

Investor Presentation

2020 First Quarter

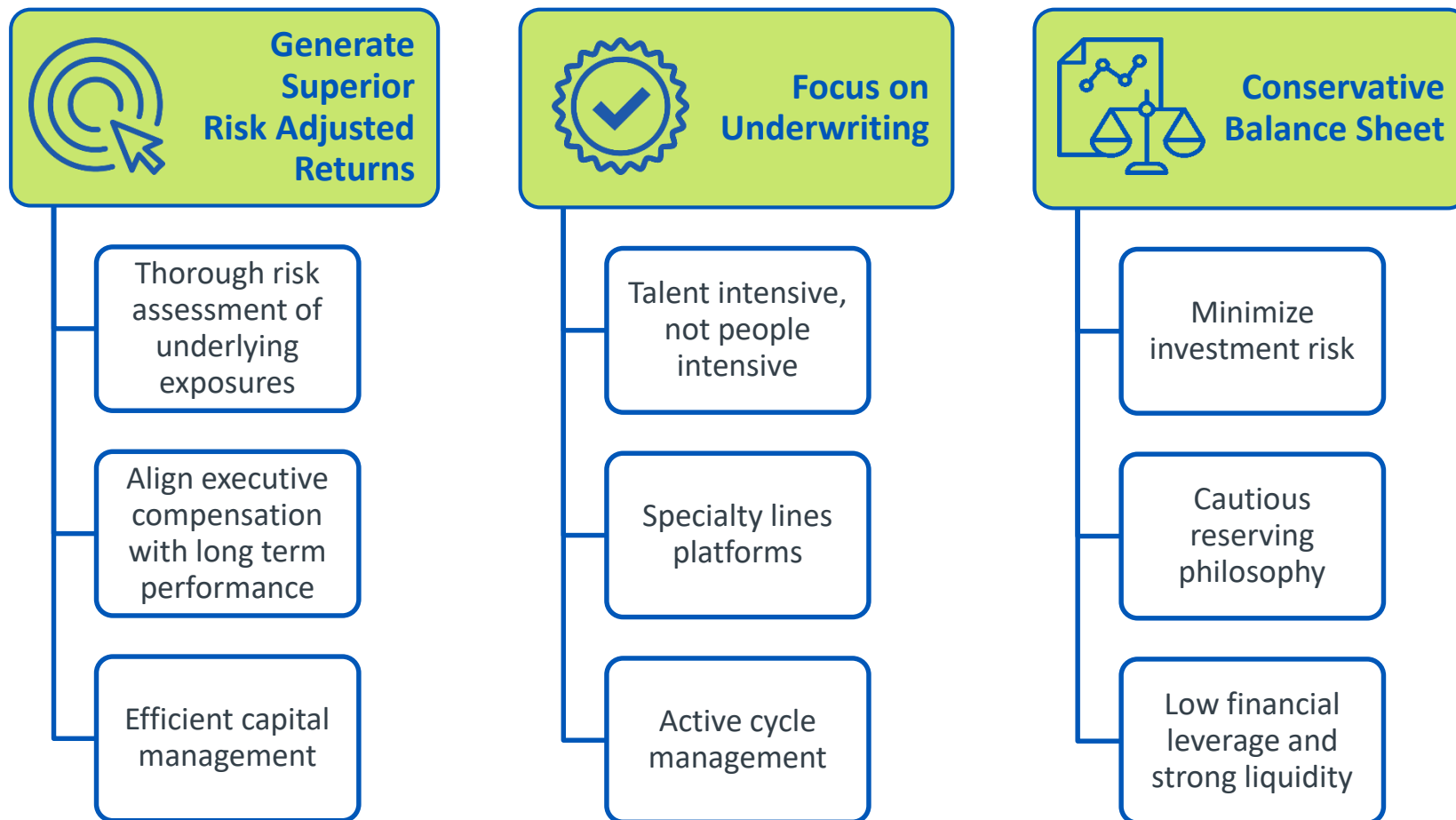


The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for forward looking statements. This presentation or any other written or oral statements made by or on behalf of Arch Capital Group Ltd. and its subsidiaries may include forward looking statements, which reflect our current 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.

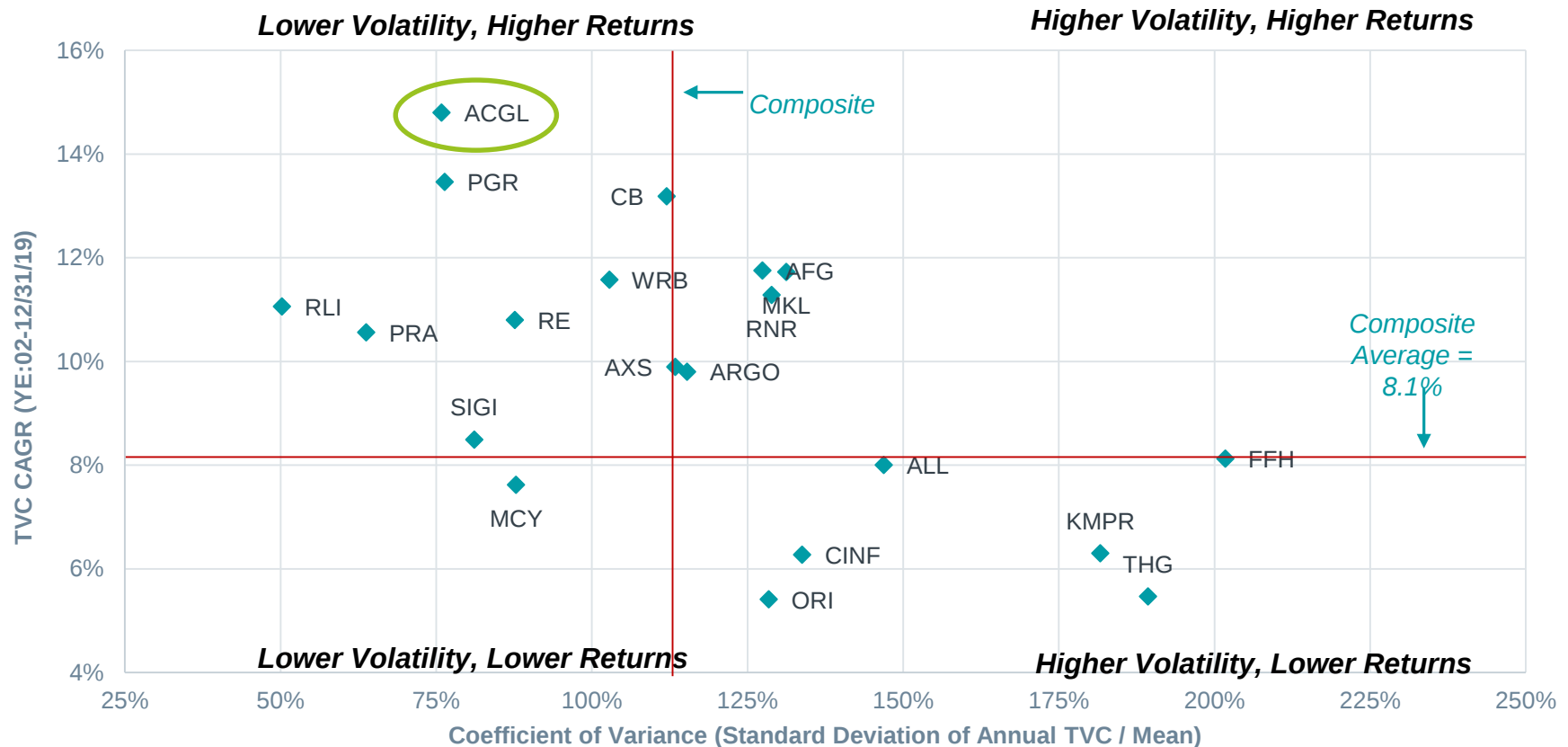
Forward-looking statements can generally be identified by the use of forward-looking terminology such as "may," "will," "expect," "intend," "estimate," "anticipate," "believe" or "continue" or their negative or variations or similar terminology. Forward-looking statements involve our current assessment 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, including pandemics such as COVID-19; 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 ("SEC").

