

Appendix 42

Evaluation of the Aggregate PIP Offer

A report for the policyholder advocate in connection
with the reattribution of the inherited estates
of the CGNU Life and CULAC with-profits funds

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1.00 Introduction and summary of conclusions

1.01 Introduction

This appendix has been prepared by LECG Ltd. for the policyholder advocate, and is a response to Aviva's appendix on the same topic. While care has been taken to explain the technical terms and concepts contained in this appendix, the complex issues involved will be better understood by readers with some familiarity of the concepts involved.

The purpose of this appendix is to evaluate Aviva plc's (Aviva) aggregate offer to eligible policyholders of the CGNU Life and CULAC with-profits funds in the context of the proposed reattribution of the funds' inherited estates. Details of the offer have been set out in *Appendix 41: The Aviva Offer*.

Aviva's offer is made to all eligible policyholders in the CGNU Life and CULAC with-profits funds and will take the form of a cash payment, save where Aviva considers that payment in cash would be disadvantageous to the policyholder. Policyholders choosing to accept Aviva's offer will receive a portion of the total cash amount offered by Aviva, the Policyholder Incentive Payment (PIP). In exchange, they will give up any interest they have in potential future special distributions from the inherited estates of the funds and will pass their interest to Aviva.

The policyholder advocate's evaluation of Aviva's aggregate offer is based on:

- data provided by Aviva that projects the funds' future assets and liabilities under Aviva's best estimate assumptions;
- counterfactuals constructed by Aviva and the policyholder advocate that use different assumptions about the future;¹ and

¹ A counterfactual is a scenario about certain events that did not happen or were not the case. In the present context, Aviva and the policyholder advocate have constructed counterfactuals about what would happen if the reattribution did not proceed. These counterfactuals are then used as 'base lines' against which to compare Aviva's reattribution proposals.

- a model that has been used by LECG to analyse the financial position of shareholders and the different groups of policyholders using the data provided by Aviva and various different assumptions.

This report compares the aggregate position of all eligible policyholders in the funds, assuming a reattribution, against several potential outcomes that might arise if there were no reattribution.

The potential benefits accruing to policyholders from the with-profits funds can be modelled as a series of cash flows over time. These cash flows may arise from one of four sources:

- the guaranteed benefits to policyholders (e.g. the sum assured), payment of which depends on prudential capital held in the inherited estates to secure the benefits in the event of an adverse investment experience;
- the ‘regular’ benefits to policyholders associated with their investments in the funds, in particular the reversionary and terminal bonuses that are added to policies’ guaranteed benefits. The quantum of these benefits depends on the funds’ investment performance and, potentially, the prudential capital held in the inherited estates to smooth those benefits in the event of an adverse investment experience;
- the benefits to policyholders associated with special distributions of excess capital from the inherited estates of the funds, without a reattribution; and
- the benefits to policyholders if there is a reattribution of the inherited estates of the funds.

The terms of the reattribution Scheme are intended to ensure that guaranteed benefits and regular benefits to policyholders are unaffected by the reattribution. The analysis therefore assumes that guaranteed and regular benefits to policyholders are identical, whether there is a reattribution or not. Similarly, the guidance given by the FSA to insurance companies (such as the use of the estate to pay shareholder tax on special distributions of excess surplus) is assumed to continue unchanged.

The two remaining sources of benefit to policyholders arise solely from the presence and use of the funds' inherited estates. This appendix therefore focuses on a comparison between:

- the cash flows potentially arising, absent a reattribution, from potential future special distributions to policyholders from the inherited estates; and
- the Policyholder Incentive Payment (PIP) offer made by Aviva to policyholders for forgoing those potential benefits as part of the proposed reattribution.

In this appendix, the comparison is conducted on an aggregate basis, comparing only the aggregate benefits forgone by policyholders absent a reattribution to the terms of Aviva's aggregate offer to policyholders.

In order to assess Aviva's offer to eligible policyholders, the policyholder advocate has looked at two general criteria:

- in aggregate, do eligible policyholders receive a PIP that is at least equal to their estimated potential special distributions across a range of new business assumptions and estate values?
- do eligible policyholders receive at least a 50 per cent share of the policyholder advocate's estimate of the residual value of the inherited estates (as detailed in *Appendix 37: Valuation of the Reattributed Estates*) under Aviva's new business assumptions?

LECG has also been asked to calculate Aviva shareholders' estimated internal rate of return (IRR) from the reattribution transaction. It is the FSA's responsibility to decide if that return is fair in the circumstances. The FSA has been provided with the results of LECG's calculations.

The impact of the reattribution on different groups of policyholders is analysed in *Appendix 43: Allocation of the Aggregate PIP between Policyholders* and in *Appendix 45: Formulation of Guidance to Policyholders*.

The remainder of this document is structured as follows:

- Section 2 sets out the policyholder advocate's general approach to valuing the inherited estates and, therefore, to the evaluation of the reattribution offer;
- Section 3 sets out the sources of value arising from the inherited estates;
- Section 4 describes the Aviva offer and describes the base-line scenarios used by Aviva and the policyholder advocate in their respective assessments of the offer;
- Section 5 contains a summary of Aviva's and the policyholder advocate's assessments of the Aviva offer to policyholders;
- Section 6 describes the incremental cash flows to shareholders from a reattribution and the associated estimated shareholder rates of return; and
- Section 7 sets out conclusions on the valuation of Aviva's aggregate PIP offer.

1.02 Summary of conclusions

LECG has evaluated Aviva's PIP offer, in aggregate, against the potential future special distributions that policyholders might expect to receive absent a reattribution. The evaluation has assumed that policyholders and shareholders divide special distributions of excess surplus from the inherited estates, absent a reattribution, in a ratio of 90:10. In addition, reflecting current FSA rules concerning permitted uses of inherited estates, the analysis has taken account of the benefits that shareholders obtain from the inherited estates outside the 90:10 terms of the funds, and the costs and risks borne by the inherited estates today that shareholders would have to bear post-reattribution.

Aviva has analysed its offer to policyholders separately and reached different, but broadly similar, conclusions to those of the policyholder advocate. The differences between the policyholder advocate's and Aviva's assessments of the aggregate PIP offer are a product of different assumptions about the valuation of the inherited estates; the appropriate deductions to make from the inherited estates; and the approach to assessing the offer.

Under current FSA rules, the value of new with-profits business written into the funds has a major impact on the value eligible policyholders might expect to receive from the estates in the form of special distributions. The policyholder advocate has evaluated Aviva's offer on three new business assumptions. The first is Aviva's assumption which is that Aviva meets its new business assumptions up to 2010 and, thereafter, that new business values increase by 5 per cent per annum. The other two new business assumptions are the policyholder advocate's: that new business falls by 5 per cent per annum or by 15 per cent per annum from 2011.

