

## Federal Advisory Committee on Insurance Impact of Low Interest Rates on Life Insurers

Colin Devine, CFA, CMA, CFP®  
[colin.devine@cdevineassociates.com](mailto:colin.devine@cdevineassociates.com)

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## State of the Industry

### Low Rates Universal Challenge

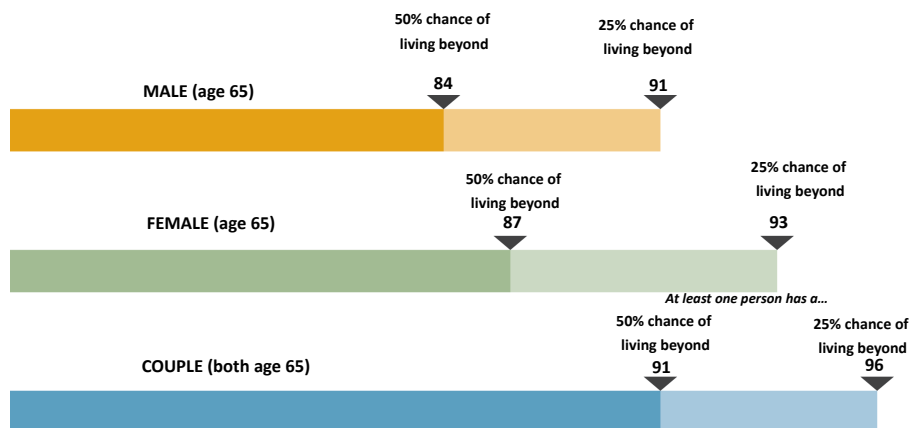
#### **Life Insurers, Individuals, Defined Benefit Pension Plans all in the same boat**

**Impact of low rate policy means cost to fund future income/benefit payments far higher than planned.**

- Rising longevity, demise of defined benefit pension plans, uncertainty of older age health costs and low interest rates could make the risk of running out of assets in retirement become a near certainty for many.
- While low rates have helped housing prices and equity markets, the price of buying “income” has risen over 20% during the last decade as interest rates have declined. Benefit of near-term fiscal policy is coming at the cost of long-term savers/retirees.

## Mortality: Good News/Bad News

*Longer lives means more expensive retirements. Even a 3% inflation rate requires a doubling of income every 23 years.*



Source: Milliman, based on the Annuity 2000 Basic mortality table.

## How Are Life Insurers Doing?

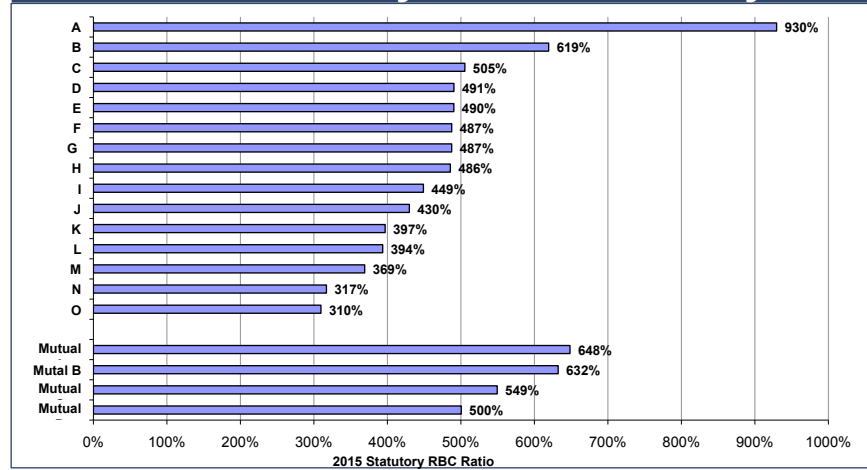
### Industry health in reasonable shape

**Capital levels high, liquidity solid, leverage moderate, financial flexibility good...but profitability stagnant.**

- Strain from low interest rates steadily building and placing increasing pressure on reserves, product pricing, policy dividends, benefits and profits. It will take years of Fed tightening to restore former earnings momentum.
- Investment portfolios continue to be of high quality but legacy policy liabilities may be where the bigger risks lie and the impact of low rates felt the most.
- Unlike banks, life insurers weathered the financial crisis very well. Only two took TARP and it was its non-insurance operations that led to the Govt. takeover of another.

## Industry Statutory Capitalization

### RBC not always the whole story



Source: Estimated combined group RBC ratios based on Insurer Year-end 2015 statutory financial reports.

