Change is Part of Life U.S. Life Insurance – Trends, Opportunities Actuarial Society of Greater New York

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State of the Industry

How Are Life Insurers Doing?

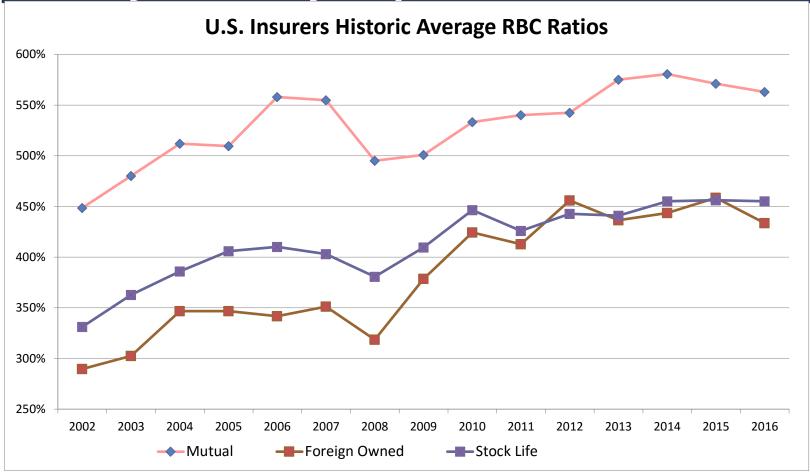
Industry health in reasonable shape

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

- Rising demand for post-retirement financial products Time will tell how many insurers have flexibility to fully
 leverage the long-term growth opportunity this presents.
- Protracted low long-term interest rates now in tenth year. Arguably, most insurer's biggest earnings lever.
- Legacy liabilities variable annuities, long-term care and other fixed liabilities a source of rising strain.
- Regulatory uncertainty DOL and SEC Fiduciary rule,
 Federal Reserve, State regulation, International.

Industry Statutory Capital Trends

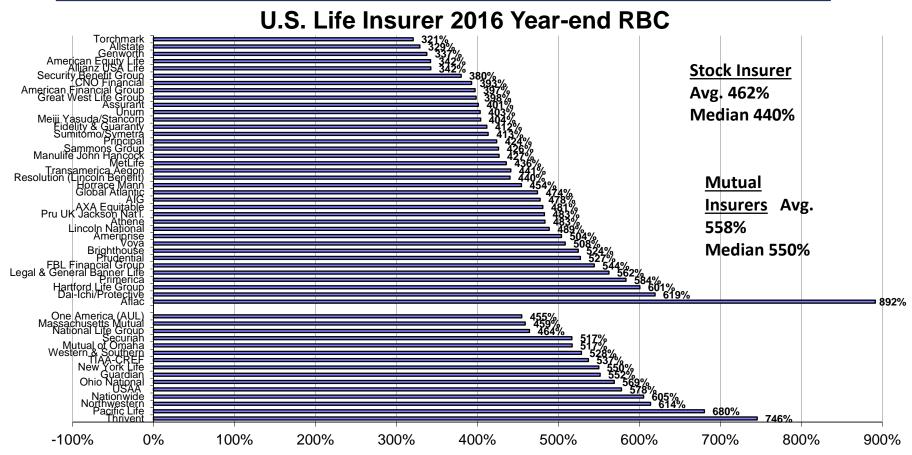
Steady industry improvement



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

RBC Peer Comparison YE16

But RBC not always the whole story



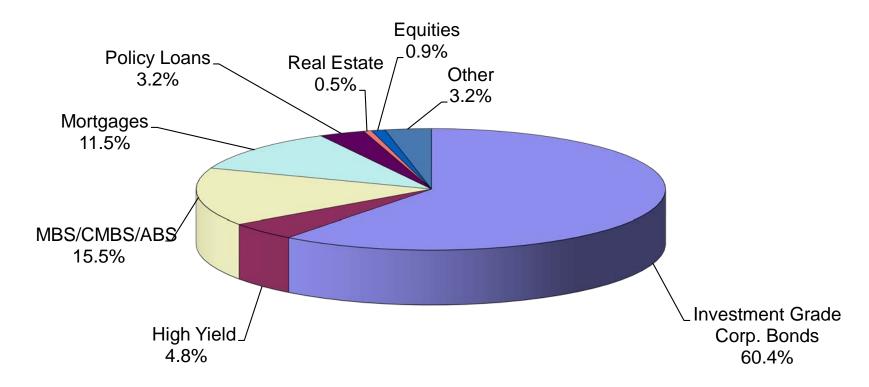
Source: Estimated combined group RBC ratios based on Insurer Year-end 2016 statutory financial reports.