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.

This presentation contains non-GAAP financial measures as defined by Regulation G of the rules of the SEC. Arch Capital Group Ltd. (the "Company") believes these non-GAAP measures provide users of its financial information meaningful and useful insight in evaluating the performance of the Company. Investors should consider non-GAAP measures in addition to, and not as a substitute for, or superior to, the comparable GAAP measures. 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 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.



Total Value Creation vs. Coefficient of Variation - Total Composite (12/31/02 - 12/31/19)



Source: Dowling & Partners Analysis

Dowling's P&C Industry Composite of 25 Companies

Excludes CNA (3.2%, 377%), Hartford (2.4%, 431%), MGIC (-4.5%, 618%), Radian (-2.0%, 695%) as coefficient of variation exceeds 250%;

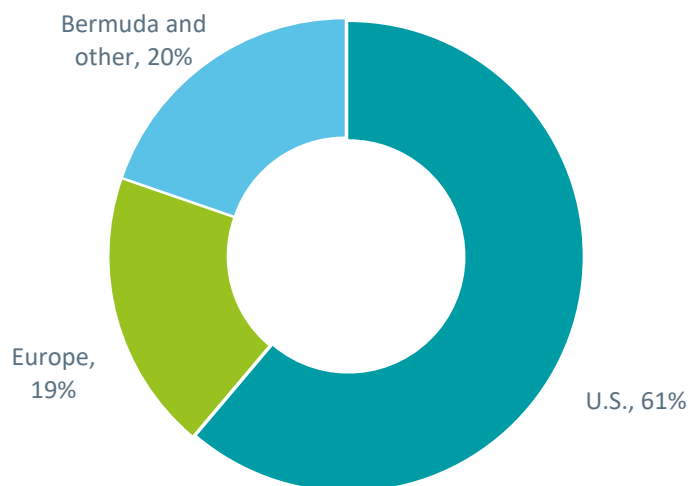
TVC is tangible book value per share growth plus accumulated dividends

Arch operates leading Specialty P&C and Mortgage Insurance businesses across a wide range of geographies and products providing meaningful diversification and earnings stability.

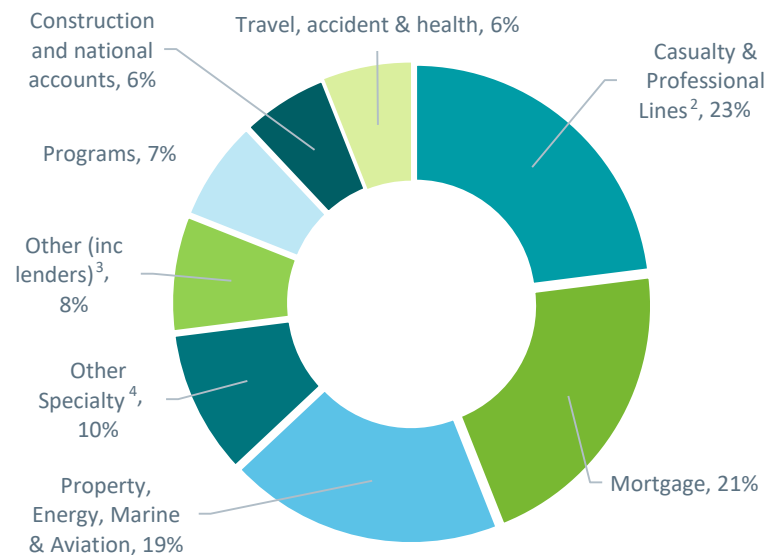
Trailing Twelve Months Ended March 31, 2020

Gross premiums written (\$8.4B)	49% insurance	33% reinsurance	18% mortgage
Net premiums written (\$6.1B)	47% insurance	32% reinsurance	21% mortgage

Underwriting Location¹



Line of Business¹



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

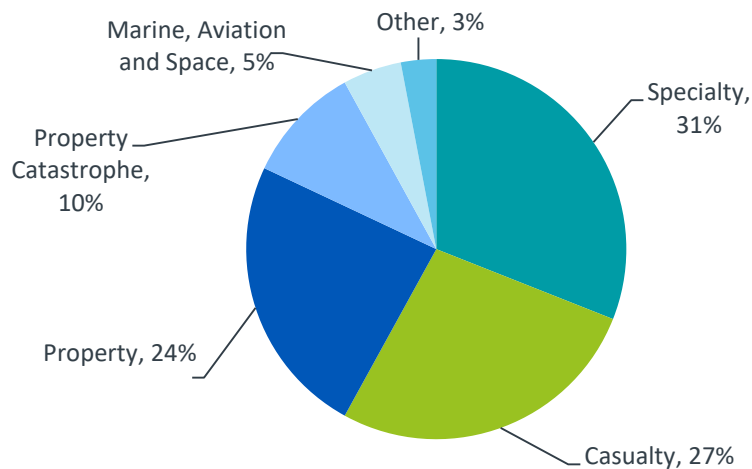
⁴ Includes reinsurance for proportional motor, trade credit, surety, workers' compensation catastrophe, and other

Strong Underwriting and Risk Management Culture

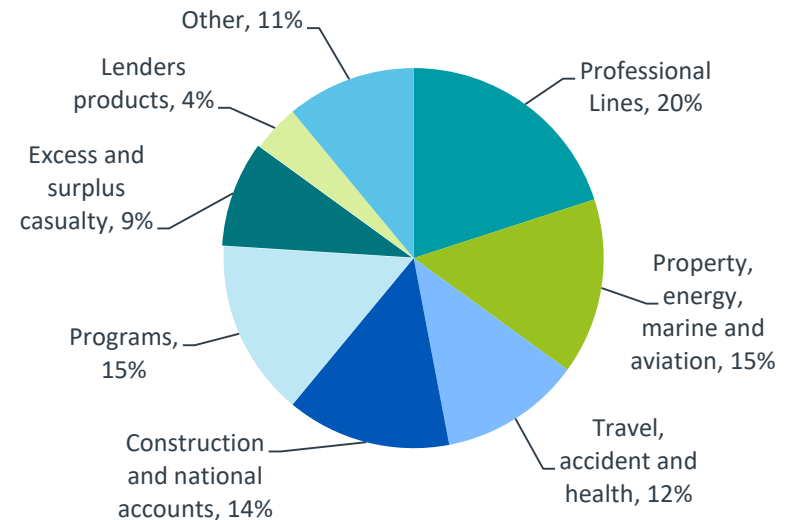
- Talent intensive platform creates resiliency through market cycle.
- Manage the cycle by allocating capital to those lines with better expected returns.
- Diversified by lines of business and geography.
- In primary insurance, focus on smaller risks and low limit business produces more predictable and less volatile results over time.

