

Supplemental Health, DI & LTC Conference

**The Economic Impact on
LTC Carriers**



ENGAGE

EVOLVE

ELEVATE

2023



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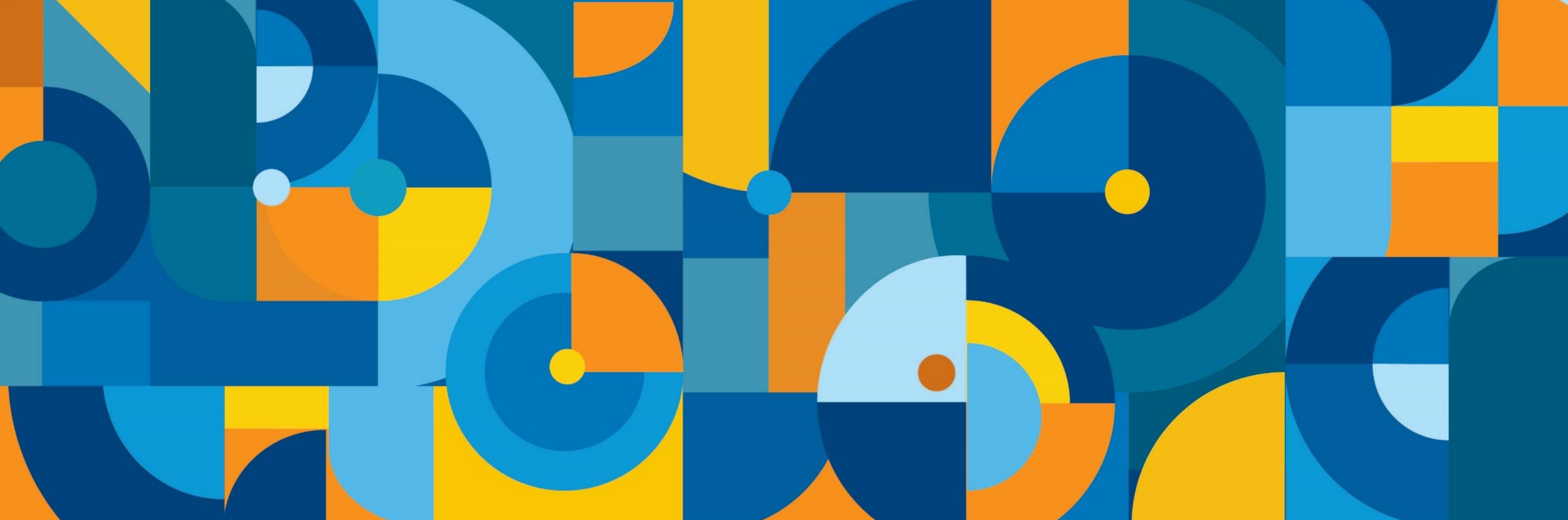
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Market Overview

HISTORICAL 10-YEAR TREASURY RATES AND MARKET IMPLIED VOLATILITY¹

Interest rates have remained volatile so far in 2023, with more Fed rate increase hikes expected



10 Yr Treasury Rates¹ and market volatility²



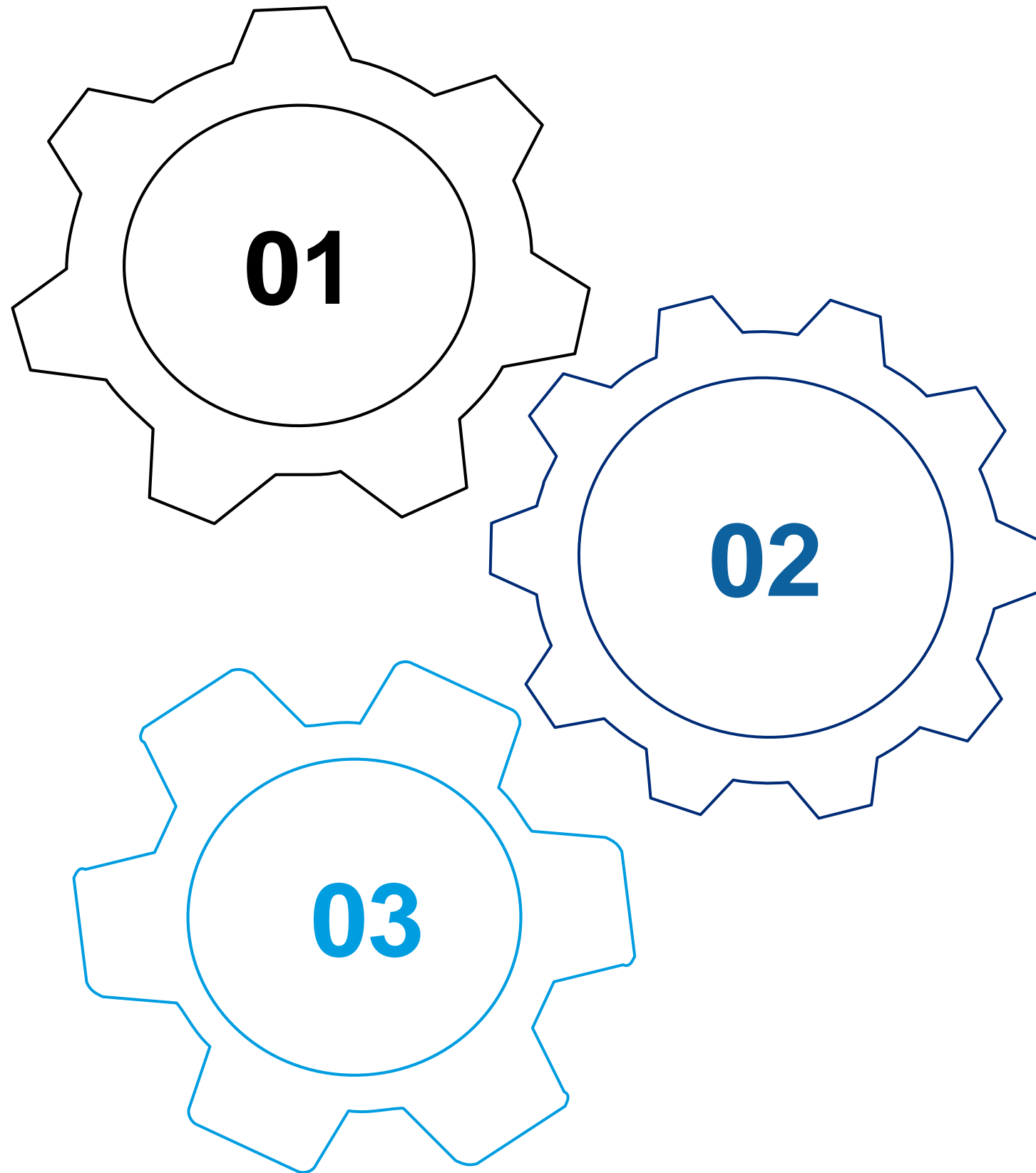
Historical event	Maximum interest rate change	Max volatility
1: Global financial crisis (2008 – 2009)	-204bps	264bps
2: Fed’s tapering of bond purchasing program (2013)	+138bps	118bps
3: COVID-19 stress (2020)	-136bps	163bps
4: Increase in interest rates (2021)	+81bps in Q1 2021	89bps
5: Latest increase in interest rates (2023)	+78bps in Q3 2023	183bps

[1] Source: US Treasury website [2] Source: ICE BofAML MOVE Index (^MOVE)



IN-FORCE RETENTION STRATEGIES

Insurers have a variety of retention strategies to choose from, but will face quantification uncertainty with each



01 Crediting rate strategy

- Challenge of designing a crediting strategy that optimally mitigates against policyholder lapse
 - If credited rates are too high, the cost of reduced interest margin exceeds the benefit of reduced lapses
 - If credited rates are too low, the cost of increased lapses exceeds the benefit of increased interest margin
- Outcome relies on insurer's success at quantifying policyholder response to different strategies, along with the timeliness of which assets can be redeployed in the rising environment

02 Retention incentive programs

- Encompass various approaches such as active outreaches, loyalty programs, and education programs
- Outcome relies on the internal sense of priority placed on these programs and coordinated efforts

03 Existing surrender disincentives

- Surrender charges can deter policyholders from surrendering
- These disincentives may only be effective on relatively newer vintages



The Economic Impact on LTC Carriers

Measure of Inflation

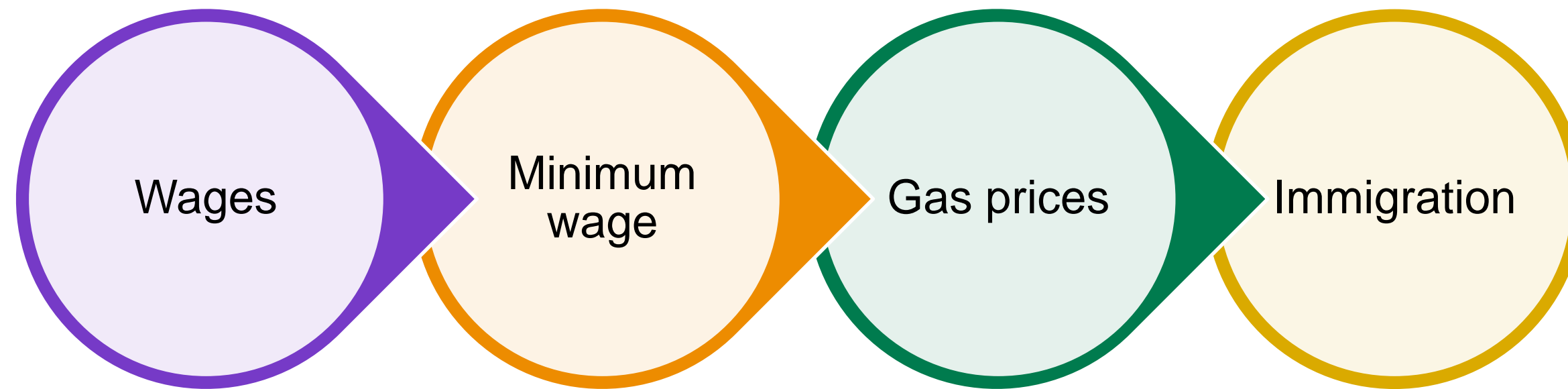
CPI

- measured by the Labor Department. It is calculated using a survey of households and only covers spending on goods and services. It excludes expenditures that aren't paid for directly, such as medical care paid for by a person's health insurance. Its limited set of expenditures can make CPI more volatile.

CPE

- measured by the Commerce department and used by the Fed. It takes into account a broader range of expenditures—and feedback from businesses—to provide a more expansive picture of price changes.

LTC: Key Drivers of Costs



Health: Key Drivers of Unit Costs

- Provider contracting
- Provider consolidation
- Price transparency
- Geographic specific trends

Disability: Key Drivers of Costs

- Insured salaries
- Cost to deliver services
- Management costs
- Purchasing power
- Recession and uncertainty

LTC: Inflation Protections

General

- Disconnect between premiums and risk

Key benefit decisions at purchase

- Daily benefit amount (Base and inflation)
- How long coverage will last
- What types of services will be covered

Runoff block issues

- Rate increases and associated benefit changes



LTC: Benefit Inflation Impact on Utilization - Example

- Assume this policy is a reimbursement policy
- Assume average inflation scenarios of 3% and 5% are applied to the daily cost of a NH stay
- The example demonstrates that as cost of care increases, benefit utilization increases. Some or all of these increases in cost of care may be offset with BIO Riders purchased at policy issue.