On the first general criterion used by the policyholder advocate to assess Aviva's aggregate offer, under any of the three assumptions, taking into account the policyholder advocate's valuation of the inherited estates, the value of Aviva's aggregate offer to policyholders exceeds the value that eligible policyholders might expect to receive from potential special distributions from the inherited estates under current FSA rules, absent a reattribution. On the second general criterion, if new business amounts increase, as Aviva assumes, then eligible policyholders could expect to receive between 54 per cent and 61 per cent of the residual value of the inherited estates, the amount that, absent a reattribution, would go to future policyholders less appropriate deductions for reattribution costs and other costs and risks that will be borne by shareholders after the reattribution.. At lower levels of new business, potential future special distributions to eligible policyholders are projected to be much higher, so the residual value of the estates is lower, as detailed in Appendix 37: *Valuation of the Reattributed Estates*. Therefore, if new business amounts fall by 5 per cent p.a., eligible policyholders are projected to receive between 35 and 43 per cent of the residual value; if they fall by 15 per cent p.a., policyholders are projected to take only 15 per cent to 22 per cent of the residual value. Nevertheless, LECG's analysis indicates that the offer is, in aggregate, superior to what eligible policyholders might receive absent a reattribution.

Aviva says that its offer exceeds the value of potential distributions to policyholders (VPDP) by a considerable margin and offers a majority of the residual value of the inherited estates to eligible policyholders for values of the Reattribution Estate between £1,200 million and £2,500 million at 1 October 2009. Aviva describes the offer as "good value" for around 99% of policyholders. Aviva's interpretation of "good value" is that it would take policyholders at

least 10 years to receive the equivalent value in potential special distributions. Its own measure of benefits to shareholders, the ‘Gross Value Created’ by the reattribution, preserves shareholder benefits at a level considered acceptable by Aviva.

LECG has calculated that shareholders’ internal rate of return from the reattribution transaction is between 10.3 per cent and 11.5 per cent, depending on the value of the Reattribution Estate at the Effective Date of the reattribution, (1 October 2009). Aviva says that its return varies between 8.2 per cent and 10.6 per cent over the same range of Reattribution Estate values between £1,200 million and £2,500 million. LECG’s calculations assume, post-reattribution, that the writing of new business will not affect releases of capital from the inherited estates as, to the extent that capital remains within the inherited estates to support new business, it may be assumed to earn Aviva’s hurdle rate of return for such business. LECG uses a conventional IRR calculation method, while Aviva uses a different method for estimating the returns to shareholders, making direct comparison difficult. Both LECG’s IRR calculation and Aviva’s calculation of shareholder returns, ignore the potential transfer of up to £100 million to the Old WPSF to safeguard non-electors’ potential future distributions from the inherited estates in the event that without such a transfer Aviva calculates that non-electors’ potential special distributions would be reduced by the reattribution itself (see Appendix 44 *The position of non-electing policyholders*).

Recently Aviva has provided a presentation to analysts quoting the shareholder IRR from the reattribution as 13.5 per cent. At this time, Aviva has not provided an explanation for the difference between the rates of return quoted.

2.00 Benefits to policyholders and shareholders from the inherited estate

2.01 The inherited estate without a reattribution

In the ordinary course of business, the inherited estate of a with-profits fund is available to provide benefits to both policyholders and shareholders. Discretion as to the use of the inherited estate, however, lies largely with the company that manages the fund.²

The FSA has advised that there are five principal uses for the inherited estate of UK with-profits funds, such as those of the CGNU Life and CULAC with-profits funds.³ Under current regulation, absent a reattribution, the FSA allows the inherited estate of with-profits funds to be used for additional purposes that are not “principal uses”. The value of these benefits (which, in the policyholder advocate’s opinion, accrue to shareholders) is in addition to the 10 per cent of bonuses that shareholders receive through the normal operation of the funds. The nature of these additional uses, and their impact on the inherited estates, is set out in *Appendix 39: The Impact of FSA Guidance on Policyholders*.

In evaluating Aviva’s offer from an eligible policyholder’s perspective, the primary benchmark against which the value of the offer has been compared is the estimated value of potential future special distributions to eligible policyholders from the inherited estates, absent a reattribution and under the FSA’s current rules. In evaluating Aviva’s offer from a shareholder’s perspective, LECG has calculated Aviva’s internal rate of return (IRR).

When modelling potential future special distributions from the inherited estates to policyholders and shareholders, it is not possible to project the behaviour of the funds indefinitely into the future. The policyholder advocate has therefore assumed that the funds are wound up after 25 years and that the inherited estates are distributed in a ratio of 90:10 to policyholders and shareholders in accordance with the funds’ current articles. Since virtually

² The scope of the company’s discretion is at the heart of the policyholder advocate’s legal challenge to Aviva and regulatory challenge to the FSA. Should the discretion be used with solely the fund’s considerations in mind (as the policyholder advocate believes should be the case) or should the company be able to use its discretion to benefit shareholders, if the latter, how far does this discretion extend? See Appendix 25 *Legal issues arising in respect of rights and interests in and uses of inherited estates*.

³ Letter from FSA to Aviva and the policyholder advocate, 6 December 2007, page 5.

no eligible policyholders are expected to be in force at the end of the 25-year period, the model provides almost a full projection of possible future special distributions to eligible policyholders.

2.02 The inherited estates in a reattribution

In a reattribution, individual policyholders are required to choose between accepting a single cash (or potentially a bonus) payment (i.e. the PIP) of a known value now or rejecting that payment and continuing to have an interest in possible future special distributions of an uncertain value from the inherited estates.

For shareholders, ownership of eligible policyholders' interests in the inherited estates (that will arise to the extent policyholders accept the Aviva offer) implies that, subject to certain constraints embodied in the Aviva Scheme, with-profits governance and FSA regulation, shareholders may invest the inherited estates in their own interests, without regard to those of policyholders in general, or those in the CGNU Life and CULAC with-profits funds in particular. For shareholders therefore, the evaluation of a given level of PIP entails a comparison between the potential future value to be gained under a reattribution from the release of capital from the RIEESA (that can then be reinvested as shareholders choose) and the potential future value that it would expect to generate from the inherited estates without a reattribution.

3.00 Aviva's baseline scenarios

3.01 The policyholder advocate's approach to the evaluation of Aviva's offer

In principle, there is a wide range of potential future outcomes for eligible policyholders and shareholders without a reattribution. For instance, the level and pattern of future investment returns will determine to a large degree whether there are special distributions of excess surplus in the inherited estates and, if there are, when they arise and, therefore, which groups of policyholders may expect to benefit from such special distributions. The policyholder advocate's analysis is not intended, however, to establish whether Aviva's offer represents good value for eligible policyholders in all circumstances. Rather, the policyholder advocate

has sought to ensure that Aviva's offer covers a reasonable range of potential future outcomes for an acceptable number of eligible policyholders.

In formulating its offer to eligible policyholders, Aviva has borne in mind its view of the likely scale and timing of special distributions to policyholders that may emerge from the inherited estates of the funds. Aviva has made its own calculations of the special distributions that eligible policyholders might reasonably expect to receive from the inherited estates, based on its own modelling. Aviva has used these calculations, periodically updated for actual investment experience, to inform the offer that Aviva has made to policyholders.

Aviva and the policyholder advocate have held extensive discussions about Aviva's projections of possible future special distributions to eligible policyholders. In addition, LECG has constructed its own model of the funds using data supplied by Aviva. The outcome of the discussions and modelling is that there remain a number of areas in which Aviva and the policyholder advocate do not fully agree.

