

A P O L L O

Elysium Re Investment Overview
June 2014

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Overview of Elysium Re

Elysium Re Business Model Overview

- Elysium Re will establish itself with \$750-1,000 million of capital
 - 50% in cash, 50% in other equity capital (existing assets such as Apollo stock, fund positions, other cash flowing assets)
- On this capital base, Elysium Re will then write \$300-500 of premium per year (in a conservative base case model)
 - Premium will be written in a variety of different property and casualty lines – opportunistic areas where rates are hardening and pricing is attractive
- Elysium Re will then earn a ~9-10% annual investment yield on these assets – both the equity capital and the income on the premium written
 - Equity capital invested in alternatives earning ~10-15%
 - Premium income invested in a diverse mix of liquid credit, real estate, and structured securities earning ~3-5%
- Over time Elysium Re will incur losses on the premium its writes at an estimated 50-60% of premium written – known as the **“loss ratio”**
 - These incurred losses will **not all actually be paid out when incurred**, but rather over the course of 2-3 years from the time of being incurred
- Elysium Re will also absorb additional brokerage and SG&A expenses associated with the writing of premium and the managing of claims and day-to day business operations
 - Brokerage costs of ~20-25% of premium written – known as **“acquisition or brokerage ratio”**
 - Other SG&A costs of ~10% of premium written – known as **“SG&A or cost ratio”**
- To the extent that its **combined ratio** – the sum of the loss ratio, the brokerage ratio, and the cost ratio – is less than 100%, Elysium Re will generate additional earnings from underwriting income – as it will effectively be borrowing money at a **negative costs of funds where the underwriting cash flows received are greater than underwriting cash flows paid out**
- Elysium Re will thus generate value from **several different sources**
 - **Return on invested capital**
 - **Underwriting income / Negative cost of funds**
 - Best-in class underwriting with targeted loss ratio of 50-60% of premium written
 - Operating structures with combined brokerage and SG&A costs of 30-35% of premium written
 - **Return on float** (float is the time between which an insurance policy is written and when it is paid out)

Elysium Re Business Model Overview (Cont'd)

- Elysium Re will try to combine the twin principles of **value underwriting and value investing**, that seeks the **best value opportunities available on both sides of the balance sheet**
 - **Value Underwriting:** Hire a management team that underwrites based on a value-oriented, “margin-of-safety” approach across a **variety of property and casualty business lines** and that can **consistently produce overall combined ratios below 100% - generating leverage with a negative cost of funds**
 - Opportunistic liability sourcing in a broad range of property and casualty businesses, with a focus on **more flexible and price-attractive E&S / non-admitted business**
 - **Value Investing:** Hire Apollo/Athene (or another leading asset manager) with a **proven track record of outperformance and a diversified and broad investing platform in liquid credit**
 - **Opportunities on Both Sides of Balance Sheet:** Elysium Re will seek the best value opportunities on both the asset and liability sides of the balance sheet.
- Elysium Re will be further complemented by additional operating and structural enhancements
 - **Non-Correlated Risk:** Property and casualty insurance is a non-correlated source of value that is not heavily exposed to capital market based volatility
 - **Clean Balance Sheet:** De novo structure with no exposure to harmful legacy investments or liabilities
 - **Broker-Based Operating Model:** Broker-focused operating model that allows management to pursue its strategy with fewer employees and less fixed costs
 - **Tax & Regulatory Efficient Structure:** Elysium Re will be [domiciled as a Caymans / Bermuda entity, allowing it further enhance returns through tax and regulatory optimization]
- Elysium Re will target an A- financial strength rating from A.M. Best in line with other highly capitalized and well-respected property and casualty insurers and reinsurers
 - Rating underpinned by a diversified book of business and by rigorous stress testing on both sides of the balance sheet

P&C Liability Funding: Negative Cost of Funds

- A key aspect of the investment thesis is **producing underwriting income and thereby a negative cost of funds**
 - Combined ratio / cost of funds will vary by line of business, but Elysium Re will target a ~90% combined ratio over 3-5 years, which equates to a ~ (10)% cost of funds
- If the combined ratio of the premium written is below 100% (negative cost of funds), **Elysium Re can earn even more significant profits by earning on both sides of the balance sheet**

\$ in millions

Key Assumptions						Combined Ratio
Initial Premium Written	\$ 250					
Life of Liabilities	4.00					
Loss Ratio	55%					
Brokerage Ratio	25%					
SG&A	10%					90%
Annual Pay-Out (Premium / WAL)		34				
		Year	Year	Year	Year	
Cash Cost of Funds Projections (0-3)		0	1	2	3	
Premium Written		\$ 250	\$ 250	\$ 250	\$ 250	
Brokerage Costs		(63)	(63)	(63)	(63)	
Other SG&A Costs		(25)	(25)	(25)	(25)	
Losses & Loss Adjustment Expense		(34)	(69)	(103)	(138)	
Total Underwriting Cash Flows		\$ 128	\$ 94	\$ 59	\$ 25	
		Year	Year	Year	Year	
Cash Cost of Funds Projections (4-7)		4	5	6	7	Total
Premium Written		\$ -	\$ -	\$ -	\$ -	\$ 1,000
Brokerage Costs		-	-	-	-	(250)
Other SG&A Costs		-	-	-	-	(100)
Losses & Loss Adjustment Expense		(103)	(69)	(34)	-	(550)
Total Underwriting Cash Flows		\$(103)	\$ (69)	\$ (34)	\$ -	\$ 100
Cost of Funds		-10%				

P&C Liability Funding: Float Generation

- Elysium Re will utilize the concept of float to generate consistent liability funding with a relatively long WAL
- Float is the time between which an insurance policy is written and when it is paid out
 - Float will vary by line of business, but Elysium Re will target 3-5 years of WAL on its liabilities, resulting in ~\$400 million of run-rate float
- By utilizing float, Elysium Re can efficiently finance its investments
- Even when the combined ratio of the premium written is 100% (i.e. 0% cost of funds) or above 100% (positive cost of funds), **Elysium Re can still earn significant profits just by earning a higher yield on its invested assets**

\$ in millions

Key Assumptions					
Initial Premium Written	\$ 250				
Life of Liabilities	4.00				
Investment Yield	10%				
Loss Ratio	65%	Combined			
Brokerage Ratio	25%	Ratio			
SG&A	10%	100%			
Premium, Related to Policyholder Pay-Out	\$ 163				
Annual Pay-Out (Premium / WAL)	41				
		Year	Year	Year	Year
		0	1	2	3
Float Waterfall Projections		\$ 163	\$ 122	\$ 81	\$ 41
			163	122	81
				163	122
					163
Total Float		\$ 163	\$ 284	\$ 366	\$ 406
Cash Flow Projections					
BoP Cash			\$ 163	\$ 301	\$ 405
Plus: Float Generation / (Reduction)			122	81	41
Plus: Investment Income Generated on Float			16	23	35
EoP Cash		\$ 163	\$ 301	\$ 405	\$ 481
Run-Rate Float From Premium	~\$400				
% of Initial Premium Written	160%				
Cost of Funds	0%				
Annual Run-Rate Profit on Float	\$ 40				

P&C Re: Illustrative High-Level Business Projections

- Elysium Re will generate value from three core value sources
 - **Underwriting income / negative costs of funds**
 - **Return on float**
 - **Return on invested capital**
- This business model enables Elysium Re to be both a **spread lender at a negative cost of funds** and an **efficient user of float arbitrage**