Trailing Twelve Months Ended March 31, 2020

Reinsurance Net Premiums Written \$2.0B

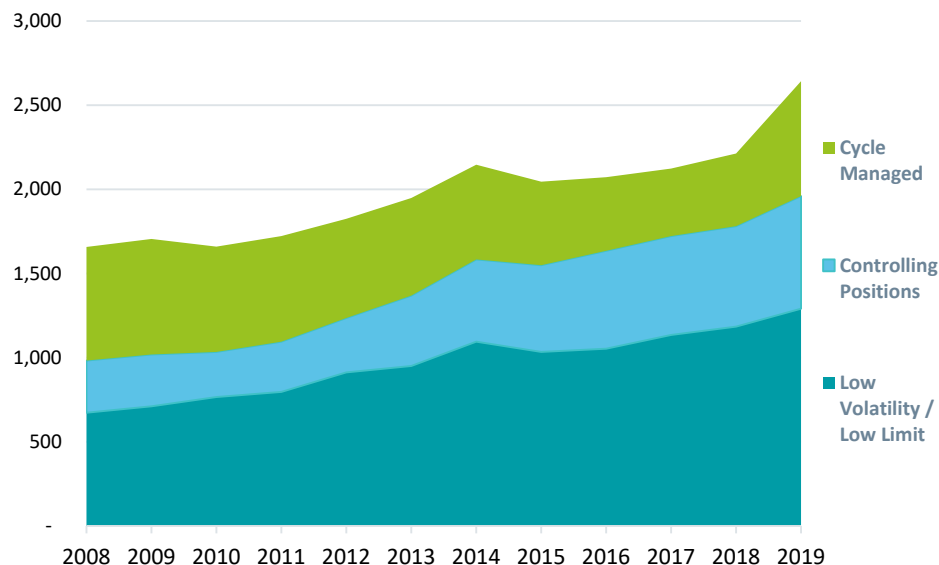


Insurance Net Premiums Written \$2.8B



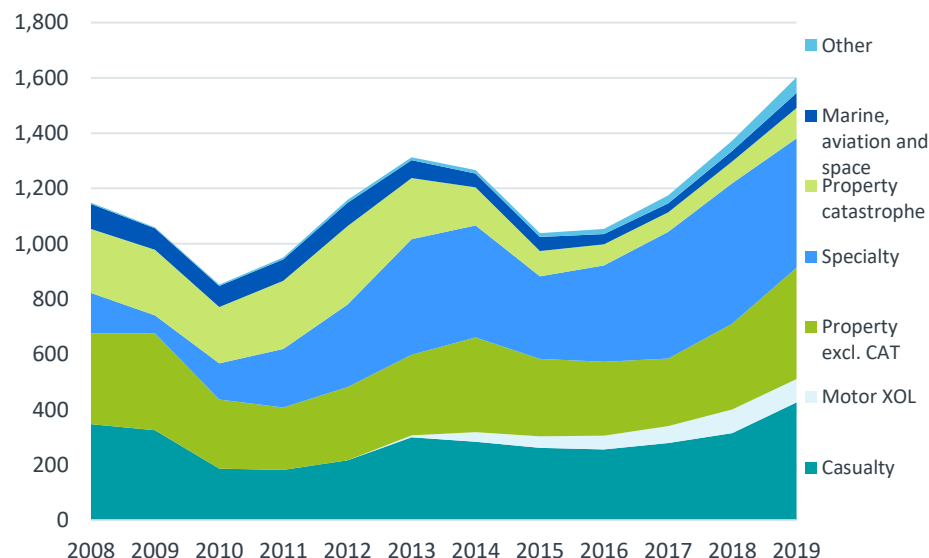
Insurance Segment

Calendar Year Net Premiums Written (\$M)



Reinsurance Segment

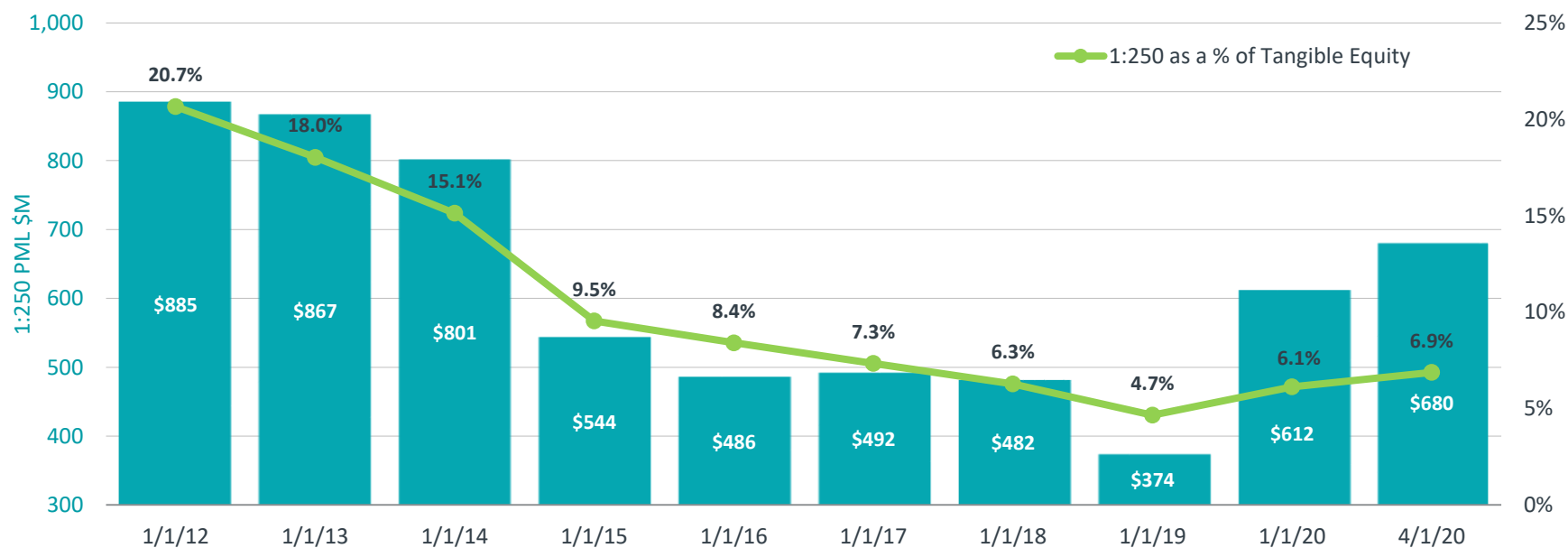
Calendar Year Net Premiums Written by Line (\$M)



Insurance Segment: 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.