The four main sources of differences are summarised in Table 1 below.

Table 1 Differences of approach between Aviva and the policyholder advocate

Issue	Impact
Calculating the size of the inherited estates	Aviva and the policyholder advocate have different estimates of the “starting value” of the estates. ⁴ Aviva places more reliance on the basis used in its audited accounts for the size of the inherited estate; the policyholder advocate relies on KPMG’s adjustments to those statements that amend assumptions considered by KPMG to be prudent or otherwise inappropriate as a basis for evaluating the reattribution offer. In total, KPMG’s adjustments increase the working capital of the inherited estate by £177 million, valued at 31 December 2008, or £185 million valued at 1 October 2009.
Deductions from the calculated estates	Aviva and the policyholder advocate have made different assumptions about the deductions that are appropriate to make from the inherited estate to reflect future costs and risks to be borne by shareholders, or allowances for the value of FSA guidance as to the uses of the inherited estate, which will be forgone by shareholders after a reattribution. ⁵
New with-profits business	Aviva and the policyholder advocate take different approaches to the likely future trends of the with-profits market and Aviva’s potential share of that market with a reattribution. Aviva assumes that future new business values will grow by 5% per annum from 2011 onwards, irrespective of whether there is a reattribution or not. Since new business values are impossible to predict with any accuracy, and since the level of new business under current FSA rules is a key determinant of the value eligible policyholders can expect to receive from the estates, the policyholder advocate has assessed the reattribution against assumptions of a 5% or 15% annual decrease in new business levels from 2011 onwards, in addition to her assessment of Aviva’s own assumptions.
Calculation of return to shareholders	The policyholder advocate and Aviva have different views on how to calculate the return to shareholders from the reattribution. LECG, on behalf of the policyholder advocate has calculated a conventional IRR based on the incremental cash flows shareholders are expected to earn. Aviva has employed a different methodology which cannot in principle be compared to the IRR calculated by LECG.

3.02 Primary scenarios used by the policyholder advocate to evaluate the offer

The policyholder advocate has used three primary new business assumptions to evaluate Aviva’s offer. Each new business assumption produces a different set of answers about the potential value of the inherited estates without a reattribution to policyholders and shareholders. In one case Aviva’s assumptions about future amounts of new business are

⁴ See Appendix 35: *Size of the Inherited Estates*.

⁵ See Appendix 37: *Valuation of the Reattributed Estates*.

used; the other cases use alternative policyholder advocate assumptions about future amounts of new business.

All of the scenarios employed by the policyholder advocate use KPMG’s calculations in respect of the size of the estates. They also use KPMG’s and LECG’s calculations of the deductions that are appropriate to make from the estates to arrive at the residual value of the proportion of the estate which, without a reattribution, would be passed to future policyholders.

These scenarios are referred to by the policyholder advocate as the “policyholder advocate basis”, using either “Aviva’s new business” assumptions or alternative, lower new business sensitivities considered by the policyholder advocate.

A summary of the scenarios used is set out in Table 2 below.

Table 2 Three scenarios used in the policyholder advocate’s evaluation of Aviva’s offer

	Policyholder advocate basis, Aviva new business	Policyholder advocate basis, alternative new business scenario	Policyholder advocate basis, alternative new business scenario
Size of the estates	Policyholder advocate	Policyholder advocate	Policyholder advocate
Deductions from the estates	Policyholder advocate	Policyholder advocate	Policyholder advocate
New business assumptions	Aviva (+5% p.a. from 2011 onwards)	-5% p.a. from 2011 onwards	-15% p.a. from 2011 onwards

Aviva and the policyholder advocate use different assumptions and methods in their respective calculations of the estimated rates of return available to shareholders from the reattribution. Those differences are discussed in more detail in Section 5.00 below, in the context of the policyholder advocate’s evaluation of the rate of return likely to be achieved by Aviva in relation to the costs incurred in the proposed reattribution.

4.00 The evaluation of Aviva’s offer to policyholders

This section summarises the adjustments to the inherited estates that the policyholder advocate has made on actuarial advice from KPMG, and then discusses the policyholder

advocate's assessment of the reattribution offer to eligible policyholders. Aviva's own assessment of the offer is summarised at the end of section 4.00.

The policyholder advocate's assessment of the aggregate offer is based on the two general criteria outlined in Section 1.00:

- in aggregate, do eligible policyholders receive at least their potential special distributions across a range of new business assumptions and estate values?
 - this ensures that policyholders in aggregate can expect to receive more from the offer than they might have got without the offer under a wide range of circumstances under the current FSA rules;
 - even if in the aggregate policyholders might be better off, individual policyholders may or may not be. The analysis of the impact of the offer for different groups of policyholders is covered in *Appendix 43: Allocation of the Aggregate PIP between Policyholders*.
- do eligible policyholders in aggregate receive at least a 50 per cent share of the estimated residual value (of that part of the inherited estates which, under current FSA rules, would be transferred to future policyholders (after the deduction of appropriate costs associated with the reattribution on the basis described in Appendix 37) under Aviva new business assumptions?
 - this ensures that under Aviva's new business assumptions eligible policyholders are expected to be offered at least half of the net estate value after deducting the estimated benefits forgone by eligible policyholders and shareholders and reattribution costs, and shareholders receive the remainder. This is an arbitrary criterion, but in a situation where under the current FSA rules, neither shareholders nor eligible policyholders would expect to receive any of the residual value in the absence of a reattribution, it is a useful guide as to the division of the residual value. If less new business is written than Aviva predicts, more

of the estates would have gone to eligible policyholders as special distributions.

Regarding shareholders' return from the reattribution, it is the FSA's responsibility to decide if that return is fair in the circumstances, and if not to use its regulatory powers to ensure the company either withdraws the offer or makes a new, more favourable one to eligible policyholders. The policyholder advocate has no power to change the offer being made. The FSA has been provided with the internal rates of return calculated by LECG across a range of estate values, which are outlined below in Section 5.02.

4.01 Summary of the policyholder advocate's adjustments to the inherited estates

The published balance sheet of the funds shows that the combined inherited estates of the CGNU Life and CULAC with-profits funds at 31 December 2007 was valued at £5,002 million. Since that date, however, Aviva has declared a special distribution of £2.3 billion, and equity and property markets around the world, including in the UK, have fallen markedly. Given that a majority of the assets of the funds (including the inherited estates) were invested in equities and properties, the value of those assets reduced by £524 million as at 30 June 2008, valuing the combined inherited estates at £2,115 million at that date.

Since then, financial markets have experienced further substantial falls and considerable volatility. As at 31 December 2008, the value of the estates was £1,570 million, based on the £1,529 million published figure plus a £41m post year-end adjustment. Aviva's reattribution offer covers a range of potential values for the inherited estates at the Effective Date (the Reattribution Estate) of between £1,200 million and £2,500 million, net of the £2.3 billion special distribution announced in February 2008.

The value of the inherited estates as at 1st October 2009 (the Reattribution Estate), for the purposes of calculating the aggregate PIP, will be calculated as the monthly unweighted average of the estates as at 30 June, 31 July and 28 August 2009 with the average rolled

forward for two months at a risk-free rate of interest. The June valuation will be audited, as will the roll forward mechanism.

