



# The Hanover Insurance Group, Inc.

*Third Quarter 2017 Results  
November 2, 2017*

*To be read in conjunction with the press release dated  
November 1, 2017 and conference call scheduled for November 2, 2017*

**The  
Hanover**  
Insurance Group®



# Forward-Looking Statements and Non-GAAP Financial Measures

## Forward-looking statements

Certain statements in this release or in the above-referenced conference call may be forward-looking statements as defined in the Private Securities Litigation Reform Act of 1995. Use of the words "believes," "anticipates," "expects," "projections," "potential," "forecast," "outlook," "should," "could," "confident," "plan," "guidance," "on track to," "committed to," "looking ahead," and similar expressions is intended to identify forward-looking statements. The company cautions investors that any such forward-looking statements are estimates or projections that involve significant judgment and that neither historical results and trends nor forward-looking statements are guarantees or necessarily indicative of future performance. Actual results could differ materially. In particular, "forward-looking statements" include statements in this press release or in such conference call regarding our ability to deliver on "Hanover 2021" goals and objectives, specifically growing profitably within existing distribution plant, thoughtfully expanding domestic and Chaucer Specialty businesses, focus on innovation and financial management; strength of balance sheet and capital base; transition of the new CEO; impact and magnitude of catastrophe losses; ability to grow in lines with adequate pricing and target profitability; risk selection; the level of conservatism and strength of reserves and the balance sheet, and the adequacy of current and prior-year reserve actions; the relative likelihood of favorable or unfavorable reserve development in domestic lines and trends and expectations for Chaucer reserve development to contribute to earnings; ability to achieve financial goals and generate strong earnings; pricing compared to long-term loss trends; volatility in commercial property lines; Specialty growth opportunities; workers' compensation loss trends, pricing and potential inflationary trends; future trends of commercial multi-peril liability claims; ability to manage Commercial Lines product mix, risk and pricing segmentation; frequency and severity trends in personal and commercial auto; Personal Lines growth momentum and trajectory; ability to be successful in the emerging-affluent market; ability to capture additional rate in Personal Lines; ability to manage the cyclical nature and volatility of Chaucer's business, risk complexity, and challenging market conditions; ability for Chaucer to create opportunities for high-quality business; effective use of reinsurance; ability to yield improved pricing and terms in conditions as a result of catastrophe activity at Chaucer; execution risks and savings benefit of expense reduction opportunities; ability to deliver superior value to shareholders; share repurchases; increased income from expected "higher yielding assets;" volatility in unrealized gains; and ability to achieve components of the 2017 guidance (including fourth quarter combined ratio), are all forward-looking statements.

The company cautions investors that neither historical results and trends nor forward-looking statements are guarantees of or necessarily indicate future performance, and actual results could differ materially. Investors are directed to consider the risks and uncertainties in our business that may affect future performance and that are discussed in readily available documents, including the company's earnings press release dated November 1, 2017 and the Annual Report, Form 10-Q and other documents filed by The Hanover with the Securities and Exchange Commission, which are available at [www.hanover.com](http://www.hanover.com) under "Investors." We assume no obligation to update this presentation, which, unless otherwise noted, are as of September 30, 2017.

These uncertainties include the uncertain U.S. and global economic environment, the possibility of adverse catastrophe experience (including terrorism) and severe weather, the uncertainties in estimating catastrophe and non-catastrophe weather-related losses, the uncertainties in estimating property and casualty losses, accident year picks, and incurred but not reported loss and LAE reserves, the ability to increase or maintain certain property and casualty insurance rates in excess of loss trends, the impact of new product introductions, adverse loss and LAE development for prior years, changes in frequency and loss trends, the ability to improve renewal rates and increase new property and casualty policy counts, adverse selection in underwriting activities, investment impairments and returns, the impact of competition (including rate pressure), adverse and evolving state, federal and, with respect to Chaucer, international, legislation or regulation, adverse regulatory or litigation actions, financial ratings actions, and those risks inherent in Chaucer's business.

Non-GAAP Measures: The discussion in this presentation of The Hanover's financial performance includes reference to certain financial measures that are not derived from generally accepted accounting principles, or GAAP, such as operating income, operating income before taxes (and interest expense), combined ratios and loss ratios, excluding catastrophes and/or prior-year development and accident year loss ratios, excluding catastrophes, and book value per share excluding net unrealized gains and losses. A reconciliation of non-GAAP measures to the closest GAAP measure is included in the end notes to this presentation, the press release dated November 1, 2017 or the financial supplement, which are posted on our website. The reconciliation of accident year loss ratio and combined ratio excluding catastrophes to the most directly comparable GAAP measure, total loss ratio and combined ratio, is found in the end notes starting on page 16 of this presentation. Operating income (operating income per diluted share) is a non-GAAP measure. It is defined as net income excluding the after-tax impact of net realized investment gains and losses, as well as results from discontinued operations divided by, in the case of per share reported figures, the average number of diluted shares of common stock. Book value per share, excluding net unrealized gains and losses, is calculated as total shareholders' equity excluding the after-tax effect of unrealized investment gains and losses, divided by the number of common shares outstanding. The definition of other financial measures and terms can be found in the 2016 Annual Report on pages 77-80.



## Third Quarter 2017

### **Net Income and Operating Income <sup>(1)</sup> of \$0.26 and \$0.11 Per Diluted Share, Respectively, Despite Heavy Industry Catastrophe Activity; Combined Ratio of 104.8%; Combined Ratio Excluding Catastrophes of 88.9%<sup>(2)</sup>**

- Current accident year catastrophe losses\* of \$202.4 million before taxes, or 16.5% of earned premiums, primarily due to hurricanes Harvey, Irma, and Maria and earthquakes in Mexico
- Combined ratio, excluding catastrophes, of 88.9%, an improvement of 3.0 points over the prior-year quarter
- Net premiums written of \$1.3 billion; up 5.7%, driven primarily by growth in Personal and Commercial Lines
- Continued price increases in Commercial and Personal Lines
- Net investment income of \$76.6 million, up 13.0% compared to the prior-year quarter
- Book value per share of \$70.10, down 0.1% from the second quarter of 2017; book value per share, excluding net unrealized gains on investments<sup>(3)</sup>, of \$64.71, down 0.2% from the second quarter of 2017

(1) See information about this and other non-GAAP measures and definitions used throughout this presentation on the final pages of this document.

\* Calendar year catastrophe loss of \$194.5 million or 15.9%, including prior year favorable catastrophe loss development of \$7.9 million or 0.6%.