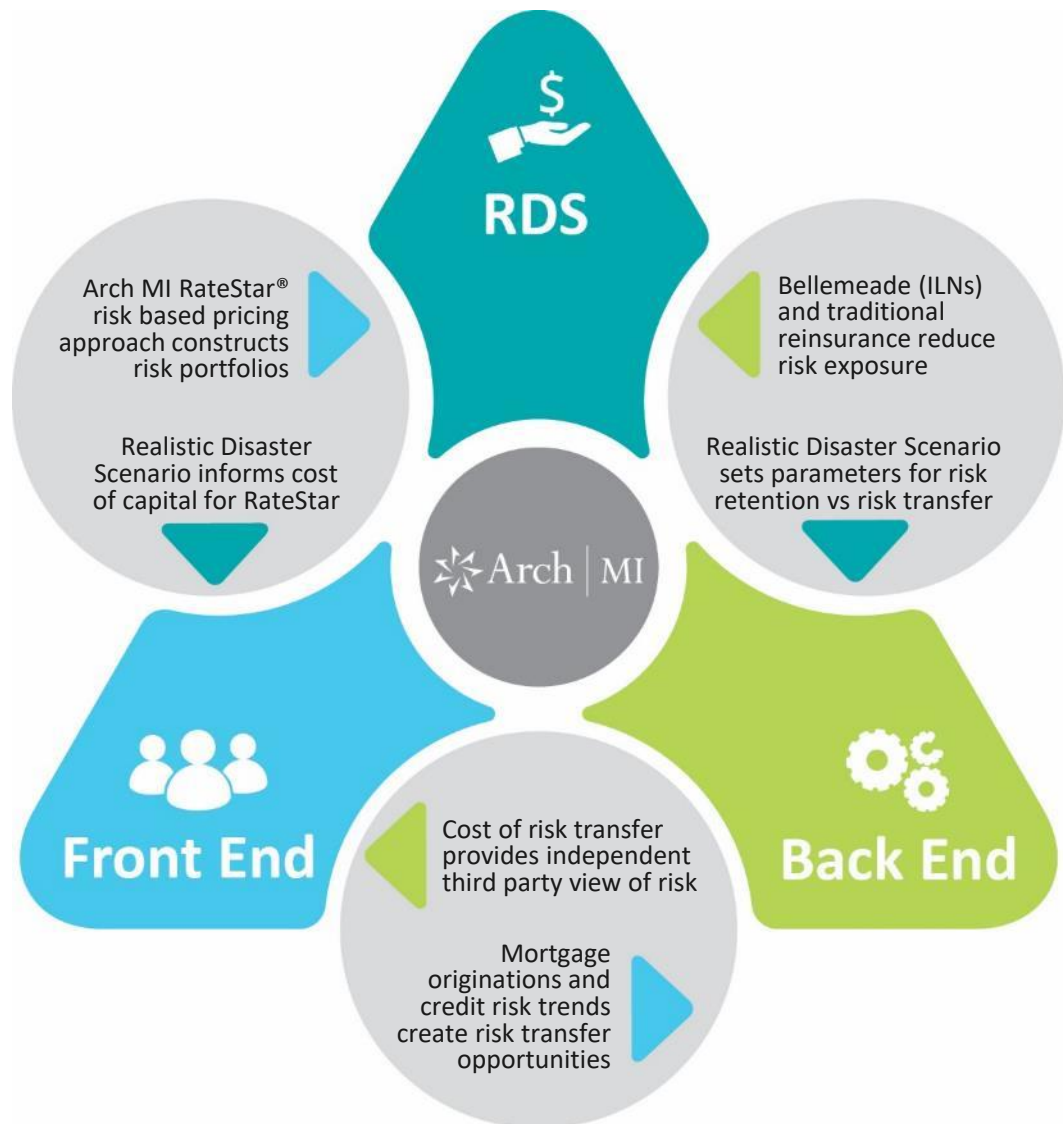
Reinsurance Segment: Casualty includes executive assurance, professional liability, workers' compensation, healthcare and other. **Specialty** includes proportional motor, surety, accident and health, workers' compensation catastrophe, agriculture, trade credit and other. **Other** includes life, casualty clash and other.

ACGL Peak Zone 1:250 PML

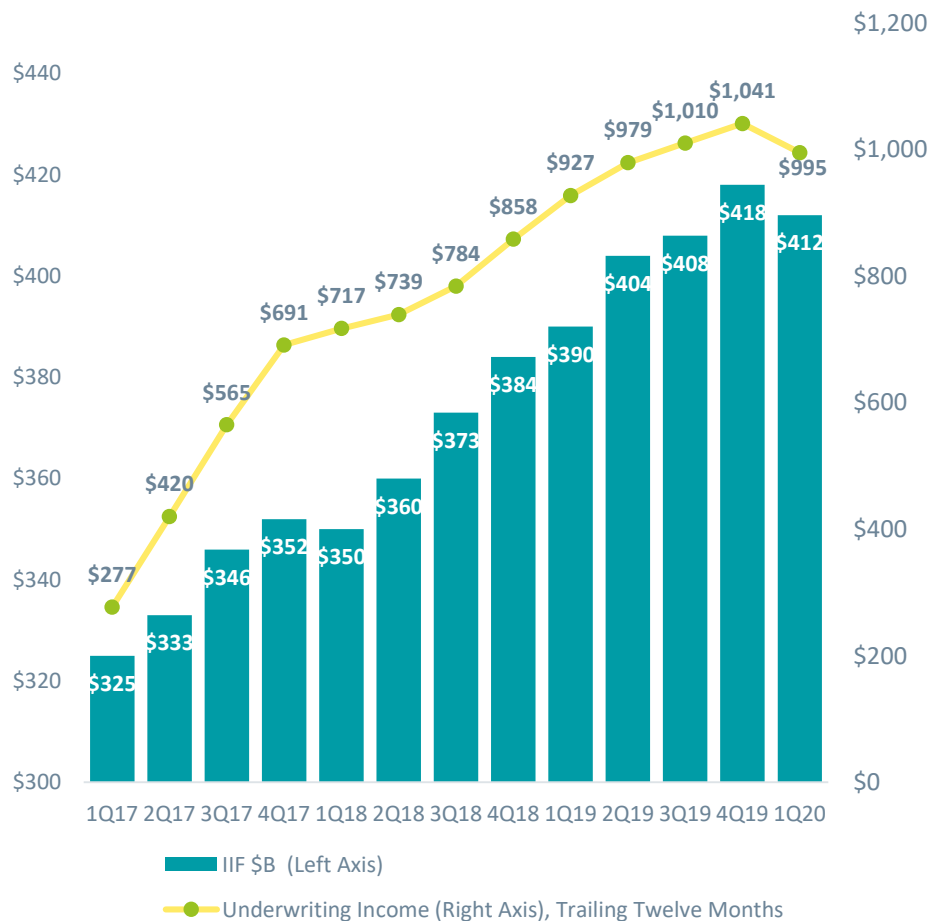


Differentiated Business Model

- Arch aggregates risk from diversified sources and then utilizes a variety of tools for managing mortgage and credit risk.
- Arch seeks to limit risk exposure from a severe economic event (RDS) to protect capital.
- Mortgage Segment is positioned for consistent attractive returns throughout the cycle.

