



Social Security Administration Act 1992

# **National Insurance Fund - Long-term Financial Estimates**

**Report by the Government Actuary on the Quinquennial Review for the  
period ending 5 April 1995 under Section 166 of the Social Security  
Administration Act 1992**

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# National Insurance Fund - Long-term Financial Estimates - Quinquennial Review

To: The Right Hon. Alistair Darling, MP  
Secretary of State for Social Security

Ms Dawn Primarolo, MP  
Paymaster General

Sir and Madam,

In accordance with the terms of section 166 of the Social Security Administration Act 1992, I have reviewed the operation of the Social Security Act 1975, Parts I to VI of the Social Security Contributions and Benefits Act 1992 (except Part I of Schedule 8) and the Social Security Administration Act 1992 in so far as it relates to those Parts during the period 6 April 1990 to 5 April 1995. My conclusions are given in the attached report.

I am, Sir and Madam,

Your obedient Servant,

Christopher Daykin, CB FIA

Government Actuary  
July 1999

# Contents

LIST OF TABLES

LIST OF FIGURES

1. SUMMARY OF THE REVIEW
2. INTRODUCTION AND SCOPE OF THE REVIEW
3. THE IMPACT OF DIFFERENT ASSUMPTIONS FOR FUTURE FLAT-RATE BENEFIT AND EARNINGS INCREASES
4. FUTURE CHANGES IN THE RELATIVE NUMBERS OF CONTRIBUTORS AND PENSIONERS
5. ESTIMATED EXPENDITURE AND RATES OF CONTRIBUTION REQUIRED IN FUTURE YEARS
6. HOME RESPONSIBILITY PROTECTION AND THE MATURING OF SERPS
7. EFFECTS OF CONTRACTING OUT
8. SENSITIVITY ANALYSIS
9. EFFECT OF SOCIAL SECURITY ACT 1998 NATIONAL INSURANCE CONTRIBUTION RATE CHANGES
10. EFFECT OF THE MARCH 1999 BUDGET NATIONAL INSURANCE CONTRIBUTION RATE AND LIMIT CHANGES
11. APPENDIX A: SUMMARY OF CONTRIBUTIONS AND BENEFITS
12. APPENDIX B: NATIONAL INSURANCE FUND: LEGISLATION AND ACCOUNTS FROM 1990
13. APPENDIX C: ESTIMATED FUTURE POPULATION OF GREAT BRITAIN
14. APPENDIX D: THE TECHNICAL ASSUMPTIONS MADE FOR THE PURPOSES OF THE FINANCIAL ESTIMATES
15. APPENDIX E: ESTIMATED BENEFIT EXPENDITURE AND CONTRIBUTION INCOME.

[Contents](#)

# List of Tables

Table Analysis of National Insurance Fund expenditure by type of benefit assuming flat-rate benefits and earnings limits  
1.1 increase with prices (% of total in year)

Table Estimated rates of contribution to the National Insurance Fund in respect of employed earners  
1.2

Table National Insurance Fund expenditure as a percentage of projected GDP  
1.3

Table Change in GDP per pensioner relative to 1999  
1.4

Table Future expectation of life in Great Britain based on projected mortality rates  
4.1

Table Population projection for Great Britain (Female pension age rising from 60 to 65 during the period 2010 to 2020)  
4.2

Table Pensioner support ratio  
4.3

Table Number of employed contributors, pensioners and the support ratio  
4.4

Table National Insurance Fund expenditure - flat-rate benefit rates and earnings limits increase with prices (£ billion in  
5.1 1999/00 price terms)

Table National Insurance Fund expenditure - flat-rate benefit rates and earnings limits increase with earnings (£ billion in  
5.2 1999/00 price terms)

Table Estimate of total expenditure as a percentage of GDP  
5.3

Table Change in GDP per pensioner relative to 1999  
5.4

Table Projected class 1 contribution rates required to balance income and expenditure  
5.5

Table Contracted-out rebate rates  
5.6

Table Analysis of the differences between the current projected contribution rates and those in the previous Quinquennial  
5.7 Review

Table Benefit expenditure on SERPS for retirement pensioners assuming real earnings growth of 1.5% per annum (£  
6.1 billions in 1999/00 prices)

Table Estimated number of employees and employed contributors (millions)  
7.1

Table Number of contributors contracted-out via COSRs, COMPs and APPs (millions)  
7.2

Table Contribution rates with different contracting out assumptions assuming flat-rate benefit rates and earnings limits  
7.3 increase in line with prices

Table Contribution rates with different contracting out assumptions assuming flat-rate benefit rates and earnings limits  
7.4 increase in line with earnings

Table Projected class 1 contribution rates required to balance income and expenditure on different real earnings growth  
8.1 assumptions where benefit rates and earnings limits are uprated in line with prices

Table Expectation of life on different mortality assumptions

## 8.2

Table Effect of variant population projections on the population, the pensioner support ratio and future contribution rates  
8.3 with real earnings growth of 1.5% per annum

Table Effect of the Social Security Act 1998 changes to Class 1 contribution rates and earnings limits  
9.1

Table Employees contribution limits in 2000/01 and 2001/02 arising from the March 1999 budget proposals (£ per week) -  
10.1 budget economic assumptions

Table National Insurance Fund expenditure after the March 1999 budget changes - flat-rate benefit rates and earnings limits  
10.2 increase in line with prices (£ billion in 1999-00 price terms)

Table National Insurance Fund expenditure after the March 1999 budget changes - flat-rate benefit rates and earnings limits  
10.3 increase in line with earnings

Table Projected class 1 contribution rates required to balance income and expenditure on a pre and post March 99 budget  
10.4 basis

Table Standard benefit rates and earnings limits 1990 to 1999  
11.1

Table Standard Class 1 contribution rates for employees (primary) and employers (secondary) 1990 to 1999  
11.2

Table Employers contributions earnings bands and contribution rates during 1998-99  
11.3

Table Contribution rates, including the NHS allocation, and earnings limits for self-employed persons 1990 to 1999  
11.4

Table National Insurance Fund income and outgo and balances for the period 1 April 1990 to 31 March 1998  
12.1

Table Analysis of expenditure on National Insurance Fund benefits in the period 1 April 1990 to 31 March 1998  
12.2

Table Estimated future population of Great Britain at mid-year based on the estimated population at mid 1996  
13.1

Table Economic activity rates for different age groups in 1998 and in 2011 and later years.  
14.1

Table Future numbers of contributors with the lower earnings limit increased in line with prices (millions)  
14.2

Table Assumed average weekly earnings of employees in 1999-00  
14.3

Table Assumed average weekly earnings of members of contracted-out occupational pension schemes in 1999-00  
14.4

Table Past numbers with basic retirement pension including overseas residents (thousands)  
14.5

Table Estimated future numbers of basic retirement pensioners (millions)  
14.6

Table Assumed percentage of married women at minimum pension age who have some own entitlement to retirement  
14.7 pensions and their overall average rate of entitlement as a percentage of the standard rate

Table Assumed percentage of all women at minimum pension age who have some entitlement to retirement pensions  
14.8 (including inheritance and substitution) and their overall average rate of entitlement as a percentage of the standard rate

Table Accrual rates for earnings-related additional retirement pension  
14.9

Table New awards of gross additional pensions, assuming real earnings growth of 1.5% per annum, for those reaching  
14.10 retirement age in selected financial years, excluding inherited amounts. (£ million in 1999/00 price terms)

Table New awards of contracted-out deductions assuming real earnings growth of 1.5% per annum for those reaching  
14.11 retirement age in selected financial years excluding inherited amounts. (£ million in 1999/00 price terms)

Table Number of widow beneficiaries under age 60 since 1990 by type of benefit (thousands)  
14.12

Table Assumed percentage of new GB widows awarded widow's benefit by age and type of benefit (including overseas  
14.13 beneficiaries)

Table Termination rates (%) for widow's benefit by age and type of benefit  
14.14

Table Historical number of beneficiaries with incapacity benefit short term lower rate or previous equivalent (thousands)  
14.15

Table Historical numbers of beneficiaries with incapacity benefit short term higher or long term rate (thousands)  
14.16

Table Past numbers of awards of short term higher rate and long term incapacity benefit (thousands)  
14.17

Table Future number of awards of short term higher rate and long term incapacity benefit (thousands)  
14.18

Table Historical incapacity benefit short term higher and long term rate beneficiaries' continuation rates  
14.19

Table Projected incapacity benefit short term higher and long term rate beneficiaries' continuation rates  
14.20

Table Estimated benefit expenditure on the assumption that earnings limits and flat-rate benefits increase with prices and  
15.1 real earnings grow at 1.5% per annum

Table Estimated contribution income on rates adequate to meet expenditure on the assumption that earnings limits and flat-  
15.2 rate benefits increase with prices and real earnings grow at 1.5% per annum

Table Estimated benefit expenditure on the assumption that earnings limits and flat-rate benefits increase with prices and  
15.3 real earnings grow at 2.0% per annum

Table Estimated contribution income on rates adequate to meet expenditure on the assumption that earnings limits and flat-  
15.4 rate benefits increase with prices and real earnings grow at 2.0% per annum

Table Estimated benefit expenditure on the assumption that earnings limits and flat-rate benefits increase with earnings and  
15.5 real earnings grow at 1.5% per annum

Table Estimated contribution income on rates adequate to meet expenditure on the assumption that earnings limits and flat-  
15.6 rate benefits increase with earnings and real earnings grow at 1.5% per annum

Table Estimated benefit expenditure on the assumption that earnings limits and flat-rate benefits increase with earnings and  
15.7 real earnings grow at 2.0% per annum

Table Estimated contribution income on rates adequate to meet expenditure on the assumption that earnings limits and flat-  
15.8 rate benefits increase with earnings and real earnings grow at 2.0% per annum

# List of Figures

Figure 1.1 Awards of basic and SERPS pension to men on average earnings as a percentage of average earnings with flat-rate benefit rates and earnings limits increased with prices

Figure 1.2 Awards of basic and SERPS pension to men on average earnings as a percentage of average earnings with flat-rate benefit rates and earnings limits increased in line with earnings

Figure 3.1 Total expenditure assuming flat-rate benefit increase with prices or earnings in future (in 1999/00 price terms, real earnings growth of 1.5% per annum)

Figure 3.2 Total expenditure as a percentage of GDP assuming real GDP and earnings growth of 1.5% per annum

Figure 3.3 Pension at award for a male on average male earnings as a percentage of male average full time earnings

Figure 3.4 Pension at award for a female on average female earnings as a percentage of female average full time earnings

Figure 3.5 Basic retirement pension plus SERPS at award as a percentage of earnings for different weekly earnings levels.

Figure 3.6 Gross contribution income in respect of employees with constant contribution rates but different increases to contribution earnings limits (£bn in 1999/00 price terms)

Figure 3.7 Gross contribution income in respect of employees with constant contribution rates but different increases to contribution earnings limits, as a percentage of GDP

Figure 3.8 Percentage of gross contribution income in respect of employees paid by employees and employers, based on a constant contribution rate

Figure 3.9 Employee contributions for employees on full time national average earnings as a percentage of earnings (males and females respectively) assuming a constant contribution rate and earnings limits increasing in line with prices

Figure 3.10 Weekly National Insurance contributions (excluding the NHS proportion) paid by an employee on average earnings based on actual future contribution rates required where benefits and earnings limits are increased in line with prices

Figure 3.11 Weekly National Insurance contributions (excluding the NHS proportion) paid by an employee on average earnings based on actual future contribution rates required where benefits and earnings limits are increased with earnings

Figure 4.1 Population projection for Great Britain - Relative change in the total population, numbers of children, people of working age and pensioners (1999=100%)

Figure 4.2 Relative changes in the number of contributors, pensioners and the support ratio (1999=100%), assuming earnings limits increase in line with prices

Figure 5.1 Real levels, relative to 1999, for male gross pay, gross pay net of National Insurance contributions and gross pay net of National Insurance contributions and income tax in future years with earnings uprating of flat-rate benefits and earnings limits.

Figure 6.1 Gross and net SERPS expenditure on pensioners as a percentage of basic retirement pension, assuming that earnings limits and basic retirement pension increase in line with prices

Figure 6.2 Percentage of future SERPS expenditure in respect of accruals before April 2002, assuming that earnings limits increase with prices

Figure 6.3 Home responsibility protection SERPS expenditure as a percentage of total gross and net SERPS expenditure assuming that earnings limits increase with prices.

# 1. Summary of the Review

1.1 The main purpose of the review is to estimate the contribution rates required to be paid to the Great Britain National Insurance Fund in future years to meet the expenditure on a pay-as-you-go basis under the current benefit and contribution structure.

1.2 This review is based on the legislation in force in March 1999 and therefore reflects the equalisation of pension ages at 65 by the changes to the State Earnings-Related Pension Scheme (SERPS) and contracting out of SERPS enacted in the Pensions Act 1995 and the contribution rules changes contained in the Social Security Act 1998. Section 10 indicates effects on the National Insurance Fund of the changes proposed in the March 1999 budget. The review does not take into account the current Welfare Reform Bill, Tax Credits Bill or the impact of the proposals in the green paper "A new contract for welfare: Partnership in Pensions" published in December 1998.

1.3 Results of projections over the period to the year 2060 are subject to considerable uncertainty and the effects of different assumptions are shown in Section 8 of the report. This summary is based on the main projections described in Sections 3 to 7.

1.4 Table 1.1 shows the breakdown of the total expenditure of the National Insurance Fund by type of expenditure, assuming that rate benefits and earnings limits increase with prices. Expenditure on retirement pension is projected to increase slowly relative to other benefits. Within retirement pension expenditure basic pension falls whilst SERPS rises as a percentage of the total.

**Table 1.1 Analysis of National Insurance Fund expenditure by type of benefit assuming flat-rate benefits and earnings increase with prices (% of total in year)**

Year	1999- 00	2000- 01	2010- 11	2020- 21	2030- 31	2040- 41	2050- 51	2060- 61
Retirement pension	70.0	69.3	64.9	61.3	63.9	65.8	63.9	62.0
Basic								
- Earnings related	9.3	10.2	16.9	19.0	19.4	18.7	19.8	22.0
Widows' pension Basic	1.4	1.4	0.9	1.3	1.0	0.8	0.9	0.8
- Earnings related	0.5	0.4	0.1	0.2	0.1	0.1	0.1	0.1
Incapacity benefit Basic	13.2	13.3	13.1	14.6	12.2	11.0	11.3	10.0
- Earnings related	1.6	1.3	0.2	0.0	0.0	0.0	0.0	0.0
Jobseekers Allowance	1.2	1.2	1.0	0.9	0.8	0.7	0.7	0.5
Other benefits	0.7	0.7	0.6	0.5	0.5	0.5	0.5	0.4
Expenses	2.2	2.2	2.1	2.2	2.2	2.4	2.8	3.0
Total Expenditure	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## Projected future contribution rates

1.5 The main factors affecting the future contribution rates needed for the National Insurance Fund are:

- The relative number of contributors and pensioners, as pension benefits account for 80% of benefit expenditure;
- The rate by which the increase in the general level of earnings exceeds the increase in benefit rates and earnings limits over the year



1.6 The number of contributors per pensioner will stay fairly constant at about 1.8 until the year 2020. Thereafter it will decline to about 1.4 by 2030 before stabilising again. These changes reflect the demographic development of the population, particularly increase of about 50% in the number of pensioners to some 16.4 million in the year 2040, allowing for the change in female pensioners and, to a lesser degree, changing economic activity rates. Other things being equal, the reduction in the number of contributors relative to pensioners would lead to contribution rates increasing by approximately a third by around the year 2030.

1.7 Whether increases in contribution rates will be necessary in practice depends on the policy for increasing flat-rate benefit rates. Increasing benefit rates by less than the rate of earnings increases will result in benefit expenditure rising more slowly than contribution income, which is related to earnings increases.

1.8 The Social Security Administration Act 1992 requires that benefit rates be increased each year at least in line with price inflation. Recent policy has been to increase benefit rates in line with price inflation and all comments by governments in recent years have supported this level of uprating. Historically, earnings have grown faster than prices by approximately 1.5% to 2.0% a year on average and it is expected that there will be a continuing differential of this order.

1.9 If upratings continue to be based on price increases, the growth in contribution income relative to benefit expenditure arising from earnings increasing faster than flat-rate benefit rates by 1.5% to 2.0% per annum, will offset the decline in the relative number of contributors to pensioners. Contribution rates would fall.

1.10 If benefit rates were increased in line with earnings, contribution rates would increase significantly up to the year 2040 before levelling off.

1.11 Table 1.2 sets out the contribution rates estimated to be required in future based on the principal assumptions.

1.12 From April 1999, the employees' National Insurance contribution rate is 10%, as in 1998. The employers' National Insurance contribution rate is 12.2%, compared to the main rate of 10% in 1998, but this rate will only be payable on earnings above a threshold. After allowing for the proportion of the contribution allocated to the NHS, the combined employee and employer rate from April 1999 is 20.25%, compared to 18.05% in 1998, although the new employers' rate will be paid on a smaller proportion of earnings.

1.13 The rates in the table below assume that the future rates of contribution by the employee and the employer will be kept proportional to each other and that the revised structure of the National Insurance contribution system applicable from April 1999 will be maintained thereafter. Contribution rates for other contribution classes are assumed to alter proportionately.

**Table 1.2 Estimated rates of contribution to the National Insurance Fund in respect of employed earners**

Year	JOINT EMPLOYEE AND EMPLOYER	
	CONTRIBUTION RATE* %	
	Earnings upratings	Price upratings
1999-00	20.0	20.0
2000-01	20.2	19.9
2010-11	21.6	18.9
2020-21	23.2	18.1
2030-31	26.7	18.6
2040-41	27.6	17.1

2050-51	27.3	15.2
2060-61	27.6	14.0

\* These rates exclude that part of the rates allocated to the NHS. They are based on the revised Class 1 contribution regime introduced by the 1998 Social Security Act. These changes took effect from April 1999.

1.14 The contribution rates in Table 1.2 are not easy to interpret, especially where employees' contribution limits indexed to price rather than earnings result in them paying contributions on an ever decreasing proportion of their earnings. A more representative of the changes in the cost of future National Insurance Fund expenditure (excluding contracted out rebates) can be obtained by relating the expenditure to the projected gross domestic product (GDP). This is illustrated in Table 1.3 below.

**Table 1.3 National Insurance Fund expenditure as a percentage of projected GDP**

Year	JOINT EMPLOYEE AND EMPLOYER	
	CONTRIBUTION RATE* %	
	Earnings upratings	Price upratings
1999-00	5.5	5.5
2000-01	5.5	5.4
2010-11	6.4	5.6
2020-21	7.0	5.5
2030-31	7.9	5.5
2040-41	8.1	4.9
2050-51	7.8	4.2
2060-61	7.7	3.7

1.15 Tables 1.2 and 1.3 show that with price uprating of flat-rate benefit rates, the burden of benefit expenditure falls, slowly at first and more quickly in later years. This is shown by both the pattern of contribution rates required and the costs of National Insurance Fund expenditure relative to GDP. If GDP rises broadly in line with real earnings, the figures indicate that, in the longer term, National Insurance Fund expenditure as a share of GDP will fall significantly, even though there will be nearly 50% more pensioners.

1.16 With earnings upratings of flat-rate benefit rates, the contribution rates required rise considerably, reflecting the change in the number of contributors to pensioners, with no counterbalancing effects for other reasons. The retirement pension share of GDP will increase significantly, broadly in line with the increasing number of pensioners.

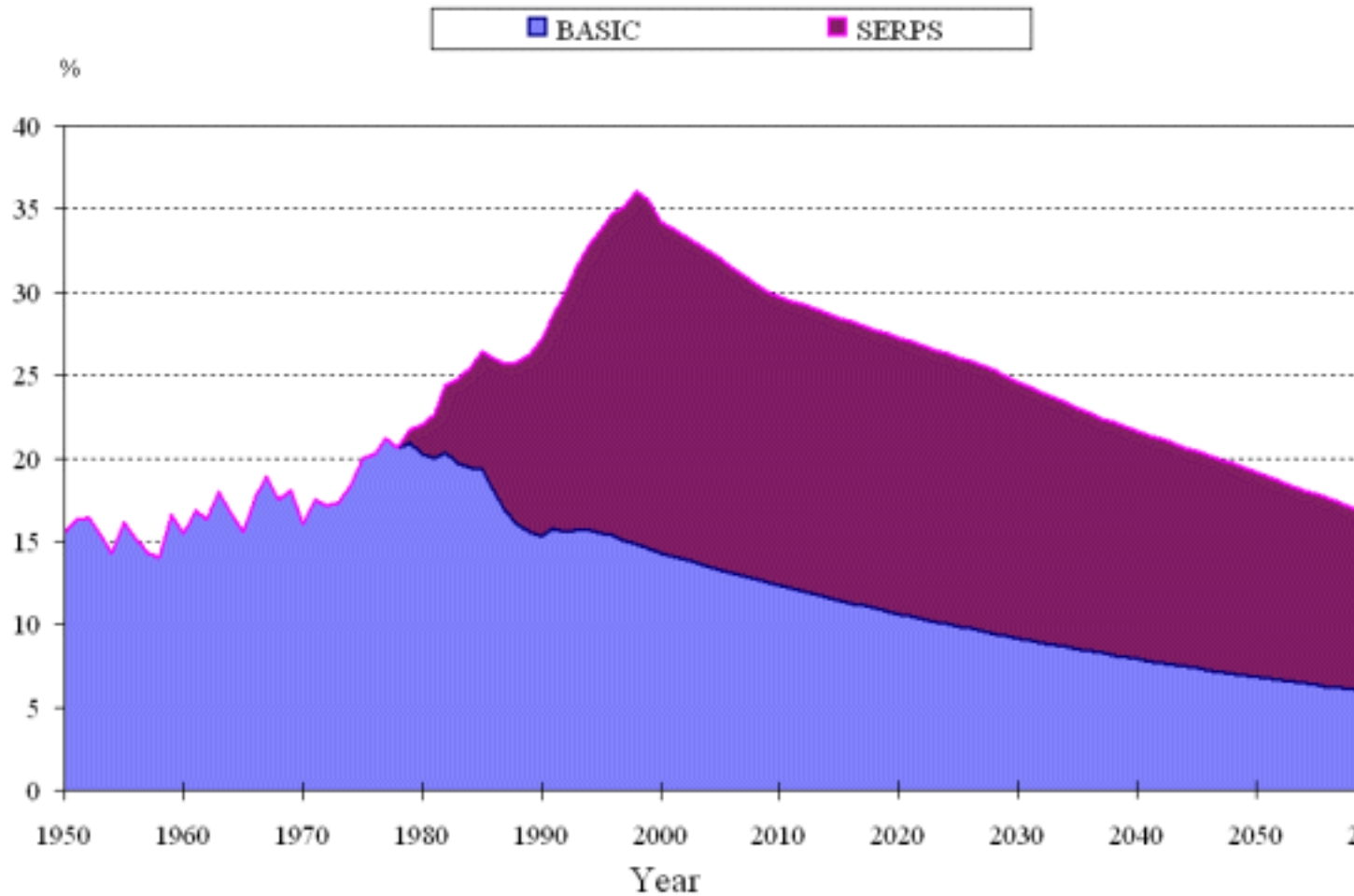
1.17 Employees only pay National Insurance contributions up to the upper earnings limit (UEL), which has fallen steadily relative to earnings, so that it is now only 110% of male full time average earnings compared to a maximum of 136% in 1982 and approximately 115% at the beginning of the 1990s. Continuation of the current policy of uprating earnings limits in line with price inflation would mean that, for employees with earnings above the UEL, a constant National Insurance contribution rate will result in their contributions falling significantly over time as a percentage of their total earnings. A much greater share of National Insurance contributions would be paid by the employer than by the employee, since the employer also pays contributions on earnings above the upper earnings limit.

1.18 Real earnings growth will result in working people being relatively better off in future even if National Insurance contribution rates were to be increased to meet the cost of increasing flat-rate benefits in line with earnings. Based on gross pay and real earnings growth of 1.5% per annum, real earnings relative to prices will, in the year 2060, be approximately 2.5 times the corresponding level in 1999/00. Allowing for higher National Insurance contribution rates and earnings limits, someone on average male earnings would have real net earnings, after National Insurance contributions, of approximately 2.4 times current levels.

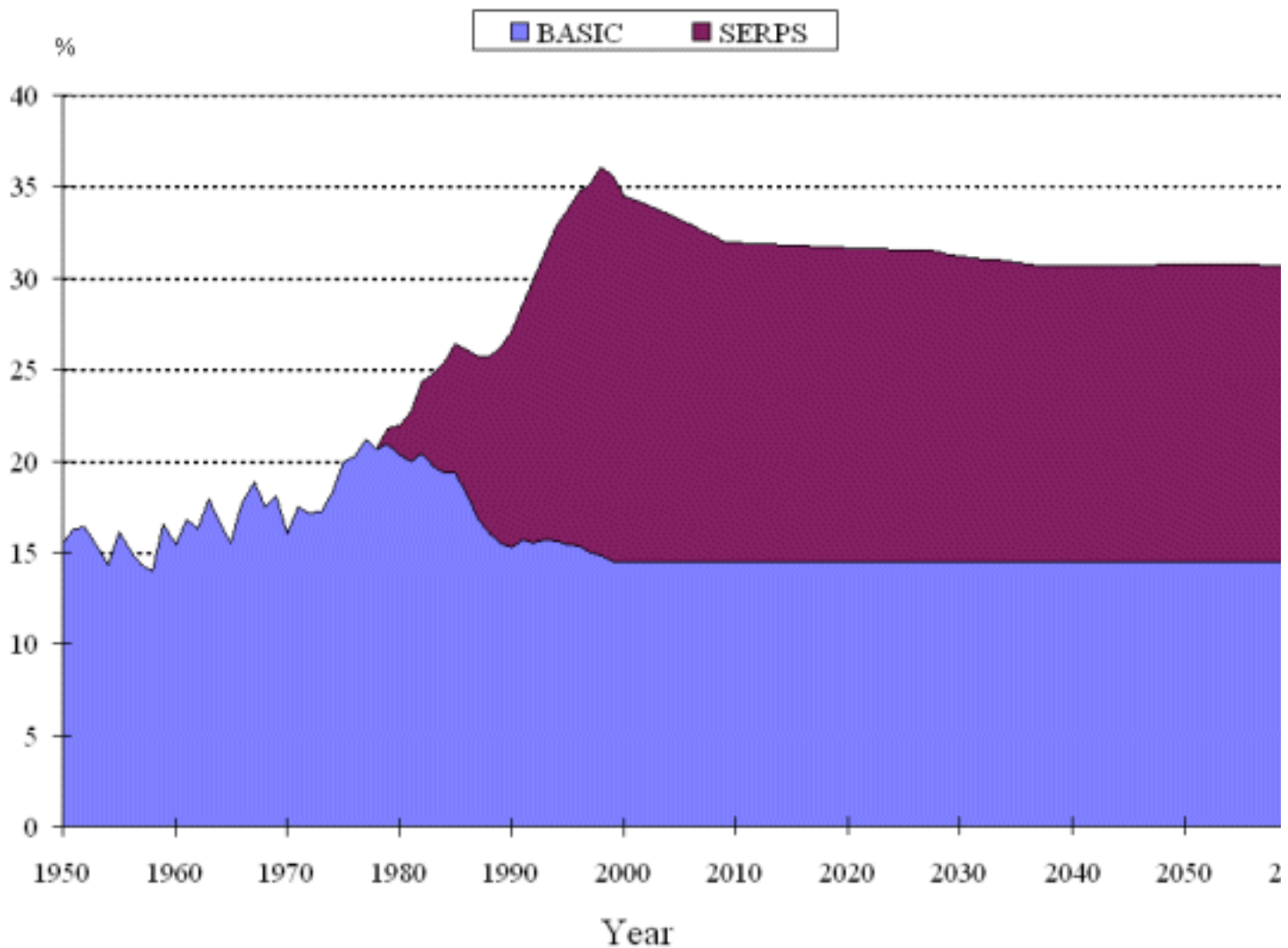
**National Insurance pension levels for individuals**

1.19 Figures 1.1 and 1.2 show the total of basic pension and SERPS at award in various years for men on average earnings and full contribution record. Figure 1.1 shows that, where earnings limits and flat-rate benefits are increased with prices, the awards increase significantly as a percentage of earnings. Figure 1.2 shows that, where earnings limits and flat-rate benefits are increased in line with earnings, the awards stay approximately constant as a percentage of earnings.

**Figure 1.1 Awards of basic and SERPS pension to men on average earnings as a percentage of average earnings with flat-benefit rates and earnings limits increased with prices**



**Figure 1.2 Awards of basic and SERPS pension to men on average earnings as a percentage of average earnings with flat-benefit rates and earnings limits increased in line with earnings**



1.20 Thus the significantly different contribution rates required in future, depending on the rate at which earnings limits and flat benefits are increased, reflect the very different levels of pensions awarded at retirement in future years, according to the different assumptions for earnings limits and flat-rate benefit increases.

**Table 1.4 Change in GDP per pensioner relative to 1999**

Year	1999-00	2000-01	2010-11	2020-21	2030-31	2040-41	2050-51	2060-61
Price uprating	100.0	99.5	93.0	87.8	75.4	63.6	56.2	50.0
Earnings uprating	100.0	100.8	106.1	112.2	109.1	105.1	104.9	104.9

1.21 Table 1.4 shows the relative change in the proportion of GDP to be spent on each pensioner in future years relative to the corresponding figure for 1999. With earnings uprating, pensioners receive an increasing share in GDP relative to 1999. This reflects the fact that the benefit rate is increasing at the same rate as the economy, that women's entitlement will grow relatively over the next years, and that more pensioners will have a significant SERPS benefit as older pensioners with little SERPS entitlement die and are replaced by newer pensioners with a fuller entitlement. With price uprating of benefit rates, in future years each pensioner will receive a smaller proportion of GDP relative to 1999. This reflects the fact that price uprating of benefit rates will not keep pace with the underlying growth in the economy and this more than offsets any increased benefit from higher women's and SERPS entitlement.



## 2. Introduction and Scope of the Review

2.1 The Great Britain National Insurance Scheme is financed on the pay-as-you-go principle with current rates of National Insurance contributions set to produce the income needed to meet current expenditure on benefits and the costs of administration, as well as maintaining a reasonable working balance in the Fund. Legislation provides for a limited Treasury Grant to be paid into the Fund if the working balance in the Fund falls below a certain level. The legislation governing the National Insurance Scheme in Great Britain has always made provision for 5-yearly reviews by the Government Actuary on the operation of the scheme, including long term projections of the expenditure and of the corresponding rates of contribution likely to be required in future years. The present review is based on the quinquennium 6 April 1990 to 5 April 1995 and contains projections to the year 2060.

2.2 The Social Security Contributions (Transfer of Functions, Etc.) Act 1999 transferred responsibility for National Insurance Contributions policy to Treasury Ministers and the Inland Revenue with effect from 1 April 1999. Operational policy and functions were also transferred. The Department for Social Security continues to be responsible for policy on benefits. For the period covered by the review, responsibility was with the Department of Social Security.

2.3 The previous review, based on the period 6 April 1985 to 5 April 1990, was published as HC 160, printed on 31 January 1995. Since that date the Government Actuary has made annual reports on the estimated short-term financial effects on the National Insurance Fund of amendments to the contribution and benefit rates.

2.4 The object of this Review is to report on the progress of the National Insurance Fund over the five year period and to consider the likely impact of the current legislation, including estimating the contribution rates likely to be required up to the year 2060 in order to finance the promised benefits. With the pay-as-you-go nature of financing, the Fund will remain adequate to meet the demands upon it over future years provided contribution rates are maintained at levels sufficient to generate the income each year to meet the expenditure in that year. As well as reviewing the financial effects on the National Insurance Fund, it is appropriate to consider the likely impact of the benefit provisions from the beneficiaries' point of view and the impact of the contribution structure on the balance of financing between the different participants.

2.5 The Pensions Act 1995 introduced a number of important changes that affect the National Insurance Fund. Throughout this review allowance has been made for these changes, of which the main ones are

- a. the increase in female retirement age from 60 to 65, phased in over the years 2010 to 2020;
- c. changes to the State Earnings-Related Pension Scheme (SERPS) entitlement and contracting out arrangements from April 1997;
- e. the introduction of age-related rebates from April 1997 for those contracting out via appropriate personal pensions and money purchase occupational pension schemes.

2.6 The review also allows for the changes to the contribution structure from April 1999, introduced by the Social Security Act 1998. The effects of these changes are shown in Section 9. Section 10 of the report sets out the effects of the changes to the National Insurance contributions structure announced in the March 1999 budget as far as they are known at this stage. The review does not include the effects of the recent green paper "A new contract for welfare: Partnership in Pensions", the current Welfare Reform Bill or the current Tax Credits Bill.

2.7 The dominant items of income and expenditure for the Fund are contributions and retirement pensions. It is factors that affect these which produce significant changes in the contribution rates needed in future to keep income and expenditure in balance. These factors are:

- a. the future relationship between increases in benefit rates and increases in earnings levels;
- b. future changes in the relative numbers of contributors and pensioners;

- c. the maturing of SERPS;
- d. the numbers of people contracted-out of SERPS and the terms for contracting out;
- e. the maturing of Home Responsibilities Protection.

