

Pricing and Managing Universal Life Products in Challenging Times

Actuaries' Clubs of Hartford & Springfield

by Elinor Friedman

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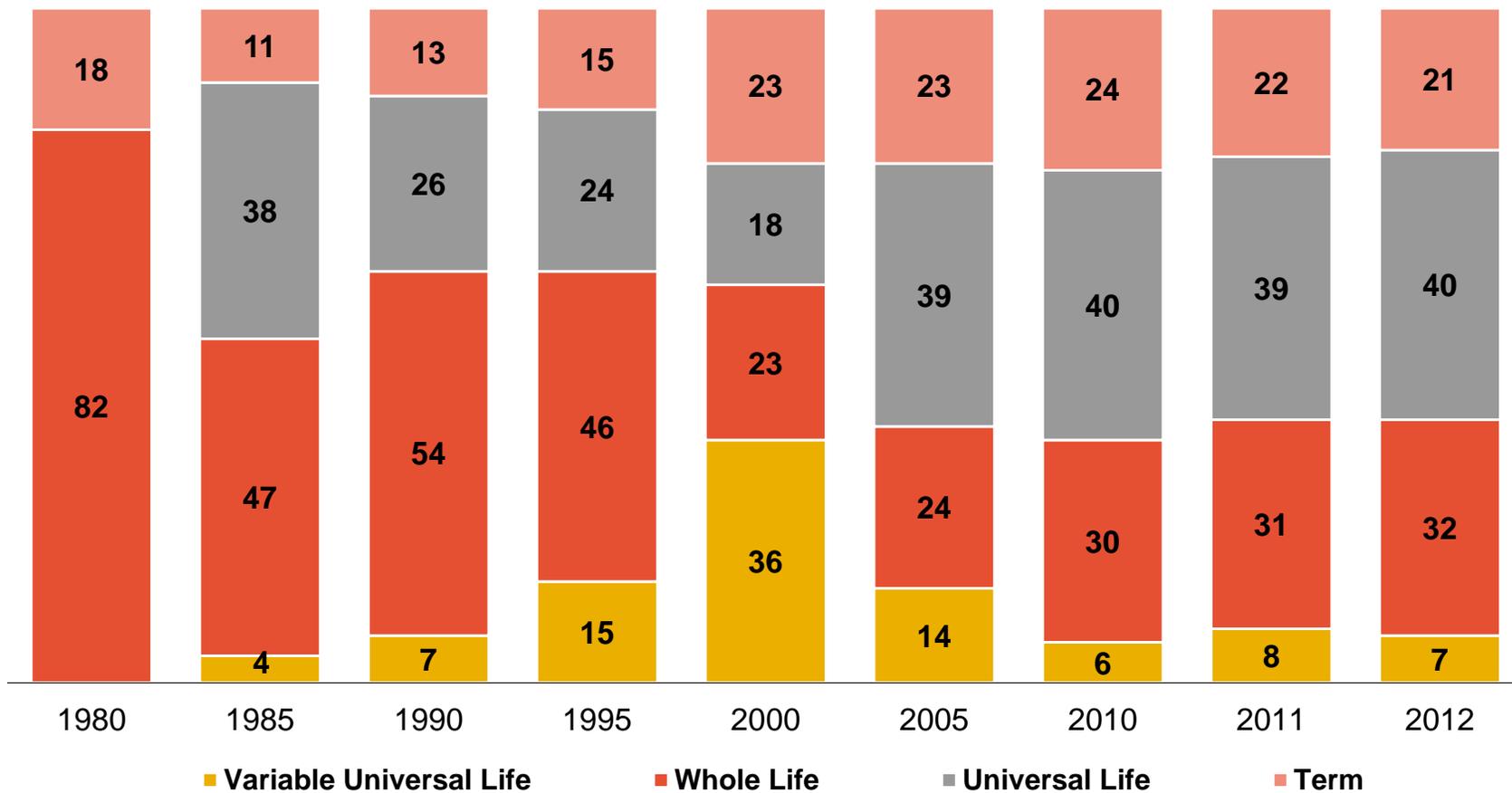
Discussion Outline

- UL market and product trends
- AG 38 developments
- Reserve financing market update
- Impact of low interest rates
- Q&A

UL Market and Product Trends

In 2012, UL products continued to dominate market share of new sales by premium

**Market Share of Individual Life Insurance by Product Type
(Percent of Total FY Premium)**



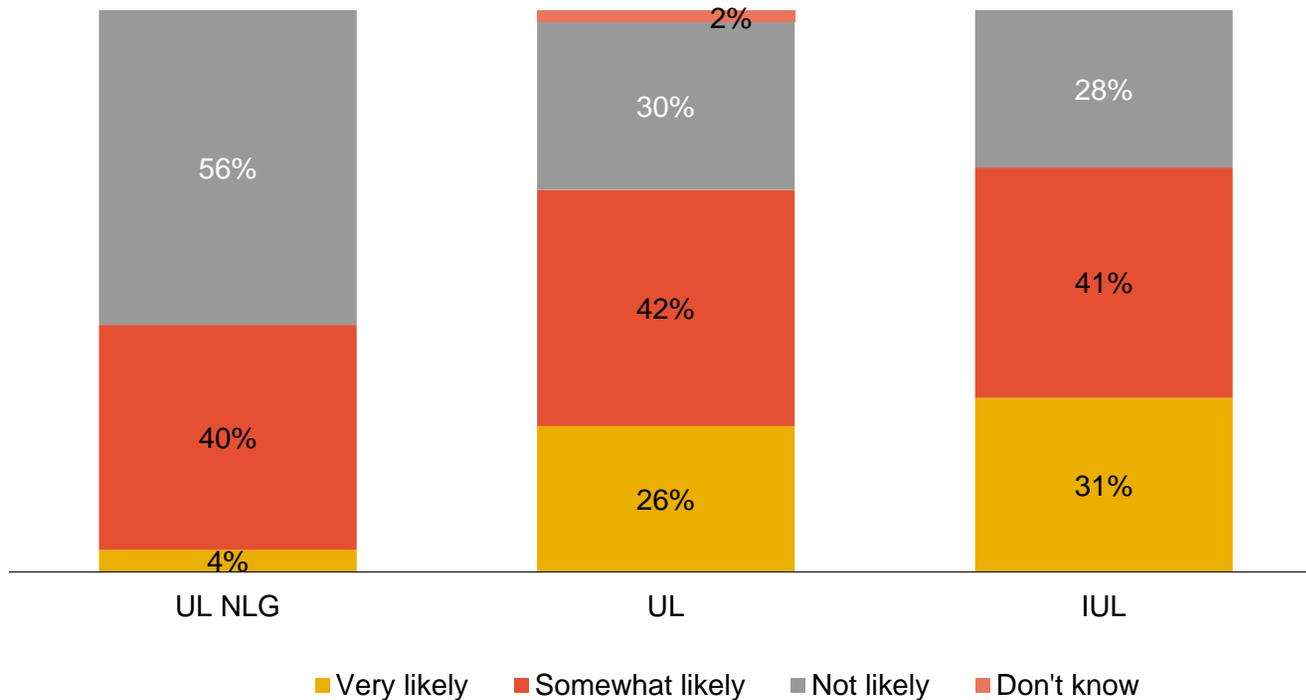
Source: LIMRA International. Based on first-year premium. UL includes Indexed UL. Results based on policies issued would be significantly different.