Based on KPMG's advice, however, the policyholder advocate believes that a number of adjustments needed to be made to the value of the inherited estates at end 2008 to arrive at a figure that is more appropriate for the purpose of evaluating the reattribution. That advice and those adjustments (totalling £177 million at 31 December 2008) are described in *Appendix 35: Size of the Inherited Estates*. For the purpose of its analysis, LECG has rolled forward this value to 1 October 2009 which adds £8 million to the adjustments (that is, making £185 million at 1 October 2009)⁶.

In the remainder of the assessment of the reattribution offer in this appendix, it has been assumed that the Reattribution Estate has a value of £1,570 million at the Effective Date (currently assumed to be 1 October 2009); at such a valuation, the policyholder advocate's adjusted value of the Reattribution Estate (including KPMG's additions) would be £1,755 million.⁷ We also provide analysis using an assumed Reattribution Estate of £1,200 million which is the minimum estate value included in Aviva's offer.

KPMG's adjusted value of the estates, however, does not reflect the costs incurred or benefits forgone by shareholders as a result of the reattribution. A number of deductions therefore need to be made from the adjusted estates to calculate the amount of the inherited estates which without a reattribution would have been paid out as special distributions to future policyholders, and in the context of a reattribution is potentially available for distribution to eligible policyholders and shareholders. The approach to calculating the appropriate deductions to make from the value of the inherited estates to estimate this residual value is contained in *Appendix 37: Valuation of the Reattributed Estates* and *Appendix 39: The Impact of FSA Guidance on Policyholders*.

⁶ KPMG will be performing a review of the Reattribution Estate during the summer of 2009, therefore depending on the outcome of this review there might be changes to these adjustments.

⁷ Supplementary details for different sizes of the Reattribution Estate may be found in Annexe A.

4.02 The policyholder advocate's evaluation of Aviva's offer to policyholders

In this section, the policyholder advocate's evaluation of Aviva's offer to policyholders is set out. The policyholder advocate uses different assumptions from Aviva in calculating the value of the inherited estates and the appropriate deductions to make from it, since she is considering a value appropriate for the reattribution and not one appropriate for regulatory purposes. Accordingly, the policyholder advocate has a different view about the amount potentially available, over time, for special distributions to policyholders and shareholders. The policyholder advocate's approach to valuing the inherited estate is set out in *Appendix 35: Size of the Inherited Estates* and *Appendix 37: Valuation of the Reattributed Estates*.

As is noted in *Appendix 38: Aviva's New With-Profits Business Assumptions*, the future amount of new with-profits business written into the funds is one of the principal factors affecting the scale and timing of potential future special distributions from the inherited estates, because inherited estate capital is permitted by the FSA to be retained in the funds to support new business, which leads to the 'intergenerational transfer' of estate from current to future policyholders. All else being equal, a higher value of new business will serve to defer and reduce the value of future special distributions.

LECG has modelled the pattern and magnitude of potential future special distributions from the inherited estates to shareholders, eligible policyholders and future policyholders, across a range of estate values and new business assumptions. Those calculations and the basis underpinning them are set out in greater detail in *Appendix 40: Analysis of Potential Future Special Distributions for Policyholders & Shareholders*. A summary is shown in Table 3 and 4 below, for Reattribution Estate values of £1,200 million (the lowest value at which the reattribution will proceed) and £1,570 million (the end-2008 published figure of £1,529 million plus a post year-end adjustment of £41 million), assuming a 100% take-up of the Aviva offer. The first row of each table shows the size of the Reattribution Estate, on which the aggregate PIP is calculated. The second row shows the net value of the adjustments to the estate advised by KPMG, less the costs arising as a result of the reattribution. The next row shows the estate value remaining after these deductions. The fourth and fifth rows show the

potential special distributions to shareholders and policyholders, absent a reattribution (i.e. shareholders' and eligible policyholders' current interest in the estate). The final row shows the 'residual value' after all of the above interests, costs and allowances have been deducted.

Table 3 LECG's calculation of the residual value of the Reattribution Estate, £1,200 million unadjusted estate at 1 October 2009

Item	Aviva new business assumptions (£m)	Alternative new business PA assumption: -5% from 2011 (£m)	Alternative new business PA assumption: -15% from 2011 (£m)
Unadjusted Reattribution Estate	1,200	1,200	1,200
Net value of adjustments	(296)	(288)	(282)
Estate value at 01/10/09 after costs, allowances and taxes	904	912	918
Distributions to shareholders	(130)	(131)	(132)
Distributions to eligible policyholders	(83)	(292)	(431)
Residual value after all interests, costs and allowances	690	488	356

Table 4 LECG's calculation of the residual value of the Reattribution Estate, £1,570 million unadjusted estate at 1 October 2009

Item	Aviva new business assumptions (£m)	Alternative new business PA assumption: -5% from 2011 (£m)	Alternative new business PA assumption: -15% from 2011 (£m)
Unadjusted Reattribution Estate	1,570	1,570	1,570
Net value of adjustments	(373)	(362)	(355)
Estate value at 01/10/09 after costs, allowances and taxes	1,197	1,208	1,215
Distributions to shareholders	(167)	(168)	(168)
Distributions to eligible policyholders	(197)	(448)	(605)
Residual value after all interests, costs and allowances	834	592	443

The difference between the columns of figures arises because of the use of alternative new business assumptions. Alongside minor differences in the value of the estate available for distribution, the principal difference arises in the division of the remaining value of the estate

between the current and future generations of policyholders. As may be seen in the tables, lower projected new business values significantly increase the potential distributions to eligible policyholders since the estate is shared with fewer future policyholders. Therefore, at lower new business levels, the residual value of the estates, representing the value of potential special distributions to future policyholders in the absence of a reattribution (less reattribution costs), is lower.

Aviva's aggregate PIP offer is of £500 million for 100% of the inherited estates on the assumption that the Reattribution Estate has a value of £1,200 million at the Effective Date. The aggregate PIP will increase by 55% of the value of the Reattribution Estate above £1,200 million, so that the aggregate offer will be £704 million if the Reattribution Estate is valued at £1,570 million at the Effective Date. The value of Aviva's offer to policyholders therefore covers both the special distributions that eligible policyholders might have received (between £83 million and £605 million, based on a Reattribution Estate of £1,200 million with Aviva's new business assumptions and the policyholder advocates -15% pa new business assumption, respectively), plus a portion of the residual value of the estates that would be distributed to future policyholders without a reattribution. A summary of that division at Reattribution Estate values of £1,200 million and £1,570 million, based on the policyholder advocate's calculations, is shown in Table 5 and 6 below.