# Consolidated Financial Results Snapshot

## Three Months Ended

(\$ in millions, except per share amounts)

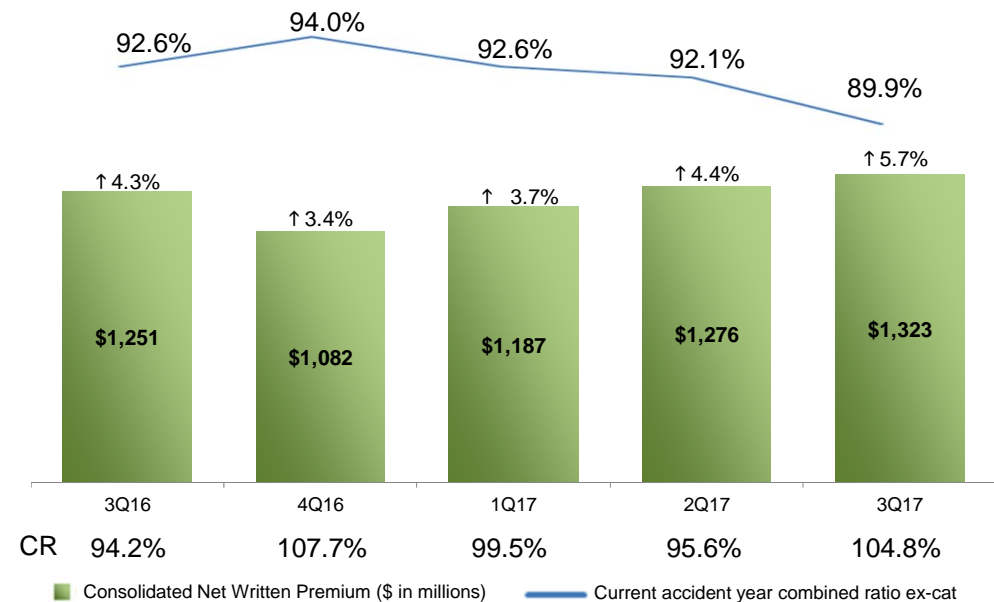
	September 30, 2016	December 31, 2016	March 31, 2017	June 30, 2017	September 30 2017
<b>Net income (loss) per share</b>	\$2.06	(\$0.32)	\$1.05	\$1.83	\$0.26
Operating income (loss) after taxes per share	\$1.83	(\$0.46)	\$0.95	\$1.69	\$0.11
<b>Book value per share</b>	\$72.08	\$67.40	\$68.44	\$70.18	\$70.10
Shareholders' equity	\$3,046	\$2,858	\$2,914	\$2,973	\$2,972
Debt	\$798	\$786	\$786	\$786	\$787
Total capital	\$3,844	\$3,644	\$3,700	\$3,759	\$3,759
Debt/total capital	20.8%	21.6%	21.3%	20.9%	20.9%
Total assets	\$14,364	\$14,220	\$14,491	\$14,793	\$15,389
Total equity, excluding net unrealized appreciation (depreciation) on investments, net of tax <sup>(4)</sup>	\$2,724.3	\$2,671.5	\$2,708.5	\$2,747.7	\$2,743.5
Average equity, excluding net unrealized appreciation (depreciation) on investments, net of tax	\$2,705.3	\$2,697.9	\$2,690.0	\$2,728.1	\$2,745.6
Operating income (loss) after tax	\$78.6	(\$19.7)	\$40.8	\$72.3	\$4.7
<b>Operating return on equity<sup>(5)</sup></b>	11.6%	(2.9)%	6.1%	10.6%	0.7%
Operating income (loss) before interest and taxes	\$129.8	(\$22.1)	\$69.1	\$118.9	\$13.1



## Catastrophe losses and strong underwriting performance, excluding catastrophes, marked the third quarter 2017 results

(\$ in millions)	Three Months Ended September 30	
	2016	2017
<b>Premiums:</b>		
Net Written	\$ 1,250.9	\$ 1,322.5
Growth	4.3%	5.7%
Net Earned	\$ 1,160.9	\$ 1,226.9
<b>Loss and LAE ratio:</b>		
Current accident year, ex-cat <sup>(6)</sup>	58.0%	56.4%
Prior accident year (favorable) unfavorable reserve development, ex-cat	(0.7)%	(1.0)%
Catastrophe losses	2.3%	15.9%
<b>Loss and LAE ratio</b>	<b>59.6%</b>	<b>71.3%</b>
<b>Expense ratio<sup>(7)</sup></b>	<b>34.6%</b>	<b>33.5%</b>
<b>Combined ratio</b>	<b>94.2%</b>	<b>104.8%</b>
<b>Combined ratio, ex-cat</b>	<b>91.9%</b>	<b>88.9%</b>
<b>Current accident year combined ratio, ex-cat<sup>(8)</sup></b>	<b>92.6%</b>	<b>89.9%</b>
Underwriting income (loss)	\$ 63.9	\$ (61.6)
Catastrophe losses	26.9	194.5
Ex-cat, underwriting income*	\$ 90.8	\$ 132.9

- Significant catastrophe events resulted in pre-tax catastrophe losses of \$202.4 million net of reinsurance, before favorable prior year development of \$7.9 million
  - While large, losses were not out-sized for our market share and geographic mix
  - Prior exposure management initiatives, robust risk management and strong reinsurance program served us well
- Strong underwriting income, excluding catastrophes, driven by lower expenses and an improved accident year loss ratio, primarily in Personal Lines
- Strong net written premium growth in areas where pricing and profitability margins are adequate



\* Non-GAAP measure, reconciles to underwriting income as displayed above



# Third Quarter Catastrophe Losses

(\$ in millions)

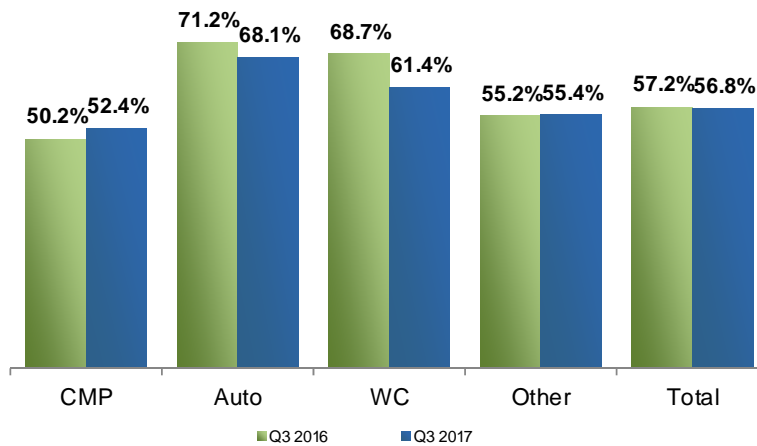
Description	Losses				% of Total
	Commercial	Personal	Chaucer	Total	
Hurricane Harvey	\$ 45	\$ 1	\$ 43	\$ 89	46%
Hurricane Irma	12	3	42	57	29%
Hurricane Maria	4	-	20	24	12%
Mexico earthquakes	-	-	19	19	10%
Other current accident year activity	1	11	1	13	7%
<b>Total accident year catastrophes</b>	<b>62</b>	<b>15</b>	<b>125</b>	<b>202</b>	<b>104%</b>
Prior year (favorable) / adverse development	-	-	(8)	(8)	(4)%
<b>Total catastrophe losses</b>	<b>\$ 62</b>	<b>\$ 15</b>	<b>\$ 117</b>	<b>\$ 194</b>	<b>100%</b>
Combined ratio impact	10.3%	3.7%	52.8%	15.9%	

