from the website. A full list of all those to whom the consultation document is being sent is shown in appendix G. Copies of responses may be made public at a later date. If you do not wish your views to be made publicly available, it would be helpful if you could say so in your response.

Christopher Daykin CB FIA

Government Actuary

August 2000

## 2. LEGISLATIVE BACKGROUND

2.1 Chapter II of Part III of the Pension Schemes Act 1993 (sections 40 to 49 inclusive) makes provision for members of pension schemes who are contracted-out, including those with appropriate personal pension schemes, and the sponsoring employers of occupational pension schemes to pay reduced rates of National Insurance contributions or to receive payments (“rebates”) from the Inland Revenue. Separate provisions apply in relation to reductions in contributions in respect of membership of salary related contracted-out schemes (sections 41 and 42), to reductions in contributions and rebates in respect of membership of money purchase contracted-out schemes (sections 42A, 42B and 45B), and to rebates in respect of membership of appropriate personal pensions (sections 43 to 45B inclusive). Section 48A describes the benefits that those members who are contracted-out by any route will give up as a result of being contracted-out, by stipulating that, in effect, periods of contracted-out employment should currently be treated as if no primary – employees’ – National Insurance contributions had been paid (“breaking the links”). Accordingly, no additional pension will be paid to those currently contracted out.

2.2 These provisions are subject to modification by the Child Support, Pensions and Social Security Act 2000, which seeks to reform SERPS through the introduction of the state second pension (S2P). Although the commencement date of these provisions is planned to be 6 April 2002, the provisions relating to S2P have not yet been commenced. In particular, section 34 of that Act amends sections 42(1)(a)(ii), 42B(1)(a) and 45A(1)(a) of the Pension Schemes Act 1993 to alter the reference to the benefits given up as a result of membership of a contracted-out pension scheme or an appropriate personal pension. Reference is now made not only to section 48A, but also to Schedule 4A to the Social Security Contributions and Benefits Act 1992, which was inserted by section 31(3) and Schedule 4 to the Child Support, Pensions and Social Security Act 2000. The effect is to stipulate that, following the introduction of S2P, in certain circumstances only a part of the additional pension will be given up by those contracted out, with the benefit being given up defined in paragraphs 6 and 7 of Schedule 4A to the 1992 Act. For further details, see appendix A(i).

2.3 Certain aspects of sections 42, 42B and 45A of the Pension Schemes Act 1993 are left unchanged by the Child Support, Pensions and Social Security Act 2000. Sections 42(2), 42B(1) and 45A(1) have the effect of requiring reconsideration of rates of rebate and/or reductions in National Insurance contributions at intervals of not more than five years. Section 42(1)(a)(ii) requires the Government Actuary (or the Deputy Government Actuary) to report not only on the rates of reduction in National Insurance contributions applying under section 41, but also on “changes ... in the factors ... affecting the cost of providing benefits of an actuarial value equivalent to that of the benefits, which ... are forgone by or in respect of members of salary related contracted-out schemes”. Similarly, section 42B(1)(a) requires the Government Actuary to report, broadly, on “the cost of providing benefits of an actuarial value equivalent to that of the benefits, which ... are forgone by or in respect of members of money purchase contracted-out schemes”. And section 45A(1)(a) requires the Government Actuary to report, broadly, on “the cost of providing benefits of an actuarial value equivalent to that of the benefits, which ... are forgone by or in respect of members of appropriate personal pension schemes”. As mentioned in paragraph 1.3 above, the same sections of the Act require any order by the Secretary of State for Social Security to vary the rate of reduction in National Insurance contributions or rebates, to which the Government Actuary’s reports would relate, to be made at least one complete tax year before they come into force. Hence for new rebates to apply from 6 April 2002, the relevant orders and the Government Actuary’s reports must be laid before Parliament by 5 April 2001.

2.4 Generally speaking, the factors affecting the costs of providing the benefits forgone are not affected by the exact nature of the benefits given up. In addition, although Schedule 4A to the Social Security Contributions and Benefits Act 1992 describes the benefits given up by those contracted-out in a new way, there will be, in effect, no change in the benefit given up by members of contracted-out occupational pension schemes. Hence figures given in this consultative document for rebates for COSRS and COMPS stand equally whether or not the benefit under consideration is affected by the introduction of S2P.

2.5 Paragraph 7 of Schedule 4A to the Social Security Contributions and Benefits Act 1992 stipulates, for members of appropriate personal pension schemes, a benefit given up following the introduction of S2P that will not be a single proportion of earnings in the range between the lower and upper earnings limits. Although this difference will affect the quantum of the rebate by altering the amount of benefit given up, as noted above it should not affect the economic or demographic assumptions appropriate for assessing the actuarial value of the benefit given up. Hence the rebate rates described in section 6 and shown in appendices D and E can be taken as either applying to “band 3” earnings (for a definition, please see appendix A(i) paragraph A.2) if those provisions have come into effect or to all earnings between the lower and upper earnings limits if the provisions of the Child Support, Pensions and Social Security Act 2000 have not come into effect.

2.6 Paragraph 2(5) of Schedule 4A to the Social Security Contributions and Benefits Act 1992 enables a “second appointed year” to be specified at a future date, in or after which additional pension will accrue only on earnings in “band 1”, ie up to the “low earnings threshold”, for those attaining “pensionable age” (commonly referred to as “state pension age”) after a prescribed date. However, such a measure would not affect the benefits defined as being given up by those contracted-out, where the additional pension and the amount given up would continue to be calculated as described in appendix A(i), using the formulae set out in paragraphs 5, 6 and 7 of Schedule 4A with no limitation to earnings in “band 1”.

2.7 Schedule 9 to the Welfare Reform and Pensions Act 1999 introduced considerable changes to the parts of the Social Security Contributions and Benefits Act 1992 which deal with National Insurance contributions, as did the Social Security Act 1998. In effect, from April 2000, primary (employees) and secondary (employers) National Insurance contributions are not payable on earnings between the lower earnings limit and the “primary threshold” and the “secondary threshold” respectively. From April 2001, both the primary and secondary thresholds will be aligned with the single person’s tax allowance, somewhat above the lower earnings limit. However, in order to protect individual benefit entitlements, additional pension and, therefore, reductions in National Insurance contributions and rebates for members of contracted-out pension arrangements will continue to be based on earnings in the range from the lower earnings limit to the upper earnings limit – “upper band earnings” or “the relevant part” in legislation. The necessary amendments to the Pension Schemes Act 1993 reflecting this approach were made by Part II of Schedule 9 to the Welfare Reform and Pensions Act 1999. These amendments allow offsetting of amounts of reductions of contributions in the first instance against National Insurance contributions on behalf of the individual member of the contracted-out scheme and then against other liabilities for National Insurance contributions that the employer may have. In the event that there is any remaining amount to be offset, this may be met by the payment of an appropriate amount by way of refund to the employer by the National Insurance Contributions Office.

2.8 In assessing the actuarial value of the benefits given up reference should be made to the nature of any survivors' pensions payable. In this context the terms of sections 54 to 56 of the Welfare Reform and Pensions Act 1999 have been considered, along with the announcement made to the House of Commons by the Secretary of State for Social Security on 15 March 2000. The benefits to survivors which have been allowed for in valuing the additional pension given up are listed in appendix A(ii) of this document.

