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Athene Holding Ltd.
4Q'19 and FY'19 Earnings Presentation

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All information is as of the dates indicated herein.

Athene 4Q'19 and FY'19 Financial Results Highlights

Record earnings and share repurchase accretion drive 18% year-over-year growth in adjusted book value per common share

	4Q'19		FY'19		
	\$ millions	Per share	\$ millions	Per share	
Earnings	Record adjusted operating income available to common shareholders	\$389	\$2.21	\$1,289	\$6.97
	Adjusted operating income available to common shareholders ex. notables ¹	\$346	\$1.97	\$1,294	\$7.00
	Adjusted operating ROA ex. notables of 1.19% in 4Q'19 and 1.12% in FY'19				
	Operating expenses as a % of average net invested assets of 0.29% in FY'19, improving 4 basis points, or 12%, from FY'18				
Assets	Net invested assets of \$117.5 billion, excluding \$7.1 billion of assets attributable to the ACRA noncontrolling interest ²				
	– Gross invested assets of \$124.6 billion, up 12% year-over-year				
	Consolidated net investment earned rate (NIER) of 4.62% in 4Q'19 (4.48% in FY'19)				
	– Fixed income and other NIER: 4.29% in 4Q'19 (4.23% in FY'19)				
– Alternatives NIER: 11.15% in 4Q'19 (9.84% in FY'19)					
Retirement Services net investment spread ex. notable items of 1.67% in 4Q'19 and 1.50% in FY'19					
Liabilities	Record annual gross organic deposits of \$18.1 billion in FY'19, up 37% year-over-year including \$3.6 billion in 4Q'19, underwritten to very attractive returns above historical average				
	– Flow Reinsurance: \$1.2 billion (\$4.0 billion in FY'19)				
	– Retail: \$1.1 billion (\$6.8 billion in FY'19)				
	– Pension Risk Transfer: \$809 million (\$6.0 billion in FY'19)				
– Funding Agreements: \$499 million (\$1.3 billion in FY'19)					
Capital	Adjusted operating ROE ex. notables	14.9%	19.4%	14.2%	17.4%
	Adjusted book value per common share of \$54.02, up 18% year-over-year				
	Standalone deployable capital of ~\$4.5 billion; ~\$2 billion of excess capital and ~\$2.5 billion of untapped debt capacity ^{3,4}				
	Total deployable capital of \$7.1 billion, including \$2.6 billion of undrawn third-party commitments to ADIP / ACRA ⁵				

¹ Reconciliations of quarterly and annual adjusted operating income available to common shareholders excluding notable items can be found on slides 26-27 of this presentation. ² Net invested assets includes Athene's proportionate share of ACRA investments, based on Athene's economic ownership, but does not include the proportionate share of investments associated with the noncontrolling interest. ³ Pro forma for repayment of \$475 million of short-term federal home loan bank (FHLB) related financing in 1H'20. ⁴ Untapped debt capacity assumes capacity of 25% adjusted debt to capitalization and is subject to general availability and market conditions. ⁵ Apollo/Athene Dedicated Investment Program ("ADIP") is the investment fund managed by Apollo Global Management that will help capitalize the Athene Co-Invest Reinsurance Affiliate ("ACRA").

Athene Delivered Significant Shareholder Value in 2019

2019 accomplishments will drive the business forward in 2020 and beyond

Record Earnings and Book Value

- Generated record annual adjusted operating income of \$1,289 million or \$6.97 per share, reflecting continued focus on profitable growth
- Grew adjusted book value to a new high of \$54 per share, or 18% year-over-year, stronger than recent pace

Record Organic Growth at Attractive Returns

- Generated record gross organic deposits of \$18+ billion, underwritten to very attractive returns above historical average
- Posted new highs for pension risk transfer deal volume and market share, and expanded into the U.K. market

Effective Capital Allocation

- Structured and raised multi billion-dollar strategic capital solution (ACRA), significantly enhancing capital flexibility
- Deployed more than \$900 million into accretive share repurchases, equivalent to ~12%¹ of market cap, generating high-teens returns
- Raised \$1.2 billion of permanent capital in two preferred share offerings at attractive cost
- Upgraded by Fitch, achieving "A" ratings across the board and continuing upgrade trajectory

Strong Investment Capabilities

- Sourced and invested a record \$30+ billion of assets at attractive yields, continuing strong track record of outperformance
- Continued build-out of direct origination capabilities including the acquisition of aircraft lease portfolio from PK AirFinance

Proactive Strategic Actions

- Moved to simplify share class structure, increasing index eligibility and broadening investor appeal
- Strengthened alignment with strategic partner, Apollo Global Management
- Celebrated 10-year anniversary and published inaugural corporate social responsibility report highlighting positive momentum built over the past decade

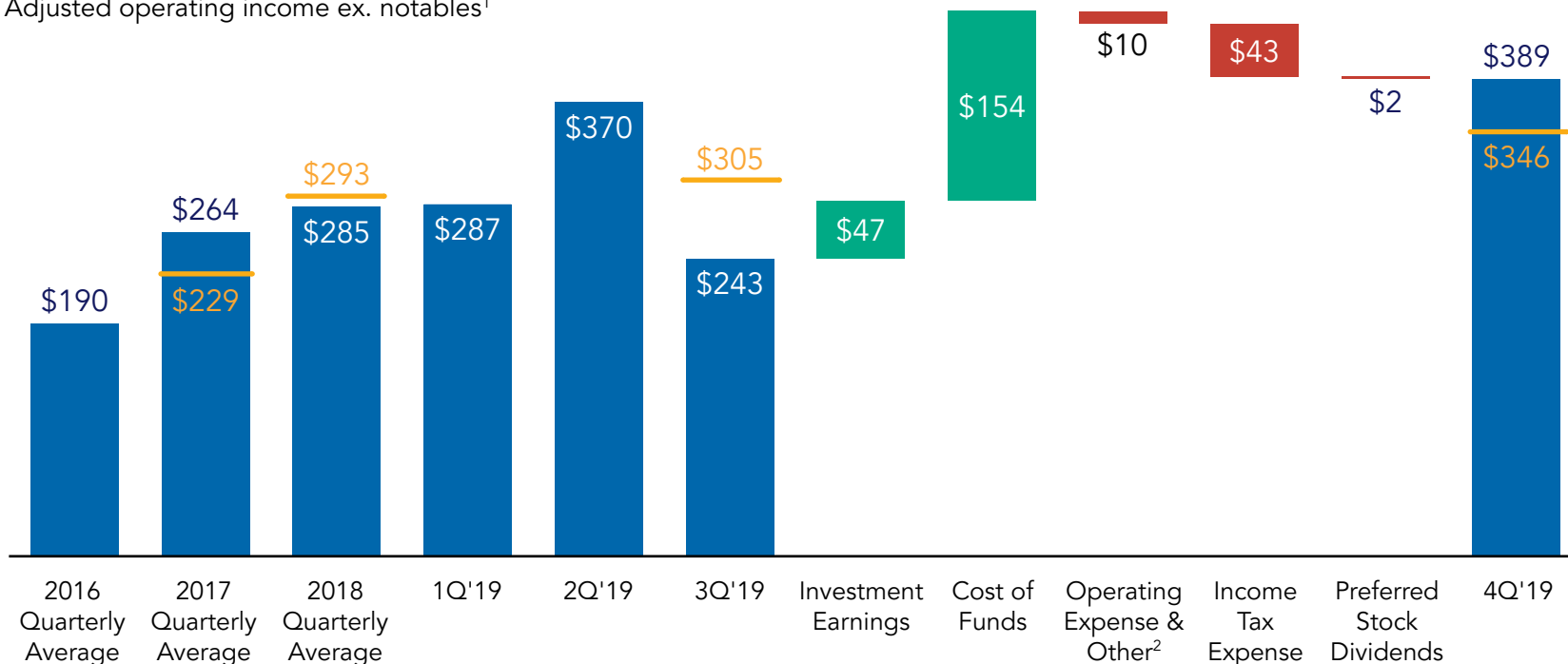
¹ Reflects cumulative share buyback activity since December 2018. Market cap as of December 2018 when Athene initiated share repurchases.

Adjusted Operating Income Rollforward – 4Q'19

Sequential increase in AOI driven by a lower cost of funds including a lower cost of crediting and other liability costs, as well as higher investment earnings

(\$ in millions)

— Adjusted operating income ex. notables¹



AOI Per Common Share

\$1.00	\$1.35	\$1.46	\$1.50	\$1.95	\$1.34	\$0.27	\$0.88	(\$0.06)	(\$0.24)	(\$0.01)	\$2.21
					\$1.67						\$1.97

Note: Components within the AOI per common share rollforward may not sum due to other factors such as changes in share count. In 4Q'19, approximately \$0.03 of share repurchase accretion is included within total adjusted operating income available to common shareholders per common share. 1 Reconciliations of quarterly adjusted operating income available to common shareholders excluding notable items can be found on slides 25 and 26 of this presentation. 2 Includes interest expense and management fees from ACRA.

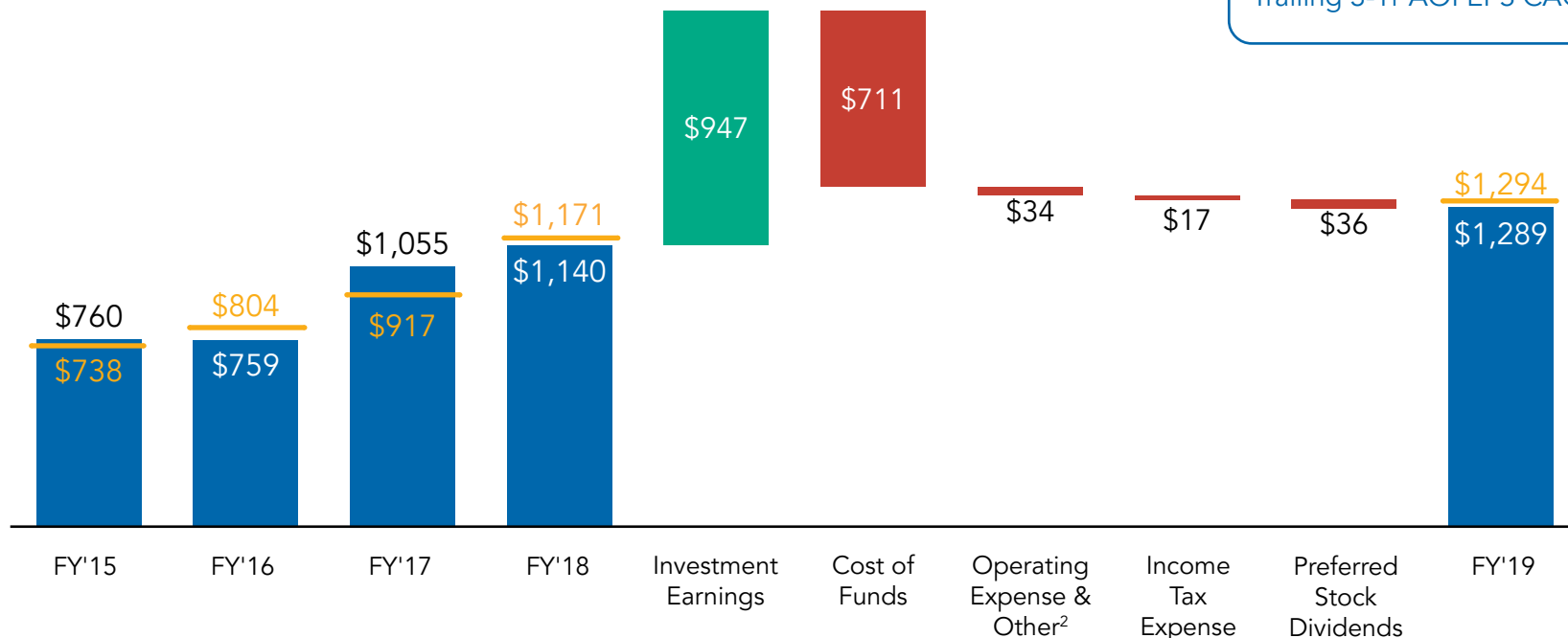
Adjusted Operating Income Rollforward – FY'19