The underlying make-up of the UL sales appears to be shifting somewhat

- UL no-lapse guarantee (“NLG”) products continue to represent the greatest proportion of new annualized UL premium (approximately 40%)
 - While UL NLG sales were up just 1% for the year, they were 27% higher in fourth quarter 2012 than they were in fourth quarter 2011
 - However, there are factors that present challenges for NLG products
 - Some companies have elected to scale back in these products, while others have elected to continue to offer them
- Indexed UL (“IUL”) products had another year of significant growth
 - In 2012, IUL represented 30 percent of overall UL premium and 12 percent of industry-wide annualized premium.
 - Like the indexed annuity space, IUL sales have held up well through the recent challenging economic period

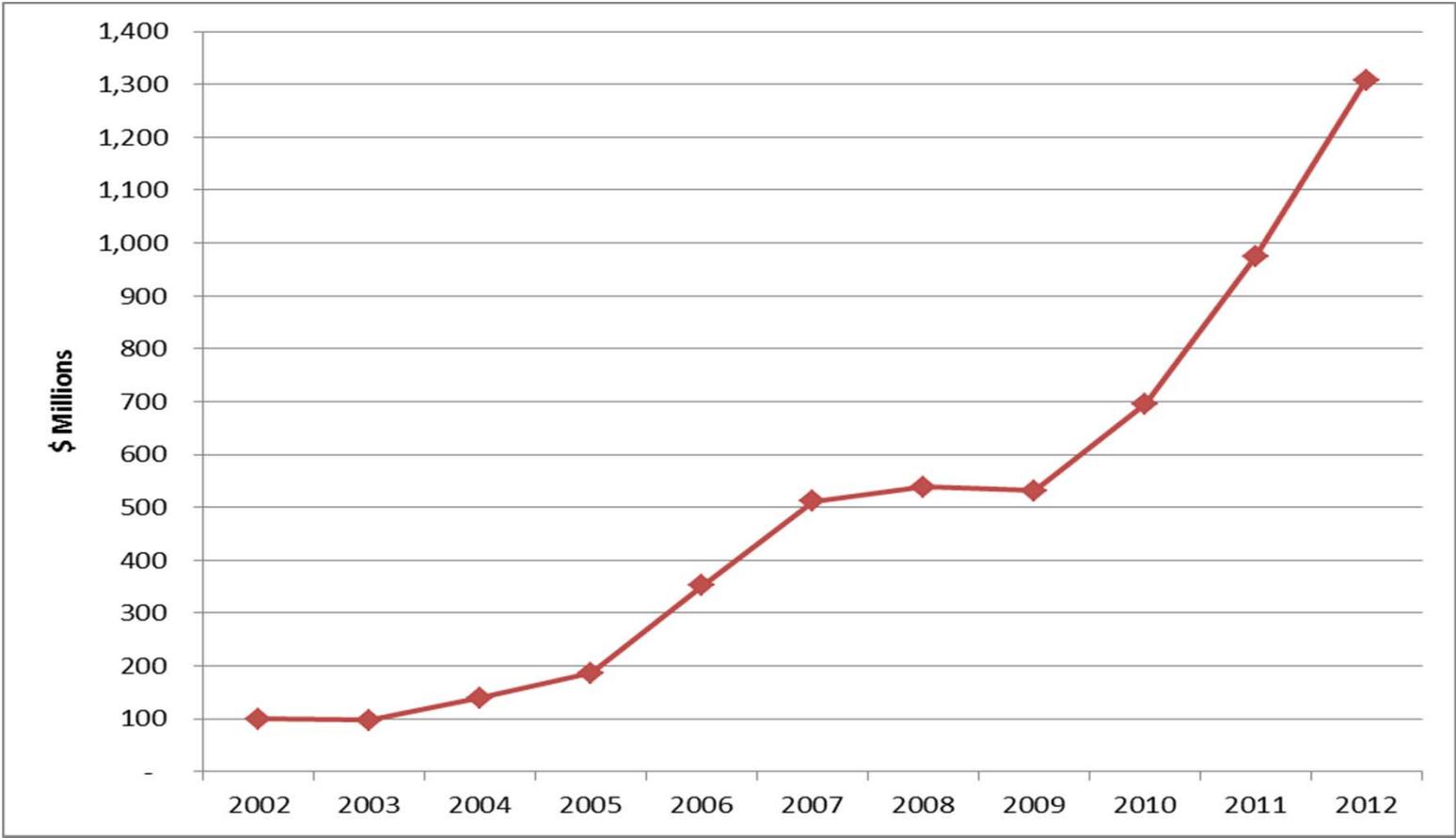
Per the 2012 Towers Watson Pricing Methodology Survey, respondents indicated that the likelihood of achieving their aggregate profit targets varies by type of UL product

