# The Hanover Insurance Group, Inc.

## Fourth Quarter 2016 Results

**February 2, 2017**

**To be read in conjunction with the press release dated February 2, 2017 and conference call scheduled for February 3, 2017**

# 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," "forecast", "outlook," "should," "could," "confident," "plan," "guidance," "on track to" 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 business issues we believe we have successfully addressed in the recent past; confidence in the existing portfolio and in the ongoing trend in underlying improvement and business growth; confidence in the ability to deliver acceptable profit levels in commercial auto; comfort with AIX's business and the quality of our Personal Lines business; the strength of reserves and the balance sheet, and the adequacy of current and prior-year reserve actions, following the actuarial reserving review in the fourth quarter 2016, including conservatism in professional liability, surety and other lines and Chaucer; the ability to achieve target profit and the ultimate accuracy of best estimates reserves for current or prior-periods; our ability to achieve financial goals and generate strong earnings; prospects for margin expansion through rate, risk selection and expense actions; ability to leverage our agency distribution network to expand shelf space with existing agents and generate growth, including the expansion of commercial offerings through industry segmentation and specialty development; pricing compared to long-term loss trends; future trends of commercial multi-peril liability claims or relating to AIX program business; frequency and severity trends in personal and commercial auto; ability to leverage pricing, business mix, profit actions in underperforming lines of business, and expense ratio improvement to drive commercial growth and profitability improvement; success of technology and service platform investments, and state and product expansion in Personal Lines; success of The Hanover Platinum Experience penetration to generate better margins, retention, and lifetime value; ability to capture the emerging-affluent market; pricing and retention trends; impact of bodily injury and collision severity trends on auto rates; the potential impact of capital actions and business investments; effects and volatility of pound sterling and other currencies on earnings; impact of commodity prices on future earnings in light of Chaucer's trade credit business; success of the proposed non-Lloyd's platform in Dublin; the ability to manage the cyclical nature of Chaucer's business, challenging market conditions, and long-term financial targets; the ability to maintain long-term profitability and leverage underwriting intellectual property, and international reach to uphold relevancy and position at Chaucer; success of Chaucer's business initiatives to offset topline headwinds; share repurchases; the outcome of the key tenets of our strategy, including leveraging the strengths of the core agency business, expanding and growing specialty capabilities, and innovating new business models and technologies; increased income from expected "higher yielding assets;" impact of low new money yields and low interest rates on earnings; volatility in unrealized gains; and changes to investment approach, including participation in the tax-exempt space, 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 the company's earnings press release dated February 2, 2017 and the Annual Report, Form 10-K and other documents filed by The Hanover with the Securities and Exchange Commission, which are available at www.hanover.com under "Investors." We assume no obligation to update this presentation, which, unless otherwise noted, are as of December 31, 2016.

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 February 2, 2017 or the financial supplement, all of 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 on pages 7, 10,13, and 16 of the financial supplement. 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 (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 2015 Annual Report on pages 78-80 (pages 80-82 of the 2015 Form 10-K).

# Fourth Quarter and Full Year 2016 Highlights

**Full Year Net Income of $3.59 per Diluted Share; Operating Income[1] of $4.27 per Diluted Share;**

**Fourth Quarter Net Loss of $0.32 per Diluted Share[2]; Operating Loss of $0.46 per Diluted Share,**

**Reflecting Reserve Strengthening in Domestic Lines of $174.1 million Before Taxes and**

**Strong Underlying Performance of the Business**

- Strengthened domestic prior-year loss and loss adjustment expense reserves by $174.1 million before taxes in the fourth quarter
- Combined ratio of 107.7% in the fourth quarter and 98.6% in the full year, including 1.4 and 2.7 points of catastrophe losses and 12.3 and 3.0 points of unfavorable prior-year development, respectively
- Current accident year combined ratio, excluding catastrophes[3], of 94.0% in the fourth quarter and 92.9% in the full year, improved from 94.3% and 93.8%, respectively
- Net premiums written[4] up 3.4% in the fourth quarter and 1.6% in the full year, excluding the impact of the UK motor sale on June 30, 2015
- Continued price increases in Commercial and Personal Lines
- Net investment income of $74.2 million in the fourth quarter, up 6.0%, and $279.4 million for the year, consistent with full year 2015
- Book value per share of $67.40, up 1.8% from December 31, 2015; book value per share excluding net unrealized gains on investments[5] of $63.01, up 0.5%
- During 2016, repurchased approximately 1.3 million shares of common stock for $105.6 million, at an average price of $80.58 per share
- On December 6, 2016, the Board of Directors increased the quarterly dividend on common shares by 9%, to $0.50 per common share

(1) Non-GAAP measure. See pages 17-20. These measures are used throughout this presentation.

# Consolidated Financial Results Snapshot

| *($ in millions, except per share amounts)* | Three Months Ended December 31, 2015 | Three Months Ended March 31, 2016 | Three Months Ended June 30, 2016 | Three Months Ended September 30, 2016 | Three Months Ended December 31, 2016 | Twelve Months Ended December 31, 2015 | Twelve Months Ended December 31, 2016 |
|---|---|---|---|---|---|---|---|
| **Net income (loss) per share** | **$1.76** | **$1.80** | **$0.05** | **$2.06** | **$(0.32)** | **$7.40** | **$3.59** |
| Operating income (loss) after taxes per share | $1.82 | $1.64 | $1.24 | $1.83 | $(0.46) | $6.25 | $4.27 |
| **Book value per share** | **$66.21** | **$69.30** | **$70.58** | **$72.08** | **$67.40** | **$66.21** | **$67.40** |
| Shareholders' equity | $2,844 | $2,957 | $3,010 | $3,046 | $2,858 | $2,844 | $2,858 |
| Debt | $803 | $803 | $798 | $798 | $786 | $803 | $786 |
| Total capital | $3,647 | $3,760 | $3,808 | $3,844 | $3,644 | $3,647 | $3,644 |
| Debt/total capital | 22.0% | 21.4% | 21.0% | 20.8% | 21.6% | 22.0% | 21.6% |
| Total assets | $13,781 | $14,028 | $14,164 | $14,364 | $14,220 | $13,781 | $14,220 |
| **Total equity, excluding net unrealized appreciation (depreciation) on investments, net of tax[6]** | **$2,694.5** | **$2,710.6** | **$2,686.2** | **$2,724.3** | **$2,671.5** | **$2,694.5** | **$2,671.5** |
| **Average equity, excluding net unrealized appreciation (depreciation) on investments, net of tax[6]** | **$2,687** | **$2,703** | **$2,698** | **$2,705** | **$2,698** | **$2,619** | **$2,683** |
| Operating income (loss) after tax | $80 | $72 | $54 | $79 | $(20) | $280 | $184 |
| **Operating return on equity** | **12.0%** | **10.6%** | **8.0%** | **11.6%** | **(2.9)%** | **10.7%** | **6.9%** |
| Operating income (loss) before interest and taxes[1] | $124 | $120 | $95 | $130 | $(22) | $466 | $323 |
| Prior year (favorable) unfavorable reserve development | $(18) | $(10) | $15 | $(8) | $143 | $(94) | $140 |
| **Operating income before interest and taxes, excluding prior year development [7]** | **$106** | **$110** | **$110** | **$122** | **$121** | **$372** | **$463** |