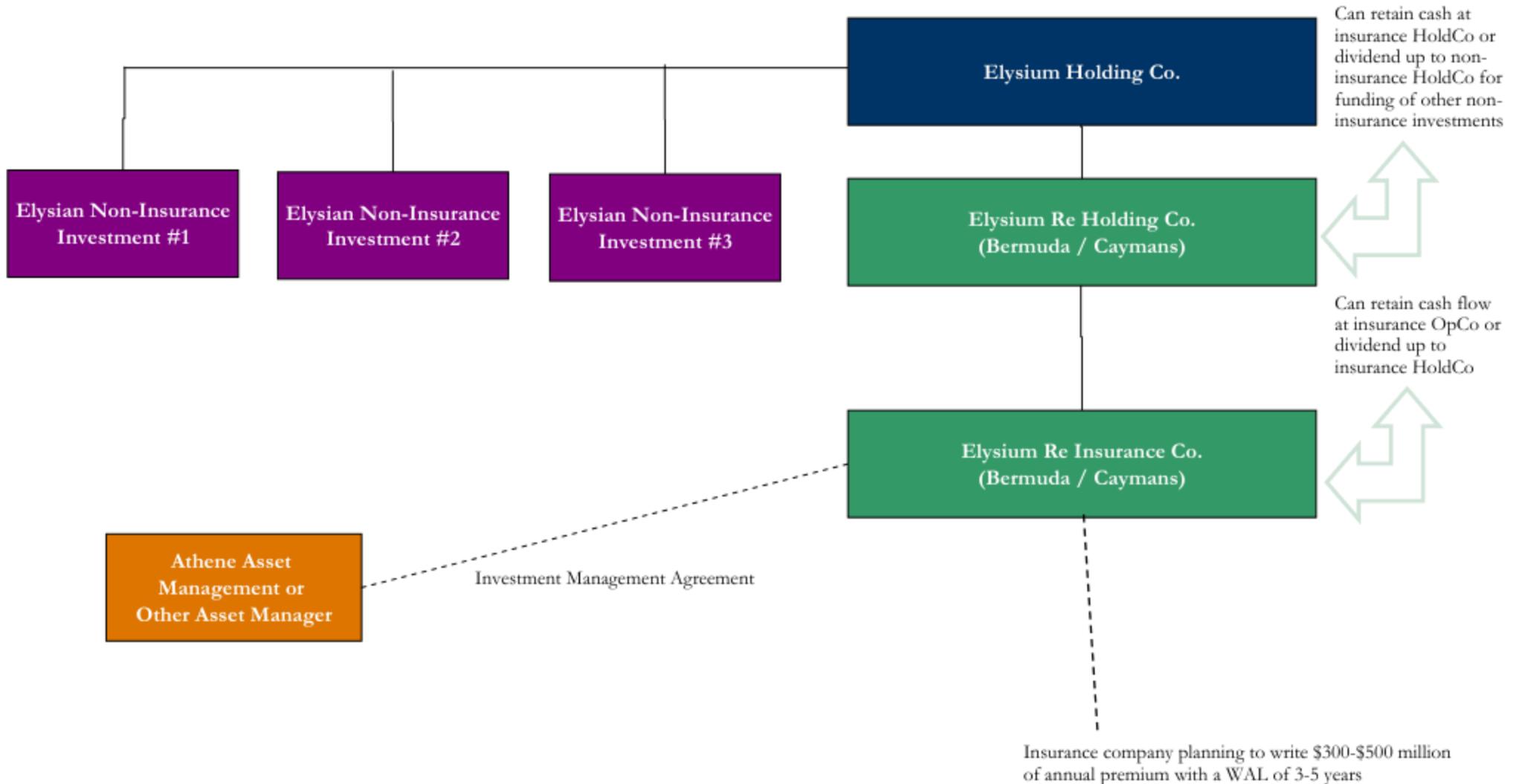
Premium Written / Equity Leverage on \$1 Billion Capital Base	Premium Written	Underwriting Income / Negative Cost of Funds at 90% Combined Ratio		Return on Float With 4 Year Life of Liabilities and 10% Investment Yield			Overall ROE With 10% Return on Invested Capital
		Profit	ROE Impact	Float	Profit	ROE Impact	
0.25x	\$250	\$25	2.5%	\$400	\$40	4.0%	16.5%
0.50x	500	50	5.0%	800	80	8.0%	23.0%
0.75x	750	75	7.5%	1,200	120	12.0%	29.5%
1.00x	1,000	100	10.0%	1,600	160	16.0%	36.0%

Fixed Annuity (Re) Insurance vs. P&C (Re) Insurance: Comparative Overview

	Fixed Annuity (Re) Insurance	P&C (Re) Insurance
Underwriting Leverage	11-15x assets / equity	Varied; key ratios include assets / equity (2-3x) and premiums written / avg. equity (0.1-1.0x)
WAL of Liabilities	5-10 years	1-3 years for property / catastrophe; 4-6 years for commercial / liability
Cost of Funds	~ 4-6% depending on crediting rate and policyholder behavior	Varies depending on line of business and underwriting ability (combined ratio); can range from (25%) to 10%
Investment Yield	5-7%	Depends on i.) average life of liabilities and ii.) focus on asset vs. liability risk; focus on asset performance (10-15%) vs. underwriting performance (2-7%)
Investment Flexibility	Longer WAL, less liquid assets permitted ; More regulatory oversight on investments; Greater focus on ALM	Shorter WAL, need more liquidity ; Less regulatory oversight on investments; Less correlation between assets & liabilities
Regulation	Primarily focused on assets	Primarily focused on liabilities and asset liquidity; Need A-rating to compete
Competition Level	Low	Medium to High
Business Model	Spread Lending	Float Arbitrage / Spread Lending / P&C Underwriting
Primary Liability Sourcing	Cedants	Brokers
Key Risks	Longevity, Rate	Underwriting, Asset Performance

Elysium Re Structure

Elysium Re would ideally be set up as an entity that could both fund its own operations, as well as produce additional cash flow for investments unrelated to Elysium Re's business



Business Plan Overview

Overview of Business Plan: Overall Approach

- Will need to hire a full management team with significant insurance experience to run general business and underwriting operations
 - Outsource asset management to AAM or another third-party asset manager
- Value on both sides of balance sheet – value underwriting and value investing
 - Assets and liabilities will compete for capital; depending on market dynamics, either investing or underwriting could be the business's value driver – and capital allocation will shift as environments change
 - A- rating with at least \$750 million of starting capital
- Operations will be based on a broker-focused model – less reliance on direct model
 - Lean operating team that concentrates primarily on underwriting and utilizes extensive broker networks to minimize agency-based fixed costs
 - Layer of distance between customer and P&C Re (e.g. Munich Re, Swiss Re) – makes it easier to “say no”
 - Greater flexibility to be opportunistic and move in and out of different markets as pricing environments shift
- Flexibility with regard to underwriting structures, lines of business, and geographies
 - Open to any opportunities as long as they offer attractive risk / reward and a sufficient “margin of safety”
 - Collateralized and non-collateralized structures (mostly non-collateralized at first)
- Focus more on E&S and non-admitted business where regulation is less strict and rates are more fluid
 - Prefer to stay away from the admitted business / commodity products
 - Don't want to take on large balance sheets (i.e. Travelers, ACE); rather, looking to take advantage of the niches

Overview of Business Plan: Overall Approach (Cont'd)

- Underwriting will target an overall combined ratio of 80-90%
 - ~ 50% loss ratio with a standard deviation of 20-30%
 - Large upside, but significant “margin of safety” provides downside protection
 - Concept of “present value of combined ratio” key determinant of underwriting and development of float
 - **Finding the right team of disciplined, but risk tolerant underwriters is crucial**
 - 20-30% expense ratio trending downwards as business matures
 - Additional OpEx expenses upfront to hire good talent and invest in right underwriting systems
 - Compensation structure should be based on return on equity / profits, not premium volume
 - Broker-focused model minimizes fixed costs and will be key driver for expense optimization
 - Broker-focused model makes it much easier to move in and out of the markets with brokers than direct model...but must be prudent with broker relationships (who hold a lot of power inherently with their distribution networks)
 - Put limits on (in hard and soft markets), so business isn't moving brokers around all the time and can build some credibility
 - Migrate out over time when markets soften and new entrants enter
 - Migrate in when markets harden and favorable supply / demand dynamic develops (easier to get data requests from brokers because they need you more)
 - **Team should also establish a rigorous risk management function**
 - Chief Risk Officer / Chief Actuary
 - AM Best BCAR maintenance and analysis – including key focus on a diversified book
 - Oversight from Black Family / Elysium Partners

Overview of Business Plan: Organizational Straw Man

- Organization needs to be driven by a culture of underwriting sophistication and by an opportunistic mindset
- Broker-focused model that help minimize fixed costs and allows core team to focus on underwriting with most back-office functions being outsourced
- Compensation structure will be based on return on equity / profits, not premium volume
- Especially for top underwriters, may consider paying more per person for top talent, but fewer overall employees (12-15 people initially)
 - **Estimate ~\$11 million of starting compensation expenses**
- Post initial upfront costs for systems, target a mid to low 20's expense ratio – in line with the better peer comparables (like Ren Re)



Overview of Business Plan: Lines of Business

- Underwriting will target an overall combined ratio of 80-90% with a 20-30% standard deviation on loss ratio
- Diverse business mix so that overall volatility is mitigated
- **Will need to develop an updated detailed block by block business plan with management that balances risk level, type of insurance, duration of claims, and frequency & severity of claims**
- For sample reference, attractive opportunities that existed in the market when AGM explored P&C Re 18 months ago included:
 - Property CAT
 - Direct Reinsurance in the US: Focus on more super regional writers, including substantial exposure to Florida stand alone companies
 - Direct Reinsurance ex-US: Focus on areas that have suffered losses in 2011 and 2010 and for which rates have not come down that significantly (yet). Book will be heavily targeted to Japan, Australia, NZ and Caribbean
 - Retrocessional Treaties: Focus on more bespoke treaties where exposure is being curtailed by the client or where a client sustained a loss in 2011. The attachment point would be at a relatively significant level for outside-the-US events to avoid small 'nuisance' cats
 - Mortgage Insurance
 - Significant opportunities to write quota shares for distressed US based monoline companies and some non-US treaties
 - Crop and MPC I
 - The poor experience of 2012 should open up opportunities for any entrant. A combination of quota share and XOL, at the lower attachment points is where management team would look to write business
 - Specialty Casualty lines
 - Some quality high excess D&O insurance providers, select few D&O/E&O middle markets programs and more unique lines (e.g. Environmental Liability) will be considered. There is some rate increase in the sector and the best way to participate will be side-by-side with clients, on a quota share basis
 - Terror, Political Risk and War
 - Smaller niche markets that allow some value-added underwriting; typically these are London based product lines

Overview of Business Plan: Lines of Business (Cont'd)