- Catastrophe losses of \$194 million, or 15.9% of earned premium, driven primarily by hurricanes Harvey and Irma
- Results consistent with risk appetite for events of this size and market share in affected geographies
- Results reflect:
  - Risk management practices
  - Strong reinsurance structure
  - Prior exposure management initiatives in domestic business

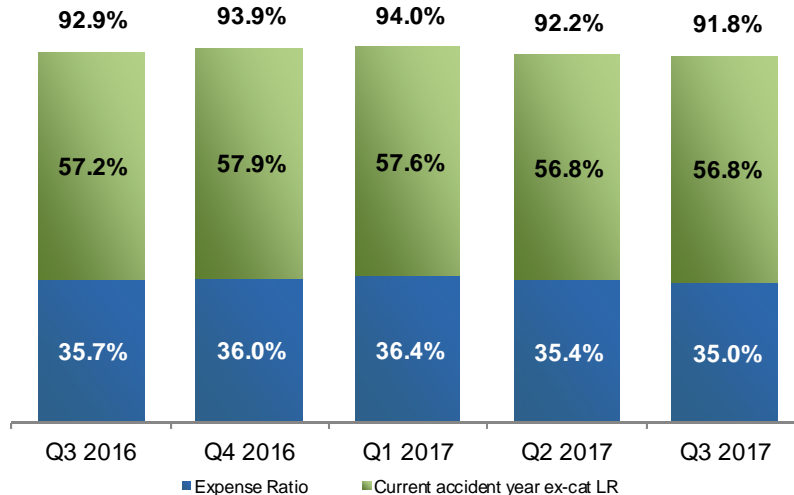


# Commercial Lines Underwriting Highlights

**Current Accident Year Loss Ratio, Ex-Cat**



**Current Accident Year Combined Ratio (CR), Ex-Cat**



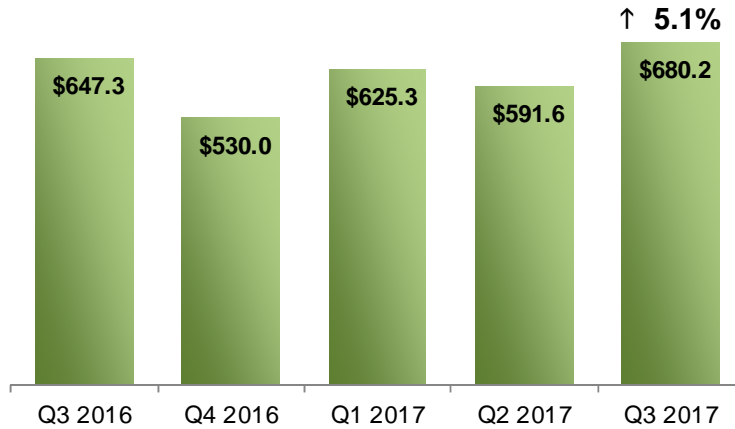
- Elevated catastrophes, at 10.3 points of the combined ratio, driven by hurricanes Harvey and Irma, stemming primarily from Marine business recorded within other commercial lines, as well as commercial multiple peril lines
- No prior year development
- Current accident year loss ratio, excluding catastrophes, improved slightly from the prior year quarter, driven by:
  - Improvements in commercial auto and workers' compensation, driven by change in mix and ongoing underwriting actions
  - Partially offset by commercial multiple peril, partly due to timing of current accident year liability loss selections in 2016
- Expense ratio improved by 70 basis points in the third quarter of 2017 from prior-year quarter, as a result of growth leverage and cost saving initiatives



# Commercial Lines Growth Highlights

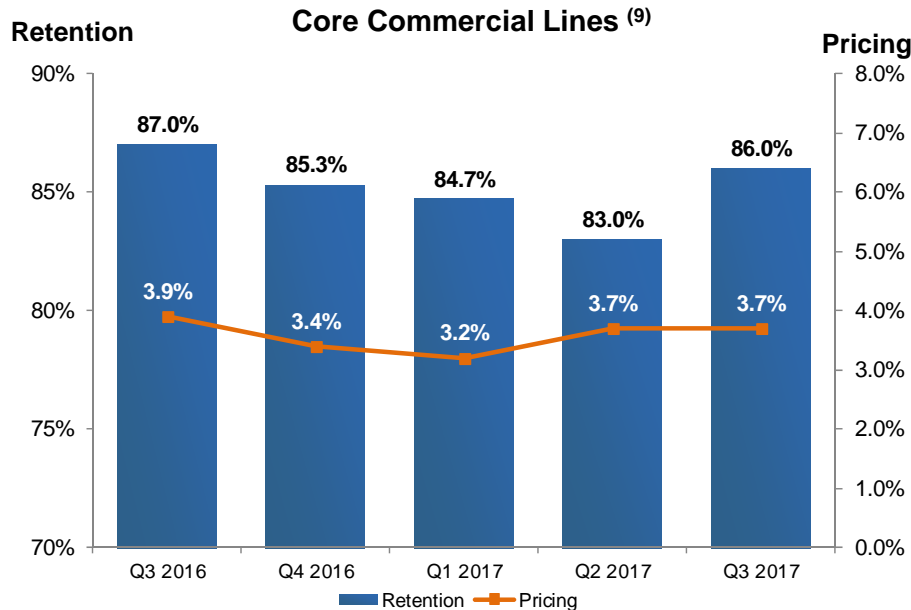
## Net Premiums Written

(\$ in millions)



- Growth of 5.1% driven by:
  - Increasing premiums in segments where pricing levels and profitability are attractive, including small commercial
  - Pricing and strong retention levels
  - Targeted new business growth

- Balancing price and retention while maximizing the quality of portfolio
- Price increases consistent with second quarter 2017

