

# The Government's estimates of the impact of the pensions lifetime allowance

REPORT BY THE NATIONAL AUDIT OFFICE  
9 March 2004



This report was prepared for the purposes of informing consideration of the proposed simplification of the taxation of pensions and should not be used as the basis for personal financial decisions.

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# SUMMARY

- 1 The Government have proposed that from 6 April 2005 (A-day), a single lifetime allowance, of £1.4 million, will limit the total amount of an individual's pension savings that can benefit from tax relief. This is one aspect of the pensions simplification proposals outlined by the Government in 2002 and 2003, which will supersede all existing tax regimes for pensions, including the "earnings cap", currently £99,000, that was introduced in 1989 to set the maximum level of earnings that may count towards calculation of pension scheme benefits or contributions. Where an individual's pension is not in the form of a personal fund, but is defined in terms of the pension he or she stands to receive, a single factor of 20:1 will be used to compute the total fund to be assessed against the allowance.
- 2 The Government estimate that around 5,000 people will have funds exceeding £1.4 million on A-day and that in future around 1,000 additional people a year over the next ten years may be affected by the lifetime allowance who would not have been affected by the 1989 earnings cap. During 2003, some commentators suggested that the number of people who would be disadvantaged by the allowance was much higher than the numbers quoted above, perhaps as many as 600,000.
- 3 In December 2003, the Chancellor of the Exchequer asked the National Audit Office to examine the reasonableness of the Government's estimates and report publicly in advance of the 2004 Budget.

The Chancellor of the Exchequer specifically asked the National Audit Office 'to consider, in the light of the proposals set out in [the 2003 consultation] document:

- 1 Whether it is factually accurate that the £1.4 million lifetime allowance is, using a factor of 20:1 to calculate the capital value of a defined benefit pension, equivalent to the maximum pension available under the current occupational pensions regime which includes the earnings cap;
- 2 Whether it is reasonable for the Government to estimate that around 5,000 people will have pension funds in excess of £1.4 million at 5 April 2005;
- 3 Whether it is reasonable for the Government to estimate that into the future, around 1,000 people a year (in addition to the 5,000 immediately affected) may be affected by the lifetime allowance who would not have been affected by the earnings cap.<sup>1</sup>

- 4 We reached the following conclusions.

## Question 1

- 5 It is factually accurate that, assuming a 20:1 valuation factor, £1.4 million is broadly equivalent to the maximum pension allowable under the current occupational pensions regime, which includes the earnings cap. That does not mean that such a sum would at any given time necessarily be enough to buy such an income.
- 6 The Government consulted on the options for assessing the capital value of defined benefit pension schemes. They chose a single factor of 20:1 following a suggestion from the Association of Consulting Actuaries and the Institute and Faculty of Actuaries. It is based on the view that the cost of providing a pension of £1 a year with provisions for widowed spouse and for pensions increasing in line with RPI is approximately £20.
- 7 Given that the proposed £1.4 million lifetime allowance is broadly equivalent to the earnings cap, the number of people significantly affected by the proposed allowance will be only a small proportion of those now earning over £100,000 a year. Most people with that level of income are already caught by the earnings cap.

## Question 2

On the basis of the evidence examined, we consider:

- 8 **Other different though reasonable ways of estimating the numbers, including the widely quoted estimates of up to 600,000 people, use different definitions of how people may be affected. They include large numbers already subject to the 1989 earnings cap and project up to 40 years into the future. They are not directly comparable to either the 5,000 in this question or the 1,000 estimate in question 3, which do not, for example, include those subject to the earnings cap.**
- 9 **Great uncertainty attaches to any estimate of the number of people likely to have funds in excess of £1.4 million at A-day.**

In particular:

- There is no single source of data and the Inland Revenue therefore had to combine national survey data.
  - Some of these sources give average information which is of less use in examining people in the top 1 per cent of earnings.
  - Individuals can and, particularly amongst the higher paid, do have multiple pension funds, and there is no comprehensive source that brings together the total value of such individuals' funds.
- 10 **The estimate of 5,000 people is at the lower end of a range of reasonable estimates.**
    - In their initial work - which was suitable and generated appropriate information - the Inland Revenue undertook some credibility checks against alternative sources of evidence, but they did not undertake sensitivity analysis and so did not have a range of possible values.
    - Using alternative assumptions that seem more likely to be tailored to the attributes of high earners drove the estimate of the number affected upwards, compared to the average assumptions made in the original estimates.

- 11 **Sensitivity testing of the Revenue's models using the proposed 20:1 factor and assumptions more closely tailored to the attributes of high earners gave figures consistent with an estimate around 10,000.**
- 12 **Other evidence is consistent with an estimate of around 10,000.**
- Another way of approaching the question is to identify specific groups. The Hundred Group of Finance Directors (mostly of FTSE 100 companies) conducted a survey of 65 of the biggest private sector employers which identified 1,000 people whose funds are valued at over £1.4 million using the 20:1 factor. Extrapolations of their figures suggested total populations of between around 7,000-10,000 depending on what assumptions were made.
  - There appear to be particular small concentrations of people who may be affected. Two occupations in particular were brought to our attention - the judiciary and airline pilots. Between them they appear to have several hundred people who could be affected due to the specific circumstances of these professions.
  - The Inland Revenue conclude that people with large retirement annuity contracts account for around a thousand of the overall number affected (some 20 per cent). ABI data on sales of annuities suggest small numbers annually have funds over £500,000, which lends weight to this view.

### Question 3

On the basis of the evidence examined we consider:

- 13 **Even greater uncertainty attaches to projections into the future which makes it even harder to provide a reliable estimate of the number likely to be affected. In particular:**
- There may be major unanticipated changes in work patterns and investment performance that would influence pension entitlements. There may also be behavioural changes as a result of the announcement of the lifetime allowance.
  - The approach used was a simple projection by numerical ratio rather than a causal model, with limited assessment of the flows in and out of the pool of those potentially affected. Credibility checks were undertaken against other evidence
- 14 **The evidential base for the estimate of 1,000 additional people a year with funds exceeding the allowance is thin and based on a number of assumptions and roundings which significantly affect the outcome.**

14 **Evidence from a survey of major companies, the current pensions in payment data and other evidence does not discredit the Inland Revenue's estimate**

- The Hundred Group survey found 745 people in 61 major companies likely to reach £1.4 million in the future. They consider their extrapolation to some 12,000 over time does not discredit the 1,000 a year estimate. However, as with the position on A-day there may be other concentrations of people affected within certain professions in the future.
- The number with funds in the range of £1.0-1.4 million, which may grow to exceed £1.4 million over the next 10 years, is around 5,000 people.
- Data on the accumulated number of pensions currently in payment indicates that 15,000 (less than 0.5 per cent) are currently over £60,000. This may understate the picture in the future but nevertheless provides an indication of the scale of large pensions.

# THE PENSIONS LIFETIME ALLOWANCE

- 1 The Government consultation documents published in December 2002<sup>2</sup> and December 2003<sup>3</sup> set out the intention of introducing a single simple and transparent system of tax privileges for pension saving. If this is implemented, it will replace the six tax approved<sup>4</sup> regimes and two unapproved regimes currently in place. One of the main proposals is for a single, lifetime allowance for the amount of pension savings that can benefit from tax relief, of £1.4 million, indexed to the retail prices index.
- 2 The Government state that under their proposals most people will be able to make pension contributions with tax relief to whatever level they can afford. However, they estimate that some 5,000 could be affected by the introduction of the lifetime allowance - currently expected to be on 6 April 2005 (referred to as A-day) - as well as around 1,000 per annum thereafter who had not previously had their pension savings capped by the annual earnings cap<sup>5</sup> introduced in 1989. If the proposals are implemented, on taking up their pension, people with funds in excess of the lifetime allowance will be subject to a recovery charge of 25 per cent<sup>6</sup>, although transitional protection is proposed for those who already exceed the allowance at A-day.
- 3 During 2003, some commentators responding to the first consultation paper suggested that the number of people who would be affected by the lifetime allowance was much higher than the figures quoted above. Estimates of up to 600,000 were suggested<sup>7</sup> and some commentators have assumed this to mean that such numbers will be disadvantaged by the allowance. In the light of the on-going debate about whether the Inland Revenue's figures were fair estimates, in his Pre-Budget Report speech on 10 December 2003, the Chancellor of the Exchequer asked the National Audit Office to examine the reasonableness of the figures and to report publicly in advance of the 2004 Budget<sup>8</sup>. Our work was undertaken in January and February 2004.

## National Audit Office remit

- 4 The Chancellor of the Exchequer specifically asked the National Audit Office 'to consider, in the light of the proposals set out in [the 2003 consultation] document:
  - 1 Whether it is factually accurate that the £1.4 million lifetime allowance is, using a factor of 20:1 to calculate the capital value of a defined benefit pension, equivalent to the maximum pension available under the current occupational pensions regime which includes the earnings cap;
  - 2 Whether it is reasonable for the Government to estimate that around 5,000 people will have pension funds in excess of £1.4 million at 5 April 2005;
  - 3 Whether it is reasonable for the Government to estimate that into the future, around 1,000 people a year (in addition to the 5,000 immediately affected) may be affected by the lifetime allowance who would not have been affected by the earnings cap.<sup>9</sup>

<sup>2</sup> *Inland Revenue (2002) Simplifying the taxation of pensions: increasing choice and flexibility for all*

<sup>3</sup> *Inland Revenue (2003) Simplifying the taxation of pensions: the Government's proposals.*

<sup>4</sup> *Approval is the process by which the Inland Revenue grants tax exempt status to pension arrangements providing they meet legislative requirements.*

<sup>5</sup> *The earnings cap was introduced by the Finance Act 1989 and is the maximum annual level of earnings that may count towards calculation of pension scheme benefits or limits, normally indexed by price movement. The cap is set at £99,000 for 2003-04.*

<sup>6</sup> *The tax to be levied on any pension fund above the lifetime limit when benefits are to be drawn.*

<sup>7</sup> *An estimate quoted by Mercer Human Resource Consulting Limited*

<sup>8</sup> *Inland Revenue 2003.*

<sup>9</sup> *Inland Revenue 2003.*



5 The National Audit Office had full discretion as to how to carry out the work to answer these questions. We made use of internal resources and also drew on advice from a range of outside sources. A full list of those with whom we consulted is at Annex A.

