BRIEFING NOTE

With-Profits Policies

This paper has been prepared by The Actuarial Profession to explain how with-profits policies work. It considers traditional non-pensions endowment policies in some detail and examines the main differences between these and other types of policy.

With-profits policies fall into four main types:

- Endowment policies – which pay out on a fixed date or on earlier death
- Whole of Life policies – which pay out only on death
- Bonds – lump sum investments which are designed to be cashed in at any time, although with a minimum saving period in mind at outset
- Annuities – which pay out an income for life

Endowment and Whole of Life policies can also be encashed (‘surrendered’) at any time. The way in which surrender values are calculated is covered in a separate section below.

Most with-profits pensions policies are structurally endowment policies, although with some differences and subject to certain tax benefits and restrictions.

All with-profits savings policies may be issued in a ‘traditional’ or a ‘unitised’ form, see below.
Traditional With-Profits Endowment

Basic Features

In exchange for regular payments (the ‘premiums’) by the policyholder, usually monthly, the insurance company guarantees to pay a minimum amount (the ‘sum assured’) on a particular future date (the ‘maturity date’), which might, for example, be 25 years ahead.

If the policyholder dies before the maturity date, the sum assured is paid out early. Hence, particularly in their earlier years, endowments also provide an element of life assurance protection.

The sum assured will take into account a conservative assessment of the investment return which the company expects to be able to return on the premiums it receives, net of the tax it has to pay on behalf of policyholders. It will also take into account a conservative estimate of the company’s anticipated future expenses and the cost of the life assurance protection provided. For shorter term policies (e.g. 10 years), the sum assured may not be much more than the total of the premiums to be paid, and in some cases it may even be less.

If a higher investment return is earned than anticipated or lower expenses incurred (or other factors are favourable), the company will make a profit. It will aim over time to pass some of that profit on to with-profits policyholders by adding ‘bonuses’ to their policies. If no profits are made, the policyholders will only receive the sum assured.

Bonuses

Bonuses take two main forms: regular (also called ‘annual’ or ‘reversionary’) and final (also called ‘terminal’).
Regular bonuses are usually added once a year, and take the form of an increase to the sum assured. This means that provided the policyholder continues to pay their premiums for the full term of the policy, regular bonuses, once added, are guaranteed to be paid at maturity or on earlier death.

Final bonuses are added to a policy only at the maturity date or on earlier death. These bonuses enable the company to give credit for elements of profit which might be reversed in the future (e.g. capital growth on shares) and which would therefore be inappropriate to pass on as regular bonus.

_Determination of Bonuses_

In the appendix to this paper, we have included a simple numerical example of how a traditional with-profits endowment works, which shows how certain key considerations drive the bonuses added. In practice, most companies will have many thousands or millions of such policies with diverse commencement dates, maturity dates and premium sizes. As practicality demands in most cases that bonus rates apply to large, relatively homogeneous groups of policies rather than individually, the actual bonus determination process is considerably more complex. An example is included below to show how a company might approach this task in practice. There are many different ways of doing this, although they will generally be similar in broad outline.

_Portfolio mix_

Once the policy is in operation, the premiums paid, after some costs, (see below), are invested - usually in a mix of fixed interest securities (e.g. UK government ‘gilts’, corporate bonds, etc), equities (or ‘ordinary shares’) and commercial properties (offices, shops, etc).

Fixed interest bonds provide a low but reliable return (with an absolute guarantee in the case of gilts) if held to maturity. Historically, equities and property have provided higher but more variable returns, as the see-sawing gains and losses in
global stock markets in the last 10 years have demonstrated. Complete reliance on equities and property could jeopardise a company’s ability to pay even the sum assured during market downturns.

At the end of each year, each company will calculate the return that it has earned on the investment of with-profits policyholders’ premiums. From this, it will deduct tax at the basic rate, which has to be paid on behalf of policyholders (the eventual maturity value is normally free of tax at both the basic and higher rate). The company will then consider a large representative sample of policies just about to mature and calculate what is called an ‘asset share’ for each. This consists of the premiums paid:

- less the proportion of the company’s expenses which is fairly attributable to that policy itself (less any tax relief on those expenses)
- less the cost of (or charge for) life insurance cover, based on the number of deaths on which the company has actually had to pay out
- less, in some cases, the cost of (or a charge for) guarantees
- less, in some cases, a charge for the use of capital
- plus the investment return (less tax) earned in each year on the premiums
- less expenses and costs/charges
- plus or minus any other profits or losses\(^1\) the company has made.