Policy Options	Originally Purchased Benefit	Benefit Value after 5 Years	Benefit Value after 10 Years	Benefit Value after 25 Years
BP	Lifetime			
BIO Rider	Yes			
BIO Type	Compound			
Inflation Amount	3%			
Daily Benefit Amount	\$150	\$174	\$202	\$314
Daily Cost of NH Stay at 3% Inflation	\$100	\$116	\$134	\$209
Daily Cost of NH Stay at 5% Inflation	\$100	\$128	\$163	\$339
Daily Utilization if on Claim at 3% Inflation	67%	67%	67%%	67%
Daily Utilization if on Claim at 5% Inflation	67%	73%	81%	108%*

* Utilization > 100% implies that the policyholder will be incurring out of pocket expenses for the NH stay at this point in time.

Confidential



LTC: Interest Rate vs Investment Returns

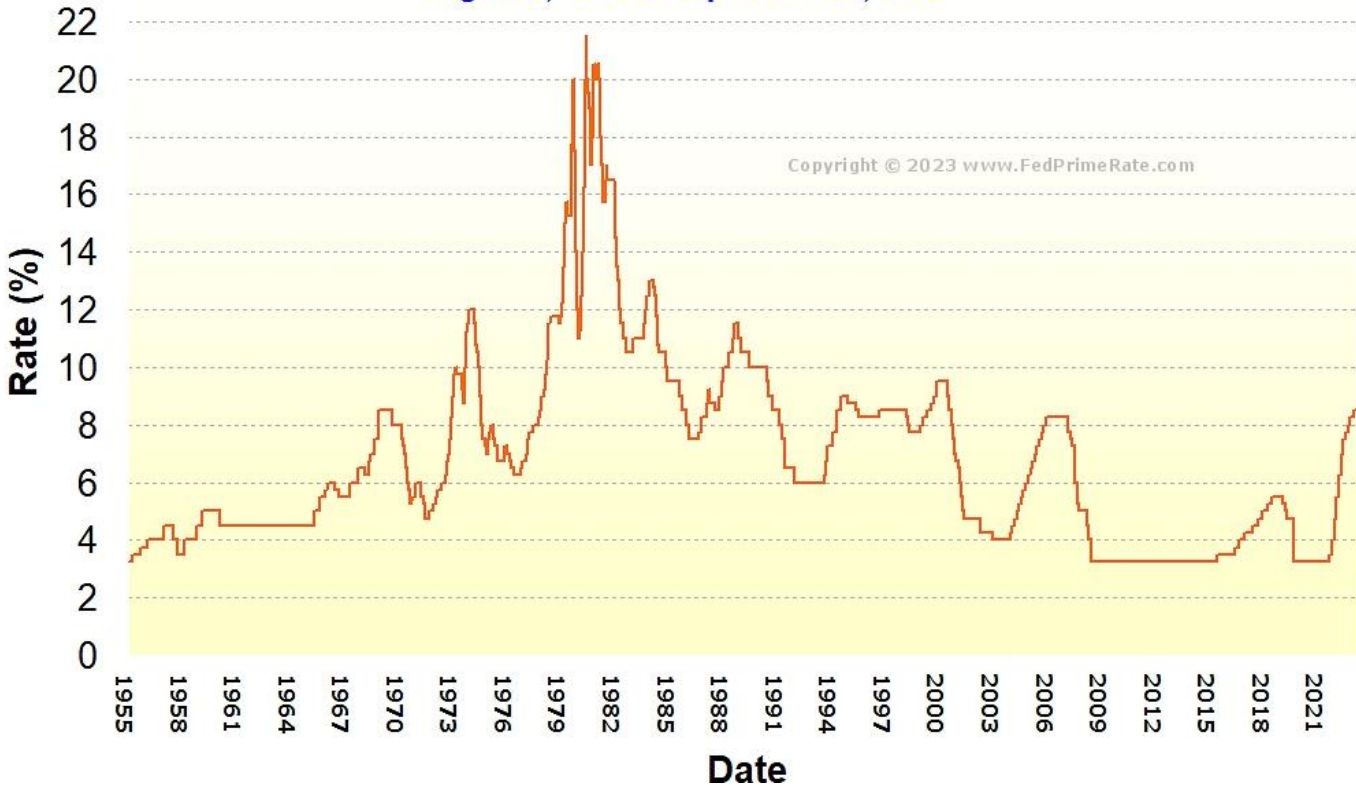
United States Historical Fed Funds Rate



<https://tradingeconomics.com/united-states/interest-rate#:~:text=Interest%20Rate%20in%20the%20United,percent%20in%20December%20of%202008.>

United States Prime Rate

August 4, 1955 - September 20, 2023



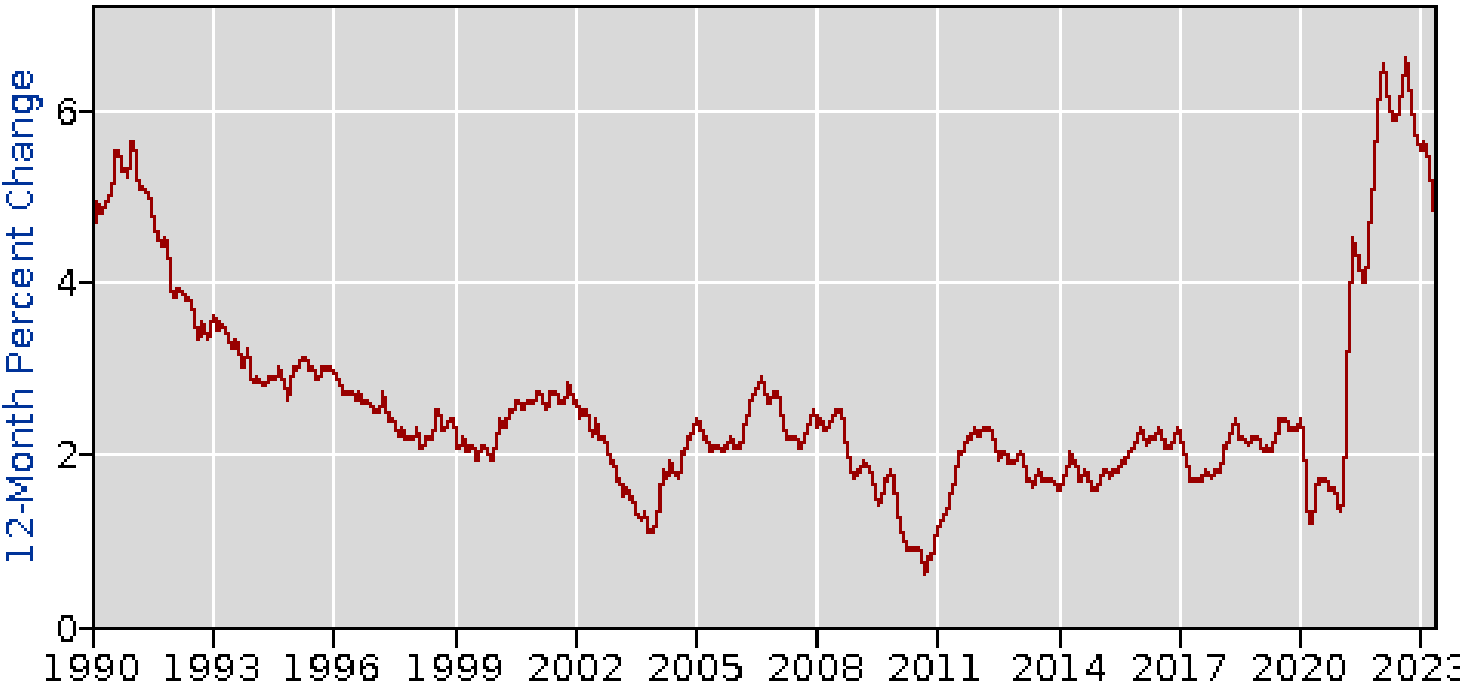
<https://fedprimerate.com/prime-rate-chart.htm>

10 Year Treasury Rate – Historical Chart



<https://www.macrotrends.net/2016/10-year-treasury-bond-rate-yield-chart>

United States Historical CPI



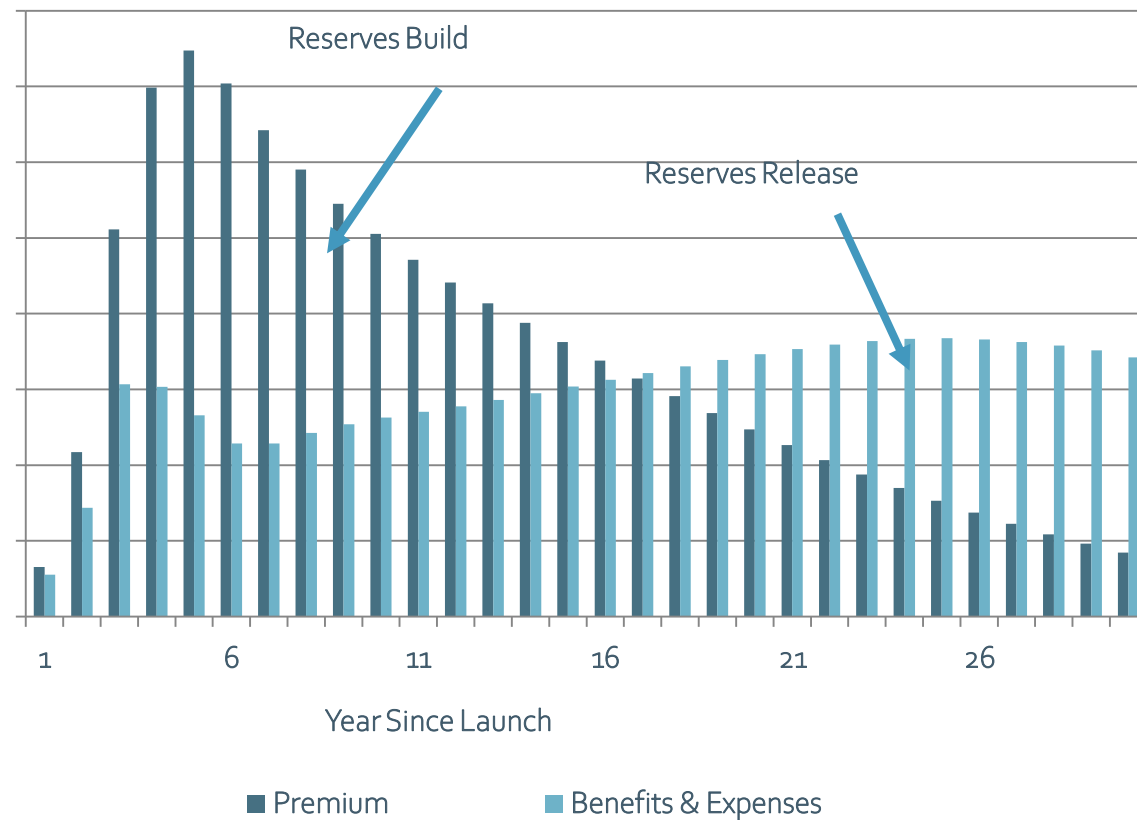
<https://data.bls.gov/pdq/SurveyOutputServlet>

