

Life Product Update

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Presenters



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Poll

- Product/Pricing Actuary
- Valuation / Finance
- ALM / Risk Management
- Consulting Actuary
- Reinsurance Actuary
- Accountant
- Other

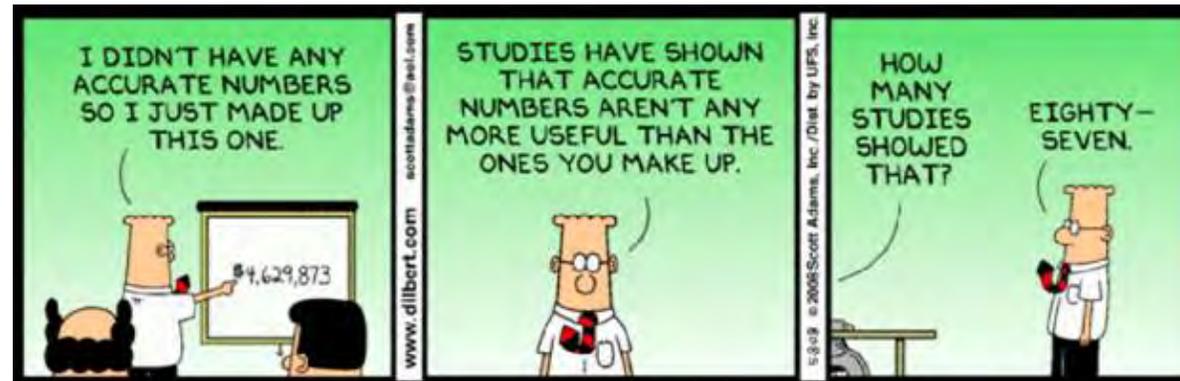
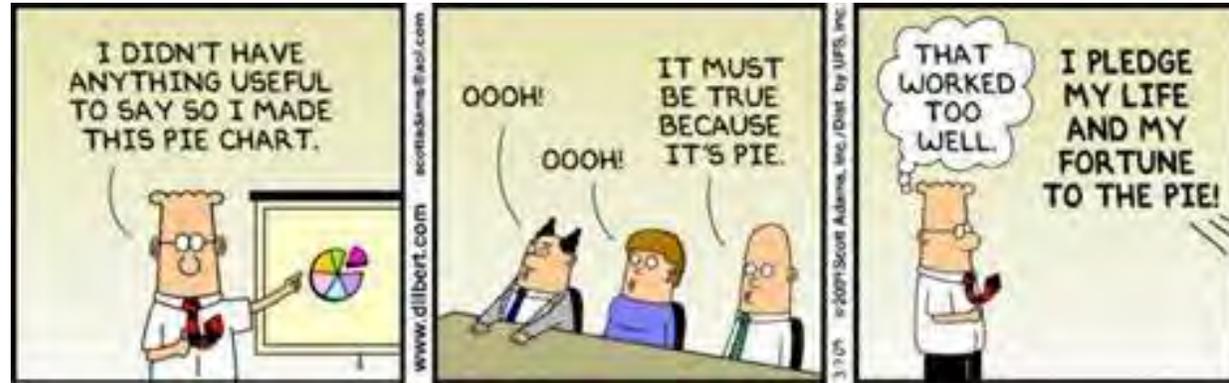
Mark all that are applicable