6 The focus of the work was on:

Consideration	Criteria	Conclusion
The reasonableness of the approach used to estimate the numbers affected.	Whether the approach was suitable for generating answers to the questions posed.	Appropriate given the lack of data to directly answer the questions.
The adequacy of the models developed and the consistency of the outputs from them with the assumptions.	Whether the models were suitable and generated appropriate information.	Suitable and generated appropriate information.
The suitability of the data sources used, in particular, for the purpose of examining the position of higher earners.	Whether the most appropriate and reliable sources were used, and whether they were adequate for examining a small group of the overall population.	Data sources were the most suitable available, but limited coverage at extremes of the distributions makes them of less use in examining attributes of the top 1 per cent highest earners.
The reasonableness of the assumptions made.	Whether the assumptions were tailored to known characteristics of the particular group - high earners - under examination.	In original models, assumptions tended to be averages, rather than tailored to attributes of high earners.
The sensitivity of the models to changes in the assumptions.	Whether testing had been undertaken to assess the sensitivity of the assumptions to changes in key variables.	Sensitivity testing was not undertaken in original modelling.
Evidence available elsewhere as to the possible number of people affected.	Whether other evidence had been examined to provide additional assurance.	Some assurance taken from other sources of data, including pensions in payment information and data from tax system
The comparability of alternative estimates of the numbers affected with the Government's figures.	Whether consideration had been given as to how alternative figures compared.	Alternative estimates not available at time Inland Revenue's work done. Our analysis showed different definitions were used by many commentators and so are not comparable.
The reporting of the results.	Whether the approach taken to reporting the end results was appropriate in view of the approach taken.	Approach to estimating numbers meant we would have expected the Revenue to have examined a range before reporting a point estimate.

- 7 Overall, the approach taken was suitable and generated appropriate information. It included credibility checks but not sensitivity analysis. As part of our work, sensitivity analysis was undertaken to test some of the key assumptions.

## Taxation of pensions

- 8 Pensions are a key element of the total package of pay and benefits which many organisations offer to their employees. According to one recent survey, nearly two-thirds of employers make extra pension provision for senior executives such as separate executive schemes or unapproved schemes, particularly where these staff are affected by the pensionable earnings cap (paragraph 2)<sup>10</sup>. However, schemes of this kind must be governed by the normal rules to be eligible for tax relief. If they are not eligible, they are outside the scope of the issue considered here.
- 9 Broadly, there are two main types of pension scheme - defined benefit (often referred to as a 'final salary' scheme), and a defined contribution (or 'money purchase') scheme (**Box 1**). Over 10 million out of a working population of 28 million are currently accruing rights in an occupational scheme (either final salary or money purchase), with about 5 million making some contribution to a personal or stakeholder pension. Around half a million are still contributing to a retirement annuity contract - a form of money purchase scheme - although no new contracts can have been opened since 1988, when they were replaced by personal pensions.

### Box 1

**Defined benefit:** a type of occupational pension scheme where the scheme rules define the benefits payable to an individual independently of the level of contributions and the scheme's investment returns. The size of the pension will usually be a function of the final salary and years of service.

**Defined contribution:** a type of pension scheme where the size of each member's retirement benefits are determined by the amount of the contributions made by or on behalf of the member to the scheme, their subsequent investment growth and the rate at which the fund is converted to an income (eg the annuity rate).

- 10 The legislation regulating pensions has been added to over time. As a result it has become very complex: there are currently eight different sets of tax rules with changes allowing people to save under previous rules until retirement. A key aim of the simplification proposals outlined by the Government is to replace these regimes with a single new one<sup>11</sup>.
- 11 The opportunity to gain tax relief on pension contributions is an attractive aspect of pensions savings. Tax relief can be gained on contributions made to approved pension schemes, both for individual and employer funded contributions. An earnings cap was introduced in the Finance Act 1989 which limits the amount of tax-relieved pension saving available. This affects members who have joined Inland Revenue approved pension schemes since 1 June 1989. The cap limits the levels of earnings on which both contributions

<sup>10</sup> Watson Wyatt Pension Plan Design Survey 2002.

<sup>11</sup> Inland Revenue 2002 paragraph 2.8.

and benefits are calculated. It was originally set at £60,000 per annum for the 1989-90 tax year. With the exception of 1993-94, when it was frozen, the cap has been increased each year in line with the retail price index, and is £99,000 for 2003-04.

- 12 Approximately 250,000 people in the UK - some 1 per cent of the working population - earn over £100,000 per annum and contribute to a pension. But those affected by the lifetime allowance, if implemented, will be a much smaller group because many people who may have large earnings now will not have been able to build up substantial funds of £1.4 million or more in a pension scheme. For example, no-one who started work after 1989 would have been able to avoid the earnings cap. Those affected will, therefore, tend to have the following characteristics:
  - be in the later part of their working life, most likely aged 50 or over;
  - have a source of earnings that is considerably higher than average and of which the pensionable amount is in excess of £100,000 per annum; and
  - be members of a pre-1989 uncapped pension scheme (ie not have changed jobs since 1989).
- 13 The vast majority of people in the country will not build up a pension fund of any kind that will take them within reach of the lifetime allowance. But there are some specific groups who are more likely to be affected. These include senior company executives, senior professionals, some self-employed people, and some with very particular sets of circumstances such as the judiciary (who often have substantial earnings from legal practice before becoming members of the judicial pension scheme). **Box 2** provides illustrative examples of how an individual could build up a pension fund of around £1.4 million, assuming the 20:1 valuation factor referred to in the Inland Revenue's 2003 consultation document.

## Box 2: Illustrative examples

### 1 Long Serving (with a half pension) earning over £140,000 in a final salary scheme

An individual would have a fund of £1.4 million if they had worked in a company where they accrued 1/60th of final pensionable salary for every year worked, having worked for 30 years and retiring on a final pensionable salary of £140,000.

Fund size =  $30/60 \times £140,000 \times 20$  (the factor suggested for valuing the benefits) = £1.4 million.

### 2 Full pension and earning over £105k in a final salary scheme

An individual would have a fund of £1.4 million if they had earned a full 2/3rds pension (perhaps by working 40 years and accruing pension at a rate of 1/60th of final salary for every year worked) and retired with final pensionable earnings of £105,000.

Fund size =  $40/60 \times £105,000 \times 20 = £1.4$  million

### 3 Half pension combined with a lump sum earning £125k in a final salary scheme

An individual would have a fund size of £1.438 million if they had earned a half pension (40 years in a 1/80th accruing pension scheme), built up a lump sum of one and a half times final pensionable salary (3/80ths of final salary per year) and retired on a final pensionable salary of £125,000.

Annual Pension income value =  $40/80 \times £125,000 \times 20 = £1.25$  million

Lump Sum value =  $40 \times 3/80 \times £125,000 = £187,500$

Fund size =  $£187,500 + £1.25$  million = £1.438 million

### 4 Contributions to a Retirement Annuity Contract

An individual would be able to build up a Retirement Annuity Contract worth £1.47 million if they:

- Retired at 60 on self-employed earnings of £200,000
- Earnings had grown in line with average earnings for the previous 30 years
- Made contributions at the maximum rates permitted by the Inland Revenue (between 17.5 per cent and 27.5 per cent dependent on age) every year for 30 years up to 2003
- Held 75 per cent of the fund in equities and 25 per cent in bonds, switching to bonds over the last ten years
- Equities grew in line with the FTSE All Share index

### 5 Maximum Contributions to a Retirement Annuity Contract

An individual could build up a Retirement Annuity Contract worth £1.4 million if they:

- Retired at 55 with self-employment earnings of £100,000
- Earnings had grown in line with average earnings for the previous 20 years
- Made contributions at the maximum rates permitted by the Inland Revenue (between 17.5 per cent and 27.5 per cent dependent on age) every year for 20 years up to 2003
- Held 75 per cent of the fund in equities and 25 per cent in bonds, switching to bonds over the last ten years
- Equities grew in line with the FTSE All Share index

## Interpretation of 'affected'

14 In the course of our work it became clear that there are a number of different interpretations in the public debate on the subject of how someone can be 'affected' by the proposed lifetime allowance. The different interpretations (from widest to narrowest) encompass people who:

- **need to be aware of the lifetime allowance in their consideration of their pension arrangements given their expected salary growth** - on this basis, some have argued that those 'affected' by the lifetime allowance includes all those people in the workforce (of any age) who could find their ability to save for a pension in a tax efficient way limited by the allowance;
- **will be caught by the lifetime allowance but are affected already by the earnings cap** - the Inland Revenue consider, because the lifetime allowance will broadly equate to the current earnings cap, that these people will not be disadvantaged. However, the argument has been put that these people will be more severely affected by the lifetime allowance than the earnings cap, and that at current annuity rates this sum will not buy a pension equivalent to the maximum possible under the current regime. Moreover, there will be some now in a 1989 scheme but who have substantial retained benefits in an uncapped scheme from previous employment;
- **are not currently subject to the earnings cap but who will be subject to the lifetime allowance** - these people will for the first time be subject to the impact of the earnings cap on the amount of tax-privileged saving they can make towards a pension. The questions posed to us are in terms of this definition of 'affected'. According to the Government's definition to have escaped the current pensionable earnings cap, someone must:
  - be a member of the same pension scheme since at least spring 1989;
  - not changed employer;
  - not worked for a company that went out of business; and
  - not taken early retirement.

## National Audit Office findings

15 The remainder of this report addresses the three questions raised by the Chancellor of the Exchequer. It summarises the evidence we gathered and the conclusions drawn from this evidence.

**QUESTION 1:** Whether it is factually accurate that the £1.4 million lifetime allowance is, using a factor of 20:1 to calculate the capital value of a defined benefit pension, equivalent to the maximum pension available under the current occupational pensions regime which includes the earnings cap.