2.8 In this report, estimated contribution income and benefit expenditure for future years are expressed in constant 1999/00 price terms. The principal assumption throughout the review for real earnings growth in excess of price increase is 1.5% per annum. The actual level of price increase has little effect on the results as figures are presented in constant price terms but where an assumption has been necessary, price increases have been assumed to be 4.0% per annum.

2.9 References to earnings limits for contributions should be taken as referring to the new threshold for employers' National Insurance contributions as well as to the lower and upper earnings limits where appropriate.

# 3. The impact of different assumptions for future flat-rate benefit and earnings increases

## Benefit expenditure

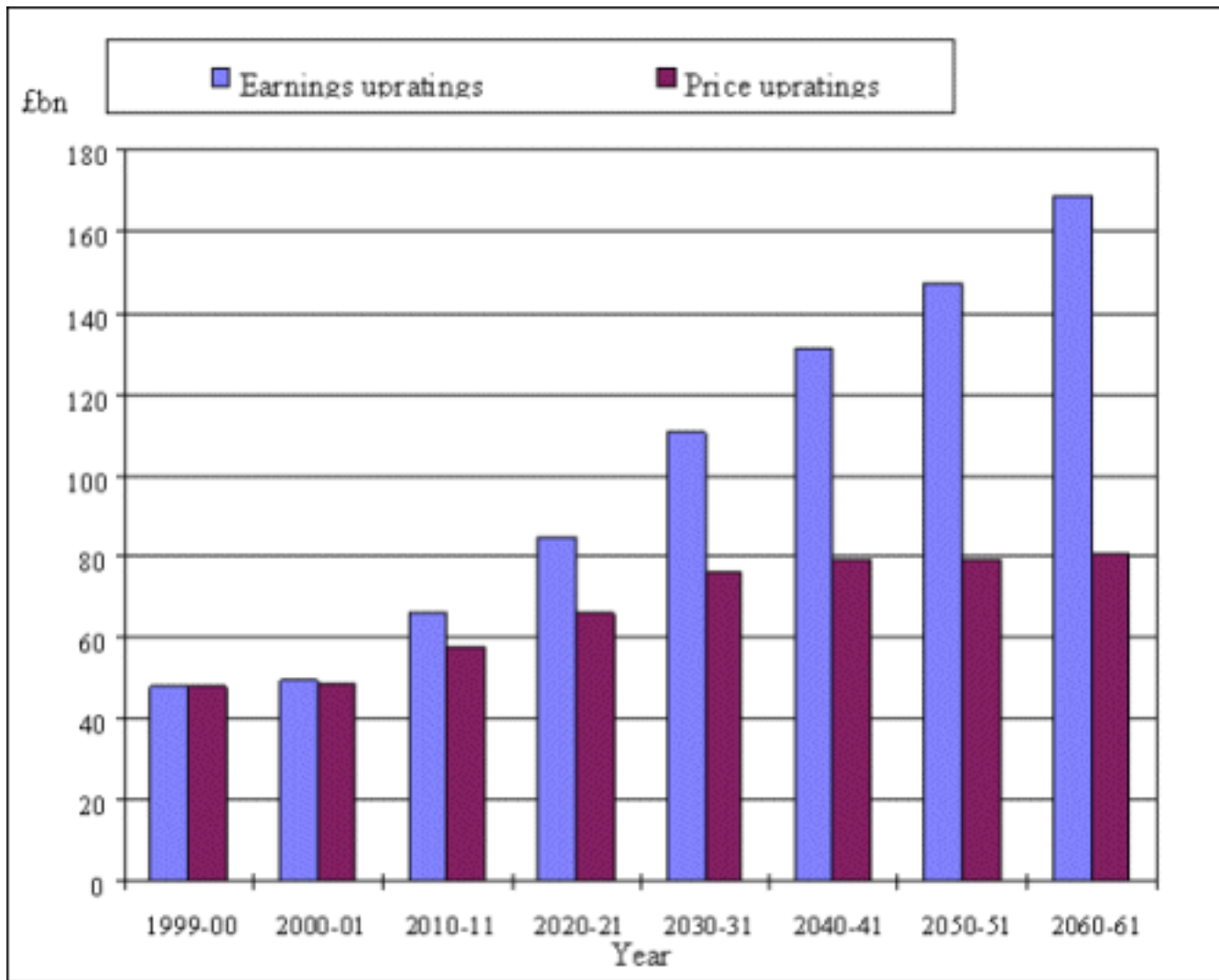
3.1 The total cost of benefit expenditure is critically dependent on the future rate of increase in benefit rates. This is illustrated in 3.1 which shows projected expenditure on two different assumptions for increasing the rate of flat-rate benefits:

- (a) increasing flat-rate benefit rates in line with prices;
- (b) increasing flat-rate benefit rates at the same rate as earnings.

Throughout this report SERPS pensions in payment are assumed to be increased with prices, in line with the original policy intent and practice adopted since the introduction of SERPS in 1978.

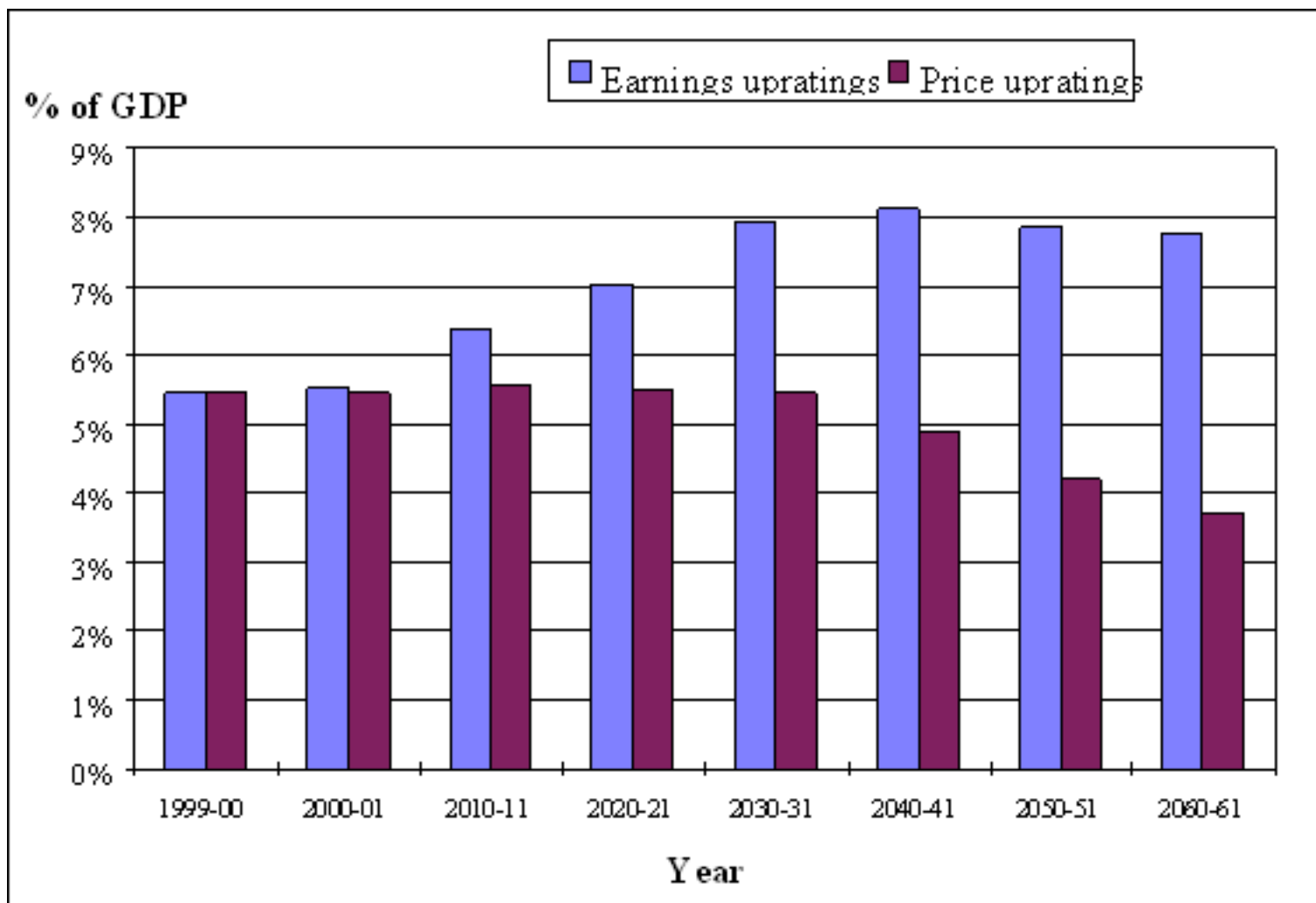
**Figure 3.1 Total expenditure assuming flat-rate benefit increase with prices or earnings in future (in 1999/00 price terms, earnings growth of 1.5% per annum)**





3.2 There is likely to be close correlation over the long term between the real growth in earnings and the real growth in the economy. Illustrating expenditure in constant price terms does not indicate the burden of the expenditure relative to the size of the economy; Figure 3.2 therefore shows an estimate of expenditure as a proportion of GDP.

**Figure 3.2 Total expenditure as a percentage of GDP assuming real GDP and earnings growth of 1.5% per annum**



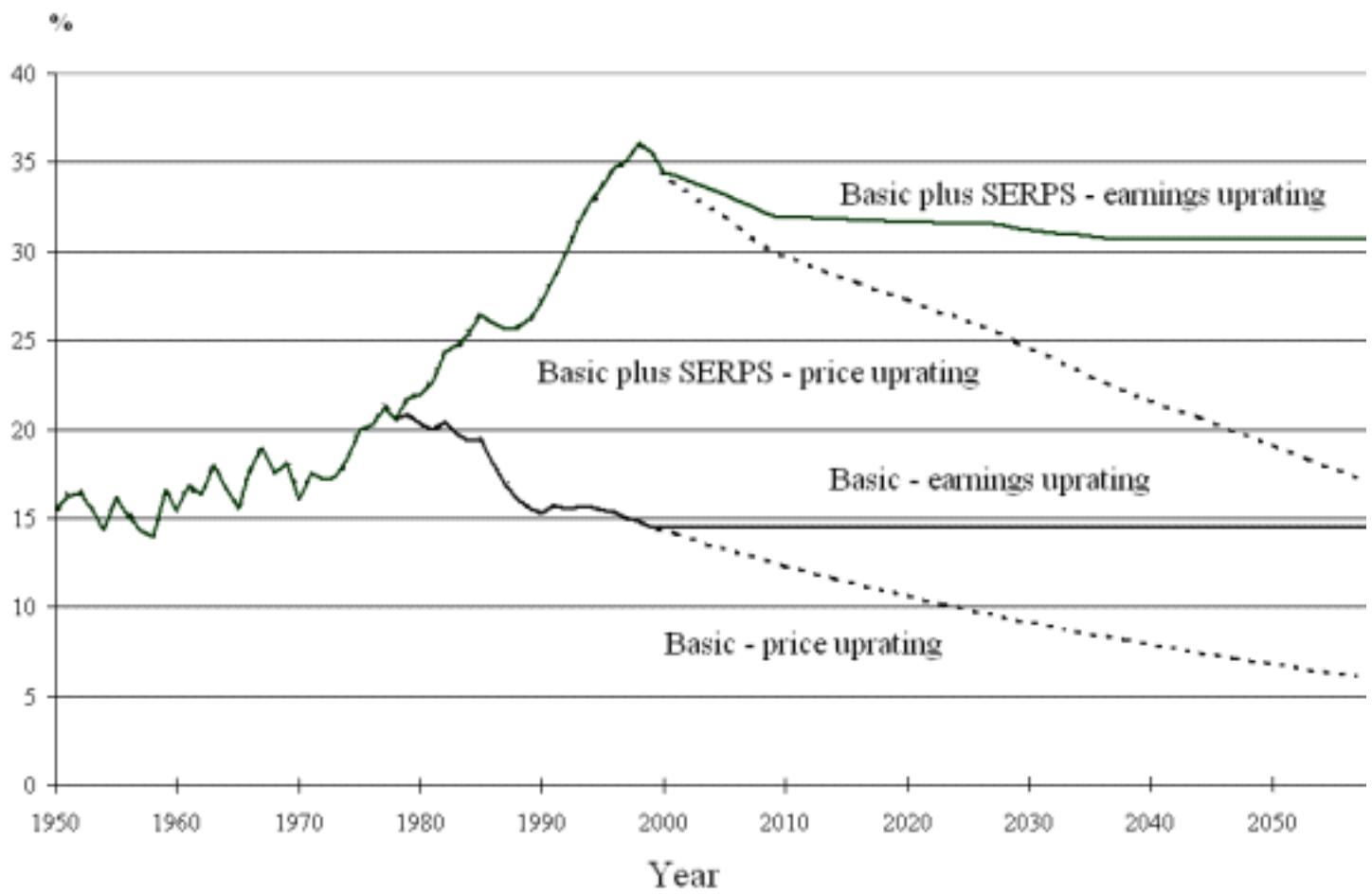
3.3 Figure 3.2 shows that uprating benefit rates in line with prices results in total expenditure staying approximately level as a percentage of GDP for the next 30 years. The increase in the number of pensioners is offset by the benefit rates being increased at a lower rate than the growth in the economy, which is more closely related to growth in earnings. After 2030, when the number of pensioners is no longer increasing, expenditure drops as a proportion of GDP. If benefit rates were uprated in line with earnings, expenditure would grow as a proportion of GDP until 2030, reflecting the increase in the number of pensioners without any offsetting reduction in benefit rates. After 2030, expenditure as a proportion of GDP would level off as the number of pensioners stabilises.

#### Awards of Pensions to Individuals

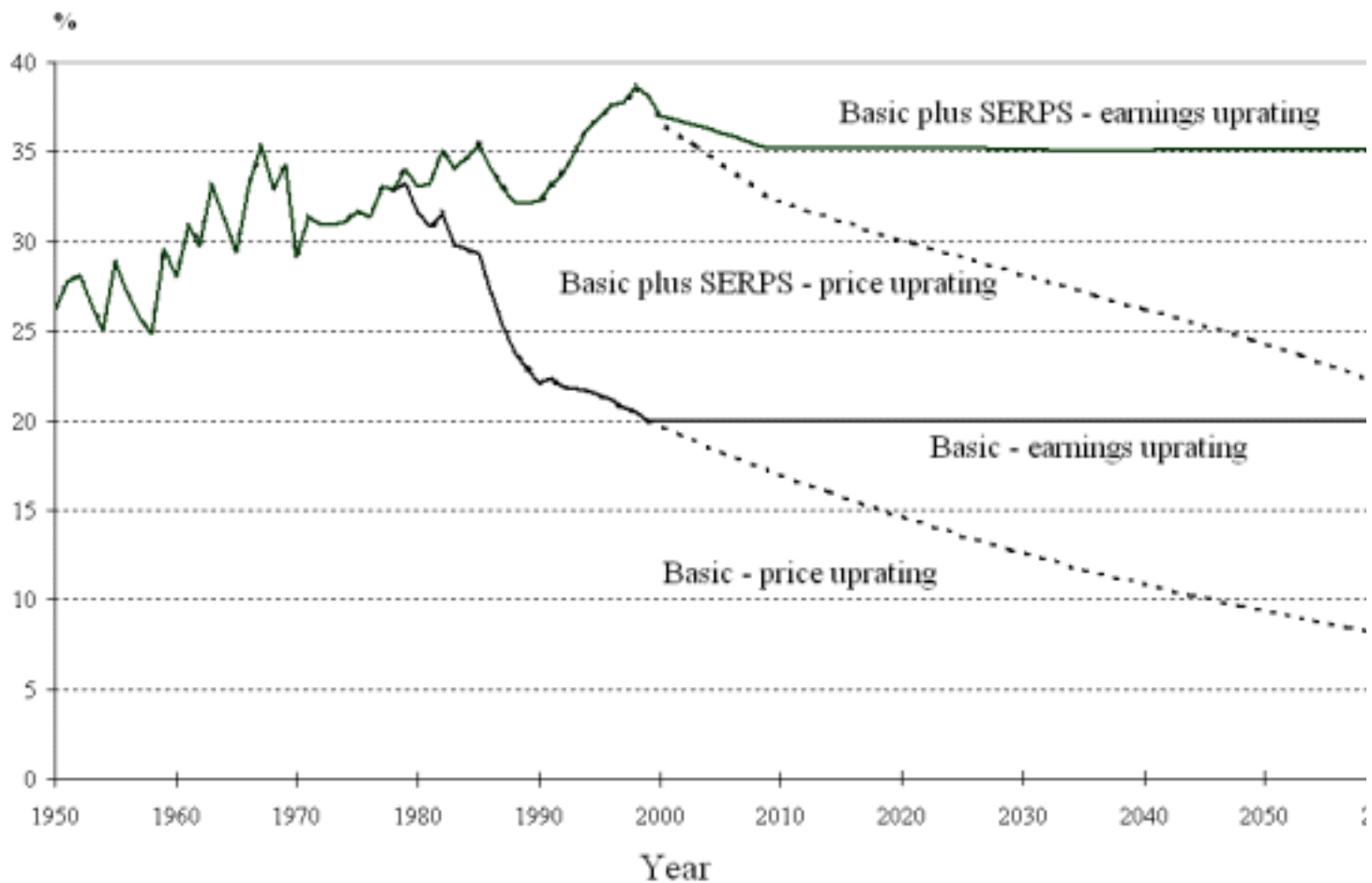
3.4 Uprating flat-rate benefits in line with earnings can be regarded as a maximum possible increase. Uprating by less than earnings would imply that State Pensions will continue to decline in relevance in future, as benefits fall to an ever smaller proportion of earnings. This is illustrated in Figures 3.3 and 3.4 which show the pensions at award for men and women on average earnings with a full contribution record, as a percentage of earnings before retirement on the assumption of:

- (a) increasing flat-rate benefit rates and earnings limits in line with prices;
- (b) increasing flat-rate benefit rates and earnings limits at the same rate as earnings.

**Figure 3.3 Pension at award for a male on average male earnings as a percentage of male average full time earnings**



**Figure 3.4 Pension at award for a female on average female earnings as a percentage of female average full time earnings**

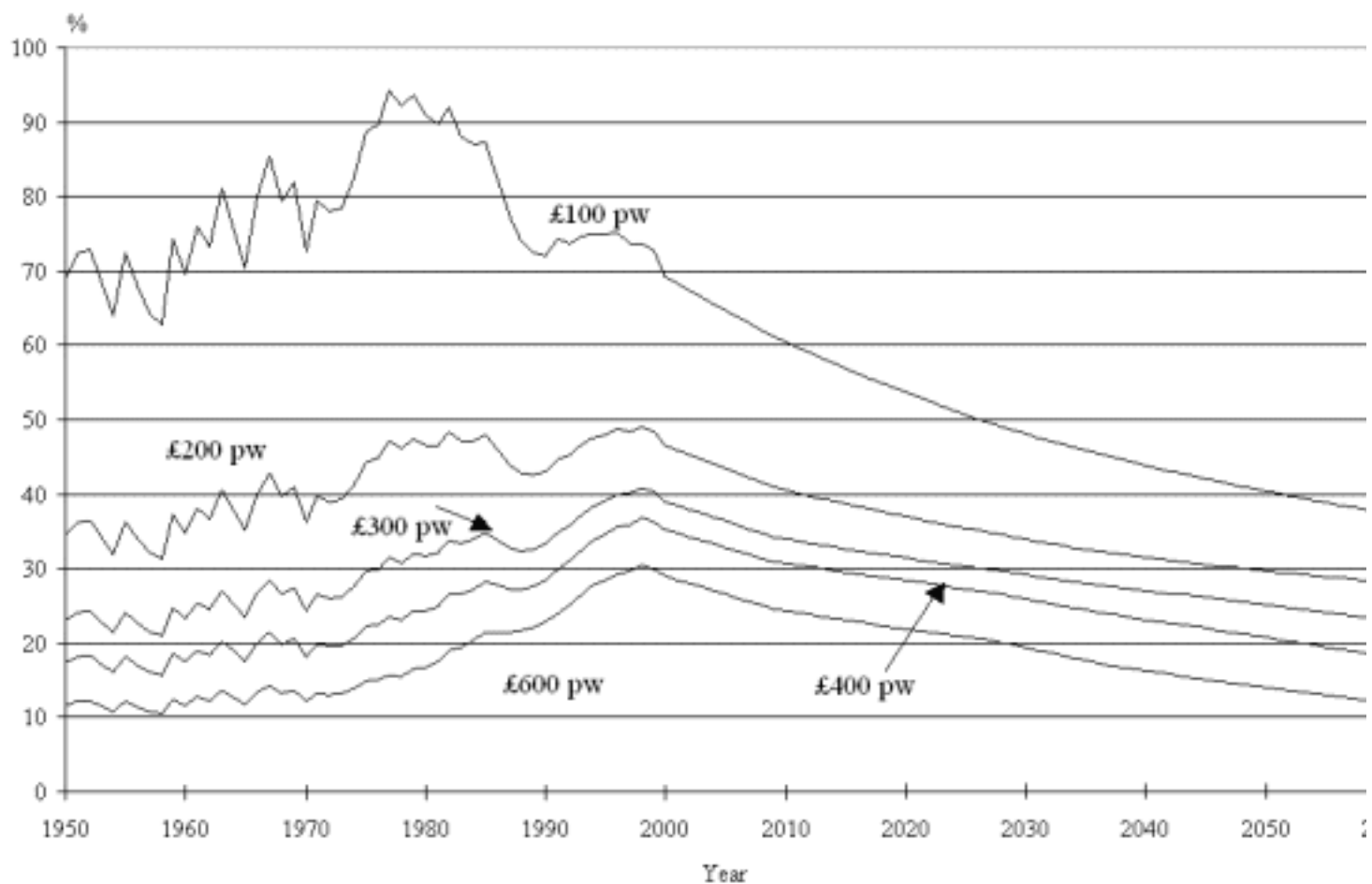


3.5 Between 1980 and 1990 basic retirement pension fell significantly as a percentage of average earnings, as a result of the uprating of basic retirement pension in line with prices over the period. Since 1990 the gap between price and earnings inflation has been narrow so that there has been less of a fall in the rate of basic retirement pension as a percentage of average earnings. With continued uprating of basic retirement pension in line with prices it will continue to fall as a percentage of average earnings so that in the year 2060 it will be approximately 6% of male average earnings and approximately 8% of female average earnings assuming that earnings increase at 1.5% per annum more than prices.

3.6 Until 1999/00 the decline in basic retirement pension as a percentage of average earnings has been more than offset by the increasing SERPS entitlements for those with good contribution records. However, with continued uprating of basic retirement pension and earnings limits at less than earnings increases, ultimately, for a person on average earnings, basic retirement pension plus SERPS will be a lower percentage of average earnings than basic retirement pension alone was in 1980.

3.7 Since basic pension is a flat-rate benefit and SERPS entitlement relates to earnings between the lower and upper earnings limits, pension at award will be a different percentage of earnings, depending on the level of earnings. This is illustrated in Figure 3.5 which shows the pensions at award for people with different earnings who have paid contributions each year in their working life, as a percentage of earnings before retirement on the assumption of uprating benefit rates and earnings limits in line with prices.

**Figure 3.5 Basic retirement pension plus SERPS at award as a percentage of earnings for different weekly earnings levels**



3.8 From now on, new awards of state pensions will fall relative to earnings at retirement for all levels of earnings. Even low earners will ultimately receive a combined basic retirement pension and SERPS of less than 40% of earnings.

### Contribution income in respect of employees

3.9 Whereas benefit expenditure is very dependent on the level of future increases in flat-rate benefits, contribution income is more linked to increases in earnings. The major exception is that the lower and upper earnings limits and the earnings threshold, which are the earnings on which contributions are paid, currently increase at the same rate as flat-rate benefits. This is most significant for employees' own contributions which are only payable on earnings up to the upper earnings limit. This is illustrated in Figures 3.3 and 3.7 which show the estimated gross contribution income (i.e. excluding contracted-out rebates) if current contribution rates remain constant in future, allowing for alternative assumptions for increasing the earnings limits:

- increase earnings limits with prices;
- increase earnings limits with earnings.

**Figure 3.6 Gross contribution income in respect of employees with constant contribution rates but different increases to contribution earnings limits (£bn in 1999/00 price terms)**



**Figure 3.7** Gross contribution income in respect of employees with constant contribution rates but different increases to contribution earnings limits, as a percentage of GDP



3.10 Figure 3.7 shows that contribution income remains roughly constant as a percentage of GDP over the period when earnings are increased at the same rate as earnings (Column 2). The figures are not distorted by a change in the number of contributors over period since the number of contributors only increases slightly, before falling back in 2060 to around the current level.

3.11 However, when earnings limits are increased in line with prices, contribution income from employees reduces as a percentage of GDP. This arises principally because employees only pay contributions on earnings up to the upper earnings limit. Once employed above the upper earnings limit, increases in their earnings do not generate any more contributions by the employee. Over time, if earnings increase at a faster rate than the upper earnings limit, many employees will earn above the upper earnings limit for contributions, which is currently approximately 110% of male full-time average earnings. The relative fall in the UEL compared male average earnings since the current UEL took effect in 1978 is illustrated by the fact that the ratio of the UEL to male full-time average earnings was a maximum of 136% in 1982 and approximately 115% at the beginning of the 1990s.

3.12 This effect is offset by employers' contributions, which are higher as a percentage of GDP when earnings limits increase at lower rate than earnings. This is because there is no upper limit for employer contributions and increases in earnings faster than increases in the earnings threshold includes more earners and earnings at the bottom of the earnings range.

3.13 Overall, the effect of increasing earnings limits by 1.5% per annum less than earnings is to reduce contribution income in 2060 by nearly 3% compared to increasing earnings limits at the same rate as earnings, for a constant contribution rate.

3.14 Figure 3.8 shows that where earnings limits are increased in line with prices, the employer will bear a proportionately greater share of the cost. In 1999/00 employers contribute approximately 58% of contributions in respect of employees, with employees contributing the balance. If earnings limits increase each year with prices, by 2060 employers will be contributing 72% of these contributions.

**Figure 3.8 Percentage of gross contribution income in respect of employees paid by employees and employers, based on a constant contribution rate**



### Contributions paid by individual employees

3.15 If earnings limits are increased in line with earnings, then an insured employee who receives earnings increases in line with national average will continue to contribute the same proportion of earnings, assuming that contribution rates are unchanged. However, if earnings limits are increased at a lower rate than earnings increases, an employee on average earnings will, in due course, pay a smaller proportion of earnings in contributions. This is illustrated in Figure 3.9, which shows the percentage of total earnings paid by an employee on full time average earnings, assuming a constant contribution rate and earnings limits increasing in line with prices.

**Figure 3.9 Employee contributions for employees on full time national average earnings as a percentage of earnings (male and female respectively) assuming a constant contribution rate and earnings limits increasing in line with prices**



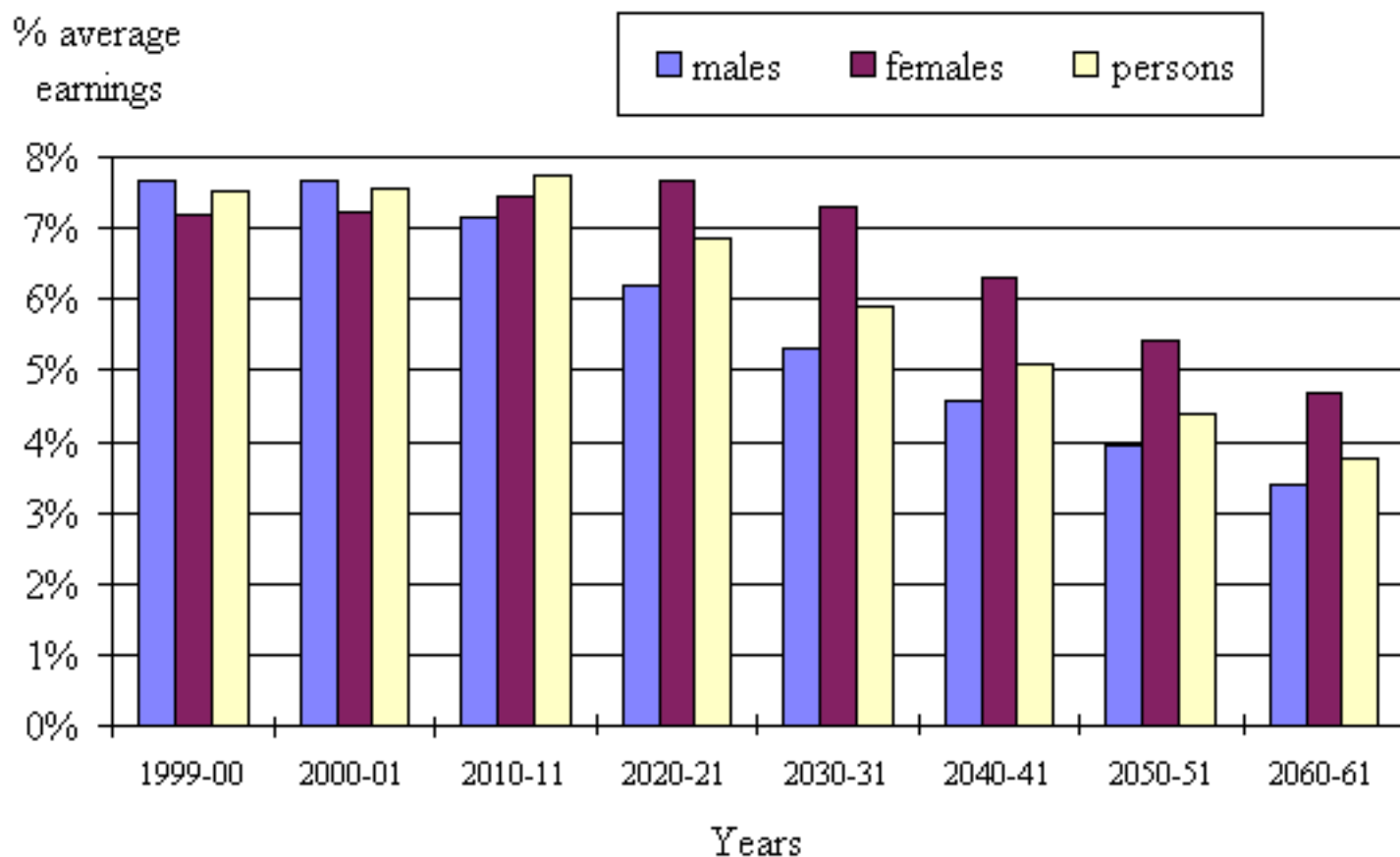


Figure 3.9 shows that a person on average full time male earnings who is not contracted-out, currently pays nearly 8% of their earnings as National Insurance contributions (excluding the part paid to the NHS). This percentage rises slightly (as the LEL falls relative to earnings) until the year 2005, by which time male average earnings exceed the upper earnings limit, assuming earnings grow at 1% per annum faster than prices. After this, National Insurance contributions will decline as a percentage of earnings, as National Insurance contributions will be constant and earnings will increase.

3.16 The picture is similar for a person on average full time female earnings. However, since these earnings are currently lower than men's, the percentage of the earnings payable as National Insurance contributions will increase slightly until the year 2026, by which time average female earnings will also have reached the upper earnings limit, assuming earnings grow at 1.5% per annum faster than prices. The percentage will then decline in a similar fashion to that for a person on average full time male earnings. Figures are shown for a person on average full time earnings.

3.17 Figure 3.9 is based on average earnings. As indicated by the difference between average male and female earnings, the impact depends on the level of earnings. The higher the earnings of an individual, the earlier the time when their earnings will be above the upper earnings limit and their National Insurance contributions will fall as a percentage of all their earnings.

