

MILLIMAN RESEARCH REPORT

UNIVERSAL LIFE AND INDEXED UNIVERSAL LIFE ISSUES

2018/2019 Executive Summary

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Background

Universal life (UL) and indexed universal life (IUL) continue to play a significant role in the life insurance market today. In recent years, the market share of UL and IUL products combined has consistently been in the range of 35% to 40%¹ of total life sales measured by first-year premium. IUL has continued to drive strong sales growth in recent years. (Throughout this report, IUL products are not included when using the term “UL.”) In 2018, Milliman conducted its 12th annual comprehensive survey aimed at addressing UL and IUL issues, and to provide carriers with competitive benchmarking to evaluate where they stand relative to their peers. Survey topics and questions were determined based on input from Milliman consultants, as well as participants in the prior year’s survey. The survey is updated annually to include current topics of interest.

The survey was sent via email to UL/IUL insurance companies on November 7, 2018; 29 companies submitted responses. The companies that participated in the study were:

- Allianz
- Amerigo
- Ameriprise
- AXA
- Bankers Life
- Brighthouse Financial
- Cincinnati Life
- Columbus Life
- EquiTrust
- Foresters
- Global Atlantic
- John Hancock
- Kansas City Life
- Lincoln Financial
- Mass Mutual
- Mutual of Omaha
- Modern Woodmen of America
- Nationwide
- New York Life
- Ohio National
- Principal
- Protective Life
- Sammons Financial Group
- Securian
- State Farm
- Symetra
- Thrivent Financial
- TIAA-CREF
- Transamerica

The questions asked of survey participants can be found in the Appendix.

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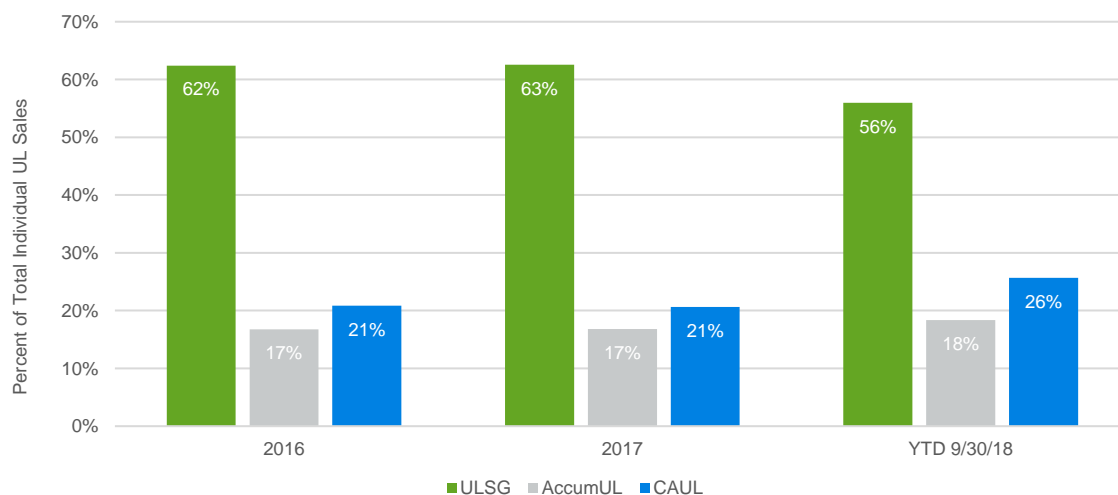
¹ According to LIMRA’s U.S. Retail Individual Life Insurance Sales reports.

Executive Summary

UNIVERSAL LIFE SALES DETAILS

Survey participants reported total individual UL sales, measured by the sum of recurring premiums plus 10% of single premiums, of \$1,103.6 million, \$1,015.0 million, and \$638.5 million, respectively, for calendar years 2016, 2017, and for 2018 as of September 30, 2018 (YTD 9/30/18). Of the 29 survey participants, 17 reported both UL and IUL sales, nine reported UL sales only, and three reported IUL sales only. The graph in Figure 1 illustrates the UL product mix as reported by survey participants from 2016 through YTD 9/30/18. The term “total individual UL” includes UL with secondary guarantees (ULSG), cash accumulation UL (AccumUL), and current assumption UL (CAUL) throughout this report. Definitions are included in Appendix I. The ULSG market share was stable from 2016 to 2017 and decreased for the period YTD 9/30/18. The market share for AccumUL was stable throughout the survey period. For CAUL, the market share was stable from 2016 to 2017 and increased during YTD 9/30/18.

FIGURE 1: UL PRODUCT MIX BY YEAR²



Relative to prior years, fewer participants reported a shift of at least 10% from or to any one UL product over the survey period; two participants reported a shift of this magnitude. In addition, two participants discontinued sales of AccumUL, and one discontinued sales of ULSG products.

There was a significant decrease in UL sales when comparing 2017 sales to annualized YTD 9/30/18 sales. Total individual UL sales decreased 16%, with 15 of the 26 participants reporting decreases in their UL sales. Twelve of the 15 reported decreases of 15% or more. The decline in sales was primarily driven by a 25% decrease in ULSG sales. In addition, six of the 15 participants appear to be focusing less on UL sales and more on IUL sales. These six reported significant increases in IUL sales from 2017 to YTD 9/30/18 (on an annualized basis).

Premium issued, the number of policies issued, and face amount issued reported by survey participants were used to determine the overall weighted average premium per policy and weighted average face amount per policy. Per Figure 2, ULSG average premium per policy was stable from 2016 to 2017 and then increased during YTD 9/30/18. For AccumUL, the average premium per policy remained stable throughout the survey period. CAUL average premium per policy increased year-over-year from 2016 to YTD 9/30/18. Per Figure 3, the average face amount per policy for ULSG decreased from 2016 to YTD 9/30/18. For AccumUL, the average face amount per policy was stable throughout the survey period. The average face amount per policy for CAUL decreased from 2016 to 2017, and then increased in YTD 9/30/18.

The highest weighted average premium per policy among the UL product types was reported for CAUL in all periods. The highest weighted average face amount per policy for all periods was reported for ULSG.

² Figure 1 will be shown again as Figure 20 in the body of the report.

FIGURE 2: UL WEIGHTED AVERAGE PREMIUM PER POLICY BY PRODUCT TYPE³

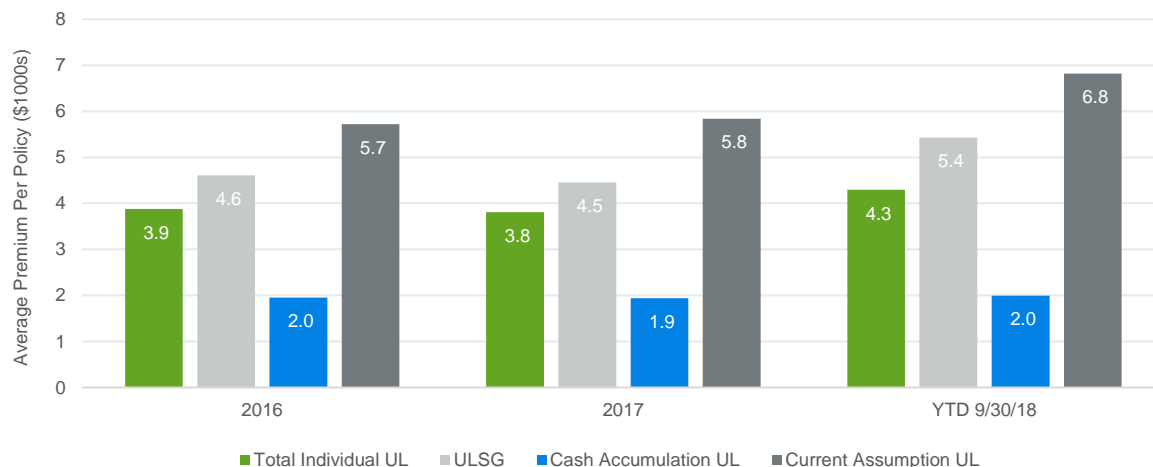
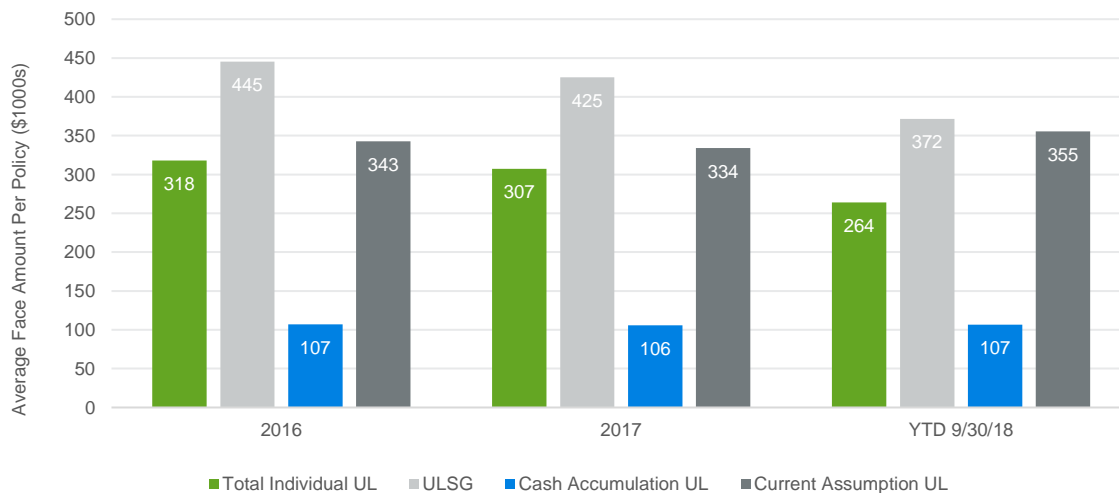


FIGURE 3: UL WEIGHTED AVERAGE FACE AMOUNT PER POLICY BY PRODUCT TYPE⁴



Expectations regarding the mix of UL/IUL business in the future vary widely by company. *Overall survey statistics suggest that companies plan to focus more on IUL with secondary guarantees (IULSG) and current assumption IUL (CAIUL) products, with less focus on cash accumulation IUL (AccumIUL) and ULSG products.*

Average issue age (weighted by premium) was determined for sales based on the midpoint of specified issue age ranges. Generally, average issue ages increased by one to two years from 2017 to YTD 9/30/18. Please note that throughout this report average issue ages were rounded to the nearest integer prior to the calculation of any differences. The table in Figure 4 shows a summary of the average issue ages calculated based on sales reported by issue age range for 2017 and YTD 9/30/18. AccumUL has lower issue ages than those reported for ULSG and CAUL.

³ Figure 2 will be shown again as Figure 29 in the body of the report.

⁴ Figure 3 will be shown again as Figure 30 in the body of the report.

FIGURE 4: UL WEIGHTED AVERAGE ISSUE AGES⁵

| CALENDAR YEAR | TOTAL INDIVIDUAL UL | ULSG | ACCUMUL | CAUL |
|-------------------|---------------------|------|---------|------|
| 2017 SALES | 59 | 60 | 54 | 62 |
| YTD 9/30/18 SALES | 61 | 61 | 56 | 64 |

A weighted average issue age was also calculated based on the total individual UL sales reported by underwriting class and issue age range. Average issue ages were determined based on the midpoint of the issue age range, and separately for each underwriting class. The table in Figure 5 shows a summary of the resulting average issue ages. The average issue age ranged from 53 to 66 in 2017 and from 51 to 67 during YTD 9/30/18. The largest drop in the average issue age from 2017 to YTD 9/30/18 was four years and it occurred in the third-best smoker/tobacco (S/T) class and lower. Only seven participants reported sales in this class, so the data is thin when spread across issue age categories.

FIGURE 5: TOTAL INDIVIDUAL UL WEIGHTED AVERAGE ISSUE AGES BY UNDERWRITING CLASS⁶

| UNDERWRITING CLASS | BASED ON 2017 PREMIUM | BASED ON YTD 9/30/18 PREMIUM |
|----------------------------------|-----------------------|------------------------------|
| NS/NT | 59 | 61 |
| S/T | 53 | 52 |
| | | |
| BEST NS/NT CLASS | 57 | 59 |
| SECOND-BEST NS/NT CLASS | 60 | 61 |
| THIRD-BEST NS/NT CLASS | 60 | 61 |
| FOURTH-BEST NS/NT CLASS | 57 | 58 |
| FIFTH-BEST NS/NT CLASS AND LOWER | 66 | 67 |
| BEST S/T CLASS | 53 | 53 |
| SECOND-BEST S/T CLASS | 53 | 51 |
| THIRD-BEST S/T CLASS AND LOWER | 58 | 54 |

UL sales were reported by 21 participants based on underwriting approach and underwriting class. Underwriting approaches were defined as follows:

- Simplified issue (SI) underwriting: Less than a complete set of medical history questions and no medical or paramedical exam.
- Accelerated underwriting (AU): The use of tools such as a predictive model to waive requirements such as fluids and a paramedical exam on a fully underwritten product for qualifying applicants without charging a higher premium than if fully underwritten.
- Fully underwritten: Complete set of medical history questions and medical or paramedical exam, except where age and amount limits allow for nonmedical underwriting.

For AU sales, participants were instructed to include total sales for products under which AU is offered. *The distribution of 2017 UL sales (on a premium basis) by underwriting approach was 14.0% SI, 0.9% AU, and 85.0% fully underwritten. For YTD 9/30/18 UL sales, the distribution by underwriting approach was 17.8% SI, 2.9% AU, and 79.3% fully underwritten. This demonstrates the gradual shifting from full underwriting to SI and AU approaches.* Details may be found in the report regarding the distribution of UL sales within each of these underwriting approaches.

⁵ Figure 4 includes information shown in Figures 36 and 39 in the body of the report.

⁶ Figure 5 includes information shown in Figure 50 in the body of the report.

Survey participants reported the distribution of UL sales by death benefit option for calendar year 2017 and YTD 9/30/18. For all UL products, the majority of sales were reported for death benefit option A/option 1. ULSG products had the highest allocation of death benefit option A. AccumUL products had the highest allocation for death benefit option B, and CAUL products had the highest allocation for death benefit option C. The distribution of UL sales by death benefit option remained stable between 2017 and YTD 9/30/18 for total individual UL and ULSG. For AccumUL, from 2017 to YTD 9/30/18 there was a shift of 6.3% across all policies from option B to option A. For CAUL, there was a shift of 4.8% from option A primarily to option C (4.0%). Figure 6 includes the distribution of UL sales by death benefit option for 2017 and YTD 9/30/18.

FIGURE 6: DISTRIBUTION OF UL SALES BY DEATH BENEFIT OPTION⁷

| DEATH BENEFIT OPTION | TOTAL INDIVIDUAL UL | ULSG | ACCUMUL | CAUL |
|------------------------------------|---------------------|-------|---------|-------|
| 2017 SALES (PREMIUM) | | | | |
| OPTION A/OPTION 1 | 95.9% | 99.8% | 83.9% | 96.0% |
| OPTION B/OPTION 2 | 3.9% | <0.1% | 16.1% | 3.7% |
| OPTION C/OPTION 3 | 0.2% | 0.2% | <0.1% | 0.4% |
| YTD 9/30/18 SALES (PREMIUM) | | | | |
| OPTION A/OPTION 1 | 95.5% | 99.8% | 90.2% | 91.2% |
| OPTION B/OPTION 2 | 3.5% | <0.1% | 9.8% | 4.5% |
| OPTION C/OPTION 3 | 1.0% | 0.2% | <0.1% | 4.4% |

INDEXED UNIVERSAL LIFE SALES DETAILS

Of the 29 survey participants, 20 reported IUL sales. Survey participants reported total IUL sales, also measured by the sum of recurring premiums plus 10% of single premiums, of \$1,135.9 million, \$1,140.6 million, and \$873.8 million, respectively, for calendar years 2016, 2017, and for YTD 9/30/18. *IUL sales during YTD 9/30/18 accounted for 58% of total UL/IUL sales combined (reported by survey participants) during YTD 9/30/18, increasing by 7% relative to the 51% of total sales it represented in 2016.* The term “total individual IUL” includes IULSG, AccumIUL, and CAIUL. Definitions are included in Appendix I.

The sales percentage increased for AccumIUL from 2016 to YTD 9/30/18 from 84% to 86% of total AccumUL/IUL sales. IULSG sales also increased from 7% to 14% of total combined ULSG/IULSG sales over the survey period. CAIUL sales increased from 2016 to YTD 9/30/18 as a percentage of total combined UL/IUL current assumption sales. The increase was from 27% to 32%. AccumIUL products dominated the IUL market during the survey period with a market share that ranged from 84% to 88%. The market share of IULSG products ranged from 5% to 7% from 2016 to YTD 9/30/18. CAIUL market share ranged from 7% to 9% over the survey period.

Figure 7 will focus primarily on characteristics of AccumIUL products because they are such a significant part of the IUL market. It shows the weighted average premium per policy and weighted average face amount per policy for AccumIUL over the survey period. The weighted average premium per policy increased year-over-year during the survey period. The weighted average face amount per policy increased from 2016 through 2017, and then decreased slightly during YTD 9/30/18.

FIGURE 7: ACCUMIUL WEIGHTED AVERAGE PREMIUM PER POLICY AND FACE AMOUNT PER POLICY⁸

| CALENDAR YEAR | WEIGHTED AVERAGE PREMIUM PER POLICY | WEIGHTED AVERAGE FACE AMOUNT PER POLICY |
|---------------|-------------------------------------|---|
| 2016 | \$5,831 | \$368,623 |
| 2017 | \$6,263 | \$383,123 |
| YTD 9/30/18 | \$6,678 | \$382,821 |

⁷ Figure 6 includes information shown in Figure 67 in the body of the report.

⁸ Figure 7 includes information shown in Figures 78 and 79 in the body of the report.

A weighted average issue age was determined for IUL sales of survey participants based on the midpoint of specified issue age ranges and reported premiums. The average issue age from 2017 to YTD 9/30/18 stayed the same for AccumIUL. The table in Figure 8 summarizes the average issue ages calculated based on sales reported by issue age range for all IUL products, and for 2017 and YTD 9/30/18.

Average issue ages for IUL products are lower than those for UL products in both 2017 and YTD 9/30/18. The difference is three years for secondary guarantee products, and four years for current assumption products. For 2017, the average issue age for AccumIUL is three years younger than the average for AccumUL sales, and during YTD 9/30/18 it is five years younger. For total individual UL/IUL, the difference in average issue ages was seven years and nine years for 2017 and YTD 9/30/18, respectively. The large difference is due to UL products being weighted more toward the older average age ULSG products and IUL products being weighted more toward the lower average age AccumIUL products. See Figure 4 versus Figure 8.

FIGURE 8: IUL WEIGHTED AVERAGE ISSUE AGES⁹

| BASIS OF SALES (PREMIUM) | TOTAL INDIVIDUAL IUL | IULSG | ACCUMIUL | CURRENT ASSUMPTION IUL |
|--------------------------|----------------------|-------|----------|------------------------|
| 2017 SALES | 52 | 57 | 51 | 58 |
| YTD 9/30/18 SALES | 52 | 58 | 51 | 60 |

A weighted average issue age was also calculated based on the total individual IUL sales reported by underwriting class and issue age range. Weighted average issue ages were determined based on the midpoint of the issue age range, and separately for each underwriting class. The table in Figure 9 shows a summary of the resulting weighted average issue ages. In 2017, the average issue age ranged from 49 to 58. Similarly, for YTD 9/30/18, the average issue age ranged from 47 to 58. From 2017 to YTD 9/30/18, the biggest changes were seen in the smoker classes where the average issues ages dropped four years in the best and third-best S/T classes.

