

PwC 2006 survey of actuarial assumptions

UK pension scheme funding — January 2007

The long-standing benchmark survey of actuarial assumptions carried out by PricewaterhouseCoopers LLP annually since 1995 once again reveals striking differences in the way that different pension fund trustees negotiate funding from their employers.

In September 2005, a new pension funding regime came into force, giving trustees greater powers to negotiate with the scheme sponsor for increased funding. The Pensions Regulator is now responsible for monitoring these funding arrangements.

To examine these changes, in late 2006, PwC surveyed 90 of the largest pension schemes in the UK, with combined pension liabilities of almost £200 billion. The survey results offer a snapshot as to how schemes are faring in general under the new regime.

The key findings

- The PwC index of how strongly trustees seek to fund their schemes this year shows that the highest target adopted by some trustees is over twice the level of the weakest, mainly because of differences in assumptions made for life expectancy and for investment returns.
- Life expectancy in retirement is now assumed on average to be one year higher than last year. This adds roughly 7% to the calculated costs of pensions and as much as £40 billion to the accounting deficits of UK private pension schemes.
- Compared to the average funding approach, differing longevity assumptions can increase or reduce liabilities by as much as 15%.
- So far, despite increased trustee powers, scheme valuations under the new regime have tended to set target funding for liabilities at similar levels to schemes before the changes.
- Schemes continue to rely heavily on higher equity returns in their funding plans, rather than on bond returns, although they are a little more cautious in putting a value on pensions when they come into payment.



- The Pensions Regulator has said it may investigate those schemes using recovery periods of over 10 years to make good their deficits. PwC’s findings suggest recovery periods have reduced significantly. The longest recovery periods for valuations since the new regime began in September 2005 are 12 years and most were 10 years or less. This compares to recovery periods of up to 20 years under the previous regime.
- Around 50% of trustee boards now include at least one independent trustee who is neither from the members nor the employer. Although a quarter of trustee boards are now also led by an independent chairman, another 20% still have chairmen drawn from the main board of the sponsoring company.
- Only 28% of respondents to the survey still have the same individual actuary advising both the trustees and sponsoring company. Of those who have separate individual advisers, almost half are using actuaries from the same firm rather than appointing actuaries from separate firms.
- Scheme members can usually exchange some of their pension for tax-free cash at retirement (so-called “commutation”) but the terms for doing this vary enormously. However, only 36% of schemes actually

reflect this commutation in their funding assumptions, notwithstanding that this can make a considerable difference to the calculated liabilities and costs.

