Arch

Investor Presentation

Wells Fargo

December 8, 2017

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Forward looking statements can generally be identified by the use of forward looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue" or their negative or variations or similar terminology. Forward looking statements involve our current assessment of risks and uncertainties. Actual events and results may differ materially from those expressed or implied in these statements. A non-exclusive list of the important factors that could cause actual results to differ materially from those in such forward-looking statements includes the following: adverse general economic and market conditions; increased competition; pricing and policy term trends; fluctuations in the actions of rating agencies and our ability to maintain and improve our ratings; investment performance; the loss of key personnel; the adequacy of our loss reserves, severity and/or frequency of losses, greater than expected loss ratios and adverse development on claim and/or claim expense liabilities; greater frequency or severity of unpredictable natural and man-made catastrophic events; the impact of acts of terrorism and acts of war; changes in regulations and/or tax laws in the United States or elsewhere; our ability to successfully integrate, establish and maintain operating procedures as well as integrate the businesses we have acquired or may acquire into the existing operations; changes in accounting principles or policies; material differences between actual and expected assessments for guaranty funds and mandatory pooling arrangements; availability and cost to us of reinsurance to manage our gross and net exposures; the failure of others to meet their obligations to us; and other factors identified in our filings with the U.S. Securities and Exchange Commission.

The foregoing review of important factors should not be construed as exhaustive and should be read in conjunction with other cautionary statements that are included herein or elsewhere. All subsequent written and oral forward looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. We undertake no obligation to publicly update or revise any forward looking statement, whether as a result of new information, future events or otherwise.

Some non-GAAP measures of financial performance also may be referred to during this presentation. The reconciliation to GAAP and definition of operating income can be found in the Current Report on Form 8-K furnished to the SEC by Arch Capital Group Ltd. (the "Company") in connection with its most recent earnings press release, and is also available on the Company's website: www.archcapgroup.com. From time to time, the Company posts additional financial information and presentations to its website, including information with respect to its subsidiaries, and investors and other recipients of this information are encouraged to check the website.

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Creating Shareholder Value

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Generate superior risk adjusted returns

- Thorough risk assessment of underlying exposures
- Align executive compensation with long term performance
- Efficient capital management

Focus on underwriting

- Talent intensive, not people intensive
- Specialty lines platforms
- Active cycle management

Conservative balance sheet

- Minimize investment risk
- Cautious reserving philosophy
- Low financial leverage and strong liquidity

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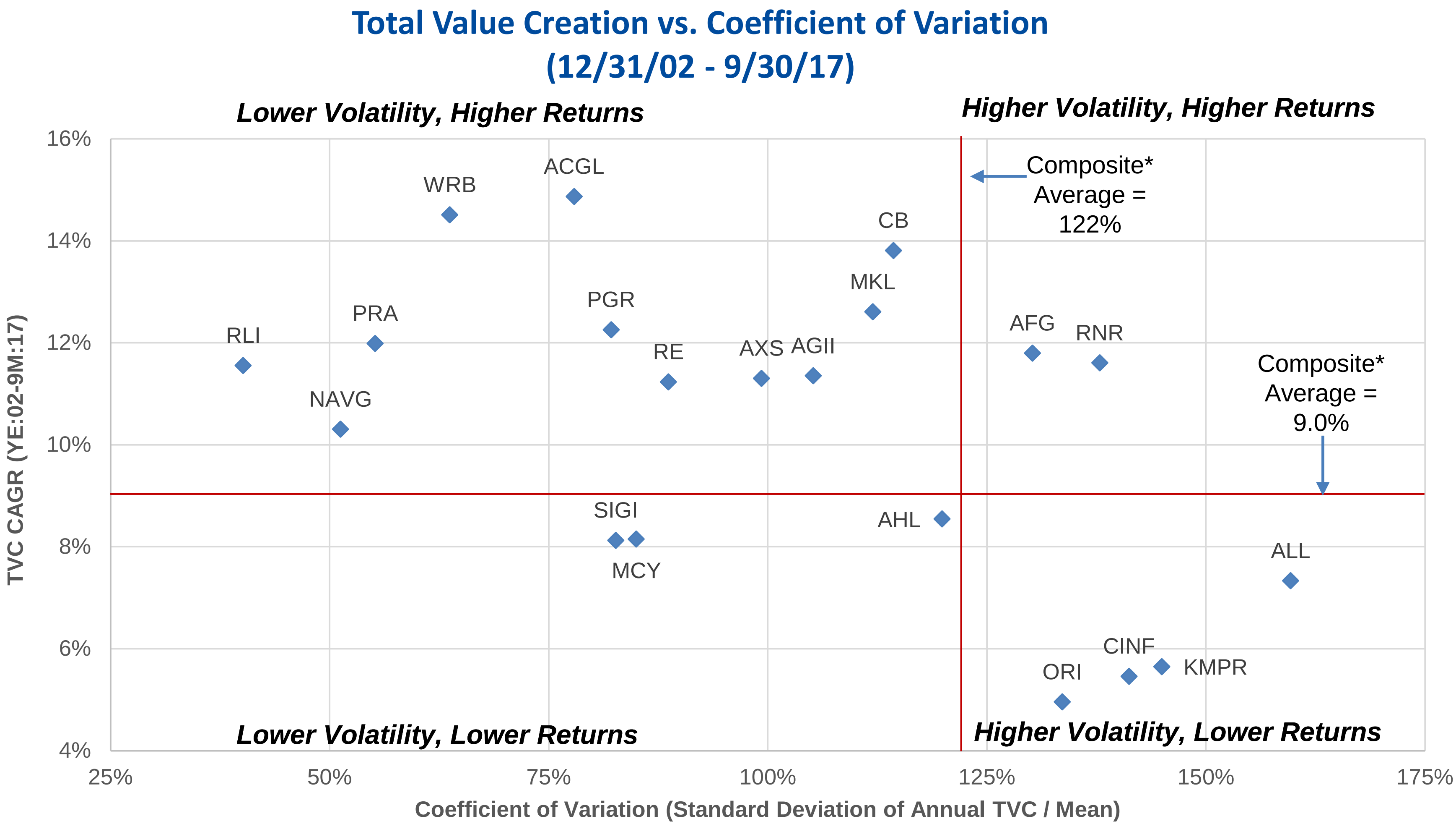
Total Value Creation



Source: Dowling & Partners Analysis
Excludes Fairfax (8.2%, 211%), Hanover (5.0%, 214%), Hartford (3.6%, 331%), XL (2.2%, 400%) & CNA (2.9%, 411%) as coefficient of variation exceeds 200%; TVC is tangible book value per share growth plus accumulated dividends.
* Dowling's P&C Industry Composite of 33 Companies

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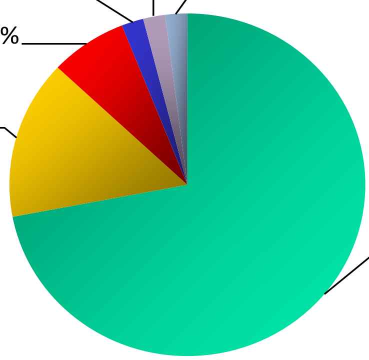
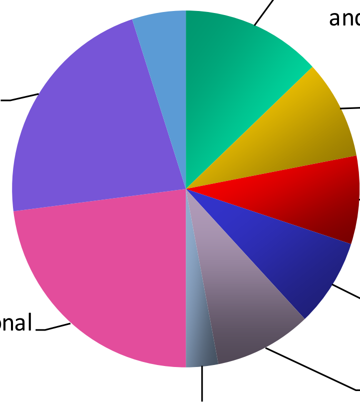
Specialty (Re)insurance Business Mix

- **Trailing Twelve Months Ended September 30, 2017**
  - Gross premiums written – 52% insurance, 28% reinsurance, 20% mortgage
  - Net premiums written – 50% insurance, 28% reinsurance, 22% mortgage
  - Flexible business mix well-positioned to manage through the P&C cycle

Client Location[1]



Line of Business[1]



Gross premiums written:	$5.82Bn
Net premiums written:	$4.18Bn

[1] Based on net premiums written, excluding amounts attributable to the 'other' segment (Watford)
[2] Includes casualty, professional liability, executive assurance, healthcare, contract binding, and excess motor
[3] Includes insurance for lenders products, alternative markets, and other insurance and reinsurance
[4] Includes reinsurance for proportional motor, trade credit, surety, workers' compensation catastrophe, and other

