



The Hanover Insurance Group

2019 Investor Presentation

Deutsche Bank Global Financial Services Conference

May 28, 2019



Forward-looking statements

Forward-Looking Statements

Certain statements in this document and comments made by management may be “forward-looking statements” as defined in the Private Securities Litigation Reform Act of 1995. All statements, other than statements of historical facts, may be forward-looking statements. Words such as, but not limited to, “believes,” “anticipates,” “expects,” “projects,” “forecasts,” “potential,” “should,” “could,” “continue,” “outlook,” and other similar expressions are intended to identify forward-looking statements. Forward-looking statements by their nature address matters that are, to different degrees, uncertain. The company cautions investors that any such forward-looking statements are estimates, beliefs, expectations or projections that involve significant judgement, and that historical results, trends and forward-looking statements are not guarantees and are not necessarily indicative of future performance. Actual results could differ materially from those anticipated.

These statements include, but are not limited to, the Company’s statements regarding:

- The company’s outlook and its ability to achieve components or the sum of the respective period guidance on its future results of operations including: the combined ratio, excluding or including both prior-year reserve development and/or catastrophe losses; catastrophe losses; growth of net investment income, net premiums written and/or net premiums earned; expense ratio; operating return on adjusted or unadjusted average equity; and/or the effective tax rate;
- Uses of capital, whether generated through normal business operations or a sale of an entity (including the remaining proceeds from the Chaucer sale), for share repurchases, special or ordinary cash dividends and/or business investments, among others;
- Variability of catastrophe losses due to risk concentrations, changes in weather patterns, terrorism or other events, as well as the complexity in estimating losses from large catastrophe events due to delayed reporting of the existence, nature or extent of losses or where “demand surge,” regulatory assessments, litigation, coverage and technical complexities or other factors may significantly impact the ultimate amount of such losses;
- Current accident year losses and loss selections (“picks”), excluding catastrophes, and prior accident year loss reserve development patterns, particularly in complex “longer tail” lines;
- The confidence or concern that the current level of reserves is adequate and/or sufficient for future claim payments, whether due to losses that have been incurred but not reported, circumstances that delay the reporting of losses, business complexity, adverse judgments or developments with respect to case reserves, the difficulties and uncertainties inherent in projecting future losses from historical data, changes in replacement and medical costs, or other factors;
- Efforts to manage expenses, while allocating capital to business investment, which is at management’s discretion;
- Mix improvement and pricing segmentation actions, among others, to grow businesses believed to be more profitable or reduce premiums attributable to products believed to be less profitable; offset long-term and/or short-term loss trends due to increased frequency; increased social inflation from a more litigious environment, increased property replacement costs, and/or social movements;
- The ability to generate growth in targeted segments through new agency appointments; rate increases, retention improvements or new business; expansion into new geographies; new product introductions; or otherwise; and
- Investment returns and the ability to increase new money yields, which are dependent on the macro-economic interest rate environment.

Additional Risks and Uncertainties

Investors are further cautioned and should consider the risks and uncertainties in the company’s business that may affect such estimates and future performance that are discussed in the company’s most recently filed reports on Form 10-K and Form 10-Q and other documents filed by The Hanover Insurance Group, Inc. (“The Hanover”) with the Securities and Exchange Commission (“SEC”) and that are also available at www.hanover.com under “Investors.” These risks and uncertainties include, but are not limited to:

- Adverse claims experience, including those driven by large or increased frequency of catastrophe events (including terrorism) and severe weather;
- The uncertainty in estimating weather-related losses, and the limitations and assumptions used to model other property and casualty losses (particularly with respect to products with longer tails or involving emerging issues related to losses incurred as the result of new lines of business or reinsurance contracts and reinsurance recoverables), leading to potential adverse development of loss and loss adjustment expense reserves;
- Litigation and the possibility of adverse judicial decisions, including those which expand policy coverage beyond its intended scope or award “bad faith” or other non-contractual damages;
- The ability to increase or maintain insurance rates in line with anticipated loss costs;



Non-GAAP Financial Measures

Additional Risks and Uncertainties (Continued)

- Investment impairments, which may be affected by, among other things, the company's ability and willingness to hold investment assets until they recover in value, as well as credit and interest rate risk and general financial and economic conditions;
 - Disruption of our independent agency channel, including the impact of competition and consolidation in the industry and among agents and brokers;
 - Competition, particularly from competitors who have resource advantages;
 - The economic and macroeconomic environment, including inflation and interest rate fluctuations, which, among other things, could result in reductions in market values of fixed maturity investments;
 - Adverse state and federal regulation, legislative and/or regulatory actions (including efforts currently underway to revise Michigan's automobile personal injury protection and catastrophic reinsurance system);
 - Financial ratings actions, in particular downgrades to our ratings;
 - Operational and technology risks and evolving technological and product innovation, including the risk of cyber-security attacks or breaches on the company's systems or resulting in claim payments;
 - Uncertainties in estimating indemnification liabilities recorded in conjunction with obligations undertaken in connection with the sale of various businesses and discontinued operations; and
 - The ability to collect from reinsurers, and the performance of the discontinued voluntary pools business (including those in the Other segment or in Discontinued Operations).
- Investors should not place undue reliance on forward-looking statements, which speak only as of the date they are made, and should understand the risks and uncertainties inherent in or particular to the company's business. We do not undertake the responsibility to update or revise our forward-looking statements.

Non-GAAP Financial Measures

The discussion in this presentation and the associated conference call 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. A reconciliation of non-GAAP measures to the closest GAAP measure is included in the end notes to this presentation, the press release dated May 1, 2019 or the financial supplement, which are posted on our website. The reconciliation of current 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 on the final pages of this document. 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 and unrealized 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. In referral to one of the company's three segments, operating income is segment income before taxes. Operating return on equity ("ROE") and adjusted operating ROE are non-GAAP measures. See end note (1) for a detailed explanation of how these measures are calculated. Operating ROE is based on non-GAAP operating income, and adjusted operating ROE is a measure of operating income as a return on only that portion of shareholders' equity attributable to the continuing business. For measurement periods prior to the close of the Chaucer transaction, which occurred on December 28, 2018, "equity attributable to Chaucer", which was reported as discontinued operations, is excluded. For measurement periods post-closing, "the un-deployed equity", and related net investment income, is excluded. This eliminates the dilutive impact of any excess capital that would have been included in "equity attributable to Chaucer" and "the un-deployed equity" for all prior periods illustrated. Had the actual Chaucer equity for all prior periods been used, the adjusted operating ROE for the continuing businesses for each of the reported periods would have been higher than illustrated in this disclosure. Management believes that these measures are helpful to investors and financial analysts in that they provide insight to the capital used by, and results of, continuing operations exclusive of interest, taxes and other non-operating items. These measures should not be construed as substitutes for GAAP ROE, which is based on net income and shareholders' equity of the entire company and without adjustments. The definition of other financial measures and terms can be found in the 2018 Annual Report on pages 72-74.