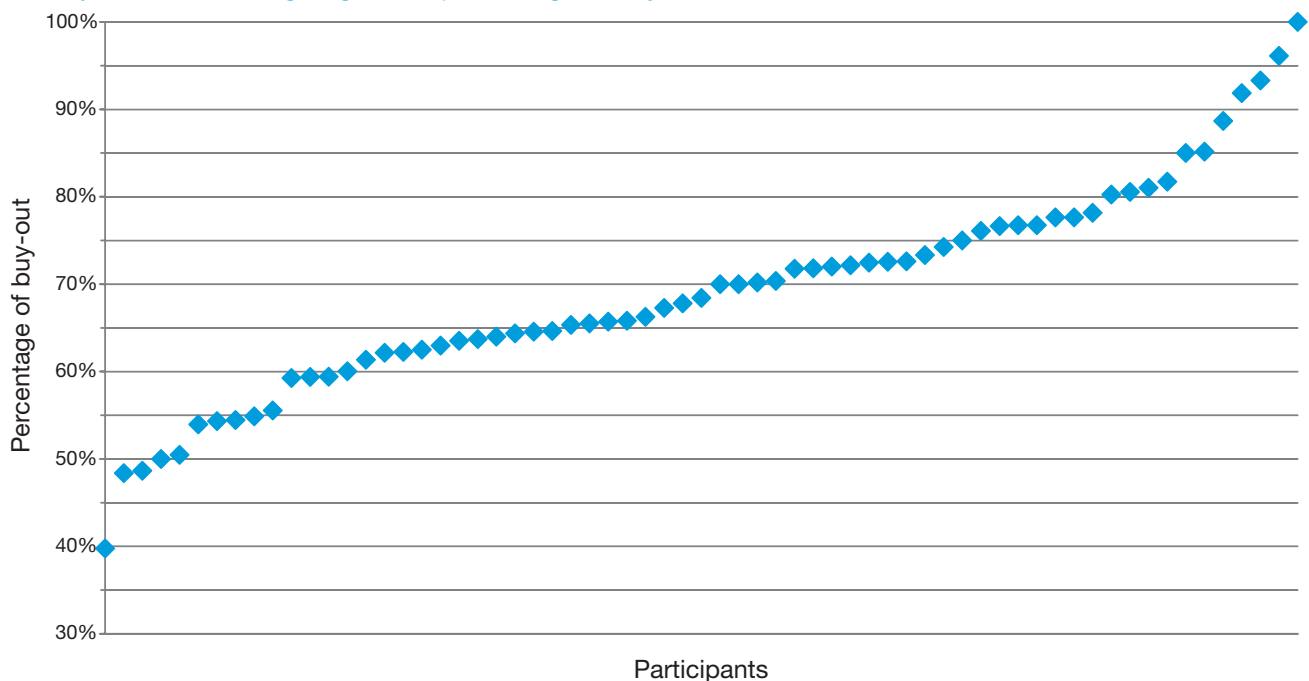
Scheme funding targets

The Pensions Regulator uses the FRS17 accounting standard as one of its “trigger points” to identify whether further investigation is required into whether trustees are being sufficiently “prudent”. Anecdotally, some trustees appear to be considering the accounting measure as a new “minimum funding standard”, but our survey does not yet provide actual evidence for this. This is something we will be monitoring closely going forward.

Funding measures

The PwC Security Index measures a scheme’s funding target relative to the full cost of buying-out the liabilities with an insurance company. In order to secure benefits, the target is likely to move towards 100% of buy-out over the lifetime of the scheme, before the scheme sponsor’s resources and willingness to fund the scheme diminish. Schemes responding to our survey show targets varying hugely between 40% and 100% of this buy-out estimate. The graph below shows the variation in financial strength for all the funds.

Security Index — funding target as a percentage of buy-out



Financial assumptions

Individual schemes' financial assumptions show a surprisingly large range, in some cases adding more than 50% and in others subtracting as much as 25% of the liabilities compared to the average approach. One commonly advanced reason for the differences is the degree to which trustees have confidence in their sponsoring employer's covenant — the willingness and ability of the employer to make up future shortfalls. Although there may be many reasons for differences in financial and demographic assumptions, this range suggests enormous scope for stronger assumptions for some trustees, all the way up to buy-out level.

Life expectancy and mortality tables

Continued life expectancy improvements are reflected in the higher assumptions than previously used, adding to the estimated liabilities of funds. Average assumptions for life expectancy in retirement have increased by around 7% compared with last year's survey, much more than the normal effect of people living longer, which has only been an extra 2 or 3% each year. This suggests that trustees and their actuaries are catching up with what is bad news for pension scheme costs, even if it's good news for the life expectancy of the pensioners themselves.

The range of schemes' life expectancy assumptions adds or subtracts as much as 15% of the calculated liability compared to using the median assumption. This is a cause for increasing focus both by trustees and analysts when reviewing disclosures in company accounts.

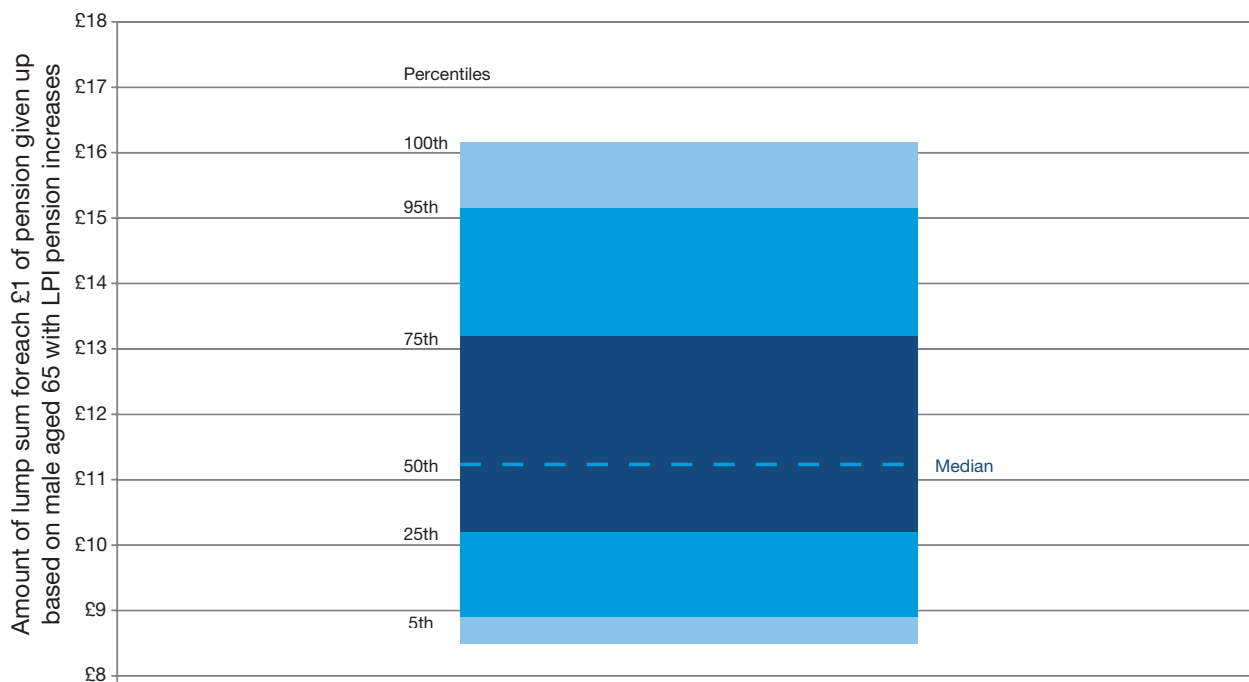
There is a strong increase in the number of schemes (42%) allowing for predicted future improvements in their mortality assumptions, by using so-called "cohort tables" that reflect the particularly healthy generation born around 1930. These tables are predicting much longer life expectancies and therefore their use results in higher calculated pension costs.