# Consolidated Underwriting Performance

| ($ in millions) | Three Months Ended December 31 | | Twelve Months Ended December 31 | |
|---|---|---|---|---|
| **Premiums:** | **2015** | **2016** | **2015** | **2016** |
| Net written | $1,046 | $1,082 | $4,754[4] | $4,699 |
| Net earned | $1,138 | $1,170 | $4,705 | $4,628 |
| | | | | |
| **Loss and LAE ratio:** | | | | |
| Current accident year, ex-cat | 58.7% | 58.3% | 59.4% | 58.4% |
| Prior year (favorable) unfavorable reserve development | (1.6%) | 12.3% | (2.0%) | 3.0% |
| Catastrophe losses | 2.3% | 1.4% | 3.9% | 2.7% |
| **Loss and LAE ratio** | **59.4%** | **72.0%** | **61.3%** | **64.1%** |
| | | | | |
| **Expense ratio** | **35.6%** | **35.7%** | **34.4%** | **34.5%** |
| **Combined ratio** | **95.0%** | **107.7%** | **95.7%** | **98.6%** |
| | | | | |
| **Combined ratio, ex-cat[8]** | **92.7%** | **106.3%** | **91.8%** | **95.9%** |
| | | | | |
| **Current accident year combined ratio, ex-cat[3]** | **94.3%** | **94.0%** | **93.8%** | **92.9%** |
| | | | | |
| Underwriting income (loss) | $53.3 | $(94.0) | $188.9 | $51.3 |
| Catastrophe losses | 26.7 | 16.0 | 181.3 | 125.1 |
| Ex-cat, underwriting income (loss)* | $80.0 | $(78.0) | $370.2 | $176.4 |

*Non-GAAP measure, reconciles to underwriting Income (loss) as displayed above

# Fourth quarter 2016 domestic reserve actions

***The following table summarizes reserve actions taken during the fourth quarter 2016 for domestic lines of business:***

| ($ in millions) unfavorable (favorable) | Net premiums written for the twelve months ended December 2016 | Reserve Actions | Primary Accident Years |
|---|---|---|---|
| Commercial multiple peril (CMP) | $ 792.9 | $ 43.7 | 2012 to 2015 |
| Workers' compensation | 285.6 | (32.0) | 2013 to 2015 |
| Commercial auto | 307.1 | 18.4 | 2012 to 2014 |
| AIX | 200.0 | 49.6 | 2011 to 2014 |
| General liability (GL) | 197.8 | 45.2 | 2012 to 2015 |
| Surety | 68.2 | 37.9 | 2012 to 2015 |
| All other lines | 509.9 | (1.3) | |
| Other commercial lines | 975.9 | 131.4 | |
| **Total Commercial Lines** | **2,361.5** | **161.5** | |
| Auto | 953.6 | 8.2 | 2013 to 2015 |
| Homeowners and other personal lines | 567.6 | (3.0) | |
| **Total Personal Lines** | **1,521.2** | **5.2** | |
| **Total Other** | - | 7.4 | |
| **Total Domestic** | **$ 3,882.7** | **$ 174.1** | |

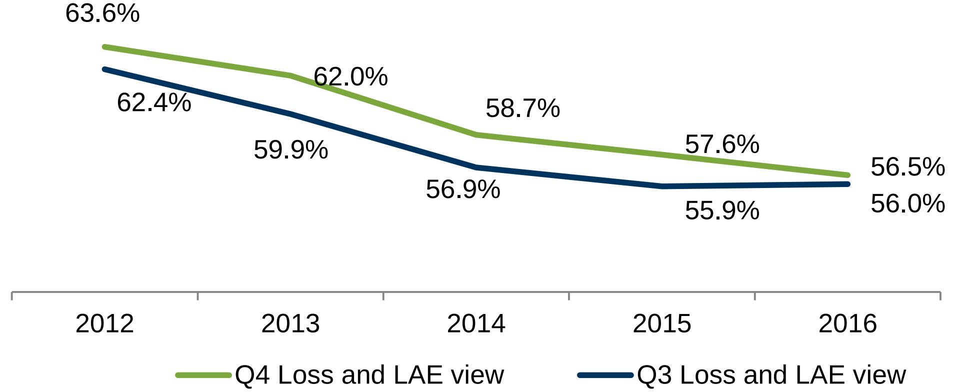
- CMP/Core GL – reserve strengthening reflects higher severity of liability losses
- Workers' Compensation – strong performance and consistent favorable development, reflecting mix change to small size accounts and lower risk profile, which led to lower best estimate
- AIX – driven primarily by discontinued programs, primarily in general liability and commercial auto coverages
- Surety – primarily reflective of recent unfavorable development in a number of high-severity contract surety losses. This led to an increase in case and IBNR reserves on prior accident years

# Confidence in the strength of the book of business

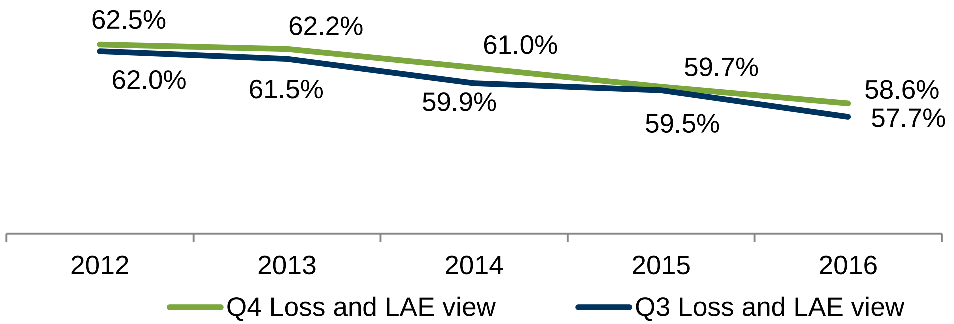
Commercial Lines loss improvement trajectory is evident, despite reserve additions