- Previous plan with AGM contemplated a flexible approach with a focus on traditional reinsurance and insurance
- There could be attractive additional growth opportunities to explore, once the base business has been fully established
 - Additional potential opportunity in alternative, more bespoke structures include:
 - Legacy run-off blocks
 - Estimated European Non-Life run-off market is currently more than \$200 billion
 - Key opportunities in asbestos trusts and related ailment XOL treaties (i.e. Mesothelioma)
 - Deals in this segment are hard to predict, model and plan for. Estimate that a few large transactions can be done over the next 4 to 5 years – their occurrence will be unpredictable. Expertise in the segment is key in identifying opportunities and there are only a few players in the segment (including an existing Apollo investment in Catalina) - expertise is a high barrier to entry
 - Third party P&C asset management (i.e. sidecars)
 - The market for “alternative capital” has clearly evolved significantly in recent years
 - Over the last 5 years, most traditional rated reinsurers that have tried to build third party managed funds have been wholly unsuccessful (Ren Re is the one exception). We believe that having both a rated vehicle and un-rated vehicle from the outset will provide P&C Re with a significant advantage
 - Non-annuity life insurance products
 - Simple products like term and whole life insurance with fixed liability structure, and which don't compete with Athene
 - Would likely require significant additional cost in terms of infrastructure and separate team of life insurance underwriters

Overview of Business Plan: Operating Expenses

- **Upfront non-compensation operating expenses of ~\$10 million**
- ~\$1 million in spend on CAT modeling technology and analytics
- ~\$9 million in other operating expenses
 - \$2 million for information & technology (very important to have best-in-class systems)
 - \$1 million to outsource back-office functions
 - \$3-4 million in T&E, other office operations, and taxes
 - \$2 million in general other (cushion for start-up costs of business)

(\$ in millions)

<u>OpEx For Models</u>	
Cat modeling	\$1,000
<u>Other OpEx</u>	
IT	\$2,000
Outsource	1,000
T&E	1,500
Office Operations	1,500
Taxes	700
Other	2,000
Sub-Total: Other Opex	\$8,700
Total	\$9,700

Overview of Business Plan: Overview of Operating Model

- **General**
 - Assumes stable underwriting environment where rates do not further harden
 - Cost optimization from broker-focused model
- **Underwriting Revenue**
 - ~\$260 million in premium written in Year 1 ramping up to ~\$2 billion Year 5 as balance sheet grows and underwriting leverage increase from ~0.25x to ~1.00x equity
 - Premium earned over a two year period
 - ~\$400 million of run-rate float premium
 - ~2.4 WAL of liabilities written
- **Loss Expenses**
 - 60-65% of premium earned
 - Paid out over a three year period (25%, 50%, 25%)
- **Acquisition Expenses**
 - 10-15% of premium written paid to brokers in year written
- **SG&A Expenses**
 - ~15% of premium written in Year 1 – primarily due to elevated OpEx from investments in core underwriting systems
 - Trends down to ~5% of premium written as business matures and fixed costs optimized due to broker-focused model
- **Investment Income**
 - Allocation: 1% Cash, 49% Non-Alternatives, 49% Alternatives
 - NIER: 0.30% Cash, 4.00% Non-Alternatives, 10.00% Alternatives
 - In Apollo NIER Cases: 0.30% Cash, 4.1% Non-Alternatives, 15% Alternatives
- **Taxes & Other**
 - 1% excise tax, no federal income tax
 - LOC charge of 50 bps
 - \$200 million liquidity facility with 100 bps commitment fee, 450 bps interest rate on drawn capital

Operating Model Projections

\$ in millions

<u>Balance Sheet</u>	<u>Key Asp.</u>	<u>Year 0</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5</u>
Assets							
Cash & Cash Equivalents	1.00%	\$10	\$13	\$17	\$23	\$31	\$39
Non-Alternatives Portfolio	49.50%	495	619	826	1,119	1,531	1,946
Alternatives Portfolio	49.50%	495	619	826	1,119	1,531	1,946
Total Assets		\$1,000	\$1,251	\$1,669	\$2,261	\$3,093	\$3,931
Liabilities							
Loss & LAE Reserves		\$0	\$70	\$225	\$445	\$754	\$1,057
Unearned Premium Reserves		0	104	229	395	627	764
Total Liabilities		\$0	\$174	\$455	\$841	\$1,381	\$1,821
Equity							
Common Equity	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
Retained Earnings		0	77	215	420	713	1,110
Total Equity		\$1,000	\$1,077	\$1,215	\$1,420	\$1,713	\$2,110
Total Liabilities & Equity		\$1,000	\$1,251	\$1,669	\$2,261	\$3,093	\$3,931
Key Statistics							
Underwriting Leverage							
Premium Written / Average Equity			0.25x	0.50x	0.75x	1.00x	1.00x
Loss & LAE Reserves / Equity			0.06x	0.19x	0.31x	0.44x	0.50x
All Reserves / Equity			0.16x	0.37x	0.59x	0.81x	0.86x
Assets / Equity			1.16x	1.37x	1.59x	1.81x	1.86x
Profitability							
Loss Ratio			59.9%	60.2%	61.3%	62.7%	63.7%
Expense Ratio			35.1%	28.5%	27.5%	26.7%	25.3%
Combined Ratio			95.0%	88.7%	88.9%	89.4%	89.0%
Earned Premium / Total Revenue			67.4%	82.0%	86.2%	88.1%	88.3%
Return on Average Equity			7.4%	12.0%	15.6%	18.7%	20.8%
NIER			6.9%	6.9%	6.9%	6.9%	6.9%

Operating Model Projections (Cont'd)

\$ in millions

Income Statement	Key Assumptions	Year 1	Year 2	Year 3	Year 4	Year 5
Premium Written		\$260	\$573	\$988	\$1,566	\$1,911
Less: Change in UPR		(104)	(125)	(166)	(231)	(138)
Premium Earned		\$156	\$448	\$822	\$1,335	\$1,773
Incurred Loss & LAE		(93)	(269)	(504)	(837)	(1,130)
Acquisition Expenses		(23)	(74)	(143)	(242)	(308)
General & Administrative Expenses		(32)	(54)	(84)	(115)	(140)
Federal Excise Tax		(3)	(6)	(10)	(16)	(19)
Sub-Total: Underwriting Income		\$5	\$45	\$82	\$125	\$176
Investment Income - Cash & Cash Equivalents		\$0	\$0	\$0	\$0	\$0
Investment Income - Non-Alternatives		22	28	38	51	67
Investment Income - Alternatives		54	70	94	128	168
Sub-Total: Investment Income		\$76	\$98	\$132	\$180	\$236
Total Operating Income		\$81	\$143	\$214	\$305	\$412
LOC & Liquidity Facility Charge		(3)	(6)	(8)	(13)	(16)
Tax		0	0	0	0	0
Total Net Income		\$77	\$137	\$205	\$293	\$397

Operating Model Projections (Cont'd)

\$ in millions

Cash Flow Statement	Key Assumptions	Year 1	Year 2	Year 3	Year 4	Year 5
<i>Memo: Target Underwriting Leverage (PW / Avg. Equity)</i>		0.25x	0.50x	0.75x	1.00x	1.00x
Premium Written		\$260	\$573	\$988	\$1,566	\$1,911
Loss & LAE Paid		(23)	(114)	(284)	(529)	(827)
Acquisition Costs Paid		(23)	(74)	(143)	(242)	(308)
General & Administrative Costs Paid		(32)	(54)	(84)	(115)	(140)
Start-Up Expenses		0	0	0	0	0
Federal Excise Tax Paid	Liq. Fac. 1.00%	(3)	(6)	(10)	(16)	(19)
LOC & Liquidity Facility Charge	1.00% 0.50%	(3)	(6)	(8)	(13)	(16)
Investment Income - Cash & Cash Equivalents		0	0	0	0	0
Investment Income - Non-Alternatives		22	28	38	51	67
Investment Income - Alternatives		54	70	94	128	168
Tax	0.00%	0	0	0	0	0
Total Cash Flow		\$251	\$418	\$591	\$833	\$837

All-In Cash Flows	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
CASH FLOWS	\$1,000.0	\$251	\$418	\$591	\$833	\$837
CASH ON CASH RETURNS		25.1%	41.8%	59.1%	83.3%	83.7%
PAYBACK %		25.1%	66.9%	126.1%	209.3%	293.1%

Overview of Key Risks

Liabilities

- **Disintermediation / Liquidity – accident events occur and Elysium Re does not have ample liquidity to pay for losses**
 - Mitigated by the time lag between the incurrence of an event and the actual pay-out of an event
- **Pricing – Business mispriced and Elysium Re does not have sufficient premium and investment income to fund losses**
 - Mitigated by ability to re-price out of soft markets in short order as premiums / pricing typically set annually
 - Catastrophe risk and other low frequency / highs severity business lines are particularly exposed to large mis-pricings and large subsequent losses

Assets

- **Credit – Investments perform significantly worse than expected and impair Elysium Re’s balance sheet and earnings power**

Capital

- Solvency – Elysium Re’s capital ratios fall below sufficient levels
- Regulatory – Regulators force Elysium Re to hold more capital against the risks in its business, resulting in reduced underwriting leverage and return on equity