PRODUCT UPDATES



Sales Update



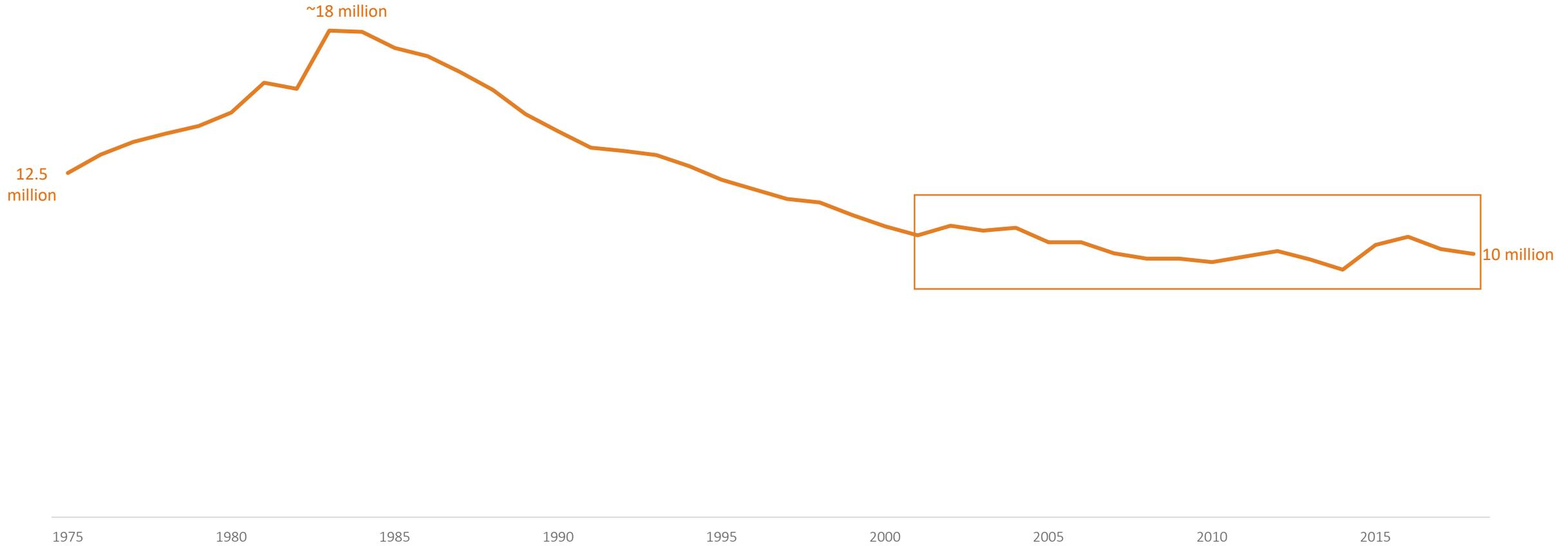
Historical Sales

2019 Recap

Combination Products

Historical Insurance Sales

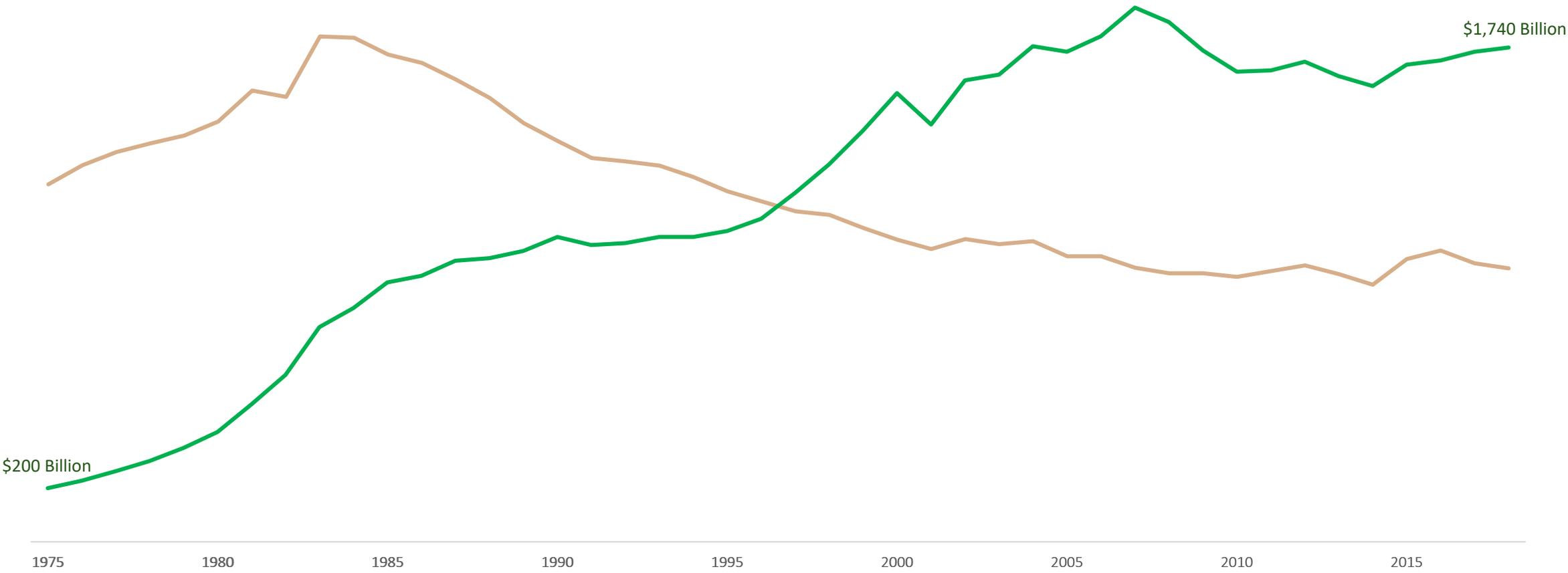
— Paid POLICIES





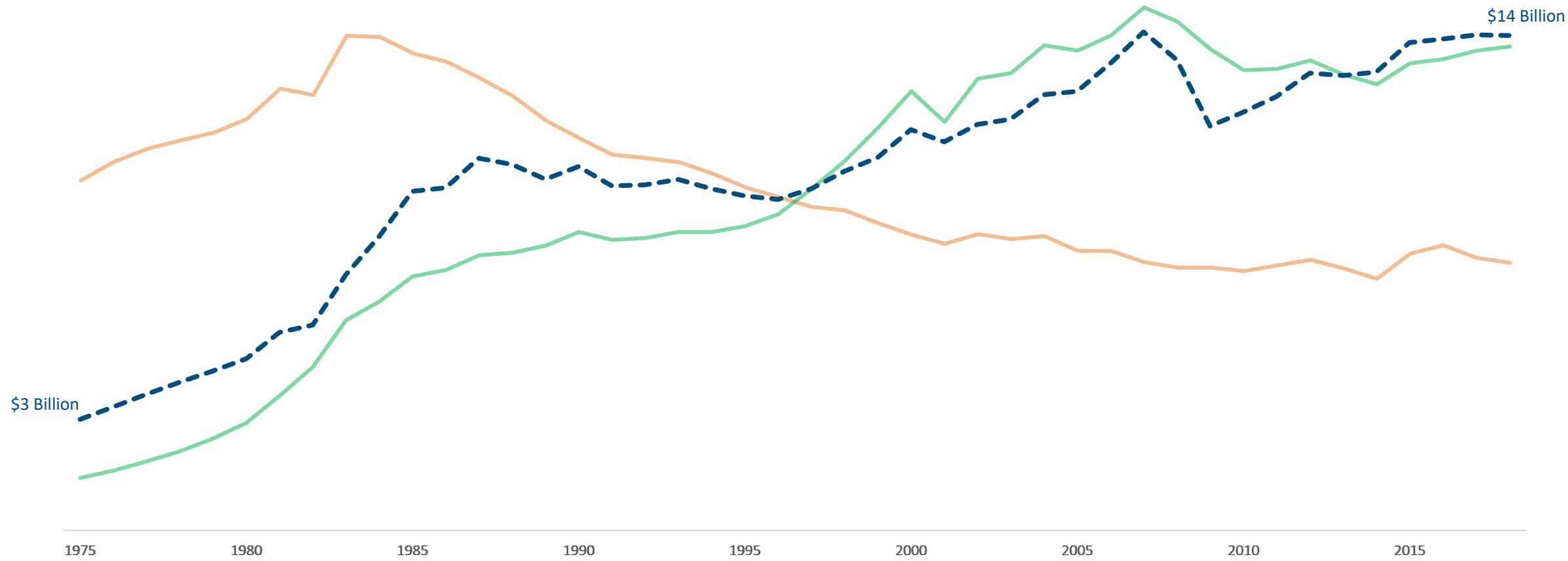
Historical Insurance Sales

— Paid POLICIES
— Face Amount



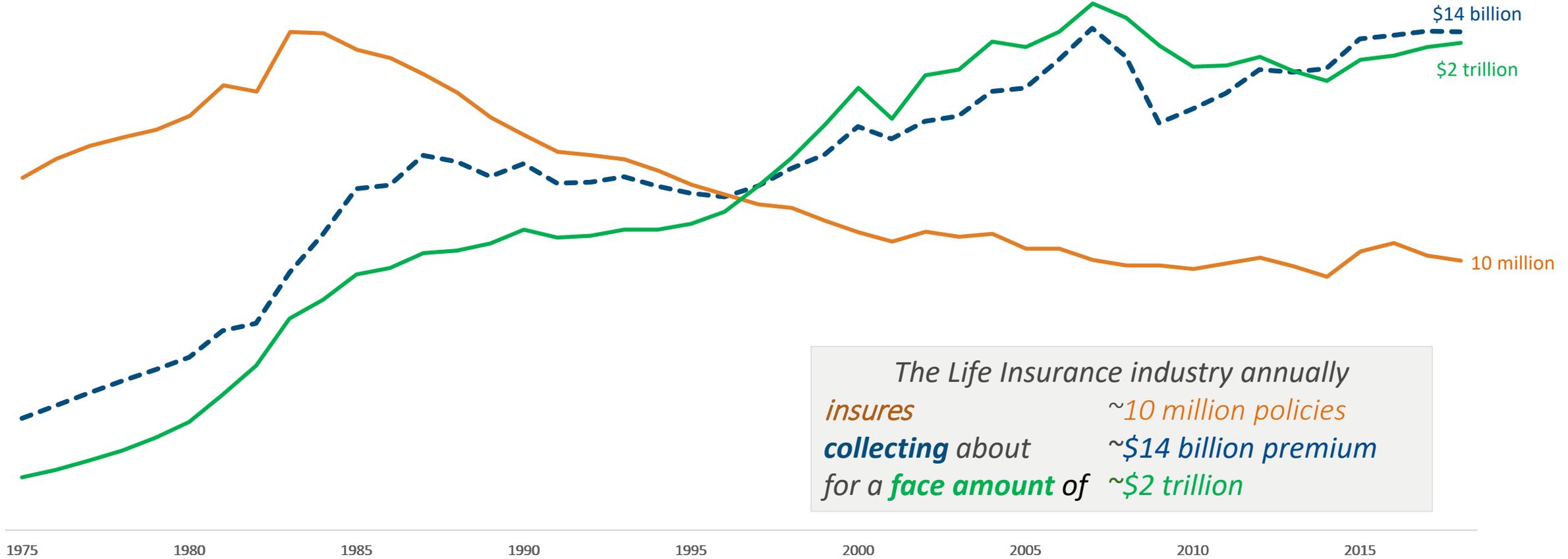
Historical Insurance Sales

- Paid POLICIES
- Face Amount
- - - Annualized Premium



Historical Insurance Sales

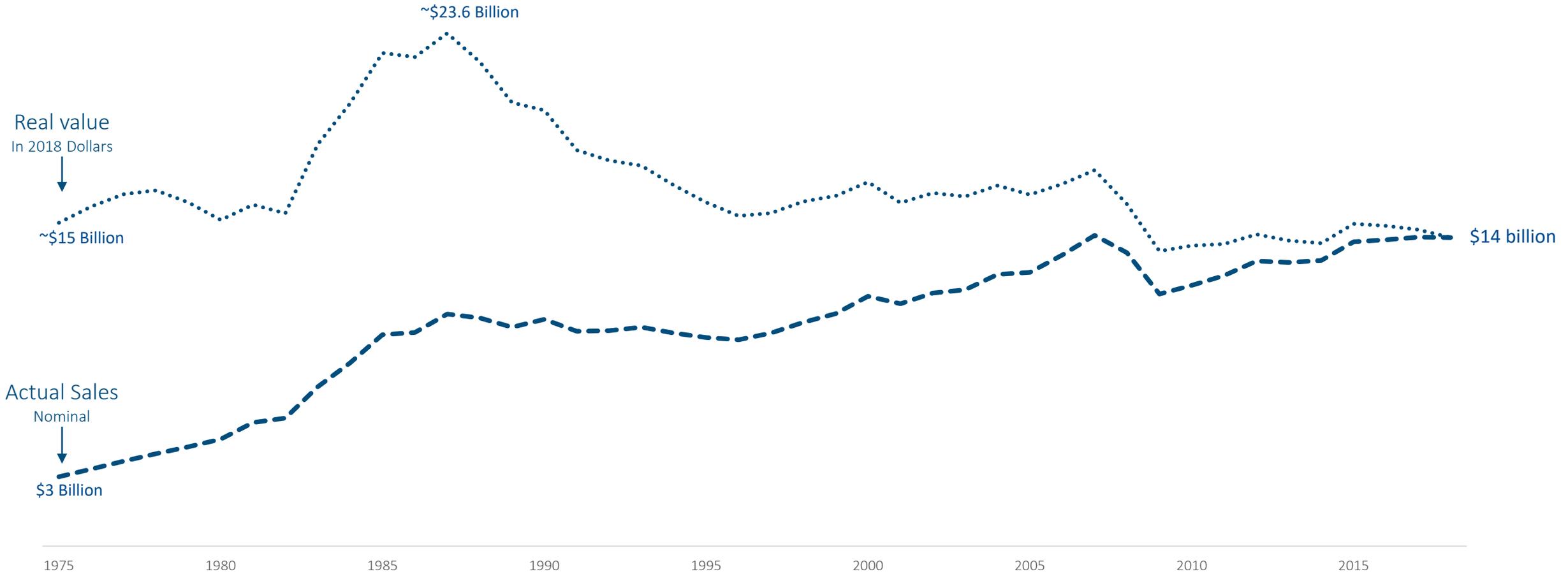
- Paid POLICIES
- Face Amount
- - - Annualized Premium



The Life Insurance industry annually insures ~10 million policies collecting about ~\$14 billion premium for a **face amount** of ~\$2 trillion

Premium CPI Adjusted

- Annualized Premium in 2018 \$s [Real]
- Annualized Premium [Nominal]

