



# Investor Presentation

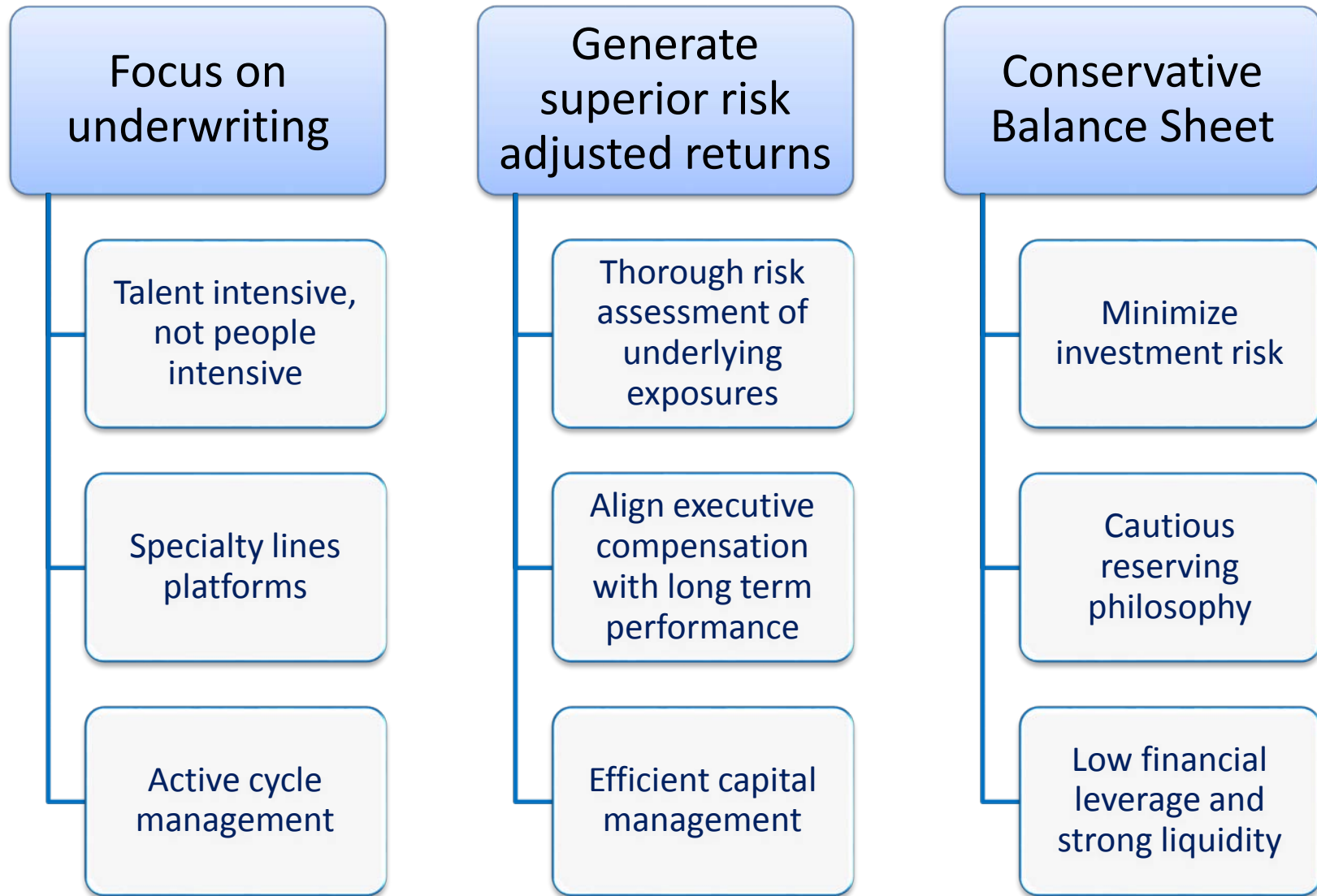
## 2017 Second Quarter

The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward looking statements. This presentation or any other written or oral statements made by or on behalf of Arch Capital Group Ltd. and its subsidiaries may include forward looking statements, which reflect our current views with respect to future events and financial performance. All statements other than statements of historical fact included in or incorporated by reference in this presentation are forward looking statements.

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.

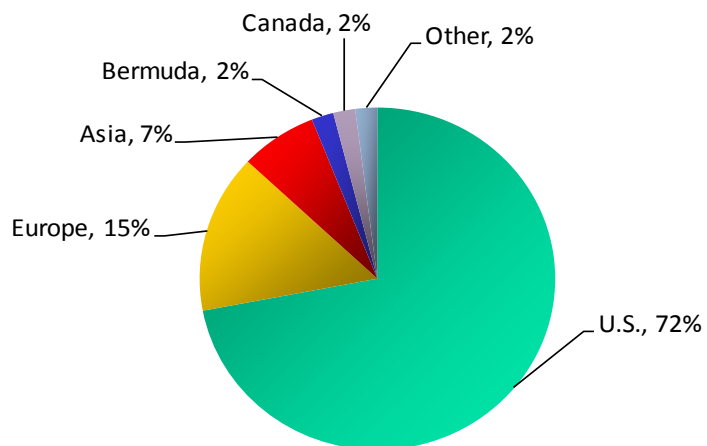
Some non-GAAP measures of financial performance also may be referred to during this presentation. The reconciliation to GAAP and definition of operating income can be found in the Current Report on Form 8-K furnished to the SEC by Arch Capital Group Ltd. (the "Company") in connection with its most recent earnings press release, and is also available on the Company's website: [www.archcapgroup.com](http://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.



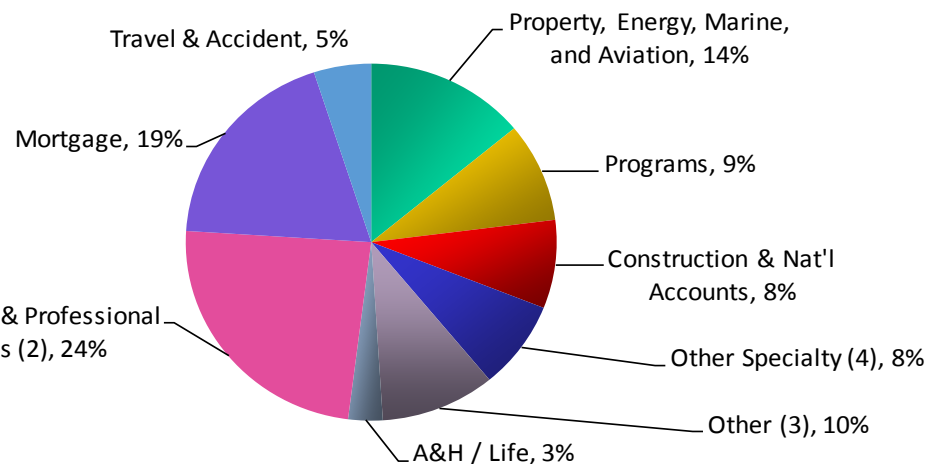
## ◆ Trailing Twelve Months Ended June 30, 2017

- Gross premiums written – 55% insurance, 28% reinsurance, 17% mortgage
- Net premiums written – 53% insurance, 28% reinsurance, 19% mortgage
- Flexible business mix well-positioned to manage through the P&C cycle

**Client Location<sup>1</sup>**



**Line of Business<sup>1</sup>**



Gross premiums written:	\$5.48B
Net premiums written:	\$3.86B

<sup>1</sup> Based on net premiums written, excluding amounts attributable to the 'other' segment (Watford)