2016 Statutory RBC Ratio

Investment Quality a Strength

Well positioned even if credit weakens

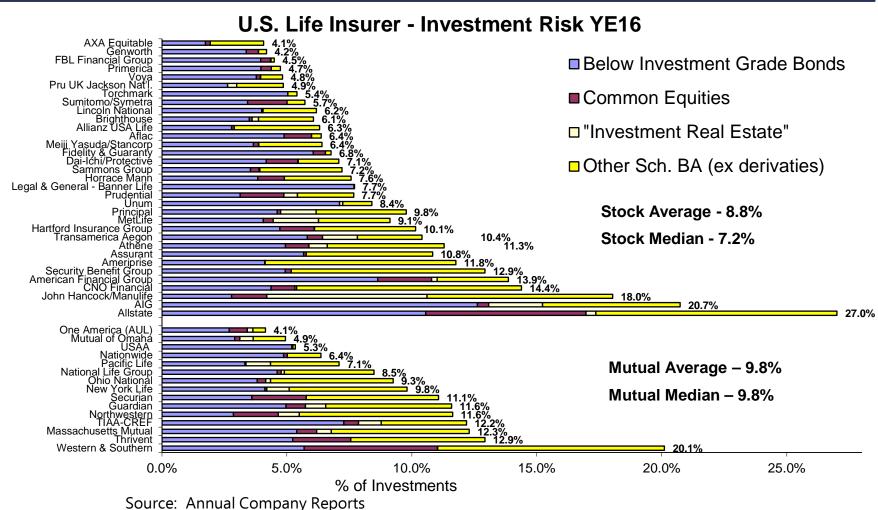
U.S. Life Insurer Average YE16 Invested Asset Mix



Source: Annual Company Reports

Investment Peer Comparison YE16

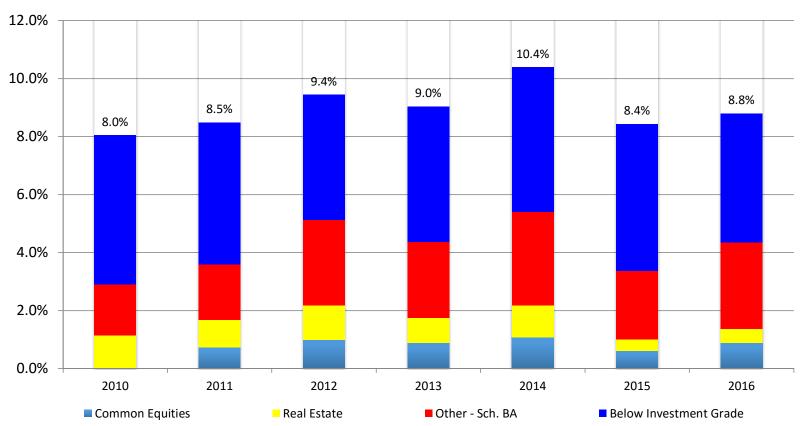
Risk appetites can vary widely



Historic Investment Risk Trends

Exposures have been relatively stable

Investment Risk % Total General Account Investments



Source: Annual Company Reports

Regulatory Key Risk Variable

Multiple Changes Underway

Will impact distribution, pricing, reserving

- Department of Labor (DOL) Fiduciary Rule delayed but likely not going away and may have broad implications.
- NAIC State regulations Changes to C1 asset RBC charges,
 Principles Based Reserving, captive reinsurance and C3 VAs.
- Federal Insurance Office may be less of an issue but still strong push for international coordination.
- Tax Reform "Inside Build-up" appears safe and corporate tax reduction to 20% a significant win. But, other changes such as DRD rate or section 3703 re tax reserves.
- Consumer Financial Protection Bureau a wildcard.

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

Life Insurers and Low Interest Rates

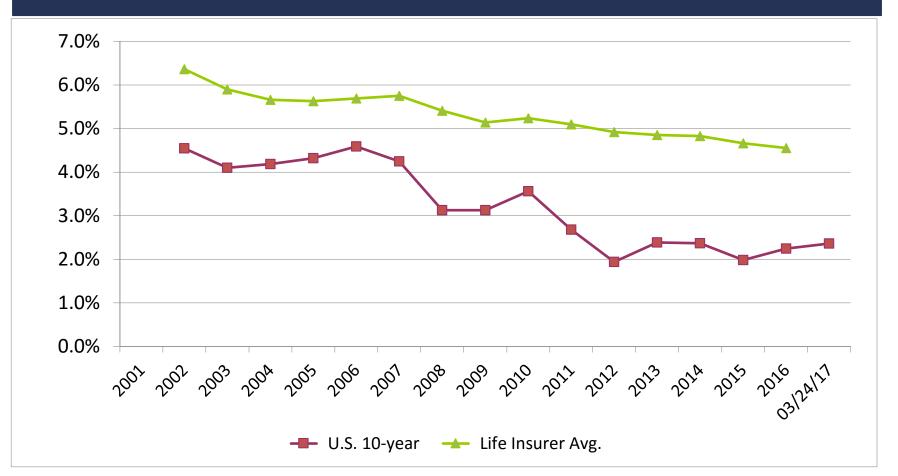
Single biggest earnings lever for most

Back in Aug. 2006, the 10-year yield was 5.0%.....but it is 2.3% today. Low for long may be here to stay