Table 5 The division of the inherited estate, Aviva and policyholder advocate calculations, £1,200 million Reattribution Estate at 1 October 2009

Item	Policyholder advocate estate, Aviva new business (£m)	Policyholder advocate estate, new business -5% p.a. from 2011 (£m)	Policyholder advocate estate, new business -15% p.a. from 2011 (£m)
Estate value at 01/10/09 after deductions	904	912	918
Total value to be received by eligible policyholders	500	500	500
Net value to be received by shareholders	404	412	418

Table 6 The division of the inherited estate, Aviva and policyholder advocate calculations, £1,570 million Reattribution Estate at 1 October 2009

Item	Policyholder advocate estate, Aviva new business (£m)	Policyholder advocate estate, new business -5% p.a. from 2011 (£m)	Policyholder advocate estate, new business -15% p.a. from 2011 (£m)
Estate value at 01/10/09 after deductions	1,197	1,208	1,215
Total value to be received by eligible policyholders	704	704	704
Net value to be received by shareholders	494	505	512

The corresponding split of the residual value of the inherited estates between eligible policyholders and shareholders is shown in Table 7 and 8 below.

Table 7 The division of the residual value of the inherited estate, £1,200 million Reattribution Estate, 1 October 2009

£ m	Residual value of inherited estate	Value of potential distributions	Share of residual value	Total
Policyholder advocate estate, Aviva new business	690			
To policyholders		83	417	500
%			60%	55%
To shareholders		130	273	404
%			40%	45%
Policyholder advocate estate, new business -5% p.a. from 2011	488			
To policyholders		292	208	500
%			43%	55%
To shareholders		131	280	412
%			57%	45%
Policyholder advocate estate, new business -15% p.a. from 2011	356			
To policyholders		431	69	500
%			19%	54%
To shareholders		132	286	418
%			81%	46%

Table 8 The division of the residual value of the inherited estate, £1,570 million Reattribution Estate, 1 October 2009

£ m	Residual value of inherited estate	Value of potential distributions	Share of residual value	Total
Policyholder advocate estate, Aviva new business	834			
To policyholders		197	507	704
%			61%	59%
To shareholders		167	327	494
%			39%	41%
Policyholder advocate estate, new business -5% p.a. from 2011	592			
To policyholders		448	256	704
%			43%	58%
To shareholders		168	336	505
%			57%	42%
Policyholder advocate estate, new business -15% p.a. from 2011	443			
To policyholders		605	99	704
%			22%	58%
To shareholders		168	344	512
%			78%	42%

It should be noted that, under current FSA rules, in the policyholder advocate's view, shareholders, in addition to their value of potential distributions and share of residual value, receive £297 million from FSA-permitted uses of inherited estates which favour shareholders, under Aviva new business assumptions.⁸ (see *Appendix 39: The Impact of FSA Guidance on Policyholders*).

Table 7 shows that, on the basis of the policyholder advocate's calculation of the value of the residual estate, eligible policyholders will receive approximately 60 per cent of the residual value of a Reattribution Estate of £1,200 million under Aviva's new business assumptions. Shareholders will receive approximately 40 per cent%. If the residual value of the inherited estates was equally divided 50:50 between eligible policyholders and shareholders, eligible policyholders and shareholders would each receive £345 million from a Reattribution Estate of £1,200 million. In total, therefore, eligible policyholders would be offered an aggregate PIP of £428 million, £72 million less than the present value of Aviva's offer for a Reattribution Estate of £1,200 million.

Using the policyholder advocate's alternative new business assumption of a 5 per cent annual decline in new business from 2011 onwards, the residual value of £488 million is divided with policyholders receiving 43 per cent and shareholders receiving 57 per cent. Alternatively, assuming the policyholder advocate's assumption that new business declines by 15 per cent annually from 2011 onwards, only 19 per cent of the residual value would be received by policyholders under Aviva's offer, the remaining 81 per cent being received by shareholders. Eligible policyholders' lesser share of the residual value when the policyholder advocate's lower new business assumptions are used arises from two aspects of LECG's calculations of potential special distributions forgone without a reattribution. The first is that eligible policyholders would receive a much larger total value of future distributions, under lower new business assumptions. The second is that the future policyholders' share of potential distributions is correspondingly smaller, so the residual value, which is based on the value forgone by future policyholders, is much lower, so that even an 81 per cent share for

⁸ The FSA guidance that is not already reflected in the table relates to the staff pensions reserve, the expense reserve, misselling costs reserve, non-endowment compensation, and data provisions / pensions review reserve.

shareholders results only in an increase of £13 million of residual value for shareholders compared to their share of residual value under Aviva new business assumptions.

Under any of the three new business assumptions, the value of Aviva's aggregate offer at £500 million for a Reattribution Estate of £1,200 million at the Effective Date exceeds the value that eligible policyholders might expect to receive from the inherited estates, under current FSA rules, without a reattribution (whether £83 million or £431 million). The policyholder advocate therefore believes that under current FSA rules, since the aggregate offer covers all the eligible policyholders' potential future special distributions from the inherited estates using a range of new business assumptions (from an increase of 5 per cent p.a. to a decline of 15 per cent p.a. from 2011 onwards), as well as a higher starting value and proportionately smaller deductions than Aviva, the offer is on average better than what policyholders might receive if there were no reattribution. Similar calculations for a range of sizes of Reattribution Estate are contained in Annexe A. All of these show that the offer in aggregate, under current FSA rules, is better for eligible policyholders than the position without a reattribution.

4.03 Aviva's assessment of the reattribution offer

Aviva's offer to policyholders is grounded in its understanding of:

- the potential value of the Reattribution Estate at the Effective Date of the reattribution using its own calculation basis; and
- the expected future value that shareholders may obtain from ownership of electing policyholders' interest in the Reattribution Estate, given its value at the Effective Date of the offer.

Aviva has compared the aggregate offer to its calculation of the value of potential distributions to policyholders and found the aggregate PIP offer to be greater. Aviva has conducted its own modelling of potential outcomes using its in-house stochastic model in its assessment of the likely benefits from the inherited estates to policyholders and shareholders, without a reattribution, and to shareholders alone with a reattribution.

Aviva says that its offer exceeds eligible policyholders' VPDP by a considerable margin and offers a majority of the residual value of the inherited estates to eligible policyholders for all values of the unadjusted Reattribution Estate between £1,200 million and £2,500 million. Its assessment is that the offer represents "good value" (it is expected that policyholders would have to wait for at least 10 years to receive the equivalent value in special distributions) for around 99 per cent of policyholders and "excellent value" (it is expected that policyholders would have to wait for at least 25 years to receive the equivalent value in special distributions) for around 95 per cent of policyholders. Its own assessment of the reattribution is that its preferred measure of benefits to shareholders, the Gross Value Created by the reattribution, is approximately constant under the terms of its offer for the range of Reattribution Estate values considered. The offer therefore generates value for shareholders that Aviva considers acceptable. The next section considers returns to shareholders using the policyholder advocate's Internal Rate of Return (IRR) calculation.

5.00 Shareholder rates of return

Aviva has argued that any surplus arising to shareholders as a result of the reattribution needs to be understood in terms of shareholders' requirement to earn a satisfactory rate of return on the shareholder funds invested in the payment of the PIP to electing policyholders. The policyholder advocate agrees that for the company to be prepared to reattribute the inherited estates (and make an offer for policyholders' interest in it), shareholders must expect a reasonable rate of return on their investment. LECG has therefore sought to assess the rates of return that shareholders might earn on the reattribution.