**Accident Year Loss Ratio, excluding catastrophes, adjusted for Prior-Year Development**

**Total Commercial Lines ($161.5 million Q4 reserve charge)**



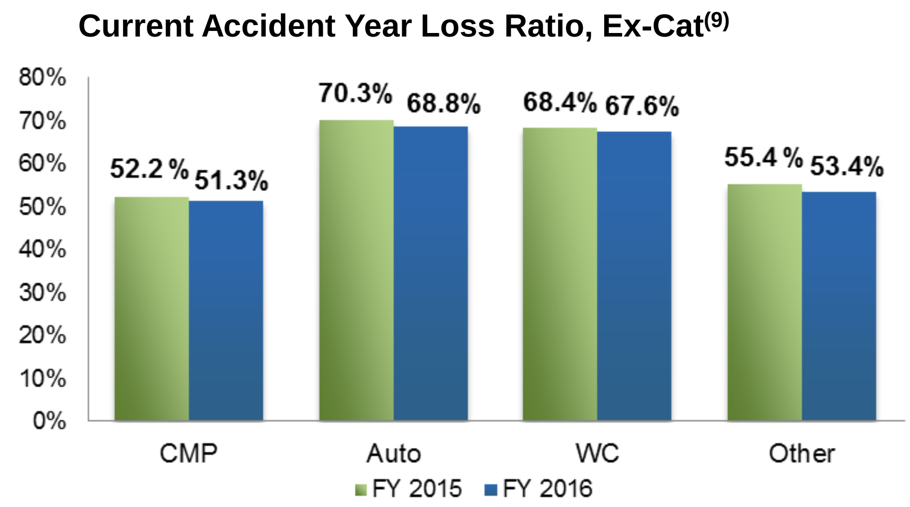

**Core Commercial Lines ($30.1 million Q4 reserve charge)**

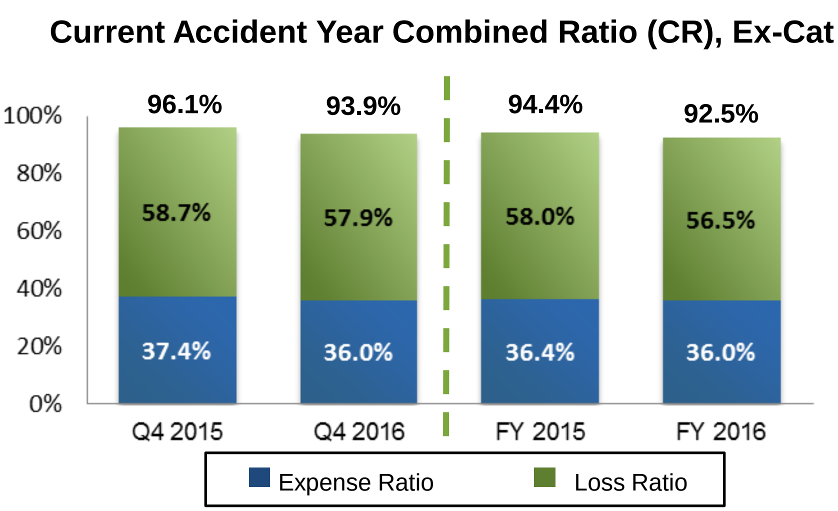



Past and ongoing profitability actions provide confidence in future performance:

- CMP/GL – specific areas of concern targeted through pricing, underwriting and claims initiatives; notable decrease in frequency in 2016; profitable business despite isolated reserve challenges
- AIX – discontinued, unprofitable programs; repriced/modified go-forward programs; business stems from key core partners; best estimates for AY 2015-2016 are holding
- Surety – adjusted case and IBNR reserves to reflect confident best estimate after detailed book review; targeting higher credit quality accounts; highly profitable commercial surety now 50% of the book

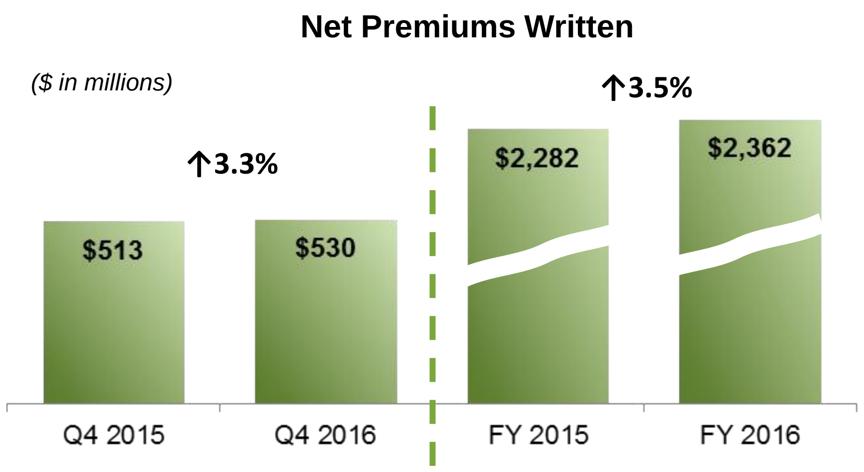
# Commercial Lines Underwriting Highlights