Likelihood of 2011 Issues Meeting Aggregate Profit Targets
(Percent of Responses)



Respondents were the least optimistic for UL NLG, and slightly more optimistic for IUL vs. current assumption UL

IUL sales have shown substantial growth in the last decade, including a 35% year of year increase in 2012 sales



Source: AnnuitySpecs.com's Indexed Sales & Market Report, 4th Quarter 2012 and previous 4th qtr reports

There has also been a large increase in the number of IUL players

- Transamerica introduced the 1st IUL product in 1997
- A single carrier (Aviva) has historically led the market, although its market share has slipped every year due to new entrants:
 - 2004 60%
 - 2006 37%
 - 2008 20%
 - 2010 16%
 - 2012 14%
- Approximately 10 carriers sold IUL in 2004; today, number of carriers has reached about 50
- Several new carriers have already gained impressive market share with their 1st product; however, others have struggled to gain traction

2012 IUL sales and market share by company

Carrier	2012 Sales (\$millions)	Market share
Aviva	\$188	14.3%
Pacific Life Companies	158	12.0
AXA Equitable	154	11.7
AEGON Companies	114	8.7
National Life Group	87	6.6
National Western	80	6.1
Allianz Life	70	5.3
Penn Mutual	65	4.9
Minnesota Life/Securian	65	4.9
American General	47	3.6
Others	286	21.9
Total	\$1,314	100.0%

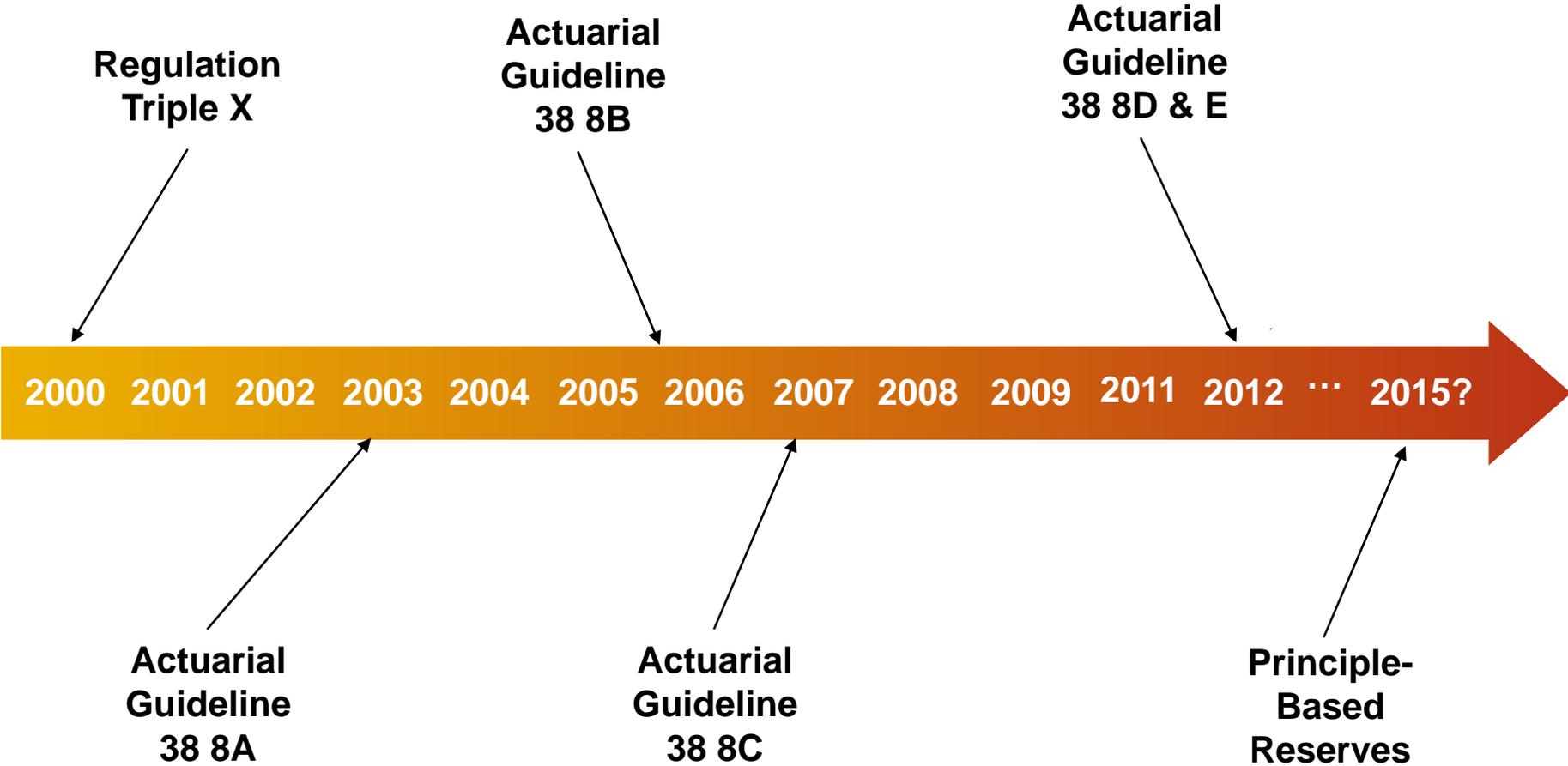
Source: AnnuitySpecs.com's Indexed Sales & Market Report, 4th Quarter 2012

Appeal of IUL

- Policyholder attractions
 - Greater upside potential than typical UL currently crediting 2.00% - 4.50%
 - High current illustrated index credits, based on historical averages (e.g. 8%)
 - Attractive minimum credited rates (e.g. many in the 2%-3% range)
 - Less risk than VUL due to underlying guarantee floor
 - Performs well in “choppy” equity markets
- Can work for either accumulation or protection focused sales
 - Historically an accumulation sale, but long-term no-lapse guarantee (“NLG”) feature allows it to compete for the protection sale as well
- Has been more limited competitors than traditional UL, but growing quickly