- 16 In the 2002 consultation document, the Government proposed a lifetime limit (the word 'allowance' was introduced later) on the amount of pension saving that can benefit from favourable tax treatment. They argued it will give "individuals greater flexibility to plan their retirement saving to suit their career needs, whilst for most people placing no constraints at all on their pensions.<sup>12</sup>" The Government consider that the proposed lifetime allowance of £1.4 million is broadly equivalent to the value of the maximum pension available under the current occupational rules. The maximum pension available is for a man aged 60 who has obtained a full two-thirds pension and, at retirement, has pensionable earnings of least £99,000, drawing an indexed pension and providing a surviving spouse's pension. As such, the lifetime allowance is designed to mirror the current arrangements under the 1989 regime, which includes the annual earnings cap<sup>13</sup>.
- 17 Originally, the Government proposed a common and consistent method of valuing pension rights using actuarial tables determining the capital value of defined benefit scheme rights for people of different ages in different types of scheme. The 2003 consultation paper subsequently repeated that a number of factors influence the capital value of a defined benefit scheme and different approaches could be used to produce tables of factors for valuing benefits. However, the Government argued that this approach would introduce major complexity. Instead, they propose to take on the suggestion of the Association of Consulting Actuaries and the Institute and Faculty of Actuaries that a single factor of 20:1 should be used to value defined benefit rights against the lifetime allowance<sup>14</sup>.
- 18 The Government chose the 20:1 factor because the cost of providing a pension of £1 per annum with a widowed spouse's pension is in the region of £20 for an individual retiring around the age of 60. It assumes that the pension increases in line with the retail price index and there are dependants' pensions payable on the death of the member. In the Government's view the benefits of a single factor are that it is simple and will be easy for members to understand and schemes to administer.

## Conclusions

- 19 In simple terms **Box 3** summarises the basic calculations to show that, using the single factor of 20:1, the maximum pension which can be provided from a single defined benefit scheme available under the current occupational pensions regime which includes the earnings cap is broadly equivalent to the proposed £1.4 million allowance. However, for those people who wish to purchase an annuity on the open market (for example, those with personal pensions and/or retirement annuity contracts), £1.4 million will not necessarily, at any particular point in time, purchase a pension of £66,000. For example, in their response to the Inland Revenue's consultation document, the Association of Consulting Actuaries quoted an example to show that if a male aged 60 were to attempt to buy an index-linked pension of £66,000 per annum with a 50 per cent widow's pension, at then prevailing market rates (January 2003) the price would be about £1.74 million, whereas a year earlier it would have been

<sup>12</sup> *Inland Revenue 2002.*

<sup>13</sup> *Inland Revenue 2002.*

<sup>14</sup> *Response from the Association of Consulting Actuaries to the HMT/Inland Revenue Consultation Document 'Simplifying the taxation of pensions' (2003).*

nearer £1.4 million. This price was based on the average price of the top five providers and the change was due to disadvantageous movements of the annuity market over time<sup>15</sup>.

### Box 3: Calculation

Current earnings cap = £99,000 in 2003-04<sup>(1)</sup>

The maximum pension allowable is 2/3rds of the earnings cap = £66,000<sup>(2)</sup>

Using a factor of 20:1<sup>(3)</sup> to value the benefits = £1.32 million, which is broadly equivalent to £1.4 million.

Sources: (1) (2) (3) Inland Revenue 2003

**QUESTION 2:** Whether it is reasonable for the Government to estimate that around 5,000 people will have pension funds in excess of £1.4 million at 5 April 2005.

- 20 This section considers the estimate of the number with pension funds in excess of £1.4 million at A-day. A crucial consideration for this question is how pension funds will be valued. For defined contribution schemes, the fund value is usually taken to be the market value of the underlying assets. Valuing defined benefits is more difficult, and there are a number of ways of converting the accrued annual pension into a total fund value. One method is to use transfer values, a way of valuing the fund of an individual wishing to transfer their accrued rights to another scheme. As mentioned in paragraph 17, the Inland Revenue have proposed (in their 2003 consultation document) to use a different method to value defined benefits, allocating a value of £20 for each £1 of accrued annual pension, regardless of age or sex. This 20:1 factor will be used at A-day to compute the value of pre A-day rights, and assess if an individual is able to obtain transitional protection.
- 21 In view of this, for this examination, we consider that the most appropriate way of valuing defined benefits is to use the 20:1 factor. Whilst it is possible to use other methods of valuing funds, at A-day, individuals will want to know whether they are 'affected', and therefore whether they will need to adjust their behaviour as a consequence. The availability of transitional protection (see 2003 consultation document) will be a key issue for individuals to consider, and their funds will be required to be valued at 20:1 by the Inland Revenue to determine this. The use of the 20:1 factor does not necessarily mean an actuarial value of the fund will be twenty times the pension.
- 22 There are other problems to be considered when valuing pension funds, including the availability and suitability of information. Estimating the size of individuals' pension funds is difficult. In particular:

15 Association of Consulting Actuaries (2003).

16 Review of ONS pensions contributions statistics (2002).

- Although much information is collected by Government and the pensions industry<sup>16</sup>, there is no mechanism for linking together multiple funds to provide information on an individual's total rights. Pension schemes are administered by a number of parties including sponsoring employers, third party administrators and insurance companies. Data are held on numerous systems, some of which are in paper form and contain errors only cleansed at the time of vesting of pension benefits. Many people have more than one pension so the number of funds does not equate to the number of people involved. Even those who have been in a single pension scheme since 1989 could have added to their pension savings using other funds.
- It is, therefore, necessary to use survey data. The primary source, the Inland Revenue's Survey of Personal Income - drawn from the Revenue's tax records - provides sufficient coverage of people at the top end of the income distribution - in this case those earning more than five times median income. However, the data available from the other main national surveys give average figures which are likely to be less applicable to people in the tail of the distributions as the surveys rarely sample people in the tails of distributions in sufficient quantity to provide accurate information of their behaviour. For example, only 100 individuals earning over £100,000 are included in the Family Resources Survey sample in 2000-01.
- There is an added complication in that the freedom to transfer pension rights, which has been available for many years, means it is possible for rights which originally accrued in a defined benefit scheme to be transferred to a defined contribution scheme. Even for those who have accrued their rights in a defined benefit scheme with a set retirement age there is some opportunity to plan when the benefits are received. Pensions do not have to be taken from individual defined contribution schemes until 75. This enables the higher paid to plan when they wish their pension rights to come into payment in the most tax advantageous manner.

### Inland Revenue's calculations

- 23 Box 2 showed some of the circumstances in which individuals could obtain a pension fund of £1.4 million or more. The Government's proposals will apply to all pension funds, with multiple funds aggregated together to be considered against the £1.4 million lifetime allowance. The Government's 2003 consultation document (page 3) makes it clear that the estimated 5,000 people is interpreted as those either currently in, or previously in, a pre-1989 uncapped pension scheme. This figure could include those now in capped schemes but with retained benefits from their time as members of uncapped schemes. The Inland Revenue have estimated that of the 5,000 people, 4,000 are members of pre-1989 occupational pension schemes and around 1,000 have retirement annuity contracts.
- 24 The Revenue undertook their estimate using two models (one for occupational pension schemes and the other for retirement annuity contracts) which drew on a range of sources of information, and made use of a number of important assumptions. These are discussed in paragraphs 25-42. **Box 4** provides an overview of the approaches used, which are discussed in detail below.



#### Box 4: Inland Revenue's approach

##### *Occupational pension schemes*

- Sources of survey data were matched across common variables, such as age and earnings to estimate the distribution of accrued pension funds of individuals. This provided a representative sample of those who are currently contributing to a private pension. For each of these representative individuals the effective fund size was calculated by taking their assumed length of service in the scheme, along with the assumed accrual rate and current earnings to work out the value of the accrued pension entitlement. This can be converted into an effective fund size by using an appropriate conversion factor. The factors chosen for the work undertaken for the 2002 consultation document were those from the Principal Civil Service Pension Scheme to compute transfer values and are dependent on age and gender.

##### *Retirement annuity contracts (RACs) and personal pensions*

- The size of a fund is a function of the contributions going in, plus the income generated from the underlying investment, less any management charges.
- The Inland Revenue modelled funds using a spreadsheet assuming:
  - three-quarters of an individual's fund is invested in equities and the rest in gilts and in the 10 years leading to retirement there is a switch away from equities.
  - Individual earnings grew with average earnings and there is a management charge of 1 per cent.
  - Individuals make average contributions of 5.6 per cent each year.

Source: Inland Revenue

#### Data sources

- 25 The main data sources used by the Inland Revenue were the Family Resources Survey, the Survey of Personal Incomes and the Government Actuary's Department's Survey of Occupational Pension Schemes (**Box 5**). The Office for National Statistics (ONS) advised us that these were the most appropriate and authoritative survey sources available for the information the model required on earnings levels, length of service in employment and accrual rates across pension schemes. The ONS suggested the model could be affected by the general problems associated with the limited coverage of people at the extremes of distributions within survey data, particularly in relation to the Family Resources Survey and particularly if only a single year's data was relied on. The consensus view of other organisations we consulted was similar.

## Box 5: Data sources used by the Inland Revenue

Data source	Summary	How used in the Inland Revenue's estimates
Survey of Personal Incomes (Inland Revenue) (SPI)	<p>Considered the definitive source of tax-payers income, from employment or other sources. Carried out annually on the previous year's tax records and consists of all information on income by source held on the main Revenue systems for each sample case. The results are 'grossed up' to represent the full tax paying population.</p> <p>The SPI is selected from the Self Assessment and COP (PAYE) systems. A sample of 200,000 cases is selected each year. The data are stratified by salary and source of income, with a heavy bias towards sampling from the higher end of the salary range. In 2000-01 the sampling ratio for those with salaries over £80,000 was 1 in 14 (21,704 in total) and all cases where over £2.5 million was paid in income tax were included in the sample. In terms of selection, the sample will suitably represent the high earners who will be affected by the lifetime allowance.</p>	<p>For the occupational model the SPI provided information on earnings and ages of people, to which other variables were applied.</p> <p>The SPI was also used to give information on numbers of people paying into RACs for given earnings levels and ages.</p> <p><b>Drawbacks</b> Although based on a sample of records, no sample error calculations are undertaken. The results are based on ratio estimates, which make calculations of precision and sample error difficult. The system by which tax relief on occupational pensions is provided means that pensionable earnings do not have to be reported to the Inland Revenue, so earnings data on the SPI includes both pensionable and non-pensionable earnings.</p>
Family Resources Survey (Department for Work and Pensions) (FRS)	<p>Collated annually and collects information on income, social security benefits, housing costs and additional benefits such as savings and pensions. In 2000-01 interviews were held with 24,000 households. The sample is selected using a standard postcode address file and stratified by region, socio-economic group, economic activity rate and male unemployment rate.</p>	<p>FRS data provided information on the length of time individuals have been a member of their current occupational pension scheme. This was used to calculate the numbers of people in pre-1989 schemes, and was applied to the SPI variables to calculate the accrued pension fund.</p> <p><b>Drawbacks</b> While the data collected on time in pension scheme seems appropriate for the FRS population, it is unlikely to give a full picture of the situation for high earners as only 100 people earning over £100,000 were included in the sample in 2000-01. The Inland Revenue team did not consider examining confidence limits around the estimates of time in current scheme, which would be a simple method of testing the possible variation.</p>
Survey of Occupational Pension Schemes: (produced by the Government Actuary's Department)	<p>The Government Actuary's Department conducts regular Occupational Pension Schemes Surveys using a sample of occupational pension schemes in the public and private sectors drawn from the Pensions Schemes Registry run by the Occupational Pensions Regulatory Authority. Reference is made to other data sources where appropriate, for example, the General Household Survey and the New Earnings Survey. The most recent survey gives results relating to the position mid-2000.</p>	<p>The survey provided the distribution of accrual rates across pension schemes, which was applied within the model to calculate accrued pension rights.</p> <p><b>Drawbacks</b> The survey is not particularly targeted to high earners' accrual rates. There is also a relatively low response rate (28 per cent) for private sector schemes.</p>

## Extrapolation of results and sampling variation

- 26 The use of survey data raises the issue of the degree of precision that can be claimed for the results. Ideally in inferential statistics (analysis of samples) the presence of sampling error should be acknowledged in the estimated results. In most situations some form of confidence limits (however crude) should be established to give the likely range in which the result would lie, in this case the likely number of people affected at A-day.