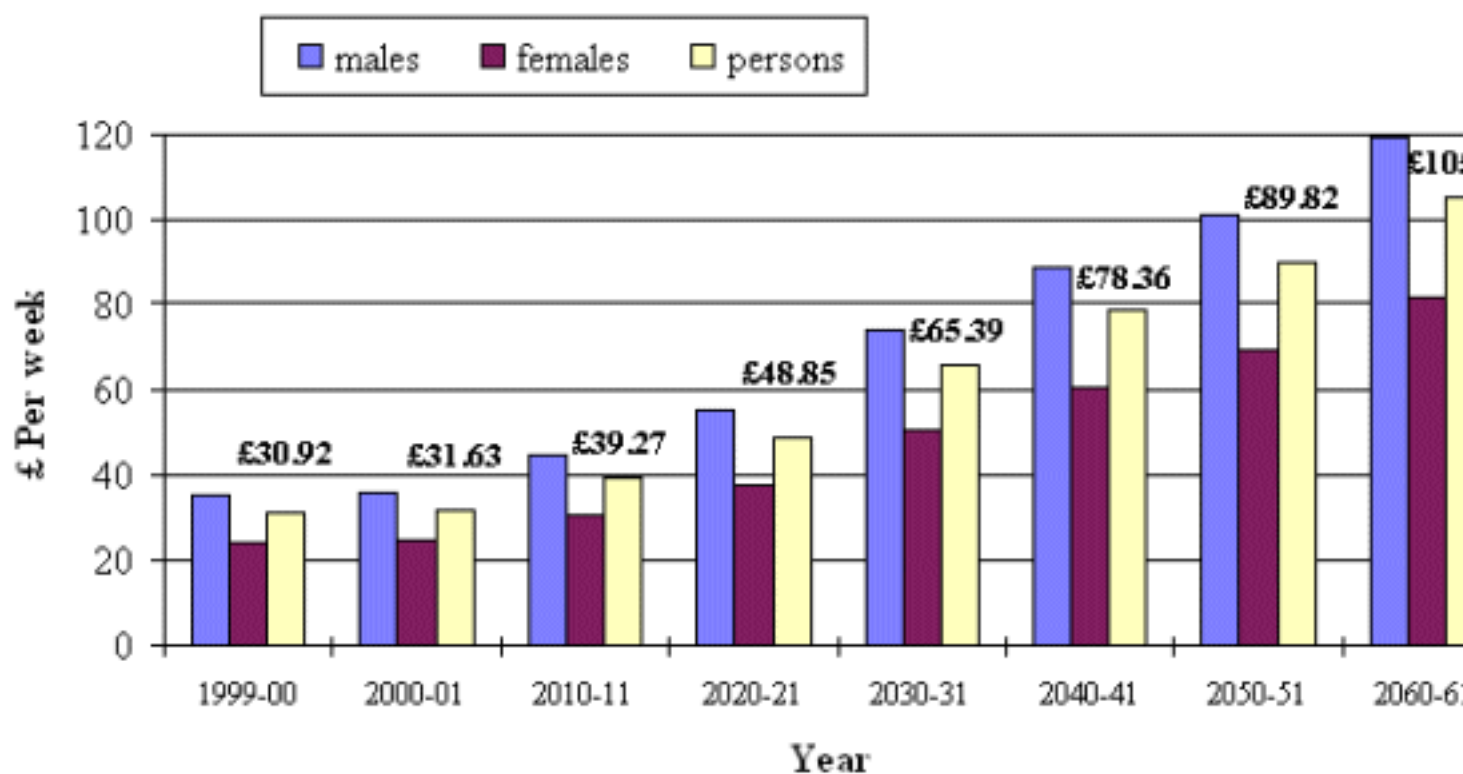
3.18 Where flat-rate benefit rates are increased at a rate less than earnings increases, the required future contribution rates fall. This compounds the effect illustrated in Figure 3.9. For example, based on the contribution rates estimated to be required in future years where flat-rate benefit rates and earnings limits increase by 1.5% per annum less than earnings, men on average earnings will be required to pay National Insurance contributions of 2% of their total earnings in the year 2060. The corresponding figure for women is 3%.

3.19 Figures 3.10 and 3.11 show the amount of weekly National Insurance contributions to be paid in future, in constant 1999/00 terms, by a man, a woman and a person on average full time earnings, taken as £460 per week, £335 per week and £415 per week respectively in 1999/00. Figures shown are for the employees' contribution only. Figure 3.10 gives figures with price upratings of earnings limits and benefits and takes account of the actual contribution rate required in future years, as set out in Section 5. The contributions exclude the NHS proportion. Figure 3.11 gives corresponding figures for earnings uprating of earnings limits and benefits. The monetary amounts shown relate to the persons' columns.

**Figure 3.10 Weekly National Insurance contributions (excluding the NHS proportion) paid by an employee on average earnings based on actual future contribution rates required where benefits and earnings limits are increased in line with prices**



Figure 3.11 Weekly National Insurance contributions (excluding the NHS proportion) paid by an employee on average earnings based on actual future contribution rates required where benefits and earnings limits are increased with earnings



## 4. Future changes in the relative numbers of contributors and pensioners

4.1 In order to project the future income and expenditure of the National Insurance Fund, it is necessary first to estimate the future numbers in the population of Great Britain subdivided by age, sex and marital status. Projections of the future population of Great Britain are prepared regularly by the Government Actuary in consultation with the Registrars General of England and Wales and of Scotland. The projections based on the estimated population at mid-1996 have been used for the present review.

4.2 The assumptions of most significance for the future finances of the National Insurance Fund are discussed in the following paragraphs.

4.3 Estimates of the future population many years ahead are inevitably subject to a considerable margin of uncertainty. This is recognised in the official projections which, in addition to a principal projection, include variant projections on alternative assumptions in regard to the main factors. The principal projection has been used for the main estimates in Section 5 of this report. The variant projections form the basis of the estimates of the effect of changes in the mortality and fertility assumptions on the future rates of contribution shown in Section 8.

4.4 Those persons who will be over the pension ages for men (65) and women (increasing from 60 up to the year 2010 to 65 by the year 2020) up to the middle of the next century are already living. Thus, the projected numbers of pensioners will be very largely determined by the assumption about future mortality and, to a lesser extent, by migration. The mortality rates assumed have been based on the experience over recent years, with an allowance made for continuing improvement in mortality for the period of the projection. For the main estimates, Table 4.1 shows the expectation of life based on the mortality rates assumed for specimen years.

**Table 4.1 Future expectation of life in Great Britain based on projected mortality rates**

	Year	Expectation of life		
		1996	2030	2060
Males				
At birth		74.3	78.5	79.2
At age 65		14.9	17.6	18.2
Females				
At birth		79.5	83.2	84.0
At age 65		18.4	21.2	21.7

4.5 Table 4.1 compares average expectations of life based on the projected mortality for the years 2030 and 2060 with current figures. The expectations of life are on a period rate basis so that, for example, the figures for 1996 assume that the mortality rates experienced at all ages will be those for 1996 with no allowance for future improvements in mortality.

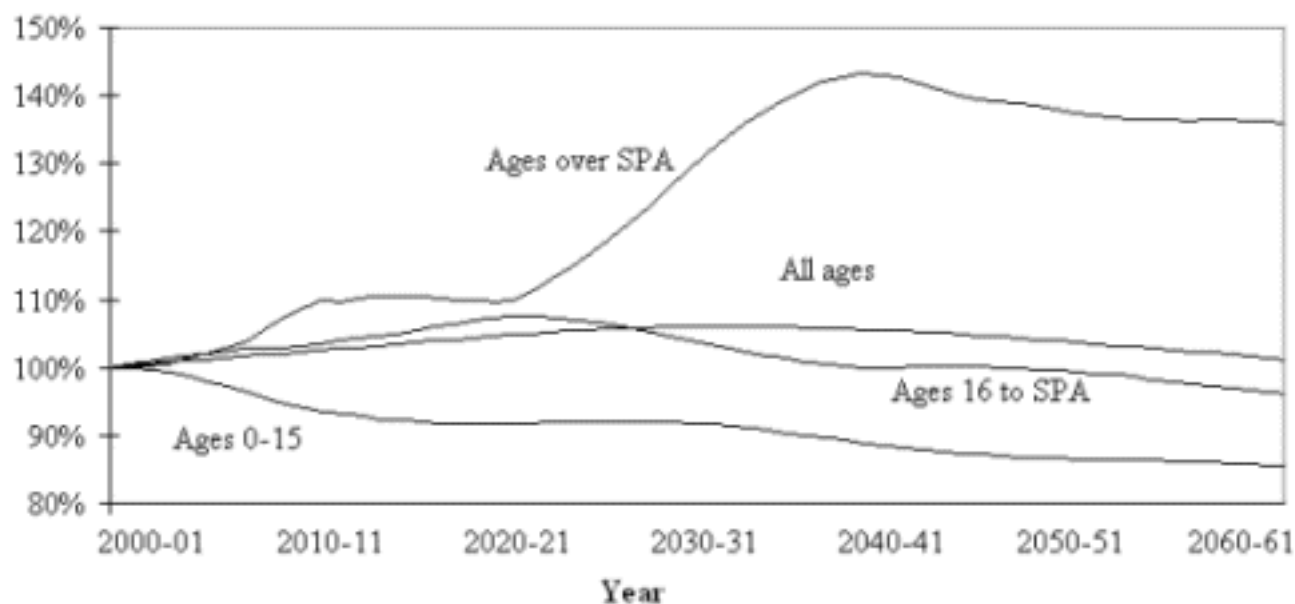
4.6 Mortality is of much less significance in determining the future numbers at working ages, since after about 20 years the numbers at these ages will depend to an increasing extent on the numbers of future births. The fertility rates for women at each age in recent years have totalled just below 1.8 children per woman, broadly the average level which has applied since the late 1970s, though well below the fertility experienced during the immediate post-war years and in the 1960s. It was assumed for the principal projection that this 'total period fertility rate' would remain at the level of 1.8 throughout. This is

about 15% below the rate of 2.1 required for each generation exactly to replace itself.

4.7 The population projections assume a net inward migration of 68,500 per annum from 1998/99 onwards. This, together with the other changed assumptions, result in an extra 1.3 million people of working age in the year 2030 and an extra 0.5 million pensioners by the year 2060.

4.8 Details of the projected numbers in the population, by age and sex, are shown in Appendix C. A summary of the future relative changes in the age bands most relevant for this review is given in Figure 4.1 and the projected numbers for specimen years are given in Table 4.2.

**Figure 4.1 Population projection for Great Britain - Relative change in the total population, numbers of children, people of working age and pensioners (1999=100 %)**



Note: SPA is state pension age; 65 for men and 60 for women, increasing to 65 between the years 2010 and 2020

**Table 4.2 Population projection for Great Britain (Female pension age rising from 60 to 65 during the period 2010 to 2020)**

GB population projections - thousands								
Year	1999-00	2000-01	2010-11	2020-21	2030-31	2040-41	2050-51	2060-61
Children 0-15	11684	11680	10920	10724	10703	10303	10109	9981
Working age 16-SPA	35485	35613	36669	38177	36653	35493	35189	34130
Pension age SPA+	10470	10490	11491	11501	13767	14930	14353	14233
Total	57639	57783	59080	60401	61122	60727	59651	58344

Note: SPA is state pension age

4.9 On the basis of the projection, the numbers in Great Britain over pension age will rise slowly from the current 10.5 million to about 10.8 million in the next six years and then faster to about 11.5m in the year 2010. Between 2010 and 2020, during which time female pension age is raised to 65 on a phased basis, the numbers over pension age remain almost constant. After this the numbers over pension age will rise more rapidly to a peak of 15 million, nearly 50% above the current numbers, in the year 2038, before slowly declining again to 14.2 million by the year 2060. The Pensions Act 1995 increases female pension age from 60 to 65 during the years 2010 to 2020. Without this change, the number over pension age would have been higher by a maximum of about 2.2 million during the 2020s.

4.10 By contrast, again allowing for the change in female pension age, the expected changes in the numbers at working ages are relatively small. The number rises slowly from the current 35.5 million to a peak of 38.2 million, some 8% above the current number, in the year 2020, before falling again to 34.1 million, some 4% below the current number, by the year 2060. The fall in the long term reflects the assumption that fertility rates will be lower than the level required to replace the population, which more than offsets the effect of a significant amount of net inward migration.

4.11 Table 4.3 shows the future changes in the pensioner support ratio - the number of people of working age per person of pension age.

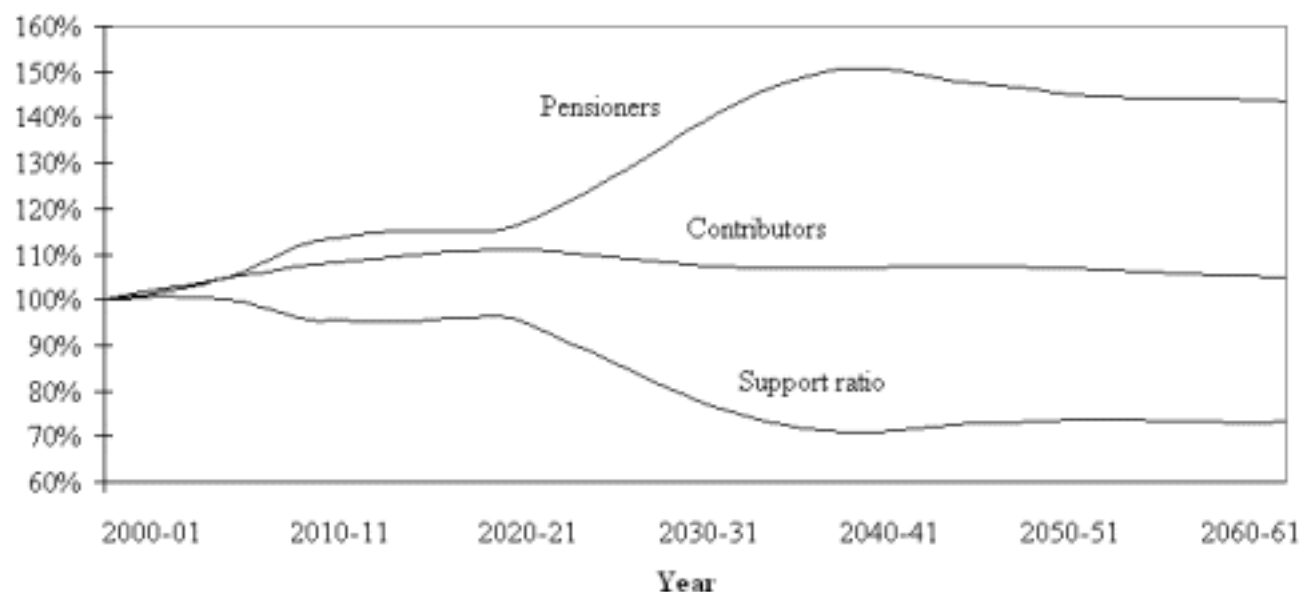
**Table 4.3 Pensioner support ratio**

Year	Number of people at working age per person at pension age
1999	3.4
2000	3.4
2010	3.2
2020	3.3
2030	2.7
2040	2.4
2050	2.5
2060	2.4

4.12 The drop in the ratio of the number of persons of working age per person over pension age from the current 3.4 to 2.4 in 2036 would lead, other things being equal, to an increase of over 40% in the required rate of National Insurance contributions.

4.13 When looking at the financial prospects for the National Insurance Fund, it is also necessary to take into account the proportions of the working population at different ages who are expected to be contributors and the proportion of the elderly who will be in receipt of pensions, including allowing for those pensions paid to people overseas. The detailed assumptions used to estimate these are set out in Appendix D. Figure 4.2 shows the future relative changes in the resulting projected numbers of contributors and pensioners and the contributory support ratio, i.e. the number of contributors per pensioner in future. For the purpose of this report a contributor has been taken to be an employee in respect of whom some contributions are paid. Thus it includes those between the lower earnings limit and the earnings threshold for employers secondary contributions where only the employees pay contributions and those over pension age where only the employers pay contributions.

**Figure 4.2 Relative changes in the number of contributors, pensioners and the support ratio (1999=100%), assuming earnings limits increase in line with prices**



**Table 4.4 Number of employed contributors, pensioners and the support ratio**

Numbers of contributors, pensioners (millions) and the support ratio

	Year 1999-00	2000-01	2010-11	2020-21	2030-31	2040-41	2050-51	2060-61
Contributors	20.0	20.2	21.6	22.2	21.5	21.4	21.3	21.0
Pensioners	10.9	11.0	12.3	12.6	15.2	16.4	15.8	15.6
Support ratio	1.8	1.8	1.7	1.8	1.4	1.3	1.4	1.3

4.14 The trend in future in the contributory support ratio is very similar to that for the population numbers in paragraph 4.11. The figures are, however, significantly lower than for the pure demographic support ratios. The numbers of contributors are lower than the numbers in the population at working ages whilst the numbers in receipt of retirement pension exceed the numbers in the population over pension age when allowance is made for overseas pensioners.

4.15 Table 4.4 shows the number of contributors per pensioner, assuming that earnings limits are increased in line with prices. The reduction in the number of contributors per pensioner is 27% to the year 2060, similar to the reduction in the number at working age to the number over pension age.

4.16 Where earnings limits are increased in line with earnings, the number of contributors is about 2.2 million lower in the year 2060, reflecting more closely the change in the working age population and the greater proportion of women workers with lower earnings.

4.17 Price indexation of earnings limits includes more lower earners than earnings upratings of earnings limits. However, those who earn only slightly above the lower earnings limits contribute very small amounts of National Insurance contributions and therefore do not substantially affect the contribution rates required. The effect on contribution income of extra contributors is lower than implied by the changes in the number of contributors.

## 5. Estimated expenditure and rates of contribution required in future years

5.1 Tables 5.1 and 5.2 show the estimated National Insurance Fund benefit expenditure (including allowance for home responsibility protection on basic and additional pension where appropriate) in future years. Estimated expenditure is shown assuming:

- increasing flat-rate benefit rates and earnings limits in line with prices;
- increasing flat-rate benefit rates and earnings limits at the same rate as earnings, with 1.5% per annum real earnings growth.

**Table 5.1 National Insurance Fund expenditure - flat-rate benefit rates and earnings limits increase with prices (£ billion 1999/00 price terms)**

Year	1999-00	2000-01	2010-11	2020-21	2030-31	2040-41	2050-51	2060-61
Retirement pension Basic	33.6	33.7	37.5	40.4	48.7	52.2	50.5	48.7
Earnings related	4.5	5.0	9.8	12.5	14.8	14.9	15.7	16.2
Widow's pension Basic	0.7	0.7	0.5	0.9	0.7	0.6	0.7	0.7
Earnings related	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Incapacity benefit Basic	6.3	6.4	7.6	9.6	9.3	8.7	8.9	8.9
Earnings related	0.8	0.6	0.1	0.0	0.0	0.0	0.0	0.0
Jobseekers Allowance	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
Other benefits	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Expenses	1.0	1.1	1.2	1.4	1.7	1.9	2.2	2.2
Total Expenditure	48.0	48.6	57.7	65.9	76.2	79.4	79.0	78.7

**Table 5.2 National Insurance Fund expenditure - flat-rate benefit rates and earnings limits increase with earnings (£ billion 1999/00 price terms)**

Year	1999-00	2000-01	2010-11	2020-21	2030-31	2040-41	2050-51	2060-61
Retirement pension Basic	33.6	34.2	44.1	55.1	77.1	95.8	107.3	119.1
Earnings related	4.5	5.0	9.8	12.5	14.8	15.1	16.2	17.4
Widow's pension Basic	0.7	0.7	0.6	1.2	1.2	1.1	1.5	1.5
Earnings related	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Incapacity benefit Basic	6.3	6.5	8.9	12.9	14.4	15.5	18.3	18.3

Earnings related	0.8	0.6	0.1	0.0	0.0	0.0	0.0
Jobseekers Allowance	0.6	0.6	0.7	0.8	0.9	1.1	1.2
Other benefits	0.3	0.3	0.4	0.4	0.5	0.6	0.6
Expenses	1.0	1.1	1.2	1.4	1.7	1.9	2.2
Total Expenditure	48.0	49.2	65.9	84.5	110.6	131.1	147.4

5.2 Table 5.1, which shows expenditure assuming that flat-rate benefits and earnings limits increase in line with prices, indicates increased expenditure in future years, reflecting the increasing number of pensioners. Table 5.2, which shows expenditure assuming flat-rate benefits and earnings limits increase at the same rate as earnings, shows even higher expenditure in future years, reflecting the increasing number of pensioners and the higher uprating assumption. Since these costs are expressed in real price terms, they represent a good indication of the proportion of GDP which National Insurance Fund expenditure represents. This is illustrated in Tables 5.3 and 5.4, which show an estimate of expenditure as a proportion of GDP and the relative change in GDP received by each pensioner.

**Table 5.3 Estimate of total expenditure as a percentage of GDP**

Year	1999- 00	2000- 01	2010- 11	2020- 21	2030- 31	2040- 41	2050- 51
Price uprating	5.5%	5.4%	5.6%	5.5%	5.5%	4.9%	4.2%
Earnings uprating	5.5%	5.5%	6.4%	7.0%	7.9%	8.1%	7.8%

5.3 Where flat-rate benefits and earnings limits are assumed to increase in line with prices, Table 5.3 shows that expenditure stays approximately level as a percentage of GDP until about the year 2030 before declining significantly thereafter. This reflects the increasing number of pensioners until the year 2030, offset by the effective reduction in benefit levels relative to the growth in GDP. After the year 2030, when pensioner numbers level off, the continuing effective cut in benefit rates leads to a fall in expenditure as a proportion of GDP. Where flat-rate benefits and earnings limits are assumed to increase in line with earnings, expenditure increases as a proportion of GDP until the year 2030, reflecting the increasing number of pensioners, with no offsetting effects from reductions in benefit rates. Thereafter the proportion stays approximately constant as the increase in the number of pensioners ceases.

**Table 5.4 Change in GDP per pensioner relative to 1999**

Year	1999- 00	2000- 01	2010- 11	2020- 21	2030- 31	2040- 41	2050- 51
Price uprating	100.0	99.5	93.0	87.8	75.4	63.6	56.2
Earnings uprating	100.0	100.8	106.1	112.2	109.1	105.1	104.9

5.4 Table 5.4 shows the relative change in the proportion of GDP to be spent on each pensioner in future years relative to the corresponding figure for 1999. With earnings uprating, pensioners receive an increasing share in GDP relative to 1999. This reflects the fact that the benefit rate is increasing at the same rate as the economy, that women's entitlement will grow relatively over the next years, and that more pensioners will have a significant SERPS benefit as older pensioners with little SERPS entitlement die and are replaced by newer pensioners with a fuller entitlement. With price uprating of benefit rates, in future years each pensioner will receive a smaller proportion of GDP relative to 1999. This reflects the fact that price uprating of benefit rates will not keep pace with the underlying growth in the economy and this more than offsets any increased benefit from higher women's and SERPS entitlement.

5.5 For earnings-related benefits (SERPS), the difference in cost on the different assumptions shown in the two tables is relatively minor for two main reasons. Firstly, in all cases earnings-related pensions in payment are assumed to be increased with prices, even when the flat-rate benefits are increased in line with earnings. This represents established policy and is not out of line with similar arrangements in the private sector where pensions at award are typically linked to final salary and increases in pension in payment do not normally exceed price increases. Thus, there is no difference in earnings-related expenditure due to different uprating assumptions for the flat rate benefits. Secondly, although the amount of SERPS at award will be slightly different, due to the different earnings



in each case, the extra cost of accruing SERPS with higher upper earnings limits will be offset by lower costs from not accruing on earnings below higher lower earnings limits.

5.6 Table 5.5 shows the estimated Class 1 contribution rates required by the National Insurance Fund in future in order to produce sufficient income to balance the expenditure on benefits and the costs of administration, on the alternative assumptions for the uprating of flat-rate benefits and the earnings limits. The contribution rates shown are for the contributions to the National Insurance Fund and exclude the 1.95% currently payable to the National Health Service. The rates shown are the main rates of Class 1 contributions, i.e. the sum of the employee rate on earnings between the lower and upper earnings limit and the employer rate payable on earnings above the earnings threshold. Contribution income in respect of employed earners accounts for approximately 97% of contribution income, with most of the balance coming from the self-employed.

**Table 5.5 Projected class 1 contribution rates required to balance income and expenditure**

JOINT EMPLOYEE AND EMPLOYER CONTRIBUTION RATE		
Year	Earnings upratings	Price upratings
1999-00	20.0	20.0
2000-01	20.2	19.9
2010-11	21.6	18.9
2020-21	23.2	18.1
2030-31	26.7	18.6
2040-41	27.6	17.1
2050-51	27.3	15.2
2060-61	27.6	14.0

\*The rate actually payable in 1999/00 is 20.25% and is the sum of the employee and employer main rate 10% and 12.2% respectively, less the corresponding National Health Service allocations of 1.05% and 0.1% respectively.

5.7 The contribution rates for 1999-00 shown in Table 5.5 are based on the new contribution structure introduced by the Social Security Act 1998. The rate of 20.0% for 1999 may be compared with the corresponding rate on the old structure, which would have been 17.4%. The actual rate payable to the National Insurance Fund in 1998/99 under the old structure was 18.05% (the employee and employer main rates of 10% each, less the allocation of 1.95% to the NHS)

5.8 The last column of Table 5.5 shows projected contribution rates on the assumption that benefits and earnings limits will rise year with prices, assumed to be 1.5% per annum less than earnings. The contribution rates fall slowly but with a small rise in 2020/21. The growing cost of SERPS and the increase in the number of pensioners is broadly offset by the continuous fall in the level of flat-rate benefits in relation to earnings. The sharp fall in the contribution rate required between 2030/31 and 2060/61 is caused by the continuing fall in the flat-rate benefits relative to earnings, at a time when the demographic trends are projected to be more stable and expenditure on earnings-related pensions has stabilised.

5.9 The first column of Table 5.5 shows projected contribution rates on the assumption that benefits and earnings limits will rise at the same rate as earnings each year. In this case, the demographic effects and the maturing of SERPS are not offset by a slower growth of flat-rate benefit rates, and contribution rates rise significantly, particularly after the year 2020/21. From the year 2040/41 onward the contribution rate stabilises, reflecting the projected stable demographics at that stage. If flat-rate benefits were to be increased each year at a rate mid-way between the increase in prices and the increase in earnings, the required contribution rates would peak at a little over 23% in the year 2030/31 and average about 21% over the whole period to the year 2060/61.

5.10 The contribution rates shown in Table 5.5 show a similar pattern to the figures for expenditure as a percentage of GDP shown in Table 5.3.

5.11 The contribution rates shown in Table 5.5 are for people who are not contracted-out. In allowing for the loss of income due to contracting out, it has been assumed that there would be a progressive reduction in the contracted-out rebate in five year steps from 1999/00 to 2060/61.

current 4.6% of relevant earnings to 3.5% in the year 2017/18 and later years. This reflects the gradual fall in the value of the SE benefit given up by members of defined benefit occupational schemes under the contracted-out arrangements from 1997-98 onwards. Similarly, the age-related rebates are expected to change in future. The contracted-out rates assumed for the relevant years are given in the Table 5.6 below.

**Table 5.6 Contracted-out rebate rates**

Year	COSRs	Contracted out rebate rates		
		COMPs	APPs	Employee re
1999-00	4.6	2.2 to 9.0	3.8 to 9.0	1.6
2000-01	4.6	2.2 to 9.0	3.8 to 9.0	1.6
2010-11	3.7	2.2 to 9.0	3.8 to 9.0	1.3
2020-21	3.5	2.2 to 7.0	3.8 to 7.5	1.2
2030-31	3.5	2.2 to 6.2	3.8 to 6.6	1.2
2040-41	3.5	2.2 to 6.2	3.8 to 6.7	1.2
2050-51	3.5	2.2 to 6.2	3.8 to 6.7	1.2
2060-61	3.5	2.2 to 6.2	3.8 to 6.7	1.2

Note: COSRs are contracted-out salary-related schemes, COMPs are contracted-out money purchase scheme APPs are appropriate personal pensions.

5.12 The lower end of the range of age-related rebates shown for COMPs and APPs is for the youngest age and the higher end of the range is for the oldest age. The employee rebate shown in the final column is the employee's part of the total rebate shown respectively in the COSRs, COMPs and APPs columns. It is not age-related for any type of contracting out.

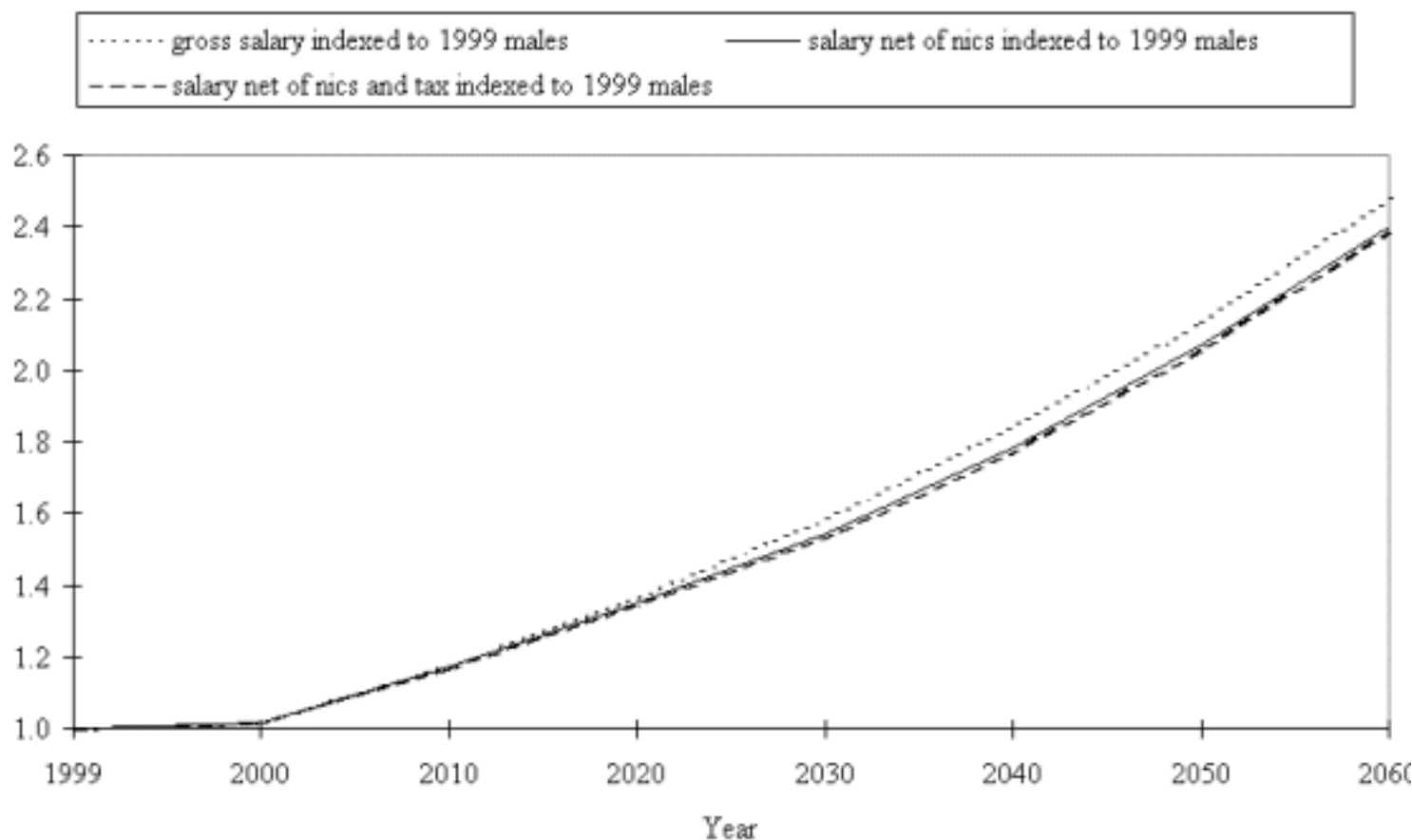
5.13 Where earnings limits are increased at rates less than earnings increases, the balance of the burden of National Insurance contributions between employees and employers changes significantly over time as employees' National Insurance contributions as a percentage of earnings, as described in paragraphs 3.9 onwards.

5.14 Figure 5.1 shows, for someone on male average earnings, the levels of real

- (a) gross pay;
- (b) gross pay net of National Insurance contributions;
- (c) gross pay net of National Insurance contributions and income tax.

in future years, relative to prices, indexed to the corresponding figures for 1999. The figures assume that flat-rate benefits, earnings limits and tax bands are increased with earnings, tax rates remain unchanged and that earnings grow at 1.5% per annum faster than prices.

**Figure 5.1 Real levels, relative to 1999, for male gross pay, gross pay net of National Insurance contributions and gross pay net of National Insurance contributions and income tax in future years with earnings uprating of flat-rate benefits and earnings limits.**



5.15 Figure 5.1 shows that, with real earnings growth of 1.5% per annum, real gross earnings will be approximately 2.5 times greater in the year 2060 than in the year 1999. Allowing for the higher National Insurance contribution rates required to meet the cost of increasing flat-rate benefits in line with earnings has very little effect on this pattern and still shows that people will be substantially better off than now. Including income tax has a marginal effect if tax bands are assumed to increase with earnings and tax rates are unchanged. Thus, even after income tax and the increased rates of National Insurance contribution required to support earnings upratings of benefits, people will be 2.4 times as well off as a result of the real earnings growth. Although Figure 5.1 is based on average male earnings, the pattern for females would be very similar.

5.16 It is vital to emphasise that the estimates for all years, including the short term, have been based on the economic and other assumptions appropriate for the long term, in order that the underlying trend should not be affected by changes to these assumptions (which are inevitably subject to considerable uncertainty) from year to year. The actual contribution rate in any future year will depend critically on demographic factors, activity rates, real rates of earnings growth and many other parameters which enter into the estimates and which could in practice develop in a wide variety of ways. The uncertainty is markedly greater for later years and this should be borne in mind in interpreting the results shown in the tables. The questions of the uncertainty in the projections and the sensitivity of projected contribution rates to changes in the main assumptions are discussed further in Section 8.