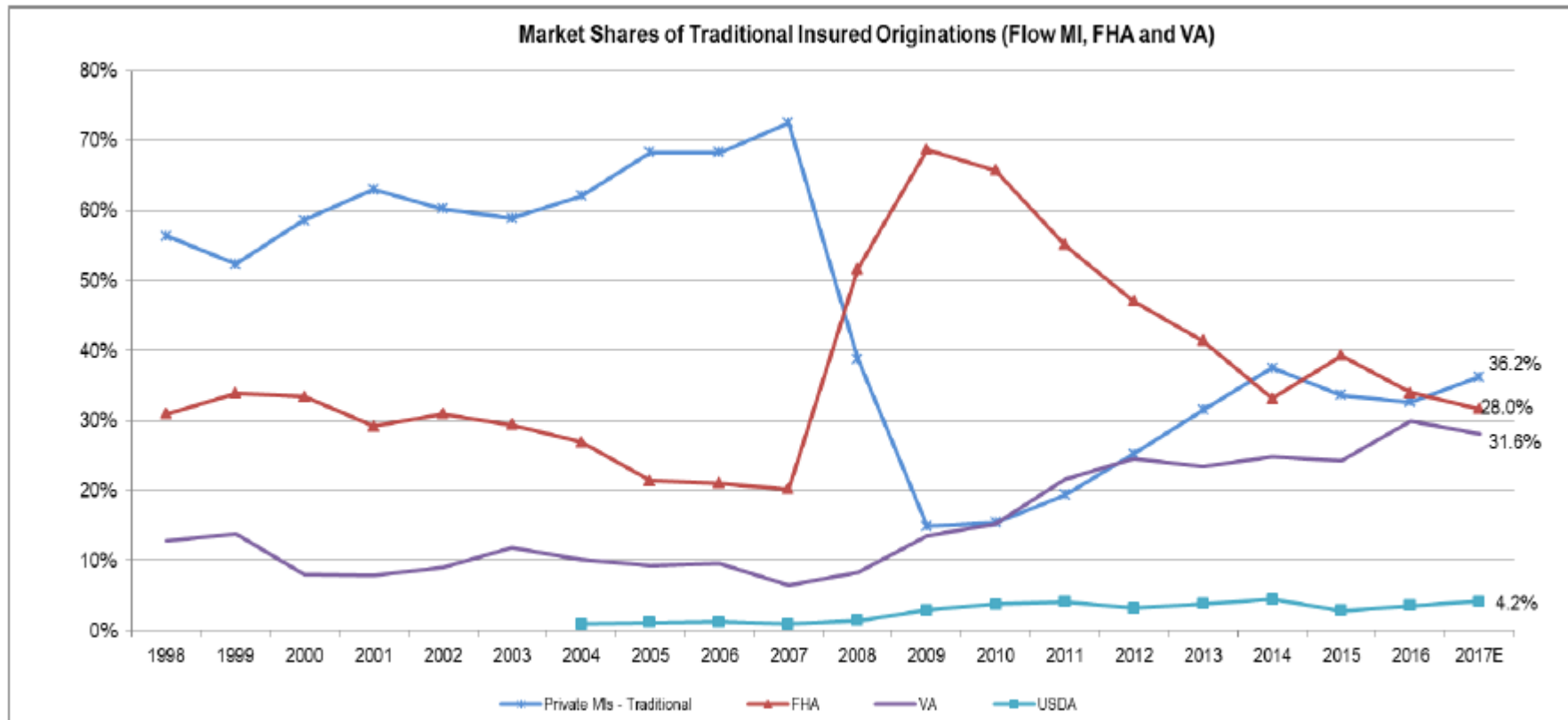
<sup>2</sup> Includes casualty, professional liability, executive assurance, healthcare, contract binding, and excess motor

<sup>3</sup> Includes insurance for lenders products, alternative markets, and other insurance and reinsurance

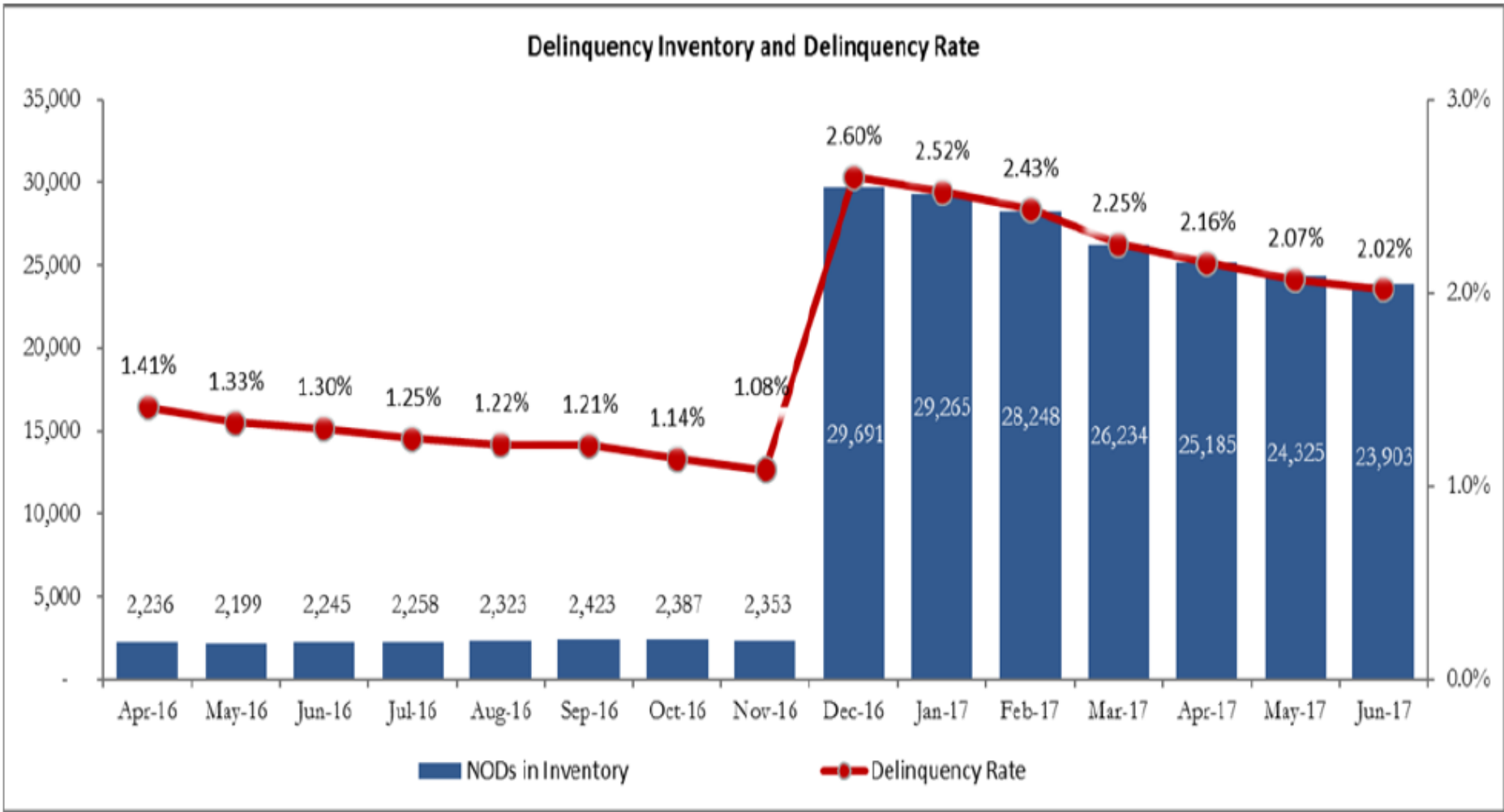
<sup>4</sup> Includes reinsurance for proportional motor, trade credit, surety, workers' compensation catastrophe, and other

- ◆ **Arch MI US – largest US MI following acquisition of UGC**
  - ◆ Retention of client relationships.
  - ◆ Combined mortgage units will generate significant scale economies.
  
- ◆ **Acquisition materially improves group financial strength**
  - ◆ Enhanced scale in MI improves both earnings and earnings stability of Arch Capital Group.
  - ◆ Growth opportunities in MI enhance returns on equity and allow more defensive posture in soft parts of the property casualty sector.
  
- ◆ **Arch has developed “best in class” management of mortgage tail risk**
  - ◆ RDS approach allows conservative tests of severe events on Mortgage risk portfolios.
  - ◆ Manage risk similar to short tail property cat and longer tail casualty clash risks.
    - ◆ Reinsurance
    - ◆ Developing Insurance Linked Securities (ILS) market with Bellemeade structures.
    - ◆ Risk based pricing allows Arch to better reduce portfolio risk upfront.