2.9 Section 7 of the Welfare Reform and Pensions Act 1999 permits different rebates to be set for contracted-out money purchase schemes and for appropriate personal pensions according to whether or not such arrangements are stakeholder pension schemes. Generally whether or not a pension arrangement is or is not a stakeholder pension scheme should not affect the cost to the arrangement of providing benefits of an actuarial value equivalent to the benefit given up. Therefore I do not propose to recommend different rebates or reductions in National Insurance contributions for members of stakeholder schemes compared to members of the same type of arrangement that is not a stakeholder scheme.

2.10 The Social Security Contributions (Transfer of Functions etc.) Act 1999 transferred responsibility for what was formerly the Contributions Agency of the Department of Social Security from the Secretary of State for Social Security to the Board of the Inland Revenue. Responsibility for certain associated functions were also transferred to the Inland Revenue. The Contributions Agency became an executive office of the Inland Revenue, called the National Insurance Contributions Office. The National Insurance Contributions Office's responsibilities include supervision of the requirements that schemes must meet in order to be contracted out, and payment of rebates to COMPS and APPs.

### **3. ECONOMIC FACTORS**

#### **Rate of investment return after retirement, relative to price increases**

3.1 The liability represented by a National Insurance additional pension in payment, like the cash flow arising from index-linked UK government bonds (“gilts”), is linked to increases in the retail price index. The security of the two cash flows, from an additional pension and from a government issued index-linked gilt, could be said to be of broadly similar quality. Hence, to derive an assumption for the rate of return applicable to additional pension rights that come into payment from pensionable age (or from death in the case of pensions to surviving spouses), it is appropriate to consider the yields on gilts.

3.2 The graph in appendix B shows annualised gross redemption yields in real terms available on index-linked gilts with terms of over 5 years since 1985, assuming inflation of 5% a year (published yields on this basis being available over the entirety of this period). This shows that these real annual gross redemption yields are broadly in the range 3.25% a year to 4.5% a year over the period from 1985 until 1997. Annualised gross redemption yields have currently fallen to previously unprecedented levels, of around 2% a year. For the most recent period figures have been published assuming inflation of 0% a year. Interpolating between figures for the two different inflation assumptions suggests that on an assumption of inflation of 2.5% a year, consistent with the Chancellor of the Exchequer’s inflation target, yields would currently be about 0.1% higher than the figures shown in the graph.

3.3 Yields on comparable government index-linked bonds issued by other governments around the world might be expected broadly to offer, in the long term, similar real returns and yields as UK government index-linked bonds. In making such comparisons, medium-term deviations of currency exchange rates from purchasing power parity and differences in definitions of price inflation in different countries have to be allowed for. Evidence given in the February 2000 paper to the Faculty of Actuaries, “Pensions and low inflation” (Fac2000), suggests that, as at October 1999, yields on government index-linked bonds in different countries, excluding the UK, ranged between 3.5% a year and 5% a year. Similar evidence is also given in Phillips & Drew2000.

3.4 I propose to use an annual rate of return after retirement relative to price increases of 2.0% a year for those retiring in 2002-03, increasing by 0.1% a year until it reaches an annual rate of 3.5% a year for those reaching pensionable age in 2017-18 and subsequent years. This will apply to all types of contracted-out pension arrangements.

#### **Rate of investment return before retirement, relative to earnings increases**

3.5 While additional pension benefits given up by those contracted out would increase in line with prices after retirement, making it possible to derive an appropriate interest rate at which to value them by considering index-linked gilt yields, additional pension benefits given up increase before retirement in line with increases in average earnings (ignoring the year immediately before pensionable age). There is no comparable asset class that can be used to derive directly an appropriate interest rate for returns relative to earnings increases.

3.6 Many pension arrangements would invest in assets such as equities or property to back liabilities in respect of future pensions for those not yet retired. As well as offering the possibility of protection against changes in the real value of money over the long term, it is generally hoped that such assets will offer a higher rate of return than assets with a higher level of guarantee such as gilts, albeit with potentially greater variability. A judgement has to be made as to the extent to which any such higher rates of return should be allowed for in determining the “actuarial value equivalent to that of the benefits, which ... are forgone” by those who are contracted out. Although investment in such assets may affect the cost of providing a certain quantum of benefits, that could well be associated with higher variability or in some cases risk of default.

3.7 Since the 1960s most UK pension funds have invested substantially in equity investments and have enjoyed considerably higher returns than they could have earned from investment in bonds. There are many studies available of the returns in investments over past periods. For example, based on figures in Phillips & Drew 2000 the real rate of return net of price inflation has been 7.6% a year on average over the 37-year period 1963-99 from investment in UK equities, compared to a real return of 2.5% a year on average from investment in bonds and 2.3% a year from cash. Equities have had much less of an advantage over bonds in the last 10 years, because of the effect of the general fall in interest rates over that period, with average real returns over the period 1990-99 having been 11.0% a year for equity investment, 9.4% a year for bond investment and 4.3% a year for cash. Fixed interest bonds are not a very suitable investment to be held against earnings-linked liabilities, but index-linked gilts could be seen as offering a useful hedge, since prices and earnings move broadly together over long periods, with the real rate of increase of earnings averaging between 1½% a year and 2½% a year over most periods of 10 years since 1950 (DSS 2000 page 4). The real return on index-linked gilts over the 10 years 1990-99 was 5.8% a year, although this also includes the effect of a substantial fall in real yields, as mentioned in paragraph 3.2.

3.8 Asset allocations now being recommended to reasonably mature pension schemes would have perhaps 20-30% weighting in bonds, almost entirely in index-linked gilts, and 70-80% in equities, perhaps half in the UK and half overseas. Most actuaries are assuming that this is consistent with assuming real returns net of earnings of at least 2% a year in the long term, with many using 2½% or 3%. In view of the uncertainties over future returns I propose to adopt a rate at the cautious end of this spectrum, namely a rate of investment return before retirement relative to earnings increases of 2% a year for all forms of contracting out.

### **Nominal rate of investment return**

3.9 An assumption about future nominal rates of return is required in respect of the period of one year immediately before attainment of pensionable age, when there is no earnings-linked revaluation of the additional pension benefit given up. It is also required in making allowance for the fact that rebates for COMPS and APPs are paid by the National Insurance Contributions Office after the end of the tax year of the earnings to which the rebates relate (see paragraphs 5.5 and 5.7). Consistent with the assumed long-term real yield on index-linked gilts (3.5%) and the Chancellor of the Exchequer's inflation target of 2.5%, I propose a rate of 6% a year for use in these circumstances.

### **Revaluation of GMPs for early leavers**

3.10 Consistent with the economic assumptions, an appropriate fixed rate of revaluation for guaranteed minimum pensions (accruing until April 1997 for members of contracted-out salary related schemes) for those leaving contracted-out employment after 5 April 2002 would be 4.5% a year.

## **4. DEMOGRAPHIC FACTORS**

### **Mortality of members of contracted-out pension arrangements and their spouses**

4.1 Projections of future mortality rates have been made by the Government Actuary's Department and the Continuous Mortality Investigation Bureau of the Faculty and Institute of Actuaries (CMIB).

4.2 The Government Actuary has, since 1954, produced the official population projections for the United Kingdom and its constituent countries, the most recent being the 1998-based projections (ONS2000). In preparing these, mortality rates need to be projected to make allowance for future improvements. Such rates are for the population as a whole, rather than specifically for members of occupational or personal pension arrangements.