Key messages

Proven strategy
with differentiated
market position

Opportunities
for continued
profitable growth

Strong financial
performance

Ambitious
but achievable
long-term goals



\$4.9B domestic P&C franchise with exceptional opportunities

~\$4.9B

Market
Capitalization*

\$4.5B

2018
Revenue

12.6%

2018 Adjusted
Operating ROE⁽¹⁾

“A”

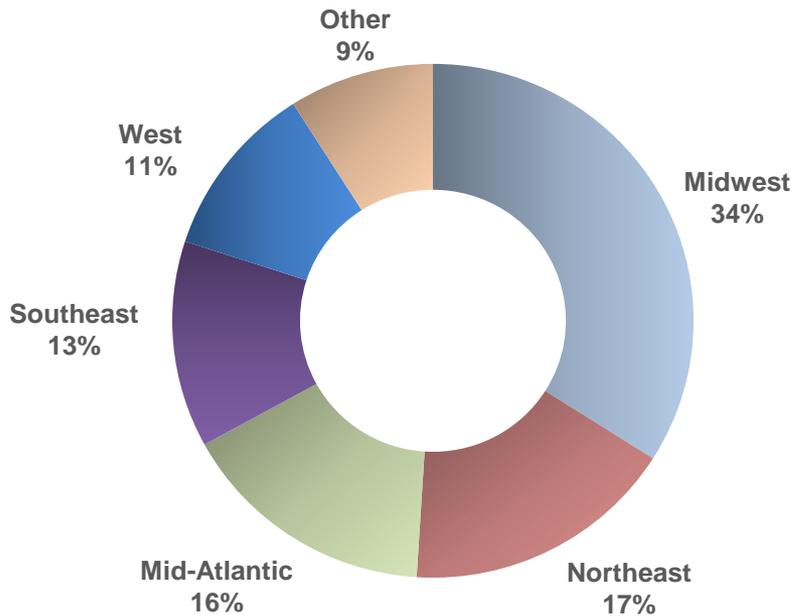
Financial
strength



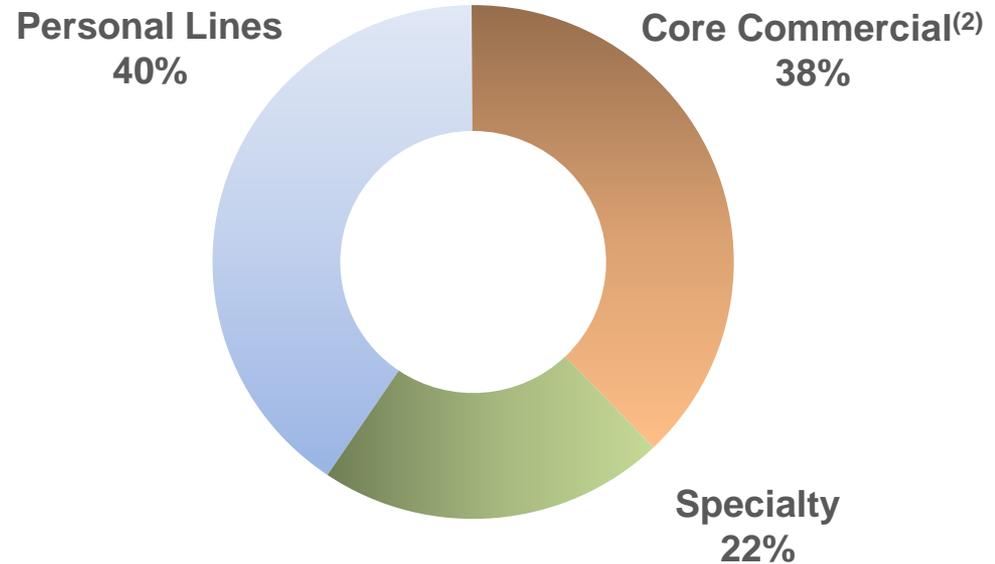
Well-diversified franchise with ***broad*** and ***relevant*** product mix

\$4.4B 2018 Net Premiums Written

Geographic Mix



Business Mix





Our Vision: To be the premier property and casualty company in the independent agency channel





Agency carrier of choice

Unique agency distribution approach



2,100 of the best agents in the U.S.

7% average agency market share



Differentiated products

Insight through data and analytics

Local presence with 49 offices



\$60B of target market data profiled

Pursuit of informed opportunities



Agency Insights allows us to help agents better serve their customers

Focus on targeted opportunities

Typical Carrier Best Practices

How Agency Insights Enhances Our Approach



Market Insights

- SNL Financial & Market Stance
- Rate Filings
- AM Best Reports
- Industry Publications
- Peer Financial Statements

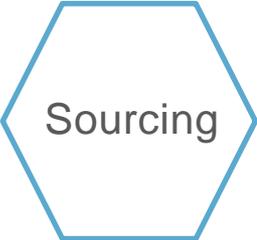
- Identify patterns in customer fragmentation:
 - mono-line vs. account business
- Clarify actual distribution & demographic patterns by product line and segment
- Clear understanding of the competitive landscape for targeted segments



Agency Planning

- Secure growth projections
- Gain commitments on initiatives

- Create and leverage industry benchmarks to help agents better serve customers and improve their economics
- Align our growth initiatives on targeted mix



Sourcing

- Develop sales pipelines with agents
- Marketing campaigns
- Focus sales staff on perceived opportunities

- Focus sales staff on specific target opportunities
- Tailor marketing campaigns to best shape and improve the agent's book of business profile



Agency carrier of choice

Areas for growth opportunities

Increasing shelf space

- Number of agents with over \$5 million in premium increased 17% in 2018; they write over 50% of our business
- 6% penetration with top agents with significant headroom remaining

Responsible risk appetite expansion

- Expanding target industry classes:
 - Financial services
 - Technology
 - Life sciences
 - Appetite expansion in professional liability

Targeted new agency appointments

- Appointed approximately 200 new agents in 2018
- Additional appointments planned for 2019
 - Balanced with a limited distribution approach