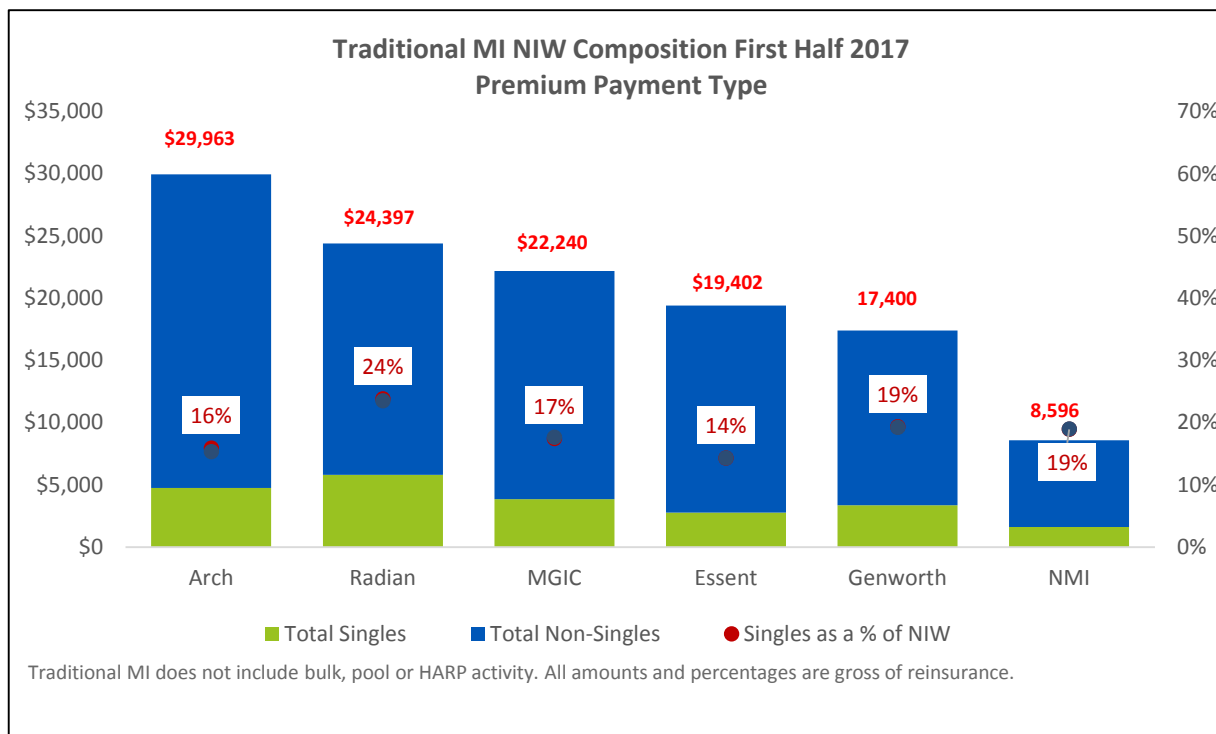
- ◆ In 2016, the Government MI programs (FHA + VA + USDA) represented ~66% of the market while private MI had ~34% share. We expect an increase in private MI share in 2017 due to a greater % of purchase originations.



Source: Inside Mortgage Finance



- ◆ Arch MI is the Market Leader with a market share over 24% in 1H17

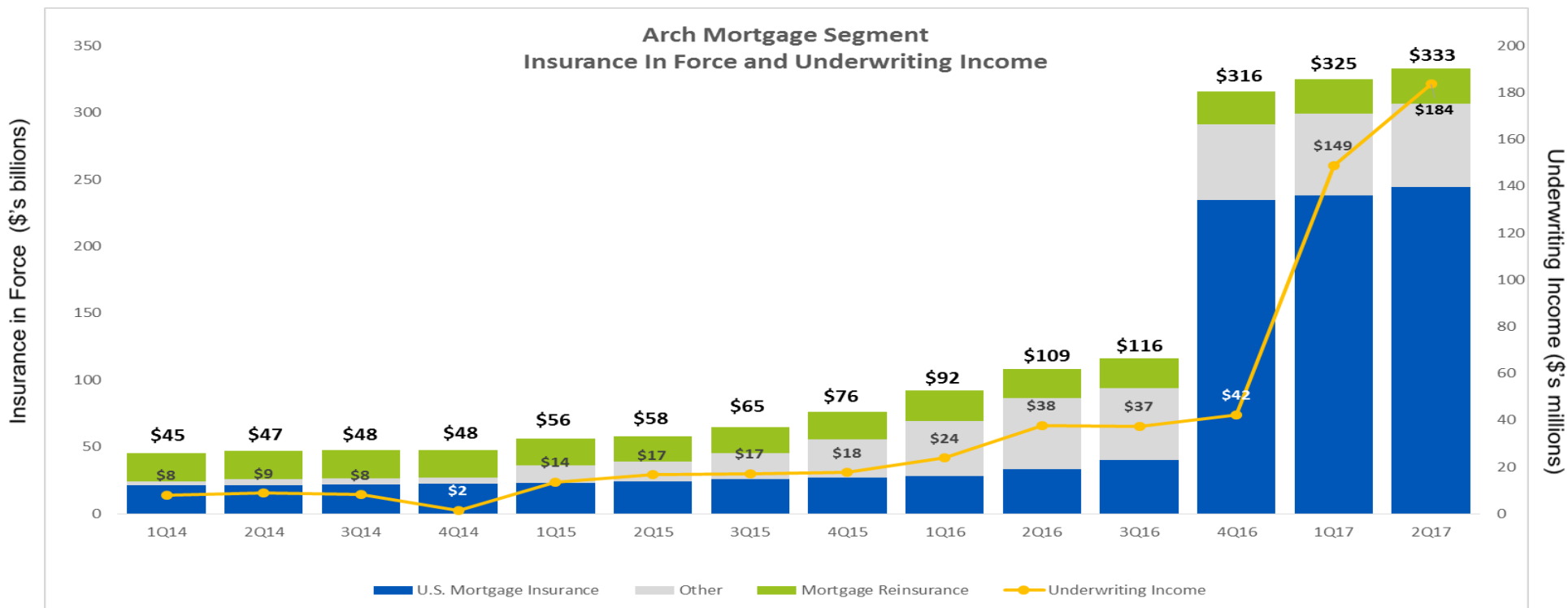


**Traditional Private Mortgage Insurance Written in 1H 17**  
(Dollar volume in billions)

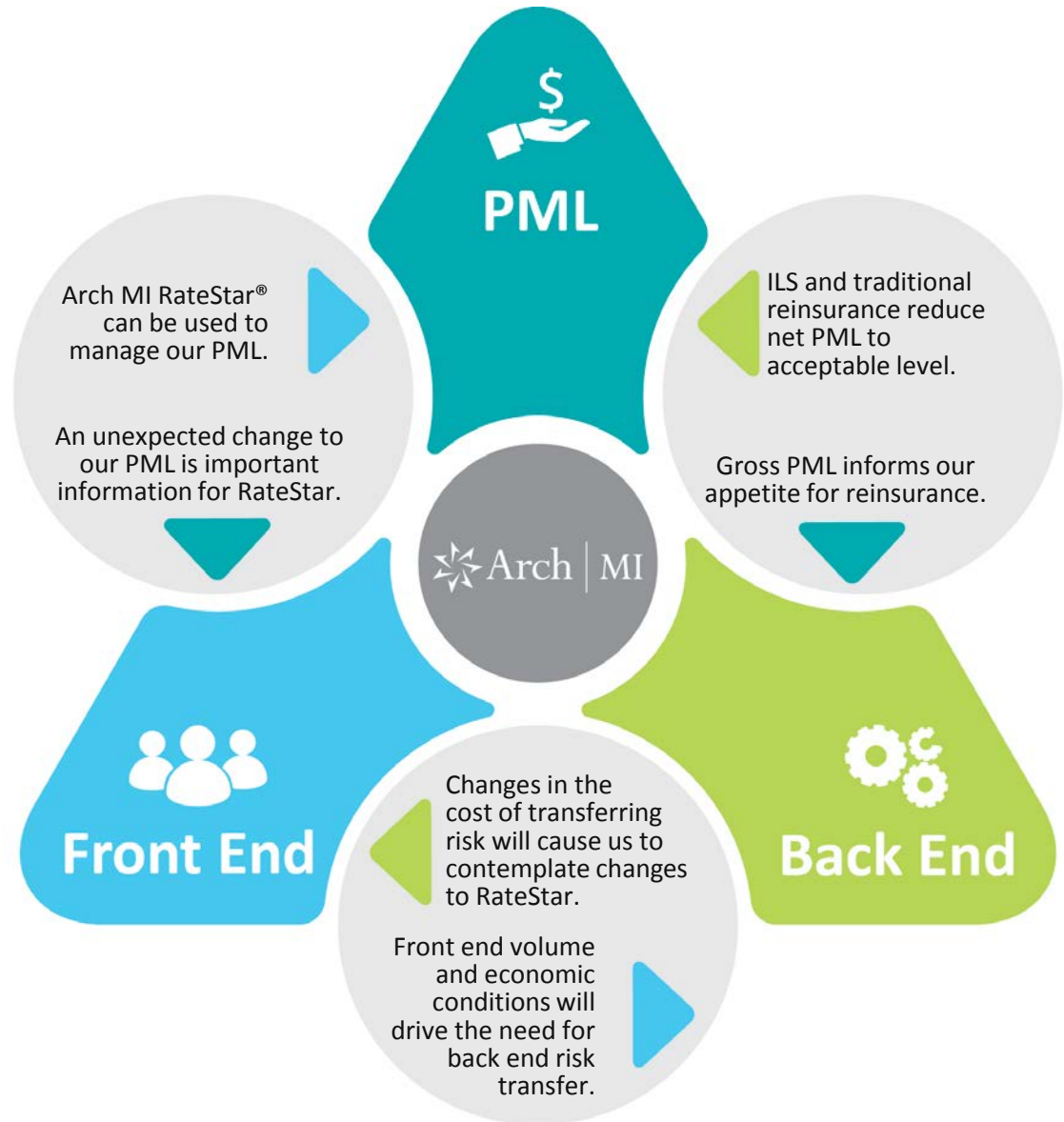
1H17 Rank	Firm	NIW	Mkt Share
1	Arch US MI	30.0	24.6%
2	Radian Guaranty, Inc	24.4	20.0%
3	Mortgage Guaranty Corp.	22.2	18.2%
4	Essent Guaranty	19.4	15.9%
5	Genworth Mortgage Insurance Corp.	17.4	14.3%
6	National Mortgage Insurance Corp.	8.6	7.1%



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



- ◆ 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



## ◆ Risk and Cycle Management

- ◆ Focus on smaller risks and primary low limit business segments produces more predictable and less volatile results over time.
- ◆ Platform provides stability to manage our participation in high volatility / high capacity lines based on market conditions.