FIGURE 9: TOTAL INDIVIDUAL IUL WEIGHTED AVERAGE ISSUE AGES BY UNDERWRITING CLASS¹⁰

| UNDERWRITING CLASS | BASED ON 2017 PREMIUM | BASED ON YTD 9/30/18 PREMIUM |
|----------------------------------|-----------------------|------------------------------|
| NS/NT | 52 | 52 |
| S/T | 51 | 48 |
| | | |
| BEST NS/NT CLASS | 49 | 49 |
| SECOND-BEST NS/NT CLASS | 49 | 50 |
| THIRD-BEST NS/NT CLASS | 56 | 55 |
| FOURTH-BEST NS/NT CLASS | 58 | 58 |
| FIFTH-BEST NS/NT CLASS AND LOWER | 51 | 52 |
| BEST S/T CLASS | 51 | 47 |
| SECOND-BEST S/T CLASS | 49 | 49 |
| THIRD-BEST S/T CLASS AND LOWER | 55 | 51 |

IUL sales were reported by 17 participants based on underwriting approach and underwriting class. Sales were split by SI, AU, and full underwriting. *The distribution of 2017 IUL sales (on a premium basis) by underwriting approach was 1.7% SI, 17.3% AU, and 81.0% fully underwritten. For YTD 9/30/18 IUL sales, the distribution by underwriting approach was 1.6% SI, 24.6% AU, and 73.7% fully underwritten. From 2017 to YTD 9/30/18, overall there was a shift from fully underwritten business to AU business. The 7.3% shift from fully underwritten business to AU was primarily driven by one participant that shifted all of its fully underwritten business to*

⁹ Figure 8 includes information shown in Figures 83 and 86 in the body of the report.

¹⁰ Figure 9 will be shown again as Figure 97 in the body of the report.

AU. The percentage of IUL business subject to AU is much larger than that reported on UL business. The difference may be attributed to the greater level of new IUL product development in recent years, relative to new UL product development. IUL writers are likely including new underwriting approaches, such as AU, in the development process. Further details may be found in the report regarding the distribution of IUL sales within each of these underwriting approaches.

Survey participants reported the distribution of IUL sales by death benefit option for calendar year 2017 and YTD 9/30/18. For all IUL products, the majority of sales were reported for death benefit option A. IULSG products had the highest allocation of death benefit option A and AccumIUL products had the highest for death benefit option B. CAIUL products have the highest allocation for death benefit option C in 2017, and AccumIUL caught up in YTD 9/30/18. For AccumIUL, from 2017 to YTD 9/30/18 there was a shift from option A (2.9%) to both option B (1.7%) and option C (1.2%). Figure 10 includes the distribution of total individual IUL sales by death benefit for 2017 and YTD 9/30/18. Sales with death benefit option B were significantly higher for indexed UL products than for UL products, in both 2017 and during YTD 9/30/18. The difference is driven by the distribution of AccumIUL products, with nearly a 50-50 mix between death benefit options A and B.

FIGURE 10: DISTRIBUTION OF IUL SALES BY DEATH BENEFIT OPTION ¹¹

| DEATH BENEFIT OPTION | TOTAL INDIVIDUAL IUL | IULSG | ACCUMIUL | CAIUL |
|------------------------------------|----------------------|-------|----------|-------|
| 2017 SALES (PREMIUM) | | | | |
| OPTION A/OPTION 1 | 57.9% | 88.8% | 52.5% | 88.1% |
| OPTION B/OPTION 2 | 41.9% | 11.1% | 47.3% | 10.7% |
| OPTION C/OPTION 3 | 0.3% | 0.1% | 0.2% | 1.2% |
| YTD 9/30/18 SALES (PREMIUM) | | | | |
| OPTION A/OPTION 1 | 55.1% | 93.9% | 49.6% | 87.0% |
| OPTION B/OPTION 2 | 43.6% | 6.0% | 49.0% | 11.6% |
| OPTION C/OPTION 3 | 1.3% | 0.1% | 1.4% | 1.4% |

SALES WITH CHRONIC ILLNESS RIDERS

There are three common approaches to chronic illness accelerated death benefit (ADB) riders. Under the discounted death benefit approach a discounted percentage of the face amount reduction is paid, with the face amount reduction occurring at the same time as the accelerated benefit payment. There is no need for charges up front or other premium requirements because the insurer covers its costs of early payment of the death benefit via a discount factor. The second approach is the lien approach, in which payment of the accelerated death benefit is considered a lien or offset against the death benefit. Access to the cash value is limited to the excess of the cash value over the sum of any other outstanding loans and the lien. Future premiums or charges for the coverage are not affected, and the gross cash value continues to grow as if the lien did not exist. The third common approach is the dollar-for-dollar death benefit reduction approach. Under this approach, when an ADB is paid, there is a dollar-for-dollar reduction in the specified amount or face amount and a pro rata reduction in the cash value based on the percentage of the specified amount or face amount that was accelerated. This approach requires an explicit charge for the ADB for chronic illness rider.

Of the 26 participants reporting UL sales, nine reported UL sales with chronic illness ADB riders. These nine reported sales of \$158.0 million, \$102.5 million, and \$73.1 million, respectively, for 2016, 2017, and YTD 9/30/18. The total face amount issued for UL policies with chronic illness riders was reported as \$10.4 billion for 2016, \$7.6 billion for 2017, and \$5.0 billion during YTD 9/30/18.

Eleven of the 20 IUL survey participants reported IUL sales with chronic illness ADB riders. Eight of the 11 also reported UL sales with chronic illness riders. Total indexed UL sales with chronic illness riders were reported equal to \$242.9 million in 2016 and \$327.1 million in 2017 by 10 participants. Sales reported by 11 participants equaled \$286.8 million during YTD 9/30/18. The total face amount issued for IUL policies with chronic illness riders was \$11.1 billion, \$15.4 billion, and \$13.4 billion, respectively, for 2016, 2017, and YTD 9/30/18.

¹¹ Figure 10 includes information shown in Figure 114 in the body of the report.

The table in Figure 11 shows a summary of sales of chronic illness riders as a percentage of total sales by premium (separately for UL and IUL products). *During YTD 9/30/18, sales of chronic illness riders as a percentage of total sales were 11.5% for UL products and 32.8% for IUL products.* This difference may also be a result of the greater level of new IUL product development in recent years, relative to new UL product development. IUL writers are likely including new chronic illness riders in the development process.

FIGURE 11: CHRONIC ILLNESS RIDER SALES AS A PERCENTAGE OF TOTAL SALES¹²

| CALENDAR YEAR | TOTAL INDIVIDUAL UL | ULSG | ACCUMUL | CAUL |
|--|---------------------|-------|---------|------|
| UL SALES WITH CHRONIC ILLNESS RIDERS AS A PERCENT OF TOTAL UL SALES | | | | |
| 2016 | 14.3% | 17.5% | 14.4% | 4.7% |
| 2017 | 10.1% | 10.6% | 18.3% | 4.7% |
| YTD 9/30/18 | 11.5% | 10.6% | 23.5% | 4.7% |
| IUL SALES WITH CHRONIC ILLNESS RIDERS AS A PERCENT OF TOTAL IUL SALES | | | | |
| 2016 | 21.4% | 15.4% | 22.9% | 7.5% |
| 2017 | 28.7% | 28.0% | 31.1% | 7.0% |
| YTD 9/30/18 | 32.8% | 33.1% | 35.2% | 9.1% |

The weighted average issue age for UL/IUL products with chronic illness riders equaled 54 in both 2017 and YTD 9/30/18 on a premium basis.

Five of nine survey participants that reported UL sales with chronic illness riders automatically included them with the base UL policy. Across all periods in the survey, the average election rates ranged from 16% to 18% for the participants that do not automatically include the rider with the base UL policy. Six of 11 IUL participants automatically include chronic illness riders with the base IUL policy. Across all periods in the survey, the average election rates reported by the participants that do not automatically include the rider with the base IUL policy ranged from 40% to 45%. *Seven of 13 participants that reported UL/IUL sales with chronic illness riders provide a discounted death benefit as an accelerated benefit. Three participants reported their chronic illness riders use a lien against the death benefit to provide the accelerated benefit. Another two use a dollar-for-dollar discounted death benefit reduction approach. The final participant uses both the discounted death benefit approach and the dollar-for-dollar death benefit reduction approach.*

SALES WITH LONG-TERM CARE (LTC) RIDERS

Of the 26 survey participants reporting UL sales, seven reported UL sales with long-term care (LTC) riders. Similarly, of the 20 survey participants reporting IUL sales, eight reported IUL sales with long-term care (LTC) riders. One of the eight reported sales for 2016 only and another for YTD 9/30/18 only. For the latter, sales were reported only by premium, because sales by face amount were not available. Figure 12 includes a summary of total UL and total IUL sales with LTC riders. In addition to the sale of LTC ADB riders, two of the seven UL participants also reported sales of an extension of benefits (EOB) rider and an inflation protection (IPR) rider, although others that offer these riders did not report sales here. The eight IUL participants reported sales of LTC ADB riders only.

FIGURE 12: TOTAL LTC RIDER SALES¹³

| CALENDAR YEAR | UL SALES WITH LTC RIDERS (\$ MILLIONS) | | | IUL SALES WITH LTC RIDERS (\$ MILLIONS) | | |
|------------------------|--|-----------------|---------------------|---|-----------------|---------------------|
| | NUMBER OF RESPONSES | SALES (PREMIUM) | SALES (FACE AMOUNT) | NUMBER OF RESPONSES | SALES (PREMIUM) | SALES (FACE AMOUNT) |
| 2016 | 7 | \$258.0 | \$4,731.1 | 7 | \$147.2 | \$9,421.2 |
| 2017 | 7 | \$304.6 | \$5,053.5 | 6 | \$230.2 | \$15,494.1 |
| YTD 9/30/18 | 6 | \$198.4 | \$3,260.0 | 7/6 | \$166.0 | \$11,478.8 |
| YTD 9/30/18 ANNUALIZED | 6 | \$264.6 | \$4,346.7 | 7/6 | \$221.3 | \$15,305.1 |

¹² Figure 11 includes information shown in Figures 119 and 124 in the body of the report.

¹³ Figure 12 includes information shown in Figures 149 and 155 in the body of the report.

Sales of policies with LTC riders as a percentage of total sales (measured by premiums, and weighting single premium sales at 10%) are shown in Figure 13. During YTD 9/30/18, sales of LTC riders as a percentage of total sales by premium were 31.1% for UL products and 19.0% for IUL products.

FIGURE 13: LTC RIDER SALES AS A PERCENTAGE OF TOTAL SALES BY PREMIUM¹⁴

| CALENDAR YEAR | TOTAL INDIVIDUAL UL | ULSG | ACCUMUL | CAUL |
|--|---------------------|-------|---------|-------|
| UL SALES WITH LTC RIDERS AS A PERCENT OF TOTAL UL SALES | | | | |
| 2016 | 23.4% | 33.0% | 0.9% | 12.5% |
| 2017 | 30.0% | 42.2% | 2.3% | 15.7% |
| YTD 9/30/18 | 31.1% | 46.6% | 6.0% | 15.1% |
| IUL SALES WITH LTC RIDERS AS A PERCENT OF TOTAL IUL SALES | | | | |
| 2016 | 13.0% | 9.1% | 12.8% | 16.9% |
| 2017 | 20.2% | 32.0% | 19.5% | 18.0% |
| YTD 9/30/18 | 19.0% | 33.1% | 17.4% | 24.1% |

Weighted average issue ages (based on premium) were 56 in both 2017 and YTD 9/30/18.

Of the seven survey participants that reported UL sales with LTC riders, one automatically includes the ADB rider with the base UL policy. Two participants reported that some of their UL LTC ADB riders are automatically included and others are not. The other four do not automatically include the ADB rider with the base UL policy. For EOB and IPR riders, three participants do not automatically include them. Note that only two of the participants reported UL sales with EOB and IPR riders, although, as noted above, others offer them. The average election rates for LTC ADB-only riders on UL products were 22.3% in 2016, 27.9% in 2017, and 37.4% during YTD 9/30/18 for those that offer LTC riders.

None of the eight participants reporting IUL sales with LTC riders automatically include LTC ADB riders with the base IUL policy. The average election rates for LTC ADB-only riders on IUL products were 26.6% in 2016, 37.1% in 2017, and 33.7% during YTD 9/30/18. Although none of the eight participants reported IUL sales with EOB or IPR riders, some offer these riders.

PROFIT MEASURES

The predominant profit measure reported by survey participants continues to be an after-tax, after-capital statutory return on investment/internal rate of return (ROI/IRR). The median ROI/IRR reported is 12.0% for CAUL, AccumIUL, and CAIUL products, 10.3% for AccumUL, and 10.0% for ULSG and IULSG. Four participants reported changes to profit measures or goals in the last two years and all reported a reduction in profit targets. The first reported its profit target is lower due to competitive pressures and the environment. The second decreased its target due to competition and sales below the targeted volume. The third indicated the pricing target was reduced based on a new framework that ties its profit goals to the company's ability to realize equilibrium between capital growth and pricing returns. The fourth participant reported it has been willing to accept a lower "statutory profit margin target" as long as its IRR target is met.

Survey participants reported their actual results relative to profit goals for 2017. *The percentage of participants reporting actual results were short of profit goals was 33% (CAUL and CAIUL), followed by 20% (ULSG), and 17% (AccumUL and AccumIUL). For YTD 9/30/18, 33% were short of their profit goals for CAUL and CAIUL, 28% for AccumUL, 20% for ULSG, 17% for AccumIUL, and 14% for IULSG. As in the past, the primary reasons reported for not meeting profit goals in 2017 and YTD 9/30/18 were low interest earnings and mortality.*

TARGET SURPLUS

The majority of survey participants continue to set target surplus pricing assumptions as a percentage of the National Association of Insurance Commissioners (NAIC) company action level. The overall NAIC risk-based capital (RBC) percentage of company action level ranged from 250% to 750%. Removing one outlier, the range is 250% to 450%, which is similar to the range reported by participants last year, but with a slightly higher maximum. The report includes details about the overall NAIC RBC percentage, broken down by component, and is shown by UL/IUL product type.

¹⁴ Figure 13 includes information shown in Figures 154 and 160 in the body of the report.

RESERVES

Twenty-six survey participants reported their timing for the implementation of principle-based reserves (PBR). Figure 14 shows a summary of responses by UL/IUL product type. The majority reported implementing PBR in 2019 and 2020. Implementation of PBR on IUL products appears to be ahead of that for UL products. Factors impacting the rationale for participants' implementation plans include resource issues, time needed, financial impact, regulatory issues (including New York's adoption of PBR), product competitiveness, PBR implementation of other products first, and delaying as long as possible until required.

FIGURE 14: PBR IMPLEMENTATION DATES¹⁵

| IMPLEMENTATION TIMING | NUMBER OF PARTICIPANTS IMPLEMENTING PBR FOR: | | | | | |
|------------------------------|--|---------|------|-------|----------|-------|
| | ULSG | ACCUMUL | CAUL | IULSG | ACCUMIUL | CAIUL |
| ALREADY IMPLEMENTED ... 2017 | 0 | 0 | 1 | 0 | 1 | 1 |
| 2018 | 1 | 0 | 1 | 1 | 2 | 2 |
| 2019 | 7 | 6 | 2 | 2 | 9 | 4 |
| 2020 | 8 | 9 | 8 | 4 | 6 | 2 |

Similar to PBR implementation, survey participants also reported the issue year for implementing the 2017 CSO Mortality Table. Figure 15 includes a summary of the responses from a different group of 26 participants. The majority plan to implement the 2017 CSO in 2019. Ten participants reported the same implementation year for both PBR and the 2017 CSO. Four plan to implement both in 2020, another four in 2019, and one in 2018. The 10th participant plans to implement both on some UL/IUL products in 2019 and on others in 2020.

FIGURE 15: 2017 CSO MORTALITY IMPLEMENTATION DATES¹⁶

| IMPLEMENTATION TIMING | NUMBER OF PARTICIPANTS IMPLEMENTING 2017 CSO FOR: | | | | | |
|------------------------------|---|---------|------|-------|----------|-------|
| | ULSG | ACCUMUL | CAUL | IULSG | ACCUMIUL | CAIUL |
| ALREADY IMPLEMENTED ... 2017 | 1 | 1 | 0 | 0 | 2 | 0 |
| 2018 | 4 | 2 | 1 | 2 | 1 | 3 |
| 2019 | 5 | 10 | 6 | 5 | 12 | 4 |
| 2020 | 4 | 3 | 4 | 1 | 2 | 0 |

At the time of the survey, recent action had been taken by regulators to reexpose Amendment Proposal Form (APF) 2018-44, which modified the equity returns assumed in the calculation of the deterministic reserve (DR) under Valuation Model (VM)-20 for indexed products. The existing economic scenario 12 equity return assumption equals 4.00% for 20 years, inclusive of the dividend yield, followed by 7.50%. APF 2018-44 suggests that, instead of using scenario 12, the DR for IUL products should be calculated based on a percentage of the amount spent on options, accumulated to the end of the option settlement period. The current requirement is to use 100% of the amount spent on options in years 1 to 20 and 108% in years 21 and thereafter. Nine of 22 participant responses indicated support for the proposal. Five responses were mixed, indicating no strong support or opposition to the proposal. The remaining nine participants reported they had no opinion, or this question is not applicable to them.

Responses were varied by survey participants regarding what approach they would use for pricing new UL products in a PBR environment for products that require one of the VM-20 reserve components. Four of the 29 participants do not know how they will reflect VM-20 reserves in pricing in a PBR environment, with two of the four noting that PBR does not apply to them. For the remaining participants, various responses were received, including no changes to the reserve approach they currently use in

¹⁵ Figure 14 includes information shown in Figure 199 in the body of the report.

¹⁶ Figure 15 includes information shown in Figure 200 in the body of the report.

pricing, reflecting VM-20 reserves in pricing, using a reduced subset of stochastic scenarios in pricing, and different variations using simplified approaches, including the net premium reserve, deterministic reserve, and stochastic reserve,

Twelve participants reported concerns about PBR for indexed UL that included a negative impact on IUL competitiveness, equity returns in the DR scenario, modeling issues, stochastic reserve issues, hedging, increases in IUL reserves, lack of clarity in VM-20 for IUL reserves, nonguaranteed elements, and the timing of changes to caps relative to interest rate movements.

Survey participants provided responses relative to the aggregation of mortality segments for determining credibility for UL/IUL products. The Valuation Manual defines a mortality segment as “a subset of policies for which a separate mortality table representing the prudent estimate mortality assumption will be determined.” Five participants reported that aggregation is yet to be determined. The majority of participants expect to aggregate mortality segments across broad categories, such as all life products, all permanent products, or all fully underwritten products.

Various options were reported by survey participants to increase credibility of mortality experience. Options included discussions and collaboration with reinsurers, using an aggregated level of mortality, combining products or segments, and using industry experience to supplement actual experience.

In planning for new UL/IUL products, 22 of the 29 participants anticipate using new underwriting approaches like AU. A wide variety of comments were submitted from these participants regarding what considerations the new underwriting approaches introduce for credibility and the development of a mortality assumption. Comments included: increased mortality is expected with an AU program, neutral impact on mortality, more weight may be applied to industry tables than a company’s own experience, reliance on reinsurer support, potentially increased credibility due to more business being placed, and comments about the credibility of the new approach relative to that of fully underwritten segments.

The number of survey participants that have modeled PBR-type reserves on existing UL/IUL products increased 38% relative to the number reported in the prior UL/IUL survey. Eighteen participants have performed such modeling for at least one UL/IUL product. The two most common products on which PBR-type reserves have been modeled are ULSG and AccumIUL.