Ratings

- **Rating Agency – Rating agencies downgrade Elysium Re’s ratings and / or refuse to give Elysium Re an A- rating and thereby substantially impair Elysium Re’s ability to write incremental premium and invest in higher yielding assets**

Taxes

- Regulatory – New regulations force Elysium Re to lose the tax advantages of its off-shore structure

Mitigants

- Diversified book of business – less volatility
- Non-correlated returns

Investment Portfolio & Rating Agency Overview

Overview of Elysium Re Investment Portfolio

- As with Athene, Elysium Re will look to utilize Apollo and AAM (or another third-party asset manager) to take advantage of arbitrages in market illiquidity and industry asset regulation (i.e. RMBS, CML), as well as by leveraging Apollo's alternative asset expertise and overall investment acumen

Liquidity and Shorter Duration

- However, unlike Athene, Elysium Re will be dealing with a regulatory and rating system (AM Best being the most powerful agency) that puts much greater focus on **liquidity and shorter duration**
 - While property and casualty liabilities offer Elysium Re the chance to source liabilities at a potentially much lower cost of funds than Athene can source with life and annuity liabilities, **the greater uncertainty of the property and casualty liabilities' payout patterns cause regulators and rating agencies to focus more heavily on having ample liquidity and often shorter duration in assets**
- As evidenced by vehicles like Greenlight Re and SAC Re, it is possible for P&C insurers to invest in riskier and more volatile assets – but this is much easier to do with highly liquid, short-duration, assets than with illiquid, long-duration, assets
 - For example, Greenlight Re's investment guidelines require that at least 80% of the invested assets will be held in publicly traded debt or equity, governments, cash, cash equivalents and gold
 - ~ 75% of Greenlight Re's portfolio is currently invested in listed equity securities

Asset Leverage

- Additionally, so as to please regulators and rating agencies, these same vehicles sometimes also appear to give up some underwriting leverage in exchange for putting more heavily risk-weighted assets on their balance sheets – and effectively rely more heavily on outsized investment returns and are less able to leverage the benefits of a spread-lending model
 - For example, Greenlight Re is levered at less than 1x equity
 - Allocates finite amount of volatility allowed by rating agencies to asset side of balance sheet so as to invest in high-return, hedge-fund type assets

Hedging

- Lastly, the precedents for alternative asset managers in the P&C reinsurance space are mostly hedge funds – who get some credit from rating agencies for the risk benefits of a "hedged" portfolio – an attribute that Elysium Re's portfolio might not get credit for

The challenge will be finding a way to generate yields in assets that are more liquid and of shorter duration, but at the same time can produce enough yield to sustain returns that will not have the benefit of 10-14x embedded leverage (although these returns will have the advantage of a low / negative cost of funds) – as a result, model requires additional "return juice" on underwriting side and may also require that Elysium Re migrate to higher risk, and more liquid assets than what Athene holds

P&C Re Sponsor: Hedge Fund vs. Elysium Re

Hedge Fund Sponsored P&C Vehicle

- Highly liquid portfolio
- Asset portfolios with 0-2 year in duration (heavy weighting to equity)
- Focus on shorter-duration securities
- Focus on publicly traded securities
- Limited longer duration investments
- Limited illiquid investments
- Modest leverage (for some like Greenlight Re)
- Benefit of a “hedged” portfolio

Elysium P&C Vehicle – Illustrative Straw Man

- ~ \$1 billion starting total balance sheet
- ~ \$500 million in equity capital – existing alternatives
 - ~\$250 million in illiquid alternatives
 - ~\$250 million in liquid / hedge fund alternatives
- 15% investment yield
- WAL of 3-7 years
- ~ \$500 million in cash to be invested in a diversified portfolio of credit, real estate, and structured securities
 - Yield range of 3.0-5.5%
 - WAL range of 3-7 years
- Total portfolio expected to yield 9-10%

AM Best Stress Tested BCAR Analysis Overview

- Capital raise of \$1 billion
- PML charges assumed to be 250% of 2 CATs premium in year 1 falling to 235%, 225%, 220%, 220% in years 2 through 5 respectively as the portfolio is better optimized over time
 - This translates into a \$ amount of PML of \$101, \$240, \$288, \$303, and \$338 million (Years 1 – 5 respectively)
 - These PML amounts as a % of year end equity are 9.4%, 19.2%, 19.4%, 17.1%, and 16.1% (Years 1 – 5 respectively)
- Investment portfolio mix for base case analysis:
 - 1-5% cash (most likely ~2%)
 - 49.5% non-alternatives portfolio
 - 49.5% alternatives portfolio
- Capital charges applied to base case investment portfolio:
 - Very conservative 40% charge applied to the entire investment portfolio (excluding cash)
- **AM Best requires a minimum stressed BCAR for the first five years of any NewCo business plan of at least 175% and will often require 200% - therefore targeting a minimum of 200% for all years – should translate to an A- rating**

Illustrative Overview of BCAR Calculation

	% Charge	Year 1 \$ Amount
<u>Adjusted Capital Calculation</u>		
A.) Reported Equity		\$1,084,645
B.) Less: Unearned Premium Reserve Charge	24%	(1,876)
C.) Less: Probable Maximum Loss ⁽¹⁾	19%	(203,975)
D.) Plus: Reserve Equity		2,029
Adjusted Capital		\$880,822
<u>Required Capital Calculation</u>		
A.) <u>Assets - C1</u>		
Fixed Income Investments Risk Charge	40%	\$220,247
Equity Investments Risk Charge	40%	220,247
B.) <u>Reserves - C2</u>		
Reserve Risk Charge	29%	29,360
Premium Risk Charge	34%	68,307
C.) <u>Market Risk - C3</u>		
Interest Rate Risk Charge	10%	4,004
Credit Risk Charge	5%	1,663
D.) <u>Business Risk - C4</u>	0%	0
Gross Required Capital		\$543,828
E.) Less: Covariance Adjustment ⁽²⁾		(223,498)
Net Required Capital		\$320,330
BCAR - ADJUSTED CAPITAL % NET REQUIRED CAPITAL		275%

(1) Probable Maximum Loss ("PML") is the maximum loss (usually a 1 in 100 event on a catastrophe line written) that the insurer could face from premium written. Generally, 2 in 100 events needs to equate 25 PML of less than 25% of total capital for insurers to comply with AM Best's calculation.

(2) Covariance adjustment is the de-risk benefit given to an insurer for diversity of risk (on both sides of balance sheet), which gives credit to the insurer for spreading out risk so that it is de-concentrated.

Key Next Steps

Key Next Steps

➤ **Find And Structure Legacy Assets**

- Detailed walk-through of all available assets of Elysium / Black Family
- Determine which assets appropriate from tax, liquidity, rating agency/regulatory, and Apollo conflicts perspective
- Source necessary cash funds for vehicle

➤ **Find Management Team For Underwriting & General Operations**

- Option 1: Reach out to precedent prospective team that AGM vehicle worked with (i.e. Marc Grandisson)
- Option 2: Source team through FIG investment banking and internal Apollo relationships
- Option 3: Source team through professional search firms

➤ **Determine Asset Manager of Portfolio**

- Option 1: Use Athene/Apollo as asset managers
- Option 2: Approach existing Elysium investment managers about managing a larger portfolio (i.e. Lone Pine, Millennium)
- Option 3: Partner through other existing relationships / family offices

Appendix 1: Former Prospective AGM Vehicle Management Team Track Record

Management Biographies

Marc Grandisson

Marc Grandisson is the Chairman and CEO of Arch Worldwide Reinsurance Group. Joined Arch Reinsurance in October 2001 as part of the new underwriting initiative of Arch Capital. Marc began his career in 1990 as an actuarial assistant with Tillinghast/Towers Perrin, first in Bermuda, subsequently transferring two years later to their Atlanta, GA office. In July 1994, he took up the position of Vice President at F&G Re, Inc. where he was responsible for non-traditional underwriting. He joined the Berkshire Hathaway Group in March 1999 where he served as a Vice President & Actuary until joining Arch Re in October 2001. Marc held the position of Chief Underwriting Officer and Actuary at Arch Re until his promotion to President and Chief Operating Officer in April 2004. Effective March 2005, and in keeping with the corporate structure at Arch, Mr. Grandisson's title changed to President & CEO. Marc was promoted to his current position in November 2005. Mr. Grandisson holds a B.Sc. in Actuarial Science from the University Laval in Canada and an M.B.A. from The Wharton School of the University of Pennsylvania. Since 1993, he has been a Member of the American Academy of Actuaries and in 1995 became a Fellow of the Casualty Actuarial Society.