## ◆ Innovation and Opportunism

- ◆ Early Investment in Controlling Businesses like National Accounts, Construction, Alt Markets, Surety.
- ◆ 27% of our \$3.0B in 2016 GWP comes from new product and distribution initiatives commencing in 2009 or later.

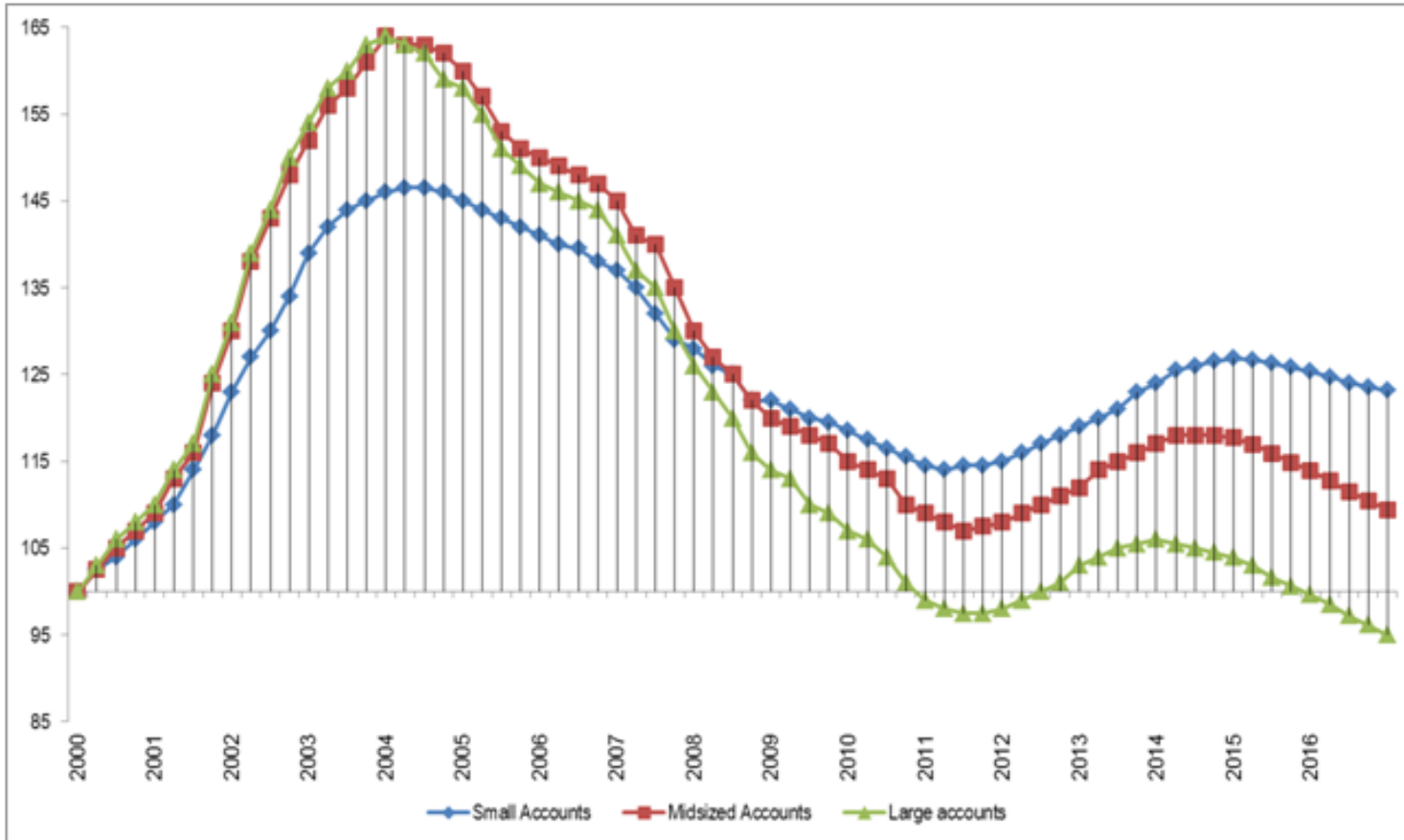
## ◆ Diversification

- ◆ Distribution: Big 3, US Retail, Lloyds Syndicate, Wholesale, Binding Authorities, MGAs.
- ◆ Product Lines: 50% Low Volatility, 28% Controlling Positions, 22% Cycle Managed [NWP mix].
- ◆ Over 40 business segments with no segment representing more than 15% of NWP.
- ◆ Geography: 81% USA, 16% UK, 3% Canada/Bermuda.

## ◆ Specialization

- ◆ Low Volatility & Controlling Position business segments are the portfolio drivers in today's market.
- ◆ Talent intensive platform provides resiliency throughout the market cycle.
- ◆ Barriers to entry in the form of technology, collateral, and regulatory compliance in certain segments mute impact of aggressive competition in high capacity / high limit segments.

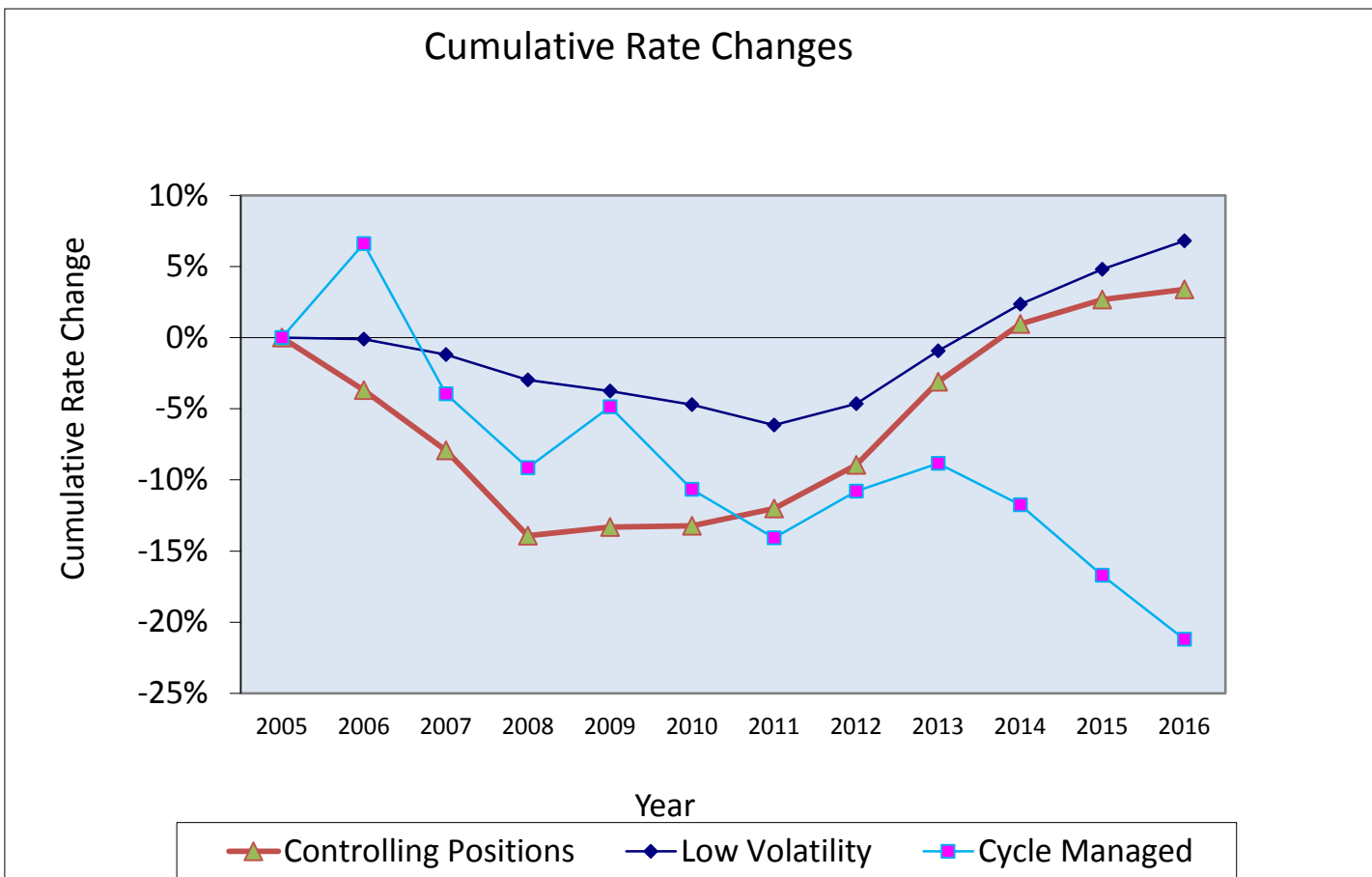
## U.S. P&C Commercial Insurance Cumulative Quarterly Rates By Account Size



Source: Council of Insurance Agents & Brokers, J.P. Morgan research.