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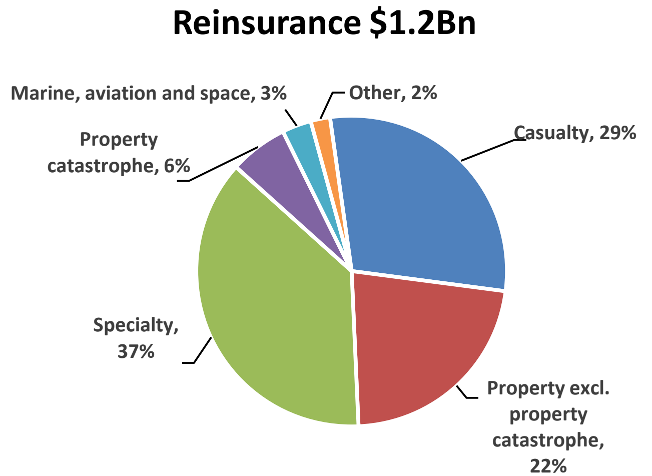
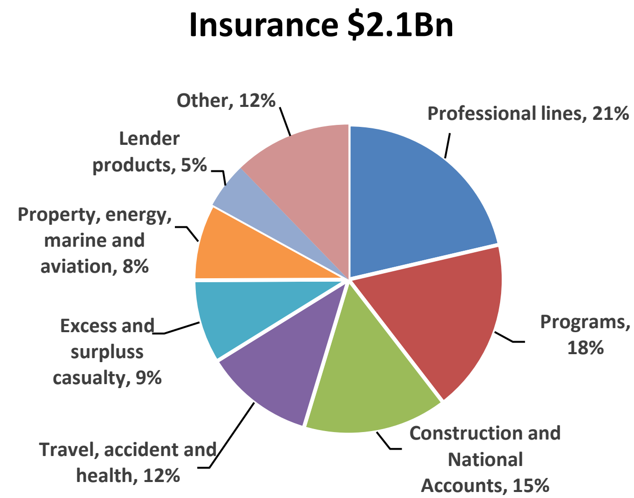
Property Casualty Segments

- **Strong Underwriting and Risk Management Culture**
  - Talent intensive platform creates resiliency through market cycle
  - Manage the cycle by linking premium writings to those lines with better expected returns
  - Diversified by line of business and geography
  - In primary insurance, focus on smaller risks and low limit business produces more predictable and less volatile results over time
  - Centralized underwriting decisions in reinsurance limit risk aggregations
- **Innovation and Opportunism**
  - Early Investment in Controlling Businesses like National Accounts, Construction, Alt Markets, Surety
  - 27% of our 2016 Insurance GWP comes from new product and distribution initiatives commencing in 2009 or later
  - Early adopter of sidecar (Flatiron) and ILS to manage exposures
  - Investor in next generation reinsurer, Watford Re and run-off company, Premia Re

Net Premiums Written

Year Ended September 30, 2017





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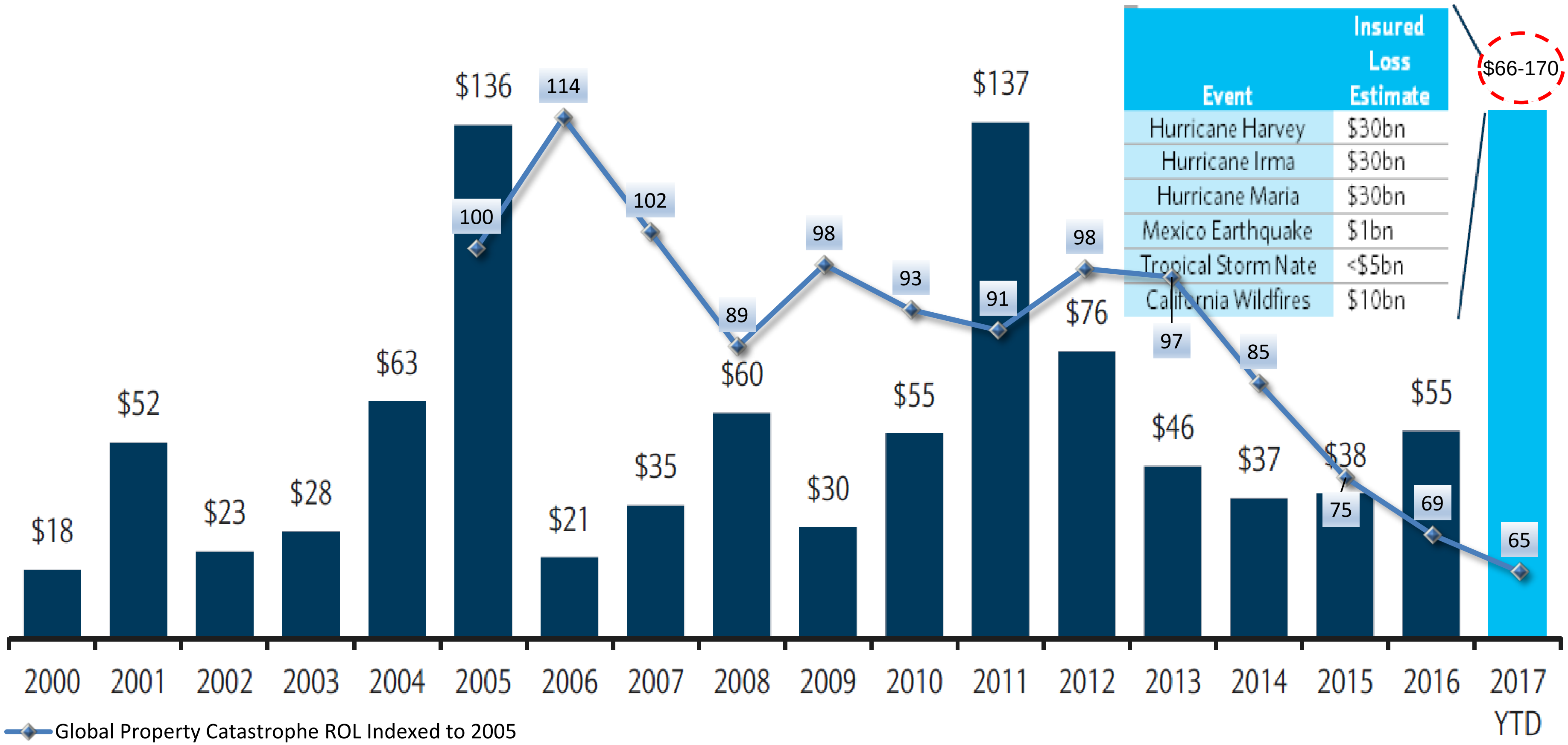
2017 Among Top 3 Years For Global Insured Losses

Annual Global Insured Catastrophe Losses Vs. Global Property Catastrophe Reinsurance Pricing ($Bn)



Event	Insured Loss Estimate
Hurricane Harvey	$30bn
Hurricane Irma	$30bn
Hurricane Maria	$30bn
Mexico Earthquake	$1bn
Tropical Storm Nate	<$5bn
California Wildfires	$10bn

Source: Catastrophe losses from Swiss Re Institute, RMS, Barclays Research Estimates. Note: Includes inflation-adjusted insured losses from natural catastrophe and man-made disasters. 2017 YTD is Barclays Research Estimate. Global Property Catastrophe Rate On Line (ROL) is from JLT Re.

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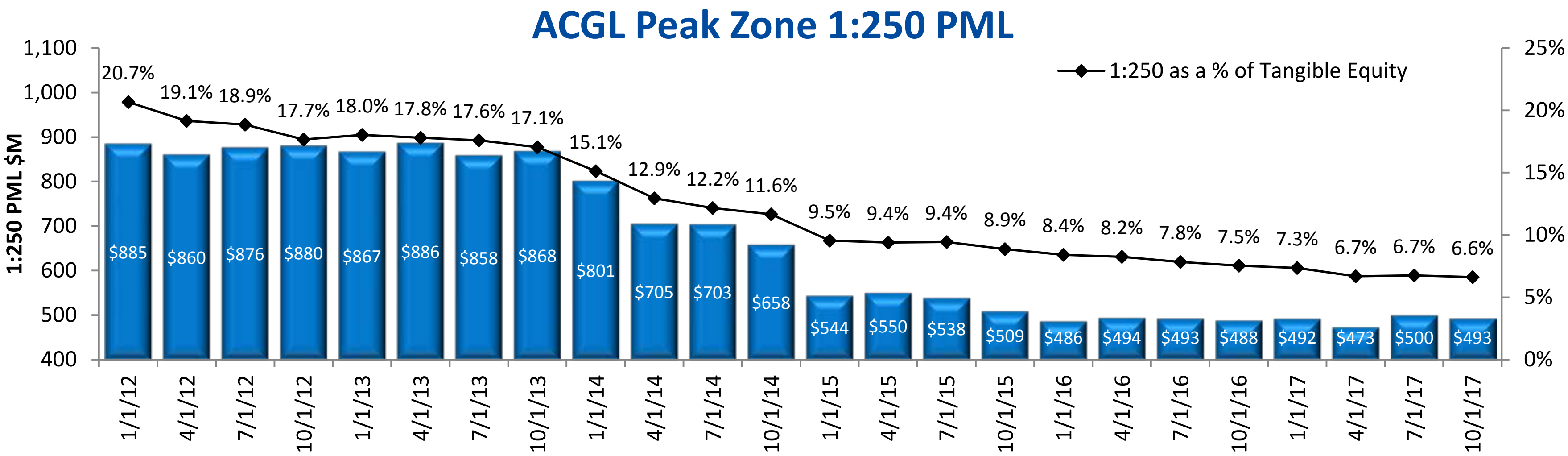
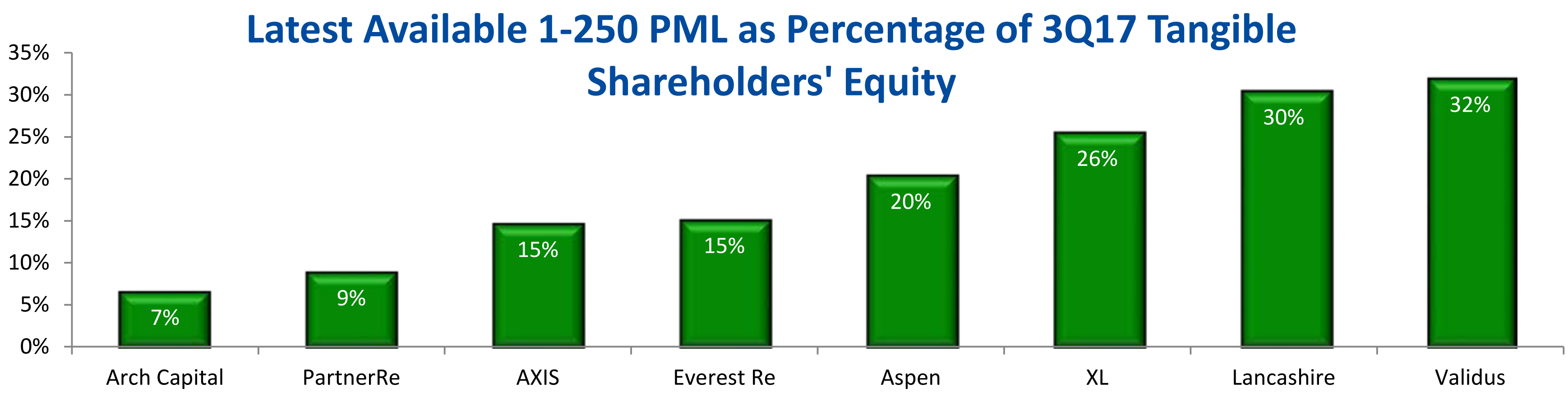
Catastrophe Risk - 1:250 Year Peak Zone