William O'Farrell

With nearly 20 years of experience in the insurance and reinsurance industry, William O'Farrell has served as Chief Reinsurance Officer for the ACE Group since 2005. In this role, he has management responsibility for the design and purchase of reinsurance programs for ACE and its business units globally, managing the company's reinsurance recoverable asset and overseeing relationships with its reinsurers and reinsurance brokers. He also serves as Chairman of ACE's Reinsurance Security Committee and is a member of its Global Credit Committee. Mr. O'Farrell joined ACE in 2003 as Senior Vice President of Reinsurance Recoverables with global responsibility for managing the company's reinsurance asset. Prior to joining ACE, he was Vice President and Legal Counsel with the Berkshire Hathaway Insurance Group, where he held a number of senior positions during his more than 10-year tenure with the company. Earlier in his career, Mr. O'Farrell served as a U.S. Army officer in Operation Desert Storm. Mr. O'Farrell holds a Bachelor of Science degree in Business Administration with a major in Finance from Creighton University. He also holds a Juris Doctorate from Creighton University's School of Law and is admitted to practice in Connecticut.

Premium Management Team: Underwriting Track Record

Loss Ratio Comparison: Arch Capital Group Ltd. vs. Reinsurance Peers

Company Name	2002Y	2003Y	2004Y	2005Y	2006Y	2007Y	2008Y	2009Y	2010Y	2011Y
	Loss Ratio (%)									
Arch Capital Group Ltd.	63.0	63.1	63.5	66.3	52.2	45.6	55.9	44.6	44.4	58.2
Alterra Capital Holdings Ltd.	83.3	74.3	74.6	93.4	67.7	64.0	68.9	62.4	56.1	96.7
Aspen Insurance Holdings Ltd.	64.0	52.7	58.7	90.1	53.1	53.1	65.8	52.0	65.8	NA
AXIS Capital Holdings Ltd.	42.7	51.1	61.4	80.3	52.9	50.1	63.7	51.0	56.9	58.6
Endurance Specialty Hldg Ltd.	55.3	56.5	57.4	95.8	50.5	47.0	64.3	53.1	59.6	86.7
Everest Re Group, Ltd.	71.7	69.6	74.4	94.0	63.2	63.7	66.0	61.0	74.9	20.3
Flagstone Reinsurance	NA	NA	NA	NA	13.9	40.4	58.1	37.3	62.4	NA
Greenlight Capital Re, Ltd.	NA	NA	NA	0.0	36.4	40.3	48.3	55.4	61.5	NA
Maiden Holdings, Ltd.	NA	NA	NA	NA	NA	59.0	62.8	66.2	64.6	NA
Montpelier Re Holdings Ltd.	40.4	23.3	51.4	178.0	29.6	31.8	55.8	24.2	48.3	NA
PartnerRe Ltd.	69.3	65.6	65.6	87.3	54.8	50.8	63.9	52.7	65.9	199.9
Platinum Underwriters	56.4	54.7	70.4	87.8	56.9	55.9	64.4	51.0	59.9	NA
RenaissanceRe Holdings Ltd.	38.1	33.0	81.9	116.6	29.2	33.6	54.8	-8.0	15.0	NA
Validus Holdings, Ltd.	NA	NA	NA	NA	29.8	33.1	61.5	36.1	56.1	NA
XL Group plc	68.6	75.6	68.8	107.4	62.2	59.8	66.2	61.5	63.8	NA

Note: Data for Arch is for its reinsurance operations only

	<u>Average</u>	<u>Standard Deviation</u>
Arch Re	56%	8%
Peer Group	61%	26%

Premium Management Team: Underwriting Track Record (Cont'd)

Expense Ratio Comparison: Arch Capital Group Ltd. vs. Reinsurance Peers

Company Name	2002Y	2003Y	2004Y	2005Y	2006Y	2007Y	2008Y	2009Y	2010Y	2011Y
	Expense Ratio (%)									
Arch Capital Group Ltd.	24.8	26.1	28.9	31.2	28.5	28.9	29.4	29.1	29.9	29.1
Alterra Capital Holdings Ltd.	27.9	25.9	19.2	12.6	18.7	24.2	23.0	25.7	29.6	96.7
Aspen Insurance Holdings Ltd.	25.0	25.3	24.7	27.1	29.3	29.9	29.8	32.1	30.9	NA
AXIS Capital Holdings Ltd.	27.7	22.5	23.0	21.5	24.4	25.2	26.1	28.2	31.8	58.6
Endurance Specialty Holdings Ltd.	30.9	28.2	28.4	27.7	31.0	32.9	29.2	30.9	29.1	86.7
Everest Re Group, Ltd.	27.4	25.7	24.6	26.2	26.5	27.9	29.2	28.1	27.9	20.3
Flagstone Reinsurance Holdings, S.A.	NA	NA	NA	NA	33.7	32.4	31.3	37.4	37.5	NA
Greenlight Capital Re, Ltd.	NA	NA	NA	0.0	73.2	51.9	48.2	41.1	41.3	NA
Maiden Holdings, Ltd.	NA	NA	NA	NA	NA	34.9	32.0	29.7	32.3	NA
Montpelier Re Holdings Ltd.	27.0	27.0	26.4	22.7	30.7	29.5	35.2	38.0	33.7	NA
PartnerRe Ltd.	27.5	27.8	29.0	29.0	29.6	29.6	30.2	29.1	29.1	199.9
Platinum Underwriters Holdings, Ltd.	35.2	30.0	26.3	26.7	26.7	25.1	27.5	25.7	26.1	NA
RenaissanceRe Holdings Ltd.	19.0	23.4	22.5	23.1	25.5	25.7	24.2	29.2	30.1	NA
Validus Holdings, Ltd.	NA	NA	NA	NA	26.9	28.9	30.7	32.8	30.1	NA
XL Group plc	28.9	27.1	27.3	25.6	27.3	29.0	28.7	32.1	31.0	NA

Note: Data for Arch is for its reinsurance operations only

Premium Management Team: Underwriting Track Record (Cont'd)

Combined Ratio Comparison: Arch Capital Group Ltd. vs. Reinsurance Peers

	2002Y	2003Y	2004Y	2005Y	2006Y	2007Y	2008Y	2009Y	2010Y	2011Y
Company Name	Combined Ratio (%)									
Arch Capital Group Ltd.	87.8	89.2	92.4	97.5	80.7	74.5	85.3	73.7	74.3	87.3
Alterra Capital Holdings Ltd.	111.2	100.2	93.8	106.0	86.4	88.2	91.9	88.1	85.7	193.4
Aspen Insurance Holdings Ltd.	89.0	78.0	83.4	117.2	82.4	83.0	95.6	84.1	96.7	n.a.
AXIS Capital Holdings Ltd.	70.4	73.6	84.4	101.8	77.3	75.3	89.9	79.2	88.7	117.2
Endurance Specialty Holdings Ltd.	86.2	84.7	85.8	123.5	81.5	79.9	93.5	84.0	88.7	173.4
Everest Re Group, Ltd.	99.1	95.3	99.0	120.2	89.7	91.6	95.2	89.1	102.8	40.6
Flagstone Reinsurance Holdings, S.A.	n.a.	n.a.	n.a.	n.a.	47.6	72.8	89.4	74.7	99.9	n.a.
Greenlight Capital Re, Ltd.	n.a.	n.a.	n.a.	0.0	109.6	92.2	96.5	96.5	102.8	n.a.
Maiden Holdings, Ltd.	n.a.	n.a.	n.a.	n.a.	n.a.	93.9	94.8	95.9	96.9	n.a.
Montpelier Re Holdings Ltd.	67.4	50.3	77.8	200.7	60.3	61.3	91.0	62.2	82.0	n.a.
PartnerRe Ltd.	96.8	93.4	94.6	116.3	84.4	80.4	94.1	81.8	95.0	399.8
Platinum Underwriters Holdings, Ltd.	91.6	84.7	96.7	114.5	83.6	81.0	91.9	76.7	86.0	n.a.
RenaissanceRe Holdings Ltd.	57.1	56.4	104.4	139.7	54.7	59.3	79.0	21.2	45.1	n.a.
Validus Holdings, Ltd.	n.a.	n.a.	n.a.	n.a.	56.7	62.0	92.2	68.9	86.2	n.a.
XL Group plc	97.5	102.7	96.1	133.0	89.5	88.8	94.9	93.6	94.8	n.a.