4.3 Analysis of National Insurance Contributions Office administrative data on pensioners with additional pensions (SERPS) have allowed comparison of the mortality of those who have been contracted-out with the mortality of the population as a whole. These comparisons have been performed both on "lives" and "amounts" bases. (A mortality investigation on a "lives" basis considers each person, and how likely they are to die at each age, while an investigation on an "amounts" basis considers each unit of pension paid. Mortality rates on an "amounts" basis are generally lighter than those on a "lives" basis, because they are weighted towards the wealthier part of the population.) The "amounts" effect in this case is limited by the truncation of additional pension and thus on reductions for those who have been contracted-out at the upper earnings limit. Clearly the analysis is only possible at ages where current pensioners have additional pensions or have been contracted-out at some point since SERPS and contracting-out were introduced in 1978 (up to age 80, say). The results on an "amounts" basis suggest that the ratios of mortality rates for those who have been contracted out to population mortality rates are around 81% for men and 87% for women.

4.4 The CMIB analyses data from a large number of life insurance companies. This allows them to produce data on the mortality experience of holders of a wide range of different products sold by the companies, and standard mortality tables based on these data. Particular groups which have been considered include "life office pensioners" (members of occupational pension schemes under which the benefits are insured through life offices), as well as holders of "retirement annuities" (broadly individuals who have bought annuities with the proceeds of personal pensions or their predecessor products) (CMIB1998). The most recent standard mortality tables for the former group, relating to data for the period 1991-1994, are the PMA/PFA92 and PML/PFL92 tables for males and females on amounts and lives bases respectively. However, the group of life office pensioners covered by these tables represents only a small fraction of the total membership of occupational pension schemes, since data from self-administered pension schemes are not included in this analysis.

4.5 In order to facilitate valuation of pension liabilities, the tables published by the CMIB include projections of mortality improvement in future years. The mortality rates experienced in recent years have usually been lighter than those previously projected, especially for men. However, the position is complicated by changes in the pensioner population covered by the studies and probably by selection effects. A study of mortality of self-administered pension schemes is now under way, but results are not yet available. (Many actuaries have not yet adopted use of the PMA/PFA tables, but rather use older tables called PA90, generally with a adjustment to the age referred to in order to allow for mortality improvements in an ad hoc manner in pension scheme valuations.) Uncertainties about the appropriateness of the projection in the CMIB tables suggest that, for the rebate basis, which relates to the whole contracted-out population, it may well be better to adjust population mortality rather than use PMA92/PFA92 or PML92/PFL92.

4.6 Differences in the effect of using the projected mortality rates from the two different sources mentioned in paragraphs 4.2 and 4.4 arise from differences in the base year mortality rates and differences in the projection of rates. Some of these differences may be seen by comparing expectations of life at age 65 as shown in the table below. Because of the limited nature of the amounts effect for the purposes of contracted-out rebates as discussed above, the PML/PFL tables have been used for comparison. Rates used for the review of contracted-out rebates for the current quinquennium are shown for comparison.

*Expectations of life at age 65*

Year of attaining age 65	Men			Women		
	PML92	Proposed rate – 85% of UK population mortality rates as projected by GAD (1998-based)	Rates used for current rebates – 95% of England & Wales population mortality rates as projected by GAD (1994-based)	PFL92	Proposed rate – 85% of UK population mortality rates as projected by GAD (1998-based)	Rates used for current rebates – 95% of England & Wales population mortality rates as projected by GAD (1994-based)
2005	18.18	18.99	16.85	21.42	22.15	20.47
2020	19.40	19.80	17.69	22.48	22.85	21.32
2035	20.22	20.16	18.11	23.19	23.17	21.69

4.7 Given the wider coverage of the Government Actuary's population projections, I propose to adopt assumptions for the mortality of members of contracted-out pension arrangements based on the mortality of the UK population adopted for the Government Actuary's 1998-based population projections. The observed mortality experience of people already retired who have been contracted-out, described in paragraph 4.3 above, suggest that it would be appropriate to adopt an assumption that the mortality of members of contracted-out pension arrangements is 85% of this mortality rate. The use of a factor of 85% also gives rise to expectations of life close to those arising from the PML/PFL tables for those reaching pensionable age in 2035 (who will be 35 in the mid-year of the quinquennium for which the rebates apply). This assumption should apply to all types of contracted-out pension arrangement.

4.8 The factor of 85% applying to population mortality rates in the assumption for the mortality (by amounts) of members of contracted-out pension arrangements may be seen as the result of a number of factors. Members of contracted-out pension arrangements will experience “active service selection” (because those who are working are likely to be healthier than the population as a whole), though any effects of this may well have reduced by the time that pensionable age is reached. There is likely to be an element of “class selection”, in that members of pension arrangements (whether contracted-out or not) tend, on average, to be wealthier, and also healthier, than non-members. This effect should persist, albeit, perhaps, to a lesser extent, following the introduction of stakeholder pensions and the state second pension, as contracting out will be aimed particularly at medium and high earners. In addition there is the question of mortality by amounts compared with mortality by lives (see paragraph 4.3 above). Although this effect may be expected to be less than for rates produced by the CMIB for pension fund purposes, for the reasons given in paragraph 4.3 it is still reasonable to assume some reduction in mortality from this cause.

4.9 For members of APPs and COMPS, if allowance were made for deaths before retirement in assessing the rebates, the amount of “protected rights” available to buy an annuity at pensionable age for those who survive to that age could well be less than that needed to replace the additional pension given up. This effect was described more fully in paragraph 4.6 of the consultative document issued prior to the review of rebates for the 1997-2002 quinquennium (GAD1995). Hence I propose to continue with the approach of making no allowance for mortality before pensionable age for members of APPs and COMPS.

4.10 Assumptions are also needed about the mortality of spouses of members of contracted-out pension arrangements. Factors such as class selection and mortality by amounts rather than by lives will apply here nearly as strongly as for the assumption about mortality for members of contracted-out arrangements. Hence I propose to adopt an assumption of 85% of population mortality for spouses of members of all types of contracted-out pension arrangements.

### **Other demographic factors**

4.11 Assumptions are also needed about a range of factors which affect the actuarial value of the additional pension given up by widow(er)s of members of contracted-out pension arrangements as a result of their spouses having been contracted out. These factors are the proportions of members and former members of contracted-out arrangements who are married at death, age disparities between husbands and wives, and rates of remarriage of widow(er)s of members of contracted-out pension arrangements. Adjustments need to be made in order to reflect the pattern of survivors’ benefits that would be payable under the additional pension as set out in appendix A(ii).

4.12 I propose to use proportions married based on the 1996-based marital status projection for England and Wales by the Government Actuary’s Department (the latest available) for members of COSRS after pensionable age. This provides sex and age specific proportions married for each year until 2066 (although the published version contains figures only to 2021 (ONS1999)). For members of COSRS before pensionable age a downward adjustment has been made to allow for widow(er)s who are married but who have no qualifying children, and who therefore receive no benefit, as described in appendix A(ii).

4.13 If allowance for a proportion married at retirement of less than 100% were used in assessing the rebates for money purchase arrangements, the amount available to buy an annuity, which would have to offer a contingent spouse's pension where the person was married, could well be less than that needed to replace the additional pension given up. Therefore I have assumed that all members of contracted-out money purchase arrangements (both COMPS and APPs) are married at pensionable age, and that the proportion married then declines in line with the assumed mortality of spouses of members of contracted-out arrangements.