Sequential increase in AOI driven by higher net investment earnings reflecting growth in net invested assets and greater investment income from Alternatives

(\$ in millions)

— Adjusted operating income ex. notables¹

+21%
Trailing 3-Yr AOI EPS CAGR



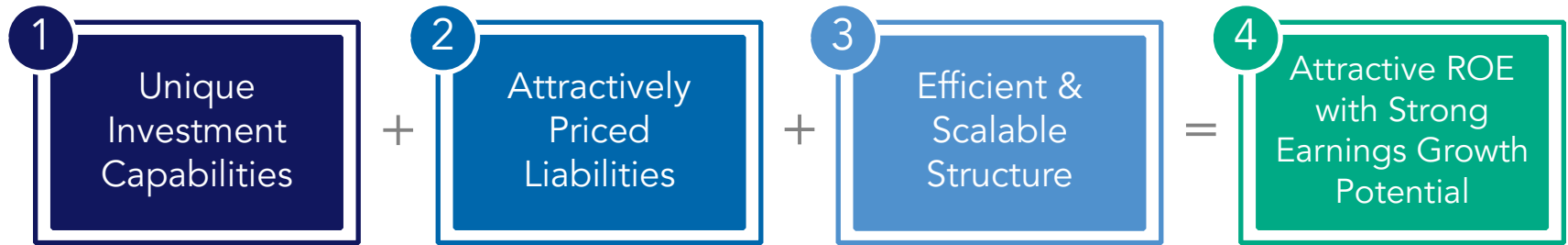
AOI Per Common Share

\$4.34	\$3.93	\$5.39	\$5.82	\$5.12	(\$3.85)	(\$0.18)	(\$0.09)	(\$0.19)	\$6.97
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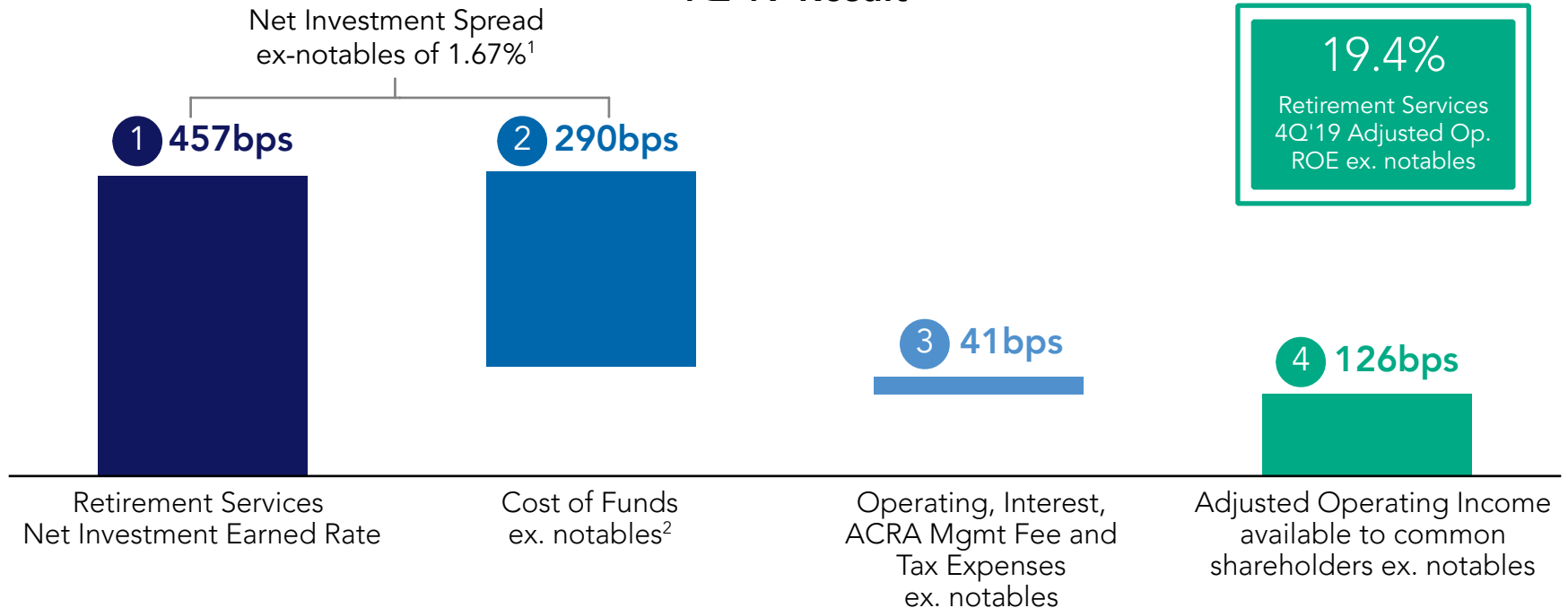
Note: Components within the AOI per common share rollforward may not sum due to other factors such as changes in share count. In FY 2019, approximately \$0.34 of share repurchase accretion is included within total adjusted operating income available to common shareholders per common share. 1 Reconciliations of annual adjusted operating income available to common shareholders excluding notable items can be found on slide 27 of this presentation. 2 Includes interest expense and management fees from ACRA.

Straightforward & Scalable Net Investment Spread Model

Achieving targeted mid-to-high teens adjusted operating ROE in Retirement Services



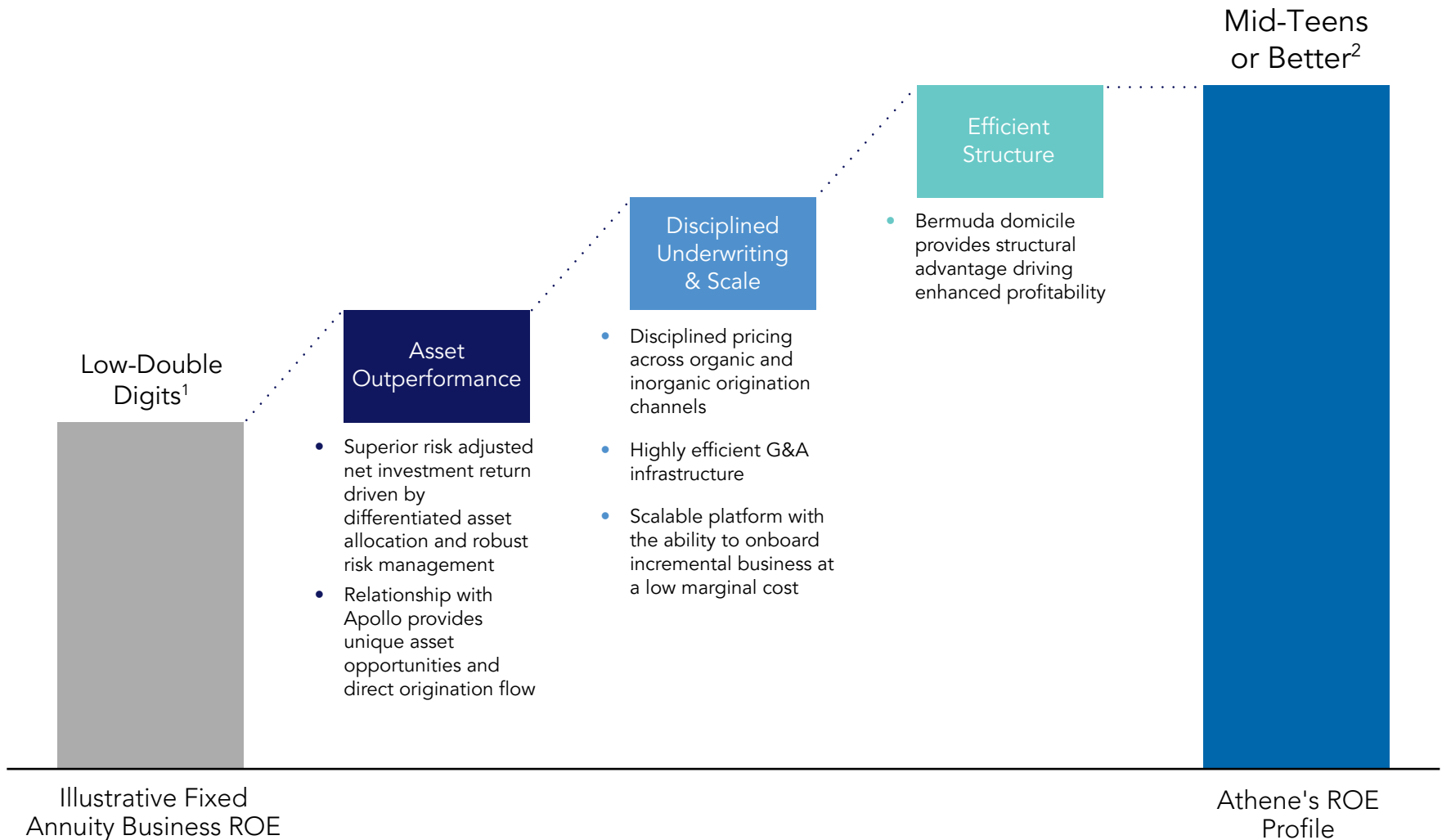
4Q'19 Result



¹ Net investment spread based on net investment earned rate less cost of funds. ² Cost of funds is calculated by dividing total liability costs, which includes cost of crediting on both deferred annuities and institutional products as well as other liability costs, by average net invested assets for the relevant period. For additional information regarding cost of funds, see Non-GAAP Measures and Definitions.

Athene's Model Drives Stronger Returns for Shareholders

Numerous fundamental advantages drive sustainable mid-teens ROE generation

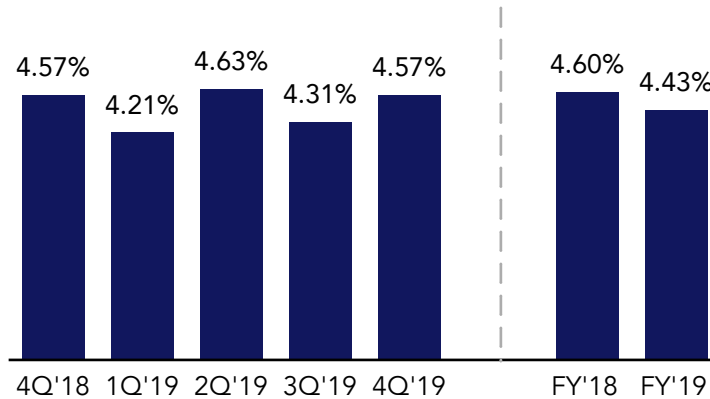


¹ Illustrative ROE assumes return on assets (ROA) of 90 basis points, assuming 12x operating leverage. ² ROE assumes ROA of 120 basis points, assuming 12x operating leverage and no financial leverage.

