Government Actuary's Department

# Actuarial Tables

With explanatory notes for use in

# Personal Injury and Fatal Accident Cases

Fifth edition

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Government Actuary's Department

# Actuarial Tables

With explanatory notes for use in

# Personal Injury and Fatal Accident Cases

Prepared by an Inter-disciplinary Working Party of Actuaries, Lawyers, Accountants and other interested parties

Fifth edition

LONDON: TSO

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# INTRODUCTION to the 5th Edition of the OGDEN TABLES

"When it comes to the explanatory notes we must make sure that they are readily comprehensible. We must assume the most stupid circuit judge in the country and before him are the two most stupid advocates. All three of them must be able to understand what we are saying".

Sir Michael Ogden QC, on his explanatory notes to the First Edition of the Ogden Tables.<sup>1</sup>

#### Vale

1. This is the first Edition to which neither Michael Ogden nor David Kemp has been a party.

2. Michael Ogden believed that the task of chairing his Working Party would be one which, when completed, would be put away and forgotten. He never foresaw that it would produce an industry, all of its own, and not end with the classic decision of **Wells v. Wells [1999] 1AC 345**. When he passed on the Chairmanship to me, I said, when accepting, that he had passed a 19-year sentence upon me, for that was the period of his rôle in the post of Chairman. He laughed. It is not to everyone to become eponymous with a set of Tables, but when he spoke to the parliamentary draftsman about his mention in the Civil Evidence Act 1995, he was told that it was simpler to refer to his name and the Tables rather than use the full title of the Working Party.

3. David Kemp started his work with his first wife, whom he commemorated by her photograph in Volume 1 of Kemp & Kemp, shortly after he came down from Cambridge. It was not his area of work as such, which was in the field of restrictive trade practice. He was due to go from Winchester College to Cambridge on a classics scholarship in 1939. World events intervened. When he did go to Corpus Christi, Cambridge, he elected to read law rather than classics, on the grounds that he had forgotten all his classics as a result of his war service. He obtained a 1st Class in Law. He regretted in retrospect, he said, not reading classics. He was skiing with his grandchildren in his 81st year.

4. Each of them, in his own way, reformed the law of damages, put it on a more professional footing, and persuaded the courts that personal injury compensation was not a subject to be treated by merely wetting one's finger and holding it in the air to discern the direction of the wind. It is right that both should be remembered for what they did for those who have been and will be injured.

#### The purpose of the Ogden Tables

5. The purpose of these Tables is to enable the simple calculation of full compensation for those victims who have suffered future loss as a result of wrongful injury. It is well established that such victims are entitled to full compensation.

6. This is in accordance with the law. The rule was first stated by Lord Blackburn in those famous words to be found in Livingstone v. Rawyards Coal Company (1880) 5 App Cas 25 at 39.

7. Compensation should be both adequate and sufficient. The authority for that can be found in the speech of Lord Lloyd of Berwick in Wells v. Wells [1999] 1AC 345 at 362 and following.

8. The problem is to attain this worthy aim; whether it is currently attainable is debatable.

9. In order to achieve that aim it is necessary for both the courts and society to look into the future. This is a perilous task and requires uncommon abilities. One Victorian judge described the quality necessary as demanding both the agility of an acrobat and the foresight of an Hebrew prophet.

10. Money will always produce problems for the value today will not necessarily be the same in the future. Inflation is more likely to occur than deflation, but there have been periods in Britain, albeit usually short periods, where deflation has occurred.

11. Any calculation of a rate of inflation must relate to some 'basket' of goods and services, and perhaps also of assets, whose prices are to be measured. There need be no unique definition or measured rate of inflation: different measures serve different purposes. For example, the retail prices index (RPI) gives a measure of inflation based on the cost of living appropriate to the expenditure patterns of typical households; its historic forbear was the price of corn. The RPI is also the measure used to uprate interest and principal on index-linked gilts. The average earnings index gives a measure of wage inflation, which has typically exceeded RPI inflation, on account of economy-wide productivity growth.

<sup>&</sup>lt;sup>1</sup> Memoirs of Sir Michael Ogden QC, 'Variety is the Spice of Legal Life', p.182; The Book Guild, 2002

12. The present value of future monetary amounts must also depend on real interest returns, as well as inflation, over the intervening period, and therefore calculated amounts of damages require assumptions to be made for such returns, including what, if any, investment risks for which they compensate. In fact, the precedent set by **Wells v. Wells [1999] 1AC 345** was that the appropriate discount rate should be based on the 'risk free' rate.

13. The Ogden Tables were originally devised to enable future losses to be simply calculated through the application of a given discount rate defined in real terms, that is, after making allowance for the effects of future inflation. This was achieved by exploiting the properties of index-linked gilts to derive a market-related measure of prevailing real interest rates over an appropriate investment horizon. The use of index-linked gilts, being tradeable British Government securities, should, in general, be expected to yield discount rates close to risk-free returns.

14. The Ogden Tables also depend on the Expectation of Life figures, which are supplied by the Government Actuary. Those figures have been consistently rising as a result of better diet, care, housing and medical treatment. This means that the average length of life has risen dramatically. This is demonstrated by the figures issued by the Government Actuary on 18th December 2003, arising from the most recent census.

15. Apart from life expectancy the main factor in using the Ogden Tables is the appropriate choice of the discount rate, now fixed by the Lord Chancellor since 25th June 2001, and revisited on 27th July 2001, at 2½%. The right choice of discount rate is vital if the proper aim of full and adequate compensation is to be achieved. It has never, since the Lord Chancellor made his first announcement, been within ½% of the correct rate of return from Index Linked Gilts, after taking tax into account.

16. The Damages Act 1996 appreciated that the search for the most appropriate method would not necessarily be a single prescribed rate in all cases and at all times. Section 1(2) of the Damages Act 1996 therefore made provision for the Court to make variations to the discount rate if any party to the proceedings shows that it is more appropriate in the case in question. Unfortunately, in two separate cases<sup>2</sup>, the Court of Appeal has emasculated that provision in large and complex cases. It has ruled in each case that consistency and fairness and the use of the Lord Chancellor's chosen discount rate should be preferred. Neither decision is helpful in the desire to achieve full and proper compensation.

#### Other methods of calculating future pecuniary loss

17. It needs to be emphasised that the Ogden Tables are not the only way, or even the best way, of calculating and estimating future losses.

18. Actuaries, who are those chosen to value those most complex of entities, pension funds, calculate future claims and losses in a different and more subtle way than the methods used in the Ogden Tables. In the United States, professional economists are called to give evidence about future losses.

19. For that reason, the Government Actuary has written an Appendix on this issue. He explains how actuaries do value future claims and losses.

20. I believe that it is essential that everyone understands the limits of the Ogden Tables. A failure to understand those limits could lead to the Ogden Tables being devalued. As with justice, the Tables need to be both fair and seen to be fair, as well as properly applied.

#### Removal of the previous Tables 1 to 18

21. This has been done as they relate to the past rather than the future. However, the fact that they are no longer published, saving valuable space, does not mean that in very particular circumstances, they may not be relevant to the calculations of damages.

#### Fatal Accident Act claims

22. The courts do not, at present, appear inclined to accept the guidance which we offered in the 4th Edition of these Tables. The courts consider themselves bound by the speech of Lord Fraser in Cookson v. Knowles [1979] AC 556 at 574. Nelson J. in White v. ESAB Group (UK) Limited [2002] PIQR Q6 would have decided differently but for the words of Lord Fraser. In reality, in complex cases, the position is that financial experts often agree that the actual method we suggest is, in fact, the correct method.

23. These tables are designed for losses that occur after the date of trial. In the Explanatory Notes it is made clear that the purpose of the Tables is for the assessment of future pecuniary loss. The Tables use discount rates which are applicable to future losses. This is because it is assumed that once the claimant has received compensation he will invest

<sup>&</sup>lt;sup>2</sup> Warriner v. Warriner [2002] 1 WLR 1703; Cooke & Others v. United Bristol Health Care & Others [2004] 1WLR 251.

it to produce an income. It is therefore fundamental that the discounted columns in the Tables should only be used for losses that arise after the date of trial or assessment.

24. If the guidance on multipliers in fatal accident cases given in section D of the Explanatory Notes is not followed, in order to select them from the date of death, it is essential that the 0% columns are used for the period prior to the trial (see paragraph 64).

#### Contingencies other than mortality

25. Certain inaccuracies have been noted in the figures used in Tables A, B and C for contingencies other than mortality. These inaccuracies were first revealed in the paper by Professors Lewis and McNabb<sup>3</sup>. They have since been confirmed by and acknowledged by the authors of the original paper, Haberman & Bloomfield<sup>4</sup>, as due to incomplete data. We have not been inclined to remove those Tables completely, for they do give an indication of the factors that should be considered. We are attempting to commission new work on this aspect for later editions of these Tables. Better figures may take some time to produce and a 'health warning' exists on those presently produced.

#### **Final matters**

26. The core of the work which constitutes these Tables is produced by the Government Actuary and his team. The lawyers are merely an encumbrance, welcomed by him, so that the process can be refined and improved. He has to listen to arcane matters such as the 'lost years' argument and other delights from the lawyers, but the Tables are intended as a mathematical tool to be used in the most simple way so that future pecuniary losses can be calculated without great stress and in the most accurate way that is easily available.

31st July 2004

Robin de Wilde QC

<sup>&</sup>lt;sup>3</sup> Journal of Law and Society Vol 29, No 3, Sept 2002.

<sup>&</sup>lt;sup>4</sup> Their paper is entitled: 'Work Time Lost to Sickness, Unemployment and Stoppages: Measurement and Application'; (1990) Journal of the Institute of Actuaries Volume 117, 533.

## **EXPLANATORY NOTES**

## SECTION A: GENERAL

#### **Purpose of tables**

1. The tables have been prepared by the Government Actuary's Department. They provide an aid for those assessing the lump sum appropriate as compensation for a continuing future pecuniary loss or consequential expense or cost of care in personal injury and fatal accident cases.

#### Application of tables

2. The tables set out multipliers. These multipliers enable the user to assess the present capital value of future annual loss (net of tax) or annual expense calculated on the basis of various assumptions which are explained below. Accordingly, to find the present capital value of a given annual loss or expense, it is necessary to select the appropriate table, find the appropriate multiplier and then multiply the amount of the annual loss or expense by that figure.

3. Tables 1 to 26 deal with annual loss or annual expense extending over three different periods of time. In each case there are separate tables for men and women.

- In Tables 1 and 2 the loss or expense is assumed to begin immediately and to continue for the whole of the rest of the claimant's life, allowing for different potential lifespans, including the possibility of early death or prolonged life. The tables apply to both the deceased and the dependants' lives in fatal accident cases.
- In Tables 3 to 14 the loss or expense is assumed to begin immediately but to continue only until the claimant's retirement or earlier death. The age of retirement is assumed to be 50 in Tables 3 and 4, 55 in Tables 5 and 6, 60 in Tables 7 and 8, 65 in Tables 9 and 10, 70 in Tables 11 and 12, and 75 in Tables 13 and 14.
- In Tables 15 to 26 it is assumed that the annual loss or annual expense will not begin until the claimant reaches retirement but will then continue for the whole of the rest of his or her life.

4. In Table 19 (males) and Table 20 (females) the age of retirement is assumed to be 60. In Table 21 (males) and Table 22 (females) the age of retirement is assumed to be 65 (and similarly for retirement ages 50, 55, 70 and 75). These tables all make due allowance for the chance that the claimant may not live to reach the age of retirement.

#### **Mortality assumptions**

5. In previous editions of these tables, tables have been included based on the mortality rates experienced in England & Wales in a historical three-year period. Tables based on mortality experienced in the years 1990 to 1992, published by the Government Actuary's Department as English Life Table No. 15 (ELT15), were set out in the 4th Edition of the tables. The Working Party has decided that it is not necessary to publish these historic tables again in this edition and have correspondingly agreed that the tables to be published should be based on a reasonable estimate of the future mortality likely to be experienced by average members of the population alive today.

6. On the basis of some reported cases, it appears that tables for pecuniary loss for life, e.g. cost of care, may have been misunderstood. The tables do not assume that the claimant dies after a period equating to the expectation of life, but take account of the possibilities that the claimant will live for different periods, e.g. die soon or live to be very old. The mortality assumptions relate to the general population of England & Wales. Unless there is clear evidence in an individual case to support the view that the individual is atypical and will enjoy longer or shorter expectation of life, no further increase or reduction is required for mortality alone.

7. For the purposes of preparing the official national population projections, the Government Actuary makes an estimate of the extent of future improvements in mortality. Tables 1 to 26 in this edition show the multipliers which result from the application of these projected mortality rates (derived from the 2002-based population projections for England & Wales, which were published in December 2003 on the GAD website <u>www.gad.gov.uk</u>. Details can also be found in the publication *National Population Projections 2002-based. PP2 No.24* from the Office of National Statistics). The actuaries on the Working Party consider that these alternative tables provide a more appropriate estimate of the value of future income streams than tables based on historic mortality which, given the rate at which mortality experience has improved, and continues to improve, are likely to underestimate future longevity to a significant extent. The Working Party therefore recommends the Courts to use Tables 1 to 26 contained in this latest edition of the tables.

#### Use of tables

8. To find the appropriate figure for the present value of a particular loss or expense, the user must first choose that table which relates to the period of loss or expense for which the individual claimant is to be compensated and to the sex of the claimant, or, where appropriate, the claimant's dependants.

9. If, for some reason, the facts in a particular case do not correspond with the assumptions on which one of the tables is based (e.g. it is known that the claimant will have a different retiring age from that assumed in the tables), then the tables can only be used if an appropriate allowance is made for this difference; for this purpose the assistance of an actuary should be sought, except for situations where specific guidance is given in these explanatory notes.

#### Rate of return

10. The basis of the multipliers set out in the tables is that the lump sum will be invested and yield income (but that over the period in question the claimant will gradually reduce the capital sum, so that at the end of the period it is exhausted). Accordingly, an essential factor in arriving at the right figure is the choice of the appropriate rate of return.

11. The annual rate of return currently to be applied is  $2\frac{1}{6}$  (net of tax), as fixed by the Lord Chancellor on 25 June 2001, and reassessed on 27 July 2001, under the provisions of the Damages Act 1996 Section 1. An annual rate of return of  $2\frac{1}{6}$  has also been set for Scotland by the Scottish Ministers on 8 February 2002. The Lord Chancellor may make a fresh determination of this rate, after receiving advice from the Government Actuary and the Treasury (and, in Scotland, by the Scottish Ministers after consultation with the Government Actuary). Tables are accordingly shown for a range of possible annual rates of return ranging from  $\frac{1}{6}$  to 5%, as in the previous edition. In addition, a 0% column has been included to show the multiplier without any discount for interest (i.e. expectations of life, or the equivalent for different periods). These are supplied to assist in the calculation of multipliers in Fatal Accident Act cases (see Section D).

12. Section 1(2) of the Damages Act 1996 makes provision for the Courts to make variations to the discount rate if any party to the proceedings shows that it is more appropriate in the case in question. Variations to the discount rate under this provision have, however, been rejected by the Court of Appeal in the cases of **Warriner v. Warriner [2002] 1 WLR 1703** and **Cooke & Others v. United Bristol Health Care & Others [2004] 1 WLR 251**. A note by the Government Actuary in Appendix A of this edition describes how appropriate account could be taken by the Courts of different inflationary conditions. Use of such sound actuarial methodology would require tables at rates of return other than the rate set by the Lord Chancellor and for this reason also it has been deemed appropriate to continue to show a range of rates of return.

13. Previous editions of these tables explained how the current yields on index-linked government bonds could be used as an indicator of the appropriate real rate of return for valuing future income streams. Such considerations were endorsed by the House of Lords in **Wells v Wells** and the same argumentation was adopted by the Lord Chancellor when he set the rate on commencement of Section 1 of the Damages Act 1996. In cases outwith the scope of these tables, the advice of an actuary should be sought.

#### Different retirement ages

14. In paragraph 9 above, reference was made to the problem that will arise when the claimant's retiring age is different from that assumed in the tables. Such a problem may arise in valuing a loss or expense beginning immediately but ending at retirement; or in valuing a loss or expense which will not begin until the claimant reaches retirement but will then continue until death. Tables are provided for retirement ages of 50, 55, 60, 65, 70 and 75. Where the claimant's actual retiring age would have been between two of these retirement ages for which tables are provided, the correct multiplier can be obtained by consideration of the tables for retirement age immediately above and below the actual retirement age, keeping the period to retirement age the same. Thus a woman of 42 who would have retired at 58 can be considered as being in between the cases of a woman of 39 with a retirement age of 55 and a woman of 44 with a retirement age of 60. The steps to take are as follows:

- (1) Determine between which retirement ages, for which tables are provided, the claimant's actual retirement age R lies. Let the lower of these ages be A and the higher be B.
- (2) Determine how many years must be subtracted from the claimant's actual retirement age to get to A and subtract that period from the claimant's age. If the claimant's age is x, the result of this calculation is (x+A-R).
- (3) Look up this new reduced age in the Table corresponding to retirement age A at the appropriate rate of return. Let the resulting multiplier be M.
- (4) Determine how many years must be added to the claimant's actual retirement age to get to B and add that period to the claimant's age. The result of this calculation is (x+B-R).

- (5) Look up this new increased age in the Table corresponding to retirement age B at the appropriate rate of return. Let the resulting multiplier be N.
- (6) Interpolate between *M* and *N*. In other words, calculate:

 $(B-R) \ge M + (R-A) \ge N$ 

and divide the result by 5.

- 15. In the example given in paragraph 14, the steps would be as follows:
  - (1) *A* is 55 and *B* is 60.
  - (2) Subtracting 3 years from the claimant's age gives 39.
  - (3) Looking up age 39 in Table 6 (for retirement age 55) gives 13.08 at a rate of return of  $2\frac{1}{2}$ %.
  - (4) Adding 2 years to the claimant's age gives 44.
  - (5) Looking up age 44 in Table 8 (for retirement age 60) gives 13.01 at a rate of return of  $2\frac{1}{2}$ %.
  - (6) Calculating  $2 \times 13.08 + 3 \times 13.01$  and dividing by 5 gives 13.04 as the multiplier.

16. When the loss or expense to be valued is that from the date of retirement to death, and the claimant's date of retirement differs from that assumed in the tables, a different approach is necessary, involving the following three steps.

- (1) Assume that there is a present loss which will continue for the rest of the claimant's life and from Table 1 or 2 establish the value of that loss or expense over the whole period from the date of assessment until the claimant's death.
- (2) Establish the value of such loss or expense over the period from the date of assessment until the claimant's expected date of retirement following the procedure explained in paragraphs 14 and 15 above.
- (3) Subtract the second figure from the first. The balance remaining represents the present value of the claimant's loss or expense between retirement and death.

17. If the claimant's actual retiring age would have been earlier than 50, or later than 75, the advice of an actuary should be sought.

#### Younger ages

18. Tables 1 and 2, which concern pecuniary loss for life, and Tables 15 to 26, which concern loss of pension from retirement age, have been extended down to age 0. In some circumstances the multiplier at age 0 is slightly lower than that at age 1; this arises because of the relatively high incidence of deaths immediately after birth.

19. Tables for multipliers for loss of earnings (Tables 3 to 14) have not been extended below age 16. In order to determine the multiplier for loss of earnings for someone who has not yet started work, it is first necessary to determine an assumed age at which the claimant would have commenced work and to find the appropriate multiplier for that age from Tables 3 to 14, according to the assumed retirement age. This multiplier should then be multiplied by the deferment factor from Table 27 which corresponds to the appropriate rate of return and the period from the date of the trial to the date on which it is assumed that the claimant would have started work. A similar approach can be used for determining a multiplier for pecuniary loss for life where the loss is assumed to commence a fixed period of years from the date of the trial. For simplicity the factors in Table 27 relate purely to the impact of compound interest and ignore mortality. At ages below 30 this is a reasonable approximation but at higher ages it would normally be appropriate to allow explicitly for mortality and the advice of an actuary should be sought.

#### Contingencies

20. Tables 1 to 26 make reasonable provision for the levels of mortality which members of the population of England & Wales alive today may expect to experience in future. The tables do not take account of the other risks and vicissitudes of life, such as the possibility that the claimant would for periods have ceased to earn due to ill-health or loss of employment. Nor do they take account of the fact that many people cease work for substantial periods to care for children or other dependants. Section B suggests ways in which allowance may be made to the multipliers for loss of earnings, to allow for certain risks other than mortality.

#### **Impaired lives**

21. In some cases, medical evidence may be available which asserts that a claimant's health impairments are equivalent to adding a certain number of years to their current age, or to treating the individual as having a specific age different from their actual age. In such cases, Tables 1 and 2 can be used with respect to the deemed higher age. For the other tables the adjustment is not so straightforward, as adjusting the age will also affect the assumed retirement age, but the procedures described in paragraphs 14 to 16 may be followed, or the advice of an actuary should be sought.

#### **Fixed periods**

22. In cases where pecuniary loss is to be valued for a fixed period, the multipliers in Table 28 may be used. These make no allowance for mortality or any other contingency but assume that regular frequent payments (e.g. weekly or monthly) will continue throughout the period. These figures should in principle be adjusted if the periodicity of payment is less frequent, especially if the payments in question are annually in advance or in arrears.

#### Variable loss or expense

23. The tables do not provide an immediate answer when the annual loss or expense to be valued is not assumed to be stable; where, for instance, the claimant's lost earnings were on a sliding scale or promotion was likely to be achieved. It may be possible to use the tables to deal with such situations by increasing the basic figure of annual loss or expenses or it may be appropriate to split the overall multiplier into two or more parts and apply different multiplicands to each. In addition to contingent widows' pensions, cases such as **Singapore Bus v Lim Soon Yong [1985] 1 WLR 1075** at **1079D – 1080A, Taylor v O'Connor [1971] AC 115** at **127, 130, Davies and others v Whiteways Cyder Co Ltd and another [1974] 3 All ER 168** etc may necessitate actuarial advice with regard to other losses.

#### Spouses' pension benefits

24. If doubt exists whether the tables are appropriate to a particular case which appears to present significant difficulties of substance, it would be prudent to take actuarial advice. This might be appropriate in relation to the level of spouses' benefits, if these are to be assessed, since these are not readily valued using Tables 1 to 26. As a rough rule of thumb, if spouse's benefits are to be included when valuing pension loss from normal pension age, the multipliers in tables 15 to 26 should be increased by 5% for a female claimant (i.e. benefits to the male spouse) and by 15% for a male claimant if the spouse's pension would be half of the pension that the member was receiving at death. If the spouse's pension would be payable at a rate of two-thirds the member's pension at death the multipliers should be increased by 7% for a female claimant.

## SECTION B: CONTINGENCIES OTHER THAN MORTALITY

25. As stated in paragraph 20, the tables for loss of earnings (Tables 3 to 14) take no account of risks other than mortality. This section shows how the multipliers in these tables may be reduced to take account of risks other than mortality. This is based on work commissioned by the Institute of Actuaries and carried out by Professor S Haberman and Mrs D S F Bloomfield (*Work time lost to sickness, unemployment and stoppages: measurement and application* (1990), Journal of the Institute of Actuaries 117, 533-595). Although there was some debate within the actuarial profession about the details of this work, and in particular about the scope for developing it further, the findings were broadly accepted and were adopted by the Government Actuary and the other actuaries who were members of the Working Party when the Second Edition of the Tables was published.

26. Since the risk of mortality (including the risks of dying early or living longer) has already been taken into account in the tables, the principal contingencies in respect of which a further reduction is to be made, particularly for earnings loss up to retirement age, are illness and unemployment. Even with the effective disappearance of the "job for life" there appears to be no scientific justification in the generality of cases for assuming significantly larger deductions than those given in this section. It should be noted that the authors of the 1990 paper (Professor Haberman and Mrs Bloomfield) wrote "All the results discussed in this paper should be further qualified by the caveat that the underlying models … assume that economic activity rates and labour force separation and accession rated do not vary in the future from the bases chosen. As mentioned already in the text, it is unlikely to be true that the future would be free from marked secular trends." The paper relied on Labour Force Surveys for 1973, 1977, 1981 and 1985 and English Life Tables No. 14 (1980-82). However, although it is now somewhat out of date, it is the best study presently available. Some related work has recently been published by Lewis, McNabb and Wass (*Methods of calculating damages for loss of future earnings*, Journal of Personal Injury Law, 2002 Number 2). It is hoped that further research into the impact of contingencies other than mortality will be carried out in due course and the Ogden Working Party is in discussion with potential researchers in the hope of carrying this forward.

27. Specific factors in individual cases may necessitate larger reductions. By contrast, there will also be cases where the standard multipliers should be increased, to take into account positive factors of lifestyle, employment prospects and life expectancy.

28. The extent to which the multiplier needs to be reduced will reflect individual circumstances such as occupation and geographical region. In the short term, levels of economic activity and unemployment, including time lost through industrial action, are relevant. Reductions may be expected to be smaller for clerical workers than for manual workers, for those living in the South rather than the North, and for those in "secure" jobs and in occupations less affected by redundancy or industrial action.

29. The factors described in subsequent paragraphs are for use in calculating loss of earnings up to retirement age. The research work did not investigate the impact of contingencies other than mortality on the value of future pension rights. Some reduction to the multiplier for loss of pension would often be appropriate when a reduction is being applied for loss of earnings. This may be less of a reduction than in the case of loss of earnings because of the ill-health contingency (as opposed to the unemployment contingency), particularly in cases where there are significant ill-health retirement pension rights. A bigger reduction may be necessary in cases where there is significant doubt whether pension rights would have continued to accrue (to the extent not already allowed for in the post-retirement multiplier) or in cases where there may be doubt over the ability of the pension fund to pay promised benefits. In the case of a defined contribution pension scheme, loss of pension rights may be able to be allowed for simply by increasing the future earnings loss (adjusted for contingencies other than mortality) by the percentage which the employer pays to the scheme in contributions.

30. The suggestions which follow are intended only to provide a 'ready reckoner', as opposed to precise figures.

#### The basic deduction for contingencies other than mortality

31. Subject to the adjustments which may be made as described below, the multiplier which has been selected from the tables, i.e. in respect of risks of mortality only, should be reduced by *multiplying* it by a figure selected from the table below, under the heading 'Medium'.

#### Levels of economic activity and employment

32. The medium set of reductions is appropriate if it is anticipated that economic activity is likely to correspond to that in the 1970s and 1980s (ignoring periods of high and low unemployment). The high set is appropriate if higher economic activity and lower unemployment rates are anticipated. The low set is appropriate if lower economic activity and higher unemployment rates are anticipated.

Loss of Earnings to Pension Age 65 (Males)							
Age at date of trial	High	Medium	Low				
20	0.99	0.98	0.97				
25	0.99	0.98	0.96				
30	0.99	0.97	0.95				
35	0.98	0.96	0.93				
40	0.98	0.96	0.92				
45	0.97	0.95	0.90				
50	0.96	0.93	0.87				
55	0.95	0.90	0.82				
60	0.95	0.90	0.81				

Table A									
LOSS (	of Earnings	to	Pension	Age	65	(Male			

#### Lower pension ages (Males)

Table B       Loss of Earnings to Pension Age 60 (Males)							
Age at date of trial	High	Medium	Low				
20	0.99	0.99	0.98				
25	0.99	0.99	0.97				
30	0.99	0.98	0.97				
35	0.99	0.98	0.96				
40	0.98	0.97	0.94				
45	0.98	0.96	0.93				
50	0.97	0.94	0.92				
55	0.96	0.93	0.88				

33. The figures will be higher for a lower pension age. For example, if pension age is 60, the figures should be as shown in Table B.

#### **Female lives**

34. As a rough guide, for female lives between ages 35 and 55 with a pension age of 60, the figures should be as shown in Table C. As for males, the factors will be lower if the pension age is higher (e.g. 65) and higher if the pension age is lower (e.g. 55).

Table C         Loss of Earnings to Pension Age 60 (Females)							
Age at date of trial	High	Medium	Low				
35	0.95	0.95	0.94				
40	0.93	0.93	0.92				
45	0.90	0.90	0.88				
50	0.91	0.90	0.88				
55	0.95	0.94	0.93				

#### Variations by occupation

35. The risks of illness, injury and disability are less for persons in clerical or similar jobs, e.g. civil servants, the professions and financial services industries, and greater for those in manual jobs, e.g. construction, mining, quarrying and ship-building. However, what matters is the precise nature of the work undertaken by the person in question, rather than the industry as such; for example, a secretary in the headquarters office of a large construction company may be at no greater risk than a secretary in a solicitor's office.

36. In less risky occupations the figures in Tables A to C should be *increased* by a maximum of the order of 0.01 up to age 40, rising to 0.03 at age 55.

37. In more risky occupations the figures in Tables A to C should be reduced by a maximum of the order of 0.01 at age 25, 0.02 at age 40 and 0.05 at age 55.

#### Variations by geographical region

38. For persons resident in the South East, East Anglia, South West and East Midlands, the figures in Tables A to C should be *increased* by a maximum of the order of 0.01 up to age 40, rising to 0.03 at age 55.

39. For persons resident in the North, North West, Wales and Scotland, the figures in Tables A to C should be reduced by a maximum of the order of 0.01 at age 25, 0.02 at age 40 and 0.05 at age 55.

## SECTION C: SUMMARY OF PERSONAL INJURY APPLICATIONS

- 40. To use the tables take the following steps:
  - (1) Choose the tables relating to the appropriate period of loss or expense.
  - (2) Choose the table, relating to that period, appropriate to the sex of the claimant (Tables 1 to 26).
  - (3) Choose the appropriate rate of return, as determined under Section 1 of the Damages Act 1996.
  - (4) Find the figure under the column in the table chosen given against the age at trial of the claimant.
  - (5) Adjust the figure to take account of contingencies other than mortality, as specified in Section B above.
  - (6) Multiply the annual loss (net of tax) or expense by that figure.

41. In cases where the claimant's expected age of retirement differs from that assumed in the tables, the more complicated procedure explained in paragraphs 14 to 17 should be followed.

#### **Example 1**

42. The following is an example of the use of the tables in a personal injury case:

The claimant is female, aged 35 at the date of the trial. She lives in London and is an established civil servant who was working in an office at a salary of £25,000 net of tax. As a result of her injuries, she has lost her job. Her loss of earnings to retirement age of 60 is assessed as follows:

- (1) Look up Table 8 for loss of earnings to pension age 60 for females.
- (2) The appropriate rate of return is determined to be  $2\frac{1}{2}$ % (the rate set under Section 1 of the Damages Act 1996).
- (3) Table 8 shows that, on the basis of a  $2\frac{1}{2}$  rate of return, the multiplier for a female aged 35 is 18.39.
- (4) Now take account of risks other than mortality. On the assumption of high economic activity for the next few years, Table C would require 18.39 to be multiplied by 0.95.
- (5) Based on Section B, further adjustment is necessary because the claimant (a) is in a secure non-manual job, and (b) lives in the South East.
- (6) The adjustments should be made as follows:

Basic adjustment to allow for short-term high economic activity (Table C)	0.95
Adjustment to allow for occupation, say	+ 0.01
	0.96
Adjustment for geographical region, say	+ 0.01
	0.97

- (7) The original multiplier taken from Table 8, namely 18.39, must therefore be multiplied by 0.97, resulting in a revised multiplier of 17.84.
- (8) The damages for loss of earnings are assessed as £446,000 (17.84 x 25,000).

#### Example 2

43. The following is a second example of the use of the tables in a personal injury case:

The claimant is male, aged 48 at the date of the trial. He lives in Manchester and was working in a factory. His retirement age was 65 and his pre-retirement multiplicand has been determined as  $\pounds 20,000$  a year net of tax. The multiplicand for costs of care is deemed to be  $\pounds 50,000$  a year. As a result of his injuries, he has lost his job. His loss of earnings to retirement age of 65 is assessed as follows:

- (1) Look up Table 9 for loss of earnings to pension age 65 for males.
- (2) The appropriate rate of return is determined to be  $2\frac{1}{2}$  (the rate set under Section 1 of the Damages Act 1996).
- (3) Table 9 shows that, on the basis of a  $2\frac{1}{2}\%$  rate of return, the multiplier for a male aged 48 is 13.38.
- (4) Now take account of risks other than mortality. On the assumption of medium economic activity for the next few years, Table A would require 13.38 to be multiplied by 0.93.
- (5) Based on Section B, further adjustment is necessary because the Plaintiff (a) is in a risky manual job, and (b) lives in the North West.
- (6) The adjustments should be made as follows:

Basic adjustment to allow for short-term medium economic activity (Table A)	0.93
Adjustment to allow for occupation, say	<u>- 0.02</u>
	0.91
Adjustment for geographical region, say	<u>- 0.03</u>
	0.88

- (7) The original multiplier taken from Table 9, namely 13.38, must therefore be multiplied by 0.88, resulting in a revised multiplier of 11.77.
- (8) The damages for loss of earnings are assessed as £235,400 (11.77 x 20,000).
- 44. The damages for cost of care are assessed as follows:
  - (1) Look up Table 1 for the multiplier at age 48.
  - (2) The appropriate rate of return is  $2\frac{1}{2}$ %.
  - (3) Table 1 shows that, on the basis of a  $2\frac{1}{2}\%$  rate of return, the multiplier at age 48 is 22.51.
  - (4) No further adjustment is made for risks other than mortality.
  - (5) The damages for cost of care are assessed at  $\pounds 1,125,500$  (22.51 x 50,000).

## SECTION D: APPLICATION OF TABLES TO FATAL ACCIDENT CASES

45. Whereas in personal injury cases the problem to be solved is that of setting a value on an income stream during the potential life of one person (the claimant), the situation is generally more complicated in fatal accident cases. Here the compensation is intended to reflect the value of an income stream during the lifetime of one or more dependants of the deceased (or the expected period for which the dependants would have expected to receive the dependency, if shorter) but limited according to the expectation of how long the deceased would have been able to provide the financial support, had he or she not been involved in the fatal accident.

46. In principle, therefore, the compensation for post-trial dependency should be based on the present value at the date of the trial of the dependency during the expected future joint lifetime of the deceased and the dependant or claimant (had the deceased survived naturally to the date of the trial), subject to any limitations on the period of dependency and any expected future changes in the level of dependency, for example, on attaining retirement age. In addition there should be compensation for the period between the date of accident and the date of trial.