4.14 Remarriage by widow(er)s of those with additional pension rights after pensionable age does not affect their inherited survivor's additional pension, and therefore no allowance for remarriage after pensionable age is needed in valuing the additional pension rights given up. For those contracted-out into COSRS, I propose to make allowance for remarriage by the widow(er)s before pensionable age based on the rates for the remarriage of widow(er)s used in the 1996-based Government Actuary's Department's projections of marital status for England and Wales (ONS1999). I have made additional allowance for the complete or partial termination of additional pension rights when children cease to qualify where the widow(er) is less than 55 at that time.

4.15 I propose to assume that husband-wife age disparities are broadly in line with the experience for the population of Great Britain as revealed in the latest (1991) census (OPCS1994).

## 5. ALLOWANCE FOR EXPENSES AND OTHER FACTORS

### Factors relevant to salary related contracted-out schemes

5.1 The requirements for contracting out for a salary related contracted-out scheme consist of certification that the benefits offered by the scheme are broadly equivalent to or better than the pensions which would be provided under the prescribed reference scheme defined in section 12B of the Pension Schemes Act 1993, and provision of related information to the National Insurance Contributions Office. The costs of certification by the actuary of the scheme under this section will clearly vary from scheme to scheme. However, they are not likely in general to be proportional to the size of the scheme or to the amount of contributions being paid into it. Therefore any allowance for the expenses in the reduction in National Insurance contributions must be broad brush. In order to allow for the costs associated with being contracted out to be covered by even moderately-sized schemes, I propose to continue with the allowance of 0.2% of "upper band earnings" (as defined in paragraph 2.7), as used in the current quinquennium.

5.2 Because the actuarial value of the additional pension benefit given up varies by the age and sex of the scheme member involved, it is necessary to weight the rates calculated as appropriate for each age and sex to produce a single rate that can be applied as a reduction in National Insurance contributions. Figures for the proportion of COSRS members at each age and sex are available from two sources, administrative data collected by the National Insurance Contributions Office and analysed by the DSS Analytical Services Division (DSS1998d), and from the New Earnings Survey produced by the Office for National Statistics. As both these data sources also have information about the earnings of COSRS members, it is also possible to produce earnings-based weighting factors. Both data sources show a steady trend for the proportion of earnings of COSRS members which relate to women to increase. In addition the DSS Analytical Services Division data suggest some increase in the average age of members of COSRS when weighted by earnings. The trends observed in the data can be projected to suggest a distribution of the earnings of COSRS members by age and sex for the mid-point of the quinquennium 2002-07. Allowance can be made, as in the current quinquennium, for the continuing possibility of "buying back into the state scheme" by paying contribution equivalent premiums for those who leave a COSRS with less than two years' service, by reducing the weights applying to those under age 25 by one third. I propose adopting weights based on this approach, as shown in appendix C (with the weights adopted for the previous quinquennium shown for comparison).

5.3 However the weights are derived, it will remain the case that schemes with an older than average age distribution will find that the average value of the additional pension benefits given up may exceed the level of the rebate as calculated above. Hence I propose, as before, that there be a contingency margin of 7.5% of the rebate excluding the expense allowance mentioned in paragraph 5.1 above (in effect, an addition of 0.3% of upper band earnings where the rebate is as shown in paragraph 6.1 below).

### **Factors relevant to appropriate personal pensions**

5.4 Some appropriate personal pensions will seek registration as stakeholder pensions under Part I of the Welfare Reform and Pensions Act 1999. In this case they will be bound by regulation 14 of the Stakeholder Pension Schemes Regulations 2000, which will have the effect of limiting the charges that can be deducted to 1/365% of the value of the fund for each day. This is the legal expression of the policy that for a stakeholder pension the only charge up to retirement age should be an annual charge levied as a proportion of the assets held in the fund, and that the maximum level of the annual charge is to be 1% a year. Given this, I propose to make a single allowance for expenses in recommending a rate of rebate for members of appropriate personal pensions, whether registered as stakeholder pension schemes or not, of a 1% a year reduction in the rate of return before retirement. In addition I propose to allow a 2% loading on the annuity factor derived from the mortality and interest rate assumptions described above in order to allow for the expenses of annuity purchase.

5.5 Rebates to appropriate personal pensions are paid by the National Insurance Contributions Office after the end of the tax year to which the earnings relate. In order to allow for this I propose to increase rebates by the nominal rate proposed in section 3.9 for one year to allow for the period between the middle of the year to which the earnings relate and the date by which it is expected that most rebates will have been paid into the pension arrangement.

### **Factors relevant to contracted-out money purchase schemes**

5.6 I propose a continuation of the current regime, under which there is an addition of 0.2% of upper band earnings to the age- and sex-specific rebate calculated without any other expense loadings.

5.7 For members of money purchase contracted-out schemes there are both reductions in National Insurance contributions and rebates paid after the end of the tax year by the National Insurance Contributions Office. Both reductions of contributions and rebates must be invested within the scheme to provide protected rights for the member. In order to allow for the payment of the rebates after the end of the tax year, I propose to allow for one year's interest at the nominal rate proposed in section 3.9 on the portion of the total paid after the end of the tax year.

## 6. SAMPLE REBATES AND SENSITIVITY ANALYSIS

### Proposed rates of reduction in National Insurance contributions for members of salary related contracted-out schemes and comparison with assumptions used for rebates in the quinquennium 1997-98 to 2001-02

6.1 On the basis of the assumptions set out above, the reduction in National Insurance contributions for members of contracted-out salary related pension schemes for the quinquennium 2002-03 to 2006-07 is 5.1% of upper band earnings (including allowance for expenses and contingency margin).

6.2 The reduction during the current quinquennium (1997-98 to 2001-02) is 4.6%. The effect of the various changes to the assumptions used is shown in the table below. The effect of declining additional pension accrual rates arises because in each successive quinquennium a greater proportion of the workforce reached age 16 after 1978 and therefore have an additional pension accrual rate based on a working life of a full 49 years. Also in each successive quinquennium fewer women have a pensionable age lower than 65.

#### *Reduction in National Insurance contributions as a percentage of upper band earnings (including allowance for administrative costs and contingency margin)*

Reduction adopted for quinquennium 1997-98 to 2001-02	4.6%
Effect of declining additional pension accrual rates	-0.6%
Effect of changing mortality and other demographic assumptions	+0.2%
Effect of changing economic assumptions *	
pre-retirement rate	+0.2%
post-retirement rate	+0.2%
Effect of changing weighting	+0.5%
<b>Proposed reduction for quinquennium 2002-03 to 2006-07</b>	<b>5.1%</b>

\* The economic assumptions adopted for the quinquennium 1997-98 to 2001-02 were a rate of return relative to prices of 3.75% a year post retirement and a rate of return relative to earnings of 2.25% a year pre retirement.

#### Effect on proposed contribution reduction of different assumptions

6.3 The table below sets out the level of reduction in National Insurance contributions which would be recommended for members of COSRS given different assumptions for the rates of return before and after pensionable age.

#### *Reduction in National Insurance contributions as a percentage of upper band earnings (including allowance for administrative costs and contingency margin)*

Annual rate of investment return pre-retirement relative to earnings increases	Annual rate of investment return post-retirement relative to price increases (after phasing period as described in paragraph 3.4)		
	3%	3.5%	4%
1.5%	5.7%	5.5%	5.2%
<b>2%</b>	5.3%	<b>5.1%</b>	4.9%
2.5%	4.9%	4.7%	4.5%

6.4 The effect of using different assumptions for the mortality of members of COSRS and their spouses are as shown in the following table. The comparator rates are those that might generally be used by actuaries calculating the appropriate rate of funding for a range of different salary-related pension schemes.

