

2021 US LIFE INSURANCE PRICING SURVEY HIGHLIGHTS

SEAC Annual Meeting: November 2021

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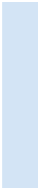




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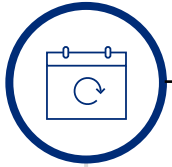
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SURVEY BASIS FOR RESULTS AND CONFIDENTIALITY



AS OF DATE

Participants were asked to describe their practices as of Q1 2021



PARTICIPANTS

60 participants with responses covering the landscape of retail and institutional products



RESULTS

This presentation summarizes the highlights of survey results. The results have been compiled in a manner as to not reveal information specific to any participant.

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HIGHLIGHTS



HIGHLIGHTS

Key insights Overall



Product Overview

- Three-quarters of participants reported that profitability meets or exceeds expectations (across all products), much better than last year when nearly half reported underperformance. Indexed products, variable products and pension risk transfer saw the most improvement. Group products reported more underperformance than last year.
- Accelerated underwriting is now table-stakes for retail product offerings; the maximum face amount has considerably increased compared to last year and total usage has increased by nearly 10%, with a significant majority of writers now utilizing some form of it
- Reinsurance has moved to an unfavorable impact on pricing for nearly 60% of life, long term care, and institutional writers this year, with the most negative impacts observed for those utilizing YRT reinsurance



Pricing Methodology and Assumptions

- With economic conditions improving, nearly one-quarter of participants switched to new money pricing; this trend was most notable for COLI/BOLI, where a large percentage (39%) made the switch
- Participants reported moving away from structured assets with a 25% decrease in allocations compared to last year (aggregate, across all products)
- RBC targets were reduced modestly for most products, with the most sizable reduction being reported for Group products (nearly 30%)



Pricing Models

- Nearly half of annuity and LTC writers are seeking a new pricing software solution



HIGHLIGHTS

Profit targets and performance relative to expectations

Change in targets and performance relative to expectations (key retail products)

- Annuity and universal life writers report better performance relative to last year
- Modest (1%) decreases in profit targets were observed for indexed annuities, indexed life and variable life

Summary of Retail Product Profitability (All Participants)

	2021				2020				Change (2021 - 2020) ¹			
	IRR	Performance ²			IRR	Performance			IRR	Performance		
	Average	Below	Meet	Exceed	Average	Below	Meet	Exceed	Average	Below	Meet	Exceed
Fixed annuities	9%	27%	60%	13%	9%	39%	52%	9%	0%	-12%	8%	4%
Indexed annuities	10%	31%	53%	16%	11%	46%	46%	8%	-1%	-15%	7%	8%
Variable annuities	11%	17%	54%	29%	11%	31%	52%	17%	0%	-14%	2%	12%
Indexed VA	10%	20%	50%	30%	N/A	N/A	N/A	N/A				
Indexed UL	10%	15%	70%	15%	11%	29%	50%	21%	-1%	-14%	20%	-6%
UL	10%	34%	56%	10%	10%	47%	51%	2%	0%	-13%	5%	8%
Variable UL	9%	12%	64%	24%	10%	21%	58%	21%	-1%	-9%	6%	3%
Term	9%	44%	44%	12%	9%	44%	49%	7%	0%	0%	-5%	5%
Whole life	9%	36%	55%	9%	9%	32%	56%	12%	0%	4%	-1%	-3%
LTC & disability	10%	27%	58%	15%	10%	26%	60%	14%	0%	1%	-2%	1%

¹ Significant trends (more than 5% movement) shown in green (favorable) and red (unfavorable)

² Performance relative to expectations

Key insights
Overall



HIGHLIGHTS

Profit targets and performance relative to expectations

Change in targets and performance relative to expectations (key institutional products)

- Group writers reported more underperformance than last year despite reductions to profit targets
- Pension risk transfer writers reported improved performance relative last year

Summary of Institutional Product Profitability (All Participants)

	2021				2020				Change (2021 - 2020) ¹			
	IRR	Performance ²			IRR	Performance			IRR	Performance		
	Average	Below	Meet	Exceed	Average	Below	Meet	Exceed	Average	Below	Meet	Exceed
COLI/BOLI	10%	0%	87%	13%	10%	8%	92%	0%	0%	-8%	-5%	13%
Pension risk transfer	10%	0%	92%	8%	11%	13%	74%	13%	-1%	-13%	18%	-5%
Group	6%	59%	41%	0%	9%	31%	63%	6%	-3%	28%	-22%	-6%
Retirement	13%	6%	77%	17%	10%	10%	80%	10%	3%	-4%	-3%	7%