AG 38 Developments

Reserve requirements for UL NLG products have changed over time, and have generally been increasing



In 2012 the NAIC adopted another revision to AG 38 to, once again, address perceived loopholes resulting from certain product designs

- The trend toward multi-fund shadow fund designs and the emergence of Term UL in 2009 drew regulatory scrutiny on reserve requirements
- Specifically, the focus of the scrutiny was on the methodology used to determine the minimum gross premiums in Step 1 of AG 38
 - Which set of rates and charges should or were intended to apply for this determination?
- In 2011 the NAIC formed a commissioner level joint working group to address the issues surrounding AG 38
- The proposal developed by the working group and adopted by the NAIC employs a bifurcated approach:

Section 8D which applies to certain policies issued prior to 1/1/2013

Section 8E which applies to new policies issued on or after 1/1/2013

Section 8D applies to policies issued between 7/1/2005 and 12/31/2012 with policy designs that include multiple sets of charges and/or credits that apply in a given policy year

- Exemption if, on any valuation date, applicable ULSG is less than 2% of total life in-force face amount and ULSG face amount less than \$1B
- May also request an exemption from state of domicile and the Financial Analysis (E) Working Group (“FAWG”) of the NAIC
- Reserve is equal to greater of formulaic reserve (under prior version of AG38) and reserve calculated using approach for calculating the deterministic reserve under VM-20, but with modifications related to investment earnings
 - Net earned rate on starting assets is set equal to the lesser of (i) the actual net portfolio yield and (ii) net investment return base on a hypothetical A-rated corporate bond portfolio
 - The projected net investment rate for reinvestment assets is the lesser of (i) 12 month average of the composite yield on seasoned corporate bonds and (ii) 7%
- Alternative reserve option based on LATF’s 11/1/2011 statement on AG 38
- Requires a stand-alone Actuarial Memorandum

Section 8E applies to new policies issued on or after 1/1/2013

- Formulaic approach similar to section 8C
- Introduces two methods (I and II) for determining minimum gross premiums in Step 1 of AG 38 depending on product design
- Method I specifies three qualifying designs and limits the interest rate or accumulation rate in the no-lapse guarantee test to an index, based on the Moody's corporate bond yield, plus 3%
 - An Actuarial Opinion signed by the Appointed Actuary and a Representation of the Company signed by a Senior Officer must be filed any time rates and/or charges are changed
- Method II introduces the greatest deficiency reserve methodology
 - Reserve based on minimum gross premiums that produces the greatest deficiency reserve at issue
 - Requires testing the level and increasing premium patterns, as well as considering other premium patterns
 - Appointed actuary must submit a report describing the premium analysis performed and conclusions

The revisions to AG 38 pose challenges for UL NLG writers

- Section 8D
 - Required companies to get up to speed quickly on VM-20 assumption setting
 - Required companies to interpret and apply constraints to investment earnings
 - Significant additional modeling, calculations and documentation needed to meet year-end reporting requirements
 - Additional reserves may be required as a result
- Section 8E
 - Need to re-design and re-price products that will be negatively impacted by Section 8E in very short timeframe
 - Expect high level of re-pricing activity for at least another 12 months
 - Increased need for reserve financing

There are still a number of “grey” areas in the revision to AG 38 requiring interpretation. The NAIC established the Emerging Actuarial Issues (E) Working Group to address questions.

AG 38 8E has already had an impact on NLG premium rates and composition of competitors

Top 20 Single Life Non-Indexed UL NLG Premiums Male Best Nonsmoker 65, \$1 Million Face Amount

Statistic	Jan-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-13
25th Percentile	19,042	18,693	18,796	18,863	18,985	19,116
Median	19,189	18,892	19,184	19,098	19,523	20,151
75th Percentile	19,496	19,024	19,725	19,753	20,120	24,893
Mean	19,219	18,730	19,307	19,348	19,679	22,624
% change	Jan-08	Jan-09	Jan-10	Jan-11	Jan-12	Jan-13
25th Percentile	-1.0%	-1.8%	0.6%	0.4%	0.6%	0.7%
Median	-1.2%	-1.5%	1.5%	-0.5%	2.2%	3.2%
75th Percentile	-1.6%	-2.4%	3.7%	0.1%	1.9%	23.7%
Mean	-1.5%	-2.5%	3.1%	0.2%	1.7%	15.0%

Source: Blease Research's Full Disclosure Reports, Towers Watson analysis

AG 38 8E has already had an impact on NLG premium rates and composition of competitors – cont'd

Top 10 Single Life Non-Indexed UL NLG Premiums Male Best Nonsmoker 65, \$1 Million Face Amount

Jan-13 Rank	Jan-12 Rank	Company	Jan-13 Premium	Jan-12 Premium	Guarantee Period
1	*	MetLife	16,691	*	Age 95
2	*	Protective Life	16,988	*	Age 100
3	1	Midland National Life	18,524	18,524	Lifetime
4	**	Hartford Life	18,991	**	Lifetime
5	6	Protective Life	19,087	18,988	Lifetime
6	9	Prudential Financial Life	19,126	19,255	Lifetime
7	3	American General Life	19,424	18,783	Lifetime
8	14	Nationwide Life	19,525	20,063	Lifetime
9	**	Lincoln National Life	19,692	**	Lifetime
10	5	Principal Life	19,935	18,974	Lifetime

