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Universal Life and Indexed Universal Life Survey Results

By Susan J. Saip

Milliman recently completed its 13th annual comprehensive survey addressing universal life (UL) and indexed UL (IUL) issues. UL/IUL products continue to play a significant role in the individual life insurance market. According to LIMRA, for the past five years the market share of these products has been stable at 35 percent to 38 percent of total life sales measured by first-year premium. Survey results are based on responses from 30 carriers of UL and IUL products. The survey covers a range of specific product and actuarial issues such as sales, profit measures, target surplus, reserves, risk management, underwriting, product design, compensation, pricing and illustrations.

The following products (as defined here) are included in the scope of the survey:

- **UL/IUL with secondary guarantees (ULSG/IULSG).** A UL/IUL product designed specifically for the death benefit guarantee market that features long-term no-lapse guarantees (guaranteed to last until at least age 90) either through a rider or as a part of the base policy.
- **Cash accumulation UL/IUL (AccumUL/AccumIUL).** A UL/IUL 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/IUL (CAUL/CAIUL).** A UL/IUL product designed to offer the lowest-cost death benefit coverage without secondary death benefit guarantees. Within this category are products sometimes referred to as "dollar-solve" or "term alternative."

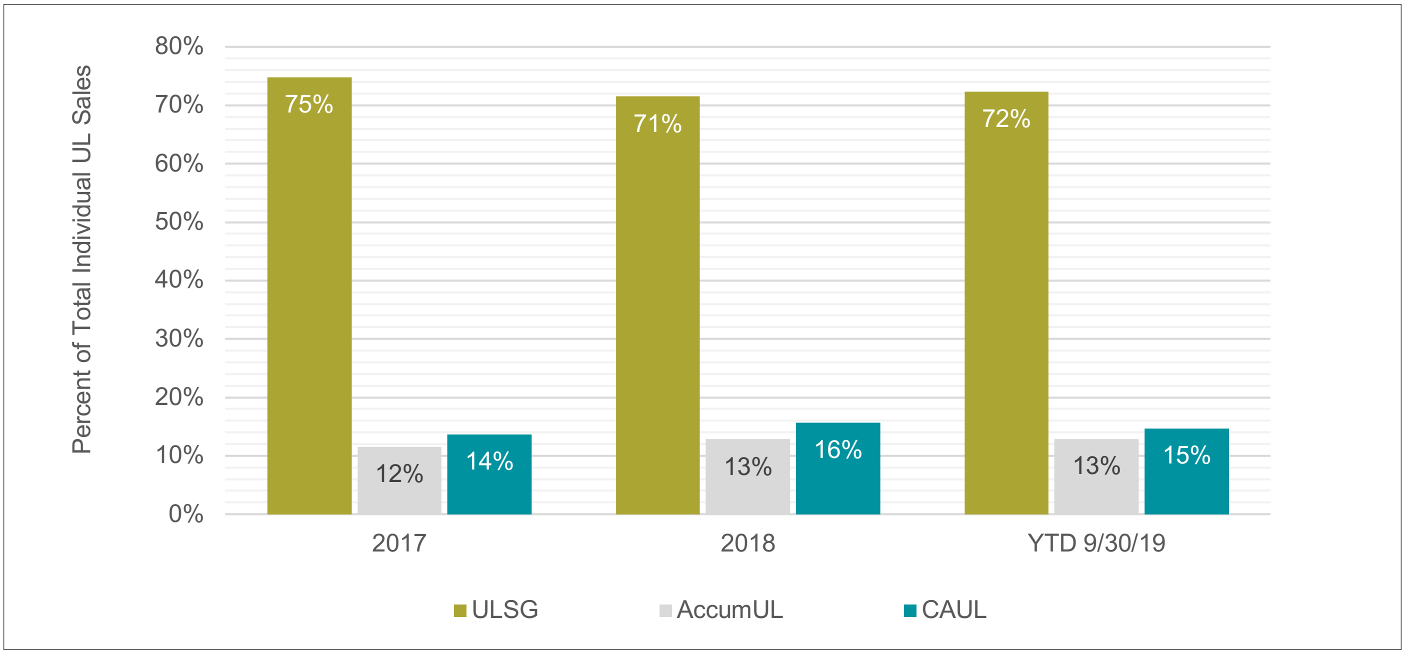
Throughout this article, the use of the term *UL* is assumed to exclude IUL.