In large part, the pattern of total expected distributions from the inherited estates without a reattribution is similar to the one that would be expected with a reattribution. To the extent that differences arise in cash flows to shareholders with and without a reattribution, those differences have been taken into account by LECG in its assessment of the incremental cash flows arising to shareholders as a result of the reattribution. When set against the cost to shareholders of the PIP, it is possible to calculate an Internal Rate of Return (IRR) to shareholders from the reattribution transaction as a whole.

5.01 Calculation of incremental cash flows

The IRR of a project or investment is the discount rate at which the present value of the cash flows from the investment is equal to zero. The calculation of an IRR generally involves an initial, negative cash outflow, followed by a series of positive cash flows that, together with the initial outflow, deliver the calculated rate of return. In the reattribution, shareholders' negative cash outflow is the payment of the PIP to electing policyholders (and the costs of the reattribution), followed by the positive cash flows generated by the potential release of capital from the RIEESA. The positive cash flows that generate the return to shareholders should be calculated on an incremental basis. That is, they should exclude those amounts that shareholders would have received anyway without making the investment in the reattribution, which are both their 10 per cent of special distributions and the value to shareholders of the FSA's permitted uses of the inherited estates.

In approaching the calculation of incremental cash flows, the policyholder advocate has had to decide on the baseline counterfactuals to use for the modelling of cash flows, with and without a reattribution. The policyholder advocate has assessed shareholder returns without a reattribution using the scenarios described in *Appendix 40: Analysis of Potential Future Special Distributions for Policyholders and Shareholders* and the calculation basis set out in *Appendix 37: Valuation of the Reattributed Estates*. The difference between the scenarios used is the level of new business written. If Aviva's new business assumptions are used, the value of capital support from the inherited estates is greater than if the policyholder advocate's alternative, lower new business assumptions are used.

With a reattribution, the policyholder advocate has assumed that:

- 100 per cent of eligible policyholders accept the Aviva offer;
- shareholders receive 100 per cent of releases of surplus capital from the RIEESA;

- for shareholder releases, a capital surplus is deemed to exist when the capital in the RIEESA has exceeded a level consistent with a credit rating of AAA plus 10 per cent;⁹
- corporation tax of 15 per cent is paid by shareholders on releases of capital from the RIEESA, based on the policyholder advocate's tax assumption. There has been no estimate made of the reduced tax rate effect of holding capital in the RIEESA;¹⁰
- the adjustments to the size of the inherited estate and deductions from the inherited estate set out in the previous section are applied to a Reattribution Estate ranging from £1,200 million to £2,500 million at the Effective Date;
- shareholders pay a PIP to policyholders that corresponds to the size of the Reattribution Estate at the Effective Date; and
- shareholders incur costs of £147 million for the reattribution, and imputed costs of 3.5 per cent of the PIP to raise the capital to pay the PIP in cash.

Following a reattribution, the policyholder advocate has assumed that any new with-profits business can be expected to earn at least Aviva's hurdle rate for such business¹¹. This has been reflected in the calculations by using a scenario in which any new business written has no impact on the inherited estate available for distribution to eligible policyholders and shareholders, including non-market risk. If new business cannot be written to be value enhancing to shareholders, including the return on capital locked-in to support new business capital reserves, the policyholder advocate assumes that Aviva will not write new business. The decision as to whether to write new business in the funds is therefore independent of the decision to release capital from the funds after a reattribution.¹² Either way, shareholders are

⁹ Further details of the circumstances in which an excess surplus is deemed to exist may be found in *Appendix 8: Risk Appetite and Capital Requirements for Life Insurers*.

¹⁰ The policyholder advocate's assumptions are set out in detail in *Appendix 34: Tax Matters in relation to the Reattribution*. Details of the impact of those assumptions on the value of the inherited estate may be found in *Appendix 37: Valuation of the Reattributed Estates*.

¹¹ Hurdle rate refers to the company's required return from any investment undertaken.

¹² Save during the first six years after the reattribution, during which time Aviva may not release capital from the inherited estate under the terms of the Scheme.

assumed to act to maximise their returns. In modelling the releases of capital to shareholders, therefore, LECG has assumed that shareholders receive distributions in line with the run-off of existing business and has not assumed that it will be reinvested in any particular value of new business as this will only be written if returns are better than is available elsewhere, including within these funds.

The incremental return to shareholders is then calculated by deducting the cash flows that shareholders would receive without a reattribution from the cash flows that they would both make and receive with a reattribution. The internal rate of return is calculated from the resulting incremental cash flows.

5.02 Shareholder returns from the reattribution

The policyholder advocate has asked LECG to estimate the returns to shareholders implicit in the Aviva offer to policyholders. Separately, LECG has assessed the PIP that Aviva could offer based on a range of alternative rates of return. That assessment has been performed by comparing post-reattribution returns to shareholders with scenarios incorporating new business values both as assumed by Aviva and by the policyholder advocate. The results of that analysis are shown in Table 9 below.

Table 9 Implied PIP offers (net of costs) consistent with different shareholder rates of return, calculated based on a PIP payment at 1 October 2009, £ million

Reattribution Estate / PIP	Net fund rate (6.15%)	7%	8%	9%	10%	11%	12%	IRR with Aviva PIP offer
£1,200m / £500m	837	753	665	587	519	458	404	10.3%
£1,570m / £704m	1,108	1,014	914	826	747	676	613	10.6%
£1,800m / £830m	1,277	1,177	1,072	979	895	819	751	10.8%
£2,100m / £995m	1,496	1,391	1,280	1,181	1,091	1,010	937	11.2%
£2,500m / £1,215m	1,789	1,676	1,556	1,448	1,351	1,262	1,181	11.5%

From Table 9, if shareholders were to earn the same rate of return on the reattribution as the fund expects to earn on its investment, net of tax, shareholders would offer a PIP of £837 million on Aviva's new business assumptions if the Reattribution Estate had a value of

£1,200 million at the Effective Date. If the Reattribution Estate had a higher value, Aviva could offer a higher PIP and still earn the rate of return of the fund.

LECG has calculated that the internal rate of return to shareholders from the reattribution is 10.3 per cent if the Reattribution Estate has a value of £1,200 million at the Effective Date, rising to 11.5 per cent if the Reattribution Estate is valued at £2,500 million. Aviva has performed its own assessment of the returns to shareholders, on the basis of which it says that it has estimated its rate of return on the reattribution is between 8.2 per cent (for a Reattribution Estate of £1,200 million) and 10.6 per cent (for a Reattribution Estate of £2,500 million). It should be noted however, that Aviva uses a different method for calculating its rates of return from the transaction. Aviva's figures are therefore not comparable with those calculated in the standard manner used by the policyholder advocate. Recently Aviva have provided a presentation to analysts quoting shareholders IRR from the reattribution as 13.5 per cent. At this time, LECG and the policyholder advocate do not have an explanation from Aviva for the difference between the rates that Aviva have quoted.