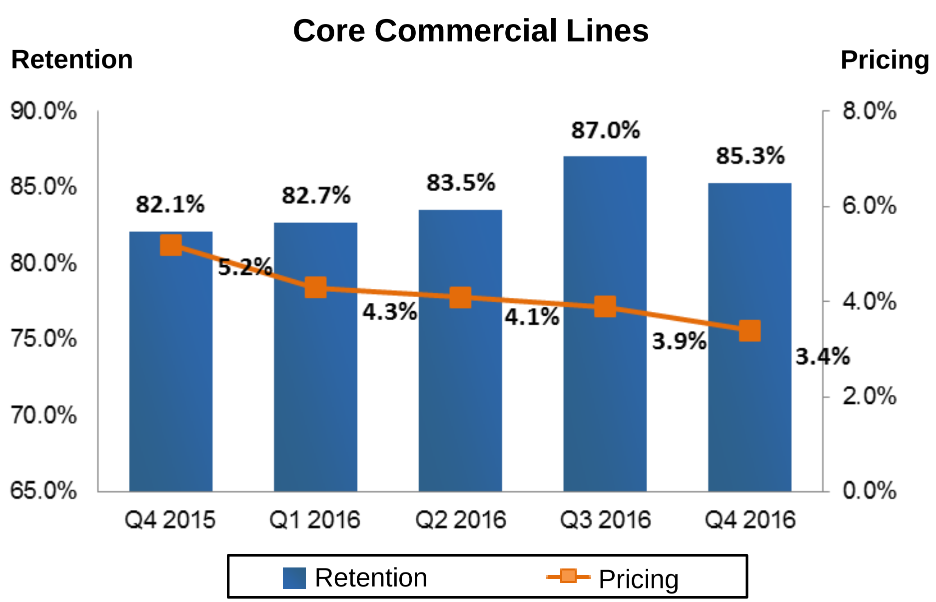



- Current accident year combined ratio, excluding catastrophes, improved 2.2 points compared to the prior-year quarter, and 1.9 points for the full year, driven by:
  - Underwriting improvement in the business, as outlined on page 7
  - Lower property loss experience, including more benign non-catastrophe weather impact
  - Lower expense ratio driven by fixed cost leverage and timing of certain expenses in the fourth quarter of 2016

# Commercial Lines Growth Highlights

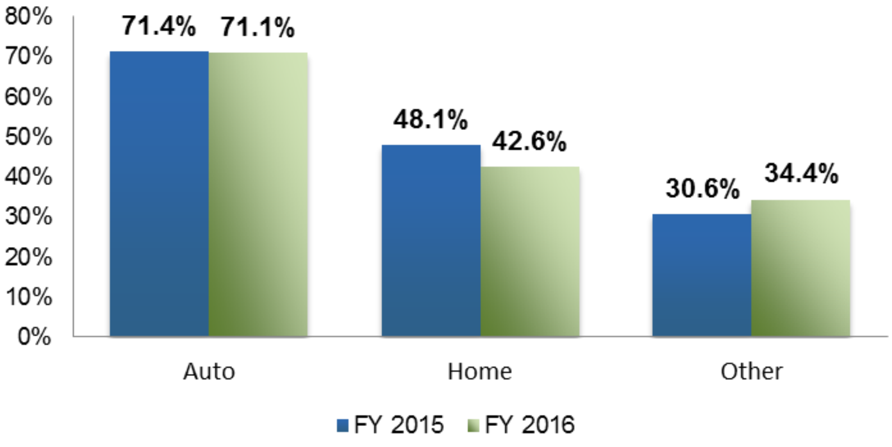


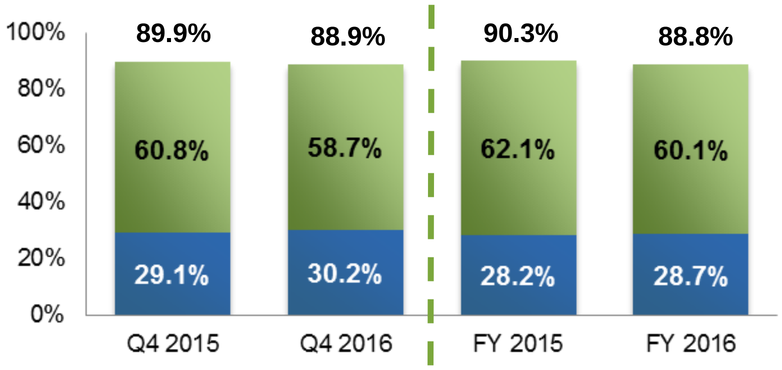

- Net premiums written growth for the fourth quarter and the full year of 2016 driven by the impact of pricing increases and improved core retention
- Growth partially offset by lower new business — a reflection of corrective measures in certain areas and competition
- Retention strengthened 3.2 points over the prior-year quarter, driven by our focus on maximizing retention on attractive business, while improving profitability on lower-performing accounts

# Personal Lines Underwriting Highlights

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

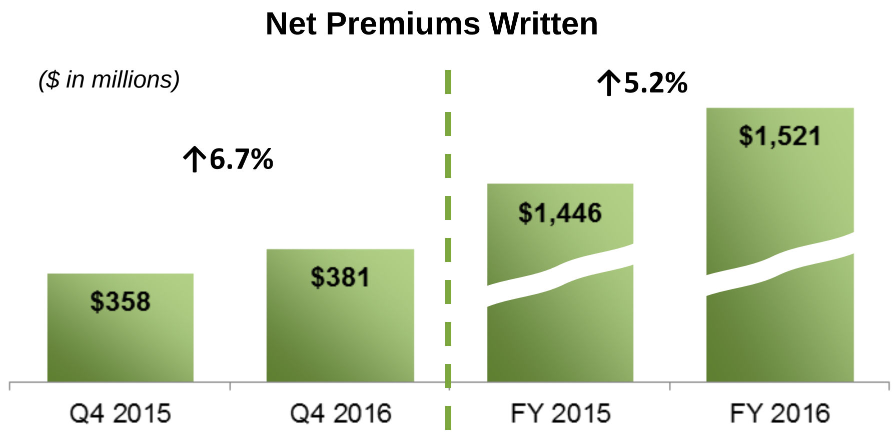



**Current Accident Year CR, Ex-Cat**

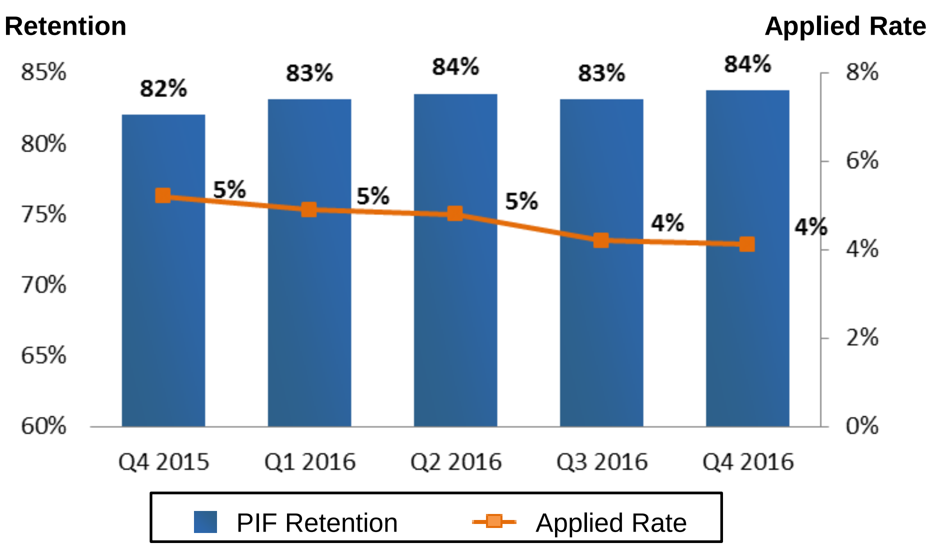



- Current accident year combined ratio, excluding catastrophes, improved one point over the prior-year quarter and 1.5 points for the year, driven by:
  - Lower non-catastrophe weather losses and the effect of earned rate in the homeowners line,
  - Partially offset by higher expense ratio, driven by higher agency performance-based compensation
  - Personal auto underwriting performance remained stable year over year, as earned rate increases offset increases in physical damage, and a slight increase in bodily injury severity