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LTC: Premium Rate Increase – Environmental Developments

Cash Flows By Year Since Product Launch



Rate Increase Required to Offset Future Losses

Deviation	Yr. 5	Yr. 10	Yr. 15	Yr. 20
+10% Claims	7%	11%	18%	27%
-1% Lapse	10%	16%	24%	34%
-1% Interest	8%	14%	20%	27%
All Three	28%	44%	64%	92%

- Cash flow mismatch causes corrective rate increases to grow over time
- Regulators resist large rate increases (>25%)
- Often cannot offset losses completely, resulting in reserve corrections
- Creates uncertainty for distribution and potential new customers



Hybrid Life and LTC Policy Considerations

Hybrid life and LTC policy considerations

- US statutory reserving
- Interest rate environment
- Morbidity considerations
- Discounted death benefit options



- Hybrid policy overview
 - Acceleration of life insurance amounts for LTC
 - Additional LTC benefits after life insurance policy values
 - Riders and other features: inflation protection, policyholder payment options



- Group policies
 - Typically voluntary life (UL, whole life, “permanent term”) + LTC benefits sold through the worksite
 - Acceleration-only
 - Extension of LTC benefits (and restoration of death benefit following acceleration)
 - Asset adequacy analysis
 - Cash flow testing or GPV



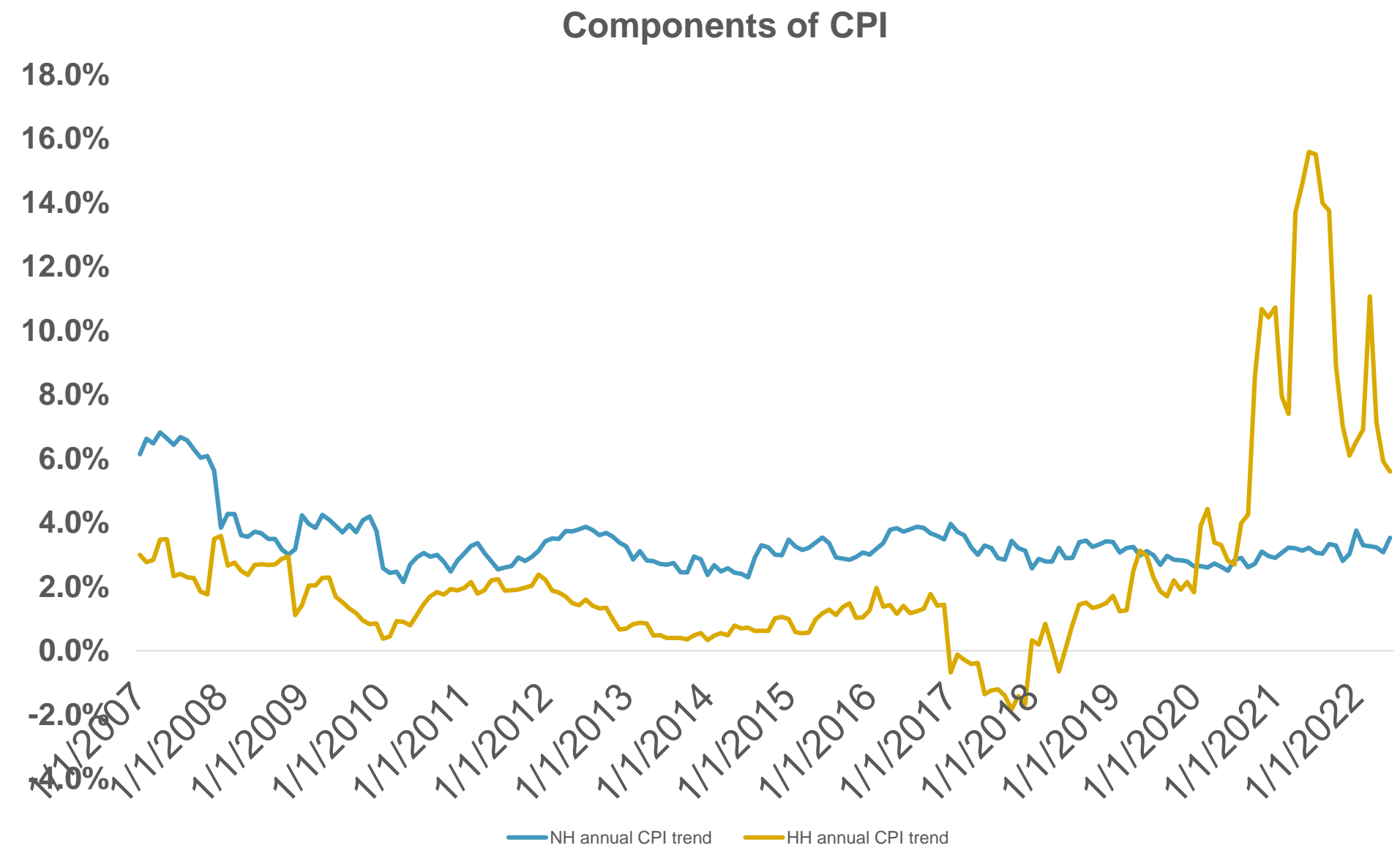
- Individual policies
 - Non-PBR blocks: asset adequacy, GPV, and cash flow testing
 - LTC liabilities have longer duration
 - Sensitive to reinvestment assumptions
 - Higher future yields can produce more favorable reinvestments
 - May produce excess asset adequacy and allow for lower additional reserves.



- Principles-based reserve considerations
 - Integrate cash flows if LTC rider values are determined by referencing base policy values
 - Interest sensitive life contracts will raise the LTC benefits payable
 - Higher yield curves may allow companies to reduce excess stochastic and deterministic reserves (SR, DR)
 - This will vary by: payment period and size of LTCI benefit

Hybrid policies – morbidity considerations

- Inflation has proceeded hot for over a year after many low years
- Tied to interest rates as Fed has mandate to keep inflation within target levels by adjusting interest rates
- Inflation impacts LTCI through cost of care and policyholder behavior





- Acceleration-only policies with discounted death benefits
 - Discount amount determined in relation to interest rate environment – typically at time of claim (many follow NAIC model #590)
 - Higher interest may allow greater discounting – at the discretion of the company
 - Proceed with caution: These features already cause customer confusion



Case Study

Standalone LTC



Issue Age: 65

Benefit Pool: 3-Year x Daily Benefit

Elimination Period: 90 day

Daily Benefit: \$100

Benefit Increase Option: 0% / 5%



Economic Environment



Scenario 1:

3/31/2022 Curve

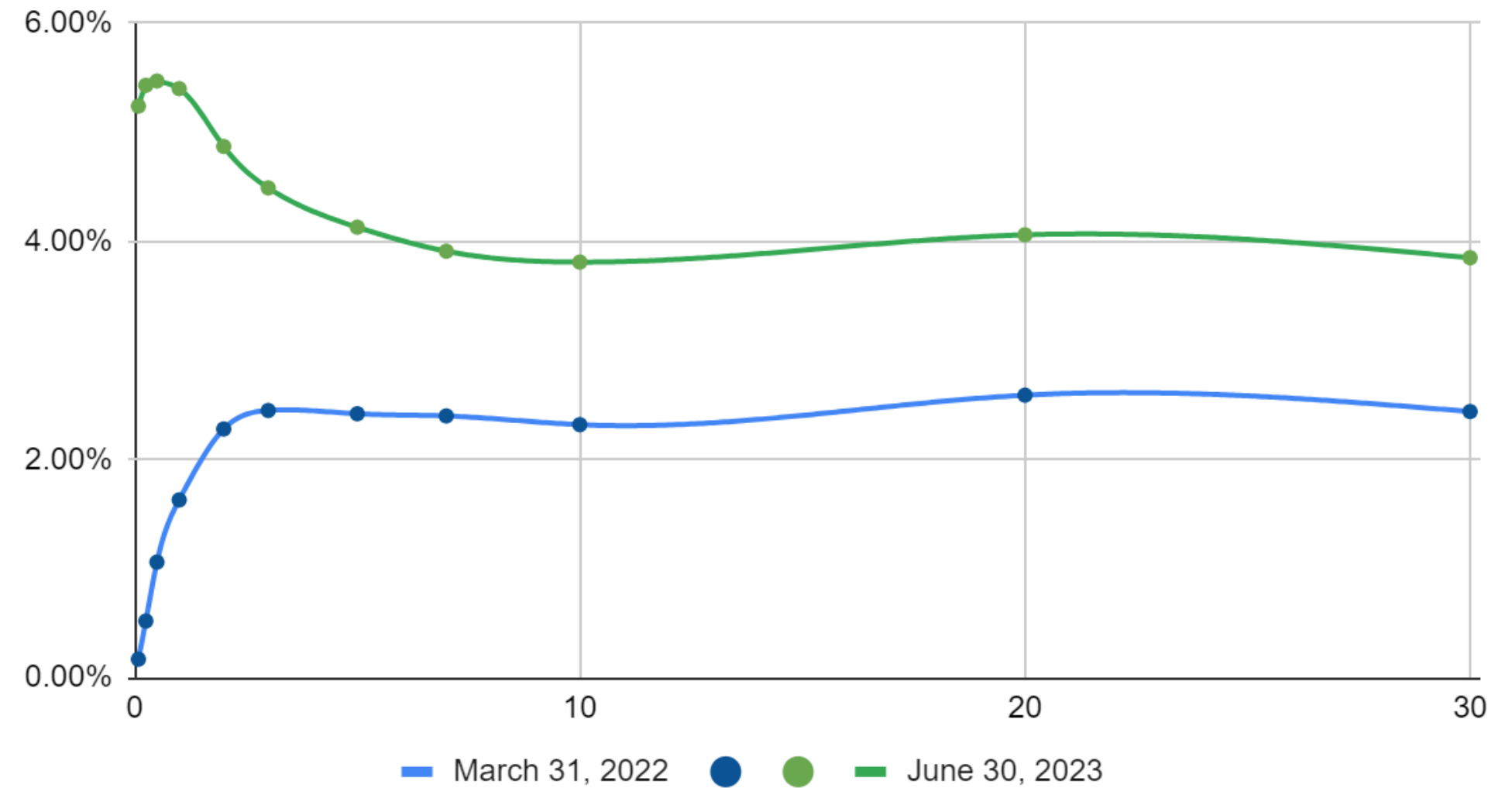
2% Inflation

Scenario 2:

6/30/2023 Curve

9% Inflation

US Treasury Par Curves



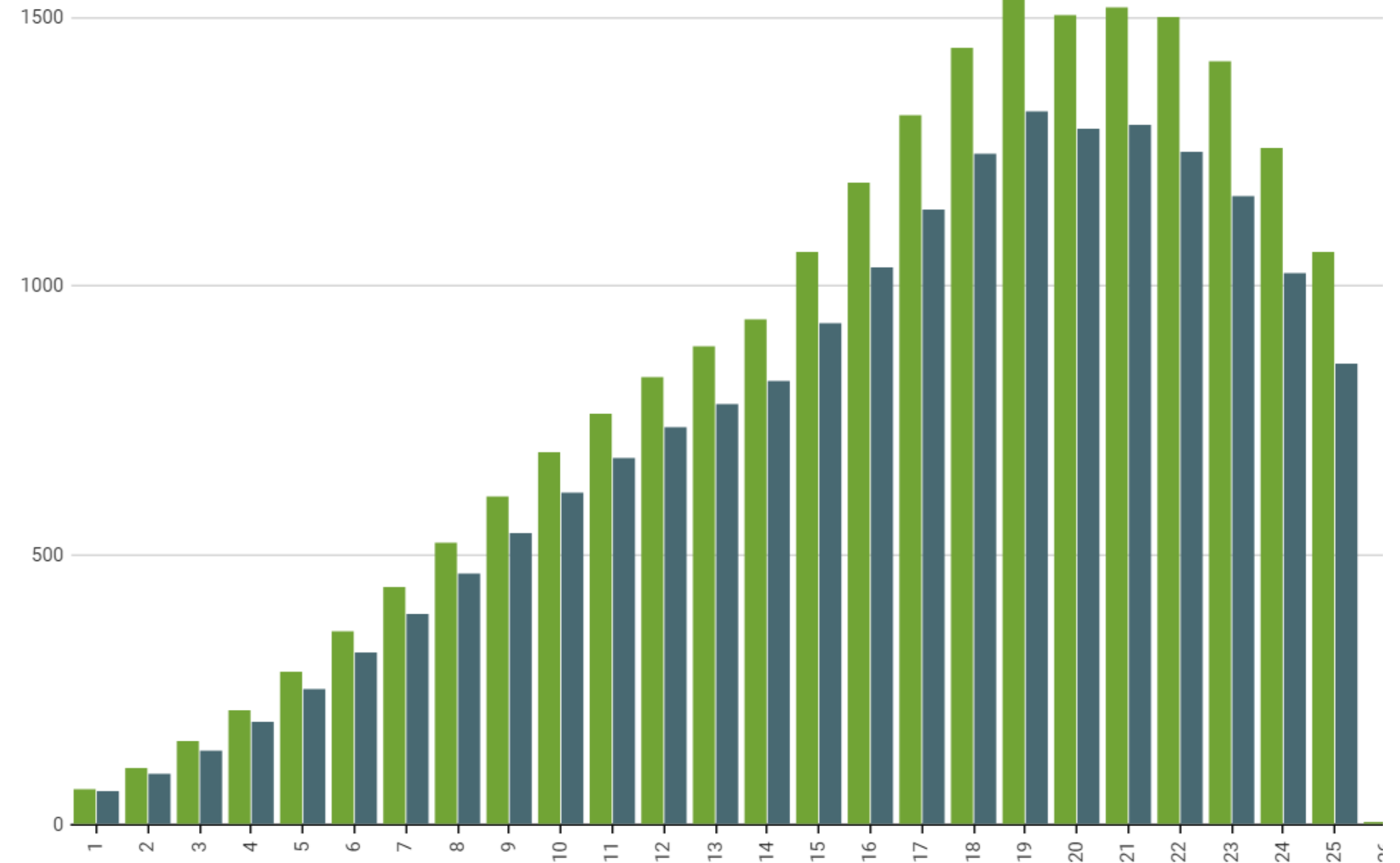
Effect of Inflation on Claim Costs



Cost of care → High total claim costs.

Total Cost Per Claim Increases faster than just inflation alone.