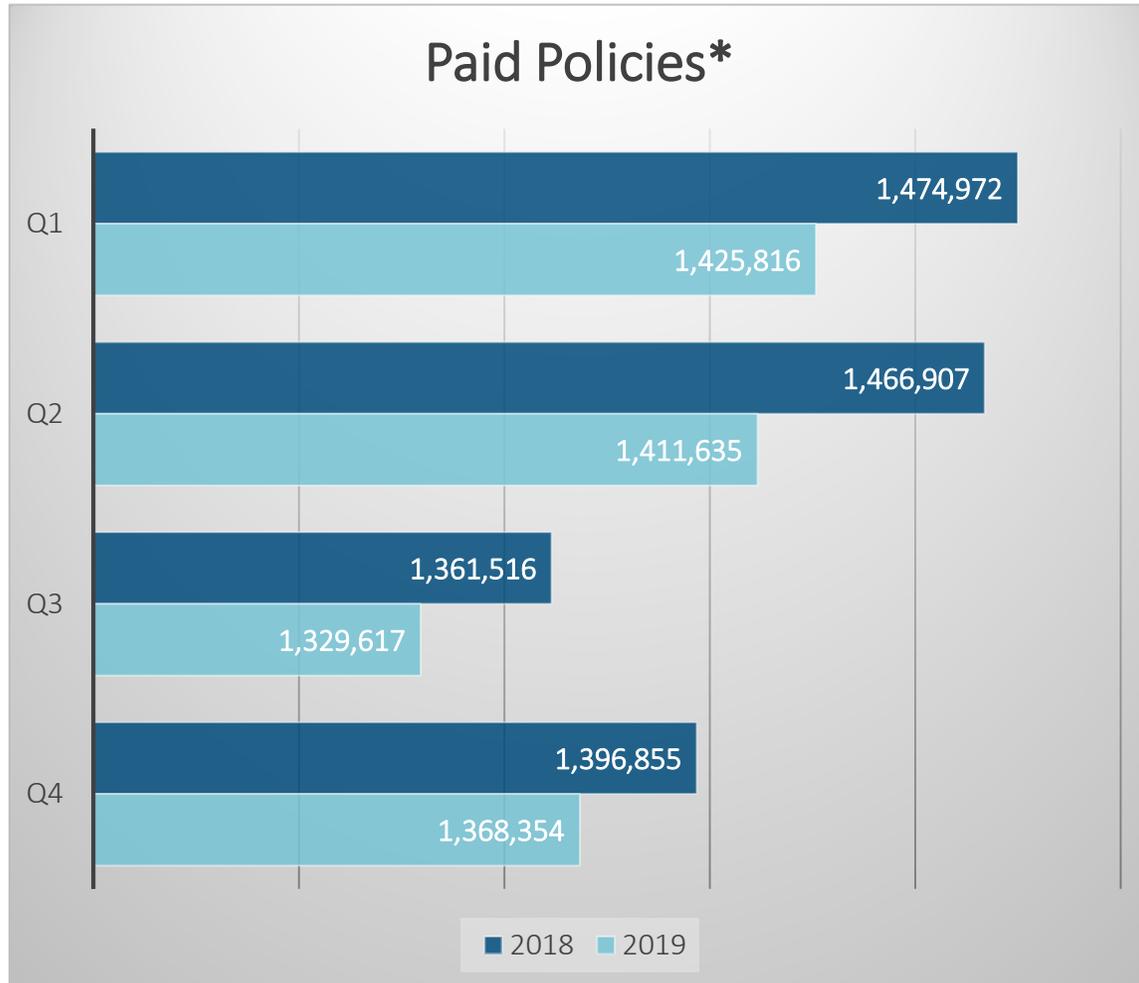


Historical Sales

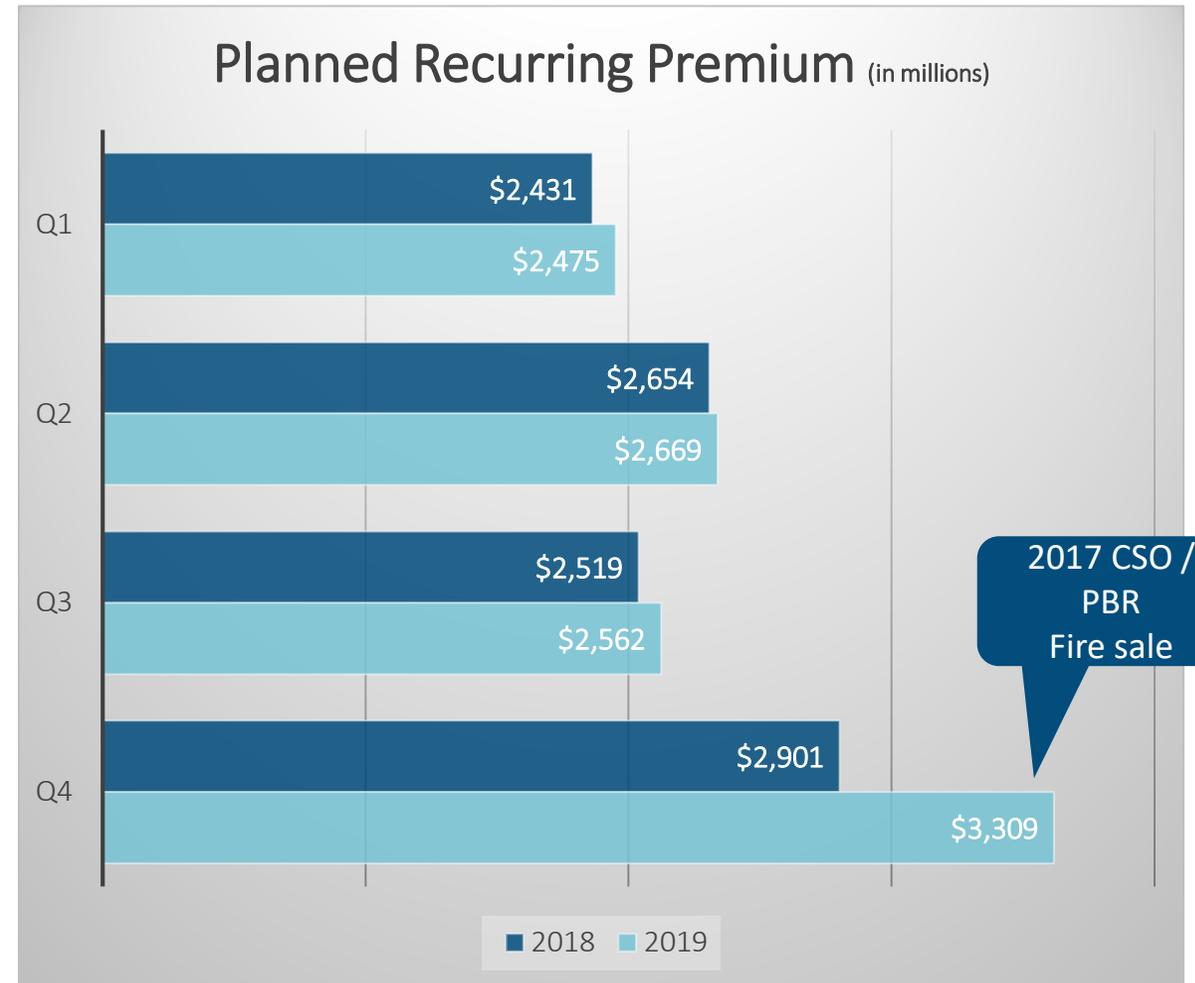
2019 Recap

Combination Products

2019 Sales



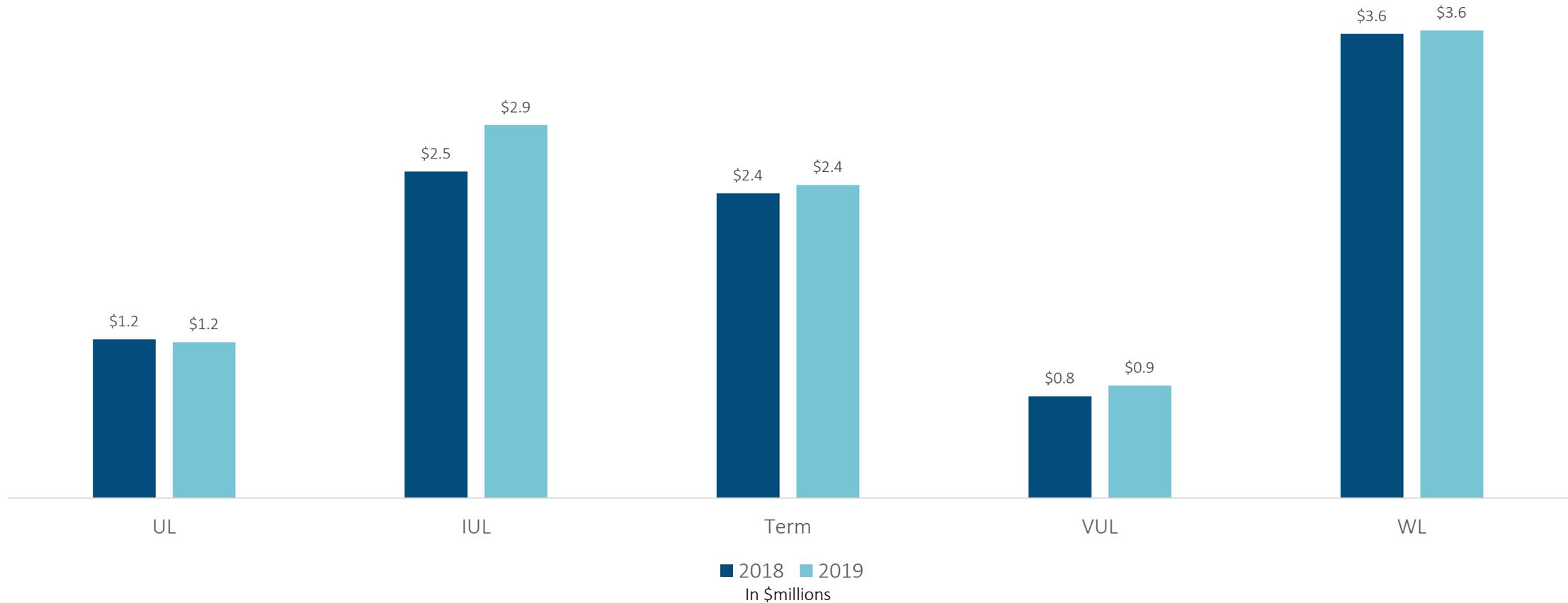
Policy Count **Down 3%**



Premium **Up 5%**

2019 Growth by Product Line [Planned Recurring Premium]

Growth	-2%	14%	3%	11%	1%
<u>2019 Market Share</u>					
Recurring Premium	11%	26%	22%	8%	33%
Policy Count	6%	7%	43%	1%	43%