**By Account Size**

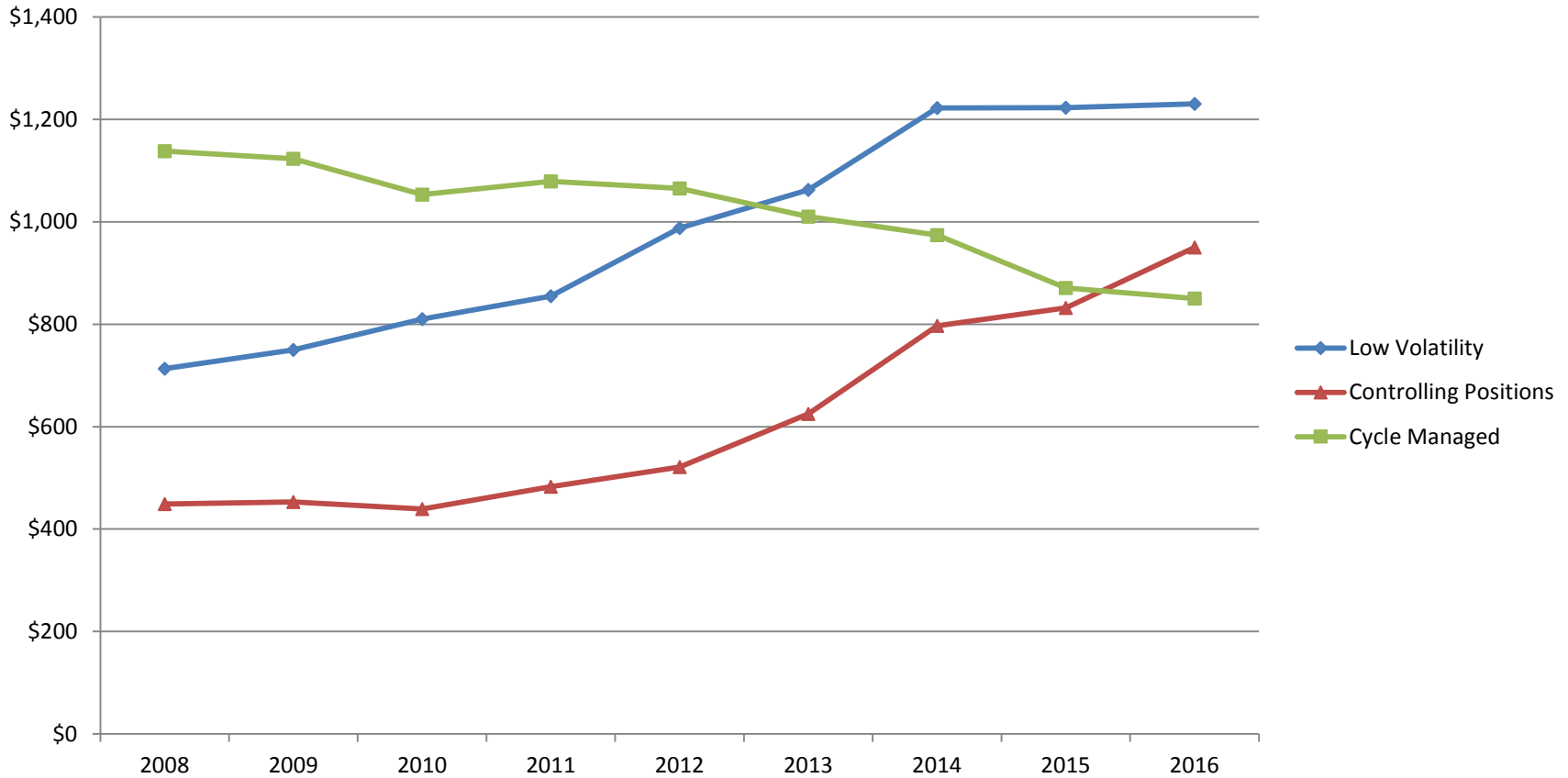
## Cumulative Rate Change Trends – U.S.



Year	Annual Rate Changes		
	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%	4.2%	-3.2%
2015	2.4%	1.7%	-5.6%
2016	1.9%	0.7%	-5.4%

**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.

## Worldwide GWP by calendar year (\$000s)

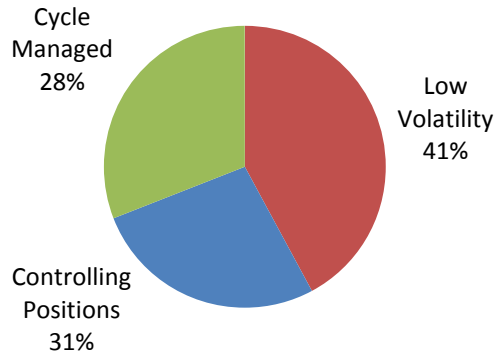


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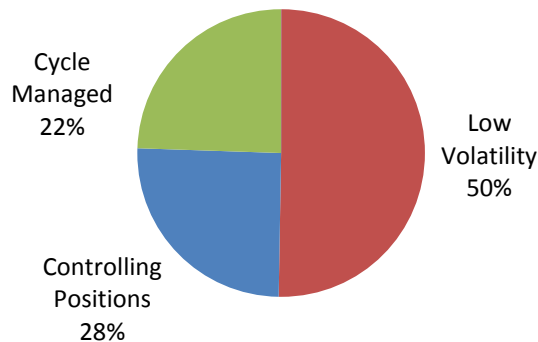
## Emphasis on Low Volatility and Controlling Positions