Tax-free cash

The opportunity to take a cash lump sum tax-free at retirement has always been popular with most members, although there is a considerable range in the amount of cash members get in exchange for giving up a pound a year in pension, as illustrated in the chart below.

In many schemes, the financial value of cash on offer to a member is worth less than the cost to the scheme of providing for the pension given up. More accurate assessment of the liabilities is achieved by making allowance for the amount of cash that members are likely to take. However, only 36% of schemes make an explicit assumption of members taking cash at retirement. Other schemes may well be overstating the amount of money required to pay member benefits.

Commutation factors





One of the schemes surveyed allowed for future potential improvements in the conversion terms to reflect future life expectancy improvements. If trustees have the right to increase the conversion rates, other sponsors may be underestimating the financial impact of future cash conversions.

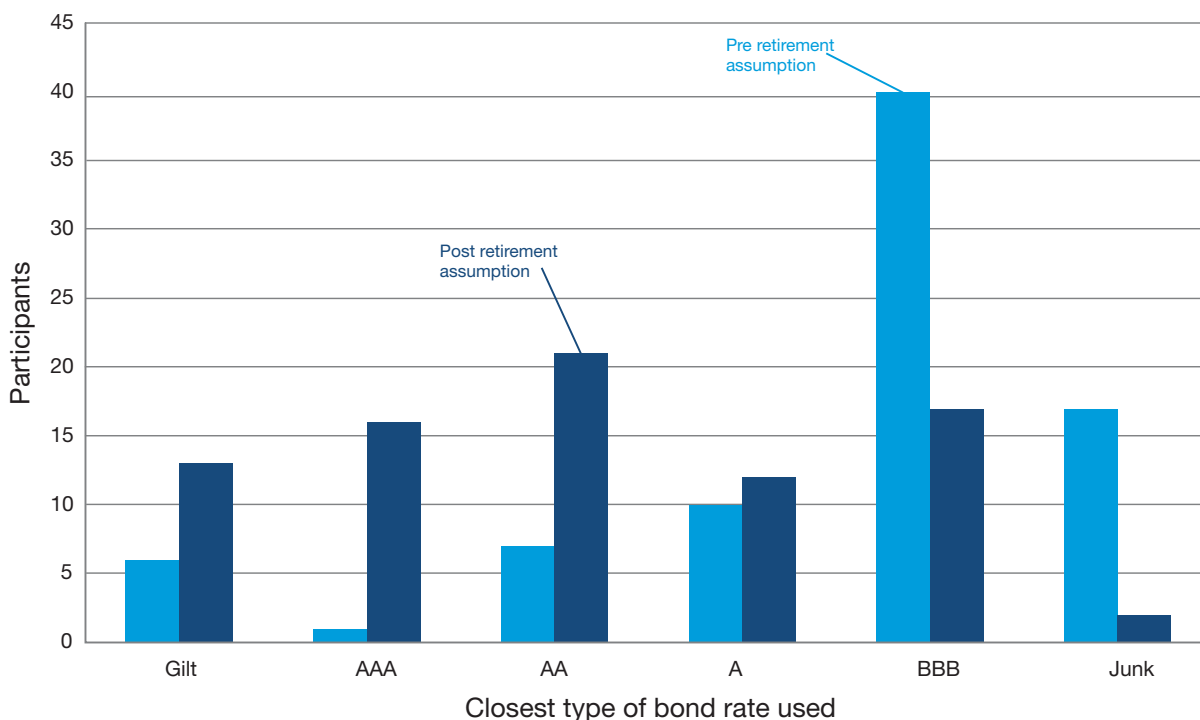
Discount rates

FRS17 and IAS19 accounting rules result in accounting numbers being calculated on the basis that future investment returns on the scheme assets will be those achieved by AA rated corporate bonds. Our survey shows that in the calculation of liabilities for scheme funding purposes agreed between trustees and employers, pension schemes assume much higher