Note that input comes from survey participants related to the UL/IUL environment in late 2019. Data does not reflect the current interest rate environment or the impact of the coronavirus (COVID-19) pandemic. The key discoveries of the survey are highlighted in this article.

UL SALES

Figure 1 illustrates the product mix of UL sales reported by 26 of the 30 survey participants for calendar years 2017 and 2018, and for year-to-date (YTD) 2019 as of Sept. 30, 2019 (YTD 9/30/19). Sales were defined as the sum of recurring premiums plus 10 percent of single premiums for purposes of the survey.

Figure 1
UL Product Mix by Year



Abbreviations: AccumUL, cash accumulation universal life; CAUL, current assumption universal life; ULSG, universal life with secondary guarantees; YTD, year to date.

UL sales declined significantly when comparing 2017 sales to annualized YTD 9/30/19 sales. Total individual UL sales decreased 31 percent, with 14 of the 26 participants reporting decreases in their UL sales. Eleven of the 14 reported decreases of 20 percent or more. The decline in sales by product was 34 percent for ULSG, 24 percent for AccumUL and 26 percent for CAUL sales. One driver of the decrease could be movement in sales from UL to IUL. Nine of the 14 participants appear to be focusing less on UL sales and more on IUL sales. Seven of the nine reported significant increases in IUL sales from 2017 to YTD 9/30/19 (on an annualized basis).

UL sales were reported by underwriting approach for 2018 and YTD 9/30/19. For the purpose of the survey, underwriting approach was defined as follows:

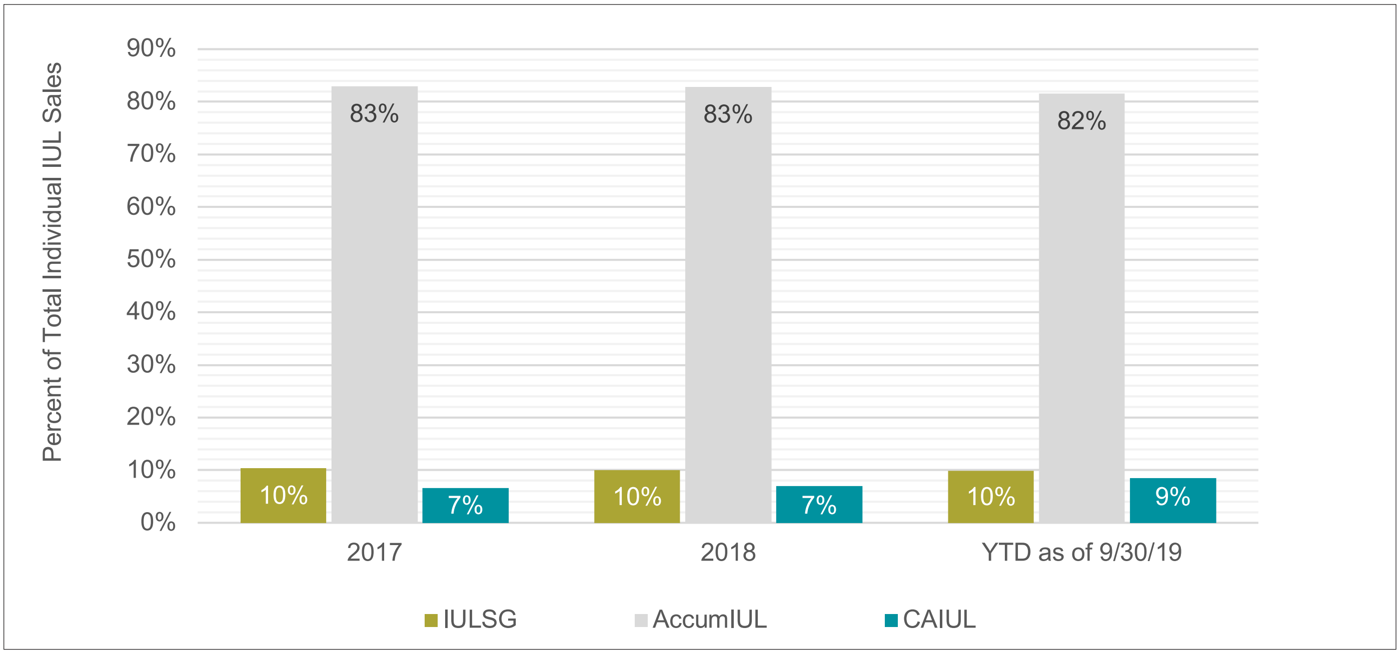
- **Simplified issue (SI) underwriting.** Less than a complete set of medical history questions and no medical or paramedical exam.
- **Accelerated underwriting (AU).** The use of tools such as a predictive model to waive requirements such as fluids and a paramedical exam on an otherwise fully underwritten product for qualifying applicants without charging a higher premium than for fully underwritten business.
- **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 2018 UL sales by underwriting approach (on a premium basis) was 5.0 percent SI, 0.4 percent AU and 93.9 percent fully underwritten. For YTD 9/30/19 UL sales, the distribution by underwriting approach was 6.9 percent SI, 0.7 percent AU and 92.5 percent fully underwritten. For both UL and IUL sales, the portion of AU business is surprisingly low. We believe that SI and AU are more commonly used on term insurance plans than UL or IUL.