### Comparison with previous review

5.17 Table 5.7 shows the difference between the contribution rates projected in this review and those in the previous review (HC 160). Results are given for the assumption that flat-rate benefit and earnings limits will be increased in line with prices. The comparison is with the post Pension Bill 1994 (Pensions Act 1995) figures with price uprating and a 4.6% rebate rate, shown in Table 5.6 of that report. Since the structure of the National Insurance contributions is different in the main estimates in this report to that in the previous report, it is not possible to compare the results directly. Thus Table 5.7 shows the effect of the main changes in the assumptions and other changes which have given rise to the differences, between the rates in the previous report and those in Table 5.6, which shows the results that would have been obtained at this review if the National Insurance contribution structure had remained unaltered.

**Table 5.7 Analysis of the differences between the current projected contribution rates and those in the previous Quinquennial Review**

2010-11      2030-31      2050-

	%	%	%
(a) rates in previous QR	17.4	17.2	14.0
(b) changes to contributors and other factors	-0.2	-0.5	-0.8
(c) changes to number of pensioners	0.0	0.4	0.5
(d) changes to average rate of basic pension	-0.4	-0.4	-0.3
(e) changes in outgo on benefits other than RP basic	-0.3	0.0	0.6
(f) changes in assumed benefit rate relative to earnings	0.2	0.2	0.2
(g) current estimates (table 9.1, column(1))	16.7	16.9	14.2

5.18 The 1996 based population projections show an increasingly large number of people at working age relative to the 1992 based population projection used in the previous QR. This arises mainly from an increase in the assumption for net migration into Great Britain. Ultimately this leads to more contributors, but in the shorter term the effects are more than offset by changes to economic activity rates and other factors. Thus projected total numbers of contributors are slightly lower in the years 2010 and 2030 and slightly higher in the year 2050. Additionally, the allowance for the effect on total wages of the change to female pension age, is larger than the previous report. These factors, together with numerous other changes to the detailed assumptions for the estimates of contribution lead to the contribution effects in row (b).

5.19 As a result mainly of the higher net migration and an assumed increase in the number of overseas pensioners, there is an increase in the projected future numbers of pensioners in later years, which leads to greater pension costs and therefore higher contribution rates (row (c)).

5.20 However, the effect of higher numbers of pensioners is offset by a reduction in the average rate of pension assumed to be in force in future. For women, the average rate of pension is further reduced since the latest marital projections show fewer widows, who have high pension entitlement, and more married women, who have a lower average entitlement. Although the effects of HRP and high economic activity lead to married women's average entitlement rising, it is nevertheless lower than the average for widows who "top up" their own entitlement to 100% by inheriting their husbands' entitlement. These changes lead to the reductions in contribution rates shown in row (d).

5.21 For other benefits, only the estimated expenditure on incapacity benefit and, in the later years, SERPS, is significantly increased. These increases are more than offset in the early years by reductions in estimated expenditure on widows' benefit, jobseekers allowance and administration costs. Overall, for early years there is a drop in expenditure on benefits other than basic retirement pension, followed by an increase in later years. This is reflected in the change in contribution rates in row (e).

5.22 Although Table 5.7 traces the changes in contribution rates between two projections assuming price increases in benefits, the starting benefit rates for the present projection are slightly higher in relation to earnings than assumed in the earlier projection, as the actual difference between the increases in earnings and prices since 1994/95 has been less than the 1.5% per annum assumed in the previous estimate. Together with the effect of price uprating on the contribution limits, this slightly increases the rates of contribution required (row (f)).

# 6. Home responsibility protection and the maturing of SERPS

6.1 SERPS began to accrue from 1978. The SERPS scheme allowed a twenty year period for full entitlement to be built up, so that those reaching retirement age in 1998/99 had a theoretical full entitlement. Changes to SERPS which have been introduced since 1978, mean that those retiring in 1998/99 are the only people who will benefit from SERPS in its original form. All later retirements will have somewhat lower entitlements, depending on when they retire.

6.2 Despite this, the cost of SERPS will continue to grow for some time, as older pensioners with little or no SERPS entitlement are replaced by new pensioners with much higher SERPS entitlement.

6.3 Members of a suitable final salary-related occupational pension scheme could contract out of SERPS from the time of its introduction in 1978. With effect from 1987, members of suitable appropriate personal pension schemes could also contract out, as could those with occupational money purchase pensions. However, before April 1997, even those contracted-out of SERPS still accrued some benefit from SERPS, equal to their gross SERPS entitlement less a contracted-out deduction in respect of their membership of a contracted-out arrangement. In particular, SERPS still provided the majority of the cost of increasing pensions in payment to offset the effects of price inflation.

6.4 With effect from April 1997, the link between SERPS and contracting out was broken, so that for accruals of pension from that year, an individual is either in SERPS or out of it completely. The concept of a gross entitlement less a contracted-out deduction has been abandoned for accruals from April 1997 but still applies to entitlements built up before April 1997. Despite this breaking of the links, it is still helpful to consider SERPS on a gross basis, that is assuming that no one is contracted-out, and the corresponding reductions in entitlement due to contracting out, for all years, including accruals of entitlement from April 1997.

6.5 Figure 3.3 showed that, for a man on average earnings who has contributed in each year, his gross SERPS pension at award would be 21% of his earnings, or approximately £97 per week for awards in the year 1999/00. However, average gross SERPS pension awards for men are very much lower, at approximately £53 per week. This is because many men do not have a full employment record. For instance, only approximately 30% of men aged 60 to 64 are employees and thus building up their SERPS entitlement. Similarly for women, Figure 3.4 showed that for a woman on average earnings and who has contributed in each year, her gross SERPS pension at award in 1999/00 would be 18% of her earnings, or approximately £61 per week. Again, in that year, average gross SERPS pension awards for women are very much lower at approximately £27 per week, reflecting women's economic activity rates. Although lower than might be expected, due to working patterns, the awards are still significant in relation to the size of the basic state pension.

6.6 The SERPS awards reflect economic activity rates and employment patterns in the same way as a pension accruing in the private sector, where no pension accrues if a person is not employed, whether they are in a final salary-related scheme or a money purchase scheme.

6.7 Table 6.1 sets out the retirement pensions benefit expenditure on SERPS, showing the gross entitlement assuming that everyone was in SERPS, the deduction in respect of contracting out and the resulting net SERPS expenditure. In Table 6.1 it is assumed that earnings exceed increases in pensions in payment by 1.5% per annum and the table shows the expenditure where earnings limits increase at the same rate as earnings or at 1.5% per annum less.

**Table 6.1 Benefit expenditure on SERPS for retirement pensioners assuming real earnings growth of 1.5% per annum (£ billions in 1999/00 prices)**

£ bn	BENEFIT EXPENDITURE ON SERPS FOR RETIREMENT
------	---

## PENSIONERS

Earnings increases exceed pension in payment increases by 1.5% pa

Earnings limits increase in line with

Year	Gross SERPS	prices		earnings		
		CODs*	Net SERPS	Gross SERPS	CODs*	Net SERPS
1999-00	8.2	3.8	4.5	8.2	3.8	4.5
2000-01	9.0	4.0	5.0	9.0	4.0	5.0
2010-11	17.4	7.6	9.8	17.4	7.6	9.8
2020-21	23.8	11.3	12.5	23.9	11.4	12.5
2030-31	31.8	17.0	14.8	32.2	17.4	14.8
2040-41	35.6	20.7	14.9	36.8	21.7	15.1
2050-51	36.3	20.6	15.7	38.9	22.7	16.2
2060-61	38.9	21.0	17.9	44.1	25.0	19.2

\*CODs stands for contracted-out deductions.

6.8 The changing proportion of net to gross SERPS over time reflects the changing proportions contracted out in the past and in the future and the different rules for different accrual periods governing the way that guaranteed minimum pensions and protected rights had to be increased to offset the effects of price inflation of pensions when in payment.

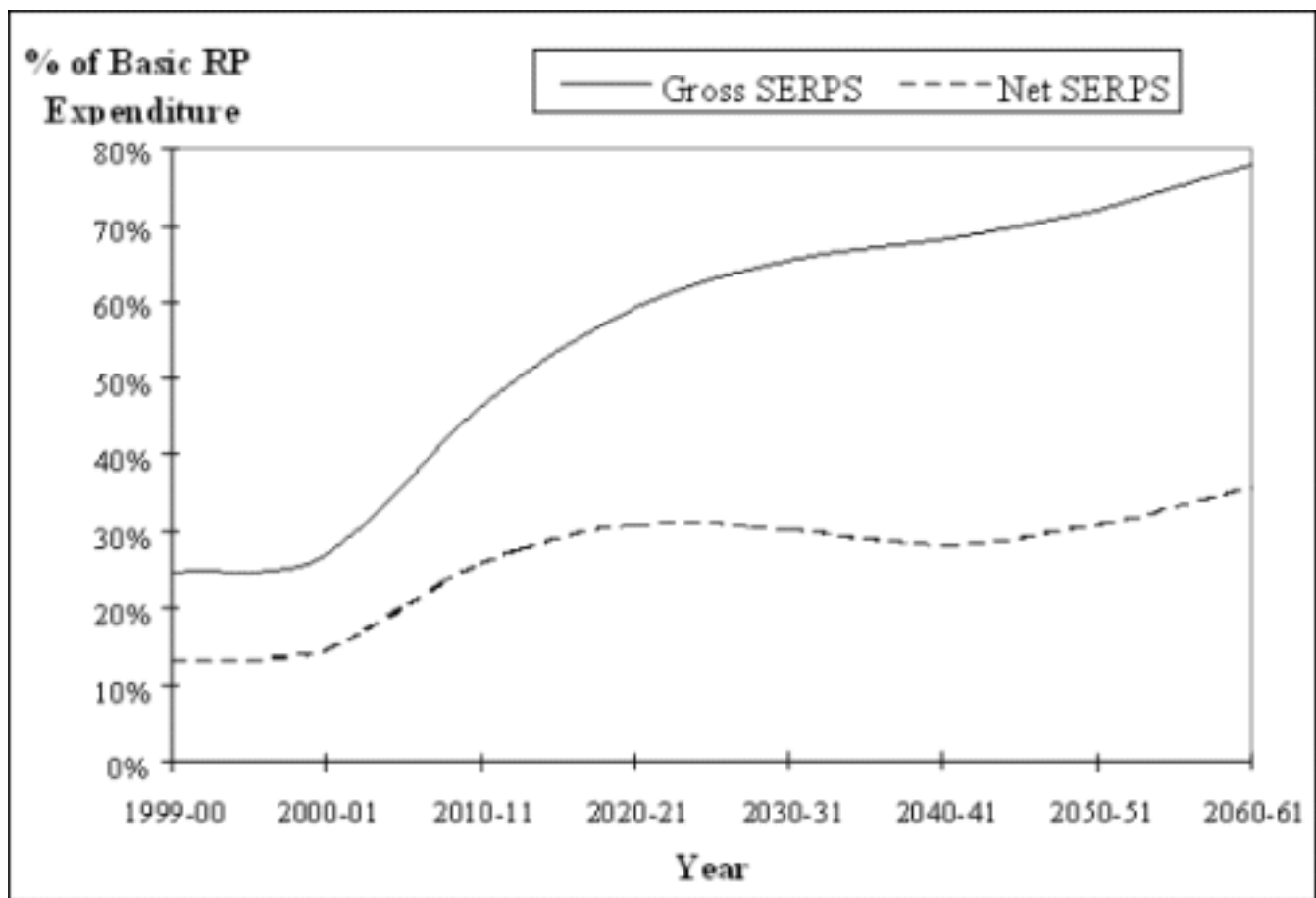
6.9 SERPS pensions are based on earnings between the lower and upper earnings limits revalued in line with earnings up to retirement age. Thus, subject to any effect of the way the lower and upper earnings limits are uprated each year, SERPS entitlements before retirement are protected against earnings inflation. This is similar to occupational pension scheme arrangements although most of those will have pensions based on final salaries rather than revalued average salaries. SERPS pensions in payment after retirement are increased with price inflation. This was the intention when SERPS was established, even though basic pension at that time was uprated in line with earnings. Again, uprating pensions in payment in line with price inflation mirrors the practice of the best private occupational pension schemes.

6.10 Net SERPS expenditure continues to grow throughout the period when expressed in constant price terms. However, expressed as a percentage of GDP, net SERPS will approximately double from its current figure of 0.5% to 1.0% in the decades starting in the years 2020 and 2030. Thereafter it will decline as a percentage of GDP to about 0.8% by the year 2060. Up to the year 2020, these changes reflect the replacement of current pensioners, many of whom have little SERPS entitlement, by newer pensioners with a much greater entitlement. Thereafter, the reductions in SERPS entitlement, which are currently being phased in, take effect but the decline in expenditure as a proportion of GDP is gradual.

6.11 SERPS expenditure is similar whether earnings limits are increased at the same rate as earnings or at a lower rate. Although one method includes higher earnings at the upper earnings limit, it excludes more earnings at the lower earnings limit. The effects are approximately offsetting.

6.12 Figure 6.1 compares expenditure on SERPS for retirement pensioners with expenditure on basic retirement pension assuming real earnings growth of 1.5% per annum and uprating of basic retirement pension and earnings limits in line with prices.

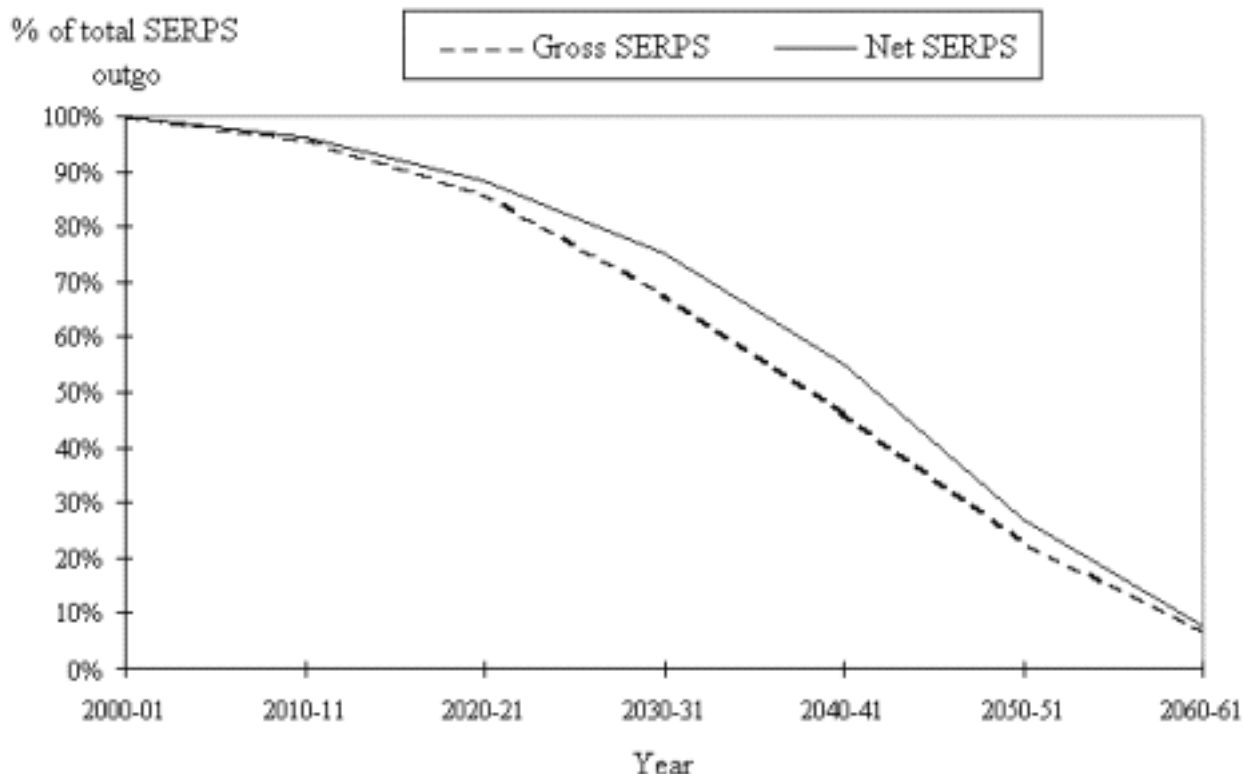
**Figure 6.1 Gross and net SERPS expenditure on pensioners as a percentage of basic retirement pension, assuming that earnings limits and basic retirement pension increase in line with prices**



6.13 Figure 6.1 shows that gross SERPS would be an increasing proportion of state pensions in future, with gross SERPS expenditure being 65% of basic retirement pension expenditure in the year 2030 and 75% in the year 2060. Net SERPS expenditure is much lower at about 30% of basic retirement pension from the year 2020, reflecting the high proportion of people contracted-out and their generally higher earnings. However, those contracted-out via COSRs should have a private pension at least as great as the SERPS pension forgone and, if their decision to contract out was well advised, so should those with APPs and COMPs.

6.14 Much of the future SERPS expenditure is in respect of SERPS already accrued. This is illustrated in Figure 6.2 which shows the percentage of future gross and net SERPS expenditure in respect of years of accrual up to and including 2001/2002.

**Figure 6.2 Percentage of future SERPS expenditure in respect of accruals before April 2002, assuming that earnings limits increase with prices**



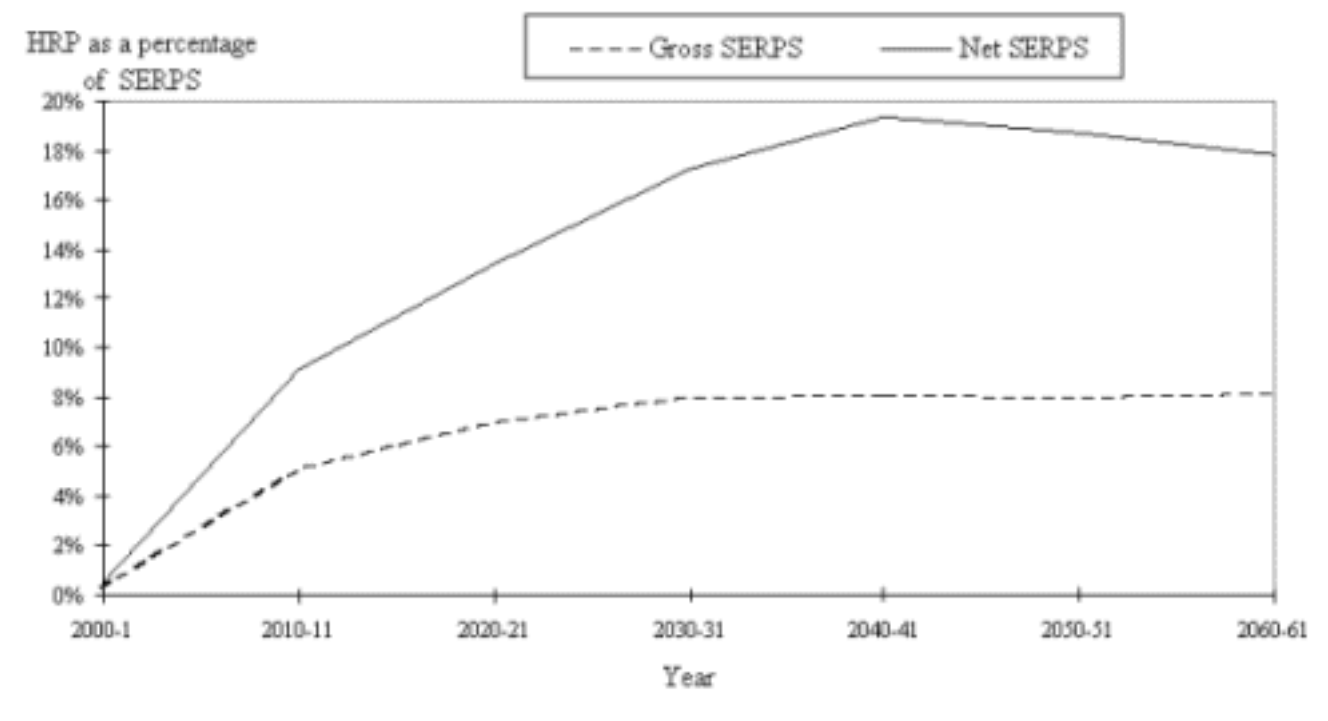
6.15 Figure 6.2 shows that, in the year 2038, SERPS accruals in respect of periods up to 2001-02 will still account for half of gross SERPS expenditure, whilst net SERPS expenditure will be an even higher percentage.

6.16 The estimated SERPS expenditure shown throughout this report includes an allowance for the effect of home responsibility protection and other enhancements to SERPS benefits arising from eligibility for other state benefits. However, the regulations applying home responsibility protection to SERPS that should have affected benefit entitlement for new awards from April 1999 have not been introduced. Nevertheless, there is a commitment on the part of government to introduce some form of extra second pension in respect of caring responsibilities or long term sickness as evidenced by the proposals in the government's green paper on pensions published in December 1998. It would not be appropriate, therefore, to exclude allowance for these extra costs from the long term projections as they might otherwise understate long term costs. In the absence of firm alternative proposals, and in order to include some appropriate allowance, SERPS costs have been calculated assuming that HRP had been introduced. Since the detailed rules and appropriate data on the precise effects of home responsibility protection are not available, only an approximate effect of home responsibility protection is included.

6.17 Home responsibility protection would have applied to gross SERPS with no corresponding offset from contracting out. Thus home responsibility protection would have been a comparatively small part of gross SERPS expenditure but a large part of net SERPS expenditure as shown in Figure 6.3.

**Figure 6.3 Home responsibility protection SERPS expenditure as a percentage of total gross and net SERPS expenditure assuming that earnings limits increase with prices.**





6.18 Figure 6.3 shows that nearly 20% of net SERPS expenditure could arise because of home responsibility protection entitlement. It would therefore be a significant part of SERPS, although still relatively small in the context of National Insurance Fund expenditure in total.

6.19 Whereas years of home responsibility protection give extra SERPS benefit, the same is not necessarily true for basic pension. In this case it is expected that women will be the main beneficiaries of home responsibility protection. However, women's entitlement to a basic state pension depends not only on their own contribution record, including home responsibility protection where appropriate, but also on the contribution record of their spouse, including divorced and deceased spouses. Thus home responsibility protection may add nothing to a women's entitlement or only increase it slightly over what she would have received.

6.20 It is expected that women's entitlement to a basic state pension will rise in future, not only because of home responsibility protection, but also because of the phasing out of the married woman's option (whereby women opted to pay lower rates of National Insurance contributions but forfeited any rights to a basic state pension based on their own contribution record) and increased economic activity by women, more of whom are expected to be employed in future. It is difficult to isolate the effect of home responsibility protection from these other effects but it is estimated that home responsibility protection may increase basic retirement pension by £0.2bn in the year 2010, increasing to £1.0bn from the year 2030, with benefit rates increasing with prices, in 1999/00 price terms. This represents about 2% of basic retirement pension expenditure in the long term.

## 7. Effects of contracting out

7.1 Table 7.1 shows the projected number of employees and how many of them contribute on average in a week.

**Table 7.1 Estimated number of employees and employed contributors (millions)**

Year	NUMBER OF EMPLOYEES AND CONTRIBUTORS		
	Number of employees	Number of contributors	
		Earnings limit increase with	
		Earnings	Prices
1999-00	23.1	20.0	20.0
2000-01	23.2	20.1	20.2
2010-11	24.2	20.9	21.6
2020-21	24.4	21.1	22.2
2030-31	23.2	20.1	21.5
2040-41	22.8	19.7	21.4
2050-51	22.4	19.4	21.3
2060-61	21.8	18.8	21.0

Note: Number of contributors include those who earn over the lower earnings limit including those over state pension age. Employees over pension age do not pay primary contributions but their employer pays secondary contributions in respect of them. Employers only pay contributions in respect of those employees earning over the earnings threshold.

7.2 Where earnings limits increase at the same rate as earnings, the number of contributors does not depend on real earnings growth. However, when earnings increase faster than earnings limits the number of contributors is affected as more people will earn above the lower earnings limit. In 1999/00 approximately 3.1 million people on average earn below the lower earnings limit in a week. This will reduce to 0.8 million in the year 2060 if earnings limits increase by 1.5% per annum less than earnings. This assumes that the increases in earnings applies uniformly across the earnings distribution. In practice, this may not happen but the effects on contribution income of those earning around the LEL is very small. The effects on benefit entitlement will also be relatively small.

7.3 The self-employed who pay class 2 and class 4 contributions and people paying voluntary class 3 contributions are not included in Table 7.1, since they are not included in SERPS and therefore cannot contract out.

7.4 Table 7.2 shows the number of contributors assumed to be contracted-out via salary-related schemes (COSRs), money purchase schemes (COMPs) and appropriate personal pensions (APPs).

**Table 7.2 Number of contributors contracted-out via COSRs, COMPs and APPs (millions)**

## NUMBER OF CONTRIBUTORS

Year	COSRs	COMPS	APPS
1999-00	8.1	0.3	3.7
2000-01	8.1	0.3	3.7
2010-11	8.1	0.3	3.7
2020-21	8.3	0.3	3.2
2030-31	8.0	0.3	2.2
2040-41	7.8	0.3	1.7
2050-51	7.7	0.3	1.7
2060-61	7.5	0.3	1.6

7.5 Virtually all members of COSRs and COMPs earn above the lower earnings limit and therefore overall membership of COSRs and COMPs is only slightly above the number of contributors. For APPs, there are substantial numbers of people who have zero earnings and there are also a significant number who earn below the lower earnings limit. Although the total number of people registered with an APP is estimated to be 5.6m in 1999/00, only some 3.7 million are projected to be entitled to a rebate.

7.6 For COSRs, the number of contributors in future has been estimated by assuming that the current percentages of COSR contributors to gross contributors by age and sex will apply in future, except that allowance has been made for a small number of final salary schemes to contract out on a money purchase basis. Thus current levels of contracting out via COSRs are assumed to be maintained, with the change in the number of COSR contributors merely reflecting demographic changes, changes in economic activity rates and a small switch by some schemes to a money purchase contracting out basis.

7.7 A similar method has been followed for COMPs. COMP numbers reflect the switch to COMPs from COSRs referred to in 7.6 above and overall the number of contributors contracting out via COMPs has been assumed to stay at 0.3 million throughout.

7.8 In the case of APPs, it has been assumed that those with an APP in 1998 will continue with this option in the future. However, in view of the switch to age-related rebates, which are significantly lower at younger ages than the flat-rate rebate payable up to 1996-97, it is assumed that the number of new APPs being effected at younger ages will be approximately half recent levels. Over time, Table 7.2 shows that this leads to approximately 2 million fewer people above the lower earnings limit contributing to an APP in the year 2060 and consequently many more people being members of SERPS.

7.9 Changes to the rebate rates for all forms of contracting out in 1997 and 1999 and, in particular, the introduction of age-related rebates which are significantly lower at younger ages than the flat-rate rebate payable up to 1996/97, as well as wider developments affecting pension schemes such as the consequences of the Pensions Act 1995 and the change of pension fund taxation, make estimates of future membership of pension schemes and the levels of contracting out via COSRs, COMPs and APPs very uncertain.

7.10 In addition, the Government is expecting to introduce stakeholder pensions. Although firm details of this have yet to be finalised, the broad framework has been set out in the green paper "A new contract for welfare: Partnership in Pensions" and subsequent consultation briefs. These proposals are likely to have significant effects on the future number of contributors contracted-out by the different methods.

7.11 To illustrate the effect of different scenarios for contracting out, Tables 7.3 and 7.4 show the contribution rates required if:

- (a) SERPS had never been introduced so that no rebates or gross or net SERPS are payable. This shows the overall impact on National Insurance contribution rates of SERPS and contracting out;
- (b) no more SERPS accrues after April 2002 so that no further rebates are paid and existing SERPS accruals are run off. This could apply if no second tier pension were to be provided by the State after April 2002 and some alternative second

tier provision were required;

(c) stakeholder pensions are introduced as a further alternative method of contracting out all those in SERPS from April 2002. For this purpose it has been assumed that rebates will be determined using APP age-related rebate rates. (If stakeholder pensions can be administered more cheaply than APPs, the corresponding age-related rebates might be lower and the contribution rate would be lower);

(d) contracting out is abolished from April 2002 so that everybody would be in SERPS, no further rebates would be paid and SERPS expenditure would be correspondingly higher in future.

7.12 Table 7.3 shows the effect with flat-rate benefit rates and earnings limits increased in line with prices and Table 7.4 shows the effect with flat-rate benefits and earnings limits increased in line with earnings. The contribution rates shown are before application of the relevant rebate for those contracted-out, if any.

7.13 Column 2 shows considerably lower contribution rates, reflecting the fact that the introduction of SERPS was a considerable increase in state pension provision. If no more SERPS accrues after April 2002, column 3 shows there is an immediate drop in the contribution rate since contracting out rebates will no longer be payable from the Fund. In the long term the contribution rate approaches that if SERPS had never been introduced as SERPS benefit entitlements diminish. Column 4 shows that if everybody contracts out contribution rates increase initially to fund the extra rebates. Ultimately contribution rates fall as SERPS expenditure will be lower. On the other hand if contracting out is abolished there is an opposite effect and column 5 shows contribution rates being lower in the short term because of the saving in the rebates, but higher in the long term because of the extra SERPS entitlement. This gives a more stable profile to the contribution rates over the whole period with price upratings but a steeper profile with earnings upratings.

**Table 7.3 Contribution rates with different contracting out assumptions assuming flat-rate benefit rates and earnings limits increase in line with prices**

JOINT EMPLOYEE AND EMPLOYER CONTRIBUTION RATE %					
Year	(1)	(2)	(3)	(4)	(5)
1999-00	20.0	15.2	20.0	20.0	20.0
2000-01	19.9	15.0	19.9	19.9	19.9
2010-11	18.9	13.7	16.4	20.2	16.6
2020-21	18.1	13.0	15.7	19.1	16.5
2030-31	18.6	13.6	16.1	19.2	18.3
2040-41	17.1	12.7	14.3	17.2	18.0
2050-51	15.2	11.2	11.9	14.6	16.7
2060-61	14.0	10.0	10.3	12.7	15.9

(1) Principal contracting out assumption. Contribution rates from column 2 of Table 5.5

(2) SERPS had never been introduced

(3) No more SERPS accrues after April 2002

(4) All members of SERPS contract out on APP terms

(5) Contracting out abolished in respect of accruals from April 2002

**Table 7.4 Contribution rates with different contracting out assumptions assuming flat-rate benefit rates and earnings limits increase in line with earnings**

JOINT EMPLOYEE AND EMPLOYER CONTRIBUTION RATE %					
Year	(1)	(2)	(3)	(4)	(5)

1999-00	20.0	15.2	20.0	20.0	20.0
2000-01	20.2	15.2	20.2	20.2	20.2
2010-11	21.6	16.3	19.0	22.9	19.2
2020-21	23.2	17.8	20.5	24.2	21.3
2030-31	26.7	21.3	23.8	27.4	26.1
2040-41	27.6	22.7	24.3	27.9	28.2
2050-51	27.3	22.5	23.2	26.8	28.4
2060-61	27.6	22.7	22.9	26.5	29.1

(1) Principal contracting out assumption. Contribution rates from column 1 of Table 5.5

(2) SERPS had never been introduced

(3) No more SERPS accrues after April 2002

(4) All members of SERPS contract out on APP terms

(5) Contracting out abolished in respect of accruals from April 2002

## 8. Sensitivity analysis

8.1 Any estimates of future benefit costs and contribution rates, especially those made far into the future, are inevitably subject to wide margins of error. The way in which the various factors which affect the results will develop is uncertain even for the short term and becomes increasingly speculative in the more distant future. It is important, therefore, that too much emphasis should not be placed on a single set of estimates but regard should be had to the range of possibilities on different assumptions. The estimates in Section 5 are given on different assumptions for the basis of uprating of flat-rate benefits and the earnings limits and show the extent to which this factor critically affects the contribution rates required in the future. This section provides estimates of the effects of changing certain of the other assumptions which are the major source of uncertainty in terms of their impact on future contribution rates.

### Real earnings growth

8.2 A key assumption, where benefit rates and earnings limits are uprated in line with price inflation, is the level of real earnings growth. Real earnings growth only has a very small effect where benefit rates and earnings limits are uprated in line with earnings inflation and therefore alternative results are not given in this case. The estimates in Section 5 assume real earnings growth of 1.5% per annum. If real earnings growth were to be 2.0% per annum then the contribution rates required where benefit rates and earnings limits are uprated in line with price inflation in future would be as set out in Table 8.1 below. Table 8.1 includes, for comparison, the corresponding figures from Table 5.5 showing the required contribution rates where real earnings growth is assumed to be 1.5% per annum.

**Table 8.1 Projected class 1 contribution rates required to balance income and expenditure on different real earnings growth assumptions where benefit rates and earnings limits are uprated in line with prices**

Year	JOINT EMPLOYEE AND EMPLOYER CONTRIBUTION RATE %	
	1.5% per annum REG	2.0% per annum REG
1999-00	20.0	20.0
2000-01	19.9	19.8
2010-11	18.9	18.0
2020-21	18.1	16.6
2030-31	18.6	16.5
2040-41	17.1	14.7
2050-51	15.2	12.8
2060-61	14.0	11.4

Note: REG is real earnings growth

8.3 Table 8.1 shows that, with real earnings growth of 2.0% per annum, the required contribution rate gradually falls relative to the rate required if real earnings growth is 1.5% per annum, so that by the year 2060 it is just over 80% of that rate.