Key insights
Overall

¹ Significant trends (more than 5% movement) shown in green (favorable) and red (unfavorable)

² Performance relative to expectations



HIGHLIGHTS

Product overview

Key insights Product overview



Product Overview Key Insights

Performance

- **Biggest winners: Equity-based products.** On the retail side, more than three-quarters of writers reported performance at-or-exceeding expectations for products with equity-based crediting (IUL, VUL, FIA, VA, IVA). A similar trend was observed on the institutional side, with nearly all writers reporting favorable performance for their COLI/BOLI and retirement products.
- **Biggest losers: General account and group products.** On the retail side, general account products (Term, WL, UL, FA, LTC) were more likely to underperform than equity-based ones, with more than one-quarter of writers reporting underperformance. On the institutional side, one-third of group writers reported underperformance despite reductions to profit targets (3% decrease in average IRR).

Performance drivers

- **Investment returns:** Investment returns are the primary driver of product performance; equity-based product writers noted investment returns as the primary reason for performance in excess of expectations, general account-based products noted investments as the primary reason for performance below expectations
- **Expenses:** Expenses were the primary driver of performance for term and group products
- **Mortality:** Mortality was a primary driver of underperformance for term and whole life



HIGHLIGHTS

Pricing methodology and assumptions

Key insights Pricing methodology



Pricing Methodology and Assumptions Key Insights

Methodology

- **Earned rate method:** Portfolio rates are primarily used for life pricing (60% of participants), whereas new money rates are used for annuity products (90% of participants)
- **Provision for risk:** While explicit tail profitability targets are uncommon, sensitivity testing is often used to describe risk across product types. Pricing is dependent on the realization of equity risk premiums for most equity-based products and market consistent metrics are not prevalent
- **Company type:** Larger writers tend to price with higher capital targets and are more likely to fully allocate expenses. Mutual and fraternal profit targets average 2% IRR points lower than stock and private companies. This differential is similar to prior years.

Assumptions

- **Capital:** NAIC RBC is the most frequently used capital target with most large companies using CAL RBC ratios around 375% and smaller companies using about 350%.
- **Expenses:** Assumptions of long-term expense improvement are most common for LTC and individual disability products. There was a decrease in usage of long-term expense improvements in pricing for nearly all products compared to last year.
- **Mortality:** Future mortality improvement is assumed by a majority of retail product writers, with the primary exception being disability



HIGHLIGHTS

Pricing models

Key insights Pricing models



Pricing Models Key Insights

Actuarial pricing software

- 40% of annuity and LTC products writers are seeking a new software solution while writers of institutional products are less enthusiastic for any sort of conversion
- The most widely used vendor systems are AXIS, MG-ALFA, and Prophet; MG-AFLA remains the most widespread, despite significant declines in usage as compared to last year
- While the least prevalent amongst leading vendor systems, Prophet received the highest ratings in all three categories (ease of use, transparency, and flexibility), and the second highest in controls
- Excel retains the non-vendor system of choice, used in conjunction with and as an alternative to vendor solutions and ranking highly for its ease of use, transparency, and flexibility

Percentage of participants using actuarial software for at least one product line

	2021	2020	Change (2021-2020)
AXIS	38%	39%	-1%
MG-ALFA	45%	64%	-19%
PROPHET	28%	28%	0%

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PRODUCT OVERVIEW



DEEP DIVE | PRODUCT PROFITABILITY (RETAIL PRODUCTS)

Stock and private companies generally have higher profit targets compared to mutuals and fraternal; mutuals and fraternal are more likely to achieve or exceed their expectations

Retail Products												
Company type												
	Mutual and fraternal companies ¹						Stock and private companies					
	Profit targets (IRR)			Performance ²			Profit targets (IRR)			Performance		
	Average	Min	Max	Below	Meet	Exceed	Average	Min	Max	Below	Meet	Exceed
				✗	⚠	✓				✗	⚠	✓
Fixed annuities	9%	6%	11%	32%	67%	2%	10%	6%	13%	19%	51%	30%
Indexed annuities	9%	7%	12%	45%	55%	0%	11%	6%	15%	18%	52%	30%
Variable annuities	10%	7%	14%	13%	65%	23%	12%	9%	15%	22%	41%	37%
Indexed Variable Annuities	7%	7%	7%	0%	100%	0%	11%	6%	15%	22%	44%	33%
Indexed UL	9%	6%	12%	0%	85%	15%	10%	6%	15%	25%	61%	14%
UL	9%	7%	12%	18%	79%	3%	11%	6%	15%	55%	26%	19%
Variable UL	8%	6%	12%	0%	75%	25%	11%	6%	15%	23%	54%	23%
Term	9%	5%	12%	45%	48%	8%	10%	6%	15%	43%	39%	18%
Whole life	9%	5%	14%	36%	56%	8%	10%	7%	12%	35%	52%	13%
LTC & disability	9%	0%	12%	23%	53%	23%	13%	8%	15%	33%	67%	0%





