The company will then compare the asset share with the sum assured and regular bonuses for each sample policy. If the asset share is the larger, the company will calculate a final bonus for that policy as:

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\text{asset share} - (\text{sum assured} + \text{regular bonus})^2
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\(^1\) These can come from a number of sources, either from the with-profits polices themselves (e.g. sales expenses not recovered before a policy terminates, fewer deaths than anticipated when setting the premium, amounts paid on surrender less than the value of the policy, sum assured and annual bonuses more than the value of the policy at maturity), from the company’s ‘non profit’ policies (e.g. holders of annuities live longer than expected, fewer holders on term assurance policies die) or simply from general activities (e.g. redundancy costs associated with closing down a sale force, profit from a motor insurance subsidiary)

\(^2\) This assumes that the company has no excess assets which fairness requires it to pay out to policyholders. Some companies, particularly those closed to new business, have such assets and their policy payouts will include a proportion of these excess assets, usually reflected by a final bonus rate in excess of that justified by the profits earned whilst policies have been in force. It also assumes that the company operates on a mutual basis. If a proportion of the
This is expressed as a rate (usually as a percentage of the sum assured plus regular bonus) and applied to all maturing policies which have been in force for the same length of time as the sample policy. By the use of a sufficiently large and representative range of sample policies, a complete scale of terminal bonus rates can be built up. Usually, some 'smoothing' then takes place to ensure that the scale varies reasonably steadily from one in-force duration to the next and that payouts on similar policies do not vary too much from year to year.

The company will then calculate the expected cost of the guarantees inherent in all its policies (e.g. the sum assureds and past regular bonuses, and possibly guaranteed annuity rates, of with-profits policies and the amounts guaranteed under non-profit policies such as annuities), taking into account the types of investments it holds. It will compare this with the total value of its assets. If the value of the assets significantly exceeds the expected cost of the guarantees, the company may decide to add a regular bonus to policies that year. This would bring the two values closer together, although, as explained above, because of the possibility of some profits being reversed in future, the company would not want to close the gap entirely, relying instead on final bonus to allow it to pass on the balance of profits to policyholders.

On the other hand, if the value of the assets and the cost of the guarantees were quite close, the company may consider it inappropriate to add any regular bonus that year, as this could jeopardise its future solvency if further losses were made in future years.

It can be seen that determining regular bonus rates is generally a more subjective process than the determination of final bonus rates. Many companies will have a minimum proportion of asset share which they consider it necessary

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3 This assumes the simplest case where all types of with-profits policies share in all the profits and losses of the company. In practice, many features will often be present which limits the entitlement of particular with-profits policies to particular parts of the company’s profits.

4 The total value of assets will always exceed the value of guarantees (or else the company would be in breach of Financial Services Authority solvency rules).
to distribute as final bonus, and so will add a regular bonus when appropriate, provided it does not reduce the expected terminal bonus below the minimum.

Regular bonus rates on traditional policies cannot be directly compared with interest rates on bank or building society accounts. The example in the appendix illustrates why this is so.

**How can policyholders be sure bonus rates are fair?**

The Financial Services Authority (FSA) has set principles which require all financial services companies to treat all their customers fairly. It has also set specific rules which apply to life insurance companies’ with-profits business.

First, the company has to establish a governance process for its with-profits business. This includes:

- **Independent input to the bonus setting process.** This is usually by way of a with-profits committee of the board, which will have some independent members (i.e. people who are not executives of the company or of any larger group of which it may be part). Independent members may have directly relevant experience, (e.g. as actuaries or lawyers) or might bring board-level experience from other organisations. The board is required to take account of this independent input (although is not obliged to follow it).

- **A ‘With-Profits Actuary’.** This is an actuary who is allocated specific responsibility by the board to advise it of the fairness implications for policyholders of the bonus decisions it makes. He or she can be an employee of the firm or an independent consultant. The board is also obliged to take account of the advice of the With-Profits Actuary (but, again, need not necessarily adopt it). The Financial Reporting Council’s Board for Actuarial Standards (the BAS) has issued professional guidance for With-Profits Actuaries.