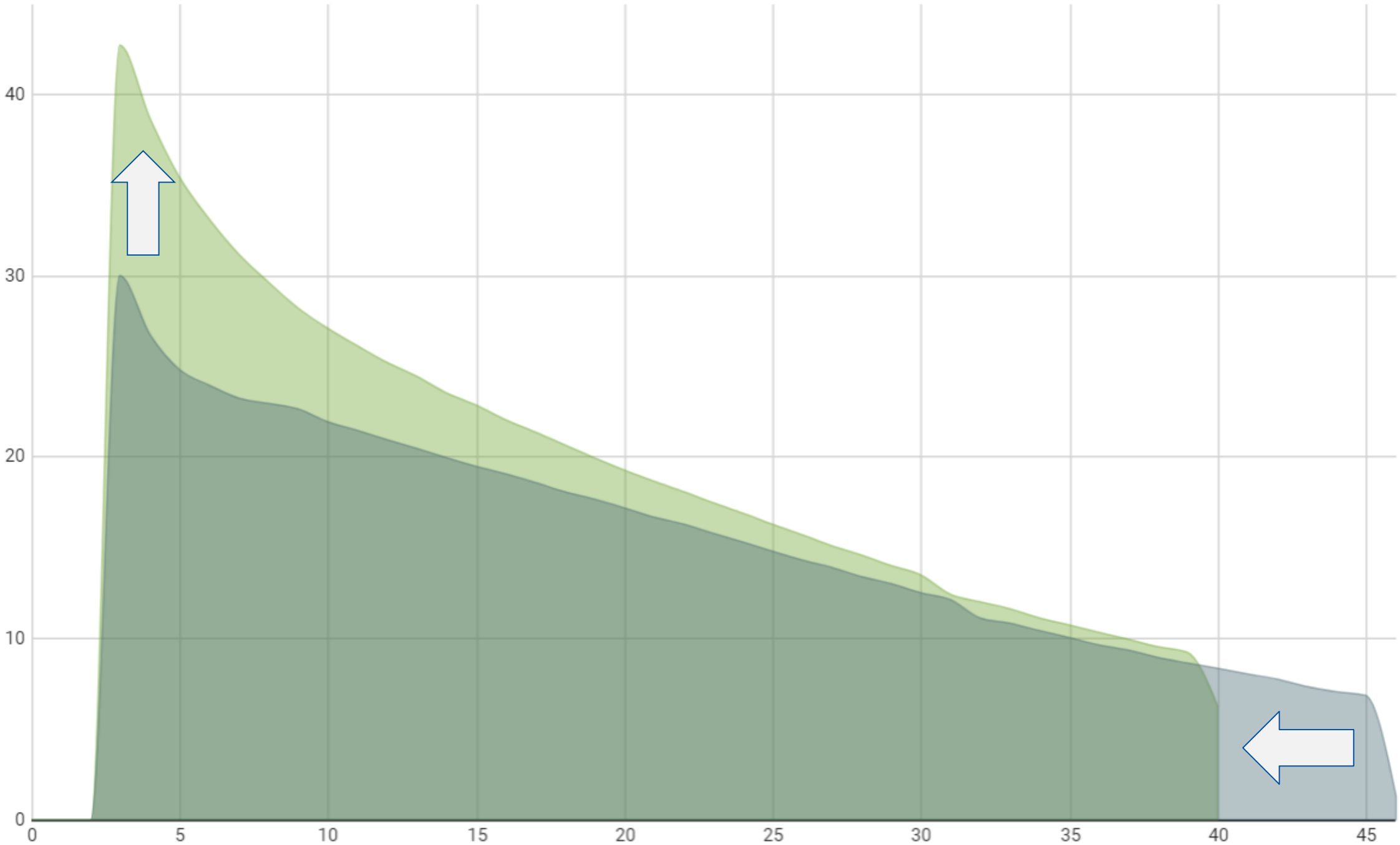
Total Claim Cost



Acceleration of Benefit Pool Utilization



Payments for a single claim date



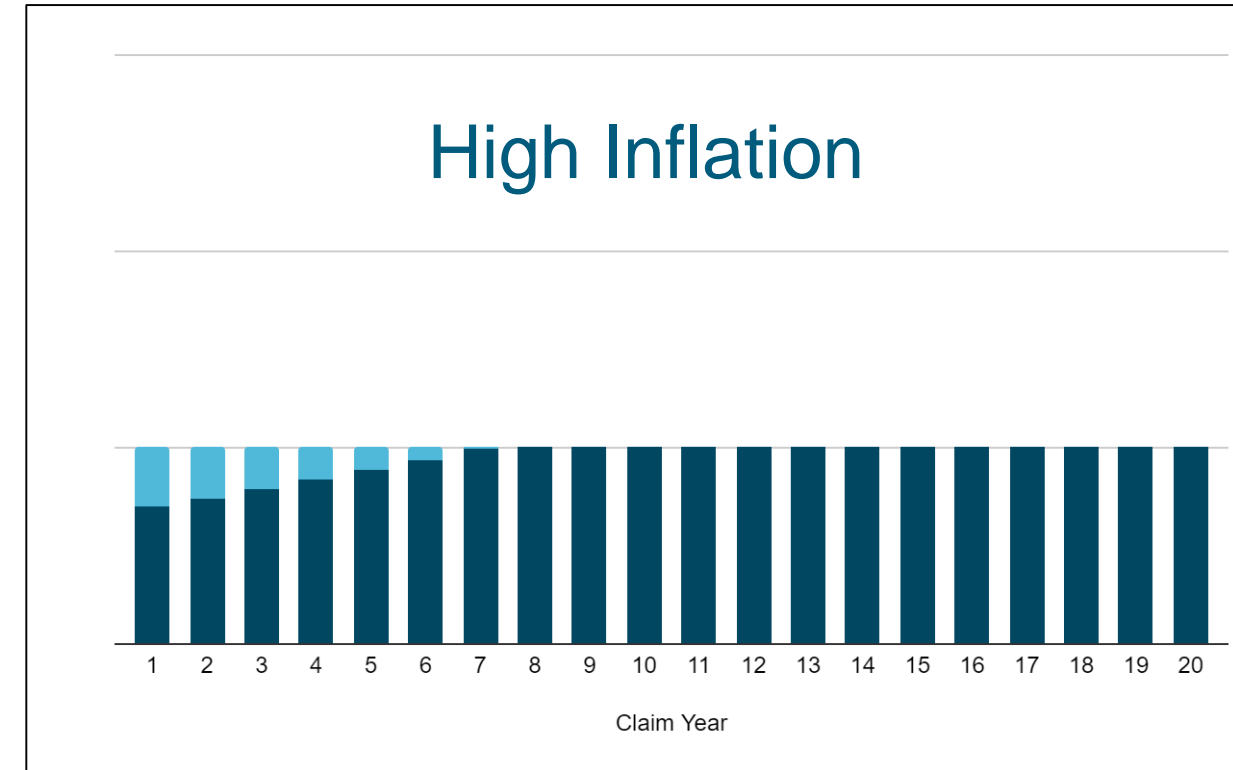
Higher Initial Payments

Faster Benefit Exhaustion

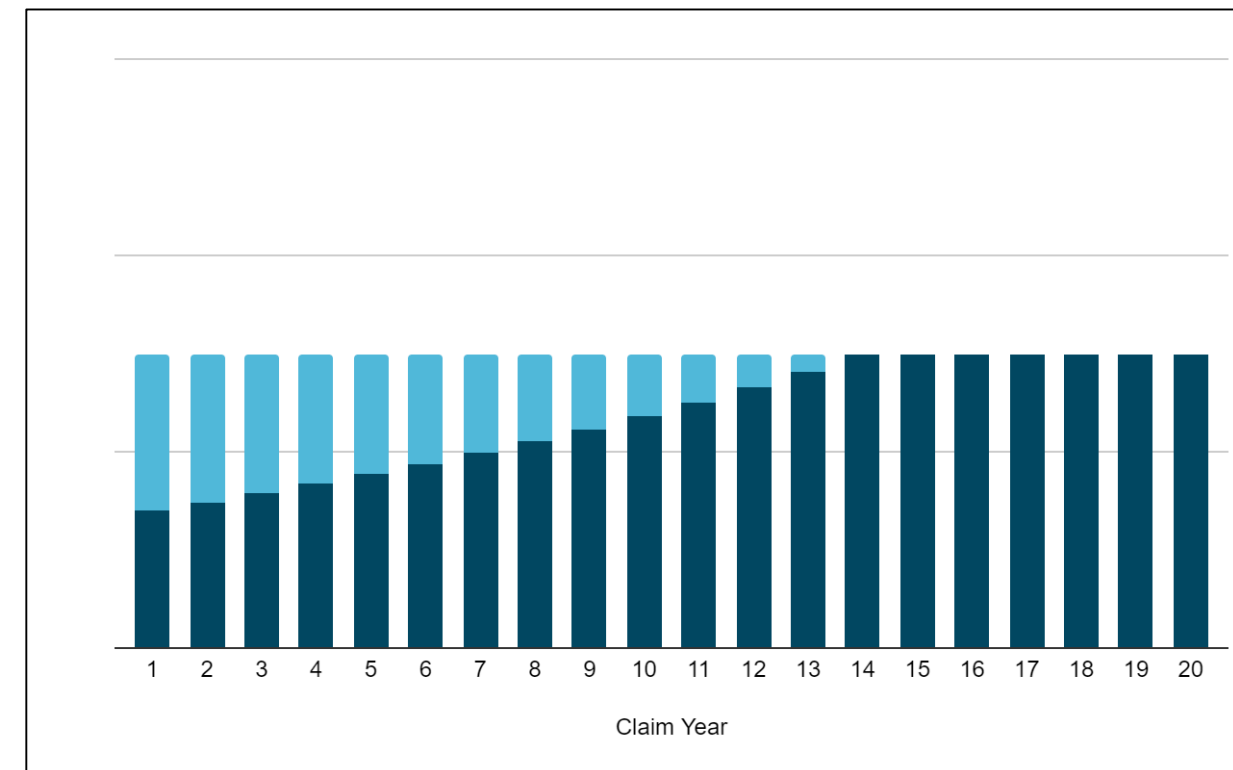
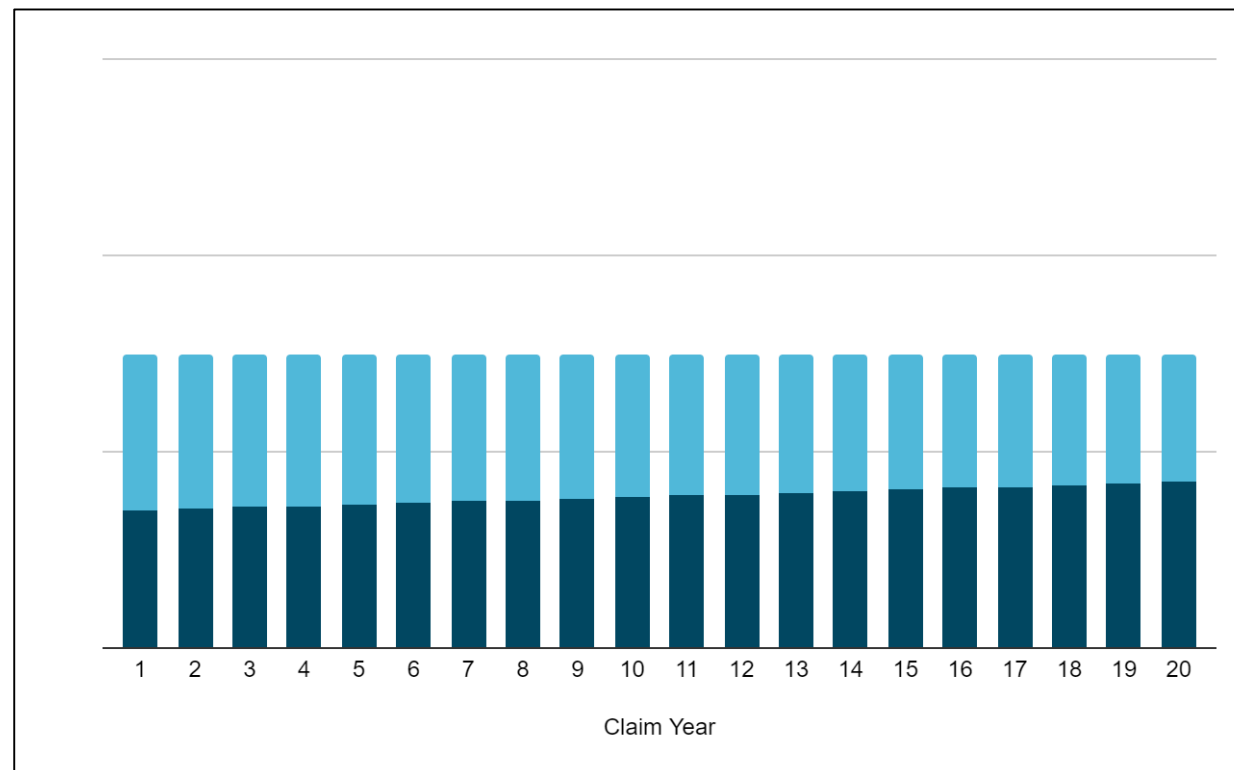
Effect of Product Design



High
Utilization



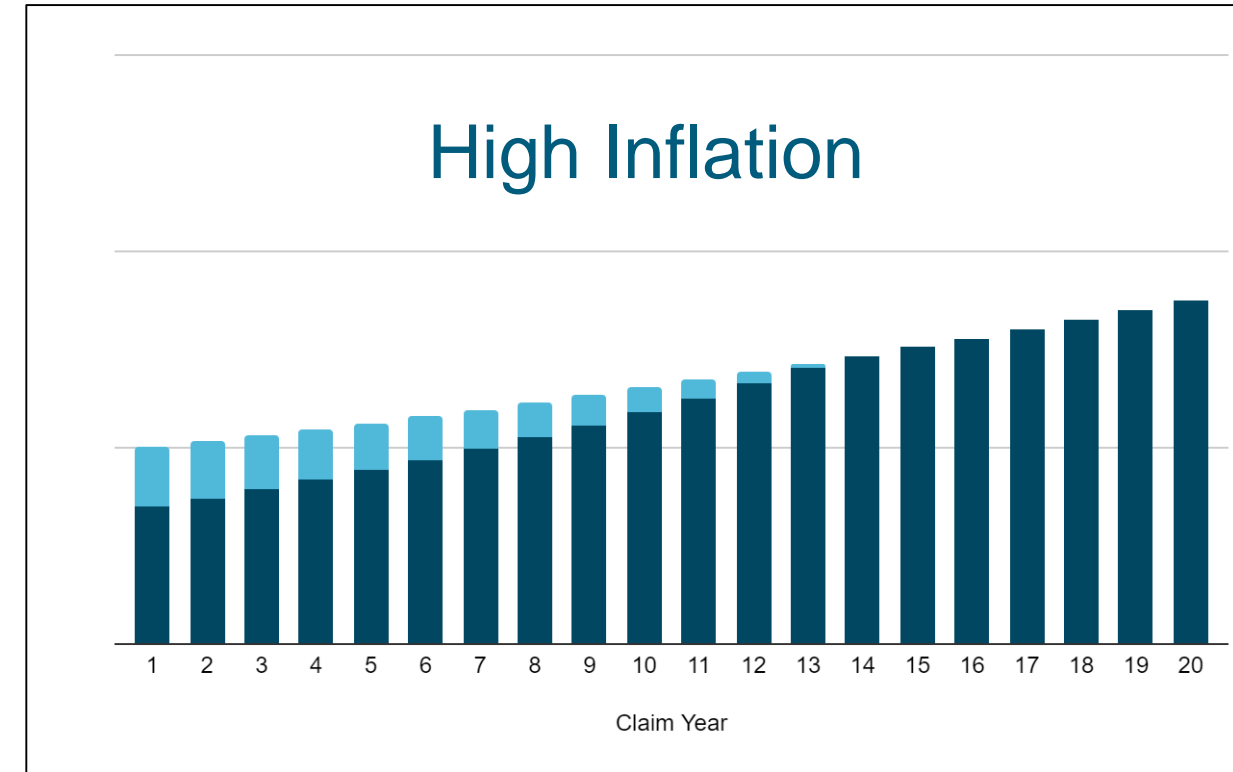
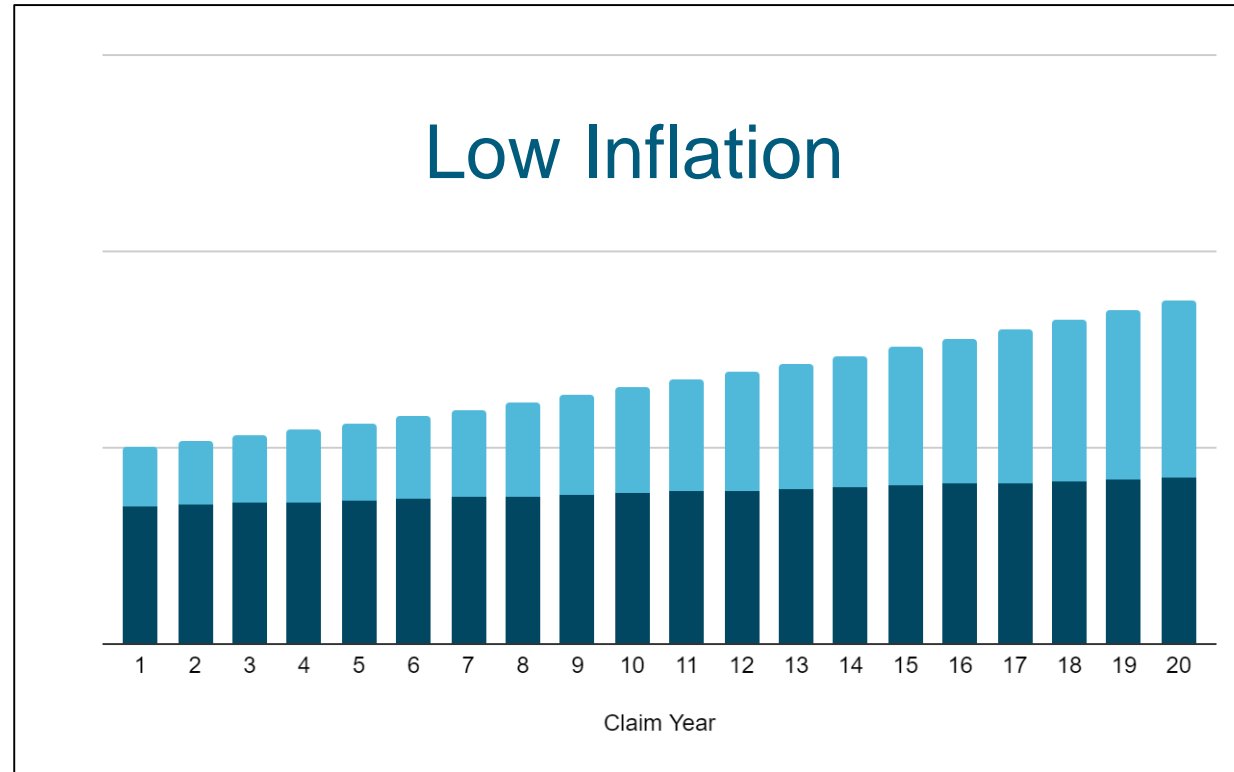
Low
Utilization