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## Interest Rates and Investments

## Life Insurers and Low Rates

### Long-term interest rates are the industry's most important earnings driver

#### Current rates well below levels assumed in pricing

- Between Aug. 2007 - Aug. 2016 the yield on 10-year U.S. Govt. bonds fell 320 bps to 1.5%. Portfolio yields still losing 15-25 bps annually and have not been helped by tight credit spreads.
- Most problematic for long duration liabilities such as traditional whole and universal life, long-term care, fixed and variable annuities but a challenge for all products.
- Strain on life insurers would ease if 10-year yield were to get back above 4%, but rates rising too fast could cause disintermediation; 50-75 bps annually would be ideal.

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## Low for Long Interest Rates – New Normal?

END OF A 30-YEAR FIXED INCOME BULL MARKET? – WHAT IF IT'S NOT?

### 10-Year U.S. Treasury Yields



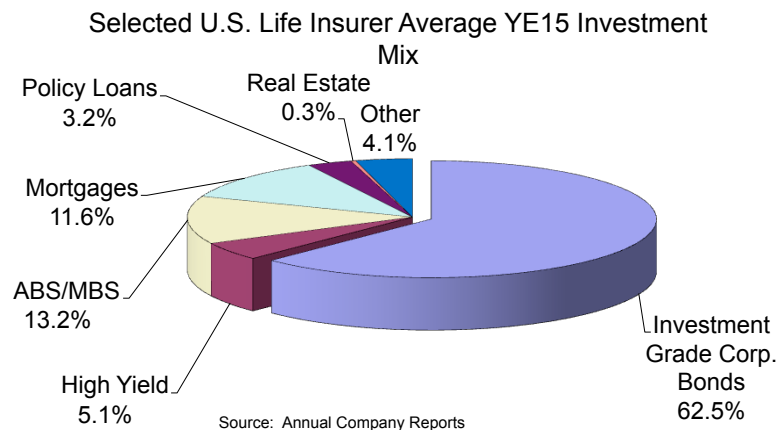
Source: WSJ

	<u>YE 11</u>	<u>YE 12</u>	<u>YE13</u>	<u>YE14</u>	<u>YE15</u>	<u>08/12/16</u>
10 Yr. UST	1.89%	1.78%	3.04%	2.05%	2.27%	1.51%

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## Investment Quality a Strength

### Portfolios in best shape in decades



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## Implications of Low Interest Rates for U.S. Life Insurers

## Interest Rates and Liabilities

### Low long-term rates have exacerbated underwriting mistakes made by insurers

- Long-duration liabilities require assumptions for future investment rates as well as policyholder behavior; both can be influenced by a variety of factors. Unlike banks, insurers make pricing guarantees they may have to live with for decades.
- Risks of minimum crediting rate guarantees on fixed annuities and life insurance policies or assuming future investment returns on premiums are self-evident.
- But variable annuity, universal life and long-term care writers have each learned a hard lesson about lapses and how actuarial experience can be adversely impacted by interest rates.

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## All About Underwriting

### Pricing actuaries can cost an insurer far more than a Chief Investment Officer

#### Investments may be sold but mis-priced liabilities can last a lifetime

- May take decades for policies to fully season and pricing mistakes to emerge.
- Legacy liabilities can tie up capital, depress returns and take years or even decades to fix. They also face growing attention from regulators, rating agencies and investors.
- Adjusting crediting rates, de-risking and re-pricing can each help improve returns, but rarely can they fully put the “genie back in the bottle.”

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## Low for Long

### Interest rates not only impact spreads but also policyholder behavior and benefits

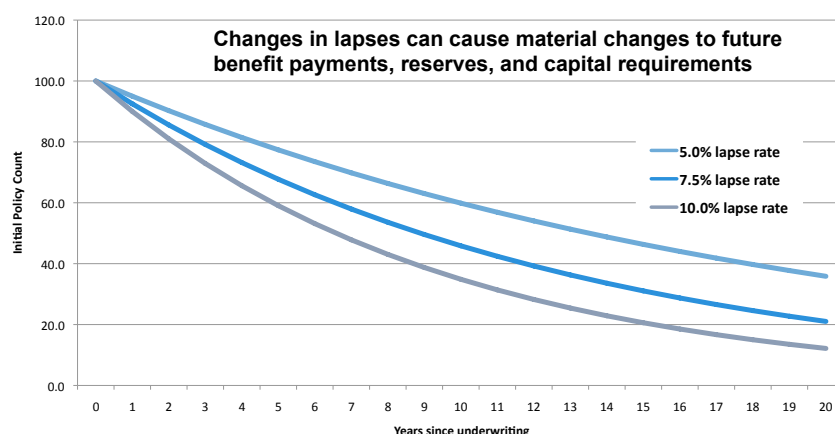
**Pricing assumptions are interdependent and adverse experience on one assumption can impact actuarial experience for others**

- Individual life insurance, annuities, pension close-outs and supplemental health products such as long-term care and disability income can be on an insurer's books for 20 years or more. Back in Aug. 2006, the 10-year yield was 5.0%.
- With the steady decline in long-term rates and resulting lower levels of guarantees on new products, the intrinsic value of in-force policies has risen. They are not lapsing and will require insurers build higher levels of reserves to pay future claims.