2016

Gross Premiums Written, FY 2016: \$3.0B

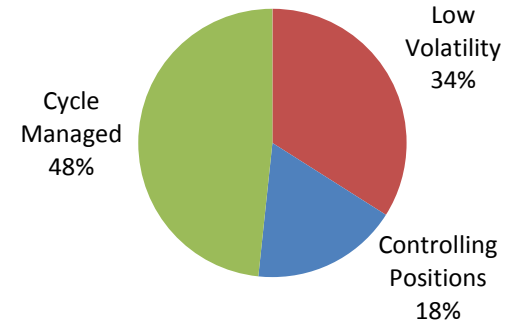


Net Premiums Written, FY 2016: \$2.1B

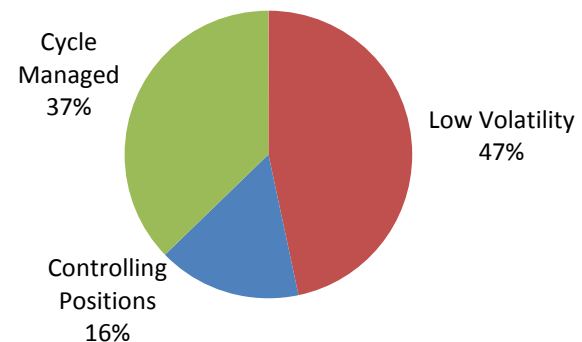


2010

Gross Premiums Written, FY 2010: \$2.0B

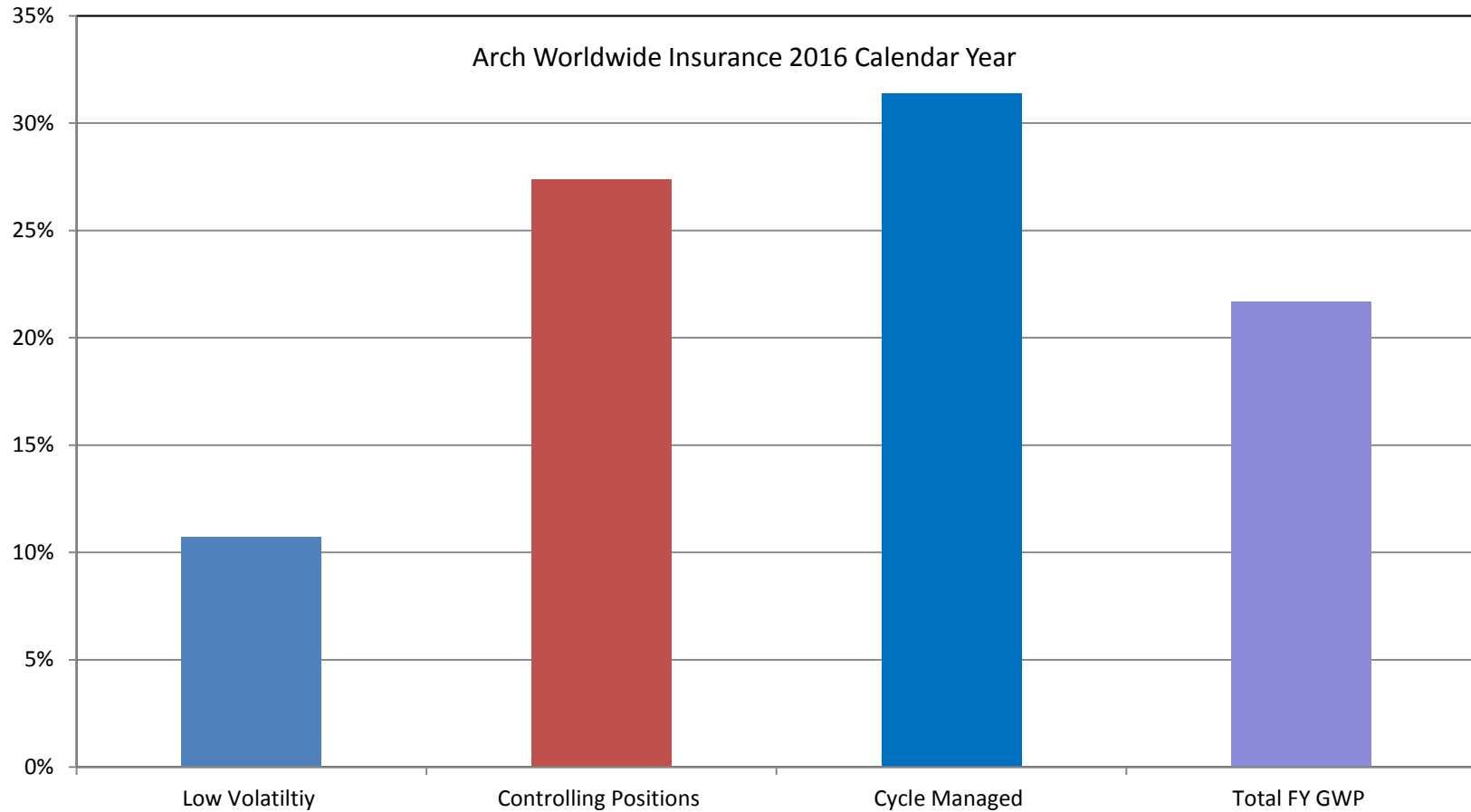


Net Premiums Written, FY 2010: \$1.7B



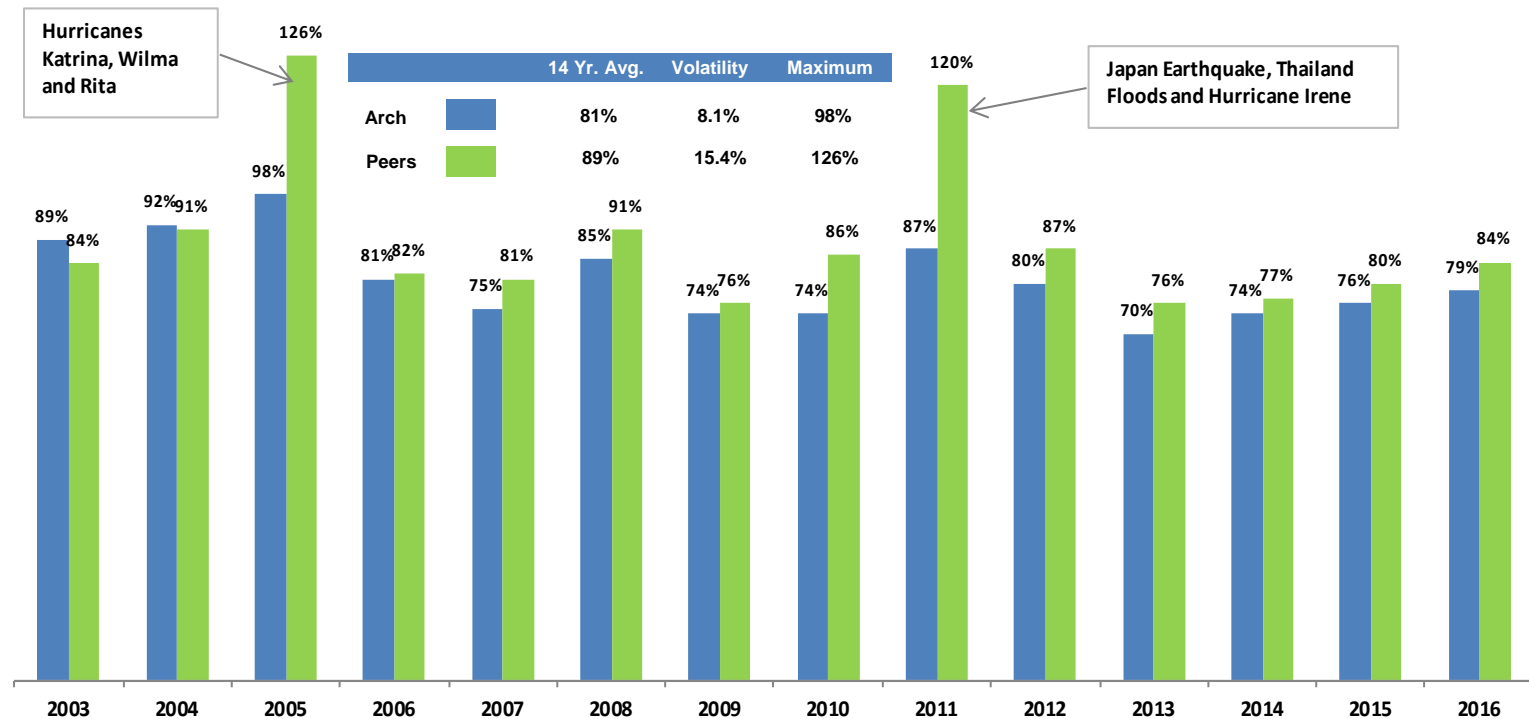
**Low Volatility** includes Programs, A&H, Travel, Contract Binding. **Controlling Positions** includes Construction, Alt Markets, National Accts, Surety. **Cycle Managed** includes Property, Marine, Offshore, Casualty, High Capacity EA, Onshore Energy, Med Mal.