### Demographic factors

8.4 The estimates in Section 5 are based on the principal mid-1996 based population projections. Variant projections, based

on higher and lower assumptions for future mortality and fertility rates, were produced along with the principal projection. These have been used to estimate the changes to the estimated contribution rates as a result of different assumptions in regard to these demographic factors. The sensitivity analysis has been restricted to those variant assumptions for mortality and fertility which lead to increases in future contribution rates, i.e. those with lower fertility and mortality rates, as these are most important from the point of view of long-term planning. Corresponding results showing lower estimated contribution rates would be obtained on the basis of the alternative demographic assumptions with higher fertility and mortality rates.

8.5 The effect of the lower mortality variant on the expectation of life is shown in Table 8.2. As a result, the numbers in the population are higher at all ages than in the principal projection. However, the effect is greater at older than at younger ages. In particular, there is a significant increase in the number of pensioners relative to the number of contributors, leading to increases in the required contribution rates.

**Table 8.2 Expectation of life on different mortality assumptions**

Principal projection		Expectation of life		
Year	1996	2030	2060	
Males				
at birth	74.3	78.5	79.2	
at age 65	14.9	17.6	18.2	
Females				
at birth	79.5	83.2	84.0	
at age 65	18.4	21.2	21.7	
Lower mortality projection		Expectation of life		
Year	1996	2030	2060	
Males				
at birth	74.3	79.7	81.2	
at age 65	14.9	18.6	19.7	
Females				
at birth	79.5	84.2	85.6	
at age 65	18.4	21.9	23.0	

The expectations of life based are on the mortality rates by age and sex appropriate for the calendar year shown.

8.6 The lower fertility variant assumes that the average family size will ultimately reach 1.6 for women born in 1981 and later, rather than 1.8 as in the principal projection. This change in the annual number of births has a delayed effect on the estimates for future contribution rates, although it is fundamental in the long term. A change in the assumption for the number of births hardly affects the contribution rate until that generation has passed school leaving age and joined the working population. As time passes, more and more of the working population will be made up of the generations that are yet to be born. On the lower fertility assumption, these generations are smaller, so that there will be fewer contributors and the contribution rate will thus have to be higher. For many years there will be little effect on the cost of benefits, as retirement pensions will be unaffected and most of the other benefit costs are concentrated at the older ages. As these smaller generations reach pension age, the smaller number of pensioners would reduce pension costs although the main effect of this will be beyond the period covered by the projections. However, if the lower fertility persisted, the fall in the numbers of

pensioners in the longer term would be accompanied by a continuing fall in the number of contributors, so that the contribution rates would still have to be higher, in spite of the lower number of pensioners.

8.7 Table 8.3 shows the effect of these alternative assumptions about future mortality and fertility on the future age distribution of the population, on the pensioner support ratio, i.e. the ratio of the numbers at the working ages to the numbers over pension age, and on the projected rates of contribution.

**Table 8.3 Effect of variant population projections on the population, the pensioner support ratio and future contribution rates with real earnings growth of 1.5% per annum**

Age group	Variant	Year							
		2000	2010	2020	2030	1999	2040	2050	2060
Percentage of population in main age bands									
Children	Main projection	20.2	18.5	17.8	17.5	20.3	17.0	16.9	17.1
	Lower mortality	20.2	18.4	17.7	17.4	20.3	16.7	16.6	16.7
	Lower fertility	20.1	17.3	16.1	15.8	20.2	14.8	14.7	14.8
Working ages	Main projection	61.6	62.1	63.2	60.0	61.6	58.4	59.0	58.5
	Lower mortality	61.6	62.0	63.0	59.6	61.5	57.7	58.0	57.4
	Lower fertility	61.7	63.0	64.3	60.6	61.6	58.9	59.0	57.6
Pension ages	Main projection	18.2	19.4	19.0	22.5	18.2	24.6	24.1	24.4
	Lower mortality	18.2	19.6	19.3	23.1	18.2	25.5	25.4	25.9
	Lower fertility	18.2	19.7	19.6	23.5	18.2	26.3	26.4	27.5
Pensioner support ratio	Main projection	3.4	3.2	3.3	2.7	3.4	2.4	2.5	2.4
	Lower mortality	3.4	3.2	3.3	2.6	3.4	2.3	2.3	2.2
	Lower fertility	3.4	3.2	3.3	2.6	3.4	2.2	2.2	2.1



		Contribution rates %							
Prices	Main projection	19.9	18.9	18.1	18.6	20.0	17.1	15.2	14.0
uprating	Lower mortality	+0.1	+0.1	+0.3	+0.4	+0.0	+0.7	+0.8	+0.9
	Lower fertility	+0.0	+0.0	+0.2	+0.6	+0.0	+1.0	+1.5	+2.0
Earning	Main projection	20.2	21.6	23.2	26.7	20.0	27.6	27.3	27.6
uprating	Lower mortality	+0.1	+0.2	+0.3	+0.6	+0.0	+1.1	+1.5	+1.7
	Lower fertility	+0.0	+0.0	+0.2	+0.9	+0.0	+1.6	+2.6	+4.0

8.8 The effects on the contribution rates required in future, of changes in the age structure of the population as a result of alternative assumptions about future mortality and fertility, shown in Table 8.3, make no allowance for any consequential effects of demographic changes on the activity rates or the level of unemployment. This applies also to the main estimates shown in the report, where the expected changes in future in the age structure of the population are an important factor in the trends in the contribution rates shown in Table 5.5, but a constant rate of unemployment has been assumed throughout and the activity rates for persons of each sex at the various ages have been assumed to remain constant from the year 2011 onwards (except for changes arising from the increase in female pension age). It might reasonably be expected that a fall in the proportion of the population at working ages would lead to some tightening of the labour market, producing a fall in the number unemployed and some increase in the proportions of married women and of persons at older ages remaining in or being drawn into the workforce. However, it is not considered that such effects could be sufficiently reliably quantified to enable allowance to be made in the projections, particularly in the more distant future when the main changes in the age structure of the population are expected to arise.

### Basic pension entitlement

8.9 The main estimates of basic retirement pension assume an average amount of entitlement to basic retirement pension based on current levels and reflecting actual changes in average entitlement in recent years and the expected changes in future years. There is some uncertainty about the precise level of the average amounts for new awards of basic retirement pension in future. On the assumption that from the year 2020

- i. awards for men are approximately 1.5% lower
- ii. awards for married women on their own entitlement are 9% lower
- iii. awards for single and divorced women are 2.5% lower
- iv. awards for widows are unchanged

then the required contribution rates would be approximately 0.3% lower, assuming benefits are uprated with prices.

### Employment factors

8.10 The principal estimates are based on the economic activity rates set out in Appendix D. The changes in activity rates over the years reflect economic and social factors and, as suggested above, significant changes in the size of the population at the working ages could also be a factor. In general, the trends over the past 20 years have been towards lower activity rates for men, particularly at ages over 55, and higher activity rates for women. The effect of different assumptions for future activity rates on the finances of the scheme would depend on the distribution of the changes according to age and sex and between full-time and part-time activity. However, as an example of the scale of the possible effect, if the activity rates for females were assumed to increase further at a rate which by the year 2020 would halve the difference between men and women, then the resulting increase in the number of contributors would reduce contribution rates by approximately 0.2% if average earnings were unaffected.

8.11 The main projections assume that the proportion of those economically active (excluding the unemployed) who are self-employed is approximately constant at just under the current 13% in future years. There was a sharp rise during the 1980s in this proportion, although it has fallen slightly in recent years. If, however, the rise during the 1980s in the proportion had been assumed to continue, then future contribution rates would have had to be higher because of the lower contribution rate paid by self-employed contributors. On the assumption that the proportion who are self-employed is approximately 15% from 2000-01, the contribution rates required would be about 0.3% higher, assuming contribution limits are uprated in line with prices.

8.12 The principal projections are based on the assumption that the unemployment claimant count is level at 1.4 million up to the year 2011. After this, it is assumed to stay at proportionately the same level relative to the numbers of economically active people. If unemployment were higher, there would be increased expenditure on contributory jobseekers allowance and a reduced number of people in employment, and therefore a lower number of contributors, so that the contribution rate needed to balance income and outgo would be higher. For each extra 0.25 million unemployed, the contribution rate would increase by approximately 0.2%.

# 9. Effect of Social Security Act 1998

## National Insurance Contribution Rate Changes

9.1 It was announced in the March 1998 budget that the basis on which Class 1, Class 1A and Class 1B National Insurance contributions (i.e. contributions in respect of employees) are calculated would be changed with effect from April 1999. These changes were brought into effect by the Social Security Act 1998. From April 1999, there will be only one employer contribution rate of 12.2%, instead of the rates of 3%, 5%, 7% and 10% which were previously payable, depending on earnings. The employers' rate is only payable on earnings above a new earnings threshold, aligned with the income tax personal allowance. Additionally the contribution of 2% of earnings below the lower earnings limit, payable by employees, is abolished. It has been assumed that there will be no change to the allocation of employers' contributions to the NHS, so that the National Insurance Fund will receive 12.2% of earnings above the earnings threshold, less 0.9% of all earnings for those earning above the lower earnings limit. No changes have been announced for the contracted-out rebate, which has been assumed to continue on the current arrangements.

9.2 Table 9.1 sets out the contribution rates required under the 1998/99 National Insurance contribution rate regime and the revised rates taking account of the changes to the Class 1 rates and limits introduced by the Social Security Act 1998.

**Table 9.1 Effect of the Social Security Act 1998 changes to Class 1 contribution rates and earnings limits**

JOINT EMPLOYEE AND EMPLOYER CONTRIBUTION RATE %		
Earnings increases exceed flat rate benefit and earnings limit increases by 1.5% pa		
Year	Pre SSA 1998 structure	Post SSA 1998 structure
1999-00	17.4	20.0
2000-01	17.3	19.9
2010-11	16.7	18.9
2020-21	16.2	18.1
2030-31	16.9	18.6
2040-41	15.8	17.1
2050-51	14.2	15.2
2060-61	13.3	14.0

9.3 In 1998/99, the main combined employee and employer contribution rate to the National Insurance Fund was 18.05%. Under the new regime, the employers' rate for the National Insurance Fund changes from 9.1% to 11.3% (excluding the effect of the NHS proportion being on a different earnings base to the 12.2% main rate) from April 1999, so that the main combined employee and employer contribution rate to the National Insurance Fund becomes 20.25%. The change in National Insurance contributions for employers is broadly revenue neutral, resulting in a small loss of approximately £0.5bn (in cash terms) in the year 1999/2000 for the National Insurance Fund. The abolition of the employees' contributions of 2%

on earnings below the lower earnings limit costs approximately £1.2bn. Thus the combined loss of revenue in 1999/00 is £1.7bn. This accounts for the required rate under the new regime in 1999/00 of 20.0% being quite close to the actual rate of 20.25% whereas if the old regime had continued the required rate of 17.4% would have been somewhat below the current rate of 18.05%.

9.4 In the year 1999/00 the contribution rates under the revised regime will be approximately 2.6% higher than under the current regime, reflecting the changes discussed in paragraph 9.3. With flat-rate benefits and earnings limits increased at 1.5% per annum less than prices, this gap narrows over time, to approximately 0.7% in the year 2060/61. Since benefit expenditure is the same in both scenarios, these different contribution rates are raising the same amount of revenue - that necessary to meet the benefit expenditure. The drop in the required rate under the new regime relative to the current contribution regime arises because, with earnings limits uprated at a lower rate than earnings, more of the wage mass is above the upper earnings limit.

9.5 The revised structure results in the employer paying an even higher proportion of class 1 National Insurance contributions. The employers' proportion will increase by approximately 14% compared to the 12% expected under the 1998/99 regime.

9.6 The changes to the contribution structure do not affect entitlement to benefit.

# 10. Effect of the March 1999 Budget

## National Insurance Contribution Rate and Limit Changes

10.1 This section contains estimates of the effects on the benefit expenditure and contribution rate of the proposed changes in the March 1999 budget.

10.2 The March 1999 budget included several proposals that would affect both the National Insurance contribution income and the SERPS expenditure in future years.

10.3 A nil rate band for employee National Insurance contribution rates will be introduced from April 2000. This band will have the effect, by April 2001, of aligning the level at which employees have to pay National Insurance contributions with the income tax personal allowance at the same time as preserving benefit entitlement for those earning between the lower earnings limit and the new threshold. In April 2001, both employees and employers will then contribute in respect of their earnings above the earnings threshold (equal to the income tax personal allowance) rather than the lower earnings limit. The lower earnings limit for employers' National Insurance contributions was changed to the weekly equivalent of the income tax personal allowance (£83 per week from April 1999, expected to be £87 per week from April 2001) as a consequence of the Social Security Act 1998.

10.4 The upper earnings limit will be increased in April 2000 and April 2001 by greater amounts than implied by price inflation. However, as the UEL is expected to be approximately 115% of male full time average earnings in 2001, these increases merely bring the level of the UEL back to equivalent levels in the early 1990s, not to the higher levels in the early 1980s.

10.5 SERPS will continue to accrue on earnings between the lower earnings limit and the increased upper earnings limits and contracted-out rebate will be based on these earnings. This will have the effect of increasing SERPS outgo in the long term and contracted-out rebates in the short and long term.

10.6 Based on the March 1999 budget economic assumptions, the contribution limits that will apply, compared to those that would have applied without the budget changes, are given in Table 10.1.

**Table 10.1 Employees contribution limits in 2000/01 and 2001/02 arising from the March 1999 budget proposals (£ per week) - budget economic assumptions**

Year	1999-00	2000-01	2001-02
Lower earnings limit	66	67	69
Nil rate limit for employees	66	76	87
Upper earnings limit with normal upratings	500	505	520
Upper earnings limit with proposed March 1999 budget upratings	500	535	575

10.7 From April 2001, the employers' National Insurance contributions rate will be reduced from its current level of 12.2% to 11.7% of earnings over the earnings threshold. From April 2000 the NHS allocation from employers' National Insurance contributions (which is based on a rate of 0.9% throughout) will be calculated by reference to 0.9% of all earnings in respect of employees earning above the employees' starting point, rather than above the lower earnings limit, as is expected to apply for 1999/2000.

10.8 The Class 1A rate which employers pay in respect of company car and fuel benefits for their employees is also

expected to be reduced to 11.7% from April 2001. From April 2000, Class 1A liability is being extended to cover other taxable fringe benefits for employees.

10.9 The flat-rate Class 2 rate paid by the self-employed will be reduced to £2 per week from April 2000 from its rate of £6.55 in 1999/2000. The flat rate is assumed to remain fixed in cash terms for all future years. The profits limits for Class 4 National Insurance contributions paid by the self-employed will be altered to align them with the nil rate limit and upper earnings limits for employees from April 2000 and the rate of Class 4 National Insurance contributions will be increased to 7% from 6% at the same time.

10.10 The estimated expenditure from the National Insurance Fund following these changes is given in Tables 10.2 and 10.3. Expenditure is shown in £ billion in 1999/00 price terms and assumes real earnings growth of 1.5% per annum.

**Table 10.2 National Insurance Fund expenditure after the March 1999 budget changes - flat-rate benefit rates and earnings limits increase in line with prices (£ billion in 1999-00 price terms)**

Year	1999-00	2000-01	2010-11	2020-21	2030-31	2040-41	2050-51	2060-61
Retirement pension Basic	33.6	33.7	37.5	40.4	48.7	52.2	50.5	50.0
Earnings related	4.5	5.0	9.8	12.5	14.9	15.2	16.2	18.7
Widow's pension Basic	0.7	0.7	0.5	0.9	0.7	0.6	0.7	0.7
Earnings related	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Incapacity benefit Basic	6.3	6.4	7.6	9.6	9.3	8.7	8.9	8.5
Earnings related	0.8	0.6	0.1	0.0	0.0	0.0	0.0	0.0
Jobseekers Allowance	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5
Other benefits	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4
Expenses	1.0	1.1	1.2	1.4	1.7	1.9	2.2	2.6
Total Expenditure	48.0	48.6	57.7	65.9	76.3	79.7	79.5	81.5

**Table 10.3 National Insurance Fund expenditure after the March 1999 budget changes - flat-rate benefit rates and earnings limits increase in line with earnings**

Year	1999-00	2000-01	2010-11	2020-21	2030-31	2040-41	2050-51	2060-61
Retirement pension Basic	33.6	34.2	44.1	55.1	77.1	95.8	107.3	123.3
Earnings related	4.5	5.0	9.8	12.5	14.9	15.3	16.6	19.6
Widow's pension Basic	0.7	0.7	0.6	1.2	1.2	1.1	1.5	1.6
Earnings related	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1
Incapacity benefit Basic	6.3	6.5	8.9	12.9	14.4	15.5	18.3	20.1
Earnings related	0.8	0.6	0.1	0.0	0.0	0.0	0.0	0.0
Jobseekers Allowance	0.6	0.6	0.7	0.8	0.9	1.1	1.2	1.4
Other benefits	0.3	0.3	0.4	0.4	0.5	0.6	0.6	0.7
Expenses	1.0	1.1	1.2	1.4	1.7	1.9	2.2	2.6
Total Expenditure	48.0	49.2	65.9	84.6	110.7	131.4	147.8	169.4

10.11 The March 1999 budget changes to the Upper Earnings Limit increase net SERPS expenditure by 4.5% in the year 2060, assuming price uprating of earnings limits, and by 2.5% assuming earnings uprating of earnings limits.

10.12 Overall, total expenditure from the National Insurance Fund increases in the year 2060 by approximately 1.0% on a price uprating basis and approximately 0.3% on an earnings uprating basis as a result of these changes.

10.13 Table 10.4 sets out the required contribution rates after these changes together with the rates required before the changes.

**Table 10.4 Projected class 1 contribution rates required to balance income and expenditure on a pre and post March 99 budget basis**

JOINT EMPLOYEE AND EMPLOYER CONTRIBUTION RATE %				
Year	Pre March 99 budget		Post March 99 budget	
	Earnings upratings	Price upratings	Earnings upratings	Price upratings
1999-00	20.0	20.0	20.0	20.0
2000-01	20.2	19.9	20.5	20.2
2010-11	21.6	18.9	21.8	19.0
2020-21	23.2	18.1	23.4	18.1
2030-31	26.7	18.6	27.0	18.5
2040-41	27.6	17.1	27.9	17.0
2050-51	27.3	15.2	27.6	15.2
2060-61	27.6	14.0	27.9	14.0

10.14 The pre-March 99 Budget figures are taken from Table 5.5 above. The post-March 99 Budget figures are similar, reflecting the small overall change in the level of National Insurance Fund expenditure. However, the rates are not directly comparable since, for employees the earnings limits are different in each case and for both employees and employers the balance between their contributions is slightly different, reflecting the proposed reduction in the employers' rate to 11.7% from the year 2001. Additionally, the estimates show that the self-employed are paying larger contributions overall following the March 99 Budget changes.

# Appendix A:

## Summary of Contributions and Benefits

11.1 This appendix summarises the principal provisions regarding National Insurance contributions and benefits in the Social Security Acts and Regulations on which the estimates for future years in this review are based. It concentrates on those aspects of contribution liability and benefit entitlement which are significant in financial terms.

**Classes of contributions**

11.2 For the purpose of assessing contribution liability, the population of Great Britain over school-leaving age and under pensionable age is divided into three categories:

- A. employed persons, i.e. all persons gainfully occupied under a contract of service or as an office-holder, and certain other persons;
- B. self-employed persons;
- C. other persons, not employed or with low earnings.

11.3 Employed and self-employed persons whose earnings are above specified minima are required to contribute to the National Insurance Fund. Those with earnings below these minima and non-employed persons may do so if they wish. Employed persons who have earnings above the lower earnings limit pay earnings-related Class 1 primary contributions; their employers pay earnings-related Class 1 secondary contributions if the employee earns above the earnings threshold. Employees pay contributions up to an upper earnings limit. Employers pay contributions on all their employees' earnings above the earnings threshold. No Class 1 primary contributions are payable by those at work after pensionable age (currently 65 for men and 60 for women) but the employer is still required to pay Class 1 secondary contributions. Class 1A contributions are payable by employers in respect of cars made available for private use and car fuel by people liable to Class 1 contributions. Class 1B contributions will be payable by employers in respect of PAYE settlement agreements.

11.4 Certain employed married women and widows, who exercised an option before 11 May 1977, have a reserved right to pay a reduced rate of contribution; their employers pay full Class 1 secondary contributions in respect of them. They may be entitled to receive statutory sick pay and statutory maternity pay but are not entitled to other benefits, except where title arises through their husband's insurance.

11.5 Self-employed persons who have not been granted exemption on account of low earnings pay flat-rate Class 2 contributions and, on their profits between specified levels, earnings-related Class 4 contributions. The self-employed do not pay contributions on earnings above a specified upper limit. Non-employed persons and others not required to contribute may pay flat-rate Class 3 contributions on a voluntary basis.

**Contribution rates 1990 to 1999**

11.6 In accordance with Section 5 of the Social Security Contributions and Benefits Act 1992, the earnings limits for each tax year have been determined by reference to the basic flat-rate pension coming into force in April of that year.

11.7 The standard rates of basic pension, the lower and upper earnings limits for Class 1 primary and secondary contributions and the earnings threshold in force between April 1990 and 1999 are shown in Table 11.1 below.

**Table 11.1 Standard benefit rates and earnings limits 1990 to 1999**

Period Commencing	Standard rates of benefit payable	Earnings limits applicable from April of financial year
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	<b>Basic pension</b>	<b>Lower limit</b>	<b>Upper limit</b>	<b>Earnings threshold</b>
	<b>£ per week</b>	<b>£ per week</b>	<b>£ per week</b>	<b>£ per week</b>
April 1990	46.90	46.00	350.00	N/A
April 1991	52.00	52.00	390.00	N/A
April 1992	54.15	54.00	405.00	N/A
April 1993	56.10	56.00	420.00	N/A
April 1994	57.60	57.00	430.00	N/A
April 1995	58.85	58.00	440.00	N/A
April 1996	61.15	61.00	455.00	N/A
April 1997	62.45	62.00	465.00	N/A
April 1998	64.70	64.00	485.00	N/A
April 1999	66.75	66.00	500.00	83.00

11.8 The main Class 1 contribution rates during the period covered by the review and in the years up to 1999-2000 are shown in Table 11.2. The first three columns show the full percentage rates, including contributions to the National Health Service. The next three columns show the net rates payable to the National Insurance Fund after deducting the allocations to the National Health Service. The remaining three columns show the percentage contribution reductions on the band of earnings between the lower and upper limits in respect of those contracted-out from the earnings-related additional pension.

**Table 11.2 Standard Class 1 contribution rates for employees (primary) and employers (secondary) 1990 to 1999**

<b>Tax year</b>	<b>Full Class 1 rate</b>			<b>Contribution payable to National Insurance Fund after deducting allocations to the NHS</b>			<b>Contribution reduction for those contracted-out</b>		
	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(7)</b>	<b>(8)</b>	<b>(9)</b>
	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>	<b>%</b>
1990-91	9.00	10.45	19.45	7.95	9.55	17.50	2.00	3.80	5.80
1991-92	9.00	10.40	19.40	7.95	9.50	17.45	2.00	3.80	5.80
1992-93	9.00	10.40	19.40	7.95	9.50	17.45	2.00	3.80	5.80
1993-94	9.00	10.40	19.40	7.95	9.50	17.45	1.80	3.00	4.80
1994-95	10.00	10.20	20.20	8.95	9.30	18.25	1.80	3.00	4.80
1995-96	10.00	10.20	20.20	8.95	9.30	18.25	1.80	3.00	4.80
1996-97	10.00	10.20	20.20	8.95	9.30	18.25	1.80	3.00	4.80
1997-98	10.00	10.00	20.00	8.95	9.10	18.05	1.60	3.00	4.60
1998-99	10.00	10.00	20.00	8.95	9.10	18.05	1.60	3.00	4.60
1999-00	10.00	12.20	22.20	8.95	11.30	20.25	1.60	3.00	4.60

Note 1: Columns (1), (4) and (7) are primary (rebate) rates (paid by employees), columns (2), (5) and (8) are secondary (rebate) rates (paid by employers) and columns (3), (6) and (9) are the total.

Note 2: From 1997-98 different levels of rebate are paid in respect of the different methods of contracting out. The figures shown in the table are in respect of COSRs. For COMPs, age-related rebates varying from 3.1% to 9.0% were paid in respect of 1997-98 and 1998-99 and these rates changed to rates between 2.2% and 9.0% from 1999-2000. For APPs, age-related rebates varying from 3.4% to 9.0% were paid in respect of 1997-98 and 1998-99 and these rates changed to rates between 3.8% and 9.0% from 1999-2000.

Note 3: In respect of 1999-00 and later years, the employers' rate of 12.2% is applied to earnings in a different way to that used in calculating the 0.9% allocated to the National Health Service. Thus the National Insurance Fund proportion of 11.3% shown in column 5 is not strictly accurate.

11.9 For those Class 1 contributors who are contracted-out, on top of the normal contracted-out rebates, an additional incentive of 2% of relevant earnings was payable for the years 1987-88 to 1992-93 for appropriate personal pensions and from 1988-89 to 1992-93 for occupational schemes for those newly contracted-out during this period. An additional rebate of 1% was payable from 1993-94 to 1996-97 to people aged 30 and over with appropriate personal pensions.

11.10 Table 11.2 shows the full rates of contribution applicable to employed persons. There were slightly reduced rates of contribution for members of the armed forces, although these were aligned with the full Class 1 rates from April 1996 onwards, and for some others because of their different eligibility conditions for some benefits. The total primary rate paid by those married women and widows who pay the reduced rate of contribution has remained at the current rate of 3.85%, of which 2.80% goes to the National Insurance Fund.

11.11 The secondary rates shown in Table 11.2 applied for those in the highest earnings band, with lower rates applying for those in lower earnings bands up to 1998/99. The limits of these earnings bands have been reviewed annually at the same time as the lower and upper earnings limits. Table 11.3 shows the employer contribution rates and the relevant earnings bands in force during the year 1998-99. (From April 1999 the lower rates applying to the lower earnings bands have been abolished by the Social Security Act 1998.)

**Table 11.3 Employers contributions earnings bands and contribution rates during 1998-99**

Weekly earnings	Class 1 rate	Contributions to National Insurance Fund
	%	%
£64.00-£109.99	3.0	2.1
£110.00-£154.99	5.0	4.1
£155.00-£209.99	7.0	6.1
£210.00 and over	10.0	9.1

11.12 Employees who earn more than the lower earnings limit pay contributions of 2% of earnings at the lower earnings limit and 10% of earnings from the lower earnings limit up to the upper limit in 1998/99. The 2% below the lower earnings limit is abolished from April 1999 by the Social Security Act 1998.

11.13 The Social Security Act 1998 changed the rate of Class 1 secondary (employers) contributions and the earnings on which they are paid with effect from April 1999. The new employers' contribution rate is 12.2%, payable on all earnings above an earnings threshold. The earnings threshold will be set by regulations for each year but is expected to follow approximately the personal allowance for income tax purposes. For the purposes of the estimates in this report, the earnings threshold in 1998/1999 has been taken as £81 p.w. (although it does not apply in that year) and this amount has been increased in subsequent years in line with the assumptions underlying this report. The amount of the employers contributions which will be allocated to the NHS is unchanged at 0.9% of all earnings in respect of those earning over the LEL.

11.14 Particulars of the small earnings exception limit, the earnings or profits limits and the contribution rates for the self-

employed during the period 1990 to 1999 are shown in Table 11.4. The allocation to the National Health Service from Class 2 contributions is 15.5% of the income whilst the Class 4 contribution percentages shown include 1.15% of profits between the lower and upper profits limits as an allocation for the National Health Service.

**Table 11.4 Contribution rates, including the NHS allocation, and earnings limits for self-employed persons 1990 to 1999**

Tax year	Small earnings exception limit	Class 2 contribution	Profits limits for Class 4 contributions		Class 4 contribution on profits between the limits
	£ p.a.	£ p.w.	Lower limit £ p.a.	Upper limit £ p.a.	%
1990-91	2,600	4.55	5,450	18,200	6.3
1991-92	2,900	5.15	5,900	20,280	6.3
1992-93	3,030	5.35	6,120	21,060	6.3
1993-94	3,140	5.55	6,340	21,840	6.3
1994-95	3,200	5.65	6,490	22,360	7.3
1995-96	3,260	5.75	6,640	22,880	7.3
1996-97	3,430	6.05	6,860	23,660	6.0
1997-98	3,480	6.15	7,010	24,180	6.0
1998-99	3,590	6.35	7,310	25,220	6.0
1999-00	3,770	6.55	7,530	26,000	6.0

11.15 People not liable to pay contributions as employed or self-employed persons may pay Class 3 contributions on a voluntary basis with a view to meeting the contribution conditions for entitlement to widow's pension and basic retirement pension. The Class 3 contribution rate has been 10 pence per week lower than the corresponding Class 2 rate for each year since 1990-91.

### **Treasury Grant**

11.16 The Treasury Grant was introduced by the Social Security Act 1993. It enables money provided by Parliament to be paid into the National Insurance Fund if the Treasury (formerly the Secretary of State for the Department of Social Security subject to Treasury consent) considers it expedient to do so to maintain the level of the Fund. It is subject to a maximum of 17% of benefit expenditure in the year. The amount paid in any financial year is based on estimates made by the Government Actuary prior to the start of the year, of the expected financial position of the Fund at the end of the year.

### **Contribution conditions and eligibility**

11.17 Full rate Class 1 contributors are eligible for all benefits provided by the scheme. Reduced rate Class 1 contributors (married women and widow optants) may be entitled to statutory sick pay and statutory maternity pay but are not entitled to other benefits except where title arises through their husband's contributions. Class 2 contributors (self-employed persons) are eligible for all benefits, with the exception of contribution based Jobseekers Allowance and the earnings-related addition to retirement, widows' and incapacity benefits. Class 3 voluntary contributors are entitled only to flat-rate retirement pensions, widows' benefits and the pensioners' Christmas bonus. Class 4 contributions by self-employed persons do not give entitlement to benefits (the entitlement of self-employed persons is determined by their Class 2 contributions).

11.18 People claiming benefits because they are sick (Incapacity Benefit, Severe Disablement Allowance) or unemployed (Jobseekers Allowance) or carers claiming Invalid Care Allowance are normally entitled to a credit for each week they are

claiming. These credits count as a Class 1 contribution at the LEL for entitlement to most benefits. Some credits count for Retirement Pension and Widows' benefit only, whilst others count also for Incapacity Benefit, Jobseekers Allowance (Contributory) and Maternity Allowance. Young persons in full time education under the age of 19 qualify for education credits. Men aged 60-64 who are not working, not claiming another benefit and are resident in Great Britain are entitled to "autocredits" for Retirement Pension and Widows' Benefit purposes. Credits may also be awarded for certain training courses. In general, contributory benefits depend on a certain number of contributions actually being paid by some specified time; credits normally help in completing the contribution record.

11.19 For retirement pension and widows, benefit, entitlement is based on lifetime contributions and credits. For both benefits a minimum of one year's contributions must be paid and to get a full rate of benefit, contributions must have been paid or credited for approximately 90% of working life. Working life for retirement pension is from age 16 to retirement age. Widows' benefit is based on the deceased husband's contribution record from age 16 to year of death (or pension age if this is earlier). Reduced rates of benefit are payable if the contribution record is less than complete with a minimum benefit rate of 25%. Below this, no pension is paid unless there is a reciprocal agreement arrangement in operation.

11.20 When an employee's or a self-employed person's employment is interrupted by sickness, or, in the case of an employee, by unemployment, in any calendar year, entitlement to benefit is determined by reference to the Class 1 (full rate) or Class 2 contribution record (including any credits) in the two consecutive tax years, the second of which ended in the previous calendar year. For example, benefit entitlement for spells of absence beginning in 1998 will be based on the contribution record in the financial years ending in 5 April 1996 and 5 April 1997. A spell of sickness is linked to a previous spell which ended 8 weeks (52 weeks in certain circumstances from October 1998) or less previously and a spell of unemployment is linked to a previous spell which ended 12 weeks or less previously and entitlement is then determined by reference to the date when the earliest linked spell of absence began.

11.21 Despite the change to employers' National Insurance contributions from April 1999, eligibility for benefits, SERPS entitlement and employers contracted-out rebates will still all be calculated with reference to earnings between the lower and upper earnings limits.

### **Basic retirement pension**

11.22 The standard rate of Category A basic pension is currently payable to male contributors from age 65 and to female contributors from age 60 (rising in stages to age 65 between the years 2010 and 2020), subject to the contribution conditions being satisfied. People who do not claim their pension at those ages will be awarded higher pensions when they subsequently claim, the increase being currently 1/7th of 1% for each week's deferment up to a maximum of five years. From 6 April 2010, people who do not claim their pension at pension age will be awarded higher pensions when they subsequently claim, the increase being 1/5th of 1% for each week's deferment with no maximum.

