INTRODUCTION

We are pleased to present the results and insights from a fresh survey of Indian life insurers, covering their participating business management and asset share calculations approaches. 20 of the 24 life insurers in India participated in this survey, which covered aspects including sources of surplus shared with policyholders, triggers and limits on bonus declarations, asset allocations and level of reserves relative to asset shares.

We hope you find this an interesting snapshot of how companies are managing this important product line. These insights could help companies benchmark their own practices against those adopted by the market. While the discretion inherent in the management of participating business may allow a wide variety of practices, we hope that understanding approaches companies adopt when compared with their peers can highlight areas for review, refinement and improvement. The survey results of our earlier February 2014 study can be found here on milliman.com
All respondents re-circulate investment surplus into asset shares and nearly all do the same for mortality surplus. Most insurers do not, however, reflect the surplus from lapses/surrenders and conversion to reduced paid-up (RPU) in asset shares. While a minority do reflect reinsurance surplus, we note that most respondents do not explicitly model reinsurance cash flows in asset share calculations. Given that several insurers are still experiencing expense overruns, it is not surprising that only 60% of the respondents are sharing the surplus from maintenance expenses with asset shares. In 02, we highlight how some of these sources of surplus are modelled in practice when performing asset share calculations.

While mortality surplus is commonly recycled to asset shares, surpluses from riders and morbidity benefits are less so. This may be due to the overall smaller proportion of surplus arising from these benefits. While 01 concerns the ‘principle’, 02 relates more to the modelling ‘practice’ and also includes additional decrements and cash flows. We note there may be some gap between these two, although companies will want to ensure that such a gap is minimised as much as possible.
03 Asset shares: Basis for investment returns

When setting reversionary bonuses (RBs):
- Fixed-income instruments: 25%
- Other investments: 35%
- Book Value - Investment return derived based on amortised cost: 75%
- Market Value - Investment return derived based on market value (i.e. including unrealised gains/losses): 65%
- Book Value - Investment return derived based on dividend income and realised gains/losses only: 60%
- Market Value - Investment return derived based on dividend income, and realised and unrealised gains/losses: 45%

Insurers typically use a book value approach to crediting investment return in their asset share, more commonly when setting RBs, which may indicate a preference for a more smoothed rate of RBs. Respondents setting TBs with regard to a book value of asset shares may wish to carry out ongoing monitoring of the book value versus the market value of their investments. This would be important to ensure both sustainability of their approach in asset-liability management and to avoid any under/over-payment to policyholders, resulting in an inequitable distribution.

When setting terminal bonuses (TBs):
- Fixed-income instruments: 40%
- Other investments: 55%
- Book Value - Investment return derived based on amortised cost: 60%
- Market Value - Investment return derived based on market value (i.e. including unrealised gains/losses): 55%
- Book Value - Investment return derived based on dividend income and realised gains/losses only: 50%
- Market Value - Investment return derived based on dividend income, and realised and unrealised gains/losses: 45%

04 Asset shares: Allowance for a cost of capital charge

- Reflected for all policies based on the total amount of solvency capital required for each policy, irrespective of the actual solvency position of the participating fund: 40%
- Reflected for all policies based on a proportion of solvency capital required for each policy, considering the extent that the required solvency margin and reserves for the participating fund exceed the total assets in the participating fund: 15%
- Reflected for all policies based on a proportion of solvency capital required for each policy, considering the extent that the required solvency margin for the participating fund is not covered by the funds for future appropriation (FFA): 10%
- Reflected for all policies based on a proportion of solvency capital required for each policy, considering the extent that the required solvency margin for the participating fund is not covered by the ‘estate’, i.e. excess of total assets in the participating fund over asset shares: 5%
- Not reflected: 30%

At the extremes, 40% of insurers allow for the entire cost of capital in relation to the solvency margin required to be held for each policy, while 30% do not allow for any cost of capital in the asset share calculation. The remaining respondents take an intermediate approach with the cost of capital reflected in the asset share calculation varying based on the source and extent of funding of solvency margin requirements that is already available from other sources.
05 Asset shares: Allowance for a cost of guarantee charge

A majority of insurers do not explicitly allow for the costs of guarantees. Depending on how heterogeneous products are across the fund, and how valuable any guarantees are, this may represent an implicit form of cross-subsidy which insurers will want to be aware of and monitor.