## Premium Sourced from “Big 3” Brokers

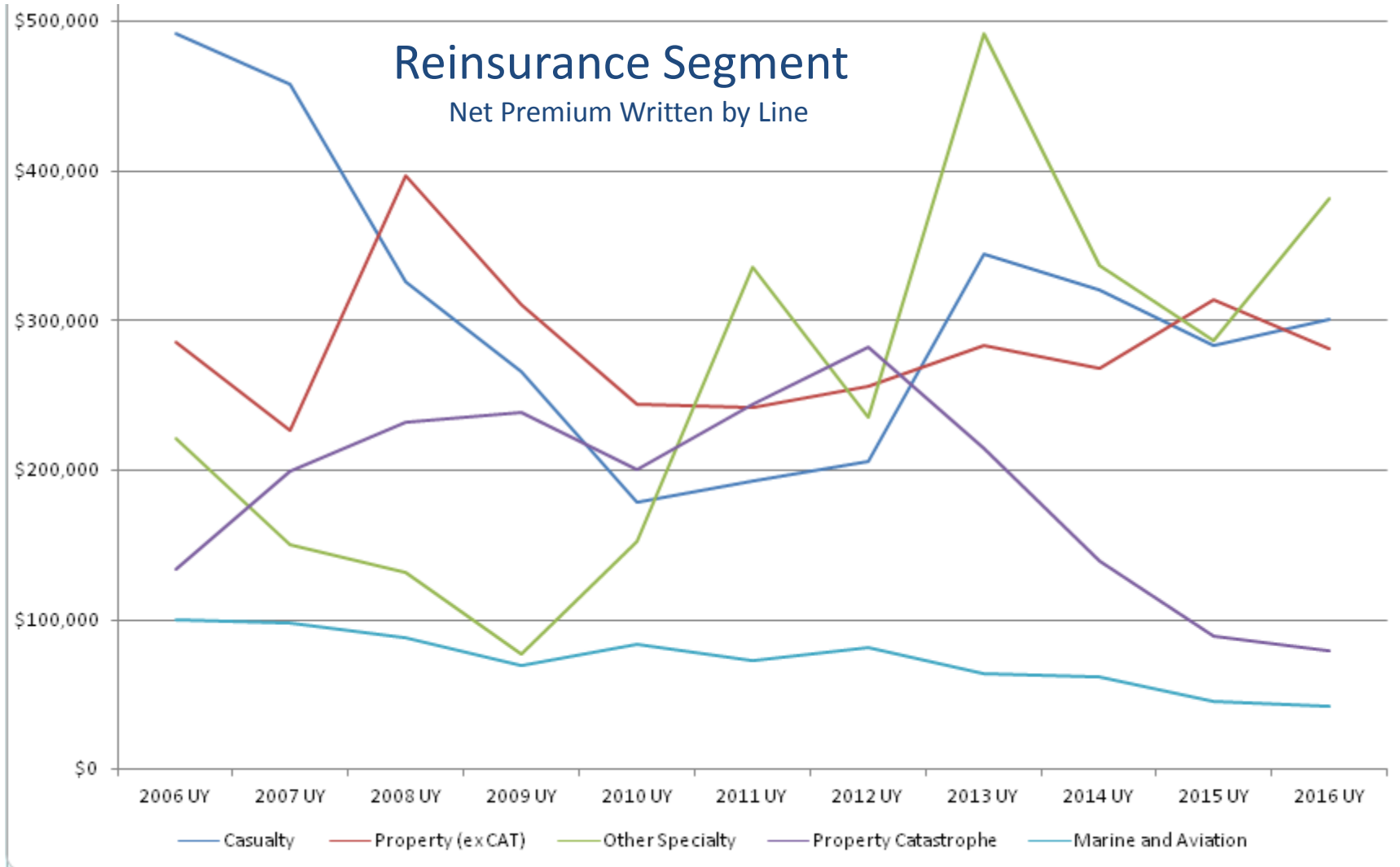




- ◆ Arch has demonstrated an ability to outperform its reinsurance peer group through a disciplined underwriting and risk management process.
- ◆ Arch has averaged an 81% reinsurance segment combined ratio over the last 13 years.

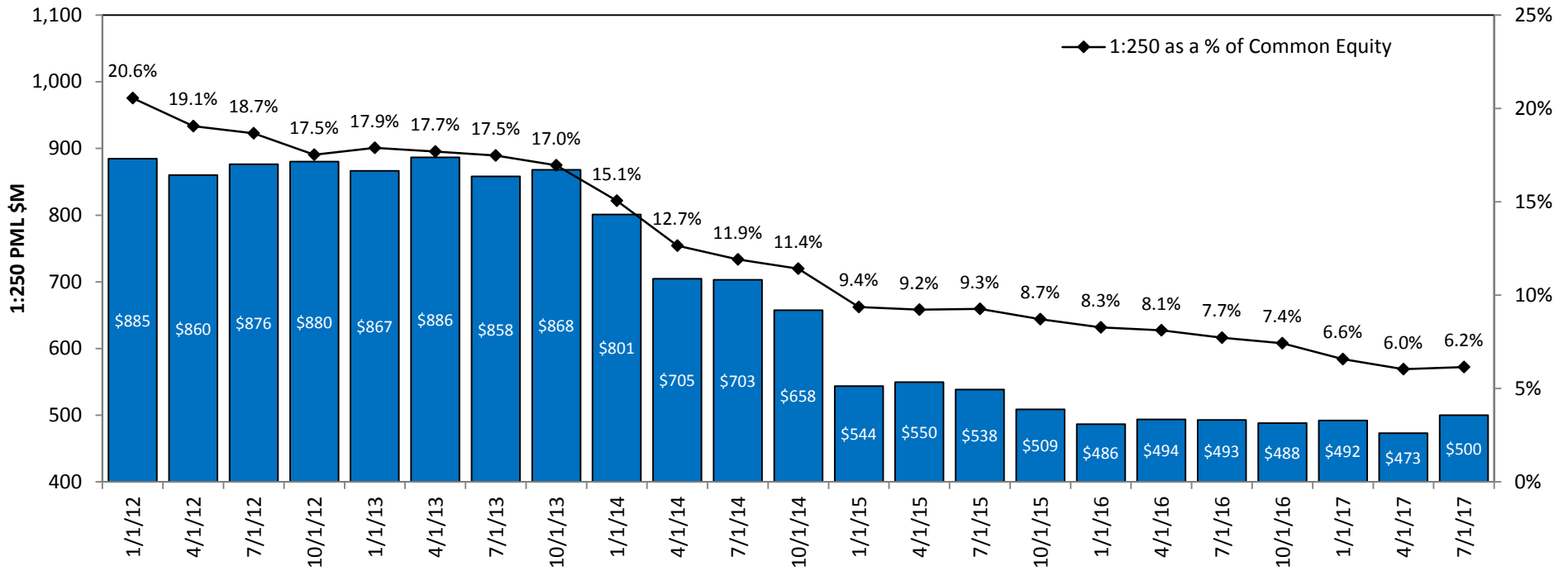


Peers include reinsurance segments of: Aspen, Alterra Capital (pre Markel acquisition (i.e. 2012 and prior)), Allied World, AXIS Group, Endurance, Everest Re, Partner Re, Platinum Underwriters (pre Renaissance Re acquisition (i.e. 2014 and prior)), Renaissance Re (incl. Platinum in 2015), Validus Holdings, XL Group and Montpelier Re (total company through 2012).



(\$000's)

## ACGL Peak Zone 1:250 PML



## ◆ Total reserves of \$7.8B\*

- History of favorable reserve releases
- IBNR plus ACR represents 63% of total reserves

## ◆ Debt and preferred of \$3.0B\*

- \$500M in revolving credit due October 2021
- \$300M<sup>1</sup> of ACGL senior notes maturing in 2034
- \$500M<sup>1</sup> of Arch-U.S. senior notes maturing in 2043
- \$500M<sup>1</sup> of Arch Capital Finance senior notes maturing in 2026
- \$450M<sup>1</sup> of Arch Capital Finance senior notes maturing in 2046
- \$773M of non-cumulative perpetual preferred shares

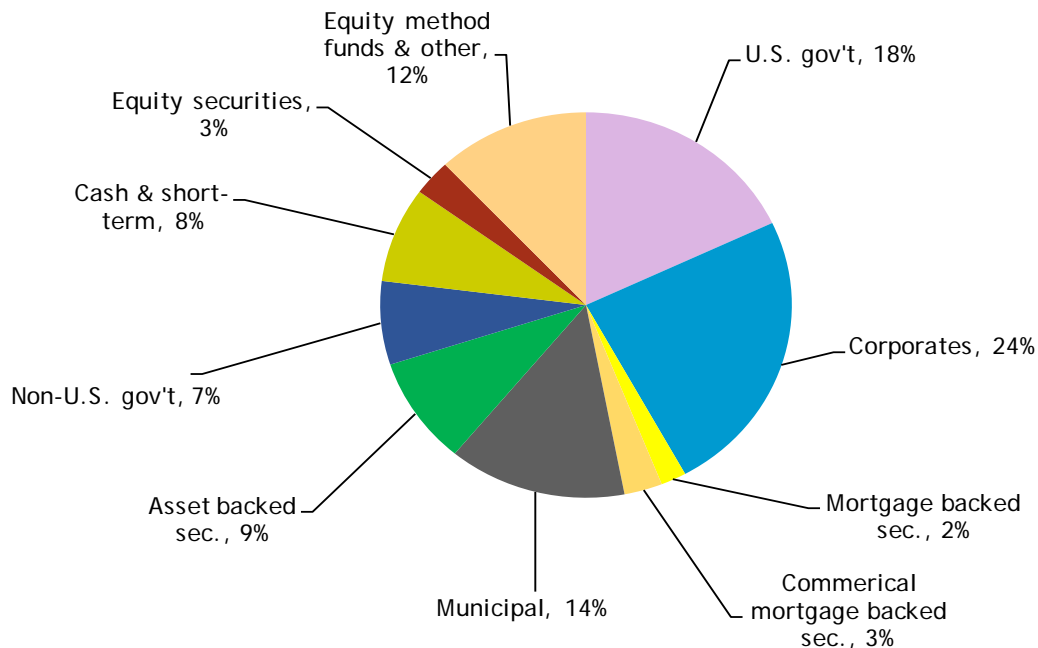
## ◆ Dividend Policy

- No common dividends

<sup>1</sup> Represents full principal amount. Amounts shown in consolidated financial statements are presented net of debt issuance costs.

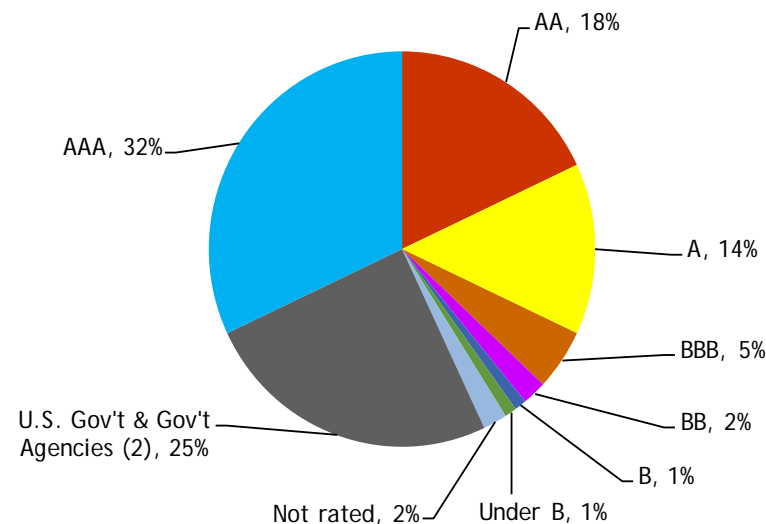
\*As of June 30, 2017 on a core basis, excludes Watford balances.

