Trends, Challenges & Opportunities in the P/C Insurance Industry 2017 and Beyond

J.D. Power Insurance Advisory Board
Chicago, IL
June 29, 2017

Robert P. Hartwig, Ph.D., CPCU ♦
Clinical Associate Professor of Finance ♦ Darla Moore School of Business
University of South Carolina and
Special Consultant ♦
Insurance Information Institute
P/C Insurance Financial Update: An Overview and Outlook

Profitability, Growth, Investments
P/C Industry Net Income After Taxes
1991–2017:Q1

- 2005 ROE* = 9.6%
- 2006 ROE = 12.7%
- 2007 ROE = 10.9%
- 2008 ROE = 0.1%
- 2009 ROE = 5.0%
- 2010 ROE = 6.6%
- 2011 ROAS1 = 3.5%
- 2012 ROAS1 = 5.9%
- 2013 ROAS1 = 10.2%
- 2014 ROAS1 = 8.4%
- 2015 ROAS = 8.4%
- 2016 ROAS = 6.2%
- 2017:Q1 ROAS = 4.4%*

• ROE figures are GAAP; 1Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 8.2% ROAS in 2014, 9.8% ROAS in 2013, 6.2% ROAS in 2012, 4.7% ROAS for 2011, 7.6% for 2010 and 7.4% for 2009; 2016E is annualized figure based actual figure through Q3 of $31.8B.

Sources: A.M. Best, ISO; Insurance Information Institute
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2017:Q1

*As of Q1:2017; Profitability = P/C insurer ROEs. 2011-16 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.
Source: Insurance Information Institute; NAIC, ISO, A.M. Best, Conning

P/C Profitability Is Both by Cyclicality and Ordinary Volatility

As Recently as 2001, Insurers Paid Out Nearly $1.16 for Every $1 in Earned Premiums

Heavy Use of Reinsurance Lowered Net Losses

Relatively Low CAT Losses, Reserve Releases

Relatively Low CAT Losses, Reserve Releases

Higher CAT Losses, Shrinking Reserve Releases, Toll of Soft Market

Cyclical Deterioration

Best Combined Ratio Since 1949 (87.6)

3 Consecutive Years of U/W Profits: First Time Since 1971-73

Sandy Impacts

Lower CAT Losses

Elevated CATs

Sources: A.M. Best, ISO (2014-2015); Figure for 2010-2013 is from A.M. Best P&C Review and Preview, Feb. 16, 2016.

U.S. Insured Catastrophe Losses

($ Billions, $ 2015)

2013/14/15 Were Welcome Respites from 2011/12, among the Costliest Years for Insured Disaster Losses in US History. 2016 Is Off to a Costlier Start.

*Through Q1 2017. 2016 and 2017 figures stated in 2016 and 2017 dollars, respectively.
Note: 2001 figure includes $20.3B for 9/11 losses reported through 12/31/01 ($25.9B 2011 dollars). Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = $12.2B ($15.6B in 2011 dollars.)
Sources: Property Claims Service/ISO; Insurance Information Institute.
Policyholder Surplus, 2006:Q4–2017:Q1

($ Billions)

2007:Q3 Pre-Crisis Peak

Drop due to near-record 2011 CAT losses

Surplus as of 3/31/17 stood at a record high $709.0B

The industry now has $1 of surplus for every $0.76 of NPW, close to the strongest claims-paying status in its history.

2010:Q1 data includes $22.5B of paid-in capital from a holding company parent for one insurer’s investment in a non-insurance business.

The P/C insurance industry entered 2017 in very strong financial condition.

Sources: ISO, A.M. Best.

(Percent)

<table>
<thead>
<tr>
<th>Year Range</th>
<th>1975-78</th>
<th>1984-87</th>
<th>2000-03</th>
</tr>
</thead>
</table>

Net Written Premiums Fell 0.7% in 2007 (First Decline Since 1943) by 2.0% in 2008, and 4.2% in 2009, the First 3-Year Decline Since 1930-33.

Outlook
2017F: 3.1%
2018F: 3.0%

2017:Q1: 4.0%
2016: 2.7%
2015: 3.5%
2014: 4.2%
2013: 4.4%
2012: +4.2%

*Q1:2017 over Q1:2016. Shaded areas denote “hard market” periods
Since 2014, personal lines Direct Premiums Written have generally grown faster than commercial lines DPW, and that growth has been less volatile.

Sources: NAIC, via SNL Financial; ISO; Insurance Information Institute calculations.
The divergence in growth between personal and commercial lines is large and is expanding rapidly.