- 27 Additional sampling variation is introduced by using parameters in the model that are themselves based on sample data, such as the information on scheme accrual rates used to impute an accrual rate to each case in the Survey of Personal Income sample. It is difficult to assess analytically the effect of such variation on the output of the model, but some sensitivity analysis based on plausible variation in the sample estimates used as model parameters would enable its effects to be explored in more detail. The key point is that the existence of such sources of uncertainty in the data means it is difficult to claim with a high degree of confidence that any point estimate is a reasonable estimate of the number of people likely to be affected. We therefore undertook some sensitivity analysis (see paragraphs 43-46 and 53-59).
- 28 The model used by Inland Revenue runs on the 200,000 sample records from the Survey of Personal Incomes. The results are then 'grossed up' based on the sampling factors in each stratum (i.e. salary range, employment etc) to give the total number affected by the lifetime limit. The results were then calibrated in line with reported occupational scheme membership in the Government Actuary's Department survey.

## Models developed

- 29 The Inland Revenue developed two separate means of estimating the numbers of people potentially affected by the lifetime allowance on A-day.
- a) Occupational pension scheme members
- 30 To produce an estimate of pre-1989 members, the Revenue developed a database holding the sample data from the SPI and information gathered through the tax system on salary, age and type of pension owned. All other figures needed for their calculations were randomly assigned to individuals according to distributions provided by the Family Resources Survey and Government Actuary's Department/National Association of Pension Funds data. Details of the model are summarised in **Box 6**. As part of our work we examined the general approach employed and inspected the database coding to ensure the model worked as expected. In general, it was a reasonable approach to tackling the problem.

### Box 6: Approach used

Time in current pension scheme was allocated to each case in the SPI based on the proportions observed in the FRS. For example, the FRS observed that 93 per cent of those aged under 25 had been in their pensions scheme for 5 years or less. Numbers from 1 to 100 were assigned to each case using a standard random number generation technique. Those with a random number less than 93 were assigned 5 years service; those with a random number of 94 to 100 were assigned 5-10 years. Another random number was then used to refine this figure to give actual number of years (such as 1,2,3 etc) to allow more realistic variation.

A third random number was used to assign individuals to either public or private sector. This assumption was based on GAD survey results stating that approximately 60 per cent of occupational pension scheme members work in the private sector. Using aggregated GAD and NAPF survey data, the Inland Revenue team worked out the proportion of occupational pension members on particular accrual rates for public and private sector, and used a final random number to assign accrual to an individual. The individual's total earned income, allocated time in fund, and allocated accrual rate were multiplied together to calculate the predicted annual accrued pension.

This annual pension was converted into a total fund size through the use of Principal Civil Service Pension Scheme (PCSPS) transfer values. The number of people whose fund size exceeded £1.4 million, based on the actuarial assumptions underlying the PCSPS factors, was identified.

- 31 Random number generation is often used in simulation exercises of this nature and is an accepted statistical method. In using it here, the Inland Revenue assumed complete independence of allocated variables, which is unlikely to be the case. If the variables were completely independent there would be no link between salary, time in scheme, public/private sector and accrual rate<sup>17</sup>. It is likely that time in scheme, accrual rate and salaries are associated, as those on higher salaries, for example, tend to have better accrual rates. Assuming independence of this data could lead to an underestimate of the total number affected and may be more significant than the sampling errors discussed above.

#### Assumptions made

- 32 A series of assumptions are incorporated into the Inland Revenue model. These are summarised in [Table 1 on page 21](#). Overall, the Inland Revenue have drawn on general statistics on the features of members of occupational pension schemes as a whole, rather than specific attributes of the target group. These characteristics are not independent. There will inevitably be some error in estimation of the distributional effects when recourse is made to using averages for each of the main variables. For example, it is possible the rate at which an individual's pension accrues is linked to the salary of that individual.
- 33 **Valuation factor:** The 20:1 factor referred to in the 2003 consultation document (see paragraph 17) was not used in the Inland Revenue's model, with the valuation factors being based upon the transfer values employed by the Principal Civil Service Pension Scheme (PCSPS) for valuing transfers out of the fund. These transfer values were used as the Inland Revenue's estimates were prepared prior to the actuarial profession's suggestion of the 20:1 factor. The PCSPS transfer valuation factors are on average around half of the 20:1 factor (ranging between 7 and 11.5 dependent on age and sex).
- 34 **Pensionable pay:** Some high earners receive much of their remuneration in non-pensionable forms such as bonuses, share options, car allowances and benefits in kind. The proportion of pay of high earners that is pensionable tends to vary by level of pay, the nature of the organisation, and the accrual rate for the pension. The Inland Revenue did not specifically consider the average proportion of pay qualifying for pension in the original model. In retaining the PCSPS valuation factors in their model, instead of adopting the 20:1 factor, it was implicitly assumed that 50 per cent of pay was pensionable. We think that this figure is too low. Whilst the median bonus paid to the chief executives of FTSE 100 companies, for example, was worth 63 per cent of salary, for senior professionals the corresponding amount was 12 per cent<sup>18</sup>. Given that there are proportionately more on salaries between £100,000-140,000 than, for example, over £350,000, this suggests that an average would be closer to the lower of the two percentages, implying a proportion of pensionable pay nearer to 75 per cent than the 50 per cent assumed by the Revenue's approach.

<sup>17</sup> For example, the random number approach could potentially give a 21 year old earning £10,000 a year in the public sector a 30th accrual rate which is probably impossible.

<sup>18</sup> IDS Management Pay Review February 2004 p15.

- 35 **Earnings growth:** To investigate the number of people likely to be affected over the next few years, the Inland Revenue's model increases salaries by 4.5 per cent each year. In reality salary increases are unlikely to be independent of salary level and there is evidence that high earners receive higher than average salary increases<sup>19</sup>. The 2001-2002 Survey of Personal Incomes will use 5.7 per cent and 5.5 per cent for males and 4.7 and 4.5 per cent for females for forecasting for the current year, which might be more appropriate. In addition, salary could potentially be associated with time in scheme, although this could operate in either direction, with those on higher salaries having achieved them by changing jobs frequently or having been in a scheme a long time.
- 36 **Public/private ratio:** The Inland Revenue model assumed a 60:40 split of private: public organisation and that this ratio remained independent of salary. It is unlikely that the high earners would be split between public and private sector workers in this way. Only a very small number earn over £200,000 in the public sector and we estimate under 1,000 over £100,000. Therefore, a more appropriate split might be to attach private sector accrual rates to all those on salaries above a certain threshold and then use the 60:40 split across the remainder.
- 37 **Accruals rate:** The allocation of accrual rates in the model assumes that the accrual rate is independent of salary. There is no firm evidence on the accrual rates for the target group, but it seems likely that many will be on better accrual rates. For example, a recent Mercer survey stated that 42 per cent of board directors need only complete 20 years to achieve a two-thirds pension, indicating a 1/30s accrual rate<sup>20</sup>. The rates used by the Revenue were derived from the Government Actuary's Department's survey and National Association of Pension Funds' survey findings, but both sources are industry wide data collations, rather than tailored to the arrangements for higher earners.
- 38 **Retirement age:** The Revenue model assumed people could retire at any age up to 65. However, evidence from Mercer suggests that around half of board directors, and 40 per cent of senior executives, retire at age 60. The Revenue model, therefore, overstates the length of time remaining in which the 60-64 age group might increase their pension benefits.
- 39 **Multiple funds:** The Inland Revenue have assumed that the numbers of people with multiple funds that collectively breach the £1.4 million is small, and does not affect the 5,000 estimate. The Inland Revenue's work focused on the rights which might have been built up in the current pension scheme and in the current period of employment. It seems likely that many of the target group will be highly mobile and so their current employment is not representative of the total rights they have accrued (although by being highly mobile they will have been capped for the majority of their career). Current employment might be subject to the statutory earnings cap, but such employees might have sizeable rights which they have acquired in previous employments and which would be uncapped and contribute significantly to the rights to be measured against the lifetime allowance. In addition, even if someone has built up maximum benefits within an approved scheme in one employment, they are allowed to build up more in succeeding employments at an accrual rate of 1/60ths.

19 See for example, *IDS Management Pay Review February 2004 p12* which states that basic salary increases for executive directors and senior executives were running at a median 6 per cent over the year to June 2003.

20 Mercer Human Resource Consulting (2002) *Executive Retirement Benefits Survey*. Note that the proportion of pre-1989 scheme members on 1/30th accrual rates is likely to be less than this if only because a large proportion of those accruing at that rate since before 1989 will have achieved their maximum pension and retired.