06 Asset shares: Allowance for taxation

Interestingly, almost all insurers ignore the actual tax position of the company when charging taxes to asset shares, although this currently may not be a significant source of surplus in the estate.

07 Asset shares: Tax rates applied
08 Tracking of sources of surplus in the estate (e.g. past injections, expense overruns, experience surplus, etc.)

A majority of insurers track the sources of surplus in their estate. In our experience this analysis can be particularly helpful in understanding the current and projected capital position of the fund, especially where the estate constitutes both surpluses and deficits from various sources.

60%

09 Purpose of asset shares

All respondents use asset shares to set and manage policyholder bonuses. However, the practice is more mixed in relation to using asset shares to review the surrender value scales and for reserving. Given that asset shares are often used as a measure of the financial commitment to policyholders, we may have expected a link between surrender values/reserves and asset shares for more insurers.

100% Setting/managing policyholder bonuses

65% Reviewing surrender value scales

50% Calculation of policy reserves

10 Target percentage of asset share paid as maturity benefits (in normal circumstances)

<table>
<thead>
<tr>
<th>Percentage of Asset Share</th>
<th>Percentage of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% of asset share</td>
<td>10%</td>
</tr>
<tr>
<td>90-110% of asset share</td>
<td>45%</td>
</tr>
<tr>
<td>80-120% of asset share</td>
<td>40%</td>
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<tr>
<td>75-125% of asset share</td>
<td>5%</td>
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</tbody>
</table>

100% of asset share

90-110% of asset share

80-120% of asset share

75-125% of asset share
Level of granularity at which reversionary bonus rates are set for most products

11

- **30%**: RB rates are typically the same for all policies of a particular product
- **65%**: RB rates vary by policy term/premium payment term (PPT) within a product
- **5%**: RB rates vary based on some other factors as well (e.g. level of sum assured/premium, age of the policyholder, etc.)

Existence of formal triggers for change in reversionary bonuses

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- **5%**: Triggers exist - based on the ratio of guaranteed liability to asset share
- **55%**: Triggers exist - based on the supportable bonus relative to last year’s bonus
- **20%**: Yes - other triggers
- **20%**: No formal triggers

A majority of respondents are applying some formal trigger to guide RB changes. This is a best practice that can help make the exercising of discretion in bonus declarations more objective.

Limits on changes in reversionary bonuses in a year

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- **15%**: Less than 25bps
- **30%**: 25bps - 50bps
- **5%**: 50bps - 100bps
- **15%**: More than 100bps
- **35%**: No limit set

A majority of insurers have set some limit on the amount of variation in declared RBs from year to year, although this is by no means ubiquitous. In our experience, most insurers do aim to avoid large changes in RBs from year to year. Thus, the answers to this question may underline a possible difference between insurers who have documented this in their internal participating fund management philosophies and those that manage this process on a more ad-hoc basis.
14 Level of granularity at which terminal bonus rates are set for most products

- TB rates are typically the same for all policies of a particular product (65%)
- TB rates vary by policy term/PPT within a product (25%)
- TB rates vary based on some other factors as well (e.g. level of sum assured/premium, age of the policyholder, etc.) (10%)

Respondents having the same TB rates for all the policies of a particular product may wish to develop a more granular approach to setting the TB declared, in order to manage the share of guaranteed and non-guaranteed surplus distribution more sharply and to delay the build-up of benefit commitments.

15 How terminal bonus rates are expressed

- As a percentage of sum assured (60%)
- As a percentage of vested reversionary bonus (20%)
- As a percentage of sum assured and vested reversionary bonuses (20%)

16 Target proportion of the maturity benefits to be declared in the form of terminal bonus

- Up to 20% (50%)
- 20-40% (30%)
- No target set (20%)

Respondents who do not have explicit targets for terminal bonus cushions may wish to develop this, both to monitor the level of guarantee build and also to help guide investment strategy.
17 Constitution of policyholders’ reasonable expectations (PRE)

Unsurprisingly, all the respondents consider benefit illustrations to be a source of PRE. However, in contrast to the answer to 09, only 60% of the respondents consider asset share as a source of PRE, possibly because the asset share philosophies are not considered to influence customer expectations, as these are not published documents. Nonetheless, insurers and their With-Prosfits Committees, may need to ensure that there is a clear documentation of what constitutes/influences PRE.