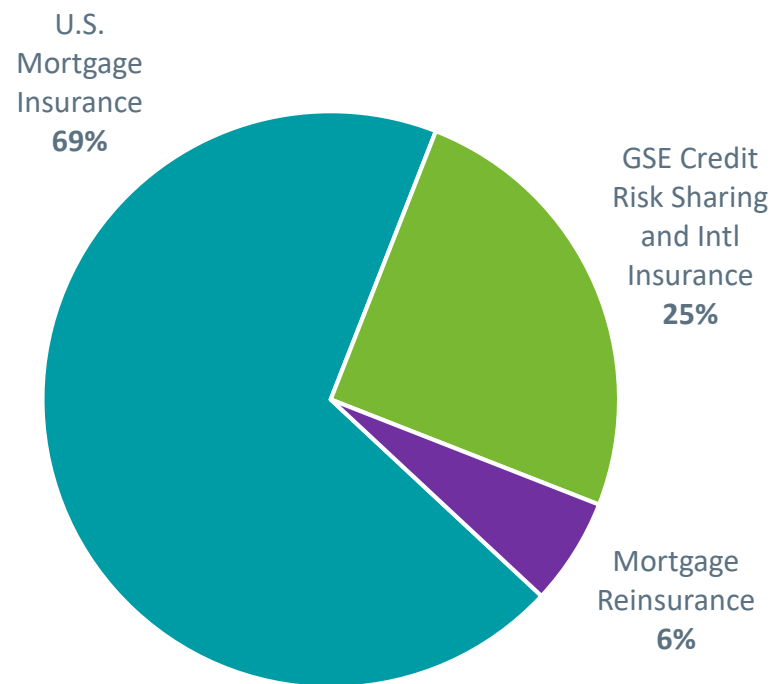


Insurance In Force (IIF) and Underwriting Income



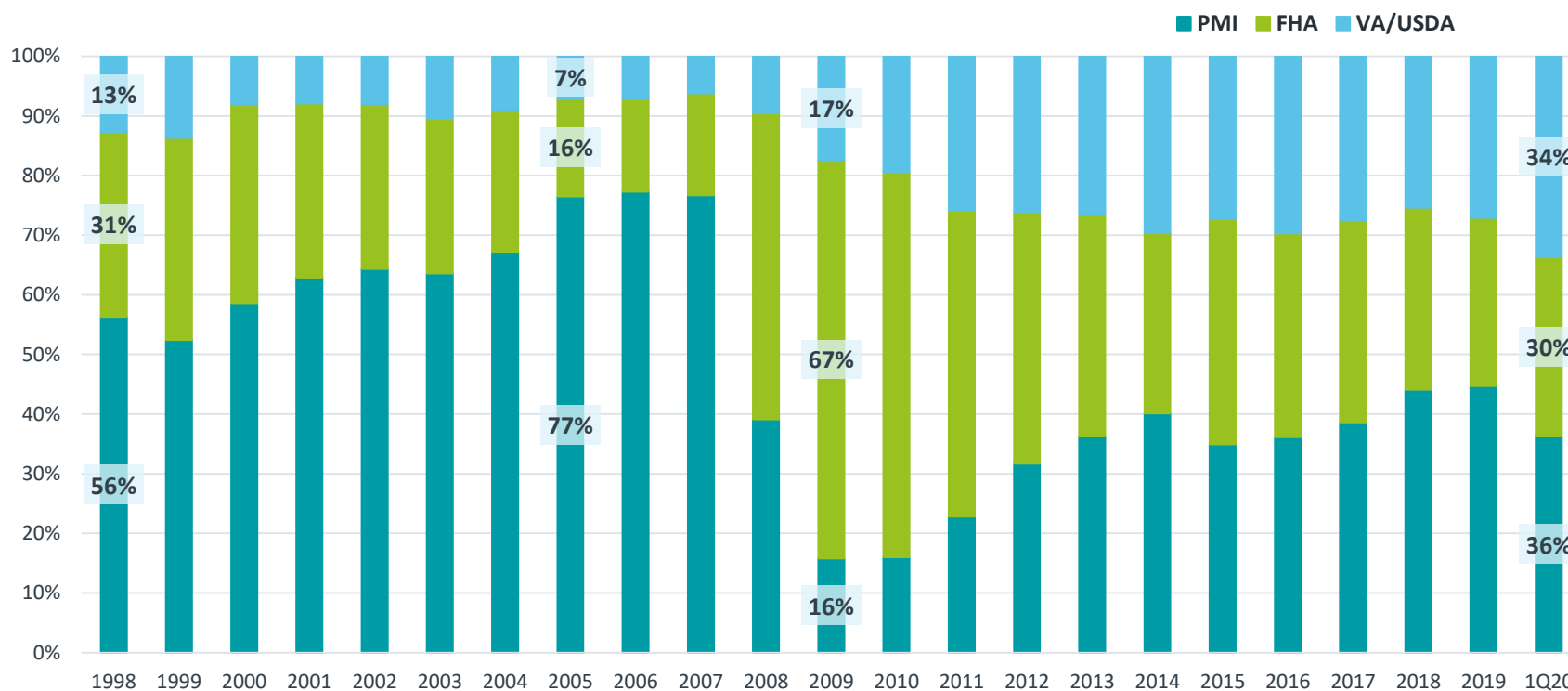
Insurance In Force (\$412B)