# Personal Lines Growth Highlights



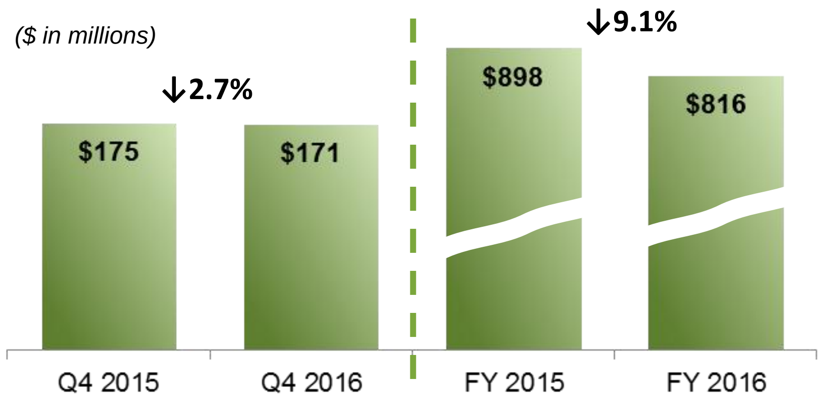

- Net premiums written growth in the fourth quarter and the full year of 2016 is attributable to rate increases, higher new business and retention
- Account business represents 83% of total policies in force and 89% of new business writings
- Retention strengthened 2 points over the prior-year quarter, a result of account focus and the success of the Hanover Platinum Experience product



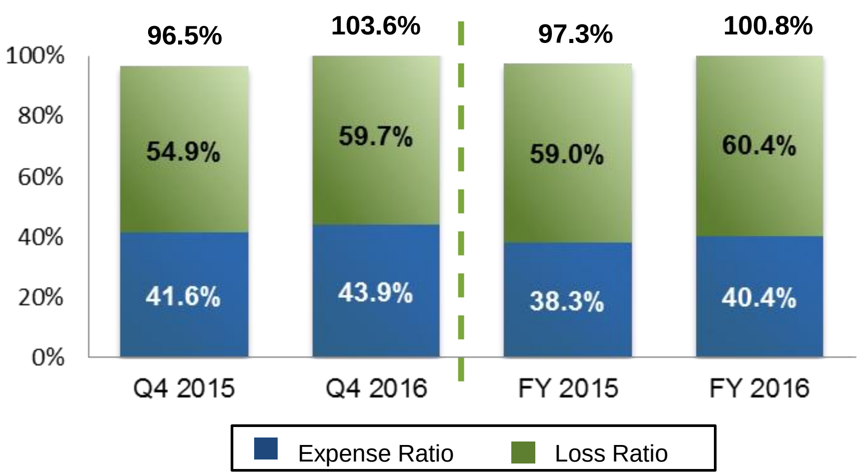

**Retention is defined as ratio of net retained policies for noted period to those policies available to renew over the same period.*

# Chaucer Highlights

**Net Premiums Written[4]**




**Current Accident Year CR, Ex-Cat**



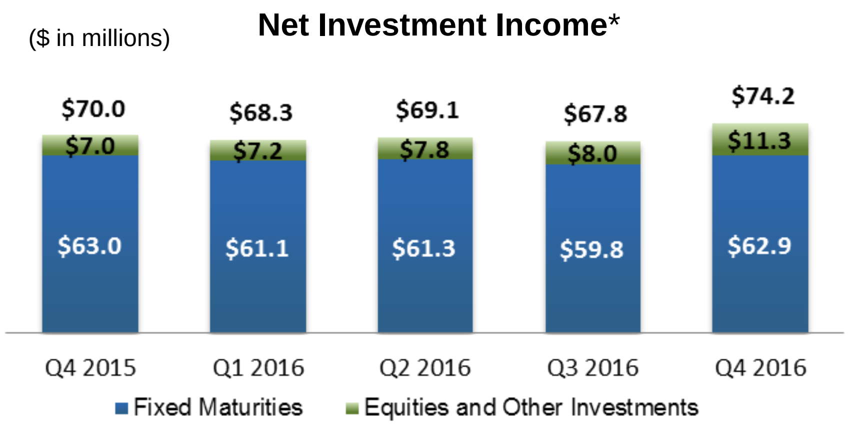

- Net premiums written[4] declined in the fourth quarter and full year driven by continued use of reinsurance, as well as challenging pricing and market conditions
- Gross premiums written[10] were down only 0.6% in the fourth quarter and 2.4%, excluding UK motor, for the full year, as we successfully maintained our influence and leadership position in the market
- Current accident year combined ratio, excluding catastrophes, increased 7.1 points compared to the prior-year quarter and 3.5 points for the full year, driven by higher large loss activity and higher overall expenses due to increased brokerage commissions from change in business mix