Twenty-four participants provided a rating of how effective they believe PBR will be in making reserve financing arrangements (captives) obsolete. Ratings are shown in the table in Figure 16. While the most common rating was average effectiveness, there is a bit of weight toward more effective (versus less effective) at making reserve financing arrangements obsolete. (Note that these ratings are with respect to UL/IUL products.)

FIGURE 16: EFFECTIVENESS RATINGS OF PBR MAKING RESERVE FINANCING ARRANGEMENTS OBSOLETE¹⁷

| RATING | # OF RESPONSES |
|------------------|----------------|
| VERY INEFFECTIVE | 0 |
| INEFFECTIVE | 5 |
| AVERAGE | 11 |
| EFFECTIVE | 6 |
| VERY EFFECTIVE | 2 |

Twenty-five of the 29 participants reported they are not assuming a financing arrangement in a post-PBR environment.

RISK MANAGEMENT

In planning for new UL/IUL products under VM-20, five participants anticipate changes to their reinsurance structures in light of PBR. The first participant will potentially have to move to a more guaranteed-type reinsurance contract. The change reported by the second will be financing primary securities. This participant may also pursue reinsurance structures other than captives. The third reported the end of the captive reinsurance structure and using credit-linked notes (CLNs). The fourth anticipates better guarantees or higher retention to limit reinsurance drag on returns via increased reserves. The fifth participant is likely to use less reinsurance.

Retention limits ranged from \$350,000 to \$40 million for survey participants, with a median limit of \$5 million and an average of \$7.2 million.

¹⁷ Figure 16 will be shown again as Figure 205 in the body of the report.

Fifteen participants reported the level of reinsurance used for AU UL/IUL business. Six of the 15 participants reported that AU UL/IUL business is being reinsured consistent with other UL/IUL business by four other participants. AU business is being fully retained by five other participants. The final four participants reported other reinsurance approaches used with AU UL/IUL business that suggest the expanded use of reinsurance with these cases.

UNDERWRITING

Table-shaving programs are offered by five of the 29 participants; all intend to continue their programs. Thirteen of the 29 participants use a credit program or other type of program that improves ratings for favorable risk factors; 12 reported they would continue their credit programs.

Of the 29 responses, full underwriting is being used by 28 participants, AU by 15 participants, and SI underwriting by 11 participants. The ages and face amounts where these underwriting approaches are used vary widely among survey participants. Four different underwriting approaches (SI, AU, full underwriting, and another approach) were reported by one of the 29 participants. Sixteen survey participants use full underwriting with another approach, seven use only full underwriting, and one uses only SI underwriting. Ten of the 16 use AU and full underwriting, five use SI underwriting and full underwriting, and the final participant uses full underwriting and another approach.

For the 14 survey participants that do not currently have an AU program, eight indicated they are planning to implement one. Six of these participants may implement the program in the next 12 months. One additional participant is currently researching AU programs and may implement one.

The percentage (based on policy count) of YTD 9/30/18 new UL/IUL business that were eligible to have underwriting requirements waived under an AU program ranged from less than 3% to 80%, with an average of 23% and a median of 20%. Of the policies that met the requirements of the AU program during YTD 9/30/18, the percentage that ultimately qualified to have requirements waived under the program ranged from 15% to 58%. The average was 37% and the median was 36%. The percentage of qualified cases that actually became sold ranged from 21% to 100%, with an average of 81% and a median of 89%. The percentage of cases that did not qualify that became sold cases ranged from 51% to 77%, with an average of 68% and a median of 70%.

Fifteen survey participants utilize fluid-less underwriting programs at face amounts where they previously would require fluids.

The use of predictive modeling in the life insurance industry has recently gained attention. Predictive modeling utilizes statistical models that relate outcomes and events to various risk factors and predictors. Of the 15 survey participants that use accelerated underwriting for UL/IUL products, 12 use predictive analytics in their AU algorithms. Only three participants reported using predictive analytics in the underwriting of UL/IUL products under other underwriting approaches (i.e., other than AU).

Scoring models are an example of predictive modeling used relative to life underwriting. *Scoring models are being used by 16 survey participants to underwrite their UL/IUL policies. Eight of the 16 use purely external scoring models and five additional participants use purely internal scoring models. The remaining three participants reported they use both internal and external scoring models. Twelve participants reported using these models for fully underwritten policies, five for SI policies, and three for AU policies. In total, five participants use lab scoring models, 11 use consumer credit-related scoring models, eight use scoring models relative to motor vehicle records (MVR), and 13 use prescription history scoring models.*

The percentage of normal applications (based on policy count) YTD 9/30/18 that actually became sold cases was reported by 19 participants. The percentages ranged from 60% to 85%, with an average of 71% and a median of 70%.

Twelve survey participants reported additional details about their SI underwritten UL/IUL products. The individual middle-/upper-income market and low-/middle-income markets were the top markets among survey participants where such products are offered. The most common underwriting tools used in this market are MIB Group reports (11 participants) and prescription drug database searches (10 participants).

Similarly, 16 of the 29 survey participants reported more details about the use of AU programs. Similar to SI UL/IUL business, the individual middle-/upper-income market was the top market among survey participants where AU UL/IUL products are offered, followed closely by the low-/middle-income market. The most common underwriting tools used in the AU market are MIB Group reports and motor vehicle records (15 participants), and prescription drug database searches (13 participants).

The majority of survey participants (23 of 29 responding) have created at least one preferred risk parameter that differs at the older ages relative to those used at the younger ages.

Knockout underwriting is the methodology used by 17 of the 29 responding participants for preferred UL/IUL products. Debit/credit underwriting is used by six additional participants. Three participants use a combination of knockout underwriting and debit/credit underwriting. One participant uses a lifestyle credit program, and another uses a preferred point system and its own scoring model. The final participant does not have fully underwritten UL/IUL business.

PRODUCT DESIGN

Nine participants repriced their ULSG designs in the last 12 months, and four repriced them in the last 13 to 24 months, with two participants repricing in both periods. Three of the nine that repriced ULSG designs in the last 12 months did so using PBR reserves. Six reported that premium rates on the new basis versus the old basis increased, two decreased premium rates, one reported no change in premium rates, and two did not report the change. Few participants reported repricing other UL/IUL designs.

A total of 10 survey participants reported they currently offer a long-term care (LTC) accelerated benefit rider on either a UL or IUL product (one did not report LTC ABR sales). Three of these 10 reported they expect to develop an enhanced LTC combination product in the next 24 months. Four additional participants are expecting to develop an LTC combination product in the next 24 months.

Nineteen of the 29 participants reported they currently offer a chronic illness accelerated benefit rider on either a UL or IUL chassis. Only 13 of the 19 reported sales of UL/IUL products with such riders. (Note that one of the 13 only reported sales by face amount and not by premium.) Two of the 19 offer more than one chronic illness rider design. A total of 10 participants currently offer a chronic illness rider with a discounted death benefit design, four participants offer a lien design, and seven offer a chronic illness rider with up-front charges. One of the 10 participants offers a discounted death benefit design with charges. The final participant offers a design with no discounting or liens, but charges a \$250 exercise fee. Eight of the 19 may develop enhanced chronic illness benefit riders in the next 24 months. One additional company expects to develop such a rider in the next 24 months.

Within 24 months, 86% of survey respondents may market either an LTC or chronic illness rider. Of the 12 participants with a chronic illness rider that includes an expectation of permanence of the condition in order for benefit to be paid, only one has plans to eliminate this requirement.

Survey participants were asked to rank the following eight specific benefits based on their value:

- Long-term care
- Chronic illness benefits
- Terminal illness benefits
- Critical illness benefits
- Longevity benefits
- Disability income benefits
- Return of premium benefits
- Unemployment benefits

Based on the median ranking, chronic illness, long-term care, and terminal illness benefits were ranked the most valuable (all with a median ranking of 2, which is the second-most valuable ranking). Unemployment benefits were ranked the least valuable of the eight specific benefits.

Cash accumulation-type UL/IUL products were the most common UL/IUL products to include wash loan provisions. Twelve survey participants reported including a wash loan provision on AccumUL, and 14 on AccumIUL products. For all UL/IUL products the cumulative outstanding wash loan amount, relative to the cash surrender value as of 9/30/18, ranged from 0% up to 10%. For other loans, the cumulative outstanding loan amount ranged from 0% to 13%.

COMPENSATION

Compensation structures are quite varied among survey participants. About 42% of participants that offer multiple UL/IUL products vary commissions and/or marketing allowables by product type and 58% do not vary them. The report includes granular information about first-year compensation, renewal compensation, and marketing allowables.

Few survey participants offer asset-based compensation on UL/IUL products, but its use is highest for AccumUL products. Few participants pay levelized compensation on cash value enhancement (CVE) riders, but its use is highest for AccumIUL products.

In general, rolling target premiums are more common on IUL products than UL products. A rolling target means that higher-percentage commissions up to the target are paid based on cumulative paid premium, even if the target premium is not met in the first year. The percentages of respondents using them equals 71% for IULSG, 72% for AccumIUL, and 83% for CAIUL. Rolling target premiums are less common on UL products, where 50% of respondents use them on AccumUL and CAUL, and 53% use them for ULSG. Target premiums are commonly rolled for two years, i.e., the higher-percentage commissions up to target may be applied cumulatively into year 2. It has become more common recently on some UL/IUL plans to not place a limit on the number of years that target premiums are rolled.

Average incentive compensation for external wholesalers was reported by UL/IUL product type by survey participants. The highest average incentive compensation payable up to target premium was reported for ULSG products (9.4%), and the lowest for IULSG products (4.0%). The highest average compensation payable on excess premium was also reported for ULSG (1.5%) and the lowest for AccumUL (0.4%).

PRICING

Figure 17 shows the split between respondents assuming a new-money crediting strategy versus a portfolio crediting strategy in pricing UL/IUL products. The report includes details about earned rates assumed in pricing UL/IUL products, in total and by crediting strategy.

FIGURE 17: UL/IUL NEW-MONEY VERSUS PORTFOLIO CREDITING STRATEGY¹⁸

| UL/IUL PRODUCT | CREDITING STRATEGY | |
|----------------|--------------------|-----------|
| | NEW-MONEY | PORTFOLIO |
| ULSG | 67% | 33% |
| ACCUMUL | 42% | 58% |
| CAUL | 46% | 54% |
| IULSG | 57% | 43% |
| ACCUMIUL | 17% | 83% |
| CAIUL | 14% | 86% |

Twelve survey participants reported the use of deterministic scenarios to price the cost of no-lapse guarantees for ULSG products. Three additional participants reported using stochastic real-world scenarios for this pricing. For IULSG pricing of no-lapse guarantees, seven participants reported using deterministic scenarios and five reported using stochastic real-world scenarios.

The report includes some very granular information about lapse rate assumptions for secondary guarantee products. A wide variety of factors are considered, including premium funding patterns, age, cash value status, risk class, whether the secondary guarantee is “in-the-money,” and other factors.

Responses were received from 17 of the 29 participants regarding the use of dynamic lapses in UL and IUL secondary guarantee pricing. Ten participants indicated that dynamic lapses are used in ULSG pricing. Four of the 10 also reported using dynamic lapses in IULSG pricing. Of the eight participants responding, a total of five use dynamic lapses in pricing IUL secondary guarantees.

Eleven of the 29 participants reported their mortality assumptions are strictly based on company experience. Seven participants base their mortality assumptions on company experience and consultants’ recommendations, and five additional participants base them on company experience and industry mortality tables. All other participants use various combinations of company experience, industry tables, recommendations of reinsurers and consultants, and underwriting criteria. Seventeen survey participants reported that the slopes of their mortality assumptions are more similar to the 2015 Valuation Basic Table (VBT) than other recent mortality tables (e.g., 1975-1980 Select & Ultimate Table, 2001 VBT, 2008 VBT). Seven additional participants reported that the slopes of their mortality assumptions are more similar to the 2008 VBT. One additional participant reported that its slope is graded into the 2008 VBT. Two participants reported that the slopes of their mortality assumptions are more similar to the 2001 VBT, and one is more similar to the 1975-1980 Select & Ultimate Table.

¹⁸ Figure 17 includes information shown in Figure 247 in the body of the report.

Fourteen participants reported they have repriced or redesigned at least one UL/IUL product under the 2017 CSO Mortality Tables. This is significantly more than the three participants that reported doing so in Milliman's previous UL/IUL survey. Responses from survey participants were mixed relative to the impact the implementation of the 2017 CSO will have on UL/IUL product development and the number of policies using Internal Revenue Code (IRC) 7702 guideline premium limits (versus cash value accumulation test or CVAT policies) that will be sold. Thirteen of the 27 responses indicated that the implementation of the 2017 CSO would have little impact on the number of guideline premium policies that are sold. Ten participants reported there would be more guideline premium policies sold, and four reported there would be fewer guideline premium policies sold.

The overall level of mortality experienced on UL/IUL relative to that assumed in pricing was reported by survey participants. Figure 18 shows the mortality levels that were reported for calendar year 2017 and YTD 9/30/18 by UL/IUL product type. The majority of participants reported mortality rates were close to or lower than those assumed in pricing for all UL/IUL products and for both calendar year 2017 and during YTD 9/30/18.

FIGURE 18: OVERALL LEVEL OF MORTALITY¹⁹

| MORTALITY RATES WERE: | NUMBER OF PARTICIPANTS | | | | | |
|-----------------------|------------------------|-------------|---------|-------------|------|-------------|
| | ULSG | | ACCUMUL | | CAUL | |
| | 2017 | YTD 9/30/18 | 2017 | YTD 9/30/18 | 2017 | YTD 9/30/18 |
| CLOSE TO EXPECTED | 9 | 10 | 9 | 10 | 6 | 6 |
| LOWER THAN EXPECTED | 5 | 1 | 4 | 2 | 3 | 1 |
| GREATER THAN EXPECTED | | 1 | 3 | 2 | 2 | 3 |
| TOTAL RESPONSES | 14 | 12 | 16 | 14 | 11 | 10 |

| MORTALITY RATES WERE: | NUMBER OF PARTICIPANTS | | | | | |
|-----------------------|------------------------|-------------|----------|-------------|-------|-------------|
| | IULSG | | ACCUMIUL | | CAIUL | |
| | 2017 | YTD 9/30/18 | 2017 | YTD 9/30/18 | 2017 | YTD 9/30/18 |
| CLOSE TO EXPECTED | 3 | 3 | 9 | 11 | 1 | 1 |
| LOWER THAN EXPECTED | 3 | 2 | 5 | 2 | 2 | 1 |
| GREATER THAN EXPECTED | | 1 | 2 | 2 | 2 | 2 |
| TOTAL RESPONSES | 6 | 6 | 16 | 15 | 5 | 4 |

Actual expense levels and those assumed in pricing UL/IUL products vary widely among survey participants, with details provided in the report. For comparison purposes, we converted acquisition and maintenance expenses to a dollar amount for a representative sample policy for each participant. (Commissions and field expenses were not included.) The calculation was done for both pricing expenses and actual (fully allocated) expenses. We assumed an average face amount of \$500,000 issued at age 55, and premiums of \$12 ("low premium") and \$18 ("high premium") per \$1,000 of face amount. (Survey participants reported the dollar amounts for percentage of premium components for both low and high premium scenarios.) The calculations were done including and excluding premium taxes.

¹⁹ Figure 18 will be shown again as Figure 262 in the body of the report.

The tables in Figure 19 show statistics relative to dollars of pricing and actual expenses for the representative sample policy, both including and excluding premium taxes.

FIGURE 19: PRICING AND ACTUAL EXPENSES FOR A REPRESENTATIVE SAMPLE POLICY INCLUDING PREMIUM TAXES²⁰

| PRICING EXPENSES | NUMBER OF RESPONSES | AVERAGE | MEDIAN | MINIMUM | MAXIMUM |
|-------------------------------------|---------------------|---------|---------|---------|---------|
| HIGH PREMIUM | | | | | |
| ACQUISITION | 29 | \$1,781 | \$1,742 | \$165 | \$3,822 |
| MAINTENANCE (WITH PREMIUM TAXES) | 29 | \$292 | \$244 | \$24 | \$1,588 |
| MAINTENANCE (WITHOUT PREMIUM TAXES) | 29 | \$182 | \$135 | \$24 | \$1,092 |
| LOW PREMIUM | | | | | |
| ACQUISITION | 29 | \$2,246 | \$2,252 | \$173 | \$5,232 |
| MAINTENANCE (WITH PREMIUM TAXES) | 29 | \$379 | \$332 | \$24 | \$2,140 |
| MAINTENANCE (WITHOUT PREMIUM TAXES) | 29 | \$214 | \$170 | \$24 | \$1,396 |

| ACTUAL (FULLY ALLOCATED) EXPENSES | NUMBER OF RESPONSES | AVERAGE | MEDIAN | MINIMUM | MAXIMUM |
|-------------------------------------|---------------------|---------|---------|---------|---------|
| HIGH PREMIUM | | | | | |
| ACQUISITION | 21 | \$2,179 | \$2,100 | \$756 | \$4,620 |
| MAINTENANCE (WITH PREMIUM TAXES) | 21 | \$341 | \$280 | \$50 | \$1,642 |
| MAINTENANCE (WITHOUT PREMIUM TAXES) | 20 | \$219 | \$160 | \$0 | \$1,146 |
| LOW PREMIUM | | | | | |
| ACQUISITION | 21 | \$2,744 | \$2,811 | \$795 | \$6,048 |
| MAINTENANCE (WITH PREMIUM TAXES) | 21 | \$435 | \$340 | \$50 | \$2,220 |
| MAINTENANCE (WITHOUT PREMIUM TAXES) | 20 | \$252 | \$160 | \$0 | \$1,476 |

ILLUSTRATIONS

A number of questions were included in the survey relative to IUL illustrated rates and rates calculated under Actuarial Guideline 49 (AG 49) Sections 4A, 4B, and 4C. The 20 participants that reported IUL sales responded to these questions.

All 20 IUL participants reported the rate that was calculated for the Benchmark Index Account (BIA) per Section 4A of AG 49. The maximum illustrated rate for indexed accounts cannot exceed a rate defined for the BIA. The BIA is based on the S&P 500 Index, an annual point-to-point crediting strategy with an annual cap, 0% floor, and 100% participation rate. The BIA rates reported by survey participants ranged from 4.25% to 8.92%, with an average of 6.60% and a median of 6.55%. Three participants reported they had to create a hypothetical index account under Section 4B of AG 49 because they did not have an indexed account that meets the definition of the BIA on its own under Section 4A. The hypothetical BIA rates for these three equal 6.09%, 6.96%, and 8.82%, respectively.

The credited rate used in IUL illustrations for participants' most popular strategies ranges from 4.25% to 7.75%. This is the same range that was reported for the current maximum illustrated rate allowed for the most popular strategies, but the average is equal to 6.44% and the median is equal to 6.42%. *Eight of the participants reported the rate decreased relative to the illustrated rate of one year ago. Three participants reported no change in the illustrated rate, and seven reported increases in the illustrated rate. The current median illustrated rate is 6.23% and the current average is 6.36%.*

²⁰ Figure 19 will be shown again as Figure 268 in the body of the report.

Twelve participants reported that IUL illustrations allow for a negative spread on loan interest charged versus interest credited. Seven of the 12 reported that they allow for a spread greater than 1% where interest credited includes all index-based interest credits, whether due to input interest rates, participation rates, multipliers, or persistency bonuses.

For policies where AG 49 applies, 12 of the 20 participants are illustrating persistency bonuses on the indexed account(s) that allow(s) the illustrated credited rate to exceed the Benchmark Index Account maximum illustrated rate.