¹ Includes mutual holding, mutual, fraternal and non-profit companies

² Performance relative to expectations. Colors indicate a significant portion of participants with profits that are below (red) and in excess of (green) expectations.



DEEP DIVE | REINSURANCE IMPACT (RETAIL PRODUCTS)

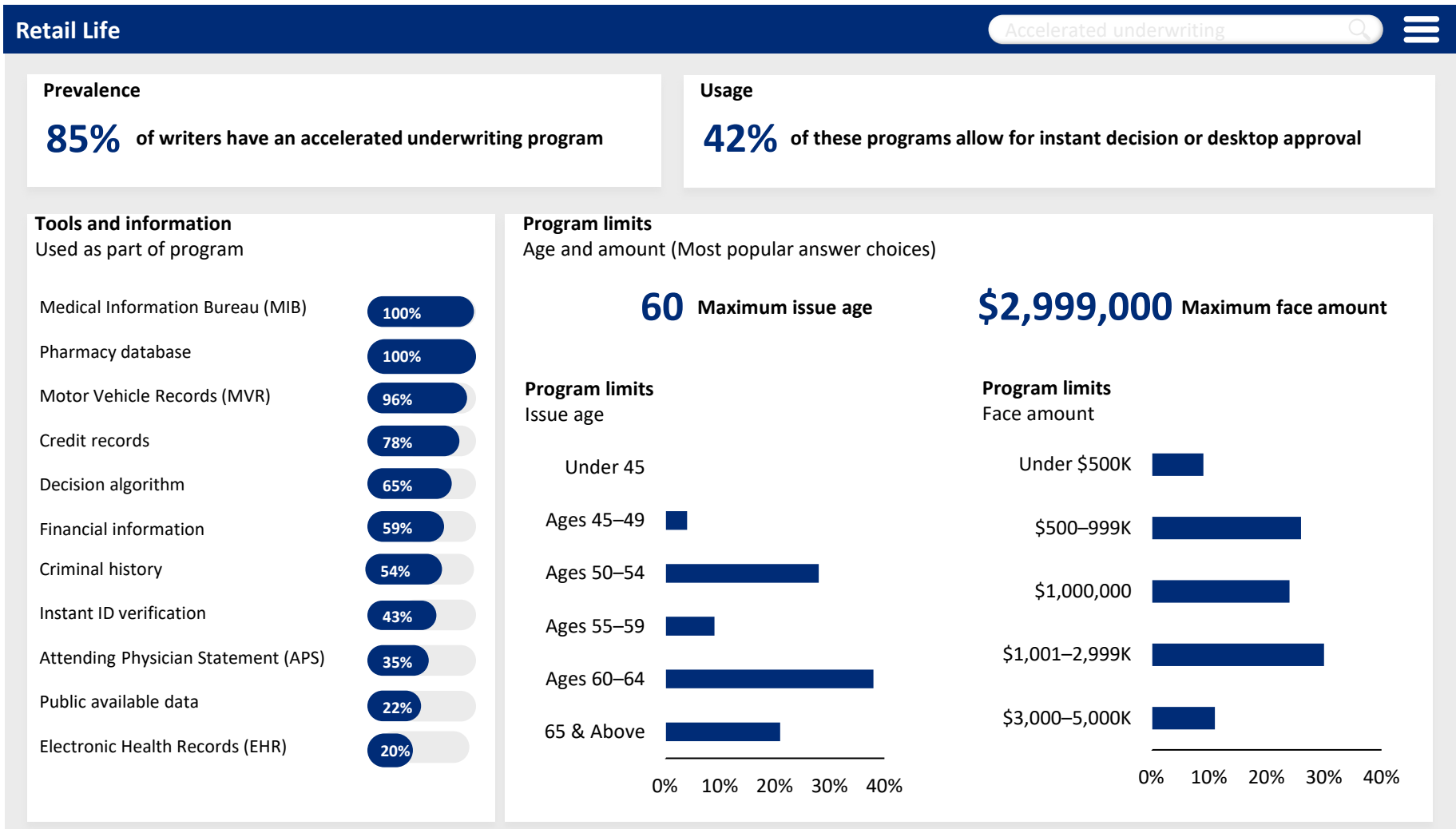
Usage of reinsurance continues to increase for fixed annuities, UL, VUL, and whole life despite fewer participants seeing it as a benefit to pricing