Source: ISO.
2016 Commercial Market Growth by Coverage

- Commercial auto rates increased as carriers reacted to ongoing challenges.
- Property, Workers’ Compensation under most severe rate pressures.
- Umbrella, excess, specialty lines liability growth may have reflected trading price for quantity (i.e. demand elasticity).

Source: Verisk Insurance Solutions.
Commercial Lines underwriting performance improved in 2013/14 but higher cats, diminishing prior year reserves, rising loss cost trends and pricing pressure in some lines are pushing combined ratios higher.

*2007-2012 figures exclude mortgage and financial guaranty segments.
Source: A.M. Best (1990-2015);
Investment Performance is a Key Driver of Insurer Profitability

The “Trump Bump” Has Lifted Stock Markets and Interest Rates

Will the Gains Help Insurers?
Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014 but showed a small (1.7%) increase in 2015—though 2016 experienced another decline.

1 Investment gains consist primarily of interest and stock dividends. Sources: ISO; Insurance Information Institute.

Yields on 10-Year U.S. Treasury Notes have been essentially below 5% for more than a decade.

Late 2016 “Trump Bump” in the aftermath of the 2016 election

Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

Net Investment Yield on Property/ Casualty Insurance Invested Assets, 2007–2016P*

The yield on invested assets remains low relative to pre-crisis yields. The Fed’s plan to raise interest rates in beginning in late 2015 has pushed up some yields, albeit quite modestly.

Sources: A.M. Best; 2015-2016 figures from ISO Insurance Solutions; Insurance Information Institute
The Strength of the Economy Will Greatly Influence Insurer Exposure Base Across Most Lines
US Real GDP Growth*

Real GDP Growth (%)

The Q4:2008 decline was the steepest since the Q1:1982 drop of 6.8%

Recession began in Dec, 2007

Demand for Insurance Should Increase in 2017-18 as GDP Growth Continues at a Steady, Albeit Moderate Pace and GraduallyBenefits the Economy Broadly

- Estimates/Forecasts from Blue Chip Economic Indicators.
- Source: US Department of Commerce, Blue Economic Indicators 6/17; Insurance Information Institute.
The Economy Drives P/C Insurance Industry Premiums via Exposure Growth


Direct Written Premiums track Nominal GDP—not quarter by quarter but overall fairly well.

Sources: SNL Financial; U.S. Commerce Dept., Bureau of Economic Analysis; I.I.I.
Animal Spirits: Unleashed from the Oval Office

Source: https://twitter.com/realdonaldtrump
Outlook: Consumers are optimistic about the future, which is consistent with expectations for stronger economic growth (consumers account for nearly 70% of all spending in the economy). Should positively influence business investment.

Source: The Conference Board; Wells Fargo Research.
Outlook: Small businesses are much more optimistic about the future.

Source: Gallup, ADP, National Federal of Independent Business; Wells Fargo Research.
New auto/light truck sales fell to the lowest level since the late 1960s. Forecast for 2014-15 is still below 1999-2007 average of 17 million units, but a robust recovery is well underway.

Yearly car/light truck sales are slowing slightly, as demand tapers following the recovery from the recession. PP Auto premium might grow by 3.5% - 5%.

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (6/17 for 2017-18; 10/16 for 2018-21F; Insurance Information Institute)
New Private Housing Starts, 1990-2022F

Job growth, low inventories of existing homes, still-low mortgage rates and demographics should continue to stimulate new home construction for several more years.

New home starts plunged 72% from 2005-2009; A net annual decline of 1.49 million units, lowest since records began in 1959.

Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the “Great Recession” Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (6/17 for 2017-18; 10/16 for 2018-22F; Insurance Information Institute.)
US Unemployment Rate Forecast

2007:Q1 to 2018:Q4F*

Rising unemployment eroded payrolls and WC’s exposure base.

Unemployment peaked at 10% in late 2009.

Unemployment forecasts have been revised modestly downwards. Optimistic scenarios put the unemployment as low as 4.1% by Q4 2017 and 3.9% by Q4 2018.

Jobless figures have been revised downwards for 2017/18


* = actual; ** = forecasts

4% 5% 6% 7% 8% 9% 10% 11%

Household net worth continues to recover from the Great Recession and could accelerate. This would expand the “wealth effect” which is more pronounced among higher income households.