Some IUL policies now include a feature that increases the credited interest rates on indexed accounts by a stated multiplier. The multiplier may be applied after application of the cap and participation rate. Six survey participants reported they offer a multiplier feature on IUL products. The multiplier ranges from 10% to 65%.

Fifteen of the 29 survey participants reported that they find illustration actuary requirements create constraints in UL/IUL pricing. All 15 also believe the constraints are more severe for certain product types, especially ULSG. Various solutions were reported to overcome illustration actuary challenges.

A variety of practices is employed regarding illustrating in-force policies if the lapse support test and/or self-support test fails. Participants have reacted by discontinuing illustrations for some products, illustrating guarantees only, supporting the block with surplus, creating new scales for illustrations, lowering or adjusting caps, and increasing spreads.

The majority of survey participants reported VM-20 is not causing any concerns for illustration testing. Similarly, the 2017 CSO mortality tables are not causing any concerns with illustration testing for the majority of survey participants.

Fourteen of 27 participants reported that they are currently testing in-force business when certifying for illustration actuary testing. Another seven participants are currently using Actuarial Standard of Practice (ASOP) 24 Section 3.7 to not test when certifying for illustration actuary testing. (ASOP 24 Section 3.7 applies to illustrations on policies in-force for one year or more.) The remaining six participants are using both approaches. Eight survey participants reported the supporting of in-force products by using distributions of surplus or prior gains as indicated under ASOP 24 Section 3.7.

Three participants reported they are illustrating utilization scenarios and examples for accelerated death benefit (ADB) riders with discounted death benefit approaches. A fourth participant has plans to do so in the future. One of the four, plus five additional participants, is illustrating utilization scenarios and examples for other ADB riders. The majority of participants that are illustrating ADB utilization reported that the illustrations are in a supplemental illustration, rather than in the basic illustration.

Appendix: The survey

Milliman, Inc.

2018/2019 Universal Life and Indexed Universal Life Survey

This survey covers individual U.S. universal life insurance and indexed universal life insurance plans. **Survivorship life and variable universal life plans are NOT included.**

Throughout the survey various terms are used to describe UL product type/markets. Following are the definitions of these terms:

Universal Life (UL)

A flexible premium permanent contract that credits cash value with current interest rates and deducts mortality and expense charges from the cash values. A UL policy can fall into any of the three product types listed below. Single premium sales and juvenile sales should be reported in the appropriate category listed below.

UL with secondary guarantees (ULSG): A UL product designed specifically for the death benefit guarantee market that features long-term (guaranteed to last until at least age 90) no-lapse guarantees either through a rider or as part of the base policy.

Cash accumulation UL (AccumUL): A UL product designed specifically for the accumulation-oriented market where efficient accumulation of cash values to be available for distribution is the primary concern of the buyer. Within this category are products that allow for high early cash value accumulation, typically through the election of an accelerated cash value rider.

Current assumption UL (CAUL): A UL product designed to offer the lowest cost death benefit coverage without death benefit guarantees. Within this category are products sometimes referred to as “dollar-solve” or “term-alternative” products.

Total individual UL: Individual UL products that include ULSG, AccumUL, and CAUL, but do not include any indexed UL products.

Indexed Universal Life (IUL)

A UL product with the cash value linked to an equity index, such as the S&P 500 or Dow Jones. An IUL product can fall into any of the three product types listed above under Universal Life. Single premium sales and juvenile sales should be reported in the appropriate category listed below.

IUL with secondary guarantees (IULSG)

Cash accumulation IUL (AccumIUL)

Current assumption IUL (CAIUL)

Total indexed UL: Indexed UL products that include IUL with secondary guarantees, cash accumulation IUL, and current assumption IUL.

Long-term care (LTC)

Long-term care refers to plans that qualify under long-term care model laws and regulations.

Chronic Illness (CI)

Chronic illness refers to plans, other than terminal illness or critical illness plans, that qualify under Model Regulation 620 governing accelerated death benefit designs.

Unless noted otherwise, "sales" refers to the sum of recurring premiums plus 10% of single premiums. **Exceptions include the single premium sales under item F (UL Sales Details tab & IUL Sales Details tab) and item C (LTC Rider Sales tab and Chronic Illness Rider Sales tab).**

If sales for a particular cell are negative, please report them as zero.

To avoid reporting sales by face amount without a corresponding entry for sales by premiums, please report premiums to two–three decimal places.

UL SALES DETAILS

A1. Please provide historical UL sales (in \$ millions) broken down by market.

IUL sales are reported in the tab "IUL Sales Details".

| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
|---------------|---------------------------------------|--|-------------|---------------------------------|
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

A2. What percentage of sales (based on policy count) elected a cash value enhancement rider?

| CALENDAR YEAR | TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
|---------------|------------------------|--|-------------|---------------------------------|
| 2017 | | | | |
| YTD 9/30/18 | | | | |

A3. What percentage of sales (based on policy count) selected no lapse guaranteed premiums to age 90 or longer?

| CALENDAR YEAR | TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
|---------------|------------------------|--|-------------|---------------------------------|
| 2017 | | | | |
| YTD 9/30/18 | | | | |

B. Please provide historical UL policies issued and face amount issued (in \$ millions) broken down by market.

| NUMBER OF POLICIES ISSUED | | | | |
|---------------------------|---------------------------------------|--|-------------|---------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

| FACE AMOUNT ISSUED | | | | |
|--------------------|---------------------------------------|--|-------------|---------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 2016 | | | | |

| FACE AMOUNT ISSUED | | | | |
|--------------------|---------------------------------------|--|-------------|---------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

C. What are your expectations regarding the mix of UL/IUL business in the future?

| TIME FRAME | TOTAL | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|------------------|-------|------------------------------------|---------|-----------------------------|-------------------------------------|-----------------------------|------------------------------|
| 2 YEARS FROM NOW | 100% | | | | | | |
| 5 YEARS FROM NOW | 100% | | | | | | |

If your expectations have changed in the last year please explain the reason for the change.

D1. Within each market, please provide 2017 UL sales (in \$ millions) by issue age group.

| 2017 UL SALES (PREMIUM) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| ISSUE AGE GROUP | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| <25 | | | | |
| 25-34 | | | | |
| 35-44 | | | | |
| 45-54 | | | | |
| 55-64 | | | | |
| 65-74 | | | | |
| 75+ | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | |

D2. Within each market, please provide YTD 9/30/18 UL sales (in \$ millions) by issue age group.

| YTD 9/30/18 UL SALES (PREMIUM) | | | | |
|--------------------------------|---------------------------------------|--|-------------|---------------------------------|
| ISSUE AGE GROUP | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| <25 | | | | |
| 25-34 | | | | |
| 35-44 | | | | |
| 45-54 | | | | |
| 55-64 | | | | |

| YTD 9/30/18 UL SALES (PREMIUM) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| ISSUE AGE GROUP | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 65-74 | | | | |
| 75+ | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | |

E. Within each market, please provide UL sales (in \$ millions) by premium type;

Single Premium Sales should be reported at 100% rather than 10%.

| 2017 UL SALES (PREMIUM) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| PREMIUM TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| SINGLE PREMIUM | | | | |
| OTHER PREMIUM | | | | |
| TOTAL = 10% OF SP + OP (SHOULD AGREE WITH QUESTION A1) | | | | |

| YTD 9/30/18 UL SALES (PREMIUM) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| PREMIUM TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| SINGLE PREMIUM | | | | |
| OTHER PREMIUM | | | | |
| TOTAL = 10% OF SP + OP (SHOULD AGREE WITH QUESTION A1) | | | | |

F1. Please provide 2017 Total Individual UL sales (in \$ millions) by underwriting class and issue age range.

“ALL AGES” COLUMN SHOULD BE EQUAL TO “ALL APPROACHES” COLUMN (UNDER QUESTION G1)

| 2017 TOTAL INDIVIDUAL UL SALES (PREMIUM) | | | | | | | | |
|--|----------|-----|-------|-------|-------|-------|-------|-----|
| UNDERWRITING CLASS | ALL AGES | <25 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75+ |
| BEST NS/NT CLASS | | | | | | | | |
| SECOND BEST NS/NT CLASS | | | | | | | | |
| THIRD BEST NS/NT CLASS | | | | | | | | |
| FOURTH BEST NS/NT CLASS | | | | | | | | |
| FIFTH BEST NS/NT CLASS AND LOWER | | | | | | | | |
| BEST S/T CLASS | | | | | | | | |

| 2017 TOTAL INDIVIDUAL UL SALES (PREMIUM) | | | | | | | | |
|--|----------|-----|-------|-------|-------|-------|-------|-----|
| UNDERWRITING CLASS | ALL AGES | <25 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75+ |
| SECOND BEST S/T CLASS | | | | | | | | |
| THIRD BEST S/T CLASS AND LOWER | | | | | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | | | | | |

F2. Please provide YTD 9/30/18 Total Individual UL sales (in \$ millions) by underwriting class and issue age range.

“ALL AGES” COLUMN SHOULD BE EQUAL TO “ALL APPROACHES” COLUMN (UNDER QUESTION G1)

| YTD 9/30/18 TOTAL INDIVIDUAL UL SALES (PREMIUM) | | | | | | | | |
|---|----------|-----|-------|-------|-------|-------|-------|-----|
| UNDERWRITING CLASS | ALL AGES | <25 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75+ |
| BEST NS/NT CLASS | | | | | | | | |
| SECOND BEST NS/NT CLASS | | | | | | | | |
| THIRD BEST NS/NT CLASS | | | | | | | | |
| FOURTH BEST NS/NT CLASS | | | | | | | | |
| FIFTH BEST NS/NT CLASS AND LOWER | | | | | | | | |
| BEST S/T CLASS | | | | | | | | |
| SECOND BEST S/T CLASS | | | | | | | | |
| THIRD BEST S/T CLASS AND LOWER | | | | | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | | | | | |

G1. Please provide 2017 Total Individual UL sales (in \$ millions) by underwriting class and underwriting approach.

Simplified issue underwriting: Less than a complete set of medical history questions and no medical or paramedical exam.

Accelerated underwriting: The use of tools such as a predictive model to waive requirements such as fluids and a paramedical exam on a fully underwritten product for qualifying applicants without charging a higher premium. **Include total sales for products under which accelerated underwriting is offered.**

Full Underwriting: Complete set of medical history questions, and medical or paramedical exam, except when age and amount limits allow for non-medical underwriting.

THE COLUMN “ALL APPROACHES” FOR QUESTIONS G1 AND G2 SHOULD BE EQUAL TO THE COLUMN “ALL AGES” UNDER QUESTIONS F1 AND F2.

Complete the table according to the following example. If the top Simplified Issue UW class is equivalent to the 4th Best NS/NT class for full underwriting, then your SI response should be entered in the 4th Best NS/NT row, not the Best NS/NT row.

| UNDERWRITING CLASS | 2017 TOTAL INDIVIDUAL UL SALES (PREMIUM) | | | |
|---|--|------------------|--------------------------|-------------------|
| | ALL APPROACHES | SIMPLIFIED ISSUE | ACCELERATED UNDERWRITING | FULL UNDERWRITING |
| BEST NS/NT CLASS | | | | |
| SECOND BEST NS/NT CLASS | | | | |
| THIRD BEST NS/NT CLASS | | | | |
| FOURTH BEST NS/NT CLASS | | | | |
| FIFTH BEST NS/NT CLASS AND LOWER | | | | |
| BEST S/T CLASS | | | | |
| SECOND BEST S/T CLASS | | | | |
| THIRD BEST S/T CLASS AND LOWER | | | | |
| TOTAL (ALL APPROACHES SHOULD AGREE WITH QUESTION F1 ALL AGES) | | | | |

G2. Please provide YTD 9/30/18 Total Individual UL sales (in \$ millions) by underwriting class and underwriting approach.

| UNDERWRITING CLASS | YTD 9/30/18 TOTAL INDIVIDUAL UL SALES (PREMIUM) | | | |
|---|---|------------------|--------------------------|-------------------|
| | ALL APPROACHES | SIMPLIFIED ISSUE | ACCELERATED UNDERWRITING | FULL UNDERWRITING |
| BEST NS/NT CLASS | | | | |
| SECOND BEST NS/NT CLASS | | | | |
| THIRD BEST NS/NT CLASS | | | | |
| FOURTH BEST NS/NT CLASS | | | | |
| FIFTH BEST NS/NT CLASS AND LOWER | | | | |
| BEST S/T CLASS | | | | |
| SECOND BEST S/T CLASS | | | | |
| THIRD BEST S/T CLASS AND LOWER | | | | |
| TOTAL (ALL APPROACHES SHOULD AGREE WITH QUESTION F2 ALL AGES) | | | | |

H1. Within each market, please provide 2017 UL sales (in \$ millions) by death benefit option.

| 2017 UL SALES (PREMIUM) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| DEATH BENEFIT OPTION | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| OPTION A/OPTION 1 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT) | | | | |
| OPTION B/OPTION 2 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT PLUS THE CASH VALUE) | | | | |
| OPTION C/OPTION 3 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT PLUS THE SUM OF PREMIUMS) | | | | |
| OTHER OPTION | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | |

DESCRIPTION OF OTHER OPTION:

H2. Within each market, please provide YTD 9/30/18 UL sales (in \$ millions) by death benefit option.

| YTD 9/30/18 UL SALES (PREMIUM) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| DEATH BENEFIT OPTION | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| OPTION A/OPTION 1 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT) | | | | |
| OPTION B/OPTION 2 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT PLUS THE CASH VALUE) | | | | |
| OPTION C/OPTION 3 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT PLUS THE SUM OF PREMIUMS) | | | | |
| OTHER OPTION | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | |

DESCRIPTION OF OTHER OPTION:

IUL SALES DETAILS

A1. Please provide historical IUL sales (in \$ millions) broken down by market. UL sales are reported in the tab "UL Sales Details".

| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
|---------------|-------------------------------------|---|------------------------------|----------------------------------|
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

A2. What percentage of sales (based on policy count) elected a cash value enhancement rider?

| CALENDAR YEAR | TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
|---------------|----------------------|---|------------------------------|----------------------------------|
| 2017 | | | | |
| YTD 9/30/18 | | | | |

A3. What percentage of sales (based on policy count) selected no lapse guaranteed premiums to age 90 or longer?

| CALENDAR YEAR | TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
|---------------|----------------------|---|------------------------------|----------------------------------|
| 2017 | | | | |
| YTD 9/30/18 | | | | |

B. Please provide historical IUL policies issued and face amount issued (in \$ millions) broken down by market.

| NUMBER OF POLICIES ISSUED | | | | |
|---------------------------|-------------------------------------|---|------------------------------|----------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

| FACE AMOUNT ISSUED | | | | |
|--------------------|-------------------------------------|---|------------------------------|----------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

C. Respond to Question C under the “UL Sales Details” tab
 Proceed to Question D below

D1. Within each market, please provide 2017 IUL sales (in \$ millions) by issue age group.

| 2017 IUL SALES (PREMIUM) | | | | |
|--|-------------------------------------|---|------------------------------|----------------------------------|
| ISSUE AGE GROUP | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| <25 | | | | |
| 25-34 | | | | |
| 35-44 | | | | |
| 45-54 | | | | |
| 55-64 | | | | |
| 65-74 | | | | |
| 75+ | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | |

D2. Within each market, please provide YTD 9/30/18 IUL sales (in \$ millions) by issue age group.

| YTD 9/30/18 IUL SALES (PREMIUM) | | | | |
|--|-------------------------------------|---|------------------------------|----------------------------------|
| ISSUE AGE GROUP | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| <25 | | | | |
| 25-34 | | | | |
| 35-44 | | | | |
| 45-54 | | | | |
| 55-64 | | | | |
| 65-74 | | | | |
| 75+ | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | |

E. Within each market, please provide IUL sales (in \$ millions) by premium type; Single Premium Sales should be reported at 100% rather than 10%.

| 2017 IUL SALES | | | | |
|--|-------------------------------------|---|------------------------------|----------------------------------|
| PREMIUM TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| SINGLE PREMIUM | | | | |
| OTHER PREMIUM | | | | |
| TOTAL = 10% OF SP + OP (SHOULD AGREE WITH QUESTION A1) | | | | |

| YTD 9/30/18 IUL SALES | | | | |
|--|-------------------------------------|---|------------------------------|----------------------------------|
| PREMIUM TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| SINGLE PREMIUM | | | | |
| OTHER PREMIUM | | | | |
| TOTAL = 10% OF SP + OP (SHOULD AGREE WITH QUESTION A1) | | | | |

F1. Please provide 2017 Total Individual IUL sales (in \$ millions) by underwriting class and issue age range.

| 2017 TOTAL INDIVIDUAL IUL SALES (PREMIUM) | | | | | | | | |
|---|----------|-----|-------|-------|-------|-------|-------|-----|
| UNDERWRITING CLASS | ALL AGES | <25 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75+ |
| BEST NS/NT CLASS | | | | | | | | |
| SECOND BEST NS/NT CLASS | | | | | | | | |
| THIRD BEST NS/NT CLASS | | | | | | | | |
| FOURTH BEST NS/NT CLASS | | | | | | | | |
| FIFTH BEST NS/NT CLASS AND LOWER | | | | | | | | |
| BEST S/T CLASS | | | | | | | | |
| SECOND BEST S/T CLASS | | | | | | | | |
| THIRD BEST S/T CLASS AND LOWER | | | | | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | | | | | |

F2. Please provide YTD 9/30/18 Total Individual IUL sales (in \$ millions) by underwriting class and issue age range.

| YTD 9/30/18 TOTAL INDIVIDUAL IUL SALES (PREMIUM) | | | | | | | | |
|--|----------|-----|-------|-------|-------|-------|-------|-----|
| UNDERWRITING CLASS | ALL AGES | <25 | 25-34 | 35-44 | 45-54 | 55-64 | 65-74 | 75+ |
| BEST NS/NT CLASS | | | | | | | | |
| SECOND BEST NS/NT CLASS | | | | | | | | |
| THIRD BEST NS/NT CLASS | | | | | | | | |
| FOURTH BEST NS/NT CLASS | | | | | | | | |
| FIFTH BEST NS/NT CLASS AND LOWER | | | | | | | | |
| BEST S/T CLASS | | | | | | | | |
| SECOND BEST S/T CLASS | | | | | | | | |
| THIRD BEST S/T CLASS AND LOWER | | | | | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | | | | | |

G1. Please provide 2017 Total Individual IUL sales (in \$ millions) by underwriting class and underwriting approach.

| UNDERWRITING CLASS | 2017 TOTAL INDIVIDUAL IUL SALES (PREMIUM) | | | |
|---|---|------------------|--------------------------|-------------------|
| | ALL APPROACHES | SIMPLIFIED ISSUE | ACCELERATED UNDERWRITING | FULL UNDERWRITING |
| BEST NS/NT CLASS | | | | |
| SECOND BEST NS/NT CLASS | | | | |
| THIRD BEST NS/NT CLASS | | | | |
| FOURTH BEST NS/NT CLASS | | | | |
| FIFTH BEST NS/NT CLASS AND LOWER | | | | |
| BEST S/T CLASS | | | | |
| SECOND BEST S/T CLASS | | | | |
| THIRD BEST S/T CLASS AND LOWER | | | | |
| TOTAL (ALL APPROACHES SHOULD AGREE WITH QUESTION F1 ALL AGES) | | | | |

G2. Please provide YTD 9/30/18 Total Individual IUL sales (in \$ millions) by underwriting class and underwriting approach.

| UNDERWRITING CLASS | YTD 9/30/18 TOTAL INDIVIDUAL IUL SALES (PREMIUM) | | | |
|---|--|------------------|--------------------------|-------------------|
| | ALL APPROACHES | SIMPLIFIED ISSUE | ACCELERATED UNDERWRITING | FULL UNDERWRITING |
| BEST NS/NT CLASS | | | | |
| SECOND BEST NS/NT CLASS | | | | |
| THIRD BEST NS/NT CLASS | | | | |
| FOURTH BEST NS/NT CLASS | | | | |
| FIFTH BEST NS/NT CLASS AND LOWER | | | | |
| BEST S/T CLASS | | | | |
| SECOND BEST S/T CLASS | | | | |
| THIRD BEST S/T CLASS AND LOWER | | | | |
| TOTAL (ALL APPROACHES SHOULD AGREE WITH QUESTION F1 ALL AGES) | | | | |

H1. Within each market, please provide 2017 IUL sales (in \$ millions) by death benefit option.

| 2017 IUL SALES (PREMIUM) | | | | |
|--|--|---|---------------------------------|----------------------------------|
| DEATH BENEFIT OPTION | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| OPTION A/OPTION 1 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT) | | | | |
| OPTION B/OPTION 2 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT PLUS THE CASH VALUE) | | | | |
| OPTION C/OPTION 3 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT PLUS THE SUM OF PREMIUMS) | | | | |
| OTHER OPTION | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | |

DESCRIPTION OF OTHER OPTION:

H2. Within each market, please provide YTD 9/30/18 IUL sales (in \$ millions) by death benefit option.

| YTD 9/30/18 IUL SALES (PREMIUM) | | | | |
|--|--|---|---------------------------------|----------------------------------|
| DEATH BENEFIT OPTION | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| OPTION A/OPTION 1 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT) | | | | |
| OPTION B/OPTION 2 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT PLUS THE CASH VALUE) | | | | |
| OPTION C/OPTION 3 (DEATH BENEFIT IS EQUAL TO THE STATED AMOUNT PLUS THE SUM OF PREMIUMS) | | | | |
| OTHER OPTION | | | | |
| TOTAL (SHOULD AGREE WITH QUESTION A1) | | | | |

DESCRIPTION OF OTHER OPTION:

CHRONIC ILLNESS RIDER SALES

Note: Sales reported in this section should also be included in the sales reported in the UL Sales Details tab and/or the IUL Sales Details tab.