Net Investment Spread Metrics – Retirement Services

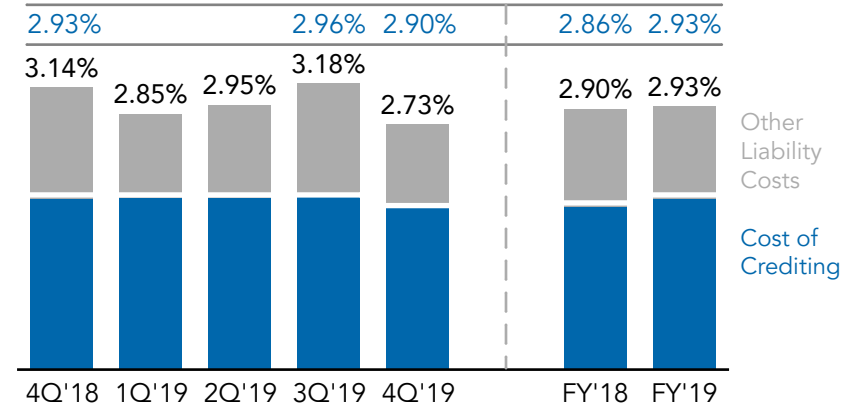
Sequential spread improvement reflects NIER rebound due to higher bond call income and a lower cost of funds due to favorable actuarial updates and equity market performance

Net Investment Earned Rate¹



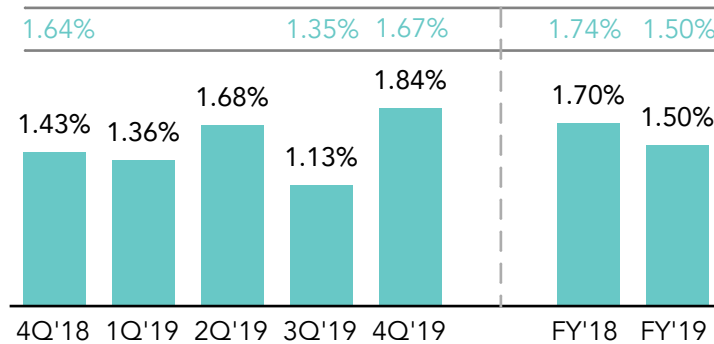
Cost of Funds²

ex. Notables:

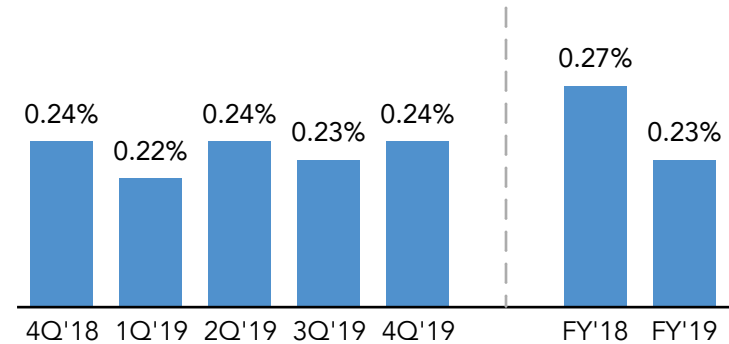


Net Investment Spread³

ex. Notables:



Operating Expenses⁴



Note: Quarterly periods are annualized. 1 Net investment earned rate is calculated by dividing net investment earnings by average net invested assets for the relevant period. 2 Cost of funds is calculated by dividing total liability costs, which includes cost of crediting on both deferred annuities and institutional products as well as other liability costs, by average net invested assets for the relevant period. 3 Net investment spread based on net investment earned rate less cost of funds. 4 Operating expenses are calculated by dividing operating expenses by average net invested assets for the relevant period.

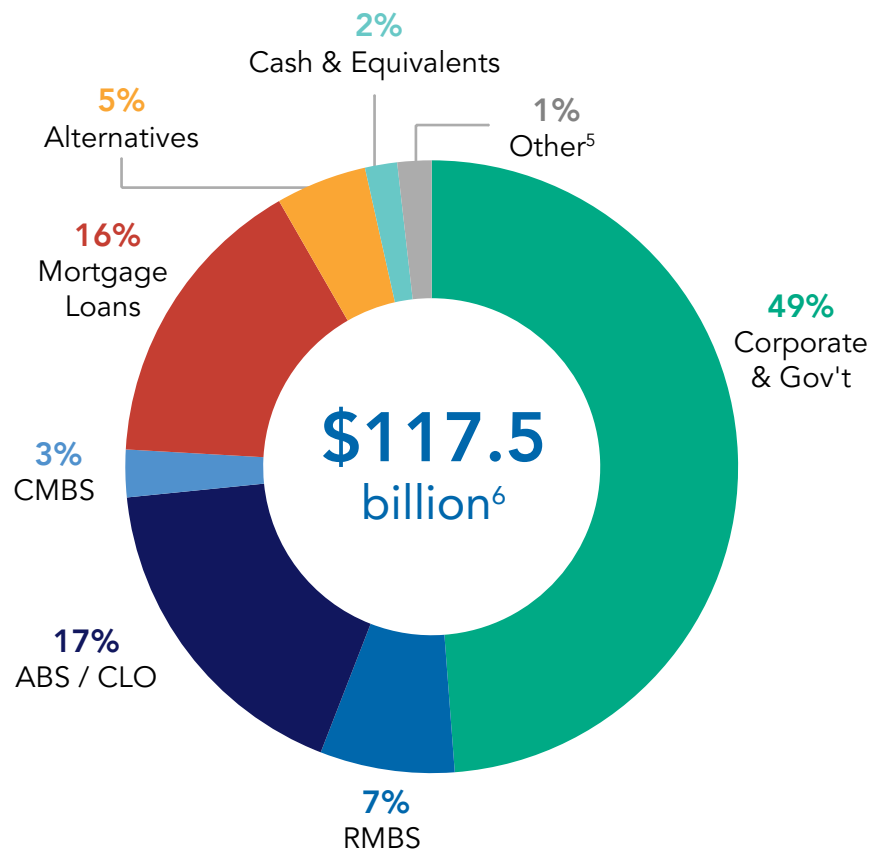
Investment Portfolio: Differentiated Capabilities Drive Returns

Strategic asset allocation targets superior returns over the long-term without assuming incremental credit risk

Commentary

- Maintaining investment discipline in low interest rate environment
- Consolidated NIER of 4.62%¹ in 4Q'19
 - Fixed Income and Other NIER rose 18bps sequentially, primarily due to an increase in RMBS yields and higher bond call income, as well as the impacts of the partial ACRA sale and lower cash drag, partially offset by lower floating rate investment income
- Retirement Services NIER of 4.57%¹ in 4Q'19
 - RS Alternatives NIER of 10.94%¹ with particular strength in Venerable investment
- 4Q'19 asset purchases of \$9.6 billion, up 42% year-over-year including close of PK AirFinance transaction
 - Record FY'19 asset purchases of over \$32 billion
 - Assets sourced through direct origination platforms are a strategic growth area
- High quality fixed income investments
 - 94% designated NAIC 1 or 2 of AFS fixed maturity securities²
 - 2bps of OTTI on average net invested assets³
- 18% of total invested assets in floating rate securities, which produce +/- \$30-\$35 million of adjusted operating income per year for every 25bp change in interest rates⁴

Investment Portfolio Composition



Note: Net invested assets includes Athene's proportionate share of ACRA investments, based on Athene's economic ownership, but does not include the proportionate share of investments associated with the noncontrolling interest. 1 For the three months ended December 31, 2019, annualized. 2 As of December 31, 2019, including related parties and ACRA noncontrolling interest. 3 OTTI for the three months ended December 31, 2019, annualized. 4 Sensitivity assumes parallel shift in spot LIBOR rate and forward yield curve. 5 Other includes short-term investments and equity securities. 6 Net invested assets as of December 31, 2019.

Liability Profile: Long-Dated, Persistent & Attractively Priced

Large in-force business produces significant and steady base of earnings

Commentary

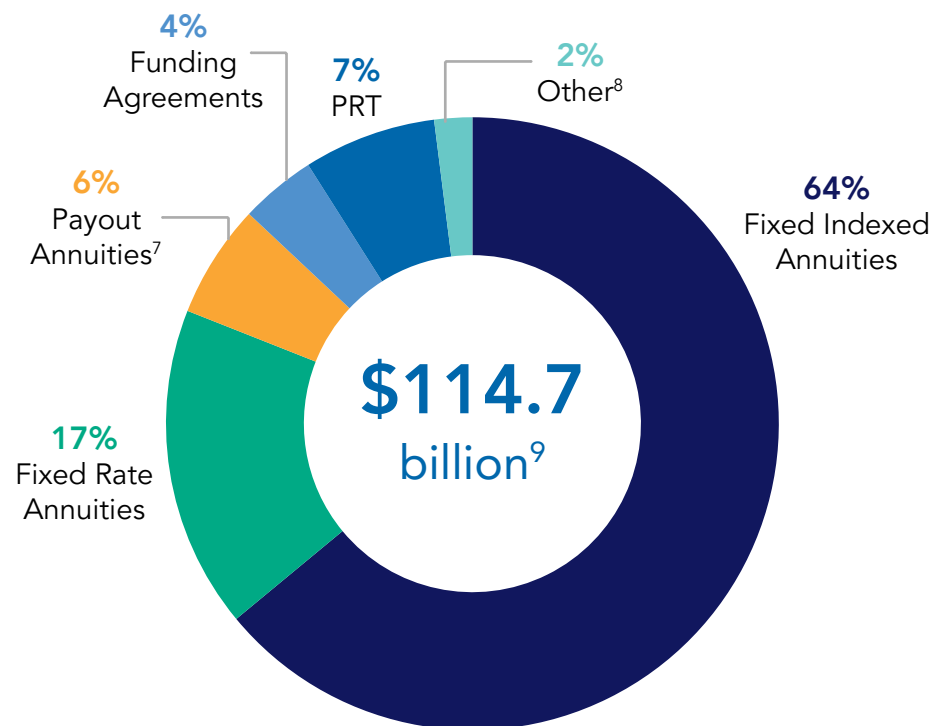
- Continue to underwrite all liability growth to the same high return thresholds and profitability standards
 - Underwritten returns for FY'19 were very attractive, above historical average
- 4Q'19 and FY'19 growth driven by flexibility and strength of multi-channel distribution model
- ~17% of liabilities are non-surrenderable

Deferred Annuity Metrics¹

Surrender charge protected ²	78%
Average surrender charge ³	6.3%
Subject to MVA ^{2,4}	64%
Cost of crediting on deferred annuities ⁵	1.95%
Distance to guaranteed minimum crediting rates	100 – 110 bps
Rider reserve as a percentage of account value with riders	10.9%