Historical Sales

2019 Recap

Combination Products

Life Combination Product Comparison

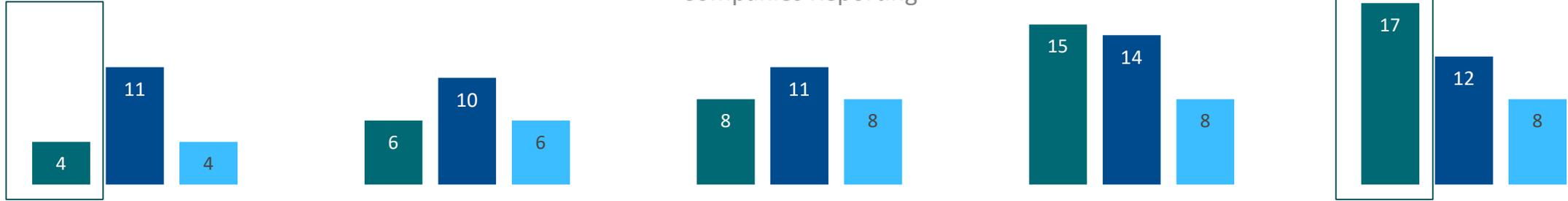
	Chronic Illness Rider [CIR]	Long Term Care Rider [LTCR]	Linked Benefits/Hybrids
Product Type	Term & Perm	Permanent Only	
Rider	Optional Rider attached to a base product <i>ABR: Acceleration Benefit Rider</i>	Bundled Product Base + ABR + EBR <i>Extension of Benefit Rider</i>	
Benefits Limited to Face Amount	Yes	No	
LTC Qualified	No	Yes	
Tax Free for Chronic Triggers	Yes, if properly structured		
Inflation Option Available?	No	Yes	
<i>LIMRA Combo Study Names</i>	<i>CI Acceleration With Rider Premium</i> <i>CI Acceleration Without Rider Premium</i> <i>Total Chronic Illness Acceleration</i>	<i>Total LTC Acceleration</i>	<i>LTC Extension With Elected Rider</i> <i>LTC Extension With No Elected Rider</i> <i>Total LTC Extension</i>

Sales: Life with LTC Combinations: Policies

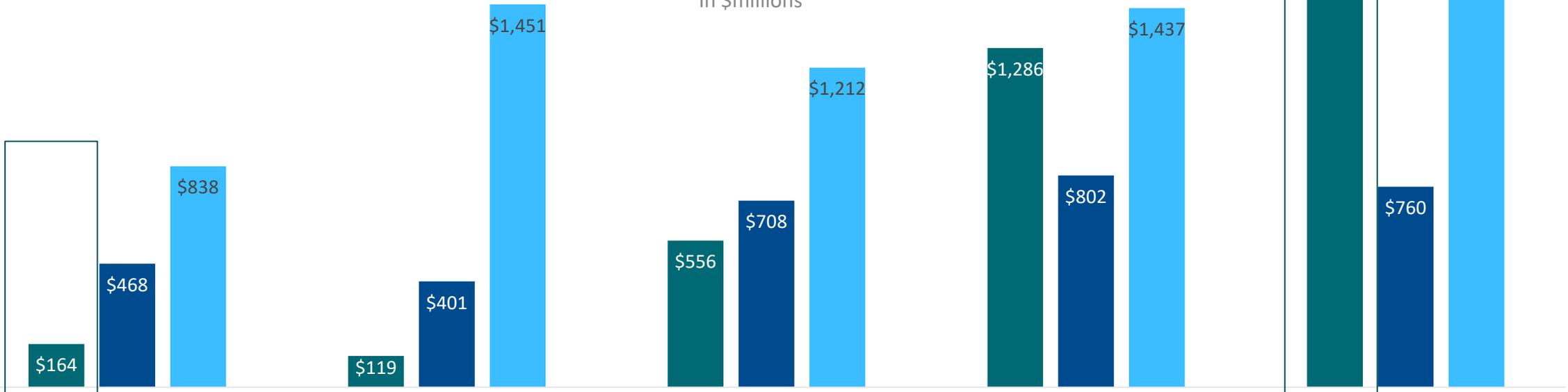


Sales: Life with LTC Combinations

Companies Reporting



Premium Issued
In \$millions



■ CIR ■ LTCR ■ Linked Benefits

Source: 2018 LIMRA Combination Study

Chronic Illness Rider - Designs

Discounted Death Benefit

- No upfront charge
- Insurer pays **discounted %** of face amount at time of payment
- Difficult to illustrate how deep those discounts may be across a range of claims scenarios

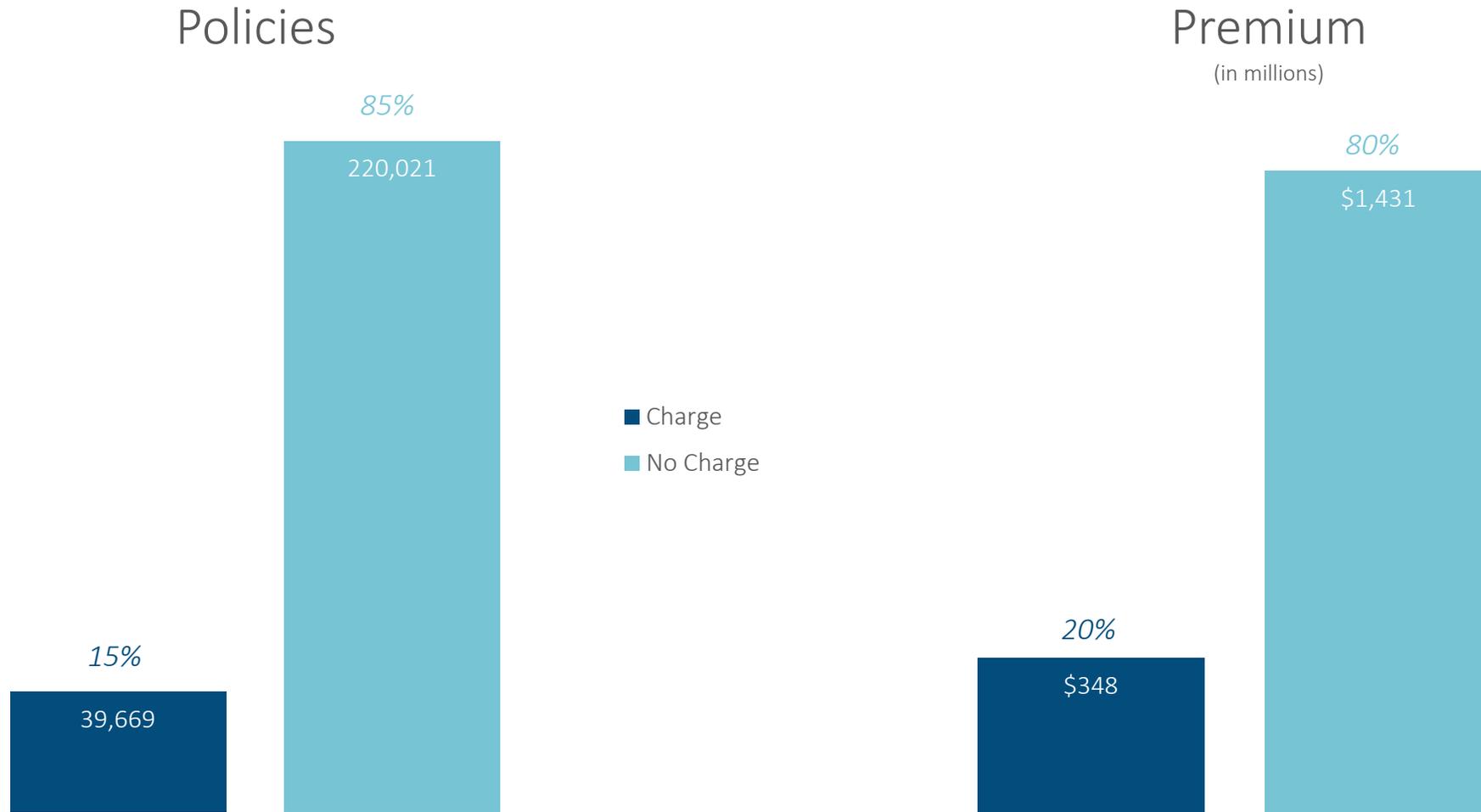
Lien Approach

- No upfront charge (usually)
- Payment of benefit is a **lien** against the death benefit of the policy
- Future premiums, charges, cash value are **unaffected by payment** and continue as if lien had not occurred