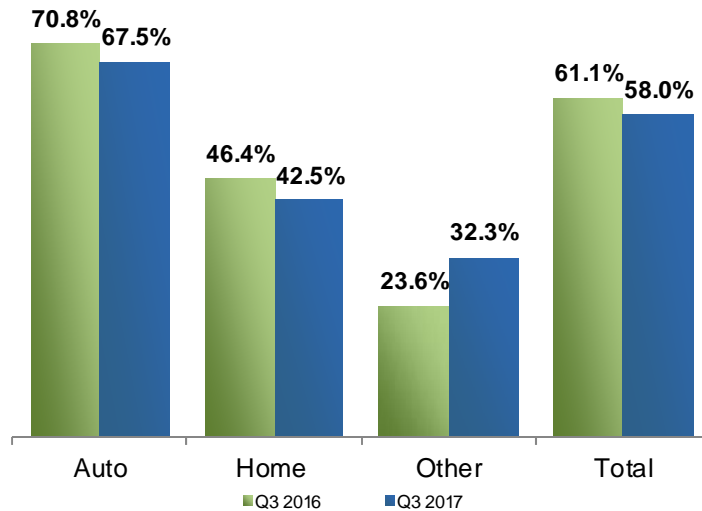




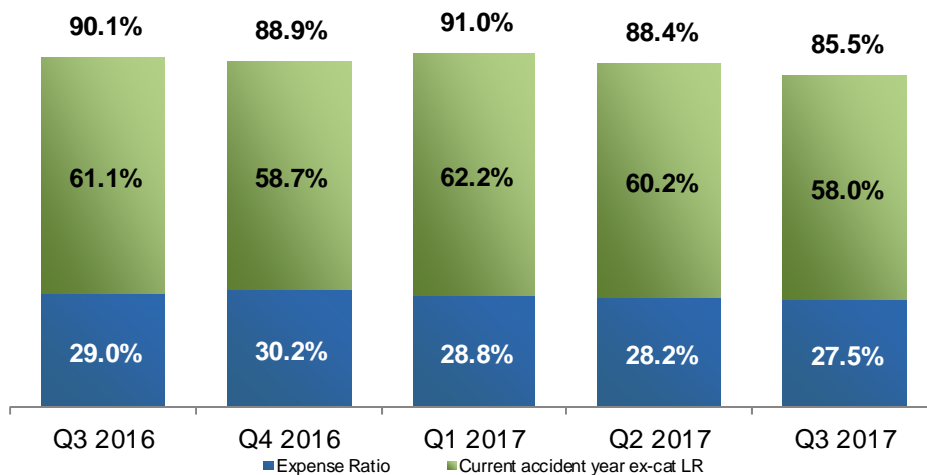


# Personal Lines Underwriting Highlights

**Current Accident Year Loss Ratio, Ex-Cat**



**Current Accident Year Combined Ratio (CR), Ex-Cat**



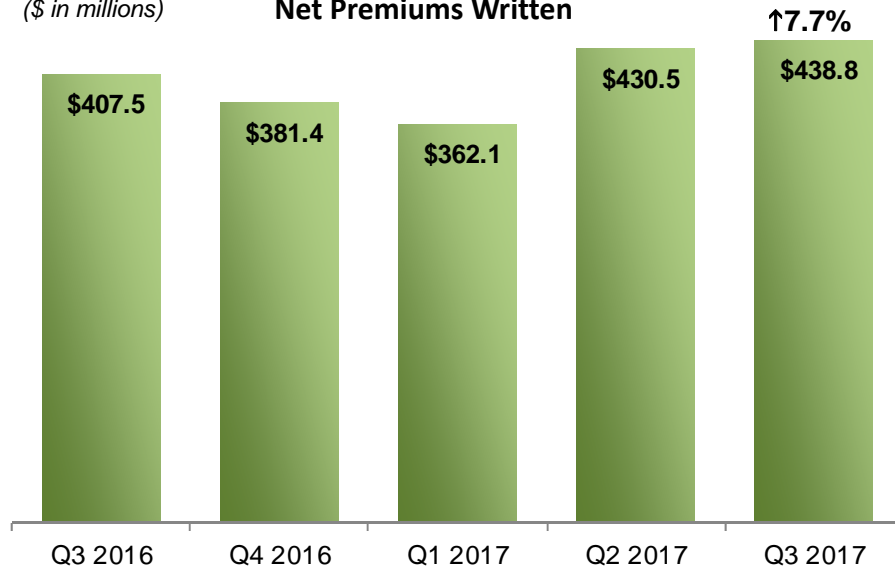
- Overall combined ratio of 89.2%, compared to 93.1%, which includes catastrophe losses of 3.7 and 3.3 points, respectively
- Current accident year loss ratio, excluding catastrophes, improved 3.1 points, driven by Auto and Homeowners:
  - Auto loss ratio improvement reflects lower frequency, as well as timing of 2016 accident year loss ratio selections
  - Auto loss trends within expectations, while rates continue to cover loss cost trends
  - Homeowners benefited from favorable comparison to higher than usual fire losses in the third quarter of 2016
- Expense ratio improved over prior-year quarter 1.5 points, driven by:
  - Growth leverage
  - Operating efficiencies, including expense initiatives
  - Comparison to elevated agency performance-based compensation in the third quarter of 2016



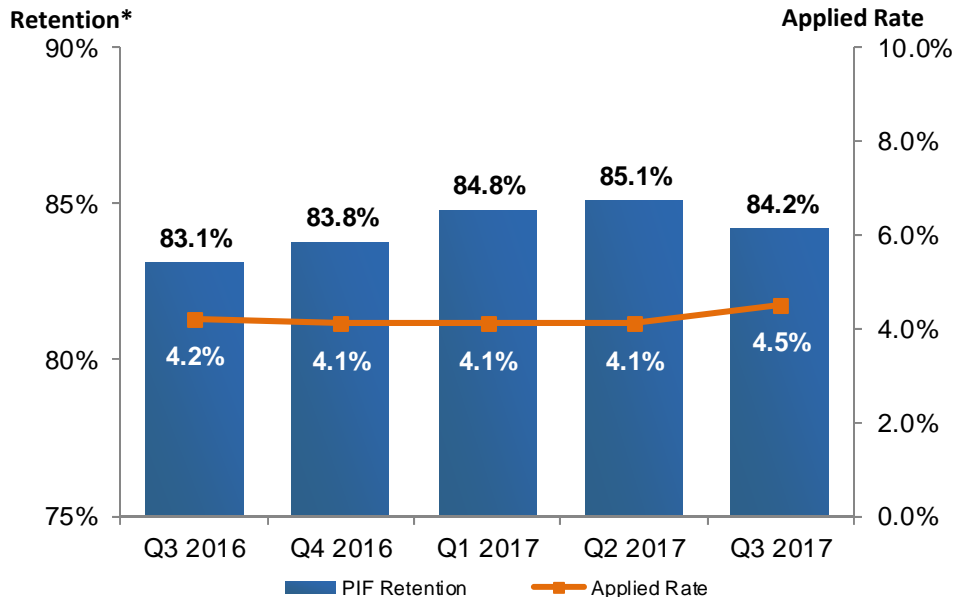
# Personal Lines Growth Highlights

(\$ in millions)

## Net Premiums Written



- Net premiums written growth driven by higher renewal premium due to rate increases and improved retention
  - Policies-in-force increased by 3.5% over prior-year quarter
- Strong quality book of business:
  - Account business represents 87% of new business and 82% of total book
  - Platinum is ~70% of new business premium<sup>(10)</sup> and ~35% of net premiums written
- Retention is up by 1.1 pts over the prior year quarter, due in part to rate stability and growth of our Platinum product.



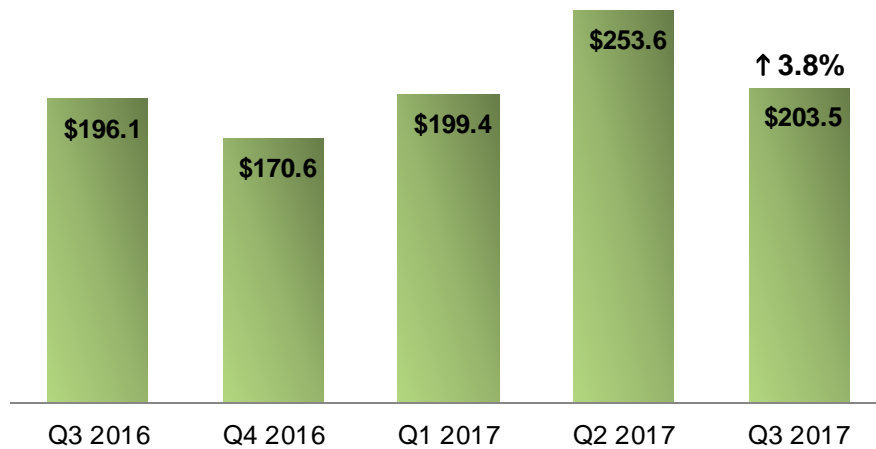
\* Retention is defined as ratio of net retained policies for noted period to those policies available to renew over the same period.