# Foreign Exchange Impact on Chaucer Segment Income

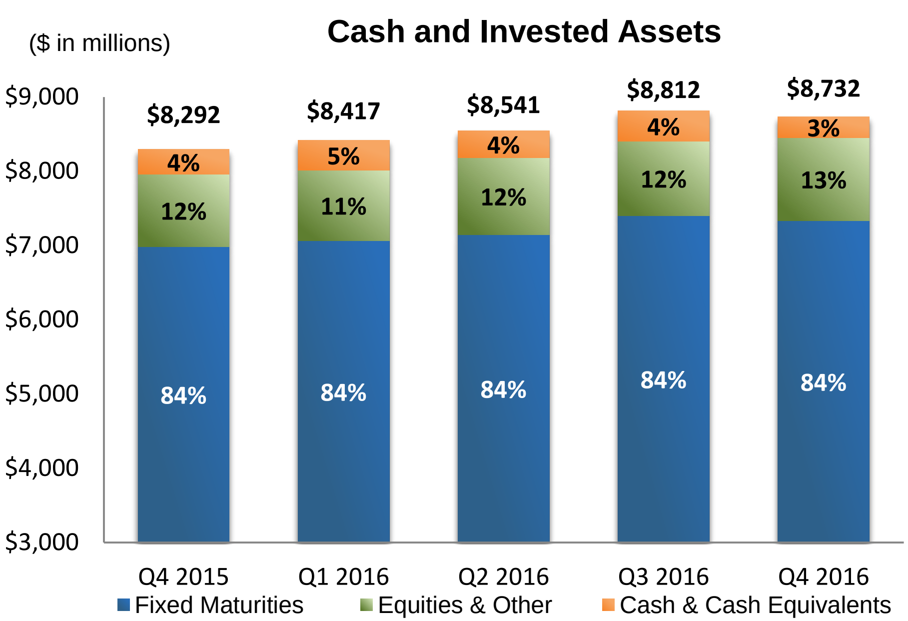
Transactional gains and losses in comprehensive income:

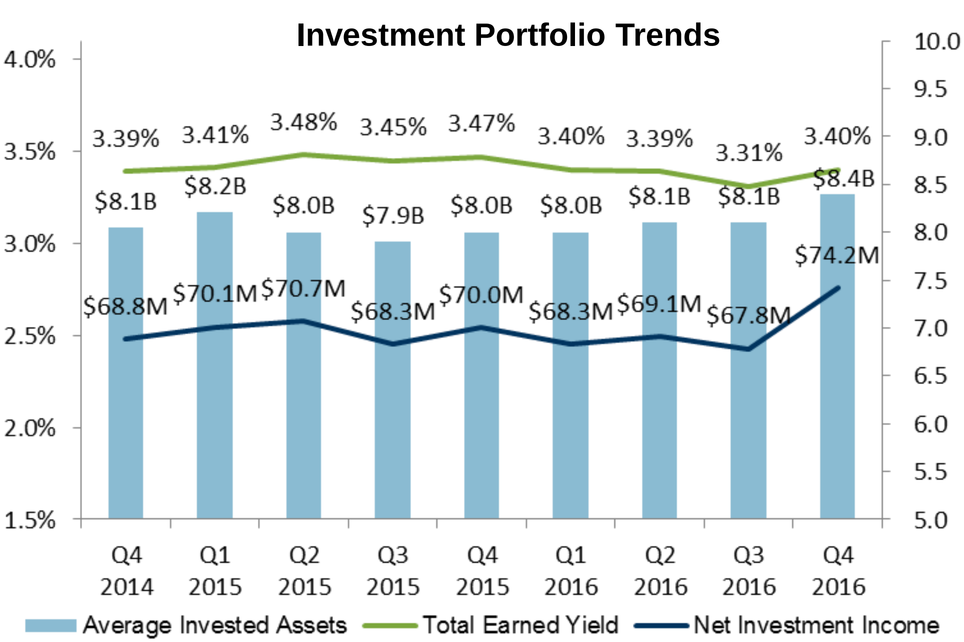
| PERIODS ENDED DECEMBER 31<br>***$ in millions*** | Q4 2015 | Q4 2016 | Full Year 2015 | Full Year 2016 |
|---|---|---|---|---|
| Effect of revaluing loss and LAE reserves | $ (6.8) | $ 6.7 | $ 13.4 | $ (36.9) |
| Effect of revaluing overseas deposits and cash | 3.5 | (1.5) | (0.5) | 11.5 |
| Effect of revaluing premium receivables | 0.2 | 0.3 | (1.2) | 3.4 |
| Total FX effect on segment income | (3.1) | 5.5 | 11.7 | (22.0) |
| FX losses reflected in realized gains/losses | (0.2) | - | (3.4) | (0.7) |
| Total FX effect on pre-tax income | (3.3) | 5.5 | 8.3 | (22.7) |
| Unrealized FX gains (losses) from investment securities | - | (1.3) | (1.2) | 8.3 |
| Total pre-tax effect of transactional FX gains (losses) on | - | - | | |
| comprehensive income | (3.3) | 4.2 | 7.1 | (14.4) |
| Tax benefit (expense) | 1.1 | (1.5) | (2.5) | 5.0 |
| Total effect of transactional FX gains (losses) on comprehensive income | $ (2.2) | $ 2.7 | $ 4.6 | $ (9.4) |

# Net Investment Income Trends




- Net investment income increased 6% over the prior-year quarter, helped by non-recurring items
- Offset pressure of new money yields by reinvesting higher operating cash flows