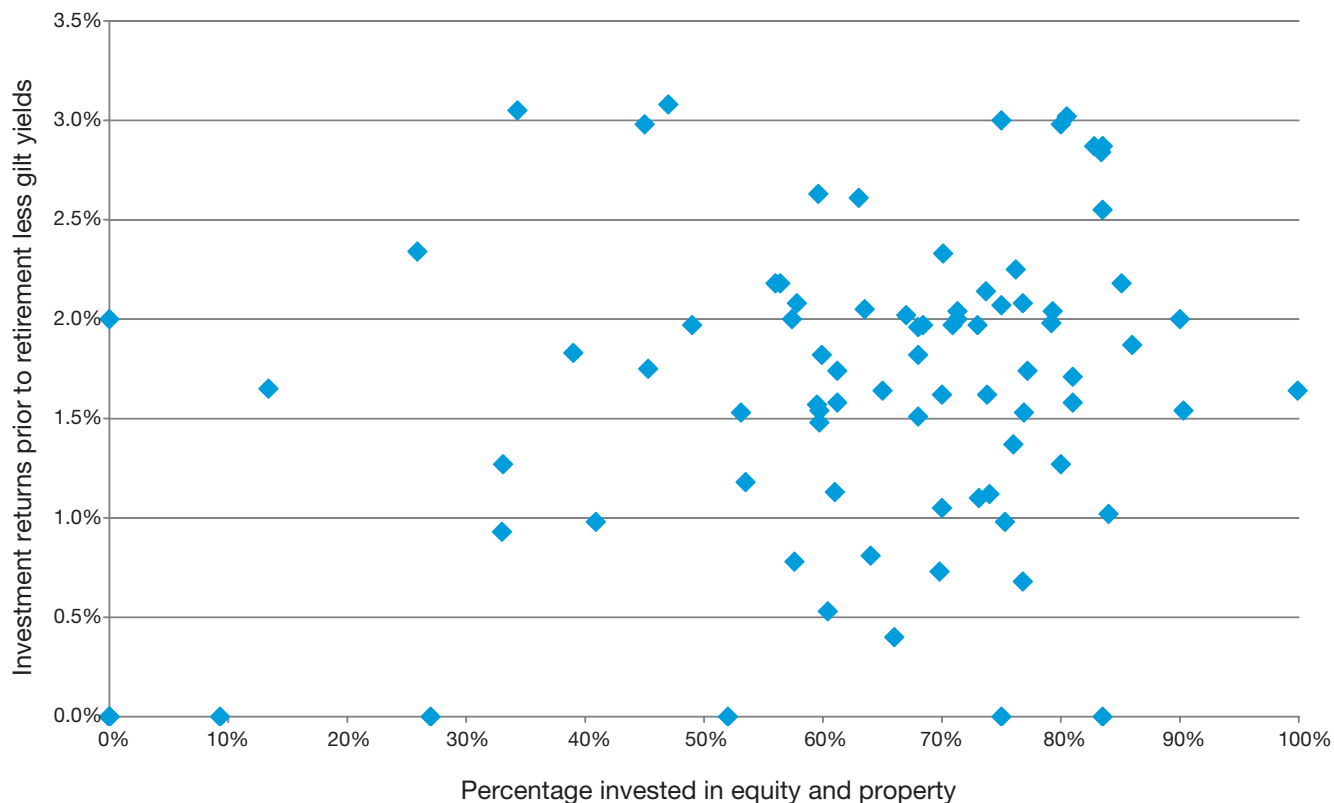
investment returns for the period up to retirement, closer to the return on BBB bonds. This reflects the hope for higher returns from equity investment or, in the absence of that, a greater level of contributions from their sponsor. For the period after retirement, the investment returns assumed tend to be lower, and in most cases close to AA or AAA bond rates.

The range of equivalent credit ratings to discount rates used by schemes is shown below, separated between assumptions used for estimating liabilities over the period before retirement and those used for pensions once they come into payment. Much less allowance for higher returns is made when carrying out a valuation of pensions in payment.