\(^1\) Annualized and seasonally adjusted figure.
Sources: Federal Reserve.
Profitability & Politics

How Is Profitability Affected by the President’s Political Party?
P/C Insurance Industry ROE by Presidential Administration, 1950-2016*

<table>
<thead>
<tr>
<th>President</th>
<th>ROE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carter</td>
<td>16.43%</td>
</tr>
<tr>
<td>Reagan II</td>
<td>15.10%</td>
</tr>
<tr>
<td>Nixon</td>
<td>8.93%</td>
</tr>
<tr>
<td>Clinton I</td>
<td>8.65%</td>
</tr>
<tr>
<td>G.H.W. Bush</td>
<td>8.35%</td>
</tr>
<tr>
<td>G.W. Bush II</td>
<td>8.33%</td>
</tr>
<tr>
<td>Obama II</td>
<td>8.20%</td>
</tr>
<tr>
<td>Clinton II</td>
<td>7.98%</td>
</tr>
<tr>
<td>Reagan I</td>
<td>7.68%</td>
</tr>
<tr>
<td>Nixon/Ford</td>
<td>6.98%</td>
</tr>
<tr>
<td>Truman</td>
<td>6.97%</td>
</tr>
<tr>
<td>Eisenhower I</td>
<td>5.43%</td>
</tr>
<tr>
<td>Eisenhower II</td>
<td>5.03%</td>
</tr>
<tr>
<td>G.W. Bush I</td>
<td>4.83%</td>
</tr>
<tr>
<td>Obama I</td>
<td>4.68%</td>
</tr>
<tr>
<td>Johnson</td>
<td>4.43%</td>
</tr>
<tr>
<td>Kennedy/Johnson</td>
<td>3.55%</td>
</tr>
</tbody>
</table>

OVERALL RECORD: 1950-2016*
Democrats 7.60%
Republicans 7.85%

Party of President has marginal bearing on profitability of P/C insurance industry

*Truman administration ROE of 6.97% based on 3 years only, 1950-52.
Source: Insurance Information Institute
Trumponomics: The Essential Elements

5 Elements

- Fair Trade
- Deregulation
- Tax Reform
- Infrastructure Investment
- Immigration Reform/Enforcement

NOTE: Unclear what the impact of current political developments will be on Trump’s economic agenda
Trump Administration: Likely Issues Impacting Insurers

**Dodd-Frank**

- **TRUMP DODD-FRANK QUOTES**
  - Dodd-Frank is a “disaster”
  - Vowed to “do a big number” on the Act

- **NEW: Financial CHOICE Act (June 2017 in House)**
  - Ends authority of the FSOC to designate non-bank SIFIs
    - Likely that MetLife, Prudential and even AIG will see their SIFI designations rescinded
  - Repeal Volker Rule
  - Some loosening of liquidity requirements for well-capitalized financial institutions; Less frequent stress tests
  - Weaken Consumer Financial Protection Bureau
  - **NOTE:** No mention of FIO, but Office of Financial Research would be eliminated
Trump Administration: Likely Issues Impacting Insurers

Tort System

- Will likely take a largely pro-business approach

- Scalia Supreme Court seat has now been filled by a Neil Gorsuch, resorting the court’s conservative tilt

- More business friendly judges appointed to the federal bench (many open seats on the federal judiciary)

- Liberal federal circuit courts could become more conservative

- Impact is likely favorable to casualty lines in the long-run (e.g., forum shopping, environmental litigation)

- US Attorney General Sessions’ Justice Department will likely have a very different relationship with the business community
Trump Administration: Likely Issues Impacting P/C Insurers

NFIP: Flood Insurance Program 2017 Reauthorization

- More encouragement of private (re)insurer participation in flood insurance market
- Use of private insurance and capital markets
- Already experimenting with private reinsurance
- Potentially strong growth line for home and commercial property insurers and reinsurers
M&A Trends

Consolidation Among P&C (Re)Insurers and Within Distribution Channels Will Likely Continue

(1) Includes transactions where a U.S. company was the acquirer and/or the target.