Diversified Liability Composition

9.5 year weighted average life⁶

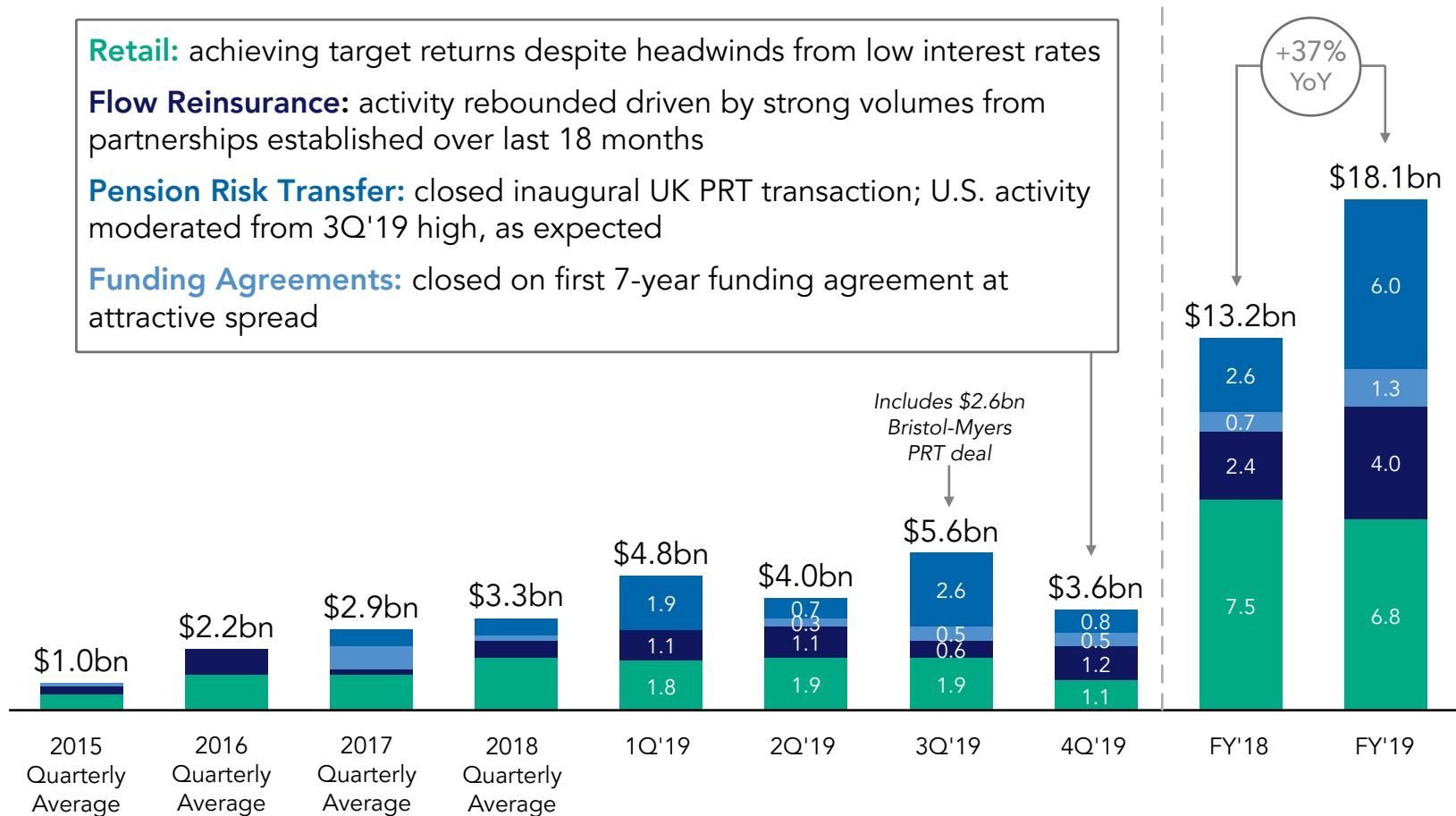


¹ As of and for the three months ended December 31, 2019, as applicable. ² Based on fixed indexed annuities and fixed rate annuities only. Refers to the percentage of account value that is in the surrender charge period. ³ Based on deferred annuities only, excluding the impact of MVAs. ⁴ Refers to the % of account value that is subject to a MVA. ⁵ For Retirement Services segment deferred annuities for the three months ended December 31, 2019, annualized. ⁶ Weighted average life of total reserve liabilities; weighted average life on deferred annuities was 8.9 years. ⁷ Includes Single Premium Immediate Annuities, Supplemental Contracts and Structured Settlements. ⁸ Other primarily consists of the AmerUs Closed Block liabilities and other life reserves. ⁹ Reserve liabilities as of December 31, 2019.

Multi-Channel Distribution Model Generates Attractive Growth

Flexibility to respond to changing market conditions across channels to opportunistically originate liabilities that generate Athene's targeted levels of profitability

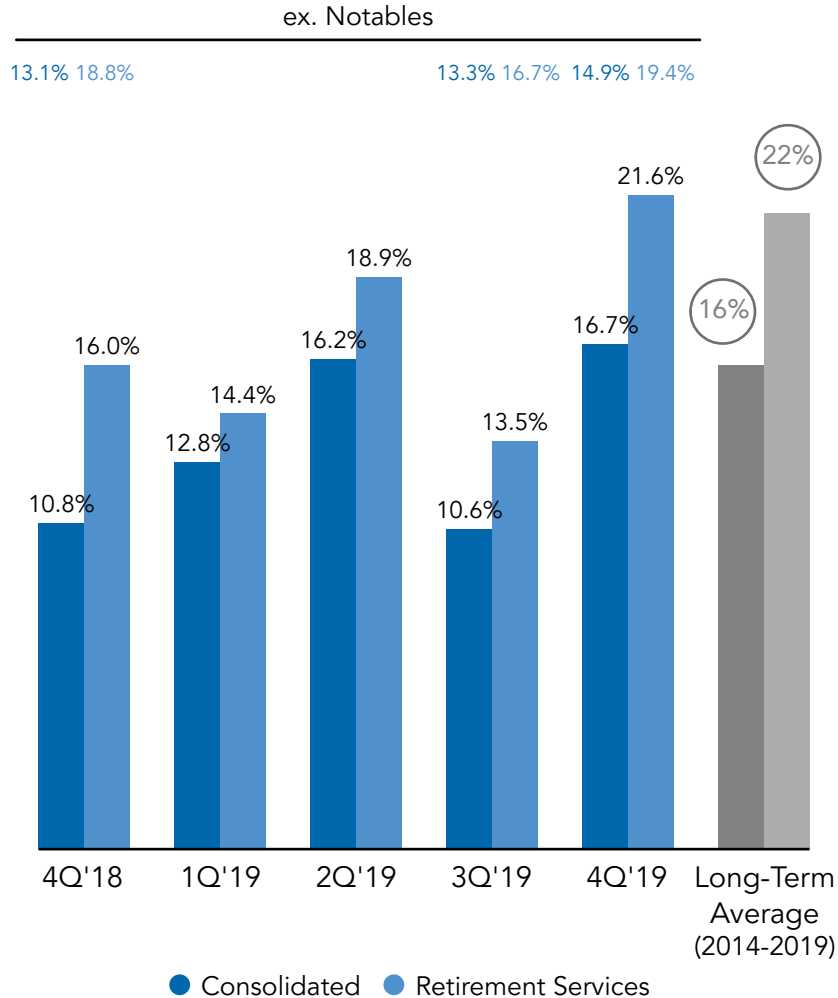
Retail: achieving target returns despite headwinds from low interest rates
Flow Reinsurance: activity rebounded driven by strong volumes from partnerships established over last 18 months
Pension Risk Transfer: closed inaugural UK PRT transaction; U.S. activity moderated from 3Q'19 high, as expected
Funding Agreements: closed on first 7-year funding agreement at attractive spread



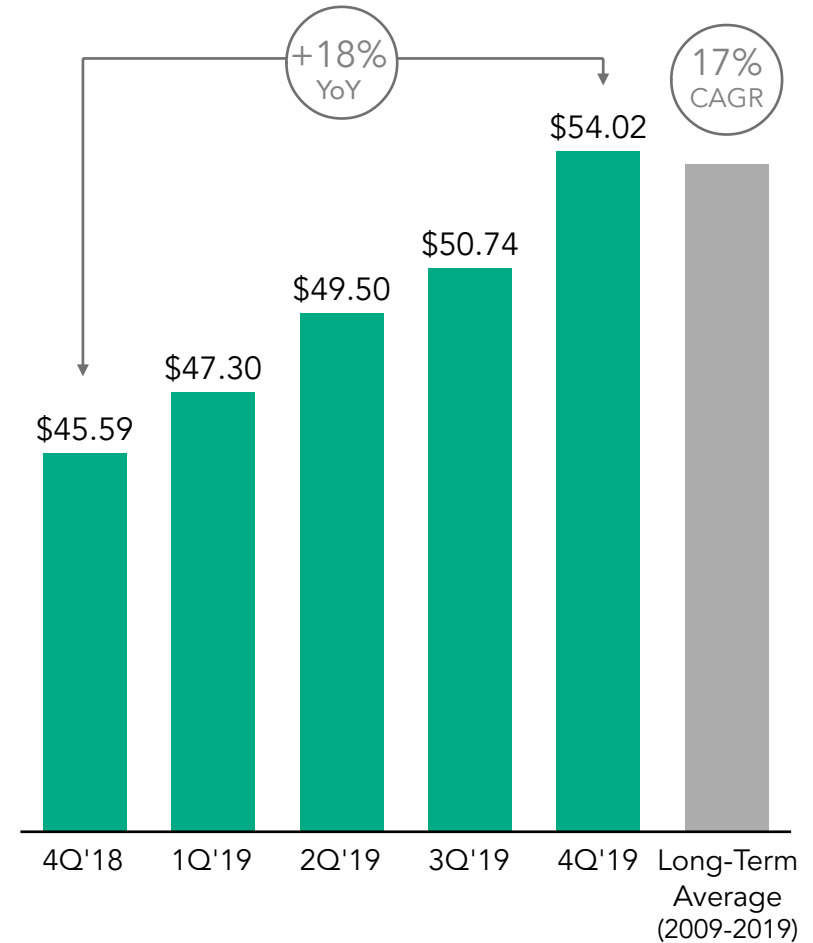
● Retail ● Flow Reinsurance ● Funding Agreements ● Pension Risk Transfer

Strong ROE Production Driving Book Value Growth

Adjusted Operating ROE



Adjusted Book Value Per Common Share



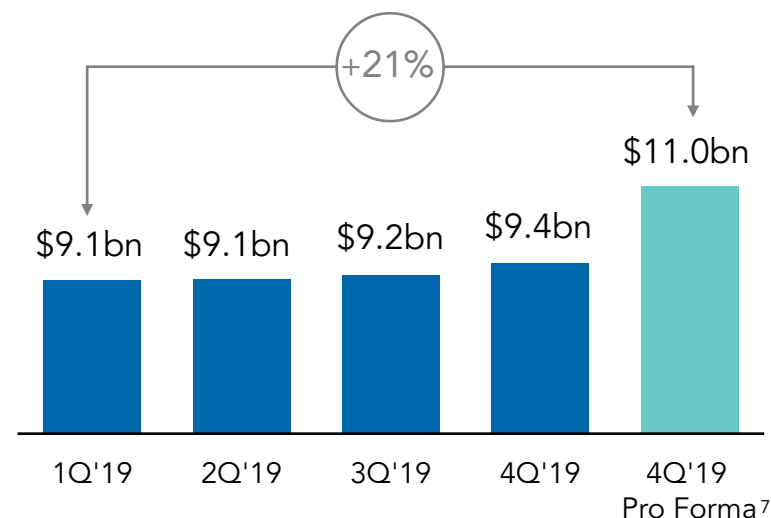
Patient and Disciplined Stewards of Capital

Capital position aligned with opportunistic approach to create long-term shareholder value

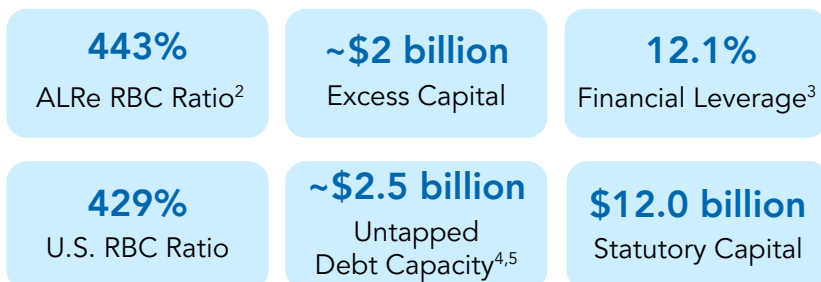
Commentary

- Consistently evaluate an abundance of capital deployment opportunities across liability trades (organic and inorganic), asset trades, as well as other opportunistic uses of capital (share repurchases, ratings maintenance and upgrades)
- 4Q'19 activity: \$283 million of share repurchases, and ~\$200 million of capital deployed for organic growth
- \$575 million of capital received upon selling two-thirds of ACRA to third party ADIP investors on October 1
- Pending strategic transaction with Apollo expected to add ~\$1 billion of excess capital in 1Q'20