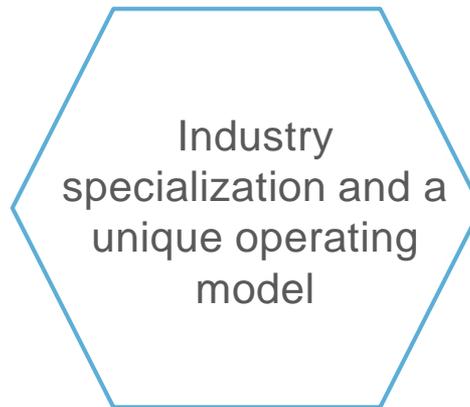
Leading specialized capabilities

Differentiation is key

Personal Lines



Core Commercial



Specialty

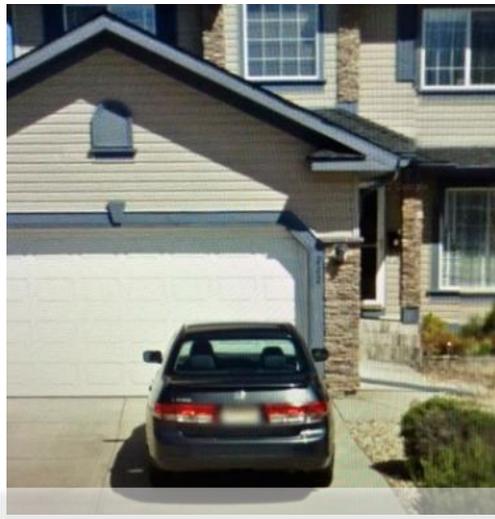


Leading specialized capabilities – Personal Lines

Industry Landscape



Non-standard/auto only



\$250k-\$2M coverage A



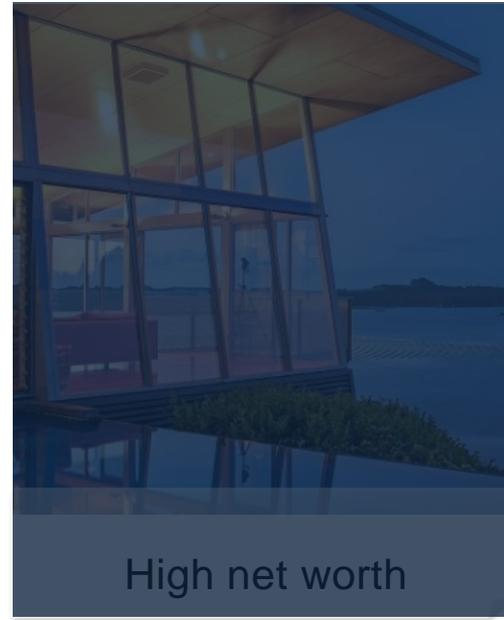
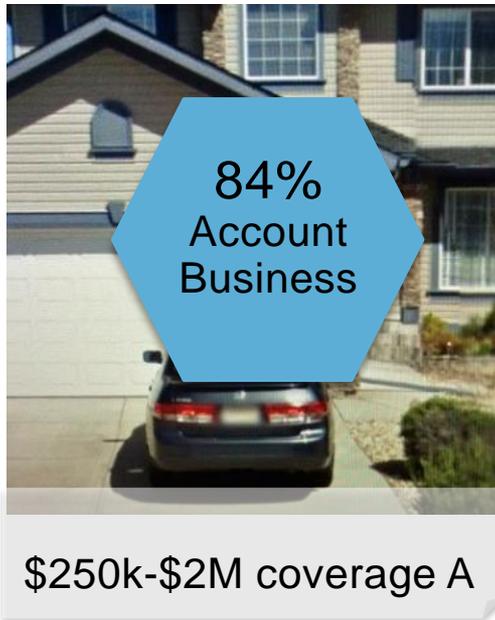
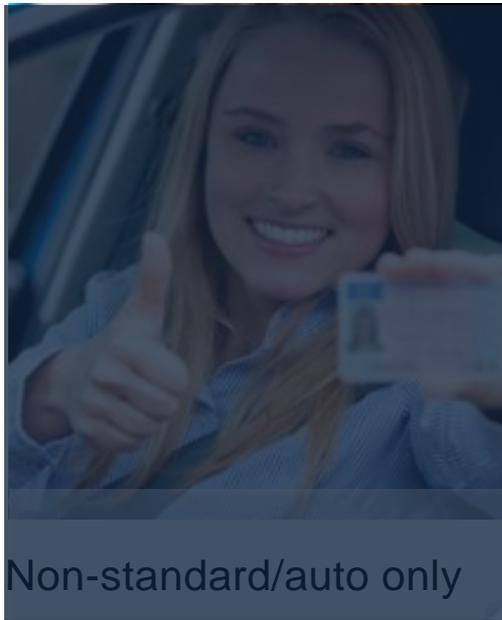
High net worth