18 Use of point of sale illustrations when setting maturity benefits

We note that all respondents use asset shares to set bonuses (as per response to 09) and also consider illustrations to be a source of policyholders’ reasonable expectations (PRE) (as per response to 17). These two facts may lead to conflicting outcomes for policyholder benefits and it seems insurers have taken a variety of approaches to address this. Those relying solely on asset shares may need to ensure that the asset share calculation fully captures policyholders’ expectations generated by illustrations.
19 Level at which asset allocations are set

There seems to be a lack of granularity in setting asset allocations for participating business, with allocations generally being set at the fund level. Insurers may wish to explore more sophisticated approaches in this area taking into account factors including the level of guarantees being offered on different products, the build-up of guarantees in different cohorts and the terminal bonus targets.

20 Share of fund in equity/property

Insurers have typically kept a substantial proportion of participating funds invested in 'safer' assets, with the allocation to equity/property being relatively low for a majority of respondents. With the increasingly attractive spreads offered by non-participating products and falling returns on government bonds, it remains to be seen whether this will continue to provide an attractive return for a product that may be expected to provide investment upside.

21 Investments in other asset classes (other than fixed interest, equities/property)

Only 25% of the respondents said that they invest in alternative asset classes. For those that do utilise alternative investments, these include Additional Tier-1 Bonds, Alternative Investment Funds, Real Estate Investment Trusts, Infrastructure Investment Trusts etc. Any persistence of the current low interest-rate environment may necessitate a broader shift into other asset classes in search of yield, or even as a hedge for guarantees.
22 Management of special surrender values (SSVs)

SSVs are typically left unchanged
- We monitor the SSV to asset share ratio to determine if a change is required
- We monitor SSVs via some other method

Respondents who are not currently monitoring the SSV to asset share ratio may wish to do so, in order to ensure that their surrender values remain equitable between groups and generations of policyholders, and that they are able to satisfy their With-Profits Committee mandates.

23 Level of reserves relative to asset shares as at 31 March 2020

Assuming that an insurer is using asset share as a measure of its commitment to policyholders, we would expect a broad level of correlation between total asset shares and total reserves. Respondents holding reserves much greater than, or less than the asset shares may wish to review their reserving methodology and bases to ensure that the link between commitments and reserves is functioning appropriately.

24 What would be your first action in a scenario where:
(a) the guarantee bites for a given cohort (i.e. guaranteed benefits due are higher than the asset shares); and (b) the reserves held for the cohort together with any funds for future appropriation (FFA) held are insufficient to pay the guaranteed benefits?

Lower the bonus payouts for other cohorts (where asset shares are higher than guarantees)
- Seek shareholder transfers into the participating fund to make good the shortfall OR to pay the shortfall from shareholders’ fund itself
- Not clearly decided/document as yet

Given the general decline in, and uncertainty surrounding interest rates, we have seen greater stress on participating funds. Companies may wish to clearly document the funds that can be drawn upon in case the guarantees bite. This type of ‘what-if’ analysis helps to structure the exercising of discretion and supports more robust modelling of downside scenarios.
Conclusions

There are significant areas of difference amongst the respondents and we feel that insurers could benefit from analysing the impact of alternative stances in many areas discussed earlier. In summary, these include:

- Approaches adopted for protection of policyholders’ interests (10, 12, 13, 16, 22)
- Allowance for lapse/surrender/RPU profits (or losses) in the calculation of asset shares (01, 02)
- Allowance for maintenance expenses on an actual basis or pricing/best estimate basis in the calculation of asset shares (01, 02)
- Allowance for the cost of capital and/or cost of guarantee in the calculation of asset shares (04, 05)
- Influence of illustrations and asset shares on the PRE in respect of maturity benefits (17)
- Approaches to enhance the overall investment performance of the participating fund by considering the investment strategy adopted (19, 20)
- Considerations for improvement of the capital efficiency/adequacy of participating business reserves through asset share and reserve linkage (23)
- Tracking and managing the level of guarantees and governance of the fund (16, 19, 24)

We hope that insurers and their With-Profits Committees find the results of the survey useful in guiding them in refining the approach adopted in the management of participating business. Our thanks to all the participants in the survey for their prompt responses.
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