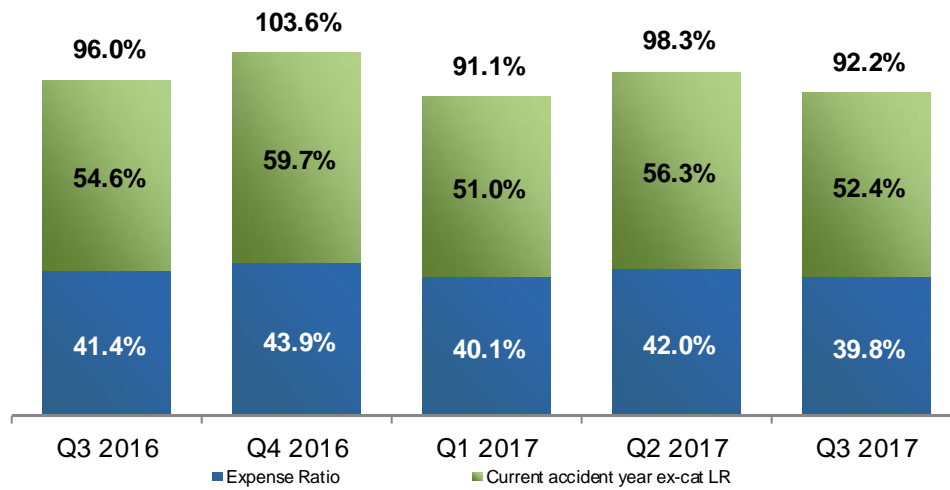
# Chaucer Highlights

(\$ in millions)

## Net Premiums Written



## Current Accident Year Combined Ratio (CR), Ex-Cat



- \$124.9 million of current accident year catastrophe losses, or 56.2% of net premiums earned, driven primarily by hurricanes Harvey and Irma
- Current quarter accident year loss ratio, excluding catastrophes, down 2.2 points, due in part to a benefit of reinstatement premium on the ratio
- Expense ratio improved 1.6 points over prior-year quarter due to lower performance-based compensation, as well as growth leverage
- Net premiums written increased 3.8% over the prior-year quarter, or 1.6% ex-reinstatement, driven by growth initiatives, which offset business lost in light of very competitive pricing environment:
  - Growth in Treaty and Casualty
  - Offset by decreases in Marine, Political Risk and Property



# Foreign Exchange Impact on Chaucer Operating Income

Transactional gains and losses in comprehensive income:

*(\$ in million)*

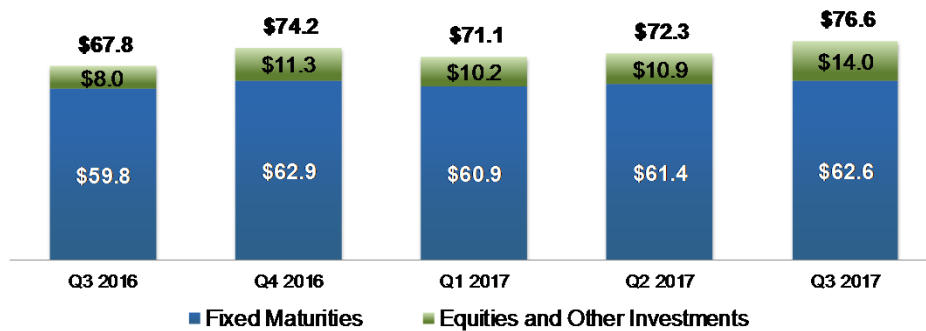
	Three Months Ended September 30	
	2016	2017
Effect of revaluing loss and LAE reserves	\$ (10.4)	\$ 0.8
Effect of revaluing overseas deposits and cash	3.3	(0.9)
Effect of revaluing premium receivables	0.3	(0.1)
Total FX effect on operating income	\$ (6.8)	\$ (0.2)
FX losses reflected in net realized investment gains	-	-
Total FX effect on pre-tax income	\$ (6.8)	\$ (0.2)
Unrealized FX gains from investment securities	2.1	-
Total pre-tax effect of transactional FX losses on comprehensive income	\$ (4.7)	\$ (0.2)
Tax benefit	1.6	0.1
Total effect of transactional FX losses on comprehensive income	\$ (3.1)	\$ (0.1)



# Net Investment Income Trends

(\$ in millions)