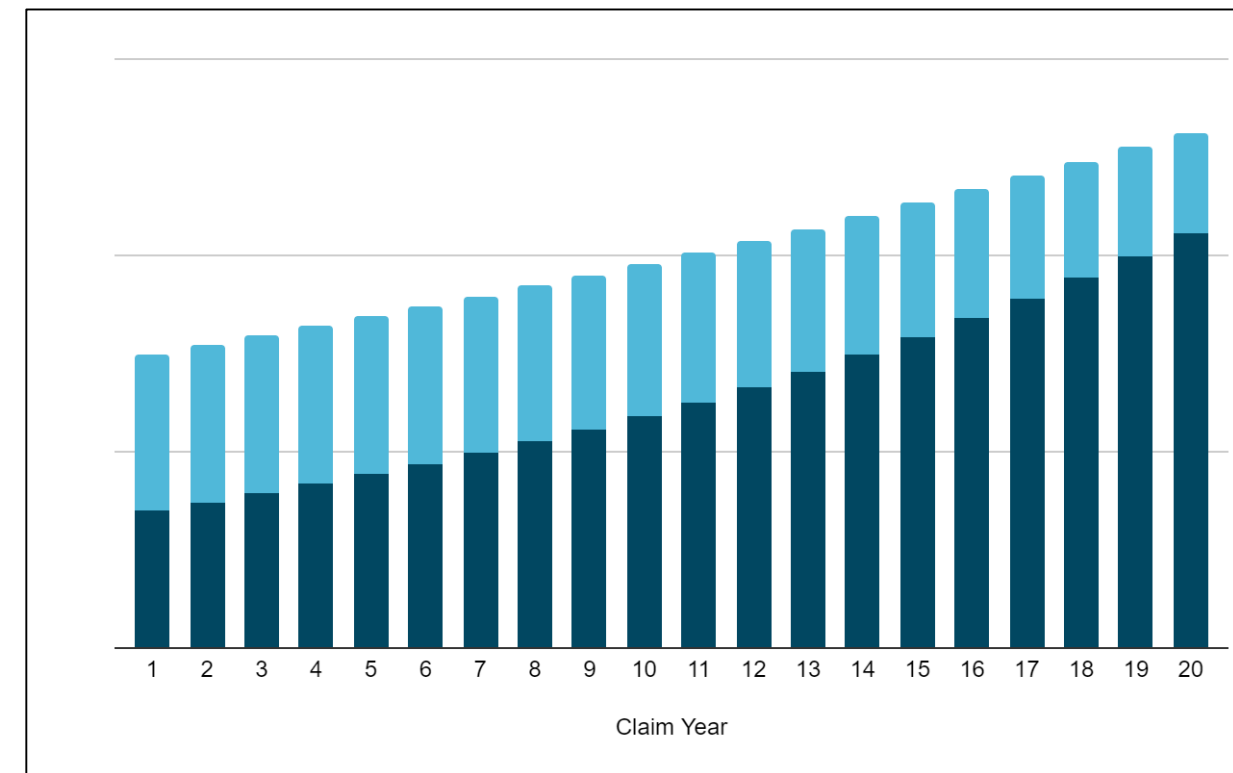
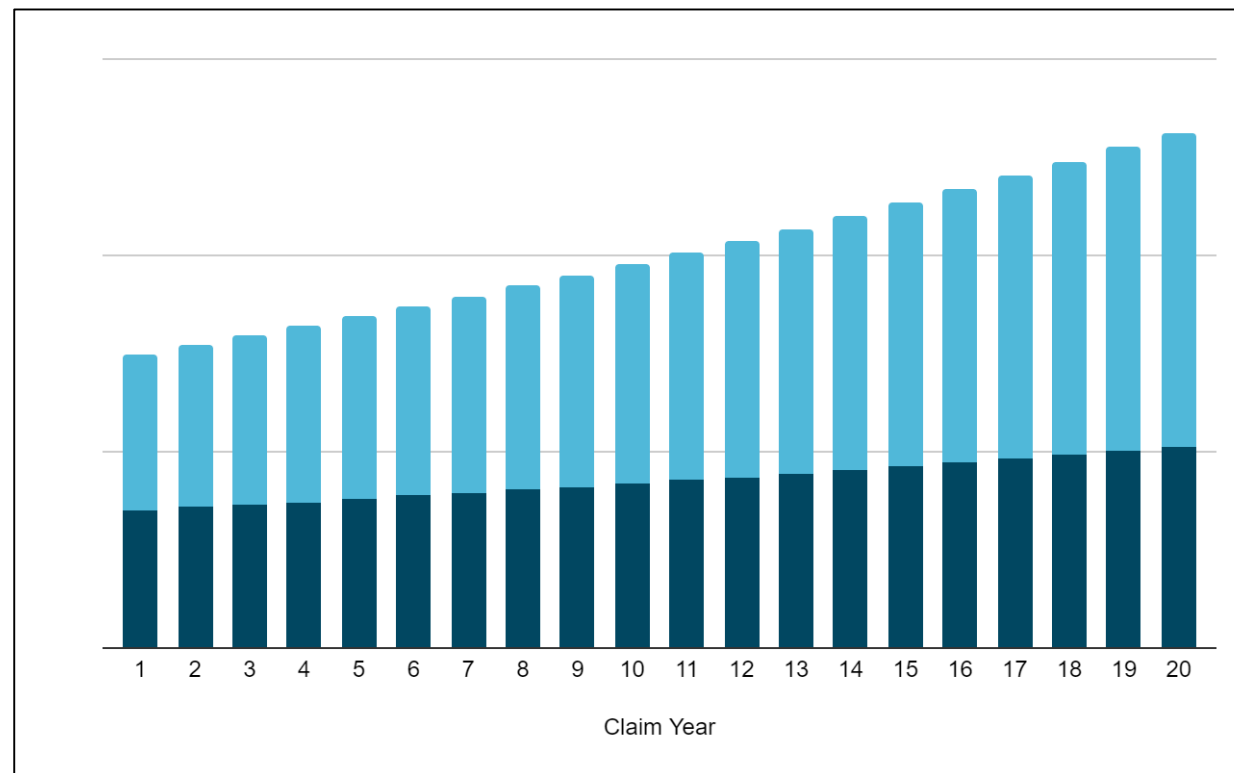
Increasing Benefit Pool



High
Utilization



Low
Utilization





8-11% Increase in Formulaic Reserves

Fixed Valuation Rate means no impact from Yield Curve

?? Impact to Asset Adequacy or Cash Flow Testing

Duration of liabilities shortened by 6 months on average

Higher overall cash flow needs

Unrealized Capital Losses in the Asset Portfolio

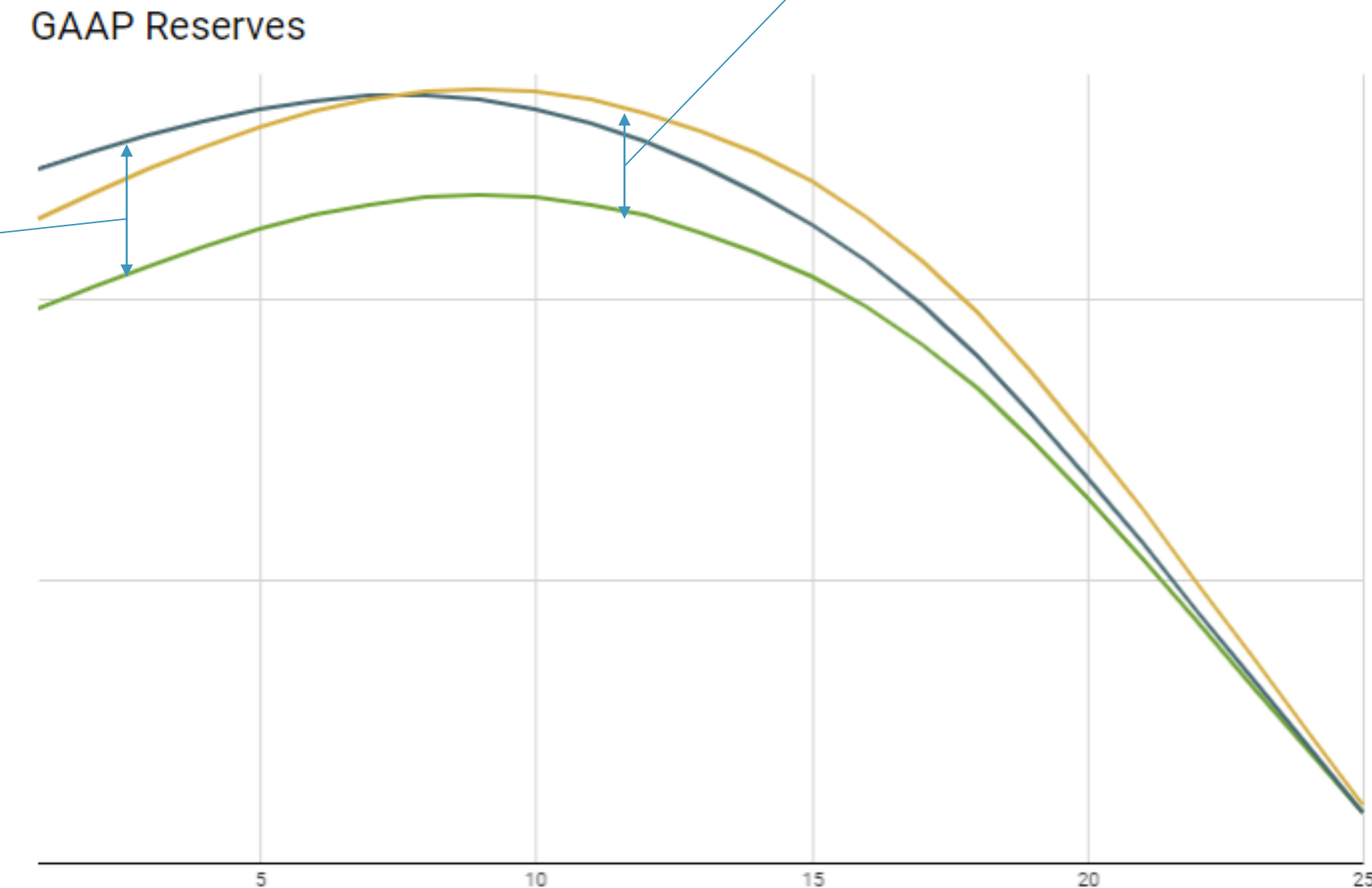
Results HEAVILY dependent on design of the asset portfolio



LDTI Basis

Benefit Cost Increase → Impacts Net Income

Impact of Yield Curve → Impacts OCI



Starting Reserve	11,050	
Effect of Change in Assumptions	1,005	9.1%
Effect of Change in Discount Rate(s)	(2,543)	-21.1%
Ending Reserve	9,512	