March 31, 2020



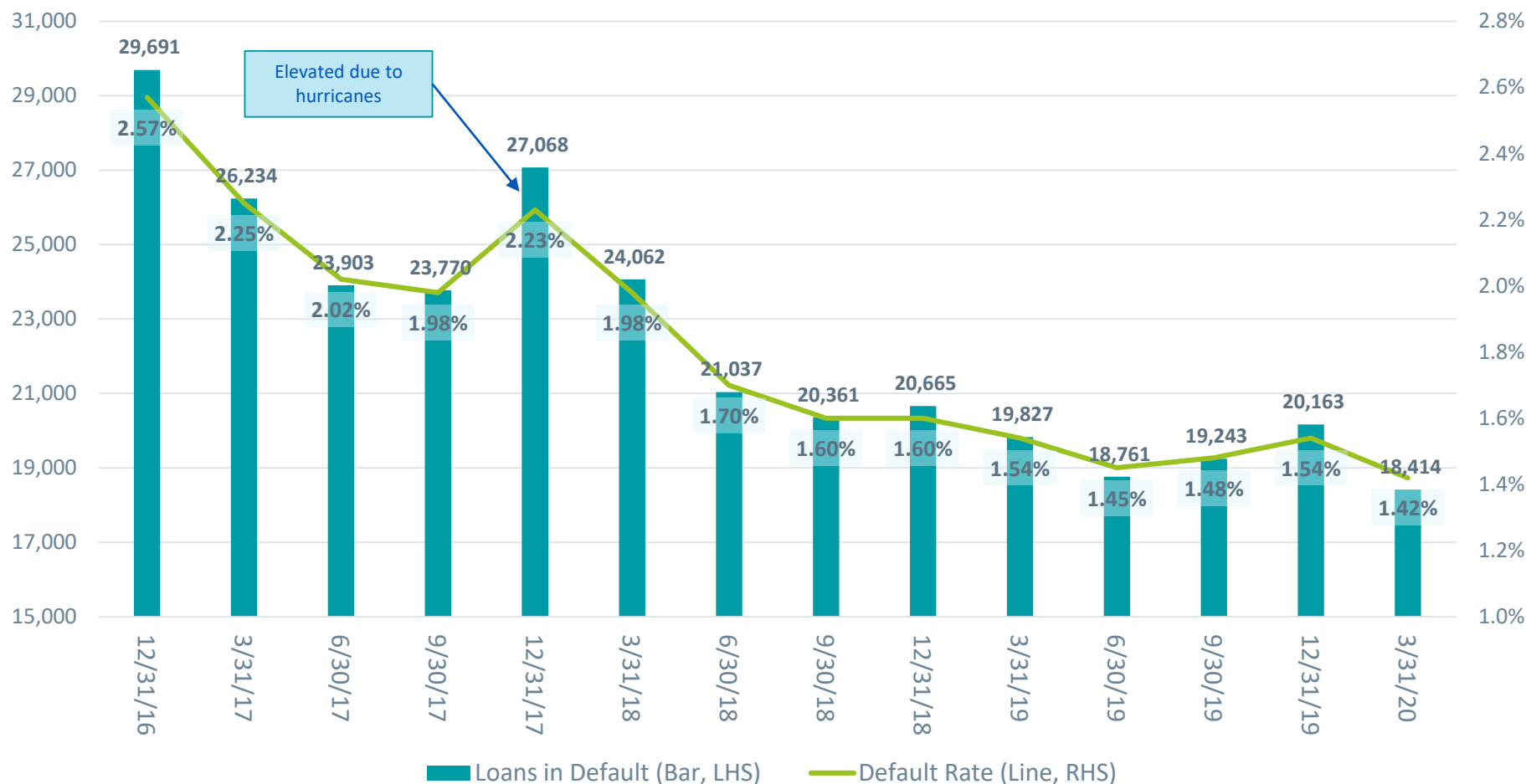
FHA/VA's Share of the Insured Mortgage Market has Declined since 2010

Market Shares of Insured Originations



Source: Inside Mortgage Finance

Loans in Default and Default Rate



Arch MI US – Bellemeade Reinsurance Coverage by Deal

March 31, 2020 (\$ in millions)

	Bellemeade Re Insurance-Linked Notes Key Metrics ⁽¹⁾								
	2017-1	2018-1	2018-2	2018-3	2019-1	2019-2	2019-3	2019-4	Total
Coverage dates for policies issued between	1/17-6/17	7/17-12/17	4/13-12/15	1/18-6/18	2005-2008 ⁽²⁾	7/18-12/18	2016	1/19-6/19	
Current Risk in force	4,688	5,476	7,995	5,591	4,103	6,070	7,293	6,161	47,376
Initial coverage at issuance date	368	374	653	506	342	621	701	577	4,143
Current coverage	190	300	381	383	229	462	603	563	3,112
Arch's retention layer	166	169	352	179	208	222	232	162	1,690
Claims paid under Arch's retention layer	3	2	3	1	8	1	1	-	18
Remaining retention before BMIR reinsurance	163	167	350	178	200	221	232	162	1,672
Delinquency % ⁽³⁾	0.94%	0.85%	0.69%	0.87%	3.86%	0.90%	0.68%	0.31%	1.00%
Delinquency trigger % ⁽⁴⁾	5.00%	5.00%	4.00%	5.00%	8.00%	5.00%	4.00%	5.00%	
Initial Attachment % (cumulative losses as % of RIF)	2.25%	2.25%	2.75%	2.25%	3.50%	2.50%	2.50%	2.25%	
Initial Detachment % (cumulative losses as % of RIF)	5.00%	5.00%	5.10%	6.35%	5.75%	7.00%	7.55%	8.00%	
Current Attachment % ⁽⁵⁾ (cumulative losses as % of RIF)	3.53%	3.08%	4.41%	3.21%	5.07%	3.65%	3.18%	2.64%	
Current Detachment % ⁽⁶⁾ (cumulative losses as % of RIF)	7.59%	8.55%	9.17%	10.06%	10.65%	11.27%	11.46%	11.78%	

- (1) Through March 31, 2020, the Company has entered into various aggregate excess of loss mortgage reinsurance agreements with special purpose reinsurance companies domiciled in Bermuda (the “Bellemeade Agreements”). The Bellemeade issuers are not subsidiaries or affiliates of the Company. Based on applicable accounting guidance, the Company does not consolidate such entities in its consolidated financial statements.
- (2) Policies primarily issued between 2005-2008 under United Guaranty Residential Insurance Company (“UGRIC”); as well as policies issued through 2015 under both UGRIC and Arch Mortgage Insurance Company.
- (3) Represents the percentage of risk in force that is 60 or more days delinquent.
- (4) When delinquency triggers reached then bond amortization stops and coverage remains constant
- (5) Represents the amount of cumulative losses as a percentage of current risk in force that the Company retains prior to the Bellemeade notes absorbing losses.
- (6) Represents the amount of cumulative losses as a percentage of current risk in force that must be reached before the Company restarts absorbing losses again.

As of March 31, 2020 (\$ in millions)

Vintage	Gross RIF	Est. RIF Ceded to QS	RIF net of QS ¹	Est Bellemeade Coverage as % of RIF	Bellemeade Reference Pool
2010 and prior	3,763	0	3,763	85%	3,200
2011	422	0	422	35%	148
2012	1,604	0	1,604	35%	558
2013	3,156	0	3,156	86%	2,716
2014	3,511	1,565	1,946	99%	1,917
2015	6,395	2,801	3,594	99%	3,558
2016	9,997	2,635	7,362	99%	7,274
2017	10,454	202	10,252	100%	10,241
2018	11,914	194	11,721	100%	11,686
2019	17,246	177	17,069	36%	6,076
2020	4,104	0	4,104	0%	0
Total	72,566	7,574	64,993	73%	47,376

¹ RIF net of QS and excess of loss reinsurance is \$58,693

Arch MI U.S. PMIERS Capital as of March 31, 2020 – DQ Rate to exhaust excess

Avg. Net RIF per Performing Loan	Incremental Required Assets as % of RIF	Incremental Required Assets per loan	PMIERS Excess (\$M)	Incremental Covid19 DQs	# of DQs at 3/31/2020	Pro Forma # of DQs at 3/31/2020	DQ Rate at 3/31/2020	Pro Forma DQ Rate required to exhaust PMIERS Excess
30,125	10.0%	3,013	1,355	449,714	17,931	467,645	1.42%	37%

Notes: For Arch U.S. MI (GSE approved entities), Net Risk in Force (RIF) per Performing Loan reflects affiliate reinsurance and MILN coverage. DQ is delinquencies.