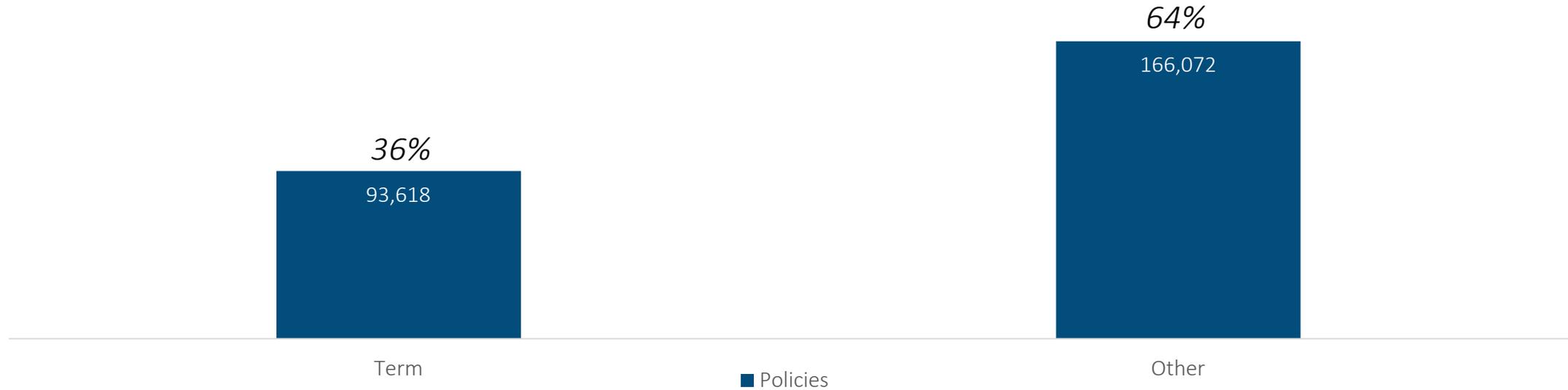
Dollar for Dollar

- **Upfront** rider charges
- Benefit Payment reduces Death Benefit **dollar for dollar**

2018: CIR : Charge vs. No Charge



CIR without a charge [by product]



CIR Lawsuit

https://www.lifeannuityspecialist.com/c/2671663/324983/woman_with_fibromyalgia_sues_over_tiny_accelerated_death_benefit

\$300 check for \$480,000 Acceleration

“When she asked for clarification of how the benefit was calculated, she got an explanation featuring a calculation using terms like the PVFB, or present value of the future death benefit, along with the PVFP, or present value of future premiums. Her lawsuit said the explanation “made no sense” and didn’t conform to state law.”

CIR vs LTCR: Which is Better?

CIR is Better

- For insurers and producers, maybe **easier path** as a life rider 101(g) vs. health type benefit
- **Fewer LTC forms** requirements
- Agents **do not need** to be **health licensed** to sell

LTCR is Better

- Can be **sold** as an **LTC solution**
- **Doesn't impose** the lump sum requirement of CIR which is more costly
- Can build in more **risk protections** such as
 - Reimbursement designs
 - Elimination period
 - Plan of Care requirement

Interested in Hearing More about Combination Products?

Later today:

Deep Dive into Hybrid Life/LTC Products

With Sean Pena, Vincent Bodnar & Allen Schmitz

Life Product Update

Accumulation Products

Jia Fei, FSA, MAAA
Willis Towers Watson
May 2020



Agenda

- Accumulation Products Overview
- Sales Trends
- Product Features
- Recent Regulatory Impacts
- Challenges in the Current Environment

Accumulation Products Overview



Accumulation Products Overview

Permanent life insurance policy with wealth accumulation focus, seeking supplemental income, in addition to death benefit



Accumulation Product Overview

VUL

- Separate accounts
- Market volatility
- Asset based charges
- License
- Relatively small market shares

IUL

- Indexed accounts
- Floor and cap
- Downside protection in trade of limited upside return
- Significant growth and market shares