47. A set of actuarial tables to make such calculations accurately would require tables similar to Tables 1 to 26 but for each combination of ages as at the date of the trial of the deceased and the dependant to whom compensation is to be paid. The Working Party concluded that this would not meet the criterion of simplicity of application which was a central objective of these tables and recommends that, in complex cases, or cases where the accuracy of the multiplier is thought by the parties to be of critical importance and material to the resulting amount of compensation (for example in cases potentially involving very large claims where the level of the multiplicand is unambiguously established), the advice of a professionally qualified actuary should be sought. However, for the majority of cases, a certain amount of

approximation will be appropriate, bearing in mind the need for a simple and streamlined process, and taking into consideration the other uncertainties in the determination of an appropriate level of compensation. The following paragraphs describe a methodology using Tables 1 to 26 which can be expected to yield satisfactory answers.

#### Damages for the period from the fatal accident to the date of trial

48. The period of pre-trial dependency will normally be equal to the period between the date of the fatal accident and the date of the trial, substituting where appropriate the lower figure of the expected period for which the deceased would have provided the dependency, had he or she not been killed in the accident, or if the period of dependency would have been limited in some way, for example if the dependant is a child.

49. A deduction may be made for the risk that the deceased might have died anyway, in the period between the date of the fatal accident and the date at which the trial takes place. In many cases this deduction will be small and could usually be regarded as *de minimis*. The need for a deduction becomes more necessary the longer the period from the date of accident to the date of trial and the older the deceased at the date of death. As an illustration of the order of magnitude of the deduction, Table D shows some examples of factors by which the multiplier should be multiplied for different ages of the deceased and for different periods from the date of accident to the date of the trial.

# Table D Factor by which pre-trial damages should be multiplied to allow for the likelihood that the deceased would not in any case have survived to provide the dependency for the full period to the date of trial.

Age of deceased at date of accident	Period from	m date of accide years)	ent to date of tr	ial or date of c	essation of dep	endency,
	Male dece	ased		Female de	eceased	
	3	6	9	3	6	9
10	1.00	1.00	1.00	1.00	1.00	1.00
20	1.00	1.00	1.00	1.00	1.00	1.00
30	1.00	1.00	1.00	1.00	1.00	1.00
40	1.00	0.99	0.99	1.00	1.00	0.99
50	0.99	0.99	0.98	1.00	0.99	0.99
60	0.98	0.97	0.95	0.99	0.98	0.97
65	0.98	0.95	0.92	0.99	0.97	0.95
70	0.96	0.92	0.87	0.98	0.95	0.92
75	0.93	0.86	0.79	0.96	0.91	0.85
80	0.89	0.79	0.69	0.93	0.84	0.76

Note: The factor for a period of zero years is clearly 1.00. Factors for other ages and periods not shown in the table may be obtained approximately by interpolation.

50. The resultant multiplier, after application of any discount for the possibility of early death of the deceased before the date of trial, even had the accident not taken place, is to be applied to the multiplicand, which is determined in the usual way. Interest will then be added up to the date of trial on the basis of special damages.

#### Damages from the date of trial to retirement age

- 51. The assessment of the multiplier involves the following steps:
  - (1) Determine the expected period for which the deceased would have been able to provide the dependency (see paragraph 52).
  - (2) Determine the expected period for which the dependant would have been able to receive the dependency (see paragraph 52).
  - (3) Take the lesser of the two periods.

- (4) Treat the resulting period as a term certain for which the multiplier is to be determined and look up the figure in Table 28 for this period at the appropriate rate of interest.
- (5) Apply any adjustment for contingencies other than mortality in accordance with Section B.
- (6) If necessary, make an allowance for the risk that the deceased might have died anyway before the date of the trial (see paragraph 54).

52. The expected periods at (1) and (2) of paragraph 51 may be obtained from the 0% column of the appropriate table at the back of this booklet. For (1), Tables 3 to 14 will be relevant, according to the sex of the deceased and the expected age of retirement. The age at which the table should be entered is the age which the deceased would have been at the date of the trial. For (2) Tables 1 and 2 can be used, according to the sex of the dependent and looking up the table at the age of the dependent at the date of the trial.

53. If the period for which the dependency would have continued is a short fixed period, as in the case of a child, the figure at (2) would be the outstanding period at the date of the trial.

54. A deduction may be made for the risk that the deceased might have died anyway before the date of trial. The need for such a deduction becomes more necessary the longer the period from the date of accident to the date of trial and the older the deceased at the date of death. As an illustration of the order of magnitude of the deduction, Table E shows some examples of the factor by which the multiplier, determined as above, should be multiplied for different ages of the deceased and for different periods from the date of accident to the date of the trial.

# Table E Factor by which post-trial damages should be multiplied to allow for the likelihood that the deceased would not in any case have survived to the date of trial in order to provide any post-trial dependency.

Age of deceased at date of accident	Period from date of accident to date of trial (years)							
	Male deceased			Female de	Female deceased			
	3	6	9	3	6	9		
10	1.00	1.00	1.00	1.00	1.00	1.00		
20	1.00	1.00	0.99	1.00	1.00	1.00		
30	1.00	0.99	0.99	1.00	1.00	1.00		
40	1.00	0.99	0.98	1.00	0.99	0.99		
50	0.99	0.97	0.96	0.99	0.98	0.97		
60	0.97	0.93	0.89	0.98	0.96	0.93		
65	0.95	0.90	0.83	0.97	0.94	0.89		
70	0.92	0.83	0.73	0.95	0.89	0.82		
75	0.87	0.72	0.58	0.91	0.81	0.68		
80	0.79	0.58	0.39	0.85	0.68	0.50		

Note: The factor for a period of zero years is clearly 1.00. Factors for other ages and periods not shown in the table may be obtained approximately by interpolation.

55. The resulting multiplier, after application of any discount for the possibility of early death of the deceased before the date of trial, even had the accident not taken place, is to be applied to the appropriate multiplicand, determined in relation to dependency as assessed for the period up to retirement age.

56. If there are several dependants, to whom damages are to be paid in respect of their own particular lifetime (or for a fixed period of dependency), separate multipliers should be determined for each and multiplied by the appropriate multiplicand using the procedure in paragraphs 51 to 55. The total amount of damages is then obtained by adding the separate components. If a single multiplicand is determined, but the damages are to be shared among two or more dependants so long as they are each alive, or during a period of common dependency, then the multiplier will be calculated using the procedure in paragraphs 51 to 55. However, at step (2) of paragraph 51 the expected period will be the longest of the expected periods for which the dependency might last.

#### Damages for the period of dependency after retirement age

57. The method described in paragraphs 51 to 56 for pre-retirement age dependency cannot satisfactorily be applied directly to post-retirement age dependency with a sufficient degree of accuracy. We therefore propose a method which involves determining the multiplier by looking at dependency for the rest of life from the date of trial and then subtracting the multiplier for dependency up to retirement age.

- 58. The assessment of the multiplier for whole of life dependency involves the following steps:
  - (1) Determine the expectation of life which the deceased would have had as at the date of trial, or such lesser period for which the deceased would have been able to provide the dependency (see paragraph 59).
  - (2) Determine the expected period for which the dependant would have been able to receive the dependency (see paragraph 59).
  - (3) Take the lesser of the two periods.
  - (4) Treat the resulting period as a term certain for which the multiplier is to be determined and look up the figure in Table 28 for this period at the appropriate rate of interest.

59. The expected periods at (1) and (2) of paragraph 58 may be obtained from the 0% column of the appropriate table at the back of this booklet. For (1) Tables 1 or 2 will be relevant, according to the sex of the deceased. The age at which the table should be entered is the age which the deceased would have attained at the date of the trial. For (2) Tables 1 and 2 can be used, according to the sex of the dependant and looking up the table at the age of the dependant at the date of the trial.

60. Deduct the corresponding multiplier for post-trial pre-retirement dependency, as determined in paragraphs 51 to 56, but without any adjustment for contingencies other than mortality, or that the deceased may have died anyway before the date of trial. The result is the multiplier for post-retirement dependency, which must then be applied to the appropriate multiplicand, assessed in relation to dependency after retirement age. The adjustment for contingencies other than mortality in respect of the damages for the period of dependency after retirement age will often be less than that required for pre-retirement age damages (see paragraph 29).

61. A deduction may finally be made for the risk that the deceased might have died anyway before the date of trial. The need for such a deduction becomes more necessary the longer the period from the date of accident to the date of trial and the older the deceased at the date of death. As an illustration of the order of magnitude of the deduction, Table E shows some examples of the factor by which the multiplier, determined as above, should be multiplied for different ages of the deceased and for different periods from the date of accident to the date of the trial. The factors for this purpose are exactly the same deductions as used in the calculation at paragraphs 51 to 56.

#### Cases where dependency is not related to employment

62. The layout of paragraphs 51 to 61 is based on the assumption that the dependency provided by the deceased would have changed at retirement age. This may not be appropriate in some cases, particularly in the important case of the deceased wife and mother whose contribution has been solely in the home or in the case of an adult child caring for an elderly parent or parents. In cases like this, where the deceased might have provided the dependency throughout their lifetime, paragraphs 57 to 61 should be ignored and paragraphs 51 to 56 used, with the difference that the expected period required at step (1) of paragraph 51 should be a whole of life expectancy, taken from Tables 1 and 2. This is also the approach to use when the deceased was already a pensioner.

#### Example 3

63. The dependant is female, aged 38 at the date of the trial, which is taking place 6 years after the date of the fatal accident which killed the male deceased, at that time aged 37, on whom the dependant was financially dependent. The Court has determined a multiplicand, up to the deceased's normal retirement age of 65, of £30,000 and has decided that no post-retirement damages are payable. The damages are to be calculated as follows:

#### Pre-trial damages:

- (1) Period between fatal accident and trial: 6 years
- (2) Factor for possible early death (Table D for male aged 37 and 6 years): 0.99
- (3) Pre-trial damages =  $6 \times 0.99 \times \pounds 30,000$

```
= £178,200 (plus interest as special damages)
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Post-trial damages:

- (1) Expected period for which the deceased would have provided the dependency (Table 9 at 0% for male aged 43, the age as at the date of trial): 21.15
- (2) Expected period for which the dependant would have been able to receive the dependency (Table 2 at 0% for female aged 38): 48.44
- (3) Lesser of two periods at (1) and (2) = 21.15
- (4) Multiplier for term certain of 21.15 years at 2½% rate of return (interpolating between the values for 21 and 22 years in Table 28)

= (22 - 21.15) x 16.39 + (21.15 - 21) x 16.97

= 16.48

- (5) Adjustment factor for contingencies other than mortality (in accordance with Section B). Assume medium economic activity. Factor from Table A: 0.96
- (6) Adjustment factor for the risk that the deceased might have died anyway before the date of trial (Table E for male aged 37 and 6 years): 0.99
- (7) Post-trial damages =  $16.48 \times 0.96 \times 0.99 \times \pounds 30,000$

= £469,878

64. If the court wishes to select multipliers from the date of death instead of following the guidance given above, it is essential to ensure that the period before the trial does not include a discount for early receipt. This could be achieved by selecting multipliers from the 0% columns of the appropriate tables and then applying the discount for early receipt to the period after the trial (using the discount rate set under Section 1 of the Damages Act 1996). Thus, the calculations for example 3 above would then be:

- (1) Expected period for which the deceased would have provided the dependency (Table 9 at 0% for male aged 37, the age as at the date of trial): 26.99
- (2) Deduct period between accidental death and date of trial of 6 years to give post-trial period: 20.99
- (3) Expected post-trial period for which the dependant would have been able to receive the dependency (Table 2 at 0% for female aged 38): 48.44
- (4) Lesser of two periods at (2) and (3) = 20.99
- (5) Multiplier for term certain of 20.99 years at 2.5% rate of return (Table 28) = 16.38
- (6) Adjustment factor for contingencies other than mortality (in accordance with Section B). Assume medium economic activity. Factor from Table A: 0.96
- (7) Pre-trial damages  $= 6 \text{ x } \pounds 30,000$

= £180,000 (plus interest as special damages)

(8) Post-trial damages =  $16.38 \times 0.96 \times \pounds 30,000$ 

= £471,744

This method can be extended to the following examples.

#### **Example 4**

65. The dependant is female, aged 50 at the date of the trial, which is taking place 4 years after the date of the fatal accident which killed the man, at that time aged 47, on whom she was financially dependent. The Court has determined a multiplicand, up to the deceased's normal retirement age of 60, of £50,000 and has decided that post-retirement damages should be payable based on a multiplicand of £30,000. The damages are to be calculated as follows:

Pre-trial damages:

- (1) Period between fatal accident and trial: 4 years
- (2) Factor for possible early death (Table D for male aged 47 and 4 years): 0.99
- (3) Pre-trial damages =  $4 \times 0.99 \times \text{\pounds}50,000$

= £198,000 (plus interest as special damages)

Post-trial pre-retirement damages:

- (1) Expected period for which the deceased would have provided the dependency (Table 7 at 0% for male aged 51, the age as at the date of trial): 8.81
- (2) Expected period for which the dependant would have been able to receive the dependency (Table 2 at 0% for female aged 50): 36.29
- (3) Lesser of two periods at (1) and (2) = 8.81
- Multiplier for term certain of 8.81 years at 2½% rate of return (interpolating between the values for 8 and 9 in Table 28)

$$= (9 - 8.81) \ge 7.26 + (8.81 - 8) \ge 8.07$$

- = 7.92
- (5) Adjustment factor for contingencies other than mortality (in accordance with Section B). Assume medium economic activity. Factor from Table B: 0.94
- (6) Adjustment factor for the risk that the deceased might have died anyway before the date of trial (Table E for male aged 47 and 4 years): 0.99
- (7) Post-trial pre-retirement damages =  $7.92 \times 0.94 \times 0.99 \times \text{\pounds}50,000$

= £368,518

Post-retirement damages:

- (1) Expectation of life of deceased at date of trial (Table 1 at 0% for male aged 51): 31.85
- (2) Expected period for which the dependant would have been able to receive the dependency (Table 2 at 0% for female aged 50): 36.29
- (3) Lesser of two periods at (1) and (2) = 31.85
- (4) Multiplier for time certain of 31.85 years at 2½% rate of return (interpolating between the values for 31 and 32 in Table 28)

 $= (32 - 31.85) \times 21.66 + (31.85 - 31) \times 22.12 = 22.05$ 

- (5) Deduct multiplier for post-trial pre-retirement damages before application of adjustment factors for contingencies other than mortality and for the risk that the deceased might have died anyway before the date of trial: 22.05 7.92 = 14.13
- (6) Adjustment factor for the risk that the deceased might have died anyway before the date of trial (Table E for male aged 47 and 4 years): 0.99
- (7) Post-retirement damages =  $14.13 \times 0.99 \times \pounds 30,000$

= £419,661

#### **Example 5**

66. There are two dependants, respectively a child aged 10 and a male aged 41 at the date of the trial, which is taking place 3 years after the date of the fatal accident which killed the woman, at that time aged 35, on whom both were financially dependent. She worked in London for a computer company and future economic activity is deemed by the Court to be high. The Court has determined a multiplicand, up to the deceased's normal retirement age of 62, of £50,000 for the male dependant and £10,000 for the child, up to the age of 21, and has decided that post-retirement damages should be payable based on a multiplicand of £20,000. The damages are to be calculated as follows:

Pre-trial damages:

- (1) Period between fatal accident and trial: 3 years
- (2) Factor for possible early death (Table D for female aged 35 and 3 years): 1.00
- (3) Pre-trial damages =  $3 \times 1.00 \times (\pounds 50,000 + \pounds 10,000)$

= £180,000 (plus interest as special damages)

Post-trial pre-retirement damages:

(1) Expected period for which the deceased would have provided the dependency should be based on female aged 38 at the date of trial with retirement age of 62. First calculate as though deceased were aged 36 and had retirement age of 60 (Table 8 at 0% for female aged 36): 23.61

Then calculate as though deceased were aged 41 and had retirement age of 65 (Table 10 at 0% for female aged 41): 23.38

Interpolate for age 38 with retirement age of 62

$$= (3 \times 23.61 + 2 \times 23.38)/5 = 23.52$$

(2) Expected period for which the male dependant would have been able to receive the dependency (Table 1 at 0% for male aged 41): 41.80

Expected period for which child would have been able to receive the dependency = 11.00

(3) Lesser of two periods at (1) and (2) = 11.00 (in case of child)

= 23.52 (in case of man)

(4) Multiplier for term certain of 11 years at  $2\frac{1}{2}$ % (Table 28): 9.63

Multiplier for term certain of 23.52 years at  $2\frac{1}{2}\%$  rate of return (interpolating between the values for 23 and 24 in Table 28)

= (24 – 23.52) x 17.55 + (23.52 – 23) x 18.11

= 17.84

- (5) Adjustment factor for contingencies other than mortality (in accordance with Section B). Factor from Table C, allowing for occupation and geographical area: 0.96 (does not apply to child)
- (6) Adjustment factor for the risk that the deceased might have died anyway before the date of trial (Table E for female aged 35 and 3 years): 1.00
- (7) Pre-retirement damages =  $9.63 \times 1.00 \times \pounds 10,000 + 17.84 \times 0.96 \times 1.00 \times \pounds 50,000$

 $= \pounds 96,300 + \pounds 856,320$  $= \pounds 952.620$ 

Post-retirement damages:

(1) Expectation of life of deceased at date of trial (Table 2 at 0% for female aged 38): 48.44

- (2) Expected period for which the dependant would have been able to receive the dependency (Table 1 at 0% for male aged 41): 41.80 (no post retirement dependency for child)
- (3) Lesser of two periods at (1) and (2) = 41.80
- (4) Multiplier for time certain of 41.80 years at 2½% rate of return (interpolating between the values for 41 and 42 in Table 28)

 $= (42 - 41.80) \times 25.78 + (41.80 - 41) \times 26.14 = 26.07$ 

- (5) Deduct multiplier for post-trial pre-retirement damages before application of adjustment factors for contingencies other than mortality and for the risk that the deceased might have died anyway before the date of trial: 26.07 17.84 = 8.23
- (6) Adjustment factor for the risk that the deceased might have died anyway before the date of trial (Table E for female aged 35 and 3 years) = 1.00
- (7) Post-retirement damages =  $8.23 \times 1.00 \times \pounds 20,000$

= £164,600

## SECTION E: CONCLUDING REMARKS

67. These tables are designed to assist the courts to arrive at suitable multipliers in a range of possible situations. However, they do not cover all possibilities and in more complex situations advice should be sought from a Fellow of the Institute of Actuaries or a Fellow of the Faculty of Actuaries.

68. In cases in which the award will be large, say, about £2 million or more at current prices, or where there are significant pension rights to be taken into consideration, more accurate calculations may be necessary. In such cases advice from an actuary will be desirable.

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Government Actuary

London

September 2004

# APPENDIX A

#### Allowing for different types of future inflation

1. As discussed by Robin de Wilde QC in the Introduction, the purpose of these Tables is to assist the Courts in making awards which will achieve their objective of fully compensating those victims who have suffered wrongful injury. Essentially what they are seeking to do is to place a single capital value on different streams of future payments, which have either been lost or forgone (e.g. loss of earnings) or will be incurred in addition to what otherwise might have been the case (e.g. costs of care).

2. Setting a value on future cash-flows is exactly what many actuaries spend most of their time doing. The process requires assumptions about the amounts to be paid, the probabilities of their being paid and the investment returns which will be assumed to be obtained on any money invested to provide for the future payments.

3. For the probability of the payments being made, we are mostly concerned in the Ogden Tables with whether the individual will survive to particular future ages. Inevitably one does not know this in advance and so the actuary will assume a model, based on statistical experience of what proportion of people live to each future age from any given age, and allowing for a reasonable assumption about how this experience might change in the future. In the 4th edition of the Ogden tables, Tables 19 to 36 made allowance for future improvement in prospects for life expectancy by using the mortality assumptions which had been used by the Government Actuary in the preparation of what were then the most up-to-date official national population projections for England & Wales. Tables 1 to 18 reflected a historic table of mortality experience from the period around the 1991 Census. It rapidly became clear that most people were in agreement that it made more sense to use the tables based on projected mortality, since this was a best estimate of how long on average people would live into the future, which is exactly what is needed for the purposes of the Tables. This edition of the Tables includes only figures based on projected mortality, now taken from the principal projection of the 2002 based official national population projections for England & Wales.

4. The Tables are based on averages, but, in the absence of specific information to the contrary, it seems reasonable to assume that a claimant (or dependant) will live for an average future lifespan. In fact the Ogden Tables do not assume that the individual will live precisely for that period – no shorter and no longer. Effectively they look at what the future payments would be worth in each of the possible scenarios, in which he or she might live different future lifespans (from dying the next day to living to 120 or so). They then take an average based on the likelihood of each of the scenarios occurring. Allowance can be made for a claimant seeming to have higher or lower expectation of life than average, through assuming they are aged less or more than they actually are. The first column in Tables 1 and 2 (at a rate of return of 0.0%) shows what are usually referred to as the 'expectations of life' (i.e. without any allowance for discount for the time value of money), so it can readily be seen how large an adjustment would be required to the actual age of the claimant in order to reduce or increase the expectation of life by the desired amount.

5. Allowance can be made in other approximate ways for the probability that the stream of future payments will be worth less than would be the case on average for the population of England & Wales. For example, life expectancy is lower in Scotland than in England & Wales (about one year – or some 5% – lower for someone currently aged 65, on the basis of the projected mortality rates used in the official national population projections) and mortality in Wales, Northern Ireland and some regions of England would be between the Scottish level and the level for England & Wales as a whole. Correspondingly, the expectation of life in other regions of England & Wales is on average higher than for England & Wales as a whole. The proportionate impact on the discounted values which appear in the Tables would be a little lower than for expectation of life.

6. Actuaries would usually allow explicitly for the amount of the future payments they are seeking to value. If the payments are set as absolute amounts of money, this is straightforward. However, estimating the amount of future payments will often involve making an assumption about future price inflation, such as if the payments are related to the cost of living, either explicitly (for example, pension payments which go up each year in line with the movement in the Retail Price Index (RPI)) or implicitly (because the payments related to the amounts necessary to purchase a particular basket of goods and services). Allowance might be made in particular cases for the expected movements in particular price indices, which might differ from general retail price inflation. For example, it is common in assessing costs under medical insurance to allow for different indices of the costs of care or hospitalisation, which are often expected to go up faster than the RPI. In other cases the payments relate to future salary expectations, so the actuary will have to make allowance for the expected future growth of salaries, which may include a general component for the growth of earnings in the economy, as well as a specific component for the individual because of a reasonable expectation that their salary would increase relative to the average, because of career progression, seniority and other factors.

7. A simple way to think of how to model all these future payments is to break down the calculation into components. So the value of a future payment might be written as:

Amount of future payment in today's money

x Factor to allow for the relevant sort of inflation by the time of payment

- x Probability of the payment being made
  - x Discount factor to allow for the time value of money

If looked at in this way, the payment amounts are explicitly increased to make allowance for future inflation (whether it be RPI inflation, medical inflation, salary growth or whatever) and the discount factor has to reflect the rate of return (in nominal terms) available on the assets held to provide for the future liability. In modern finance theory, it is generally thought inappropriate to base the discount factor on the assets actually held but to use something called the "risk-free rate of return", which in simple terms means the return on a very secure investment (such as a fixed interest security issued by the UK government) of term corresponding to the duration for which a discounting factor is needed.

8. Thus values could be obtained for future payments likely to be affected by different types of inflation, by allowing for those inflation rates explicitly and using a common risk-free rate of return, which would be based on the yields on government fixed interest securities (gilts).

9. Where the type of inflation with which we are concerned is the increase in the cost of living (as measured by the Retail Price Index), there is a shortcut available for this calculation, as the UK government has since 1981 been issuing index-linked government securities. These are also essentially risk-free investments (over their term), but the payments of interest and return of capital at the maturity date are not fixed in money terms but are increased in line with the movements in the UK RPI. So we can combine the factor for allowing for inflation in the formula in paragraph 7 above with the discount factor, replacing the rate of return on ordinary fixed interest securities by the real rate of return on index-linked gilts. This so-called 'real' rate of return is much lower than the rate of return on fixed interest securities, since it allows for the offsetting effect of inflation. The formula then becomes:

Amount of future payment in today's money

- x Probability of the payment being made
  - x Real rate of return discount factor to allow for the time value of money in respect of inflation linked payments

This is the basis on which the Ogden Tables are now prepared, and the rate of return, which is set by the Lord Chancellor in Regulations, is the real rate of return discount factor, derived from the returns on index-linked gilts, with an allowance for tax.

10. It is still possible to use this approach, and the rates of return on index-linked gilts, where the future payment streams are deemed to go up in line with earnings or with some other price index. This can be done in one of two ways. The first way would be to allow explicitly for the rate of increase of the future payments relative to prices, in other words to allow for the real rate of earnings growth or of costs of care (that is to say the growth in excess of price inflation). The formula at paragraph 7 would then become:

Amount of future payment in today's money

x Factor to allow for the relevant sort of <u>real</u> inflation by the time of payment (i.e. the inflation in excess of future price inflation as measured by the RPI)

x Probability of the payment being made

x Real rate of return discount factor to allow for the time value of money in respect of inflation linked payments

11. Another way of doing it would be to allow implicitly for the relevant <u>real</u> rate of inflation by using a lower discount factor. This is equivalent to the formula in paragraph 9, but with the relevant type of inflation substituted for RPI inflation:

Amount of future payment in today's money

- x Probability of the payment being made
  - x <u>Real rate of return</u> discount factor to allow for the time value of money in respect of inflation linked payments according to the relevant inflation index

12. Real earnings growth in the UK has averaged some  $1\frac{1}{2}$  to 2% a year more than growth in the RPI. This is based on general earnings growth in the economy and does not allow for the growth of earnings which many individuals experience throughout their careers. It is, of course, uncertain what an appropriate assumption would be for the future, but actuaries commonly allow in their calculations for 2% real earnings growth (they might allow for somewhat less in the way of general earnings growth and include a specific allowance for the earnings progression of individuals). If we take 2% a year future real earnings growth as an example, the real rate of return discount factor which would allow properly for this type of inflation in the formula in paragraph 11 would be some two percentage points below the real rate of return based on RPI inflation, the real rate of return to use in the Ogden Tables in order to allow properly for earnings inflation, would be about  $\frac{1}{2}\%$  (strictly, the pre-tax rate implicit in the  $2\frac{1}{2}\%$  should be reduced by two percentage points and then a deduction made for tax, but it is unlikely that this would be very different, especially as the deduction for tax is an approximation). For a woman aged 40, this would increase the multiplier shown in Table 2 from 26.92 to 41.10, roughly a 53% increase in the amount of compensation due.

13. Future inflation in the costs of care is even more uncertain. To the extent that the care relates primarily to the services of carers or medical staff, then an earnings inflation assumption might be a reasonable proxy. Medical costs arising from medicines and hospitalisation are also generally expected to go up faster than ordinary retail price inflation, but perhaps not quite so much as earnings in the long term. If we were to make an assumption that costs of care would go up by 1% a year on average more than inflation as measured by the RPI, then the real rate of return to use in the Ogden Tables to allow for payments in respect of costs of care would be about  $1\frac{1}{2}$ % (i.e.  $2\frac{1}{2}$ % less 1%). For a woman aged 40, this would increase the multiplier shown in Table 2 from 26.92 to 32.87, roughly a 22% increase in the amount of compensation due.

14. An alternative way of approaching the problem, instead of amending the discount rate, would be to provide a supplementary table for increasing the multiplicand to allow for the fact that the payments are expected to increase faster than the rate of inflation implicit in the rate of discount set by the Lord Chancellor. A sample of such a table for use with the multipliers for loss of life in Tables 1 and 2 might be as follows:

Age at date	Expected average yearly increase in excess of RPI increases						
of trial	0.5%	1.0%	1.5%	2.0%	2.5%		
Males							
20	1.13	1.29	1.48	1.72	2.02		
30	1.11	1.25	1.41	1.60	1.84		
40	1.10	1.21	1.34	1.49	1.67		
50	1.08	1.17	1.27	1.38	1.52		
60	1.06	1.13	1.20	1.28	1.38		
Females							
20	1.13	1.30	1.50	1.76	2.08		
30	1.12	1.26	1.43	1.64	1.89		
40	1.10	1.22	1.36	1.53	1.72		
50	1.08	1.18	1.29	1.42	1.56		
60	1.07	1.14	1.22	1.31	1.42		

# Additional factors to be applied to the multiplicand to allow for the stream of payments to be valued going up by different percentages more than the RPI

Government Actuary's Department

July 2004

# APPENDIX B

#### Comments by the Association of British Insurers and the NHS Litigation Authority

#### Introduction

1. The Association of British Insurers (ABI) is the trade association for the UK insurance industry and represents companies transacting over 95% of the domestic insurance in the United Kingdom. ABI representatives welcomed participating in the preparatory discussions leading to the preparation of this fifth edition of the tables. The NHS Litigation Authority is a Special Health Authority set up to handle all clinical negligence claims arising in England.

2. Representatives of both ABI and the NHS Litigation Authority welcomed participating in the preparatory discussions leading to the preparation of this fifth edition of the tables.

3. At the time of writing this appendix, the law applicable to the valuation and payment of personal injury claims involving damages for future loss is on the cusp of significant change. Implementation of sections 100 - 101 of The Courts Act 2003 will for the first time lead to judicially ordered periodical payments in these claims. If these are assessed based on the claimant's annual needs – the "bottom up" approach – it is likely that the traditional multiplier & multiplicand approach, with which these tables assist, will become less relevant.

4. We recognise the refinements that this latest edition brings to the actuarial principles involved in assessing claims for future losses and expenses. First, the broadening of the range of retirement ages (as set out in tables 3-26 above) should enable insurers, legal representatives and the judiciary more readily to value and settle claims with these features. Second, the general updating of the multipliers to reflect recent improvements in projected mortality should be a positive development for those claims in which post-injury life expectancy remains on a par with that of the general population. Third, it is worth re-emphasising the reasons for removing what were tables 1-18 in the fourth edition: "...*the fact that they are no longer published ... does not mean in very particular circumstances that they may not be relevant to the calculations of damages*".<sup>5</sup>

#### Reservations

5. However, certain aspects of the Introduction and Explanatory Notes to the present edition do give insurers and the NHS Litigation Authority cause for significant concern; some to the extent that we disagree with the points made.

6. The agreed purpose of the tables is to "*provide an aid for those assessing the lump sum appropriate as compensation*..."<sup>6</sup> in claims involving future losses. We do not accept that the tables or the accompanying text should seek to advocate reform of the legal basis on which compensation is assessed. In our view, so doing weakens the authority of the tables and undermines the consensus in the Working Party.

7. It is with some regret that we feel obliged to raise our concerns by way of this Appendix, but we judge it essential to respond to certain arguments and assertions which could, without further commentary or interpretation, be viewed as advocating approaches that we believe were not matters on which the various interests in the Working Party were agreed. We set out our main concerns below.

#### Multipliers in Fatal Accident Act Cases

8. In the fourth edition, we stated that: "...there is perhaps a danger that the use of overly scientific approaches in this area may bring a spurious accuracy to a calculation which, almost by definition, will prove wrong in the future."<sup>7</sup>

9. The valuation of fatal accident claims is based on several informed judgments and assumptions (such as the period of dependency, its amount and any variation in it), which taken together are far more likely to affect the amount of the fatal accident claim than say preferring the methodology suggested in Section D of the current Explanatory Notes to that outlined by Lord Fraser in **Cookson v Knowles [1979] AC 556**. It is worth emphasising that Nelson J in **White v ESAB [2002] PIQR Q76** considered himself bound by this authority.

<sup>&</sup>lt;sup>5</sup> See paragraph 21 of the Introduction to this edition.

<sup>&</sup>lt;sup>6</sup> Paragraph 1 of the Explanatory Notes to this edition.