Source: Dowling and Partners Analysis; Company Reports; Latest Available PML ($) as Percentage of 3Q S/E; *Everest's 1/1/16 stated PMLS were impacted by the timing of ILW purchases = PMLs were reduced mid-year. Aspen's PML is as of 7/1/17. PartnerRe's exposure is shown as a percentage of 2Q17 TSE.

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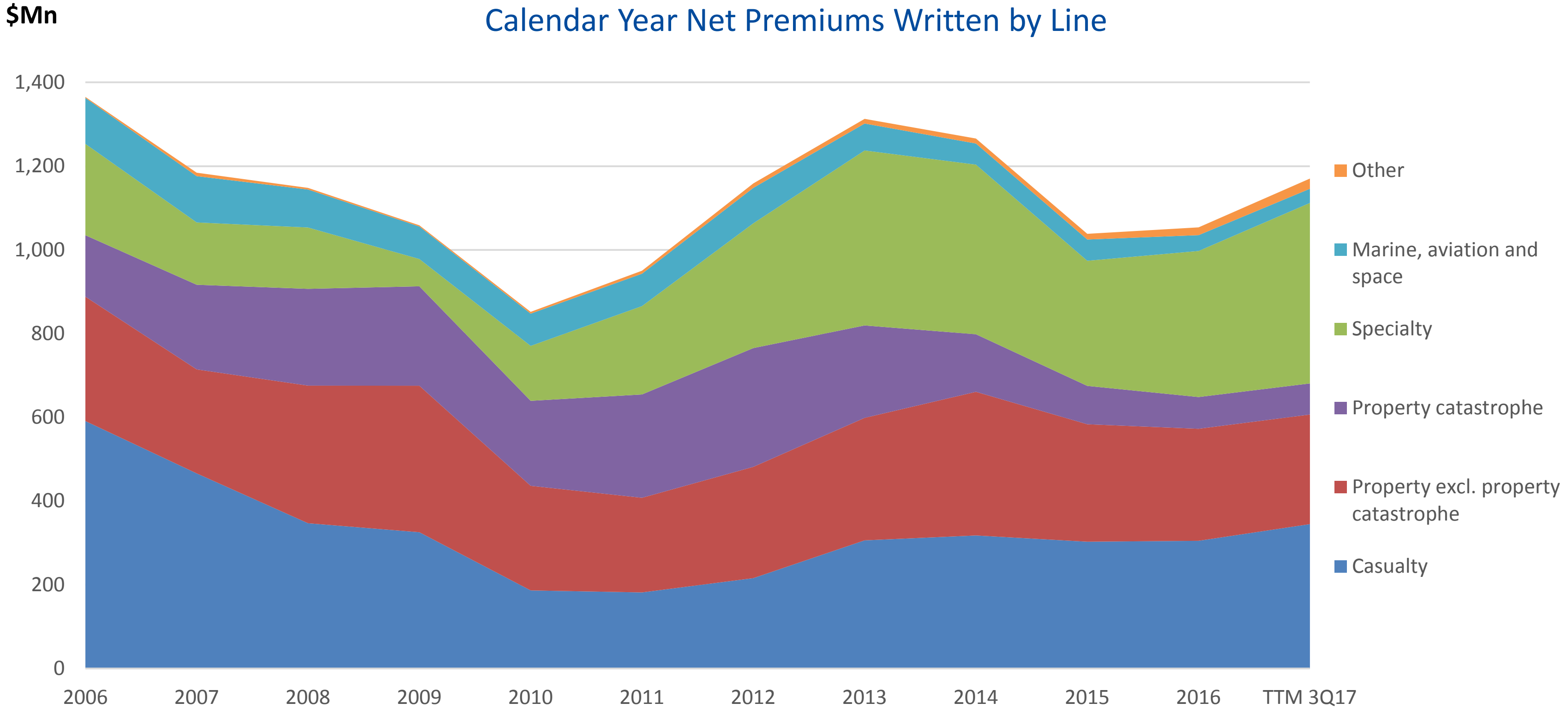
Reinsurance Segment

Calendar Year Net Premiums Written by Line



- **Casualty**: provides coverage to ceding company clients on third party liability and workers' compensation exposures from ceding company clients, primarily on a treaty basis. Exposures include, among others, executive assurance, professional liability, workers' compensation, excess and umbrella liability, excess motor and healthcare business
- **Property excluding property catastrophe**: provides coverage for both personal lines and commercial property exposures and principally covers buildings, structures, equipment and contents. The primary perils in this business include fire, explosion, collapse, riot, vandalism, wind, tornado, flood and earthquake. Business is assumed on both a proportional and excess of loss basis. In addition, facultative business is written which focuses on commercial property risks on an excess of loss basis.
- **Property catastrophe**: provides protection for most catastrophic losses that are covered in the underlying policies written by reinsureds, including hurricane, earthquake, flood, tornado, hail and fire, and coverage for other perils on a case-by-case basis. Property catastrophe reinsurance provides coverage on an excess of loss basis when aggregate losses and loss adjustment expense from a single occurrence of a covered peril exceed the retention specified in the contract.
- **Specialty**: provides coverage to ceding company clients for proportional motor and other lines including surety, accident and health, workers' compensation catastrophe, agriculture, trade credit and political risk.
- **Marine and aviation**: provides coverage for energy, hull, cargo, specie, liability and transit, and aviation business, including airline and general aviation risks. Business written may also include space business, which includes coverages for satellite assembly, launch and operation for commercial space programs.
- **Other**. includes life reinsurance business on both a proportional and non-proportional basis, casualty clash business and, in limited instances, non-traditional business which is intended to provide insurers with risk management solutions that complement traditional reinsurance.

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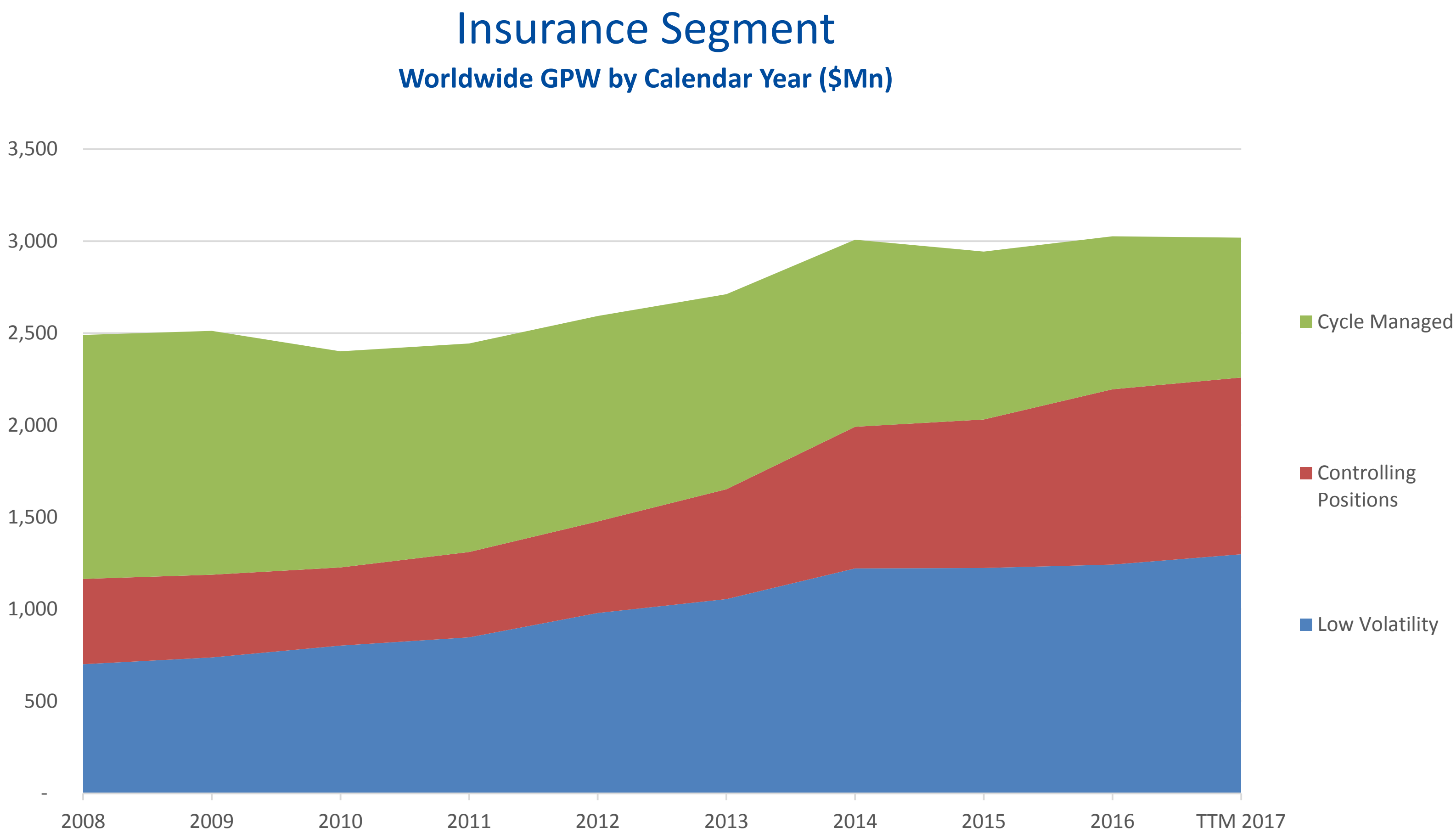
Cycle Management



