Private pension contributions: updated estimates, 1996–2004

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This article describes the progress that has been made in the surveys of pension funds and insurance companies. It updates the estimates of pension contributions first published in August 2004 in the ONS article 'Private pension estimates and the National Accounts'. It also explains how the new estimates and methodological improvements have been incorporated in the national accounts dataset released on 30 June 2005.

Introduction

The Office for National Statistics (ONS) article 'Private pension estimates and the National Accounts' published in August 2004 (Tily, Penneck and Forrest, 2004) discussed the complexities of measuring pension flows and the associated problems of estimates derived from surveys, and presented preliminary new estimates of total pension contributions for the years 1995 to 2002. It also described inconsistencies that had been identified in the compilation processes for pension estimates in the National Accounts and made a preliminary assessment of the impact on key National Accounts aggregates. This article describes the progress that has been made in the surveys of pension funds and insurance companies; updates the estimates of pension contributions; and explains how the new estimates and methodological improvements have now been incorporated in the National Accounts dataset released on 30 June 2005.

Total contributions to private (non-state) pensions are now estimated to have risen from £37 billion in 1996 to £69 billion in 2004. There has been a marked increase in contributions in the latest two years, driven mainly by employers' contributions to funded occupational schemes. Much of this increase is thought to be associated with the requirement to remove deficits in defined benefit schemes.

Progress on pension fund and insurance company surveys

The previous article described how the surveys to pension funds and insurance companies had been modified following the Pension Contributions Statistics Review. New and revised questions and improved guidance were introduced to provide a fuller and more accurate breakdown of income that would enable clearer identification of contributions to different types of pension.

Results from the new and revised questions included in the quarterly surveys have been published in the publication *Investment by insurance companies, pension funds and trusts* (Series MQ5) since July 2004, providing an improved breakdown between occupational and personal pension business of insurance companies, and clearer identification of the flows between self-administered and insurance-managed funds. However, response to the more detailed additional questions included in the annual survey for 2003 was poor despite consultation with the industry before the questions were introduced, as some businesses needed time to adapt their systems. These questions asked for data on transfers, a breakdown of individual/personal pension premiums by type of pension and a breakdown of occupational pension premiums by scheme type. As a result of the poor response, the quality of detailed figures based on these questions for 2003 is not sufficient to justify their publication.

Data collection for the 2004 annual surveys will continue until November 2005. It is impossible to predict the final response at this stage and say with absolute confidence whether the level of quality and response will be sufficient to support publication of results from the new questions. However, the early indications are

that response has improved in the 2004 surveys compared to the first collection for 2003. ONS is continuing to work with the insurance industry, drawing their attention to the importance of the new questions, with the aim of further improving the level and quality of response to a position that will enable publication of the results for the new questions for 2004.

Latest results from pension fund surveys

The problems described above are largely associated with pension business carried out by insurance companies rather than self-administered funds, which account for the bulk of occupational scheme business. The questionnaire to self-administered funds was also revised in 2004 to include an additional breakdown of contributions according to whether the scheme is of the defined benefit or defined contribution type. Detailed figures showing this breakdown will be published in the next edition of *Investment by insurance companies, pension funds and trusts* in October 2005. The first year's results suggest that over 90 per cent of the contributions were to schemes of the defined benefit type, the remainder being to defined contribution or hybrid schemes. As mentioned above, response to the parallel question to insurance companies was poor, but information from other sources such as the Association of British Insurers suggests that the position is reversed for insured occupational schemes. These tend to be smaller, and predominantly of the defined contribution type.

Recent trends in the (already published) breakdown of contributions to self-administered pension funds between employees' and employers' contributions are of considerable interest in any assessment of the overall position. Since 1998 employees' contributions have shown only a modest rise; but there has been considerably larger growth in employers' contributions, particularly in 'special' contributions, which has accelerated since 2001.