*Reduction in National Insurance contributions as a percentage of upper band earnings (including allowance for administrative costs and contingency margin)*

Mortality assumption	
PA90 rated down by four years for scheme members and spouses	4.9%
<b>85% of UK population mortality as proposed</b>	<b>5.1%</b>
PMA92/PFA92 for scheme members, WA92/PMA92 for spouses	5.4%

**Proposed rates of rebates for members of appropriate personal pensions**

6.5 The table in appendix D sets out the rates of rebate as a percentage of upper band earnings for members of appropriate personal pensions calculated on the assumptions set out above. The rates shown are applicable to earnings in band 3 as defined in Schedule 4A to the Social Security Contributions and Benefits Act 1992 (ie that band of earnings on which additional pension will, broadly, continue to accrue at 20% following the introduction of S2P). For years during the quinquennium, if any, when the provisions of Schedule 4A have not come into force, the same rebate rates would apply to all upper band earnings. Rebates paid must be on a unisex basis, notwithstanding the differences in pensionable age for women born before 1955, and other actuarial factors which might mean that “the cost of providing ... benefits ... forgone” may be higher for women than for men. In order to make contracting out attractive to both sexes it is appropriate to set the rebate at the higher of the levels applying to men and to women, as, if this were not the case, and rates based on the average costs of the benefits given up were used, contracting out would not be attractive to women. These reasons were set out more fully in paragraph 4.1 of GAD1995. Therefore the rates shown in appendix D are rates applying for women up to age 58 last birthday at the start of the relevant tax year (the oldest age at which a woman accrues additional pension rights and is thus able to contract out in the quinquennium), and male rates at older ages.

6.6 The rates shown in appendix D (and in appendices E and F) do not include the effect of any “cap” on rebates. In the current quinquennium rebates for APPs are capped at 9% of upper band earnings. If a cap at this level is retained, at higher ages rebates will be paid at the rate of 9% of earnings in band 3, rather than the rates shown in the table in appendix D. Rebates applying to earnings in other bands could similarly be capped at corresponding levels (ie 18% of earnings in band 1 and 4.5% of earnings in band 2).

6.7 The tables in appendix E show the effect of altering certain key assumptions on rebates for the middle year of the quinquennium (2004-05) for a selection of ages and for both sexes.

**Proposed rates of reductions in National Insurance contributions and rebates for members of contracted-out money purchase schemes**

6.8 The table in appendix F sets out the total rates of rebate as a percentage of upper band earnings for members of contracted-out money purchase schemes calculated on the assumptions set out above. As with rebates for members of appropriate personal pensions, it is appropriate to set the rebate at the higher of the levels applying to men and to women. The rates shown include allowance for expenses as in paragraph 5.6 above. The rebates shown assume that the level of rebate applicable at the lowest age (2.6% of upper band earnings) is delivered as a reduction of National Insurance contributions during the year. At ages older than the lowest age, any excess of the total rebate is assumed to be paid by the National Insurance Contributions Office as an age-related rebate after the end of the year in question. Allowance for interest, as mentioned in paragraph 5.7 above, is applicable only to this age-related part.

## References

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## Appendix A(i)

### ADDITIONAL PENSION BENEFITS UNDER THE STATE SECOND PENSION AND EFFECT OF CONTRACTING OUT

A.1 The Child Support, Pensions and Social Security Act 2000 includes a number of changes to additional pension (the state earnings-related pension scheme – SERPS), which will subsequently be known as the state second pension (S2P). The main changes, which are planned to take effect from tax year 2002-03, are:

- the introduction of three different accrual rates on different bands of earnings;
- treating those earning between the annual lower earnings limit (the “qualifying earnings factor” or “QEF”) up to the “low earnings threshold” – £9,500 a year in terms of 1999-2000 earnings – as though they earned the low earnings threshold; and
- treating qualifying carers and people with long-term disabilities who have no earnings or earnings below the annual lower earnings limit, as if they had earnings at the level of the low earnings threshold.

The introduction of three different accrual rates will affect the consideration of rebates for contracting out (for APPs at least), while the other measures – deeming of earnings of £9,500 for those with lower earnings and credits for long-term disabled people and carers – do not.

A.2 Following its introduction, the state second pension will accrue on earnings (actual or treated as earned) between the lower earnings limit (LEL) and the upper earnings limit (UEL). Earnings between the lower earnings limit and the upper earnings limit will initially be divided into three bands. Band 1 will be from the annual lower earnings limit to the low earnings threshold (LET). Band 2 will be from the low earnings threshold plus £1 to  $(3 \times \text{LET} - 2 \times \text{QEF})$ . This would be £21,600 in terms of 1999-2000 earnings. Band 3 will be from the top of the second band plus £1 to the upper earnings limit. The low earnings threshold will be increased each year in line with the annual increase in average earnings, including the period between 1999-2000 and 2002-03. Rounding rules will apply to the calculation of the low earnings threshold and the calculation of the top of Band 2.

A.3 The state second pension accrual rates will be double, half and equal to the current SERPS accrual rates on bands 1, 2 and 3 of earnings respectively. Thus, for example, for retirements in the year 2009-10 and later, the state second pension will be based on 40%, 10% and 20% of earnings in bands 1, 2 and 3 respectively.

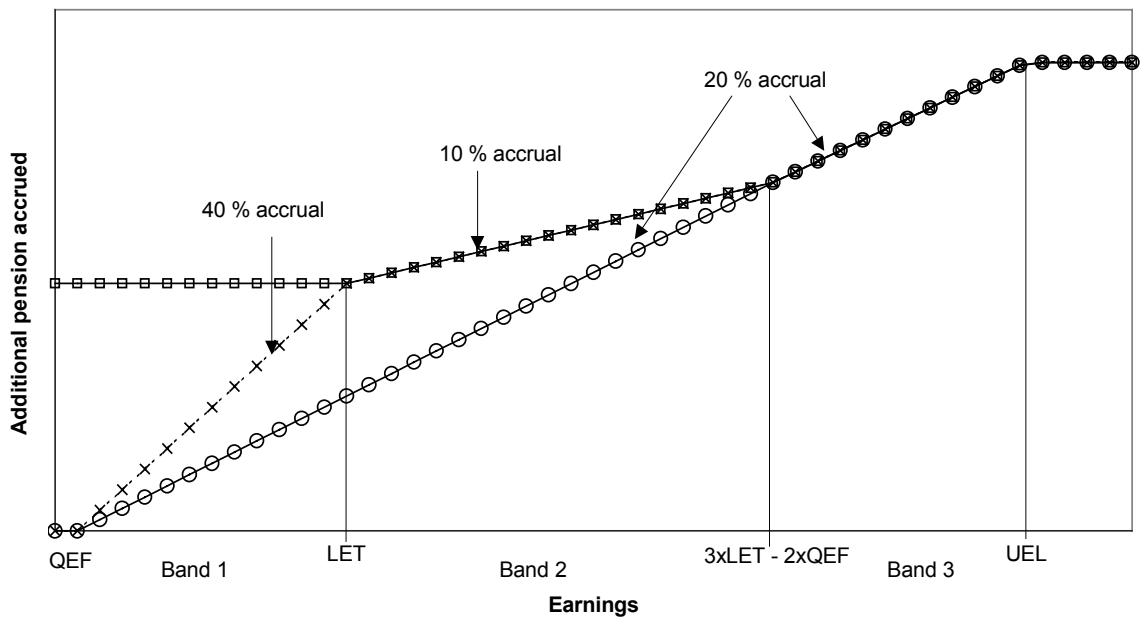
A.4 The top of the second band is likely to increase faster than earnings, because the low earnings threshold will increase in line with earnings and the lower earnings limit, and thus the QEF, will increase in line with prices, which is likely to be more slowly than earnings. The upper earnings limit will probably be increased broadly in line with prices (ignoring the possibility of any further higher increases similar to those announced in the March 1999 budget). Thus, the top of the second band will exceed the upper earnings limit after a number of years. There will then only be two bands, as the upper earnings limit will continue to apply. On the assumption that earnings increase at 1.5% a year faster than prices, this cross-over will occur approximately in the year 2014, allowing for the increases in the upper earnings limit in excess of price inflation announced in the March 1999 budget. If there are further increases in the upper earnings limit over and above price inflation, this will delay the time when the top of the second band will exceed the upper earnings limit.