- 40 However, there are factors which tend to limit the sizes of multiple pots. A fund accrued early in a career will be based on the typically lower earnings of the individual at that stage in their life. It cannot be uprated by more than the RPI and therefore will not benefit from the higher real earnings growth of someone with long service in one job.
- 41 Nevertheless it is, therefore, possible that there is a sizeable number of individuals with multiple funds. One group where large multiple pots may be significant is the judiciary. Many are likely to have built up significant private funds as barristers and solicitors over perhaps 20 years or more prior to joining the Judicial Pension Scheme, in which (uniquely) it is possible to build up an additional maximum pension over 15 to 20 years without having to take retained benefits into account. Not taking sufficient account of these people could lead to underestimating the total number affected.
- 42 Overall, whilst there has been good use of available data, the assumptions made were all based on averages and are likely to be robust for individuals close to the average values. The group in which we are most interested is likely to be at the higher end of the income distribution and the average values may not be representative for them. The advice we received was that the assumptions were most likely to lead to underestimating the number involved. However, in the Revenue's view some may result in an overestimate, while the direction in which some impact is unclear.

#### Sensitivity Analysis

- 43 To test the impact of changes in the assumptions, we undertook sensitivity analysis with the Inland Revenue on their model. Table 1 shows the alternative scenarios we investigated.
- 44 The aim was to test the robustness of the assumptions by replacing them with those more tailored to the likely characteristics of higher earners and in some cases, more extreme values. The majority of variables altered had a limited impact in isolation on the final number of people 'affected' within occupational pension schemes. However, in almost all scenarios above, the estimate increased compared to the original provided by the Inland Revenue, although the difference was only marginal for the majority of cases, as shown in the column headed 'changes'.
- 45 The model is most sensitive to the proportion of taxable pay that is pensionable. This sensitivity was illustrated through combining the 20:1 valuation factor with the 75 per cent proportion of pensionable pay, which doubled the original estimate to around 9,500. Multiple variable scenario A in Table 1 - which is not an extreme case - generates a figure of around 11,500. The 'extreme case', using a 20:1 factor with 100 per cent of pay being pensionable, generated an estimate of around 15,500, although we do not consider this to be realistic. Other combinations of factors could increase the estimate further, but these are also extremes. On the other hand, using PCSPS factors and reducing the proportion of pensionable pay will reduce the estimate.

**Table 1: Sensitivity Analysis on Inland Revenue Occupational Schemes Model**

Variable	Original value	Replacement value and justification	Changes*
Valuation Factor	PCSPS transfer values	20:1 with 100 per cent pensionable earnings (extreme case)	+11,000
Valuation Factor and pensionable earnings	PCSPS transfer values	20:1 with 75 per cent pensionable earnings (more likely to be appropriate for higher earners)	+5,000
Valuation Factor and pensionable earnings	PCSPS transfer values	20:1 with 50 per cent pensionable earnings (comparable to the original estimate but with 20:1 replacing PCSPS factors)	+400
Projected earnings growth	4.5 per cent	5 per cent as used in the 2001-02 Survey of Personal Incomes	+100
Length of Service Data	FRS data	FRS data modified to add an additional year	+100
Private:Public designation ratio	60:40	60:40 for salaries up to £200,000 100:0 for salaries over £200,000 to reflect that few public sector employees earn more than £200,000	+200
Accrual Rate	GAD/NAPF surveys	Watson Wyatt's Pension Plan Design Survey 2000 'accrual rates for senior executives' for salaries over £200,000, rather than an average distribution.	+1,400
Retirement Age	65	Half of 60-64 group retire before 65	-500
Proportion of Pension Scheme Membership	FRS data	For salaries over £200,000 set at 100 per cent. Evaluate impact of all high earners being members of a pension scheme	+500
Multiple variable scenario A		To assess the cumulative impact of several variables upon the model we used 20:1 valuation factor with 75 per cent pensionable pay, and both 100 per cent pension scheme membership and Watson Wyatt accrual rates for salaries over £200,000.	+7,000
Multiple variable scenario B		The Inland Revenue also looked at the effect on the estimate using the 20:1 factor, 70 per cent pensionable pay (Mercer estimate), retirement at 60, 15 years service at 1/60th.	+4,000

\*Note: Change on baseline estimate of 4,500.

46 The proportion of pay that is pensionable is critical. Towards the end of our work, the Survey of Personal Incomes for 2001-02 became available. The original Revenue modelling discussed in this report was based on the survey for 1999-2000 (cross-checked to 2000-01 data). The Revenue's own modelling of the 2001-02 data, done whilst we were finalising our work, gave estimates which were lower than the earlier work, in some cases by one-quarter. This may reflect higher than average bonus payments (which are typically not pensionable) in the earlier years and projection of this data to A-day levels of earnings may thus have overstated pensionable earnings growth.

b) Retirement annuity contracts (RACs)

47 To estimate the number contributing to retirement annuity contracts, the Inland Revenue developed a model to simulate the growth of an individual's fund. The key elements are:

- To start with the Revenue modelled an individual earning £300,000 in 2005 and worked backwards using an index of average earnings. This approach takes account of earnings and works out contributions to the pension fund at an assumed percentage. From this the model calculates the interest earned and the management charge deduction to give the value of the fund carried forward at each year end.
- The return depends on the mix of the fund between gilts and equities, adjusted by the 'life style' factor near retirement. 'Lifestyling' gradually transfers equity holdings into gilts over a period of time up until retirement to reduce the risk to which the fund is exposed.
- The outcome shows the value of the accumulated fund for each year.
- A number of combinations were modelled by the Inland Revenue, which offered a profile of the type of individual who could build up a RAC exceeding £1.4 million.
- The Inland Revenue then used the Survey of Personal Incomes to count the number of people who fulfill their criteria in the year of the survey.
- The Inland Revenue then assumed that 20% of those people have consistently maintained their RACs payments at the required levels for the required period up to the survey.

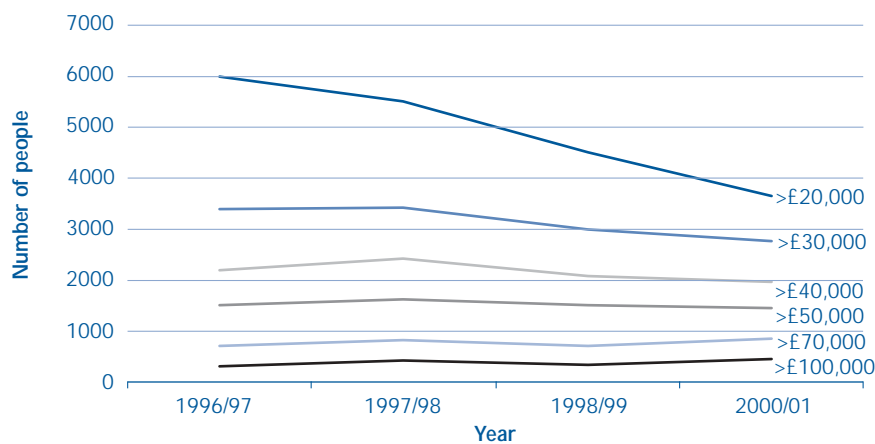
48 We examined the model in detail to ensure that it worked as intended and did not contain errors. Our examination involved reviewing the structure and detail of the model, the formulae and any embedded constants. Having identified some weaknesses, we worked with Inland Revenue to modify the spreadsheet to allow for further sensitivity analysis.



- 49 The model involved a number of assumptions ([Table 2 on page 24](#)). An examination suggested that several of the assumptions were less appropriate than they might have been for the circumstances of higher earners, in particular, the percentage contributions paid and the ratio of equities to gilts. On the other hand, one key assumption which may overstate the potential to accumulate a large fund is that it assumes previous growth was in line with average earnings over the entire career. In practice, earnings in the earlier part of a career, and consequently, contributions, are likely to have been lower.
- 50 The model also makes an assumption about the shift in the form of investment over time. A 75 per cent weighting in equities and 25 per cent in bonds was used until 10 years before retirement, when there is a 'lifestyle' shift into bonds by retirement, designed to reduce risk towards the end of an individual's working life. Standard lifestyle strategies would be 100 per cent invested in equities prior to the switchover period. High earners may be more likely to include in their investment portfolios some riskier assets with potentially higher returns and to choose a shorter switchover period such as five years or less.
- 51 The model assumes that only 20 per cent of the numbers potentially affected actually will be, as the other 80 per cent will not have maintained contributions at the required level for long enough to build up a £1.4 million fund. The Inland Revenue base this assumption partly on research by the Financial Services Authority on the persistency of contributions to personal pensions and partly on evidence from tax records of actual contribution rates and amounts. The persistency report suggests that only 54 per cent of people continue to pay into a personal pension four years after purchase from an Independent Financial Adviser<sup>21</sup>. The Inland Revenue consider that extrapolated forward, only 20 per cent of people are likely to maintain contributions for 20 years or more. Whilst this may be a reasonable average, it is possible that the high earners making sizeable payments to retirement annuity contracts may not adopt such behaviour (there may be a significant relationship between lapse rate and factors such as age and pay, for example). It is also questionable how relevant research about recent purchases of financial products is to consideration of those who started some 20 or more years ago, especially when the tax regime offers incentives for continued contributions.
- 52 The Inland Revenue have data showing the size of contributions paid into RACs each year since the introduction of Income Tax Self Assessment in 1996-97. Whilst this data shows an overall decline in the numbers of people making RACs contributions each year, it does show a small relatively stable number making the largest contributions each year - the group we are interested in ([Box 8](#)). However, to put these numbers into context, someone contributing £20,000 in the most recent year would have had to make contributions equivalent in real terms for 31 years to achieve a fund of £1.4 million. New 2001-02 figures show a further decline in the number contributing.

21 "Stopping Short: why do so many consumers stop contributing to long term policies?", Sarah Smith, Financial Services Authority, January 2004 pg 13.

**Box 8: Number of people paying into RACs by contribution value**



Data for 1999-2000 unavailable

Source: Inland Revenue

**Sensitivity Analysis**

53 To test the implications of the assumptions chosen we undertook sensitivity analysis on the Revenue's RACs model. The changes to the assumptions are summarised in Table 2.