Note: Data for Arch is for its reinsurance operations only

Premium Management Team: Underwriting Track Record (Cont'd)

Summary: Arch Capital Group Ltd. vs. Reinsurance Peers

		2002Y	2003Y	2004Y	2005Y	2006Y	2007Y	2008Y	2009Y	2010Y	2011Y
Arch Capital Group Ltd.	Loss Ratio (%)	63.0	63.1	63.5	66.3	52.2	45.6	55.9	44.6	44.4	58.2
Peer Group Average	Loss Ratio (%)	59.0	55.6	66.5	93.7	46.2	48.8	61.8	46.9	57.9	92.4
Arch Capital Group Ltd.	Expense Ratio (%)	24.8	26.1	28.9	31.2	28.5	28.9	29.4	29.1	29.9	29.1
Peer Group Average	Expense Ratio (%)	27.7	26.3	25.1	22.0	31.0	30.5	30.4	31.4	31.5	92.4
Arch Capital Group Ltd.	Combined Ratio (%)	87.8	89.2	92.4	97.5	80.7	74.5	85.3	73.7	74.3	87.3
Peer Group Average	Combined Ratio (%)	86.7	82.6	91.7	114.2	77.5	78.9	91.7	78.0	88.4	168.6

Note: Data for Arch is for its reinsurance operations only

Appendix 2: Additional P&C Industry Materials

Case Study: Greenlight Capital Re Valuation Overview

Trading statistics

Price (02/08/12)	\$25.97
Market cap (mm)	\$972
52-week high	\$29.25
52-week low	\$20.01
P / 2012 EPS	6.8x
P / 2013 EPS	5.7x
Diluted P/BV	1.32x
Dividend yield	-

Stock price performance



Company overview

- Greenlight Capital Re, Ltd. ("GLRE") is a specialist property and casualty reinsurer based in the Cayman Islands
- Founded In August 2004 through \$212mm private placement
 - principal investors included David Einhorn (16.8%), Montpellier International (9.3%), Keren Ohr Lanoar (7.0%), United Congregation Mesorah (7.0%), Seneca Capital (5.8%) and Scoggin International (5.1%) (pre-IPO ownership from prospectus)
- Completed simultaneous \$224mm IPO and \$50mm private placement from David Einhorn In May 2007
 - IPO consummated at 1.24x 3/31/2007 pro forma diluted price / book
- Underwrites non-commoditized, customized property and casualty reinsurance products in areas that are underserved or experience capacity shortages and provide favorable long-term returns on capital
- Reinsurance business operates through two categories:
 - frequency business: characterized by contracts with a potentially large number of smaller losses (primary insurer clients typically buy this to increase underwriting capacity)
 - severity business: characterized by contracts with potential for significant losses emanating from an event (primary insurers looking to reduce balance sheet volatility buy this product); potential for higher long-term returns at the expense of increased volatility
- GLRE complements underwriting with a non-traditional investment approach focused on value-oriented long-short investments in a variety of asset classes with primary focus on public equity securities
 - Investment portfolio is managed by DME Advisors, an entity controlled by David Einhorn
- Majority of business sourced through reinsurance brokers
- Currently has an "A (Excellent)" financial strength rating (upgraded in September 2011) with a stable outlook from A.M. Best
- Employs 21 full-time individuals in offices in the Cayman Islands and Dublin, Ireland

Price / book value



Price / NTM earnings^(a)



The P&C sector includes many types of coverage



The P&C sector can be broadly divided into personal and commercial lines coverage served by both insurance and reinsurance carriers

Property & casualty coverage (Insurance and Reinsurance)		
	Commercial lines	Personal lines
<p>"Short tail" <1 year</p>	<ul style="list-style-type: none"> - Ocean marine - Inland marine - Commercial auto - Aircraft - Fidelity 	<ul style="list-style-type: none"> - Personal auto - Homeowners multiple peril - Accident and health
<p>"Medium tail" < 1 – 3 years</p>	<ul style="list-style-type: none"> - Earthquake - Surety - Commercial multiple peril - Errors & omissions - Product liability 	<ul style="list-style-type: none"> - Umbrella - Warranty - Credit
<p>"Long tail" > 3 years</p>	<ul style="list-style-type: none"> - Medical malpractice - Workers' compensation - Directors & officers - Financial guaranty - Mortgage guaranty - Title 	

Weighted average life of liability by P&C product line



WAL

	<u>Weighted average life of liability (years)</u>
Homeowners & Farmowners	<1
Private passenger auto liability	1 - 2
Commercial auto liability	2 - 3
Worker's comp	5 - 6
Commercial multiple peril	2 - 3
Medical professional liability	4 - 5
Marine, aircraft and boiler & machinery	2 - 3
Other liability	4 - 5
Product liability	5 - 6

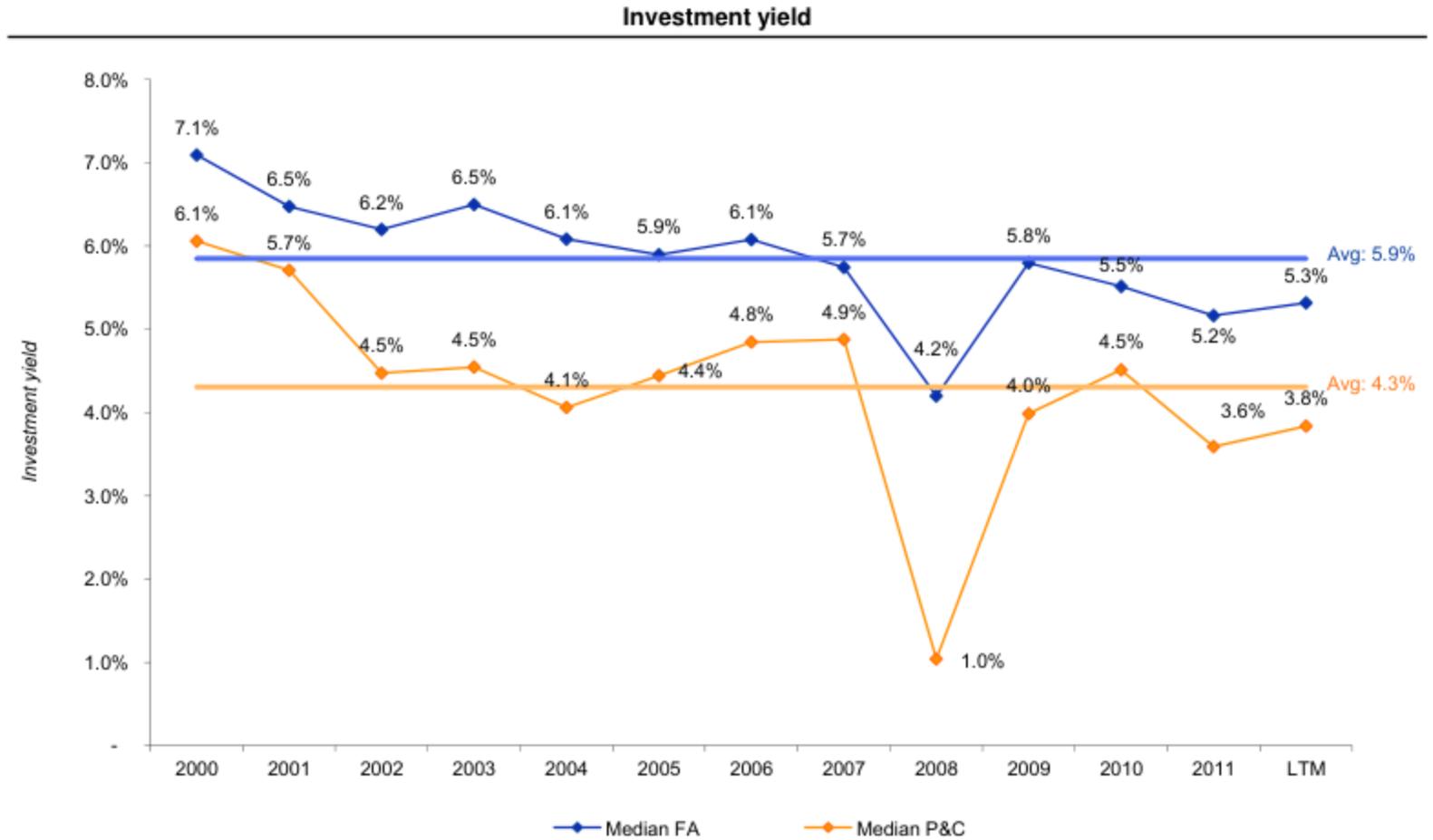
Note: Other liabilities include but are not limited to Errors & Omissions, Directors & Officers, Environmental, and Umbrella coverage.
Source: SNL

Historical investment yield

Annuities vs P&C insurers



Given the longer maturity profile of the investment portfolio, FA industry's portfolio yield is on average higher than P&C industry by ~1.5%



Note: Averages calculated on the median of the constituents. LTM as of latest available financial data.
Source: SNL Financial

