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UL Benchmarking Survey

by Sue Sell

Universal Life (UL) insurance continues to play a significant role in the life insurance market. According to LIMRA, International, Inc., year-to-date UL annualized premium accounted for about 40 percent of U.S. individual life insurance sales as of Sept. 30, 2007. There is a high level of interest in this market as it continues to grow. Milliman, Inc. recently conducted a comprehensive survey of leading UL insurers to discover current dynamics of the UL market. The scope of the survey included UL with secondary guarantees (ULSG), cash accumulation UL, current assumption UL, and indexed UL.

The definition of the product categories is as follows:

ULSG—A UL product that is designed for the death benefit guarantee market with long-term no lapse guarantees.

Cash Accumulation UL—A UL product that is designed to focus on cash accumulation.

Current Assumption UL—A UL product designed to provide low-cost death benefits without death benefit guarantees. Products in the category are sometimes referred to as “dollar-solve” or “term alternative” products.

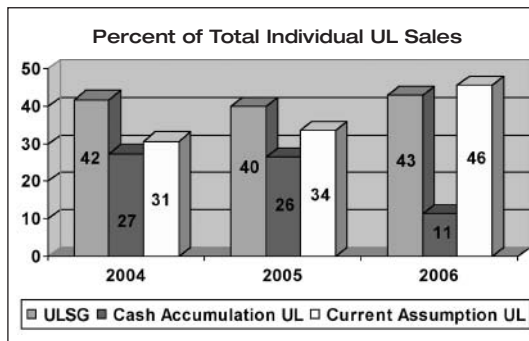
Indexed UL—A UL product where the interest credited to the cash value is tied to the performance of an index, such as the S&P 500.

Eighteen carriers participated in the survey. Since just seven carriers responded to the indexed UL part of the survey, with only four of the seven reporting sales information, the comments that follow will primarily address ULSG, cash accumulation UL, and current assumption UL results.



Sales

Sales reported by survey participants represented about one-third of UL industry sales. For purposes of the survey, sales were defined as the sum of recurring premiums plus 10 percent of single premiums. The following graph illustrates the UL product mix as reported by survey participants from 2004 through 2006.



ULSG sales have remained fairly level during this period. The change in the mix of cash accumulation and current assumption sales in 2006 was driven primarily by the sales of two large carriers.



Sue Sell, FSA, MAAA, is a consulting actuary with Milliman Inc. in Lake Forest, Ill. She can be reached at sue.sell@milliman.com.

continued on page 12

Overall, the median policy size for total UL business ranged from \$310,482 in 2004 to \$470,477 in 2006. The table below shows that the median policy size for current assumption UL is the highest in all reported calendar years.

| Calendar Year | Median of Average Policy Sizes (\$ thousands) | | | |
|---------------|---|---------|----------------------|-----------------------|
| | Overall | ULSG | Cash Accumulation UL | Current Assumption UL |
| 2004 | \$310.5 | \$322.2 | \$244.7 | \$395.6 |
| 2005 | 345.3 | 311.3 | 246.6 | 365.0 |
| 2006 | 470.5 | 268.3 | 235.3 | 630.7 |

The following chart shows the distribution of UL sales by channel. The brokerage channel had the largest percent of sales for all UL product types. (Note that a different number of companies are included in the various cells and that one participant provided only overall UL sales by distribution channel and another provided only ULSG sales by distribution channel).

| Distribution Channel | Overall | ULSG | Cash Accumulation UL | Current Assumption UL |
|------------------------|---------|------|----------------------|-----------------------|
| PPGA | 16% | 19% | 34% | 22% |
| Brokerage | 57% | 52% | 37% | 44% |
| Career Agent | 25% | 27% | 29% | 33% |
| Stockbrokers | 2% | 2% | < 1% | < 1% |
| Financial Institutions | < 1% | < 1% | < 1% | < 1% |

ULSG sales had the highest average issue age (66), followed by current assumption UL (65) and cash accumulation UL (58). The gender mix by product type is shown in the table below:

| Product Type | Male | Female |
|---------------------|-------|--------|
| Total Individual UL | 61.5% | 38.5% |
| ULSG | 56.3% | 43.7% |
| Cash Accumulation | 69.0% | 31.0% |
| Current Assumption | 63.8% | 36.2% |

Profit Measures

The primary profit measure assumed in pricing by the majority of survey participants is a statutory ROI/IRR on an after-tax and after-cost of capital basis. The median target ROI/IRR for cash accumulation UL

was the highest at 12.00 percent, followed by current assumption UL at 11.90 percent and then by cash accumulation UL at 11.65 percent.

Actual results relative to profit goals were reported by survey participants. Results for all product types were very favorable:

- 67 percent of ULSG and cash accumulation UL participants reported they are meeting their goals.
- 75 percent of current assumption UL participants reported they are meeting pricing goals.
- One ULSG participant, four cash accumulation participants and one current assumption UL participant reported their actual results exceeded their profit goals.

Target Surplus

The majority of survey participants reported target surplus on an NAIC risk-based capital (RBC) basis. The overall target NAIC RBC percentage ranged from 200- to 300-percent for all markets. The following table shows the median components of RBC by UL product type:

| Product Type | Median Component of Target RBC | | | |
|--------------------|--------------------------------|----------|---------------|--------------|
| | Overall Target NAIC RBC% | % of NAR | % of Reserves | % of Premium |
| ULSG | 250% | 0.12% | 2.78% | 5.00% |
| Cash Accumulation | 250% | 0.20% | 2.65% | 5.00% |
| Current Assumption | 250% | 0.08% | 3.54% | 5.00% |

Reserves

When asked about their outlook regarding principle-based reserves (PBR), participants' responses were nearly evenly split among an immaterial, positive and negative impact. Most respondents to the survey expect that PBR will be in place in 2010 at the earliest. Nearly 53 percent of participants have not performed modeling of PBR-type reserves on existing UL products. An overwhelming majority of survey participants have not

developed new designs for consideration under PBR.