A1. Please provide historical UL sales (in \$ millions) on all business *with chronic illness riders*.

| UL SALES WITH CHRONIC ILLNESS ACCELERATED BENEFIT RIDERS (PREMIUM) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

| UL SALES WITH CHRONIC ILLNESS ACCELERATED BENEFIT RIDERS (FACE AMOUNT) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

A2. Please provide historical IUL sales (in \$ millions) on all business *with chronic illness riders*.

| IUL SALES WITH CHRONIC ILLNESS ACCELERATED BENEFIT RIDERS (PREMIUM) | | | | |
|---|--|---|------------------------------|----------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

| IUL SALES WITH CHRONIC ILLNESS ACCELERATED BENEFIT RIDERS (FACE AMOUNT) | | | | |
|---|--|---|------------------------------|----------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

B. Please provide historical policies issued on all business **with chronic illness riders**.

| NUMBER OF POLICIES ISSUED ON UL SALES WITH CHRONIC ILLNESS RIDERS | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

| NUMBER OF POLICIES ISSUED ON IUL SALES WITH CHRONIC ILLNESS RIDERS | | | | |
|---|--|---|------------------------------|----------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

C. Please provide UL/IUL sales (in \$ millions) of all business **with chronic illness riders** that is single premium business (at 100% not at 10%, and in dollars not percentages).

| UL SINGLE PREMIUM SALES WITH CHRONIC ILLNESS RIDERS (BASED ON PREMIUM) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

| IUL SINGLE PREMIUM SALES WITH CHRONIC ILLNESS RIDERS (BASED ON PREMIUM) | | | | |
|---|--|---|------------------------------|----------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

D. Please provide UL/IUL combined sales (in \$ millions) of all business **with chronic illness riders** by issue age group.

| ISSUE AGE GROUP | SALES (PREMIUM) | |
|-----------------|-----------------|----------------------|
| | 2017 | YTD AS OF 9/30/17 |
| <25 | | |
| 25-34 | | |
| 35-44 | | |
| 45-54 | | |
| 55-64 | | |
| 65-74 | | |
| 75+ | | |

E1. Is your chronic illness rider automatically included with the base UL policy? (Yes/No/Some are Optional and Others are Not)

For riders that are not automatically included, what was the election rate of UL chronic illness riders at the time of sale for the following time periods? (e.g., X% of UL policies issued in calendar year YYYY elected a chronic illness ADB)

| YEAR | 2016 | 2017 | DURING YTD AS OF 9/30/17 |
|-----------------------------------|------|------|-----------------------------|
| CHRONIC ILLNESS ADB ELECTION RATE | | | |

E2. Is your chronic illness rider automatically included in the base IUL policy? (Yes/No/Some are Optional and Others are Not)

For riders that are not automatically included, what was the election rate of IUL chronic illness riders at the time of sale for the following time periods? (e.g., X% of IUL policies issued in calendar year YYYY elected a chronic illness ADB)

| YEAR | 2016 | 2017 | YTD AS OF 9/30/17 |
|-----------------------------------|------|------|----------------------|
| CHRONIC ILLNESS ADB ELECTION RATE | | | |

F. What is the structure of your chronic illness rider? (Please indicate with an "X")

| STRUCTURE OF CHRONIC ILLNESS RIDERS | |
|--|--|
| LIEN APPROACH | |
| DISCOUNTED DEATH BENEFIT APPROACH | |
| DOLLAR-FOR-DOLLAR BENEFIT REDUCTION APPROACH | |
| OTHER (PLEASE DESCRIBE) | |

LTC RIDER SALES

Note: Sales reported in this section should also be included in the sales reported in the UL Sales Details tab and/or the IUL Sales Details tab.

A1. Please provide 2016 UL sales (in \$millions) on all business *with LTC riders*.

| 2016 UL SALES (PREMIUM) WITH LTC RIDERS | | | | |
|---|---------------------------------------|--|-------------|---------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

| 2016 UL SALES (FACE AMOUNT) WITH LTC RIDERS | | | | |
|---|---------------------------------------|--|-------------|---------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

Please provide 2017 UL sales (in \$ millions) on all business *with LTC riders*.

| 2017 UL SALES (PREMIUM) WITH LTC RIDERS | | | | |
|---|---------------------------------------|--|-------------|---------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

| 2017 UL SALES (FACE AMOUNT) WITH LTC RIDERS | | | | |
|---|---------------------------------------|--|-------------|---------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

Please provide YTD 9/30/18 UL sales (in \$ millions) on all business *with LTC riders*.

| YTD 9/30/18 UL SALES (PREMIUM) WITH LTC RIDERS | | | | |
|---|---------------------------------------|--|-------------|---------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

| YTD 9/30/18 UL SALES (FACE AMOUNT) WITH LTC RIDERS | | | | |
|---|---------------------------------------|--|-------------|---------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

A2. Please provide 2016 IUL sales (in \$ millions) on all business *with LTC riders*.

| 2016 IUL SALES (PREMIUM) WITH LTC RIDERS | | | | |
|---|--|---|------------------------------|----------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

| 2016 IUL SALES (FACE AMOUNT) WITH LTC RIDERS | | | | |
|---|--|---|------------------------------|----------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

Please provide 2017 IUL sales (in \$ millions) on all business *with LTC riders*.

| 2017 IUL SALES (PREMIUM) WITH LTC RIDERS | | | | |
|---|--|---|------------------------------|----------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

| 2017 IUL SALES (FACE AMOUNT) WITH LTC RIDERS | | | | |
|---|--|---|------------------------------|----------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

Please provide YTD 9/30/18 IUL sales (in \$ millions) on all business *with LTC riders*.

| YTD 9/30/18 IUL SALES (PREMIUM) WITH LTC RIDERS | | | | |
|---|--|---|------------------------------|----------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

| YTD 9/30/18 IUL SALES (FACE AMOUNT) WITH LTC RIDERS | | | | |
|---|--|---|------------------------------|----------------------------------|
| LTC RIDER TYPE | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| WITH LTC ACCELERATED BENEFIT RIDER ONLY | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER AND EXTENSION OF BENEFITS RIDER | | | | |
| WITH LTC ACCELERATED BENEFIT RIDER, EXTENSION OF BENEFITS RIDER, AND INFLATION PROTECTION RIDER | | | | |

B. Please provide historical policies issued on all business **with LTC riders**.

| NUMBER OF POLICIES ISSUED ON UL BUSINESS WITH LTC RIDERS | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| SALES (\$ PREMIUMS) | | | | |
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 2016 | | | | |
| 2017 | | | | |
| YTD AS OF 9/30/17 | | | | |

| NUMBER OF POLICIES ISSUED ON IUL BUSINESS WITH LTC RIDERS | | | | |
|---|--|---|------------------------------|----------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

C. Please provide UL/IUL sales of all business **with LTC riders** that is single premium business (at 100%, not at 10% and in dollars, not percentages).

| UL SINGLE PREMIUM SALES WITH LTC RIDERS (BASED ON PREMIUM) | | | | |
|--|---------------------------------------|--|-------------|---------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL UL | (A) UL WITH SECONDARY GUARANTEES | (B) ACCUMUL | (C) CURRENT ASSUMPTION UL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

| IUL SINGLE PREMIUM SALES WITH LTC RIDERS (BASED ON PREMIUM) | | | | |
|---|--|---|------------------------------|----------------------------------|
| CALENDAR YEAR | (A)+(B)+(C) TOTAL INDIVIDUAL IUL | (A) IUL WITH SECONDARY GUARANTEES | (B) CASH ACCUMULATION IUL | (C) CURRENT ASSUMPTION IUL |
| 2016 | | | | |
| 2017 | | | | |
| YTD 9/30/18 | | | | |

D. Please provide UL/IUL combined sales (in \$ millions) of all business **with LTC riders** by issue age group.

| ISSUE AGE GROUP | SALES (PREMIUM) | |
|-----------------|-----------------|-------------|
| | 2017 | YTD 9/30/18 |
| <25 | | |
| 25-34 | | |
| 35-44 | | |
| 45-54 | | |
| 55-64 | | |
| 65-74 | | |
| 75+ | | |

E1. Is your LTC rider automatically included with the base UL policy? (Yes/No/Some are Optional and Others are Not)

| LTC ACCELERATED BENEFIT RIDER | EXTENSION OF BENEFITS RIDER | INFLATION PROTECTION RIDER |
|-------------------------------|-----------------------------|----------------------------|
| | | |

For UL LTC riders that are not automatically included, what was the election rate at the time of sale for the following time periods? (e.g., X% of UL policies issued in calendar year YYYY elected an LTC ADB Only)

| LTC RIDER TYPE | 2016 | 2017 | DURING YTD 9/30/18 |
|-------------------------------|------|------|--------------------|
| LTC ACCELERATED BENEFIT RIDER | | | |
| EXTENSION OF BENEFITS RIDER | | | |
| INFLATION PROTECTION RIDER | | | |

E2. Is your LTC rider automatically included with the base IUL policy? (Yes/No/Some are Optional and Others are Not)

| LTC ACCELERATED BENEFIT RIDER | EXTENSION OF BENEFITS RIDER | INFLATION PROTECTION RIDER |
|-------------------------------|-----------------------------|----------------------------|
| | | |

For IUL LTC riders that are not automatically included, what was the election rate at the time of sale for the following time periods? (e.g., X% of IUL policies issued in calendar year YYYY elected an LTC ADB Only)

| LTC RIDER TYPE | 2016 | 2017 | DURING YTD 9/30/18 |
|-------------------------------|------|------|--------------------|
| LTC ACCELERATED BENEFIT RIDER | | | |
| EXTENSION OF BENEFITS RIDER | | | |
| INFLATION PROTECTION RIDER | | | |

PROFIT MEASURES

A. Please provide responses relevant to the pricing of new sales issued today.

| PROFIT MEASURES AND GOALS | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|--|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| STATUTORY | | | | | | |
| STATUTORY ROI/IRR (%) | | | | | | |
| AFTER-TAX? (YES/NO/FRATERNAL) | | | | | | |
| AFTER-CAPITAL? (YES/NO) | | | | | | |
| PRIMARY OR SECONDARY MEASURE? | | | | | | |
| IF STATUTORY IRR IS A PRIMARY MEASURE, IS IT DETERMINED ON A: (PLEASE INDICATE WITH AN "X".) | IF PRICING IS BASED ON A LEVERED BASIS, CASH FLOWS (THAT ARE DISCOUNTED TO SOLVE FOR THE IRR TO GET A PRESENT VALUE OF ZERO) INCLUDE THE AMOUNT BORROWED (+), AS WELL AS THE LOAN REPAYMENTS (-). SO, IF ON AN UNLEVERED BASIS, CAPITAL WAS EQUAL TO \$100 (FOR EXAMPLE), BUT ON A LEVERED BASIS, \$40 WAS BORROWED, THEN IN THE IRR CALCULATION, \$60 OF CAPITAL WOULD BE REFLECTED, AS WELL AS THE LOAN REPAYMENT AMOUNTS. | | | | | |
| LEVERED BASIS? (REFLECTS THAT A PORTION OF THE CAPITAL IS FROM BORROWING) | | | | | | |
| UNLEVERED BASIS? | | | | | | |
| STATUTORY ROA (BPS) | | | | | | |
| AFTER-TAX? (YES/NO/FRATERNAL) | | | | | | |
| AFTER-CAPITAL? (YES/NO) | | | | | | |
| PRIMARY OR SECONDARY MEASURE? | | | | | | |
| PROFIT MARGIN (% OF PREMIUM) | | | | | | |
| AFTER-TAX? (YES/NO/FRATERNAL) | | | | | | |
| AFTER-CAPITAL? (YES/NO) | | | | | | |
| PRIMARY OR SECONDARY MEASURE? | | | | | | |
| IN THE PRICING OF NEW SALES ISSUED TODAY, WHAT DISCOUNT <u>RATE</u> IS USED TO CALCULATE THE PROFIT MARGIN? (E.G., 0%, 10%) | | | | | | |
| WHAT IS THE <u>BASIS</u> OF THE DISCOUNT RATE THAT IS USED TO CALCULATE THE PROFIT MARGIN? (E.G., THE NET INVESTMENT EARNINGS RATE) | | | | | | |
| IS THE DISCOUNT RATE USED TO CALCULATE THE PROFIT MARGIN ON A PRE-TAX OR AFTER-TAX BASIS? | | | | | | |
| OTHER STATUTORY MEASURE | | | | | | |

| PROFIT MEASURES AND GOALS | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| (PLEASE DESCRIBE) | | | | | | |
| OTHER STATUTORY GOAL | | | | | | |
| AFTER-TAX? (YES/NO/FRATERNAL) | | | | | | |
| AFTER-CAPITAL? (YES/NO) | | | | | | |
| PRIMARY OR SECONDARY MEASURE? | | | | | | |
| IF APPLICABLE, IN THE PRICING OF NEW SALES ISSUED TODAY, WHAT DISCOUNT RATE IS USED TO CALCULATE THE OTHER STATUTORY MEASURE? (E.G., 0%, 10%) | | | | | | |
| IF APPLICABLE, WHAT IS THE BASIS OF THE DISCOUNT RATE THAT IS USED TO CALCULATE THE OTHER STATUTORY MEASURE? (E.G., THE NET INVESTMENT EARNINGS RATE) | | | | | | |
| IF APPLICABLE, IS THE DISCOUNT RATE USED TO CALCULATE THE OTHER STATUTORY PROFIT MEASURE ON A PRE-TAX OR AFTER-TAX BASIS? | | | | | | |

| PROFIT MEASURES AND GOALS | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|--|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| GAAP | | | | | | |
| GAAP ROE (%) | | | | | | |
| AFTER-TAX? (YES/NO/FRATERNAL) | | | | | | |
| AFTER-CAPITAL? (YES/NO) | | | | | | |
| PRIMARY OR SECONDARY MEASURE? | | | | | | |
| HOW IS ROE MEASURED OVER THE LIFE OF THE BUSINESS? (SEE CHOICES A, B, AND C BELOW) | | | | | | |
| A. AVERAGE PROFITS/AVERAGE CAPITAL? (YES/NO) | | | | | | |
| B. DISCOUNTED PROFITS / DISCOUNTED CAPITAL? (YES/NO) | | | | | | |
| IF DISCOUNTED, WHAT DISCOUNT RATE IS USED? | | | | | | |
| C. OTHER METHOD OF MEASURING ROE (PLEASE DESCRIBE) | | | | | | |

| PROFIT MEASURES AND GOALS | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|--|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| GAAP ROA (BPS) | | | | | | |
| AFTER-TAX? (YES/NO/FRATERNAL) | | | | | | |
| AFTER-CAPITAL? (YES/NO) | | | | | | |
| PRIMARY OR SECONDARY MEASURE? | | | | | | |
| OTHER GAAP MEASURE (PLEASE DESCRIBE) | | | | | | |
| OTHER GAAP GOAL | | | | | | |
| AFTER-TAX? (YES/NO/FRATERNAL) | | | | | | |
| AFTER-CAPITAL (YES/NO) | | | | | | |
| PRIMARY OR SECONDARY MEASURE? | | | | | | |
| IF APPLICABLE, IN THE PRICING OF NEW SALES ISSUED TODAY, WHAT DISCOUNT <u>RATE</u> IS USED TO CALCULATE THE OTHER GAAP MEASURE? (E.G., 0%, 10%) | | | | | | |
| IF APPLICABLE, WHAT IS THE <u>BASIS</u> OF THE DISCOUNT RATE THAT IS USED TO CALCULATE THE OTHER GAAP MEASURE? (E.G., THE NET INVESTMENT EARNINGS RATE) | | | | | | |
| IF APPLICABLE, IS THE DISCOUNT RATE USED TO CALCULATE THE OTHER GAAP PROFIT MEASURE ON A PRE-TAX OR AFTER-TAX BASIS? | | | | | | |

B. If your profit goals changed in the last two years, please describe the change in basis (e.g., statutory IRR to statutory profit margin) and/or the change in target (e.g., increased from 10% to 12%) and the rationale for the change.

C1. Indicate with an “X” your actual results for 2017 relative to profit goals:

| ACTUAL RESULTS | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|----------------------------------|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| EXCEED PROFIT GOALS | | | | | | |
| MEETING OR CLOSE TO PROFIT GOALS | | | | | | |
| SHORT OF PROFIT GOALS | | | | | | |

If short of profit goals, which of the following factors were primary contributors to the shortfall? (Indicate with an “X”)

| ACTUAL RESULTS | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|-----------------------------|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| INTEREST EARNINGS? | | | | | | |
| MORTALITY? | | | | | | |
| EXPENSES? | | | | | | |
| OTHER? (PLEASE DESCRIBE) | | | | | | |

C2. Indicate with an “X” your actual results for YTD 9/30/18 relative to profit goals:

| ACTUAL RESULTS | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|----------------------------------|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| EXCEED PROFIT GOALS | | | | | | |
| MEETING OR CLOSE TO PROFIT GOALS | | | | | | |
| SHORT OF PROFIT GOALS | | | | | | |

If short of profit goals, which of the following factors were primary contributors to the shortfall? (indicate with an “X”)

| FACTOR | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|-----------------------------|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| INTEREST EARNINGS? | | | | | | |
| MORTALITY? | | | | | | |
| EXPENSES? | | | | | | |
| OTHER? (PLEASE DESCRIBE) | | | | | | |

TARGET SURPLUS

B. Please provide responses relevant to the pricing of new sales issued today. (We are not looking for you S&P or A.M. Best rating, but rather your pricing assumption for target surplus.)

| TARGET SURPLUS BASIS | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|--|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| OVERALL NAIC RBC (% OF COMPANY ACTION LEVEL) | | | | | | |
| % OF NET AMOUNT AT RISK | | | | | | |
| % OF RESERVES | | | | | | |
| % OF PREMIUM | | | | | | |
| S&P (EXPRESS AS A % OF NAIC CAL) | | | | | | |
| A.M. BEST (EXPRESS AS A % OF BCAR) | | | | | | |
| % MCCSR | | | | | | |
| INTERNAL FORMULA (EXPRESS AS A % OF NAIC CAL) | | | | | | |
| OTHER (PLEASE DESCRIBE AND EXPRESS AS A % OF NAIC CAL) | | | | | | |

B. Is your target surplus assumption set using: (Please indicate with an "X".)

| | | |
|--|--|-------------|
| HISTORICAL COMPANY FIGURES? | | |
| PROJECTED COVARIANCE AT FUTURE POINTS IN TIME? | | => DESCRIBE |
| OTHER? | | |

C. Are you assuming increased capital requirements in aggregate due to tax reform?

| | |
|-----|--|
| YES | |
| NO | |

D. If there has been a change in target surplus in recent years, please describe the change and the rationale for the change.