* January 2012 product in Full Disclosure Report had lifetime guarantee period

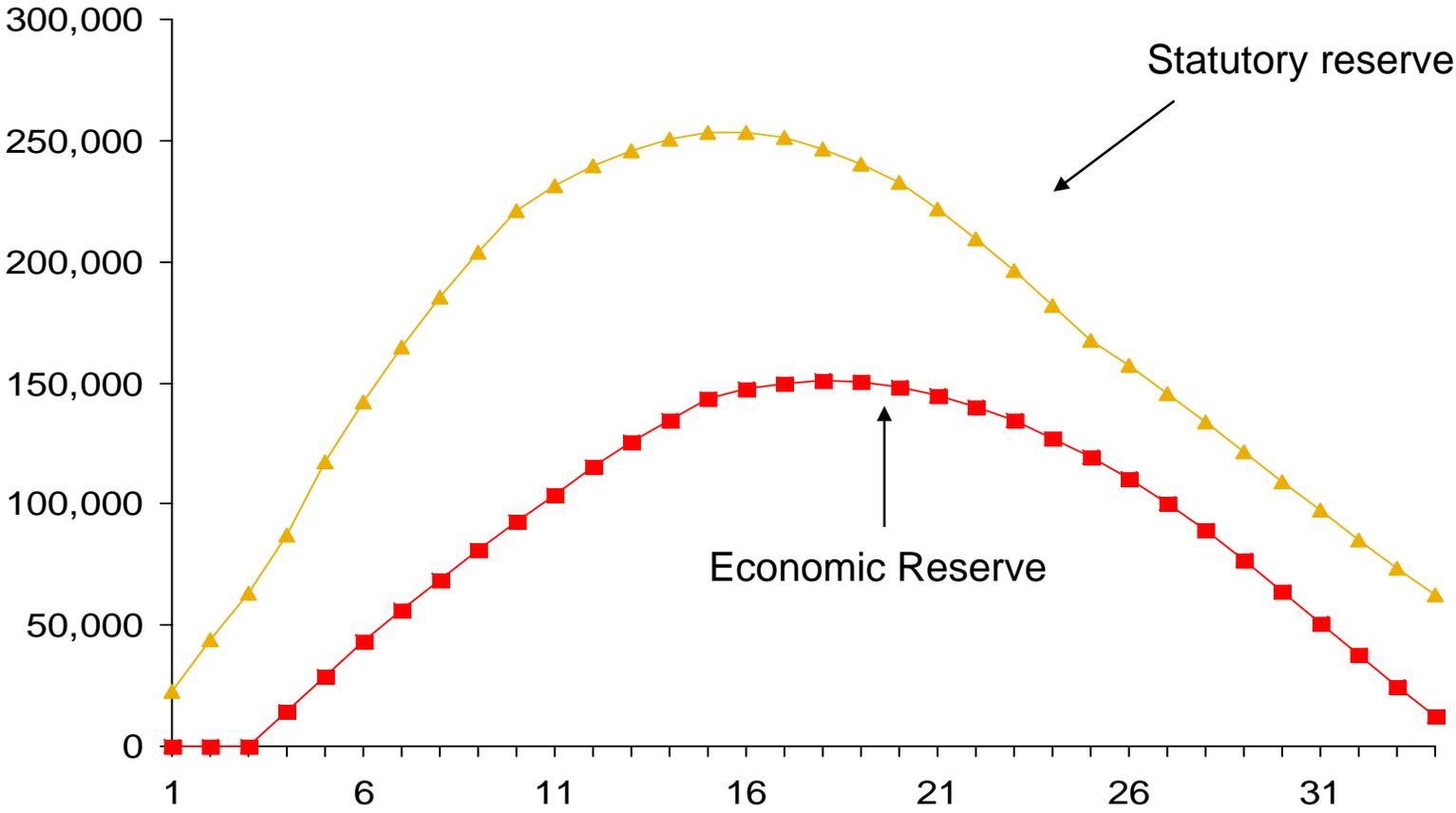
** Company did not participate in January 2012 Full Disclosure Report

Source: Blease Research's Full Disclosure Reports, Towers Watson analysis

Reserve Financing Market Update

A key driver of UL NLG profitability is the method used to manage the statutory reserve strain

Illustrative



The market for excess reserve financing has largely recovered since the economic crisis

- Increased appetite from counterparties
 - However, a fair amount of execution risk remains
- The cost of financing has trended down, but will likely never return to pre-crisis levels
- Available tenors have lengthened
 - E.g. 20 years for UL NLG
- Some companies have or are considering internal deals backed by parental guarantees
 - Several states have adopted similar limited purpose subsidiary regulation to Iowa

The Captives and Special Purpose Vehicle Use (E) Subgroup of the Financial Condition (E) Committee was charged with reviewing the use of captives and SPVs formed by commercial insurers.