INDEXED UL SALES

IUL sales reported by 22 of the 30 survey participants accounted for 63 percent of total UL/IUL sales combined during YTD 9/30/19, increasing from the 50 percent of total sales it represented in 2017. The AccumIUL sales percentage increased from 2017 to YTD 9/30/19, from 88 percent to 91 percent of total AccumUL/AccumIUL sales. IULSG sales also increased, from 12 percent to 19 percent of total combined ULSG/IULSG sales over the survey period. CAIUL sales, as a percentage of total combined CAUL/CAIUL sales, increased from 33 percent to 50 percent over this period. Figure 2 illustrates the product mix of IUL sales for calendar years 2017 and 2018 and for YTD

Figure 2
IUL Product Mix by Year



Abbreviations: AccumIUL, cash accumulation indexed universal life; CAIUL, current assumption indexed universal life; IULSG, Indexed universal life with secondary guarantees; YTD, year to date.

9/30/19. Sales of AccumIUL products continued to dominate the IUL market throughout the survey period.

The distribution of 2018 IUL sales (on a premium basis) by underwriting approach was 1.2 percent SI, 1.6 percent AU and 97.1 percent fully underwritten. For YTD 9/30/19 IUL sales, the distribution by underwriting approach was 0.6 percent SI, 1.9 percent AU and 97.5 percent fully underwritten. The portion of IUL sales subject to SI underwriting was 5 percent to 6 percent lower than reported for UL sales. The portion of IUL sales subject to AU was more than double what was reported for UL sales.

LIVING BENEFIT RIDER SALES

There are three common approaches to chronic illness accelerated death benefit (ADB) riders: the discounted death benefit approach, the lien approach and the dollar-for-dollar approach. The dollar-for-dollar approach includes an explicit premium, but the other approaches do not. Definitions of the various approaches are as follows:

- **Discounted death benefit approach.** The insurer pays the owner a discounted percentage of the face amount reduction, with the face amount reduction occurring at the same time as the accelerated benefit payment. This approach avoids the need for charges up front or other premium requirements for the rider, because the insurer covers its costs of early payment of the death benefit via a discount factor.
- **Lien approach.** The payment of accelerated death benefits is considered a lien or offset against the death benefit. Access to the cash value (CV) is restricted to any excess of the CV over the sum of the lien and any other outstanding policy loans. Future premiums and charges for the coverage are unaffected, and the gross policy values continue to grow as if the lien did not exist. In most cases, lien interest charges are assessed under this design.
- **Dollar-for-dollar approach.** There is a dollar-for-dollar reduction in the specified amount or face amount of the base plan and a pro rata reduction in the CV based on the percentage of the specified amount or face amount that was accelerated.

Of the 26 participants reporting UL sales, 13 reported UL sales with chronic illness ADB riders. Fourteen of the 22 IUL survey participants reported IUL sales with chronic illness ADB riders. Ten of the 14 also reported UL sales with chronic illness riders.