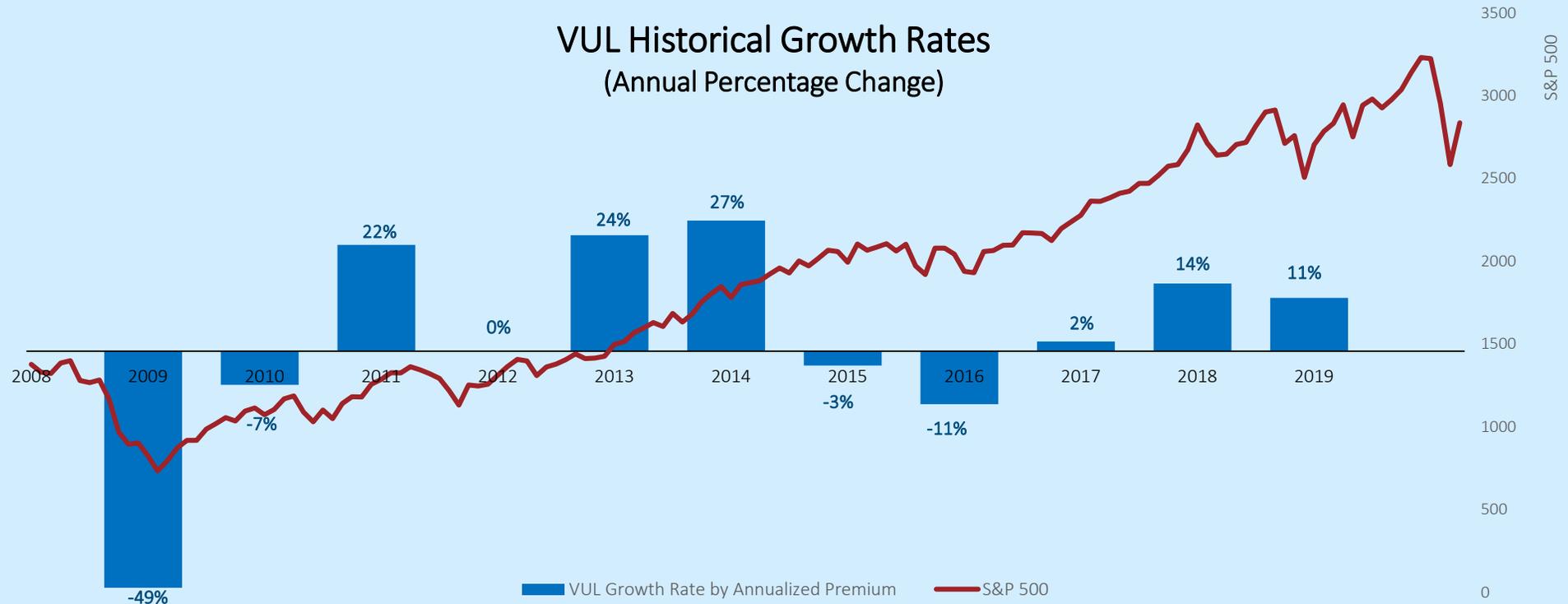
Sales Trends



VUL

Variable Universal Life Sales

VUL sales tend to follow equity market performance

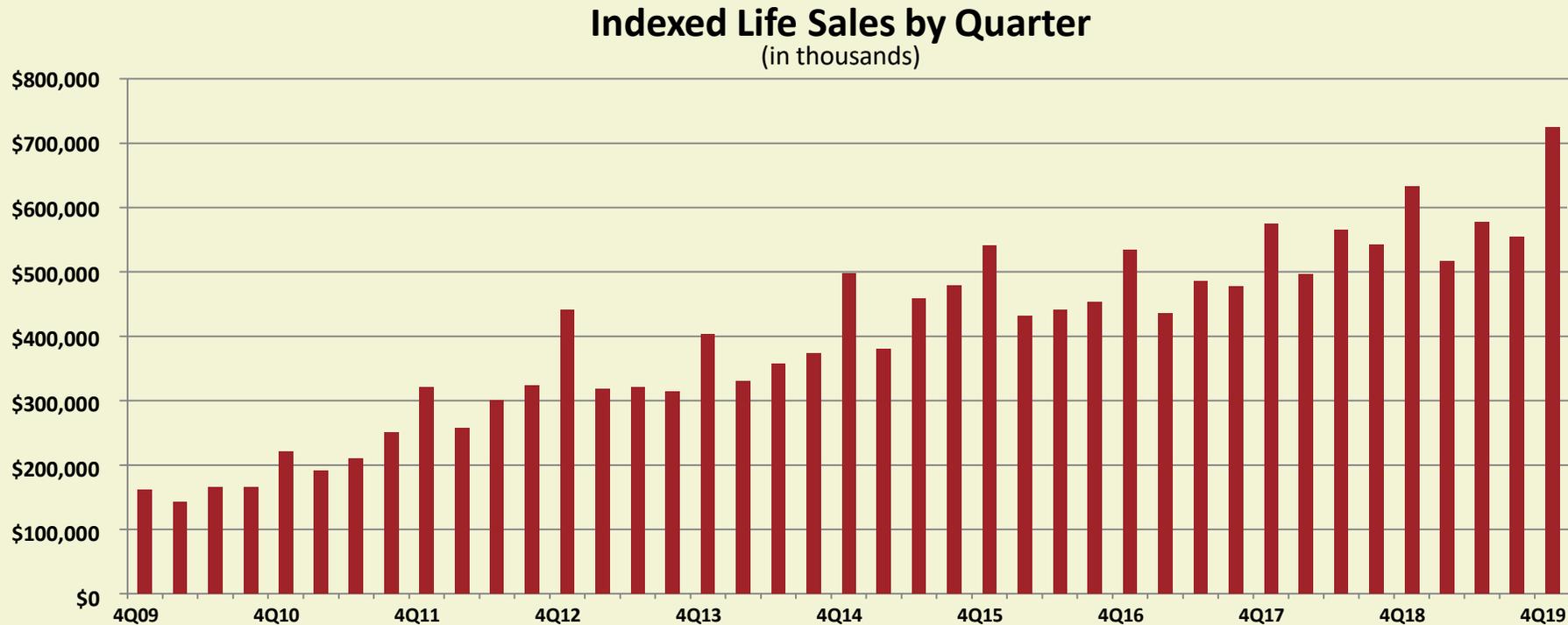


Data source: LIMRA and <https://finance.yahoo.com>

IUL

Indexed Life Sales

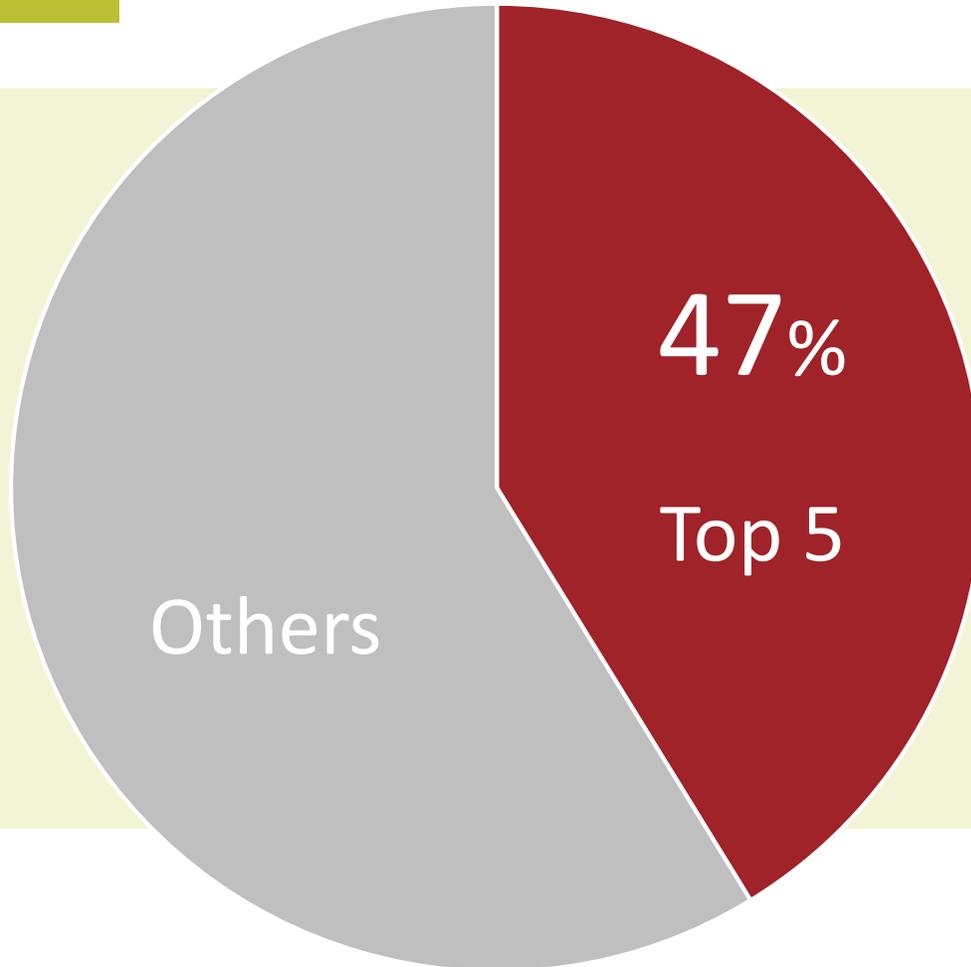
IUL has grown significantly in the last 10 years



Data source: Wink's Sales & Market Report, 2009-2019, Sales based on target premiums

IUL

Indexed Life Sales Market Share



Top 3 companies: 33%

Top 5 companies: 47%

Top 10 companies: 70%

*Data source: Wink's Sales & Market Report, 2009-2019,
Sales based on target premiums*

Product Features



IUL

Indexed UL Product Features

What's new – 2019 vs. 2014

Willis Towers Watson did a research study of comparing the top 5 IUL Products sold in 2019 with the top 5 IUL products sold in 2014.

IUL

Indexed UL Product Features

What's new – 2019 vs. 2014

Indexed strategy:

- Most IUL products offer more than 2 indexed options. Some offer 5 or 6 indexed options
- S&P 500 is still the most dominant index option
- Annual Point-to-Point has been the most common crediting method
- **Bonus crediting rate appears increasing and moves from non-guaranteed to guaranteed basis**
- Supported by either a combination of new money and portfolio, or new money only

Data source: Wink, Inc.

IUL

Indexed UL Product Features What's new – 2019 vs. 2014

- **Policy charges** have stayed relatively at the same level
- Most products now have **fund based charges** that were not presented in 2014
- **Surrender Charger Period** tends to be lengthened
- More IUL products offer shorter-term **no lapse guarantees**
- A variety of **riders** being offer on IUL
- Priced based on **2017 CSO reserve tables and VM-20**
- **Illustrated rates** are generally lower as a result of AG49

Data source: Wink, Inc.

Recent Regulatory Changes



VUL

IUL

Recent Regulatory Changes

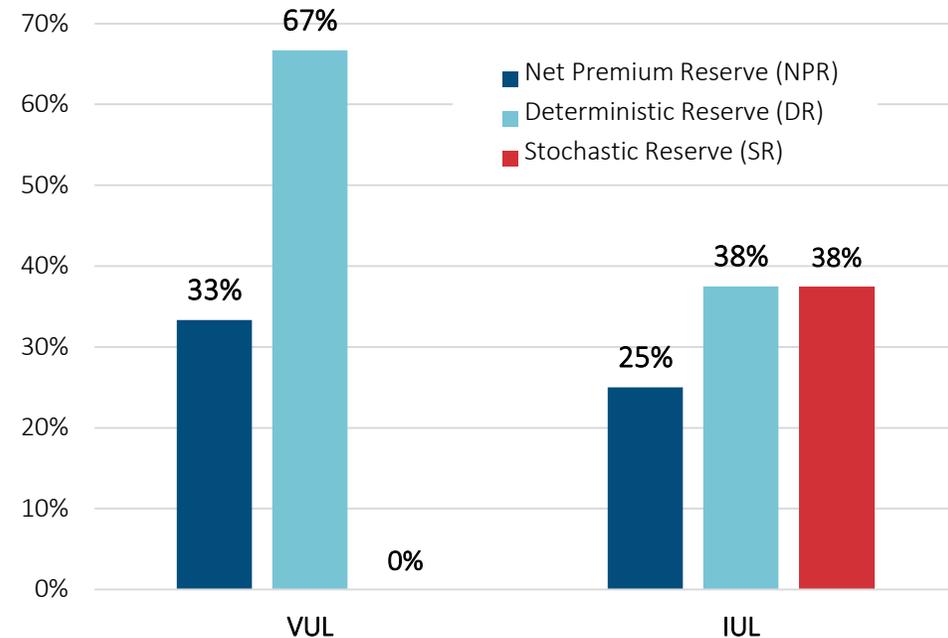
VM-20 Reserve

Dominant Component of VM-20 Reserve

(Percent of Responses)

Based on 2018 WTW Pricing Methodology Survey, the portion of the VM-20 reserve that has dominated varies by company and by product type, with generally DR dominating for VUL, DR and SR evenly dominating for IUL

Portion of VM-20 Reserve that has Dominated (Percent of Responses)



Polls

Post VM-20 Reserve

- Which component of the VM-20 reserve has dominated for your company's IUL product?
 - A. Net Premium Reserve (NPR)
 - B. Deterministic Reserve (DR)
 - C. Stochastic Reserve (SR)
 - D. I don't like IUL!

Polls

Post VM-20 Reserve

- Which component of the VM-20 reserve has dominated for your company's VUL product?
 - A. Net Premium Reserve (NPR)
 - B. Deterministic Reserve (DR)
 - C. Stochastic Reserve (SR)
 - D. I don't like VUL!