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## Implications of Adverse Lapse Experience

### INTEREST RATES CAN IMPACT POLICYHOLDER BEHAVIOR



	<u>Year 5</u>	<u>Year 10</u>	<u>Year 15</u>	<u>Year 20</u>
5.0% lapse rate	77.4%	59.9%	46.3%	35.8%
7.5% lapse rate	67.7%	45.9%	31.1%	21.0%
10.0% lapse rate	59.0%	34.9%	20.6%	12.2%

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## Low Interest Rates and Japan

### Japanese life insurers have managed through decades of low interest rates

#### Regulatory intervention played an important role.

- Combination of very low long-term interest rates, limited corporate bond market, high minimum crediting rate guarantees and poor quality investments led to several insolvencies.
- However, many companies also benefited from extremely favorable mortality gains due to the industry's use of highly conservative historic mortality tables.
- While interest spreads for most Japanese life insurers are still negative, it is slowly improving and continues to be offset by mortality experience that remains very positive.

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## Legacy liability examples

### Low interest rates have exacerbated underwriting mistakes made by insurers

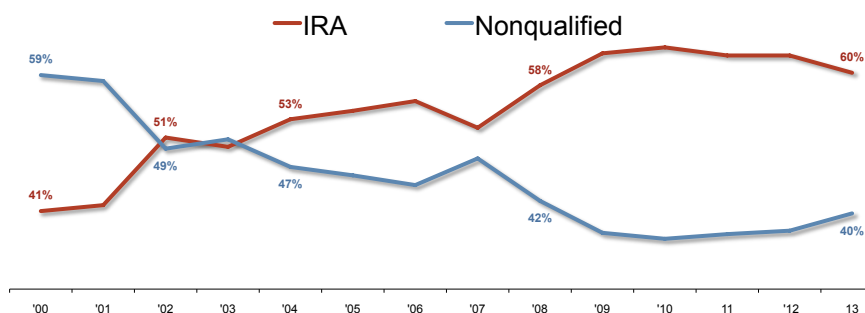
- **Individual disability** – Non-cancellable own occupation policies that one insurer wrote up until the early 90's still represent about one-third of its general account reserves. No ability to raise premiums to offset drop in interest rates. Approx. 95% are on claim and block lapsing at around 5%.
- **Variable annuities** - Insurers quick to provide generous living benefits but slow to recognize increased risks as they became SPIAs in "disguise." Benefit utilization tracking over 80% with lapses of 5%-8% vs. 10%-plus assumed in pricing. Equity market recovery has helped reduce "in the moneyness" of guarantees.

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## What changed for Variable Annuities

IRAS BECAME DOMINANT SOURCE OF FUNDS FOR LIVING BENEFITS

### Percent of Deferred VA Retail Sales



Source: U.S. Individual Annuities survey, LIMRA SRI. Retail = IRA + Nonqualified annuity sales.

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## Liabilities cont'd.

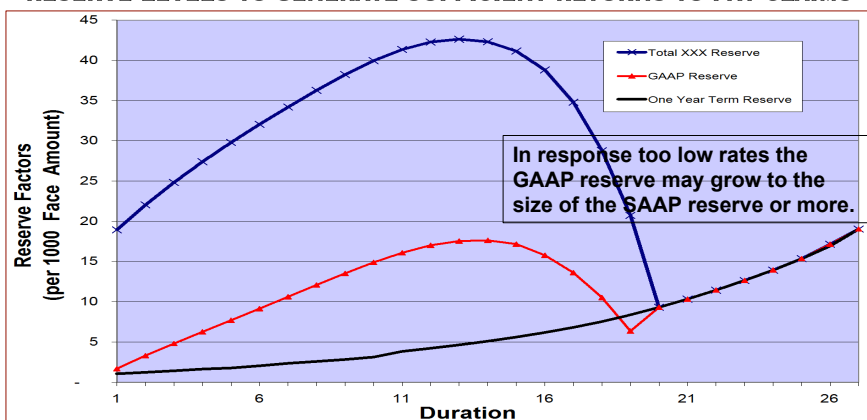
### “Measure twice cut once”

- **Universal life** – Insurers have been implementing significant increases for cost of insurance (COI) to offset far lower investment returns than assumed in pricing. Causing much faster cash value erosion and has spurred a host of lawsuits. Policies with secondary guarantees have lifetime pricing effectively “locked in” with limited ability to change COI and are also facing higher capital requirements.
- **Long-term care** – Pricing overly reliant on lapse support. To compensate for uninsurable older age health risk and lower than assumed investment returns on renewal premiums, carriers have exited the market while others are seeking rate increases of 20%, 30%, 40% or more.