In the event that non-electing policyholders' value of potential special distributions from the OWPSF's inherited estate is lower than that they would have expected to receive without a reattribution, Aviva has agreed to transfer up to £100 million of capital from the RIEESA to the Old WPSF to cover any potential shortfall. These arrangements are described and analysed further in *Appendix 44: The Position of Non-Electing Policyholders*. The rates of return shown above do not take into account this offer to transfer up to £100 million of capital from the RIEESA to the Old WPSF. The amount of any such transfer will not be known until after the reattribution election. LECG note, however, that shareholders would receive 10 per cent of any such distributions, reducing the effective cost to shareholders of such a transfer to 90 per cent of its initial value.

6.00 Conclusions

For the purposes of evaluating Aviva's reattribution offer, LECG has constructed a financial model populated with data supplied by Aviva, but employing different assumptions according to the views of the policyholder advocate. In evaluating the reattribution offer from eligible

policyholders' perspective, the model has been used to compare the value of the benefits to eligible policyholders absent a reattribution (i.e. the potential value of their special distributions from the inherited estates), to the aggregate value of the reattribution offer (i.e. the PIP).

The model also allows consideration of the position of shareholders, absent a reattribution, against their position post-reattribution, taking into account current FSA regulation and guidance. In the ordinary course of business, the inherited estates are available to provide benefits to both policyholders and shareholders, although discretion as to the principles on which the funds are managed lies largely with the company that manages it. The FSA has advised that there are five possible principal uses for the inherited estates of UK with-profits funds. In addition, under current regulation, the FSA allows the inherited estates to be used for a range of additional purposes, described in detail in *Appendix 39: The Impact of FSA Guidance on Policyholders*.

In accordance with her high level criteria for evaluating Aviva's offer, the policyholder advocate has sought to ensure that under current FSA rules, Aviva's PIP offer in aggregate is higher over a reasonable range of potential outcomes than policyholders would expect to receive from potential special distributions from the inherited estates in the absence of a reattribution.

For its own part, Aviva has made its calculations of the benefits that might accrue to policyholders and shareholders and has used that analysis to inform its own offer. The differences between the policyholder advocate and Aviva are a product of different assumptions about:

- the appropriate method for calculating the size of the inherited estates;
- the appropriate deductions to make from the size of the inherited estates to reflect additional risks taken, costs incurred and benefits forgone by shareholders post-reattribution; and

- the trend and amount of new with-profits business assumed to be written, absent a reattribution.

The combined value of the CGNU Life and CULAC inherited estates has been reduced over the course of 2008 as a result of the fall in the financial markets and their increased volatility, from around £2.6 billion¹³ at the beginning of the year to around £1,570 million at the end.¹⁴ To the valuation of the inherited estates calculated by Aviva, the policyholder advocate has added back an amount of £177 million (at 31 December 2008), on KPMG's advice, to reflect actuarial assumptions and calculations more appropriate for the purposes of the reattribution than for meeting the standards laid down by regulation. From that adjusted value of the inherited estates, LECG has then made a range of deductions to reflect the present regulatory and legal context in which the funds operate, the views of the policyholder advocate's advisory team, information provided by Aviva and a range of alternative assumptions for new business. These deductions are described in *Appendix 37: Valuation of the Reattributed Estates*.

The policyholder advocate has evaluated Aviva's offer on three new business assumptions, assuming that Aviva meets its new business assumptions up to 2010. - that new business values increase by 5 per cent per annum from 2011 (Aviva's assumption) and on the basis of two policyholder advocate assumptions of falls of 5 per cent per annum or 15 per cent per annum from 2011. Under any of the three new business assumptions, taking into account the policyholder advocate's higher starting value of the estates and proportionately smaller deductions from it, LECG has estimated that the value of Aviva's aggregate PIP offer to policyholders exceeds the value that eligible policyholders would expect to receive in the form of special distributions from the inherited estates under current FSA regulation, absent a reattribution,

The policyholder advocate notes that policyholders may expect, on Aviva's new business assumptions, to receive more than half of the residual value of the inherited estates, part of the

¹³ This figure corresponds to the value of the estate at 31 December 2007 of £5,002 million, less the special distribution of approximately £2.3 billion, released in February 2008.

¹⁴ This figure corresponds to the £1,529 million year-end 2008 value published by Aviva, plus a £41 million post year-end adjustment.

amount of the inherited estates that could be paid to future policyholders in the form of special distributions absent a reattribution; the policyholder advocate is therefore satisfied her second criterion for evaluation of the aggregate offer has been met. On the policyholder advocate's lower new business assumptions, of declining amounts of new business from 2011, eligible policyholders receive considerably less than half of the residual value of the inherited estates. Nevertheless, under current FSA rules, the PIP offer is on average superior to what eligible policyholders might receive from potential special distributions if there were no reattribution.

Aviva says that its offer exceeds the value of potential distributions to policyholders by a considerable margin and offers a majority of the residual value of the inherited estates to eligible policyholders for values of the Reattribution Estate between £1,200 million and £2,500 million at 1 October 2009. Aviva describes the offer as 'good value' for around 99 per cent of policyholders. Its own measure of benefits to shareholders, the Gross Value Created by the reattribution, adds value to shareholders at a level considered acceptable by Aviva.

The policyholder advocate has also asked LECG to calculate shareholder returns from the reattribution. The appropriate benchmark for comparison, absent a reattribution, when evaluating Aviva's offer from a shareholder perspective, is not only the value of shareholders' 10 per cent of special distributions from the inherited estates but also an amount that recognises both the benefits to shareholders from the additional uses of the estates permitted by the FSA and the costs and risks currently borne by the estates that shareholders will need to bear following a reattribution. Absent a reattribution, LECG has calculated cash flows that accord with Aviva's best estimate returns and the FSA's guidance in respect of the regulation of with-profits funds.

Post-reattribution, the policyholder advocate reasons that any new with-profits business can be expected to earn at least Aviva's hurdle rate of return. The policyholder advocate's assumption has been reflected in the calculations by using a scenario in which any new business written has no impact on the inherited estate available for distribution to shareholders. If new business cannot be written so as to be value enhancing to shareholders,

including the return on capital locked-in to support new business and the cost of non-market risk, the policyholder advocate assumes that Aviva will not write new business. The decision as to whether to write new business is therefore independent of the decision to release capital from the funds post-retribution. For that reason, LECG has assumed that releases of capital from the RIEESA are made in accordance with the terms of the Scheme, but that new business has no impact on the pattern of releases of capital.

LECG has calculated that shareholders' internal rate of return from the retribution transaction is expected to be between 10.3 and 11.5 per cent, depending on the value of the inherited estate at the Effective Date. Aviva says that its return varies between 8.2 and 10.6 per cent over the same range of unadjusted estate values between £1,200 million and £2,500 million.¹⁵ Both LECG's and Aviva's calculations ignore the potential transfer of up to £100 million to the Old WPSF to safeguard non-electors' potential future special distributions in the event that they are reduced by the retribution itself. Recently Aviva have provided a presentation to analysts quoting a rate of return to shareholders from the retribution of 13.5 per cent. At this time, LECG and the policyholder advocate do not have an explanation from Aviva for the difference between the rates that Aviva have quoted.