Employers' special contributions are generally lump sum payments to reduce any deficit between the assets and liabilities of defined benefit schemes, where the pension paid is determined by scheme rules and associated with salary and length of service. Much of the increase in normal contributions may be driven by the same factor; some employers make a single payment that does not distinguish between a 'normal' and a 'special' element, while others may have increased their regular contribution rates in response to a deficit. Another factor affecting the balance between employees' and employers' contributions may be the increasing incidence of 'salary sacrifice' pension agreements. These are arrangements whereby the employee agrees to a cut in their gross pay, offset by switching their contribution to the pension scheme onto the employer. This results in the employer saving on National Insurance contributions and potentially higher savings for the employee.

Updated assessment of private pension contributions

Funded occupational schemes

Self-administered schemes account for the bulk of the funded occupational sector. The survey data from these are considered sound and are used directly, with one adjustment for additional voluntary contributions which are passed by self-administered schemes to insurance companies. However, as noted above, the survey to insurance companies has not yet produced robust estimates of new contributions to pensions net of transfers. An element of estimation is therefore still required to produce overall totals for contributions to funded occupational schemes. The methodology used to produce estimates up to 2002 was based on earnings growth, membership of occupational schemes, and contribution rates, and relied on the assumption that employers' normal contributions moved broadly in line with employees'. The recent trends in employers' contributions discussed above suggest that this assumption no longer holds, so some modifications have been made to the methodology, and the estimates for the most recent years have been informed in part by the trend shown in the independent survey of the Association of British Insurers' member companies.

The Association of British Insurers' estimates of 'premiums receivable' suggest contributions to insured funds have been flat. The difference between this and the recent sharp increase in self-administered fund contributions is probably due to the different mix of scheme types. Most insured funds are defined contribution, where the pension paid out depends on the size of the accumulated pot at retirement. Although employers and/or their employees may decide to increase their payments to a defined contribution scheme if they decide the invested fund is growing at a rate inadequate to meet their desired income in retirement, there is no requirement for them to do so, as there would be for a defined benefit scheme in deficit.

Table 1
Contributions to self-administered pension funds

£ billion

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Employees'	3.8	4.0	3.8	4.6	5.1	4.9	5.2	5.3	5.4
Employers' normal	6.7	6.7	6.5	7.6	8.4	9.3	10.9	15.1	17.7
Employers' special	1.2	1.0	1.1	1.6	2.3	2.1	3.4	5.8	8.0

Source: MQ5: Investment by insurance companies, pension funds and trusts

Personal pensions

Estimates of contributions to personal pensions are based, as last year, on HM Revenue and Customs (HMRC; formerly Inland Revenue) sources, derived from returns made by pension providers or the individual as part of the administrative process for claiming tax relief on contributions. These sources cover personal (including group personal) and stakeholder pensions; free-standing Additional Voluntary Contributions; and Retirement Annuity Contracts, the precursor to personal pensions. HMRC have recently published a series for these contributions from 1990/91 to 2003/04, with a breakdown by type of contribution. The statistics can be found at http://www.hmrc.gov.uk/stats/pensions/table7-16.pdf

Unfunded schemes

As explained in last year's article, actual contributions to public sector unfunded schemes are made by employees, while employers' contributions are largely an internal accounting transaction within government. These latter are calculated on an actuarial basis, to represent the amounts that would be required to meet the accruing liabilities if the schemes were funded. A revised actuarial methodology for calculating the contributions required for teachers' and NHS schemes has been incorporated, resulting in upward revisions of around £1 billion throughout the time period. The updated estimates also incorporate revisions to some other components for 2002 so the total figure for unfunded scheme contributions has been revised by around £2 billion for that year.