Low Volatility includes Programs, A&H, Travel, Contract Binding. **Controlling Positions** includes Construction, Alt Markets, National Accts, Surety. **Cycle Managed** includes Property, Marine, Offshore, Casualty, High Capacity EA, Onshore Energy, Med Mal.

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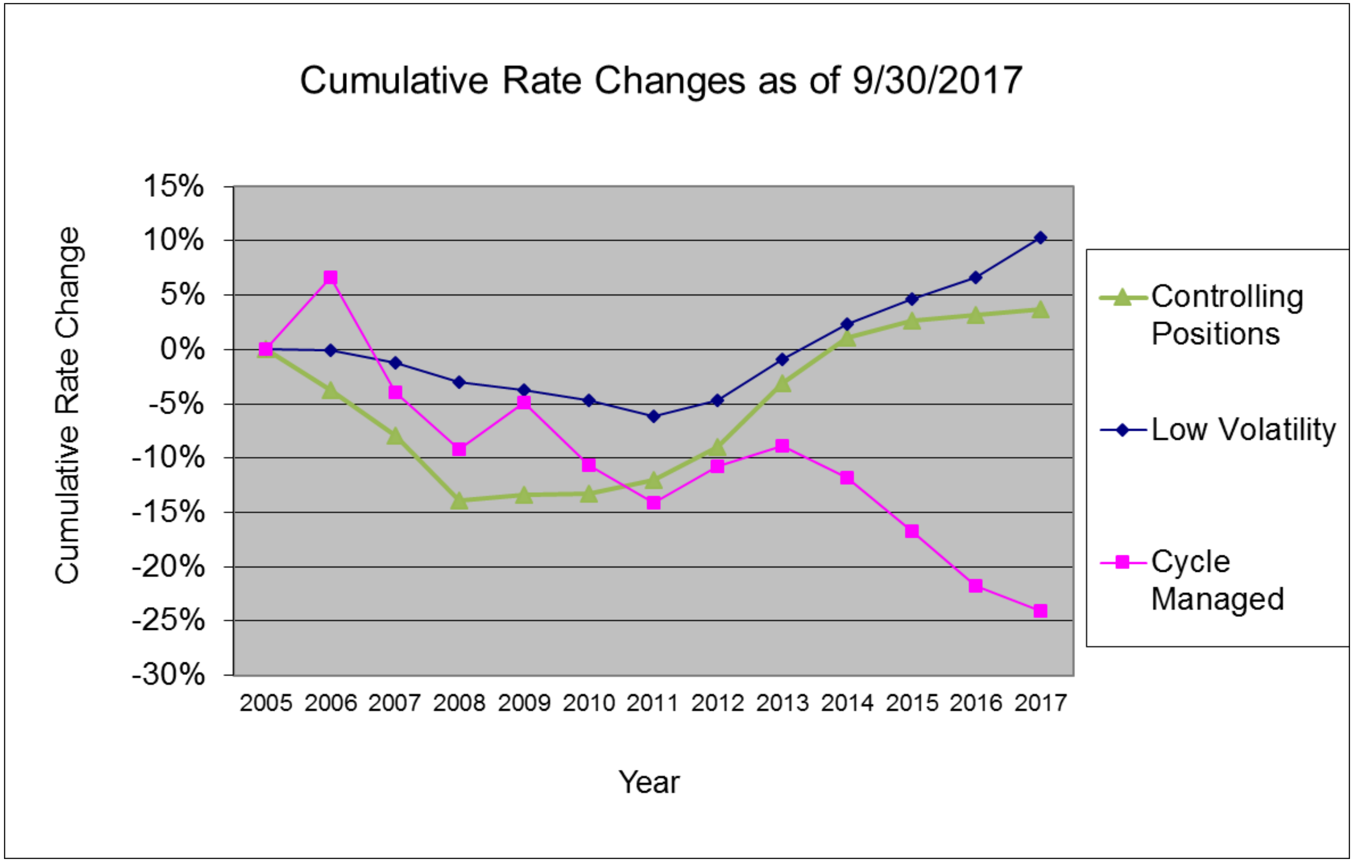
Insurance Segment Rate Changes



Annual Rate Changes			
Year	Low Volatility	Controlling Positions	Cycle Managed
2005	Base	Base	Base
2006	-0.1%	-3.7%	6.6%
2007	-1.1%	-4.4%	-9.9%
2008	-1.8%	-6.5%	-5.4%
2009	-0.8%	0.7%	4.7%
2010	-1.0%	0.1%	-6.1%
2011	-1.5%	1.4%	-3.8%
2012	1.6%	3.5%	3.8%
2013	3.9%	6.4%	2.2%
2014	3.3%	4.3%	-3.2%
2015	2.3%	1.6%	-5.6%
2016	1.9%	0.5%	-6.1%
2017	3.4%	0.5%	-2.9%

Low Volatility includes Programs, A&H, Travel, Contract Binding. **Controlling Positions** includes Construction, Alt Markets, National Accts, Surety. **Cycle Managed** includes Property, Marine, Offshore, Casualty, High Capacity EA, Onshore Energy, Med Mal.

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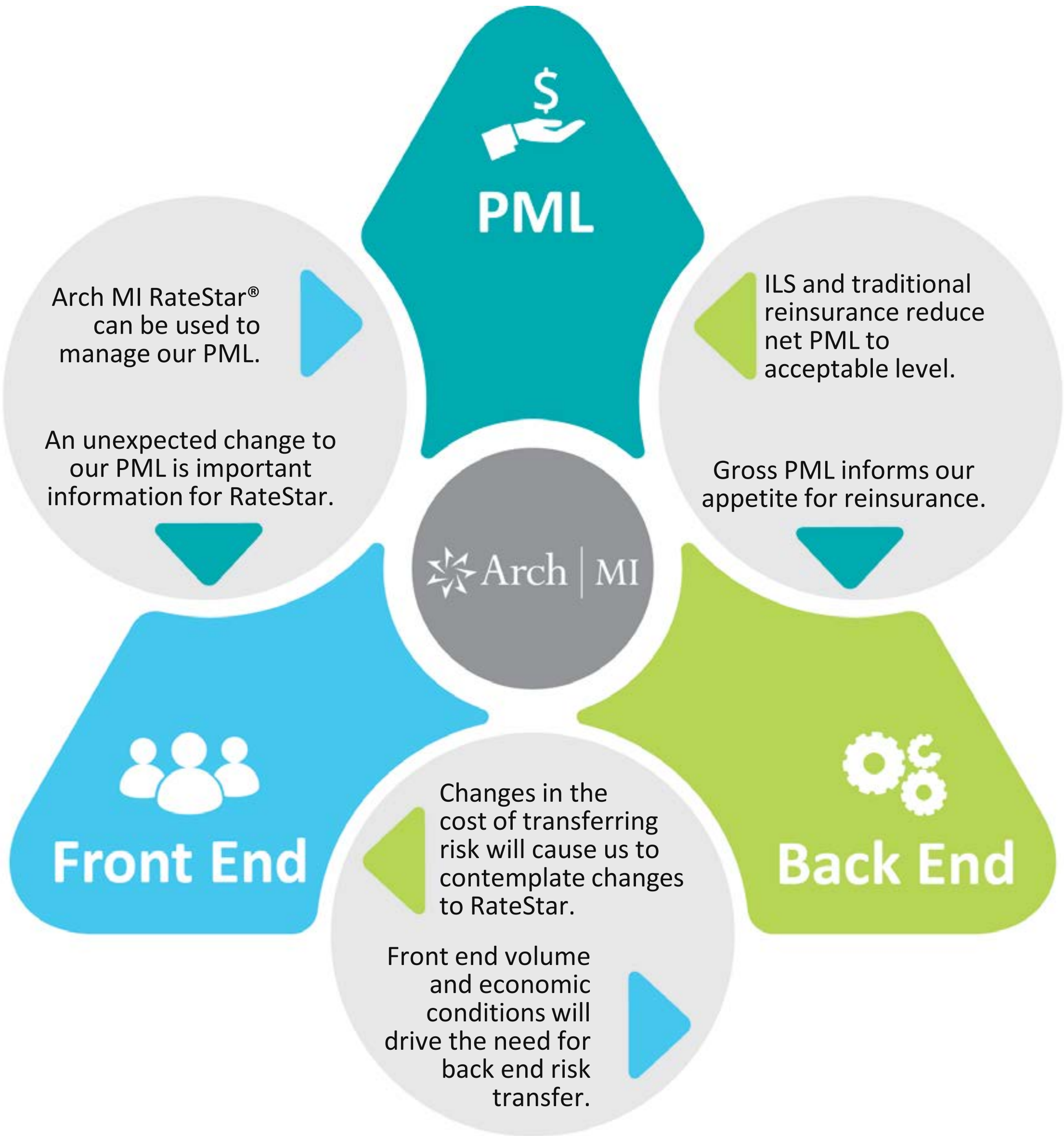
Differentiated Business Model