Case Study 2 - Combo Product



Life with LTC

Issue Age: 65

Death Benefit: \$109,500

Acceleration of DB for LTC benefits

Elimination Period: 90 day

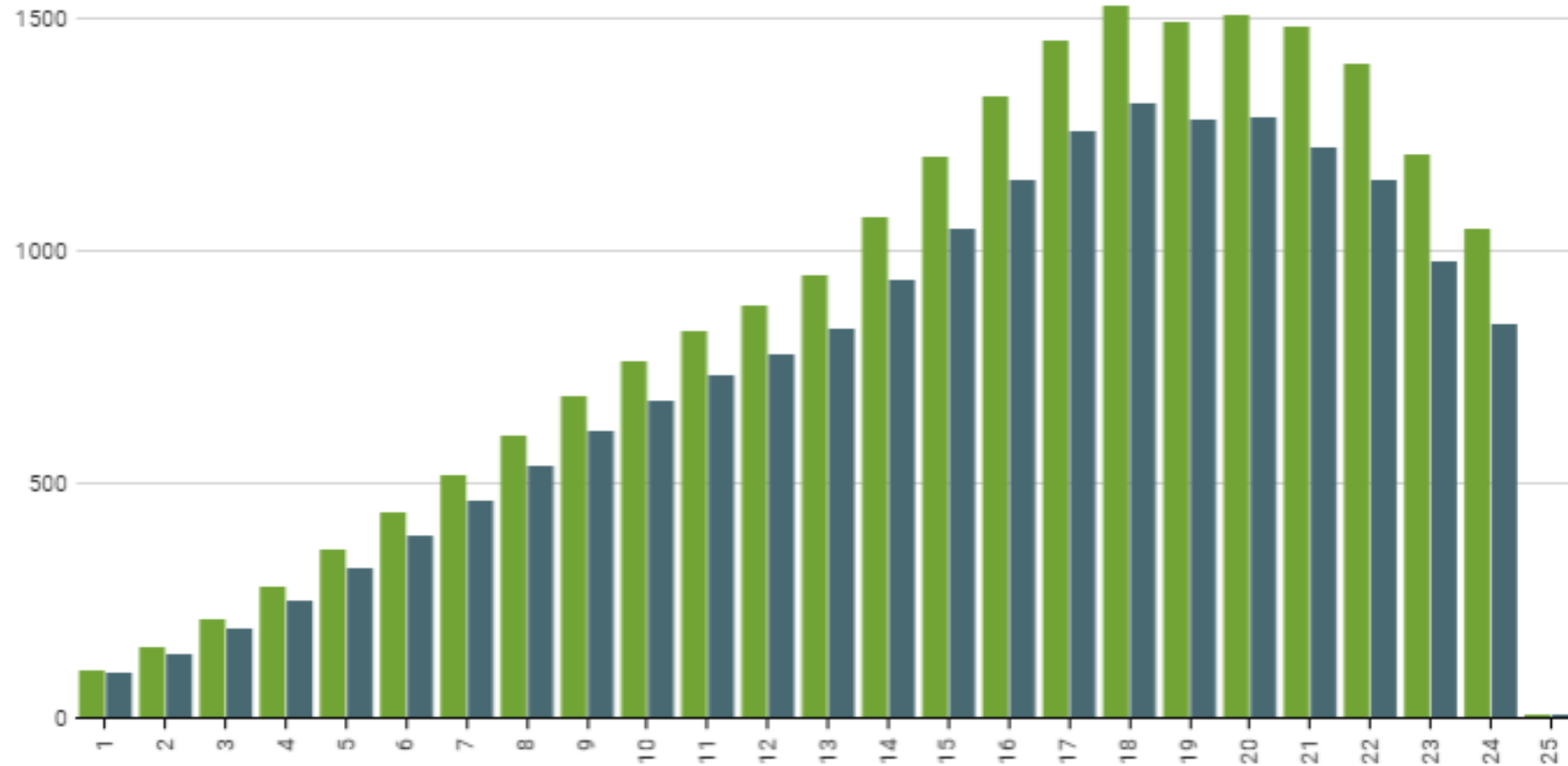
Daily Benefit: \$100



Case Study 2 - Combo Product

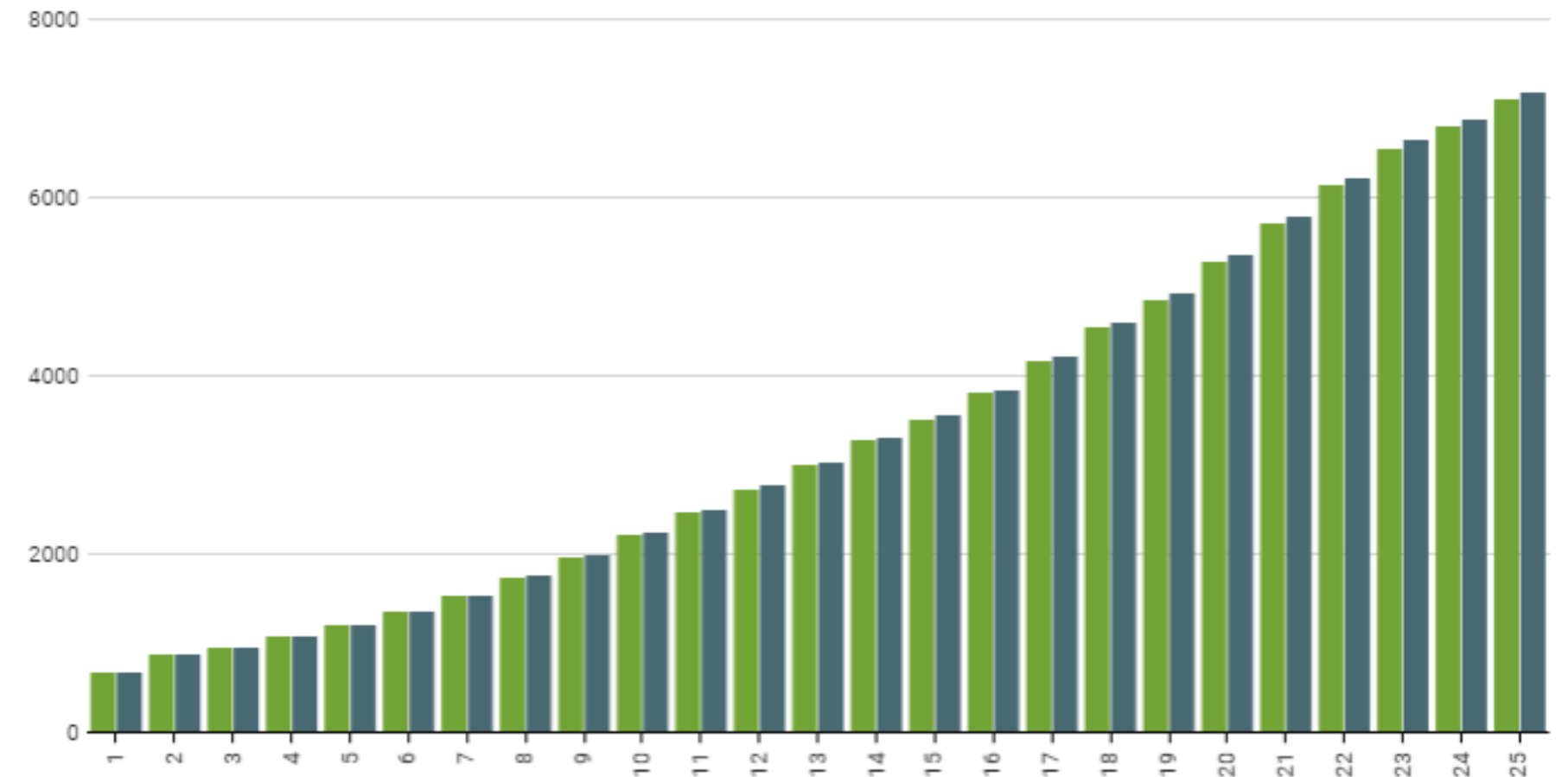


LTC Benefits



Increase in LTC Benefits is same as in standalone product.

Death Benefits

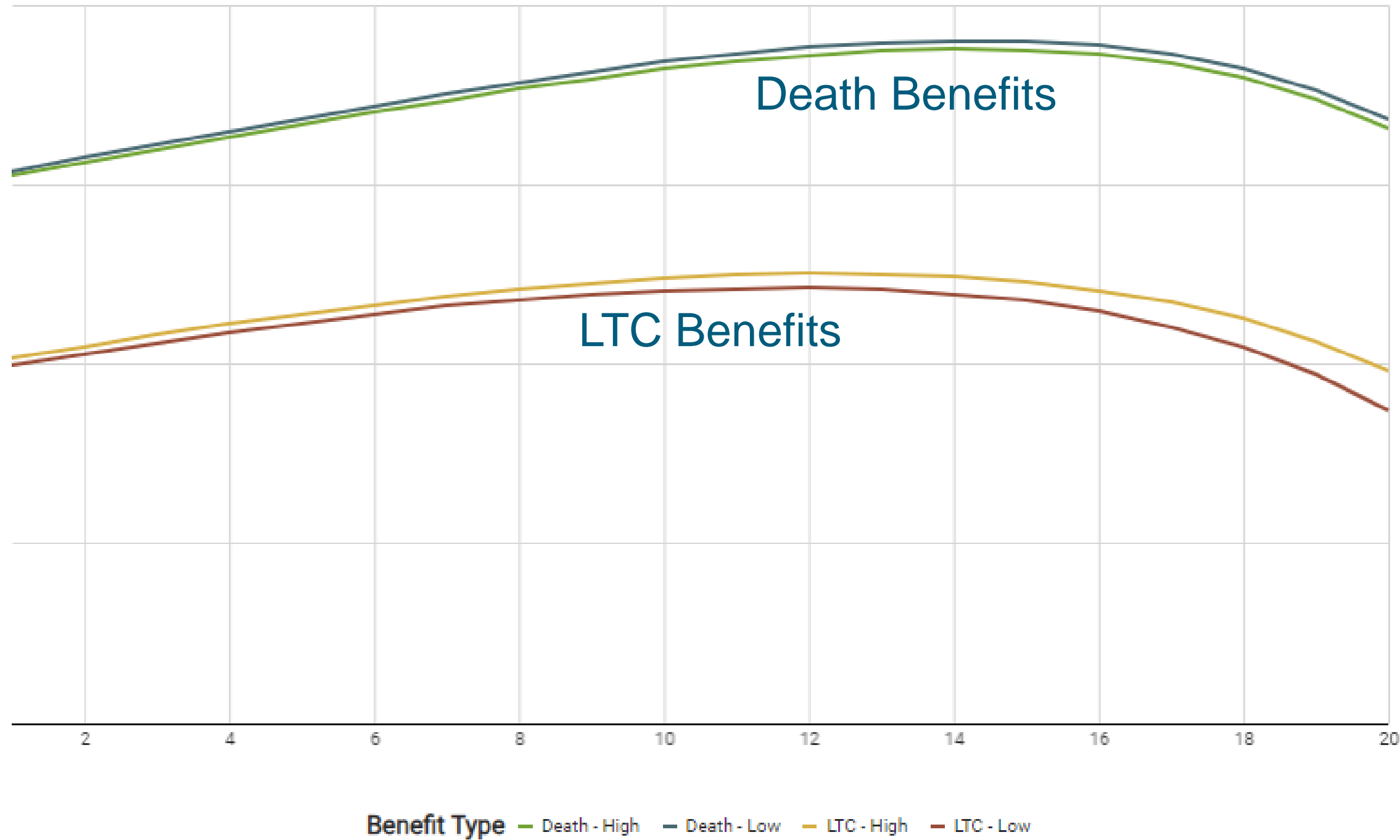


Decrease in Death Benefits as a result of higher overall LTC utilization.