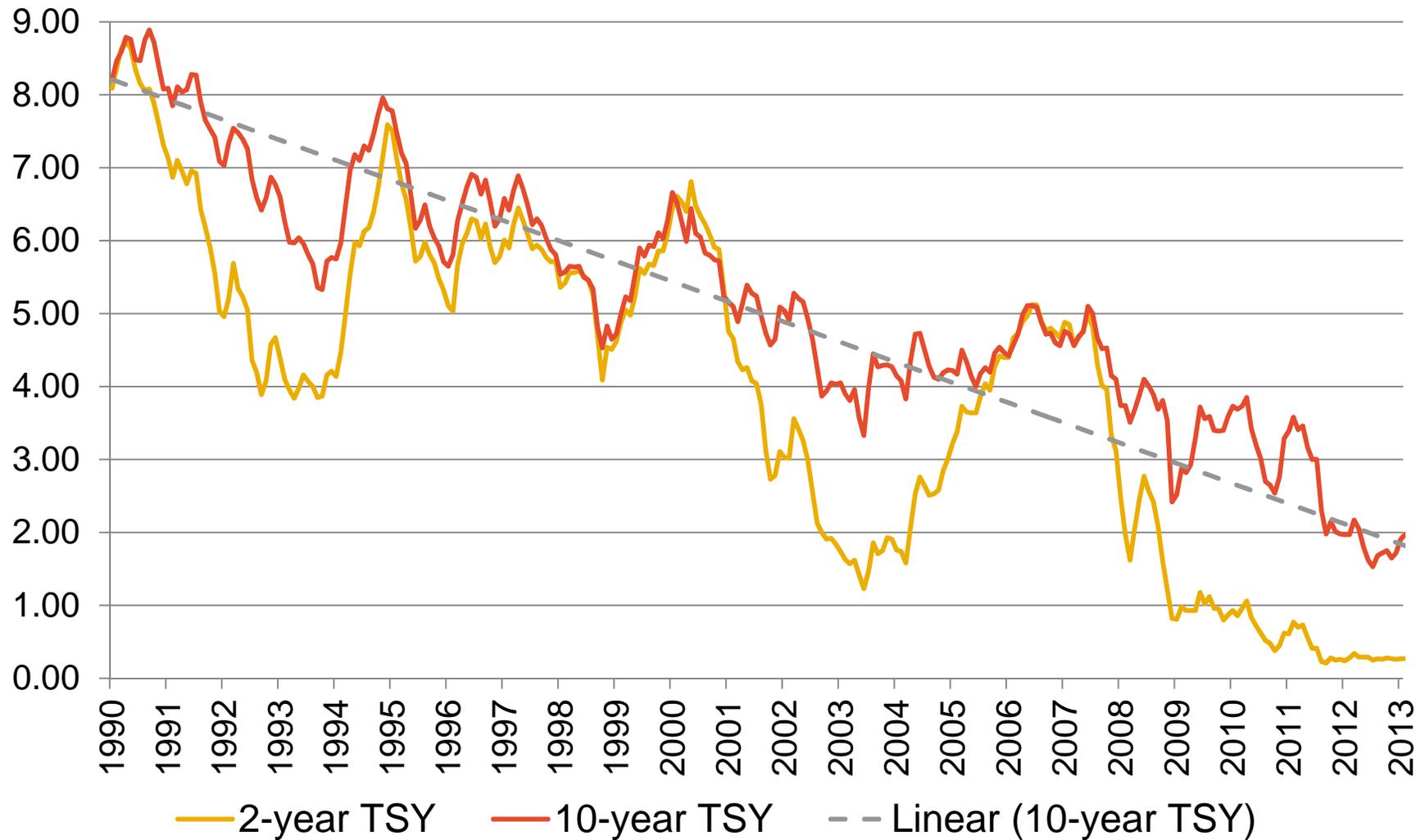
The subgroup exposed an updated white paper comment in March 2013, including the following recommendations:

- Accounting considerations
 - If there are XXX and AXXX issues that have not been addressed, those issues should be addressed directly, as opposed to through the use of captives
- Confidentiality
 - Consider type of information that should and should not be held confidential
- Credit for Reinsurance Model
 - Examine the use of conditional LOCs or parental guarantees, and whether they comply with requirements of the Credit for Reinsurance Model or other financial solvency requirements
- Disclosure and Transparency
 - Enhance disclosure in ceding company statements regarding the impact of the transactions on the financial position of the ceding insurer

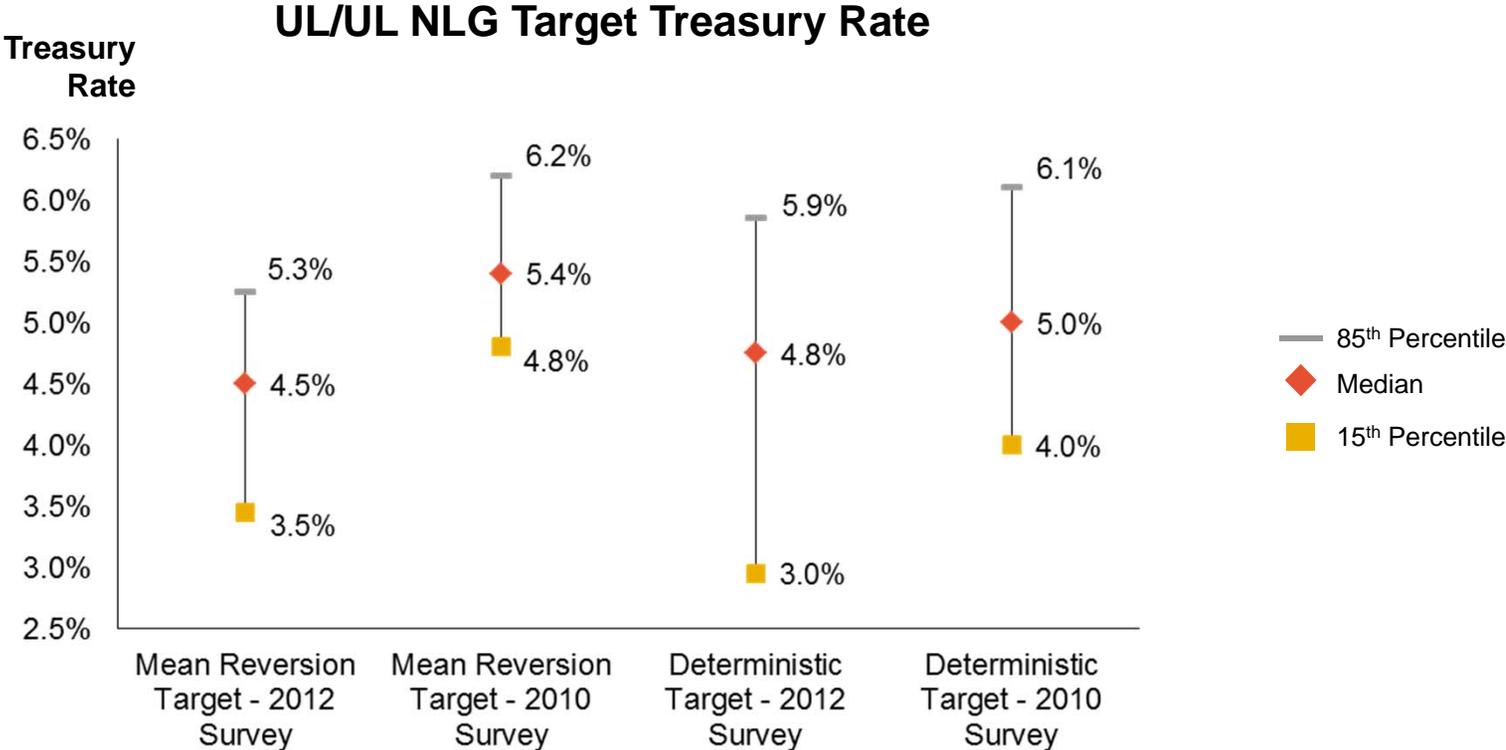
Difficult to speculate how these recommendations will ultimately impact the use of captives and the reserve financing market. However, it has created a sense of urgency with some companies to get transactions done in 2013.