<sup>&</sup>lt;sup>7</sup> Ogden Tables, Fourth Edition - appendix C paragraph 10.

#### Inflation and Appendix A

10. We do not accept the arguments or the table of factors in the latter part of Appendix A. The arguments are for an allowance to be made for different types of future inflation. It is our view that this is a matter reserved for the Lord Chancellor<sup>8</sup> to consider in prescribing any rate under the Damages Act 1996 (as amended). The Lord Chancellor specifically took inflation into account in setting the discount rate in 2001. He stated that setting the rate (emphasis added):

"... involves making assumptions for the future about a wide variety of factors affecting the economy as a whole, including for example the likely rate of inflation. In these circumstances, it is inevitable that any approach to setting the discount rate must be fairly broad-brush. Put shortly, there can be no single "right" answer as to what rate should be set. Since it is in the context of larger awards, intended to cover longer periods, that there is the greatest risk of serious discrepancies between the level of compensation and the actual losses incurred if the discount rate set is not appropriate, I have had this type of award particularly in mind when considering the level at which the discount rate should be set.<sup>9</sup>

11. Since then, the Court of Appeal have been invited to examine the Lord Chancellor's decision and reasons for setting the discount rate at 2.5% on several occasions, most recently in **Cooke v United Bristol Health Care & others [2004] 1 WLR 251** (and earlier in **Warriner v Warriner [2002] 1 WLR 1703**). In **Cooke** the argument was advanced that the multiplicand should be adjusted because care costs and earnings were asserted to rise at a rate faster than prices inflation.

12. Laws LJ stated very clearly in **Cooke** that the effects of inflation were squarely within the factors considered by the Lord Chancellor in the reasons given in 2001 for setting the present discount rate. Therefore the Court of Appeal was bound by that rate. Laws LJ said that:

"The key rests in the fact, plain in my judgment beyond the possibility of sensible argument, that it is a premise of the Lord Chancellor's order that the effects of inflation in claims for future loss are to be catered for solely by means of the multiplier, conditioned as it is by the discount rate. Accordingly the multiplicand was necessarily treated as based on current costs at the date of trial."

13. We are firmly of the view that any arguments that seek to depart from the discount rate set by the Lord Chancellor – whether by way of applying a different discount rate in a particular case or arguing for an adjustment to the multiplicand, as advocated in Appendix A above – have been firmly rejected by the Court of Appeal for the time being. We are unable to support Appendix A and maintain that it is not the function of this Working Party to advocate an approach which would inevitably conflict with the current case law from the appeal courts.

14. In any event, it is apparent in any examination of compensation for future losses in personal injury claims that there is a notable lack of a credible body of evidence concerning how these awards are invested, managed and ultimately spent. We believe that proper research is required further to inform the debate in this important area.

#### Summary

15. We find ourselves unable to support the arguments advanced in the Explanatory Notes and Appendix A that challenge the current discount rate and the reasoning underlying its selection. These matters are reserved by statute to the Lord Chancellor and consequently the appellate Courts have refused to entertain them.

16. This present position reinforces the stability of the discount rate. The Lord Chancellor made this plain in setting the rate in 2001, when he envisaged: "... a situation in which claimants and defendants may have a reasonably clear idea about the impact of the discount rate upon their cases, so as to facilitate negotiation of settlements and the presentation of cases in court."

Association of British Insurers and NHS Litigation Authority

September 2004

<sup>&</sup>lt;sup>8</sup> And, as of June 2003, Secretary of State for Constitutional Affairs

<sup>&</sup>lt;sup>9</sup> Setting the Discount Rate, Lord Chancellor's Reasons (27 July 2001) http://www.dca.gov.uk/civil/discount.htm

#### Table 1 Multipliers for pecuniary loss for life (males)

Age at date of trial	Multipli and rate	er calculated of return of	l with allow	ance for pro	jected morta	ality from th	ie 2002-base	ed populatio	n projection	S		Age at date of trial
triai	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	uiui
0	83.24	67.69	56.00	47.08	40.18	34.76	30.46	27.00	24.17	21.83	19.88	0
ı 1	82.62	67.34	55.82	47.00	40.16	34.79	30.51	27.06	24.23	21.90	19.95	1
2	81.62	66.68	55.37	46.70	39.96	34.65	30.42	26.99	24.19	21.87	19.93	2
3	80.60	66.00	54.92	46.39	39.75	34.51	30.32	26.92	24.14	21.84	19.91	3
4	79.58	65.31	54.45	46.08	39.53	34.36	30.21	26.85	24.09	21.80	19.88	4
5	78.55	64.62	53.98	45.75	39.31	34.20	30.10	26.77	24.03	21.76	19.85	5
6	77.52	63.92	53.50	45.42	39.08	34.04	29.98	26.69	23.97	21.71	19.82	6
7	76.48	63.21	53.01	45.08	38.84	33.87	29.87	26.60	23.91	21.67	19.78	7
8	75.45	62.50	52.52	44.74	38.60	33.70	29.74	26.51	23.84	21.62	19.74	8
9 10	73.38	61.06	51.52	44.03	38.10	33.34	29.61 29.48	26.42	23.70	21.57	19.71	10
11	72.34	60.34	51.01	43.67	37.84	33.16	29.35	26.22	23.63	21.46	19.62	11
12	71.30	59.61	50.49	43.31	37.58	32.96	29.21	26.12	23.55	21.40	19.58	12
13	70.26	58.88	49.97	42.93	37.31	32.77	29.06	26.01	23.47	21.34	19.53	13
14	69.22	58.14	49.45	42.56	37.04	32.57	28.92	25.90	23.39	21.27	19.48	14
15	00.10	37.40	48.92	42.17	30.70	52.50	28.70	23.19	23.30	21.21	19.45	13
16	67.15	56.66	48.38	41.79	36.47	32.15	28.61	25.67	23.21	21.14	19.38	16
17	65.00	55.92	47.83	41.40	35.19	31.94	28.43	25.55	23.12	21.07	19.52	1/
19	64.08	54.46	46.79	40.62	35.61	31.52	28.13	25.31	22.94	20.93	19.22	19
20	63.08	53.73	46.25	40.23	35.32	31.30	27.97	25.19	22.85	20.86	19.16	20
21	62.07	52.99	45.71	39.83	35.03	31.08	27.80	25.06	22.75	20.79	19.10	21
22	61.06	52.25	45.16	39.42	34.72	30.85	27.63	24.93	22.65	20.71	19.04	22
23	60.05	51.50	44.61	39.01	34.41	30.62	27.45	24.79	22.54	20.63	18.98	23
24	59.03	50.75	44.05	38.59	34.10	30.38	27.27	24.65	22.43	20.54	18.91	24
25	57.01	40.24	43.49	38.10	22.45	20.88	27.08	24.51	22.32	20.45	18.84	25
20	56.00	49.24	42.92	37.75	33.43	29.88	20.89	24.30	22.20	20.30	18.77	20
28	54 99	47.72	41 76	36.85	32.77	29.36	26.09	24.20	21.06	20.20	18.61	28
29	53.98	46.95	41.18	36.40	32.42	29.09	26.27	23.88	21.83	20.06	18.53	29
30	52.97	46.18	40.58	35.94	32.07	28.81	26.05	23.70	21.69	19.95	18.44	30
31	51.96	45.40	39.98	35.48	31.71	28.53	25.83	23.53	21.55	19.84	18.35	31
32	50.94	44.62	39.38	35.01	31.34	28.24	25.60	23.34	21.40	19.72	18.25	32
33	49.93	43.83	38.76	34.53	30.96	27.94	25.36	23.15	21.24	19.59	18.15	33
34	48.91	43.04	38.15	34.04	30.57	27.63	25.11	22.95	21.09	19.46	18.04	34
35	47.90	42.23	37.32	33.34	30.18	27.31	24.80	22.75	20.92	19.55	17.95	33
36	46.88	41.45	36.89	33.04	29.78	26.99	24.60	22.54	20.75	19.18	17.81	36
38	43.80	40.04	35.60	32.33	29.57	26.00	24.55	22.32	20.37	19.05	17.09	38
39	43.83	39.02	34.95	31.48	28.52	25.97	23.77	21.85	20.38	18.72	17.42	39
40	42.81	38.20	34.29	30.95	28.08	25.61	23.47	21.61	19.98	18.55	17.28	40
41	41.80	37.38	33.62	30.41	27.64	25.25	23.17	21.36	19.77	18.37	17.13	41
42	40.78	36.56	32.96	29.86	27.19	24.88	22.86	21.10	19.56	18.19	16.98	42
43	39.78	35.74	32.28	29.31	26.73	24.50	22.55	20.84	19.33	18.00	16.82	43
44	38.77	34.92	31.61	28.75	26.27	24.11	22.23	20.57	19.10	17.81	16.66	44
45	37.77	34.09	30.93	28.19	25.80	23.72	21.90	20.29	18.8/	17.01	10.48	45
46	36.78	33.27	30.25	27.62	25.33	23.32	21.56	20.00	18.63	17.40	16.31	46
47 48	34.80	31.63	29.30	27.03	24.85	22.92	21.22	19.71	18.30	16.97	15.03	47
49	33.82	30.81	28.18	25.89	23.87	22.08	20.51	19.11	17.86	16.74	15.73	49
50	32.84	29.98	27.48	25.29	23.36	21.65	20.14	18.79	17.58	16.50	15.53	50
51	31.85	29.15	26.78	24.69	22.85	21.21	19.76	18.46	17.30	16.25	15.31	51
52	30.87	28.32	26.07	24.08	22.32	20.76	19.37	18.12	17.00	15.99	15.08	52
53	29.90	27.48	25.35	23.47	21.79	20.30	18.97	17.77	16.69	15.72	14.85	53
54	28.93	26.65	24.64	22.85	21.26	19.84	18.56	17.41	16.38	15.45	14.60	54
	27.97	25.82	23.92	22.23	20.72	19.37	18.15	17.05	10.00	15.17	14.35	55
50 57	27.02	25.01	23.21	21.01	20.18	18.89	17.22	16.69	15.74	14.88	14.10	50 57
58	25.09	24.20	22.31	21.00	19.04	17.42	16.89	15.94	15.41	14.39	13.64	58
59	24.27	22.61	21.11	19.77	18.56	17.46	16.47	15.57	14.74	13.99	13.30	59
60	23.37	21.82	20.42	19.16	18.02	16.98	16.04	15.18	14.40	13.68	13.02	60
61	22.50	21.05	19.74	18.56	17.48	16.50	15.61	14.80	14.05	13.37	12.74	61
62	21.64	20.29	19.06	17.95	16.94	16.02	15.18	14.41	13.71	13.06	12.46	62
63	20.79	19.53	18.39	17.35	16.40	15.54	14.75	14.02	13.35	12.73	12.17	63
64 65	19.94	18.78	17.71	16.75	15.86	15.05	14.30	13.62	12.99	12.40	11.86	64
0.5	19.10	18.02	17.03	10.13	13.31	14.33	13.85	13.21	12.01	12.00	11.33	65
60 67	18.25	17.26	16.35	15.51	14.74	14.03	13.38	12.78	12.22	11.70	11.22	66 67
68	16.56	10.49	13.05	14.00	14.17	12.51	12.90	12.34	11.82	10.95	10.88	0/ 68
69	15.72	14.95	14.25	13.60	12.99	12.43	11.91	11.43	10.97	10.55	10.16	69
70	14.89	14.19	13.55	12.95	12.40	11.88	11.41	10.96	10.54	10.15	9.78	70

#### Table 1 Multipliers for pecuniary loss for life (males) continued

Age at date of trial	Multiplie and rate	er calculated of return of	with allow	ance for pro	jected mort	ality from th	e 2002-base	ed populatio	n projection	S		Age at date of trial
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
71	14.08	13.45	12.86	12.32	11.81	11.34	10.90	10.49	10.10	9.74	9.41	71
72	13.29	12.72	12.19	11.69	11.23	10.80	10.40	10.02	9.67	9.34	9.03	72
73	12.53	12.01	11.54	11.09	10.67	10.28	9.91	9.56	9.24	8.94	8.65	73
74	11.80	11.34	10.91	10.50	10.12	9.77	9.43	9.12	8.82	8.54	8.27	74
75	11.10	10.69	10.30	9.94	9.59	9.27	8.96	8.68	8.41	8.15	7.91	75
76	10.44	10.07	9.72	9.39	9.08	8.79	8.51	8.25	8.01	7.77	7.55	76
77	9.81	9.48	9.16	8.87	8.59	8.33	8.08	7.84	7.62	7.40	7.20	77
78	9.21	8.91	8.63	8.37	8.12	7.88	7.65	7.44	7.24	7.04	6.86	78
79	8.64	8.38	8.12	7.89	7.66	7.45	7.24	7.05	6.87	6.69	6.52	79
80	8.09	7.86	7.63	7.42	7.22	7.03	6.84	6.67	6.50	6.34	6.19	80
81	7.56	7.35	7.15	6.96	6.78	6.61	6.45	6.29	6.14	6.00	5.86	81
82	7.04	6.86	6.68	6.52	6.36	6.20	6.06	5.92	5.78	5.66	5.53	82
83	6.55	6.39	6.24	6.09	5.95	5.81	5.68	5.56	5.44	5.32	5.22	83
84	6.10	5.95	5.82	5.69	5.56	5.44	5.33	5.22	5.11	5.01	4.91	84
85	5.67	5.55	5.43	5.31	5.20	5.09	4.99	4.89	4.80	4.71	4.62	85
86	5.28	5.17	5.06	4.96	4.86	4.77	4.68	4.59	4.51	4.43	4.35	86
87	4.92	4.82	4.73	4.64	4.55	4.47	4.39	4.31	4.23	4.16	4.09	87
88	4.59	4.50	4.42	4.34	4.26	4.19	4.12	4.05	3.98	3.92	3.86	88
89	4.29	4.21	4.14	4.07	4.00	3.94	3.87	3.81	3.75	3.69	3.64	89
90	4.01	3.95	3.88	3.82	3.76	3.70	3.64	3.59	3.54	3.48	3.43	90
91	3.75	3.69	3.63	3.58	3.52	3.47	3.42	3.37	3.32	3.28	3.23	91
92	3.50	3.45	3.40	3.35	3.30	3.25	3.21	3.16	3.12	3.08	3.04	92
93	3.29	3.24	3.19	3.15	3.11	3.07	3.03	2.99	2.95	2.91	2.88	93
94	3.11	3.06	3.02	2.99	2.95	2.91	2.87	2.84	2.80	2.77	2.74	94
95	2.93	2.90	2.86	2.83	2.79	2.76	2.73	2.69	2.66	2.63	2.60	95
96	2.76	2.73	2.69	2.66	2.63	2.60	2.57	2.55	2.52	2.49	2.47	96
97	2.59	2.56	2.53	2.50	2.47	2.45	2.42	2.40	2.37	2.35	2.33	97
98	2.42	2.39	2.36	2.34	2.32	2.29	2.27	2.25	2.23	2.20	2.18	98
99	2.25	2.23	2.21	2.18	2.16	2.14	2.12	2.10	2.08	2.06	2.05	99
100	2.10	2.08	2.06	2.04	2.02	2.00	1.98	1.97	1.95	1.93	1.92	100

#### Table 2 Multipliers for pecuniary loss for life (females)

Age at date of trial	Multipli and rate	er calculated of return of	l with allow	ance for pro	jected morta	ality from th	ie 2002-base	ed populatio	n projection	S		Age at date of trial
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	ti itai
0	87.08	70.28	57.76	48.29	41.02	35.35	30.88	27.30	24.39	22.00	20.01	0
1	86.43	69.92	57.57	48.21	41.00	35.38	30.93	27.36	24.45	22.06	20.07	1
23	85.43 84.42	69.27 68.61	57.15 56.71	47.93	40.82	35.26	30.85	27.30	24.42	22.04	20.06	23
4	83.40	67.94	56.27	47.35	40.43	34.99	30.67	27.18	24.33	21.98	20.04	4
5	82.38	67.26	55.82	47.04	40.22	34.86	30.57	27.11	24.29	21.95	19.99	5
6	81.36	66.58	55.36	46.73	40.01	34.71	30.47	27.05	24.24	21.91	19.97	6
8	80.34	65.89 65.20	54.90 54.43	46.42 46.10	39.80	34.56	30.37	26.97	24.19 24.13	21.88	19.94	8
9	78.28	64.51	53.96	45.78	39.36	34.26	30.16	26.82	24.08	21.80	19.89	9
10	77.25	63.81	53.48	45.45	39.13	34.09	30.04	26.74	24.02	21.76	19.85	10
11	76.23	63.11	52.99	45.11	38.89	33.93	29.93	26.66	23.96	21.71	19.82	11
12	75.20	62.40 61.69	52.51 52.01	44.77	38.05 38.41	33.70	29.81	26.57	23.90	21.67	19.79	12
14	73.14	60.97	51.51	44.07	38.16	33.41	29.55	26.39	23.77	21.57	19.72	14
15	72.11	60.26	51.01	43.72	37.91	33.23	29.42	26.29	23.70	21.52	19.68	15
16	71.09	59.54	50.50	43.36	37.65	33.05	29.29	26.20	23.62	21.47	19.64	16
18	69.04	58.09	49.99	42.63	37.13	32.60	29.13	25.99	23.33	21.41	19.00	17
19	68.02	57.37	48.96	42.25	36.86	32.47	28.87	25.89	23.40	21.29	19.51	19
20	66.99	56.63	48.43	41.87	36.58	32.27	28.72	25.78	23.31	21.23	19.46	20
21	65.96 64.94	55.90 55.16	47.90 47.36	41.49	36.30	32.06	28.57	25.66	23.23	21.17	19.41	21
22	63.91	54.41	46.82	40.69	35.71	31.63	28.24	25.42	23.04	21.10	19.30	22
24	62.88	53.66	46.27	40.29	35.41	31.40	28.07	25.29	22.94	20.95	19.25	24
25	61.85	52.90	45.71	39.88	35.10	31.17	27.90	25.16	22.84	20.87	19.18	25
26 27	60.82 50.70	52.14	45.15	39.46	34.79	30.93	27.72	25.02	22.74	20.79	19.12	26
28	58.76	50.61	44.00	38.60	34.14	30.09	27.33	24.88	22.03	20.70	18.98	28
29	57.72	49.84	43.42	38.16	33.81	30.18	27.14	24.58	22.39	20.52	18.91	29
30	56.69	49.06	42.83	37.71	33.46	29.92	26.94	24.42	22.27	20.42	18.83	30
31	55.66 54.63	48.28 47.50	42.24 41.64	37.26	33.12 32.76	29.65	26.73 26.52	24.25 24.08	22.14	20.32	18.75	31
33	53.59	46.71	41.04	36.33	32.40	29.09	26.29	23.91	21.86	20.21	18.57	33
34	52.56	45.92	40.43	35.86	32.03	28.80	26.07	23.73	21.72	19.99	18.48	34
35	51.53	45.12	39.81	35.38	31.65	28.51	25.83	23.54	21.57	19.86	18.38	35
36 37	50.50 49.47	44.32 43.52	39.19	34.89 34.40	31.27	28.20	25.59	23.35	21.41	19.74	18.28	36 37
38	48.44	42.72	37.93	33.89	30.48	27.57	25.09	22.94	21.09	19.47	18.06	38
39	47.41	41.91	37.29	33.39	30.08	27.25	24.82	22.73	20.91	19.33	17.94	39
40	46.39	41.10	36.64	32.87	29.66	26.92	24.55	22.51	20.73	19.18	17.82	40
41 42	45.36	40.28 39.47	35.99	32.35 31.83	29.24 28.82	26.58	24.28 24.00	22.28	20.55	19.03	17.69	41 42
43	43.32	38.65	34.69	31.30	28.39	25.88	23.71	21.81	20.16	18.70	17.42	43
44	42.31	37.84	34.02	30.76	27.95	25.52	23.41	21.57	19.96	18.53	17.28	44
45	41.30	37.02	33.30	30.22	27.51	25.10	23.11	21.32	19.75	18.30	1/.13	45
46 47	40.29	35.20	32.09	29.67	27.06	24.78	22.80	21.06	19.55	18.18	16.98	46 47
48	38.28	34.56	31.34	28.56	26.13	24.01	22.16	20.52	19.08	17.79	16.65	48
49	37.29	33.73	30.66	27.99	25.66	23.62	21.82	20.24	18.84	17.59	16.48	49
50	30.29	32.91	29.98	27.42	25.18	23.22	21.48	19.95	18.39	17.38	16.30	50
51 52	35.30 34.32	32.09	29.29	26.84	24.70	22.81	21.14 20.78	19.00	18.34	17.10	15.91	51
53	33.34	30.44	27.90	25.67	23.70	21.96	20.42	19.04	17.81	16.71	15.71	53
54 55	32.36	29.62	27.20	25.08	23.20	21.53	20.05	18.72	17.54	16.47	15.51	54
56	20.44	28.80	20.31	24.49	22.09	21.10	19.07	18.40	16.07	15.07	15.29	55
57	29.49	27.98	25.12	23.29	21.66	20.00	18.90	17.73	16.67	15.71	14.85	57
58	28.54	26.36	24.42	22.69	21.14	19.76	18.51	17.39	16.37	15.45	14.61	58
59 60	27.61	25.56	23.72	22.09	20.62	19.30	18.11	17.04	16.06	15.18	14.37	59 60
61	25.09	23.96	22.05	20.87	19 56	18 37	17.70	16.00	15.75	14.50	13.87	61
62	24.86	23.16	21.64	20.26	19.02	17.89	16.87	15.94	15.09	14.32	13.61	62
63	23.95	22.36	20.94	19.64	18.47	17.41	16.44	15.56	14.75	14.01	13.33	63
64 65	23.04	21.56	20.23	19.02 18.38	17.92	16.91 16.40	16.00 15.54	15.16 14.75	14.40 14.03	13.69	13.05	64 65
66	21.12	19.93	18 77	17 72	16.76	15.88	15.07	14 33	13.64	13.01	12.73	66
67	20.27	19.10	18.03	17.05	16.16	15.33	14.58	13.88	13.24	12.64	12.09	67
68	19.33	18.25	17.27	16.37	15.54	14.77	14.07	13.42	12.82	12.26	11.74	68
69 70	18.39 17.45	17.40 16.55	16.50 15.73	15.67 14.96	14.90 14.26	14.20 13.61	13.54	12.94 12.45	12.38	11.86 11.44	11.37 10.99	69 70
10	17.75	10.00	10.10	11.70	11.20	12.01	12.01	12.70	11.74	11.77	10.77	70

Table 2	<b>Multipliers</b>	for pecuniary	loss for life	(females)	<b>Continued</b>
				· /	

Age at date of trial	at Multiplier calculated with allowance for projected mortality from the 2002-based population projections Age at date of and rate of return of											
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
71	16.52	15.71	14.96	14.26	13.62	13.02	12.46	11.95	11.46	11.02	10.60	71
72	15.62	14.88	14.20	13.56	12.98	12.43	11.92	11.44	11.00	10.59	10.20	72
73	14.74	14.07	13.45	12.88	12.34	11.84	11.38	10.94	10.54	10.15	9.79	73
74	13.88	13.29	12.73	12.21	11.72	11.27	10.85	10.45	10.07	9.72	9.39	74
75	13.07	12.53	12.03	11.56	11.12	10.71	10.32	9.96	9.62	9.30	9.00	75
76	12.29	11.81	11.36	10.93	10.54	10.17	9.81	9.49	9.17	8.88	8.60	76
77	11.55	11.12	10.71	10.33	9.97	9.64	9.32	9.02	8.74	8.47	8.22	77
78	10.83	10.45	10.09	9.75	9.43	9.12	8.84	8.57	8.31	8.07	7.84	78
79	10.15	9.81	9.48	9.18	8.89	8.62	8.36	8.12	7.89	7.67	7.46	79
80	9.49	9.18	8.90	8.63	8.37	8.13	7.89	7.68	7.47	7.27	7.08	80
81	8.85	8.58	8.33	8.09	7.86	7.64	7.43	7.24	7.05	6.87	6.70	81
82	8.23	8.00	7.77	7.56	7.36	7.17	6.98	6.81	6.64	6.48	6.33	82
83	7.64	7.44	7.24	7.05	6.88	6.71	6.54	6.39	6.24	6.10	5.96	83
84	7.09	6.91	6.73	6.57	6.41	6.26	6.12	5.98	5.85	5.72	5.60	84
85	6.56	6.40	6.25	6.11	5.97	5.84	5.71	5.59	5.48	5.36	5.26	85
86	6.07	5.93	5.80	5.68	5.56	5.44	5.33	5.22	5.12	5.02	4.93	86
87	5.61	5.49	5.38	5.27	5.16	5.06	4.96	4.87	4.78	4.69	4.61	87
88	5.18	5.08	4.98	4.89	4.79	4.71	4.62	4.54	4.46	4.38	4.31	88
89	4.79	4.70	4.62	4.54	4.45	4.38	4.30	4.23	4.16	4.09	4.03	89
90	4.44	4.36	4.28	4.21	4.14	4.07	4.01	3.94	3.88	3.82	3.77	90
91	4.11	4.04	3.97	3.91	3.85	3.79	3.73	3.68	3.62	3.57	3.52	91
92	3.81	3.75	3.70	3.64	3.59	3.53	3.48	3.43	3.39	3.34	3.30	92
93	3.55	3.50	3.45	3.40	3.35	3.31	3.26	3.22	3.18	3.14	3.10	93
94	3.32	3.27	3.23	3.18	3.14	3.10	3.06	3.02	2.98	2.95	2.91	94
95	3.09	3.05	3.01	2.98	2.94	2.90	2.87	2.83	2.80	2.77	2.74	95
96	2.88	2.85	2.82	2.78	2.75	2.72	2.69	2.66	2.63	2.60	2.57	96
97	2.69	2.66	2.63	2.60	2.57	2.55	2.52	2.49	2.47	2.44	2.42	97
98	2.51	2.49	2.46	2.43	2.41	2.38	2.36	2.34	2.31	2.29	2.27	98
99	2.34	2.31	2.29	2.27	2.25	2.22	2.20	2.18	2.16	2.14	2.12	99
100	2.16	2.14	2.12	2.10	2.08	2.06	2.05	2.03	2.01	1.99	1.98	100

Table 3	Multipliers	for loss	of earnings to	pension age 5	0 (males)
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Age at date of trial	Multiplic and rate	er calculated of return of	l with allow	ance for pro	jected morta	ality from th	e 2002-base	ed populatio	n projection	S		Age at date of trial
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
16	33.53	30.86	28.48	26.35	24.45	22.74	21.21	19.83	18.59	17.46	16.44	16
17	32.54	30.02	27.76	25.74	23.93	22.30	20.84	19.51	18.31	17.23	16.24	17
18	31.55	29.17	27.04	25.13	23.41	21.86	20.45	19.18	18.03	16.99	16.03	18
19	30.57	28.33	26.32	24.51	22.88	21.40	20.06	18.85	17.74	16.74	15.82	19
20	29.58	27.49	25.60	23.89	22.34	20.94	19.66	18.50	17.45	16.48	15.59	20
21	28.60	26.64	24.86	23.25	21.79	20.46	19.25	18.15	17.13	16.21	15.36	21
22	27.62	25.79	24.12	22.61	21.23	19.97	18.83	17.77	16.81	15.93	15.11	22
23	26.63	24.93	23.37	21.95	20.66	19.47	18.39	17.39	16.47	15.63	14.85	23
24	25.65	24.06	22.62	21.29	20.07	18.96	17.94	16.99	16.12	15.32	14.58	24
25	24.67	23.20	21.85	20.62	19.48	18.43	17.47	16.58	15.76	15.00	14.29	25
26	23.68	22.33	21.08	19.93	18.87	17.90	16.99	16.16	15.38	14.66	14.00	26
27	22.70	21.45	20.30	19.24	18.26	17.34	16.50	15.72	14.99	14.31	13.68	27
28	21.72	20.57	19.52	18.53	17.62	16.78	15.99	15.26	14.58	13.94	13.35	28
29	20.73	19.69	18.72	17.82	16.98	16.20	15.47	14.79	14.16	13.56	13.01	29
30	19.75	18.80	17.92	17.10	16.33	15.61	14.93	14.30	13.71	13.16	12.64	30
31	18.77	17.91	17.11	16.36	15.66	15.00	14.38	13.80	13.26	12.74	12.26	31
32	17.78	17.01	16.29	15.61	14.97	14.37	13.81	13.28	12.78	12.31	11.86	32
33	16.80	16.11	15.46	14.85	14.28	13.73	13.22	12.74	12.28	11.85	11.44	33
34	15.82	15.21	14.63	14.08	13.57	13.08	12.62	12.18	11.76	11.37	11.00	34
35	14.83	14.29	13.78	13.30	12.84	12.41	11.99	11.60	11.23	10.87	10.54	35
36	13.85	13.38	12.93	12.51	12.10	11.72	11.35	11.00	10.67	10.35	10.05	36
37	12.86	12.46	12.07	11.70	11.35	11.01	10.69	10.38	10.09	9.81	9.54	37
38	11.88	11.53	11.20	10.88	10.58	10.28	10.01	9.74	9.48	9.24	9.00	38
39	10.89	10.60	10.32	10.05	9.79	9.54	9.30	9.07	8.85	8.64	8.44	39
40	9.90	9.66	9.43	9.20	8.99	8.78	8.58	8.38	8.20	8.02	/.84	40
41	8.92	8.72	8.53	8.35	8.17	8.00	7.83	7.67	7.52	7.37	7.22	41
42	7.93	1.11	7.62	7.48	7.33	7.20	7.06	6.93	6.81	6.69	6.57	42
43	6.94	6.82	6./1	6.59	6.48	6.38	6.27	6.17	6.07	5.98	5.88	43
44	5.95 4.07	5.87	5.78	5.70	5.61	5.54	5.46	5.38	5.51	5.23	5.10	44
43	4.97	4.90	4.64	4.79	4.75	4.07	4.02	4.30	4.31	4.40	4.41	43
46	3.98	3.94	3.90	3.86	3.82	3.79	3.75	3.72	3.68	3.65	3.61	46
4'/	2.99	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	47
48	1.99	1.98	1.97	1.96	1.95	1.95	1.94	1.93	1.92	1.91	1.90	48
49	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	49

#### Table 4 Multipliers for loss of earnings to pension age 50 (females)

Age at date of trial	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected morta	ality from th	ne 2002-base	ed populatio	n projection	S		Age at date of trial
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
16	33.79	31.08	28.68	26.53	24.61	22.89	21.34	19.95	18.69	17.55	16.52	16
17	32.79	30.24	27.96	25.93	24.10	22.45	20.97	19.63	18.42	17.33	16.33	17
18	31.80	29.40	27.24	25.31	23.57	22.00	20.59	19.31	18.14	17.09	16.12	18
19	30.80	28.55	26.52	24.69	23.04	21.55	20.20	18.97	17.85	16.84	15.91	19
20	29.81	27.69	25.78	24.06	22.49	21.08	19.79	18.62	17.55	16.58	15.68	20
21	28.81	26.83	25.04	23.41	21.94	20.60	19.37	18.26	17.24	16.30	15.45	21
22	27.82	25.97	24.29	22.76	21.37	20.10	18.94	17.88	16.91	16.02	15.20	22
23	26.83	25.10	23.53	22.10	20.79	19.60	18.50	17.50	16.57	15.72	14.94	23
24	25.83	24.23	22.77	21.43	20.20	19.08	18.05	17.09	16.22	15.41	14.66	24
25	24.84	23.35	22.00	20.75	19.60	18.55	17.58	16.68	15.85	15.08	14.37	25
26	23.84	22.47	21.22	20.06	18.99	18.00	17.09	16.25	15.47	14.74	14.07	26
27	22.85	21.59	20.43	19.36	18.36	17.45	16.59	15.80	15.07	14.39	13.75	27
28	21.85	20.70	19.63	18.64	17.73	16.87	16.08	15.34	14.66	14.02	13.42	28
29	20.86	19.81	18.83	17.92	17.08	16.29	15.55	14.87	14.23	13.63	13.07	29
30	19.86	18.91	18.02	17.19	16.41	15.69	15.01	14.38	13.78	13.22	12.70	30
31	18.87	18.01	17.20	16.44	15.74	15.07	14.45	13.87	13.32	12.80	12.32	31
32	17.88	17.10	16.37	15.69	15.05	14.44	13.87	13.34	12.84	12.36	11.91	32
33	16.88	16.19	15.54	14.92	14.34	13.80	13.28	12.79	12.33	11.90	11.49	33
34 25	15.89	15.27	14.09	14.14	13.03	13.13	12.07	12.23	11.81	11.42	11.04	25
33	14.90	14.30	13.84	13.30	12.89	12.40	12.04	11.03	11.27	10.91	10.38	33
36	13.91	13.43	12.98	12.56	12.15	11.76	11.39	11.04	10.71	10.39	10.08	36
38	12.91	12.30	12.11	11.74	10.61	10.32	10.73	0.77	0.12	9.84	9.37	37
30	10.92	10.63	10.35	10.92	0.82	9.57	0 33	9.10	8.88	8.67	9.03	30
40	9.94	9.69	9.46	9.23	9.02	8.81	8.61	8.41	8.22	8.04	7.87	40
41	8 94	8 75	8 56	8 37	8 19	8.02	7.86	7 70	7 54	7 39	7 24	41
42	7.95	7.80	7.65	7.50	7.36	7.22	7.08	6.95	6.83	6.71	6.59	42
43	6.96	6.84	6.73	6.61	6.50	6.39	6.29	6.19	6.09	5.99	5.90	43
44	5.97	5.88	5.80	5.71	5.63	5.55	5.47	5.40	5.32	5.25	5.18	44
45	4.98	4.92	4.86	4.80	4.74	4.68	4.63	4.57	4.52	4.47	4.42	45
46	3.99	3.95	3.91	3.87	3.83	3.79	3.76	3.72	3.69	3.65	3.62	46
47	2.99	2.97	2.95	2.93	2.90	2.88	2.86	2.84	2.82	2.80	2.78	47
48	2.00	1.99	1.98	1.97	1.96	1.95	1.94	1.93	1.92	1.91	1.90	48
49	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	49

Table 5	Multipliers	for loss	of earnings to	pension age	e 55 (males)
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Age at date of trial	Multiplic and rate	er calculated of return of	l with allow	ance for pro	jected morta	ality from th	ie 2002-base	ed populatio	n projection	IS		Age at date of trial
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
16	38.32	34.85	31.80	29.13	26.77	24.69	22.84	21.20	19.73	18.42	17.25	16
17	37.32	34.02	31.12	28.56	26.30	24.30	22.51	20.92	19.50	18.23	17.09	17
18	36.33	33.20	30.44	27.99	25.83	23.90	22.18	20.65	19.27	18.04	16.92	18
19	35.35	32.38	29.75	27.42	25.35	23.50	21.84	20.36	19.03	17.83	16.75	19
20	34.37	31.56	29.06	26.84	24.86	23.09	21.50	20.07	18.79	17.63	16.58	20
21	33.39	30.73	28.36	26.25	24.36	22.66	21.14	19.77	18.53	17.41	16.39	21
22	32.41	29.90	27.66	25.65	23.85	22.23	20.77	19.45	18.26	17.18	16.20	22
23	31.42	29.06	26.95	25.04	23.33	21.79	20.39	19.13	17.98	16.94	15.99	23
24	30.44	28.22	26.23	24.43	22.80	21.33	20.00	18.79	17.69	16.69	15.78	24
25	29.46	27.38	25.50	23.80	22.26	20.87	19.60	18.45	17.39	16.43	15.55	25
26	28.48	26.53	24.77	23.17	21.71	20.39	19.19	18.09	17.08	16.16	15.32	26
27	27.50	25.68	24.03	22.52	21.15	19.90	18.76	17.72	16.76	15.88	15.07	27
28	26.52	24.82	23.28	21.87	20.58	19.40	18.32	17.33	16.42	15.58	14.81	28
29	25.54	23.96	22.52	21.21	20.00	18.89	17.87	16.93	16.07	15.27	14.54	29
30	24.56	23.10	21.76	20.53	19.41	18.37	17.41	16.52	15.71	14.95	14.25	30
31	23.58	22.23	20.99	19.85	18.80	17.83	16.93	16.10	15.33	14.61	13.95	31
32	22.60	21.36	20.22	19.16	18.18	17.28	16.44	15.66	14.94	14.26	13.64	32
33	21.62	20.48	19.43	18.46	17.55	16.71	15.93	15.20	14.53	13.89	13.31	33
34	20.64	19.60	18.64	17.74	16.91	16.13	15.41	14.73	14.10	13.51	12.96	34
35	19.66	18.71	17.84	17.02	16.25	15.54	14.87	14.25	13.66	13.11	12.59	35
36	18.67	17.82	17.03	16.28	15.58	14.93	14.32	13.74	13.20	12.69	12.21	36
37	17.69	16.93	16.21	15.54	14.90	14.31	13.75	13.22	12.72	12.25	11.81	37
38	16.71	16.03	15.38	14.78	14.21	13.67	13.16	12.68	12.22	11.80	11.39	38
39	15.73	15.12	14.55	14.01	13.50	13.01	12.55	12.12	11.71	11.32	10.95	39
40	14.75	14.21	13.71	13.23	12.77	12.34	11.93	11.54	11.17	10.82	10.48	40
41	13.77	13.30	12.86	12.44	12.03	11.65	11.29	10.94	10.61	10.30	10.00	41
42	12.79	12.38	12.00	11.63	11.28	10.95	10.63	10.32	10.03	9.75	9.49	42
43	11.81	11.46	11.13	10.82	10.52	10.23	9.95	9.69	9.43	9.19	8.95	43
44	10.83	10.54	10.26	9.99	9.74	9.49	9.25	9.02	8.81	8.59	8.39	44
45	9.85	9.61	9.38	9.15	8.94	8.73	8.53	8.34	8.16	7.98	7.80	45
46	8.87	8.68	8.49	8.30	8.13	7.96	7.79	7.64	7.48	7.33	7.19	46
47	7.89	7.74	7.59	7.44	7.30	7.17	7.03	6.90	6.78	6.66	6.54	47
48	6.91	6.80	6.68	6.57	6.46	6.35	6.25	6.15	6.05	5.95	5.86	48
49	5.93	5.85	5.76	5.68	5.60	5.52	5.44	5.36	5.29	5.22	5.15	49
50	4.95	4.89	4.83	4.77	4.72	4.66	4.60	4.55	4.50	4.45	4.40	50
51	3.97	3.93	3.89	3.85	3.81	3.78	3.74	3.71	3.67	3.64	3.61	51
52	2.98	2.96	2.94	2.92	2.89	2.87	2.85	2.83	2.81	2.79	2.77	52
53	1.99	1.98	1.97	1.96	1.95	1.94	1.93	1.92	1.91	1.91	1.90	53
54	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	54

Table 6	<b>Multipliers</b>	for loss	of earnings	to pension	age 55 (	(females)

Age at date of trial	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected mort	ality from th	e 2002-base	ed populatio	n projection	S		Age at date of trial
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
16	38.66	35.15	32.07	29.36	26.98	24.87	23.00	21.34	19.86	18.54	17.35	16
17	37.67	34 33	31 39	28.80	26.51	24 48	22.68	21.07	19.64	18 35	17.19	17
18	36.68	33.50	30.71	28.23	26.04	24.09	22.35	20.80	19.41	18.16	17.03	18
19	35.68	32.67	30.01	27.65	25.55	23.68	22.01	20.51	19.17	17.96	16.86	19
20	34.69	31.84	29.31	27.06	25.06	23.27	21.66	20.22	18.92	17.75	16.69	20