- The Arch model aggregates risk from diversified sources and then maintain a variety of options for syndicating risk on the back end.
- Arch's differentiated business model is sustainable through the economic cycle and positions Arch to deliver consistent, attractive returns to our shareholders



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Mortgage Earnings Growth

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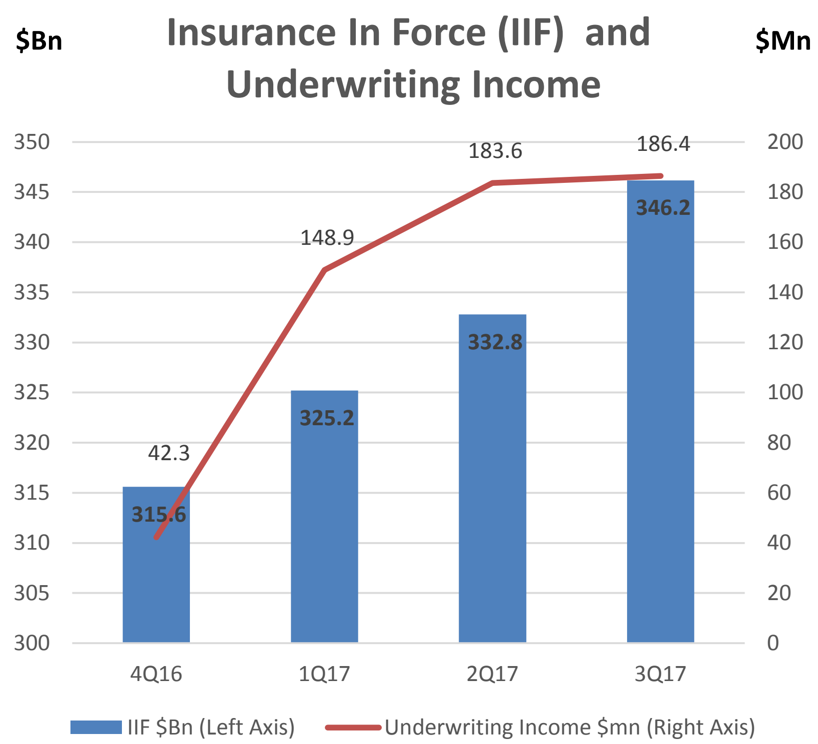
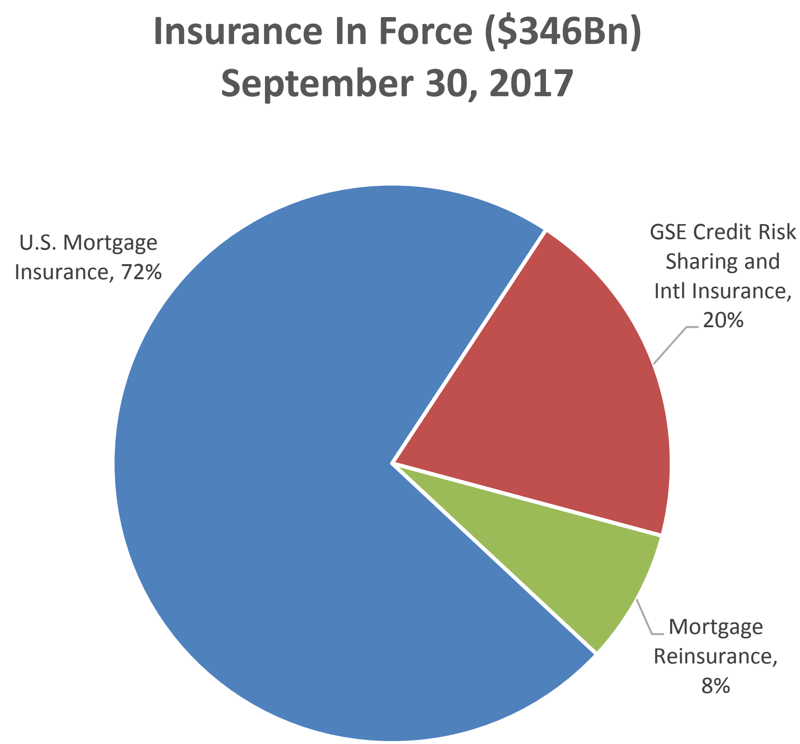
- **Arch is building a portfolio of diversified mortgage businesses**
- **Mortgage Insurance business provides a recurring, multi-year revenue stream**





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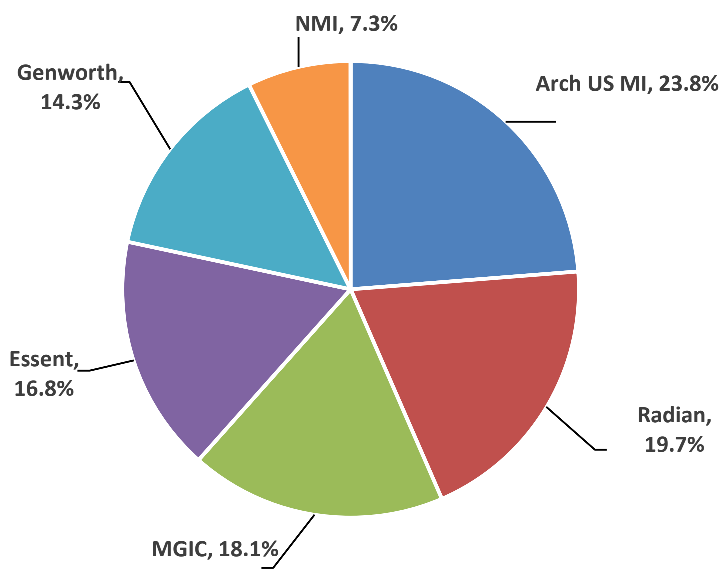
Significant Market Share And Improved Expense Ratio

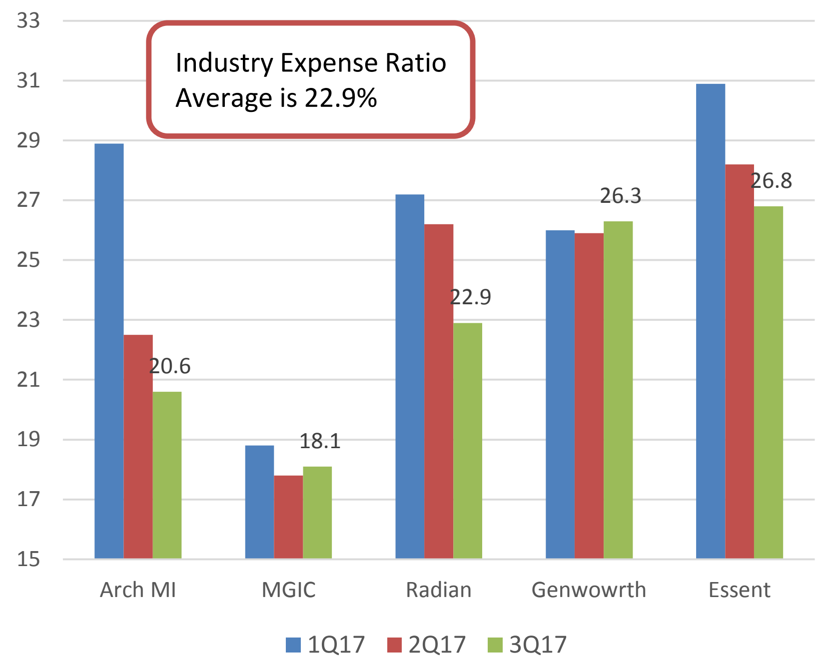
- **Arch MI is the US Market Share Leader**

Mortgage Insurance Market Share 9M17



- **Arch MI Expense Ratio is Declining and Below The Industry's Average**

GAAP Expense Ratio (%) Comparison



While Arch MI benefits from economies of scale, Arch spends more on analytics and risk management transactions of "tail" risk