Investment returns allowed for in calculating the funding target



Allowance for equity out-performance compared with gilts



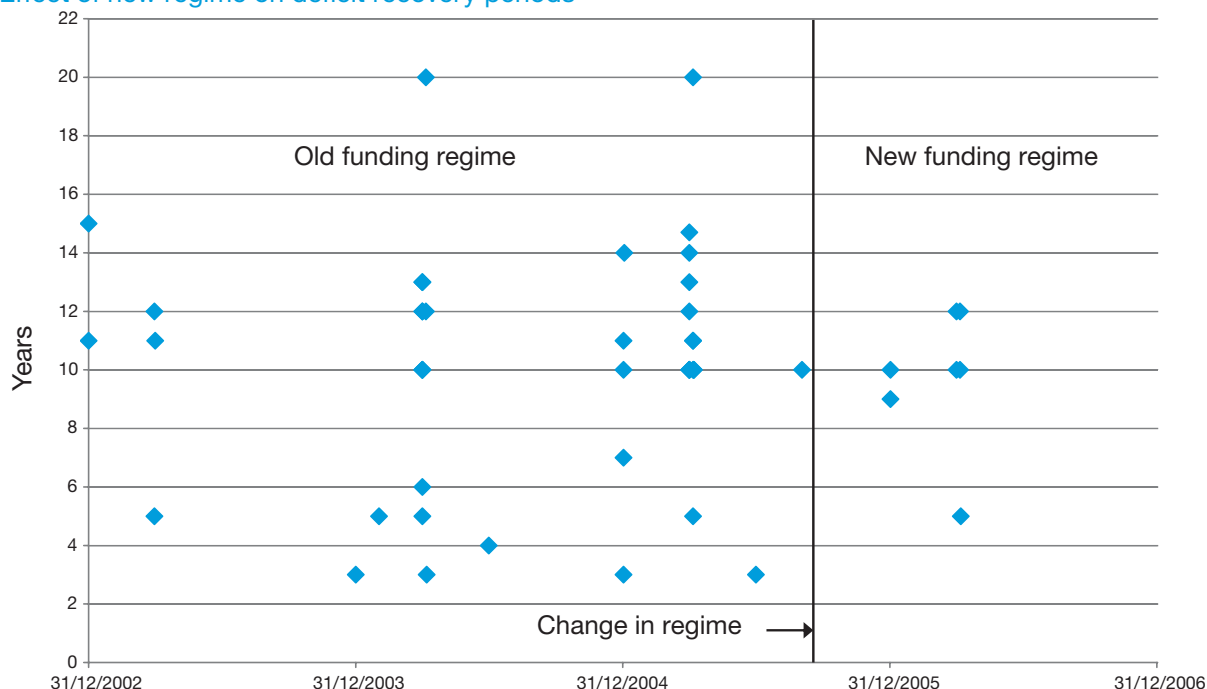
As in previous years our survey does not show any direct link between the rate of investment return assumed prior to retirement and the percentage invested in riskier assets such as equity and property.

The recovery periods for pension schemes participating in the survey ranged from three to 20 years, with an average of 10 years. However, the trend since September 2005 appears to be away from spreading periods of substantially more than 10 years, with only a maximum of 12 year spreading.

Deficit recovery periods

As well as addressing the funding target, the Regulator is focussing attention on schemes that submit deficit recovery plans with periods of more than 10 years for getting back on track to the funding target.

Effect of new regime on deficit recovery periods



Trustee independence

There is wide variety in the make-up of trustee boards. The shift towards greater use of independent trustees is illustrated by the fact that:

- 50% of trustee boards include at least one independent trustee; and
- 25% of all boards are led by an independent chairman.

This is good news for those who may be concerned to see more independent governance of pension funds.

In contrast:

- 50% of all boards include a director from the main sponsor;
- 20% have one of their sponsor's main board directors as a chairman; and
- 15% of schemes reported having trustees who had resigned to avoid a potential conflict of interest in the past three years.

Almost three-quarters of respondents (72%) have separate individuals as actuaries advising trustees and sponsors but almost half of those use actuaries from the same rather than independent firms. The remaining 28% still have the same actuary advising both the trustees and sponsoring company, although a quarter of these are currently addressing the potential need to secure separate advice.

For more information please contact:

Peter Tompkins
London
020 7804 3458
peter.tompkins@uk.pwc.com

Marc Hommel
London
020 7804 6936
marc.hommel@uk.pwc.com

Peter Woods
Leeds
0113 289 4093
peter.j.woods@uk.pwc.com

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