Eight of 17 survey participants are moving toward preferred mortality splits and lapses in reserves (the interim solution). Four participants reported they will not be reflecting such factors for various reasons, including its cost, insignificant impact, added complication, etc.

Risk Management

All survey participants use external reinsurance on a yearly renewable term (YRT) basis. Of those responding, nearly 93 percent of participants reported that their external reinsurance is on an onshore basis. Six participants reported the use of internal reinsurance with nearly an even split between those using onshore and offshore reinsurance. Few participants have accessed the capital markets for support or structured capital solutions that allow them to hold AXXX-type reserves as tax reserves.

Retention limits reported by survey participants ranged from \$350,000 up to \$25 million. The median limit reported is \$10 million. Eight of the 18 participants reduce their retention limits at older ages.

Underwriting

Table shaving programs are becoming less common as evidenced by responses to the UL survey. Seven of the 18 participants currently are offering such a program, with at least one carrier intending to discontinue the program and another noting it will not offer its table-shaving program in its current form. Two participants reported they have made modifications to their table-shaving programs within the last two years. The table-shaving program is offered up to age 70 by five of the seven participants, to age 80 by one participant, and to all ages by another participant.

New underwriting developments are being used by 10 survey participants, especially at the older ages. The following table

summarizes the number of survey participants using various underwriting process:

| Underwriting Process | Number of Participants Using |
|---|------------------------------|
| Tele-underwriting or telephonic screening | 8 |
| Cognitive impairment testing | 9 |
| Activities of Daily Living (ADL) measures | 10 |
| Additional question on the application | 6 |

The majority of survey participants (11) have not created any unique preferred risk parameters for the older ages.

2001 CSO Mortality Issues

Nearly all participants assess cost of insurance (COI) charges beyond age 100 on plans that utilize the 2001 CSO Mortality Table. Survey participants were asked to rank in order of significance various areas of change with respect to 2001 CSO product designs. The following table summarizes the rankings and shows that the most significant area of change reported by survey participants is lower guideline premium limits.

| Item | Ranked #1 | Ranked in the Top 2 | Ranked in the Top 3 |
|--|-----------|---------------------|---------------------|
| Lower guideline premium limits | 9 | 15 | 17 |
| Enhanced primary guarantees | 3 | 7 | 11 |
| Higher CVAT requirements (higher death benefits relative to cash values) | 2 | 7 | 11 |
| Other | 2 | 4 | 4 |
| Allowed use of interim tables | 1 | 1 | 8 |

Compensation

Survey participants reported total compensation across all levels of producers, with the exception of brokerage general agent (BGA) bonuses. Compensation structures among survey participants are quite varied. In many cases, commissions do not vary by product type. Median commissions,

continued on page 14

as well as the range of commissions, were similar between ULSG and cash accumulation UL products. Current assumption UL products had slightly higher first year commissions up to target. Following is a summary of the primary components of compensation by product type:

| Component | Median | | |
|--|--------|-------------------|--------------------|
| | ULSG | Cash Accumulation | Current Assumption |
| Typical first-year commission – up to target | 90% | 90% | 94% |
| Typical first-year commission – excess | 3.00% | 3.00% | 3.00% |
| Typical renewal commission | 3.00% | 3.25% | 3.00% |

Pricing

A portfolio crediting strategy is assumed in pricing ULSG products by the majority of participants (11 out of 18). Earned rates assumed in pricing ULSG products ranged from 5.75- to 6.50-percent, with an average earned rate of about 6.17 percent.

Survey participants reported that ultimate lapse rates assumed in pricing range from 0- to 7-percent (UL business with and without secondary guarantees). The median ultimate lapse rate reported by participants is 1 percent. If a ULSG secondary guarantee is in the money, the most frequent response for the ultimate lapse rate assumption is 0 percent. The level of ultimate lapse rates reported when the secondary guarantee is not in the money ranged from 0- to 6-percent. Nearly all survey participants test sensitivities with respect to lapse rates in the tail on ULSG products.

The majority of survey participants reported that the slope of their pricing mortality assumption is more similar to the Valuation Basic Table than the 1975-1980 Select & Ultimate Table. Mortality improvement is assumed in pricing UL products by the majority of participants and is reflected explicitly in almost all cases. The majority of participants apply mortality improvement for 10 to 20 years. Mortality improvement factors for males ranged from 0.25- to 1.40-percent and for females from 0.25- to 0.60-percent. The use of mortality improvement reported by survey participants is higher than what has been seen in previous surveys conducted by the Society of Actuaries' regarding the use of mortality improvement by direct writers.

Conclusion

The UL market is a dynamic and ever-changing market. UL insurers must be creative in dealing with the many issues and challenges they face. In many cases, procedures and assumptions are developed based on limited experience and guidance. The UL survey provides carriers with a benchmark for those issues where experience and guidance are not available.

A summary of the Universal Life / Indexed Universal Life Issues report may be found at <http://www.milliman.com/expertise/life-financial/publications/rr>. □