- Portfolio yields have been steadily falling by 15-25bps annually and with that underlying core earnings momentum.
- 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 would ease if 10-year yields got back above 4% or even 3%, but rising too fast could cause disintermediation; 50-75 bps annually would be ideal.

Interest Rates and Investment Yields

Steady decline will take years to reverse



Insurers and Low Rates

Impact spreads, policyholder behavior and benefits

Pricing assumptions interdependent and adverse experience on one can materially impact experience for others

- Individual life, annuities, pension close-outs, LTC and disability income will be on the books for 20 years or more.
- Decline in long-term rates and lower guarantees on new products means intrinsic value of in-force policies has risen; rising persistency suggests policyholders understand this.
- VAs, LTC and SGUL are not lapsing and the industry must build higher levels of reserves to pay future claims. Also risk of GAAP assumption unlocks on FAS 60 policies such as LTC.

Low Interest Rates a Material Risk

But could they also present an opportunity for long-term growth

Cost to fund future income/benefit payments is far higher than most individual or pensions planned

- Rising longevity, loss of defined benefit pension plans, uncertain older age health costs makes risk of running out of assets in retirement near certainty for many.
- While low rates have helped housing prices and equity markets, it has also meant the price of buying "income" has risen over 20% during the last decade.
- A 3% inflation rate requires a doubling of income every 23 years; the average will live almost 20 years post-65. DIA's compelling way to insure longevity risk.

Product Trends

All About Underwriting

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

May take decades for policies too fully season and pricing mistakes to emerge

- Underperforming investments can be sold but mis-priced liabilities can last forever and very difficult to sell.
- 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, COI's, de-risking, reducing policy dividends and re-pricing can each help improve returns, but rarely can they fully put the "genie back in the bottle."

Product Landscape Transformed

Material changes across product lines

Carriers have undertaken a host of strategic/pricing actions:

- Variable annuities exit or material pull-back by former leaders such as HIG, MET, PRU, John Hancock and Voya.
- Long-term care similar story as companies including Hancock, MET, PRU, GNW, UNM, AMP and CNO have all but exited. Only a few writers of traditional LTC remain.
- Universal Life material COI increases implemented by Transamerica, Lincoln, Phoenix and John Hancock.
- Traditional Life significant dividend actions taken by most mutual insurers in response to low rates.

Innovation Well Under Way

Life industry adapting and re-inventing

Shift to linked-benefits and indexed investments as well as slowly rising focus on offering fee-based products.

- Greater focus on high persistency products priced for "zero" rate environment that can transition through life stages without lapse supported pricing.
- Predictive analytics & advanced underwriting helping to improve efficiency as well as overall customer experience.
- Who says life is "dead" 1H17 industry sales grew 3.8% with gains across all lines most notably IUL, up 10% to \$921M.
 Annuity sales continued to shrink tied to DOL regulatory pressures however indexed sales still good.

Embracing Disruption

Other areas undergoing evolution/revolution

- DNA testing Is broad based testing coming? What are its implications for underwriting, disclosure, ethics?
- Fixed indexed annuities Is the addition of living benefits repeating the feature mistakes made by VA writers?
- Adapting in-force policies Can we improve policyholder satisfaction with existing contracts by offering ability to add new LTC/critical illness riders or elect term extensions?
- Life settlements/Policy CSVs Has the time come to accept these as a part of doing business and older age health care cost planning? Can we make the process easier?

Other Potential Issues

Multiple sources of future uncertainty

- DOL Fiduciary Rule 18-month delay does not mean BIC has gone away. May allow for coordinated action by DOL with SEC, state and federal regulators.
- Opioid crisis rapidly emerging concern worldwide. Could it impact mortality assumptions and pricing. Cuts across all socio-economic boundaries.
- Unpredictability of older age health good news and bad news is we are all living longer. Does exit from traditional LTC market suggest insurers are not able to price this risk?
- Cyber Equifax breach may suggest who isn't vulnerable?