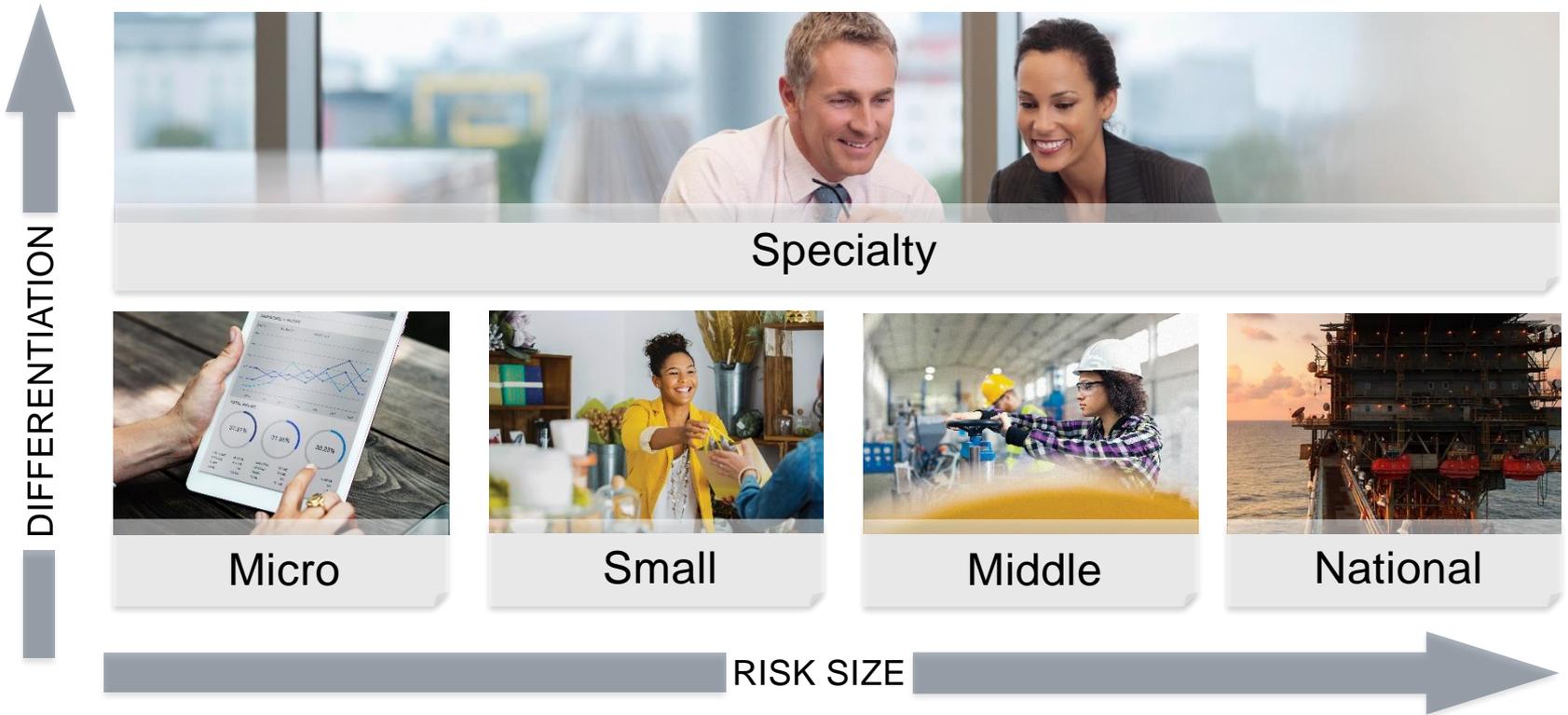


Leading specialized capabilities – Personal Lines

Where we play

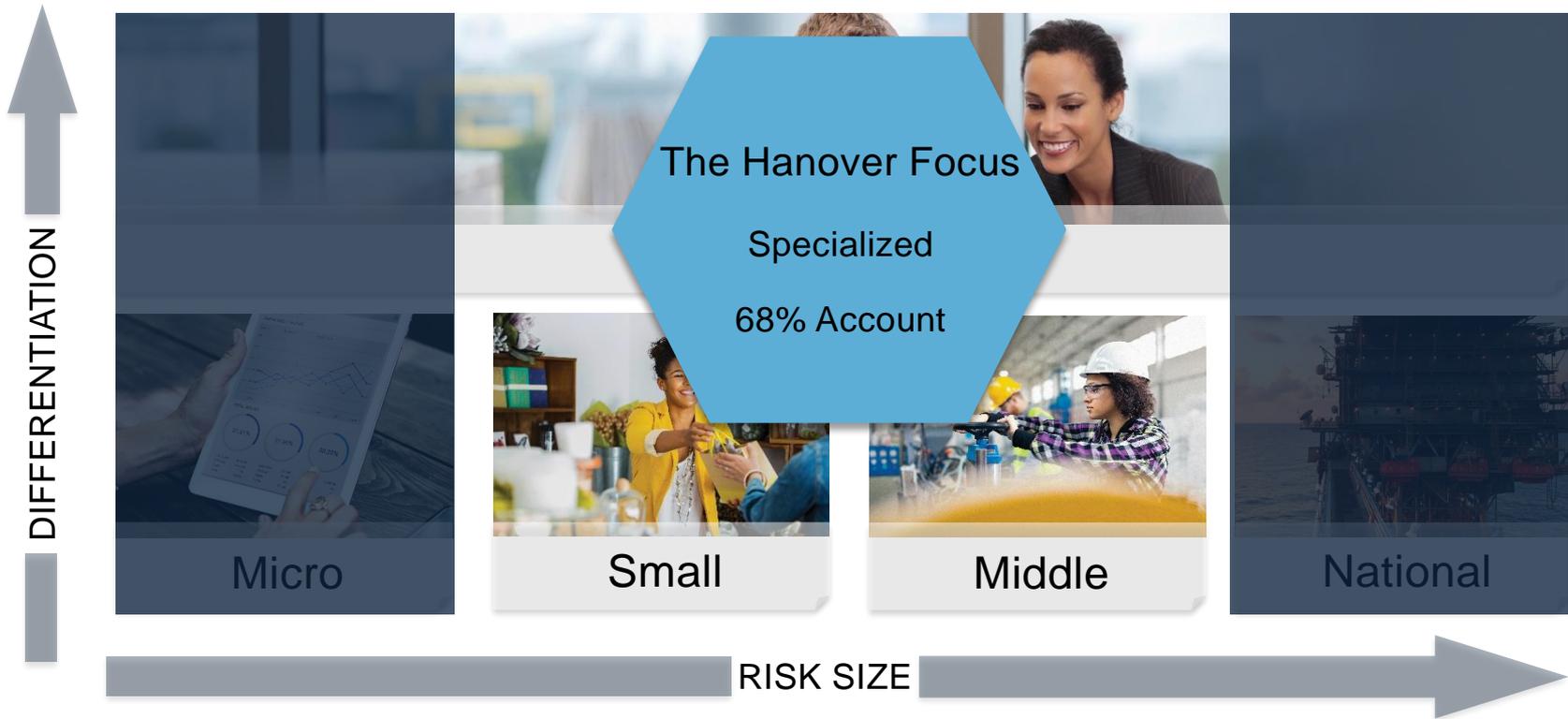


Industry Landscape



Leading specialized capabilities – Commercial Lines

Where we play



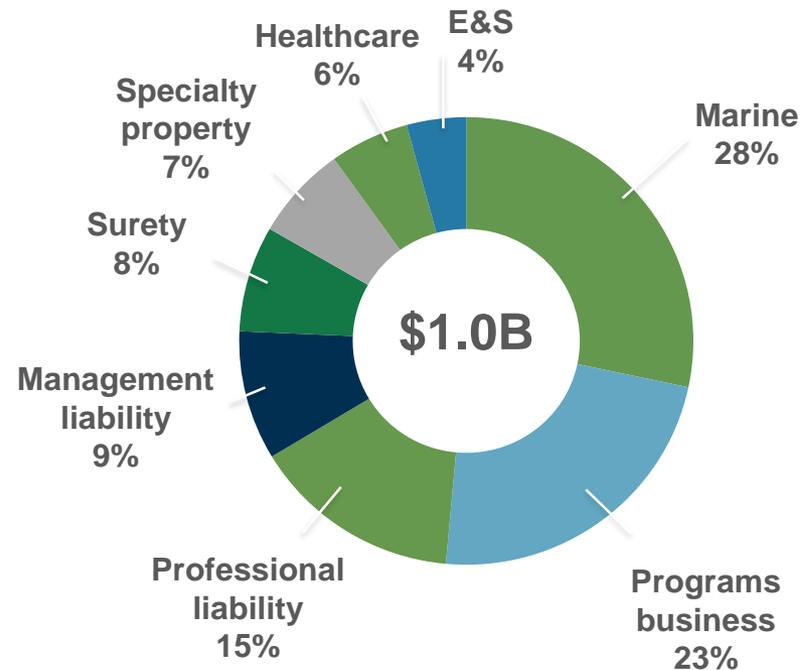


Leading specialized capabilities

Areas for growth opportunities

- Expanding product capabilities
- Enhancing existing E&S platforms
- Building increased relevance and shelf space with agents
- Leveraging Core Commercial platform

Specialty 2018 net premiums written





Growth through innovation



Customer and agency interactions

- New platform for Personal and Small Commercial
- White-labeled websites for micro market



Analytics

- Improved data science across the enterprise
 - Claims predictive modeling
 - Underwriting, pricing and actuarial models



Efficiencies

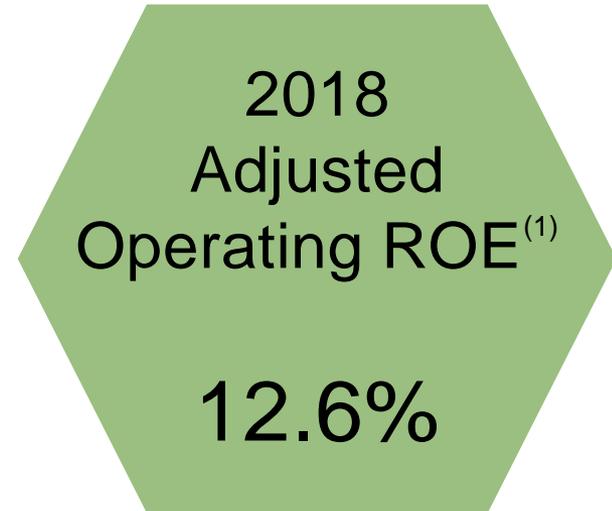
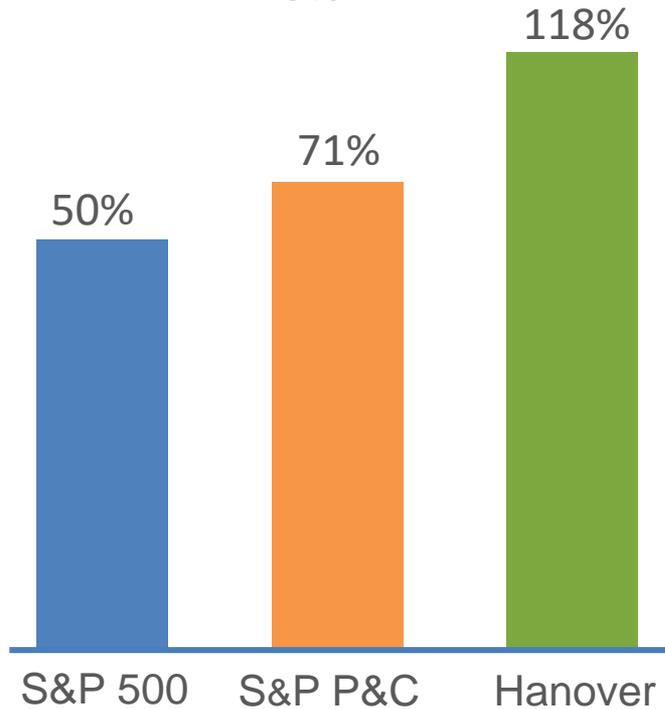
- Use of robotics for operational efficiencies
- Use of drones in the underwriting and claims process