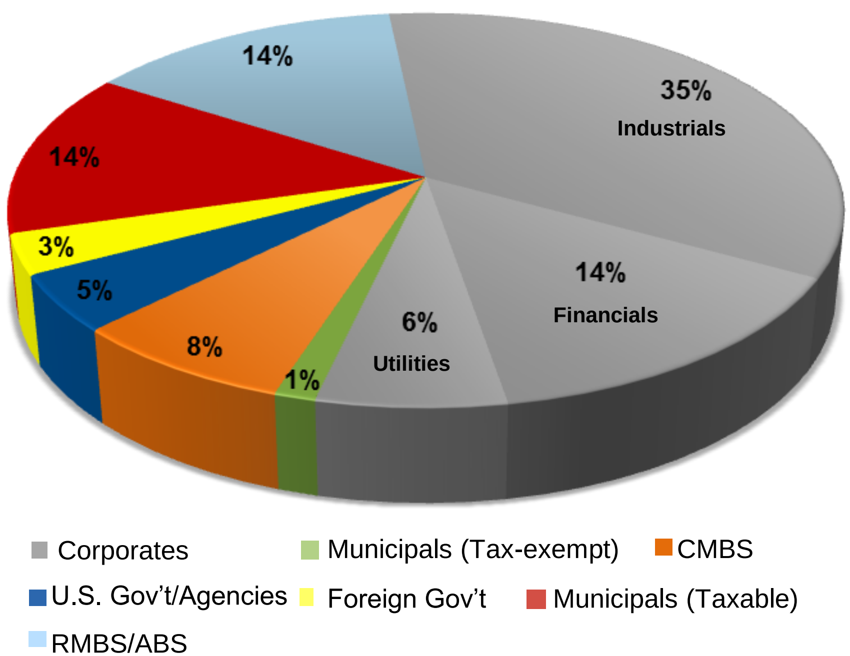


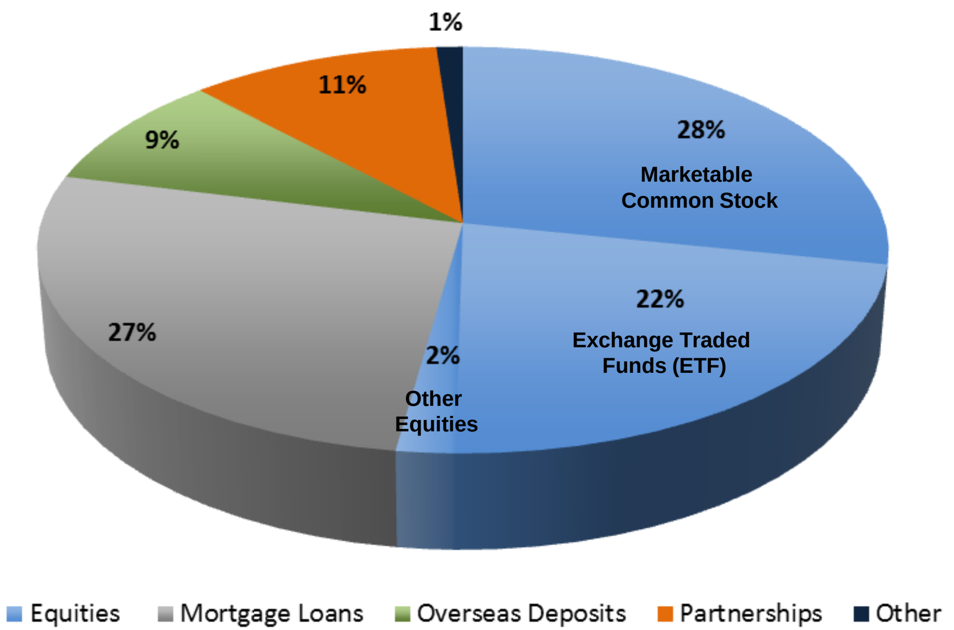

*Net Investment Income from Equities and Other investments is presented net of investment expenses.

# Investment Portfolio Holdings Breakdown as of December 31, 2016

### Fixed Income $7.3 Billion




### Equities & Other $1.1 Billion




**<u>Fixed Income Characteristics:</u>**

- 94% of fixed maturity securities are investment grade
- Weighted average quality A+
- Duration: 4.5 years

# About The Hanover

*The Hanover Insurance Group, Inc., based in Worcester, Mass., is the holding company for several property and casualty insurance companies, which together constitute one of the largest insurance businesses in the United States. For more than 160 years, The Hanover has provided a wide range of property and casualty products and services to businesses, individuals, and families. The Hanover distributes its products through a select group of independent agents and brokers. Together with its agents, the company offers specialized coverages for small and mid-sized businesses, as well as insurance protection 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, casualty, property and energy. For more information, please visit hanover.com*

# End Notes

(1) Operating income (loss) and operating income (loss) per diluted share are non-GAAP measures. Operating income before taxes, as referenced in the results of the three business segments, is defined as, with respect to such segment, operating income before taxes and interest expense. The following table provides the reconciliation of operating income and operating income per diluted share to the most directly comparable GAAP measures, income from continuing operations and income from continuing operations per diluted share, respectively:

| The Hanover Insurance Group, Inc. | Three months ended December 31 | | | | Twelve months ended December 31 | | | |
|---|---|---|---|---|---|---|---|---|
| | 2016 | | 2015 | | 2016 | | 2015 | |
| *($ In millions, except per share data)* | $ Amount | Per Share Diluted(2) | $ Amount | Per Share Diluted | $ Amount | Per Share Diluted | $ Amount | Per Share Diluted |
| **OPERATING INCOME (LOSS)** | | | | | | | | |
| Commercial Lines | ($93.3) | | $16.8 | | $35.9 | | $143.3 | |
| Personal Lines | 42.2 | | 57.7 | | 178.4 | | 149.3 | |
| Chaucer | 39.2 | | 51.3 | | 126.8 | | 183.7 | |
| Other | (10.2) | | (2.2) | | (18.3) | | (10.2) | |
| Total (operating income before interest and taxes) | (22.1) | | 123.6 | | 322.8 | | 466.1 | |
| Interest expense | (12.1) | | (14.7) | | (54.9) | | (60.6) | |
| Operating (loss) income before income taxes | (34.2) | ($0.81) | 108.9 | $2.47 | 267.9 | $6.20 | 405.5 | $9.05 |
| Income tax benefit (expense) on operating (loss) income | 14.5 | 0.35 | (28.6) | (0.65) | (83.5) | (1.93) | (125.5) | (2.80) |
| Operating (loss) income after income taxes | (19.7) | (0.46) | 80.3 | 1.82 | 184.4 | 4.27 | 280.0 | 6.25 |
| Gain on disposal of U.K motor business, net of tax | - | - | 0.3 | 0.01 | 0.9 | 0.02 | 40.6 | 0.91 |
| Other non-operating items: | | | | | | | | |
| Net realized investment gains (losses) | 3.6 | 0.08 | (10.5) | (0.24) | 8.6 | 0.20 | 19.5 | 0.43 |
| Loss from repayment of debt | (2.2) | (0.05) | - | - | (88.3) | (2.05) | (24.1) | (0.54) |
| Other | 0.2 | - | 0.3 | 0.01 | 3.0 | 0.07 | 0.1 | 0.01 |
| Income tax benefit on other non-operating items | 5.9 | 0.14 | 7.4 | 0.16 | 47.5 | 1.10 | 14.7 | 0.33 |
| Income (loss) from continuing operations, net of taxes | (12.2) | (0.29) | 77.8 | 1.76 | 156.1 | 3.61 | 330.8 | 7.39 |
| Discontinued operations, net of taxes | (1.3) | (0.03) | (0.2) | - | (1.0) | (0.02) | 0.7 | 0.01 |
| Net (loss) income | (13.5) | (0.32) | $77.6 | 1.76 | $155.1 | $3.59 | $331.5 | $7.40 |
| Weighted average shares outstanding | | 42.5 | | 44.1 | | 43.2 | | 44.8 |

(2) Per diluted share amounts in the fourth quarter of 2016 exclude common stock equivalents, since the impact of these instruments was anti-dilutive.