Source: Conning proprietary database.
USL announced the acquisition of Wells Fargo Insurance Services on June 26.
Drivers of M&A Activity

<table>
<thead>
<tr>
<th>P/C Insurers</th>
<th>Distribution Segment</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Soft Market Conditions/Limited Organic Growth Opportunities:</strong> Mostly commercial lines and reinsurance</td>
<td><strong>Slow Growth:</strong> Acquisition provides surest and fastest path to growth</td>
</tr>
<tr>
<td><strong>Expense Ratios:</strong> Desire to lower ERs via realization of economies of scale</td>
<td><strong>Diverse Universe of Buyers:</strong> Agencies, brokerages, MGAs/MGUs, insurers, private equity firms, banks</td>
</tr>
<tr>
<td><strong>Interest Rates:</strong> Low yields continue to pressure longer-tailed lines and can encourage debt-financed M&amp;A</td>
<td><strong>Lack of Succession:</strong> Avg. age of an insurance agent is now 59 and rising. Difficulty attracting younger generation of talent.</td>
</tr>
<tr>
<td><strong>Capital Management/Valuations:</strong> Prevalence of excess capital even after share repurchases; View that M&amp;A may be more accretive to earns than share repurchases</td>
<td><strong>Scale and Efficiency:</strong> Need/desire to improve efficiency; New InsurTech start-ups active in the distribution segment.</td>
</tr>
</tbody>
</table>

Auto & Home Insurance: State of the Personal Lines Market

Auto Frequency and Severity Are an Immediate Challenge

Dearth of Major CATs (Until Recently), Pricing Discipline Has Helped Home

*Latest available.
**Excludes 1992, the year of Hurricane Andrew. If 1992 is included the resulting homeowners RNW is 2.0%
Sources: NAIC; Insurance Information Institute.

Homeowners is Now Outperforming Pvt.Pass. Auto and P-C Industry as a Whole. HO Volatility is Associated Primarily With Coastal Exposure Issues
Homeowners Insurance Combined Ratio: 1990–2017F

- Hurricane Andrew
- Record tornado activity
- Hurricane Ike
- Hurricane Sandy

Homeowners Performance Has Improved Markedly Since the 2011/12’s Large Cat Losses. Extreme Regional Variation Can Be Expected Due to Local Catastrophe Loss Activity. Results in 2016 Will Be Impacted by Severe Spring Weather.

Sources: A.M. Best (1990-2014); Insurance Information Institute (2015E-17F).

Claims Paid per 100 Exposures

- **CAT-related claims**
- **Non-CAT-related claims**
- **All Claims**

Sources: Insurance Services Office FastTrack, Insurance Information Institute.
Private Passenger Auto Underwriting Performance Is Showing the Strains of Rising Frequency (and Severity) Trends in Many States

Sources: A.M. Best (1990-2014); Conning (2015E-17F); Insurance Information Institute.
Claim Trends in Private Passenger Auto Insurance

Rising Frequencies and Severities in Many Coverages

Will that Pattern Be Sustained?
Collision Coverage: Severity & Frequency Trends Are Both Higher in 2016

Annual Change, 2005 through 2016*

The Recession, High Fuel Prices Helped Temper Frequency and Severity, But this Trend Has Clearly Reversed, Consistent with Experience from Past Recoveries

*Four quarters ending with 2016 Q4.
Source: ISO/PCI Fast Track data; Insurance Information Institute
Bodily Injury: Severity Trend Is Up, Frequency Decline Has Ended—Rising?

Annual Change, 2005 through 2016*

Cost Pressures Will Increase if BI Frequency and Severity Trends Persist

*2016 figure is for the 4 quarters ending 2016:Q4.
Source: ISO/PCI Fast Track data; Insurance Information Institute
Property Damage Liability: Severity and Frequency Are Up

Annual Change, 2005 through 2016*

Severity/Frequency Trends Have Been Volatile, But Rising Severity since 2011 Is a Concern

*2016 figure is for the 4 quarters ending 2016:Q4.
Source: ISO/PCI Fast Track data; Insurance Information Institute
A Few Factors Driving Adverse Private Passenger Auto Loss Trends

More Jobs, Better Economy, More People Driving, Lower Gas Prices, More Expensive Cars, Higher Speed Limits, Distracted Driving, Marijuana …
America is Driving More Again: 2000-2016

Tremendous Growth In Miles Driven. The More People Drive, The More Frequently They Get Into Accidents.


People Drive to and from Work and Drive to Entertainment. Out of Work, They Curtail Their Movement.

Sources: Federal Highway Administration; Seasonally Adjusted Employed from Bureau of Labor Statistics (Series ID CES0000000001); Insurance Institute for Highway Safety; Insurance Information Institute.

There are not only more accidents, but accidents per 100 insured vehicles is up too. This is what matters to insurers.

When people are out of work, they drive less. When they get jobs, they drive to work, helping drive claim frequency higher.