RESERVES

A. The operative date of the Valuation Manual was January 1, 2017. Please indicate with an “X” the calendar year when you implemented or plan to implement PBR:

| IMPLEMENTATION DATE | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|------------------------------|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| ALREADY IMPLEMENTED ... 2017 | | | | | | |
| 2018 | | | | | | |
| 2019 | | | | | | |
| 2020 | | | | | | |

What was/is the primary rationale for the company’s decision regarding the timing of implementing PBR?

Please indicate with an “X” the issue year when you implemented or plan to implement the 2017 CSO valuation mortality table.

| ISSUE YEAR | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|------------------------------|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| ALREADY IMPLEMENTED ... 2017 | | | | | | |
| 2018 | | | | | | |
| 2019 | | | | | | |
| 2020 | | | | | | |

B. Has your company analyzed the Stochastic Exclusion Test for the UL/IUL product(s) expected to be sold? (Yes/No)
If so, was the outcome what you expected?

Was product design or any other relevant components changed as a result of this test? (Yes/No)
If so, please describe.

C. How do you expect the company will approach the pricing of new UL/IUL products in a PBR environment for products that require one of the VM-20 modeled reserve components?

Please comment on any difficulties presented by forecasting the deterministic reserve and/or stochastic reserve.

Recent action has been taken by regulators to re-expose APF 2018-44 which modifies the equity returns assumed in the calculation of the deterministic reserve (DR) for indexed products. Please comment on the appropriateness of APF 2018-44.

D. Do you have any concerns about the Net Premium Reserve floor? (Yes/No)
If so, please explain, providing a distinction between UL and IUL. If appropriate, in particular, if you think the NPR needs to be clarified for separate account or indexed products, please include these comments.

E. For IUL valuations and projections (in general),

| ARE YOU: | (PLEASE INDICATE WITH AN "X") |
|---|-------------------------------|
| EXPLICITLY MODELING THE CAPS AND OPTIONS, OR | |
| MODELING THE INDEXED ACCOUNT LIKE A FIXED ACCOUNT (A SPREAD)? | |
| OTHER, PLEASE DESCRIBE | |

What is your company philosophy for setting renewal caps?

F. What are your specific concerns about PBR for IUL?

G. Have you/your company examined the Relative Risk tool (RRtool.soa.org) with assumption tables updated August 18, 2017, or any other actuarially sound method for establishing a valuation mortality basis? (Yes/No)

H. VM-01, paragraph 33 defines a mortality segment as “a subset of policies for which a separate mortality table representing the prudent estimate assumption will be determined.” VM-20 permits the aggregation of mortality segments in determining credibility (Section 9.C.4.b). When determining credibility for UL/IUL products, briefly describe the aggregation of mortality segments for purposes of credibility (i.e., describe the products, risk classes, tobacco status, etc. that are aggregated).

I. Understanding that not all cells (policy year/age/risk class combination) will have credibility, generally how credible (e.g., 30%, 50%, etc.) is the mortality segment to which the UL/IUL products belong? If mortality segments vary by non-tobacco (NT) vs. tobacco (T) status, then credibility may be reported separate for NT and T segments.

J. What options have been used to increase credibility of mortality experience?

K. In planning for new UL/IUL products, does your company anticipate using new underwriting techniques like accelerated underwriting? (Yes/No)
If so, what considerations does this introduce for credibility and the development of a mortality assumption?

What is (or will be) the company’s approach to supporting the prudent best-estimate mortality assumptions for accelerated underwritten business that is (or has been) moved to VM-20 valuation?

L. PBR modeling and new designs

| PBR MODELING AND NEW DESIGNS | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| HAVE YOU MODELED PBR-TYPE RESERVES ON EXISTING PRODUCTS? (YES/NO) | | | | | | |
| HAVE YOU DEVELOPED NEW DESIGNS FOR CONSIDERATION UNDER PBR?(YES/NO) | | | | | | |

| IF YOU HAVE DEVELOPED NEW DESIGNS FOR CONSIDERATION UNDER PBR, HAVE YOU PRICED YOUR PRODUCTS USING: (PLEASE INDICATE WITH AN "X".) | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|--|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| THE NET PREMIUM RESERVE (NPR) ONLY? | | | | | | |
| THE MAXIMUM OF THE NPR, DETERMINISTIC RESERVE, AND STOCHASTIC RESERVE? | | | | | | |
| OTHER? | | | | | | |
| DESCRIPTION OF OTHER | | | | | | |

Have you modeled AG 38 8D reserves on existing products? (Yes/No)

Have you modeled AG 48 reserves on existing products? (Yes/No)

Relative to your company's strategy for PBR implementation, how will AG 48 play a role in these strategic decisions? Please indicate any considerations, such as delaying PBR until 2020 due to tax advantages of continuing to issue AG 48 Covered Policies.

From an industry standpoint, how effective do you think PBR will be in making reserve financing arrangements (captives) obsolete? (Please indicate with an "X".)

| | |
|------------------|--|
| VERY INEFFECTIVE | |
| INEFFECTIVE | |
| AVERAGE | |
| EFFECTIVE | |
| VERY EFFECTIVE | |

Explain why you chose this effectiveness level.

M. If you have developed any AG 48 projected reserves for your UL products:

What is the ratio of the AG 48 Actuarial Method reserve over the AXXX reserve when the AXXX reserve is at its peak?

Which component seems to be the main drive of the AG 48 reserve? (Please indicate with an "X".)

| | |
|-----------------------|--|
| NET PREMIUM RESERVE | |
| DETERMINISTIC RESERVE | |
| STOCHASTIC RESERVE | |

N. If the company has performed VM-20 **forecasts** for AG 38 or AG 48, please describe the findings made during that process that are relevant to new business pricing in a PBR-world.

O. Are you assuming a financing arrangement in a post-PBR environment? (Yes/No)

P. Describe any issues you have had with PBR and simplified issue UL/IUL policies.

Q. What are your views about the application of VM-20 for UL/IUL with a LTC rider?

Do you intend to calculate the reserves: (Please indicate with an "X".)

- a. For the riders separately from the base plan, or
- b. Calculate them on an integrated basis (base plan + riders)

R. In the statutory annual statement, do you report the active life and disabled life reserves on LTC riders attached to UL/IUL policies in a (please indicate with an "X"):

- a. Life insurance reserve column?
- b. Health insurance reserve column?

Do you assume LTC riders are subject to statutory NAIC health reserve and reporting requirements as required for standalone LTC policies? (Yes/No)

RISK MANAGEMENT

A. Please indicate your use of the following risk management tools regarding your UL/IUL business:

| RISK MANAGEMENT MEASURE | CURRENTLY | ONE YEAR AGO |
|--|-----------|--------------|
| DO YOU USE EXTERNAL REINSURANCE? (YES/NO) | | |
| IF YES, WHAT FORM OF REINSURANCE IS USED (YRT, COINSURANCE)? | | |
| IF YES, PLEASE INDICATE WITH AN "X": | | |
| ONSHORE REINSURANCE IS USED | | |
| OFFSHORE REINSURANCE USED | | |
| DO YOU USE INTERNAL REINSURANCE? (YES/NO) | | |
| IF YES, PLEASE INDICATE WITH AN "X": | | |
| ONSHORE REINSURANCE IS USED | | |
| OFFSHORE REINSURANCE USED | | |
| IF ONSHORE INTERNAL REINSURANCE IS USED: (PLEASE INDICATE WITH AN "X") | | |
| ONSHORE WITH LOC OR OTHER 3 RD PARTY FUNDING IS USED | | |
| ONSHORE WITH PARENTAL GUARANTEE ("IOWA SOLUTION") IS USED | | |

B. Capital solutions

| CAPITAL SOLUTIONS | CURRENTLY | ONE YEAR AGO |
|---|-----------|--------------|
| HAVE YOU STRUCTURED CAPITAL SOLUTIONS SO YOU ARE ALLOWED TO HOLD AXXX-TYPE RESERVES AS TAX RESERVES? (YES/NO) | | |

C. Cost of financing assumed in pricing

| COST OF FINANCING | CURRENTLY | ONE YEAR AGO |
|---|------------------|---------------------|
| WHAT COST OF FINANCING DO YOU ASSUME IN PRICING YOUR UL/IUL SECONDARY GUARANTEE PRODUCTS? | | |
| IF CHANGES WERE MADE TO YOUR ASSUMPTION IN THE LAST YEAR, WHEN WERE THEY MADE? | | |

D. What implications has the recent economic environment had on your capital solutions?

E. In planning for new UL/IUL products under VM-20, does your company anticipate any changes to the reinsurance structure in light of PBR? (Yes/No)
If so, in what way?

F. What are your retention limits?

Do you start to reinsure at an “attachment point” below the ultimate retention level?

What is your attachment point as a percent of the full retention level? (For example, if your retention limit is \$5 million with an attachment point of \$2 million, your attachment point as a percent of the full retention level would be 40%.)

G. Please indicate below (with an “X”) the level of reinsurance used for your accelerated underwritten business:

| LEVEL OF REINSURANCE USED FOR ACCELERATED UNDERWRITTEN BUSINESS | (PLEASE INDICATE WITH AN “X”) | |
|---|--------------------------------------|--------------|
| ACCELERATED UNDERWRITTEN BUSINESS IS BEING REINSURED WITH OTHER UL/IUL BUSINESS | | |
| ACCELERATED UNDERWRITTEN BUSINESS IS BEING FULLY RETAINED | | |
| OTHER APPROACH | | => DESCRIBE: |
| DO NOT OFFER ACCELERATED UNDERWRITTEN BUSINESS | | |

H. For the index included in your IUL product, do you: (Please indicate with an “X”.)

| | |
|--|--|
| HEDGE THE INDEX WITH DERIVATIVE INSTRUMENTS? | |
| ACCEPT THE RISK? | |

If you hedge, please describe the hedging strategy you use to fund the index credits for IUL.

If you hedge, what is the threshold of volume (account value) before hedging is economically efficient?

If you hedge, do you hedge your IUL with your indexed annuity business? (Yes/No)

UNDERWRITING

A. Do you have a table-shaving program? (Yes/No)

If yes:

What is the age range offering?

What is the maximum number of tables that may be shaved?

Please describe other pertinent components of your table shaving program.

Have you modified your program in the last two years?

If yes, please describe.

Do you expect to continue your table-shaving program?

B. Do you have a “credit program” or other type of program that improves the rating for favorable risk factors? (Yes/No)

If yes:

What is the age range offering?

What is the maximum number of tables that may be reduced?

What risk classes are allowed in this program? Are substandard risks allowed in this program?

What restrictions does your credit program impose?

Please describe other pertinent components of your credit program.

How is your credit program managed? (e.g., is there a budget or management of the impact of the program?)

What is the mortality impact of the credit program?

How is the mortality impact determined?

Have you modified your program in the last two years?

If yes, please describe.

Do you expect to continue your program?

C. Which of the following underwriting approaches is your company currently using for UL/IUL products, and at what ages and face amounts are they used? **Please provide face limits by age groupings, separated by semicolons (e.g., 0-25 \$250K+; 26-45 \$100K+, etc.)**

| UNDERWRITING APPROACH | INDICATE WITH AN “X” IF APPROACH IS USED | AGES AND FACE AMOUNTS WHERE USED |
|---|--|----------------------------------|
| <i>SIMPLIFIED ISSUE UNDERWRITING</i> : LESS THAN A COMPLETE SET OF MEDICAL HISTORY QUESTIONS AND NO MEDICAL OR PARAMEDICAL EXAM. | | |
| <i>ACCELERATED UNDERWRITING</i> : THE USE OF TOOLS SUCH AS A PREDICTIVE MODEL TO WAIVE REQUIREMENTS SUCH AS FLUIDS AND A PARAMEDICAL EXAM ON A FULLY UNDERWRITTEN POLICY FOR QUALIFYING APPLICANTS WITHOUT CHARGING A HIGHER PREMIUM. | | |
| <i>FULL UNDERWRITING</i> : COMPLETE SET OF MEDICAL HISTORY QUESTIONS, AND MEDICAL OR PARAMEDICAL EXAM, EXCEPT WHERE AGE AND AMOUNT LIMITS ALLOW FOR NON-MEDICAL UNDERWRITING. | | |
| <i>OTHER</i> : PLEASE DESCRIBE | | |

If applicable, when was your accelerated underwriting program implemented?

If you do not have an accelerated underwriting program, are you planning to implement one? (Yes/No)

If so, are you planning to implement it in the next 12 months? (Yes/No)

D. Of all new UL/IUL business during YTD 9/30/18, what percentage (based on policy count) qualified to have requirements waived under an accelerated underwriting program?

What percentage of the qualified cases actually became sold cases?

What percentage of the cases that did not qualify became sold cases?

Of those policies that met the requirements of the AU program during YTD 9/30/18, what percentage ultimately qualified to have requirements waived under the accelerated program?

(That is, if the applicant meets the age, policy size, height/weight, or other entrance requirements to participate in the AU program, how many are actually approved to go through the program (vs. being reviewed in the AU program and then “kicked out” to full underwriting due to any of the scores received during the AU program review?))

E. Do you utilize any fluid-less underwriting programs for UL/IUL products at face amounts where you would normally require fluids? (Yes/No)

For fluid-less UL/IUL policies, how does your company determine if an applicant is a tobacco user?

How is the risk class determined in these situations?

F. Do you use predictive analytics in your accelerated underwriting program for UL/IUL products? (Yes/No)

Do you allow the use of non-FCRA (Fair Credit Reporting Act) regulated data as part of the algorithm to waive requirements?

Do you use predictive analytics in underwriting of UL/IUL products **under any other underwriting approach (i.e., other than accelerated underwriting)?**

If applicable, please describe your predictive analytics (e.g., any direct actions on rating or decisions, or just insight to dig deeper elsewhere.)

G. If you are using an accelerated underwriting model for UL/IUL products, did you partner with a reinsurer to define the parameters of the program? (Yes/No)

H. Which scoring models are used to underwrite UL/IUL policies?

| SCORING MODELS USED TO UNDERWRITE UL/IUL POLICIES | (PLEASE INDICATE WITH AN “X”) |
|---|-------------------------------|
| INTERNAL | |
| EXTERNAL | |
| DO NOT USE SCORING MODELS | |

| IF APPLICABLE, HOW ARE SCORING MODELS BEING USED? | (PLEASE INDICATE WITH AN “X”) |
|---|-------------------------------|
| FOR SIMPLIFIED ISSUE BUSINESS | |
| FOR FULLY UNDERWRITTEN BUSINESS | |
| OTHER (PLEASE DESCRIBE) | |

If applicable, are scoring models used with automated rules? (Yes/No)

| IF APPLICABLE, WHAT TYPES OF SCORING MODELS ARE USED? | (PLEASE INDICATE WITH AN "X") |
|---|-------------------------------|
| LAB | |
| CONSUMER CREDIT RELATED | |
| MOTOR VEHICLE RECORDS | |
| PRESCRIPTION HISTORIES | |
| OTHER (PLEASE DESCRIBE) | |

I. Do you offer a Wellness program with your UL/IUL products? (Yes/No)

If yes:

Please provide a brief description of the program.

What age limits apply?

What face amount limits apply?

What risk class limits apply?

What other restrictions/limits apply?

J. Please respond to the following questions regarding the underwriting of HIV positive cases for UL/IUL insurance:

Is coverage allowed for HIV positive cases? (Yes/No)

If so, what is the maximum amount of coverage allowed?

To be eligible for coverage, what are the requirements regarding the diagnosis of HIV positive? (e.g., diagnosed 3 years prior to application for insurance; age range 20-39)

What are the exclusions for HIV positive cases?

K. Underwriting exceptions

For reconsideration decisions (business decisions) or exceptions, what is the structure for the underwriter's decision making?

Are underwriting exceptions reflected in pricing assumptions? (Yes/No)

If yes, how are underwriting exceptions reflected in pricing?

Do you allow underwriting exceptions in order to beat competitive offers? (Yes/No)

What percentage (based on policy count) of total UL/IUL new business (YTD 9/30/18) is underwriting exceptions?

What percentage (based on face amount) of total UL/IUL new business (YTD 9/30/18) is underwriting exceptions?

L. Do you allow trial applications for UL/IUL business? (Normal application process without medical testing.) (Yes/No)

Describe the parameters for submission of trial applications.

What restrictions are there, if any, for trial applications?