**Table 2: Sensitivity Analysis on Inland Revenue Retirement Annuity Contract Model**

Variable	Original value	Replacement value and justification	Justification
Projected Returns on Equities	5 per cent	10 per cent	Evaluate impact of future stock market rises
Projected Returns on Equities	5 per cent	20 per cent	Evaluate impact of future stock market rises
Ratio of Equities to Gilts prior to "lifestyling"	75:25	100 per cent	Assess impact of high risk pension fund
Retirement Age	60	65	Impact of retiring later
Lifestyling period	10 years	5 years	Impact of leaving equities invested for longer
Percentage Contributions paid	5.6 per cent	10 per cent	Impact of larger contributions
Percentage Contributions paid	5.6 per cent	15 per cent	Impact of larger contributions
Multiple variables		Maximum IR permitted contribution rates and 100 per cent invested in equities	Impact of several variable changes upon the model

- 54 The majority of revised scenarios input into the model did not affect the number generated in the original estimate. The main reason for this is that the model, unlike that for occupational pensions, does not generate as an output the number of people affected. Instead, it produces characteristics of RAC contributors (earnings levels and years of contributions), which were then used in conjunction with SPI data to count the number of current contributors fitting this profile.
- 55 The original profile of an 'affected' RAC contributor used by the Inland Revenue was someone earning over £100,000 and who could have made 30 years of contributions. There were some 4,200 people meeting this profile in 2000-01. Using the Inland Revenue's 20 per cent persistency assumption (paragraph 51) to adjust for those not paying in consistently, this gave 840 'affected' individuals - or around 1,000.
- 56 When the variables in Table 2 were altered, whilst some of them increased the fund size, only increasing contribution levels led to funds in excess of £1.4 million for the profiled individuals. None of the scenarios in Table 2 generated a potentially affected individual who earned less than £100,000 and had made less than 30 years contributions. As such, the Inland Revenue's original estimate included the people affected in all Table 2 scenarios, and was therefore resistant to the sensitivity testing.
- 57 Inland Revenue hold data on the percentage contributions made during 2000-2001 from the Survey of Personal Incomes (Table 3) which can serve as a cross-check. This shows that around 1,800 individuals earning £100,000 or more paid 15 per cent or more of their earnings into a Retirement Annuity Contract and only 747 (3%) more than 20 per cent. This figure appears to support the Inland Revenue's original estimate of 1,000 RAC contributors at A-day as some of the 1,800 will not have made contributions at this level for a sufficiently long enough period to develop a £1.4 million fund. Contributions for any particular individual will change considerably year by year, affected, for example, by fluctuations in self-employed earnings. Looking at contributions levels at a point in time will omit individuals who temporarily reduce their high contributions owing to a poor earnings year, but include large ones from those with a good year, including those taking advantage of the facility to carry relief forward and back.

**Table 3: Numbers of people making percentage contributions for given earnings levels in 2000/2001<sup>22</sup>**

Earnings	Proportion of earnings paid into RAC during the year				
	<5%	5% - 10%	10% - 15%	15% - 20%	20% +
£100k - £200k	13,947	2,139	662	240	277
£200k - £300k	2,472	487	220	323	173
£300k +	2,544	520	582	499	297
Total	18,963	3,146	1,464	1,062	747

<sup>22</sup> Inland Revenue Survey of Personal Incomes 2000/2001.

- 58 The only factor which changed the Inland Revenue's estimate was the age at which the RAC contributor first started to make contributions. The model generates scenarios for contributor's earnings and length of contributions, but the Inland Revenue only hold data on earnings and age. As such, an assumption must be made about the age at which an individual takes out a RAC, which when added with the length of contributions, gives the current age of the individual. The Inland Revenue assumed that contributors were unlikely to start until they were aged 26. The number affected increases if this age is reduced. We agree with the Inland Revenue that it is unlikely a person would have taken out a RAC at age 16, and their assumption of a minimum age of 26 appears more reasonable.
- 59 The Association of British Insurers (ABI) also collects information on the values of annuities purchased each year. Information from 2001 shows that of the 258,000 annuities sold, a fraction of 1 per cent were purchased with a fund exceeding £500,000 (the survey did not distinguish between amounts above this size)<sup>23</sup>. This lends support to the Inland Revenue's estimates that only a relatively small number of RACs contributors will have funds exceeding £1.4 million at A-day. The data relates to a single annuity, which is appropriate for the two-thirds of people who have only one pension fund and purchase one annuity with it, however, some high earners may have a range of pensions with different providers which would not be picked up in this data.

### Other evidence

- 60 As well as examining the Inland Revenue's estimates we sought other evidence. In the time available, we were not able to undertake a comprehensive survey of all high earners. Instead, we have been able to draw on the findings of a survey undertaken in February 2004 by the Hundred Group of Finance Directors, which provides a detailed picture of those likely to be affected within many of the biggest and most successful employers in the UK. In addition, we had contact with a number of organisations and companies, as well as advisers to high earners. We also sought information about certain high earning professions. This evidence is relevant to both this question and the third question (see paragraph 67 onwards).

### Hundred Group survey

- 61 In February 2004, the Hundred Group of Finance Directors gathered information about the number of members who might be affected by the lifetime allowance. They did this by requesting data from 100 major organisations (mostly FTSE 100 companies) about the number of active and deferred members of defined benefit schemes who had joined prior to June 1989 and whose accrued pensions are £50,000 or greater, broken down by age<sup>24</sup>. The survey also asked for details of the number of active and deferred members of defined contribution schemes whose accumulated fund was £1 million or greater. More than 60 companies responded, covering 1.5 million active or deferred members.

<sup>23</sup> Association of British Insurers "Annuities: The Consumer Experience"

<sup>24</sup> The Hundred Group discussed the survey instrument with the Treasury, Inland Revenue and the National Audit Office in January 2004. The response rate was about 80% given the presence within the Hundred Group survey of some related companies.

- 62 There are a number of limitations to this source of information. The survey had to be completed in two weeks. In the time available, there was limited opportunity to check that each company had interpreted the request for information in the same way. Nevertheless, the information generated provides some hard evidence to help us assess the reasonableness of the Revenue's estimates. The key findings were that there are 1,039 employees of 61 surveyed companies who have accrued pension funds exceeding £70,000 per annum and will therefore be affected by the lifetime allowance at A-day.
- 63 The Hundred Group extrapolated from their figures to the wider environment of UK pension schemes on the basis that the proportion of Hundred Group pension scheme members affected is 0.07 per cent. They recognise the extrapolation is speculative since their respondents may well not be representative of the wider UK pension population of 16.8 million people. There is also the possibility of double counting, with active members in one scheme with substantial pension benefits also having deferred benefits in another. Moreover, the extrapolation does not consider those members who have deferred benefits and an active benefit, none of which alone exceed £70,000 per annum, but which when aggregated do exceed the limit. On the basis of their extrapolation, the Hundred Group consider the total number of active and deferred members who will immediately be affected by the lifetime allowance at A-day is unlikely to exceed 11,750 and will probably be lower at around 10,000.
- 64 We agree with the Hundred Group's view that the members they surveyed may not be representative of the UK pensions population. A more appropriate approach may be to extrapolate to the wider private sector pension scheme population, given that very few public sector employees earn more than £100,000 and are thus unlikely to be affected. According to the Government Actuary's Department's Occupational Pensions Scheme survey 2000, there are approximately 5.7 million active private sector scheme members and 4.5 million in public sector schemes. Using this ratio to remove those in public sector schemes would give a figure of around 6,500 private sector employees affected. This assumes that the ratio applies equally to deferred pension scheme membership as it does to current active scheme membership, which may not hold true. The low number of public sector employees earning more than £100,000 means that the total estimate would be unlikely to exceed 7,000 using this alternative method.

#### Additional evidence

- 65 Some additional evidence can be derived from considering particular occupations in addition to those covered by the Hundred Group survey. Annex B summarises some information on possible groups and suggests that whilst in certain large, well remunerated professions - for example, partners in accountancy firms - there could be many with substantial pension funds, many are excluded from the estimates because they are already subject to the earnings cap. One major firm told us that more than half its partners are post-1989, with turnover at around 7 per cent per annum. In addition though, there are numerically smaller occupations - such as the judiciary and airline pilots - where there may be strong concentrations of people affected because of their particular circumstances.

## Conclusion

- 66 Great uncertainty attaches to any estimate of the total number of people likely to be affected on A-day as there is no single source of data and that available presents average information of less use in examining the top 1 per cent of earners. The estimate of 5,000 people is at the lower end of a range of reasonable estimates. In their initial work, the Inland Revenue undertook some credibility checks against alternative sources of evidence, but they did not undertake sensitivity analysis and so did not have a range of possible values. Sensitivity testing of the Revenue's models using the 20:1 factor and assumptions that seem more closely tailored to the attributes of high earners gave figures consistent with an estimate of around 10,000. Other evidence is consistent with an estimate of around 10,000.

**QUESTION 3:** Whether it is reasonable for the Government to estimate that into the future, around 1,000 a year (in addition to the 5,000 immediately affected) may be affected by the lifetime allowance who would not have been affected by the earnings cap.

- 67 This section examines the third question. It comments on the Inland Revenue's approach and draws on other evidence about the number of people likely to be affected by the lifetime allowance in the future.
- 68 The Inland Revenue estimate that there may be a further 1,000 people a year, with pensions currently below £1.4 million, who over the 10 years following A-day will retire and be affected by the lifetime allowance on account of their membership of a pre-1989 scheme<sup>25</sup>. The consultation document refers to people retiring over the next 10 years, although this is not specifically mentioned in the question above and is not how the Inland Revenue has undertaken its estimate. However, those retiring are a subset of those who will be affected over the period, as some will reach this level but remain in the workforce.
- 69 The question refers to 'around 1,000 a year' - an average figure over a period of time - in this case, 10 years. Given the uncertainties around the decisions to be made by the relevant population, it is possible that the true figure will not be close to 1,000 in some years, and could be higher, but in others will be lower. The sources of uncertainty include variations due to changing socio-economic trends such as increasing retirement age, or fluctuations in the stock market.

## Uncertainties

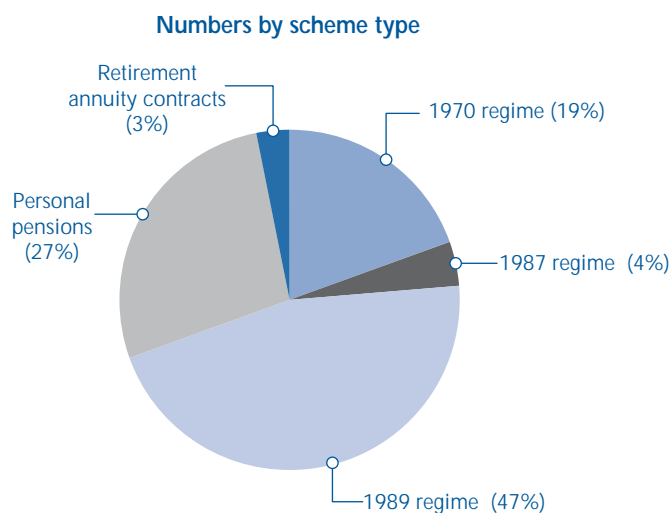
- 70 It is even harder to forecast into the future than to estimate the position on A-day. The calculations for A-day relate to people with most of their working lives behind them so that career histories and realised investment performance will be known to them (if not to those attempting to calculate the value of their accrued pension entitlements). In looking ahead, there are major unanticipated changes in work and investment performance patterns that would influence the accrued defined benefit and defined contribution entitlements. Potential forecast errors are likely to increase the further forward the projection is made.