11.23 For the pension to be paid at the full standard rate of £66.75 per week from April 1999, contributions must satisfy the conditions set out in 11.19 above. Since April 1978, any complete tax year in which a person qualifies for home responsibilities protection while looking after children or disabled persons has been excluded from the requisite number of years of contributions/credits for a full basic pension. This makes it easier for such a person to satisfy the qualifying conditions. Contributions paid in countries with which there is a reciprocal agreement may be taken into account in qualifying for a pension, although any resulting pension is adjusted to reflect the period working abroad.

11.24 A married woman whose husband is receiving a Category A retirement pension at the standard rate may receive a Category BL pension of about 60% of the amount of her husband's pension based on her husband's contribution record if she is over age 60 and retired. A dependent wife who is under age 60 does not receive a pension, but her husband may receive an addition to his pension for a dependant. A married woman may also be entitled to a Category A retirement pension based on her own contributions. In this case she will usually receive her Category A pension topped up by the Category BL entitlement to the maximum of the Category BL rate.

11.25 A widow or widower (widowed over pension age whose wife was over pension age when she died) may receive a Category B pension at the full standard rate where the contribution conditions and other conditions relating to age at date of death are satisfied. This can be added to any Category A pension based on their own record subject to the maximum for a single person. Divorced persons and widows widowed under pension age may take into account contributions paid by the former spouse up to the time of divorce or widowhood instead of their own contributions in the same period, if that would lead to a more favourable entitlement to basic pension on their own contribution record.

### **Graduated pension**

11.26 Employees who paid graduated contributions in the period between April 1961 and April 1975 earned units of graduated pension. Each £7.50 paid by a man and each £9.00 paid by a woman gave entitlement to a pension unit of 2.5 pence per week. Since November 1978 the value of the unit has been uprated each year and is currently 8.67 pence per week from April 1999. Increments to graduated pensions are awarded where retirement is deferred and widows and widowers (subject to certain conditions) can inherit one half of the graduated pension to which the deceased spouse was entitled.

### **Earnings-related additional pension (SERPS)**

11.27 Since April 1978 employees who have paid Class 1 contributions have been entitled to an earnings-related additional pension. The earnings on which contributions are paid in any tax year are revalued in line with the increases in the general level of earnings, up to the year before that in which pension age is attained. The lower earnings limit in the latter year is then subtracted to obtain the revalued relevant earnings in respect of each contribution year. For new awards of pension from April 2000 the calculation of the relevant earnings will change. The lower earnings limit for the year when the earnings are earned will be deducted before those earnings are revalued rather than deducting the lower earnings limit in the year prior to retirement after revaluation. The revalued relevant earnings are then averaged over the period from age 16, or April 1978 if later, to retirement age. Provision existed to allow periods for which a contributor has been awarded credits in respect of sickness or has been eligible for home responsibility protection to be excluded from the calculation of the average with effect from 1999. However, the enabling regulations have not been brought into effect and therefore these credits will not apply. Since it appears clear that some form of credits will be granted in due course, this report assumes that home responsibility protection had been introduced otherwise the financial estimates would have been too low. Legislation provides that for awards of additional pension from April 1999, payments of Family Credit and Disabled Working Allowance will count as earnings for the purposes of calculating the entitlement to additional pension for years of accrual 1995/96 onwards. Those contracted out will not receive these credits for years after 1996/97.

11.28 Under the Social Security Contributions and Benefits Act 1992, additional pension will eventually be 20% of average earnings as defined above and may then be regarded as accruing uniformly over the working life between age 16 and pension age. However, for those over age 16 when the scheme of additional pension took effect in April 1978, the working life for this purpose is taken as the years between April 1978 and the year in which pension age is attained, subject to a minimum of 20 years. Under the scheme as originally enacted in the Social Security Pensions Act 1975, the pension was to be 25% of average earnings as defined in that Act. The Social Security Act 1986 preserved the right to benefits accrued before 1988 and the new benefit level is to be phased in gradually under transitional provisions. The result is that the accrual rate will be  $25/N\%$  in respect of earnings up to April 1988, where N is the number of tax years in the earner's working life from April 1978 to the one preceding pension age, with a minimum value of 20. The accrual rate in respect of earnings from April 1988 depends on the year in which pensionable age is attained. Those retiring before April 2000 will receive a pension based on an accrual rate of  $25/N\%$  for all earnings. For those retiring from then up to April 2009 there will be a phased reduction in the accrual rate from  $25/N\%$  to  $20/N\%$ . For later retirements, the accrual rate for post-1988 earnings will be the ultimate rate of  $20/N\%$ . A complete summary of the accrual rates is given in Table 13.9 in section 13, which sets out the detailed assumptions underlying the projections of future expenditure and illustrates the effect of the changes in the accrual rates in future. The rate of additional pension is subject to a contracted-out deduction where a person has been a member of a contracted-out occupational pension scheme or a holder of an appropriate personal pension. In respect of accruals of pension from April 1997 the arrangements for contracting out were altered and are described more fully below.

11.29 Until April 2000 a widow or widower may inherit the whole of the deceased spouse's additional pension, subject to the combined pension not exceeding the maximum additional pension (for inheritance purposes) to which an individual could be entitled. From April 2000 a widow or widower will be entitled to receive half of the additional pension which was payable to the deceased spouse, subject to the same overall limit.

### **Contracting out**

11.30 Members of occupational pension schemes meeting required conditions may be contracted-out of (part of) the additional pension. In that case, both the employees and their employers are allowed a reduction in the rate of National Insurance contributions payable on the band of earnings between the lower and upper earnings limits as described above.

11.31 In respect of accruals of pension for periods prior to April 1997, contracted-out defined benefit schemes are required to provide guaranteed minimum pensions (GMPs) at the retirement ages under the State Scheme and to a spouse on the death of a member. Occupational schemes operating on a money purchase basis can also be used for contracting out provided that the contributions made to the scheme in respect of employees are not less than the amount of the contracted-out contribution reduction and provided that the pensions from the scheme satisfy certain requirements. Individuals can choose to effect a personal pension arrangement that is approved for the purposes of contracting out. In this case, the individual and their

employers will pay the full National Insurance contributions applicable to those who are not contracted-out. The equivalent of the contracted-out contribution reduction (together with an allowance in lieu of tax relief on the employee's share) will be paid by the Department of Social Security (DSS) into the personal pension arrangement chosen by the individual.

11.32 The GMPs which schemes have to provide in respect of periods up to April 1997 accrued at the rate of 25/N% on relevant earnings between April 1978 to March 1988, where N is as defined in paragraph 11.28 above, except that there is no adjustment in respect of home responsibility protection. From April 1988 onwards, GMPs have accrued at the rate of 20/N% of relevant earnings. The earnings to which these percentages are applied are broadly the same as the earnings that count for additional pension. The additional pension payable from the National Insurance Fund will be reduced by the amount of any contracted-out deductions (COD) (which will be of a similar amount to the GMP) in respect of any period of contracted-out employment. Contracted-out defined benefit occupational pension schemes are required to uprate GMPs accrued after April 1988, when in payment, in line with movements in prices, up to a limit of 3% per annum. No increases are required for GMPs that accrued before April 1988.

11.33 For members of money purchase, i.e. defined contribution, occupational pension schemes and those with approved personal pensions, the additional pension payable from the National Insurance Fund will be reduced by a notional COD in respect of the period up to April 1997. This is calculated in the same way as the actual COD would be for a member of a contracted-out defined benefit occupational pension scheme.

11.34 A GMP at half of the rate payable to the contributor must be provided by contracted-out defined benefit schemes to surviving widows in respect of accruals from April 1978 and to widowers in respect of accruals from April 1988 onwards. Where appropriate, CODs will be deducted from benefits payable from the National Insurance Fund to widows and widowers. In the case of surviving spouses of members of defined contribution schemes or holders of approved personal pensions, a notional COD (which may in certain circumstances be equivalent to 100% of the rate payable to the contributor) will be deducted from the National Insurance Fund benefit. There is no maximum for combined own and inherited COD, unlike combined own and inherited SERPS.

11.35 In respect of accruals from April 1997, members of occupational pension schemes that meet certain conditions and people with appropriate personal pensions can contract out of the additional pension. In respect of these periods, people will not receive additional pension less a COD but will be completely out of SERPS. Their Earnings-Related pension will come entirely from the occupational pension schemes or appropriate personal pension and these arrangements will be responsible for providing increases in pensions in payment in line with movements in prices, up to a limit of 5% per annum.

### **Widows' benefits**

11.36 Widow's benefit comprises widow's payment, widowed mother's allowance and widow's pension. The entitlement is based on contributions paid by or credited to the deceased husband and is broadly similar to the conditions for retirement pension, adjusted for the actual age of the deceased at death. The benefit is usually converted to retirement pension not later than age 65 although widowed mother's allowance can be paid beyond age 65. The following paragraphs are the rules governing the benefits payable to widows who were widowed on or after 11 April 1988. Slightly different rules apply for those widowed earlier.

11.37 A widow's payment of £1,000 is payable immediately on widowhood if under 60 or the husband under 65 at death. This is followed by widowed mother's allowance of £66.75 per week from April 1999 where the widow has a qualifying child eligible for, or with underlying entitlement to, child benefit. An addition of £9.90 is paid for the first dependent child and £11.30 per week is paid in respect of each subsequent dependent child of a widow receiving widowed mother's allowance. Where there are no children, a widow's pension of £66.75 per week from April 1999 is paid for those aged 55 or over at widowhood; normally, if the widow is over 60, retirement pension will be paid. The widow's pension is payable on a sliding scale of between 30% and 93% of the full rate for those aged between 45 and 54 at widowhood or when widowed mothers allowance ends. Reduced rates are paid when the husband's contribution record is deficient.

11.38 An earnings-related additional widow's pension is payable in respect of earnings on which contributions were paid by the husband since April 1978. This additional pension accrues in the same way as the additional retirement pension described above. The N used to determine the accrual rate is the same as the value of N for a man retiring in the year that the widowhood occurs (number of tax years from April 1978 to the year preceding the husband's death, subject to a minimum of 20 and a maximum of 49). As with earnings-related additional retirement pension, provision exists to allow this value of N to be adjusted in respect of any credits to the husband for incapacity and home responsibility protection, although the enabling regulations are not yet in place. The additional pension is reduced to reflect any deductions in respect of periods of contracted-out employment (where a different value of N is used in calculating the contracted out deduction).

## **Contributory Jobseekers Allowance**

11.39 Jobseekers Allowance replaced Unemployment benefit in October 1996 with some transitional protection. The rate of Jobseekers Allowance is £51.40 per week from April 1999 for those aged 25 and over and £40.70 per week from April 1999 for those aged 18 to 24. Class 1 contributions at the level of 25 times the LEL must have been paid in at least one of the last two contribution years before the claim and both years must be qualifying years by virtue of contributions and/or credits. The benefit is payable after 3 waiting days for up to 6 months in any period of interruption of employment in a single spell or linked spells provided the contribution and other conditions are satisfied. After benefit has been paid for 6 months it cannot be paid again until the claimant has requalified by working as an employee for at least 16 hours in each of at least 13 weeks in the 26 weeks before benefit is reclaimed and is based on a later contribution period.

## **Incapacity benefit (IB)**

11.40 Incapacity benefit replaced sickness and invalidity benefits for new awards from 13 April 1995. People in receipt of invalidity benefit (IVB) on that date continue to have their entitlement calculated on the old rules for as long as they remain entitled, subject to the comments below.

11.41 Incapacity benefit is paid in respect of a claimant who is unable to work because of sickness or disability after April 1995. The claimant must satisfy the contribution conditions; for IB contributions at the level of 25 times the LEL must have been paid at some stage and both the last two contribution years must be qualifying years by virtue of contributions and/or credits. IB is paid at three rates:

- A. IB short-term lower rate at a personal rate of £50.35 per week from April 1999 for the first 28 weeks, after three waiting days, unless the claimant is an employee in receipt of SSP.
- B. IB short-term higher rate at a personal rate of £59.55 per week from April 1999 for cases between 29 and 52 weeks and immediately for those transferring from SSP after 168 days (28 weeks), provided they satisfy the contribution conditions.
- C. IB long-term rate at a personal rate of £66.75 per week from April 1999 thereafter as long as the claimant satisfies the "all work" test and is under state pension age. For claimants who are aged under 35 at the start of the incapacity an age addition of £14.05 per week from April 1999 will be paid and for those aged 35 to 44 an addition of £7.05 per week from April 1999 will be paid.

For the first 28 weeks claimants are assessed against their ability to carry out the "normal occupation" as now. For those without a regular occupation, the all work test will apply from the outset. For all other claimants, the all work test will apply after 28 weeks. Certain cases will be exempt from the all work test.

11.42 Increases may be paid with IB for an adult dependant who is caring for a dependent child or is aged 60 or over, provided their earnings are less than the adult dependency addition. The rate is £31.15 per week from April 1999 for claimants on the short-term rates, and £39.95 per week from April 1999 for those on the long-term rate. Child dependency increases may also be paid for claimants on the short-term higher rate or long-term rate (subject to the earnings of the wife/adult dependant).

11.43 Claimants in receipt of invalidity benefit at April 1995 continue to receive IB at IVB rates for the remainder of the spell of incapacity and for any subsequent linking spells. The personal rate for benefit is £66.75 per week from April 1999, and where there is title to any age-related addition and dependency increases these continue to be paid and are uprated each year. Any additional pension already in payment, based on earnings between April 1978 and April 1991, also continues but is not uprated annually. Claimants on IVB over state pension age at April 1995 continue to receive IVB up to age 70 (men) or 65 (women). After April 1995 claimants on IB reaching state pension age will cease IB and switch to retirement pension. Claimants in receipt of IVB at April 1995 are subject to the all work test unless they fall into one of a list of specified categories. In addition to those categories which apply to new IB claims, existing IVB claimants who were 58 on 13 April 1995 and in receipt of IVB since 1 December 1993 were exempt.

## **Maternity allowance**

11.44 Maternity allowance is paid to a woman expecting a child who has stopped work provided she has worked and paid full contributions as an employee or as a self-employed person for at least 26 weeks in the 66 weeks ending with the week before the expected week of childbirth. The allowance is payable for a maximum of 18 weeks, starting at the earliest 11 weeks before the baby is due. It is not payable if the woman is entitled to statutory maternity pay for the same week. It is payable at £59.95 per week from April 1999 if the woman was employed, and £51.70 per week from April 1999 if she was unemployed or self-employed, in the fifteenth week before the expected week of childbirth.

## **Guardian's allowance**

11.45 This allowance is payable at the rate of £9.90 per week for the first child and £11.30 for subsequent children to a person who provides a home for, or maintains, a child whose parents are both dead. In certain circumstances only one parent need be dead. There are no contribution conditions but there is a residence test.

## **Christmas bonus for pensioners**

11.46 This bonus of £10 is payable shortly before Christmas to retirement pensioners, incapacity and widow beneficiaries resident in the UK and elsewhere within the EU.

## **Statutory sick pay and statutory maternity pay**

11.47 Statutory sick pay (SSP) and statutory maternity pay (SMP) are paid by the employer direct to employees who satisfy the conditions for eligibility. Some payments of SSP by certain small employers and most of SMP are then recovered by the employer by reducing the amount of National Insurance contributions to be paid. The benefits replace sickness benefit and maternity allowance for most employees. In the National Insurance Fund accounts they are treated as deductions from contributions and are shown as such in the tables of projected income and expenditure in this review. As a result of the introduction of the transfer from the Consolidated Fund to offset recoveries made by employers in respect of SSP and SMP the amounts of these benefits have no effect on the finances of the National Insurance Fund itself.

### **Statutory sick pay**

11.48 Most people who work for an employer and earn enough to pay Class 1 National Insurance contributions, including women who have opted to pay reduced rate contributions, will receive statutory sick pay from their employers for up to 28 weeks during a period of interruption of work. There are a number of groups of employees excluded from the statutory sick pay scheme and such employees may be entitled to sickness benefits. Following a full period of 28 weeks in receipt of statutory sick pay, an employee will be able to claim incapacity benefit.

11.49 The amount of statutory sick pay is £59.55 per week from April 1999.

### **Statutory maternity pay**

11.50 Statutory Maternity Pay (SMP) is paid by employers to women expecting a child who have been in their employment for a continuous period of at least 26 weeks into the 15th week before the expected week of confinement, and have average weekly earnings that equal or exceed the lower earnings limit for the payment of National Insurance contributions. SMP is payable for up to 18 weeks commencing at the earliest 11 weeks before the week the baby is due.

11.51 There are two rates of SMP. The first six weeks are paid at 90% of the employee's average earnings (or at the SMP rate if higher). The remaining weeks are paid at a flat-rate of £59.55 per week from April 1999.



# Appendix B:

## National Insurance Fund: Legislation and Accounts from 1990

12.1 Appendix A summarises the rules governing contributions and benefits assumed to apply in future for the purpose of deriving the financial estimates. These are based on the legislation in force in March 1999. This Appendix briefly summarises the changes in the relevant legislation since 1990, the start of the formal period covered by the review. In addition, the accounts for the National Insurance Fund for the period 1990-91 to 1997-98 (which are the latest available) are summarised in Tables 12.1 and 12.2.

### Legislation

12.2 The Social Security Act 1990 removed expenditure on industrial injuries benefits from the National Insurance Fund and introduced a transfer from the Consolidated Fund to meet expenditure on statutory sick pay and statutory maternity pay. This reduced the expenditure to be met by contributions and the contribution rates needed in future compared to what would otherwise have been required. In addition, the Act phased out additional pension with invalidity benefit whilst preserving amounts accrued to the financial year 1990/91.

12.3 The Statutory Sick Pay Act 1991 reduced from 100% to 80% the amount of statutory sick pay which employers could recover from their payments of National Insurance contribution.

12.4 The Social Security (Contributions) Act 1991 introduced liability to Class 1A contributions, payable by employers only, on the value attributed to the benefit of private use of a company car and free fuel.

12.5 The Social Security Contributions and Benefits Act 1992 and the Social Security Administration Act 1992 consolidated the legislation on social security whilst the Pension Schemes Act 1993 consolidated certain enactments relating to pension schemes including the arrangements for contracting out.

12.6 The Social Security Act 1993 introduced an additional rebate of 1% of relevant earnings for appropriate personal pensioners aged 30 and over on the 6 April at the start of each tax year. This began in respect of the 1993-94 year. The 1993 Act also introduced the Treasury grant, whereby payments can be made out of money provided by Parliament in order to adjust the level of the National Insurance Fund.

12.7 The Statutory Sick Pay Act 1994 removed the right of employers, other than small employers, to recover their payments of statutory sick pay.

12.8 The Social Security (Incapacity for Work) Act 1994 introduced incapacity benefit in place of sickness benefit and invalidity benefit with effect from April 1995.

12.9 The Social Security (Contributions) Act 1994 increased the main rate of Class 1 primary contribution payable by employed earners.

12.10 The Pension Act 1995 increased State pension age for women from 60 to 65 between the years 2010 and 2020, amended the terms for contracting out, introduced age-related rebates for contracting out on a money purchase and personal pension basis and altered the calculation of SERPS pensions.

12.11 The Jobseekers Act 1995 replaced unemployment benefit by the Jobseekers Allowance.

12.12 The Social Security Act 1998 changed the rate of Class 1 secondary (employers contribution rates) and the earnings on which they are paid with effect from April 1999. The new employers contribution rate will be 12.2% payable on all

earnings above an earnings threshold. The earnings threshold will be set by regulations for each year but is expected to follow approximately the income tax personal allowance. The earnings threshold in 1999/2000 is £83 per week. Entitlement to state benefits, the amount of SERPS benefit and the employers contracted-out rebate will continue to be determined with reference to earnings between the lower and upper earnings limits. The amount of employers National Insurance contributions payable to the NHS will be unchanged at 0.9% of all earnings in respect of those earning over the lower earnings limit. The Act also introduces a new class 1B employer liability of 12.2% in respect of PAYE settlement agreements.

### National Insurance Fund accounts

12.13 Tables 12.1 and 12.2 summarise the income and outgo of the National Insurance Fund as shown in the accounts for the five years 1990/91 to 1994/95 formally covered by this review and for 1995/96 to 1997/98.

**Table 12.1 National Insurance Fund income and outgo and balances for the period 1 April 1990 to 31 March 1998**

	£ billion							
	90- 91	91- 92	92- 93	93- 94	94- 95	95- 96	96- 97	97- 98
Balance at the beginning of the year	10.3	11.8	8.3	3.4	4.5	6.8	7.8	7.7
Income from contributions								
Class 1 (employees and employers) Gross amount	30.9	32.5	33.5	34.8	37.0	39.1	40.7	44.6
Employers recoveries in respect of								
(1) SSP	0.9	0.8	0.7	0.7	0.0	0.0	0.1	0.0
(2) SMP	0.3	0.4	0.4	0.4	0.5	0.5	0.3	0.5
Net amount received	29.7	31.3	32.4	33.7	36.5	38.5	40.3	44.1
Class 2 (self-employed flat-rate)	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.6
Class 3 (voluntary)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1
Class 4 (self-employed earnings-related)	0.5	0.5	0.5	0.6	0.6	0.7	0.7	0.8
State scheme premiums	0.2	0.1	0.1	0.1	0.1	0.2	0.2	0.2
Treasury Grant				7.6	6.3	3.6	1.9	0.9
Compensation for SSP and SMP recoveries				1.1	0.5	0.5	0.5	0.6
Income from investments (including gains and losses on realisation)	1.3	1.1	1.1	0.5	0.4	0.4	0.5	0.5
Other receipts	1.0	1.1	0.9					
<b>TOTAL INCOME</b>	34.1	34.7	35.7	44.3	45.1	44.6	44.9	47.8
Expenditure on benefits (see Table 12.2)	29.3	34.1	36.2	38.5	39.3	40.1	41.7	42.6
Payments to personal pension providers	2.1	2.5	2.7	2.9	2.0	2.0	2.0	2.1
Transfer to Northern Ireland	0.2	0.1	0.0	0.0	0.1	0.1	0.1	0.2

Administration costs	1.0	1.2	1.3	1.6	1.3	1.2	1.0	1.0
Other payments	0.0	0.3	0.3	0.3	0.2	0.2	0.1	0.1
<b>TOTAL OUTGO</b>	<b>32.6</b>	<b>38.1</b>	<b>40.6</b>	<b>43.2</b>	<b>42.9</b>	<b>43.6</b>	<b>45.0</b>	<b>46.0</b>
Excess of income over outgo	1.5	-3.5	-4.9	1.1	2.3	1.0	-0.1	1.9
Balance at end of year	11.8	8.3	3.4	4.5	6.8	7.8	7.7	9.6

Note 1: Components may not sum to totals due to rounding.

Note 2: In 1990 industrial injury benefits of £437m were paid from the Fund. Under section 16 of the Social Security Act 1990 these amounts were reimbursed from Class XIV, Vote 1. Both the income and outgo have been omitted from the figures for 1990 in Tables 12.1 and 12.2. After 1990 industrial injury benefits were not met by the Fund.

**Table 12.2 Analysis of expenditure on National Insurance Fund benefits in the period 1 April 1990 to 31 March 1998**

£ billion

	<b>90-91</b>	<b>91-92</b>	<b>92-93</b>	<b>93-94</b>	<b>94-95</b>	<b>95-96</b>	<b>96-97</b>	<b>97-98</b>
Unemployment benefit/Jobseekers Allowance	0.9	1.6	1.8	1.7	1.3	1.1	0.9	0.5
Incapacity benefit	4.6	5.8	6.6	7.4	8.0	7.9	7.7	7.4
Maternity benefit	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Widows' benefit	0.9	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Guardian's allowance and child's special allowance	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Retirement pension	22.7	25.5	26.7	28.2	28.7	30.0	32.0	33.6
Christmas lump sum payment to pensioners	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Total expenditure on benefits	29.3	34.1	36.2	38.5	39.3	40.1	41.7	42.6

Note 1: Components may not sum to totals due to rounding.

Note 2: In 1990 industrial injury benefits of £437m were paid from the Fund. Under section 16 of the Social Security Act 1990 these amounts were reimbursed from Class XIV, Vote 1. Both the income and outgo have been omitted from the figures for 1990 in Tables 12.1 and 12.2. After 1990 industrial injury benefits were not met by the Fund.

Note 3: Prior to 1995 invalidity and sickness benefit were paid instead of incapacity benefit.

# Appendix C:

## Estimated future population of Great Britain

**Table 13.1 Estimated future population of Great Britain at mid-year based on the estimated population at mid 1996**

Male	(thousands)							
Age last birthday	1996	2000	2010	2020	2030	2040	2050	2060
0-4	1865	1790	1697	1734	1675	1617	1612	1571
5-9	1934	1909	1741	1718	1727	1642	1622	1604
10-14	1827	1919	1801	1708	1745	1686	1628	1623
15-19	1746	1835	1931	1764	1741	1749	1665	1645
20-24	1885	1749	1970	1853	1761	1799	1740	1683
25-29	2275	2005	1886	1982	1817	1795	1804	1721
30-34	2403	2320	1775	1994	1879	1789	1826	1769
35-39	2109	2386	2018	1901	1996	1834	1813	1822
40-44	1856	2035	2322	1785	2003	1890	1801	1839
45-49	2016	1834	2363	2004	1891	1986	1827	1807
50-54	1682	1970	1990	2276	1755	1970	1860	1774
55-59	1441	1564	1756	2274	1934	1830	1923	1770
60-64	1322	1376	1825	1862	2138	1656	1860	1759
65-69	1213	1202	1375	1568	2050	1750	1662	1749
70-74	1044	1026	1101	1499	1555	1798	1401	1577
75-79	715	800	819	988	1149	1526	1308	1251
80-84	443	433	532	626	885	944	1100	868

85-89	202	221	271	317	414	498	677	580
90 and over	66	84	108	152	204	305	352	431
Total male	28043	28455	29280	30005	30320	30063	29484	28841
Female	(thousands)							
<b>Age last birthday</b>	<b>1996</b>	<b>2000</b>	<b>2010</b>	<b>2020</b>	<b>2030</b>	<b>2040</b>	<b>2050</b>	<b>2060</b>
0-4	1773	1699	1611	1646	1590	1535	1530	1492
5-9	1838	1814	1649	1627	1635	1555	1535	1518
10-14	1731	1821	1706	1618	1654	1598	1543	1538
15-19	1652	1745	1840	1676	1654	1662	1582	1563
20-24	1793	1682	1907	1792	1705	1741	1685	1630
25-29	2174	1918	1842	1938	1775	1753	1761	1682
30-34	2312	2224	1728	1952	1838	1752	1788	1732
35-39	2063	2293	1936	1861	1957	1794	1773	1781
40-44	1847	2002	2225	1734	1957	1844	1759	1794
45-49	2015	1829	2275	1923	1850	1945	1786	1765
50-54	1693	1981	1967	2186	1707	1927	1818	1734
55-59	1469	1595	1774	2209	1870	1802	1897	1743
60-64	1381	1431	1883	1883	2101	1645	1858	1754
65-69	1368	1311	1472	1653	2078	1764	1704	1794
70-74	1311	1242	1256	1671	1691	1897	1490	1685
75-79	1066	1138	1036	1207	1369	1739	1480	1435
80-84	830	771	816	891	1210	1245	1404	1111
85-89	512	518	547	549	690	797	1029	874
90 and over	268	313	329	379	472	668	745	878
Total female	29095	29328	29799	30397	30803	30664	30167	29503

# Appendix D:

## The Technical Assumptions made for the Purposes of the Financial Estimates

14.1 This appendix describes the methods and assumptions used in deriving the estimates of income and expenditure given in the report. Paragraphs 14.2 to 14.20 below give the assumptions used to estimate the numbers of contributors and amounts of contribution income. Paragraphs 14.21 to 14.86 set out the assumptions underlying the estimates for retirement pensions and other benefits and for administration costs.

### Contribution income

14.2 Estimates of future contribution income are derived by projecting the numbers in each class of contributor, allowing for demographic and other changes, and the average incomes on which contributions are based in each class. These projections are carried out by age and sex for employees.

### Future numbers of contributors

14.3 The projected future numbers of contributors were obtained in three stages. First, estimates of the future numbers economically active were obtained by applying activity rates, varying according to age and sex, to the future numbers in the population projection. Second, the resulting numbers economically active were broken down into employees, the self-employed, and the unemployed. Finally, employees and the self-employed were sub-divided according to whether or not they were liable to pay contributions.

### Rate of unemployment

14.4 One of the assumptions necessary for obtaining estimates of future numbers of contributors is the rate of unemployment, as this is a major factor in determining the size of the labour force. For the main estimates in the review the number of unemployed claimants has been assumed to be 1.4 million up to the year 2011. After this, the proportion of the economically active who are unemployed was kept at 4.7%, the same proportion as in the year 2011, for all future years.

### Numbers economically active

14.5 The future numbers economically active were obtained using the DfEE projections of activity rates and the corresponding numbers economically active for the period up to the year 2011, published in Labour Market Trends.

14.6 The activity rates assumed for future years in the DfEE projections include allowance for a continuation of recent trends, in particular for a further rise in the activity rates for women and for a further fall in the activity rates for men. The rates projected for the year 2011 have been used for all later years in the main estimates except that adjustments were made to allow for the increase in female state pension age. The rates for 1998 and for 2011 and later years before adjustment for female state pension age are shown in Table 14.1.

**Table 14.1 Economic activity rates for different age groups in 1998 and in 2011 and later years.**

Age	Men		Women	
	1999	2011 and Later	1999	2011 and Later
	Per cent		Per cent	
	Per cent		Per cent	
16-19	66.9	67.9	63.1	61.4
20-24	83.7	85.7	70.5	74.1
25-34	93.3	91.0	75.2	79.9
35-44	92.0	89.4	77.0	78.6
45-54	88.5	87.3	76.8	82.7
55-59	74.6	71.1	53.1	54.5
60-64	53.8	49.2	30.3	36.9
65-69	15.0	13.0	3.5	3.8
70 and over	4.6	4.4	3.5	3.8

## Breakdown of numbers economically active

14.7 The economically active population comprises all people in employment or self-employment, whether full-time, part-time or on training schemes, as well as the unemployed who are seeking work. In order to derive the numbers of contributors from the numbers economically active it is necessary to exclude those who, although classed as active, will not be paying contributions. In the main, these are the unemployed, those employed but with earnings below the lower earnings limit (who are mainly part-time workers) and the self-employed with earnings below the small earnings exception level. The estimated future number of contributors thus depends on the assumed basis of indexation of the basic pension and the contribution limits as this affects the level of the lower limit and therefore the number of those with low incomes who are liable to pay contributions. Table 14.2 shows estimates of future numbers on the assumption that the earnings limits are raised at a rate of 1.5% per annum below earnings. If earnings limits are raised with earnings the number of contributors would be lower by about 1.1 million by 2020 and about 2.2 million by 2060. However, because those excluded from the scheme would all have very low earnings, the effect on the contribution yields would be relatively small.

**Table 14.2 Future numbers of contributors with the lower earnings limit increased in line with prices (millions)**

Financial Year	Employees			Self-employed			Grand total	Reduced Rate Women*
	Men	Women	Total	Men	Women	Total		
1999-00	10.8	9.2	20.0	1.8	0.5	2.2	22.2	0.1
2000-01	10.9	9.3	20.2	1.7	0.5	2.2	22.3	0.1
2010-11	11.1	10.5	21.6	1.8	0.5	2.3	23.8	-
2020-21	11.1	11.1	22.2	1.8	0.5	2.4	24.5	-
2030-31	10.7	10.8	21.5	1.8	0.5	2.3	23.8	-
2040-41	10.5	10.9	21.4	1.8	0.5	2.3	23.7	-
2050-51	10.4	10.9	21.3	1.8	0.5	2.3	23.6	-
2060-61	10.2	10.8	21.0	1.7	0.5	2.3	23.2	-

\*included in the employees-women and grand total columns.

14.8 The numbers of contributors in Table 14.2 are those who pay contributions in a typical week. They are therefore lower than the numbers who pay at any time in the financial year as that would include those who only pay contributions for part of the year. The estimates of the number of employed contributors include some who are temporarily sick in the week and some over pension age for whom only the employer's contribution would be payable. Allowance for the estimated numbers in these categories is made in the estimates of contribution income. The figures for the self-employed represent those paying class 2 contributions. The estimated numbers self-employed in future years are based on the assumption that the increase experienced during the 1980s will level off. The proportion of those economically active who are self-employed is assumed to remain at 13% in future years. After allowing for the effects of the lower earnings limit and the small earnings exception, the self-employed account for about 10% of contributors. As the self-employed pay lower contributions than the employed, an increase in the proportion of contributors who are self-employed leads to an increase in the contribution rate needed to finance the benefit expenditure. The effect of varying the assumption of the proportion self-employed is given in paragraph 8.11. In addition to the number of contributors shown in Table 14.2, it is assumed that about 200,000 persons will pay voluntary class 3 contributions.