Sources: Company reports and competitors' 8-K filings

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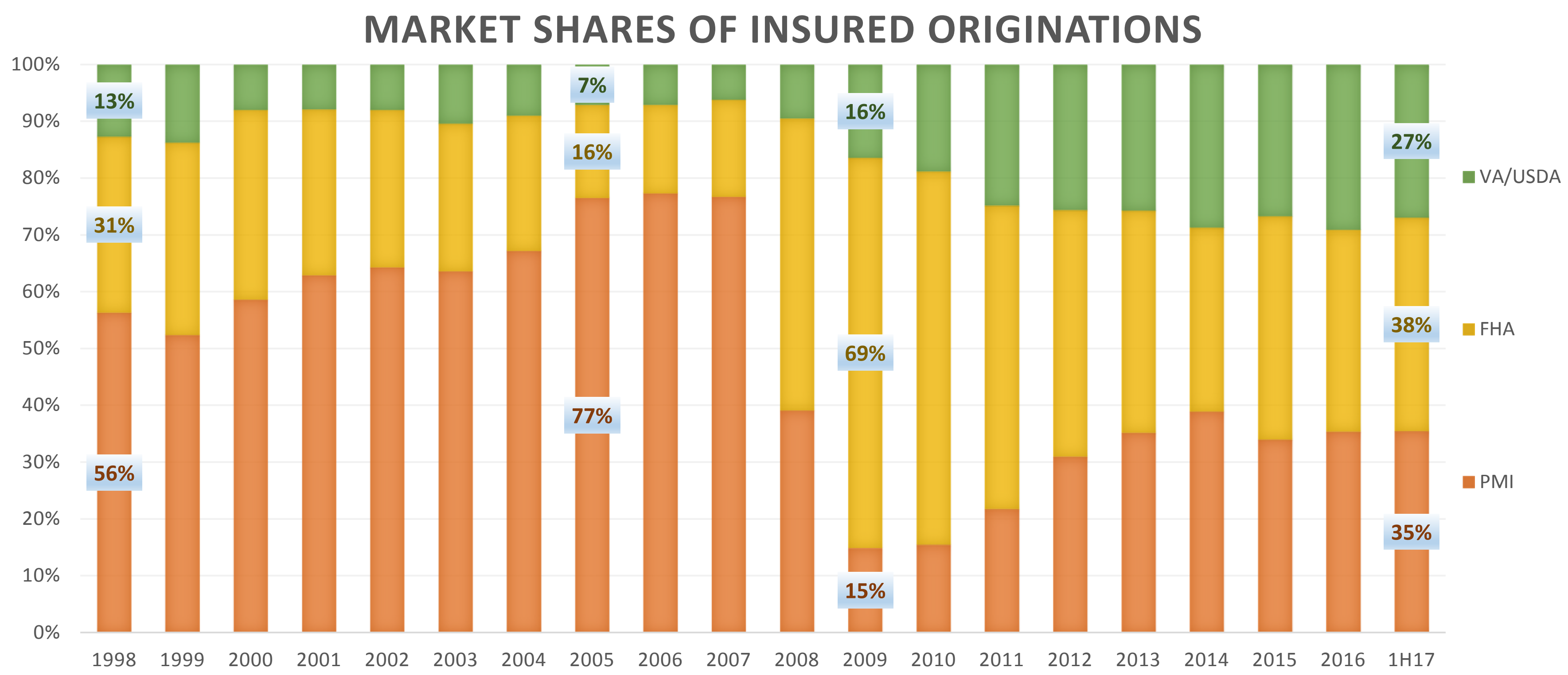
US Primary Mortgage Insurance Industry

- **Government MI programs (FHA + VA + USDA) share of the insured mortgage market has declined significantly since 2010**



Source: Inside Mortgage Finance

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Arch US MI – Maintaining Underwriting Discipline

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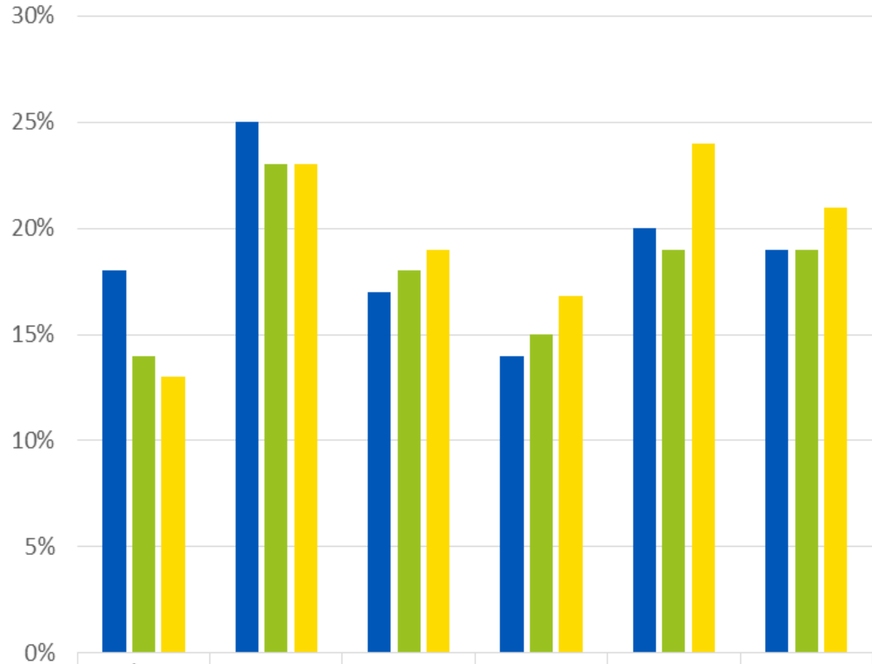
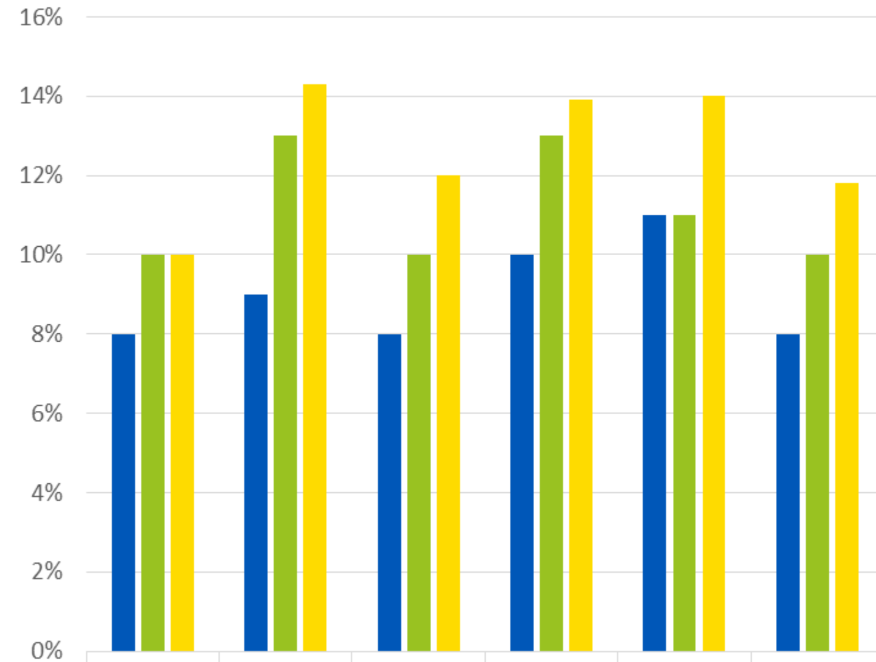
Single Premium Policies as % of Total NIW



	Arch U.S. MI	Radian	MGIC	Essent	Genworth	NMI
1Q17	18%	25%	17%	14%	20%	19%
2Q17	14%	23%	18%	15%	19%	19%
3Q17	13%	23%	19%	17%	24%	21%

LTV > 95% as % of Total NIW



	Arch U.S. MI	Radian	MGIC	Essent	Genworth	NMI
1Q17	8%	9%	8%	10%	11%	8%
2Q17	10%	13%	10%	13%	11%	10%
3Q17	10%	14%	12%	14%	14%	12%

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Arch MI US - Delinquency Rate Improving