Sources: Seasonally Adjusted Employed from Bureau of Labor Statistics; Rolling 4-Qtr. Avg. Frequency from Insurance Services Office; Insurance Information Institute.
More Miles Driven → More Collisions, 2006-2016:Q3

The More Miles People Drive, the More Likely They are to Get in an Accident, Helping Drive Claim Frequency Higher.

Sources: Federal Highway Administration; Rolling four-quarter average frequency from ISO, a Verisk Analytics company; Insurance Institute for Highway Safety; Insurance Information Institute.
Does Spending on Vehicles Affect Claim Severity?

Annual Change, 2005 through 2016

As the Economy Has Gotten Better, People Are Spending More on Vehicles – When Those Cars Wreck, Severity Increases.

* Claim Frequency Through Second Quarter.
Source: ISO, a Verisk Analytics company; Bureau of Labor Statistics Consumer Expenditure Survey (vehicle purchases – net outlay)
Insurance Information Institute.
Personal Lines Growth Drivers

Rate and Exposure are Both Presently Important Growth Drivers
Monthly Change in Auto Insurance Prices, 1991–2017*

Cyclical peaks in PP Auto tend to occur roughly every 7-10 years (early 1990s, early 2000s, early and late 2010s)

Last pricing peak occurred in late 2010 at 5.3%, falling to 2.8% by Mar. 2012

“Hard” markets tend to occur during recessionary periods

Mar. 2017 reading of 8.1% is up from 5.1% a year earlier. Current rate trend is strongest since 2002-03.

*Percentage change from same month in prior year; through Mar. 2017; seasonally adjusted
Note: Recessions indicated by gray shaded columns.
Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institutes.
Private Passenger Auto Insurance
Net Written Premium, 2000–2017F

PP Auto premiums written continue
to recover from a period of flat
growth attributable to the weak
economy impacting new vehicle
sales, car choice, and increased
price sensitivity among consumers

PPA will generate
$7B - $9B in new
premiums annually
through 2017

PPA NWP volume in 2015
was up $35.3B or 22.5%
since the 2009 trough; By
2017 the gain is expected to
be $51.4B or 32.7%

Sources: A.M. Best (1990-2014); Insurance Information Institute (2015-17F).
Homeowners Insurance Net Written Premium, 2000–2017F

Homeowners insurance NWP continues to rise (up 167% 2000-2017F) despite very little unit growth during the real estate crash. Reasons include rate increases, especially in coastal zones, ITV endorsements (e.g., “inflation guards”), compulsory for mortgaged properties and resumption of home building activity.

The Homeowners line will generate about $4B in new premiums annually through 2016.

Sources: A.M. Best; Insurance Information Institute.
INDUSTRY DISRUPTORS

Technology, Society and the Economy Are All Changing at a Rapid Pace

Reality vs. Drinking the Silicon Valley Kool Aid
The Sharing Economy Has Grown—And Attracted Political Scrutiny

There’s no question that the hype around autonomous vehicles far exceeds the reality.
Media is Obsessed with Driverless Vehicles: Often Predicting the Demise of Auto Insurance

By 2035, it is estimated that 25% of new vehicle sales could be fully autonomous models.

Questions

- Are auto insurers monitoring these trends?
- How are they reacting?
- Will Google or (Amazon) take over the industry?
- Will the number of auto insurers shrink?
- How will liability shift?

Source: Boston Consulting Group.
## A Few of the (Many) Technological Hurdles Facing Autonomous Vehicles

<table>
<thead>
<tr>
<th>Tech Hurdle</th>
<th>Discussion of Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to Operate Safely in All Weather Conditions</td>
<td>Heavy rain, snow, fog and compromise radar and lidar sensor technologies, requiring humans to intervene</td>
</tr>
<tr>
<td>Driving Safely Despite Unclear Lane Markings</td>
<td>Vehicle can have difficulty making guidance decisions when lines on roads are faint or absent.</td>
</tr>
<tr>
<td>Reliably Recognizing Traffic Lights that Are Not Working Properly</td>
<td>If lights are out (e.g., power outage), vehicle has no understanding of how to operate. Requires that a machine be taught human intuition understand cooperation among multiple vehicles as well as external input from non-drivers (e.g., police)</td>
</tr>
<tr>
<td>Ability to Respond to Spoken Commands or Hand Signals from Law Enforcement, Highway Safety Employees, Construction Crews, Pedestrians, Cyclists, etc.</td>
<td>Verbal instructions, eye contact, hand signals, gesturing all play extremely important roles in driving, more so than is generally appreciated or understood.</td>
</tr>
</tbody>
</table>