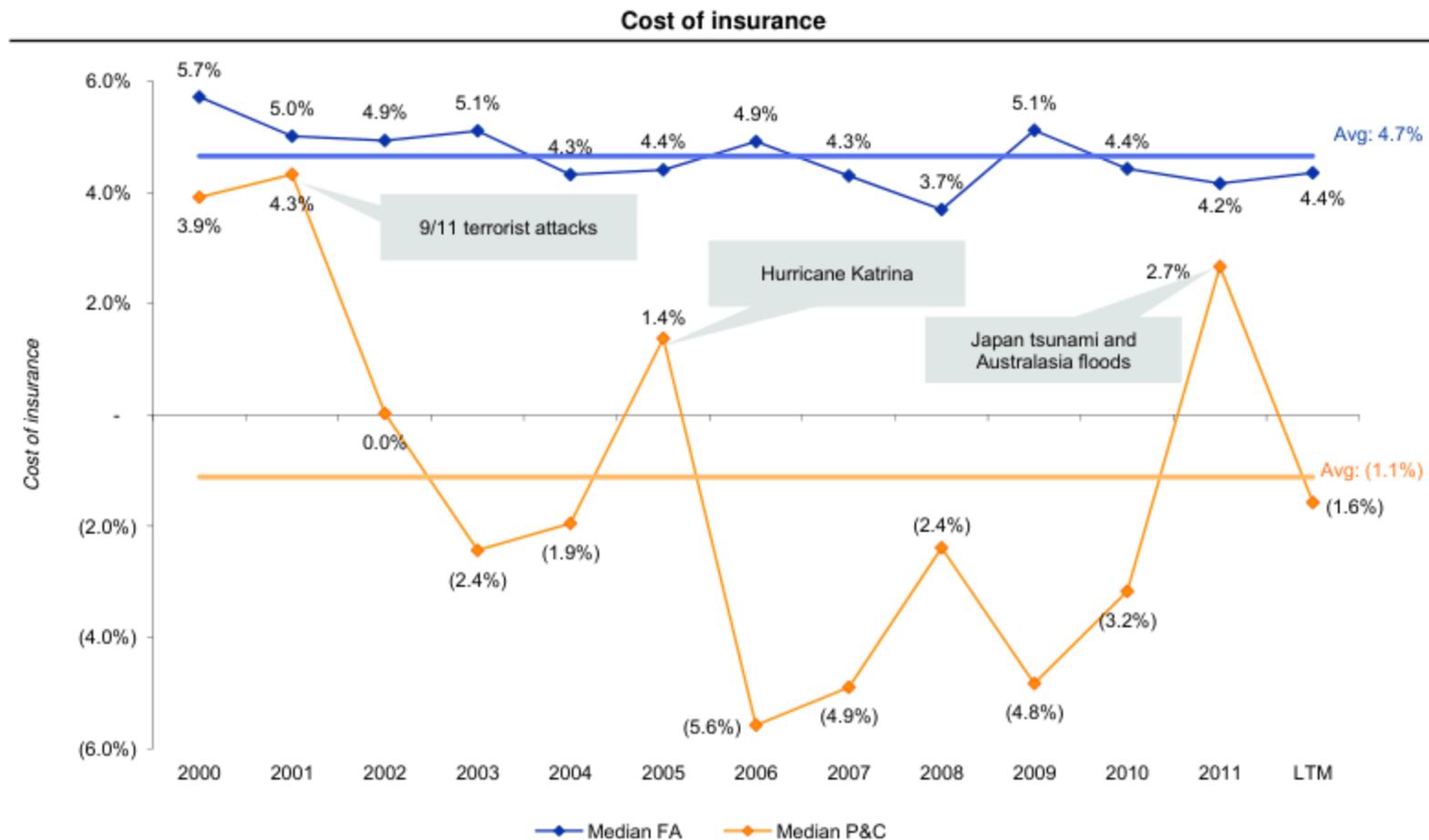
Historical cost of insurance

Annuities vs P&C insurers



P&C underwriting is inherently more volatile than FA because of differences in the risk profile of the underlying business

Over the long-term, the P&C universe we analyzed has experienced negative cost of insurance, i.e., underwriting profit



Note: Averages calculated on the median of the constituents. Cost of insurance defined as total policy income less total policy expense less underwriting expenses over reserves. LTM as of latest available financial data.
 Source: SNL Financial

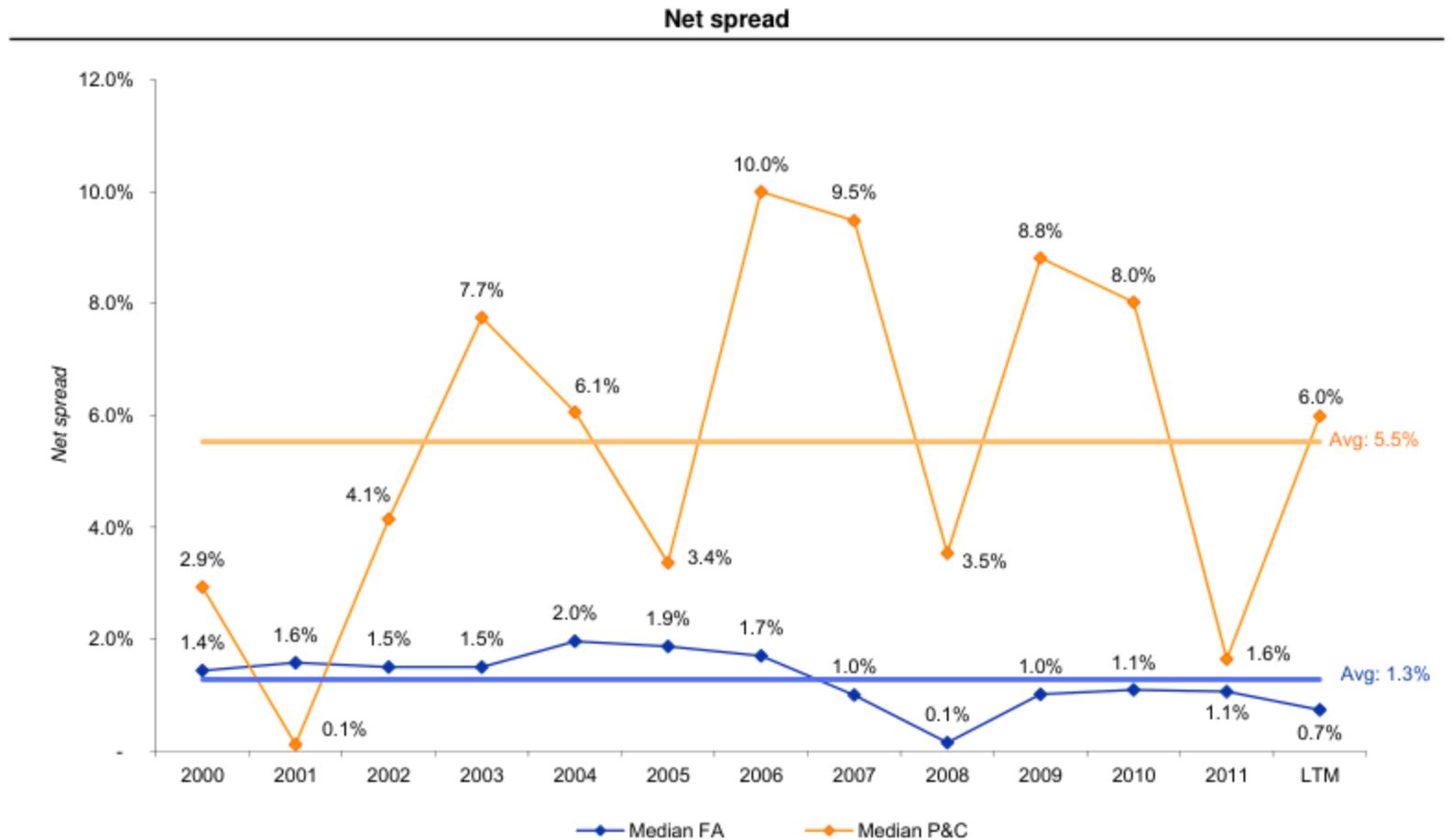
Implied historical net spread

Annuities vs P&C insurers



The net spread for P&C has exceeded FA despite the lower yield due to the lower cost of insurance

Volatility in the P&C insurance's cost of insurance directly contributes to volatility in net spread



Note: Averages calculated on the median of the constituents. LTM as of latest available financial data.
Source: SNL Financial