Retail Products		Reinsurance impacts					
		2021		2020		Change (2021 - 2020)	
	% reflecting reinsurance	% view reinsurance as a benefit	% reflecting reinsurance	% view reinsurance as a benefit	% reflecting reinsurance	% view reinsurance as a benefit	
Fixed annuities	17%	 100%	13%	 92%	4%	8%	
Indexed annuities	40%	 100%	40%	 100%	0%	0%	
Variable annuities	5%	 N/A	9%	 N/A	-3%	N/A	
Indexed Variable Annuities	8%	 N/A	N/A	 N/A	N/A	N/A	
Indexed UL	94%	 38%	96%	 48%	-2%	-10%	
UL	91%	 43%	88%	 49%	3%	-6%	
Variable UL	93%	 48%	86%	 48%	7%	0%	
Term	83%	 50%	88%	 52%	-5%	-2%	
Whole life	59%	 37%	56%	 43%	3%	-6%	
LTC & disability	41%	 47%	47%	 47%	-6%	0%	



ACCELERATED UNDERWRITING (AU)

Continuing the year-over-year trend, more participants have adopted an accelerated underwriting program for their retail life products. The usage of instant approval and face amount limits have both increased from last year, as writers are becoming more comfortable with their programs.



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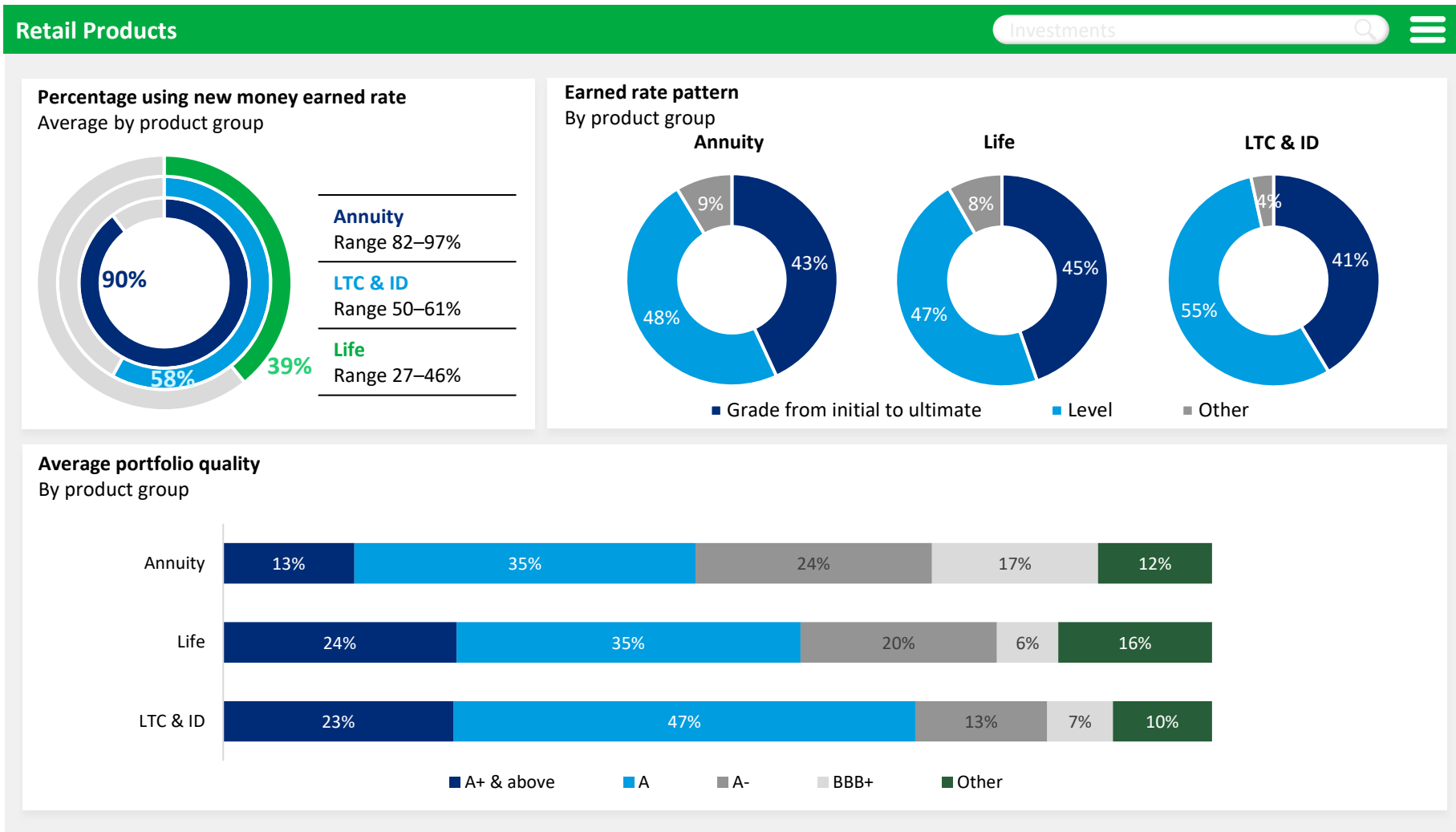