<sup>25</sup> *Inland Revenue 2003.*

- 71 Another unknown factor is the extent to which there are behavioural changes as a result of the announcement of the introduction of the lifetime allowance. It could be argued that at least some of those potentially affected would, once alerted to the implications of the allowance with a marginal tax rate of 55 per cent on the value of the pension fund in excess of the limit, seek to ensure that they did not exceed it. This might be feasible in certain circumstances. To the extent that they succeeded, the number affected would be lower, but it is impossible to predict this behaviour. The Revenue's approach produces an estimate, essentially assuming no behavioural response.

#### Calculation of those with the potential to be affected

- 72 To estimate how many people are likely to have accrued a fund in excess of £1.4 million after A-day, the Revenue examined how many were likely to be in pre-1989 occupational pension schemes or were RAC contributors and earning enough to accumulate a fund of that size. The approach was a simple projection by numerical ratio, rather than causal model, so it is not possible to discuss separately the size of the effects of different factors. An alternative would have been to use a stocks and flows methodology, which would have calculated the number affected through explicit modelling of the numbers going in and out of the affected group. In that way, it might have been easier to identify the effects of different assumptions.
- 73 Instead, the Inland Revenue began by looking at the population of high earners. The Survey of Personal Incomes reports that 250,000 employed and self-employed people (around 1 per cent of the working population) earn over £100,000 per annum and are paying into a pension scheme. The New Earnings Survey also suggests that 200,000 full time adult employees earn over £100,000 gross (although this does not include the self-employed).
- 74 As discussed earlier the Government consider that if individuals are subject to the current earnings cap in a post-1989 scheme, they will broadly be in the same position under the lifetime allowance. The Inland Revenue estimated the number of pre-1989 pension scheme members earning above £100,000 at approximately 80,000. This calculation used evidence about the numbers of occupational scheme members who were in pre-1989 schemes. The Inland Revenue estimate that overall 25 per cent of the working population are now in this group, from their analysis of FRS and SPI data (Box 9). However, they consider that higher earners are more likely to be in pre-1989 schemes, based on 2002 research which found that 40 per cent of FTSE 100 directors joined their company before 1989. The Hundred Group, also found that around 40 per cent of active and deferred members of the 61 FTSE company schemes surveyed joined prior to 1 June 1989. Given this evidence, the Revenue made their original estimate of 25 per cent more cautious by increasing it to 33 per cent. It seems appropriate to provide for the possibility that higher earners are more likely than average to be in pre-1989 schemes.

**Box 9: Inland Revenue analysis of breakdown of pension scheme member by scheme type**

75 In their calculations the Revenue do not attempt to estimate the separate flows into and out of the pool of relevant people. Instead they consider that since the net effect may be an inflow or outflow, the likely pool could be between 50-100,000 - figures either side of 80,000. This is because, although it has not been possible to join a pension scheme under pre-1989 rules or take out a new RAC for the last 15 years, the number of pre-1989 regime members potentially affected by the lifetime allowance after A-day could increase beyond the 80,000 estimated above. Some people who, whilst earning below the earnings cap level at A-day, will continue to gain promotions or have pay increases above the level at which the lifetime allowance is uprated. Offsetting such additions there will be an outflow due to retirements and job moves which mean an individual leaves the pre-1989 scheme.

#### Assumptions about those who will be affected

- 76 The Revenue consider there is considerable difference between the group of those who could potentially be affected and those who actually will. Their justification for this is that:
- overall only around 5 per cent of pension members ever reach maximum benefits (through long service in a defined benefit scheme or making maximum contributions in a defined contribution scheme); and
  - some will change jobs and therefore would become subject to the earnings cap.



- 77 The Inland Revenue's approach was as follows. For defined contribution schemes they used data from the FRS and SPI. For personal pensions, the SPI, used as the base for modelling, includes actual tax records for the self-employed and higher rate payers (which will include the group of interest) and imputed data for the rest of the population. For RACs the Revenue were also able to draw on tax data. This showed that only around 2 per cent of contributors made the maximum contributions in 1999-2000. They consider this may be overstated since it will include individuals carrying back from previous years.
- 78 For occupational pension contributors, the Revenue examined the 0.5 million occupational pension members on the FRS likely to be coming up to retirement, and considered how many had or had the potential to reach 40 years of service. They then added in data from a 2001 survey<sup>26</sup> of occupational schemes which identified the number of those retiring who had maximum benefits. This analysis suggested that only around 1 per cent of overall occupational members coming up to retirement were likely to hit current Revenue maximum limits. When combined with the data on personal pensions and RACs, this suggested around 2 per cent overall would reach maximum limits. However, given the uncertainty of the data and the small sample sizes for occupational pension scheme members, the Inland Revenue assumed that at most 5 per cent of all members will ever reach the maximum pension possible.
- 79 For higher earners the Revenue have assumed 10 per cent (i.e. double the 5 per cent figure) will reach maximum benefits. The Revenue base such an assumption on the grounds that high earners are likely to be better informed and better able to make full use of pension tax benefits. They also take assurance from the data of contributions to RACs (Table 3), which shows a relatively low number of people contributing as much as they could each year.
- 80 The Revenue's assumption is significant since it removes some 90 per cent of high earners in pre-1989 schemes. It is also not the case that individuals will need to reach maximum benefits to exceed the lifetime allowance. This is certainly not the case for someone earning, for example, £200,000 who is in a defined benefit scheme. It is also arguable that the assumption does not take sufficient account of the fact that some people will have multiple funds, although the Revenue are confident it does.
- 81 Having estimated that 10 per cent of the 50-100,000 are likely to be affected - between 5-10,000 - the Revenue have taken the figure at the higher end of the range and assumed that 10,000 would reach the lifetime allowance spread evenly over a 10 year period. Thus, they arrive at the estimate that around 1,000 a year will be affected.
- 82 Timing is extremely difficult to forecast and assuming an even flow is not unreasonable. The Revenue consider the majority will be affected by about 2015. This is on the grounds that by 2005 nearly 70 per cent of pre-1989 members will be 45 or more and 44 per cent over 50, and many of these will retire in the next decade. However, 10 years is unlikely to be the entire period over which all those affected will reach £1.4 million. Although the youngest person in a pre-1989 scheme in theory could have been born in the early 1970s, it more likely that the group includes people currently in their mid-30s and above. Thus, some will not retire until the 2020s and early 2030s, so it is possible the distribution will have a long 'tail'.

- 83 The Revenue re-ran the occupational pension schemes model for each year between 2005 and 2015. They assumed an earnings growth of 4.5 per cent and a 2.5 per cent increase in the lifetime allowance each year. This calculation gave a figure for the number of people falling into the pool each year. The Revenue then added to this a figure to take account of the RAC contributors who would also be affected in the same year. It assumed that those RAC contributors earning above £100,000 would be affected, and that the ratio of RACs contributors to pre-1989 occupational scheme members earning over £100,000 predicted for 2005 held true over the entire 10 year period. This alternative model gave an overall increase of pre-1989 members 'affected' of 9,800, consistent with their original estimate of 10,000 over 10 years.
- 84 In considering whether the estimate allows for the uncertainties in their calculations the Revenue suggest that by assuming that all pay is pensionable and thus focusing on people earning over £100,000, rather than a higher figure, they have built in provision. Additionally, they have reflected the uncertainty by putting a range around the 80,000 potentially affected and by assuming the percentage of those actually affected is anything up to five times the average.

### Other evidence

- 85 To further consider the reasonableness of the Government's estimates, we examined several other sources of evidence.

### Hundred Group survey

- 86 Paragraphs 61-64 summarised the findings of the Hundred Group survey in relation to those expected to be affected on A-day. In addition, this survey sought information about those whose pensions were currently below levels likely to be affected by the lifetime allowance, but who might in time. It identified approximately 745 active members in 61 FTSE schemes whose accrued annual pensions were between £50-70,000. Whilst acknowledging the difficulties of estimating the proportion of those who will be affected by the lifetime allowance before they retire, the Hundred Group extrapolate the results to the total number of active members of UK pension schemes - 10.1 million - to suggest that around 12,000 members are likely to be affected by the lifetime allowance in the future.
- 87 The figure is subject to the same reservations as before, and also does not include deferred members, but the Hundred Group considers it does not discredit the Government's 1,000 a year estimate.

### Consideration of specific occupations

- 88 As with the previous question (paragraph 65) some consideration can be given to occupations other than covered by the Hundred Group survey likely to be affected in the future, who are not currently subject to the earnings cap. The evidence referred to above on the judiciary and airline pilots also suggested that there might be more than 1,000 in these very specific occupations who might be affected in the coming years.

## Private pensions currently in payment

89 In order to provide an additional estimate of the number who may be affected by the lifetime allowance, the Inland Revenue also examined the data available on the current pensions in payment (Table 4). These are the stock of individuals in receipt of pensions who have retired over a number of years. This is a potentially useful consistency check drawing on hard data, which the Revenue consider suggests that in the light of recent experience, an average flow of 1,000 a year would not be unreasonable. According to the data from the Survey of Personal Incomes 2000-01, around 5.4 million individuals have an income from a private pension in payment. Of these, less than 0.5 per cent - some 15,000 - receive more than £60,000, which is broadly the maximum pension an individual will get tax relief on under the new regime.

**Table 4: Pensions in payment 2000-01**

Private pension amount (£ per annum, lower limit)	No of individuals (000s)
Less than £50,000	5,340
50,000	8
60,000	5
70,000	3
80,000	2
90,000	1
100,000	4
Subtotal of those with £60,000 or more	15
Overall total	5,363

90 This snapshot from the SPI may understate the picture for future years. The Revenue concede it is difficult to gauge to what extent the current pensions in payment may usefully indicate the distribution of income in the future. One reason is that future cohorts of retirees may have a different income profile to current retirees as a result of an increasing number being subject to the earnings cap since 1989.