21	33.69	31.00	28.61	26.47	24.55	22.84	21.30	19.91	18.66	17.52	16.50	21
22	32.70	30.16	27.89	25.86	24.04	22.40	20.93	19.59	18.39	17.29	16.30	22
23	31.70	29.31	27.17	25.25	23.52	21.95	20.54	19.27	18.11	17.05	16.10	23
24	30.71	28.46	26.44	24.62	22.98	21.49	20.15	18.93	17.82	16.80	15.88	24
25	29.71	27.61	25.71	23.99	22.43	21.02	19.74	18.58	17.51	16.54	15.65	25
26	28.72	26.75	24.96	23.35	21.88	20.54	19.32	18.21	17.20	16.27	15.41	26
27	27.73	25.89	24.21	22.69	21.31	20.05	18.89	17.84	16.87	15.98	15.16	27
28	26.73	25.02	23.46	22.03	20.73	19.54	18.45	17.45	16.53	15.68	14.90	28
29	25.74	24.15	22.69	21.36	20.14	19.02	17.99	17.05	16.17	15.37	14.62	29
30	24.74	23.27	21.92	20.68	19.54	18.49	17.52	16.63	15.80	15.04	14.33	30
31	23.75	22.39	21.14	19.99	18.93	17.94	17.04	16.20	15.42	14.70	14.03	31
32	22.76	21.51	20.35	19.29	18.30	17.39	16.54	15.75	15.02	14.35	13.71	32
33	21.77	20.62	19.56	18.58	17.66	16.82	16.03	15.29	14.61	13.97	13.38	33
34	20.77	19.73	18.76	17.85	17.01	16.23	15.50	14.82	14.18	13.59	13.03	34
35	19.78	18.83	17.95	17.12	16.35	15.63	14.96	14.33	13.74	13.18	12.66	35
36	18.79	17.93	17.13	16.38	15.68	15.02	14.40	13.82	13.27	12.76	12.28	36
37	17.80	17.03	16.31	15.63	14.99	14.39	13.82	13.29	12.79	12.32	11.87	37
38	16.81	16.12	15.47	14.86	14.29	13.74	13.23	12.75	12.29	11.86	11.45	38
39	15.82	15.21	14.63	14.09	13.57	13.08	12.62	12.18	11.77	11.38	11.00	39
40	14.83	14.30	13.78	13.30	12.84	12.41	11.99	11.60	11.23	10.87	10.54	40
41	13.85	13.38	12.93	12.50	12.10	11.72	11.35	11.00	10.67	10.35	10.05	41
42	12.86	12.45	12.07	11.70	11.34	11.01	10.69	10.38	10.08	9.80	9.53	42
43	11.87	11.53	11.19	10.88	10.57	10.28	10.00	9.73	9.48	9.23	9.00	43
44	10.89	10.59	10.31	10.04	9.79	9.54	9.30	9.07	8.85	8.64	8.43	44
45	9.90	9.66	9.43	9.20	8.99	8.78	8.58	8.38	8.20	8.02	7.84	45
46	8.91	8.72	8.53	8.34	8.17	8.00	7.83	7.67	7.52	7.37	7.22	46
47	7.93	7.77	7.62	7.48	7.33	7.20	7.06	6.93	6.81	6.69	6.57	47
48	6.94	6.82	6.71	6.59	6.48	6.38	6.27	6.17	6.07	5.98	5.88	48
49	5.95	5.87	5.78	5.70	5.62	5.54	5.46	5.38	5.31	5.24	5.16	49
50	4.97	4.91	4.85	4.79	4.73	4.67	4.62	4.56	4.51	4.46	4.41	50
51	3.98	3.94	3.90	3.86	3.82	3.79	3.75	3.72	3.68	3.65	3.61	51
52	2.99	2.96	2.94	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	52
53	1.99	1.98	1.97	1.96	1.95	1.95	1.94	1.93	1.92	1.91	1.90	53
54	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	54

Table / Multipliers for loss of carmings to pension age of (male)	Table 7	Multipliers	for loss	of earnings to	pension age 60	(males)
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Age at date of trial	Multiplier calculated with allowance for projected mortality from the 2002-based population projections Ag and rate of return of dat											Age at date of trial
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
16 17	43.02 42.02	38.67 37.86	34.92 34.26	31.66 31.14	28.84 28.41	26.38 26.03	24.22 23.93	22.33 22.09	20.66 20.47	19.18 19.02	17.87 17.74	16 17
18	41.03	37.06	33.61	30.60	27.98	25.67	23.65	21.86	20.27	18.86	17.61	18
19	40.05	36.26	32.96	30.07	27.54	25.31	23.35	21.61	20.07	18.70	17.47	19
20	39.07	35.46	32.30	29.53	27.10	24.95	23.05	21.37	19.87	18.53	17.33	20
21	38.09	34.65	31.63	28.98	26.64	24.57	22.74	21.11	19.65	18.35	17.19	21
22	37.11	33.84	30.96	28.42	26.18	24.19	22.42	20.84	19.43	18.17	17.03	22
23	36.13	33.02	30.28	27.86	25.71	23.79	22.09	20.57	19.20	17.97	16.87	23
24	35.15	32.20	29.60	27.28	25.23	23.39	21.75	20.28	18.96	17.77	16.70	24
25	34.17	31.38	28.90	26.70	24.74	22.98	21.40	19.99	18.71	17.56	16.52	25
26	33.19	30.55	28.21	26.11	24.24	22.55	21.04	19.68	18.45	17.34	16.33	26
27	32.21	29.72	27.50	25.51	23.73	22.12	20.67	19.37	18.18	17.11	16.13	27
28	31.23	28.89	26.79	24.91	23.21	21.68	20.29	19.04	17.90	16.87	15.93	28
29	30.25	28.05	26.07	24.29	22.68	21.22	19.90	18.70	17.01	16.02	15./1	29
21	29.27	27.21	23.33	23.07	22.14	20.70	19.30	10.30	17.00	16.00	15.49	21
31	28.29	26.36	24.62	23.03	21.59	20.28	19.09	18.00	1/.00	16.09	15.25	31
32	27.31	25.51	23.88	22.39	21.03	19.79	18.00	17.02	16.07	15.80	15.00	32
33	20.34	24.00	23.13	21.73	19.88	19.29	17.77	17.24	15.08	15.50	14.74	33
35	24.38	22.94	21.61	20.40	19.88	18.76	17.30	16.43	15.50	14.87	14.18	35
36	23.40	22.07	20.84	10.72	18.67	17.71	16.82	16.00	15.24	14.53	13.87	36
37	22.42	21.20	20.04	19.02	18.06	17.16	16.33	15.56	14.84	14.18	13.56	37
38	21.44	20.32	19.28	18.32	17.42	16.59	15.82	15.10	14.43	13.81	13.22	38
39	20.46	19.44	18.49	17.60	16.78	16.01	15.30	14.63	14.00	13.42	12.87	39
40	19.49	18.56	17.69	16.88	16.13	15.42	14.76	14.14	13.56	13.02	12.51	40
41	18.51	17.67	16.88	16.15	15.46	14.81	14.21	13.64	13.10	12.60	12.12	41
42	17.54	16.78	16.07	15.40	14.78	14.19	13.64	13.12	12.62	12.16	11.72	42
43	16.56	15.89	15.25	14.65	14.09	13.55	13.05	12.58	12.13	11.70	11.30	43
44	15.59	14.99	14.42	13.89	13.38	12.90	12.45	12.02	11.62	11.23	10.86	44
45	14.62	14.09	13.59	13.12	12.67	12.24	11.83	11.45	11.08	10.74	10.40	45
46	13.65	13.19	12.75	12.33	11.94	11.56	11.20	10.86	10.53	10.22	9.92	46
47	12.68	12.28	11.90	11.54	11.19	10.86	10.55	10.25	9.96	9.68	9.42	47
48	11.71	11.37	11.05	10.74	10.44	10.15	9.88	9.62	9.36	9.12	8.89	48
49	10.75	10.46	10.19	9.92	9.67	9.42	9.19	8.96	8.75	8.54	8.34	49
50	9.78	9.54	9.31	9.09	8.88	8.0/	8.48	8.29	8.10	7.93	1.15	50
51	8.81	8.62	8.43	8.25	8.07	7.91	7.74	7.59	7.43	7.29	7.14	51
52	/.84	/.69	/.54	7.39	1.25	/.12	6.99	6.86	6.74	6.62	6.50	52
55 54	5.80	0.75	0.03 5.72	0.32 5.64	0.41	0.51 5.48	0.21 5.40	0.11 5.33	5.26	5.92	5.82 5.11	53 54
55	J.09 4 92	4 86	4 80	5.04 4.74	4.68	5.40 4.63	4 57	5.55 4 52	5.20 4 47	5.10 4.42	4 37	54
56	2.04	2.01	2.07	2.02	2 70	2.76	2 72	2.00	2.65	2 (2	2 50	55
50 57	3.94 2.07	2.91	3.8/ 202	3.83 2.00	3.19 2.88	3./0 2.86	3.12 2.81	3.09 2.82	3.03 2.80	3.02 2.78	3.38 2.76	50 57
58	1.98	1 97	1.92	1.95	1 94	1 94	1 93	1.02	1.00	1 90	1.89	58
59	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	59

#### Table 8 Multipliers for loss of earnings to pension age 60 (females)

Age at date of trial	e at Multiplier calculated with allowance for projected mortality from the 2002-based population projections and rate of return of										Age at date of trial	
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
16	43.48	39.07	35.26	31.96	29.10	26.60	24.42	22.50	20.81	19.31	17.99	16
17	42.48	38.26	34.61	31.44	28.67	26.26	24.14	22.27	20.62	19.16	17.86	17
18	41.49	37.46	33.96	30.91	28.24	25.90	23.85	22.04	20.43	19.01	17.74	18
19	40.50	36.65	33.30	30.37	27.80	25.54	23.55	21.79	20.23	18.84	17.60	19
20	39.50	35.83	32.63	29.82	27.35	25.17	23.25	21.54	20.03	18.67	17.46	20
21	38.51	35.02	31.95	29.26	26.89	24.80	22.94	21.28	19.81	18.49	17.31	21
22	37.51	34.19	31.27	28.70	26.42	24.41	22.61	21.02	19.59	18.31	17.16	22
23	36.52	33.37	30.59	28.13	25.95	24.01	22.28	20.74	19.35	18.11	16.99	23
24	35.52	32.54	29.89	27.55	25.46	23.60	21.94	20.45	19.11	17.91	16.82	24
25	34.53	31.70	29.19	26.96	24.96	23.18	21.59	20.15	18.86	17.69	16.64	25
26	33.53	30.86	28.48	26.36	24.46	22.75	21.22	19.84	18.60	17.47	16.45	26
27	32.54	30.02	27.77	25.75	23.94	22.32	20.85	19.52	18.33	17.24	16.25	27
28	31.54	29.17	27.05	25.14	23.42	21.87	20.46	19.19	18.04	17.00	16.04	28
29	30.55	28.32	26.32	24.51	22.88	21.40	20.07	18.85	17.75	16.74	15.83	29
30	29.56	27.47	25.58	23.88	22.33	20.93	19.66	18.50	17.44	16.48	15.60	30
31	28.56	26.61	24.84	23.23	21.77	20.45	19.24	18.14	17.13	16.20	15.36	31
32	27.57	25.75	24.09	22.58	21.21	19.95	18.81	17.76	16.80	15.92	15.10	32
33	26.58	24.88	23.33	21.92	20.63	19.45	18.36	17.37	16.46	15.61	14.84	33
34	25.59	24.01	22.57	21.25	20.04	18.93	17.91	16.97	16.10	15.30	14.56	34
35	24.60	23.14	21.80	20.57	19.44	18.39	17.43	16.55	15.73	14.97	14.27	35
36	23.61	22.26	21.02	19.88	18.82	17.85	16.95	16.12	15.35	14.63	13.97	36
37	22.62	21.38	20.23	19.18	18.20	17.29	16.45	15.67	14.95	14.28	13.65	37
38	21.63	20.49	19.44	18.47	17.56	16.72	15.94	15.21	14.54	13.90	13.31	38
39	20.64	19.61	18.64	17.75	16.91	16.14	15.41	14.74	14.11	13.52	12.96	39
40	19.65	18.71	17.84	17.02	16.25	15.54	14.87	14.25	13.66	13.11	12.59	40
41	18.67	17.82	17.02	16.28	15.58	14.93	14.31	13.74	13.20	12.69	12.21	41
42	17.69	16.92	16.20	15.53	14.90	14.30	13.74	13.21	12.72	12.25	11.81	42
43	16.70	16.02	15.38	14.77	14.20	13.66	13.15	12.67	12.22	11.79	11.38	43
44	15.72	15.11	14.54	14.00	13.49	13.01	12.55	12.11	11.70	11.31	10.94	44
45	14.74	14.21	13.70	13.22	12.77	12.33	11.93	11.54	11.17	10.81	10.48	45
46	13.76	13.29	12.85	12.43	12.03	11.65	11.28	10.94	10.61	10.29	9.99	46
47	12.78	12.38	11.99	11.63	11.28	10.94	10.63	10.32	10.03	9.75	9.48	47
48	11.80	11.46	11.13	10.81	10.51	10.22	9.95	9.68	9.43	9.18	8.95	48
49	10.82	10.53	10.26	9.99	9.73	9.49	9.25	9.02	8.80	8.59	8.39	49
50	9.85	9.61	9.37	9.15	8.94	8.73	8.53	8.34	8.15	7.97	7.80	50
51	8.87	8.67	8.48	8.30	8.13	7.96	7.79	7.63	7.48	7.33	7.19	51
52	7.89	7.73	7.58	7.44	7.30	7.16	7.03	6.90	6.78	6.65	6.54	52
53	6.91	6.79	6.67	6.56	6.45	6.35	6.24	6.14	6.04	5.95	5.86	53
54	5.93	5.84	5.75	5.67	5.59	5.51	5.43	5.36	5.28	5.21	5.14	54
55	4.95	4.89	4.83	4.77	4.71	4.65	4.60	4.55	4.49	4.44	4.39	55
56	3.96	3.92	3.89	3.85	3.81	3.77	3.74	3.70	3.67	3.64	3.60	56
57	2.98	2.96	2.93	2.91	2.89	2.87	2.85	2.83	2.81	2.79	2.77	57
58	1.99	1.98	1.97	1.96	1.95	1.94	1.93	1.92	1.91	1.90	1.90	58
59	1.00	0.99	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	59

#### Table 9Multipliers for loss of earnings to pension age 65 (males)

Age at date of trial	at Multiplier calculated with allowance for projected mortality from the 2002-based population projections Age date tr										Age at date of	
ulai	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	ulai
16	47.58	42.29	37.79	33.95	30.66	27.82	25.37	23.25	21.39	19.77	18.34	16
17	46.58	41.50	37.16	33.45	30.26	27.51	25.12	23.05	21.23	19.64	18.24	17
18	45.59	40.71	36.54	32.96	29.87	27.19	24.87	22.84	21.07	19.51	18.13	18
19	44.61	39.93	35.92	32.46	29.47	26.87	24.61	22.64	20.90	19.37	18.02	19
20	43.63	39.15	35.29	31.95	29.06	26.55	24.35	22.42	20.73	19.23	17.91	20
21	42.65	38.36	34.65	31.44	28.65	26.21	24.08	22.20	20.55	19.09	17.79	21
22	41.67	37.56	34.01	30.92	28.23	25.87	23.80	21.98	20.36	18.94	17.66	22
23	40.69	36.77	33.36	30.39	27.79	25.52	23.51	21.74	20.17	18.78	17.53	23
24	39.71	35.97	32.71	29.86	27.35	25.16	23.21	21.50	19.97	18.61	17.40	24
25	38.73	35.16	32.05	29.31	26.91	24.79	22.91	21.24	19.76	18.44	17.25	25
26	37.75	34.35	31.38	28.76	26.45	24.41	22.60	20.98	19.54	18.26	17.10	26
27	36.77	33.54	30.71	28.20	25.99	24.02	22.27	20.71	19.32	18.07	16.94	27
28	35.79	32.73	30.03	27.64	25.51	23.63	21.94	20.44	19.09	17.87	16.78	28
29	34.81	31.91	29.34	27.06	25.03	23.22	21.60	20.15	18.84	17.67	16.60	29
30	33.83	31.09	28.65	26.48	24.54	22.81	21.25	19.85	18.59	17.45	16.42	30
31	32.86	30.26	27.95	25.89	24.04	22.38	20.89	19.54	18.33	17.23	16.23	31
32	31.88	29.43	27.25	25.29	23.53	21.94	20.52	19.22	18.06	17.00	16.03	32
33	30.90	28.60	26.53	24.68	23.01	21.50	20.13	18.90	17.77	16.75	15.82	33
34	29.92	27.76	25.81	24.06	22.47	21.04	19.74	18.56	17.48	16.50	15.60	34
35	28.95	26.92	25.09	23.43	21.93	20.57	19.33	18.20	17.18	16.23	15.37	35
36	27.97	26.07	24.35	22.80	21.38	20.09	18.91	17.84	16.86	15.96	15.13	36
37	26.99	25.22	23.61	22.15	20.82	19.60	18.48	17.46	16.53	15.67	14.88	37
38	26.01	24.37	22.86	21.49	20.24	19.09	18.04	17.07	16.18	15.37	14.61	38
39	25.04	23.51	22.11	20.83	19.65	18.58	17.58	16.67	15.83	15.05	14.33	39
40	24.06	22.65	21.35	20.15	19.06	18.05	17.11	16.25	15.46	14.72	14.04	40
41	23.09	21.78	20.58	19.47	18.45	17.51	16.63	15.83	15.08	14.38	13.73	41
42	22.12	20.92	19.81	18.78	17.83	16.95	16.14	15.38	14.68	14.02	13.41	42
43	21.15	20.05	19.03	18.08	17.20	16.39	15.63	14.93	14.27	13.65	13.08	43
44	20.18	19.17	18.24	17.37	16.57	15.81	15.11	14.45	13.84	13.27	12.73	44
45	19.21	18.30	17.45	16.66	15.92	15.22	14.58	13.97	13.40	12.87	12.37	45
46	18.25	17.43	16.66	15.93	15.26	14.62	14.03	13.47	12.95	12.45	11.99	46
47	17.29	16.55	15.85	15.20	14.59	14.01	13.47	12.96	12.47	12.02	11.59	47
48	16.33	15.67	15.05	14.46	13.91	13.38	12.89	12.43	11.98	11.57	11.17	48
49	15.37	14.79	14.23	13.71	13.21	12.74	12.30	11.88	11.48	11.10	10.74	49
50	14.42	13.90	13.41	12.94	12.50	12.08	11.69	11.31	10.95	10.61	10.28	50
51	13.46	13.01	12.58	12.17	11.78	11.41	11.06	10.72	10.40	10.10	9.80	51
52	12.50	12.11	11.74	11.38	11.04	10.72	10.41	10.11	9.83	9.56	9.30	52
53	11.54	11.21	10.89	10.58	10.29	10.01	9.74	9.49	9.24	9.00	8.78	53
54	10.58	10.30	10.03	9.78	9.53	9.29	9.06	8.84	8.62	8.42	8.22	54
55	9.63	9.40	9.17	8.96	8.75	8.55	8.35	8.17	7.99	7.81	7.65	55
56	8.68	8.49	8.31	8.13	7.96	7.79	7.63	7.48	7.33	7.18	7.04	56
57	7.73	7.58	7.43	7.29	7.15	7.02	6.89	6.77	6.65	6.53	6.41	57
58	6.78	6.66	6.55	6.44	6.33	6.23	6.13	6.03	5.93	5.84	5.75	58
59	5.82	5.74	5.65	5.57	5.49	5.42	5.34	5.27	5.20	5.13	5.06	59
60	4.87	4.81	4.75	4.69	4.64	4.58	4.53	4.48	4.43	4.37	4.33	60
61	3.91	3.87	3.83	3.80	3.76	3.73	3.69	3.66	3.62	3.59	3.56	61
62	2.95	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	2.74	62
63	1.97	1.97	1.96	1.95	1.94	1.93	1.92	1.91	1.90	1.89	1.88	63
64	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	64

Table 10	Multipliers	for loss	of e	arnings to	pension	age 65 (	(females)	)
							· /	

Age at date of trial	Age a Multiplier calculated with allowance for projected mortality from the 2002-based population projections Age a date of and rate of return of tria											Age at date of trial
ului	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	titut
16	48.20	42.81	38.23	34.32	30.98	28.10	25.61	23.45	21.57	19.92	18.48	16
17	47.20	42.03	37.61	33.84	30.59	27.79	25.37	23.26	21.42	19.80	18.38	17
18	46.21	41.24	36.99	33.34	30.20	27.48	25.12	23.06	21.26	19.67	18.28	18
19	45.22	40.45	36.36	32.84	29.80	27.16	24.86	22.85	21.09	19.54	18.17	19
20	44.22	39.65	35.72	32.33	29.39	26.83	24.59	22.64	20.92	19.40	18.06	20
21	43.22	38.85	35.08	31.81	28.97	26.49	24.32	22.42	20.74	19.25	17.94	21
22	42.23	38.05	34.43	31.28	28.54	26.14	24.04	22.19	20.55	19.10	17.81	22
23	41.23	37.24	33.77	30.75	28.11	25.79	23.75	21.95	20.36	18.94	17.68	23
24	40.24	36.43	33.11	30.21	27.66	25.42	23.45	21.70	20.16	18.78	17.54	24
25	39.24	35.61	32.44	29.65	27.21	25.05	23.14	21.45	19.94	18.60	17.40	25
26	38.25	34.79	31.76	29.10	26.75	24.67	22.83	21.19	19.73	18.42	17.25	26
27	37.25	33.97	31.08	28.53	26.28	24.28	22.50	20.92	19.50	18.23	17.09	27
28	36.25	33.14	30.39	27.95	25.80	23.88	22.16	20.63	19.26	18.03	16.92	28
29	35.26	32.31	29.69	27.37	25.31	23.46	21.82	20.34	19.02	17.82	16.75	29
30	34.26	31.47	28.99	26.78	24.81	23.04	21.46	20.04	18.76	17.61	16.56	30
31	33.27	30.63	28.28	26.18	24.30	22.61	21.10	19.73	18.50	17.38	16.37	31
32	32.28	29.79	27.56	25.57	23.78	22.17	20.72	19.41	18.22	17.15	16.17	32
33	31.28	28.94	26.84	24.95	23.25	21.72	20.33	19.08	17.94	16.90	15.96	33
34	30.29	28.09	26.11	24.33	22.71	21.26	19.93	18.73	17.64	16.65	15.74	34
35	29.30	27.24	25.38	23.69	22.17	20.78	19.52	18.38	17.33	16.38	15.51	35
36	28.31	26.38	24.63	23.05	21.61	20.30	19.10	18.01	17.01	16.10	15.26	36
37	27.32	25.52	23.89	22.40	21.04	19.80	18.67	17.63	16.68	15.81	15.01	37
38	26.33	24.66	23.13	21.74	20.46	19.29	18.22	17.24	16.34	15.51	14.74	38
39	25.35	23.79	22.37	21.06	19.87	18.77	17.77	16.84	15.98	15.19	14.46	39
40	24.36	22.92	21.60	20.39	19.27	18.24	17.29	16.42	15.61	14.86	14.17	40
41	23.38	22.05	20.83	19.70	18.66	17.70	16.81	15.99	15.23	14.52	13.86	41
42	22.40	21.17	20.04	19.00	18.04	17.14	16.31	15.54	14.83	14.16	13.54	42
43	21.42	20.30	19.26	18.30	17.40	16.58	15.80	15.09	14.42	13.79	13.21	43
44	20.44	19.42	18.47	17.58	16.76	16.00	15.28	14.61	13.99	13.41	12.86	44
45	19.46	18.53	17.67	16.86	16.11	15.40	14.74	14.13	13.55	13.00	12.50	45
46	18.49	17.65	16.86	16.13	15.44	14.79	14.19	13.62	13.09	12.59	12.11	46
47	17.51	16.76	16.05	15.39	14.76	14.17	13.62	13.10	12.61	12.15	11.71	47
48	16.54	15.86	15.23	14.63	14.07	13.54	13.04	12.56	12.12	11.69	11.29	48
49	15.57	14.97	14.40	13.87	13.37	12.89	12.44	12.01	11.60	11.22	10.85	49
50	14.60	14.07	13.57	13.10	12.65	12.22	11.82	11.43	11.07	10.72	10.39	50
51	13.63	13.17	12.73	12.31	11.92	11.54	11.18	10.84	10.52	10.21	9.91	51
52	12.66	12.26	11.88	11.52	11.17	10.85	10.53	10.23	9.94	9.67	9.40	52
53	11.69	11.35	11.03	10.71	10.42	10.13	9.86	9.60	9.35	9.11	8.87	53
54	10.72	10.44	10.16	9.90	9.65	9.40	9.17	8.94	8.73	8.52	8.32	54
55	9.76	9.52	9.29	9.07	8.86	8.65	8.46	8.27	8.08	7.91	7.74	55
56	8.79	8.60	8.41	8.23	8.06	7.89	7.73	7.57	7.42	7.27	7.13	56
57	7.82	7.67	7.52	7.38	7.24	7.11	6.97	6.85	6.72	6.60	6.49	57
58	6.86	6.74	6.63	6.51	6.41	6.30	6.20	6.10	6.00	5.91	5.82	58
59	5.89	5.80	5.72	5.63	5.55	5.48	5.40	5.32	5.25	5.18	5.11	59
60	4.92	4.86	4.80	4.74	4.68	4.63	4.57	4.52	4.47	4.42	4.37	60
61	3.94	3.91	3.87	3.83	3.79	3.76	3.72	3.69	3.65	3.62	3.59	61
62	2.97	2.95	2.92	2.90	2.88	2.86	2.84	2.82	2.80	2.78	2.76	62
63	1.98	1.97	1.97	1.96	1.95	1.94	1.93	1.92	1.91	1.90	1.89	63
64	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	64

Table 11	Multipliers	for loss	of earnings to	pension age	70 (males)
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Age at date of trial	at Multiplier calculated with allowance for projected mortality from the 2002-based population projections Age and rate of return of tri										Age at date of	
triai	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	titui
16	51.94	45.66	40.40	35.98	32.23	29.05	26.33	23.99	21.97	20.22	18.70	16
17	50.94	44.89	39.80	35.51	31.87	28.77	26.11	23.82	21.84	20.11	18.61	17
18	49.95	44.12	39.21	35.04	31.51	28.48	25.88	23.64	21.70	20.00	18.52	18
19	48.97	43.35	38.61	34.58	31.14	28.19	25.65	23.46	21.55	19.89	18.43	19
20	47.99	42.59	38.01	34.10	30.77	27.90	25.42	23.28	21.41	19.78	18.34	20
21	47.01	41.81	37.40	33.62	30.39	27.60	25.18	23.09	21.26	19.65	18.24	21
22	46.02	41.04	36.78	33.13	30.00	27.29	24.94	22.89	21.10	19.53	18.14	22
23	45.04	40.26	36.16	32.64	29.60	26.97	24.68	22.68	20.93	19.39	18.03	23
24	44.06	39.47	35.53	32.14	29.20	26.64	24.42	22.47	20.76	19.25	17.92	24
25	43.08	38.68	34.90	31.63	28.79	26.31	24.15	22.25	20.58	19.11	17.80	25
26	42.10	37.89	34.26	31.11	28.37	25.97	23.87	22.03	20.40	18.96	17.68	26
27	41.12	37.10	33.62	30.59	27.94	25.62	23.59	21.80	20.21	18.80	17.55	27
28	40.14	36.30	32.97	30.05	27.51	25.27	23.30	21.56	20.01	18.64	17.41	28
29	39.16	35.50	32.31	29.52	27.06	24.90	23.00	21.31	19.81	18.47	17.27	29
30	38.18	34.70	31.05	28.97	20.01	24.55	22.69	21.05	19.59	18.29	17.12	30
31	37.20	33.89	30.98	28.41	26.15	24.15	22.37	20.78	19.37	18.10	16.97	31
32	36.23	33.08	30.30	27.85	25.68	23.75	22.04	20.51	19.14	17.91	16.80	32
33 24	33.23	32.20	29.02	27.28	25.20	23.35	21.70	20.23	18.90	17.71	16.05	20
34	34.27	31.44	28.95	26.70	24.71	22.94	21.50	19.95	18.05	17.30	16.45	54 35
20	22.21	20.70	20.25	20.11	27.22	22.52	21.00	10.21	10.57	17.20	16.27	20
30	31.34	29.79	27.55	25.52	23.71	22.09	20.03	19.31	18.12	16.81	15.07	30 37
38	30.36	28.55	26.02	24.91	22.66	21.05	19.86	18.65	17.55	16.55	15.60	38
39	29.38	27.28	25.38	23.67	22.00	20.73	19.60	18.30	17.33	16.29	15.04	39
40	28.41	26.43	24.65	23.04	21.58	20.25	19.04	17.94	16.94	16.02	15.18	40
41	27.43	25 59	23.92	22.40	21.02	19 77	18.62	17 57	16.62	15 74	14 93	41
42	26.46	24.74	23.18	21.76	20.46	19.27	18.19	17.19	16.28	15.44	14.67	42
43	25.49	23.89	22.43	21.10	19.88	18.77	17.74	16.80	15.93	15.14	14.40	43
44	24.53	23.04	21.68	20.44	19.30	18.25	17.29	16.40	15.58	14.82	14.12	44
45	23.56	22.19	20.93	19.77	18.71	17.72	16.82	15.98	15.21	14.49	13.82	45
46	22.60	21.34	20.17	19.10	18.11	17.19	16.34	15.55	14.82	14.15	13.52	46
4/	21.65	20.49	19.41	18.42	1/.50	16.64	15.85	15.11	14.43	13.79	13.20	4/
40	20.70	19.05	18.04	17.75	16.88	15.08	13.55	14.00	14.02	13.42	12.87	40
50	18.79	17.91	17.09	16.32	15.60	14.93	14.30	13.71	13.16	12.64	12.32	50
51	17.84	17.05	16.30	15.60	14 95	14 33	13.76	13.21	12 70	12.22	11 77	51
52	16.89	16.18	15.50	14.87	14.28	13.72	13.19	12.70	12.23	11.79	11.37	52
53	15.95	15.31	14.70	14.14	13.60	13.09	12.62	12.17	11.74	11.34	10.95	53
54	15.00	14.43	13.90	13.39	12.91	12.46	12.03	11.62	11.23	10.87	10.52	54
55	14.06	13.56	13.09	12.64	12.21	11.81	11.42	11.06	10.71	10.38	10.06	55
56	13.12	12.69	12.27	11.88	11.50	11.15	10.80	10.48	10.17	9.87	9.59	56
57	12.19	11.82	11.46	11.11	10.79	10.47	10.17	9.89	9.61	9.35	9.10	57
58	11.27	10.95	10.64	10.34	10.06	9.79	9.53	9.28	9.04	8.81	8.59	58
59 60	10.35	0.20	9.81	9.56	9.32	9.09	8.8/	8.65	8.44 7.83	8.25 7.66	8.06	59 60
(1	9.42	9.20	0.70	7.07	7.90	7.(4	7.40	7.24	7.05	7.00	( 01	(1
62	8.30 7.50	8.32 7.44	8.14 7.30	7.97 7.16	7.80	7.04 6.00	7.49 6.77	7.34 6.65	6.53	6.42	630	61 62
63	6.66	6 55	6 44	6 33	6.23	6.13	6.03	5.93	5.84	5 75	5.66	63
64	5.74	5.65	5.57	5.49	5.41	5.34	5.26	5.19	5.12	5.05	4.99	64
65	4.81	4.75	4.69	4.63	4.58	4.52	4.47	4.42	4.37	4.32	4.27	65
66	3.87	3.83	3.79	3.75	3.72	3.68	3.65	3.61	3.58	3.55	3.52	66
67	2.92	2.90	2.88	2.85	2.83	2.81	2.79	2.77	2.75	2.74	2.72	67
68	1.96	1.95	1.94	1.93	1.92	1.91	1.90	1.89	1.89	1.88	1.87	68
69	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.97	69

Table 12	Multipliers	for loss	of e	arnings to	pension	age 70 (	(females)
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Age at date of trial	at Multiplier calculated with allowance for projected mortality from the 2002-based population projections Age a date of and rate of return of tria										Age at date of trial	
ului	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	titut
16	52.79	46 36	40 98	36 46	32.63	29 39	26.61	24 23	22.18	20.40	18 85	16
17	51 79	45 59	40.39	36.00	32.28	29.11	26.40	24.07	22.05	20.30	18 77	17
18	50.79	44.82	39.79	35.54	31.92	28.83	26.18	23.90	21.92	20.19	18.69	18
19	49.80	44.05	39.19	35.06	31.55	28.54	25.95	23.72	21.78	20.08	18.60	19
20	48.80	43.27	38.58	34.59	31.18	28.25	25.72	23.53	21.63	19.97	18.51	20
21	47.80	42.48	37.96	34.10	30.79	27.94	25.48	23.34	21.48	19.85	18.41	21
22	46.81	41.70	37.34	33.61	30.40	27.63	25.23	23.15	21.32	19.72	18.31	22
23	45.81	40.90	36.71	33.11	30.00	27.32	24.98	22.94	21.16	19.59	18.20	23
24	44.81	40.11	36.08	32.60	29.60	26.99	24.72	22.73	20.99	19.45	18.09	24
25	43.81	39.31	35.43	32.08	29.18	26.65	24.45	22.51	20.81	19.31	17.98	25
26	42.82	38.51	34.79	31.56	28.76	26.31	24.17	22.29	20.63	19.16	17.85	26
27	41.82	37.70	34.13	31.03	28.33	25.96	23.88	22.05	20.43	19.00	17.72	27
28	40.82	36.89	33.47	30.49	27.89	25.60	23.59	21.81	20.24	18.84	17.59	28
29	39.82	36.07	32.80	29.95	27.44	25.23	23.28	21.56	20.03	18.67	17.45	29
30	38.83	35.26	32.13	29.39	26.98	24.85	22.97	21.30	19.81	18.49	17.30	30
31	37.83	34.43	31.45	28.83	26.51	24.47	22.65	21.03	19.59	18.30	17.14	31
32	36.84	33.61	30.77	28.26	26.04	24.07	22.32	20.76	19.36	18.11	16.98	32
33	35.84	32.78	30.08	27.68	25.56	23.67	21.98	20.47	19.12	17.90	16.81	33
34 25	34.85	31.95	29.38	27.10	25.06	23.25	21.63	20.18	18.87	17.69	16.63	34
35	33.80	31.11	28.07	26.50	24.50	22.83	21.27	19.87	18.01	1/.4/	10.44	35
36	32.87	30.27	27.96	25.90	24.05	22.39	20.90	19.56	18.34	17.24	16.25	36
3/	31.88	29.43	27.25	25.29	23.53	21.95	20.52	19.23	18.06	17.00	16.04	3/
38	30.89	28.59	26.52	24.67	23.00	21.49	20.13	18.89	17.77	16.75	15.82	38
39 40	29.90	27.74	25.80	24.04	22.40	21.05	19.75	18.33	17.47	16.49	15.00	59 40
40	20.91	20.09	23.00	23.41	21.91	20.33	19.32	17.02	17.10	15.04	15.30	40
41 42	27.93	26.04	24.32	22.77	21.35	20.07	18.89	17.82	16.84	15.94	15.12	41
42	20.95	23.18	23.38	22.12	20.79	19.57	18.40	17.44	16.16	15.05	14.80	42
44	24.99	23.47	22.03	20.79	19.62	18.55	17.56	16.65	15.81	15.03	14.37	44
45	24.02	22.61	21.31	20.12	19.02	18.02	17.09	16.23	15.44	14.70	14.02	45
46	23.04	21.74	20.54	19.44	18.42	17.48	16.61	15.80	15.05	14.36	13.71	46
47	22.07	20.88	19.77	18.75	17.80	16.93	16.11	15.36	14.66	14.00	13.40	47
48	21.11	20.01	18.99	18.05	17.18	16.36	15.61	14.90	14.25	13.63	13.06	48
49	20.14	19.14	18.21	17.34	16.54	15.79	15.09	14.43	13.82	13.25	12.71	49
50	19.17	18.27	17.42	16.63	15.89	15.20	14.55	13.95	13.38	12.85	12.35	50
51	18.21	17.39	16.62	15.90	15.23	14.60	14.00	13.45	12.92	12.43	11.97	51
52	17.25	16.51	15.82	15.17	14.56	13.98	13.44	12.93	12.45	12.00	11.57	52
53	16.29	15.63	15.01	14.42	13.87	13.35	12.86	12.40	11.96	11.54	11.15	53
54	15.33	14.75	14.20	13.67	13.18	12.71	12.27	11.85	11.45	11.07	10.71	54
	14.38	15.80	13.36	12.91	12.47	12.03	11.00	11.28	10.92	10.38	10.20	33
56	13.43	12.98	12.55	12.14	11.75	11.39	11.03	10.70	10.38	10.07	9.78	56
50	12.48	12.09	11.72	11.30	11.02	10.70	0.72	10.10	9.82	9.55	9.29	57 59
50	10.58	10.30	10.88	9.77	9.53	9.20	9.75	9.40	9.23	8.99	8.77	50
60	9 64	9 40	9 18	8.96	8 76	8 55	8 36	8.17	7 99	7.82	7.65	60
61	8.60	8 50	8 2 2	8.14	7.07	7.80	7.64	7.40	7.34	7.10	7.05	61
62	8.09 7.74	8.30 7.59	8.32 7.45	7 30	7.97	7.80	6.90	6.78	6.66	6.54	6.43	62
63	6 79	6.68	6 56	6 4 5	635	6.24	6.14	6.04	5.95	5 85	5 76	63
64	5.84	5.75	5.67	5.59	5.51	5.43	5.35	5.28	5.21	5.14	5.07	64
65	4.88	4.82	4.76	4.70	4.65	4.59	4.54	4.49	4.43	4.38	4.33	65
66	3.92	3.88	3.84	3.80	3.77	3.73	3.70	3,66	3,63	3.59	3,56	66
67	2.95	2.93	2.91	2.89	2.86	2.84	2.82	2.80	2.78	2.76	2.75	67
68	1.98	1.97	1.96	1.95	1.94	1.93	1.92	1.91	1.90	1.89	1.88	68
69	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	0.97	0.97	0.97	69

Table 13	Multipliers	for loss	of earnings to	pension age	75 (males)
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Age at date of	Age at Multiplier calculated with allowance for projected mortality from the 2002-based population projections Age at date of and rate of return of trial										Age at date of	
ulai	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	ulai
16	56.02	48.74	42.73	37.74	33.57	30.06	27.10	24.58	22.42	20.56	18.96	16
17	55.02	47.98	42.15	37.30	33.23	29.80	26.90	24.42	22.30	20.47	18.88	17
18	54.02	47.22	41.57	36.85	32.89	29.54	26.70	24.27	22.18	20.37	18.81	18
19	53.04	46.47	41.00	36.41	32.55	29.28	26.49	24.11	22.06	20.28	18.73	19
20	52.06	45.72	40.42	35.97	32.21	29.01	26.29	23.95	21.93	20.18	18.66	20
21	51.07	44.96	39.83	35.51	31.85	28.74	26.07	23.78	21.80	20.08	18.57	21
22	50.09	44.20	39.24	35.05	31.49	28.46	25.85	23.61	21.66	19.97	18.49	22
23	49.10	43.43	38.64	34.58	31.13	28.17	25.62	23.43	21.52	19.85	18.40	23
24	47.12	41.88	37.43	33.63	30.75	27.87	25.59	23.24	21.37	19.74	18.30	24
25	46.15	41.11	36.81	33.14	20.08	27.37	24.00	22.05	21.22	10.48	18.10	25
20	45.15	40.33	36.19	32.64	29.98	26.94	24.90	22.65	20.89	19.40	17 99	20
28	44.19	39.55	35.57	32.14	29.18	26.62	24.39	22.43	20.72	19.21	17.88	28
29	43.21	38.76	34.93	31.63	28.77	26.29	24.12	22.22	20.54	19.07	17.76	29
30	42.23	37.97	34.30	31.12	28.36	25.95	23.84	21.99	20.36	18.92	17.63	30
31	41.24	37.17	33.65	30.59	27.93	25.60	23.56	21.76	20.17	18.76	17.50	31
32	40.26	36.37	33.00	30.06	27.49	25.24	23.26	21.51	19.97	18.59	17.37	32
33	39.28	35.57	32.34	29.52	27.05	24.88	22.96	21.26	19.76	18.42	17.22	33
34	38.30	34.77	31.68	28.98	26.60	24.50	22.65	21.01	19.55	18.24	17.07	34
35	37.32	33.90	31.01	28.42	20.14	24.12	22.33	20.74	19.32	18.05	16.92	35
36	36.34	33.14	30.33	27.86	25.67	23.73	22.00	20.46	19.09	17.86	16.75	36
3/	30.30	32.33 31.50	29.05	27.28	25.19	23.32	21.00	20.18	18.85	17.05	16.30	3/
39	33 40	30.68	28.90	26.70	24.70	22.91	20.95	19.88	18.00	17.44	16.39	30
40	32.42	29.85	27.56	25.52	23.69	22.06	20.58	19.26	18.07	16.98	16.00	40
41	31 44	29.02	26.85	24 91	23.18	21.61	20.21	18 94	17 79	16 74	15.80	41
42	30.47	28.19	26.14	24.30	22.65	21.16	19.82	18.60	17.50	16.49	15.58	42
43	29.50	27.35	25.43	23.69	22.12	20.70	19.42	18.26	17.20	16.24	15.35	43
44	28.53	26.52	24.70	23.07	21.58	20.24	19.02	17.90	16.89	15.97	15.12	44
45	27.57	25.69	23.98	22.44	21.03	19.76	18.60	17.54	16.57	15.69	14.88	45
46	26.61	24.85	23.25	21.80	20.48	19.28	18.18	17.17	16.25	15.40	14.62	46
47	25.66	24.02	22.52	21.16	19.92	18.78	17.74	16.79	15.91	15.10	14.36	47
48	24./1	23.18	21.79	20.51	19.35	18.28	16.84	16.39	15.30	14./9	14.09	48
50	22.81	22.34	21.05	19.80	18.17	17.70	16.84	15.99	14.83	14.47	13.80	49 50
51	21.87	20.66	10.55	18.52	17.58	16.70	15.80	15.14	14.44	13 70	13.10	51