PRICING METHODOLOGY AND ASSUMPTIONS



DEEP DIVE | INVESTMENTS (RETAIL PRODUCTS)

The portion of writers pricing with a graded earned rate increased for all product types from last years survey, most considerably for LTC and disability (50% increase)





DEEP DIVE | ASSET INVESTMENTS (RETAIL PRODUCTS)

Investment grade corporate bonds make the backbone of portfolios, followed by cash and structured assets. The one-third of writers who reflect alternative assets in pricing are allocating a considerable portion of their portfolio to these assets (15-23% depending on product group).

Retail Products						Investments	
Percentage of writers that utilize in pricing							
	Investment grade bonds	Cash & loans	Structured ¹	High yield	Alternatives ²		
Life	94%	79%	52%	30%	34%		
Annuity	98%	78%	82%	51%	33%		
Individual health	100%	70%	57%	43%	26%		
Average allocation for those that utilize in pricing							
	Investment grade bonds	Cash & loans	Structured ¹	High yield	Alternatives ²		
Life	69%	36%	18%	4%	17%		
Annuity	55%	33%	23%	5%	23%		
Individual health	71%	26%	19%	4%	15%		

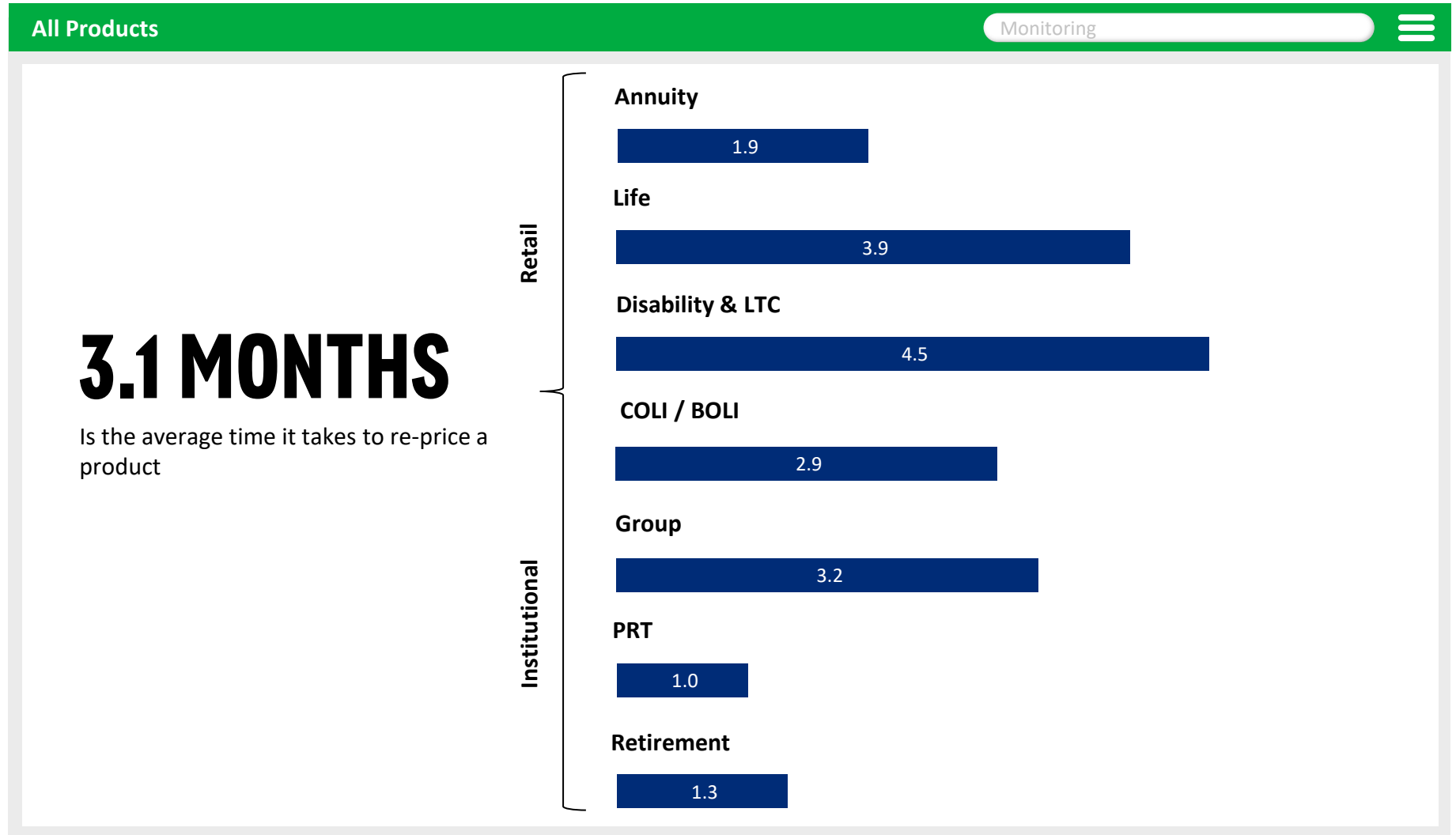
¹ Structured assets (e.g., CLO, CMBS, RMBS, ABS)