Are outsourced underwriting resources being used for trial applications? (Yes/No)

| QUESTION | ALL DISTRIBUTION CHANNELS COMBINED |
|--|------------------------------------|
| WHAT PERCENTAGE OF BUSINESS (BASED ON POLICY COUNT) SOLD YTD 9/30/18 CAME THROUGH TRIAL APPLICATIONS? | |
| WHAT PERCENTAGE OF TRIAL APPLICATIONS (BASED ON POLICY COUNT) YTD 9/30/18 ACTUALLY BECAME SOLD CASES? | |
| WHAT PERCENTAGE OF TRIAL APPLICATIONS (BASED ON POLICY COUNT) YTD 9/30/18 WERE EXPECTED TO BECOME SOLD CASES? | |
| WHAT PERCENTAGE OF NORMAL APPLICATIONS (BASED ON POLICY COUNT) YTD 9/30/18 ACTUALLY BECAME SOLD CASES? | |

M. Are you using any of the following underwriting tools for fully underwritten business? If so, at what ages? At what face amounts? Please describe the tool and indicate if any changes have been made in the last year.

| UNDERWRITING TOOLS | TOOL USED? (YES/NO) | AGES WHERE USED | FACE AMOUNTS WHERE USED | IF TOOL IS USED, PLEASE DESCRIBE | HAS THIS CHANGED IN THE LAST YEAR? IF YES, HOW? |
|--|---------------------|-----------------|-------------------------|----------------------------------|---|
| DO YOU USE TELE-UNDERWRITING OR TELEPHONIC SCREENING? | | | | | |
| DO YOU USE COGNITIVE IMPAIRMENT TESTING? | | | | | |
| DO YOU USE ADL EVALUATIONS? | | | | | |
| DO YOU USE PRESCRIPTION DRUG DATABASE SEARCHES? | | | | | |
| HAVE YOU DEVELOPED ADDITIONAL QUESTIONS ON YOUR APPLICATION? | | | | | |

N. If you use simplified issue and/or accelerated underwriting for your UL/IUL products:

| PLEASE INDICATE IN WHICH MARKETS THE UL/IUL PRODUCTS ARE OFFERED. (PLEASE INDICATE WITH AN "X".) | SIMPLIFIED ISSUE | ACCELERATED UNDERWRITING |
|--|------------------|--------------------------|
| INDIVIDUAL MIDDLE/UPPER INCOME | | |
| COLI/BOLI | | |
| JUVENILE | | |
| LOW/MIDDLE INCOME | | |
| MORTGAGE | | |
| OTHER (PLEASE DESCRIBE BELOW) | | |
| DESCRIPTION OF OTHER MARKET | | |

Please indicate which of the following underwriting tools or data elements are used with your UL/IUL products, and the ages and face amounts where used. The use of these tools and data elements on a reflexive basis should be included. **Please provide face limits by age groupings, separated by semicolons (e.g., 0-25 \$250K+; 26-45 \$100K+, etc.)**

| UNDERWRITING TOOLS/DATA ELEMENTS | SIMPLIFIED ISSUE | | ACCELERATED UNDERWRITING | |
|---|------------------|----------------------------------|--------------------------|----------------------------------|
| | USED? (YES/NO) | AGES AND FACE AMOUNTS WHERE USED | USED? (YES/NO) | AGES AND FACE AMOUNTS WHERE USED |
| ACTIVITIES OF DAILY LIVING (ADL) | | | | |
| ATTENDING PHYSICIAN'S STATEMENT (APS) | | | | |
| CONSUMER DATABASE | | | | |
| CREDIT HISTORY | | | | |
| COGNITIVE TESTING | | | | |
| FACE-TO-FACE SALE | | | | |
| FELONY | | | | |
| FINANCIAL | | | | |
| FRAUD CHECK | | | | |
| LIFESTYLE | | | | |
| MEDICAL INFORMATION BUREAU (MIB) | | | | |
| MOTOR VEHICLE REPORT (MVR) | | | | |
| ORAL FLUID | | | | |
| PERSONAL HISTORY INTERVIEW | | | | |
| PHYSICAL FUNCTIONAL STATUS/TESTING (E.G., GET UP AND GO TEST) | | | | |
| PREDICTIVE MODELS: | | | | |
| INTERNAL PREDICTIVE MODEL | | | | |
| THIRD PARTY PREDICTIVE MODEL | | | | |
| IF THIRD PARTY PREDICTIVE MODEL, WHICH MODEL(S)? | | | | |
| PRESCRIPTION DRUG DATABASE SEARCH | | | | |
| TELE-UNDERWRITING WITH DRILL-DOWN QUESTIONS | | | | |
| TELE-UNDERWRITING WITHOUT DRILL-DOWN QUESTIONS | | | | |
| OTHER (PLEASE DESCRIBE BELOW) | | | | |
| DESCRIPTION OF OTHER UNDERWRITING TOOL OR DATA ELEMENT | | | | |

| QUESTION | SIMPLIFIED ISSUE | ACCELERATED UNDERWRITING |
|---|------------------|--------------------------|
| DO YOU ADD ANY UNDERWRITING QUESTIONS TO YOUR UL/IUL APPLICATION NOT FOUND IN YOUR FULLY UNDERWRITTEN APPLICATION? (YES/NO) | | |
| IF YES, PLEASE DESCRIBE | | |

O. Which of the following preferred risk parameters at the older ages differ from those at the younger ages? (Please indicate with an "X".)

| | |
|----------------------------|--|
| 1) FAMILY HISTORY | |
| 2) CHOLESTEROL | |
| 3) BMI | |
| 4) BLOOD PRESSURE | |
| 5) OTHER. PLEASE DESCRIBE. | |
| 6) NO DIFFERENCE | |
| 7) NO PREFERRED PRODUCT | |

P. For your products that offer a preferred risk class, which underwriting methodology is used? (Please indicate with an "X".)

| | |
|---------------------------|--|
| KNOCK-OUT UNDERWRITING | |
| DEBIT/CREDIT UNDERWRITING | |
| OTHER (PLEASE DESCRIBE) | |
| NO PREFERRED PRODUCT | |

PRODUCT DESIGN

A. On Secondary Guarantee Products, please indicate with an "X" which design(s) you offer:

| DESIGN | ULSG | IULSG | |
|---|------|-------|------------|
| MINIMUM SCHEDULED PREMIUM DESIGN (LONG-TERM GUARANTEE) | | | |
| SHADOW ACCOUNT DESIGN WITH A SINGLE FUND (LONG-TERM GUARANTEE) | | | |
| SHADOW ACCOUNT DESIGN WITH MULTIPLE FUNDS (LONG-TERM GUARANTEE) | | | |
| HYBRID | | | =>DESCRIBE |
| NO LAPSE GUARANTEE UP TO ABOUT 10 YEARS (SHORT-TERM GUARANTEE) | | | |
| OTHER DESIGN | | | =>DESCRIBE |

| PRODUCT: | ULSG | IULSG |
|--|-------------|--------------|
| IF YOU HAVE A MINIMUM SCHEDULED PREMIUM DESIGN, HOW LATE CAN THE PREMIUM BE PAID TO STILL MEET THE MINIMUM PREMIUM REQUIREMENT (E.G., 30 DAYS, 60 DAYS)? | | |

B. Did you reprice your UL product?

| REPRICING | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|-------------------------------------|----------------|------------------------------|--------------------------------------|------------------------------|-------------------------------|
| REPRICE IN LAST 12 MONTHS? (YES/NO) | | | | | | |
| IF YES, DID THAT REPRICING USE PBR RESERVES? (YES/NO) | | | | | | |
| REPRICE IN LAST 13-24 MONTHS? | | | | | | |
| IF YES, DID THAT REPRICING USE PBR RESERVES? (YES/NO) | | | | | | |
| GENERAL LEVEL OF PREMIUMS ON NEW VS. OLD BASIS | | | | | | |

C. Secondary guarantee modifications

| SECONDARY GUARANTEE MODIFICATIONS | ULSG | IULSG |
|---|-------------|--------------|
| DO YOU EXPECT TO MODIFY YOUR SECONDARY GUARANTEES IN THE NEXT 12 MONTHS? (YES/NO) | | |
| DO YOU EXPECT TO MODIFY YOUR SECONDARY GUARANTEE IN THE NEXT 13-24 MONTHS? (YES/NO) | | |
| IF NO, ARE YOU WAITING FOR PRINCIPLES-BASED RESERVES TO BE EFFECTIVE PRIOR TO MAKING ANY CHANGES? | | |

D. Which strategies have you used in light of the recent low interest rate environment? (indicate with an "X" all that apply)

| STRATEGY | STRATEGY USED |
|--|----------------------|
| INTENTIONALLY REDUCE/LIMIT SALES BY: | |
| INCREASING PREMIUM RATES | |
| DISCONTINUED SALES OF CERTAIN PRODUCTS | |
| RIDING IT OUT/DOING NOTHING | |
| LAUNCHING A NEW DESIGN WITH: | |
| REDUCED GUARANTEES | |
| REMOVING THE NO LAPSE GUARANTEE | |
| OTHER | |
| PLEASE DESCRIBE | |

E. Does your company allow for purchases of UL/IUL products via the internet? (Yes/No)

| IF YOU RESPONDED "YES", PLEASE RESPOND TO THE FOLLOWING QUESTIONS: | PLEASE INDICATE WITH AN "X". |
|--|------------------------------|
| ARE YOUR INTERNET PRODUCTS NON-MEDICAL OR MEDICAL? | |
| NON-MEDICAL? | |
| MEDICAL? | |
| WHICH OF THE FOLLOWING ITEMS ARE HANDLED VIA THE INTERNET? | |
| EDUCATION ABOUT THE PRODUCT | |
| PROVIDE A QUOTE | |
| FILL OUT AN APPLICATION | |
| PAYMENT OF PREMIUM | |
| OTHER, PLEASE DESCRIBE | |
| | |
| IS AN AGENT STILL INVOLVED IN THESE SALES? (YES/NO) | |
| WHAT HAVE BEEN THE BIGGEST CHALLENGES OF INTERNET SALES? | |

F. Do you currently offer a Long-term Care accelerated death benefit rider (ADB) today? (This includes ADBs either with or without an Extension of Benefits rider and/or Inflation Protection rider.) (Yes/No)

Do you expect to develop LTC combination products in the next 24 months? (Yes/No)

G. Chronic illness accelerated benefit rider design(s)

| WHICH CHRONIC ILLNESS ACCELERATED BENEFIT RIDER DESIGN(S) DO YOU CURRENTLY OFFER? | PLEASE INDICATE WITH AN "X". |
|---|------------------------------|
| CHRONIC ILLNESS WITH DISCOUNTED DEATH BENEFIT, NO CHARGES | |
| CHRONIC ILLNESS WITH LIENS, NO UPFRONT CHARGES | |
| CHRONIC ILLNESS WITH UPFRONT CHARGES | |
| OTHER (PLEASE DESCRIBE) | |
| DO NOT CURRENTLY OFFER A CHRONIC ILLNESS ADB DESIGN | |

| WHICH CHRONIC ILLNESS ACCELERATED BENEFIT RIDER DESIGN(S) DO YOU EXPECT TO DEVELOP IN THE NEXT 24 MONTHS? | PLEASE INDICATE WITH AN "X". |
|---|------------------------------|
| CHRONIC ILLNESS WITH DISCOUNTED DEATH BENEFIT, NO CHARGES | |
| CHRONIC ILLNESS WITH LIENS, NO UPFRONT CHARGES | |
| CHRONIC ILLNESS WITH UPFRONT CHARGES | |

| | |
|--|-------------------------------------|
| WHICH CHRONIC ILLNESS ACCELERATED BENEFIT RIDER DESIGN(S) DO YOU EXPECT TO DEVELOP IN THE NEXT 24 MONTHS? | PLEASE INDICATE WITH AN "X". |
| OTHER (PLEASE DESCRIBE) | |
| DO NOT EXPECT TO DEVELOP A CHRONIC ILLNESS ADB DESIGN IN THE NEXT 12 MONTHS | |

H. Chronic illness rider requirement of an expectation of permanence of the condition

| | |
|--|-------------------------------------|
| DOES YOUR LATEST CHRONIC ILLNESS RIDER INCLUDE A REQUIREMENT OF AN EXPECTATION OF PERMANENCE OF THE CONDITION IN ORDER FOR BENEFITS TO BE PAID? | PLEASE INDICATE WITH AN "X". |
| YES | |
| NO | |
| IF SO, DO YOU HAVE PLANS TO ELIMINATE THIS REQUIREMENT? | |
| YES | |
| NO | |

I. Which of the following Living Benefits (other than LTC or Chronic Illness benefits) do you offer or expect to offer in the next 24 months? (Please indicate with an "X".)

| LIVING BENEFITS | OFFER OR EXPECT TO OFFER | |
|--|---------------------------------|-------------|
| TERMINAL ILLNESS ACCELERATED DEATH BENEFIT | | |
| CRITICAL ILLNESS ACCELERATED DEATH BENEFIT | | |
| OTHER | | =>DESCRIBE: |

J. In your opinion, which of the following riders/product features do you believe companies find valuable? Please assign a ranking of 1 to 5 to each of the following items (1 = most valuable and 5 = least valuable)

Long-Term Care (plans that qualify under Long-Term Care Model Laws and Regulations)

Chronic illness benefits (plans that qualify under Model Regulation 620 governing accelerated death benefit designs)

Terminal illness (typically, diagnosis of no more than 12 months to live; large % of face amount is available for qualified insureds)

Critical illness benefits (often defined ailments under the rider)

Longevity benefits (if you live to a certain age, you start receiving a payout of the death benefit. May get payout for 8–10 years; a small residual death benefit remains for the beneficiary.)

Disability income benefits (more than just waiver of premium; if disabled, receive a portion of the face amount for as long as disabled, differentiated from chronic illness or LTC since may meet the definition of disability, but not two of six ADLs)

Return of Premium benefits (can either be at death (face + premiums paid) or after a specified number of years get return of premiums)

Unemployment benefits (waiver of premium if you lose your job; usually must qualify for unemployment benefits and company waives premium for up to one year)

- K. Do you currently offer a simplified issue, single premium UL policy? (Yes/No)
 If not, are you considering offering a simplified issue, single premium UL policy in the next 24 months? (Yes/No)
 If you do offer a simplified issue, single premium UL policy, does it include a LTC rider? (Yes/No)

L. Interest rate persistency bonus on IUL policies

| UNDER AG 48, WHICH OF THE FOLLOWING ARE IMPACTED BY AN ADDITIONAL PERSISTENCY BONUS? | PLEASE INDICATE WITH AN "X". |
|--|------------------------------|
| ILLUSTRATION VALUES | |
| INCREASED PERSISTENCY IN PRICING | |
| COI CHANGES | |
| OPTION BUDGET CHANGES | |
| FUTURE OPTION BUDGET CHANGE DURING INTEREST RATE BONUS PERIOD | |
| OTHER (PLEASE DESCRIBE) | |
| NOT APPLICABLE | |

M. Are your UL/IUL products designed to use the cash value accumulation test (CVAT) or guideline premium test? (Indicate Yes/No)

| CVAT OR GUIDELINE PREMIUM TEST | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| ALL CVAT | | | | | | |
| ALL GUIDELINE PREMIUM | | | | | | |
| MIX OF CVAT AND GUIDELINE PREMIUM, DEPENDING ON PRODUCT | | | | | | |
| POLICYHOLDER CHOICE | | | | | | |

N. 2017 CSO mortality concerns - simplified issue plans

| ARE YOU HAVING CONCERNS THAT 2017 CSO MORTALITY FOR SOME CELLS EXCEEDS EXPECTED MORTALITY ON SIMPLIFIED ISSUE PLANS? | PLEASE INDICATE WITH AN "X". |
|--|------------------------------|
| YES | |
| NO | |

O. 2017 CSO mortality – compliance with guideline premium test

| | |
|--|-------------------------------------|
| ARE YOU HAVING ANY PROBLEMS COMPLYING WITH THE GUIDELINE PREMIUM TEST WITH THE USE OF THE 2017 CSO MORTALITY TABLE? | PLEASE INDICATE WITH AN "X". |
| YES | |
| NO | |

P. Loan provisions in UL/IUL product(s)

| WASH LOAN PROVISION | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|--|-------------------------------------|----------------|------------------------------|--------------------------------------|------------------------------|-------------------------------|
| DO YOU INCLUDE A WASH LOAN PROVISION? (YES/NO) | | | | | | |

| WHAT IS THE CUMULATIVE OUTSTANDING LOAN AMOUNT RELATIVE TO THE CASH SURRENDER VALUE (%) AS OF 9/30/18? | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|--|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| WASH LOANS (CREDITED RATE ON LOANED AV = LOAN INTEREST) | | | | | | |
| OTHER LOANS | | | | | | |

Q. Does your pricing reflect expected utilization of wash loans? (Yes/No)

COMPENSATION

Please respond to questions A and B relative to your non-New York compensation.

A. Please provide the following components of your compensation programs by market type:
(Report total compensation across all levels of producers, excluding BGA bonuses).

| COMPENSATION COMPONENT | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| TYPICAL FIRST YEAR COMMISSION – UP TO TARGET | | | | | | |
| TYPICAL FIRST YEAR COMMISSION – EXCESS | | | | | | |
| TYPICAL RENEWAL COMMISSIONS | | | | | | |
| MARKETING ALLOWABLE (INCLUDES EXPENSES FOR HOME OFFICE SUPPORT AND/OR ALLOWABLES FOR BGA SUPPORT); ADDITIVE TO COMMISSION | | | | | | |
| DO YOU OFFER ASSET-BASED COMPENSATION? (YES/NO) IF YES, WHAT ARE YOUR ASSET- BASED COMPENSATION RATES? | | | | | | |
| DO YOU OFFER A CASH VALUE ENHANCEMENT RIDER? (YES/NO) DO YOU OFFER LEVELIZED COMPENSATION ON THE RIDER? (YES/NO) IF YES, WHAT ARE THE RATES? IF NO, DESCRIBE THE NON-LEVELIZED COMPENSATION PAID ON YOUR CASH VALUE ENHANCEMENT RIDER. | | | | | | |
| DO YOU PAY A PRODUCTION BONUS ON YOUR UL/IUL BUSINESS? (YES/NO) IF YES, PLEASE DESCRIBE. | | | | | | |
| DO YOU HAVE ROLLING TARGET PREMIUMS? (YES/NO) IF YES, FOR HOW MANY YEARS? | | | | | | |

B. Which of the following categories are included in the Marketing Allowable figures shown above? (Please indicate with an “X”.)

| CATEGORIES | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|------------------------------------|---------|-----------------------------|-------------------------------------|-----------------------------|------------------------------|
| ALLOWABLE FOR BGA SUPPORT | | | | | | |
| REGIONAL STAFF EXPENSES | | | | | | |
| ALL EXPENSES FOR THE MARKETING DEPARTMENT | | | | | | |
| DIRECT PAYMENTS MADE TO DISTRIBUTORS TO SPONSOR MEETINGS OR EVENTS | | | | | | |
| WHOLESALER AND DISTRIBUTION SUPPORT STAFF COMPENSATION | | | | | | |
| WHOLESALER AND DISTRIBUTION SUPPORT STAFF TRAVEL AND EXPENSE BUDGETS | | | | | | |
| RECOGNITION | | | | | | |
| OTHER (PLEASE DESCRIBE) | | | | | | |

C. Incentive compensation Do you pay incentive compensation to external wholesalers (Yes/No)

[We are looking for production-based compensation (as a % of target premium; % of premium in excess of target premium). We are not looking for the inclusion of anything like bonuses that may be based on production levels.]

| CATEGORIES | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|--|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| DO YOU PAY INCENTIVE COMPENSATION TO EXTERNAL WHOLESALERS (YES/NO) | | | | | | |
| IF SO, WHAT IS THE AVERAGE INCENTIVE COMPENSATION FOR EXTERNAL WHOLESALERS PAYABLE ON TARGET PREMIUM, AS A PERCENTAGE OF TARGET PREMIUM? | | | | | | |
| IF SO, WHAT IS THE AVERAGE INCENTIVE COMPENSATION FOR EXTERNAL WHOLESALERS PAYABLE ON PREMIUM IN EXCESS OF TARGET PREMIUM? | | | | | | |

D. Commission chargebacks

| CATEGORIES | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| DO YOU CHARGEBACK COMMISSIONS? (YES/NO) | | | | | | |
| IF SO, WHAT IS THE LENGTH OF THE COMMISSION CHARGEBACK PERIOD? | | | | | | |
| IF SO, WHAT IS THE LENGTH OF THE COMMISSION CHARGEBACK PERIOD ON FACE AMOUNT DECREASES? | | | | | | |