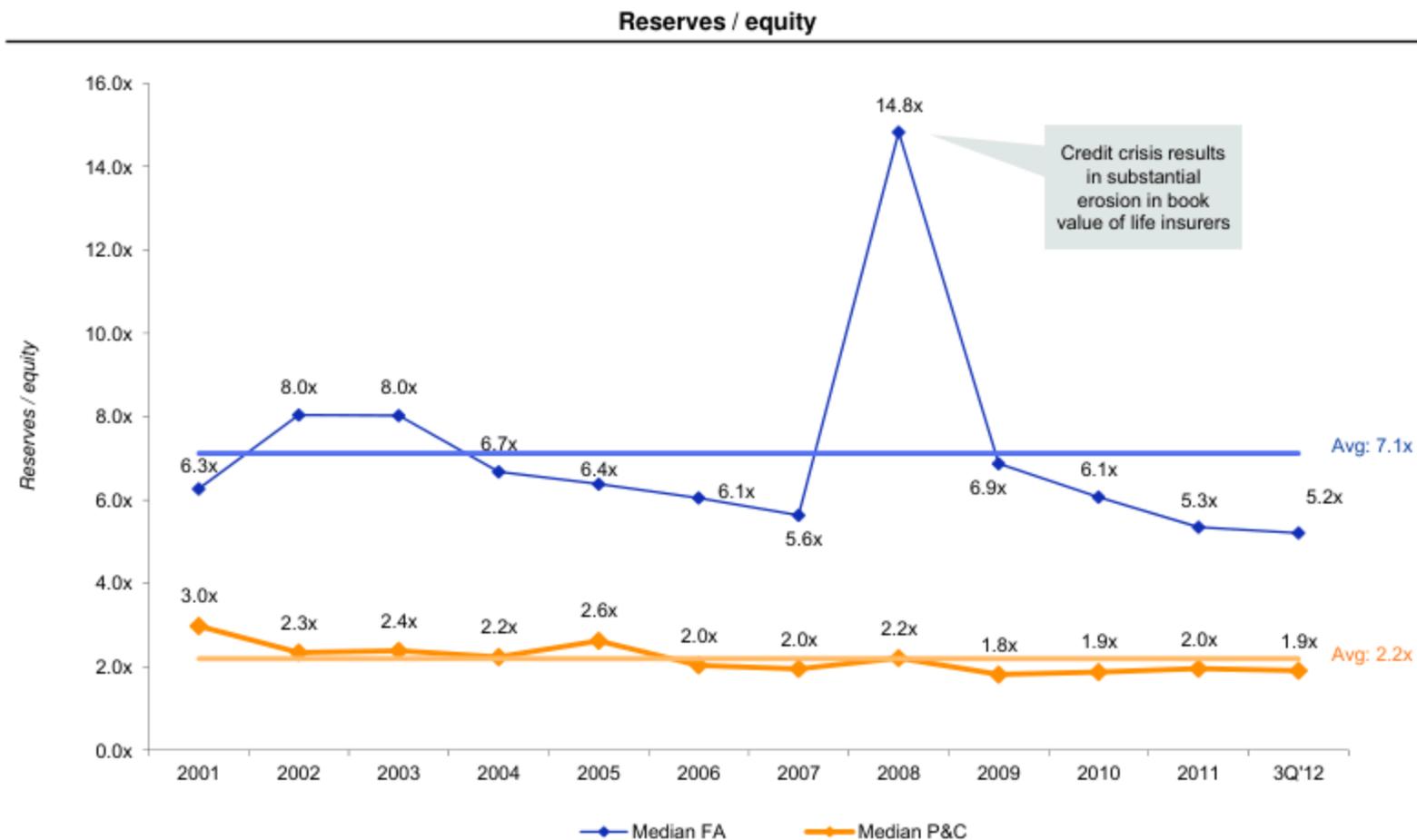
Historical leverage

Annuities vs P&C insurers



Volatility in underwriting necessitates a higher equity cushion for P&C businesses

As a result, P&C businesses employ lower operating leverage compared to FA businesses



Note: Averages calculated on the median of the constituents.
Source: SNL Financial

Invested assets

Annuities vs P&C insurers



	Bonds	Preferred stock	Common stock	Other invested assets	Mortgage loans	Other
Annuity						
Protective Life	83.2%	0.8%	0.3%	0.2%	11.2%	4.3%
Conseco	92.4%	0.1%	0.3%	0.1%	4.9%	2.2%
Symetra	82.4%	0.5%	1.9%	1.2%	13.2%	0.8%
FBL Financial ^(a)	85.6%	0.7%	0.5%	1.7%	6.9%	4.6%
American Equity Investment Life	79.2%	0.2%	0.1%	2.0%	11.9%	6.6%
National Western Life	94.3%	-	0.1%	-	1.1%	4.5%
Citizens	80.6%	0.2%	5.3%	-	0.1%	13.7%
Kansas City Life	75.1%	0.5%	0.2%	2.3%	17.1%	4.8%
Presidential Life	88.3%	1.7%	-	8.0%	-	2.0%
Mean	84.6%	0.5%	1.0%	1.7%	7.4%	4.8%
Median	83.2%	0.5%	0.3%	1.2%	6.9%	4.5%
P&C						
ACE Limited	87.2%	-	-	-	-	12.8%
Allied World Assurance Holdings	81.0%	-	7.1%	-	-	12.0%
Allstate	80.7%	0.2%	8.7%	8.1%	1.5%	0.9%
Arch Capital Group	89.2%	-	-	0.1%	-	10.7%
Axis Capital Holdings	88.7%	-	2.6%	0.1%	-	8.6%
Chubb	86.1%	-	4.9%	6.8%	-	2.1%
CNA Financial	88.8%	0.8%	0.1%	6.1%	0.8%	3.4%
Endurance Specialty Holdings	87.9%	-	-	-	-	12.1%
Everest Re Group	80.3%	0.2%	0.4%	7.0%	-	12.1%
Hanover	90.3%	0.3%	6.8%	1.9%	0.1%	0.7%
HCC Insurance Holdings	94.8%	-	-	-	-	5.2%
Infinity Property and Casualty	92.1%	-	3.4%	-	-	4.5%
Markel	66.1%	-	27.2%	0.1%	-	6.6%
Mercury General	77.4%	0.2%	12.9%	0.8%	-	8.7%
Montpelier Re Holdings	94.3%	0.7%	0.7%	1.5%	-	2.8%
Platinum Underwriters Holdings	82.0%	-	-	-	18.0%	-
Progressive	72.9%	1.6%	12.3%	0.0%	-	13.2%
The Travelers Companies	92.3%	0.2%	0.6%	4.3%	0.1%	2.5%
Validus Holdings	86.1%	-	-	13.9%	-	-
W.R. Berkley Corporation	79.4%	1.4%	4.7%	5.2%	1.5%	1.9%
Mean	84.9%	0.3%	4.6%	2.8%	1.1%	6.0%
Median	86.7%	0.0%	1.7%	0.5%	0.0%	4.9%

Maturities profile of bonds

Annuities vs P&C insurers



	< 1 year	1 - 5 years	5 - 10 years	10 - 20 years	20+ years
Annuity					
Protective Life	5.8%	18.8%	28.8%	10.2%	36.5%
Conseco	4.0%	16.9%	27.1%	14.0%	38.0%
Symetra	6.4%	26.4%	39.1%	15.0%	13.1%
FBL Financial (a)	7.6%	22.2%	31.3%	18.9%	20.0%
American Equity Investment Life	3.4%	8.2%	19.8%	27.1%	41.5%
National Western Life	10.4%	34.9%	49.0%	5.7%	0.1%
Citizens	0.9%	6.8%	17.4%	58.8%	16.2%
Kansas City Life	8.0%	31.2%	40.9%	14.3%	5.6%
Presidential Life	7.1%	23.7%	32.1%	26.5%	10.6%
Mean	6.0%	21.0%	31.7%	21.2%	20.2%
Median	6.4%	22.2%	31.3%	15.0%	16.2%
P&C					
ACE Limited	16.7%	39.5%	30.4%	8.4%	5.1%
Allied World Assurance Holdings	17.2%	71.9%	9.2%	1.4%	0.4%
Allstate	7.6%	43.0%	31.2%	14.0%	4.2%
Arch Capital Group	11.7%	56.0%	30.1%	2.2%	0.1%
Axis Capital Holdings	15.8%	49.9%	29.1%	2.8%	2.4%
Chubb	10.6%	37.9%	28.9%	18.9%	3.8%
CNA Financial	7.9%	34.3%	22.7%	14.2%	20.9%
Endurance Specialty Holdings	24.6%	60.4%	11.9%	2.2%	1.0%
Everest Re Group	17.8%	56.6%	14.3%	5.2%	6.1%
Hanover	11.4%	37.3%	37.5%	10.5%	3.3%
HCC Insurance Holdings	13.0%	41.3%	31.4%	9.6%	4.6%
Infinity Property and Casualty	14.3%	46.6%	20.0%	6.2%	12.9%
Markel	12.6%	48.5%	32.5%	6.4%	0.0%
Mercury General	21.4%	40.8%	24.2%	11.2%	2.5%
Montpelier Re Holdings	NA	NA	NA	NA	NA
Platinum Underwriters Holdings	NA	NA	NA	NA	NA
Progressive	17.6%	70.4%	10.7%	0.9%	0.4%
The Travelers Companies	11.3%	34.4%	30.6%	22.2%	1.6%
Validus Holdings	NA	NA	NA	NA	NA
W.R. Berkley Corporation	19.5%	36.9%	26.5%	11.8%	5.4%
Mean	14.8%	47.4%	24.8%	8.7%	4.4%
Median	14.3%	43.0%	28.9%	8.4%	3.3%

Additional detail on P&C risks by product line



Different lines of P&C businesses generate varying levels of ultimate losses per dollar of premium earned; the level of volatility also varies

On this page, we have assigned frequency and severity scores to various P&C business lines

Frequency business entails insurance that is characterized by contracts containing a potential large number of smaller losses emanating from multiple events (e.g., auto, workers comp., etc.)

Severity business entails insurance that is characterized by contracts containing the potential for significant losses emanating from one event (e.g., aircraft insurance, marine insurance, etc.)

Historical incurred losses by product line (% of premiums earned)

	2010	2009	2008	2007	2006	5 year average	Frequency	Severity
Private passenger auto liability	66.6	66.7	64.4	62.8	58.8	63.9		
Auto physical damage	58.5	57.8	60.4	57.6	55.3	57.9		
Homeowners	66.0	64.9	74.4	55.1	50.0	62.3		
Workers' Comp	72.1	69.4	62.4	62.7	61.7	65.1		
Commercial multi peril	51.9	48.3	56.2	43.5	45.0	48.9		
Commerical auto liability	53.9	54.9	54.3	52.6	53.7	53.8		
Allied lines	54.5	52.9	79.2	38.2	57.0	57.0		
Fire	42.0	41.3	56.6	47.8	42.1	46.0		
Medical professional liability	32.5	35.5	32.7	37.1	42.7	36.3		
Aircraft	63.6	65.1	66.9	52.6	52.2	60.1		
Marine	55.8	55.1	64.6	57.1	53.4	57.2		

Source: 2011 Best's Quantitative Analysis Report, SNL, DB estimates