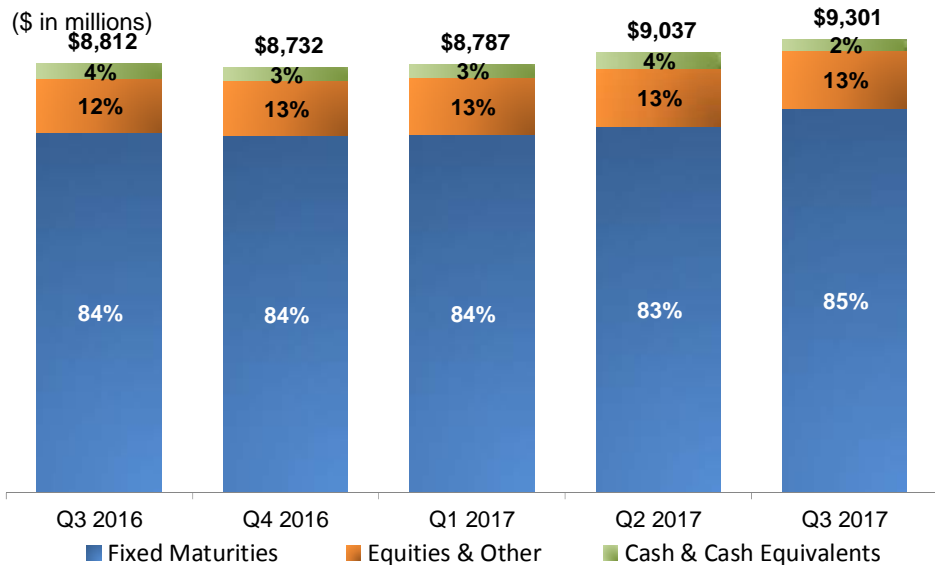
## Net Investment Income\*



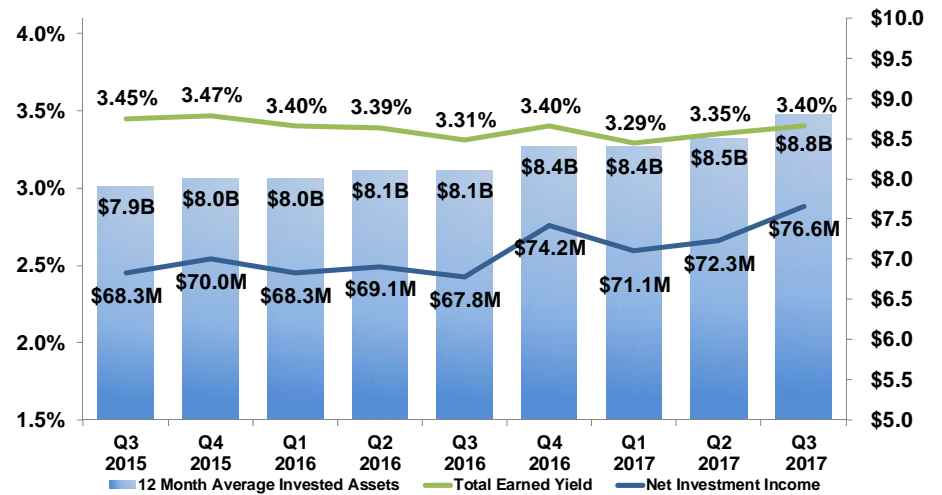
- Net investment income increased 13% over the prior-year quarter, primarily due to:
  - Reinvestment of higher operating cash flows from underwriting activity
  - Higher partnership income by \$4 million
  - Partially offset by lower new money yields due to continued lower interest rate environment

## Cash and Invested Assets

(\$ in millions)



## Investment Portfolio Trends

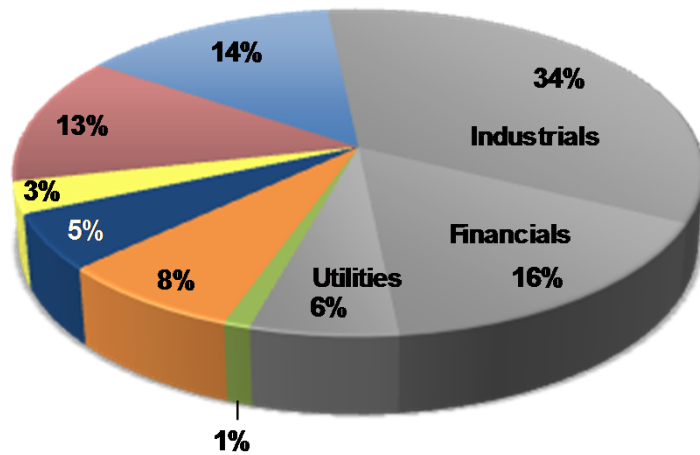


\*Net Investment Income from Equities and Other investments is presented net of investment expenses.



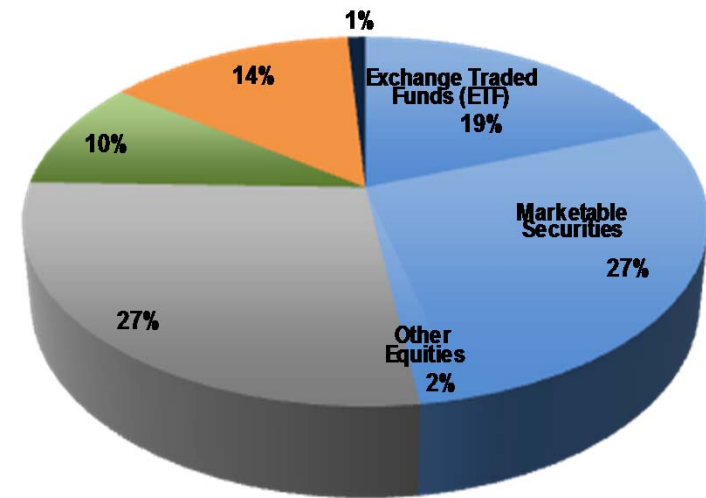
# Investment Portfolio Holdings Breakdown as of September 30, 2017

**Fixed Maturities \$7.9 Billion**



- Corporates
- U.S. Gov't/Agencies
- RMBS/ABS
- Municipals (Tax-exempt)
- Foreign Gov't
- Municipal (Taxable)
- CMBS

**Equities and Other \$1.2 Billion**



- Equities
- Mortgage Loans
- Overseas Deposits
- Partnerships
- Other

## Fixed Income Characteristics:

- 95% of fixed maturity securities are investment grade
- Weighted average quality: A+
- Duration: 4.4 years



## About The Hanover

*The Hanover Insurance Group, Inc. is the holding company for several property and casualty insurance companies, which together constitute one of the largest insurance businesses in the United States. The company provides exceptional insurance solutions in a dynamic world. The Hanover distributes its products through a select group of independent agents and brokers. Together with its agents, The Hanover offers standard and specialized insurance protection for small and mid-sized businesses, as well as for homes, automobiles, and other personal items. Through its international member company, Chaucer, The Hanover also underwrites business at Lloyd's of London in several major insurance and reinsurance classes, including marine, property and energy. For more information, please visit [hanover.com](http://hanover.com).*



# End Notes

- (1) Operating income (loss) and operating income (loss) per diluted share are non-GAAP measures. See the disclosure on the use of non-GAAP measures throughout this presentation under the heading “Forward-Looking Statements and Non-GAAP Financial Measures.” Operating income (loss) before taxes, as referenced in the results of the three business segments, is defined as, with respect to such segment, operating income (loss) before taxes and interest expense. The following table provides the reconciliation of operating income (loss) and operating income (loss) per diluted share to the most directly comparable GAAP measures, income (loss) from continuing operations and income (loss) from continuing operations per diluted share, respectively:

<b>The Hanover Insurance Group, Inc.</b>										
	Three Months ended September 30, 2016		Three Months ended December 31, 2016		Three Months ended March 31, 2017		Three Months ended June 30, 2017		Three Months ended September 30, 2017	
	\$	Per Share	\$	Per Share	\$	Per Share	\$	Per Share	\$	Per Share
(In millions, except per share data)	Amount	Diluted	Amount	Diluted	Amount	Diluted	Amount	Diluted	Amount	Diluted
<b>OPERATING INCOME (LOSS)</b>										
Commercial Lines	\$42.5		(\$93.3)		\$37.4		\$43.2		\$28.2	
Personal Lines	41.7		42.2		9.9		47.9		59.7	
Chaucer	48.4		39.2		24.9		29.7		(73.8)	
Other	(2.8)		(10.2)		(3.1)		(1.9)		(1.0)	
Total	129.8		(22.1)		69.1		118.9		13.1	
Interest expense	(12.5)		(12.1)		(12.0)		(12.2)		(12.1)	
Operating income (loss) before income taxes	117.3	\$2.73	(34.2)	(\$0.81)	57.1	\$1.33	106.7	\$2.49	1.0	\$0.02
Income tax (expense) benefit on operating income	(38.7)	(0.90)	14.5	0.35	(16.3)	(0.38)	(34.4)	(0.80)	3.7	0.09
Operating income (loss) after income taxes	78.6	1.83	(19.7)	(0.46)	40.8	0.95	72.3	1.69	4.7	0.11
Other non-operating items:										
Net realized investment gains	4.2	0.10	3.6	0.08	1.9	0.04	5.9	0.14	13.4	0.31
Loss from repurchase of debt	-	-	(2.2)	(0.05)	-	-	-	-	-	-
Other	2.5	0.06	0.2	-	-	-	(1.6)	(0.04)	(5.5)	(0.13)
Income tax benefit (expense) on other non-operating items	3.0	0.07	5.9	0.14	2.5	0.06	1.8	0.04	(0.3)	(0.01)
Income (loss) from continuing operations, net of taxes	88.3	2.06	(12.2)	(0.29)	45.2	1.05	78.4	1.83	12.3	0.28
Discontinued operations, net of taxes	0.1	-	(1.3)	(0.03)	-	-	-	-	(1.2)	(0.02)
Net income (loss)	\$88.4	\$2.06	(\$13.5)	(\$0.32)	\$45.2	\$1.05	\$78.4	\$1.83	\$11.1	\$0.26
Weighted average shares outstanding*		43.0		42.5		42.9		42.8		42.9