VUL

IUL

Recent Regulatory Changes Post VM-20 Reserves

- Review methodology and areas for improvement
- Identify inherent risks
- Establish risk mitigating controls
- Prepared for examinations and audits
- Academy issued Practice Note –

“Common Practices of Examining Actuaries Involved in Statutory Financial Solvency Examinations of Life and Health Insurers Including Considerations for Principle-Based Reserves, April 2020”

Recent Regulatory Changes (Cont'd)

AG 49

- AG 49 was adopted in 2015
- Bring uniformity to the illustrations of IUL policies
- Hot discussions have been around possible amendments on crediting “multipliers” or “bonuses” in the past couple of years

	Base Policy	Index Crediting Bonus Example 1	Index Crediting Bonus Example 2
Crediting Bonus	0	0.5	1
Rider Charge	0	4%	8%

Examples only

Total Index Credited Interest = Base Index Credited Interest x (1 + Crediting Bonus)

Recent Regulatory Changes (Cont'd)

AG 49

- Discussed five possible ways to address concerns related to the crediting rate
- The possibilities were narrowed down to
 - possibility 2, eliminating any difference between the illustrated rate for products with index multipliers and products without index multipliers, and
 - possibility 3, allowing a heavily constrained difference between products with multipliers and products without multipliers.
- During the 2019 Fall National meeting, the Life Actuarial Task Force voted to revise AG 49 according to “possibility 2” which intends for no difference between the multiplier and non-multiplier in **IUL** illustration

Recent Regulatory Changes (Cont'd)

Highlights on AG49 Proposed amendment

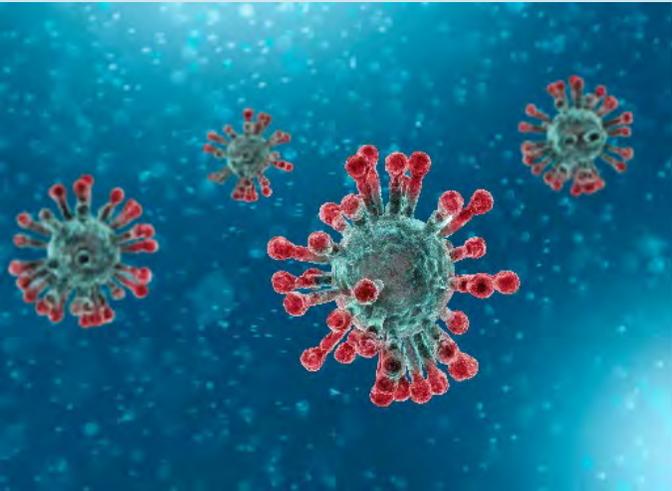
	Current AG49	Proposed Amendments
Maximum credited rate	Based upon the geometric average annual credited rates of the “Benchmark Index Account”	Place greater restriction with consideration of crediting “multiples” or “bonuses”
Earned interest rate	145% of the annual net investment earnings rate of the general account if hedging program is in place	Allow 145% of supplemental hedge budget in determining the maximum assumed interested rate
Loan spread	No more than 100 basis points	The new allowable spread including all the bonuses impacting the policy account value

The proposed amendments are still work in progress and subject to change and approval from regulators!

Challenges in the Current Environment



Challenges in the Current Environment



Considerations for Pandemic Risk Stress Test

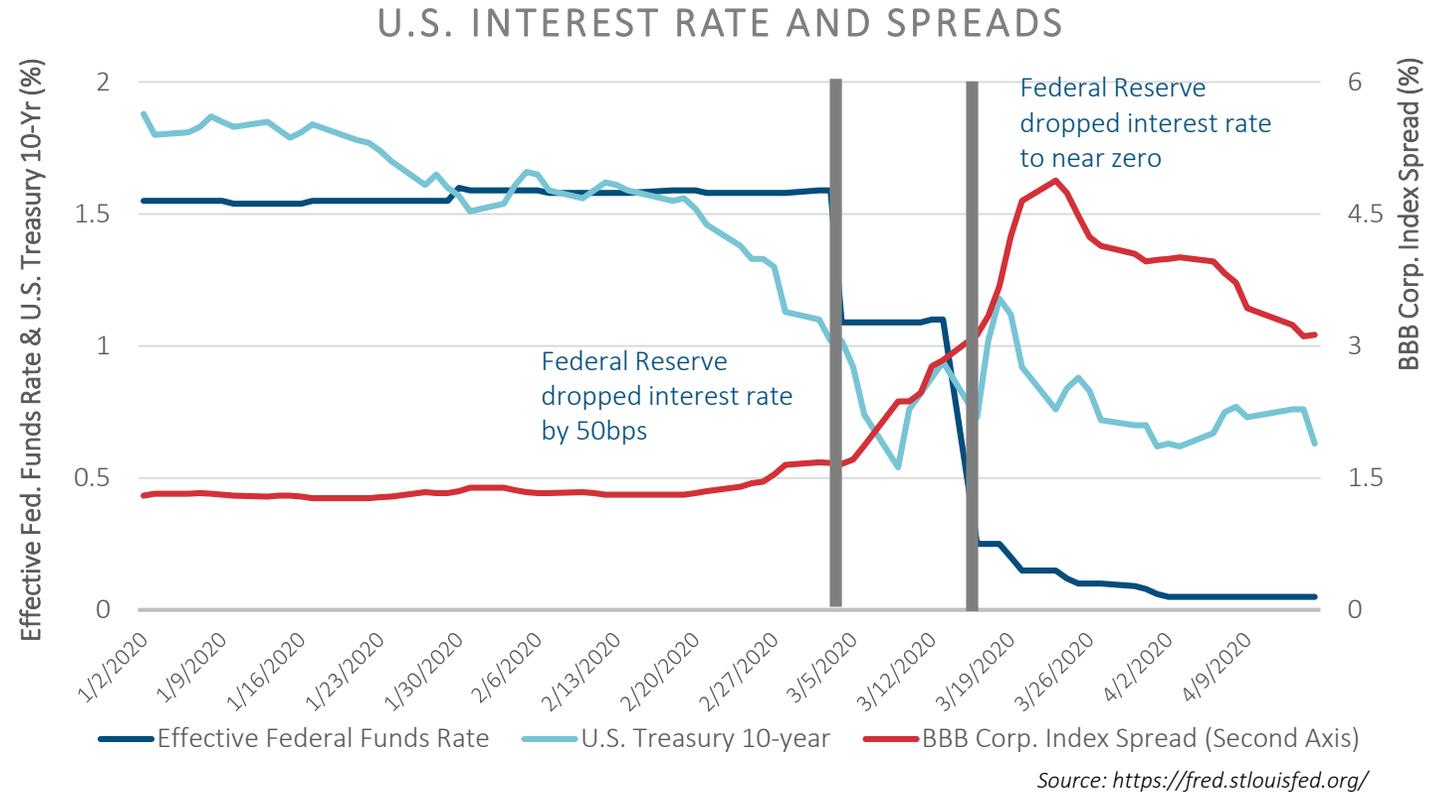
- Important to perform stress test
- More severe shock at old ages vs. same shock for each age
- A larger shock for a shorter time period vs. a milder shock for a longer-period

Challenges in the Current Environment

Economic assumptions

“Zero” and “Negative” interest rate

- Significant impact to portfolio yield and reinvestment rate
- Larger and more direct impact to assets maturing in the near term
- Reserve impact from PBR and CFT scenarios that are directly linked to the U.S. treasury rates
- Lower discount rate also increase the value of guarantees and capital requirement

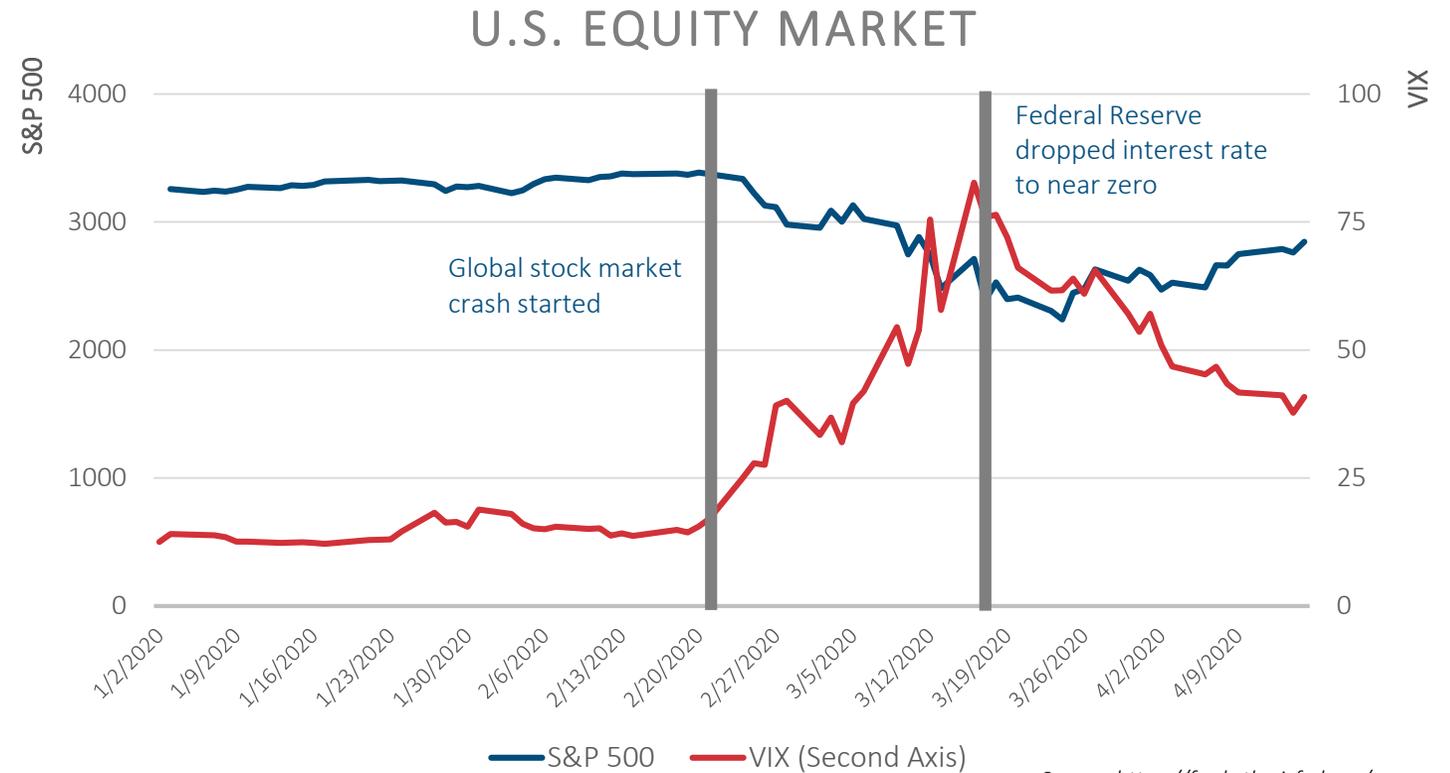


Challenges in the Current Environment

Economic assumptions

High volatility in equity market

- Shrink in the asset based revenue for IUL and VUL products
- Increased option price makes hedging more expensive
- Unexpected premium persistency behavior and transfers to fixed return accounts



Source: <https://fred.stlouisfed.org/>

Challenges in the Current Environment

Repricing!