52	20.92	19.81	18 79	17.84	16.96	16.70	15.89	14 69	14.44	13.79	12.86	52
53	19.98	18.96	18.02	17.15	16.34	15.59	14.89	14.23	13.62	13.05	12.52	53
54	19.04	18.11	17.26	16.46	15.71	15.02	14.37	13.76	13.19	12.66	12.16	54
55	18.11	17.27	16.49	15.76	15.08	14.44	13.84	13.28	12.75	12.26	11.79	55
56	17.18	16.43	15.72	15.05	14.43	13.85	13.30	12.79	12.30	11.84	11.41	56
57	16.27	15.59	14.95	14.35	13.79	13.25	12.75	12.28	11.84	11.42	11.02	57
58	15.36	14.75	14.18	13.64	13.13	12.65	12.20	11.77	11.36	10.98	10.61	58
59 60	14.40	13.92	12.41	12.95	12.47	12.04	11.05	11.24	10.87	10.52	0.19	59 60
61	12.50	12.00	11.05	11.40	11.00	10.70	10.46	10.70	0.95	0.57	0.20	61
62	12.07	12.23	11.00	11.46	11.15	10.79	9.86	0.15	9.85	9.37	9.50	62
63	10.90	10.59	10.30	10.75	9 75	9 49	9.80	9.00	9.32 8.77	8.55	8 34	63
64	10.02	9.76	9.51	9.27	9.04	8.82	8.60	8.40	8.20	8.01	7.83	64
65	9.14	8.92	8.71	8.51	8.32	8.13	7.95	7.78	7.61	7.45	7.29	65
66	8.25	8.07	7.90	7.74	7.58	7.42	7.27	7.13	6.99	6.85	6.72	66
67	7.36	7.22	7.08	6.95	6.82	6.70	6.58	6.46	6.35	6.24	6.13	67
68	6.47	6.36	6.25	6.15	6.05	5.95	5.86	5.77	5.68	5.59	5.50	68
69 70	5.57	5.49	5.41	5.34	5.26	5.19	5.12	5.05	4.98	4.91	4.85	69
/0	4.0/	4.02	4.30	4.51	4.45	4.40	4.35	4.30	4.25	4.20	4.10	/0
71	3.77	3.73	3.70	3.66	3.63	3.59	3.56	3.53	3.49	3.46	3.43	71
12 73	2.80	2.84 1.02	2.81 1.01	2.79	2.// 1.80	2./J 1.88	2./4 1.87	2./2 1.87	2.70 1.86	2.08 1.85	2.00	12
74	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	0.96	0.96	0.96	74

Table 14	Multipliers	for loss	of	earnings t	0	pension	age (	75 (	(females)	)
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Age at date of	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected mort	ality from th	ne 2002-base	ed populatio	n projection	S		Age at date of
trial	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	trial
16	57.18	49.67	43 48	38 35	34 07	30.48	27 44	24.86	22.66	20.77	19 13	16
17	56.18	48.92	42.92	37.92	33.74	30.23	27.25	24.72	22.55	20.68	19.06	17
18	55.18	48.16	42.34	37.49	33.41	29.97	27.06	24.57	22.43	20.59	19.00	18
19	54.18	47.40	41.76	37.04	33.07	29.71	26.86	24.42	22.32	20.50	18.92	19
20	53.18	46.64	41.18	36.59	32.73	29.45	26.65	24.26	22.19	20.40	18.85	20
21	52.18	15.87	40.59	36.14	32.37	20.17	26.44	24.00	22.06	20.30	18 77	21
21	51.18	45.10	30.00	35.67	32.57	29.17	26.22	24.09	21.00	20.30	18.68	21
22	50.18	44.32	39.39	35.20	31.65	28.61	25.99	23.92	21.93	20.20	18.00	22
23	49 18	43 54	38 77	34 73	31.05	28.01	25.76	23.56	21.79	19.97	18.00	23
25	48.18	42.76	38.16	34 24	30.89	28.01	25.52	23.37	21.04	19.85	18.41	25
26	17.19	41.07	27.54	22.75	20.50	27.70	25.29	22.17	21.12	10.72	10.11	26
20	47.10	41.97	36.01	33.75	30.30	27.70	25.20	23.17	21.55	19.72	18.20	20
28	40.18	40.38	36.27	32 74	29.69	27.06	23.02	22.97	21.17	19.59	18.20	28
20	44 18	39.58	35.63	32.74	29.28	26.72	24.70	22.70	20.82	19.31	17.97	20
30	43.18	38.78	34 99	31 71	28.86	26.38	24.19	22.34	20.62	19.16	17.85	30
21	42.19	27.07	24.32	21.19	28.00	26.03	22.02	22.01	20.45	10.00	17.72	21
32	42.10	37.97	34.33	30.64	20.43	20.03	23.93	22.08	20.45	19.00	17.72	31
32	41.19	36.35	33.07	30.04	27.99	25.07	23.04	21.64	20.23	18.67	17.30	32
34	30.10	35.53	32 34	29.55	27.09	24.93	23.02	21.37	10.83	18.49	17.30	34
35	38.20	34 71	31.66	28.99	26.63	24.55	22.71	21.55	19.61	18 31	17.30	35
26	27.20	22.90	20.08	20.55	26.05	24.16	22.71	20.70	10.29	10.51	16.09	26
30	36.20	33.09	30.98	20.42	20.10	24.10	22.38	20.79	19.56	16.12	16.98	30
38	35.21	32.00	20.60	27.85	25.08	23.75	21.70	20.31	19.14	17.91	16.63	38
30	34 23	31.40	28.00	26.68	24.69	22.54	21.70	10.02	18.50	17.49	16.05	30
40	33.24	30.57	28.20	26.08	24.09	22.92	20.98	19.61	18 38	17.26	16.45	40
41	22.25	20.72	27.40	25.49	22.67	22.15	20.50	10.20	18.10	17.02	16.05	41
41	31.27	29.75	27.49	23.48	23.07	22.00	20.00	19.29	17.82	16.78	15.05	41
42	30.20	28.90	26.05	24.80	23.13	21.01	10.22	18.50	17.52	16.53	15.67	42
43	20.29	28.00	25.33	24.23	22.02	20.69	19.83	18.02	17.33	16.27	15.02	43
45	28.34	26.38	23.55	22.99	21.54	20.05	19.01	17.91	16.91	15.99	15.59	45
16	2010 1	25.52	22.00	22.33	20.09	10.72	19.50	17.54	16.50	15.71	14.01	16
40	27.57	23.33	23.07	22.50	20.98	19.75	18.39	17.54	16.39	15./1	14.91	40
47	25.40	24.09	223.13	21.71	19.84	19.23	17.71	16.77	15.01	15.11	14.05	48
40	23.43	22.04	21.50	20.40	19.26	18.75	17.25	16.37	15.51	14 79	14.00	40
50	23.51	22.14	20.88	19.73	18.67	17.69	16.78	15.95	15.18	14.46	13.80	50
51	22.55	21.20	20.12	10.05	18.06	17.15	16.20	15.52	14.70	14.12	12.40	51
52	22.55	21.29	10.12	19.05	17.45	16.60	15.81	15.52	14.79	14.12	13.49	52
53	20.64	19.58	18.59	17.68	16.83	16.00	15 31	14.62	13.99	13.30	12.84	53
54	19.69	18.72	17.82	16.98	16.00	15 47	14 79	14.16	13.56	13.01	12.04	54
55	18.74	17.86	17.04	16.28	15.56	14.89	14.26	13.68	13.13	12.61	12.12	55
56	17.80	17.01	16.26	15.57	14.91	14 30	13 73	13.18	12.68	12 20	11 75	56
57	16.87	16.15	15.20	14.85	14.26	13 70	13.17	12.68	12.00	11 77	11.75	57
58	15.93	15.29	14 69	14.12	13 59	13.08	12.61	12.00	11.73	11 33	10.95	58
59	15.00	14 44	13.90	13 39	12.91	12.46	12.01	11.62	11.73	10.87	10.52	59
60	14.08	13.58	13.10	12.65	12.23	11.82	11.43	11.07	10.72	10.39	10.07	60
61	13.15	12 72	12 30	11.90	11.53	11 17	10.83	10.50	10.19	9.89	9.61	61
62	12.13	11.85	11 49	11.50	10.82	10.50	10.00	9.91	9 64	9.38	9.12	62
63	11 31	10.98	10.67	10.37	10.02	9.82	9 56	931	9.07	8.84	8 61	63
64	10.38	10.11	9.84	9.59	9.35	9.12	8.89	8.68	8.47	8.27	8.08	64
65	9.45	9.23	9.01	8.80	8.59	8.40	8.21	8.03	7.85	7.68	7.52	65
66	8 52	8 34	8 16	7 99	7 82	7.66	7 50	7 35	7 21	7.07	6.93	66
67	7.59	7.45	7.30	7.17	7.03	6.90	6.78	6.66	6.54	6.42	6.31	67
68	6.66	6.55	6.44	6.33	6.23	6.13	6.03	5.93	5.84	5.75	5.66	68
69	5.73	5.64	5.56	5.48	5.40	5.33	5.25	5.18	5.11	5.04	4.98	69
70	4.79	4.73	4.67	4.62	4.56	4.51	4.46	4.41	4.36	4.31	4.26	70
71	3.85	3.81	3.78	3.74	3.70	3.67	3.64	3.60	3.57	3.54	3.50	71
72	2.91	2.89	2.87	2.84	2.82	2.80	2.78	2.76	2.74	2.73	2.71	72
73	1.95	1.94	1.94	1.93	1.92	1.91	1.90	1.89	1.88	1.87	1.86	73
74	0.99	0.98	0.98	0.98	0.98	0.98	0.97	0.97	0.97	0.97	0.96	74

Table 15	<b>Multipliers</b>	for loss	of	pension	commencing	age 50 (	(males)	
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Age at date of trial	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected morta	ality from th	ne 2002-base	ed populatio	n projection	IS		Age at date of
triar	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	titui
0	33.97	24.05	17.13	12.26	8.82	6.38	4.64	3.39	2.48	1.83	1.35	0
1	34.11	24.27	17.37	12.50	9.04	6.57	4.80	3.52	2.59	1.92	1.43	1
2	34.09	24.38	17.54	12.68	9.22	6.73	4.94	3.64	2.70	2.00	1.50	2
3	34.07	24.49	17.70	12.86	9.40	6.90	5.09	3.77	2.80	2.09	1.57	3
4	34.04	24.59	17.87	13.05	9.58	7.06	5.23	3.90	2.91	2.19	1.65	4
5	34.01	24.70	18.03	13.23	9.76	7.24	5.39	4.03	3.03	2.28	1.73	5
6	33.98	24.80	18.20	13.42	9.95	7.41	5.55	4.17	3.15	2.39	1.82	6
7	33.94	24.90	18.36	13.61	10.14	7.59	5.71	4.31	3.27	2.49	1.91	7
8	33.91	25.00	18.53	13.80	10.34	7.78	5.88	4.46	3.40	2.60	2.00	8
9	33.88	25.10	18.70	14.00	10.53	7.96	6.05	4.61	3.53	2.72	2.10	9
10	33.84	25.20	18.87	14.20	10.73	8.16	6.22	4.77	3.67	2.84	2.20	10
11	33.80	25.30	19.04	14.40	10.94	8.35	6.41	4.93	3.82	2.96	2.31	11
12	33.77	25.40	19.21	14.60	11.15	8.55	6.59	5.10	3.97	3.09	2.42	12
13	33.73	25.50	19.38	14.80	11.36	8.76	6.78	5.28	4.12	3.23	2.54	13
14	33.69	25.60	19.55	15.01	11.58	8.97	6.98	5.46	4.28	3.37	2.67	14
15	33.65	25.70	19.73	15.22	11.80	9.19	7.19	5.64	4.45	3.52	2.80	15
16	33.61	25.80	19.91	15.43	12.02	9.41	7.40	5.84	4.63	3.68	2.94	16
17	33.58	25.90	20.09	15.65	12.25	9.64	7.61	6.04	4.81	3.84	3.08	17
18	33.54	26.01	20.27	15.88	12.49	9.87	7.84	6.25	5.00	4.01	3.24	18
19	33.52	26.12	20.46	16.10	12.73	10.11	8.07	6.46	5.20	4.19	3.40	19
20	33.49	26.24	20.65	16.34	12.98	10.36	8.31	6.69	5.40	4.38	3.57	20
21	33.47	26.35	20.85	16.57	13.24	10.62	8.55	6.92	5.62	4.58	3.74	21
22	33.44	26.46	21.04	16.81	13.49	10.88	8.81	7.16	5.84	4.78	3.93	22
23	33.41	26.57	21.24	17.05	13.76	11.14	9.07	7.40	6.07	5.00	4.13	23
24	33.39	26.69	21.44	17.30	14.02	11.42	9.33	7.66	6.31	5.22	4.33	24
25	33.36	26.80	21.64	17.55	14.30	11.70	9.61	7.93	6.56	5.45	4.55	25
26	33.33	26.91	21.84	17.80	14.57	11.98	9.89	8.20	6.82	5.70	4.77	26
27	33.30	27.03	22.04	18.06	14.86	12.28	10.19	8.49	7.09	5.95	5.01	27
28	33.27	27.14	22.25	18.32	15.15	12.58	10.49	8.78	7.38	6.22	5.26	28
29	33.25	27.26	22.45	18.58	15.44	12.89	10.80	9.08	7.67	6.50	5.52	29
30	33.22	27.37	22.66	18.85	15.74	13.21	11.12	9.40	7.97	6.79	5.80	30
31	33.19	27.49	22.87	19.12	16.05	13.53	11.45	9.73	8.29	7.09	6.09	31
32	33.16	27.60	23.09	19.40	16.36	13.86	11.79	10.06	8.62	7.41	6.39	32
33	33.13	27.72	23.30	19.67	16.68	14.20	12.14	10.41	8.96	7.74	6.71	33
34	33.10	27.84	23.52	19.96	17.01	14.55	12.50	10.77	9.32	8.09	7.04	34
35	33.07	27.95	23.74	20.24	17.34	14.91	12.87	11.15	9.69	8.45	7.40	35
36	33.03	28.07	23.96	20.54	17.68	15.27	13.25	11.54	10.08	8.83	7.77	36
37	33.00	28.19	24.18	20.83	18.02	15.65	13.64	11.94	10.48	9.23	8.15	37
38	32.97	28.30	24.40	21.13	18.37	16.03	14.05	12.35	10.90	9.64	8.56	38
39	32.94	28.42	24.63	21.43	18.73	16.43	14.46	12.78	11.33	10.08	8.99	39
40	32.91	28.54	24.86	21.74	19.10	16.83	14.90	13.23	11.78	10.53	9.44	40
41 42 43 44 45	32.88 32.86 32.83 32.82 32.82 32.80	28.66 28.79 28.92 29.05 29.19	25.09 25.33 25.58 25.83 26.08	22.06 22.38 22.71 23.05 23.40	19.47 19.86 20.25 20.66 21.07	17.25 17.68 18.12 18.58 19.05	15.34 15.80 16.28 16.77 17.28	13.69 14.17 14.67 15.19 15.73	12.25 12.75 13.26 13.80 14.36	11.01 11.50 12.03 12.57 13.15	9.91 10.41 10.94 11.49 12.08	41 42 43 44 45
46	32.80	29.34	26.35	23.76	21.50	19.54	17.81	16.29	14.94	13.75	12.69	46
47	32.80	29.49	26.62	24.13	21.95	20.04	18.36	16.88	15.56	14.39	13.34	47
48	32.81	29.65	26.90	24.51	22.41	20.56	18.93	17.49	16.20	15.06	14.03	48
49	32.82	29.81	27.19	24.89	22.88	21.10	19.52	18.12	16.88	15.76	14.76	49
50	32.84	29.98	27.48	25.29	23.36	21.65	20.14	18.79	17.58	16.50	15.53	50

	Table 16	Multipliers	for loss	of	pension	commencing	age 50 (	(females)	)
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Age at date of trial	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected morta	ality from th	e 2002-base	ed populatio	n projection	IS		Age at date of trial
uiui	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	titui
0 1 2	37.54 37.69 37.67	26.42 26.66 26.78	18.71 18.97 19.15	13.32 13.57 13.77	9.54 9.77 9.96	6.87 7.07 7.24	4.97 5.14 5.29	3.61 3.75 3.88	2.64 2.76 2.87	1.94 2.03 2.12	1.43 1.50 1.58	0 1 2
2 3 4	37.66 37.63	26.91 27.03	19.34 19.52	13.98 14.18	10.16 10.36	7.42 7.60	5.45 5.61	4.02 4.16	2.98 3.10	2.22 2.32	1.66 1.74	2 3 4
5	37.61	27.15	19.71	14.38	10.56	7.79	5.78	4.30	3.22	2.42	1.83	5
6 7 8	37.59 37.56 37.53	27.26 27.38 27.50	19.89 20.08 20.27	14.59 14.80 15.02	10.76 10.97	7.98 8.18 8.38	5.95 6.12 6.30	4.45 4.60 4.76	3.35 3.48 3.62	2.53 2.64 2.76	2.01	6 7 8
8 9 10	37.51 37.48	27.62 27.74	20.27 20.46 20.65	15.02 15.23 15.45	11.40 11.62	8.58 8.79	6.49 6.68	4.93 5.10	3.76 3.91	2.88 3.01	2.22 2.33	9 10
11 12	37.45	27.86	20.84	15.67	11.85	9.00 9.22	6.88 7.08	5.27 5.46	4.06	3.14	2.44	11
13 14	37.39 37.36	28.09 28.21	21.23 21.43	16.13 16.36	12.31 12.55	9.45 9.68	7.29 7.50	5.64 5.84	4.39 4.56	3.43 3.58	2.69 2.82	13 14
15	37.33	28.33	21.62	16.59	12.80	9.92	7.72	6.04	4.75	3.74	2.96	15
16 17	37.30 37.27	28.45 28.58	21.83 22.03	16.83 17.07	13.04 13.30	10.16 10.41	7.95 8.18	6.25 6.46	4.93 5.13	3.91 4.08	3.11 3.27	16 17
18 19 20	37.24 37.21 37.18	28.70 28.82 28.94	22.23 22.44 22.65	17.57 17.82	13.55 13.82 14.09	10.66	8.43 8.67 8.93	6.69 6.92 7.16	5.33 5.54 5.76	4.27 4.46 4.66	3.43 3.60 3.78	18 19 20
20	37.15	29.06	22.86	18.07	14.36	11.46	9.19	7.40	5.99	4.86	3.96	20
22 23	37.12 37.08	29.19 29.31	23.07 23.28	18.33 18.59	14.64 14.92	11.74 12.03	9.46 9.74	7.66 7.92	6.23 6.47	5.08 5.31	4.16 4.37	22 23
24 25	37.05 37.01	29.43 29.55	23.50 23.71	18.86 19.13	15.21 15.50	12.32 12.62	10.03 10.32	8.20 8.48	6.73 6.99	5.54 5.79	4.58 4.81	24 25
26 27	36.98 36.94	29.67 29.79	23.93 24.15	19.40 19.67	15.80 16.10	12.93 13.24	10.63 10.94	8.77 9.07	7.27 7.56	6.05 6.32	5.05 5.30	26 27
28 29	36.90 36.87	29.91 30.03	24.37 24.59	19.95 20.24	16.41 16.73	13.56 13.89	11.26 11.59	9.38 9.71	7.85 8.16	6.60 6.89	5.56 5.84	28 29
30	36.83	30.16	24.82	20.52	17.05	14.23	11.93	10.04	8.49	7.20	6.13	30
32 33	36.79 36.75 36.71	30.28 30.40 30.52	25.27 25.50	21.11	17.72	14.93	12.28	10.39	9.17 9.53	7.85	6.75 7.08	31 32 33
34	36.67	30.64	25.73	21.71	18.40	15.67	13.40	11.50	9.91	8.57	7.44	34
36	36.59	30.89	25.97	22.02	19.12	16.03	13.79	12.31	10.30	9 35	/.80	36
37	36.56	31.02	26.45	22.65	19.49	16.84	14.61	12.73	11.13	9.77	8.60	37
38 39	36.48	31.14	26.93	22.98	20.25	17.68	15.49	13.63	12.03	10.20	9.03 9.48	38 39
40	36.45	31.40	27.18	23.64	20.65	18.11	15.95	14.10	12.51	11.14	9.95	40
41 42	36.42 36.39	31.54 31.67	27.44 27.70	23.98 24.33	21.05 21.46	18.56	16.42 16.91	14.59 15.10	13.01	11.64 12.16	10.45 10.97	41 42
43	36.36	31.81	27.96	24.68	21.89	19.49	17.42	15.63	14.07	12.71	11.52	43
44 45	36.34 36.32	32.10	28.23 28.50	25.05 25.42	22.32 22.77	20.47	17.94 18.48	16.18	14.64	13.29	12.10	44 45
46	36.31	32.25	28.78	25.80	23.22	20.99	19.04	17.34	15.84	14.52	13.36	46
47 48	36.30 36.29	32.41 32.57	29.07 29.37	26.19 26.59	23.69 24.17	21.52 22.07	19.62 20.22	17.95	16.48 17.16	15.19 15.88	14.03 14.75	47 48
49 50	36.29 36.29	32.74 32.91	29.67 29.98	27.00 27.42	24.67 25.18	22.63 23.22	20.84 21.48	19.26 19.95	17.86 18.59	16.61 17.38	15.50 16.30	49 50

Table 17 M	ultipliers for	loss of <b>j</b>	pension	commencing	age 55 (	males)
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Age at date of trial	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected morta	ality from th	ne 2002-base	ed populatio	n projectior	15		Age at date of trial
titui	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	titui
0	29.19	20.38	14.29	10.08	7.13	5.07	3.62	2.60	1.87	1.35	0.98	0
1	29.31	20.56	14.50	10.27	7.31	5.22	3.75	2.70	1.96	1.42	1.04	1
2	29.29	20.65	14.63	10.42	7.45	5.35	3.86	2.80	2.03	1.48	1.09	2
3	29.27	20.74	14.77	10.57	7.59	5.48	3.97	2.89	2.11	1.55	1.14	3
4	29.24	20.83	14.90	10.72	7.74	5.61	4.09	2.99	2.20	1.62	1.20	4
5	29.21	20.91	15.04	10.87	7.89	5.75	4.21	3.09	2.28	1.69	1.26	5
6	29.18	20.99	15.18	11.02	8.04	5.89	4.33	3.20	2.37	1.76	1.32	6
7	29.15	21.08	15.31	11.18	8.19	6.03	4.46	3.31	2.46	1.84	1.38	7
8	29.12	21.16	15.45	11.33	8.35	6.18	4.59	3.42	2.56	1.92	1.45	8
9	29.08	21.24	15.59	11.49	8.51	6.32	4.72	3.54	2.66	2.01	1.52	9
10	29.05	21.33	15./3	11.65	8.6/	6.48	4.86	3.66	2.17	2.10	1.60	10
11	29.01	21.41	15.87	11.81	8.83	6.63	5.00	3.78	2.87	2.19	1.68	11
12	20.90	21.49	16.01	12.14	9.00	6.95	5.14	4.05	2.99	2.29	1.70	12
14	28.94	21.57	16.15	12.14	9.17	7.12	5.29	4.05	3.10	2.39	1.04	13
15	28.87	21.03	16.43	12.48	9.52	7.29	5.61	4.33	3.35	2.60	2.03	15
16	28.83	21.73	16.58	12.16	9.70	7.47	5 77	4 47	3.48	2.00	2.00	16
17	28.79	21.90	16.73	12.83	9.88	7.64	5.94	4.63	3.62	2.84	2.13	10
18	28.76	21.98	16.88	13.01	10.07	7.83	6.11	4.78	3.76	2.96	2.34	18
19	28.73	22.07	17.03	13.20	10.27	8.02	6.29	4.95	3.91	3.10	2.46	19
20	28.71	22.17	17.19	13.39	10.47	8.22	6.47	5.12	4.06	3.23	2.58	20
21	28.68	22.26	17.35	13.58	10.67	8.42	6.66	5.30	4.22	3.38	2.71	21
22	28.65	22.35	17.51	13.77	10.87	8.62	6.86	5.48	4.39	3.53	2.85	22
23	28.62	22.44	17.67	13.96	11.08	8.83	7.06	5.67	4.56	3.69	2.99	23
24	28.59	22.53	17.83	14.16	11.30	9.04	7.27	5.86	4.74	3.85	3.13	24
25	28.56	22.62	17.99	14.36	11.51	9.26	/.48	6.06	4.93	4.02	3.29	25
26	28.53	22.71	18.15	14.57	11.74	9.49	7.70	6.27	5.12	4.20	3.45	26
27	28.50	22.80	18.32	14.77	11.96	9.72	7.93	6.49	5.33	4.39	3.62	27
20	28.47	22.89	18.40	14.98	12.19	9.90	8.10	6.94	5.54	4.38	3.00	20
30	28.41	23.08	18.82	15.41	12.66	10.20	8.65	7.18	5.98	5.00	4.19	30
31	28.38	23.17	18 99	15.63	12.91	10.70	8 90	7 43	6.22	5.22	4 40	31
32	28.34	23.26	19.16	15.85	13.15	10.96	9.16	7.68	6.46	5.45	4.62	32
33	28.31	23.35	19.33	16.07	13.41	11.22	9.43	7.95	6.72	5.70	4.84	33
34	28.28	23.44	19.51	16.30	13.66	11.50	9.71	8.22	6.98	5.95	5.08	34
35	28.24	23.53	19.68	16.53	13.93	11.78	9.99	8.50	7.26	6.22	5.34	35
36	28.21	23.62	19.86	16.76	14.19	12.06	10.28	8.80	7.55	6.49	5.60	36
37	28.17	23.71	20.04	16.99	14.46	12.35	10.58	9.10	7.84	6.78	5.88	37
38	28.14	23.80	20.22	17.23	14.74	12.65	10.89	9.41	8.15	7.08	6.17	38
39	28.10	23.90	20.40	17.47	15.02	12.96	11.21	9.73	8.47	7.40	6.48	39
40	28.06	23.99	20.58	17.72	15.31	13.27	11.54	10.07	8.81	7.73	6.80	40
41	28.03	24.08	20.77	17.97	15.61	13.60	11.88	10.42	9.16	8.07	7.14	41
42	28.00	24.18	20.96	18.23	15.91	13.93	12.23	10.78	9.52	8.44	7.49	42
43	27.97	24.28	21.15	18.49	16.22	14.27	12.60	11.15	9.90	8.82	7.87	43
44	27.94	24.38	21.55	18.70	16.54	14.02	12.97	11.54	10.30	9.21	8.20	44
43	27.92	24.49	21.55	19.05	17.20	14.99	13.30	10.27	10.71	9.03	0.00	43
46	27.91	24.60	21.76	19.31	17.20	15.36	13.77	12.37	11.14	10.07	9.12	46
47	27.09	24./1	21.97	19.00	17.00	15.75	14.10	12.01	12.00	10.35	9.38	4/ 48
49	27.88	24.96	22.42	20.21	18 27	16 57	15.07	13.27	12.07	11.52	10.59	49
50	27.88	25.09	22.65	20.52	18.65	16.99	15.53	14.24	13.08	12.05	11.13	50
51	27.89	25.22	22.89	20.84	19.03	17.43	16.01	14.75	13.62	12.61	11.70	51
52	27.89	25.36	23.13	21.17	19.43	17.89	16.51	15.29	14.19	13.20	12.31	52
53	27.90	25.50	23.38	21.51	19.84	18.36	17.03	15.85	14.78	13.82	12.95	53
54	27.93	25.66	23.64	21.86	20.27	18.85	17.58	16.43	15.40	14.47	13.63	54
55	27.97	25.82	23.92	22.23	20.72	19.37	18.15	17.05	16.06	15.17	14.35	55

Table 18	Multipliers	for loss	of	pension	commencing	age 55 (	(females)	)
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$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Age at date of	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected mort	ality from th	ne 2002-base	ed populatio	n projectior	15		Age at date of
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	unai	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	triai
1 = 32,80 = 22,88 = 16,04 = 11,31 = 8,01 = 5,70 = 4,07 = 2,92 = 2,11 = 1,52 = 1,11 = 1 = 1 = 32,32,7 = 23,09 = 16,25 = 11,64 = 8,22 = 5,98 = 4,32 = 3,13 = 22,82 = 1,66 = 11,22 = 3 = 3,277 = 23,09 = 16,65 = 11,88 = 8,49 = 6,13 = 4,44 = 3,24 = 2,37 = 1,74 = 12,8 = 4, 45 = 3,273 = 23,29 = 16,66 = 11,98 = 8,65 = 6,28 = 4,57 = 3,35 = 2,66 = 11,98 = 1,48 = 7, 32,68 = 23,49 = 16,82 = 12,52 = 8,99 = 6,59 = 4,85 = 3,58 = 2,66 = 11,98 = 1,48 = 7, 32,68 = 23,49 = 16,82 = 12,52 = 8,99 = 6,59 = 4,85 = 3,58 = 2,66 = 11,98 = 1,48 = 7, 32,68 = 23,49 = 16,22 = 12,36 = 17,29 = 12,68 = 9,34 = 6,91 = 5,14 = 3,33 = 2,87 = 2,16 = 16,3 = 9 = 32,62 = 23,69 = 17,29 = 12,68 = 9,34 = 6,91 = 5,14 = 3,33 = 2,87 = 2,16 = 16,3 = 9 = 32,62 = 23,69 = 17,27 = 12,68 = 9,54 = 6,91 = 5,14 = 3,33 = 2,87 = 2,16 = 16,3 = 9 = 32,52 = 2,369 = 17,77 = 15,3 = 9,84 = 6,91 = 5,14 = 3,33 = 2,87 = 2,16 = 16,3 = 9 = 12 = 32,51 = 24,09 = 17,77 = 13,52 = 9,74 = 5,66 = 4,24 = 3,23 = 2,46 = 1,89 = 112 = 32,45 = 24,29 = 18,10 = 13,61 = 10,27 = 7,79 = 5,54 = 4,10 = 3,10 = 2,36 = 114 = 13 = 32,45 = 24,29 = 18,20 = 17,77 = 5,77 = 4,37 = 3,35 = 2,57 = 18,8 = 12 = 32,32 = 2,46 = 18,97 = 11,30 = 10,47 = 7,89 = 6,11 = 4,70 = 3,26 = 2,81 = 2,18 = 15 = 32,42 = 18,25 = 14,40 = 11,00 = 8,78 = 6,66 = 5,20 = 4,07 = 3,20 = 2,62 = 18 = 17 = 32,32 = 2,46 = 18,97 = 14,40 = 11,00 = 8,79 = 6,86 = 5,38 = 4,23 = 3,34 = 2,64 = 19 = 32,33 = 2,469 = 18,57 = 14,40 = 11,00 = 8,79 = 6,86 = 5,38 = 4,23 = 3,34 = 2,64 = 19 = 32,33 = 2,469 = 18,57 = 14,40 = 11,00 = 8,79 = 6,86 = 5,38 = 4,23 = 3,34 = 2,64 = 19 = 32,33 = 2,469 = 18,57 = 14,40 = 11,00 = 8,79 = 6,86 = 5,38 = 4,23 = 3,34 = 2,64 = 19 = 32,33 = 2,469 = 18,57 = 14,40 = 11,00 = 8,79 = 6,86 = 5,38 = 4,23 = 3,34 = 2,64 = 19 = 2,31 = 3,34 = 2,64 = 11,30 = 8,79 = 6,86 = 5,33 = 4,23 = 3,34 = 2,64 = 19,42 = 13,32 = 2,35 = 14,44 = 11,40 = 11,40 = 11,40 = 14	0	32.68	22.68	15.82	11.10	7.82	5.54	3.94	2.81	2.02	1.45	1.05	0
2         32.79         22.99         16.20         11.47         8.16         5.84         4.19         3.02         2.19         1.66         1.22         3           4         32.75         23.19         16.65         11.84         8.49         6.13         4.44         3.24         2.37         1.74         1.28         4           5         32.73         23.29         16.66         11.98         8.65         6.28         4.71         3.46         2.66         1.90         1.44         6           7         32.68         23.49         16.97         1.22         8.99         6.59         4.85         3.58         2.66         1.90         1.44         6           9         32.62         23.59         17.12         12.66         9.52         7.08         5.29         3.97         2.90         1.61         1.63         1.11           13         32.41         23.09         17.77         13.23         9.89         7.43         5.60         4.24         3.23         2.46         1.89         1.11           13         32.41         18.26         13.30         1.47         7.98         5.44         4.54         3.49	1	32.80	22.88	16.04	11.31	8.01	5.70	4.07	2.92	2.11	1.52	1.11	1
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2	32.79	22.99	16.20	11.47	8.16	5.84	4.19	3.02	2.19	1.59	1.16	2
$  \begin{array}{ccccccccccccccccccccccccccccccccccc$	3	32.77	23.09	16.35	11.64	8.32	5.98	4.32	3.13	2.28	1.66	1.22	3
$            5  32.73  23.29  16.66  11.98  8.65  6.28  4.57  3.35  2.46  1.82  1.35  5.7 \\ 32.68  23.49  16.97  12.32  8.99  6.59  4.85  3.58  2.66  1.98  1.48  7.7 \\ 32.62  23.69  17.3  12.50  9.16  6.75  4.99  3.71  2.76  2.07  1.55  8. \\ 9  32.62  23.69  17.29  12.68  9.34  6.91  5.14  3.83  2.87  2.16  1.63  99 \\ 10  32.60  23.79  17.45  12.86  9.52  7.08  5.29  3.97  2.99  2.26  1.71  10 \\ 11  32.57  23.89  17.61  13.04  9.70  7.25  5.44  4.10  3.10  2.36  1.80  11 \\ 12  32.54  24.09  17.73  13.23  9.89  7.43  5.60  4.24  3.23  2.46  1.89  12 \\ 13  32.54  24.09  17.93  13.42  10.08  7.64  5.77  4.39  3.35  2.46  1.80  11 \\ 15  32.45  24.29  18.30  10.47  7.79  5.94  4.54  3.49  2.26  2.08  14 \\ 15  32.45  24.29  18.43  10.47  7.79  6.11  4.70  3.66  2.48  18 \\ 16  32.45  24.29  18.43  10.47  7.79  6.14  4.70  3.66  2.48  12 \\ 17  32.39  24.49  18.40  10.46  8.18  6.47  5.02  3.71  2.9  2.29  126 \\ 17  32.30  24.49  18.49  14.40  11.00  8.78  8.8  6.47  5.02  3.91  2.9  2.29  126 \\ 17  32.30  24.69  18.95  14.60  11.30  8.79  6.86  5.38  4.33  3.34  2.24  19 \\ 20  23.20  25.00  19.47  15.43  11.50  9.07  7.6  5.56  4.39  3.344  2.64  19 \\ 21  32.27  24.89  19.29  15.02  11.74  9.22  7.27  5.75  4.57  3.64  2.91  21 \\ 21  32.21  25.40  19.47  15.43  11.97  9.44  7.48  5.95  4.57  3.64  2.91  21 \\ 23  23.24  25.00  19.47  15.43  11.97  9.44  7.48  5.95  4.47  3.34  2.64  19 \\ 21  32.27  24.89  19.29  15.02  11.74  9.22  7.27  5.75  4.57  3.84  4.52  3.71  26 \\ 26  23.10  25.40  20.18  16.11  12.91  10.39  8.39  6.81  5.54  4.57  3.84  2.91  21 \\ 24  32.24  25.00  19.47  15.45  11.30  8.88  8.16  6.76  5.48  5.33  4.45  3.44  25 \\ 3.13  3.19  3.16  22.40  17.4  12.29  10.5  10.37  4.57  4.57  3.64  2.91  21 \\ 21  32.24  23.00  19.55  15.66  13.41 $	4	32.75	23.19	16.51	11.81	8.49	6.13	4.44	3.24	2.37	1.74	1.28	4
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5	32.73	23.29	16.66	11.98	8.65	6.28	4.57	3.35	2.46	1.82	1.35	5
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	6	32.70	23.39	16.82	12.15	8.82	6.43	4.71	3.46	2.56	1.90	1.41	6
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	7	32.68	23.49	16.97	12.32	8.99	6.59	4.85	3.58	2.66	1.98	1.48	7
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8	32.65	23.59	17.13	12.50	9.16	6.75	4.99	3.71	2.76	2.07	1.55	8
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	9	32.62	23.69	17.29	12.68	9.34	6.91	5.14	3.83	2.87	2.16	1.63	9
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	10	32.60	23.79	17.45	12.80	9.52	7.08	5.29	3.97	2.99	2.20	1./1	10
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	11	32.57	23.89	17.61	13.04	9.70	7.25	5.44 5.60	4.10 4.24	3.10	2.36	1.80	11
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	13	32.54	24.09	17.93	13.23	10.08	7.61	5.00	4 39	3 35	2.57	1.09	13
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	14	32.48	24.19	18 10	13.61	10.27	7 79	5 94	4 54	3 49	2.69	2.08	14
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	15	32.45	24.29	18.26	13.80	10.47	7.98	6.11	4.70	3.62	2.81	2.18	15
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	16	32.42	24 39	18 43	14 00	10.67	8 18	6.29	4 86	3 77	2.93	2.29	16
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	17	32.39	24.49	18.60	14.20	10.88	8.38	6.47	5.02	3.91	3.06	2.40	17
	18	32.36	24.59	18.77	14.40	11.09	8.58	6.66	5.20	4.07	3.20	2.52	18
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	19	32.33	24.69	18.95	14.60	11.30	8.79	6.86	5.38	4.23	3.34	2.64	19
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	20	32.30	24.79	19.12	14.81	11.52	9.00	7.06	5.56	4.39	3.49	2.78	20
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	21	32.27	24.89	19.29	15.02	11.74	9.22	7.27	5.75	4.57	3.64	2.91	21
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	22	32.24	25.00	19.47	15.23	11.97	9.44	7.48	5.95	4.75	3.80	3.06	22
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	23	32.20	25.10	19.65	15.45	12.20	9.67	7.70	6.15	4.93	3.97	3.21	23
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	24	32.17	25.20	19.82	15.66	12.43	9.91	7.92	6.36	5.13	4.15	3.37	24
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	25	32.13	25.30	20.00	15.89	12.67	10.15	8.16	6.58	5.33	4.33	3.53	25
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	26	32.10	25.40	20.18	16.11	12.91	10.39	8.39	6.81	5.54	4.52	3.71	26
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	27	32.06	25.49	20.36	16.33	13.16	10.64	8.64	7.04	5.76	4.72	3.89	27
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	28	32.02	25.59	20.55	16.56	13.41	10.90	8.89	7.28	5.98	4.93	4.08	28
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	29	21.05	25.09	20.75	10.80	13.00	11.10	9.15	7.55	6.46	5.15	4.28	29
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	30	21.95	25.79	20.91	17.05	13.92	11.43	9.42	1.19	0.40	5.50	4.49	30
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	31	31.91	25.89	21.10	17.27	14.19	11.71	9.69	8.05	6.72	5.62	4.72	31
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	32	31.07	25.99	21.29	17.51	14.40	11.99	9.97	8.55 8.61	7.25	6.13	4.95 5.10	32
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	34	31.85	26.09	21.40	18.00	15.02	12.28	10.27	8.01	7.23	6.40	5 4 5	34
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	35	31.75	26.29	21.86	18.25	15.30	12.88	10.87	9.21	7.84	6.68	5.72	35
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	36	31.71	26.30	22.06	18 51	15.50	13.10	11 10	0.53	8 1 4	6.98	6.00	36
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	37	31.67	26.39	22.00	18.77	15.89	13.19	11.19	9.86	8 46	7 29	6.30	37
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	38	31.63	26.59	22.45	19.03	16.20	13.83	11.86	10.20	8.80	7.61	6.61	38
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	39	31.59	26.70	22.65	19.30	16.50	14.17	12.20	10.55	9.14	7.95	6.94	39
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	40	31.55	26.80	22.86	19.57	16.82	14.51	12.56	10.91	9.50	8.31	7.28	40
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	41	31.52	26.91	23.07	19.85	17.15	14.86	12.93	11.28	9.88	8.68	7.64	41
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	42	31.48	27.02	23.28	20.13	17.48	15.23	13.31	11.67	10.27	9.07	8.02	42
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	43	31.45	27.13	23.49	20.42	17.82	15.60	13.71	12.08	10.68	9.47	8.42	43
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	44	31.42	27.24	23.71	20.72	18.16	15.98	14.11	12.50	11.11	9.90	8.85	44
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	45	31.40	27.36	23.94	21.02	18.52	16.38	14.53	12.94	11.55	10.34	9.29	45