\*Weighted average shares outstanding and per diluted share amounts in the fourth quarter of 2016 exclude common stock equivalents, as the impact of these instruments was anti-dilutive.





## End Notes Continued

(2) Combined ratio, excluding catastrophes, is a non-GAAP measure, which is equal to the combined ratio, excluding catastrophe losses. This measure and measures excluding prior-year reserve development (“current accident-year” ratios) are used throughout this document. The combined ratio (which includes catastrophe losses and prior-year reserve development) is the most directly comparable GAAP measure. The following is reconciliation of combined ratio, excluding catastrophes:

	Three months ended September 30, 2017					Three months ended September 30, 2016				
	Commercial Lines	Personal Lines	Total Domestic	Chaucer	Total	Commercial Lines	Personal Lines	Total Domestic	Chaucer	Total
Total combined ratio	102.1%	89.2%	97.1%	139.4%	104.8%	99.2%	93.1%	96.9%	81.3%	94.2%
Less: catastrophe ratio	10.3%	3.7%	7.7%	52.8%	15.9%	3.0%	3.3%	3.1%	(1.5%)	2.3%
Combined ratio, excluding catastrophe losses	<u>91.8%</u>	<u>85.5%</u>	<u>89.4%</u>	<u>86.6%</u>	<u>88.9%</u>	<u>96.2%</u>	<u>89.8%</u>	<u>93.8%</u>	<u>82.8%</u>	<u>91.9%</u>

(3) The following is a reconciliation of book value per share, excluding net unrealized gains on investments:

	June 30 2017	September 30 2017
Book value per share	\$70.18	\$70.10
Less: Net unrealized gains on investments	5.31	5.39
Book value per share, excluding net unrealized gains on investments	<u>\$64.87</u>	<u>\$64.71</u>



## End Notes Continued

(4) Total shareholders' equity, excluding net unrealized appreciation (depreciation) on investments, net of tax, is a non-GAAP measure. Total shareholder's equity, is the most directly comparable GAAP measure, and is reconciled in the table below. For the calculation of Operating Return on Equity ("operating ROE"), the average of beginning and ending shareholders' equity, excluding net unrealized appreciation (depreciation) on investments, net of tax, is used for the period as shown in the table below.

(\$ In millions)	June 30 2016	September 30 2016	December 31 2016	March 31 2017	June 30 2017	September 30 2017
Total shareholders' equity	\$3,009.7	\$3,045.7	\$2,857.5	\$2,913.5	\$2,972.5	\$2,972.0
Less: net unrealized appreciation (depreciation) on investments, net of tax	<u>\$323.5</u>	<u>\$321.4</u>	<u>\$186.0</u>	<u>\$205.0</u>	<u>\$224.8</u>	<u>\$228.5</u>
Total shareholders' equity, excluding net unrealized appreciation (depreciation) on investments, net of tax	<u>\$2,686.2</u>	<u>\$2,724.3</u>	<u>\$2,671.5</u>	<u>\$2,708.5</u>	<u>\$2,747.7</u>	<u>\$2,743.5</u>
Average shareholders' equity		\$3,027.7	\$2,951.6	\$2,885.5	\$2,943.0	\$2,972.3
Average shareholders' equity, excluding net unrealized appreciation (depreciation) on investments, net of tax		\$2,705.3	\$2,697.9	\$2,690.0	\$2,728.1	\$2,745.6



## End Notes Continued

(5) Operating Return on Average Equity (“operating ROE”) is a non-GAAP financial measure. Operating ROE is calculated by dividing annualized operating income after tax for the applicable period (as defined on end note (1)), by average shareholders’ equity, excluding unrealized appreciation (depreciation) on investments, net of tax, for the stated period (as defined on end note (4)).

	September 30 2016	December 31 2016	March 31 2017	June 30 2017	September 30 2017
(\$ In millions, except percentages)					
Annualized net income (period ended net income multiplied by 4)	\$353.6	(\$54.0)	\$180.8	\$313.6	\$44.4
Average shareholders’ equity	\$3,027.7	\$2,951.6	\$2,885.5	\$2,943.0	\$2,972.3
Return on equity (GAAP)	11.7%	(1.8%)	6.3%	10.7%	1.5%

	September 30 2016	December 31 2016	March 31 2017	June 30 2017	September 30 2017
(\$ In millions, except percentages)					
Annualized operating income <sup>(1)</sup> (period ended operating income multiplied by 4)	\$314.4	(\$78.8)	\$163.2	\$289.2	\$18.8
Average shareholders’ equity, excluding net unrealized appreciation (depreciation) on investments, net of tax	\$2,705.3	\$2,697.9	\$2,690.0	\$2,728.1	\$2,745.6
Operating return on equity (non-GAAP)	11.6%	(2.9%)	6.1%	10.6%	0.7%

	September 30 2017
(\$ In millions, except percentages)	
Operating income <sup>(1)</sup>	\$4.7
Impact of elevated catastrophe related activity for the period, net of tax (35% statutory tax rate):	
Calendar year catastrophe losses above management’s assumption (4.8%* vs 15.9% actual catastrophe ratio)	89.1
Lower performance base compensation expense and higher net reinstatement premiums	(7.1)
"Normalized" operating income (non-GAAP)	<u>\$86.7</u>
Annualized "normalized" operating income (non-GAAP) (period ended normalized operating income multiplied by 4)	346.8
Average shareholders’ equity, excluding net unrealized appreciation (depreciation) on investments, net of tax	\$2,745.6
"Normalized" operating return on equity (non-GAAP)	12.6%

\* Management’s assumption based on modeled results



## End Notes Continued

(6) Current accident year loss ratio, excluding catastrophe losses, is a non-GAAP measure, which is equal to the loss ratio, excluding prior-year reserve development and catastrophe losses. The loss ratio (which includes catastrophe losses and prior-year loss reserve development) is the most directly comparable GAAP measure. The following is a reconciliation of current accident year loss ratio, excluding catastrophe losses:

Consolidated	Three months ended September 30, 2017				Three months ended September 30, 2016			
	Commercial Lines	Personal Lines	Chaucer	Total	Commercial Lines	Personal Lines	Chaucer	Total
	Total loss and LAE Ratio	67.1%	61.7%	99.6%	71.3%	63.5%	64.1%	39.9%
Less:								
Prior-year reserve development ratio	-	-	(5.6%)	(1.0%)	3.3%	(0.3%)	(13.2%)	(0.7%)
Catastrophe ratio	10.3%	3.7%	52.8%	15.9%	3.0%	3.3%	(1.5%)	2.3%
Current accident year loss ratio, excluding catastrophe losses	<u>56.8%</u>	<u>58.0%</u>	<u>52.4%</u>	<u>56.4%</u>	<u>57.2%</u>	<u>61.1%</u>	<u>54.6%</u>	<u>58.0%</u>

Commercial Lines	Three months ended September 30, 2017					Three months ended September 30, 2016				
	Multiple Peril	Auto	Workers' Comp	Other	Total	Multiple Peril	Auto	Workers' Comp	Other	Total
	Total loss and LAE Ratio	61.4%	72.9%	61.4%	71.6%	67.1%	61.5%	75.9%	63.3%	61.3%
Less:										
Prior-year reserve development ratio	-	-	-	-	-	4.7%	2.5%	(5.4%)	4.9%	3.3%
Catastrophe ratio	9.0%	4.8%	-	16.2%	10.3%	6.6%	2.2%	-	1.2%	3.0%
Current accident year loss ratio, excluding catastrophe losses	<u>52.4%</u>	<u>68.1%</u>	<u>61.4%</u>	<u>55.4%</u>	<u>56.8%</u>	<u>50.2%</u>	<u>71.2%</u>	<u>68.7%</u>	<u>55.2%</u>	<u>57.2%</u>

Personal Lines	Three months ended September 30, 2017				Three months ended September 30, 2016			
	Auto	Home	Other	Total	Auto	Home	Other	Total
	Total loss and LAE Ratio	68.0%	52.2%	34.4%	61.7%	71.8%	52.9%	26.9%
Less:								
Prior-year reserve development ratio	-	-	-	-	(0.6%)	-	2.2%	(0.3%)
Catastrophe ratio	0.5%	9.7%	2.1%	3.7%	1.6%	6.5%	1.1%	3.3%
Current accident year loss ratio, excluding catastrophe losses	<u>67.5%</u>	<u>42.5%</u>	<u>32.3%</u>	<u>58.0%</u>	<u>70.8%</u>	<u>46.4%</u>	<u>23.6%</u>	<u>61.1%</u>



## End Notes Continued

(6) Continued.

<b>Chaucer</b>	Three Months Ended				
	September 30, 2016	December 31, 2016	March 31, 2017	June 30, 2017	September 30, 2017
Total loss and LAE Ratio	39.9%	43.4%	53.4%	49.0%	99.6%
Less:					
Prior-year reserve development ratio	(13.2%)	(14.7%)	(1.1%)	(7.9%)	(5.6%)
Catastrophe ratio	(1.5%)	(1.6%)	3.5%	0.6%	52.8%
Current accident year loss ratio, excluding catastrophe losses	54.6%	59.7%	51.0%	56.3%	52.4%

(7) On this page and later in this document, the expense ratio is reduced by installment fee revenues for purposes of the ratio calculation.



## End Notes Continued

- (8) Current accident year combined ratio, excluding catastrophe losses, is a non-GAAP measure, which is equal to the combined ratio, excluding prior-year reserve development and catastrophe losses. The combined ratio (which includes catastrophe losses and prior-year reserve development) is the most directly comparable GAAP measure. The following is a reconciliation of current accident year combined ratio:

	Three months ended				
	September 30, 2017				
	Commercial Lines	Personal Lines	Total Domestic	Chaucer	Total
Total combined ratio	102.1%	89.2%	97.1%	139.4%	104.8%
Less:					
Prior-year reserve development ratio	-	-	-	(5.6%)	(1.0%)
Catastrophe ratio	10.3%	3.7%	7.7%	52.8%	15.9%
Current accident year combined ratio, excluding catastrophe losses	<u>91.8%</u>	<u>85.5%</u>	<u>89.4%</u>	<u>92.2%</u>	<u>89.9%</u>
	June 30, 2017				
Total combined ratio	99.4%	91.8%	96.5%	91.0%	95.6%
Less:					
Prior-year reserve development ratio	-	-	-	(7.9%)	(1.3%)
Catastrophe ratio	7.2%	3.4%	5.7%	0.6%	4.8%
Current accident year combined ratio, excluding catastrophe losses	<u>92.2%</u>	<u>88.4%</u>	<u>90.8%</u>	<u>98.3%</u>	<u>92.1%</u>
	March 31, 2017				
Total combined ratio	100.2%	101.6%	100.9%	93.5%	99.5%
Less:					
Prior-year reserve development ratio	-	-	-	(1.1%)	(0.2%)
Catastrophe ratio	6.2%	10.6%	7.9%	3.5%	7.1%
Current accident year combined ratio, excluding catastrophe losses	<u>94.0%</u>	<u>91.0%</u>	<u>93.0%</u>	<u>91.1%</u>	<u>92.6%</u>
	December 31, 2016				
Total combined ratio	122.8%	93.4%	112.2%	87.3%	107.7%
Less:					
Prior-year reserve development ratio	27.6%	1.4%	18.1%	(14.7%)	12.3%
Catastrophe ratio	1.3%	3.1%	2.0%	(1.6%)	1.4%
Current accident year combined ratio, excluding catastrophe losses	<u>93.9%</u>	<u>88.9%</u>	<u>92.1%</u>	<u>103.6%</u>	<u>94.0%</u>
	September 30, 2016				
Total combined ratio	99.2%	93.1%	96.9%	81.3%	94.2%
Less:					
Prior-year reserve development ratio	3.3%	(0.3%)	1.9%	(13.2%)	(0.7%)
Catastrophe ratio	3.0%	3.3%	3.1%	(1.5%)	2.3%
Current accident year combined ratio, excluding catastrophe losses	<u>92.9%</u>	<u>90.1%</u>	<u>91.9%</u>	<u>96.0%</u>	<u>92.6%</u>



## End Notes Continued

- (9) Core Commercial business provides commercial property and casualty coverages to small and mid-sized businesses in the U.S., generally with annual premiums per policy up to \$250,000, primarily through the commercial multiple peril, commercial auto and workers' compensation lines of business, as reported on pages 8 and 9 of the Third Quarter 2017 Financial Supplement.

(\$ in millions)	Three months ended September 30, 2017			Three months ended September 30, 2016		
	Core Commercial	Other Commercial	Total	Core Commercial	Other Commercial	Total
Net premiums written	\$409.7	\$270.5	\$680.2	\$384.6	\$262.7	\$647.3
Net premiums earned	\$358.3	\$245.7	\$604.0	\$341.9	\$245.3	\$587.2

- (10) Excludes Massachusetts.