Accumulation Product Wrap-up



Summary

- ✓ Growth of accumulation products
- ✓ Innovation of product development
- ✓ Regulatory considerations for pricing
- ✓ Challenges and opportunities!

Contact Information



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Protection Product Update



Market Disruptors- Term Life Insurance

- Distribution Disruptors

- Online Quote Aggregators

- ETHOS
 - Policygenius
 - Health IQ: Targets the Healthy Folks

- Non-Traditional Distribution

- iptiQ: Utilizes digital sales platforms
 - Haven Life: Direct online Life Insurance Sales

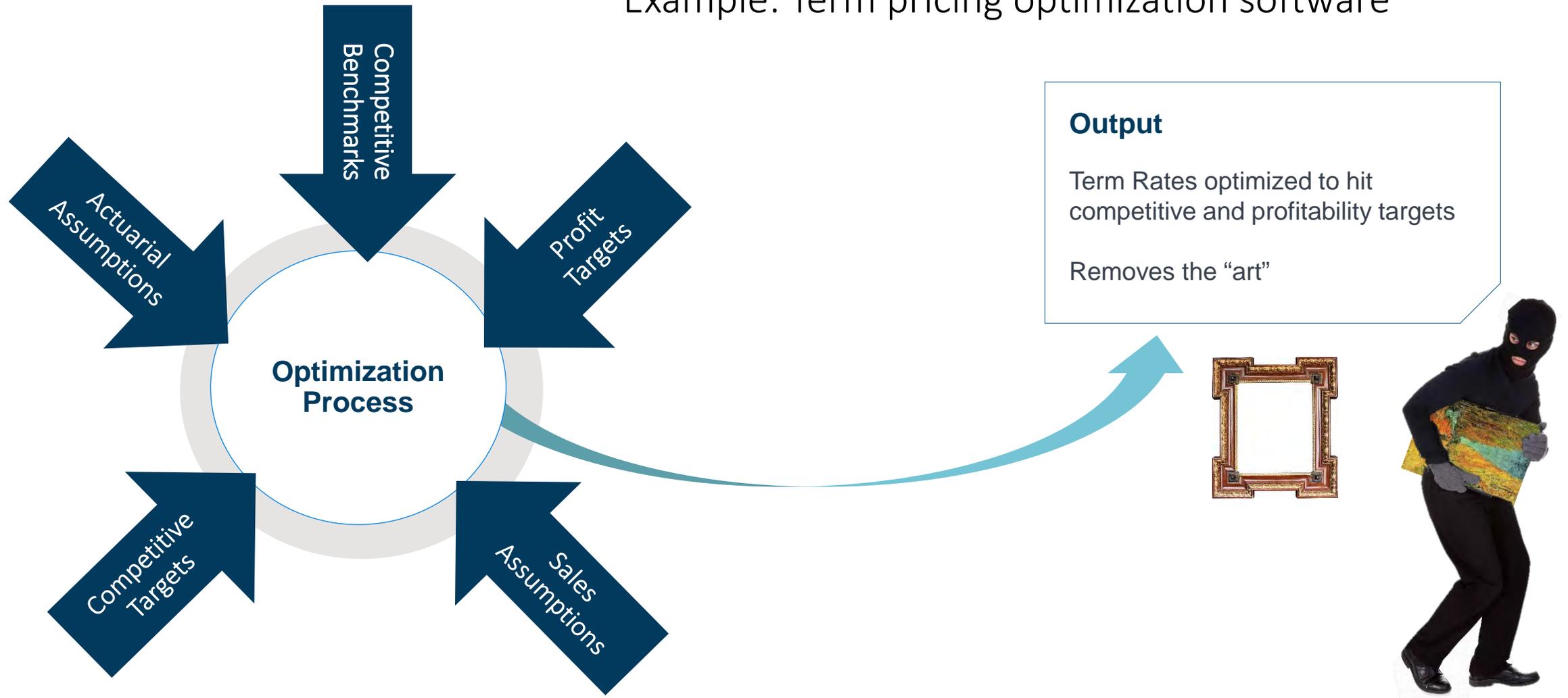
- Wellness Discounts

- John Hancock Vitality: Utilizes ongoing health data monitoring to provide discounts (like the “Safe Driver Discounts”)



Market Disruptors: For Actuaries

Example: Term pricing optimization software



VM20 – Product Design Implications

Term Insurance

- Alternative Post-Level Term Options
 - May reduce PLT anti-selection
- Expansion of Designs
- Nonforfeiture Considerations

Universal Life with Secondary Guarantees (ULSG)

- VM20 favors shadow account designs
- VM20 favors shorter guarantee ULSG to term insurance
 - ULSG products have greater flexibility to term
- Outstanding issue: Differing experience may prevent pricing alignment

What is the future of ULSG Design and Term Insurance?

- Will specified premium designs go the way of the dodo?
- Will term insurance go the way of the dinosaur?



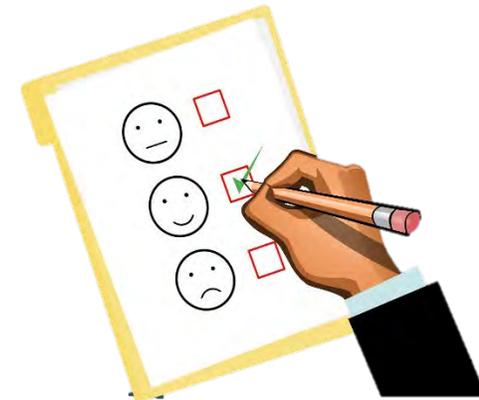
*Not to scale

COVID-19 Survey



COVID – 19: It's Hip, It's Now, It's Wow

- A recent survey was conducted of life insurance product areas regarding thoughts and reactions
 - Economic/Interest Rate Expectations
 - Mortality Expectations
 - Product Plans
 - Underwriting Guidelines
 - Additional Thoughts



Has your company made changes due to the Disruptor: COVID-19?

A. No Changes

B. Exploring Changes

C. Made Underwriting Changes

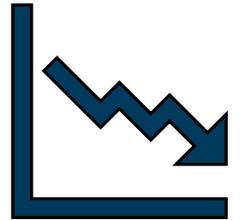
D. Made Product Changes/Adjustments

E. Both: Underwriting & Product Changes/Adjustments

COVID – 19: Lowered Expectations

Economic/Interest Rate Expectations

- General agreement that lower rates aren't going anywhere
- More than half expected more than 2 years, with almost 1/4 expecting more than 6 years



Mortality Expectations

- General consensus that mortality impact will be short lived
- More than 80% expect higher mortality for less than 2 years, 40% expecting higher for less than 1 year



COVID – 19: Other Than Not Leaving the House, What are You Up To?

Near-Future Product Plans

About 40% of carriers intend to making pricing changes in response to COVID-19

Responses varied by product type, with products most dependent on investment returns having higher proportion of planned changes

Based on the above and responses to previous questions, changes likely center around interest rate expectations

Changes in Underwriting Guidelines

General responses

- Enhancing/Expanding good health statements
- Limitations on older-age and substandard issues
- Relaxation of in-person underwriting practices

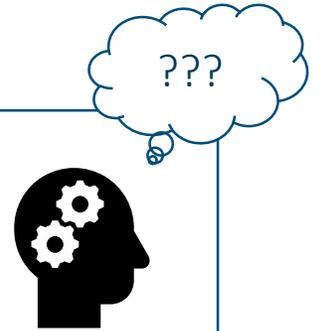
Notable responses

- Focus on comorbidity risks
- Factoring ability to work remotely

COVID – 19: What On Earth are You Thinking?

Additional Thoughts

- Common Theme
 - The need for upgraded technology to support remote sales practices and underwriting
- Interesting Responses
 - This will be much more impactful for morbidity risk than mortality
 - Potential mortality improvement as a result of high comorbidity



COVID – 19: Don't Be Shy

If interested in obtaining the full survey report containing all of the questions and further detail on responses, feel free to contact me at:

Ian.Laverty@Milliman.com

More surveys on the way. Feel free to contact me if you would like to participate and/or have thoughts as to what you would like to see asked/answered on additional surveys.

Product Development Section Research and Webcasts



Research Sponsored by Product Development Section

- Accelerated Underwriting Practices Survey
- Modeling and Forecasting Cause-of-Death Mortality
- Credibility Theory in Canadian Life Insurance Industry
- Machine Learning Approach to Incorporating Industry Mortality Table Features in Mortality Analysis
- Practical Analysis of PBR Mortality Credibility

<https://www.soa.org/sections/product-dev/product-dev-research/>

Webcasts Sponsored by Product Development Section

- The Current Challenges of Illustration Actuary Testing
 - June 11, 2020
 - <https://www.soa.org/prof-dev/webcasts/2020-current-challenges/>
- An Intro to Structure Indexed Annuities
 - On-demand (March 11 recording)
 - <https://www.soa.org/prof-dev/recordings/2020-intro-structured-annuity/>

Questions?





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