Financial results validate The Hanover strategy

Made great financial strides over the last several years

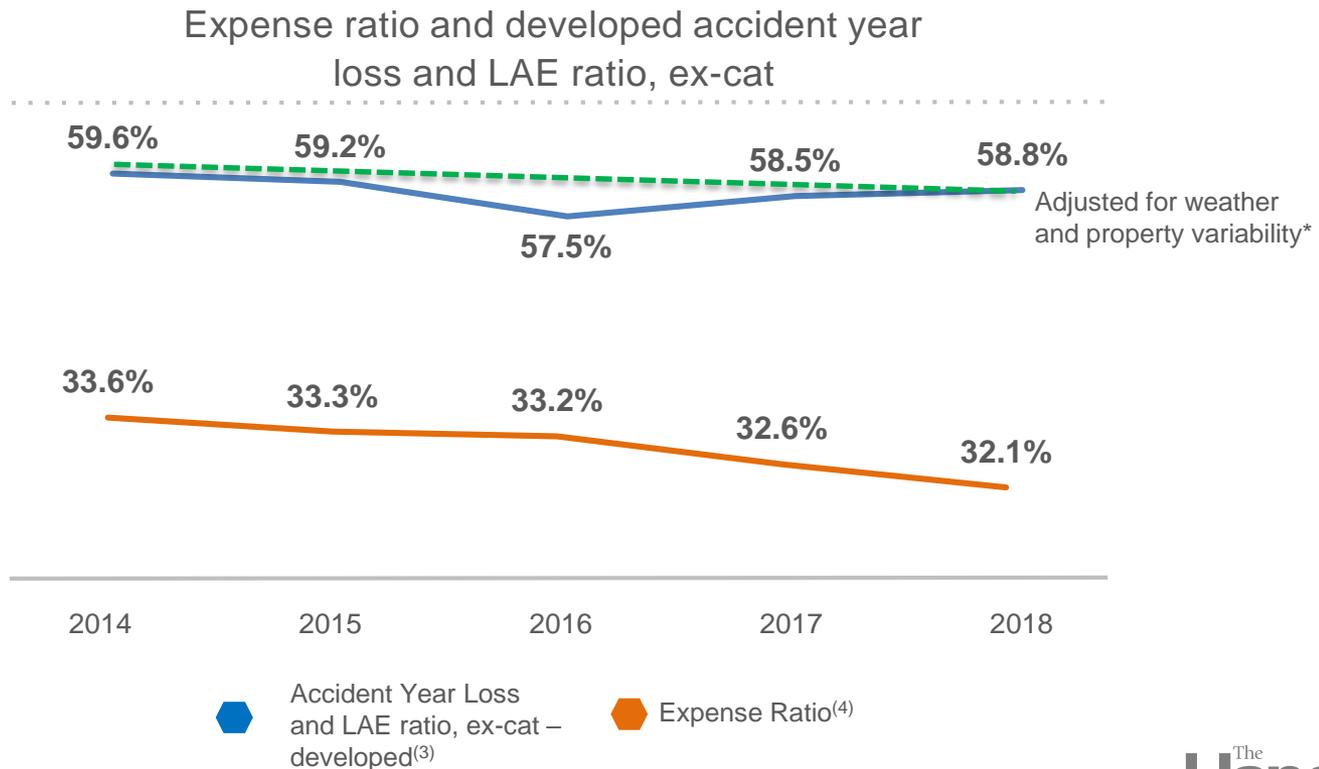
5 Year Total Shareholder
Return*





Improvement driven by strong fundamentals

- Improved accident year loss performance
- Expense ratio improvement from cost reductions and growth leverage

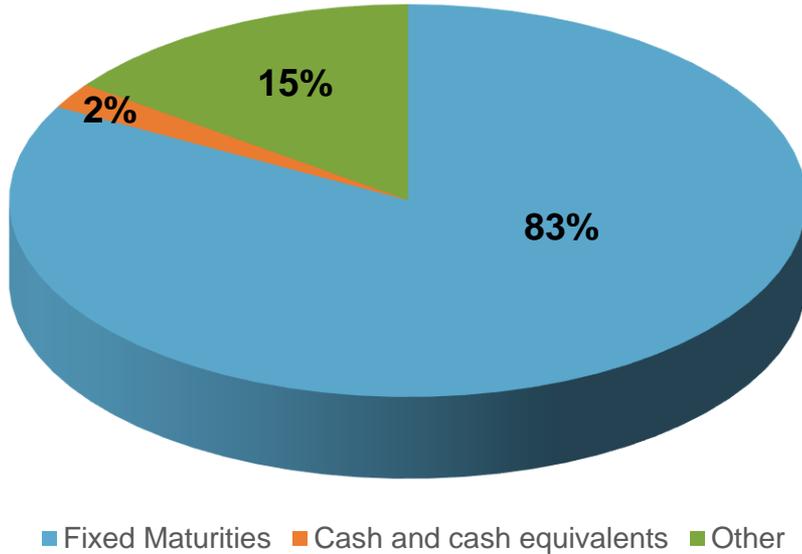




Growth in net investment income

High quality, well-laddered and stable portfolio

Investment Portfolio* - \$7.9 billion

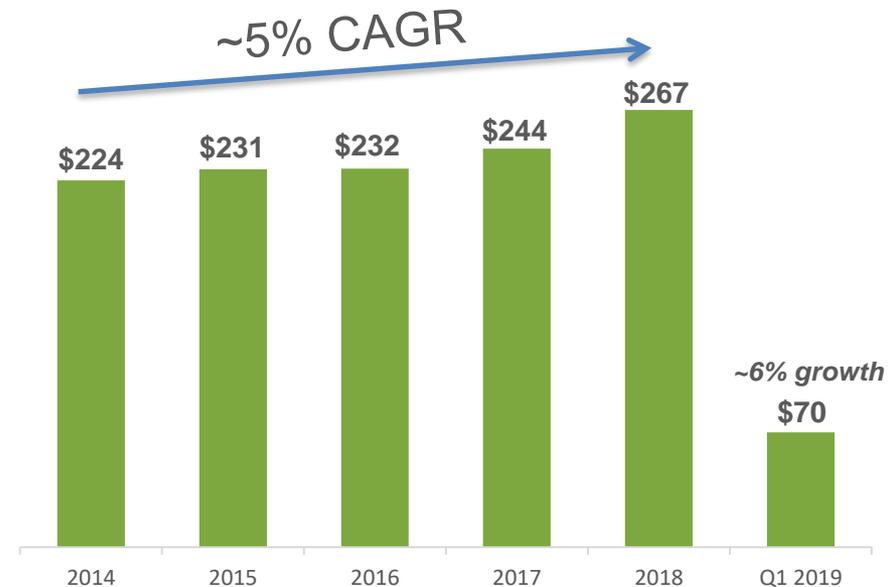


Fixed Income Characteristics:

- 95% of fixed maturity securities are investment grade
- Weighted average quality: A+
- Duration: 4.3 years

Net Investment Income

(\$ in millions)



*As of March 31, 2019



Ambitious but achievable long-term goals

Strong financial platform for profitable growth

13-14% Target Operating ROE

Targeted
profitable
growth

6-7% premium growth

Prioritizing margin over
growth

Stable
loss ratio

Pricing increases and mix
optimization

Offset loss trends

Financial
Rigor

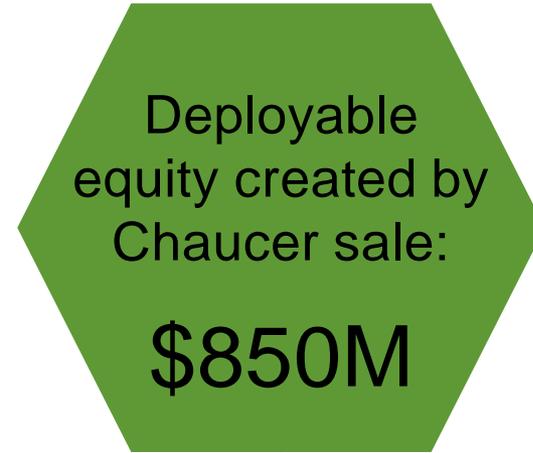
Continued expense discipline

24-26% marginal
expense ratio

Thoughtful capital
management and allocation



Disciplined capital management



Share repurchases

\$470M

Regular Dividends

\$570M

Returned to shareholders in 2019

\$450M

To be redeployed

\$400M

Financial Strength Ratings:

- A.M. Best – A
- S&P – A
- Moody's – A3



Key messages

Proven strategy
with differentiated
market position

Opportunities
for continued
profitable growth

Strong financial
performance

Ambitious
but achievable
long-term goals



Appendix



Strong First Quarter 2019 Operating Results

Three months ended March 31

(\$ in millions)

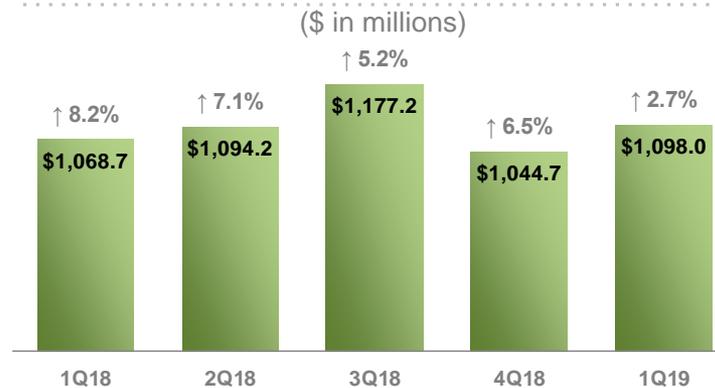
| | 2018 | 2019 |
|--|-----------|-----------|
| Net premiums written | \$1,068.7 | \$1,098.0 |
| Growth | 8.2% | 2.7% |
| Net premiums earned | \$1,042.5 | \$1,095.1 |
| Combined ratio | 96.6% | 95.8% |
| Combined ratio, ex-cat ⁽⁵⁾ | 90.4% | 92.2% |
| Current accident year combined ratio, ex-cat ⁽⁶⁾ | 90.4% | 92.2% |