A.5 After the state second pension is introduced, contracted-out salary related schemes (COSRS) and contracted-out money purchase schemes (COMPS) rebates will continue to reflect the current SERPS accrual rates. This is covered in part III of Schedule 4A to the Social Security Contributions and Benefits Act 1992, which is inserted by section 31(3) and Schedule 4 of the Child Support, Pensions and Social Security Act 2000. In particular, paragraph 8(3) of Schedule 4A stipulates that rebates will be based on actual earnings without any deeming of earnings to the level of the low earnings threshold as will occur for additional pension. Members of COSRS and COMPS earning below £21,600 (in terms of 1999-2000 earnings) will receive a state second pension top-up from the National Insurance Fund. This will be based on the difference between what their state second pension (based on the low earnings threshold if they earn less than that) would have been and what their SERPS entitlement would have been, if they had not been contracted out.

A.6 Following the introduction of the state second pension, appropriate personal pension scheme (APP) rebates will reflect the state second pension accrual rates structure. Rebates will be based on actual earnings. Those with an APP who earn less than the low earnings threshold in a year will receive a state second pension top-up from the National Insurance Fund based on the difference between the low earnings threshold and their actual earnings in a year.

A.7 The graph below aims to illustrate the pattern of benefits which will accrue under the state second pension, and the pattern of benefits given up by members of contracted-out pension arrangements.

**State second pension accrual**



- State second pension, including effect of deemed earnings at low earnings threshold for low earners
- Benefits given up by members of contracted-out occupational schemes (as for pre-2002 additional pension benefits)
- - \* - - Benefits given up by members of APPs (state second pension ignoring deeming of earnings to low earnings threshold)

## Appendix A(ii)

### STATE ADDITIONAL PENSIONS FOR SURVIVING SPOUSES

Additional pension (S2P/SERPS) rights inheritable from April 2001 following the Welfare Reform and Pensions Act 1999, by age and status of surviving spouse of member with additional pension rights.

Widow(er) over pensionable age on bereavement	Paid in full until death
Widow(er) under pensionable age but with qualifying children	Paid in full until death, remarriage before pensionable age, or children ceasing to qualify. Where children cease to qualify and the widow(er) is aged 45 or over at that time, then payment will re-commence when the widow(er) reaches pensionable age, provided the widow(er) has not remarried in the interim, and continue until death. Where children cease to qualify and the widow(er) is aged 55 or over at that time, the pension that re-commences at pensionable age will be at the full rate that was payable initially on bereavement. Where children cease to qualify when the widow(er) is aged between 45 and 54, the pension re-commences at pensionable age at a fraction of its former level, the fraction depending on the age at cessation of children's qualification. Where children cease to qualify and the widow(er) is aged under 45, no further benefit is paid
Widow(er) with no qualifying children, aged 55 or over on bereavement	No immediate pension, but a pension on reaching pensionable age, provided that the widow(er) has not remarried in the interim, at the full rate continuing until death
Widow(er) with no qualifying children, aged between 45 and 54 inclusive on bereavement	No immediate pension, but a pension on reaching pensionable age and continuing until death of a fraction of the full rate, provided that the widow(er) has not remarried in the interim, the fraction depending on the age at bereavement
Widow(er) with no qualifying children, aged under 45 on bereavement	No benefit

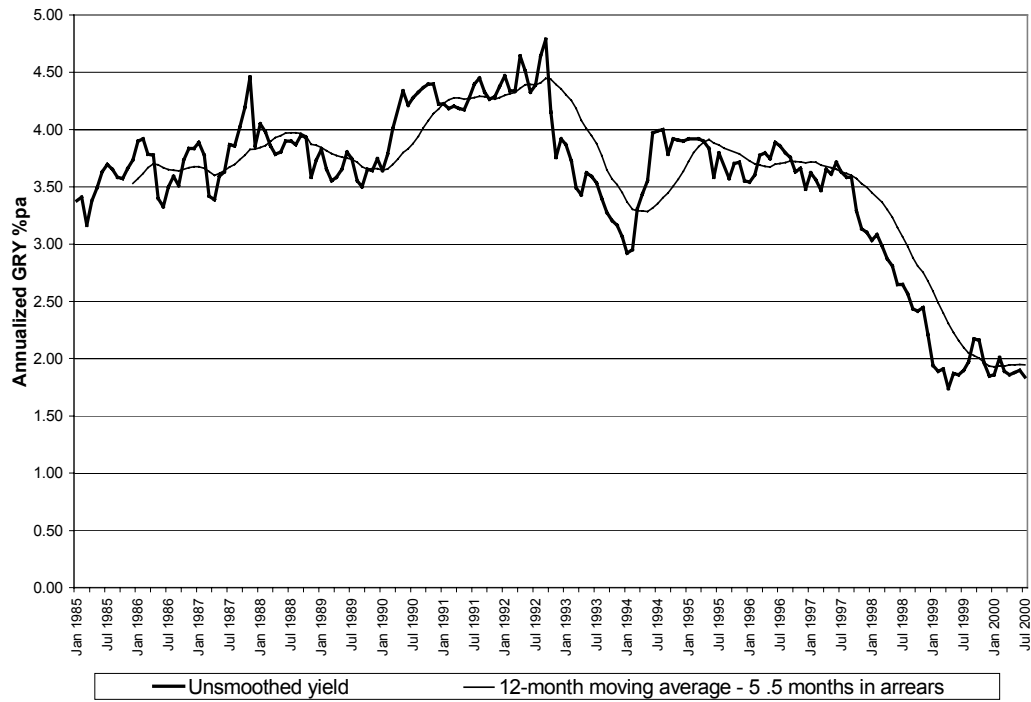
A qualifying child is one for whom the widow(er) is receiving child benefit.

Note – in this table “paid in full” or “full rate” means 50% of the deceased person's additional pension rights. This applies regardless of whether additional pension rights would qualify for continuing 100% inheritance following the announcement by the Secretary of State for Social Security in the House of Commons on 15 March 2000 of special rules for people who can demonstrate that they have been wrongly informed of the reduction to half-rate inheritance.