91 In addition, we have been advised that:

- schemes are in the main only starting to reach maturity. The average pension in the future will be based on longer than average service, with many of those now retiring having up to 40 years exposure to scheme membership rather than much less in the case of those already retired. However, the extent to which this will apply to the high earners is uncertain;
- as mentioned earlier, there is some opportunity to plan when benefits are received. There are many options which are likely to be attractive to high net worth individuals and so it is difficult to look solely at the income from pension tax payers below the age of 75 and draw definite conclusions about the total rights.

- 92 These points raise the possibility that the snapshot from the SPI may understate the picture for future years. Nevertheless, it does provide an indication of the proportion of high private pensions based on actual figures. A further credibility check on the numbers affected in future is provided from the results of modelling those affected at A-day. These results suggest around 5,000 with funds below £1.4 million but above £1 million, which gives an indication of the group with the potential to exceed the lifetime allowance in the near future.

#### Alternative calculations

- 92 The Government's consultation document stated that there was some speculation that the number of people disadvantaged by the lifetime allowance is much higher than the figures suggested<sup>27</sup>. In particular, there has been discussion in the press that whilst the Inland Revenue estimated the number affected was 5,000, others had identified 20-120 times as many. The implication in much of the coverage was that the figures were comparable. We therefore examined other reported estimates to resolve whether alternative approaches helped shed light on the Revenue's figures and to establish whether the Revenue's estimates were seriously flawed.
- 93 The most widely quoted alternative estimates were provided by actuaries - Mercer Human Resource Consulting Limited and Aon Consulting. **Box 10** summarises how they are calculated. Our examination highlights that they have been produced in different ways to the Revenue's figures and address different timescales. Most significantly, they include those already capped by the post-1989 tax regime, who are not, in the Government's definition, 'affected' by the change. Therefore, in both cases the headline figures which have been quoted in the press - 600,000 and 100,000 people respectively - do not (and we were advised by the firms concerned were never intended to) compare with the Revenue's estimate of 5,000.

## Box 10: Alternative calculations

A) Mercer	B) Aon Consulting
<ul style="list-style-type: none"> <li>■ Take as the starting point everyone who could be capped under the new tax regime, including those who were already capped under the existing tax regimes.</li> <li>■ The data used was the most recent population profile completed by the Government Actuary and the most recent earnings surveys, including the New Earnings Survey 2002.</li> <li>■ Since not everyone saves the maximum permitted in a pension fund, took the view that only those with incomes greater than £140,000 per annum would be likely to hit the new lifetime allowance.</li> <li>■ By extrapolating the available earnings distributions, estimated that today just under 0.5 per cent of the population would fall into this group.</li> <li>■ Then projected the population forward, allowing for mortality and real salary growth of 2 per cent per annum to estimate the number reaching retirement age with pay greater than 10 per cent of the lifetime allowance (indexed to prices).</li> <li>■ Adding up the number in this group retiring (taking 55 as the average retirement age for this group, so the sum also includes some already over 55) over the next 25 years gives the number aged 30 and over who can be expected to be affected by the lifetime allowance. This is estimated to be 300,000. This group should reasonably be able to take a view whether there is a realistic chance that they will become a 'high earner' if they are not already in that class.</li> <li>■ Doing similar calculations over the next 40 years (to include everyone now in the workforce) doubles the number. Thus, there are close to 600,000 in the workforce who could find their ability to save for their pension in a tax efficient way limited by the proposed Lifetime Allowance.</li> </ul>	<ul style="list-style-type: none"> <li>■ Working population of the UK is 28.5 million.</li> <li>■ Of these, the National Statistics New Earnings Survey 2002 suggests around 1 per cent earn more than £100,000.</li> <li>■ Around 11 million people are in an occupational pension scheme - about 50 per cent of the population.</li> <li>■ Combining these gives a figure of 150,000 who are working, earning more than £100,000 per annum and in a pension scheme.</li> <li>■ The assumption is that the £1.4 million limit might impact on members with a pension of £60,000 per annum. This represents 60 per cent of salary of someone earnings £100,000. Not all members will retire on 60 per cent of salary but employees on this amount do typically secure significant pension benefits. And it is only 30 per cent of salary for someone earning £200,000 per annum.</li> <li>■ Estimate therefore that 100,000 out of the total of 150,000 are potentially affected. This is the number who, based on their salary today are likely to be affected in the future by the limit.</li> <li>■ The figures are based on 50 per cent of employees being in pension schemes. However, the recent Pensions Green Paper shows that 84 per cent of those earning more than £22,000 are in pension schemes. Assuming the figure is not even higher for those earning more than £100,000, applying this percentage increases the figure to 160,000 affected.</li> </ul>

Source: Mercer Human Resource Consulting Limited, AON Consulting

- 94 Instead, in both cases the estimates quoted are of the number of people 'affected' over a period of time, rather than on A-day. Mercer estimate that 300,000 will be affected over 25 years, and 600,000 over the next 40 years. This figure includes everyone Mercers estimate 'could reasonably expect to have the financial capacity to retire with funds in excess of the lifetime allowance between 2005 and 2045'. Mercer told us that, in its view, the number of people reaching the age of 55 each year who are likely to have funds greater than the lifetime allowance and who are currently uncapped (broadly equivalent to the Revenue's estimate of 1,000 a year) is likely to be nearer to 2,000 a year to start with, increase slightly over the next 10 years and then tail off.
- 95 The figure of 100,000 quoted by Aon Consulting is not the number affected today but the people who, based on their salary today, are likely to be affected by the limit. Aon advised us that from its perspective its figures represent the number of people who companies will probably need to engage with - and probably quite soon - as a result of the changes, which will generate additional work for companies.

## Conclusions

- 96 Even greater uncertainty attaches to projections into the future and makes it even harder to provide a reliable estimate. The Revenue have sought to combine what data they have available. The evidential base is thin and a number of assumptions and roundings have been made which significantly affect the outcome. However, evidence from the Hundred Group survey - which identified 745 people likely to be affected in the future in 61 FTSE 100 companies, the current pensions in payment data, and other data does not discredit the Inland Revenue's estimate.
- 97 The alternative calculations examined - suggesting 100,000 and 600,000 people would be affected - are reasonable but different ways of estimating the number of people affected and include those already affected by the earnings cap, who are excluded from the Inland Revenue's figures. As such they are not directly comparable with either the estimates of 5,000 or the 1,000 made by the Revenue.



The National Audit Office undertook this work in January and February 2004. We are very grateful for the advice and assistance we received from the large number of individuals and bodies with whom we consulted. In the course of the work we drew on the assistance of:

Professor David Blake, Director, Pensions Institute, Cass Business School, City University

Professor Steven Haberman, Professor of Actuarial Science, Cass Business School, City University

Ian Reynolds, Actuary, Beachcroft Wansbroughs Consulting and Richard Hobbs, Managing Director, Beachcroft Wansbroughs Consulting

Further technical advice was provided by Jeff Jones BSc and Bruce Williams MSc MBA.

We also consulted with or received evidence from:

Aon Consulting

Association of British Insurers

British Airline Pilots Association

CBI

Department for Constitutional Affairs

Institute of Fiscal Studies

Diageo plc

Government Actuary's Department

James Hay

IBM

KPMG LLP

Mercer Human Resource Consulting Limited

National Association of Pension Funds

Office for National Statistics

One Hundred Group of Finance Directors

Pensions Policy Institute

PricewaterhouseCoopers

Rathbones

Smith and Williamson

Tesco plc

Roy Walkden

The NAO received information regarding several occupations, which is summarised below. This is not an exhaustive list, but provides some further information about factors which may affect particular groups.

Partners in major accountancy firms	There are around 5,000 partners in the Top 50 firms of accountants. Most will be earning more than £100,000 per annum and a significant proportion will already have built up, or have the potential to build up a large pension fund. However, there is significant turnover amongst partners in many firms and those who have become partners since 1989 will be subject to the earnings cap. One major firm told us that more than half their partners were post-1989 scheme members. Even taking the Inland Revenue's estimate that one third of high earners are in pre-1989 schemes, this suggests perhaps 1,500-2,000 might - if they are able to contribute sufficient - be affected over the next 15 years - split between A-day and into the future.
Lawyers	There are around 100,000 lawyers in England and Wales. The legal profession is generally regarded as well remunerated and for a small number this can mean annual income in excess of £1 million. However, solicitors' salaries vary considerably across the country, being substantially higher in London than elsewhere. Many would therefore, not be able to build up a sufficiently large fund. And as with accountants, lawyers starting employment in the last 15 years will be subject to the earnings cap. Thereafter, the number affected will depend on the size of the contributions made by these individuals. The most likely concentration of people potentially affected will be in the major London firms.
Company executives	The survey undertaken by the Hundred Group of Finance Directors has identified around 1,000 individuals within 61 FTSE 100 companies who are likely to have funds above £1.4 million at A-day and 750 thereafter. The Hundred Group's extrapolation (which we consider is likely to overstate the numbers) suggests 10,000 at A-day and 11,000 beyond.
Judges	Although the judiciary is a relatively small group, it is possible that a significant proportion will be affected. Judges are appointed from amongst barristers and solicitors. There are currently 2,000 members of the Judicial Pension Scheme and around 100 judges are appointed annually. For more senior judges this scheme on its own will ensure many approach or exceed the £1.4 million allowance. But in addition, almost all will have pension funds from their previous employment, in many cases in uncapped pre-1989 schemes. For many - after perhaps 20 years or more of contributions - these funds will be substantial on their own. Therefore, when the funds are combined, as will be the case when they are tested against the lifetime allowance, many more will be affected. Members of the pre-1989 Judicial Pension Schemes and members and future members of the 'post-1989' Judicial Pension Scheme are both included.



Airline pilots	Again, although a small group, significant numbers are well paid, have long service and will have remained in the same scheme for many years. Some also have deferred forces pensions. Although we have not audited the data, the British Air Line Pilots Association consider significant numbers of their members will be affected.
Senior public servants	The lifetime allowance is unlikely to affect any but the most senior public servants. In the senior civil service there are around 200 people earning more than £100,000 <sup>28</sup> . Many of these will have been lifetime public servants and so unaffected by the earnings cap. A further few hundred people earn over £100,000 in local government, housing associations, health trusts and charities <sup>29</sup> , although in many cases these people will have moved jobs in recent years to take up these posts. It seems reasonable to assume that relatively few senior public servants will be affected.

28 Senior salaries review body annual report 2003.  
 29 IDS Management Pay Review November 2003.

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