- Combined ratio of 95.8%, including 3.6 points of catastrophe losses, including:
 - Current accident year catastrophe loss ratio of 4.8% driven by winter weather events in the Midwest and Northeast
 - \$13.5 million, or 1.2%, of favorable catastrophe reserve development reflecting the sale of subrogation rights related to certain 2017 and 2018 California wildfire losses
- Favorable prior-year reserve development in Commercial Lines largely offset by unfavorable development in Personal Lines
- Current accident year loss and LAE ratio, ex-cats, of 60.3%, an increase of 2.3 points from prior-year quarter, driven by:
 - Large loss activity in specialty industrial property business
 - Lower than usual winter weather in Q1 2018
- Expense ratio of 31.9%, an improvement of 0.5 points from the prior-year quarter, primarily due to fixed cost leverage from premium growth
- Top-line growth of 2.7%, driven by:
 - Strong growth in more profitable businesses
 - Partially offset by specific underwriting initiatives
 - Growth of 4.3%, excluding these initiatives⁽⁷⁾

Current Accident Year Combined Ratio, Ex-Cat



Net Premiums Written and Growth





Highly profitable, whole account-oriented Personal Lines portfolio

2018 net premiums written growth of 8% to \$1.8 billion

Business characteristics

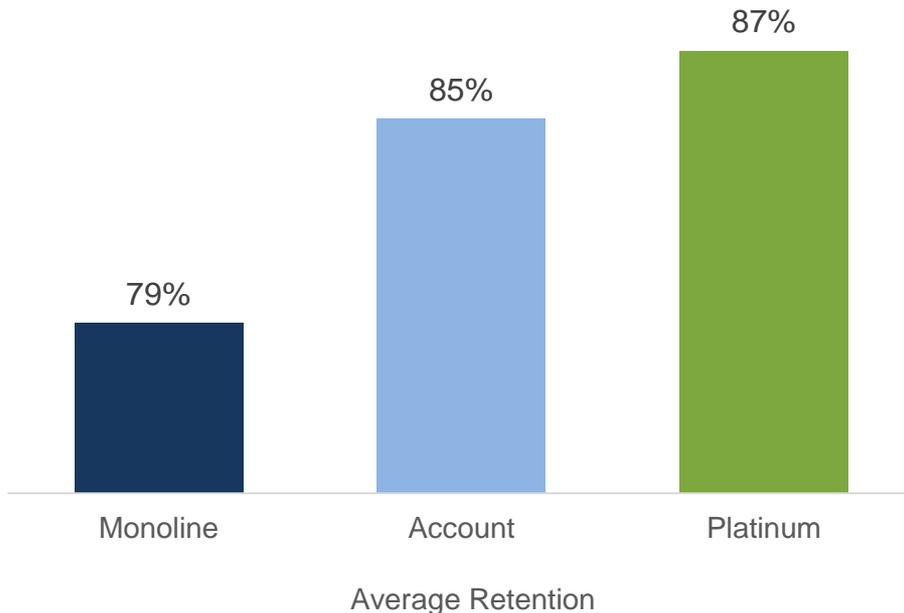
Where we are today

- Whole account, value-oriented offering with customer base more resilient to commoditization
- Account business offers higher lifetime value
- Local operating model well established with best distributors
- Account business represents approximately 84% of portfolio and new business, Hanover Platinum product makes up ~44% of portfolio

Where we are going

- Existing agency penetration should fuel profitable growth for customers with complex insurance needs
- Select new agency appointments in under-penetrated geographies
- Leveraging agent-centric distribution strategy to grow higher profit business, \$6-\$8 billion of new emerging affluent business within footprint

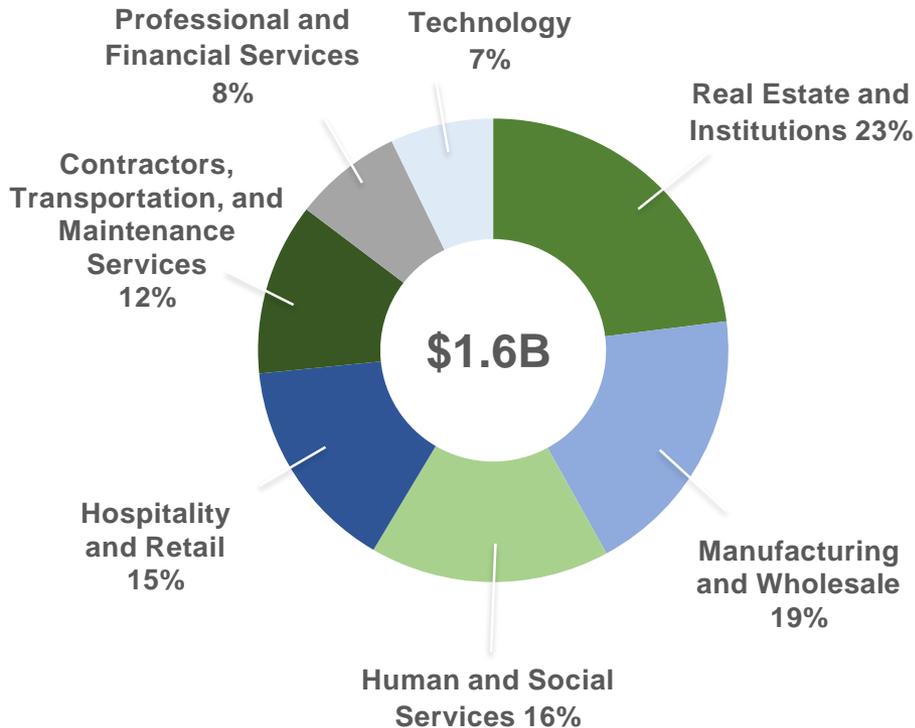
Improving retention with Account and Hanover Platinum Experience offering





Market leading Core Commercial offering

2018 net premiums written



Business characteristics

Where we are today

- Diversified capabilities focused mainly on the lower-end of risk and account size spectrum
- Distinctive industry specialization
- Underwriting flexibility: point of sale and non-point of sale capabilities
- Market insight into opportunities due to Agency Insights tool
- Small account size value oriented portfolio

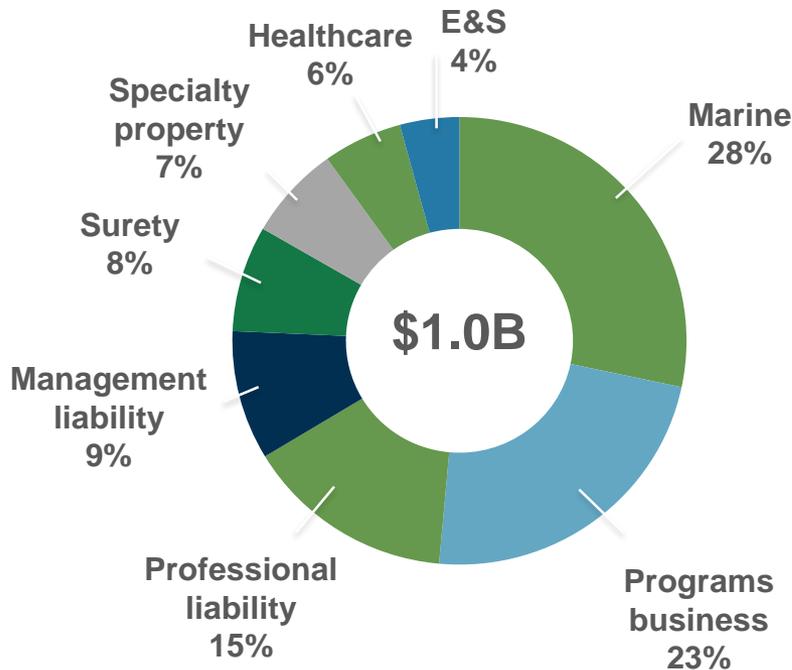
Where we are going

- Gain further agency penetration
- Create more attractive product packages to better serve our agents:
 - Strengthen Small Commercial product by adding specialty coverages
 - Middle Market appetite expansion in targeted areas