Statutory Reserve Impacts



PV Benefits



PV of Death Benefits Reduced

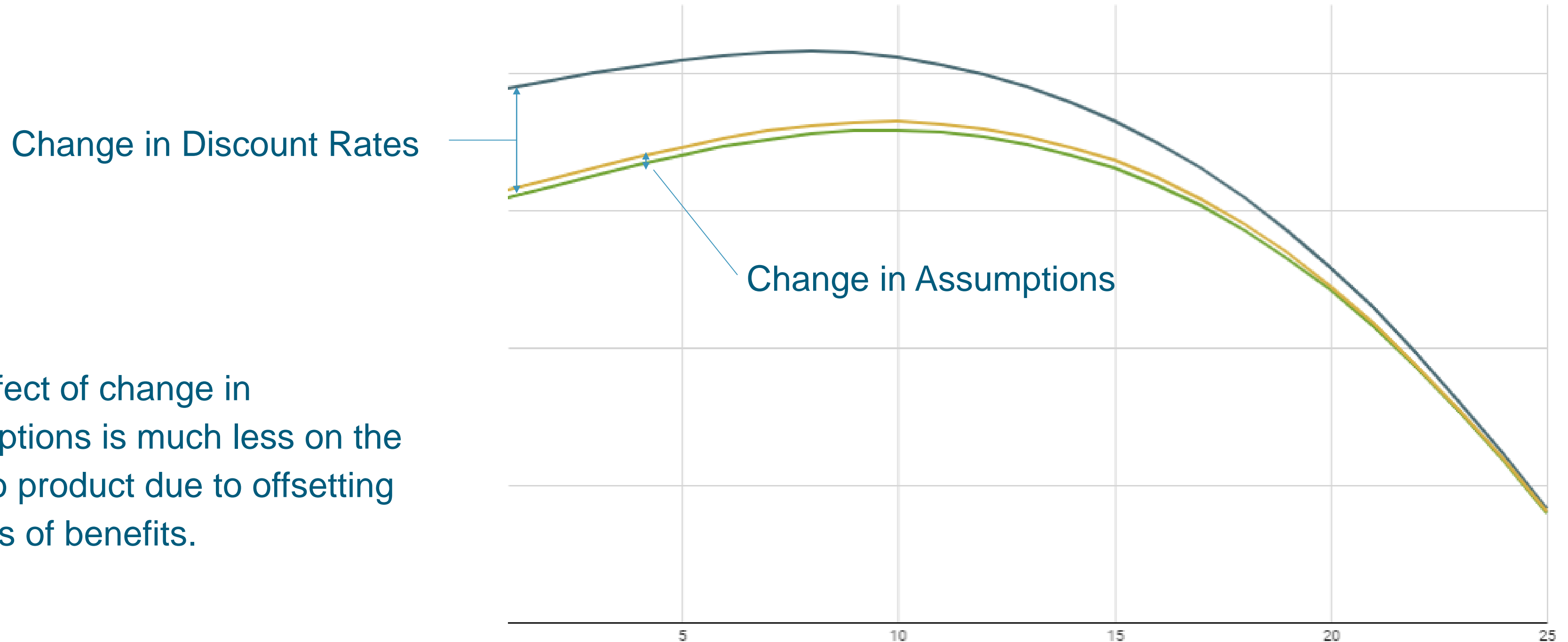
But PV of LTC Benefits increased more

2-5% Net Reserve Increase

GAAP Reserve Impacts



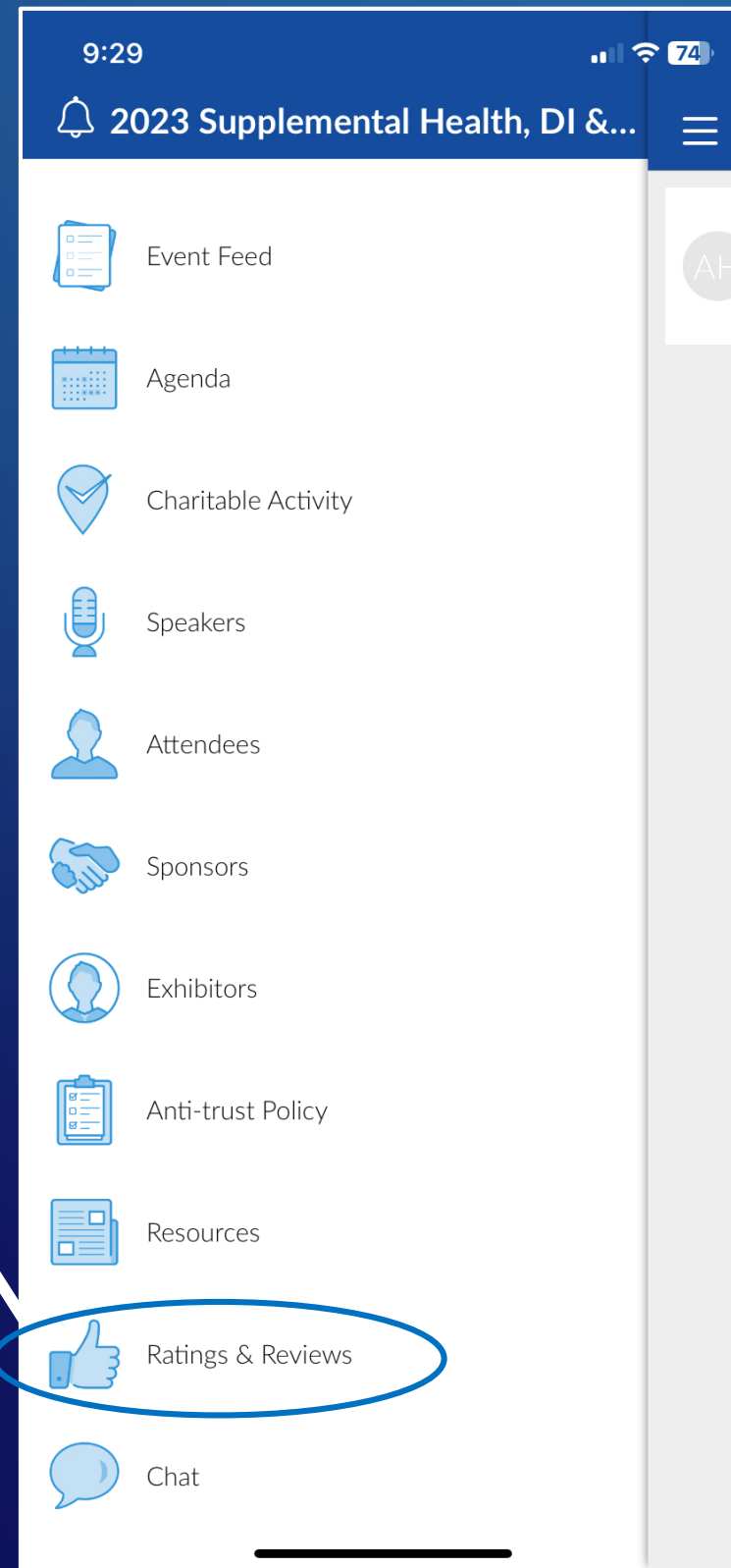
GAAP Reserves



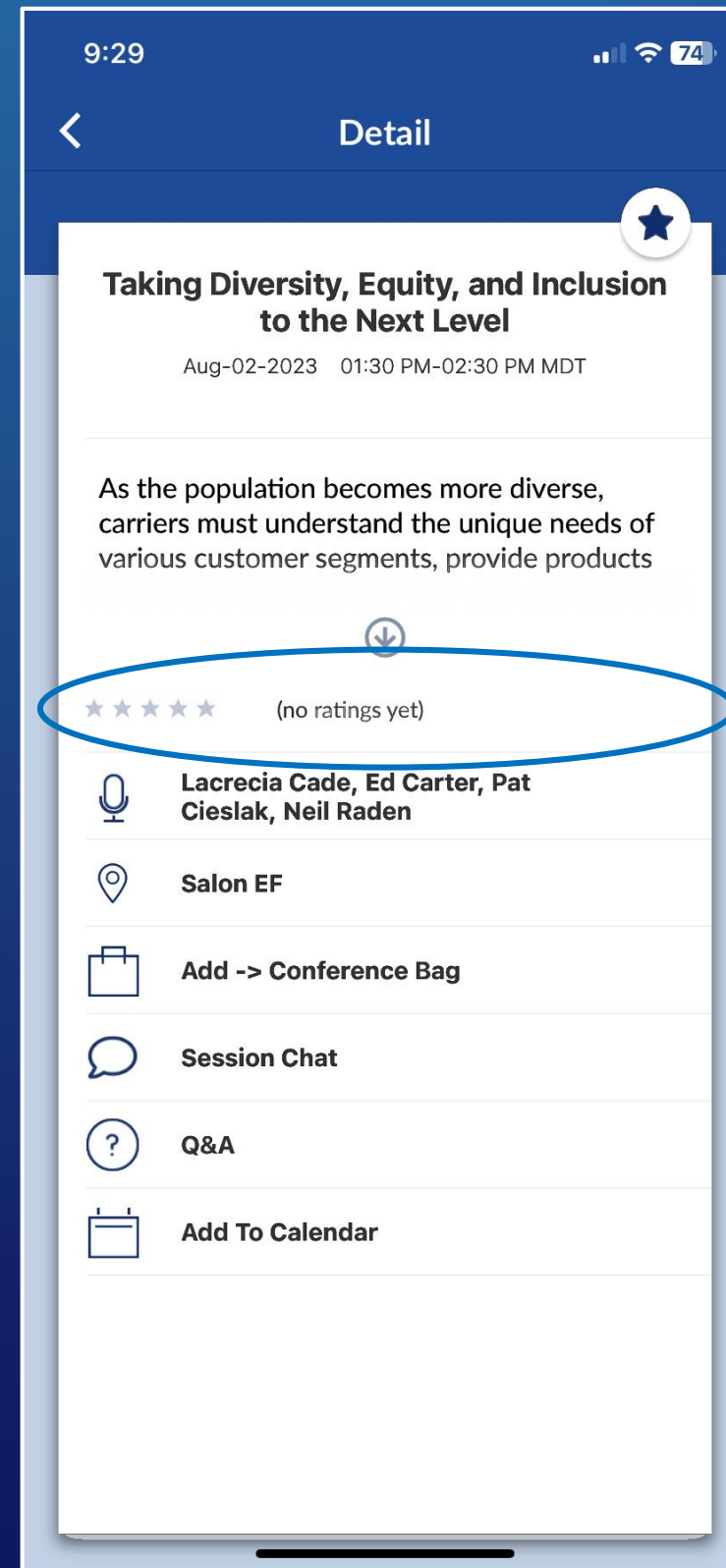
The effect of change in assumptions is much less on the Combo product due to offsetting impacts of benefits.

Please Provide Your Feedback on the Conference App

OPTION 1



OPTION 2



Thank You



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