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	46	31.38	27.48	24.16	21.32	18.89	16.79	14.97	13.39	12.01	10.81	9.76	46
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	47	31.36	27.61	24.40	21.64	19.26	17.21	15.42	13.86	12.50	11.30	10.25	47
49       31.35       2/.8/       24.88       22.29       20.04       18.08       16.37       14.86       13.53       12.35       11.31       49         50       31.33       28.01       25.13       22.63       20.45       18.54       16.87       15.39       14.08       12.92       11.89       50         51       31.33       28.15       25.39       22.98       20.87       19.02       17.39       15.94       14.66       13.52       12.49       51         52       31.33       28.30       25.65       23.34       21.30       19.51       17.92       16.51       15.26       14.14       13.14       52         53       31.34       28.45       25.93       23.71       21.75       20.02       18.48       17.11       15.89       14.80       13.81       53         54       31.36       28.62       26.21       24.09       22.21       20.55       19.06       17.74       16.56       15.49       14.53       54         55       31.39       28.80       26.51       24.49       22.69       21.10       19.67       18.40       17.25       16.22       15.29       55	48	31.34	27.73	24.63	21.96	19.65	17.64	15.88	14.35	13.00	11.82	10.77	48
50         51.55         28.01         22.15         22.05         20.45         18.54         16.87         15.39         14.08         12.92         11.89         50           51         31.33         28.15         25.39         22.98         20.87         19.02         17.39         15.94         14.66         13.52         12.49         51           52         31.33         28.30         25.65         23.34         21.30         19.51         17.92         16.51         15.26         14.14         13.14         52           53         31.34         28.45         25.93         23.71         21.75         20.02         18.48         17.11         15.89         14.80         13.81         53           54         31.36         28.62         26.21         24.09         22.21         20.55         19.06         17.74         16.56         15.49         14.53         54           55         31.39         28.80         26.51         24.49         22.69         21.10         19.67         18.40         17.25         16.22         15.29         55	49 50	31.33	27.87	24.88	22.29	20.04	18.08	16.37	14.86	13.53	12.35	11.31	49
51       51.55       28.15       25.95       22.98       20.87       19.02       17.39       15.94       14.66       15.52       12.49       51         52       31.33       28.30       25.65       23.34       21.30       19.51       17.92       16.51       15.26       14.14       13.14       52         53       31.34       28.45       25.93       23.71       21.75       20.02       18.48       17.11       15.89       14.80       13.81       53         54       31.36       28.62       26.21       24.09       22.21       20.55       19.06       17.74       16.56       15.49       14.53       54         55       31.39       28.80       26.51       24.49       22.69       21.10       19.67       18.40       17.25       16.22       15.29       55	50	31.33	28.01	25.13	22.03	20.45	18.54	10.8/	15.39	14.08	12.92	11.89	50
52         51.55         28.50         25.65         25.34         21.50         19.51         17.92         16.51         15.26         14.14         13.14         52           53         31.34         28.45         25.93         23.71         21.75         20.02         18.48         17.11         15.89         14.80         13.81         53           54         31.36         28.62         26.21         24.09         22.21         20.55         19.06         17.74         16.56         15.49         14.53         54           55         31.39         28.80         26.51         24.49         22.69         21.10         19.67         18.40         17.25         16.22         15.29         55	51	31.33	28.15	25.39	22.98	20.87	19.02	17.39	15.94	14.66	13.52	12.49	51
55         31.34         26.45         23.75         23.71         21.75         20.02         16.46         17.11         13.69         14.60         15.81         55           54         31.36         28.62         26.21         24.09         22.21         20.55         19.06         17.74         16.56         15.49         14.53         54           55         31.39         28.80         26.51         24.49         22.69         21.10         19.67         18.40         17.25         16.22         15.29         55	52 53	31.33	28.30	25.05	23.34	21.30	19.51	17.92	10.51	15.20	14.14	13.14	52 52
51         51.50         20.22         20.21         24.09         22.21         20.55         17.00         17.74         10.50         15.49         14.55         54           55         31.39         28.80         26.51         24.49         22.69         21.10         19.67         18.40         17.25         16.22         15.29         55	55	31.34	20.45 28.62	25.95	23.71	21.73 22.21	20.02	10.40	17.11 17.74	15.09	15.40	14.53	53 54
	55	31.39	28.80	26.51	24.49	22.69	21.10	19.67	18.40	17.25	16.22	15.29	55

Table 19	Multipliers	for	loss	of	pension	commencing	age 60	(males)	)

Age at date of	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected mort	ality from th	ne 2002-base	ed populatio	n projection	IS		Age at date of
trial	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	trial
0	24.49	16.85	11.64	8.08	5.63	3.94	2.76	1.95	1.38	0.98	0.70	0
1	24.59	17.00	11.81	8.23	5.76	4.05	2.86	2.03	1.44	1.03	0.73	1
2	24.57	17.07	11.92	8.35	5.88	4.15	2.94	2.09	1.50	1.07	0.77	2
3	24.55	17.14	12.03	8.47	5.99	4.25	3.03	2.17	1.56	1.12	0.81	3
4	24.52	17.21	12.13	8.59	6.10	4.35	3.12	2.24	1.62	1.17	0.85	4
5	24.49	17.28	12.24	8.71	6.22	4.46	3.21	2.32	1.68	1.22	0.89	5
6	24.47	17.35	12.35	8.83	6.34	4.57	3.30	2.40	1.74	1.28	0.93	6
7	24.44	17.41	12.46	8.95	6.46	4.68	3.40	2.48	1.81	1.33	0.98	7
8	24.40	17.48	12.57	9.08	6.58	4.79	3.50	2.56	1.88	1.39	1.03	8
9	24.37	17.54	12.68	9.20	6.70	4.90	3.60	2.65	1.96	1.45	1.08	9
10	24.34	17.61	12.79	9.33	6.83	5.02	3.70	2.74	2.03	1.51	1.13	10
11	24.31	17.67	12.90	9.46	6.96	5.14	3.81	2.83	2.11	1.58	1.19	11
12	24.27	17.74	13.01	9.59	7.09	5.26	3.92	2.93	2.19	1.65	1.25	12
13	24.24	17.80	13.13	9.72	7.22	5.38	4.03	3.03	2.28	1.72	1.31	13
14	24.20	17.87	13.24	9.85	7.36	5.51	4.15	3.13	2.37	1.80	1.37	14
15	24.16	17.93	13.35	9.98	7.49	5.64	4.27	3.23	2.46	1.88	1.44	15
16	24.13	17.99	13.47	10.12	7.63	5.78	4.39	3.34	2.56	1.96	1.51	16
17	24.09	18.06	13.59	10.26	7.78	5.91	4.51	3.46	2.66	2.05	1.58	17
18	24.06	18.13	13.71	10.40	7.92	6.06	4.65	3.57	2.76	2.14	1.66	18
19	24.04	18.20	13.83	10.55	8.07	6.20	4.78	3.70	2.87	2.23	1.74	19
20	24.01	18.27	13.95	10.70	8.23	6.35	4.92	3.82	2.98	2.33	1.83	20
21	23.98	18.34	14.08	10.85	8.39	6.51	5.06	3.95	3.10	2.43	1.92	21
22	23.95	18.41	14.20	11.00	8.55	6.66	5.21	4.09	3.22	2.54	2.01	22
23	23.92	18.48	14.33	11.15	8.71	6.82	5.36	4.23	3.34	2.65	2.11	23
24	23.89	18.55	14.46	11.31	8.87	6.99	5.52	4.37	3.48	2.77	2.21	24
25	23.86	18.62	14.58	11.46	9.04	7.15	5.68	4.52	3.61	2.89	2.32	25
26	23.83	18.69	14.71	11.62	9.21	7.33	5.84	4.68	3.75	3.02	2.44	26
27	23.80	18.76	14.84	11.78	9.39	7.50	6.01	4.84	3.90	3.15	2.56	27
28	23.76	18.83	14.97	11.95	9.56	7.68	6.19	5.00	4.05	3.29	2.68	28
29	23.73	18.90	15.10	12.11	9.74	7.87	6.37	5.17	4.21	3.44	2.82	29
30	23.70	18.97	15.24	12.28	9.93	8.05	6.55	5.35	4 38	3.59	2.95	30
31 32 33 34 35	23.66 23.63 23.59 23.56 23.52	19.04 19.11 19.17 19.24 19.31	15.24 15.37 15.50 15.64 15.77 15.91	12.20 12.45 12.62 12.79 12.97 13.15	10.12 10.31 10.50 10.70	8.25 8.44 8.65 8.85 9.06	6.74 6.94 7.14 7.35 7.56	5.53 5.72 5.91 6.11 6.32	4.55 4.72 4.91 5.10 5.30	3.75 3.92 4.09 4.27 4.46	3.10 3.25 3.41 3.58 3.76	31 32 33 34 35
36 37 38 39 40	23.48 23.44 23.40 23.36 23.32	19.31 19.38 19.44 19.51 19.58 19.64	16.04 16.18 16.32 16.46 16.60	13.13 13.33 13.51 13.69 13.88 14.07	10.30 11.10 11.31 11.52 11.74 11.96	9.00 9.28 9.50 9.73 9.96 10.19	7.78 8.00 8.23 8.47 8.71	6.54 6.76 6.99 7.22 7.47	5.51 5.72 5.95 6.18 6.42	4.65 4.86 5.07 5.30 5.53	3.94 4.13 4.34 4.55 4.77	36 37 38 39 40
40 41 42 43 44 45	23.29 23.25 23.21 23.18 22.15	19.04 19.71 19.78 19.85 19.93 20.00	16.74 16.88 17.03 17.18	14.07 14.26 14.46 14.66 14.86	12.18 12.41 12.65 12.89	10.19 10.44 10.69 10.94 11.21	8.97 9.23 9.50 9.77	7.72 7.99 8.26 8.54	6.67 6.93 7.20 7.49	5.77 6.03 6.30 6.58 6.87	5.01 5.26 5.52 5.79	40 41 42 43 44 45
43 46 47 48 49 50	23.13 23.13 23.11 23.09 23.07 23.06	20.00 20.09 20.17 20.26 20.35 20.44	17.50 17.66 17.83 18.00 18.17	15.07 15.29 15.51 15.73 15.96 16.20	13.14 13.39 13.65 13.92 14.20 14.48	11.48 11.76 12.05 12.35 12.66 12.98	10.00 10.36 10.67 10.99 11.32 11.66	9.15 9.47 9.80 10.14 10.50	8.09 8.42 8.76 9.11 9.48	7.18 7.50 7.84 8.20 8.57	6.38 6.70 7.04 7.40 7.77	46 47 48 49 50
51 52 53 54 55	23.04 23.03 23.03 23.03 23.03 23.05	20.53 20.63 20.73 20.84 20.97	18.35 18.53 18.72 18.92 19.12	16.44 16.69 16.95 17.21 17.49	14.77 15.07 15.38 15.70 16.03	13.31 13.64 13.99 14.36 14.74	12.01 12.38 12.76 13.16 13.57	10.30 10.87 11.26 11.66 12.09 12.53	9.86 10.26 10.68 11.13 11.59	8.97 9.38 9.81 10.26 10.75	8.17 8.58 9.02 9.49 9.98	51 52 53 54 55
56	23.08	21.10	19.35	17.78	16.39	15.14	14.01	13.00	12.09	11.26	10.51	56
57	23.13	21.26	19.59	18.10	16.76	15.56	14.48	13.50	12.61	11.81	11.08	57
58	23.19	21.42	19.85	18.43	17.16	16.01	14.97	14.03	13.17	12.39	11.68	58
59	23.27	21.61	20.12	18.78	17.57	16.48	15.49	14.59	13.76	13.01	12.33	59
60	23.37	21.82	20.42	19.16	18.02	16.98	16.04	15.18	14.40	13.68	13.02	60

Table 20	Multipliers	for loss	of	pension	commencing	age 60	(females)	)
							· · · · · · · · · · · · · · · · · · ·	

Age at date of	Multiplic and rate	er calculated of return of	l with allow	ance for pro	jected mort	ality from th	ne 2002-base	ed populatio	n projectior	18		Age at date of
trial	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	triai
0	27.87	19.07	13.11	9.05	6.28	4.37	3.06	2.15	1.51	1.07	0.76	0
1	27.98	19.24	13.29	9.22	6.43	4.50	3.16	2.23	1.58	1.12	0.80	1
2	27.96	19.33	13.42	9.36	6.55	4.61	3.25	2.31	1.64	1.17	0.84	2
3	27.94	19.41	13.55	9.49	6.68	4.72	3.35	2.39	1.71	1.22	0.88	3
4	27.92	19.50	13.67	9.63	6.81	4.84	3.45	2.47	1.77	1.28	0.93	4
	27.90	19.30	12.02	9.77	7.09	5.09	2.55	2.55	1.04	1.34	1.02	5
7	27.85	19.00	13.95	10.05	7.08	5.20	3.76	2.04	1.92	1.40	1.02	7
8	27.83	19.82	14.18	10.19	7.35	5.33	3.87	2.83	2.07	1.52	1.12	8
9	27.80	19.90	14.31	10.33	7.49	5.45	3.99	2.92	2.15	1.59	1.18	9
10	27.78	19.99	14.44	10.48	7.64	5.59	4.10	3.02	2.24	1.66	1.24	10
11	27.75	20.07	14.57	10.63	7.78	5.72	4.22	3.13	2.32	1.73	1.30	11
12	27.72	20.15	14.71	10.78	7.93	5.86	4.35	3.23	2.42	1.81	1.36	12
13	27.69	20.23	14.84	10.93	8.08	6.00	4.47	3.34 3.46	2.51	1.89	1.43	13
15	27.63	20.31	15.11	11.08	8.40	6.29	4.00	3.58	2.71	2.06	1.50	14
16	27.61	20.47	15.25	11.40	8.56	6.45	4.88	3.70	2.82	2.15	1.65	16
17	27.58	20.55	15.38	11.56	8.72	6.60	5.02	3.83	2.93	2.25	1.73	17
18	27.55	20.64	15.52	11.72	8.89	6.76	5.16	3.96	3.04	2.35	1.82	18
19	27.52	20.72	15.66	11.89	9.06	6.93	5.31	4.09	3.16	2.45	1.91	19
20	27.49	20.80	15.80	12.05	9.23	7.09	5.47	4.23	3.29	2.50	2.00	20
21	27.46	20.88	15.94	12.22	9.40	7.26	5.63	4.38	3.42	2.67	2.10	21
22	27.42	20.90	16.09	12.39	9.38	7.44	5.79	4.55	3.55	2.79	2.20	22
24	27.36	21.04	16.37	12.74	9.95	7.80	6.13	4.84	3.83	3.04	2.42	23
25	27.32	21.20	16.52	12.92	10.14	7.99	6.31	5.01	3.98	3.18	2.54	25
26	27.29	21.28	16.66	13.10	10.33	8.18	6.50	5.18	4.14	3.32	2.67	26
27	27.25	21.36	16.81	13.28	10.53	8.37	6.68	5.35	4.30	3.46	2.80	27
28	27.21	21.44	16.96	13.46	10.72	8.57	6.88	5.53	4.47	3.62	2.94	28
30	27.17	21.52	17.11	13.83	11.13	8.99	7.08	5.92	4.82	3.94	3.08	30
31	27.10	21.68	17.40	14.02	11.34	9.20	7 49	6.12	5.01	4.12	3 39	31
32	27.06	21.75	17.55	14.22	11.55	9.42	7.71	6.33	5.21	4.30	3.56	32
33	27.02	21.83	17.71	14.41	11.77	9.65	7.93	6.54	5.41	4.49	3.73	33
34	26.97	21.91	17.86	14.61	11.99	9.88	8.16	6.76	5.62	4.69	3.92	34
35	26.93	21.99	18.01	14.81	12.22	10.11	8.40	6.99	5.84	4.89	4.11	35
36	26.89	22.07	18.17	15.01	12.45	10.35	8.64	7.23	6.07	5.11	4.31	36
37	26.85	22.14	18.33	15.22	12.68	10.60	8.89	7.47	6.30	5.33	4.52	37
38 30	26.81	22.22	18.48	15.45	12.92	10.85	9.15	7.73	0.33 6.81	5.57 5.81	4.74	38 30
40	26.73	22.30	18.81	15.86	13.41	11.38	9.68	8.26	7.07	6.07	5.22	40
41	26.69	22.46	18.97	16.07	13.66	11.65	9.96	8.55	7.35	6.34	5.48	41
42	26.66	22.55	19.14	16.30	13.92	11.93	10.25	8.84	7.64	6.62	5.75	42
43	26.62	22.63	19.31	16.53	14.19	12.22	10.55	9.14	7.94	6.91	6.04	43
44	26.59	22.72	19.48	16.76	14.46	12.52	10.86	9.46	8.25	7.22	6.34	44
45	20.50	22.81	19.00	17.00	14.74	12.82	11.18	9.78	8.58	7.00	0.05	45
46 47	26.53	22.90	19.84	17.24	15.03	13.13	11.51	10.12	8.92	7.88	6.98 7.33	46
48	26.30	23.00	20.02	17.49	15.52	13.40	12.21	10.47	9.28	8.61	7.33	48
49	26.46	23.20	20.40	18.00	15.93	14.13	12.57	11.22	10.03	9.00	8.09	49
50	26.45	23.31	20.60	18.27	16.24	14.49	12.95	11.61	10.44	9.40	8.49	50
51	26.44	23.41	20.80	18.54	16.57	14.85	13.35	12.02	10.86	9.83	8.92	51
52	26.43	23.53	21.01	18.82	16.91	15.23	13.75	12.45	11.30	10.28	9.38	52
53	26.43	23.65	21.23	19.11	17.25	15.62	14.17	12.90	11.77	10.76	9.86	53
54 55	26.45	23.78	21.45	19.41	17.01	16.02	14.61	13.30	12.25	11.26	10.36	54
56	20.43	23.71	21.00	20.04	18 27	16.99	15.07	11.00	12.70	12.24	11.90	55
57	26.47	24.00	21.95	20.04	18.77	17.34	15.55	14.50	13.50	12.54	12.47	50 57
58	26.56	24.38	22.45	20.73	19.19	17.82	16.58	15.46	14.46	13.54	12.72	58
59	26.61	24.56	22.73	21.10	19.63	18.31	17.13	16.06	15.08	14.20	13.40	59
60	26.69	24.75	23.03	21.48	20.09	18.84	17.70	16.68	15.75	14.90	14.12	60

Table 21 Multir	pliers for loss	of pension	commencing	age 65 (	males)
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Age at date of trial	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected mort	ality from th	ne 2002-base	ed populatio	n projection	IS		Age at date of trial
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	ti itti
0	19.92	13 50	9 1 9	6.28	4 30	2.96	2.04	1.42	0.98	0.69	0.48	0
1	20.00	13.62	9.32	6.39	4.41	3.05	2.11	1.47	1.03	0.72	0.51	1
2	19.98	13.68	9.40	6.48	4.49	3.12	2.17	1.52	1.07	0.75	0.53	2
3	19.96	13.73	9.49	6.58	4.58	3.19	2.24	1.57	1.11	0.78	0.56	3
4	19.93	13.78	9.57	6.67	4.66	3.27	2.30	1.63	1.15	0.82	0.58	4
5	19.91	13.84	9.65	6.76	4.75	3.35	2.37	1.68	1.20	0.86	0.61	5
6	19.88	13.89	9.74	6.85	4.84	3.43	2.44	1.74	1.24	0.89	0.64	6
7	19.85	13.94	9.82	6.95	4.93	3.51	2.51	1.80	1.29	0.93	0.67	7
8	19.82	13.99	9.91	7.04	5.02	3.59	2.58	1.86	1.34	0.97	0.71	8
9	19.79	14.04	9.99	7.14	5.11	3.68	2.65	1.92	1.39	1.02	0.74	9
10	19.76	14.09	10.08	1.23	5.21	3.77	2.73	1.99	1.45	1.06	0.78	10
11	19.73	14.14	10.16	7.33	5.31	3.85	2.81	2.05	1.50	1.11	0.82	11
12	19.70	14.18	10.25	7.43	5.40	3.94	2.89	2.12	1.56	1.15	0.86	12
13	19.67	14.23	10.33	7.53	5.50	4.04	2.97	2.19	1.62	1.20	0.90	13
14	19.03	14.28	10.42	7.03	5.01	4.13	3.00	2.27	1.09	1.20	0.94	14
15	19.00	14.33	10.51	7.73	5.00	4.23	2.02	2.34	1.75	1.31	1.02	15
16	19.57	14.37	10.60	7.84	5.82	4.33	3.23	2.42	1.82	1.37	1.03	16
1/	19.55	14.42	10.08	7.94	5.92	4.45	3.32	2.50	1.69	1.45	1.08	1 /
10	19.30	14.47	10.78	8.05	6.15	4.54	3.42	2.39	2.04	1.49	1.14	10
20	19.40	14.55	10.87	8 27	6.26	4.04	3.62	2.07	2.04	1.50	1.19	20
20	10.42	14.63	11.06	8 30	6.38	1.87	3 72	2.76	2.12	1.70	1.20	20
21	19.42	14.05	11.00	8.59	6.50	4.87	3.83	2.80	2.20	1.70	1.31	21
23	19.35	14.00	11.15	8.62	6.62	5 10	3.05	3.05	2.20	1.77	1.50	23
23	19.33	14.79	11.25	8 73	6 74	5.22	4.06	3.16	2.47	1.03	1.52	23
25	19.30	14.84	11.44	8.85	6.87	5.35	4.17	3.26	2.56	2.01	1.59	25
26	19.27	14 89	11 54	8 97	7.00	5 47	4 2.9	3 37	2.66	2.10	1.67	26
27	19.24	14.94	11.64	9.09	7.13	5.60	4.41	3.49	2.76	2.20	1.75	27
28	19.20	14.99	11.74	9.22	7.26	5.73	4.54	3.61	2.87	2.29	1.83	28
29	19.17	15.04	11.83	9.34	7.39	5.87	4.67	3.73	2.98	2.39	1.92	29
30	19.14	15.09	11.93	9.47	7.53	6.01	4.80	3.85	3.10	2.50	2.02	30
31	19.10	15.14	12.03	9.59	7.67	6.15	4.94	3.98	3.22	2.61	2.12	31
32	19.06	15.19	12.13	9.72	7.81	6.29	5.08	4.12	3.34	2.72	2.22	32
33	19.03	15.23	12.23	9.85	7.95	6.44	5.23	4.25	3.47	2.84	2.33	33
34	18.99	15.28	12.33	9.98	8.10	6.59	5.38	4.40	3.60	2.96	2.44	34
35	18.95	15.33	12.43	10.11	8.25	6.74	5.53	4.54	3.74	3.09	2.56	35
36	18.91	15.37	12.53	10.25	8.40	6.90	5.69	4.70	3.89	3.23	2.68	36
37	18.87	15.42	12.63	10.38	8.55	7.06	5.85	4.85	4.04	3.37	2.81	37
38	18.83	15.46	12.74	10.52	8.71	7.23	6.01	5.02	4.19	3.51	2.95	38
39	18.79	15.51	12.84	10.65	8.86	7.39	6.18	5.18	4.35	3.67	3.09	39
40	18.75	15.55	12.94	10.79	9.03	7.57	6.36	5.36	4.52	3.83	3.24	40
41	18.71	15.60	13.04	10.93	9.19	7.74	6.54	5.53	4.70	3.99	3.40	41
42	18.67	15.65	13.15	11.08	9.36	7.92	6.72	5.72	4.88	4.17	3.57	42
43	18.63	15.69	13.26	11.22	9.53	8.11	6.92	5.91	5.07	4.35	3.74	43
44	18.59	15.74	13.30	11.57	9.70	8.50	7.11	6.32	5.20	4.54	3.92 4.12	44
46	10.50	15.05	12.50	11.55	10.07	0.50	7.52	6.52	5.69	4.05	4.22	46
40	18.55	15.65	13.39	11.00	10.07	8.70	7.35	6.33	5.08	4.95	4.52	40
47	18.30	15.90	13.71	12.01	10.20	0.91	7.08	6.99	5.90 6.14	5.40	4.55	47
40	18.44	16.02	13.05	12.01	10.45	934	8 21	7 23	6 38	5.40	4.90	40
50	18.42	16.08	14.08	12.35	10.86	9.57	8.45	7.48	6.63	5.89	5.24	50
51	18 39	16.14	14 20	12.52	11.07	9.80	8 70	7 74	6.89	615	5 50	51
52	18.37	16.21	14.33	12.70	11.28	10.04	8.96	8.01	7.17	6.43	5.78	52
53	18.35	16.27	14.46	12.88	11.50	10.29	9.22	8.28	7.46	6.72	6.07	53
54	18.34	16.35	14.60	13.07	11.73	10.55	9.50	8.58	7.76	7.03	6.38	54
55	18.34	16.43	14.75	13.27	11.97	10.82	9.79	8.88	8.07	7.35	6.70	55
56	18.34	16.52	14.91	13.48	12.22	11.10	10.10	9.21	8.41	7.69	7.05	56
57	18.36	16.62	15.08	13.71	12.49	11.40	10.42	9.55	8.77	8.06	7.42	57
58	18.40	16.74	15.26	13.95	12.77	11.71	10.77	9.91	9.14	8.45	7.82	58
59	18.44	16.87	15.46	14.20	13.07	12.05	11.13	10.30	9.55	8.86	8.24	59
60	18.51	17.01	15.67	14.47	13.38	12.40	11.51	10.71	9.97	9.31	8.70	60
61	18.59	17.18	15.91	14.76	13.72	12.78	11.92	11.14	10.43	9.78	9.19	61
62	18.69	17.36	16.16	15.07	14.08	13.18	12.36	11.61	10.92	10.29	9.71	62
63	18.81	17.56	16.43	15.41	14.47	13.61	12.83	12.11	11.45	10.84	10.28	63
64 65	18.95	1/./8	10.73	15.76	14.88	14.07	13.32	12.64	12.01	11.43	10.89	64
05	17.10	10.02	17.05	10.13	13.31	17.33	13.03	13.41	12.01	12.00	11.33	03

Age at date of trial	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected mort	ality from th	ne 2002-base	ed populatio	on projection	15		Age at date of trial
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
0 1 2 3 4	23.16 23.24 23.23 23.21 23.19 23.17	15.62 15.75 15.82 15.89 15.96	10.58 10.72 10.82 10.92 11.03	7.19 7.33 7.43 7.54 7.65	4.91 5.03 5.12 5.22 5.32 5.43	3.36 3.46 3.55 3.63 3.72	2.31 2.39 2.46 2.53 2.61 2.68	1.60 1.66 1.72 1.77 1.84	1.11 1.15 1.20 1.25 1.30	0.77 0.81 0.84 0.88 0.92 0.96	0.54 0.56 0.59 0.62 0.65	0 1 2 3 4
6	23.17	16.02	11.13	7.86	5.53	3.90	2.08	1.90	1.33	1.00	0.08	6
7	23.12	16.15	11.33	7.98	5.64	4.00	2.84	2.03	1.45	1.05	0.75	7
8	23.10	16.22	11.43	8.09	5.74	4.09	2.93	2.10	1.51	1.09	0.79	8
9	23.07	16.28	11.53	8.20	5.85	4.19	3.01	2.17	1.57	1.14	0.83	9
10	23.05	16.35	11.64	8.32	5.96	4.29	3.10	2.25	1.63	1.19	0.87	10
11	23.02	16.41	11.74	8.43	6.08	4.39	3.19	2.32	1.70	1.24	0.91	11
12	23.00	16.47	11.85	8.55	6.19	4.50	3.28	2.40	1.76	1.30	0.96	12
13	22.97	16.54	11.95	8.67	6.31	4.61	3.38	2.48	1.83	1.35	1.00	13
14	22.94	16.60	12.06	8.79	6.43	4.72	3.47	2.57	1.90	1.41	1.05	14
15	22.91	16.66	12.16	8.91	6.55	4.83	3.58	2.65	1.98	1.48	1.11	15
16 17 18 19	22.88 22.86 22.83 22.80	16.73 16.79 16.86 16.92	12.27 12.38 12.49 12.60	9.04 9.16 9.29 9.42	6.67 6.80 6.93 7.06 7.10	4.95 5.07 5.19 5.31	3.68 3.79 3.90 4.01	2.74 2.84 2.93 3.03	2.05 2.13 2.22 2.30	1.54 1.61 1.68 1.75	1.16 1.22 1.28 1.34	16 17 18 19
20 21 22 23 24	22.74 22.74 22.71 22.68 22.64	17.05 17.11 17.17 17.23	12.71 12.82 12.93 13.05 13.16	9.55 9.68 9.81 9.95 10.08	7.33 7.47 7.61 7.75	5.57 5.70 5.84 5.98	4.12 4.24 4.37 4.49 4.62	3.14 3.24 3.35 3.47 3.59	2.39 2.49 2.58 2.68 2.79	1.85 1.91 2.00 2.08 2.18	1.41 1.47 1.55 1.62 1.70	20 21 22 23 24
25	22.61	17.29	13.27	10.22	7.89	6.12	4.75	3.71	2.90	2.27	1.79	25
26	22.57	17.35	13.39	10.36	8.04	6.26	4.89	3.83	3.01	2.37	1.87	26
27	22.54	17.41	13.50	10.50	8.19	6.41	5.03	3.96	3.13	2.47	1.96	27
28	22.50	17.47	13.62	10.64	8.34	6.56	5.18	4.09	3.25	2.58	2.06	28
29 30 31	22.46 22.43 22.39	17.53 17.59 17.65	13.73 13.85 13.96	10.79 10.93 11.08	8.50 8.66 8.82	6.72 6.88 7.04	5.32 5.48 5.63	4.23 4.38 4.52	3.37 3.50 3.64	2.90 2.70 2.81 2.94	2.16 2.27 2.38	29 30 31
32	22.35	17.71	14.08	11.23	8.98	7.20	5.79	4.67	3.78	3.07	2.49	32
33	22.31	17.77	14.20	11.38	9.15	7.37	5.96	4.83	3.93	3.20	2.61	33
34	22.27	17.83	14.32	11.53	9.31	7.55	6.13	4.99	4.08	3.34	2.74	34
35	22.23	17.88	14.43	11.68	9.49	7.72	6.31	5.16	4.24	3.49	2.87	35
36	22.19	17.94	14.55	11.84	9.66	7.91	6.49	5.34	4.40	3.64	3.01	36
37	22.15	18.00	14.68	12.00	9.84	8.09	6.67	5.51	4.57	3.80	3.16	37
38	22.11	18.06	14.80	12.16	10.02	8.28	6.86	5.70	4.75	3.96	3.32	38
39	22.06	18.12	14.92	12.32	10.21	8.48	7.06	5.89	4.93	4.14	3.48	39
40	22.02	18.18	15.04	12.49	10.39	8.68	7.26	6.09	5.12	4.32	3.65	40
41 42 43 44 45	21.98 21.95 21.91 21.87 21.84	18.23 18.30 18.36 18.42 18.49	15.17 15.30 15.43 15.56 15.69	12.65 12.83 13.00 13.18 13.36	10.59 10.78 10.98 11.19 11.40	8.88 9.09 9.31 9.53 9.75	7.68 7.90 8.13 8.37	6.30 6.51 6.73 6.96 7.19	5.32 5.53 5.74 5.97 6.20	4.51 4.70 4.91 5.13 5.35	3.83 4.01 4.21 4.42 4.63	41 42 43 44 45
46	21.81	18.55	15.83	13.54	11.62	9.99	8.61	7.44	6.44	5.59	4.86	46
47	21.77	18.62	15.97	13.73	11.84	10.23	8.86	7.69	6.70	5.84	5.10	47
48	21.75	18.69	16.11	13.92	12.06	10.48	9.12	7.96	6.96	6.10	5.36	48
49	21.72	18.77	16.26	14.12	12.29	10.73	9.39	8.23	7.23	6.37	5.62	49
50	21.70	18.84	16.40	14.32	12.53	10.99	9.67	8.52	7.52	6.66	5.90	50
51	21.68	18.92	16.56	14.53	12.78	11.26	9.95	8.81	7.82	6.96	6.20	51
52	21.66	19.00	16.71	14.74	13.03	11.54	10.25	9.12	8.14	7.27	6.51	52
53	21.65	19.09	16.88	14.96	13.29	11.83	10.56	9.44	8.46	7.60	6.84	53
54	21.64	19.18	17.04	15.18	13.56	12.13	10.88	9.78	8.81	7.95	7.19	54
55	21.64	19.28	17.22	15.42	13.83	12.44	11.22	10.13	9.17	8.31	7.55	55
56	21.65	19.39	17.40	15.66	14.12	12.77	11.56	10.50	9.55	8.70	7.94	56
57	21.66	19.50	17.59	15.91	14.42	13.10	11.93	10.88	9.95	9.11	8.36	57
58	21.69	19.62	17.80	16.18	14.74	13.46	12.31	11.29	10.37	9.54	8.80	58
59	21.72	19.75	18.01	16.45	15.06	13.82	12.71	11.71	10.81	10.00	9.26	59
60	21.77	19.90	18.23	16.74	15.41	14.21	13.13	12.16	11.28	10.48	9.76	60
61	21.82	20.05	18.47	17.04	15.77	14.61	13.57	12.63	11.77	10.99	10.28	61
62	21.89	20.22	18.71	17.36	16.14	15.03	14.03	13.12	12.29	11.54	10.85	62
63	21.96	20.39	18.97	17.69	16.53	15.47	14.52	13.64	12.84	12.11	11.44	63
64	22.04	20.57	19.24	18.03	16.93	15.93	15.02	14.18	13.42	12.72	12.07	64
65	22.12	20.75	19.51	18.38	17.34	16.40	15.54	14.75	14.03	13.36	12.75	65

Table 23	Multipliers	for	loss	of	pension	commencing	age	70 (	(males)	)
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Age at date of	Multiplie and rate	er calculated of return of	l with allow	ance for pro	jected mort	ality from th	ne 2002-bas	ed populatic	on projectior	15		Age at date of
trial	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	trial
0	15 54	10.27	6.05	167	2 1 5	2 1 2	1.45	0.08	0.67	0.46	0.22	0
1	15.54	10.37	0.93	4.07	3.15	2.13	1.45	0.98	0.07	0.40	0.32	1
2	15.59	10.40	7.04	4.70	3.22	2.19	1.50	1.02	0.70	0.48	0.35	2
3	15.56	10.50	7.17	4.82	3 35	2.24	1.54	1.00	0.75	0.50	0.35	3
4	15.50	10.54	7.23	4.05	3 41	2.30	1.50	1.13	0.70	0.55	0.37	4
5	15.55	10.50	7.29	5.02	3 47	2.33	1.67	1.15	0.82	0.55	0.30	5
	15.01	10.62	7.25	5.02	2.54	2.11	1.07	1.17	0.02	0.57	0.10	
0	15.49	10.65	7.35	5.09	3.54	2.40	1.72	1.21	0.85	0.60	0.42	07
8	15.40	10.09	7.42	5.10	3.00	2.52	1.77	1.23	0.88	0.62	0.44	8
0	15.45	10.75	7.40	5.25	3.07	2.38	1.02	1.29	0.92	0.03	0.47	0
10	15.38	10.70	7.54	5 37	3.80	2.04	1.07	1.35	0.95	0.08	0.49	10
11	15.25	10.00	7.00	5.44	2.00	2.73	1.00	1.40	1.02	0.74	0.54	11
11	15.35	10.85	/.00	5.44	3.8/	2.77	1.98	1.42	1.05	0.74	0.54	11
12	15.32	10.80	7.75	5 59	4.02	2.85	2.04	1.47	1.00	0.81	0.50	12
14	15.25	10.90	7.85	5.66	4.02	2.96	2.10	1.52	1.11	0.84	0.62	14
15	15.20	10.95	7.92	5 73	4 16	3.03	2.13	1.62	1 19	0.88	0.65	15
16	15.20	11.00	7.02	5.91	4.24	2.10	2.22	1.69	1.24	0.02	0.60	16
10	15.20	11.00	7.98	5.81	4.24	3.10	2.20	1.08	1.24	0.92	0.08	10
18	15.17	11.05	8.04	5.00	4.32	3.10	2.34	1.75	1.20	1.00	0.71	17
10	15.14	11.07	8.18	6.04	4.40	3.23	2.41	1.75	1.35	1.00	0.75	10
20	15.09	11.10	8.25	6.12	4 56	3 40	2.55	1.05	1.37	1.04	0.82	20
20	15.05	11.17	9.23	6.12	1.50	2 49	2.55	1.09	1.11	1.09	0.02	20
21	15.00	11.17	0.31 9.29	6.20	4.04	3.40	2.02	1.98	1.49	1.15	0.80	21
22	15.05	11.21	0.30 8.45	6.29	4.75	3.50	2.09	2.04	1.55	1.10	0.90	22
23	14.07	11.25	8.52	6.45	4.01	3.05	2.77	2.11	1.01	1.23	0.95	23
25	14.94	11.20	8 59	6 54	4 99	3.82	2.83	2.25	1.07	1.29	1.04	25
26	14.01	11.25	9.66	6.62	5.09	2.01	2.01	2.22	1.90	1.40	1.00	20
20	14.91	11.33	8.00	6.02	5.08	3.91	3.01	2.55	1.80	1.40	1.09	20
28	14.85	11.38	8.80	6.80	5.27	4.00	3.10	2.41	1.07	1.40	1.14	27
20	14.82	11.42	8.80	6.89	5 36	4 19	3 27	2.47	2 02	1.52	1.20	20
30	14 79	11.48	8.94	6.98	5 46	4 28	3 37	2.65	2.10	1.66	1.32	30
21	14.75	11.51	0.01	7.07	5.56	4.20	2.46	2.00	2.10	1.00	1.20	21
31	14.75	11.51	9.01	7.07	5.50	4.38	3.40	2.74	2.18	1.75	1.50	31
32	14.72	11.57	9.15	7.10	5.00	4 58	3.66	2.03	2.20	1.81	1.45	32
34	14.60	11.60	9.22	7 34	5.86	4 69	3.76	3.02	2.43	1.00	1 59	34
35	14.61	11.63	9.29	7.43	5.96	4.79	3.86	3.12	2.53	2.05	1.67	35
36	14.57	11.66	9.36	7 53	6.07	4.90	3.07	3.22	2.62	2.14	1.75	36
37	14.57	11.60	9.43	7.55	6.17	5.01	4.08	3 33	2.02	2.14	1.75	37
38	14.33	11.05	9.50	7.71	6.28	5.13	4 19	3 44	2.82	2.32	1.03	38
39	14.45	11.74	9.56	7.81	6.39	5.24	4.31	3.55	2.93	2.42	2.01	39
40	14.41	11.77	9.63	7.91	6.50	5.36	4.43	3.67	3.04	2.53	2.10	40
41	14.36	11 79	9.71	8.00	6.62	5.48	4.55	3 70	3.16	2.64	2 20	41
42	14.30	11.75	9.78	8.10	6.73	5.40	4 68	3.91	3 27	2.04	2.20	42
43	14.28	11.85	9.85	8.21	6.85	5 73	4 81	4 04	3 40	2.87	2.42	43
44	14.25	11.88	9.92	8.31	6.97	5.86	4.94	4.17	3.53	2.99	2.54	44
45	14.21	11.90	10.00	8.41	7.10	6.00	5.08	4.31	3.66	3.12	2.66	45
46	14 17	11 94	10.07	8 52	7.22	6.13	5.22	4 4 5	3.80	3 25	2 79	46
47	14 14	11.97	10.15	8.63	7 35	6.28	5 37	4 60	3.95	3 39	2.92	47
48	14.10	12.00	10.23	8.74	7.49	6.42	5.52	4.75	4.10	3.54	3.07	48
49	14.07	12.03	10.31	8.86	7.62	6.57	5.68	4.91	4.26	3.70	3.21	49
50	14.04	12.07	10.40	8.97	7.76	6.72	5.84	5.08	4.42	3.86	3.37	50
51	14.01	12.10	10.48	9.09	7.90	6.88	6.00	5.25	4.59	4.03	3.54	51
52	13.98	12.14	10.56	9.21	8.05	7.04	6.17	5.42	4.77	4.20	3.71	52
53	13.95	12.18	10.65	9.33	8.19	7.21	6.35	5.60	4.95	4.39	3.89	53
54	13.93	12.22	10.74	9.46	8.35	7.38	6.53	5.80	5.15	4.58	4.08	54
55	13.91	12.26	10.84	9.59	8.51	7.56	6.73	6.00	5.35	4.79	4.29	55
56	13.90	12.32	10.94	9.74	8.68	7.75	6.93	6.21	5.57	5.00	4.50	56
57	13.90	12.38	11.05	9.88	8.86	7.95	7.14	6.43	5.80	5.24	4.73	57
58	13.90	12.45	11.17	10.04	9.04	8.16	7.37	6.67	6.04	5.48	4.98	58
59	13.92	12.53	11.30	10.21	9.24	8.38	7.60	6.91	6.30	5.74	5.24	59
60	13.95	12.62	11.44	10.39	9.45	8.61	7.86	7.18	6.57	6.02	5.52	60
61	13.99	12.73	11.60	10.58	9.68	8.86	8.12	7.46	6.86	6.32	5.83	61
62	14.05	12.85	11.77	10.79	9.92	9.13	8.41	7.76	7.17	6.64	6.15	62
63	14.12	12.98	11.95	11.02	10.17	9.41	8.72	8.08	7.51	6.98	6.50	63
64	14.20	13.12	12.14	11.25	10.45	9.71	9.04	8.43	7.86	7.35	6.88	64
65	14.29	13.27	12.34	11.50	10.73	10.02	9.38	8.79	8.24	7.74	7.28	65
66	14.39	13.43	12.56	11.76	11.02	10.35	9.73	9.16	8.64	8.16	7.71	66
67	14.49	13.59	12.78	12.02	11.33	10.70	10.11	9.57	9.06	8.60	8.17	67
68	14.60	13.77	13.01	12.31	11.66	11.06	10.51	9.99	9.52	9.07	8.66	68
69	14.73	13.97	13.26	12.61	12.01	11.45	10.94	10.45	10.00	9.59	9.19	69