The pro-forma DQ rate required to exhaust PMIERS Excess is 37% if we assume all DQs are 2-3 missed payments. If we assume that all the DQs age to greater than or equal to twelve missed monthly payments, the pro-forma DQ rate required to exhaust PMIERS Excess is 20%.

Computation of required assets as percentage of RIF as of March 31, 2020

	PMIERS Risk Charge
2-3 Missed Payment DQs	55.00%
FEMA Disaster Multiplier	0.3
	16.5%
Performing Risk Charge	(6.5%)
Incremental Risk Charge	10.0%

- Under PMIERS delinquent loans are subject to non-performing risk charges based on the number of missed monthly payments.
- For 2-3 missed payments, the risk charge is 55% of the RIF. The longer the delinquency ages, the higher the risk based charge. Arch MI's portfolio risk charge was 6.5% at March 31, 2020.
- PMIERS prescribes that a 0.30 multiplier be applied to the risk-based required assets (a 70% haircut to the required asset requirement) for delinquencies in FEMA Declared Major Disaster Areas, for 120 days or longer if the forbearance plan was executed in response to a FEMA Declared Major Disaster Area eligible for individual assistance. All 50 states have been declared Major Disaster Areas.

- The percentage of loans in forbearance is lower for GSEs vs. FHA borrowers and private label securities.

MBA's Forbearance and Call Volume Survey

May 4 – 10, 2020

Total loans in forbearance	8.16%
 Fannie Mae and Freddie Mac loans in forbearance	6.25%
Ginnie Mae loans in forbearance	11.26%
Other loans (e.g., private-label securities and portfolio loans) in forbearance	9.26%

Source: Mortgage Bankers Association, May 18, 2020 press release

- A significant number of forbearance loans are current.

“Of the borrowers under forbearance who have an enterprise backed mortgage about one third are continuing to make their payments”

— FHFA director Mark Calabria
MBA Live: State of the Industry, May 19, 2020

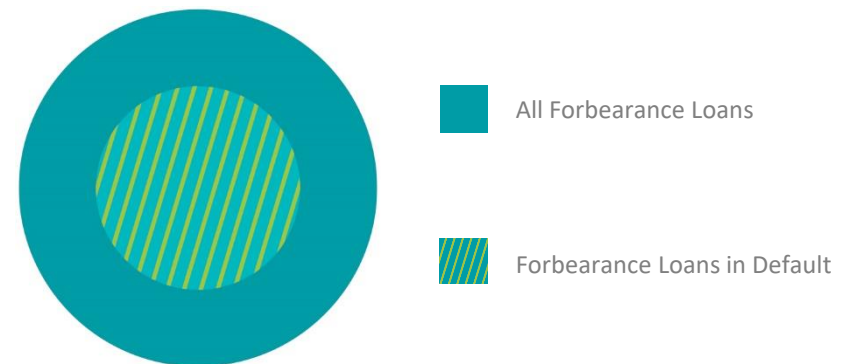


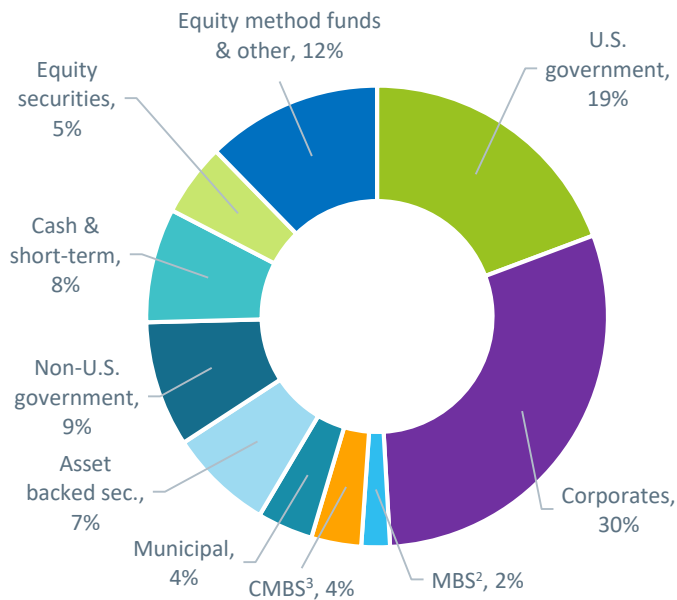
Illustration of Moody's S3 Scenario

	Moody's S3 - Pre COVID (March 2020)	Recent Observations
Home Price Appreciation	-7% Over 5 Quarters	5% to 6% YoY increases (last 6 months)
Mortgage Interest Rate	3.2% Over 4 quarters	3.3% Freddie Mac PMMS May 14
Unemployment Rate (U3)	7.4% Peak at YE 2021	14.7% April #, released May 8th
Gross Domestic Product	-2.3% 4Q2020 Trough	-4.8% Q1 annualized, released Apr 28th
Loans in Forbearance	N/A	6.25% MBA survey for GSEs (May 10th)
Ultimate Claim Rate	3.0% - 3.5% Arch modelled	

Note: Ultimate claim rates are at Arch MI US lifetime losses as a percentage of RIF at 3/31/2020

- Arch manages the portfolio conservatively to protect our reserves on an economic basis and ensure our ongoing ability to pay claims.
- Arch's investment approach is to improve the Company's Return on Equity while avoiding undue risk. We do this by focusing on total return with thoughtful target allocation and periodic rebalancing.

Investment by Type¹



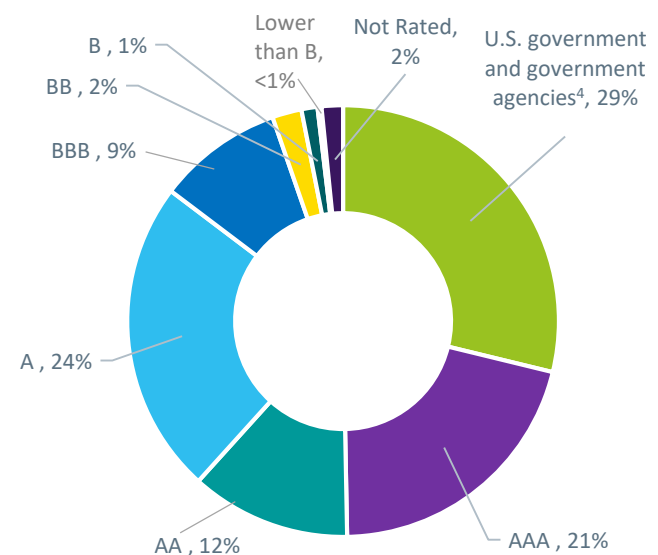
¹ Excluding amounts attributable to the 'other' segment (Watford)

² MBS = Mortgage backed securities

³ CMBS = Commercial mortgage backed securities

⁴ Includes U.S. government – sponsored agency MBS and agency CMBS.