14.9 As can be seen from Table 14.2 above, by 1999 there are very few married women and widows paying Class 1 contributions at the reduced rate left. The remaining cases are expected to run off over the next few years as they reach pension age.

### **Numbers contracted-out**

14.10 The number of members of defined benefit occupational schemes (COSRs) who were contracted-out contributors averaged about 7.9 million in each week during 1995-96, the last year for which statistics are available from the DSS Analytical Services Division publication - Second Tier Pension Provision 1995/96. This number declined slowly during the early 1990s as a result of changing patterns of employment, in particular increases in part-time work, a switch from manufacturing to service industries and a relative rise in the number of smaller businesses, all of which resulted in a trend towards a lower proportion of employees who were members of occupational pension schemes. Following the increase in the number of employees since 1995/96 it has been assumed that there are approximately 8.1 million contracted-out contributors on average each week in 1999/00. The number of contracted-out contributors in future has been estimated by assuming that the current percentages of COSR contributors to gross contributors by age and sex will apply in future, except that allowance has been made for a small number of final salary schemes to contract out on a money purchase basis. Thus current levels of contracting out via COSRS are assumed to be maintained, with the change in the number of COSR contributors merely reflecting demographic changes, changes in economic activity rates and a small switch by some schemes to a money purchase contracting out basis.

14.11 The number of members of occupational money purchase schemes (COMPs) who were contracted-out contributors averaged about 0.3 million in each week during 1995-96, the last year for which statistics are available. For the main estimates the number of contracted-out contributors in COMPs in future has been assumed to remain constant at that level.

### **Personal pensions**

14.12 Individuals who are not members of contracted-out occupational schemes are able to take out personal pensions for the purposes of contracting out. By the end of 1995-96, about 5.4 million appropriate personal pensions were in force, although about 1.6 million of those did not receive any rebate in that financial year, as their earnings were below the annual lower earnings limit. In considering the assumptions to be made for the future numbers with appropriate personal pensions, it is necessary to take account of certain features of the terms on which such pensions are available to employees. With effect from April 1997, rebates to appropriate personal pensions are on an age-related basis. Prior to then, a flat-rate rebate and additional amounts had been paid.

14.13 These changes have resulted in appropriate personal pensions being less financially attractive than before and it is likely that, as a result, fewer people will contract out in this way. For the main estimates in this report it has been assumed that those people who currently have an appropriate personal pension will maintain them to state pension age but that the take up of appropriate personal pensions at the younger ages will be approximately half of previous levels. This will result over time in a significantly lower number of appropriate personal pensions than is the case currently.

### **Average earnings**

14.14 In obtaining estimates of future contribution income, regard must be had not only to the assumed increases in average earnings but also to the distributions of earnings, in order that allowance can be made for the effect of changes in the lower



and upper earnings limits relative to the level of earnings, for example with upratings in line with prices. Information on earnings from the New Earnings Survey was used to construct separate distributions by age for men and women and for full-time and part-time employees. The estimated average weekly earnings in 1999-00 terms for each of these categories is shown in Table 14.3. The averages apply to all employees including those with earnings below the lower earnings limit who are not required to pay contributions and who are underrepresented in the New Earnings Survey. Real earnings growth in future was taken to apply to each category and throughout the whole of each earnings distribution.

**Table 14.3 Assumed average weekly earnings of employees in 1999-00**

	<b>Men</b>	<b>Women</b>
Full-time	£445	£320
Part-time	£110	£105

14.15 It was assumed that the proportions working part-time would remain constant in future at the present levels of about 11% for men and 46% for women. Married women optants were assumed to have the same earnings distribution as other women.

14.16 As explained in paragraphs 14.10 and 14.11, the future numbers of employees in contracted-out occupational schemes were derived as a proportion of the total number of employees; 44% of male and 30% of female employees were assumed to be in contracted-out schemes. Virtually all the contracted-out males and 75% of the females were assumed to be full-time employees. Separate earnings distributions, based on special analyses of the data in the New Earnings Survey, were used for the estimates of future contracted-out rebates. Within all four groups of employees, the average earnings of those contracted-out exceeds the average for all employees. Table 14.4 shows the assumed average earnings of those contracted-out.

**Table 14.4 Assumed average weekly earnings of members of contracted-out occupational pension schemes in 1999-00**

	<b>Men</b>	<b>Women</b>
Full-time	£500	£370
Part-time	£260	£180

14.17 The assumed future earnings on which rebates in respect of appropriate personal pensions are payable were based on data on the amount of rebates and incentives paid to appropriate personal pension holders in 1995-96. It was assumed that the age and sex specific earnings would remain constant in future relative to average earnings.

14.18 The contributions from the self-employed consist of the class 2 flat-rate weekly contribution and the class 4 contribution, which is a percentage of relevant profits. Class 2 contributions are assumed to be paid by the same proportion of the self-employed as at present (approximately 72%) to allow for exemptions for persons with earnings below the small earnings exception. The income from class 4 contributions was derived using a distribution of relevant profits (based on the Inland Revenue's survey of personal incomes) combined with allowance for changes in the assumed numbers self-employed. Relevant profits were assumed to grow in line with the assumed real earnings growth.

14.19 The reduced rate of contribution payable by married women and widow optants to the National Insurance Fund is assumed to remain at 2.8% in future (the total rate of 3.85% includes 1.05% payable as the National Health Service allocation.). Following the Social Security Act 1998, married women and widow optants will not pay contributions on earnings below the lower earnings limit from April 1999. The reductions in the standard contribution rates for certain seamen are assumed to remain unaltered in future years and have negligible financial effect.

### **State scheme premiums**

14.20 Contribution equivalent premiums are payable when an early leaver from a contracted-out scheme is transferred back to the state scheme. The most recent data suggest that the amount of contribution equivalent premiums represents approximately 0.75% of the amount of contracted-out rebates paid to schemes. For this review, income from state scheme premiums has been ignored in view of their relatively small amount.

### **Estimated future number of retirement pensioners**

14.21 Statistics of a sample of retirement pensions in payment as at March and September each year are produced by the Department of Social Security. Table 14.5 shows the total numbers in payment at selected dates since 1990. The number of

pensioners rose by about 40,000 a year between 1990 and 1994; about half of this being due to increases in overseas pensioners. From 1995, the numbers have increased by approximately 150,000 per year of which around 30,000 arise from overseas pensioners. Most of the remainder is due to the phasing out of Incapacity Benefit to those over pension age commencing from April 1995. The number of male pensioners increased by around 25,000 per year up to 1994 and nearly 90,000 per year subsequently, reflecting the very high number who were formerly remaining on Incapacity Benefit. The number of women with some element of their pensions based on their own contribution record increased significantly between 1990 and 1997, partly as those women retiring now have had more years in work contributing to the scheme than those who retired before. The phasing out of the married women's reduced rate contribution option may be expected to lead to continuing increases in the proportion of married women entitled to pensions in their own right. The number of women in receipt of pensions based solely on their husband's contribution record has fallen significantly since 1990. Overall the number of women pensioners have increased by over 15,000 per year up to 1994 and around 60,000 per year from 1995, again resulting from the phasing out of Incapacity Benefit to those over pension age which affects women both directly as claimants themselves and indirectly as spouses of male claimants.

**Table 14.5 Past numbers with basic retirement pension including overseas residents (thousands)**

Date	MEN	WOMEN		TOTAL WOMEN	TOTAL PENSIONERS
		with some own entitlement	based solely on husbands' contributions		
Sept 1990	3,487	2,965	3,536	6,502	9,989
Sept 1991	3,517	3,053	3,476	6,530	10,048
Sept 1992	3,547	3,148	3,416	6,565	10,111
Sept 1993	3,557	3,221	3,339	6,560	10,116
Sept 1994	3,583	3,308	3,260	6,568	10,151
Sept 1995	3,654	3,419	3,199	6,618	10,272
Sept 1996	3,755	3,549	3,132	6,681	10,436
Sept 1997	3,849	3,694	3,057	6,751	10,599

14.22 The projected future numbers of basic retirement pensioners resident in GB were obtained by applying factors to the numbers in the population projection at the relevant ages to allow for those in Great Britain not receiving retirement benefits. An additional factor was applied to estimate the numbers of non-resident pensioners.

14.23 It is possible to defer claiming retirement pension for up to 5 years after minimum pension age. The proportion currently deferring is estimated to be around 1.5% for men, but around 5.5% for women. The saving in pension expenditure in any one year as a result of people deferring retirement is subsequently offset by the cost of the increments in their rate of pensions once retirement takes place. These financial effects offset each other in the longer term and the proportions in the population affected are relatively small. However, in the past a considerably higher proportion deferred and current expenditure on increments is still quite substantial. Furthermore there will be changes to the scheme for deferrers and the rate of increments following the raising of female pension age from the year 2010. Estimates include allowance for deferrers and increments to continue at the current level for new awards up to the year 2010, after which it is assumed that, when pension age for women becomes 65, the proportion deferring will fall to the 1.5% level shown currently for men, and that the higher rate of increments will be paid.

14.24 Recent statistics from the Department of Social Security show that, at March 1997, there were about 142,000 men and 41,000 women receiving incapacity benefit and at September 1997 there were 35,000 receiving widow's benefit over pension age. Since 1995 incapacity benefit has not been payable to new cases reaching pension age, although those already over pension age in 1995 retained the right to remain on incapacity benefit for up to 5 years after pension age. As from 1995, those claiming incapacity benefit reaching pension age must claim Retirement Pension. Currently the numbers over pension age on incapacity benefit are reducing, leading to the increase in numbers of pensioners noted above. By the year 2000 these will all be phased out and there should be very few incapacity benefit claimants over pension age. Some widows over pension age may be entitled to a higher pension if they claim retirement pension rather than widow's benefit as they could receive their graduated pension. However, as the increase would be relatively small, there should be no financial effect on the National Insurance Fund in assuming that those in receipt of widow's benefit when reaching pension age, or who become

eligible after pension age, receive retirement pension instead. For convenience of calculation, therefore, it has been assumed that there is no expenditure on any other benefit over pension age and that retirement pension is paid instead.

14.25 For men resident in Great Britain, it has been assumed that 99% of those in the population reaching age 65 are eligible for retirement pension, including deferrers. For women, a slightly higher overall ultimate proportion is assumed, although, because some do not become entitled until their husband reached 65, in practice the proportion is lower at pension age. At present about 7.2% of all retirement pensions are payable to non-residents. This percentage has been rising slowly and for those more recently retired it is around 8.5%. It has been assumed that the percentage for new retirements will continue to rise at the current rate to reach 10% of all pensioners (11% of GB pensioners) and that it will stabilise at that level. The overall percentage will increase correspondingly and stabilise at the same percentage some 20 years later. Similar ultimate proportions have been assumed for both men and women.

14.26 For women, in addition to the factors affecting men, it is necessary to allow for the projected changes in future to the proportions entitled to retirement pensions at minimum pension age. The steady increase in the proportions of women economically active and the abolition of the married women's contribution option result in increasing proportions of women being entitled to retirement pension on their own contribution record rather than relying solely on that of their husband. As a result, instead of a large proportion of married women only becoming entitled to retirement pension when their husband retires, increasing proportions are becoming eligible for some retirement pension based on their own contributions when they reach age 60. At present, it is estimated that approximately 60% of newly retired married women are entitled to some flat-rate retirement pension on their own contributions although more than half of these will be entitled to higher pensions when their husbands retire. It has been assumed for the projections that by the year 2010 about 90% of married women will be entitled to some flat-rate retirement pension based on their own contribution record, although even then approximately 25% are estimated to have entitlement lower than that including allowance for their husband's record. By the year 2025, it is assumed that 97% will have some title on their own contributions, and that of this proportion, about 88% will have title to a basic pension greater than that based on their husband's record as the effect of the introduction of home responsibility protection increases women's entitlement. The assumptions for intervening years have been derived by interpolation.

14.27 It should be noted that the changes to women's entitlement arising from higher economic activity, the abolition of the married women's option and Home Responsibility Protection, do not, at older ages, lead to much change in the numbers of women in receipt of retirement pension. At the younger ages, primarily 60 to 64 and to a lesser extent 65 to 69, there is an increase, but this diminishes as their husbands reach 65 or they become widows. However, it does lead to a significant shift from married women and widows relying mainly on their husband's insurance to entitlement on their own contribution record. At present, for many women their husbands' record is still higher than their own and so the gain is only for the few years whilst their husband is under 65. This leads to an increase in numbers, with only a relatively small increase in the costs because the average amount of benefit to the extra women is small. In the longer term it is expected that most married women will have higher pensions on their own records than on their husbands. This leads to an increase in the cost of retirement pension without much effect on numbers, as these women have fairly substantial pensions in their own right and the average amount of pension increases. Widows are less affected since they tend to have high entitlement on their husbands' records. There will also be smaller effects for single and divorced women, mainly by way of higher average amounts, although the latter also benefit from substitution.

14.28 The estimated total numbers of men and women in receipt of flat-rate basic pensions in future, including people overseas, are shown in Table 14.6. As explained in paragraph 14.24 above, projected numbers of retirement pensioners include those who in past years were in receipt of incapacity and widows' benefits over pension age, but exclude those deferring.

**Table 14.6 Estimated future numbers of basic retirement pensioners (millions)**

<b>Year</b>	<b>Men</b>	<b>Women</b>	<b>Total</b>
1999-00	4.0	6.9	10.9
2000-01	4.0	6.9	11.0
2010-11	4.6	7.7	12.3
2020-21	5.7	7.0	12.6

2030-31	6.9	8.3	15.2
2040-41	7.5	8.9	16.4
2050-51	7.1	8.6	15.8
2060-61	7.1	8.6	15.6

Index numbers

(1999-00=100)

1999-00	100	100	100
2000-01	102	101	101
2010-11	116	113	114
2020-21	142	101	116
2030-31	173	121	140
2040-41	188	130	151
2050-51	179	126	145
2060-61	178	125	144

Note: This table allows for increasing the pension age for women from 60 to 65 between the years 2010 and 2020. Had pension age remained at 60 the numbers of women pensioners would have been approximately 2 million higher.

14.29 In spite of the increase in the proportion of women in future entitled to basic pensions on their own contribution records, the number of male pensioners increases at a faster rate than females. This is in line with the projected changes in the population over pension age, details of which are shown in Appendix C. This is due chiefly to the raising of female pension age.

14.30 Approximately 5.5 million people are currently in receipt of earnings-related additional pensions in addition to their basic retirement pension. This is much lower than the current numbers in receipt of basic pension as earnings-related pensions have only been awarded to those retiring since April 1979 (or to eligible widows or widowers since that date). The number in receipt of additional pensions will continue to increase rapidly over the next 15 years and ultimately may be expected to be slightly higher than the number of basic pensioners assuming that most people will have at least one year of contracted in employment in their working life. For basic pension to be paid even at a reduced rate, contributions must normally have been paid for a minimum of about 10 years whereas only one year's relevant earnings gives entitlement to some earnings-related pension.

### **Expenditure on basic pension**

14.31 Paragraphs 14.21 to 14.30 set out the assumptions made in projecting the number of future retirement pensioners. The corresponding estimated expenditure was obtained by multiplying the projected numbers by estimated average amounts of basic retirement pension. The first stage is to calculate the future cost in respect of the survivors of those already retired and in receipt of known amounts of pension. Average amounts are assumed to remain constant for each cohort, with allowance for higher rates payable on award of widows' retirement pensions when a married male pensioner dies and deferrers as they retire. All those in receipt of incapacity or widows' benefit are assumed to switch to retirement pension at the base date of the projection. To this estimate is then added the cost of pensions to future new awards based on the projections of the numbers of pensioners and the estimated average amounts at award for future cohorts of pensioners.

14.32 About 93% of all male retirement pensioners resident in GB have a full rate basic pension, with an overall mean rate as a proportion of the standard Category A rate of nearly 98.5%. However, for newly retired men, only about 88% have full rate basic pension and the overall mean rate is 97.6%. Although the vast majority of existing men have full basic pension entitlement, the proportion of each annual cohort retiring with 100% pensions and the overall average has been falling steadily each year as the advantageous effects of crediting entitlement prior to 1948 and in respect of contributions paid up to 1975 become steadily less important. For women, about 53% of those with entitlement solely on their own records have a

full rate pension and the overall mean rate for these women is about 80%. For newly retired women the corresponding figures are around 25% with full standard rate and a mean rate of 65.5%. Many of these will be entitled to higher rates of pension when their husbands retire and/or when they become widows and will thus move out of the category of women with entitlement solely on their own records. This will leave behind those (relatively lower numbers) at higher ages who have a high entitlement on their own record, resulting in the average entitlement for all women solely on their own record being higher than for new retirements.

14.33 For future awards of male pensions it was assumed that the mean proportion of standard rate at pension age would continue to fall slowly, reaching 96.5% by the year 2020 and then stabilise at that level. This includes a notional allowance for the possible increase in basic pension for those who become widowed.

14.34 In the case of women, basic pension entitlement on their own contribution record as a proportion of the standard rate is projected to change significantly in future. The increase in past years in female activity rates, the phasing out of the married women's contribution option and the introduction of home responsibility protection mean that not only will more women be entitled to pensions based on their own contributions but also that the average rate of their pension will rise. As married women who were paying the lower optant rate of contributions in 1977 retained the right, under certain conditions, to continue to pay such contributions, the average benefit rate for those retiring in the next few years is still significantly affected by the fact that the optant contributions do not confer any pension entitlement. However, further into the future, the effect of the assumed changes in activity rates, home responsibility protection and the phasing out of the option increases. As a result, the female average pension rate is projected to increase to 86% for new awards of pension by the year 2020 and ultimately to 89%. Table 14.7 sets out the assumed average rates for various groups of women for selected years in future, showing the steady increase from the present average to that assumed for the ultimate position.

**Table 14.7 Assumed percentage of married women at minimum pension age who have some own entitlement to retirement pensions and their overall average rate of entitlement as a percentage of the standard rate**

Financial year of reaching pension age	Assumed percentage with some own entitlement %	Overall average rate of benefit %
1998-99	63.0	53.6
2000-01	67.5	56.5
2005-06	78.4	64.5
2010-11	87.5	71.9
2015-16	91.1	75.6
2020-21	93.9	79.1
2025-26	96.3	83.3
Ultimate	96.3	83.9

**Table 14.8 Assumed percentage of all women at minimum pension age who have some entitlement to retirement pensions (including inheritance and substitution) and their overall average rate of entitlement as a percentage of the standard rate**

Financial year of reaching pension age	Assumed percentage with some entitlement %	Average rate of benefit %
1998-99	80.2	69.5

2000-01	82.6	70.7
2005-06	88.6	75.0
2010-11	93.7	79.8
2015-16	97.1	83.1
2020-21	98.7	86.1
2025-26	99.1	88.5
Ultimate	99.1	89.4

14.35 As stated in paragraph 14.25, it was assumed that the number of pensions in payment to people overseas would eventually be 11% of the number of pensioners in Great Britain. The latest data show that the average benefit rate for overseas pensioners is about 50% of that paid to those in Great Britain and this factor has been used to project the future cost of overseas pensions.

### **Graduated pension**

14.36 Entitlement to graduated pensions is based on graduated contributions which were made between April 1961 and March 1975. The majority of those who have retired since 1975, as well as those retiring in the next few years, will therefore have their entitlements based on 14 years of graduated contributions. Thereafter, those retiring will have started contributing after 1961 and the average amount of new awards will reflect the steady reduction in the number of potential contributing years. Due to the structure and changes to the Graduated scheme, the bulk of contributions in practice arose towards the end of the scheme and average numbers of units at award are likely to remain fairly constant until those who were still at the start of their working lives when the scheme ended and only contributed for the last few years of the scheme retire.

14.37 The future expenditure on graduated pension has been based on amounts of graduated pension in payment in 1975 and accrued rights to pension by 1975. Amounts of pension in payment are survived using population mortality with allowance for inheritance of rights by surviving widows and widowers. Future awards of graduated pension after 1975 are derived from the accrued rights, survived to pension age and survived thereafter using population mortality. Allowance is made for inheritance by surviving widows and widowers. The results of this are compared with actual data on graduated pension and the estimates for future years are adjusted to align with recent data.

14.38 Recent data on graduated pension shows that the average numbers of units in payment has remained fairly static at around 29; average units for new awards have also been static for some time at about the same level. The projections show that this is likely to continue for some years up to around the year 2012, after which the average number of units for new awards will fall rapidly to nil. Expenditure on graduated pension is expected to continue to rise slightly up until around the year 2012, but after this it will start to fall quite rapidly until it eventually reaches zero around the year 2050.

### **Additional pension**

14.39 Earnings-related additional pensions are payable to anyone retiring who has paid sufficient class 1 contributions in any tax year between April 1978 and March 1997. From April 1997, people who are contracted-out no longer accrue additional pension in respect of any year from April 1997 in which they are contracted-out, nor do they accrue any guaranteed minimum pensions or notional guaranteed minimum pensions in the case of personal pensions and contracted-out money purchase schemes. However, in order to quantify the effects of contracting out, people contracted-out after April 1997 have been treated as though they still accrue additional pension and guaranteed minimum pensions and notional guaranteed minimum pensions in the case of personal pensions and contracted-out money purchase schemes. The effect on additional pension net expenditure is zero as the gross additional pension is exactly offset by the contracted-out deductions.

14.40 An individual's additional pension depends upon the amount of earnings on which contributions were paid in each tax year from 1978-79 up to the last complete year before pension age, and on the financial year in which pension age is reached (as this determines the accrual rate). For new awards from April 2000, earnings between the lower and upper earnings limits in each tax year will be revalued in line with the general level of earnings up to the tax year before that in which pension age is reached and these are the earnings on which additional pension will be based. For awards before April 2000, earnings up to the upper earnings limits in each tax year are revalued in line with the general level of earnings up to the tax year before that in which pension age is reached and the amount of the lower earnings limit for that latter tax year is then subtracted from each year's earnings, leaving the surplus amounts on which the additional pension is based. These surpluses are then

multiplied by the accrual rate factors shown in Table 14.9 to arrive at the additional pension. Surpluses in respect of financial years between 1978-79 and 1987-88 are multiplied by the factors in column (1), which are 25% divided by the number of financial years between 1978-79 (or the tax year of reaching 16, if later) and the one before pension age is reached. Surpluses in respect of later years are multiplied by the factors in column (2), which reflect the continuation of the 25% factors until the 1999-2000 financial year, followed by a phased reduction over 10 years to the ultimate factor of 20%. In respect of retirements in 1999-2000 and later years, the denominators in the factors in columns (1) and (2) have been assumed to be reduced by any years in which the individual was entitled to home responsibility protection or incapacity credits, although the minimum denominator which can be used for the accrual rate is 20 (subject to the introduction of regulations). However, as stated previously the regulations implementing this have not been introduced.

**Table 14.9 Accrual rates for earnings-related additional retirement pension**

Year of retirement	Accrual rate % for period	Accrual rate % for period
	1978-79 to 1987-88	1988-89 onwards
	(1)	(2)
1998-99 and prior	25/20	25/20
1999-00	25/21	25/21
2000-01	25/22	24.5/22
2001-02	25/23	24/23
2002-03	25/24	23.5/24
2003-04	25/25	23/25
2004-05	25/26	22.5/26
2005-06	25/27	22/27
2006-07	25/28	21.5/28
2007-08	25/29	21/29
2008-09	25/30	20.5/30
2009-10	25/31	20/31
2010-11	25/32	20/32
:	25/44	20/44
2022-23	25/49	20/49
:		
2027-28 and later		

14.41 The projected expenditure on additional pension is based on the aggregate relevant earnings, analysed by age and sex, for past years, as given in the Department of Social Security data on contribution income, together with the projected relevant earnings in future years for each cohort retiring in future. The essentials of the procedure are as follows:

A. The additional pension at award was calculated by first surviving and revaluing the earnings factors which each cohort had built up in each financial year from 1978-79 onwards, based on actual data for past years up to 1995-96 and estimates for future years on the assumptions about earnings, activity rates, etc., set out in paragraphs 14.2 to 14.19. The total additional pension at award in each future financial year was then calculated by multiplying the revalued earnings factors (between the upper and lower earnings limits or after deducting corresponding amounts in respect of lower earnings limits for post- and pre-April 2000 awards respectively as described in 14.40 above), by the relevant factors in Table 14.9. The accrual rate factors for each cohort were adjusted by the estimated credits for home responsibility protection and incapacity earned by

each cohort from 1978-79 onwards. The projected expenditure in each future year from these amounts of new awards is then derived each year by allowing for survivorship and inheritance.

14.42 Table 14.10 shows the amount of new awards of additional pension in selected years, assuming that the revaluation of the lower and upper earnings limits is in line with earnings or with prices. Awards will reduce as a result of the changes in the accrual rates as shown in Table 14.10. The trend throughout the first half of the next century is also affected by the fluctuation from year to year in the numbers reaching pension age, which reaches a peak between 2025-26 and 2030-31.

**Table 14.10 New awards of gross additional pensions, assuming real earnings growth of 1.5% per annum, for those reaching retirement age in selected financial years, excluding inherited amounts. (£ million in 1999/00 price terms)**

Year	Limits uprated with prices			Limits uprated in line with earnings		
	Male	Female	Total	Male	Female	Total
1999-00	665	198	863	665	198	863
2000-01	683	213	896	688	215	903
2005-06	697	345	1042	702	346	1048
2010-11	876	222	1098	883	222	1105
2015-16	967	238	1205	979	237	1216
2020-21	994	539	1533	1015	536	1551
2025-26	1128	682	1811	1168	678	1846
2030-31	1112	748	1859	1179	743	1922
2035-36	1053	736	1788	1150	733	1884
2040-41	841	622	1463	953	623	1576
2045-46	958	745	1703	1127	753	1880
2050-51	1022	820	1841	1254	837	2092
2055-56	1108	923	2031	1424	959	2383
2060-61	1041	884	1924	1406	938	2344

Note: The new awards assume that those contracted-out after April 1997 still accrue gross additional pension

14.43 The impact of the different assumptions for revaluation of the lower and upper earnings limits were estimated using the same earnings distributions as in the projections for contribution income. Table 14.10 shows that increasing the limits in line with earnings gives rise to higher aggregate awards of additional pension.

### **Contracted-out deduction**

14.44 As described in paragraph 14.39, people who are contracted-out from April 1997 do not accrue any guaranteed minimum pensions or notional guaranteed minimum pensions in the case of personal pensions and contracted-out money purchase schemes. However, in order to quantify the effects of contracting out, people contracted-out after April 1997 have been treated as though they still accrue guaranteed minimum pensions and notional guaranteed minimum pensions in the case of personal pensions and contracted-out money purchase schemes. The effect on net expenditure on additional pension is zero as the gross additional pension is exactly offset by the contracted-out deductions.

14.45 The deductions in respect of guaranteed minimum pensions and notional guaranteed minimum pensions in the case of personal pensions and contracted-out money purchase schemes were calculated in a similar manner to the estimates for additional pension described above. The projections were based on the Department of Social Security data on contributions at the contracted-out rate and on the relevant earnings of those with a personal pension, analysed by age and sex for past



years, together with the projected corresponding earnings in future years for each cohort. Table 14.11 shows the amount of new awards of contracted-out deductions in selected years in future assuming that the revaluation of the lower and upper earnings limits is in line with earnings or with prices. In assessing the aggregate contracted-out deductions at award, allowance was made for the effect of the payment of the state scheme premiums based on data on the amounts of contribution equivalent premiums and other state scheme premiums, analysed by sex, age and amount. As a result, the amounts of contracted-out deduction at award in the long term were approximately 1% less than if no state scheme premiums had been payable.

**Table 14.11 New awards of contracted-out deductions assuming real earnings growth of 1.5% per annum for those reaching retirement age in selected financial years excluding inherited amounts. (£ million in 1999/00 price terms)**

Year	Limits uprated with prices			Limits uprated in line with earnings		
	Male	Female	Total	Male	Female	Total
1999-00	376	102	478	376	102	478
2000-01	406	116	522	409	117	527
2005-06	408	177	584	411	177	588
2010-11	557	116	673	562	116	678
2015-16	641	130	771	650	130	780
2020-21	670	302	972	686	303	989
2025-26	783	399	1182	816	403	1218
2030-31	811	485	1297	864	494	1358
2035-36	774	470	1244	849	484	1332
2040-41	510	363	873	591	380	971
2045-46	530	385	915	647	414	1060
2050-51	560	417	977	719	460	1178
2055-56	601	462	996	815	526	1341
2060-61	560	437		804	514	1318

Note: The new awards assume that those contracted-out after April 1997 still accrue contracted-out deductions

14.46 The mortality rates used in projecting the contracted-out deductions were lower than the rates underlying the official population projections because experience shows that occupational scheme pensioners generally experience lighter mortality age for age than the population as a whole. Similarly, allowance was made in the projections of additional pension for the lower mortality rates likely to be experienced by those with higher amounts of additional pension entitlement, so that the mortality rates used in surviving the amounts of additional pension were lower than those used for projecting the numbers in the population.

### **Widows' benefits**

14.47 Widow's benefit comprises widow's payment, widowed mother's allowance and widow's pension (see paragraph 11.36). Expenditure on widows' benefits (including those over pension age) in 1998-99 is about £1 billion, some 2% of total National Insurance Fund outgo.

14.48 In 1998, the total number of widows under age 60 in Great Britain was approximately 275,000. About 230,000 were in receipt of widows' benefits from the National Insurance Fund. Of the remainder, about 2,000 were receiving industrial death benefit (because the husband's death had resulted from an industrial accident or disease), about 3,000 were receiving

war pensions not payable from the National Insurance Fund and some were not receiving any state benefit. In addition, there were approximately 14,000 widows' pensions in payment to widows under age 60 resident overseas.

14.49 Table 14.12 shows the numbers of widows under age 60 including those overseas, in receipt of widows' benefits over the period since 1990 taken from the Department of Social Security statistics which are based on a 5% sample of beneficiaries. The figures in Table 14.12 show a significant drop in widow beneficiaries over the period. This is mainly due to the changes in the rules governing entitlement to widow's benefit introduced in the Social Security Act 1986.

**Table 14.12 Number of widow beneficiaries under age 60 since 1990 by type of benefit (thousands)**

<b>Date</b>	<b>Widowed mother's allowance</b>		<b>Widow's pension (non age related)</b>	<b>Age-related widow's pension</b>	<b>Total</b>
<b>September</b>	<b>With dependent children</b>	<b>Without dependent children</b>			
1990	51	17	116	128	312
1991	49	14	100	137	299
1992	50	10	86	144	290
1993	50	8	74	151	283
1994	50	6	63	157	277
1995	50	6	53	158	266
1996	49	5	46	158	259
1997	47	4	41	155	248

14.50 The projected number of beneficiaries of widow's benefit was derived by estimating awards for each future year and surviving these awards using past data on terminations of benefit and transfers to other types of widow's benefit. In estimating the cost of the lump sum widow's payment received immediately on widowhood, it was assumed that the benefit would be awarded to 94% of the projected number of new widows under pension age.

14.51 Table 14.13 shows the proportions of projected Great Britain new widows in each age group who are assumed to be awarded widow's benefit, by type of benefit. These proportions were derived by reference to data on awards since the rules governing entitlement to widow's benefit were changed in 1988. Allowance is made for awards between ages 60 and 64 following the increase in female pension age between the years 2010 and 2020. Total awards are greater than 100% of GB widows in some cases because of the inclusion of overseas beneficiaries.

**Table 14.13 Assumed percentage of new GB widows awarded widow's benefit by age and type of benefit (including overseas beneficiaries)**

<b>Age</b>	<b>Widowed mother's allowance</b>	<b>Widow's pension (non age related)</b>	<b>Age-related widow's pension</b>	<b>Total</b>
Under 45	83	0	0	83
45-49	37	0	67	103
50-54	16	0	87	102
55-59	3	98	0	102

14.52 Table 14.14 shows the proportions of beneficiaries of each type of widow's benefit at the start of the year who are assumed to have stopped receiving the benefit by the end of the year. Different proportions are applied to beneficiaries who were awarded widow's benefit prior to 1988, when the rules for entitlement changed.

**Table 14.14 Termination rates (%) for widow's benefit by age and type of benefit**

Age	Widowed mother's allowance	Widow's pension (non age related)	Age-related widow's pension
Under 40	7.2	-	-
40-44	12.0	-	-
45-49	3.3	-	2.0
50-54	2.4	-	1.2
55-58	3.9	0.8	1.9

14.53 In 1998, about 30,000 widows at ages 60 to 64 in Great Britain (approximately 15% of all widows at those ages) were receiving widows' benefits, mainly widows' pensions at rates close to the full rate, having chosen not to convert their pensions to widows' retirement pensions. However, as explained in 14.24, it has been assumed that all widows over minimum pension age switch to retirement pension. If, instead, the same percentage of widows stayed on widows' benefits over age 60 this would only have a marginal effect on the aggregate expenditure as there would be a rise in the cost of widows' pensions and a corresponding drop in retirement pensions.