Impact of Low Interest Rates

U.S. Treasury rates have generally been trending down for 20+ years



Per the 2012 Towers Watson Pricing Methodology Survey, the median 10-year Treasury rate target used in projecting expected profits for UL and UL NLG is higher than current levels, but is lower than previously assumed



“Mean reversion target” is used for stochastic projections, while the “Deterministic target” is the ultimate rate used for single, deterministic projections. Compared to 2010’s Survey, the median mean reversion target has decreased by 0.9% and the median deterministic target has decreased by 0.25%.

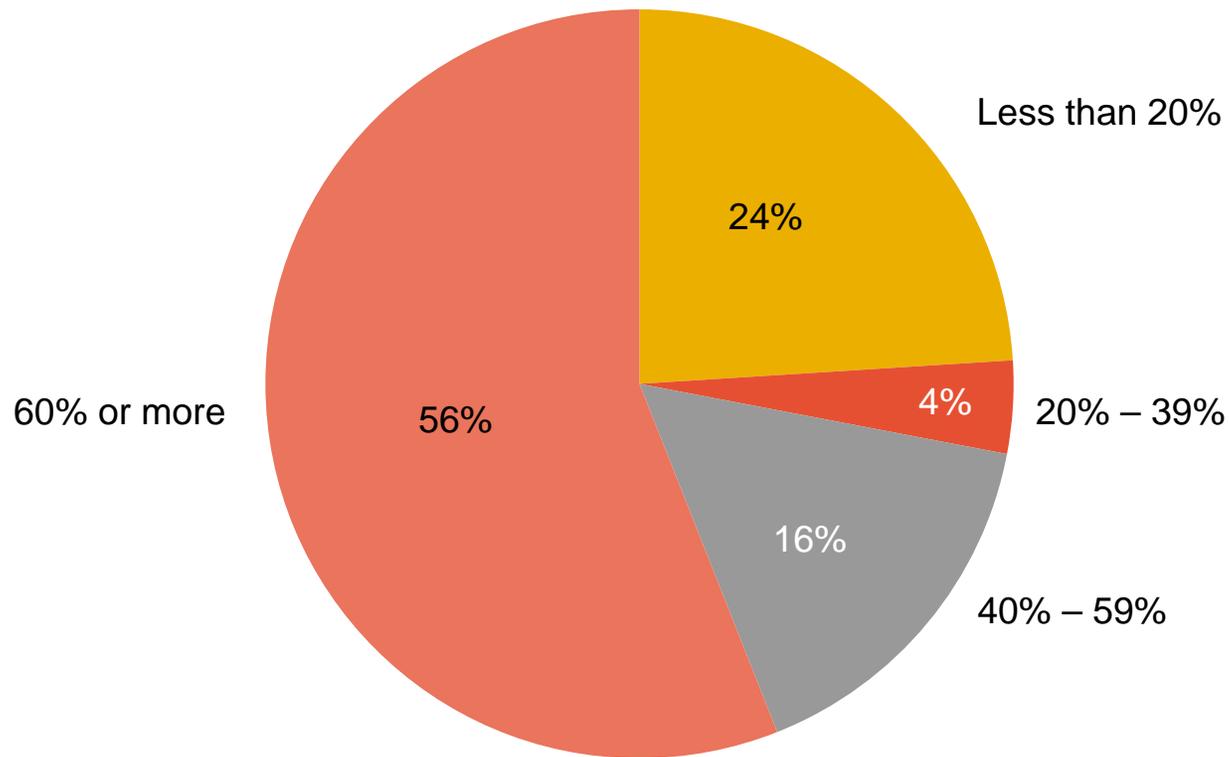
The average grading period to achieve the ultimate rate for single, deterministic projection is 12 years (ranging from five to 30 years) based on 80% of respondents; 20% of respondents use a level rate throughout the projection.

Towers Watson Life Insurance CFO Survey Program

- 30th survey, conducted in March and April of 2012, focused on issues related to the low interest rate environment
- Survey covered various topics, including product and in-force strategies and investment strategies in the current interest rate environment. Select questions and results are contained in subsequent slides.

CFO Survey: Minimum Interest Rate Guarantees

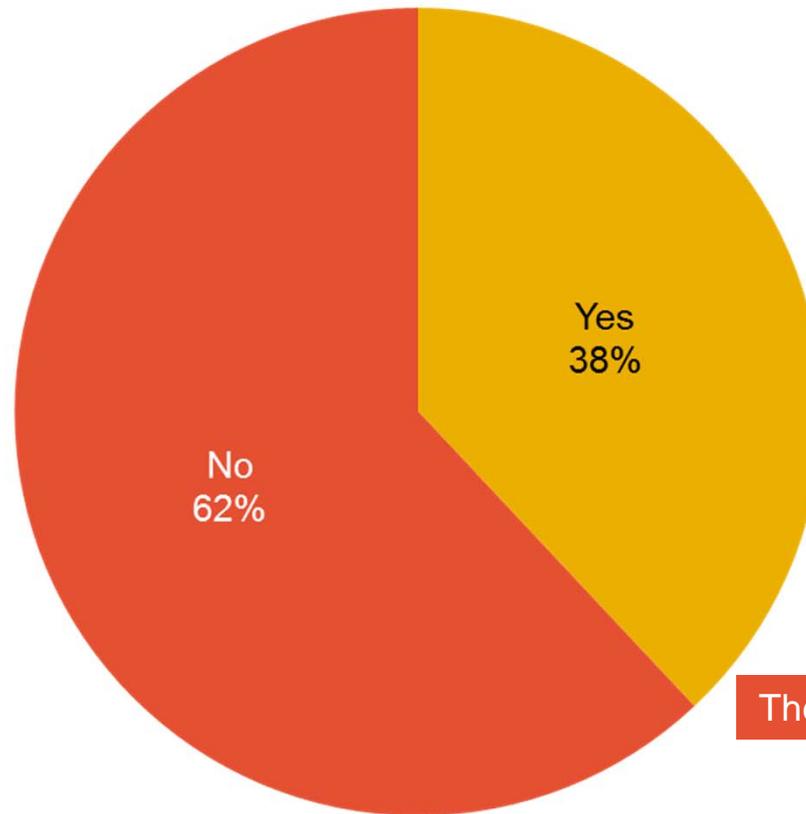
What portion of your total interest-sensitive life insurance block (measured by account value) currently has the credited rate set to its minimum guaranteed rate?