M&A and Share Valuations

M&A Warming Up - Somewhat

Resurgence has many motivations

- Look for M&A to focus more on opportunistic dispositions.
 Reluctance to take on other's actuarial problems many have enough of their own
- Regulatory and legacy liability issues may influence further spin-offs such as MetLife/Brighthouse, ING/Voya or AXA with Equitable; divestitures; or product line sales or exits.
- Private equity firms have an appetite for selective types of liabilities such as fixed annuities and recently LTC
- Selective buyers such as Nationwide with Jefferson National or Hartford with Aetna's group operations.

Share Valuations Have Lagged

Anticipate life stocks will largely trade in line with interest rates

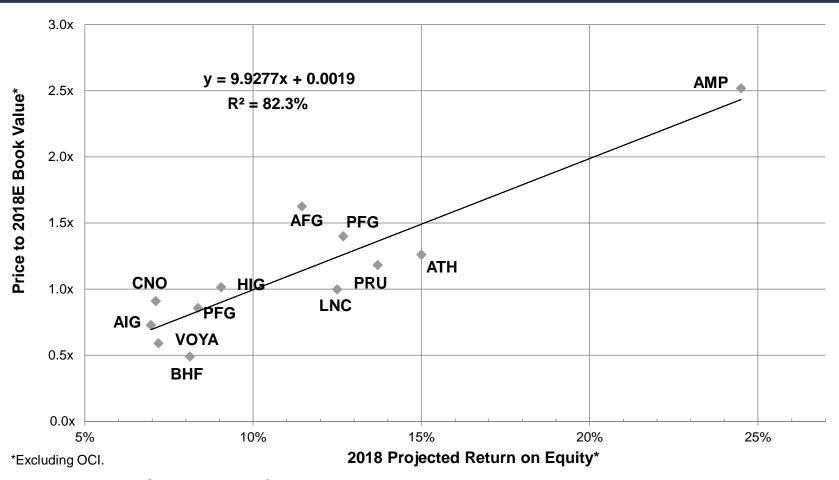
Financials are still only sector of S&P 500 that have not returned to pre-crisis share valuation levels.

 Between 2006-16 life shares off approx. 3% vs.44% gain for S&P 500. YTD in 2017 S&P Life index is up 6.7% vs. 11.7% gain for S&P 500.

Price / Book Ratio S&P 500 Life/Health Insurers	2006 2.9x 1.7x	2008 2.0x 1.4x	2016 2.9x 1.1x	11/09/17 3.2x 1.4x
P/E Ratio S&P 500 - trailing	17x	16x	18x	25x
Life/Health Insurers	14x	10x	10x	11x

Life Insurer P/B vs. ROE Regression

Great companies not always great stocks



Source: Annual Company Reports

Wrapping Up and Looking Ahead

Generally Optimistic Outlook

Life Insurance a marathon not a sprint

Low interest rates pose a formidable risk but confident most insurers adjusting business models to a new paradigm

- Restoring earnings momentum will be slow Industry possesses long-term growth potential tied to favorable demographic trends for protection against rising longevity vs. premature mortality.
- Appeal of lifetime guarantees remains strong Ability to provide products that deliver guaranteed financial security have insurers uniquely positioned but we have to continue to pivot and adapt.
- Interest rates and regulatory change a challenge Evolving distribution strategies, adoption of advanced underwriting technologies, redesigning and aligning compensation, and more customer centric products helping to overcome this.

Who says that Life doesn't change?

- Aetna
- Alexander Hamilton
- Allmerica
- AmerUs
- American General
- Aviva
- Banner
- Berkshire
- •C N A
- Canada Life
- •Chubb
- Confederation Life
- •Conn General / CIGNA
- Connecticut Mutual
- Crown Life
- Equitable
- Executive Life
- First Colony

- First Penn-Pacific
- Forethought
- Fortis/Union Security
- General American
- Genworth
- Hartford
- Home Life
- •Indianapolis Life
- Integrity
- •ING (ReliaStar and SLD)
- Jackson National
- Jefferson Pilot
- John Alden
- John Hancock
- •Kemper
- Kentucky Central
- Life of Georgia
- Life of Virginia

- Lincoln Benefit
- •MetLife Brighthouse
- Mutual Life of Canada
- •MONY
- Mutual Benefit
- New England
- North American Life
- Protective
- Provident Mutual
- Security CT
- Southland
- SunAmerica
- Symetra
- Transamerica
- Travelers
- US Financial
- •US Life
- West Coast Life

Why Life Insurers Matter

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

A closing thought:

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.

Thank You

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, investments, liability de-risking, retirement income products and investor relations. He is also a frequent speaker at various industry conferences as well as corporate boards of directors.

Previously, Colin was a Managing Director with 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.