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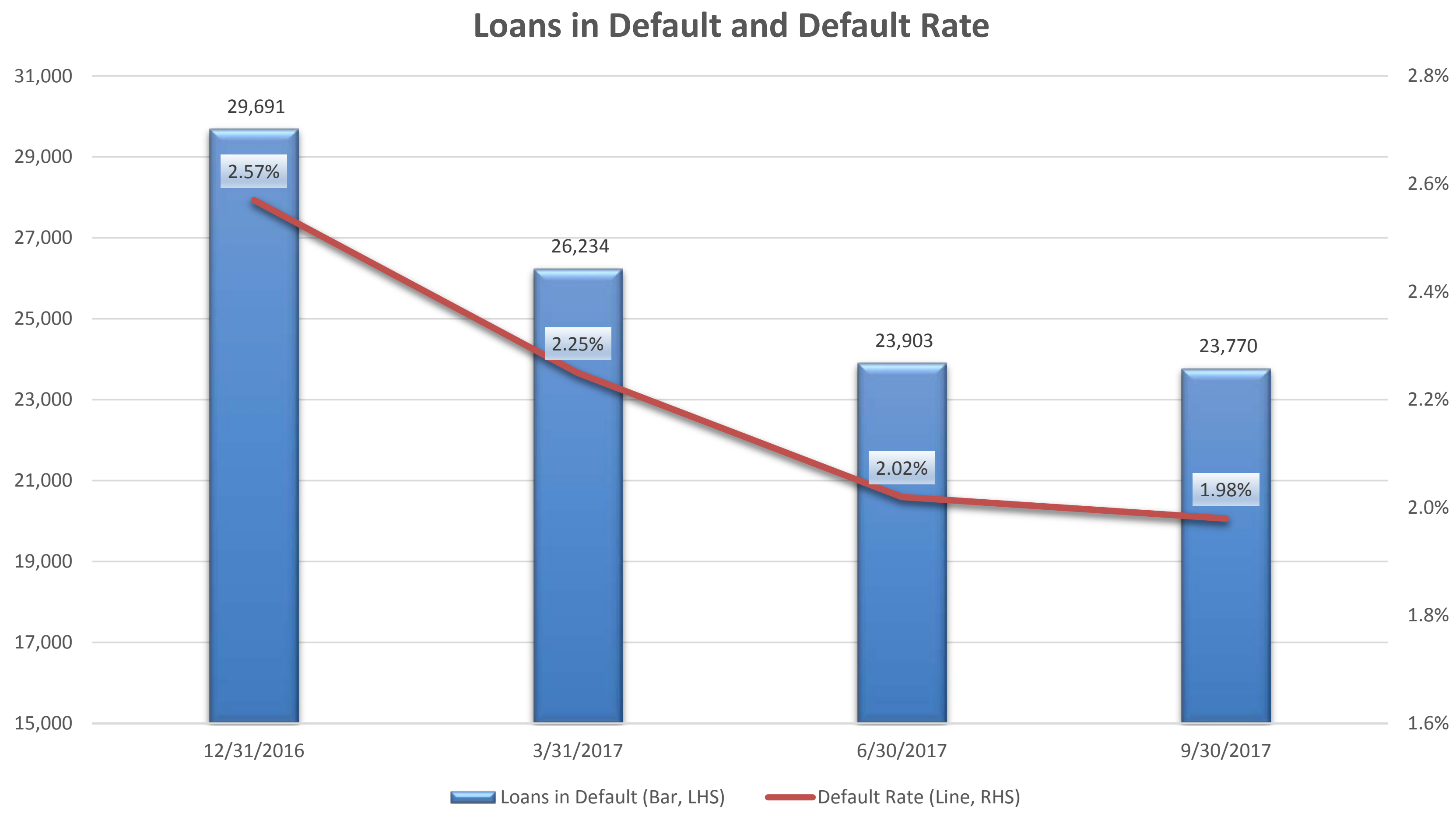
- **Number and proportion of loans in default continues to decline as mortgages originated before 2009 run-off**



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Credit Risk Transfer (CRT)

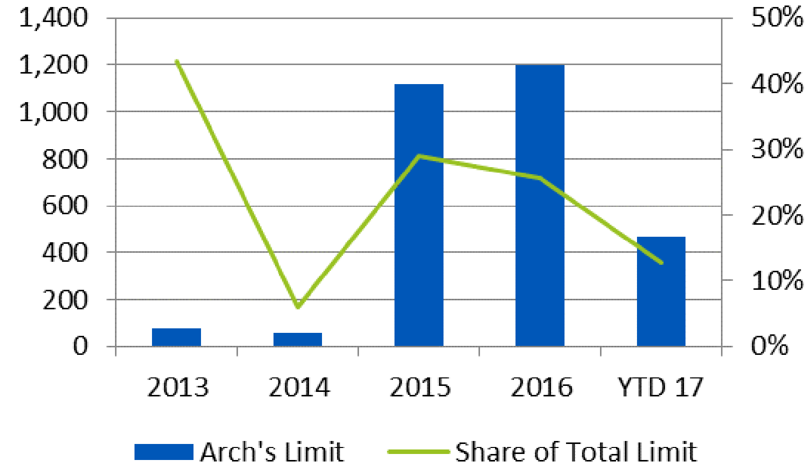
($Mn)	2015	2016	YTD 17
Gross Premiums Written	**9**	**56**	**53**
Net Premiums Earned	9	56	53
Fee Income	18	16	11
Loss and Loss Adjustment Expenses	1	10	11
Underwriting Expenses	1	3	2
Underwriting Income	**25**	**59**	**51**
New Insurance Written	1,119	1,200	467
Insurance In Force	N/A	2,452	2,450

Excludes Watford Re

Observations

- GSEs have increased the amount of limit insured through CRT, but the number of insurance participants has also increased
  - Arch was one of two participants on the first CRTs placed in 2013
  - As many as 17 companies have participated in recent CRTs
- GSEs have begun executing CRTs that are commitments to insure loans that the GSEs will acquire in the future

Arch Limit and Share of CRT Deals



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"Best in Class" Management of Tail Risk

- **Upfront risk management through risk based pricing (Ratestar)**
  - Consists of 1.3Mn unique rates and adjustments across 17 risk dimensions
  - Reflects differences in economic conditions and can be updated in most states without need to re-file
  - Rate adjustments (i.e. surcharges) have the same level of granularity as base rates
    - Surcharges under rate cards do not vary by LTV or coverage percentage, potentially resulting in mispricing in the low and high LTV bands

- **Purchase reinsurance to mitigate stress losses and optimize capital**
  - Utilize Insurance Linked Securities (ILS) market through Bellemeade Re to mitigate stress losses and gain insight into capital market's perception of Mortgage's portfolio
  - Third party multi-line reinsurers

- **RDS approach facilitates understanding of Mortgage risk portfolio's losses in a severe stress**
  - Manage risk similar to short tail property cat and longer tail casualty clash risks
  - Limits maximum exposure to 25% of tangible equity
    - Current exposure is 15.7%

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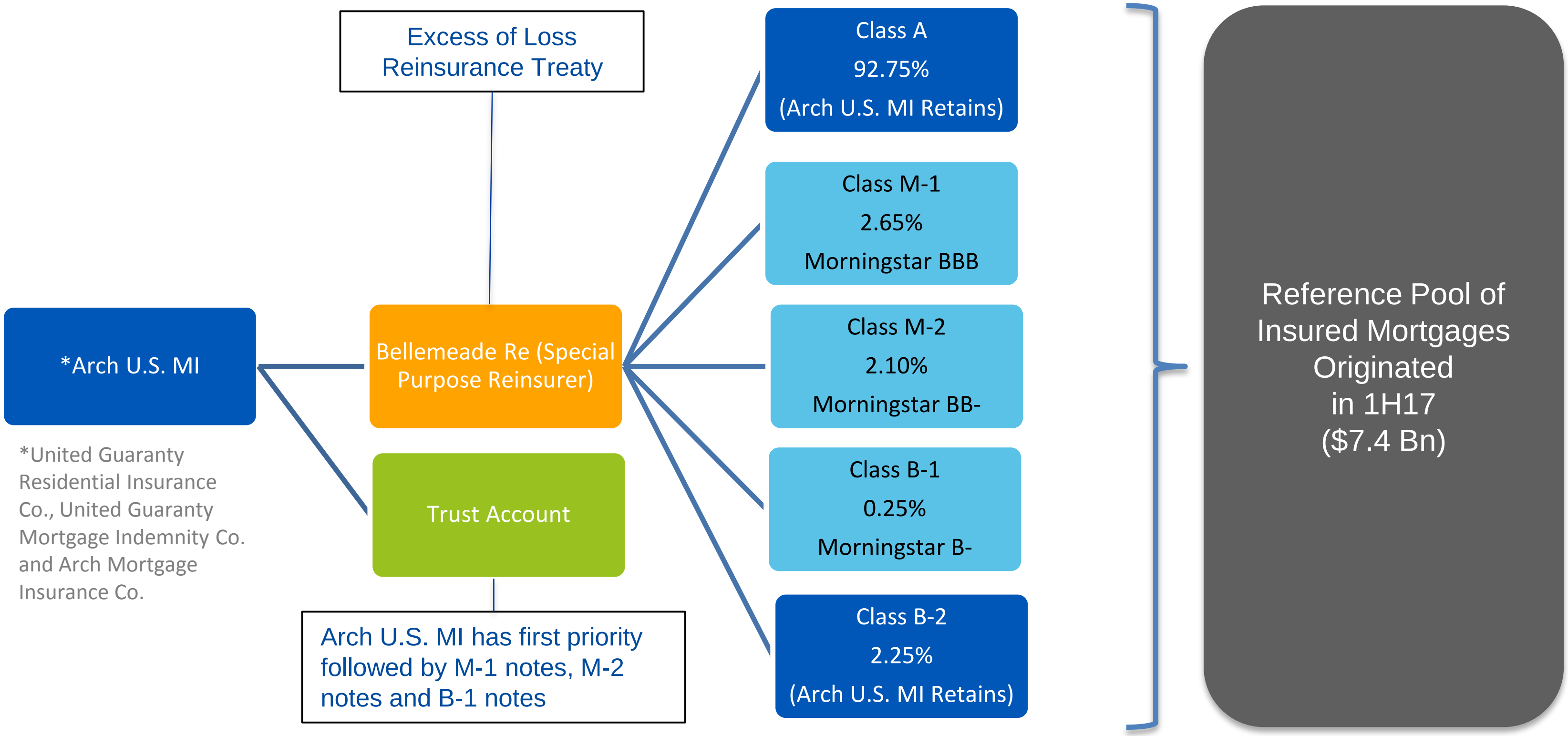
- **Bellemeade Re is a critical risk management tool for Arch's Mortgage segment**
  - Arch U.S. MI recently closed on Bellemeade Re 2017-1 Ltd (Bellemeade Re) which provides excess of loss protection on loans originated in 1H17
  - Bellemeade Re transactions also provide insight into the market's perception of our recent production
  - Bellemeade Re II demonstrated insurance linked securitizations can absorb a variety of risks including loans originated before 2009



*United Guaranty Residential Insurance Co., United Guaranty Mortgage Indemnity Co. and Arch Mortgage Insurance Co.