PRICING

A. Interest crediting strategy assumed in pricing UL/IUL with secondary guarantee products

| INTEREST RATES/CREDITING STRATEGY | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|--|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| DO YOU ASSUME A NEW-MONEY OR PORTFOLIO CREDITING STRATEGY IN PRICING UL/IUL PRODUCTS? (PLEASE INDICATE WITH AN "X".) | | | | | | |
| NEW-MONEY | | | | | | |
| PORTFOLIO CREDITING STRATEGY | | | | | | |
| FOR UL PRODUCTS, WHAT NET EARNED RATE IS ASSUMED (NET OF INVESTMENT EXPENSES AND DEFAULT RISK CHARGES)? | | | | | | |
| HOW HAS THIS RATE CHANGED RELATIVE TO THE RATE ASSUMED ONE YEAR AGO IN TERMS OF BPS? (FOR EXAMPLE, IF RATES DROPPED FROM 5% TO 4%, YOU WOULD REPORT -100 BPS) | | | | | | |
| | | | | | | |
| FOR IUL PRODUCTS, WHAT NET EARNED RATE IS ASSUMED FOR INDEXED ACCOUNTS, WITHOUT EARNINGS ON CALL OPTIONS (I.E., WHAT I THE NET EARNED RATE ASSUMED ON YOUR BOND PORTFOLIO)? | | | | | | |
| IS THE SAME NET EARNED RATE ASSUMED FOR FIXED ACCOUNTS? (YES/NO) | | | | | | |
| IF NO, WHAT IS THE NET EARNED | | | | | | |

| INTEREST RATES/CREDITING STRATEGY | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| RATE ASSUMED FOR FIXED ACCOUNTS? | | | | | | |
| HOW HAS THE RATE FOR INDEXED ACCOUNTS (<i>WITHOUT EARNINGS ON CALL OPTIONS</i>) CHANGED RELATIVE TO THE RATE ASSUMED ONE YEAR AGO IN TERMS OF BPS? (FOR EXAMPLE, IF RATES DROPPED FROM 5% TO 4%, YOU WOULD REPORT -100 BPS) | | | | | | |
| IF THE NET EARNED RATE ASSUMED FOR FIXED ACCOUNTS IS DIFFERENT, HOW HAS THIS RATE CHANGED RELATIVE TO THE RATE ASSUMED ONE YEAR AGO IN TERMS OF BPS? (FOR EXAMPLE, IF RATES DROPPED FROM 5% TO 4%, YOU WOULD REPORT -100 BPS) | | | | | | |

| WHAT IS THE SOURCE OF THE EARNED RATE ON THE EQUITY ACCOUNT? | PLEASE INDICATE WITH AN "X" |
|--|-----------------------------|
| COMMON ILLUSTRATED RATE | |
| PERCENT OF AN ASSUMED EQUITY RETURN | |
| PERCENT OF A PORTFOLIO RETURN | |
| HISTORICAL RETURN (LIKE A 25-YEAR AVERAGE) | |
| OTHER | DESCRIBE → |

B. Stochastic modeling of UL with secondary guarantee products

| USE OF STOCHASTIC MODELING | UL WITH SECONDARY GUARANTEES | IUL WITH SECONDARY GUARANTEES |
|---|------------------------------|-------------------------------|
| DO YOU USE STOCHASTIC MODELING TO EVALUATE THE INVESTMENT RISK IN YOUR UL/IUL WITH SECONDARY GUARANTEE PRODUCTS? (YES/NO) | | |

C. Scenarios for No Lapse Guarantee pricing

| WHAT SCENARIOS DO YOU USE TO PRICE THE COST OF THE NO LAPSE GUARANTEE? (PLEASE INDICATE WITH AN "X".) | UL WITH SECONDARY GUARANTEES | IUL WITH SECONDARY GUARANTEES |
|---|------------------------------|-------------------------------|
| DETERMINISTIC | | |
| STOCHASTIC REAL WORLD SCENARIOS | | |
| STOCHASTIC RISK NEUTRAL SCENARIOS | | |
| OTHER | | |
| DESCRIPTION OF OTHER SCENARIOS | | |

D. Lapse rates in pricing secondary guarantee products

| QUESTION | UL WITH SECONDARY GUARANTEES | IUL WITH SECONDARY GUARANTEES |
|--|------------------------------|-------------------------------|
| IN PRICING YOUR SECONDARY GUARANTEE PRODUCTS, AT WHAT DURATION DO LAPSE RATES DECREASE TO THE ULTIMATE LAPSE RATE? | | |
| WHAT ULTIMATE LAPSE RATE DO YOU ASSUME IN PRICING? | | |
| WHAT ARE THE LAPSE RATES IF THE SECONDARY GUARANTEE IS FULLY PAID UP FOR LIFE, BUT THE CASH SURRENDER VALUE IS POSITIVE? | | |
| WHAT ARE THE LAPSE RATES IF THE GUARANTEE IS "IN-THE-MONEY" (I.E., THE SECONDARY GUARANTEE IS STILL IN EFFECT BUT THE CURRENT CASH VALUES ARE NOT POSITIVE)? | | |
| WHAT ARE THE LAPSE RATES IF THE GUARANTEE IS NOT "IN-THE-MONEY"? | | |
| HOW HAVE YOUR LAPSE RATES CHANGED RELATIVE TO THE RATES ASSUMED ONE YEAR AGO? (% INCREASE OR % DECREASE) | | |

E. Dynamic Lapses

| DYNAMIC LAPSES | UL WITH SECONDARY GUARANTEES | IUL WITH SECONDARY GUARANTEES |
|--|------------------------------|-------------------------------|
| ARE DYNAMIC LAPSES USED IN UL/ IUL SECONDARY GUARANTEE PRICING? (YES/NO) | | |
| IF SO, PLEASE DESCRIBE THE DYNAMIC LAPSE FUNCTION USED. | | |
| IF THE SECONDARY GUARANTEE IS FULLY PAID FOR LIFE, BUT THE CASH SURRENDER VALUE IS POSITIVE, DOES YOUR DYNAMIC LAPSE FUNCTION ALLOW FOR A LAPSE RATE THAT IS GREATER THAN ZERO? (YES/NO) | | |

F. Do you reflect premium persistency in pricing (i.e., future planned premiums are changed to reflect premium persistency)? (Yes/No)

G. Effect of PBR on Guaranteed UL pricing

| EFFECT OF PBR ON GUARANTEED UL PRICING | |
|--|--|
| HAVE YOU ANALYZED THE EFFECT OF PBR ON GUARANTEED UL PRICING? (YES/NO) | |
| IF YES, DID PBR PROVIDE A BENEFIT TO PRICING? | |

H. Mortality assumptions

| WHAT ARE YOUR MORTALITY ASSUMPTIONS BASED ON? | INDICATE WITH AN "X" | WHICH INDUSTRY TABLES? ==> |
|---|----------------------|----------------------------|
| COMPANY EXPERIENCE | | |
| INDUSTRY TABLES | | |
| CONSULTANT'S RECOMMENDATIONS | | |
| OTHER (PLEASE DESCRIBE) | | |

I. Pricing mortality assumption slope

| IS THE SLOPE OF YOUR PRICING MORTALITY ASSUMPTION MORE SIMILAR TO: | PLEASE INDICATE WITH AN "X" |
|--|-----------------------------|
| THE 1975-1980 SELECT & ULTIMATE TABLE, | |
| THE 2001 VALUATION BASIC TABLE, | |
| THE 2008 VALUATION BASIC TABLE, | |
| OR THE 2016 VALUATION BASIC TABLE? | |

J. 2017 CSO repricing

| 2017 CSO REPRICING | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|---|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| HAS THE COMPANY REPRICED OR REDESIGNED ITS UL/IUL PRODUCTS UNDER THE 2017 CSO? (YES/NO) | | | | | | |

K. 2017 CSO implementation

| 2017 CSO IMPLEMENTATION | |
|--|--------------------------------|
| WITH THE IMPLEMENTATION OF THE 2017 CSO MORTALITY TABLE BY 1/1/2020, WHAT AFFECT WILL THAT HAVE ON UL/IUL PRODUCT DEVELOPMENT? | (PLEASE INDICATE WITH AN "X".) |
| THERE WILL BE MORE GUIDELINE PREMIUM POLICIES SOLD. | |
| THERE WILL BE FEWER GUIDELINE PREMIUM POLICIES SOLD. | |
| THERE WILL BE ABOUT THE SAME GUIDELINE PREMIUM POLICIES SOLD. | |
| ARE COMPANIES DEVELOPING CVAT PRODUCTS DUE TO THE DECREASE IN GUIDELINE PREMIUMS? (YES/NO) | |
| WILL NECESSARY PREMIUM TESTING ON CVAT PRODUCTS BECOME MORE IMPORTANT? (YES/NO) | |

L. Do you vary the preferred to standard ratio by issue age? (Yes/No)

Do you vary the preferred to standard ratio by duration? (Yes/No)

Do these rates eventually converge? (Yes/No)

If yes, at what age?

If no, what permanent differential in rates exists?

M. Do you use mortality improvement assumptions in your pricing? (Yes/No)

Is mortality improvement implicit or explicit?

If mortality improvement is applied for a certain number of years, how many years?

If mortality improvement is applied to a certain age, to what age?

| DOES YOUR MORTALITY IMPROVEMENT ASSUMPTION VARY BY: | (PLEASE INDICATE WITH AN "X".) | | |
|---|--------------------------------|-------------|--|
| GENDER? | | | |
| AGE? | | | |
| DURATION? | | | |
| SMOKER VS. NON-SMOKER? | | | |
| FACE AMOUNT? | | | |
| OTHER? | | => DESCRIBE | |

Please provide detail on your mortality improvement assumptions.

N. Have you changed your mortality assumption in pricing in light of 2008 VBT studies, 2016 VBT studies or other industry studies (e.g., MIMSA)? (Yes/No)

If based on other industry studies, please specify which studies.

O. Do you adjust your mortality assumptions based on different lapse assumptions by product? (Yes/No)

P. Overall level of mortality

| PLEASE INDICATE WITH AN "X" THE OVERALL LEVEL OF MORTALITY ON UL/IUL PRODUCTS RELATIVE TO THAT ASSUMED IN PRICING. | UL WITH SECONDARY GUARANTEES | ACCUMUL | CURRENT ASSUMPTION UL | IUL WITH SECONDARY GUARANTEES | CASH ACCUMULATION IUL | CURRENT ASSUMPTION IUL |
|--|------------------------------|---------|-----------------------|-------------------------------|-----------------------|------------------------|
| 2017 MORTALITY RATES WERE CLOSE TO EXPECTED | | | | | | |
| 2017 MORTALITY RATES WERE LOWER THAN EXPECTED | | | | | | |
| 2017 MORTALITY RATES WERE HIGHER THAN EXPECTED | | | | | | |
| YTD 9/30/18 MORTALITY RATES WERE CLOSE TO EXPECTED | | | | | | |
| YTD 9/30/18 MORTALITY RATES WERE LOWER THAN EXPECTED | | | | | | |
| YTD 9/30/18 MORTALITY RATES WERE HIGHER THAN EXPECTED | | | | | | |

Q. Claims for LTC ADB riders

| IF YOU OFFER A LTC ACCELERATED DEATH BENEFIT RIDER (ADB), PLEASE INDICATE BELOW (WITH AN "X.") THE OVERALL LEVEL OF CLAIMS FROM 2012 THROUGH YTD 9/30/18 RELATIVE TO THAT ASSUMED IN PRICING. (THIS INCLUDES ADB'S EITHER WITH OR WITHOUT AN EXTENSION OF BENEFITS RIDER AND/OR INFLATION PROTECTION RIDER.) | INCIDENCE OF CLAIMS | TERMINATION OF CLAIMS (E.G., RECOVERY, DEATHS, NONRENEWAL) |
|--|---------------------|--|
| CLAIMS WERE CLOSE TO EXPECTED | | |
| CLAIMS WERE BETTER THAN EXPECTED | | |
| CLAIMS WERE WORSE THAN EXPECTED | | |
| IF CLAIMS WERE NOT AS EXPECTED, IN WHAT AREAS DID THEY DIFFER? (E.G., FREQUENCY OF CLAIMS, AVERAGE SIZE OF CLAIM) | | |

R. Is economic capital reflected in pricing? (Yes/No) (Economic capital is defined as the realistic amount of capital required to support a business to meet future risks [required from an economic point of view, not a regulatory point of view]. It reflects the insurer's specific financial condition and risk appetite.)

Is market consistent economic capital reflected in pricing? (Yes/No) (For market consistent economic capital, the market value of assets and liabilities is determined based on methods similar to those used for valuing other financial assets sold in the marketplace, and risk-neutral investment assumptions and discount rates).

S. Special provisions reflected in pricing for redundant reserves

| ARE ANY SPECIAL PROVISIONS REFLECTED IN PRICING FOR REDUNDANT RESERVES? (YES/NO) | IF SO, PLEASE INDICATE WITH AN "X" WHICH PROVISIONS ARE REFLECTED. |
|--|--|
| EXISTING FUNDING SOLUTIONS | |
| ANTICIPATED LONG-TERM FUNDING SOLUTIONS | |
| NO FUNDING SOLUTION IN PLACE, BUT REDUCED COST ASSUMED DUE TO REDUCED RISKS | |
| OTHER (PLEASE DESCRIBE) | |

T. Home Office Expense Levels

(Exclude field expenses) Expenses should be reported assuming a \$500,000 policy issued at age 55.

| HOME OFFICE EXPENSE LEVELS | PRICING LEVELS | ACTUAL LEVELS (FULLY ALLOCATED) |
|---|----------------|---------------------------------|
| ACQUISITION (EXCLUDING COMMISSIONS) | | |
| \$ PER POLICY | | |
| % OF PREMIUM – UP TO TARGET | | |
| % OF PREMIUM – EXCESS | | |
| PER UNIT (ENTER THE COST PER \$1000, RATHER THAN THE COST FOR A \$500,000 POLICY) | | |
| OTHER | | |
| DESCRIPTION OF OTHER ACQUISITION EXPENSE METRIC | | |
| MAINTENANCE | | |
| \$ PER POLICY | | |
| ANNUAL INFLATION % | | |
| % OF PREMIUM | | |
| % OF PREMIUM – PREMIUM TAXES | | |
| PER UNIT (ENTER THE COST PER \$1000, RATHER THAN THE COST FOR A \$500,000 POLICY) | | |
| % OF ACCOUNT VALUE | | |
| OTHER | | |
| DESCRIPTION OF OTHER MAINTENANCE EXPENSE METRIC | | |

For comparison purposes, we calculate the dollars of acquisition expense and maintenance expense (separately) for a \$500,000 policy issued at age 55, based on two assumed premium levels and the expense metrics reported above. For any % of premium components, please report the following dollar amounts:

| EXPENSE | PRICING LEVELS – \$ OF EXPENSE | ACTUAL LEVELS - \$ OF EXPENSE (FULLY ALLOCATED) |
|---|--------------------------------|---|
| ACQUISITION (% OF PREMIUM COMPONENT) | | |

| EXPENSE | PRICING LEVELS – \$ OF EXPENSE | ACTUAL LEVELS - \$ OF EXPENSE (FULLY ALLOCATED) |
|---|-----------------------------------|--|
| ASSUMED LOW PREMIUM = \$12 PER \$1000 | | |
| ASSUMED HIGH PREMIUM = \$18 PER \$1000 | | |
| MAINTENANCE (% OF PREMIUM COMPONENT) | | |
| ASSUMED LOW PREMIUM = \$12 PER \$1000 | | |
| ASSUMED HIGH PREMIUM = \$18 PER \$1000 | | |

U. Do you include overhead expenses in pricing UL/IUL insurance? (Yes/No)

If yes, what percentage of overhead expenses is reflected in pricing UL/IUL insurance?

ILLUSTRATIONS

A. Letters of credit

| | |
|--|---------------------------------------|
| DO YOU TREAT LETTERS OF CREDIT AS AN EXPENSE IN ILLUSTRATION TESTING? | (PLEASE INDICATE WITH AN "X".) |
| YES | |
| NO | |
| NOT APPLICABLE | |
| IF NOT, ARE LETTER OF CREDIT COSTS IN ILLUSTRATION TESTING: | (PLEASE INDICATE WITH AN "X".) |
| IGNORED? | |
| HANDLED IN ANOTHER FASHION? (PLEASE EXPLAIN.) | |
| NOT APPLICABLE | |

B. Product types no longer illustrating non-guaranteed elements

| | |
|---|---|
| WHICH OF THE FOLLOWING PRODUCT TYPES ARE NO LONGER ILLUSTRATING NON-GUARANTEED ELEMENTS (I.E., EITHER REMOVED AS AN ILLUSTRATED FORM OR SHOWING ONLY GUARANTEES FOR CURRENT VALUES)? | (MARK ALL THAT APPLY WITH AN "X".) |
| ULSG | |
| ACCUMUL | |
| CAUL | |
| IULSG | |
| CASH ACCUMULATION IUL | |
| CURRENT ASSUMPTION IUL | |

C. What is the rate you have calculated for your Benchmark Index Account per Section 4A of Actuarial Guideline 49?

Have you had to create a hypothetical index account under Section 4B because you do not have an indexed account that meets the definition of the benchmark index account on its own under Section 4A? (Yes/No)

What is the rate, if any, you have calculated for your **hypothetical** Benchmark Index Account per Section 4C of Actuarial Guideline 49?

What rate is the illustrated rate for your most popular strategy/investment choice within your **IUL** product? (typically illustrated by your reps)?

What is the current maximum illustrated rate allowed for your most popular strategy/investment choice within your **IUL** product?

What is that strategy/investment choice?

How has this rate changed relative to the rate used one year ago? **(For example, if rates dropped from 5% to 4%, you would report -100 bps)**

How often are you changing this rate?

Does this illustrated rate apply to both non-loaned and loaned values? (Yes/No)

If not, what rate applies to loaned values?

If not, what rate applies to non-loaned values?

Do your IUL illustrations allow for a negative spread on loan interest charged vs. interest credited on the account value? (Yes/No)

If Yes, do our IUL illustrations allow for a negative spread on loan interest charge vs. interest credited on the account value that is greater than 1% of the loan amount, where the interest credited includes all index based interest credits whether due to input interest rates, participation rates, multipliers, or persistency bonuses? (Yes/No/Not Applicable)

If Yes, what is the maximum percentage allowed for this negative spread?

For policies where AG 49 applies, do you have a persistency bonus being illustrated on your indexed account(s) that allows the illustrated credited rate to exceed the Benchmark Index Account maximum illustrate rate? (Yes/No)

Do you have a multiplier on your index credited interest rate? (Yes/No)

If "Yes", what is that multiplier?

Have you made any changes to your product design based on Actuarial Guideline 49? (Yes/No)

Is your product now using indexes other than the S&P 500 as a result of Actuarial Guideline 49? (Yes/No)

If yes, which indexes are now being used?

Have you encountered any administrative challenges with respect to Actuarial Guideline 49? (Yes/No)

If yes, please describe.

D. Do you find that Illustration Actuary requirements create a pricing constraint? (Yes/No)

If so, is the constraint more severe for certain product types? (Yes/No)

Please list the types of products that give rise to Illustration Actuary challenges.

What solutions have been employed during product development and pricing to overcome Illustration Actuary challenges?

What is your practice regarding illustrating in-force policies for which the lapse support test and/or self-support test has failed? (e.g., do you create a new scale for illustrations that is not equal to the current scale?)

E. Is VM-20 causing you any concerns for illustration testing (Yes/No/Not Sure)

F. Are the 2017 CSO mortality tables causing you any concerns with illustration testing? (Yes/No/Not Sure)

Please explain.

G. What has been the impact of the low interest rate environment on your ability to support illustration testing for:

In-force UL/IUL business?

New UL/IUL business?

Are the higher rate floors on older in-force blocks of business causing issues for illustration testing? (Yes/No)

H. When certifying for Illustration Actuary testing on inforce business, are you: (Please indicate with an "X".)

Currently testing inforce business?

Using ASOP 24 Section 3.7 to not test?

Other (please describe)

Do you support any of your inforce products by using distributions of surplus or prior gains as indicated under ASOP 24 Section 3.7?

If supporting with surplus or prior gains, do you set up a reserve or make any accounting adjustments to indicate this?

I. Do you sensitivity test to see where the disciplined current scale (DCS) breakpoints are (i.e., when the DSC might fail)? (Yes/No)

J. Are you illustrating utilization scenarios/examples for accelerated death benefit riders with a discounted death benefit approach? (Yes/No)

Are you illustrating utilization scenarios/examples for accelerated death benefit riders with other death benefit approaches? (Yes/No)

If you are illustrating utilization scenarios/examples, are these demonstrations in the basic illustration or in a supplemental illustration?

K. Are there any issues that you would like to see addressed through an actuarial guideline or update of the Life Illustration Model Regulation for **ANY** illustrated product? (Yes/No)

If so, please describe.

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