## Appendix B

### YIELDS AVAILABLE FROM UK GOVERNMENT INDEX-LINKED BONDS

Annualised gross redemption yield (GRY) on index-linked gilts (over 5 years)  
assuming inflation of 5% a year (see paragraph 3.2)



Source: FTSE Actuaries Government Securities indices

## Appendix C

### WEIGHTS FOR REDUCTIONS IN CONTRIBUTIONS FOR CONTRACTED-OUT SALARY RELATED SCHEMES

*Proportions of earnings of COSRS members in each age band and sex (see paragraph 5.2)*

Age	Proposed weights		Weights used for current quinquennium	
	Men	Women	Men	Women
16-19	0.000	0.000	0.003	0.001
20-24	0.012	0.007	0.033	0.025
25-29	0.037	0.024	0.077	0.055
30-34	0.053	0.035	0.100	0.050
35-39	0.093	0.073	0.099	0.044
40-44	0.113	0.102	0.104	0.047
45-49	0.102	0.097	0.107	0.047
50-54	0.080	0.072	0.076	0.029
55-59	0.054	0.033	0.055	0.017
60-64	0.012		0.028	0.001
65			0.002	
Total	0.557	0.443	0.684	0.316
Weighted average age	42	41	41	38

## Appendix D

### APPROPRIATE PERSONAL PENSION REBATES

*Percentage of earnings applicable to band 3 ("20% accrual rate band"), with no cap  
 (see paragraphs 6.5 and 6.6)*

Age last birthday at start of tax year	Tax year				
	2002-03	2003-04	2004-05	2005-06	2006-07
15	4.2%	4.2%	4.2%	4.2%	4.2%
16	4.2%	4.2%	4.2%	4.2%	4.2%
17	4.2%	4.2%	4.2%	4.2%	4.2%
18	4.3%	4.3%	4.3%	4.3%	4.3%
19	4.3%	4.3%	4.3%	4.3%	4.3%
20	4.4%	4.4%	4.4%	4.4%	4.4%
21	4.4%	4.4%	4.4%	4.4%	4.4%
22	4.5%	4.5%	4.5%	4.5%	4.5%
23	4.5%	4.5%	4.5%	4.5%	4.5%
24	4.5%	4.5%	4.5%	4.5%	4.5%
25	4.6%	4.6%	4.6%	4.6%	4.6%
26	4.6%	4.6%	4.6%	4.6%	4.6%
27	4.7%	4.7%	4.7%	4.7%	4.7%
28	4.7%	4.7%	4.7%	4.7%	4.7%
29	4.8%	4.8%	4.8%	4.8%	4.8%
30	4.8%	4.8%	4.8%	4.8%	4.8%
31	4.9%	4.9%	4.9%	4.9%	4.9%
32	4.9%	4.9%	4.9%	4.9%	4.9%
33	5.0%	5.0%	5.0%	5.0%	5.0%
34	5.0%	5.0%	5.0%	5.0%	5.0%
35	5.0%	5.0%	5.1%	5.1%	5.1%
36	5.1%	5.1%	5.1%	5.1%	5.1%
37	5.1%	5.1%	5.1%	5.2%	5.2%
38	5.2%	5.2%	5.2%	5.2%	5.2%
39	5.2%	5.2%	5.2%	5.2%	5.3%
40	5.4%	5.3%	5.3%	5.3%	5.3%
41	5.6%	5.5%	5.3%	5.3%	5.4%
42	5.7%	5.6%	5.5%	5.4%	5.4%
43	5.9%	5.8%	5.7%	5.6%	5.5%
44	6.1%	6.0%	5.9%	5.7%	5.6%
45	6.3%	6.2%	6.0%	5.9%	5.8%
46	6.5%	6.4%	6.2%	6.1%	6.0%
47	7.0%	6.6%	6.4%	6.3%	6.2%
48	7.8%	7.1%	6.6%	6.5%	6.4%
49	8.8%	7.9%	7.2%	6.7%	6.6%
50	9.9%	8.9%	8.0%	7.3%	6.8%
51	11.2%	10.0%	9.0%	8.0%	7.3%
52	12.0%	11.3%	10.1%	9.0%	8.1%
53	13.0%	12.1%	11.4%	10.2%	9.1%
54	14.1%	13.1%	12.2%	11.5%	10.3%
55	15.2%	14.2%	13.3%	12.4%	11.7%
56	16.5%	15.4%	14.3%	13.4%	12.5%
57	17.9%	16.7%	15.5%	14.5%	13.5%
58	19.5%	18.1%	16.9%	15.7%	14.6%
59	12.2%	11.4%	10.7%	10.2%	9.8%
60	13.2%	12.3%	11.5%	10.8%	10.3%
61	14.3%	13.3%	12.4%	11.6%	10.9%
62	15.4%	14.4%	13.4%	12.6%	11.7%
63	16.7%	15.6%	14.6%	13.6%	12.7%

Appendix E(i)

SENSITIVITY ANALYSES FOR APPROPRIATE PERSONAL PENSION REBATES

Percentage of earnings applicable to band 3 ("20% accrual rate band") by sex and age last birthday at start of tax year 2004-05, with no cap (see paragraphs 6.6 and 6.7)

Rate of investment return pre-retirement relative to earnings increases	Rate of investment return post-retirement relative to price increases											
	3%				3.5%				4%			
1.5%	Men	20	5.6%	Men	20	5.3%	Men	20	5.0%	Men	20	5.0%
		30	5.9%		30	5.6%		30	5.3%			
		40	6.2%		40	5.9%		40	5.5%			
		50	7.9%		50	7.5%		50	7.1%			
		58	10.7%		58	10.4%		58	10.1%			
	Women	20	5.7%	Women	20	5.4%	Women	20	5.1%	Women	20	5.1%
		30	6.0%		30	5.7%		30	5.4%			
		40	6.3%		40	5.9%		40	5.6%			
		50	8.9%		50	8.4%		50	8.0%			
		58	17.1%		58	16.9%		58	16.6%			
2%	Men	20	4.6%	Men	20	4.3%	Men	20	4.1%	Men	20	4.1%
		30	5.0%		30	4.7%		30	4.5%			
		40	5.5%		40	5.2%		40	4.9%			
		50	7.4%		50	7.0%		50	6.6%			
		58	10.4%		58	10.1%		58	9.8%			
	Women	20	4.6%	<b>Women</b>	<b>20</b>	<b>4.4%</b>	Women	20	4.1%	Women	20	4.1%
		30	5.1%		<b>30</b>	<b>4.8%</b>		30	4.6%			
		40	5.6%		<b>40</b>	<b>5.3%</b>		40	5.0%			
		50	8.4%		<b>50</b>	<b>8.0%</b>		50	7.6%			
		58	17.1%		<b>58</b>	<b>16.9%</b>		58	16.6%			
2.5%	Men	20	3.7%	Men	20	3.5%	Men	20	3.3%	Men	20	3.3%
		30	4.3%		30	4.0%		30	3.8%			
		40	4.9%		40	4.7%		40	4.4%			
		50	6.9%		50	6.6%		50	6.2%			
		58	10.2%		58	9.9%		58	9.6%			
	Women	20	3.7%	Women	20	3.5%	Women	20	3.3%	Women	20	3.3%
		30	4.3%		30	4.1%		30	3.9%			
		40	5.0%		40	4.7%		40	4.5%			
		50	8.0%		50	7.5%		50	7.2%			
		58	17.1%		58	16.9%		58	16.6%			

Bold figures are rates on proposed assumptions.