Adjusted Common Shareholders' Equity⁶



Capital Metrics¹



Share Repurchase Activity

December 10, 2018 - February 18, 2020

Open Market Share Repurchases	22.4 million
Total Capital Used for Share Repurchases	\$927 million
Average Price Paid per Share	\$41.44
Average Adj. P/B on Share Repurchases	0.86x
Remaining Share Repurchase Authorization	\$640 million

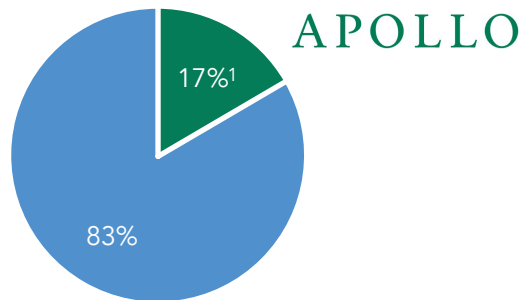
¹ As of December 31, 2019. ² ALRe RBC ratio, which is used in evaluating our capital position and the amount of capital needed to support our segment, is calculated by applying the NAIC RBC factors in effect as of December 31, 2019 to the Statutory Financial Statements of AHL's non-U.S. reinsurance subsidiaries, on an aggregate basis. ³ Adjusted debt to capital ratio. ⁴ Pro forma for repayment of \$475 million of short-term federal home loan bank (FHLB) related financing in 1H'20. ⁵ Untapped debt capacity assumes capacity of 25% adjusted debt to capitalization and is subject to general availability and market conditions. ⁶ See Non-GAAP Measures and Definitions and Non-GAAP Measure Reconciliations for more information on adjusted common shareholders' equity. ⁷ Pro forma for includes \$1.55 billion of new shares being issued in connection with strategic transaction with Apollo announced Oct. 28, 2019, assuming valuations as of the deal announcement.

Simplifying Share Structure Through Accretive Transaction

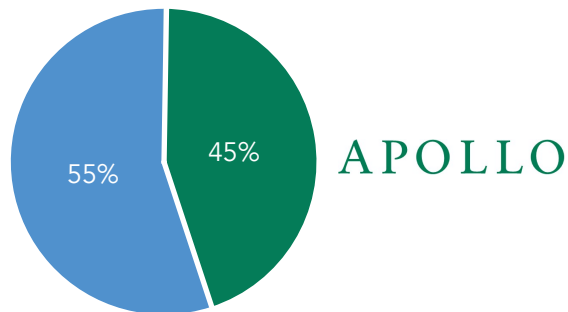
Previously announced strategic transaction with Apollo broadens investor appeal and enhances index eligibility

Previous: Asymmetry between ownership/voting power

Economics



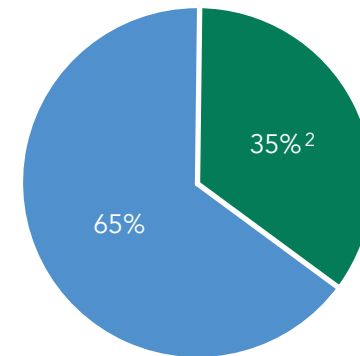
Voting Power



Pro Forma: Single share class structure

 **ATHENE** **APOLLO**

Economics and Voting Power



- Subsequent to transaction close expected in 1Q'20, Athene fully eligible for inclusion in a major S&P index
- Investment in Apollo provides Athene shareholders with exposure to Apollo's robust growth, profitability, and yield characteristics

Note: Previously announced strategic transaction with Apollo is pending close, subject to regulatory and Athene shareholder approvals.

¹ Represents Apollo's beneficial ownership in Athene, including direct investment, affiliates, and Apollo employees. ² Represents Apollo's beneficial ownership in Athene, including direct investment, affiliates, Apollo employees, and certain members of Athene management. Assumes exercise of Apollo's conditional right to buy up to 35% of the issued and outstanding common shares.

Cost of Funds Components – Retirement Services

	Typical % of CoF	Drivers	4Q'19
Cost of Crediting			
Deferred Annuities	50 – 60%	Includes fixed interest credited and option costs of FIAs. Costs should trend in line with the size of the block.	\$429
Institutional Products	5 – 15%	Includes crediting costs associated with pension risk transfer and funding agreements. Costs should trend in line with the size of the block and increase in line with the strategic growth initiatives for the institutional channel.	\$92
Other Liability Costs			
Rider Reserves	10 – 20%	Reserve pattern impacted by the level of current period operating profits and changes in future expectations of profits and rider benefits.	\$124
DAC, DSI, VOBA Amortization	10 – 20%	Amortization pattern impacted by the level of current period operating profits and changes in future expectations of profits.	\$131
Other	< 10%	Primarily payout annuities (excluding PRT), policy maintenance costs, reinsurance expense allowances, excise taxes, and non-deferred acquisition costs, net of product charges. Costs generally trend in line with changes in the size of the block.	\$4
Cost of Funds			\$780

Note: The typical percentage range for each component of cost of funds may change over time. Rider reserves and DAC, DSI and VOBA amortization amounts may fall outside of the typical range due to a number of factors including unlocking of assumptions and equity market performance. For further detail regarding the components of cost of funds, please see Athene's quarterly financial supplement for the period ending December 31, 2019.



Appendix

Consolidated Results of Operations

(In millions, except percentages and per share data)

	Three months ended December 31,		Years ended December 31,	
	2018	2019	2018	2019
Net income (loss) available to Athene Holding Ltd. common shareholders	\$ (104)	\$ 432	\$ 1,053	\$ 2,136
Non-operating adjustments				
Investment gains (losses), net of offsets	(114)	(47)	(274)	994
Change in fair values of derivatives and embedded derivatives – FIAs, net of offsets	(288)	136	242	(65)
Integration, restructuring and other non-operating expenses	(4)	(24)	(22)	(70)
Stock compensation expense	(3)	(3)	(11)	(12)
Income tax (expense) benefit – non-operating	65	(19)	(22)	—
Less: Total non-operating adjustments	(344)	43	(87)	847
Adjusted operating income available to common shareholders	\$ 240	\$ 389	\$ 1,140	\$ 1,289
Adjusted operating income available to common shareholders by segment				
Retirement Services	\$ 296	\$ 404	\$ 1,201	\$ 1,322
Corporate and Other	(56)	(15)	(61)	(33)
Adjusted operating income available to common shareholders	\$ 240	\$ 389	\$ 1,140	\$ 1,289
Notable items	53	(43)	31	5
Adjusted operating income available to common shareholders excluding notable items	\$ 293	\$ 346	\$ 1,171	\$ 1,294
ROE	(4.8)%	12.8%	12.1%	19.7%
Adjusted operating ROE	10.8%	16.7%	13.9%	14.1%
ROA	(0.34)%	1.19%	0.95%	1.55%
Adjusted operating ROA	0.88%	1.34%	1.22%	1.11%
Earnings (loss) per common share - diluted Class A ¹	\$ (0.53)	\$ 2.42	\$ 5.32	\$ 11.41
Adjusted operating earnings per common share ²	\$ 1.23	\$ 2.21	\$ 5.82	\$ 6.97
Weighted average common shares outstanding - diluted Class A ¹	164.2	145.1	161.1	154.3
Weighted average common shares outstanding - adjusted operating ²	195.5	175.7	195.9	184.8

¹ Diluted earnings per share on Class A common shares, including diluted Class A weighted average common shares outstanding, includes the dilutive impacts, if any, of Class B and Class M common shares and any other stock-based awards. Based on allocated net income (loss) of \$351 million (81%) and \$(87) million (84%) diluted Class A common shares for the three months ended December 31, 2019 and 2018, respectively. Diluted earnings per share on Class A common shares, including diluted Class A weighted average common shares outstanding, includes the dilutive impacts, if any, of Class B and Class M common shares and any other stock-based awards. Based on allocated net income of \$1,760 million (82%) and \$857 million (81%) diluted Class A common shares for the years ended December 31, 2019 and 2018, respectively. ² Represents weighted average common shares outstanding assuming conversion or settlement of all outstanding items that are able to be converted to or settled in Class A common shares, including the impacts of Class B and Class M common shares outstanding and any other stock-based awards outstanding, but excluding any awards for which the exercise or conversion price exceeds the market value of our Class A common shares on the applicable measurement date.

Retirement Services Adjusted Operating Results

(In millions, except percentages)

	Three months ended December 31,				Years ended December 31,			
	2018	% ¹	2019	% ¹	2018	% ¹	2019	% ¹
Fixed income and other investment income	\$ 1,132	4.35 %	\$ 1,172	4.29 %	\$ 3,825	4.36 %	\$ 4,652	4.23 %
Alternatives investment income	99	11.00 %	134	10.94 %	363	11.15 %	410	9.32 %
Net investment earnings	1,231	4.57 %	1,306	4.57 %	4,188	4.60 %	5,062	4.43 %
Cost of crediting	(516)	(1.91)%	(521)	(1.83)%	(1,659)	(1.82)%	(2,179)	(1.91)%
Other liability costs	(332)	(1.23)%	(259)	(0.90)%	(981)	(1.08)%	(1,172)	(1.02)%
Cost of funds	(848)	(3.14)%	(780)	(2.73)%	(2,640)	(2.90)%	(3,351)	(2.93)%
Other operating expenses	(65)	(0.24)%	(69)	(0.24)%	(242)	(0.27)%	(266)	(0.23)%
Interest expense	—	— %	(5)	(0.02)%	(5)	(0.01)%	(8)	(0.01)%
Management fees from ACRA	—	— %	2	0.01 %	—	— %	2	— %
Pre-tax adjusted operating income	318	1.19 %	454	1.58 %	1,301	1.42 %	1,439	1.26 %
Income tax (expense) benefit - operating	(22)	(0.09)%	(50)	(0.16)%	(100)	(0.10)%	(117)	(0.10)%
Adjusted operating income	296	1.10 %	404	1.42 %	1,201	1.32 %	1,322	1.16 %
Preferred stock dividends	—	— %	—	— %	—	— %	—	— %
Adjusted operating income available to common shareholders	\$ 296	1.10 %	\$ 404	1.42 %	\$ 1,201	1.32 %	\$ 1,322	1.16 %
Notable items	53	0.20 %	(43)	(0.15)%	31	0.03 %	5	— %
Adjusted operating income available to common shareholders excluding notable items	\$ 349	1.29 %	\$ 361	1.27 %	\$ 1,232	1.35 %	\$ 1,327	1.16 %
Cost of crediting on deferred annuities	\$ 443	2.00 %	\$ 429	1.95 %	\$ 1,431	1.95 %	\$ 1,774	1.97 %
Cost of crediting on institutional products	73	3.74 %	92	2.85 %	228	3.42 %	405	3.47 %
Cost of crediting	\$ 516	1.91 %	\$ 521	1.83 %	\$ 1,659	1.82 %	\$ 2,179	1.91 %
Net investment earned rate	4.57%		4.57%		4.60%		4.43%	
Cost of crediting	1.91%		1.83%		1.82%		1.91%	
Other liability costs	1.23%		0.90%		1.08%		1.02%	
Cost of funds	3.14%		2.73%		2.90%		2.93%	
Net investment spread	1.43%		1.84%		1.70%		1.50%	
Net Investment Earned Rate	4.57%		4.57%		4.60%		4.43%	
Cost of crediting on deferred annuities	2.00%		1.95%		1.95%		1.97%	
Investment margin on deferred annuities	2.57%		2.62%		2.65%		2.46%	
Adjusted operating ROE	16.0%		21.6%		18.4%		17.3%	

¹ Net investment earned rate, cost of funds (comprised of cost of crediting and other liability costs), other operating expenses, interest expense, management fees from ACRA and income tax (expense) benefit use average net invested assets for the relevant period as the denominator in the calculation. Cost of crediting on deferred annuities is calculated as interest credited on fixed strategies and option costs on index annuity strategies divided by average account value of our deferred annuities. Cost of crediting on institutional products is calculated as interest credited on institutional products (pension risk transfer and funding agreement) divided by average reserves on institutional products. Interim periods are annualized.