Figure 3 summarizes sales of chronic illness riders as a percentage of total sales by premium (separately for UL and IUL products). During YTD 9/30/19, sales of chronic illness riders as a percentage of total sales were 11.4 percent for UL products and 37.3 percent for IUL products. The difference may be driven by the greater level of IUL product development in recent years relative to that for UL products.

Figure 3
Chronic Illness Rider Sales as a Percentage of Total Sales

Calendar Year	Total Individual UL	ULSG	Cash Accumulation UL	Current Assumption UL
UL Sales With Chronic Illness Riders as a Percentage of Total UL Sales				
2017	9.4%	7.4%	22.8%	9.5%
2018	10.5%	7.7%	24.9%	11.0%
YTD 9/30/19	11.4%	9.6%	20.4%	12.7%
Calendar Year	**Total Individual IUL**	**IULSG**	**Cash Accumulation IUL**	**Current Assumption IUL**
IUL Sales With Chronic Illness Riders as a Percentage of Total IUL Sales				
2017	28.0%	17.4%	30.6%	13.1%
2018	33.2%	22.8%	36.2%	12.2%
YTD 9/30/19	37.3%	29.1%	40.8%	13.3%

Abbreviations: IUL, indexed universal life; IULSG, indexed universal life with secondary guarantees; UL, universal life; ULSG, universal life with secondary guarantees; YTD, year to date.

Figure 4 shows sales of long-term care (LTC) riders as a percentage of total sales (measured by premiums and weighting single-premium sales at 10 percent) for UL and IUL products separately by product type. During YTD 9/30/19, sales of policies with LTC riders as a percentage of total sales by premium were 54.6 percent for UL products and 14.7 percent for IUL products. It is notable that over half of UL sales by premium include an LTC rider. In addition, most of those sales include extension of benefit riders.

Figure 4
LTC Rider Sales as a Percentage of Total Sales by Premium

Calendar Year	Total Individual UL	ULSG	Cash Accumulation UL	Current Assumption UL
UL Sales With LTC Riders as a Percentage of Total UL Sales				
2017	49.5%	62.1%	2.8%	20.1%
2018	51.0%	65.7%	7.4%	19.3%
YTD 9/30/19	54.6%	68.6%	15.7%	19.9%
Calendar Year	**Total Individual IUL**	**IULSG**	**Cash Accumulation IUL**	**Current Assumption IUL**
IUL Sales With LTC Riders as a Percentage of Total IUL Sales				
2017	17.6%	25.9%	17.2%	10.1%
2018	16.2%	22.8%	15.4%	15.6%
YTD 9/30/19	14.7%	20.4%	13.8%	16.8%

Abbreviations: IUL, indexed universal life; IULSG, indexed universal life with secondary guarantees; UL, universal life; ULSG, universal life with secondary guarantees; YTD, year to date.

Within 24 months, 90 percent of survey respondents intend to market either an LTC or chronic illness rider.

DRIVERS OF UL/IUL PROFITABILITY

The UL/IUL survey included information about the following key drivers of UL/IUL pricing:

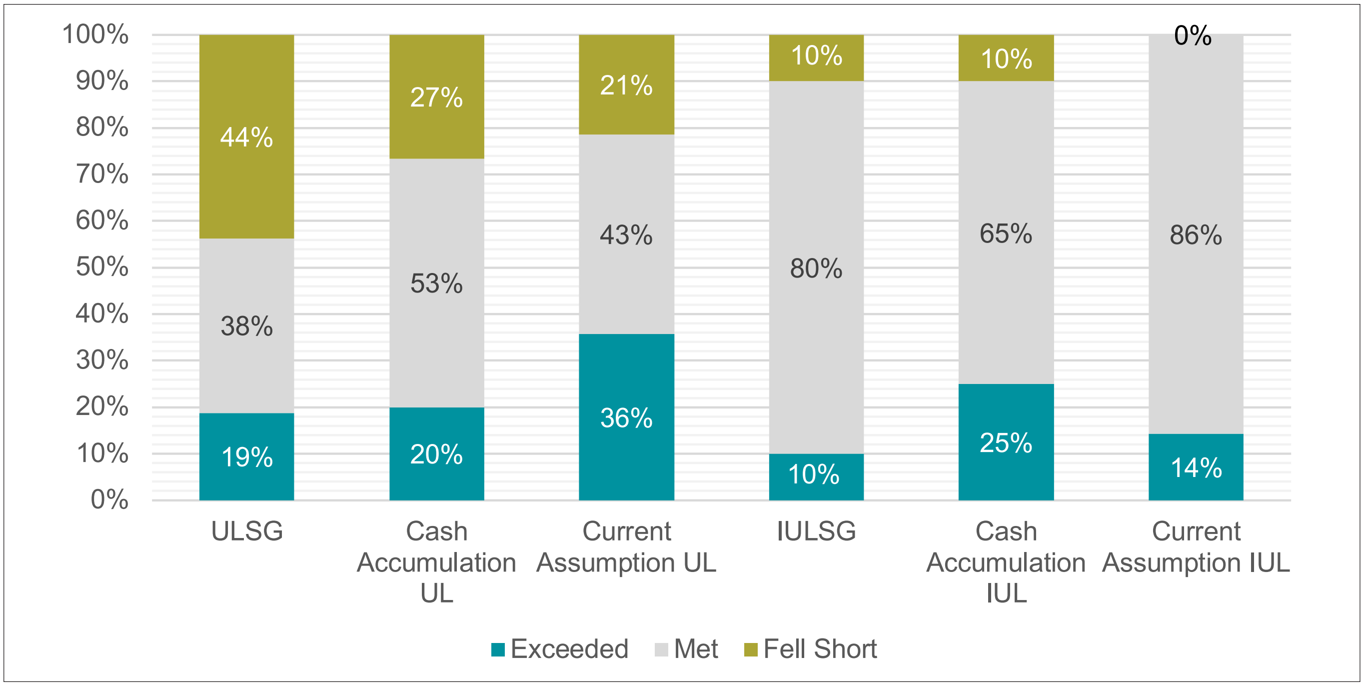
- profit measures and targets,
- target surplus,
- reserves,
- reinsurance,
- investment yields and
- expenses.

Profit Measures and Targets

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 target reported by survey participants was 10.0 percent for ULSG, AccumUL, CAUL and IULSG; 10.5 percent for AccumIUL; and 11.0 percent for CAIUL.

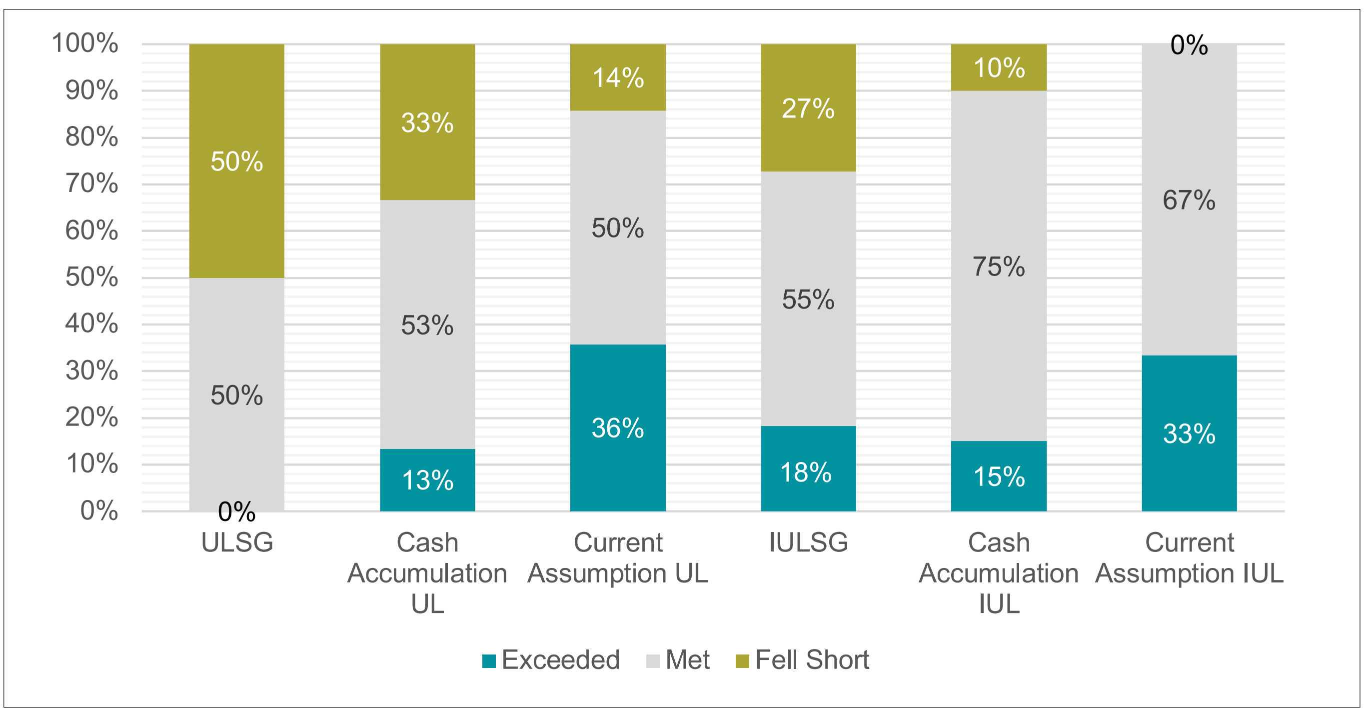
Figures 5 and 6 show the percentage of survey participants reporting that they fell short of, met or exceeded their profit goals by UL/IUL product type, for calendar year 2018 and YTD 9/30/19, respectively. Of note is the percentage of participants that fell short of their profit goals for ULSG products: 44 percent in 2018 and 50 percent during YTD 9/30/19. The primary reasons reported for not meeting profit goals were lower interest earnings and higher expenses.