## Investable Assets by Type<sup>1</sup>



Total investable assets: \$19.2B

## Fixed Maturities by Rating<sup>1</sup>

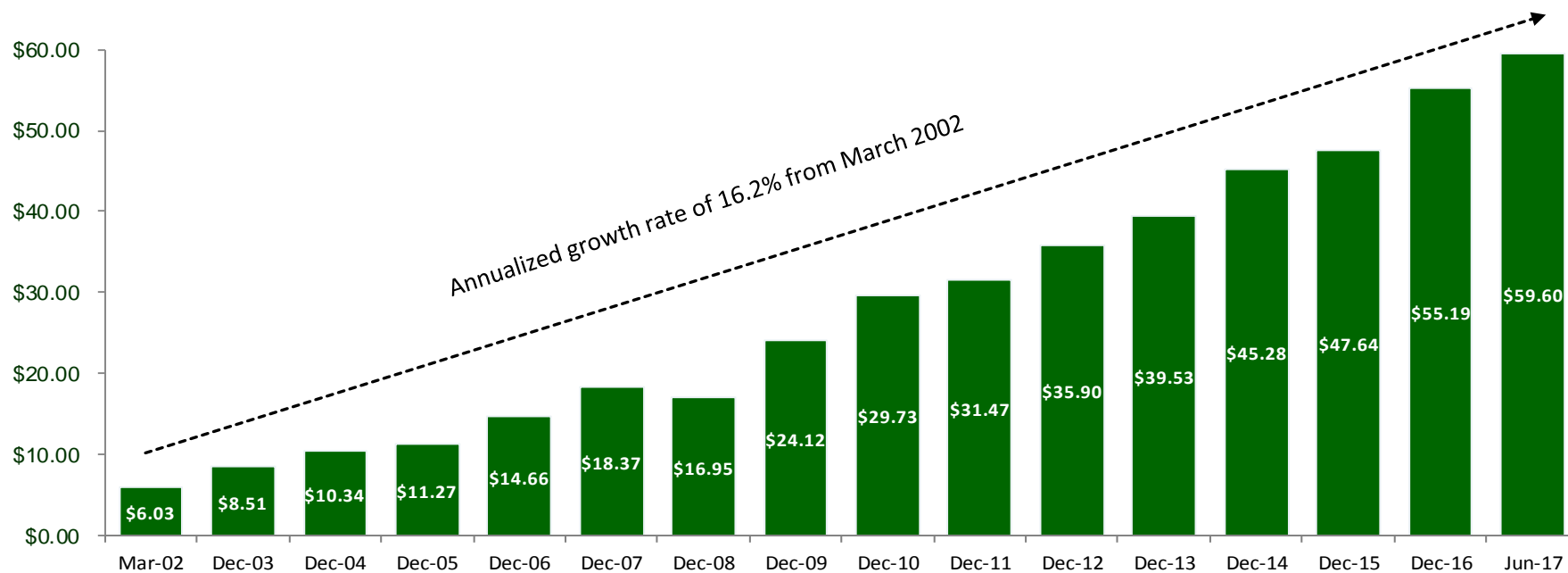


Total fixed maturities:	\$14.7B
Average effective duration:	3.41
Average S&P / Moody's credit quality:	AA/Aa2

<sup>1</sup> As of June 30, 2017, excludes amounts attributable to the 'Other' segment (Watford)

<sup>2</sup> Includes U.S. government-sponsored agency mortgage backed securities and agency commercial mortgage backed securities

## ◆ Book value per common share<sup>1</sup>

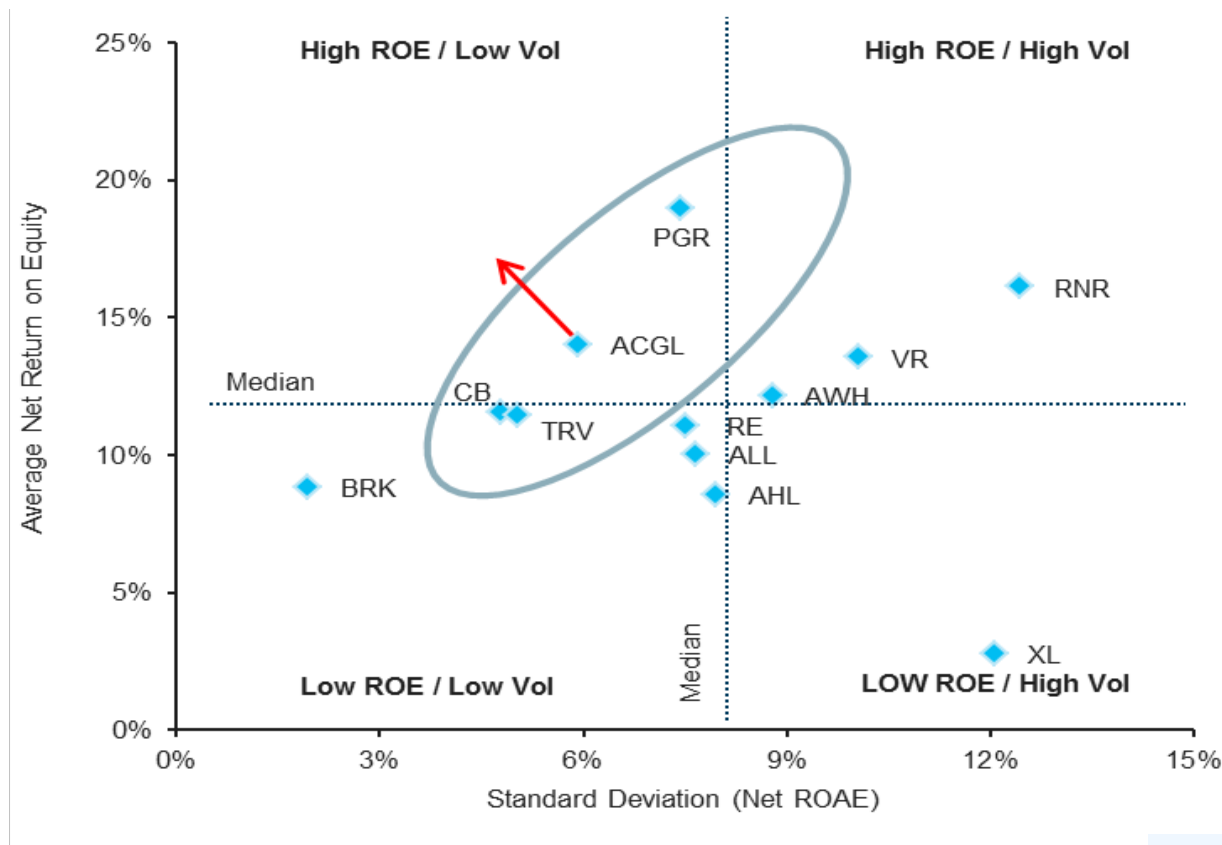


Total Capitalization <sup>2</sup> (\$bn):	\$1.0	\$1.9	\$2.5	\$2.8	\$3.9	\$4.3	\$3.8	\$4.7	\$4.9	\$5.0	\$5.6	\$6.5	\$7.0	\$7.1	\$10.5	\$11.1
Debt/Preferred to Total Capitalization <sup>2</sup>	0.0%	10.5%	11.8%	10.8%	7.7%	6.9%	10.4%	8.5%	8.2%	8.0%	7.2%	18.7%	17.3%	17.2%	28.7%	27.0%

<sup>1</sup> As of June 30, 2017, excluding the effects of stock options and restricted stock units outstanding

<sup>2</sup> Available to Arch, including senior debt, preferred equity, common stock and AOCI.

# 2002 - 2016 Average Return on Equity



Source: Barclays Research

- ◆ Arch operates leading insurance, reinsurance and mortgage 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



Year	Time Line	Rating Agency <sup>1</sup>
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 expanded 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	Jun-30-17	CAGR <sup>4</sup>
BVPS <sup>2</sup> :	\$6.03	\$59.60	16.2%
Total capital <sup>3</sup> :	\$1.0bn	\$11.1bn	

<sup>1</sup> Financial Strength Ratings unless otherwise noted

<sup>2</sup> Excludes the effects of stock options and restricted stock units outstanding

<sup>3</sup> Includes senior debt, preferred equity, and common stock (including AOCI)

<sup>4</sup> Compound annual growth rate

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