(3) Current accident year combined ratio, excluding catastrophes, is a non-GAAP measure. This measure and measures excluding prior-year reserve development ("accident-year" ratios) are used throughout this document. The combined ratio (which includes catastrophe losses and prior-year loss reserve development) is the most directly comparable GAAP measure. See the disclosure on the use of non-GAAP measures under the heading "Forward-Looking Statements and Non-GAAP Financial Measures." The reconciliation can be found on page 2 of the press release.

# End Notes Continued

(4) Net premiums written for Chaucer as reported for the twelve months ended December 31, 2015 do not reflect the June 30, 2015 transfer of $137.4 million of unearned premium reserves previously written by the UK motor business. This transfer of unearned premium reserves is part of the disposition of the UK motor business and has no impact on net premiums earned. See end note (5) to the press release for a reconciliation to net premiums written including UK motor transfer.

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

| | Twelve months ended December 31 2016 | Twelve months ended December 31 2015 |
|---|---|---|
| Book Value Per Share, excluding net unrealized gains on investments | $63.01 | $62.72 |
| Net unrealized gains on investments | 4.39 | 3.49 |
| Book Value Per Share | $67.40 | $66.21 |

(6) Non-GAAP measure. Shareholder's equity as reported on the first table below is the most directly comparable GAAP measure, respectively, for each period. For the calculation of Operating Return on Equity (ROE), we use the average of beginning and ending shareholders' equity, excluding net unrealized appreciation (depreciation) on investments, for the period it is calculated, as per the second table below.

| ($ In millions) | December 31 2014 | September 30 2015 | December 31 2015 | March 31 2016 | June 30 2016 | September 30 2016 | December 31 2016 |
|---|---|---|---|---|---|---|---|
| Total shareholders' equity | 2,844.0 | 2,877.5 | 2,844.4 | 2,957.0 | 3,009.7 | 3,045.7 | 2,857.5 |
| Minus: Net unrealized appreciation (depreciation) on investments, net of tax | 300.9 | 197.9 | 149.9 | 246.4 | 323.5 | 321.4 | 186.0 |
| Total shareholders' equity, excluding net unrealized appreciation (depreciation) on investments, net of tax | 2,543.1 | 2,679.6 | 2,694.5 | 2,710.6 | 2,686.2 | 2,724.3 | 2,671.5 |

| | Three months ended | | | | | Twelve months ended | |
|---|---|---|---|---|---|---|---|
| | December 31 | March 31 | June 30 | September 30 | December 31 | December 31 | December 31 |
| ($ In millions) | 2015 | 2016 | 2016 | 2016 | 2016 | 2015 | 2016 |
| Total shareholders' equity, excluding net unrealized appreciation (depreciation) on investments, net of tax: | | | | | | | |
| Balance at the start of the period | 2,679.6 | 2,694.5 | 2,710.6 | 2,686.2 | 2,724.3 | 2,543.1 | 2,694.5 |
| Balance at the end of the period | 2,694.5 | 2,710.6 | 2,686.2 | 2,724.3 | 2,671.5 | 2,694.5 | 2,671.5 |
| Average shareholders' equity, excluding net unrealized appreciation (depreciation) on investments, net of tax | 2,687 | 2,703 | 2,698 | 2,705 | 2,698 | 2,619 | 2,683 |

# End Notes Continued

(7) Operating income before interest and taxes, excluding prior year development is a non-GAAP measure. A reconciliation to the Operating income (loss) before interest and taxes can be found on page 4 of this document. Operating loss and income before interest and taxes is also Non-GAAP measure. A reconciliation to the to the most directly comparable GAAP measure can be found in endnote (1).

(8) Combined ratio, excluding catastrophes, is a non-GAAP measure. 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 loss reserve development) is the most directly comparable GAAP measure. A reconciliation of this measure to the GAAP measure for each of the Commercial Lines, Personal Lines and Chaucer segments is provided in the table which follows the discussion of each respective segment results in the press release. A reconciliation to the consolidated ratio is found on page 2 of the press release. See the disclosure on the use of non-GAAP measures on page 2 of the presentation and in the press release.

(9) Current accident year loss ratio, excluding catastrophes, is a non-GAAP measure. This measure and measures excluding prior-year reserve development ("accident-year" ratios) are used throughout this document. The loss ratio (which includes catastrophe losses and prior-year loss reserve development) is the most directly comparable GAAP measure. See the disclosure on the use of non-GAAP measures under the heading "Forward-Looking Statements and Non-GAAP Financial Measures." The reconciliation can be found below:

| | Twelve months ended December 31, 2016 | | | |
|---|---|---|---|---|
| | Commercial Lines | Personal Lines | Chaucer | Consolidated |
| Current accident year loss ratio, excluding catastrophe losses | 56.5% | 60.1% | 60.4% | 58.4% |
| Prior accident year unfavorable (favorable) reserve development | 9.6% | 0.3% | (11.4)% | 3.0% |
| Catastrophe losses | 3.0% | 3.2% | 1.0% | 2.7% |
| Total Loss and LAE Ratio | 69.1% | 63.6% | 50.0% | 64.1% |

| | Twelve months ended December 31, 2015 | | | |
|---|---|---|---|---|
| | Commercial Lines | Personal Lines | Chaucer | Consolidated |
| Current accident year loss ratio, excluding catastrophe losses | 58.0% | 62.1% | 59.0% | 59.4% |
| Prior accident year unfavorable (favorable) reserve development | 2.0% | (1.4)% | (11.4)% | (2.0)% |
| Catastrophe losses | 4.0% | 5.3% | 1.6% | 3.9% |
| Total Loss and LAE Ratio | 64.0% | 66.0% | 49.2% | 61.3% |

# End Notes Continued

10) Gross premiums written for Chaucer as discussed for the fourth quarter and full year of 2015, excludes $1.6 million and $187.5 million of gross premiums written, respectively, previously written by the UK motor business.

(11) The following table is a reconciliation of operating income, excluding domestic prior year development after taxes, used during the earnings call on February 3, 2017, to Operating income (loss) after taxes.

| | Three months ended December 31 | | Twelve months ended December 31 | |
|---|---|---|---|---|
| | 2016 | 2015 | 2016 | 2015 |
| Operating income excluding | | | | |
| domestic prior year development after taxes | $94.3 | $88.3 | $337.5 | $296.8 |
| Domestic prior year development pre-tax | (174.1) | (12.7) | (235.6) | (25.8) |
| Tax benefit | 60.1 | 4.7 | 82.5 | 9.0 |
| Operating (loss) income after taxes | $(19.7) | $80.3 | $184.4 | $280.0 |