Leading Specialty coverages

2018 net premiums written



Business characteristics

Where we are today

- Diversified capabilities focused mainly on the lower-end of risk and account size spectrum
- More than doubled Domestic Specialty business in nine years (~10% CAGR) using organic and inorganic approaches
- Underwriting structure reaching scale
- Added industry expertise to help us develop our appetite and roadmap for Cyber and Financial Institutions capabilities

Where we are going

- Filling in the capability and growing prudently
 - Further penetration of targeted retail agents
 - Responsibly expand risk appetite as agents move upstream toward specialized offerings
 - Further develop existing wholesale and E&S platforms with targeted new agency appointments
 - Align our businesses around three verticals in order to better leverage our capabilities in Specialty and across the enterprise



Strong and leverageable distribution platform

Agent segmentation The Hanover focus

| Segment | # of Agents in U.S. |
|------------------------|---------------------|
| 1. Top 3 brokers | 3 |
| 1a. Top 4 – 10 brokers | 7 |
| 2. Top 200 | 200 |
| 3. Regional agents | 1,500 |
| 4. Mid-sized agents | ≈7,000 |
| 5. Small agents | ≈26,000 |
| Total | 35,000 |

| # of Target Agents | The Hanover share |
|--------------------|-------------------|
| Limited | |
| 7 | 4% |
| 150 | 5% |
| 500 | 8% |
| 1,000 | 16% |
| 450 | 22% |
| ≈2,100 | 7% |

Opportunities ahead

100% committed to our Independent Agents

- Dedicated to the success of 2,100 of the industry's best independent agents
- Offering franchise value
- Providing local expertise & underwriting authority
- Continued evolution of tools and insights that help agents improve their economics

Focused franchise, broad coverage:

- 45% of our premium and strong momentum with the industry's Top 200 agents
- Access to 40% of U.S. independent agency premium

Substantial headroom:

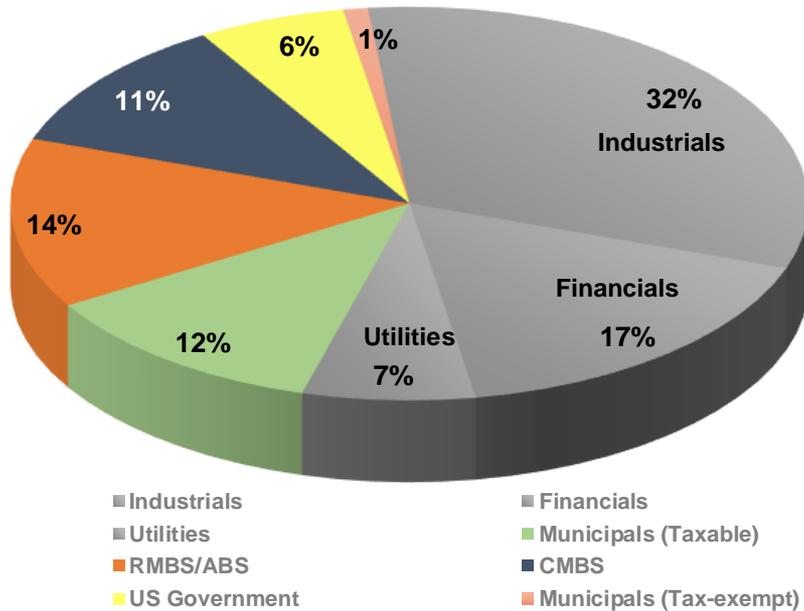
- 7% "addressable" market share
- 4% market share with the Top 10 U.S. agents



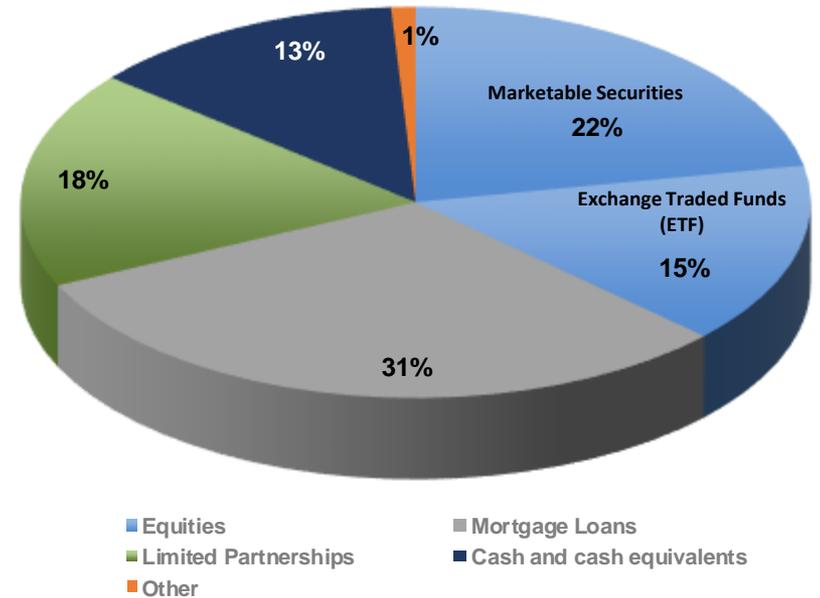
Investment Portfolio Holdings – Total Invested Assets \$7.9B

March 31, 2019

Fixed Maturities \$6.6 Billion



Equities and Other \$1.3 Billion



Fixed Income Characteristics:

- 95% of fixed maturity securities are investment grade
- Weighted average quality: A+
- Duration: 4.3 years



End notes

(1) Adjusted Operating Return on Average Equity (“Adjusted Operating ROE”) is a non-GAAP measure. See the disclosure on the use of non-GAAP measures throughout this presentation under the heading “Non-GAAP Financial Measures.” Adjusted operating ROE is derived from operating ROE, which is calculated by dividing full year 2018 operating income (see end note (8)), by average shareholders’ equity, excluding unrealized appreciation (depreciation) on fixed maturity investments, net of tax, for the stated period. For Adjusted Operating ROE, shareholders’ equity is adjusted for “equity attributable to Chaucer” for measurement periods prior to the close, which occurred on December 28, 2018 and “the un-deployed equity” for measurement periods post-close and net unrealized appreciation (depreciation) on fixed maturity investments, net of tax. Operating ROE and Adjusted Operating ROE should not be construed as substitutes for GAAP ROE. Total shareholders’ equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, is also a non-GAAP measure. Total shareholders’ equity is the most directly comparable GAAP measure, and is reconciled below. For the calculation of Operating ROE, the average shareholders’ equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, for the beginning, ending and intra-reported quarters’ are used. For the calculation of Adjusted Operating ROE, the average shareholders’ equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, and “equity attributable to Chaucer” for measurement periods prior to the close, or “the un-deployed equity” for measurement periods post-close, net of tax, for the beginning, ending and intra-reported quarters’ are used. See calculations in table on the following page, including the calculation of GAAP ROE using net income and average shareholders’ equity without adjustments.