Net Reserve Liability Rollforward

(In millions)

	Three months ended December 31,		Years ended December 31,	
	2018	2019	2018	2019
1 Net reserve liabilities – beginning	\$ 98,553	\$ 118,825	\$ 75,447	\$ 107,732
2 Gross deposits	13,147	3,735	40,587	18,507
3 Deposits attributable to ACRA noncontrolling interest	—	(544)	—	(544)
Net deposits	13,147	3,191	40,587	17,963
4 Liability outflows	(3,125)	(2,497)	(8,859)	(10,991)
5 Sale of ACRA noncontrolling interest to ADIP	—	(6,141)	—	(6,141)
6 Other reserve changes	(843)	1,274	557	6,089
Net reserve liabilities – ending	\$ 107,732	\$ 114,652	\$ 107,732	\$ 114,652

- 1 Retirement Services net reserve liabilities include deferred annuity, payout annuity, funding agreements and life products. Additionally, Retirement Services net reserve liabilities include our economic ownership of ACRA reserve liabilities but does not include the reserve liabilities associated with the noncontrolling interest.
- 2 Gross deposits equal deposits from our retail, flow reinsurance and institutional channels as well as premiums and deposits for life and products other than deferred annuities or our institutional products, renewal deposits on older blocks of business, annuitizations, and reserve liabilities acquired in our inorganic channel at inception. Gross deposits include all deposits sourced by Athene, including all of the deposits reinsured to ACRA.
- 3 Deposits attributable to ACRA noncontrolling interest include the proportionate share of deposits associated with the noncontrolling interest.
- 4 Liability outflows includes full surrenders, partial withdrawals, death benefits, annuitization benefits and interest payments and maturities on funding agreement products.
- 5 ACRA noncontrolling interest reserve liabilities at inception were \$6.1 billion.
- 6 Other reserve changes primarily include fixed and bonus interest credits, change in fair value of reinsurance assets, change in rider reserves, product charges and change in life reserves.

Non-GAAP Measures and Definitions

▪ Adjusted operating income is a non-GAAP measure used to evaluate our financial performance excluding market volatility and expenses related to integration, restructuring, stock compensation, and other expenses. Our adjusted operating income equals net income adjusted to eliminate the impact of the following (collectively, the "non-operating adjustments"): (a) investment gains (losses), (b) change in fair values of derivatives and embedded derivatives - FIA, net of offsets, (c) integration, restructuring, and other non-operating expenses, (d) stock compensation expense, (e) bargain purchase gain and (f) income tax (expense) benefit - non-operating.

We consider these non-operating adjustments to be meaningful adjustments to net income available to AHL common shareholders for the reasons discussed in greater detail above. Accordingly, we believe using a measure which excludes the impact of these items is useful in analyzing our business performance and the trends in our results of operations. Together with net income available to AHL common shareholders, we believe adjusted operating income available to common shareholders provides a meaningful financial metric that helps investors understand our underlying results and profitability. Adjusted operating income available to common shareholders should not be used as a substitute for net income available to AHL common shareholders.

▪ Adjusted operating ROA is a non-GAAP measure used to evaluate our financial performance and profitability. Adjusted operating ROA is computed using our adjusted operating income available to common shareholders divided by average net invested assets for the relevant period. To enhance the ability to analyze these measures across periods, interim periods are annualized. While we believe each of these metrics are meaningful financial metrics and enhance our understanding of the underlying profitability drivers of our business, they should not be used as a substitute for ROA presented under GAAP.

▪ Adjusted operating ROE is a non-GAAP measure used to evaluate our financial performance excluding the impacts of AOCI and the cumulative change in fair value of funds withheld and modco reinsurance assets, net of DAC, DSI, rider reserve and tax offsets. Adjusted AHL common shareholders' equity is calculated as the ending AHL shareholders' equity excluding AOCI, the cumulative change in fair value of funds withheld and modco reinsurance assets and preferred stock. Adjusted operating ROE is calculated as the adjusted operating income available to common shareholders, divided by average adjusted AHL common shareholders' equity. These adjustments fluctuate period to period in a manner inconsistent with our underlying profitability drivers as the majority of such fluctuation is related to the market volatility of the unrealized gains and losses associated with our AFS securities. Except with respect to reinvestment activity relating to acquired blocks of businesses, we typically buy and hold AFS investments to maturity throughout the duration of market fluctuations, therefore, the period-over-period impacts in unrealized gains and losses are not necessarily indicative of current operating fundamentals or future performance. Accordingly, we believe using measures which exclude AOCI and the cumulative change in fair value of funds withheld and modco reinsurance assets are useful in analyzing trends in our operating results. To enhance the ability to analyze these measures across periods, interim periods are annualized. Adjusted operating ROE should not be used as a substitute for ROE. However, we believe the adjustments to net income available to AHL common shareholders and equity are significant to gaining an understanding of our overall financial performance.

▪ Adjusted operating earnings per common share, weighted average common shares outstanding – adjusted operating and adjusted book value per common share are non-GAAP measures used to evaluate our financial performance and financial condition. The non-GAAP measures adjust the number of shares included in the corresponding GAAP measures to reflect the conversion or settlement of all shares and other stock-based awards outstanding. We believe using these measures represents an economic view of our share counts and provides a simplified and consistent view of our outstanding shares. Adjusted operating earnings per common share is calculated as the adjusted operating income available to common shareholders, over the weighted average common shares outstanding – adjusted operating. Adjusted book value per common share is calculated as the adjusted AHL common shareholders' equity divided by the adjusted operating common shares outstanding. Our Class B common shares are economically equivalent to Class A common shares and can be converted to Class A common shares on a one-for-one basis at any time. Our Class M common shares are in the legal form of shares but economically function as options as they are convertible into Class A shares after vesting and payment of the conversion price. In calculating Class A diluted earnings per share on a GAAP basis, we are required to apply sequencing rules to determine the dilutive impacts, if any, of our Class B common shares, Class M common shares and any other stock-based awards. To the extent our Class B common shares, Class M common shares and/or any other stock-based awards are not dilutive, after considering the dilutive effects of the more dilutive securities in the sequence, they are excluded. Weighted average common shares outstanding – adjusted operating and adjusted operating common shares outstanding assume conversion or settlement of all outstanding items that are able to be converted to or settled in Class A common shares, including the impacts of Class B common shares on a one-for-one basis, the impacts of all Class M common shares net of the conversion price and any other stock-based awards, but excluding any awards for which the exercise or conversion price exceeds the market value of our Class A common shares on the applicable measurement date. For certain historical periods, Class M shares were not included due to issuance restrictions which were contingent upon our IPO. Adjusted operating earnings per common share, weighted average common shares outstanding – adjusted operating and adjusted book value per common share should not be used as a substitute for basic earnings per share – Class A common shares, basic weighted average common shares outstanding – Class A or book value per common share. However, we believe the adjustments to the shares and equity are significant to gaining an understanding of our overall results of operations and financial condition.

▪ Adjusted debt to capital ratio is a non-GAAP measure used to evaluate our capital structure excluding the impacts of AOCI and the cumulative change in fair value of funds withheld and modco reinsurance assets, net of DAC, DSI, rider reserve and tax offsets. Adjusted debt to capital ratio is calculated as total debt excluding debt of consolidated variable interest entities (VIEs) divided by adjusted AHL shareholders' equity. Adjusted debt to capital ratio should not be used as a substitute for the debt to capital ratio. However, we believe the adjustments to total debt and shareholders' equity are significant to gaining an understanding of our capitalization, debt utilization and debt capacity.