Fixed Maturity by Rating¹



At Arch, we believe that it is our responsibility to do the right thing for our employees, our clients, our shareholders and our communities. We published our first Sustainability Report and SASB disclosure at the end of March. These reports are available on the Investor Relations page of ACGL's website. We acknowledge this responsibility to our stakeholders in these key areas:



Community Impact

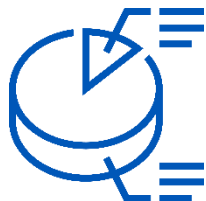
Our people give both their time and their financial resources to charities of all types, and the company promotes corporate citizenship through charitable donations and company-sponsored volunteer activities. In response to COVID-19 pandemic the Company donated \$1 million to organizations focused on food insecurity, health issues in underserved and high-risk communities and providing front-line responders with protective equipment and essential medical items.

Arch is committed to making a positive impact on the communities where our employees live and work through our matching gift program, corporate giving and employee volunteerism. We help employees amplify their community impact by providing our worldwide employees with a 1:1 match on their donations to recognized charitable organizations. In addition, in response to COVID-19, Arch temporarily enhanced its corporate match for employees' charitable contributions from 1:1 to 2:1 to strengthen employees' ability to impact the charities most meaningful to them.



Environmental Stewardship: Our Environmental Policy

We understand the risks that environmental challenges present to people and communities. As environmental stewards, we take an active role in reducing our environmental impact and look for cost-effective ways to protect and conserve natural resources. We are committed to long-term, sustainable approaches to protecting the environment. 22% of our offices globally are located in certified LEEDs buildings and we have prioritized looking for new office space in LEED-certified and Energy Star® buildings when considering new leaseholds.



Responsible Investing

We believe that the incorporation of material, non-financial factors into investment selection and risk management has the potential to enhance long-term investment returns. We use Environmental, Social & Governance (ESG) factors with respect to our directly managed assets and with respect to assets managed for us by third-party managers. We measure our exposure to ESG risks at both individual asset classes and total portfolio levels.



Investing in our People

We create a workplace culture where all employees are treated with dignity and respect, and individual differences are valued, all with the goal of securing trust, empowerment and satisfaction for our employees. We foster this culture through our learning and development programs and our competitive compensation and health and welfare programs. In March 2020, we closed all our offices worldwide and implemented work from home strategy in response to COVID-19 pandemic. We extended the U.S. employee medical insurance to cover certain in-network services related to the testing and evaluation of coronavirus and COVID-19 — as well as inpatient treatment. Additionally, Arch has established an employee assistance fund, “Arch Cares” to provide monetary support to our employees with financial hardships caused by the COVID-19 pandemic.



Diversity and Inclusion

Arch recognizes that bringing together diverse backgrounds and experiences drives innovation and leads to better outcomes for all stakeholders. We seek to foster a culture that embraces diversity and gives our people the opportunity to succeed. This commitment is embedded in our values and contained in our company policies. Earlier this year, 78% of Arch employees participated in our first global employee engagement survey. The results indicated that our people share a bright outlook for our future, with an 84% engagement score (nine points above the industry norm).



Governance

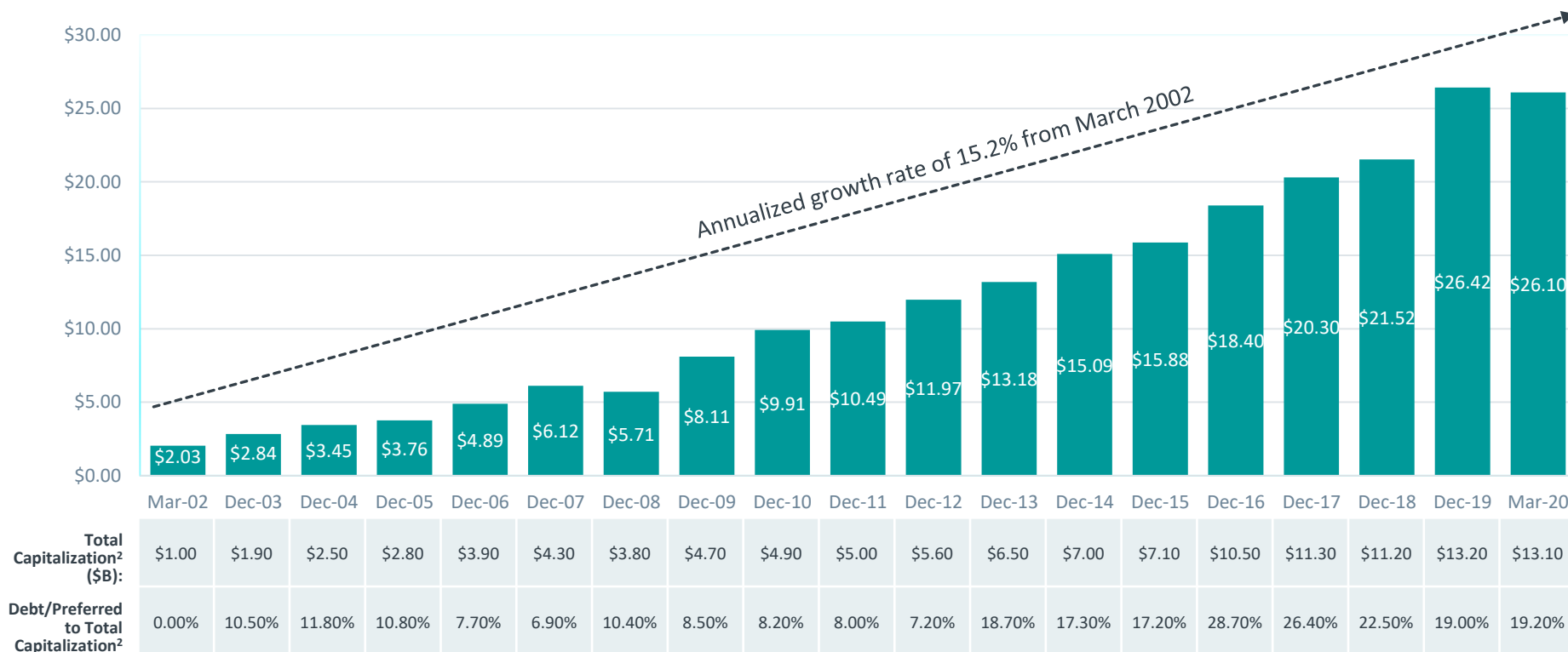
We maintain the highest standards of corporate governance and ethical conduct. Our Board of Directors oversees the company’s strategic direction and approach to risk management. In selecting Board members, our Nominating and Governance Committee’s objective is to choose individuals with skills and experience who can best represent our shareholders and assist Arch’s management in operating the business. The company endeavors to maintain a Board representing a diverse spectrum of expertise, background, perspective, race, gender and experience.



Data Security

Arch is committed to applying high standards of diligence and security when it comes to handling and protecting personal data and observing data protection laws and regulations. Our commitment is documented in our Privacy and Data Protection Policy.

Book value per common share¹



¹ 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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