70	14.89	14.19	13.55	12.95	12.40	11.88	11.41	10.96	10.54	10.15	9.78	70

Table 24	Multipliers	for loss	of	pension	commencing	age	70	(females	)
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Age at date of	Multiplic and rate	er calculated of return of	with allow	ance for pro	jected mort	ality from th	ne 2002-bas	ed populatio	n projectior	15		Age at date of
trial	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	trial
0	18 57	12 34	8 23	5 51	3 70	2 50	1 60	1.15	0.78	0.53	0.36	0
1	18.63	12.54	8 34	5.61	3 79	2.50	1.09	1.19	0.81	0.55	0.38	1
2	18.62	12.45	8 42	5.69	3.86	2.63	1.74	1.17	0.85	0.58	0.38	2
3	18.60	12.50	8.50	5.02	3.94	2.69	1.85	1.23	0.88	0.50	0.40	3
4	18.58	12.60	8.58	5.86	4 01	2.76	1.00	1.32	0.00	0.64	0.44	4
5	18.56	12.65	8.65	5.94	4.09	2.82	1.96	1.36	0.95	0.66	0.47	5
6	19.54	12.70	8 72	6.02	4.17	2.80	2.01	1.41	0.00	0.60	0.40	6
7	18.54	12.70	8.75	6.10	4.17	2.89	2.01	1.41	1.02	0.09	0.49	7
8	18.50	12.75	8.89	6.19	4 33	3.03	2.07	1.50	1.02	0.72	0.54	8
9	18.47	12.85	8.96	6.27	4 41	3.10	2.19	1.56	1 11	0.79	0.56	9
10	18.45	12.89	9.04	6.36	4.49	3.18	2.26	1.61	1.15	0.82	0.59	10
11	18.43	12.94	9.12	6.45	4 57	3 25	2 3 2	1.66	1 10	0.86	0.62	11
12	18.45	12.94	9.12	6 54	4.57	3 33	2.32	1.00	1.19	0.80	0.62	12
13	18.37	13.04	9.28	6.63	4 75	3 41	2.46	1 78	1.29	0.94	0.68	13
14	18.35	13.08	9.36	6.72	4.84	3.49	2.53	1.84	1.34	0.98	0.72	14
15	18.32	13.13	9.44	6.81	4.93	3.58	2.60	1.90	1.39	1.02	0.75	15
16	18 30	13.18	9.52	6.90	5.02	3.66	2.68	1.96	1 44	1.06	0.79	16
17	18.27	13.10	9.61	7.00	5.02	3 75	2.00	2.03	1.50	1.00	0.83	17
18	18.24	13.25	9.69	7.09	5.21	3.84	2.83	2.10	1.56	1 16	0.87	18
19	18.22	13.32	9.77	7.19	5.31	3.93	2.91	2.17	1.62	1.21	0.91	19
20	18.19	13.37	9.86	7.29	5.40	4.02	3.00	2.24	1.68	1.26	0.95	20
21	18 16	13 41	9.94	7 39	5 50	4 11	3.08	2 32	1 75	1.32	1.00	21
22	18.13	13.46	10.02	7.49	5.61	4.21	3.17	2.40	1.81	1.38	1.05	22
23	18.10	13.50	10.11	7.59	5.71	4.31	3.26	2.48	1.88	1.44	1.10	23
24	18.07	13.55	10.19	7.69	5.82	4.41	3.36	2.56	1.96	1.50	1.15	24
25	18.04	13.59	10.28	7.79	5.92	4.51	3.45	2.64	2.03	1.57	1.21	25
26	18.00	13.64	10.36	7.89	6.03	4.62	3.55	2.73	2.11	1.63	1.27	26
27	17.97	13.68	10.45	8.00	6.14	4.73	3.65	2.82	2.19	1.70	1.33	27
28	17.93	13.72	10.53	8.10	6.25	4.84	3.75	2.92	2.28	1.78	1.39	28
29	17.90	13.77	10.62	8.21	6.37	4.95	3.86	3.02	2.36	1.86	1.46	29
30	17.86	13.81	10.70	8.32	6.48	5.07	3.97	3.12	2.45	1.94	1.53	30
31	17.83	13.85	10.79	8.43	6.60	5.18	4.08	3.22	2.55	2.02	1.61	31
32	17.79	13.89	10.88	8.54	6.72	5.30	4.20	3.33	2.64	2.11	1.68	32
33	17.75	13.93	10.96	8.65	6.84	5.43	4.31	3.44	2.75	2.20	1.76	33
34	17.71	13.97	11.05	8.76	6.97	5.55	4.44	3.55	2.85	2.29	1.85	34
35	17.67	14.01	11.14	8.88	7.09	5.68	4.56	3.67	2.96	2.39	1.94	35
36	17.63	14.05	11.22	8.99	7.22	5.81	4.69	3.79	3.07	2.50	2.03	36
37	17.59	14.09	11.31	9.11	7.35	5.94	4.82	3.92	3.19	2.60	2.13	37
38	17.55	14.13	11.40	9.22	7.48	6.08	4.96	4.05	3.31	2.72	2.23	38
39	17.51	14.17	11.49	9.34	7.62	6.22	5.09	4.18	3.44	2.83	2.34	39
40	17.47	14.21	11.58	9.46	7.75	6.36	5.24	4.32	3.57	2.96	2.45	40
41	17.43	14.25	11.67	9.59	7.89	6.51	5.39	4.46	3.71	3.09	2.57	41
42	17.39	14.29	11.76	9.71	8.03	6.66	5.54	4.61	3.85	3.22	2.70	42
43	17.36	14.33	11.86	9.84	8.18	6.82	5.69	4.77	4.00	3.36	2.83	43
44	17.32	14.37	11.95	9.97	8.33	6.97	5.85	4.92	4.15	3.50	2.97	44
45	17.28	14.41	12.05	10.10	8.48	7.14	6.02	5.09	4.31	3.66	3.11	45
46	17.25	14.46	12.15	10.23	8.64	7.30	6.19	5.26	4.48	3.82	3.26	46
47	17.21	14.50	12.25	10.37	8.79	7.48	6.37	5.44	4.65	3.98	3.42	47
48	17.18	14.55	12.35	10.50	8.96	7.65	6.55	5.62	4.83	4.16	3.59	48
49 50	17.15	14.60	12.45	10.65	9.12	/.83	6.74	5.81	5.02	4.34	3.70	49
50	17.12	14.00	12.30	10.79	9.29	0.02	0.93	0.01	5.21	4.33	3.93	50
51	17.09	14.70	12.67	10.94	9.47	8.21	7.13	6.21	5.42	4.73	4.14	51
52	17.07	14.75	12.78	11.09	9.65	8.41	7.34	6.42	5.63	4.94	4.35	52
55 54	17.04	14.81	12.89	11.25	9.83	8.01	7.50	0.04	5.85	5.10	4.50	55
55	17.05	14.07	13.01	11.41	10.02	0.02 9.04	7.78 8.01	7.12	6.33	5.40	5.03	55
	17.01	15.00	12.26	11.37	10.22	0.07	0.01	7.12	0.55	5.04	5.00	55
50 57	17.01	15.00	13.20	11.75	10.43	9.27	8.20 8.51	1.51	0.39	5.90	5.29	50
58	17.01	15.08	13.40	11.93	10.04	9.51	0.31 8 79	7.05	0.80 7.14	6.46	5.50	5/ 59
59	17.01	15.10	13.69	12.12	11.00	10.01	9.05	8 20	7 44	6.76	6.15	50
60	17.05	15.35	13.85	12.51	11.34	10.28	9.34	8.50	7.75	7.08	6.47	60
61	17.00	15 14	14.02	12.22	11.50	10.57	0.65	0.00	8.00	7.40	6.07	£1
62	17.08	15.40	14.02	12.73	11.39	10.37	9.03	0.03	0.09 8 11	1.42 7.79	0.62	61
63	17.11	15.57	14.19	12.90	12.03	10.00	9.97 10 30	9.10	0.44 8.80	7.70 8.16	7.10	62
64	17.20	15.81	14.57	13.19	12.13	11.17	10.50	9.88	9.19	8 56	7 98	64
65	17.24	15.93	14.75	13.67	12.70	11.81	11.00	10.27	9.59	8.98	8.41	65
66	17.28	16.05	14 02	13.02	12.00	12.15	11 37	10.66	10.01	0.42	8 87	66
67	17.20	16.05	15 12	14 17	13.29	12.13	11.57	11 08	10.01	9.88	935	67
68	17.36	16.29	15.31	14 42	13.29	12.49	12.15	11.50	10.45	10 37	9.86	68
69	17.40	16.41	15.51	14.68	13.92	13.21	12.56	11.96	11.40	10.88	10.40	69
70	17.45	16.55	15.73	14.96	14.26	13.61	13.01	12.45	11.92	11.44	10.99	70

Table 25	Multipliers	for loss	of	pension	commencing	age	75 (	(males)	)
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Age at date of	Multiplic and rate	er calculated of return of	d with allow	ance for pro	ojected mort	ality from th	ne 2002-base	ed populatio	n projectior	15		Age at date of
tildi	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	tildi
0	11.43	7.51	4.95	3.27	2.17	1.44	0.96	0.64	0.43	0.29	0.20	0
1	11.47	7.57	5.02	3.33	2.22	1.48	1.00	0.67	0.45	0.31	0.21	1
2	11.45	7.60	5.06	3.38	2.26	1.52	1.02	0.69	0.47	0.32	0.22	2
5 4	11.45	7.65	5.10	3.42 3.47	2.30	1.50	1.05	0.72	0.49	0.35	0.23	5 4
5	11.39	7.68	5.19	3.52	2.39	1.63	1.11	0.74	0.51	0.36	0.24	5
6	11.37	7.70	5.23	3.56	2.43	1.67	1.15	0.79	0.54	0.38	0.26	6
7	11.35	7.72	5.27	3.61	2.48	1.71	1.18	0.82	0.57	0.39	0.27	7
8	11.33	7.75	5.31	3.66	2.52	1.75	1.21	0.84	0.59	0.41	0.29	8
9 10	11.30	7.77	5.30 5.40	3.70	2.57	1.79	1.24	0.87	0.61	0.43	0.30	10
11	11.25	7.81	5 44	3.80	2.66	1.87	1.32	0.93	0.66	0.47	0.33	11
12	11.23	7.84	5.48	3.85	2.71	1.91	1.35	0.96	0.68	0.49	0.35	12
13	11.20	7.86	5.53	3.90	2.76	1.95	1.39	0.99	0.71	0.51	0.36	13
14	11.18	7.88	5.57	3.95	2.81	2.00	1.43	1.02	0.73	0.53	0.38	14
15	11.13	7.90	5.01	4.00	2.00	2.04	1.47	1.00	0.70	0.55	0.40	15
10	11.12	7.92	5.05	4.03	2.91	2.09	1.51	1.09	0.79	0.57	0.42	10
18	11.07	7.96	5.74	4.15	3.01	2.19	1.59	1.16	0.85	0.63	0.46	18
19	11.05	7.99	5.79	4.21	3.06	2.24	1.64	1.20	0.88	0.65	0.48	19
20	11.02	8.01	5.83	4.26	3.12	2.29	1.68	1.24	0.92	0.68	0.51	20
21	11.00	8.03	5.88	4.31	3.18	2.34	1.73	1.28	0.95	0.71	0.53	21
22	10.97	8.05	5.92 5.97	4.57	3.23	2.40	1.78	1.33	1.03	0.74	0.56	22
23	10.95	8.09	6.01	4.48	3.35	2.51	1.88	1.41	1.07	0.81	0.58	23
25	10.89	8.11	6.06	4.54	3.41	2.56	1.93	1.46	1.11	0.84	0.64	25
26	10.86	8.13	6.11	4.59	3.47	2.62	1.99	1.51	1.15	0.88	0.67	26
27	10.83	8.15	6.15	4.65	3.53	2.68	2.04	1.56	1.19	0.91	0.70	27
28	10.80	8.17	6.20	4.71	3.59	2.74	2.10	1.61	1.24	0.95	0.73	28
30	10.74	8.21	6.29	4.83	3.71	2.86	2.13	1.71	1.33	1.03	0.81	30
31	10.71	8.23	6.33	4.89	3.78	2.93	2.27	1.77	1.38	1.08	0.84	31
32	10.68	8.24	6.38	4.94	3.84	2.99	2.34	1.83	1.43	1.12	0.88	32
33	10.65	8.26	6.42	5.00	3.91	3.06	2.40	1.89	1.48	1.17	0.93	33
34 35	10.61	8.27	6.47 6.51	5.06	3.98	3.13	2.46	1.95	1.54	1.22	0.97	34
36	10.53	8 30	6.55	5.12	4.04	3.20	2.55	2.01	1.66	1.27	1.02	35
30	10.54	8.30	6.60	5 25	4.11	3.27	2.60	2.07	1.00	1.33	1.00	30
38	10.47	8.33	6.64	5.31	4.25	3.41	2.74	2.21	1.78	1.44	1.17	38
39	10.43	8.34	6.68	5.37	4.32	3.48	2.81	2.28	1.85	1.50	1.22	39
40	10.39	8.35	6.73	5.43	4.39	3.56	2.89	2.35	1.91	1.56	1.28	40
41	10.35	8.36	6.77	5.49	4.46	3.64	2.97	2.42	1.98	1.63	1.34	41
43	10.31	8 39	6.86	5.55	4.54	3 79	3 1 3	2.58	2.00	1.70	1.40	42
44	10.24	8.40	6.90	5.68	4.69	3.88	3.21	2.66	2.21	1.84	1.54	44
45	10.20	8.41	6.95	5.75	4.77	3.96	3.30	2.75	2.29	1.92	1.61	45
46	10.16	8.42	6.99	5.82	4.85	4.05	3.38	2.84	2.38	2.00	1.68	46
47	10.13	8.44 8.45	7.04	5.88	4.93	4.14	3.48	2.93	2.47	2.08	1.76	47
49	10.09	8.46	7.13	6.02	5.10	4.32	3.67	3.12	2.65	2.26	1.03	40
50	10.02	8.48	7.18	6.10	5.18	4.41	3.77	3.22	2.75	2.36	2.03	50
51	9.99	8.49	7.23	6.17	5.27	4.51	3.87	3.32	2.86	2.46	2.12	51
52	9.95	8.50	7.28	6.24	5.36	4.61	3.97	3.43	2.96	2.56	2.22	52
53	9.92	8.52	7.33	6.32	5.45	4.71	4.08	3.54	3.07	2.67	2.33	53
55	9.89	8.56	7.38	6.47	5.64	4.82	4.19	3.03	3.31	2.79	2.44	55
56	9.84	8.58	7.50	6.56	5.75	5.04	4,43	3.90	3.44	3.03	2.68	56
57	9.82	8.61	7.56	6.65	5.86	5.16	4.56	4.03	3.57	3.17	2.81	57
58	9.81	8.65	7.63	6.75	5.97	5.29	4.70	4.18	3.72	3.31	2.96	58
50	9.81	8.69	7.71	6.85	6.09	5.43	4.84	4.32	3.87	3.46	3.11	59
61	9.01	0.74	7.09	0.95	6.26	5.37	4.99	4.48	4.03	2.03	3.27	60
61 62	9.83	8.79 8.86	7.88 7.98	7.07	0.30 6.50	5.72 5.88	5.15 5.32	4.05	4.20 4 38	3.8U 3.98	3.44 3.62	61 62
63	9.88	8.94	8.09	7.33	6.66	6.05	5.51	5.02	4.58	4.18	3.82	63
64	9.92	9.02	8.20	7.48	6.82	6.23	5.70	5.22	4.78	4.39	4.04	64
65	9.96	9.10	8.32	7.62	6.99	6.42	5.90	5.43	5.00	4.61	4.26	65

 Table 25
 Multipliers for loss of pension commencing age 75 (males) continued

Age at date of trial	Multiplie and rate	er calculated of return of	d with allow	ance for pro	ojected mort	ality from t	ne 2002-bas	ed populatio	on projection	15		Age at date of trial
u uu	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
66	10.00	9.19	8.45	7.77	7.17	6.61	6.11	5.65	5.23	4.85	4.50	66
67	10.05	9.27	8.57	7.93	7.35	6.81	6.33	5.88	5.47	5.10	4.75	67
68	10.09	9.36	8.70	8.09	7.53	7.02	6.55	6.12	5.73	5.36	5.02	68
69	10.15	9.46	8.84	8.26	7.73	7.24	6.79	6.38	6.00	5.64	5.31	69
70	10.22	9.58	8.99	8.45	7.95	7.48	7.05	6.66	6.29	5.95	5.63	70
71	10.31	9.71	9.17	8.66	8.19	7.75	7.34	6.96	6.61	6.28	5.98	71
72	10.43	9.88	9.37	8.90	8.46	8.05	7.67	7.31	6.97	6.66	6.37	72
73	10.60	10.09	9.62	9.19	8.78	8.39	8.04	7.70	7.38	7.09	6.81	73
74	10.82	10.36	9.93	9.53	9.15	8.80	8.46	8.15	7.86	7.58	7.32	74
75	11.10	10.69	10.30	9.94	9.59	9.27	8.96	8.68	8.41	8.15	7.91	75

Table 26 Nultipliers for loss of pension commencing age /5 (femal	Table 26	e 26 Multipliers	for loss	of pensior	i commencing age	75	(females
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Age at date of	Multiplic and rate	er calculated of return of	d with allow	ance for pro	ojected mort	ality from th	ne 2002-base	ed populatio	n projection	IS		Age at date of
ulai	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	ulai
0	14.16	9.27	6.09	4.01	2.65	1.76	1.17	0.78	0.52	0.35	0.24	0
1	14.21	9.35	6.17	4.09	2.72	1.81	1.21	0.81	0.55	0.37	0.25	1
2	14.19	9.39	6.23	4.15	2.77	1.85	1.24	0.84	0.57	0.38	0.26	2
3	14.18	9.42	6.28	4.20	2.82	1.90	1.28	0.87	0.59	0.40	0.27	3
4	14.16	9.46	6.34	4.26	2.87	1.94	1.32	0.90	0.61	0.42	0.29	4
5	14.14	9.50	6.39	4.32	2.93	1.99	1.36	0.93	0.64	0.44	0.30	5
6	14.12	9.53	6.45	4.38	2.98	2.04	1.39	0.96	0.66	0.46	0.32	6
0	14.11	9.57	6.51	4.44	3.04	2.09	1.44	0.99	0.69	0.48	0.33	/
0	14.06	9.00	6.62	4.50	3.09	2.13	1.40	1.02	0.71	0.50	0.35	0
10	14.04	9.67	6.68	4.62	3.21	2.10	1.56	1.00	0.77	0.52	0.38	10
11	14.02	9 70	6.73	4 69	3 27	2.29	1.61	1 13	0.80	0.56	0.40	11
12	14.00	9.73	6.79	4.75	3.33	2.34	1.65	1.17	0.83	0.59	0.42	12
13	13.98	9.77	6.85	4.81	3.39	2.40	1.70	1.21	0.86	0.61	0.44	13
14	13.95	9.80	6.90	4.88	3.46	2.45	1.75	1.25	0.89	0.64	0.46	14
15	13.93	9.83	6.96	4.94	3.52	2.51	1.80	1.29	0.93	0.67	0.48	15
16	13.91	9.87	7.02	5.01	3.58	2.57	1.85	1.33	0.96	0.70	0.51	16
17	13.88	9.90	7.08	5.08	3.65	2.63	1.90	1.38	1.00	0.73	0.53	17
18	13.86	9.93	7.14	5.14	3.72	2.69	1.96	1.42	1.04	0.76	0.56	18
19	13.83	9.96	7.20	5.21	3.78	2.76	2.01	1.47	1.08	0.79	0.58	19
20	13.81	9.99	7.25	5.28	3.85	2.82	2.07	1.52	1.12	0.83	0.61	20
21	13.78	10.03	7.31	5.35	3.92	2.88	2.13	1.57	1.16	0.86	0.64	21
22	13.75	10.06	7.37	5.42	3.99	2.95	2.19	1.62	1.21	0.90	0.67	22
23	13.72	10.09	7.43	5.49	4.07	3.02	2.25	1.68	1.25	0.94	0.71	23
24 25	13.70	10.12	7.49	5.50	4.14	3.09	2.31	1.73	1.30	0.98	0.74	24 25
25	12.64	10.13	7.55	5.05	4.20	2.22	2.30	1.75	1.35	1.02	0.70	25
20	13.04	10.17	7.01	5.71	4.29	3.25	2.44	1.65	1.40	1.07	0.81	20
28	13.57	10.20	7.07	5.85	4.37	3 38	2.51	1.91	1.40	1.11	0.85	27
29	13.54	10.25	7.79	5.93	4.52	3.46	2.65	2.04	1.57	1.21	0.94	20
30	13.51	10.28	7.85	6.00	4.60	3.54	2.73	2.11	1.63	1.26	0.98	30
31	13.47	10.31	7.91	6.08	4.69	3.62	2.80	2.17	1.69	1.32	1.03	31
32	13.44	10.34	7.97	6.16	4.77	3.70	2.88	2.25	1.75	1.37	1.08	32
33	13.40	10.36	8.03	6.23	4.85	3.79	2.96	2.32	1.82	1.43	1.13	33
34	13.37	10.39	8.09	6.31	4.94	3.87	3.04	2.39	1.89	1.49	1.18	34
35	13.33	10.41	8.15	6.39	5.02	3.96	3.13	2.47	1.96	1.56	1.24	35
36	13.30	10.43	8.21	6.47	5.11	4.05	3.21	2.55	2.03	1.62	1.30	36
37	13.26	10.46	8.27	6.55	5.20	4.14	3.30	2.64	2.11	1.69	1.36	37
38	13.22	10.48	8.33	6.63	5.29	4.23	3.39	2.72	2.19	1.77	1.43	38
39 40	13.18	10.50	8.39	6.70	5.38	4.33	3.48	2.81	2.27	1.84	1.49	39
40	12.14	10.55	0.45	( 00	5.40	4.42	2.00	2.90	2.30	2.00	1.50	40
41	13.11	10.55	8.51	6.88	5.57 5.67	4.52	3.68	3.00	2.45	2.00	1.64	41
42	13.07	10.57	8.63	7.05	5.07	4.02	3.88	3.19	2.54	2.09	1.72	42
44	12.99	10.60	8.70	7.14	5.87	4.83	3.99	3.30	2.73	2.27	1.88	44
45	12.96	10.64	8.76	7.22	5.97	4.94	4.10	3.41	2.84	2.36	1.98	45
46	12.92	10.67	8.82	7.31	6.07	5.05	4.21	3.52	2.94	2.47	2.07	46
47	12.89	10.69	8.89	7.41	6.18	5.17	4.33	3.63	3.05	2.57	2.17	47
48	12.85	10.72	8.96	7.50	6.29	5.29	4.45	3.75	3.17	2.68	2.27	48
49	12.82	10.75	9.02	7.59	6.40	5.41	4.57	3.88	3.29	2.80	2.38	49
50	12.79	10.77	9.09	7.69	6.52	5.53	4.70	4.00	3.42	2.92	2.50	50
51	12.75	10.80	9.16	7.79	6.63	5.66	4.83	4.14	3.55	3.04	2.62	51
52	12.73	10.83	9.24	7.89	6.75	5.79	4.97	4.27	3.68	3.18	2.74	52
53	12.70	10.86	9.31	7.99	6.87	5.92	5.11	4.42	3.82	3.31	2.88	53
54 55	12.67	10.90	9.39	8.10	7.00	6.00	5.20	4.5/	3.97	3.40	3.02	54
55	12.03	10.93	9.47	0.21	7.13	0.21	5.41	4.00	4.13	2.77	2.22	55
50 57	12.63	10.97	9.55	8.32	1.21	0.30	5.57	4.88	4.29	3.//	3.32	50
58	12.02	11.02	9.04	0.44 8 57	7.41	6.67	5.75	5.05	4.40	5.94 112	3.49 3.67	5/ 58
59	12.01	11.07	9.75	8.69	7 71	6.84	6.08	5 41	4.83	4 31	3.85	50
60	12.61	11.12	9.93	8.83	7.87	7.02	6.27	5.61	5.03	4.51	4.05	60
61	12.62	11.24	10.03	8 97	8.03	7.20	6.47	5.81	5.23	4 72	4 26	61
62	12.63	11.31	10.05	9.12	8.20	7.39	6.67	6.03	5.46	4.94	4.48	62
63	12.64	11.38	10.26	9.27	8.38	7.59	6.89	6.25	5.69	5.18	4.72	63
64	12.66	11.46	10.38	9.42	8.57	7.80	7.11	6.49	5.93	5.42	4.97	64
65	12.67	11.53	10.50	9.58	8.75	8.01	7.33	6.73	6.18	5.68	5.23	65

 Table 26
 Multipliers for loss of pension commencing age 75 (females) continued

Age at date of trial	Multipli and rate	Multiplier calculated with allowance for projected mortality from the 2002-based population projections Ar da										
	0.0%	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	
66	12.68	11.59	10.61	9.73	8.94	8.22	7.56	6.97	6.43	5.95	5.50	66
67	12.68	11.65	10.72	9.88	9.12	8.43	7.80	7.23	6.70	6.22	5.78	67
68	12.67	11.71	10.83	10.04	9.31	8.65	8.04	7.49	6.98	6.51	6.08	68
69	12.66	11.76	10.94	10.19	9.50	8.87	8.29	7.76	7.26	6.81	6.40	69
70	12.66	11.82	11.05	10.35	9.70	9.10	8.55	8.04	7.57	7.13	6.73	70
71	12.67	11.90	11.18	10.52	9.91	9.35	8.83	8.34	7.90	7.48	7.09	71
72	12.71	11.99	11.33	10.72	10.15	9.62	9.14	8.68	8.26	7.86	7.49	72
73	12.78	12.13	11.52	10.95	10.43	9.94	9.48	9.05	8.65	8.28	7.93	73
74	12.90	12.30	11.75	11.23	10.75	10.29	9.87	9.48	9.11	8.76	8.43	74
75	13.07	12.53	12.03	11.56	11.12	10.71	10.32	9.96	9.62	9.30	9.00	75

Table 27 Discounting fa	ctors for term certain
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Term	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	Term
1	0.9950	0.9901	0.9852	0.9804	0.9756	0.9709	0.9662	0.9615	0.9569	0.9524	1
2	0.9901	0.9803	0.9707	0.9612	0.9518	0.9426	0.9335	0.9246	0.9157	0.9070	2
3	0.9851	0.9706	0.9563	0.9423	0.9286	0.9151	0.9019	0.8890	0.8763	0.8638	3
4	0.9802	0.9610	0.9422	0.9238	0.9060	0.8885	0.8714	0.8548	0.8386	0.8227	4
5	0.9754	0.9515	0.9283	0.9057	0.8839	0.8626	0.8420	0.8219	0.8025	0.7835	5
6	0.9705	0.9420	0.9145	0.8880	0.8623	0.8375	0.8135	0.7903	0.7679	0.7462	6
7	0.9657	0.9327	0.9010	0.8706	0.8413	0.8131	0.7860	0.7599	0.7348	0.7107	7
8	0.9609	0.9235	0.8877	0.8535	0.8207	0.7894	0.7594	0.7307	0.7032	0.6768	8
9	0.9561	0.9143	0.8746	0.8368	0.8007	0.7664	0.7337	0.7026	0.6729	0.6446	9
10	0.9513	0.9053	0.8617	0.8203	0.7812	0.7441	0.7089	0.6756	0.6439	0.0139	10
11	0.9466	0.8963	0.8489	0.8043	0.7621	0.7224	0.6849	0.6496	0.6162	0.5847	11
12	0.9419	0.8874	0.8304	0.7883	0.7450	0.7014	0.6304	0.6246	0.5643	0.5308	12
14	0.9326	0.8700	0.8118	0.7579	0 7077	0.6611	0.6178	0.5775	0.5400	0.5051	14
15	0.9279	0.8613	0.7999	0.7430	0.6905	0.6419	0.5969	0.5553	0.5167	0.4810	15
16	0.9233	0.8528	0.7880	0.7284	0.6736	0.6232	0.5767	0.5339	0.4945	0.4581	16
17	0.9187	0.8444	0.7764	0.7142	0.6572	0.6050	0.5572	0.5134	0.4732	0.4363	17
18	0.9141	0.8360	0.7649	0.7002	0.6412	0.5874	0.5384	0.4936	0.4528	0.4155	18
19	0.9096	0.8277	0.7536	0.6864	0.6255	0.5703	0.5202	0.4746	0.4333	0.3957	19
20	0.9051	0.8195	0.7425	0.6730	0.6103	0.5537	0.5026	0.4564	0.4146	0.3769	20
21	0.9006	0.8114	0.7315	0.6598	0.5954	0.5375	0.4856	0.4388	0.3968	0.3589	21
22	0.8961	0.8034	0.7207	0.6468	0.5809	0.5219	0.4692	0.4220	0.3797	0.3418	22
23	0.8916	0.7954	0.7100	0.6342	0.5667	0.5067	0.4533	0.4057	0.3634	0.3256	23
24	0.8872	0.7876	0.6995	0.6217	0.5529	0.4919	0.4380	0.3901	0.34//	0.3101	24
23	0.8828	0.7798	0.0892	0.6093	0.3394	0.4776	0.4231	0.3731	0.3327	0.2935	23
26	0.8784	0.7720	0.6790	0.5976	0.5262	0.4637	0.4088	0.3607	0.3184	0.2812	26
27	0.8/40	0.7644	0.6690	0.5859	0.5134	0.4502	0.3950	0.3468	0.3047	0.2678	27
20	0.8653	0.7493	0.6494	0.5631	0.4887	0.4243	0.3687	0.3333	0.2910	0.2331	28
30	0.8610	0.7419	0.6398	0.5521	0.4767	0.4120	0.3563	0.3083	0.2670	0.2314	30
31	0.8567	0.7346	0.6303	0.5412	0.4651	0.4000	0 3442	0.2965	0.2555	0 2204	31
32	0.8525	0.7273	0.6210	0.5306	0.4538	0.3883	0.3326	0.2851	0.2445	0.2099	32
33	0.8482	0.7201	0.6118	0.5202	0.4427	0.3770	0.3213	0.2741	0.2340	0.1999	33
34	0.8440	0.7130	0.6028	0.5100	0.4319	0.3660	0.3105	0.2636	0.2239	0.1904	34
35	0.8398	0.7059	0.5939	0.5000	0.4214	0.3554	0.3000	0.2534	0.2143	0.1813	35
36	0.8356	0.6989	0.5851	0.4902	0.4111	0.3450	0.2898	0.2437	0.2050	0.1727	36
37	0.8315	0.6920	0.5764	0.4806	0.4011	0.3350	0.2800	0.2343	0.1962	0.1644	37
38	0.8274	0.6852	0.5679	0.4712	0.3913	0.3252	0.2706	0.2253	0.1878	0.1566	38
39 40	0.8232	0.6717	0.5595	0.4619	0.3817	0.3158	0.2014	0.2100	0.1797	0.1491	39 40
41	0.0151	0.0717	0.5315	0.4440	0.2(22	0.3000	0.2320	0.2003	0.1(45	0.1420	41
41	0.8151	0.6584	0.5451	0.4440	0.3033	0.2976	0.2440	0.2003	0.1645	0.1353	41
42	0.8110	0.6519	0.5351	0.4355	0.3343	0.2890	0.2338	0.1920	0.1574	0.1288	42
44	0.8030	0.6454	0.5194	0.4184	0.3374	0.2724	0.2201	0.1780	0.1442	0.1169	44
45	0.7990	0.6391	0.5117	0.4102	0.3292	0.2644	0.2127	0.1712	0.1380	0.1113	45
46	0.7950	0.6327	0.5042	0.4022	0.3211	0.2567	0.2055	0.1646	0.1320	0.1060	46
47	0.7910	0.6265	0.4967	0.3943	0.3133	0.2493	0.1985	0.1583	0.1263	0.1009	47
48	0.7871	0.6203	0.4894	0.3865	0.3057	0.2420	0.1918	0.1522	0.1209	0.0961	48
49	0.7832	0.6141	0.4821	0.3790	0.2982	0.2350	0.1853	0.1463	0.1157	0.0916	49
50	0.7793	0.6080	0.4/50	0.3/15	0.2909	0.2281	0.1791	0.1407	0.1107	0.0872	50
51	0.7754	0.6020	0.4680	0.3642	0.2838	0.2215	0.1730	0.1353	0.1059	0.0831	51
52 52	0.7/16	0.5961	0.4611	0.35/1	0.2769	0.2150	0.16/1	0.1301	0.1014	0.0791	52
55 54	0.7677	0.3902	0.4345	0.3301	0.2702	0.2088	0.1615	0.1231	0.0970	0.0733	55 54
55	0.7601	0.5785	0.4409	0.3365	0.2572	0.1968	0.1508	0.1157	0.0888	0.0683	55
56	0.7563	0.5728	0 4344	0 3299	0.2509	0 1910	0.1457	0.1112	0.0850	0.0651	56
57	0.7525	0.5671	0.4280	0.3234	0.2448	0.1855	0.1407	0.1069	0.0814	0.0620	57
58	0.7488	0.5615	0.4217	0.3171	0.2388	0.1801	0.1360	0.1028	0.0778	0.0590	58
59	0.7451	0.5560	0.4154	0.3109	0.2330	0.1748	0.1314	0.0989	0.0745	0.0562	59
60	0.7414	0.5504	0.4093	0.3048	0.2273	0.1697	0.1269	0.0951	0.0713	0.0535	60
61	0.7377	0.5450	0.4032	0.2988	0.2217	0.1648	0.1226	0.0914	0.0682	0.0510	61
62	0.7340	0.5396	0.3973	0.2929	0.2163	0.1600	0.1185	0.0879	0.0653	0.0486	62
63	0.7304	0.5343	0.3914	0.2872	0.2111	0.1553	0.1145	0.0845	0.0625	0.0462	63
04 65	0.7267	0.5290	0.3836	0.2816	0.2059	0.1508	0.1106	0.0813	0.0598	0.0440	64 65
66	0.7201	0.5195	0.37/2	0.2704	0.1060	0.1401	0 1022	0.0751	0.05/2	0.0300	66
67	0.7195	0.5185	0.3743	0.2700	0.1900	0.1421	0.1033	0.0731	0.0547	0.0399	67
68	0.7124	0.5083	0.3633	0.2601	0.1865	0.1340	0.0964	0.0695	0.0501	0.0362	68
69	0.7088	0.5033	0.3580	0.2550	0.1820	0.1301	0.0931	0.0668	0.0480	0.0345	69
70	0.7053	0.4983	0.3527	0.2500	0.1776	0.1263	0.0900	0.0642	0.0459	0.0329	70

Factor to discount value of multiplier for a period of deferment

 Table 27
 Discounting factors for term certain continued

		r									
Term	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	Term
71	0.7018	0.4934	0.3475	0.2451	0.1732	0.1226	0.0869	0.0617	0.0439	0.0313	71
72	0.6983	0.4885	0.3423	0.2403	0.1690	0.1190	0.0840	0.0594	0.0420	0.0298	72
73	0.6948	0.4837	0.3373	0.2356	0.1649	0.1156	0.0812	0.0571	0.0402	0.0284	73
74	0.6914	0.4789	0.3323	0.2310	0.1609	0.1122	0.0784	0.0549	0.0385	0.0270	74
75	0.6879	0.4741	0.3274	0.2265	0.1569	0.1089	0.0758	0.0528	0.0368	0.0258	75
76	0.6845	0.4694	0.3225	0.2220	0.1531	0.1058	0.0732	$\begin{array}{c} 0.0508 \\ 0.0488 \\ 0.0469 \\ 0.0451 \\ 0.0434 \end{array}$	0.0353	0.0245	76
77	0.6811	0.4648	0.3178	0.2177	0.1494	0.1027	0.0707		0.0337	0.0234	77
78	0.6777	0.4602	0.3131	0.2134	0.1457	0.0997	0.0683		0.0323	0.0222	78
79	0.6743	0.4556	0.3084	0.2092	0.1422	0.0968	0.0660		0.0309	0.0212	79
80	0.6710	0.4511	0.3039	0.2051	0.1387	0.0940	0.0638		0.0296	0.0202	80

Factor to discount value of multiplier for a period of deferment

Table 26 With the stor peculiary loss for term certa	Fable 28	8 Multipliers	s for pecuniary	loss fo	or term certai
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Term	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	Term
1	1.00	1.00	0.99	0.99	0.99	0.99	0.98	0.98	0.98	0.98	1
2	1.99	1.98	1.97	1.96	1.95	1.94	1.93	1.92	1.91	1.91	2
3	2.98	2.96	2.93	2.91	2.89	2.87	2.85	2.83	2.81	2.79	3
4	3.96	3.92	3.88	3.85	3.81	3.77	3.74	3.70	3.67	3.63	4
5	4.94	4.88	4.82	4.76	4.70	4.65	4.59	4.54	4.49	4.44	5
6	5.91	5.82	5.74	5.66	5.58	5.50	5.42	5.35	5.27	5.20	6
7	6.88	6.76	6.65	6.54	6.43	6.32	6.22	6.12	6.02	5.93	7
8	7.84	7.69	7.54	7.40	7.26	7.12	6.99	6.87	6.74	6.62	8
9	8.80	8.61	8.42	8.24	8.0/	7.90	7.74	7.58	7.43	7.28	10
10	9.73	9.32	9.29	9.07	0.60	8.00	8.40	0.27	8.09	7.91	10
11	10.70	10.42	10.15	9.88	9.63	9.39	9.16	8.93	8.72	8.51	11
12	12.50	11.51	10.99	10.08	10.39	10.10	9.85	9.37	9.52	9.08	12
13	13.52	13.07	12.64	12.23	11.12	11 46	11 11	10.18	10.45	10.14	13
15	14.45	13.93	13.44	12.98	12.54	12.12	11.72	11.34	10.98	10.64	15
16	15 38	14 79	14 24	13 71	13.22	12.75	12.30	11.88	11 48	11 11	16
17	16.30	15.64	15.02	14.43	13.88	13.36	12.87	12.41	11.97	11.55	17
18	17.22	16.48	15.79	15.14	14.53	13.96	13.42	12.91	12.43	11.98	18
19	18.13	17.31	16.55	15.83	15.17	14.54	13.95	13.39	12.87	12.38	19
20	19.03	18.14	17.30	16.51	15.78	15.10	14.46	13.86	13.30	12.77	20
21	19.94	18.95	18.03	17.18	16.39	15.65	14.95	14.31	13.70	13.14	21
22	20.84	19.76	18.76	17.83	16.97	16.17	15.43	14.74	14.09	13.49	22
23	21.73	20.56	19.48	18.47	17.55	16.69	15.89	15.15	14.46	13.82	23
24	22.02	21.55	20.18	19.10	18.11	17.19	16.34	15.55	14.62	14.14	24
25	23.30	22.13	21.56	20.22	10.05	19.14	17.19	16.30	15.10	14.72	25
20	24.30	22.91	21.30	20.32	19.19	18.14	17.10	16.50	15.40	14.73	20
28	26.13	24.44	22.20	21.49	20.21	19.04	17.97	16.99	16.09	15.27	28
29	27.00	25.19	23.55	22.06	20.71	19.47	18.35	17.32	16.38	15.52	29
30	27.86	25.94	24.20	22.62	21.19	19.89	18.71	17.64	16.65	15.75	30
31	28.72	26.67	24.83	23.17	21.66	20.30	19.06	17.94	16.91	15.98	31
32	29.58	27.41	25.46	23.70	22.12	20.69	19.40	18.23	17.16	16.19	32
33	30.43	28.13	26.07	24.23	22.57	21.08	19.73	18.51	17.40	16.40	33
34	31.27	28.85	26.68	24.74	23.01	21.45	20.04	18.78	17.63	16.59	34
35	32.12	29.56	27.28	25.25	23.43	21.81	20.35	19.04	17.85	16.78	35
36	32.95	30.26	27.87	25.74	23.85	22.16	20.64	19.28	18.06	16.96	36
38	34.62	30.93	28.43	26.25	24.20	22.30	20.93	19.32	18.20	17.15	38
39	35.44	32 32	29.58	27.17	25.04	23.15	21.20	19.75	18.64	17.44	39
40	36.26	33.00	30.14	27.63	25.42	23.46	21.73	20.19	18.81	17.58	40
41	37.08	33.67	30.69	28.08	25.78	23.76	21.97	20.39	18 98	17.72	41
42	37.89	34.33	31.23	28.52	26.14	24.06	22.21	20.59	19.14	17.86	42
43	38.70	34.98	31.76	28.95	26.49	24.34	22.45	20.78	19.30	17.98	43
44	39.51	35.63	32.28	29.37	26.83	24.62	22.67	20.96	19.44	18.10	44
45	40.31	36.27	32.80	29.78	27.17	24.88	22.89	21.13	19.58	18.21	45
46	41.10	36.91	33.30	30.19	27.49	25.15	23.10	21.30	19.72	18.32	46
47	41.90	37.54	33.80	30.59	27.81	25.40	23.30	21.46	19.85	18.43	47
48	42.69	38.10	34.30	30.98	28.12	25.64	23.49	21.62	19.97	18.53	48
49 50	45.47	30.70	35.26	31.30	28.42	25.88	23.08	21.77	20.09	18.02	49 50
51	45.03	40.00	35.20	32.10	20.02	26.34	24.04	22.05	20.20	18 70	51
52	45.80	40.60	36.20	32.10	29.00	26.54	24.21	22.03	20.31	18.87	52
53	46.57	41.19	36.66	32.82	29.56	26.77	24.37	22.31	20.51	18.95	53
54	47.34	41.78	37.11	33.17	29.82	26.97	24.53	22.43	20.61	19.03	54
55	48.10	42.36	37.55	33.51	30.08	27.17	24.69	22.55	20.70	19.10	55
56	48.86	42.93	37.99	33.84	30.34	27.37	24.83	22.66	20.79	19.16	56
57	49.61	43.50	38.42	34.17	30.59	27.56	24.98	22.77	20.87	19.23	57
58	50.36	44.07	38.84	34.49	30.83	27.74	25.12	22.88	20.95	19.29	58
59 60	51.85	44.05	39.20	34.80	31.00	27.92	25.25	22.98	21.05	19.54	59 60
61	52.50	45 72	40.00	35 /1	31.29	20.05	25.50	23.07	21.10	10.45	61
62	53 33	45.75	40.08	35 70	31.32	28.20	25.50	23.17	21.17	19.43	62
63	54.06	46.81	40.88	36.00	31.95	28.58	25.74	23.34	21.30	19.55	63
64	54.79	47.34	41.26	36.28	32.16	28.73	25.85	23.42	21.36	19.59	64
65	55.52	47.86	41.65	36.56	32.36	28.88	25.96	23.50	21.42	19.64	65
66	56.24	48.39	42.02	36.83	32.56	29.02	26.07	23.58	21.47	19.68	66
67	56.95	48.90	42.40	37.10	32.75	29.16	26.17	23.65	21.53	19.72	67
68	57.67	49.41	42.76	37.36	32.94	29.30	26.27	23.73	21.58	19.75	68
69 70	58.38	49.92	43.12	37.62	33.13	29.43	26.36	23.79	21.63	19.79	69 70
/0	39.09	30.42	43.48	31.81	33.31	29.30	20.45	23.80	∠1.08	19.82	/0

Multiplier for regular frequent payments for a term certain at rate of return of

 Table 28 Multipliers for pecuniary loss for term certain continued

1	0	1 1.	·								
Term	0.5%	1.0%	1.5%	2.0%	2.5%	3.0%	3.5%	4.0%	4.5%	5.0%	Term
71 72	59.79 60.49	50.91 51.41	43.83 44 17	38.12 38.36	33.48 33.65	29.68 29.80	26.54 26.63	23.92 23.98	21.72	19.85 19.88	71 72
73 74	61.19	51.89	44.51	38.60	33.82	29.92	26.71	24.04	21.80	19.91	73 74
74	62.57	52.85	45.18	39.06	34.14	30.05	26.79	24.10 24.15	21.84 21.88	19.94	74
76	63.26	53.32	45.50	39.29	34.30	30.25	26.94	24.20	21.92	19.99	76
77	63.94	53.79	45.82	39.51	34.45	30.36	27.01	24.25	21.95	20.02	77
78	64.62	54.25	46.14	39.72	34.60	30.46	27.08	24.30	21.99	20.04	78
79	65.29	54.71	46.45	39.93	34.74	30.56	27.15	24.35	22.02	20.06	79
80	65.97	55.16	46.75	40.14	34.88	30.65	27.21	24.39	22.05	20.08	80

Multiplier for regular frequent payments for a term certain at rate of return of

# ACTUARIAL FORMULAE AND BASIS

Tables 1 and 2	$\overline{a}_x$
Tables 3 and 4	ā <sub>x :</sub>
Tables 5 and 6	ā <sub>x:</sub>
Tables 7 and 8	ā <sub>x :</sub>
Tables 9 and 10	ā <sub>x :</sub>
Tables 11 and 12	ā <sub>x :</sub>
Tables 13 and 14	ā <sub>x :</sub>
Tables 15 and 16	(50-x) $\Big  \overline{a}_x$
Tables 17 and 18	(55-x) $  \overline{a_x} \rangle$
Tables 19 and 20	(60-x) $\Big  \overline{a}_x$
Tables 21 and 22	(65-x) $\Big  \overline{a}_x$
Tables 23 and 24	(70-x) $\Big  \overline{a}_x$
Tables 25 and 26	(75-x) $  \overline{a}_x$

Table 27:  $1/(1+i)^n$ 

Table 28:  $\overline{a} = \frac{1}{n}$ 

- Mortality assumptions for 2002-based official population projections for England & Wales
- Loadings: None
- Rate of return: As stated in the Tables





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