Figure 5
Actual Results Relative to Profit Goals for 2018



Abbreviations: IUL, indexed universal life; IULSG, indexed universal life with secondary guarantees; UL, universal life; ULSG, universal life with secondary guarantees.

Figure 6
Actual Results Relative to Profit Goals for YTD 9/30/19



Abbreviations: IUL, indexed universal life; IULSG, indexed universal life with secondary guarantees; UL, universal life; ULSG, universal life with secondary guarantees; YTD, year to date.

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 percent to 450 percent.

Reserves

Various questions were included in the survey relative to principle-based reserves (PBR) in accordance with the Valuation Manual Chapter 20 (VM-20).

The stochastic exclusion test (SET) is a means of determining whether the added effort of calculating stochastic reserves under PBR is required. The majority of survey participants are not using the SET. Of the 28 respondents, 20 are not using the test, have not analyzed the test or PBR does not apply to them. Seven participants are using the ratio test for this aspect of VM-20 relative to UL/IUL products. One participant is using the certification option. Four of the eight participants using the SET ratio test or certification option indicated that the SET results are consistent both pre-reinsurance and post-reinsurance. One participant noted that the results are not consistent. Two participants reported that SET results with respect to reinsurance have not been analyzed or completed. The eighth participant indicated that it is not modeling reinsurance at this time because it is immaterial.

Ten survey participants reported they are explicitly modeling the deterministic reserve (DR) and stochastic reserve (SR) in pricing projections (i.e., projecting these reserve components). An additional seven participants are explicitly modeling the DR, but not the SR. The remaining 13 participants said they are not explicitly modeling either the DR or the SR in pricing projections or did not respond to the question.

Many survey participants are struggling with challenges presented by forecasting the deterministic and stochastic reserves. Difficulties were reported with run times, scenarios, modeling and assumptions.

A variety of responses were received from 18 survey participants relative to how their companies are reflecting reinsurance in the DR/SR for yearly renewable term (YRT) deals. Approaches included not reflecting reinsurance, taking the ½ c_x reserve credit for YRT deals, using prudent estimates for reinsurer actions, adjusting YRT rates consistent with projected mortality, modeling expected experience with a margin on the YRT premium, reflecting the YRT deals in the reserves and treating reinsurance as a cash flow item in pricing.

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." The majority expect to aggregate mortality segments across broad categories, such as all life products, all permanent products or all fully underwritten products.

Reinsurance

Survey participants reported that retention limits on UL/IUL business ranged from $350,000 up to $30 million, with a median limit of $3 million and an average of about $6.1 million.