- **Principles and Practices of Financial Management (PPFM).** Since April 2004, companies are required to publish PPFM in respect of their with-profits business. These are often very lengthy and detailed descriptions of
exactly how a company determines its bonus rates and exercises other aspects of its discretion on its with-profits business. It is probably of more relevance to the FSA and to financial advisers than to the general public. However, during 2006, companies were required to send most existing customers a ‘plain English’ description of the key matters in the PPFM.

- **Reporting.** Every year, each company must report publicly on its adherence, or otherwise, to its PPFM. In addition, it must receive a report from its With-Profits Actuary containing his or her opinion of the company’s exercise of discretion. The company must make this opinion public. The with-profits committee (or other provider of independent input to the board) may also submit a report which the company is required to publish. A company must also notify policyholders of any changes to its PPFM, three months in advance in the cases of change in principles.

Second, the FSA has included rules in its Conduct of Business sourcebook (COB) that limit the discretion which companies have over determining bonus rates and surrender values. The rules do not permit companies to hold back profits from policyholders without good reason and require payouts to be calculated using the asset share approach we described earlier, unless there is good reason not to⁵.

Wherever possible companies are required to publish a range, expressed as a percentage of asset share, within which maturity values will mostly lie. For example, this might be 85% to 110%. Whatever the range (it must span 100%), if payouts begin to drift outside it then final bonus rates must be adjusted to bring payouts back within the range.

**Surrender Values**

So far, this paper has examined the operation of with-profits endowments on the assumption that policies are held to the maturity date unless the policyholder dies.

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⁵ One common reason for not using the asset share approach is that bonus rates for a particular product follow those declared on another product. This is common practice for whole life assurance, which often follows bonus rates declared on endowments assurances.
earlier. In practice, many policyholders choose to surrender their policies before the maturity date. If this happens, the benefits guaranteed at maturity are irrelevant and the insurer needs to use some other approach that will treat the policyholder fairly, given the way in which the funds have been invested for their original purpose of funding the maturity benefits.

As with maturity values, the COB requires companies to publish a range as a percentage of asset share within which most surrender values will lie. Again, this must contain 100%. Because of the different ways in which surrender values are calculated, a small proportion of surrender values may nevertheless be significantly more or less than asset share. Final bonus is not ‘lost’ on surrender and is either explicitly or implicitly added when justified to ensure that surrender values meet the published target range requirements.

If a policyholder stops paying premiums but does not surrender the policy, the policy becomes ‘paid-up’. In general, the sum assured is reduced so that it reflects only the proportion which was ‘bought’ by the premiums already paid. Regular bonuses declared may also be reduced. In most cases, paid-up policies will still be eligible for any future regular or final bonus.

**Low-Cost (Mortgage) Endowment Policies**

Mortgages come in two main forms: ‘repayment’ (where a proportion of each monthly payment includes a repayment of part of the loan) and ‘interest-only’ (where only interest is paid to the lender each month). Interest-only loans must be repaid in full at the end of their term, either from the sale proceeds of the property or by other means.

A with-profits endowment has in the past been a popular means of repaying an interest-only mortgage. Endowments taken out before 1984 benefited from tax relief on premiums and the interest payments on the mortgage were also, until more recently, fully tax relievable. Repaying via a with-profits endowment was more tax efficient than a repayment mortgage.
If the endowment was chosen so that the sum assured was equal to the amount of the loan, then the policy would guarantee to repay the loan (either at maturity or on earlier death). Any bonuses added would accumulate a further sum for other purposes. However, the sum of the endowment premium and the interest was larger than the amount payable under a repayment mortgage, even if the cost of a simple life insurance only policy was added to the latter (to ensure the repayment mortgage was also repayable on early death).

Companies therefore started selling endowments with lower sums assured which required a significant level of future bonuses (regular and/or final) to be added before the policy would fully repay the loan. Some simple life insurance was also added to this package (together a ‘low-cost endowment’) to make up the sum assured to the loan amount on early death. Most policies were sold on a ‘joint life’ basis to married couples; this means that the sum assured would be paid out in the event of either partner dying during the policy term.

This was initially successful, and many of the earlier low-cost endowments repaid their loans after periods of up to 25 years, mainly because of the high regular and final bonuses paid until relatively recently.