### Appendix E(ii)

Rates on proposed assumptions compared with those using assumptions that might generally be used in calculating the appropriate rate of funding for a range of different salary-related pension schemes.

*Percentage of earnings applicable to band 3 ("20% accrual rate band") by sex and age last birthday at start of tax year 2004-05, with no cap (see paragraphs 6.6 and 6.7).*

Mortality assumption			
PA90 rated down by four years for scheme members and spouses	Men	20	4.0%
		30	4.4%
		40	4.9%
		50	6.6%
		58	9.7%
	Women	20	4.2%
		30	4.6%
		40	5.1%
		50	7.8%
		58	16.6%
<b>85% of UK population mortality (1998-based projection)</b>	Men	20	4.3%
		30	4.7%
		40	5.2%
		50	7.0%
		58	10.1%
	<b>Women</b>	<b>20</b>	<b>4.4%</b>
		<b>30</b>	<b>4.8%</b>
		<b>40</b>	<b>5.3%</b>
		<b>50</b>	<b>8.0%</b>
		<b>58</b>	<b>16.9%</b>
PMA92/PFA92 for scheme members, WA92/PMA92 for spouses	Men	20	4.5%
		30	5.0%
		40	5.4%
		50	7.3%
		58	10.5%
	Women	20	4.6%
		30	5.0%
		40	5.5%
		50	8.2%
		58	17.4%

Bold figures are rates on proposed assumptions.

**Appendix E(iii)**

*Percentage of earnings applicable to band 3 ("20% accrual rate band") by sex and age last birthday at start of tax year 2004-05, with no cap (see paragraphs 6.6 and 6.7)*

<b>Expense assumption</b>			
No expense loading	Men	20	2.8%
		30	3.4%
		40	4.1%
		50	6.0%
		58	9.4%
	Women	20	2.8%
		30	3.4%
		40	4.1%
		50	7.0%
		58	16.5%
<b>1% annual charge, 2% loading on annuity purchase price</b>	Men	20	4.3%
		30	4.7%
		40	5.2%
		50	7.0%
		58	10.1%
	<b>Women</b>	<b>20</b>	<b>4.4%</b>
		<b>30</b>	<b>4.8%</b>
		<b>40</b>	<b>5.3%</b>
		<b>50</b>	<b>8.0%</b>
		<b>58</b>	<b>16.9%</b>
6% initial charge, 0.8% annual charge and 2% loading on annuity purchase price (as used for rebates for quinquennium 1997-98 to 2001-02)	Men	20	4.2%
		30	4.7%
		40	5.3%
		50	7.3%
		58	10.7%
	Women	20	4.3%
		30	4.8%
		40	5.4%
		50	8.3%
		58	17.9%

Bold figures are rates on proposed assumptions.

## Appendix F

### CONTRACTED-OUT MONEY PURCHASE SCHEME REBATES

*Percentage of upper band earnings, with no cap (see paragraphs 6.6 and 6.8)*

Age last birthday at start of tax year	Tax year				
	2002-03	2003-04	2004-05	2005-06	2006-07
15	2.6%	2.6%	2.6%	2.6%	2.6%
16	2.6%	2.6%	2.6%	2.6%	2.6%
17	2.7%	2.7%	2.7%	2.7%	2.7%
18	2.7%	2.7%	2.7%	2.7%	2.7%
19	2.8%	2.8%	2.8%	2.8%	2.8%
20	2.8%	2.8%	2.8%	2.8%	2.8%
21	2.9%	2.9%	2.9%	2.9%	2.9%
22	2.9%	2.9%	2.9%	2.9%	3.0%
23	3.0%	3.0%	3.0%	3.0%	3.0%
24	3.1%	3.1%	3.1%	3.1%	3.1%
25	3.1%	3.1%	3.1%	3.1%	3.1%
26	3.2%	3.2%	3.2%	3.2%	3.2%
27	3.2%	3.2%	3.2%	3.2%	3.2%
28	3.3%	3.3%	3.3%	3.3%	3.3%
29	3.4%	3.4%	3.4%	3.4%	3.4%
30	3.4%	3.4%	3.4%	3.4%	3.4%
31	3.6%	3.6%	3.6%	3.6%	3.6%
32	3.6%	3.6%	3.6%	3.6%	3.6%
33	3.7%	3.7%	3.7%	3.7%	3.7%
34	3.8%	3.8%	3.8%	3.8%	3.8%
35	3.8%	3.8%	3.8%	3.8%	3.8%
36	3.9%	3.9%	3.9%	3.9%	3.9%
37	4.0%	4.0%	4.0%	4.0%	4.0%
38	4.1%	4.1%	4.1%	4.1%	4.1%
39	4.1%	4.1%	4.1%	4.1%	4.1%
40	4.3%	4.2%	4.2%	4.2%	4.2%
41	4.4%	4.4%	4.3%	4.3%	4.3%
42	4.6%	4.5%	4.4%	4.4%	4.4%
43	4.8%	4.7%	4.6%	4.5%	4.4%
44	5.0%	4.9%	4.8%	4.7%	4.6%
45	5.3%	5.1%	5.0%	4.9%	4.8%
46	5.5%	5.4%	5.3%	5.1%	5.0%
47	6.0%	5.6%	5.5%	5.4%	5.3%
48	6.8%	6.1%	5.7%	5.6%	5.5%
49	7.8%	6.9%	6.2%	5.8%	5.7%
50	9.0%	7.9%	7.1%	6.4%	5.9%
51	10.3%	9.1%	8.1%	7.2%	6.5%
52	11.2%	10.6%	9.3%	8.2%	7.4%
53	12.1%	11.4%	10.8%	9.5%	8.4%
54	13.3%	12.5%	11.6%	11.0%	9.7%
55	14.6%	13.6%	12.7%	11.8%	11.2%
56	16.0%	14.9%	13.8%	12.9%	12.0%
57	17.4%	16.3%	15.1%	14.2%	13.2%
58	19.1%	17.8%	16.6%	15.4%	14.4%
59	11.5%	10.8%	10.1%	9.7%	9.3%
60	12.6%	11.8%	11.0%	10.3%	9.9%
61	13.7%	12.9%	12.0%	11.2%	10.6%
62	15.0%	14.0%	13.1%	12.2%	11.5%
63	16.5%	15.3%	14.4%	13.4%	12.5%

## **Appendix G**

### **LIST OF CONSULTEES**

Association of British Insurers  
Association of Consulting Actuaries  
Association of Pension Lawyers  
Association of Unit Trusts and Investment Funds  
Bank of England  
Cabinet Office, Regulatory Impact Unit  
Confederation of British Industry  
Department of Social Development Northern Ireland  
Department of Social Security  
Faculty of Actuaries and Institute of Actuaries  
Financial Services Authority  
HM Treasury  
Inland Revenue  
Isle of Man Department of Social Security  
Mini Official Committee on Occupational Pensions (MOCOP)  
National Association of Pension Funds  
Nationalised Industries Pension Group  
National Insurance Contributions Office  
Occupational Pensions Regulatory Authority  
Occupational Pension Schemes Joint Working Group  
The Pensions Advisory Service (OPAS)  
Pension Research Accountants Group  
Pensions Management Institute  
Pensions Ombudsman  
Pension Schemes Office  
Self-invested Personal Pension Provider Group  
Society of Pension Consultants  
Trades Union Congress  
UK Debt Management Office