Non-GAAP Measures and Definitions

- Net investment spread is a key measurement of the profitability of our Retirement Services segment. Net investment spread measures our investment performance less the total cost of our liabilities. Net investment earned rate is a key measure of our investment performance, while cost of funds is a key measure of the cost of our policyholder benefits and liabilities. Investment margin on our deferred annuities measures our investment performance less the cost of crediting for our deferred annuities, which make up a significant portion of our reserve liabilities.
 - Net investment earned rate is a non-GAAP measure we use to evaluate the performance of our net invested assets that does not correspond to GAAP net investment income. Net investment earned rate is computed as the income from our net invested assets divided by the average net invested assets for the relevant period. To enhance the ability to analyze these measures across periods, interim periods are annualized. The adjustments to arrive at our net investment earned rate add alternative investment gains and losses, gains and losses related to trading securities for CLOs, net VIE impacts (revenues, expenses and noncontrolling interest) and the change in fair value of reinsurance assets. We include the income and assets supporting our change in fair value of reinsurance assets by evaluating the underlying investments of the funds withheld at interest receivables and we include the net investment income from those underlying investments which does not correspond to the GAAP presentation of change in fair value of reinsurance assets. We exclude the income and assets supporting business that we have exited through ceded reinsurance including funds withheld agreements. We believe the adjustments for reinsurance provide a net investment earned rate on the assets for which we have economic exposure.
 - Cost of funds includes liability costs related to cost of crediting on both deferred annuities and institutional products as well as other liability costs. Cost of funds is computed as the total liability costs divided by the average net invested assets for the relevant period. To enhance the ability to analyze these measures across periods, interim periods are annualized.
 - * Cost of crediting includes the costs for both deferred annuities and institutional products. Cost of crediting on deferred annuities is the interest credited to the policyholders on our fixed strategies as well as the option costs on the indexed annuity strategies. With respect to FIAs, the cost of providing index credits includes the expenses incurred to fund the annual index credits, and where applicable, minimum guaranteed interest credited. Cost of crediting on institutional products is comprised of PRT costs including interest credited, benefit payments and other reserve changes, net of premiums received when issued, as well as funding agreement costs including the interest payments and other reserve changes. Cost of crediting is computed as the cost of crediting for deferred annuities and institutional products divided by the average net invested assets for the relevant periods. Cost of crediting on deferred annuities is computed as the net interest credited on fixed strategies and option costs on indexed annuity strategies divided by the average net account value of our deferred annuities. Cost of crediting on institutional products is computed as the PRT and funding agreement costs divided by the average net institutional reserve liabilities. Our average net invested assets, net account values and net institutional reserve liabilities are averaged over the number of quarters in the relevant period to obtain our associated cost of crediting for such period. To enhance the ability to analyze these measures across periods, interim periods are annualized.
 - * Other liability costs include DAC, DSI and VOBA amortization, change in rider reserves, the cost of liabilities on products other than deferred annuities and institutional products, excise taxes, premiums, product charges and other revenues. We believe a measure like other liability costs is useful in analyzing the trends of our core business operations and profitability. While we believe other liability costs is a meaningful financial metric and enhances our understanding of the underlying profitability drivers of our business, it should not be used as a substitute for total benefits and expenses presented under GAAP.
- Operating expenses excludes integration, restructuring and other non-operating expenses, stock compensation expense, interest expense and policy acquisition expenses. We believe a measure like operating expenses is useful in analyzing the trends of our core business operations and profitability. While we believe operating expenses is a meaningful financial metric and enhances our understanding of the underlying profitability drivers of our business, it should not be used as a substitute for policy and other operating expenses presented under GAAP.
- In managing our business, we analyze net invested assets, which does not correspond to total investments, including investments in related parties, as disclosed in our consolidated financial statements and notes thereto. Net invested assets represents the investments that directly back our net reserve liabilities as well as surplus assets. Net invested assets is used in the computation of net investment earned rate, which allows us to analyze the profitability of our investment portfolio. Net invested assets includes (a) total investments on the consolidated balance sheets with AFS securities at cost or amortized cost, excluding derivatives, (b) cash and cash equivalents and restricted cash, (c) investments in related parties, (d) accrued investment income, (e) the consolidated VIE assets, liabilities and noncontrolling interest, (f) net investment payables and receivables and (g) policy loans ceded (which offset the direct policy loans in total investments). Net invested assets also excludes assets associated with funds withheld liabilities related to business exited through reinsurance agreements and derivative collateral (offsetting the related cash positions). We include the underlying investments supporting our assumed funds withheld and modco agreements in our net invested assets calculation in order to match the assets with the income received. We believe the adjustments for reinsurance provide a view of the assets for which we have economic exposure. Net invested assets includes our proportionate share of ACRA investments, based on our economic ownership, but does not include the proportionate share of investments associated with the noncontrolling interest. Our net invested assets are averaged over the number of quarters in the relevant period to compute our net investment earned rate for such period. While we believe net invested assets is a meaningful financial metric and enhances our understanding of the underlying drivers of our investment portfolio, it should not be used as a substitute for total investments, including related parties, presented under GAAP.
- In managing our business, we also analyze net reserve liabilities, which does not correspond to total liabilities as disclosed in our consolidated financial statements and notes thereto. Net reserve liabilities represent our policyholder liability obligations net of reinsurance and is used to analyze the costs of our liabilities. Net reserve liabilities include (a) the interest sensitive contract liabilities, (b) future policy benefits, (c) dividends payable to policyholders, and (d) other policy claims and benefits, offset by reinsurance recoverable, excluding policy loans ceded. Net reserve liabilities include our proportionate share of ACRA reserve liabilities, based on our economic ownership, but does not include the proportionate share of reserve liabilities associated with the noncontrolling interest. Net reserve liabilities is net of the ceded liabilities to third-party reinsurers as the costs of the liabilities are passed to such reinsurers and, therefore, we have no net economic exposure to such liabilities, assuming our reinsurance counterparties perform under our agreements. The majority of our ceded reinsurance is a result of reinsuring large blocks of life business following acquisitions. For such transactions, GAAP requires the ceded liabilities and related reinsurance recoverables to continue to be recorded in our consolidated financial statements despite the transfer of economic risk to the counterparty in connection with the reinsurance transaction. While we believe net reserve liabilities is a meaningful financial metric and enhances our understanding of the underlying profitability drivers of our business, it should not be used as a substitute for total liabilities presented under GAAP.
- Sales statistics do not correspond to revenues under GAAP but are used as relevant measures to understand our business performance as it relates to deposits generated during a specific period of time. Our sales statistics include deposits for fixed rate annuities and FIAs and align with the LIMRA definition of all money paid into an individual annuity, including money paid into new contracts with initial purchase occurring in the specified period and existing contracts with initial purchase occurring prior to the specified period (excluding internal transfers). While we believe sales is a meaningful metric and enhances our understanding of our business performance, it should not be used as a substitute for premiums presented under GAAP.

Non-GAAP Measure Reconciliations

Reconciliation of AHL shareholders' equity to adjusted AHL common shareholders' equity

(In millions)	December 31,		
	2009	2018	2019
Total AHL shareholders' equity	\$ 113	\$ 8,276	\$ 13,391
Less: Preferred stock	—	—	1,172
Total AHL common shareholders' equity	113	8,276	12,219
Less: AOCI	1	(472)	2,281
Less: Accumulated change in fair value of reinsurance assets	—	(75)	493
Total adjusted AHL common shareholders' equity	\$ 112	\$ 8,823	\$ 9,445
Retirement Services		\$ 7,807	\$ 7,443
Corporate and Other		1,016	2,002
Total adjusted AHL common shareholders' equity		\$ 8,823	\$ 9,445

Reconciliation of average AHL shareholders' equity to average adjusted AHL common shareholders' equity

(In millions)	Twelve months ended December 31,					Three months ended December 31,		Years ended December 31,	
	2014	2015	2016	2017	2018	2018	2019	2018	2019
Average AHL shareholders' equity	\$ 3,648	\$ 4,959	\$ 6,124	\$ 8,029	\$ 8,726	\$ 8,627	\$ 13,468	\$ 8,726	\$ 10,834
Less: Average preferred stock	—	—	—	—	—	—	1,172	—	586
Less: Average AOCI	359	203	63	908	489	(220)	2,362	489	905
Less: Average accumulated change in fair value of reinsurance assets	100	58	41	112	43	(53)	610	43	209
Average adjusted AHL common shareholders' equity	\$ 3,189	\$ 4,698	\$ 6,020	\$ 7,009	\$ 8,194	\$ 8,900	\$ 9,324	\$ 8,194	\$ 9,134
Retirement Services	\$ 2,262	\$ 3,333	\$ 4,186	\$ 4,823	\$ 6,522	\$ 7,416	\$ 7,468	\$ 6,522	\$ 7,625
Corporate and Other	927	1,365	1,834	2,186	1,672	1,484	1,856	1,672	1,509
Average adjusted AHL common shareholders' equity	\$ 3,189	\$ 4,698	\$ 6,020	\$ 7,009	\$ 8,194	\$ 8,900	\$ 9,324	\$ 8,194	\$ 9,134

Reconciliation of total capitalization to total adjusted capitalization

(In millions)	December 31,	
	2018	2019
Total debt	\$ 991	\$ 1,467
Total AHL shareholders' equity	8,276	13,391
Total capitalization	9,267	14,858
Less: AOCI	(472)	2,281
Less: Accumulated change in fair value of reinsurance assets	(75)	493
Total adjusted capitalization	\$ 9,814	\$ 12,084

Non-GAAP Measure Reconciliations

Reconciliation of basic Class A common shares outstanding to adjusted operating common shares outstanding

<i>(In millions)</i>	December 31,		
	2009	2018	2019
Class A common shares outstanding	0.1	162.2	142.8
Conversion of Class B common shares to Class A common shares	9.7	25.4	25.4
Conversion of Class M common shares to Class A common shares	—	4.9	5.5
Effect of other stock compensation plans	—	1.0	1.2
Adjusted operating common shares outstanding	9.8	193.5	174.9

Reconciliation of book value per common share to adjusted book value per common share

	December 31,		
	2009	2018	2019
Book value per common share	\$ 11.62	\$ 42.45	\$ 76.21
Preferred stock	—	—	(6.67)
AOCI	(0.13)	2.42	(12.98)
Accumulated change in fair value of reinsurance assets	—	0.39	(2.80)
Effect of items convertible to or settled in Class A common shares	—	0.33	0.26
Adjusted book value per common share	\$ 11.49	\$ 45.59	\$ 54.02

Reconciliation of basic earnings per Class A common shares to adjusted operating earnings per common share

<i>(in millions)</i>	Three months ended December 31,		Years ended December 31,	
	2018	2019	2018	2019
Basic earnings (loss) per share – Class A common shares	\$ (0.53)	\$ 2.43	\$ 5.34	\$ 11.44
Non-operating adjustments				
Investment gains (losses), net of offsets	(0.59)	(0.26)	(1.40)	5.39
Change in fair values of derivatives and embedded derivatives – FIAs, net of offsets	(1.47)	0.77	1.24	(0.36)
Integration, restructuring and other non-operating expenses	(0.02)	(0.13)	(0.12)	(0.37)
Stock compensation expense	(0.01)	(0.02)	(0.05)	(0.07)
Income tax (expense) benefit – non-operating	0.33	(0.11)	(0.11)	—
Less: Total non-operating adjustments	(1.76)	0.25	(0.44)	4.59
Less: Effect of items convertible to or settled in Class A common shares	—	(0.03)	(0.04)	(0.12)
Adjusted operating earnings per common share	\$ 1.23	\$ 2.21	\$ 5.82	\$ 6.97

Non-GAAP Measure Reconciliations

Reconciliation of basic weighted average Class A common shares to weighted average common shares outstanding - adjusted operating

(In millions)	Three months ended December 31,		Years ended December 31,	
	2018	2019	2018	2019
Basic weighted average common shares outstanding – Class A	164.2	144.5	160.5	153.9
Conversion of Class B common shares to Class A common shares	25.5	25.4	29.3	25.4
Conversion of Class M common shares to Class A common shares	5.2	5.2	5.6	5.1
Effect of other stock compensation plans	0.6	0.6	0.5	0.4
Weighted average common shares outstanding – adjusted operating	195.5	175.7	195.9	184.8

Reconciliation of net income (loss) available to common shareholders to adjusted operating income available to common shareholders ex. notable items

(In millions)	Three Months Ended,							
	Mar. 31, 2017	June 30, 2017	Sept. 30, 2017	Dec. 31, 2017	Mar. 31, 2018	June 30, 2018	Sept. 30, 2018	Dec. 31, 2018
Net income (loss) available to Athene Holding Ltd. common shareholders	\$ 377	\$ 298	\$ 244	\$ 439	\$ 277	\$ 257	\$ 623	\$ (104)
Less: Total non-operating adjustments	109	37	31	126	36	(31)	252	(344)
Adjusted operating income available to common shareholder	268	261	213	313	241	288	371	240
Notable items	(50)	(26)	17	(81)	12	(11)	(23)	53
Adjusted operating income available to common shareholders excluding notable items	\$ 218	\$ 235	\$ 230	\$ 232	\$ 253	\$ 277	\$ 348	\$ 293
Retirement Services adjusted operating income available to common shareholders	\$ 277	\$ 248	\$ 226	\$ 287	\$ 239	\$ 287	\$ 379	\$ 296
Proceeds from bond previously written down	(14)	—	—	—	—	—	—	—
Rider reserve and DAC equity market performance	(40)	(28)	(20)	(55)	14	(13)	(38)	58
Unlocking	—	—	20	—	—	—	13	—
Tax impact of notable items	4	2	—	4	(2)	2	2	(5)
Retirement Services notable items	(50)	(26)	—	(51)	12	(11)	(23)	53
Retirement Services adjusted operating income available to common shareholders excluding notable items	227	222	226	236	251	276	356	349
Corporate and Other adjusted operating income (loss) available to common shareholders	(9)	13	(13)	26	2	1	(8)	(56)
Germany adjusted operating income (loss), net of tax	—	—	17	(30)	—	—	—	—
Corporate and Other adjusted operating income (loss) available to common shareholders excluding notable items	(9)	13	4	(4)	2	1	(8)	(56)
Adjusted operating income available to common shareholders excluding notable items	\$ 218	\$ 235	\$ 230	\$ 232	\$ 253	\$ 277	\$ 348	\$ 293

Non-GAAP Measure Reconciliations

Reconciliation of net income (loss) available to common shareholders to adjusted operating income available to common shareholders ex. notable items cont.