| | December 31, 2017 | March 31, 2018 | June 30, 2018 | September 30, 2018 | December 31, 2018 |
|---|-------------------|------------------|------------------|--------------------|-------------------|
| Total shareholders' equity (GAAP) | \$2,997.7 | \$2,913.1 | \$2,939.8 | \$2,982.4 | \$2,954.7 |
| Less: net unrealized appreciation (depreciation) on fixed maturity investments, net of tax | 205.4 | 0.3 | (48.8) | (74.0) | (27.2) |
| Total shareholders' equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax | \$2,792.3 | \$2,912.8 | \$2,988.6 | \$3,056.4 | \$2,981.9 |
| Less: Pre-sale, equity attributable to Chaucer; or post-close, un-deployed equity | 614.6 | 614.6 | 614.6 | 614.6 | 656.6 |
| Adjusted shareholders' equity, excluding both net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and pre-sale, equity attributable to Chaucer; or post-close, un-deployed equity | <u>\$2,177.7</u> | <u>\$2,298.2</u> | <u>\$2,374.0</u> | <u>\$2,441.8</u> | <u>\$2,325.3</u> |
| Average shareholders' equity | | | | | \$2,957.5 |
| Average shareholders' equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax | | | | | \$2,946.4 |
| Average adjusted shareholders' equity, excluding both net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and pre-sale, equity attributable to Chaucer; or post-close, un-deployed equity | | | | | \$2,323.4 |



End notes continued

(1) Continued.

| | Year ended December 31 2018 |
|--|-----------------------------------|
| <i>Net Income ROE</i> | |
| Net income (GAAP) | \$ 391.0 |
| Average shareholders' equity (GAAP) | <u>2,957.5</u> |
| Return on average equity | <u><u>13.2%</u></u> |
| <i>Operating income ROE (non-GAAP)</i> | |
| Operating income after taxes | \$ 292.1 |
| Average shareholders' equity, excluding net unrealized appreciation (depreciation) on fixed maturity investments, net of tax | <u>2,946.4</u> |
| Operating return on average equity | <u><u>9.9%</u></u> |
| <i>Adjusted operating income ROE (non-GAAP)</i> | |
| Operating income after taxes | \$ 292.1 |
| Adjusted average shareholders' equity, excluding both net unrealized appreciation (depreciation) on fixed maturity investments, net of tax, and un-deployed equity | <u>2,323.4</u> |
| Adjusted operating return on average equity | <u><u>12.6%</u></u> |



End notes continued

(2) 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 Fourth Quarter 2018 Financial Supplement.

(3) Current accident year loss and LAE ratio, excluding catastrophe losses, and developed accident year loss ratio, excluding catastrophe losses, are non-GAAP measures, which are equal to the loss and LAE ratio ("loss ratio"), excluding prior-year reserve development and catastrophe losses and, in the case of "developed" accident year loss ratio, includes reserve development which presents in later years, but is attributable to the earlier accident year. The loss ratio (which includes losses, LAE, catastrophe losses and prior-year loss reserve development) is the most directly comparable GAAP measure. The following is a reconciliation of the GAAP loss ratio to the current accident year loss ratio, excluding catastrophe losses, and the developed accident year loss ratio, excluding catastrophe losses.

| | Years ended December 31, | | | | |
|--|--------------------------|--------|--------|-------|-------|
| | 2014 | 2015 | 2016 | 2017 | 2018 |
| Total loss and LAE ratio (GAAP) | 65.8% | 64.8% | 67.2% | 64.7% | 64.0% |
| Less: | | | | | |
| Prior-year reserve development | 0.2% | 0.7% | 6.2% | - | - |
| Catastrophe ratio | 5.6% | 4.5% | 3.1% | 6.4% | 5.2% |
| Current accident year loss ratio, excluding catastrophe losses | 60.0% | 59.6% | 57.9% | 58.3% | 58.8% |
| Development on respective accident year | (0.4%) | (0.4%) | (0.4%) | 0.2% | - |
| Developed loss and LAE ratio, excluding catastrophe losses | 59.6% | 59.2% | 57.5% | 58.5% | 58.8% |

| | Three months ended | | | | |
|--|--------------------|---------------|--------------------|-------------------|----------------|
| | March 31, 2018 | June 30, 2018 | September 30, 2018 | December 31, 2018 | March 31, 2019 |
| Total loss and LAE Ratio | 64.2% | 63.5% | 63.1% | 65.3% | 63.9% |
| Less: | | | | | |
| Prior-year reserve development ratio | - | - | - | - | - |
| Catastrophe ratio | 6.2% | 5.6% | 4.2% | 4.6% | 3.6% |
| Current accident year loss ratio, excluding catastrophe losses | 58.0% | 57.9% | 58.9% | 60.7% | 60.3% |

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



End notes continued

(5) Combined ratio, excluding catastrophes, is a non-GAAP measure, which is equal to the combined ratio, excluding 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 the GAAP combined ratio to the combined ratio, excluding catastrophes losses:

| | Three months ended | |
|--|--------------------|----------------|
| | March 31, 2018 | March 31, 2019 |
| Total combined ratio | 96.6% | 95.8% |
| Less: catastrophe ratio | 6.2% | 3.6% |
| Combined ratio, excluding catastrophe losses | <u>90.4%</u> | <u>92.2%</u> |

(6) 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 the GAAP combined ratio to the current accident year combined ratio, excluding catastrophe losses:

| | Three months ended | | | | |
|--|--------------------|---------------|--------------------|-------------------|----------------|
| | March 31, 2018 | June 30, 2018 | September 30, 2018 | December 31, 2018 | March 31, 2019 |
| Total combined ratio | 96.6% | 95.5% | 95.1% | 97.4% | 95.8% |
| Less: | | | | | |
| Prior-year reserve development ratio | - | - | - | - | - |
| Catastrophe ratio | 6.2% | 5.6% | 4.2% | 4.6% | 3.6% |
| Current accident year combined ratio, excluding catastrophe losses | <u>90.4%</u> | <u>89.9%</u> | <u>90.9%</u> | <u>92.8%</u> | <u>92.2%</u> |

(7) Below is a reconciliation of net premiums written to net premiums written, excluding Commercial Auto and Hanover Program business (what is referred to as “growth of 4.3%, excluding these initiatives” on page 25):

| Consolidated | March 31, 2018 | March 31, 2019 | Growth |
|--|-------------------|-------------------|--------------|
| Consolidated net premiums written | \$1,068.7 | \$1,098.0 | 2.7 % |
| Less: | | | |
| Commercial Auto | 89.7 | 85.8 | (4.3)% |
| Program Business | 52.8 | 46.3 | (12.4)% |
| Net premiums written, excluding Commercial Auto and Program Business | <u>\$926.2</u> | <u>\$965.9</u> | <u>4.3 %</u> |



End notes continued

(8) Operating income (loss) is a non-GAAP measure. 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) to the most directly comparable GAAP measure, income (loss) from continuing operations, and to net income:

| (\$ in millions) | Year ended December 31, 2018 |
|--|---------------------------------|
| OPERATING INCOME (LOSS) | |
| Commercial Lines | \$265.7 |
| Personal Lines | 146.2 |
| Other | (5.4) |
| Total | 406.5 |
| Interest expense | (45.1) |
| Operating income before income taxes | 361.4 |
| Income tax expense on operating income | (69.3) |
| Operating income after income taxes | 292.1 |
| Non-operating items: | |
| Net realized losses from sales and other | (2.7) |
| Net change in fair value of equity securities | (43.4) |
| Net other-than-temporary impairment losses on investments recognized in earnings | (4.6) |
| Loss from repayment of debt | (28.2) |
| Income tax benefit on other non-operating items | 25.8 |
| Income from continuing operations, net of taxes | 239.0 |
| Discontinued Operations: | |
| Gain from sale of Chaucer business, net of taxes | 131.9 |
| Income from Chaucer business, net of taxes | 20.0 |
| Income from discontinued life business, net of taxes | 0.1 |
| Net income | <u>\$391.0</u> |