After about 1998, it became clear that the days of consistently high investment returns were over (for at least the reasonably foreseeable future) and it became more difficult to demonstrate that low-cost endowments were fit for purpose, especially for customers with a low appetite for investment risk. At the same time, it became more likely that many existing policies would fail to achieve a sufficient maturity value to repay the mortgage they backed.

Companies first wrote to policyholders in 2000 to advise them whether a ‘shortfall’ was likely for them or not. Falls in share prices during 2000-2003 led to many more policies being likely to have a shortfall.
Other types of policy

Whole of Life Policies

Traditional whole of life policies operate in a similar way to endowments, with an initial sum assured which is guaranteed and with the possibility of regular bonuses (guaranteed once added), and a final bonus on death. Regular bonus is usually at the same rate as applies to the company’s endowment policies. Final bonus is often at the rate which would apply for an endowment policy which had started at the same time as the whole of life policy and matured at the date of death.

Pensions Policies

With-profits personal pension plans and with-profits ‘defined contribution’ company pension schemes operate in a very similar way to endowments, with the maturity date set equal to the policyholder’s retirement date. However, the insurance company is not subject to tax on the investment return it earns (neither can it relieve its expenses). This leads to a different sum assured to a non-pensions endowment and usually to different scales of regular and final bonus.

Also, benefits have to be taken in the form allowed by legislation, which in most circumstances requires at least 75% of the maturity proceeds to be used to buy an annuity from an insurance company (or suffer severe tax penalties). Such policies may not be surrendered for cash, but the surrender value may be paid to another pension scheme.

Perhaps the biggest difference is that many pensions policies are ‘single premium’ in nature. This means that only one premium is paid at the outset. As with regular premium policies, this premium buys a sum assured which receives regular bonuses and a final bonus, although, with the latter, often on a different scale to that for regular premium policies.
*With-Profits Annuities*

Annuities are policies which, in exchange for a single premium, pay out an annual amount for as long as the policyholder, and sometimes a surviving spouse or partner too, remains alive. The Actuarial Profession has produced a Briefing Paper which explains how annuities work.

One specific type of annuity is a with-profits annuity. Typically, this will have a guaranteed minimum amount payable each year, which may be enhanced by regular bonuses in the form of additions to the guaranteed minimum amount. In this form, the annuity cannot reduce.

However, the initial amount of the annuity is quite low. So variants have been designed which, much as with low-cost endowments, anticipate future bonuses. If future bonuses are lower than anticipated, the annuity will reduce.

Again, exactly as for low-cost endowments, the fall in stock markets during 2000-2003 (and over 2008) meant that many with-profits annuities sold prior to 2000 with high anticipated future bonus rates experienced substantial reductions.

Increasing longevity can also lead to lower bonus rates.

*Unitised With-Profits Policies*

Over the last 15-20 years, another form of with-profits policy has emerged: ‘unitised’ with-profits. This has accounted for the majority of more recent sales.

Under these plans, each premium buys a number of units, as for example do investments in a unit trust. However, unlike a unit trust, the price of each unit does not move in line with the value of a particular portfolio of assets. Rather, the company adds a regular bonus if justified, sometimes as frequently as daily, which increases the unit price. Expense charges on these products are usually
explicit and will be used when determining bonus rates rather than actual experience. The method of determining whether there is a regular bonus and, if so, its amount is, subject to the point regarding expense experience, essentially the same as that for traditional with-profits policies. Similarly, on death or maturity, a final bonus may be paid, again determined similarly to that for traditional with-profits policies (usually using asset shares).

Generally, because regular bonus is effectively paid as a proportion of premium, the rates of bonus on unitised with-profits policies are more comparable with interest rates paid by banks. However, it must not be forgotten that a reasonable part of the return will still be delivered by the final bonus rather than the regular bonus.

Unlike a traditional with-profits policy, there is no explicit sum assured as such, although as the price of units cannot fall (as there cannot be a negative bonus), the premium paid is an effective minimum guarantee on death or maturity, less any explicit charges made by cancelling units (e.g. for the company’s expenses or for life assurance cover). In some cases, there may be a minimum guaranteed rate of regular bonus.

As for traditional with-profits policies, unitised with-profits policies may be surrendered early. To ensure that the surrender value lies within the specified percentage of asset share range, the company will either add a final bonus to the value of the units or, if the value of the units is too high, make a deduction from that value (called a ‘market value reduction’ or ‘MVR’).