In summary, therefore, the policyholder advocate believes that Aviva's retribution offer, in aggregate, is likely to offer policyholders a value superior to that which they could expect to obtain absent a retribution under current FSA regulatory rules. The FSA rules disadvantage policyholders by permitting shareholders to take more than 10 per cent of the estate, and by permitting the estate to be transferred from the current generation to future generations without compensation. The former increases shareholder returns from the estate at the expense of policyholders, and the latter transfers estate value to a group of future policyholders who have no contract, rights, or vote in a retribution. Of the total value of possible future special distributions available to policyholders, absent a retribution, significantly less than half of the total value would be expected to go to eligible policyholders because of the free intergenerational transfer of capital to future policyholders. The

¹⁵ As noted above, Aviva's rates of return are not comparable with those calculated under the standard method used by the policyholder advocate.



policyholder advocate has challenged the current FSA rules, and the FSA has indicated its intention to maintain current regulation of with-profits funds. In that context, the policyholder advocate is satisfied that her main criteria outlined in Section 1.01 have been met and that the Aviva aggregate reattribution offer is in the interests of eligible policyholders; it is the FSA's responsibility to determine if the estimated return to shareholders from the reattribution is fair.

Annexe A: Details of calculations for a range of Reattribution Estate Values

The first row of the table below shows the size of the Reattribution Estate, on which the aggregate PIP is calculated. The second row shows the net value of the adjustments to the estate advised by KPMG, less the costs arising as a result of the reattribution. The next row shows the estate value remaining after these deductions. The fourth and fifth rows show the potential special distributions to shareholders and policyholders, absent a reattribution (i.e. shareholders' and eligible policyholders' current interest in the estate). The final row shows the 'residual value' after all of the above interests, costs and allowances have been deducted.

Table 10 LECG's calculation of the residual value of the inherited estate, £1,800 million Reattribution Estate at 1 October 2009

Item	Aviva new business assumptions (£m)	Alternative new business assumption: -5% from 2011 (£m)	Alternative new business assumption: -15% from 2011 (£m)
Unadjusted Reattribution Estate	1,800	1,800	1,800
Net value of adjustments	(420)	(408)	(400)
Estate value at 01/10/09 after costs, allowances and taxes	1,380	1,392	1,400
Distributions to shareholders	(189)	(190)	(191)
Distributions to eligible policyholders	(292)	(557)	(721)
Residual value after all interests, costs and allowances	899	644	488

Table 11 The division of the inherited estate, Aviva and policyholder advocate calculations, £1,800 million Reattribution Estate at 1 October 2009

Item	Policyholder advocate estate, Aviva new business (£m)	Policyholder advocate estate, new business -5% p.a. from 2011 (£m)	Policyholder advocate estate, new business -15% p.a. from 2011 (£m)
Estate value at 01/10/09 after deductions	1,380	1,392	1,400
Total value to be received by eligible policyholders	830	830	830
Net value to be received by shareholders	550	562	570

Table 12 The division of the residual value of the inherited estate, £1,800 million Reattribution Estate, 1 October 2009

£ m	Residual value of inherited estate	Value of potential distributions	Share of residual value	Total
Policyholder advocate estate, Aviva new business	899			
To policyholders		292	538	830
%			60%	60%
To shareholders		189	361	550
%			40%	40%
Policyholder advocate estate, new business -5% p.a. from 2011	644			
To policyholders		557	273	830
%			42%	60%
To shareholders		190	371	562
%			58%	40%
Policyholder advocate estate, new business -15% p.a. from 2011	488			
To policyholders		721	109	830
%			22%	59%
To shareholders		191	380	570
%			78%	41%

Table 13 LECG's calculation of the residual value of the inherited estate, £2,100 million Reattribution Estate at 1 October 2009

Item	Aviva new business assumptions (£m)	Alternative new business assumption: -5% from 2011 (£m)	Alternative new business assumption: -15% from 2011 (£m)
Unadjusted Reattribution Estate	2,100	2,100	2,100
Net value of adjustments	(482)	(468)	(459)
Estate value at 01/10/09 after costs, allowances and taxes	1,618	1,632	1,641
Distributions to shareholders	(219)	(220)	(220)
Distributions to eligible policyholders	(440)	(716)	(885)
Residual value after all interests, costs and allowances	960	696	536

Table 14 The division of the inherited estate, Aviva and policyholder advocate calculations, £2,100 million Reattribution Estate at 1 October 2009

Item	Policyholder advocate estate, Aviva new business (£m)	Policyholder advocate estate, new business -5% p.a. from 2011 (£m)	Policyholder advocate estate, new business -15% p.a. from 2011 (£m)
Estate value at 01/10/09 after deductions	1,618	1,632	1,641
Total value to be received by eligible policyholders	995	995	995
Net value to be received by shareholders	623	637	646

Table 15 The division of the residual value of the inherited estate, £2,100 million Reattribution Estate at 1 October 2009

£ m	Residual value of inherited estate	Value of potential distributions	Share of residual value	Total
Policyholder advocate estate, Aviva new business	960			
To policyholders		440	555	995
%			58%	61%
To shareholders		219	405	623
%			42%	39%
Policyholder advocate estate, new business -5% p.a. from 2011	696			
To policyholders		716	279	995
%			40%	61%
To shareholders		220	417	637
%			60%	39%
Policyholder advocate estate, new business -15% p.a. from 2011	536			
To policyholders		885	110	995
%			21%	61%
To shareholders		220	426	646
%			79%	39%

Table 16 LECG's calculation of the residual value of the inherited estate, £2,500 million Reattribution Estate at 1 October 2009

Item	Aviva new business assumptions (£m)	Alternative new business assumption: -5% from 2011 (£m)	Alternative new business assumption: -15% from 2011 (£m)
Unadjusted Reattribution Estate	2,500	2,500	2,500
Net value of adjustments	(564)	(548)	(538)
Estate value at 01/10/09 after costs, allowances and taxes	1,936	1,952	1,962
Distributions to shareholders	(258)	(259)	(260)
Distributions to eligible policyholders	(679)	(958)	(1,128)
Residual value after all interests, costs and allowances	999	735	575

Table 17 The division of the inherited estate, Aviva and policyholder advocate calculations, £2,500 million Reattribution Estate at 1 October 2009

Item	Policyholder advocate estate, Aviva new business (£m)	Policyholder advocate estate, new business -5% p.a. from 2011 (£m)	Policyholder advocate estate, new business -15% p.a. from 2011 (£m)
Estate value at 01/10/09 after deductions	1,936	1,952	1,962
Total value to be received by eligible policyholders	1,215	1,215	1,215
Net value to be received by shareholders	721	737	747

Table 18 The division of the residual value of the inherited estate, £2,500 million Reattribution Estate at 1 October 2009

£ m	Residual value of inherited estate	Value of potential distributions	Share of residual value	Total
Policyholder advocate estate, Aviva new business	999			
To policyholders		679	536	1215
%			54%	63%
To shareholders		258	463	721
%			46%	37%
Policyholder advocate estate, new business -5% p.a. from 2011	735			
To policyholders		958	257	1215
%			35%	62%
To shareholders		259	477	737
%			65%	38%
Policyholder advocate estate, new business -15% p.a. from 2011	575			
To policyholders		1128	87	1215
%			15%	62%
To shareholders		260	488	747
%			85%	38%