Seventeen participants reported the level of reinsurance used for AU UL/IUL business. Seven of the 17 participants reported that AU UL/IUL business is being reinsured consistent with other UL/IUL business. AU business is being fully retained by six 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.

The percentage of new UL/IUL business ceded in 2018 and YTD 9/30/19 reported by survey participants is shown in Figure 7. The percentages for IUL business are higher than the percentages reported for UL business.

Figure 7
Percentage of New UL/IUL Business Ceded

Statistic	Percentage of New UL Business Ceded		Percentage of New IUL Business Ceded	
	2018	YTD 9/30/19	2018	YTD 9/30/19
Number of Responses	25	25	22	21
Average	32.7%	32.3%	36.3%	33.4%
Median	22.0%	19.4%	23.9%	30.0%
Minimum	2.0%	0.4%	4.0%	3.0%
Maximum	90.0%	90.0%	100%	100%

Abbreviations: IUL, indexed universal life; UL, universal life; YTD, year to date.

Investment Yields

The use of a new-money crediting strategy versus a portfolio strategy in pricing UL/IUL products was reported in the survey. Figure 8 shows the split between respondents assuming a new-money strategy and a portfolio strategy by UL/IUL product type.

Figure 8
UL/IUL New-Money vs. Portfolio Crediting Strategy

UL/IUL Product	Crediting Strategy	
	New Money	Portfolio
ULSG	67%	33%
AccumUL	46%	54%
CAUL	42%	58%
IULSG	45%	55%
AccumIUL	26%	74%
CAIUL	50%	50%

Abbreviations: AccumIUL, cash accumulation IUL; AccumUL, cash accumulation UL; CAIUL, current assumption IUL; CAUL; current assumption UL; IUL, indexed universal life; IULSG, indexed universal life with secondary guarantees; UL, universal life; ULSG, universal life with secondary guarantees.

Many survey participants are struggling with challenges presented by forecasting the deterministic and stochastic reserves.

Expenses

Actual expense levels and those assumed in pricing UL/IUL products vary widely among survey participants. 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. The calculations were done including and excluding premium taxes.

The tables in Figure 9 show statistics relative to dollars of pricing and actual expenses for the representative sample policy for issue age 55, both including and excluding premium taxes.

Figure 9
Pricing and Actual Expenses for a Representative Sample Policy

Pricing Expenses	Number of Responses	Average	Median	Minimum	Maximum
Issue Age 55—High Premium					
Acquisition	26	$2,460	$2,570	$173	$7,081
Maintenance with premium taxes	28	$315	$289	$55	$662
Maintenance without premium taxes	28	$160	$143	$14	$482
Issue Age 55—Low Premium					
Acquisition	26	$1,924	$2,019	$165	$4,831
Maintenance with premium taxes	28	$246	$228	$55	$535
Maintenance without premium taxes	28	$143	$141	$14	$415

Actual (Fully Allocated) Expenses	Number of Responses	Average	Median	Minimum	Maximum
Issue Age 55—High Premium					
Acquisition	20	$3,357	$2,794	$345	$14,281
Maintenance with premium taxes	22	$362	$330	$207	$662
Maintenance without premium taxes	22	$201	$178	$32	$482
Issue Age 55—Low Premium					
Acquisition	20	$2,597	$2,260	$345	$9,631
Maintenance with premium taxes	22	$288	$269	$152	$531
Maintenance without premium taxes	22	$200	$178	$32	$482

CONCLUSION

The UL/IUL market has seen many years of evolution, with regulatory actions and economic issues commonly facing the industry. The recent COVID-19 pandemic has forced the life insurance industry to react quickly and to develop creative solutions to survive in this challenging environment. What direction will the UL/IUL market take as a consequence of this global crisis with its implications for mortality experience, interest rates and underwriting refinements? Following industry trends and addressing challenges are key actions necessary to staying competitive in this market.

A complimentary copy of the key discoveries of the May 2020 *Universal Life and Indexed Universal Life Issues* report may be found at *https://www.milliman.com/en/insight/Universal-life-and-indexed-universal-life-issues-2019-2020-survey.* ■

Susan J. Saip, FSA, MAAA, is a consulting actuary in the Chicago office of Milliman. She can be reached at *sue.saip@milliman.com.*