N = 25

Interestingly, the TW CFO Survey results indicate that some survey companies are taking action

CFO Survey: During the past five years, has your company increased the current COI rates and/or expense loads on at least some portion of your life insurance block?

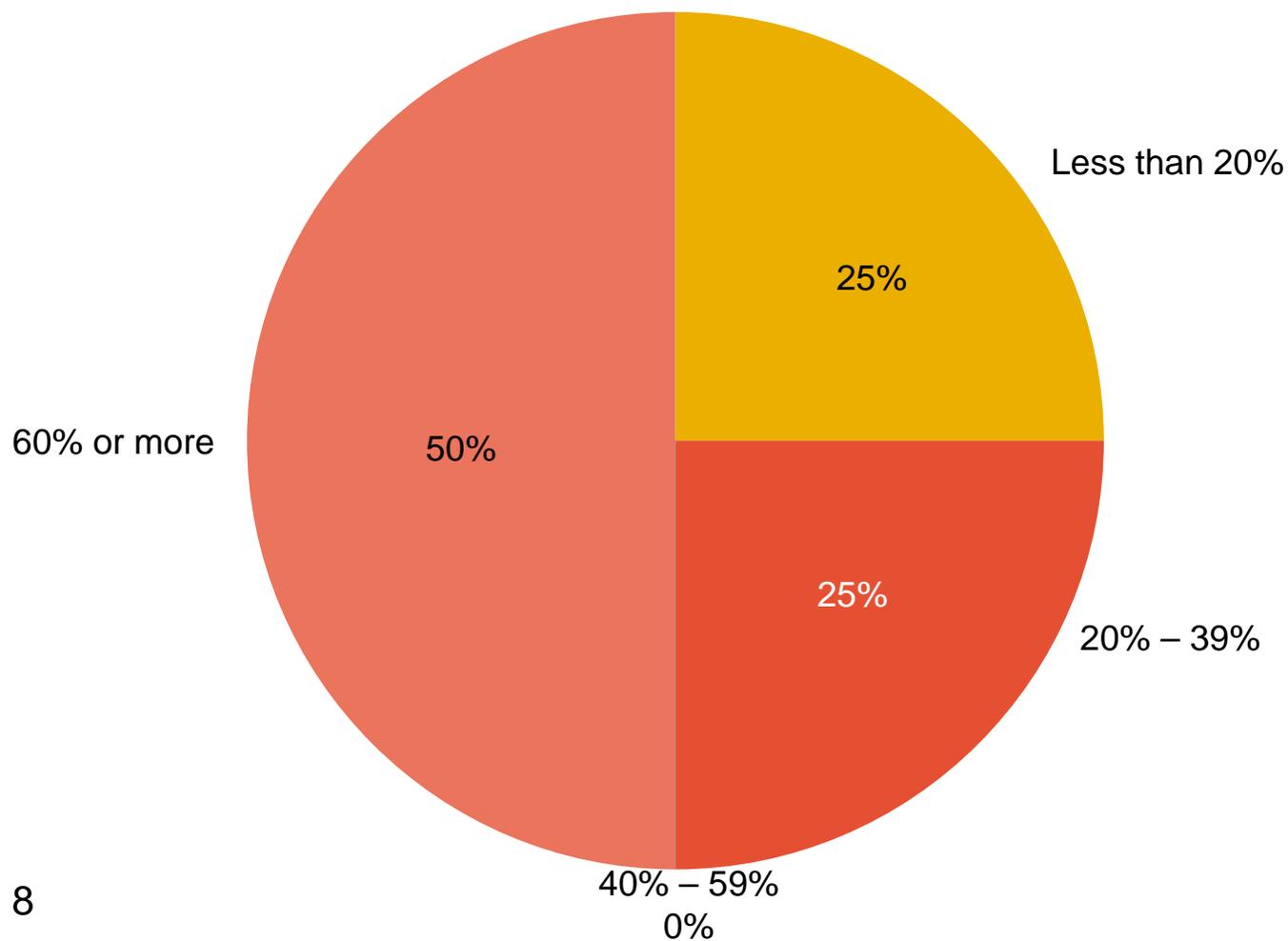


These results surprised us, at first

N = 24

CFO Survey: Magnitude of COI Rate and/or Expense Load Increases

In the past five years, roughly what portion of the total interest-sensitive life insurance block (measured by account value) were increases applied to?



N = 8

There are key issues involved in adjusting non-guaranteed elements on in-force business

- How companies want to be perceived on this issue
- Communication: Policyholder and distributor
- Reaction: Policyholder and distributor
- Need for regulatory notification
- Potential for litigation
- Reinsurers' reaction

On new business, we see the most activity in the following areas

- Reducing MGIR on new issues
 - Practical limitations due to nonforfeiture law (annuities) and 7702 considerations (life insurance)
- Increasing premium rates on UL NLG
 - However, changes to AG 38 are generally a stronger factor
- Increased interest in IUL products
- Exit product segments

In general, offer less “locked-in” products

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