	Three Months Ended,			
	Mar. 31, 2019	June 30, 2019	Sept. 30, 2019	Dec. 31, 2019
<i>(In millions)</i>				
Net income available to Athene Holding Ltd. common shareholders	\$ 708	\$ 720	\$ 276	\$ 432
Less: Total non-operating adjustments	421	350	33	43
Adjusted operating income available to common shareholder	287	370	243	389
Notable items	—	—	62	(43)
Adjusted operating income available to common shareholders excluding notable items	\$ 287	\$ 370	\$ 305	\$ 346
Retirement Services adjusted operating income available to common shareholders	\$ 286	\$ 376	\$ 256	\$ 404
Rider reserve and DAC equity market performance	—	—	5	(25)
Actuarial updates	—	—	—	(22)
Out of period actuarial adjustments	—	—	13	—
Unlocking	—	—	48	—
Tax impact of notable items	—	—	(4)	4
Retirement Services notable items	—	—	62	(43)
Retirement Services adjusted operating income available to common shareholders excluding notable items	286	376	318	361
Corporate and Other adjusted operating income (loss) available to common shareholders	1	(6)	(13)	(15)
Adjusted operating income available to common shareholders excluding notable items	\$ 287	\$ 370	\$ 305	\$ 346

Non-GAAP Measure Reconciliations

Reconciliation of net income available to common shareholders to adjusted operating income available to common shareholders excluding notable items

<i>(In millions)</i>	Years Ended December 31,				
	2015	2016	2017	2018	2019
Net income available to Athene Holding Ltd. common shareholders	\$ 579	\$ 773	\$ 1,358	\$ 1,053	\$ 2,136
Less: Total non-operating adjustments	(181)	14	303	(87)	847
Adjusted operating income available to common shareholder	760	759	1,055	1,140	1,289
Notable items	(22)	45	(138)	31	5
Adjusted operating income available to common shareholders excluding notable items	\$ 738	\$ 804	\$ 917	\$ 1,171	\$ 1,294
Retirement Services adjusted operating income available to common shareholders	\$ 789	\$ 808	\$ 1,038	\$ 1,201	\$ 1,322
Proceeds from bond previously written down	—	—	(14)	—	—
Rider reserve and DAC equity market performance	—	—	(152)	21	(51)
Actuarial updates	—	—	—	—	(22)
Out of period actuarial adjustments	—	—	—	—	30
Unlocking	(24)	158	20	13	48
Deferred tax valuation allowance release	—	(102)	—	—	—
Tax impact of notable items	2	(11)	10	(3)	—
Retirement Services notable items	(22)	45	(136)	31	5
Retirement Services adjusted operating income available to common shareholders excluding notable items	767	853	902	1,232	1,327
Corporate and Other adjusted operating income (loss) available to common shareholders	(29)	(49)	17	(61)	(33)
Germany adjusted operating income, net of tax	—	—	(2)	—	—
Corporate and Other adjusted operating income (loss) available to common shareholders excluding notable items	(29)	(49)	15	(61)	(33)
Adjusted operating income available to common shareholders excluding notable items	\$ 738	\$ 804	\$ 917	\$ 1,171	\$ 1,294

Non-GAAP Measure Reconciliations

Reconciliation of GAAP net investment income to net investment earnings and earned rate

(In millions)	Three months ended December 31,				Years ended December 31,			
	2018		2019		2018		2019	
	Dollar	Rate	Dollar	Rate	Dollar	Rate	Dollar	Rate
GAAP net investment income	\$ 1,121	4.10 %	\$ 1,225	4.22%	\$ 4,004	4.30 %	\$ 4,522	3.91%
Change in fair value of reinsurance assets	132	0.48 %	188	0.65%	301	0.32 %	680	0.59%
Net VIE earnings	(18)	(0.07)%	12	0.04%	37	0.04 %	80	0.07%
Alternative income gain (loss)	(20)	(0.07)%	(12)	(0.04)%	(34)	(0.04)%	1	—%
ACRA noncontrolling interest	—	— %	(61)	(0.21)%	—	— %	(61)	(0.05)%
Held for trading amortization and other	(11)	(0.04)%	(13)	(0.04)%	(76)	(0.08)%	(43)	(0.04)%
Total adjustments to arrive at net investment earnings/earned rate	83	0.30 %	114	0.40%	228	0.24 %	657	0.57%
Total net investment earnings/earned rate	<u>\$ 1,204</u>	<u>4.40 %</u>	<u>\$ 1,339</u>	<u>4.62%</u>	<u>\$ 4,232</u>	<u>4.54 %</u>	<u>\$ 5,179</u>	<u>4.48%</u>
Retirement Services	\$ 1,231	4.57 %	\$ 1,306	4.57%	\$ 4,188	4.60 %	\$ 5,062	4.43%
Corporate and Other	(27)	(7.57)%	33	7.16%	44	1.99 %	117	8.33%
Total net investment earnings/earned rate	<u>\$ 1,204</u>	<u>4.40 %</u>	<u>\$ 1,339</u>	<u>4.62%</u>	<u>\$ 4,232</u>	<u>4.54 %</u>	<u>\$ 5,179</u>	<u>4.48%</u>
Retirement Services	\$ 107,939		\$ 114,149		\$ 90,995		\$ 114,310	
Corporate and Other	1,484		1,837		2,182		1,409	
Consolidated average net invested assets	<u>\$ 109,423</u>		<u>\$ 115,986</u>		<u>\$ 93,177</u>		<u>\$ 115,719</u>	

Non-GAAP Measure Reconciliations

Reconciliation GAAP interest sensitive contract benefits to Retirement Services' cost of crediting

(In millions)	Three months ended December 31,				Years ended December 31,			
	2018		2019		2018		2019	
	Dollar	Rate	Dollar	Rate	Dollar	Rate	Dollar	Rate
GAAP interest sensitive contract benefits	\$ (825)	(3.06)%	\$ 1,146	4.02%	\$ 290	0.32 %	\$ 4,557	3.99%
Interest credited other than deferred annuities and institutional products	35	0.13 %	64	0.23%	65	0.07 %	232	0.20%
FIA option costs	275	1.02 %	269	0.94%	886	0.97 %	1,109	0.97%
Product charges (strategy fees)	(28)	(0.10)%	(31)	(0.11)%	(98)	(0.11)%	(119)	(0.10)%
Reinsurance embedded derivative impacts	14	0.05 %	14	0.05%	49	0.05 %	57	0.05%
Change in fair values of embedded derivatives – FIAs	1,039	3.85 %	(905)	(3.17)%	436	0.48 %	(3,644)	(3.19)%
Negative VOBA amortization	9	0.03 %	8	0.03%	31	0.04 %	36	0.03%
ACRA noncontrolling interest	—	— %	(42)	(0.15)%	—	— %	(42)	(0.03)%
Other changes in interest sensitive contract liabilities	(3)	(0.01)%	(2)	(0.01)%	—	— %	(7)	(0.01)%
Total adjustments to arrive at cost of crediting	1,341	4.97 %	(625)	(2.19)%	1,369	1.50 %	(2,378)	(2.08)%
Retirement Services cost of crediting	\$ 516	1.91 %	\$ 521	1.83%	\$ 1,659	1.82 %	\$ 2,179	1.91%
Retirement Services cost of crediting on deferred annuities	\$ 443	2.00 %	\$ 429	1.95%	\$ 1,431	1.95 %	\$ 1,774	1.97%
Retirement Services cost of crediting on institutional products	73	3.74 %	92	2.85%	228	3.42 %	405	3.47%
Retirement Services cost of crediting	\$ 516	1.91 %	\$ 521	1.83%	\$ 1,659	1.82 %	\$ 2,179	1.91%
Retirement Services average net invested assets	\$ 107,939		\$ 114,149		\$ 90,995		\$ 114,310	
Average net account value on deferred annuities	88,874		87,660		73,567		89,878	
Average institutional net reserve liabilities	7,827		12,931		6,683		11,632	

Non-GAAP Measure Reconciliations

Reconciliation of GAAP benefits and expenses to other liability costs

(In millions)	Three months ended December 31,		Years ended December 31,	
	2018	2019	2018	2019
GAAP benefits and expenses	\$ 1,325	\$ 2,723	\$ 5,462	\$ 13,956
Premiums	(1,857)	(907)	(3,462)	(6,382)
Product charges	(128)	(132)	(449)	(524)
Other revenues	(4)	(10)	(26)	(37)
Cost of crediting	(227)	(238)	(724)	(1,013)
Change in fair value of embedded derivatives – FIA, net of offsets	1,266	(1,003)	327	(3,577)
DAC, DSI and VOBA amortization related to investment gains and losses	36	28	110	(477)
Rider reserves	8	3	16	(58)
Policy and other operating expenses, excluding policy acquisition expenses	(102)	(138)	(395)	(488)
AmerUs closed block fair value liability	14	6	112	(152)
ACRA noncontrolling interest	—	(74)	—	(74)
Other	1	1	10	(2)
Total adjustments to arrive at other liability costs	(993)	(2,464)	(4,481)	(12,784)
Other liability costs	\$ 332	\$ 259	\$ 981	\$ 1,172
Retirement Services	\$ 332	\$ 259	\$ 981	\$ 1,172
Corporate and Other	—	—	—	—
Consolidated other liability costs	\$ 332	\$ 259	\$ 981	\$ 1,172

Reconciliation GAAP policy and other expenses to operating expenses

(In millions)	Three months ended December 31,		Years ended December 31,	
	2018	2019	2018	2019
Policy and other operating expenses	\$ 172	\$ 200	\$ 626	\$ 744
Interest expense	(13)	(20)	(57)	(67)
Policy acquisition expenses, net of deferrals	(70)	(62)	(233)	(256)
Integration, restructuring and other non-operating expenses	(4)	(24)	(22)	(70)
Stock compensation expenses	(3)	(3)	(11)	(12)
ACRA noncontrolling interest	—	(5)	—	(5)
Total adjustments to arrive at operating expenses	(90)	(114)	(323)	(410)
Operating expenses	\$ 82	\$ 86	\$ 303	\$ 334
Retirement Services	\$ 65	\$ 69	\$ 242	\$ 266
Corporate and Other	17	17	61	68
Consolidated operating expenses	\$ 82	\$ 86	\$ 303	\$ 334

Non-GAAP Measure Reconciliations

Reconciliation of total investments, including related parties, to net invested assets

<i>(In millions)</i>	December 31,	
	2018	2019
Total investments, including related parties	\$ 107,632	\$ 129,845
Derivative assets	(1,043)	(2,888)
Cash and cash equivalents (including restricted cash)	3,403	4,639
Accrued investment income	682	807
Payables for collateral on derivatives	(969)	(2,743)
Reinsurance funds withheld and modified coinsurance	223	(1,440)
VIE and VOE assets, liabilities and noncontrolling interest	718	730
Unrealized (gains) losses	808	(4,095)
Ceded policy loans	(281)	(235)
Net investment receivables (payables)	(139)	(57)
ACRA noncontrolling interest	—	(7,077)
Total adjustments to arrive at net invested assets	3,402	(12,359)
Net invested assets	\$ 111,034	\$ 117,486

Reconciliation of total liabilities to net reserve liabilities

<i>(In millions)</i>	December 31,	
	2018	2019
Total liabilities	\$ 117,229	\$ 132,734
Short-term debt	—	(475)
Long-term debt	(991)	(992)
Derivative liabilities	(85)	(97)
Payables for collateral on derivatives	(969)	(3,255)
Funds withheld liability	(721)	(408)
Other liabilities	(889)	(1,181)
Reinsurance ceded receivables	(5,534)	(4,863)
Policy loans ceded	(281)	(235)
ACRA noncontrolling interest	—	(6,574)
Other	(27)	(2)
Total adjustments to arrive at net reserve liabilities	(9,497)	(18,082)
Net reserve liabilities	\$ 107,732	\$ 114,652