² Alternatives include traditional risky assets (e.g., real estate, equities) and other risky assets (e.g., alternative, private equity, hedge funds, venture capital, debt financing)



DEEP DIVE | MONITORING (ALL PRODUCTS)

On average it takes 3 months to re-price a product, with significant variation by product type



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PRICING MODELS



PRICING SOFTWARE TRENDS

All Pricing Software Packages												Modeling and software		
	2021				2020				Change (2021 - 2020)					
	Usage (% of participants)	Ease of use	Transparency / Auditability	Flexibility	Participant %	Ease of use	Transparency / Auditability	Flexibility	Usage (% of participants)	Ease of use	Transparency / Auditability	Flexibility		
AXIS	38%	3.2	3.1	2.9	39%	3.2	3.0	3.0	-1%					
EXCEL	63%	4.5	4.3	4.2	79%	4.5	4.3	4.2	-16%					
MG-ALFA	45%	3.6	3.5	3.8	64%	3.8	3.6	3.8	-19%					
PROPHET	28%	3.6	3.8	4.1	28%	3.8	3.9	4.3	0%					
OTHER	18%	4.0	3.4	4.2	25%	3.7	3.3	4.1	-7%					

Responses were aggregated across multiple use-cases and skip-responses were excluded. This may cause the number of responses summarized to differ from the number of participants using a particular software.



ACTUARIAL MODELING PRICING SYSTEMS BY PRODUCT

AXIS and ALFA are the primary systems used to price retail products, whereas Excel is most frequently used by institutional writers. Annuity and LTC writers express strong interests in changing modeling systems.

All Products						Modeling and software	☰
	AXIS	EXCEL	MG-ALFA	PROPHET	OTHER	% considering changing modeling system	
Fixed annuities	20%	11%	39%	20%	11%	37%	
Indexed annuities	17%	11%	43%	17%	11%	31%	
Variable annuities	15%	19%	26%	15%	26%	41%	
Indexed VA	18%	18%	18%	9%	36%	55%	
Indexed UL	30%	3%	47%	10%	10%	23%	
UL	25%	0%	42%	22%	11%	14%	
Variable UL	25%	5%	40%	15%	15%	25%	
Term	30%	9%	35%	15%	11%	24%	
Whole life	27%	5%	39%	17%	12%	22%	
LTC & disability	15%	12%	38%	21%	13%	38%	
COLI/BOLI	29%	14%	43%	14%	0%	0%	
Group	18%	41%	5%	0%	36%	14%	
PRT	0%	45%	9%	36%	9%	18%	
Retirement	6%	72%	11%	6%	6%	17%	

Responses were aggregated across multiple use-cases and skip-responses were excluded. This may cause the number of responses summarized to differ from the number of participants using a particular software.

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