Aggregate contributions

The updated estimates of overall contributions to private pension schemes are shown in Table 2 and Figure 1. These extend the estimates presented last year to 2004; incorporate data revisions to earlier years as discussed above; and also provide for the first time a breakdown between employees' and employers' contributions. Apart from being of interest in its own right, this breakdown is required to compile the National Accounts. The sources used for self-administered funds, unfunded schemes and personal pensions provide the split directly. The breakdown for contributions to insured schemes is assumed to be generally similar to that for self-administered funds, looking at normal employers' contributions only. However, the results of the Government

Figure 1
Contributions to private pension schemes

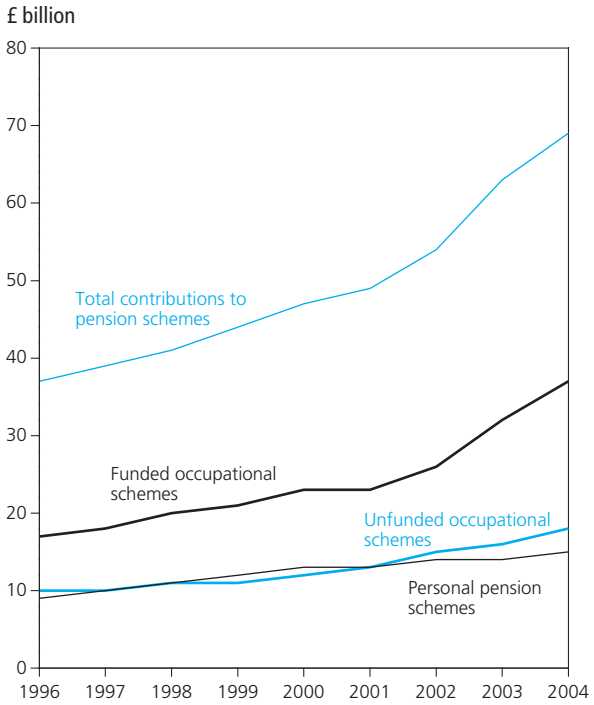


Table 2
Contributions to private pension schemes[1]

£ billion

	1996	1997	1998	1999	2000	2001	2002	2003	2004
Funded occupational schemes	**17**	**18**	**20**	**21**	**23**	**23**	**26**	**32**	**37**
of which, employers'	13	13	14	15	16	16	19	25	30
employees'	5	5	6	6	7	7	7	7	7
Unfunded occupational schemes	**10**	**10**	**11**	**11**	**12**	**13**	**15**	**16**	**18**
of which, employers'	7	7	8	8	9	9	10	11	12
employees'	2	3	3	3	3	3	4	5	6
Personal pension schemes	**9**	**10**	**11**	**12**	**13**	**13**	**14**	**14**	**15**
of which, employers'	2	3	3	4	4	4	5	6	6
employees' and individuals'	7	8	8	8	9	8	9	9	8
Total contributions	**37**	**39**	**41**	**44**	**47**	**49**	**54**	**63**	**69**
of which, employers'	22	23	25	27	29	30	35	42	48
employees' and individuals'	14	16	16	18	18	19	20	20	21

1. Components may not add to totals due to rounding.

Actuary Department's Occupational Pension Scheme Survey for 2004 suggest that the ratio of employers' to employees' contributions has not increased as much for defined contribution schemes as for defined benefit schemes. A slightly different breakdown has therefore been used to derive the figures for the (mainly defined contribution) insured schemes in the latest years.

Private pensions and the National Accounts

Reconciliation with the National Accounts estimate of contributions

One of the purposes of developing the presentation shown as Table 2 was to provide a more intuitive estimate of total contributions to pension schemes (excluding the state pension) than provided by the National Accounts. Under international guidelines the main presentation of pensions components is based on the 'social' concept, which identifies transactions related to the provision of insurance (through both the private and public sectors) for events and circumstances such as illness and unemployment as well as retirement and hence pensions. There are aspects of the National Accounts treatment of pensions, following mainly from the whole economy perspective of the accounts, that are less relevant to a basic overview of contributions. First, the treatment of personal pensions is not straightforward. On the one hand, personal pensions that individuals take out of their own accord are not regarded as social contributions but as the purchase of a saving instrument (and hence are recorded, but not separately identifiable, in the 'Financial Account'). On the other hand, personal pensions that are sponsored by employers are regarded as social contributions and are included as social contributions to funded pensions. Second, in the National Accounts the 'fund' or stock of pension contributions is regarded as owned by the household sector. Therefore 'property income' (dividends, interest and rent) earned on the pension fund accrues to the household sector and is included in the National Accounts as part (indeed a very large part) of employees' social contributions to funded schemes. Third, the National Accounts figure for employers' social contributions also include employers' liability insurance.