## A Few of the (Many) Technological Hurdles Facing Autonomous Vehicles

<table>
<thead>
<tr>
<th>Tech Hurdle</th>
<th>Discussion of Problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making Left Turns Into Intersections with Fast Moving Traffic</td>
<td>Crossing or merging into rapidly flowing lanes of traffic is a complex task that often involves making eye contact with other drivers. Researchers experimenting with electronic signals or V2V communications.</td>
</tr>
<tr>
<td>Small Object Detection and Avoidance</td>
<td>Vehicles can detect objects in roadways, but do not possess reliable “scene understanding” that would allow the vehicle to distinguish between a small bad on the road that is empty (or full of paper refuse such as a McDonald’s bag) or is solid and could damage the vehicle</td>
</tr>
</tbody>
</table>
| Cybersecurity                                                              | There is no evidence that autonomous vehicles will be any more secure than any other networked computer (autonomous vehicles are essentially computers on wheels). *Imagine a WannaCry-like ransomware attack striking millions of vehicles while being operated...Pay now or die???

I.I.I. Poll: Driverless Cars

Why Americans Would Not Want to Ride in a Driverless Car, May 2016

Safety Concerns Are Paramount Among Those Who Would Avoid Driverless Cars.

1 Based on those who would not ride in a driverless car. Respondents could give more than one answer. Source: Insurance Information Institute Annual Pulse Survey.
INSURANCE TECHNOLOGY: FIN TECH ZEROES IN

Number and Value of Deals Is Increasing

In Search of the Elusive Insurance ‘Unicorn’
The Internet of Things and the Insurance Industry Value Chain

Who owns the data? Where does it flow? Who does the analytics? Who is the capital provider?


Insurance tech deals reached a new record in 2016 but funding was higher in 2015. 2 out of every 3 InsurTech deals in 2016 was at the early stage!

Source: CB Insights at https://www.cbinsights.com/blog/2016-insurance-tech-funding/
Early Stage InsurTech Financing (Seed/ Series A), 2011 – 2016

There was a sharp increase in early stage InsurTech financing in 2016, increasing to $508 million, a 56% increase over 2015.

2 out of every 3 InsurTech deals in 2016 was at the early stage!

Sources: CB Insights at https://www.cbinsights.com/blog/2016-insurance-tech-funding/
Launches of Insurance Corporate Venture Capital Units, 2015 – 2017 YTD*

VC arms of insurers launched since 2015 have provided more than $500 million in funding

Are large P/C insurers more likely to invest in InsurTech start-ups?

Top 25 P/C Insurers by Direct Written Premium, 2015

Sources: NAIC from CB Insights at https://www.cbinsights.com/blog/largest-pc-insurers-rank-startup-investments/
Start-Up InsurTech Investments by Top 25 P/C Insurers, 2015 - 2017*

10 of the Top 25 P/C insurers have made InsureTech start-up investments since 2015.— but there is little correlation between size and number of investments within this group.

USAA and AmFam lead in P/C InsurTech investment

*As of June 23, 2017.
Sources: NAIC from CB Insights at https://www.cbinsights.com/blog/largest-pc-insurers-rank-startup-investments/
Recent Lemonade Statistics (as of mid-June 2017)

- Operating in 3 States: NY, CA and IL
- Licensed in 10 States: NY, CA, IL, AZ, MI, NC, NJ, RI, TX and VA
- 85% of Policyholders Are 1st Time Buyers of (Dwelling) Insurance
  - 90% renters
  - First 1,000 policies sold took 3 months; next 1,000 took 1 month; next 1,000 took 2 weeks
  - Millennials account for the majority of buyers

SOURCE: Lemonade.com
Insurance Industry Employment Trends

Can the Industry Close the Talent Gap?
U.S. Employment in the Direct P/C Insurance Industry: 1990–2017*

*As of April 2017; not seasonally adjusted; Does not include agents & brokers.

Note: Recessions indicated by gray shaded columns.

Some Recent Hiring Trends

- Hiring of new grads was strong in 2016/17

- USC RMI Grads in 2016/17 Were Hired by:
  - National/Global and super regional carriers (p/c and life)
  - National/Global and regional brokers
  - Specialty insurers
  - Health insurers
  - Consulting firms
  - Banks (national, regional, investment)
  - Tech firms
  - Mutual funds
  - Pension funds
  - Industrial firms

SOURCE: University of South Carolina
Thank you for your time and your attention!

Twitter: twitter.com/bob_hartwig

For a copy of this presentation, email me at robert.hartwig@moore.sc.edu