14.54 In 1998, the average widowed mother's allowance in payment was about 90% of the standard rate. The average widow's pension was about 92% for the full rate cases and about 61% for the age-related cases. Although there has been a slight tendency for the average benefit rate to fall in recent years, it was considered satisfactory to base the projections on the above proportions. The estimates allow for an increase in numbers on widow's benefit when female pension age is raised from 60 to 65 between the years 2010 and 2020.

14.55 Child dependency additions are payable with widowed mother's allowance. The average number of children per beneficiary has been about 1.6 in recent years and was assumed to be 1.5 throughout the projection period.

### **Earnings-related widows' pensions**

14.56 Widows whose husbands have paid class 1 contributions at any time since April 1978 are entitled to earnings-related widows' pension. The amount of additional pension at award was obtained as part of the estimation of earnings-related retirement pension, by calculating the amounts of additional pension entitlement for men at death, for those with a wife below minimum pension age. These amounts were adjusted to allow for entitlement to widows' benefits for widows below age 45, and for the age-related factors applying to widows between the ages of 45 and 54. The adjusted awards were then survived using the same method as for flat-rate widows' benefits, allowing for terminations and transfers within widow's benefit, and eventually transfer to RP on reaching pension age. Allowance was made for raising female pension age.

### **Guardian's allowance and child's special allowance**

14.57 Expenditure on guardian's allowance was determined by varying the existing caseload analysed by age of child by projected numbers of children by age, and recent data on family size to determine the appropriate numbers and costs. Expenditure on child's special allowance, which ceased for new awards from April 1987, and is now extremely small, was estimated by approximate methods.

### **Christmas bonus to pensioners**

14.58 The estimated future expenditure on this benefit is derived from the projected numbers eligible for those benefits (retirement pensions, widows' pensions and incapacity benefit) which give entitlement to the lump sum.

### **Incapacity benefit**

14.59 Incapacity benefit replaced invalidity and sickness benefits from April 1995. The assumptions used to derive the estimates for future expenditure on incapacity benefit were based on the past statistics available for invalidity and sickness benefits as well as more recent statistics on incapacity benefit.

14.60 Incapacity benefit short term lower rate is payable for the first 28 weeks of incapacity (if statutory sick pay is not payable and provided there is underlying entitlement). Incapacity benefit short term higher rate is payable for weeks 29 to 52 and incapacity benefit long term rate is payable thereafter as long as incapacity continues, until state pension age.

14.61 Table 14.15 shows the number in receipt of incapacity benefit short term lower rate at each statistical date since 1990.

**Table 14.15 Historical number of beneficiaries with incapacity benefit short term lower rate or previous equivalent (thousands)**

<b>Date (March)</b>	<b>Total</b>
1990	103
1991	109
1992	138
1993	147
1994	127
1995	127
1996	134
1997	128

14.62 Expenditure on incapacity benefit short term lower rate in 1998-99 is estimated to be about £300 million, about 0.6% of total outgo. Incapacity benefit short term lower rate benefit beneficiaries are now mainly those who were self-employed or unemployed prior to their period of incapacity and so ineligible for statutory sick pay. In addition, some employees are either ineligible for statutory sick pay at the start of their spell of incapacity or become ineligible later during the spell. These employees therefore receive incapacity benefit short term lower rate. The projected expenditure in future was based on assuming that the separate proportions of the employed, self-employed and unemployed currently in receipt of incapacity benefit short term lower rate would remain constant in future. On this basis the average number of beneficiaries at any point in time remains at around 120,000 throughout the period of the projection with a small increase in later years to allow for the change in female state pension age.

14.63 Table 14.16 shows the number of beneficiaries with incapacity benefit short term higher or long term rate in force at those dates since 1990 on which the Department of Social Security conducted their annual sample of incapacity/invalidity benefit claimants. It shows that the number of beneficiaries rose continuously and significantly from 1990 to 1995. After 1995 the numbers under pension age have stayed approximately level but numbers over pension age are dropping as beneficiaries must now switch to retirement pension at pension age. After the year 2000 there will be no beneficiaries over pension age on incapacity benefit.

**Table 14.16 Historical numbers of beneficiaries with incapacity benefit short term higher or long term rate (thousands)**

<b>Date</b>	<b>Males</b>		<b>Females</b>		<b>Total</b>
	<b>Under pension age</b>	<b>Over pension age</b>	<b>Under pension age</b>	<b>Over pension age</b>	
1990	740	177	263	29	1209
1991	775	201	293	37	1306
1992	845	219	330	46	1439
1993	927	229	372	53	1580
1994	982	235	402	62	1681
1995	1049	237	450	68	1804
1996	1032	185	457	53	1727
1997	1015	142	469	41	1667

Note: figures may not sum to totals due to rounding.

14.64 A large part of the increase in the number of women beneficiaries is attributable to the phasing out of the married women's contribution option. An increasing number of married women falling sick are able to satisfy the contribution conditions for incapacity benefit and, as a result, the number of women beneficiaries is increasing at a faster rate than for men. This trend is likely to continue for a few more years until all those paying the married women's reduced rate contribution reach pension age.

14.65 The projected numbers of incapacity benefit beneficiaries with short term higher or long term rate in future were derived as follows:

- A. By estimating the number out of those in force in 1997 (the latest date for which statistical information was available), who would still be in receipt of benefit in later years, by using factors for the probability of continuing to receive benefit (see below); and
- B. Estimating the number of new awards in each future year by applying award rates to the population, subdivided by sex and age, allowing for the effect of any changes to potential entitlement as a result of the phasing out of the married women's option, changing economic activity rates and increasing female pension age between the years 2010 and 2020 and then surviving such new awards as in (A).

**Table 14.17 Past numbers of awards of short term higher rate and long term incapacity benefit (thousands)**

<b>Period ending</b>	<b>Males</b>	<b>Females</b>	<b>Total</b>
April 1990	208	76	284
April 1991	188	77	265
April 1992	217	85	302
April 1993	223	94	317
April 1994	226	100	325
April 1995	219	104	322
April 1996	183	102	285
April 1997	181	105	287

Note: figures may not sum to totals due to rounding.

**Table 14.18 Future number of awards of short term higher rate and long term incapacity benefit (thousands)**

	<b>Men</b>	<b>Women</b>	<b>Total</b>
2000-01	193	113	306
2010-11	210	125	335
2020-21	220	177	397
2030-31	208	167	376
2040-41	199	164	362
2050-51	201	166	368
2060-61	194	160	354

Note: figures may not sum to totals due to rounding.

14.66 Table 14.19 shows the proportions of those beneficiaries in force at the start of the year or awarded during the year remaining on benefit at the end of the year for each year since 1990 (excluding those who switch to retirement pension on reaching state pension age). In assessing the rates which would be suitable to assume for future years, regard was had to a more detailed analysis of the trends in recent years in the age/duration continuation rates, with suitable smoothing to allow

for the random element in the data.

**Table 14.19 Historical incapacity benefit short term higher and long term rate beneficiaries' continuation rates**

<b>Statistical Year ending</b>	<b>Average continuation rate</b>	
	<b>Men</b>	<b>Women</b>
April 1990	0.91	0.91
April 1991	0.90	0.90
April 1992	0.91	0.91
April 1993	0.92	0.92
April 1994	0.91	0.89
April 1995	0.93	0.93
April 1996	0.89	0.87
April 1997	0.89	0.87

14.67 Smoothing the age and sex specific probabilities in recent years derived the assumed probabilities of surviving on benefit in future years. The probabilities of survival allow for the introduction of the all work test. Table 14.20 shows the resulting aggregate assumptions for the continuation probabilities for men and women.

**Table 14.20 Projected incapacity benefit short term higher and long term rate beneficiaries' continuation rates**

<b>Year</b>	<b>Average continuation rate</b>	
	<b>Men</b>	<b>Women</b>
2000-01	0.91	0.90
2010-11	0.92	0.91
2020-21	0.92	0.91
2030-31	0.92	0.91
2040-41	0.92	0.91
2050-51	0.92	0.91
2060-61	0.92	0.91

### **Additional pension**

14.68 Earnings-related additional pension is payable with incapacity benefit only for awards up to March 1995 and the amounts are not updated. Estimates for the cost of additional pension have been derived from the projected numbers on incapacity benefit at March 1997 and applying appropriate factors for proportions with additional pension and average amounts. As the amounts in force will not be updated, allowance has been made for compensating increases in IVA expenditure.

### **Jobseekers allowance**

14.69 Contributory Jobseekers Allowance (JSA) is payable under the conditions summarised in paragraph 11.39. Expenditure in 1998-99 is estimated to be about £0.5 billion, i.e. about 1% of outgo, if unemployment averages at around 1.4 million (a rate of about 5%).

14.70 For the central estimates in section 5 of the report, a long-term rate of unemployment of 4.7% has been assumed for

all future years. The effect of different assumptions for the level of unemployment is shown in section 8.

14.71 For a stated assumption for the level of employment, in order to estimate expenditure on unemployment benefit it remains to consider the proportion who will be entitled to receive benefit from the National Insurance Fund. Those newly unemployed who were formerly self-employed or non-employed (e.g. married women who had been at home) or who had previously exhausted their entitlement to benefit but not requalified or young persons who had not been employed for a sufficient period since leaving school or who have been earning below the LEL and fail the contribution conditions will not be entitled to receive benefit. Those who meet the contribution and other conditions will receive benefit from the National Insurance Fund for a maximum of 26 weeks before benefit ceases on current legislation. They will not requalify until they have been back at work for at least 16 hours in each of at least 13 weeks in the 26 week period before they claim benefit again, and entitlement is based on a later contribution period. (Income based Jobseekers Allowance may be paid from general revenue to an unemployed claimant if contributory Jobseekers Allowance is not in payment, or to top-up the contributory Jobseekers Allowance in payment if the income based Jobseekers Allowance entitlement is higher).

14.72 It is impossible to predict with any confidence precisely what proportion of the unemployed will receive benefit from the National Insurance Fund at any time. This will depend upon several factors and particularly on whether the unemployment rate has recently been increasing or decreasing, whether the newly unemployed include large numbers of young persons or others without entitlement or adults who have been in regular employment, and whether the same individuals remain unemployed for long periods and exhaust their entitlement or are replaced by others with entitlement to 26 weeks' benefit.

14.73 The probability of being entitled to contributory Jobseekers Allowance depends upon the duration of the spell of unemployment; for instance only a very small number of those who have been unemployed for 6 months or more are still entitled. Costs have therefore been derived by examining the trends in both the probability of ceasing to claim contributory Jobseekers Allowance between durations of unemployment and the proportions of those unemployed who are entitled to benefit at successive durations. It is estimated that on average about 15% of the unemployed will be entitled to contributory Jobseekers Allowance in 1998-99 with the current level of unemployment. In general it has been the case that for lower levels of unemployment, the average duration of unemployment declines and the overall proportion entitled to contributory Jobseekers Allowance rises. The recent experience implied that it would be reasonable to assume that 15% of those counted as unemployed would on average be entitled to benefit if the unemployment rate were 5%.

### **Statutory sick pay**

14.74 Statutory sick pay is payable to employees for up to 28 weeks during a period of entitlement due to sickness. The benefit is paid by employers, but qualifying small employers may recover some of the statutory sick pay they pay by reducing the amount of National Insurance contributions they remit.

14.75 The finances of the National Insurance Fund are not affected by statutory sick pay as the fund recovers from the consolidated fund the amount of the deductions made by small employers. The estimates for statutory sick pay are thus included only for completeness. It is estimated that these will amount to just under £30 million in 1998-99. In view of the small amount, the future estimates were derived by simply adjusting this figure in line with the estimates of the numbers of future contributors.

### **Statutory maternity pay**

14.76 Statutory maternity pay is payable by employers to women satisfying the eligibility conditions. The benefit is payable for 18 weeks and includes an earnings-related element in the first six weeks. The benefit is paid by employers, but employers may recover most (92% for other than small employers who may recover more) of the amounts they pay by reducing the amount of National Insurance contributions they remit.

14.77 The finances of the National Insurance Fund are not affected by statutory maternity pay as the fund recovers from the consolidated fund the amount of the deductions made by employers. The estimates for statutory maternity pay are thus included only for completeness. Recoveries by employers in respect of expenditure on statutory maternity pay in 1998-99 are estimated to be about £600m. For later years it has been assumed that the number eligible for statutory maternity pay will vary with the number of births and the estimated proportion of women at the child-bearing ages who are contributing employees.

### **Maternity allowance**

14.78 Maternity allowance is payable to women not entitled to statutory maternity pay, subject to their satisfying the

contribution conditions.

14.79 The annual number of maternity allowance awards is approximately 38,000 and at any point of time the average number of beneficiaries is about 13,000. The expenditure in 1998-99 is estimated to be £36 million, about 0.1% of the total expenditure of the National Insurance Fund. In view of this, the projections of maternity allowance expenditure were made by simply adjusting the current numbers and expenditure in proportion to the numbers of births in future years in the population projection.

## **Benefit increases for dependants**

### **Adult dependency increases**

14.80 Most benefits are increased if the beneficiary has an adult dependant defined as a wife or other dependant, with earnings, if any, below a specified limit. The amount of the increase is generally about 60% of the insured person's benefit.

14.81 In the case of male retirement pensioners, a dependent wife is in practice always under age 60 as, if she is over 60, the wife of a retirement pensioner is entitled in her own right to a pension on her husband's insurance (if not on her own insurance record). In March 1998 there were about 93,000 male pensioners with dependent wives. As would be expected, the proportion of male pensioners with adult dependants reduces rapidly with increasing age of the pensioner as the percentage with wives under age 60 falls. Currently just over 5% of male pensioners aged 65-69 have dependent wives, whilst the average falls to approximately 2% when measured over all male pensioners. The proportions have been falling slowly for some time. This trend is assumed to continue for a short while before stabilising. From the year 2010 onwards, allowance has been made for an increase in the numbers of men with adult dependants as a result of the increase in female pension age. It has been assumed that all married women over 60 with husbands over 65 who qualify for RP would become adult dependants.

14.82 In 1997/98 there were about 225,000 male incapacity beneficiaries under pension age with dependent wives. This represented about 20% of all male beneficiaries. For the purpose of the projections, account has been taken of the changes in the rules for adult dependency additions with incapacity benefit, leading to significantly lower proportions entitled in respect of wives under pension age. Ultimately, allowing for the increase in female state pension age, it has been assumed that the proportion of male beneficiaries entitled to adult dependency additions will fall to approximately 11%.

### **Child dependency increases**

14.83 At the latest dates for which information is available, child dependency increases were payable to male beneficiaries for about 24,000 children of retirement pensioners, 75,000 children of widow beneficiaries and 170,000 children of incapacity beneficiaries. For retirement pension the proportion of men with child dependency additions has been fairly stable, but the average number of children has also been rising slightly. This trend has been assumed to continue for a few years before stabilising. For Widowed Mother's Allowance the average number of children has been fairly constant and has been assumed to remain so for the future. For Incapacity Benefit the tendency for beneficiaries to be entitled to child increases has been decreasing in recent years. It was considered adequate to assume that the proportions of beneficiaries with children and the average number of children per beneficiary remain similar to current levels but with a small allowance for the downward trend.

14.84 With the exception of retirement pension, adult and child dependency increases are available to females on the same basis as males. However the numbers involved are very small in comparison with additions to male beneficiaries, mainly because of the greater effect of the potential dependant's earnings. The costs of dependency additions to female beneficiaries are insignificant and so have not been analysed in detail. The projected expenditure is based on adjusting the current overall proportions entitled to allow for the downward trends.

### **Redundancy payments**

14.85 The annual amount of redundancy payments net of recoveries is currently about £150 million, some 0.3% of fund outgo. It was considered adequate to base the future estimates on that amount.

### **Administration costs**

14.86 It is estimated that the cost of administration in 1998-99 will be about £1.0 billion, about 2% of total expenditure. In future, whilst the numbers of contributors and those in receipt of benefits other than retirement pensions are relatively stable, the increase in the number of pensioners will tend to increase costs. On the other hand, this is likely to be offset by



improvements in the efficiency of administration. As administration costs are a relatively small proportion of total outgo, it has been assumed as a practical expedient that they will stay constant in real earnings terms at about current levels.

# Appendix E: Estimated Benefit Expenditure and Contribution Income

**Table 15.1 Estimated benefit expenditure on the assumption that earnings limits and flat-rate benefits increase with prices and real earnings grow at 1.5% per annum**

(£ billion in 1999-2000 price terms)

	1999-00	2000-01	2010-11	2020-21	2030-31	2040-41	2050-51	2060-61
<b>Retirement Pension</b>								
Flat-rate pension	32.52	32.55	36.21	39.35	48.18	52.06	50.43	50.02
Graduated pension	1.09	1.14	1.25	1.05	0.51	0.14	0.02	0.00
<b>additional pension</b>								
gross	8.23	9.00	17.38	23.83	31.80	35.57	36.26	38.89
contracted out deductions	3.75	4.05	7.62	11.34	17.04	20.69	20.58	20.98
net additional pension	4.48	4.96	9.76	12.49	14.76	14.88	15.68	17.92
<b>Widows pensions</b>								
flat-rate*	0.68	0.67	0.53	0.89	0.74	0.62	0.69	0.66
earnings-related	0.22	0.22	0.08	0.11	0.08	0.07	0.08	0.08
<b>Incapacity benefits</b>								
flat-rate	6.32	6.44	7.56	9.59	9.31	8.74	8.94	8.53
earnings-related	0.76	0.64	0.11	0.02	0.00	0.00	0.00	0.00
<b>Jobseekers Allowance</b>	0.60	0.60	0.60	0.61	0.58	0.57	0.56	0.55
<b>Maternity allowance</b>	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03
<b>Redundancy benefit</b>	0.15	0.17	0.17	0.17	0.16	0.16	0.15	0.15
<b>Christmas bonus</b>	0.12	0.12	0.14	0.15	0.18	0.19	0.18	0.18
<b>TOTAL</b>	46.98	47.56	56.45	64.45	74.54	77.47	76.77	78.12

\* includes widows payment

**Table 15.2 Estimated contribution income on rates adequate to meet expenditure on the assumption that earnings limits and flat-rate benefits increase with prices and real earnings grow at 1.5% per annum**

(£ billion in 1999-2000 price terms)

[illegible]

\* includes class 1A and 1B

**Table 15.3 Estimated benefit expenditure on the assumption that earnings limits and flat-rate benefits increase with prices and real earnings grow at 2.0% per annum**

(£ billion in 1999-2000 price terms)

	<b>1999- 00</b>	<b>2000- 01</b>	<b>2010- 11</b>	<b>2020- 21</b>	<b>2030- 31</b>	<b>2040- 41</b>	<b>2050- 51</b>	<b>2060- 61</b>
<b>Retirement Pension</b>								
Flat-rate pension	32.52	32.55	36.21	39.35	48.18	52.06	50.43	50.02
Graduated pension	1.09	1.14	1.25	1.05	0.51	0.14	0.02	0.00
<b>additional pension</b>								
gross	8.23	9.00	17.68	24.99	34.74	40.18	42.11	46.19
contracted out deductions	3.75	4.05	7.78	11.97	18.70	23.34	23.64	24.43
net additional pension	4.48	4.96	9.91	13.02	16.04	16.83	18.47	21.76
<b>Widows pensions</b>								
flat-rate*	0.68	0.67	0.53	0.89	0.74	0.62	0.69	0.66
earnings-related	0.22	0.22	0.08	0.11	0.08	0.08	0.09	0.09
<b>Incapacity benefits</b>								
flat-rate	6.32	6.44	7.56	9.59	9.31	8.74	8.94	8.53
earnings-related	0.76	0.64	0.11	0.02	0.00	0.00	0.00	0.00
<b>Jobseekers Allowance</b>	0.60	0.60	0.60	0.61	0.58	0.57	0.56	0.55
<b>Maternity allowance</b>	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03
<b>Redundancy benefit</b>	0.15	0.17	0.17	0.17	0.16	0.16	0.15	0.15
<b>Christmas bonus</b>	0.12	0.12	0.14	0.15	0.18	0.19	0.18	0.18
<b>TOTAL</b>	46.98	47.56	56.60	64.99	75.82	79.43	79.57	81.98

\* includes widows payment

**Table 15.4 Estimated contribution income on rates adequate to meet expenditure on the assumption that earnings limits and flat-rate benefits increase with prices and real earnings grow at 2.0% per annum**

(£ billion in 1999-2000 price terms)

	<b>1999- 00</b>	<b>2000- 01</b>	<b>2010- 11</b>	<b>2020- 21</b>	<b>2030- 31</b>	<b>2040- 41</b>	<b>2050- 51</b>	<b>2060- 61</b>
<b>Employees' contributions</b>								
Gross	22.91	23.04	25.20	26.79	27.76	26.21	23.72	21.67
COSR Rebates	2.09	2.12	1.92	2.04	2.07	2.11	2.10	2.07
COMP Rebates	0.08	0.08	0.07	0.07	0.08	0.08	0.08	0.08
Personal Pension Rebates	0.68	0.70	0.68	0.63	0.48	0.40	0.41	0.41
Net	20.06	20.14	22.53	24.05	25.13	23.63	21.12	19.10
<b>Employers' contributions*</b>								
Gross	32.08	32.80	39.75	46.97	56.42	61.72	65.09	70.22
COSR Rebates	3.92	3.97	3.61	3.82	3.89	3.95	3.95	3.89
COMP Rebates	0.15	0.15	0.15	0.15	0.16	0.16	0.17	0.17
Personal Pension Rebates	1.52	1.71	2.28	2.26	1.66	1.30	1.35	1.36
Net	26.48	26.97	33.72	40.75	50.71	56.31	59.63	64.80
<b>Self -employed</b>								
Class 2	0.60	0.58	0.58	0.56	0.55	0.49	0.42	0.38
Class 4	0.83	0.87	1.02	1.17	1.31	1.31	1.22	1.16
<b>Voluntary Class 3</b>	0.05	0.05	0.05	0.05	0.05	0.04	0.04	0.03
<b>Deduction for SSP</b>	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
<b>Deduction for SMP</b>	-0.61	-0.62	-0.72	-0.86	-0.97	-1.11	-1.31	-1.50
<b>Consolidated Fund transfer</b>	0.63	0.64	0.75	0.89	1.00	1.14	1.34	1.53
<b>NET INCOME</b>	48.03	48.62	57.89	66.57	77.75	81.78	82.43	85.47
Benefit expenditure	46.98	47.56	56.60	64.99	75.82	79.43	79.57	81.98
Administration costs	1.04	1.06	1.30	1.58	1.93	2.35	2.86	3.49
<b>TOTAL OUTGO</b>	48.03	48.62	57.89	66.57	77.75	81.78	82.43	85.47
Percentage of outgo met by:								
Employees	41.76	41.43	38.91	36.13	32.32	28.89	25.63	22.35
Employers	53.83	54.15	56.95	59.88	63.94	67.47	70.72	74.03

Self-employed	2.98	2.98	2.76	2.59	2.39	2.20	1.99	1.80
Voluntary	0.11	0.11	0.08	0.07	0.06	0.05	0.04	0.04
Transfer	1.32	1.32	1.29	1.33	1.29	1.39	1.62	1.79
<b>TOTAL</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

\* includes class 1A and 1B

**Table 15.5 Estimated benefit expenditure on the assumption that earnings limits and flat-rate benefits increase with earnings and real earnings grow at 1.5% per annum**

(£ billion in 1999-2000 price terms)

	<b>1999- 00</b>	<b>2000- 01</b>	<b>2010- 11</b>	<b>2020- 21</b>	<b>2030- 31</b>	<b>2040- 41</b>	<b>2050- 51</b>	<b>2060- 61</b>
<b>Retirement Pension</b>								
Flat-rate pension	32.52	33.04	42.65	53.70	76.25	95.52	107.24	123.27
Graduated pension	1.09	1.16	1.47	1.44	0.80	0.26	0.03	0.00
<b>additional pension</b>								
gross	8.23	9.00	17.38	23.90	32.21	36.81	38.93	44.13
contracted out deductions	3.75	4.05	7.62	11.41	17.42	21.74	22.71	24.98
net additional pension	4.48	4.96	9.76	12.49	14.80	15.07	16.22	19.15
<b>Widows pensions</b>								
flat-rate*	0.68	0.68	0.63	1.21	1.18	1.15	1.46	1.65
earnings-related	0.22	0.22	0.08	0.11	0.08	0.08	0.09	0.10
<b>Incapacity benefits</b>								
flat-rate	6.32	6.54	8.85	12.88	14.38	15.53	18.31	20.15
earnings-related	0.76	0.64	0.11	0.02	0.00	0.00	0.00	0.00
<b>Jobseekers Allowance</b>								
	0.60	0.61	0.71	0.83	0.92	1.05	1.20	1.36
<b>Maternity allowance</b>								
	0.04	0.04	0.04	0.05	0.06	0.06	0.07	0.08
<b>Redundancy benefit</b>								
	0.15	0.17	0.17	0.17	0.16	0.16	0.15	0.15
<b>Christmas bonus</b>								
	0.12	0.12	0.16	0.20	0.28	0.35	0.39	0.45
<b>TOTAL</b>	46.98	48.18	64.63	83.11	108.91	129.22	145.19	166.35

\* includes widows payment

**Table 15.6 Estimated contribution income on rates adequate to meet expenditure on the assumption that earnings limits and flat-rate benefits increase with earnings and real earnings grow at 1.5% per annum**

(£ billion in 1999-2000 price terms)

	<b>1999- 00</b>	<b>2000- 01</b>	<b>2010- 11</b>	<b>2020- 21</b>	<b>2030- 31</b>	<b>2040- 41</b>	<b>2050- 51</b>	<b>2060- 61</b>
<b>Employees' contributions</b>								
Gross	22.91	23.37	29.87	37.67	47.74	56.15	63.26	72.33
COSR Rebates	2.09	2.11	1.97	2.22	2.49	2.84	3.22	3.65
COMP Rebates	0.08	0.08	0.07	0.08	0.10	0.11	0.13	0.15
Personal Pension Rebates	0.68	0.69	0.66	0.62	0.49	0.43	0.49	0.56
Net	20.06	20.49	27.16	34.75	44.67	52.77	59.42	67.98
<b>Employers' contributions*</b>								
Gross	32.03	33.00	42.82	53.89	69.27	81.64	91.78	105.14
COSR Rebates	3.91	3.96	3.70	4.17	4.67	5.32	6.04	6.84
COMP Rebates	0.15	0.15	0.15	0.17	0.19	0.22	0.26	0.30
Personal Pension Rebates	1.52	1.70	2.24	2.23	1.70	1.44	1.64	1.84
Net	26.45	27.20	36.74	47.33	62.71	74.66	83.84	96.16
<b>Self-employed</b>								
Class 2	0.62	0.62	0.79	0.99	1.28	1.49	1.67	1.92
Class 4	0.84	0.87	1.11	1.39	1.79	2.09	2.34	2.69
<b>Voluntary Class 3</b>	0.05	0.06	0.07	0.09	0.11	0.14	0.16	0.18
<b>Deduction for SSP</b>	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
<b>Deduction for SMP</b>	-0.60	-0.61	-0.68	-0.77	-0.84	-0.91	-1.02	-1.12
<b>Consolidated Fund transfer</b>	0.63	0.63	0.71	0.80	0.86	0.94	1.05	1.15
<b>NET INCOME</b>	48.03	49.24	65.86	84.53	110.56	131.14	147.41	168.94
Benefit expenditure	46.98	48.18	64.63	83.11	108.91	129.22	145.19	166.35
Administration costs	1.04	1.06	1.23	1.42	1.65	1.92	2.23	2.58
<b>TOTAL OUTGO</b>	48.03	49.24	65.86	84.53	110.56	131.14	147.41	168.94

Percentage of outgo met by:

Employees	41.78	41.60	41.23	41.11	40.40	40.24	40.31	40.24
Employers	53.77	53.96	54.70	55.04	55.94	56.22	56.16	56.24
Self-employed	3.03	3.04	2.89	2.81	2.77	2.73	2.71	2.73
Voluntary	0.11	0.11	0.10	0.10	0.10	0.10	0.11	0.11
Transfer	1.31	1.29	1.07	0.95	0.78	0.71	0.71	0.68
<b>TOTAL</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

\* includes class 1A and 1B

**Table 15.7 Estimated benefit expenditure on the assumption that earnings limits and flat-rate benefits increase with earnings and real earnings grow at 2.0% per annum**

(£ billion in 1999-2000 price terms)

	<b>1999- 00</b>	<b>2000- 01</b>	<b>2010- 11</b>	<b>2020- 21</b>	<b>2030- 31</b>	<b>2040- 41</b>	<b>2050- 51</b>	<b>2060- 61</b>
<b>Retirement Pension</b>								
Flat-rate pension	32.52	33.20	45.02	59.54	88.79	116.84	137.79	166.35
Graduated pension	1.09	1.17	1.55	1.59	0.94	0.32	0.04	0.00
<b>additional pension</b>								
gross	8.23	9.00	17.68	25.10	35.43	42.35	46.99	56.16
contracted out deductions	3.75	4.05	7.78	12.07	19.31	25.13	27.37	31.70
net additional pension	4.48	4.96	9.90	13.03	16.12	17.22	19.62	24.46
<b>Widows pensions</b>								
flat-rate*	0.68	0.69	0.66	1.34	1.38	1.41	1.88	2.22
earnings-related	0.22	0.22	0.08	0.12	0.09	0.09	0.11	0.13
<b>Incapacity benefits</b>								
flat-rate	6.32	6.57	9.35	14.29	16.74	19.00	23.53	27.19
earnings-related	0.76	0.64	0.11	0.02	0.00	0.00	0.00	0.00
<b>Jobseekers Allowance</b>	0.60	0.61	0.75	0.92	1.08	1.29	1.54	1.83
<b>Maternity allowance</b>	0.04	0.04	0.05	0.06	0.07	0.08	0.10	0.11
<b>Redundancy benefit</b>	0.15	0.17	0.17	0.17	0.16	0.16	0.15	0.15
<b>Christmas bonus</b>	0.12	0.12	0.17	0.22	0.33	0.43	0.50	0.61



<b>TOTAL</b>	46.98	48.39	67.81	91.30	125.69	156.81	185.26	223.05
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\* includes widows payment

**Table 15.8 Estimated contribution income on rates adequate to meet expenditure on the assumption that earnings limits and flat-rate benefits increase with earnings and real earnings grow at 2.0% per annum**

(£ billion in 1999-2000 price terms)

	<b>1999- 00</b>	<b>2000- 01</b>	<b>2010- 11</b>	<b>2020- 21</b>	<b>2030- 31</b>	<b>2040- 41</b>	<b>2050- 51</b>	<b>2060- 61</b>
<b>Employees' contributions</b>								
Gross	22.91	23.47	31.34	41.41	55.11	68.14	80.72	96.98
COSR Rebates	2.09	2.13	2.09	2.47	2.91	3.48	4.15	4.93
COMP Rebates	0.08	0.08	0.08	0.09	0.11	0.14	0.16	0.20
Personal Pension Rebates	0.68	0.70	0.70	0.69	0.57	0.53	0.64	0.75
Net	20.06	20.56	28.47	38.16	51.53	64.00	75.77	91.09
<b>Employers' contributions*</b>								
Gross	32.08	33.20	45.00	59.31	80.07	99.21	117.27	141.17
COSR Rebates	3.92	3.99	3.92	4.63	5.45	6.52	7.79	9.25
COMP Rebates	0.15	0.15	0.16	0.18	0.22	0.27	0.33	0.41
Personal Pension Rebates	1.52	1.71	2.36	2.47	1.97	1.75	2.10	2.48
Net	26.48	27.36	38.56	52.02	72.42	90.66	107.05	129.03
<b>Self-employed</b>								
Class 2	0.60	0.61	0.83	1.08	1.47	1.81	2.13	2.58
Class 4	0.83	0.87	1.16	1.52	2.06	2.53	2.98	3.60
<b>Voluntary Class 3</b>	0.05	0.05	0.07	0.09	0.13	0.16	0.20	0.25
<b>Deduction for SSP</b>	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03	-0.03
<b>Deduction for SMP</b>	-0.60	-0.61	-0.68	-0.77	-0.84	-0.91	-1.02	-1.12
<b>Consolidated Fund transfer</b>	0.63	0.63	0.71	0.80	0.86	0.94	1.05	1.15
<b>NET INCOME</b>	48.03	49.45	69.11	92.88	127.61	159.16	188.12	226.54
Benefit expenditure	46.98	48.39	67.81	91.30	125.69	156.81	185.26	223.05
Administration costs	1.04	1.06	1.30	1.58	1.93	2.35	2.86	3.49

<b>TOTAL OUTGO</b>	48.03	49.45	69.11	92.88	127.61	159.16	188.12	226.54
Percentage of outgo met by:								
Employees	41.76	41.58	41.20	41.09	40.38	40.21	40.28	40.21
Employers	53.84	54.03	54.78	55.14	56.07	56.37	56.35	56.45
Self-employed	2.98	3.00	2.89	2.81	2.77	2.72	2.71	2.73
Voluntary	0.11	0.11	0.10	0.10	0.10	0.10	0.11	0.11
Transfer	1.31	1.28	1.02	0.86	0.68	0.59	0.56	0.51
<b>TOTAL</b>	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

\* includes class 1A and 1B