The fullest presentation of the National Accounts pension figures is Table 6.1.4S of the Blue Book. As noted, only part of personal pension contributions is included in this table and even those form a small part of other aggregates. Estimates for unfunded public sector pensions are separately identifiable, as the various series labelled imputed and actual social contributions to notionally funded and unfunded schemes. The total of these individual components is consistent with the total in Table 2. Table 3 shows how the National Accounts estimates of employers' and employees' social contributions to funded occupational schemes (D.6111 and D.6112) reconcile with the estimate of pension contributions to funded occupational schemes shown in the top block of Table 2 and in bold in Table 3. This is based on 2002 as the latest year common to both the present and previous articles.

Impact on National Accounts aggregate measures

The previous article was not only concerned with presenting a reassessment of pension contributions, but also with a number of changes to other (private) pension components of the National Accounts. In addition there was a discussion about how these changes might impact on Gross Domestic Product and the household saving ratio. Timing considerations meant that none of these changes were implemented in Blue Book 2004, but the Blue Book 2005 dataset now incorporates all these changes and the overall revision to these aggregate measures is now known.

Aside from the change to contributions, the main changes (by size/impact) to other components that were outlined in the previous article were as follows:

1. A downward revision to total property income earned on the pension fund and life assurance reserves. These reserves, and hence the property income earned by the funds, are treated as owned by the household sector. There is a corresponding reduction to the amount that is allocated to employees' social contributions on the secondary distribution of income account (for example, by £4 billion in 2002).
2. An additional downward revision to the amount of property income that is allocated to employees' social contributions on the secondary distribution of income account (for example, by £8 billion in 2002).

Table 3
Contributions to occupational schemes, 2002

	£ billion
D.6111 Employers' actual social contributions to funded pension schemes – National Accounts basis	26
of which:	
employers' contributions to employer-sponsored personal schemes	6
employers' liability insurance	1
employers' contributions to funded occupational schemes	**19**
D.6112 Employees' actual social contributions to funded pension schemes – National Accounts basis	33
of which:	
employees' contributions to employer-sponsored personal schemes	3
property income accruing on pension fund reserves	23
employees' contributions to funded occupational schemes	**7**

These were both covered and quantified in Table 3 of the August 2004 *Economic Trends* article.

3. A large downward revision to pension benefits, following the correction of system errors (for example, by £25 billion in 2002).

See Table 2 of the August 2004 *Economic Trends* article.

Only changes to pension contributions impact on GDP and the saving ratio. Pension contributions are part of the 'compensation of employees' component of the income measure of GDP. The actual impact of the changes was slightly different to those announced in the August 2004 *Economic Trends* article, due to a number of smaller upward movements, in particular to public sector unfunded schemes, and the removal of adjustments that to a limited extent anticipated some of the revision. In National Accounts terms, the total downward revision to employers' and employees' contributions grew from £2 billion in 1996, with figures of £6 billion to £9 billion between 1999 and 2002, and then fell back to about £4 billion in 2003 and 2004.

The pension contribution revisions were one of several factors feeding into the ONS annual reassessment of GDP. This involves bringing together a number of annual data sources in an Input-Output Supply and Use Tables framework. These processes were applied to all years from 1996 to 2003, and resulted in an upward revision to the overall current price estimate of GDP in each year by between £0.5 billion and £6 billion (comparing Blue Book 2005 with Blue Book 2004). Within compensation of employees, the downward revisions to pensions contributions were largely offset in all years, because the estimate of 'wages and salaries' was revised up, in part, following the introduction of HMRC 'benchmarking' estimates from administrative tax sources. The main upward change to the income measure of GDP followed from a revised estimate of company profits. Therefore the impact of pension changes on GDP was minimal.