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Key Terms of Bellemeade Re 2017-1

Cedants	◆ United Guaranty Residential Insurance Co., United Guaranty Mortgage Indemnity Co. and Arch Mortgage Insurance Co.
Reinsurer	◆ Bellemeade Re 2017-1 Ltd. (Bellemeade Re), a special purpose reinsurer domiciled in Bermuda
Effective Date	◆ August 1, 2017
Maturity	◆ October 25, 2027
Coverage	◆ Bellemeade Re will reinsure cedants' RIF on loans originated between January 1, 2017 and July 1, 2017 that have never been delinquent or modified ◆ Bellemeade Re is responsible for all losses exceeding 2.25% of RIF subject to an initial limit of $368 million ◆ Reinsurance from Bellemeade Re will inure to the benefit of Arch Re Ltd
Allocation of Principal Repayments	◆ If the default rate is less than 5% and Class A's subordination is at least 7.25%, Class A's coverage will be reduced by its pro rata share of principal repayments on covered loans, and the remaining principal repayments on covered loans will be allocated to the most senior class with coverage remaining ◆ If the default rate is greater than 5% or Class A's subordination is less than 7.25%, all principal repayments on covered loans will be allocated to Class A (i.e., no amortization of bonds)
Allocation of Losses	◆ Covered losses are allocated sequentially to the most junior class with coverage remaining
Pricing	◆ Initial: M-1 (BBB rating by Morningstar): 170 basis points (bps), M-2 (BB-): 335 bps, B-1 (B+): 475 bps (weighted average: 307 bps)
Security	◆ Bellemeade Re will maintain a trust account with funds equal to the coverage it provides to the cedants ◆ Eligible investments for trust are money market funds that invest directly in U.S. Treasuries and agencies

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Diversified Platform Provides a Strong Base

- Arch operates leading property casualty and mortgage insurance businesses across a wide range of geographies and products providing meaningful diversification and stability of earnings
- Experienced underwriting teams compensated for long term performance
- Disciplined risk management and conservative reserving philosophy
- Strong balance sheet with high-quality investment portfolio
- Long-term track record of consistent financial performance and risk adjusted returns

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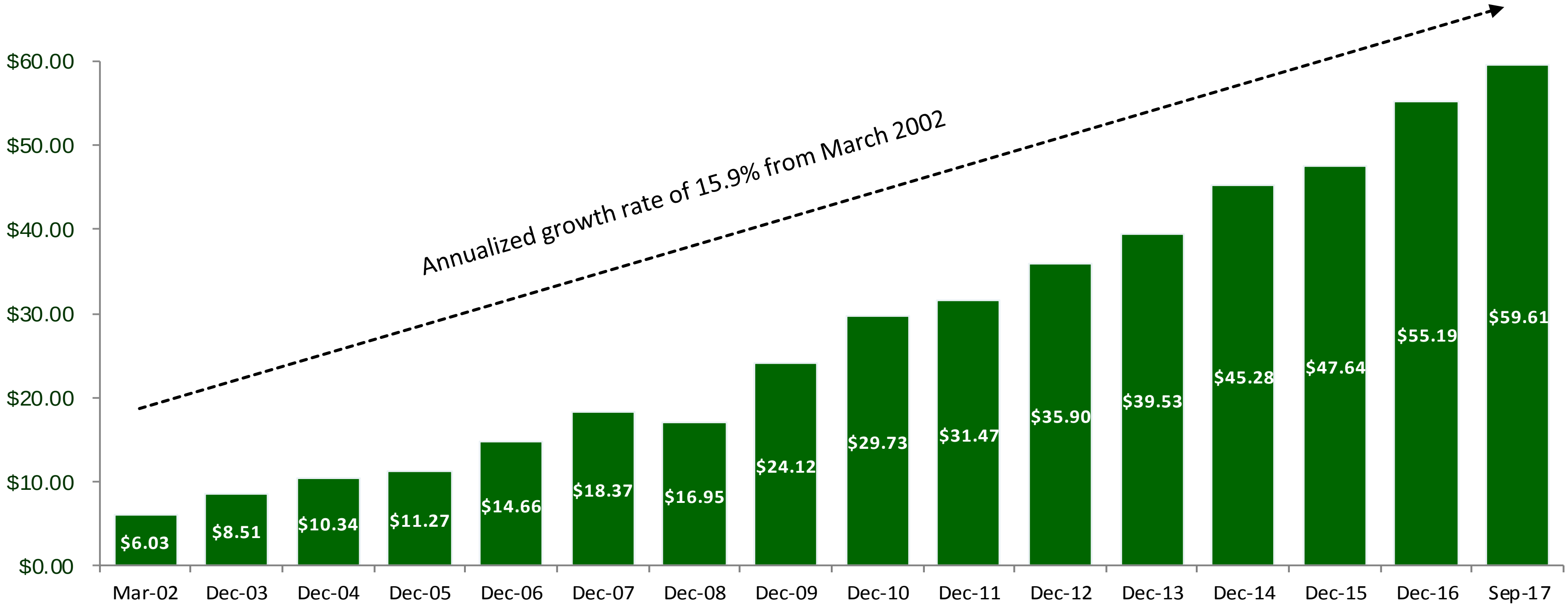
Financial Performance

Book value per common share[1]



Total Capitalization[2] ($Bn):	$1.0	$1.9	$2.5	$2.8	$3.9	$4.3	$3.8	$4.7	$4.9	$5.0	$5.6	$6.5	$7.0	$7.1	$10.5	11.0
Debt/Preferred to Total Capitalization[2]	0.0%	10.5%	11.8%	10.8%	7.7%	6.9%	10.4%	8.5%	8.2%	8.0%	7.2%	18.7%	17.3%	17.2%	28.7%	26.3%

[1] As of September 30, 2017, excluding the effects of stock options and restricted stock units outstanding

[2] Available to Arch, including senior debt, preferred equity, common stock and AOCI.

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History

Year	Time Line	Rating Agency[1]
2001	Arch Reinsurance Ltd. formed; first reinsurance bound	
2002	E&S underwriter Arch Specialty Insurance Company acquired	AM Best rates "A-"
2003	Surety book purchased; Arch Indemnity Insurance Company acquired	
2004	Specialty commercial lines in Europe and the U.K. started with approval of Arch Insurance Company Europe; raised $300 million in senior notes	S&P rates "A-" (senior notes "BBB-") Fitch rates "A-" (senior notes "BBB-")
2005	Arch Insurance received license in Canada	Moody's rates "A2"
2006	European operations expended into Zurich; Flatiron Re (sidecar) formed	AM Best upgrades to "A"
2007	Property Fac Re formed; purchased Wexford Underwriting Managers, a MGU of excess WC and employers liability; A&H underwriter Arch Re Denmark formed	S&P upgrades to "A"
2008	Joint venture with Gulf Investment Corp.; Arch Reinsurance Europe Underwriting Limited formed	
2009	Lloyd's Syndicate 2012 approved; Arch Re Europe's operations expand to life reinsurance; insurance D&O division expanded; recruited mortgage team	Fitch upgrades to "A+"
2010	Expansion of Accident & Health Group	S&P upgrades to "A+"
2011	Arch Mortgage Insurance Ltd. formed; expanding into global mortgage insurance and reinsurance	AM Best upgrades to "A+" Moody's upgrades to "A1"
2012	Credit & surety reinsurance purchased from Ariel Re	
2013	Arch Insurance Canada Ltd. formed; announced first insurance/reinsurance of Freddie Mac STACR transaction; raised $500 million in senior note	S&P rates senior notes "A-" Fitch rates senior notes "A-"
2014	Closed acquisition of CMG MI (renamed Arch Mortgage Insurance Company); Watford Re Ltd., Launched	S&P rates "BBB+" AM Best rates "A-"
2015	Arch Mortgage Guaranty begins operations	Moody's rates "A3"
2016	Acquired United Guaranty Corporation on December 31, 2016 making Arch MI the world's largest mortgage insurer.	Ratings under review
2017	Arch MI U.S. upgrade to A; Acquired AIG United Guaranty Insurance (Asia) Limited	S&P upgrades to "A"

Financial Results Along the Way

	Mar-31-02	Sep-30-17	CAGR[4]
BVPS[2]:	$6.03	$59.61	15.9%
Total capital[3]:	$1.0bn	$11.0bn	

[1] Financial Strength Ratings unless otherwise noted
[2] Excludes the effects of stock options and restricted stock units outstanding
[3] Includes senior debt, preferred equity, and common stock (including AOCI)
[4] Compound annual growth rate

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