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## Low Rates Mean Higher Future Reserves

**LIABILITY RESERVES BUILD UP OVER MANY YEARS. FOR PRODUCTS SUCH AS SGUL, LTC, AND VA INSURERS MAY FACE MUCH HIGHER RESERVE LEVELS TO GENERATE SUFFICIENT RETURNS TO PAY CLAIMS**



Source: Ernst & Young.

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## Adapting to Low for Long Rates

### Life industry adapting and re-inventing

**Carriers have raised premium rates, reduced benefits and exited product lines such as VAs and LTC due to adverse experience.**

- Anticipate growing shift to combination or linked-benefit products that provide more flexibility for future re-pricing as well as upside "participating" potential for policyholder if experience is favorable.
- Look for greater focus on high persistency products priced for "zero" rate environment that can transition through life stages without lapse supported pricing.
- Increased use of riders so policyholders can customize products to their needs and allow insurers to more effectively price risk.

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## Other effects on Life Insurers of Low Interest Rates

## Share Valuations Have Lagged

**Anticipate life stocks will largely trade in line with direction of interest rates**

**Financials are still only sector of S&P 500 that have not returned to pre-crisis share valuation levels.**

- Between 2006-16 life shares off approx. 3% vs. 44% gain for S&P 500. YTD S&P Life index down 1.3% vs. 6.9% gain for S&P 500.
- Life insurer valuations may be looking through accounting and in line with historic levels on discounted fair value “economic” basis.

<u>Price / Book Ratio</u>	<u>2006</u>	<u>2008</u>	<u>2015</u>	<u>08/12/16</u>
<b>S&amp;P 500</b>	2.9x	2.0x	2.8x	2.9x
<b>Life/Health Insurers</b>	1.7x	1.4x	0.9x	1.1x

<u>P/E Ratio</u>				
<b>S&amp;P 500</b>	17x	16x	18x	16x
<b>Life/Health Insurers</b>	14x	10x	11x	10x

## M&A Warming up - Somewhat

### Resurgence led by Japanese buyers

**Notable recent deals include:**

Protective Life – Dia-ichi \$5.7B

StanCorp – Meiji Yasuda \$5.0B

Symetra – Sumitomo \$3.8B

- Look for M&A to stay moderate with a focus on opportunistic dispositions. Will continue to be a reluctance to take on problems of others – many have enough of their own
- Regulatory issues may cause some insurers to re-think their presence in the U.S. Could take the form of out-right spin-offs, divestitures or business line sales.

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## Wrapping Up

## Cautiously Optimistic Outlook

### Life Insurance is a marathon not a sprint

**Low interest rates pose a formidable risk but confident industry is already adjusting business models to a new paradigm.**

- Life insurance sector possesses good long-term growth potential tied to favorable demographic trends and a shift in focus towards protection against rising longevity vs. premature mortality.
- Industry's ability to continue providing products to help retirees manage financial security is at risk and will be tied to direction of interest rates, regulatory capital reforms and consumer protection.
- Restoring earnings momentum will be slow but do not anticipate a future "solvency" crisis for life insurers. Effectiveness of existing regulatory supervision was vetted during the financial crisis.

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## Why Life Insurers Matter

### Only life insurers can guarantee lifetime income and offer tax-free death benefits

#### Three closing thoughts:

*"Americans should convert at least half of their retirement savings into an annuity" US Treasury Dept.*

*"There is a lack of financial education about the benefits of annuities and what's available" US Government Accountability Office*

*Ben Bernanke, former U.S. Federal Reserve Chairman, owns two annuities which represent the largest percentage of his own personal investment holdings.....so do I.*

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# THANK YOU

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## Colin W. Devine CFA, CMA, CFP®

Colin Devine provides strategic advisory services to the insurance and investment management sectors on a host of industry issues including capital and risk management, general account investments, variable annuity de-risking, retirement income products and investor relations. He is also a frequent guest speaker at various industry conferences as well as corporate boards of directors.

Previously, Colin was a Managing Director with both Jefferies LLC and Citigroup responsible for equity research coverage of North American life insurance companies. He was on the Institutional Investor All-America Research Team for 14 straight years where he held the #1 ranking in the Life Insurance Equity Research category for six consecutive years. Colin was also named one of the "Last Honest Analysts" by Smart Money Magazine.

Before joining Citigroup, Colin was a Director in Standard & Poor's Insurance Ratings group. Preceding that, Colin was a vice president of a major Canadian life insurer where he was involved in investment and risk management as well as a number of corporate development and treasury initiatives.

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