*With-Profits Bonds*

With-Profits Bonds are generally only found in unitised form. Large volumes were sold between the mid-1990s and 2001. Structurally, this is a single premium whole of life policy, although the death benefit is in practice only slightly more than the initial investment. In practice, it is therefore an investment vehicle with
no fixed term. The investment can be encashed at any time by surrendering the policy.

As described above, if the policy is surrendered when the policy value is outside the specified range around the asset share, either a final bonus will be added or the MVR deducted.

To provide some protection against poor investment performance, most policies come with some guarantee. Most commonly, this takes the form of a guarantee that an MVR will not be deducted if the policy is surrendered on certain occasions. The fifth or 10th anniversary of commencement is a common guarantee date. Some policies repeat the guarantee periodically. Some policies only have a weaker guarantee that any MVR will not reduce the surrender value to less than the initial amount invested.

Most policies also do not deduct an MVR on death and many allow annual encashments to be made (typically up to 7.5% of the initial investment) without an MVR. Some earlier policies even guaranteed a minimum regular bonus rate.

In the late 1990s, when many of these policies were sold, MVRs were unnecessary because asset shares generally grew faster than policy values. MVRs became necessary when stock markets tumbled in 2000-2003 as asset shares, which were heavily invested in shares, fell below policy values. MVRs must now reflect the falls in the stock market experienced over 2008.

If there is no immediate need for the money, before surrendering a with-profits bond subject to an MVR, policyholders should consider whether they can invest the proceeds in such a way, taking into account their attitude to risk, to make up the loss. If not, it may be worth deferring the surrender particularly if there is a forthcoming guarantee date.
**APPENDIX**

**Numerical example of how a with-profits policy provides a return**

Consider a 10-year endowment policy where the premium is £1,000pa.

The sum assured is based on the company earning an investment return of 2.5%p.a. after tax and its expenses, so is £10,500 (i.e. Just a little more than the £10,000 total of premiums which will be paid). Fig 1 shows this.

![Figure 1](image)

We might reasonably expect the company to be able to earn more that 2.5%p.a. As an example, let us assume the company’s investments actually earned 7.5%p.a. after tax and expenses and there were no other sources of profits and losses. Then ignoring the small cost of the life insurance provided, the company would have accumulated nearly £14,000. This is more than the sum assured. To ensure fairness, the company must distribute this excess to the policyholder.

It could have added a regular bonus of 3% of the sum assured to the policy each year over the 10 years. This would have added $3\% \times £10,500 = £315$ to the policy every year. Once added, the bonus is guaranteed to be paid at maturity or on earlier death. Fig. 2 shows how this would look.
It is worth noting that, although the company has been able to earn an additional return of 5%p.a. (i.e. 7.5% - 2.5%) compared to Fig 1, it has only needed to add bonus at 3%p.a. to the policy to be able to give the whole of this extra return to the policyholder. This is because the bonus is calculated as 3% of the sum assured. So, in the first year the company adds £315 to the policy but will have earned at most an extra 5% x £1,000 = £50, as it has then only received one premium of £1,000 from the policyholder. In fact, it will earn rather less as it will have incurred some expenses and so have had rather less than £1,000 to invest. It will not be until year six that the company actually begins to earn more than it is adding in bonuses.

The company will only have been able to earn a return like 7.5%p.a. after tax by investing in asset classes such as shares and property. As the returns from these are by no means certain, the company cannot be sure that it will earn at least 5% in each future year to justify adding a bonus each year at 3% right from the outset.

In practice, therefore, it is likely to add bonuses at a lower rate to make it less likely that its investments will be worth less at the end of ten years than the sum assured and the bonuses already added.
However, if it does this and ends up with assets worth more than the sum assured and the bonuses it has added, it will have paid less than it could to policyholder. Some companies and types of policy aim to achieve fairness over time by paying out higher bonuses after a period of good investment returns and lower ones after a poor period, aiming on average to pay out what has been earned over an economic cycle.

Others pay a lower bonus throughout and add a final bonus when policies mature. Fig 3 shows the company earning the same return as Fig 2 but paying a regular bonus of only 1.5% of the sum assured each year and a final bonus of 15% of the sum assured at maturity.

![Figure 3](image-url)