Apart from GDP there are two additional impacts that need to be considered. These relate to the impact on sector account aggregates which bring together both the changes to contributions and the changes to other pensions components of the accounts (changes 1 to 3 above).

The household saving ratio is derived as the difference between household income and consumption, calculated as a percentage of household income: it is shown in Table 6.1.6 of the Blue Book. The impact of pension changes on the household saving ratio has come in two stages. The first of these stages was implemented in the September 2004 Quarterly National Accounts (QNA). At that point ONS incorporated the revision to total property income (change 1). This revision reduced the household saving ratio by 0.5 per cent over the period 2000 to 2003 with a smaller downward revision in earlier years. The second stage was implemented in the 2005 Blue Book. Here, while the downward revisions to pension contributions were largely offset within compensation of employees by the revisions to wages and salaries, the net effect of these and other changes implemented in the Blue Book process was fairly small downward revisions to the saving ratio in most years.

However in 2004 the revision was large, with the saving ratio reduced by 1.4 percentage points to 4.2 per cent: this was mainly driven by a large upward revision to household consumption expenditure.

The various changes to the saving ratio are shown on Figure 2. Overall, as anticipated in the August 2004 article, the pension and other changes have contributed to a progressively lower saving ratio, particularly over recent periods. That said, the changes are not large in terms of a longer-period perspective. Furthermore it should be noted that revisions of this size are not exceptional. As an indication of the size of revisions, the average revision without regard to sign (average absolute revision) has been 1.5 percentage points measured between the first publication and estimates three years later and calculated over the last five years.

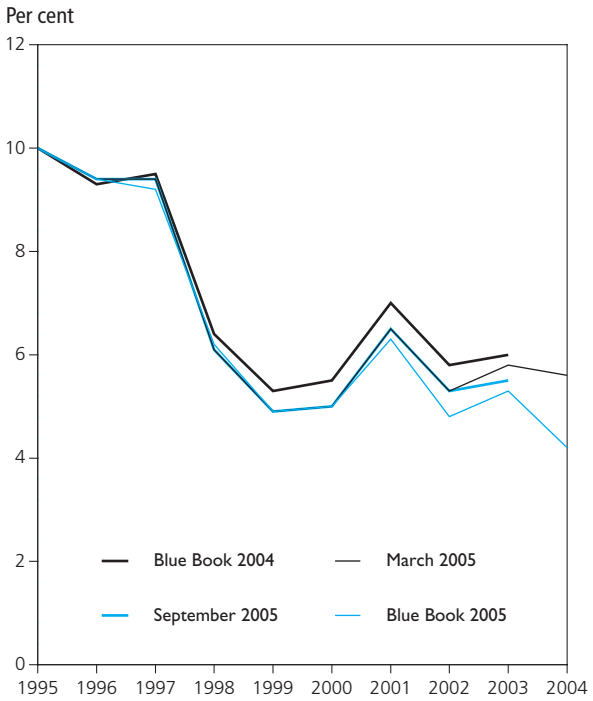
The larger change to the sector accounts arises from the impact of changes to pension components on gross households' disposable income (GHDI; derived in Table 6.1.4 of the Blue Book). This seeks to provide a measure of how much actual (normally cash) resources households have at their disposal to spend or save and is not affected by changes to pension contributions. Between Blue Book 2004 and Blue Book 2005, the impact on GHDI of the changes to pension components was:

- a reduction from the downward revision to pension benefits
- a net increase from the changes to property income and the way in which it is allocated to employees' contributions

with an additional large impact from a non-pension component:

- an increase from the upward revision to wages and salaries.

Figure 2
Household saving ratio: revisions



The net effect of all these and other minor changes was large downward revisions to GDHI in years 2000 to 2003 of between £8 billion (1 per cent of GHDI) and £15 billion (2 per cent of GHDI).

In summary, changes to pensions measures have now been incorporated into the latest view of the economy published as the *UK National Accounts: the Blue Book 2005*. The changes made were broadly in line with the provisional assessment published in the August 2004 *Economic Trends* article and have not in themselves led to substantial change in the overall ONS assessment of the economy.

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