Overview and Outlook for the P/C Insurance Industry
*Trends, Challengers & Opportunities*

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P/C Insurance Financial Update: An Overview and Outlook

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

Net income will likely fall sharply in 2017 as high CAT losses take their toll

- 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; USC RUM Center estimate (2017 based on actual NIAT of $15.5B though Q2 and ROAS of 4.4%).
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2017E

*Est. for 2017 based on actual ROAS of 4.45 through Q2; 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: NAIC, ISO, A.M. Best, Conning, USC RUM Center estimates.
P/C Profitability Is Both by Cyclicality and Ordinary Volatility

- Hugo
- Andrew, Iniki
- Northridge
- Lowest CAT Losses in 15 Years
- Sept. 11
- 4 Hurricanes
- Katrina, Rita, Wilma
- Low CATs
- Harvey, Irma, Maria
- Sandy
- Financial Crisis*
- Record Tornado Losses

*2017 Estimate based on actual ROAS through Q2 of 4.4%.
Sources: ISO, Fortune; USC RUM Center.
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

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

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

Elevated CATs

Relatively Low CAT Losses, Reserve Releases

Avg. CAT Losses, More Reserve Releases

Sandy Impacts

Lower CAT Losses

Cyclical Deterioration

Best Combined Ratio Since 1949 (87.6)


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

2007:Q3 Pre-Crisis Peak

Drop due to near-record 2011 CAT losses

Surplus as of 6/30/17 stood at a record high $717.0B

The industry now has $1 of surplus for every $0.74 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.

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%

*Q2:2017 over Q2:2016. 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: Components of Commercial DWP Growth

- Direct Written Premium (DWP) in US lines covered by ISO MarketStance grew 3.1 percent in 2016.
- Soft market conditions counteracted moderate 4.1 percent exposure growth.

Source: Verisk Insurance Solutions.
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.
INVESTMENTS:
THE NEW REALITY

Investment Performance is a Key Driver of Insurer Profitability

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

Will the Gains Help Insurers?
Insurers Are Major Investors, 2016*

Total invested assets: $6.1 trillion*

Categories of Investments ($billions)

- Bonds: $508
- Stock: $749
- Mortgages & Real Estate: $796
- Other: $4,088

Categories of Bonds ($billions)

- Corporates: $2,222
- Munis: $906
- Mortgage & Asset-Backed: $562
- US Gov't: $267
- Other: $131

22% of corporate bonds outstanding
15% of municipal bonds outstanding

*Includes affiliated and unaffiliated investments. All segments of the insurance industry.

Sources: NAIC (the Center for Insurance Policy and Research, August 24, 2017) via SNL Financial; I.I.I.
**S&P 500 Index Returns, 1950 – 2017**

*Stock markets rose sharply following the 2016 election and continued to rise through the first half of 2017. Trump Bump: Sharp surge in stock post-election*

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.

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

*2017 estimate based on annualized $23.4B actual figure for 1st Half 2017.
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—shrank in 2017

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.

*Monthly, constant maturity, nominal rates, through August 2017.

A full normalization of interest rates is unlikely until the early/mid-2020s, more than a decade after the onset of the financial crisis.

Sources: Blue Chip Economic Indicators (10/17 for 2017 and 2018; for 2019-2021 10/17 issue); Insurance Info. Institute.
The yield on invested assets remains low relative to pre-crisis yields. Fed rate increases beginning in late 2015 have pushed up some yields, albeit quite modestly.

Investment yield in 2016 were down about 150 BP from pre-crisis levels.

Sources: NAIC data, sourced from S&P Global Market Intelligence; Insurance Information Institute.
P/C Insurer Investment Yields: Lowest in Half a Century

Average yields in 2016 dropped to 3.1%, their lowest level since the mid-1960s.
Total Investment Gains Were Down in 2016 as Both Investment Income and Realized Capital Gains Declined

1 Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.
* 2017E figure based on 1st half actual of $27.0B. 2005 figure includes special one-time dividend of $3.2B;
Sources: ISO, SNL; Insurance Information Institute.
Insured Catastrophe Losses

2017 Will Become One of the Costliest Years Ever for US Insurers

*Hurricanes Harvey and Irma Exact a Big Toll*

2017 is likely to become the second most costly year ever for insured CAT losses, behind only 2005. Maria losses in PR could push this figure beyond $75B

*Includes PCS H1 insured losses of $17.7B, estimated Hurricane Harvey and Irma insured losses of $20B and $18B, respectively. Stated in 2017 dollars. Excludes NFIP losses.

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.
Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1997–2016

1. Catastrophes are defined as events causing direct insured losses to property of $25 million or more in 2016 dollars.
2. Excludes snow.
3. Does not include NFIP flood losses
4. Includes wildland fires
5. Includes civil disorders, water damage, utility disruptions and non-property losses such as those covered by workers compensation.

Source: ISO’s Property Claim Services Unit.

Wind losses are by far cause the most catastrophe losses, even if hurricanes/TS are excluded.

Insured cat losses from 1997-2016 totaled $421.2B, an average of $21.1B per year or $1.76B per month.

- Hurricanes & Tropical Storms, $161.1
- Tornadoes, $168.1
- Erik, $25.0
- Other Wind/Hail/Flood, $29.7
- Fires, $8.4
- Other, $0.8
- Winter Storms, $28.2

Tornado share of CAT losses is rising

Winter storm losses were much above average in 2014/15 pushing this share up

Events Involving Tornadoes (2), $168.1

Terrorism, $25.0

Other Wind/Hail/Flood (3), $29.7

Fires (4), $8.4

Other (5), $0.8

39.9%

38.2%
Top 18 Most Costly Disasters in U.S. History—Katrina Still Ranks #1

(Insured Losses, 2017 Dollars, $ Billions)*

Harvey, Irma and Maria combined caused an estimated $60B+ in privately insured losses in the US

15 of the 18 Most Expensive Insurance Events in US History Have Occurred Since 2004—3 of those in 2017

*Adjusted to June 2017 values.
Sources: PCS, RMS, Karen Clark & Co; USC Center for Risk and Uncertainty Management adjustments to 2017 dollars using the CPI.
Homeowners Insurance Losses Ranked by Frequency: 2010 – 2014

Claims per 100 insured house years

Wind and Water dominate HO claims

Comprehensive Coverage: Frequency and Severity Trends Are Volatile

Annual Change, 2005 through 2017*

Severe weather is a principal cause of the spikes in both frequency and severity.

Weather Creates Volatility for Comprehensive Coverage. Enormous Comprehensive Losses Are Expected in Q3:2017 Due to Hurricanes Harvey and Irma. Harvey ~$4.75B insured auto losses!

*2017 figure is for the 4 quarters ending with 2017:Q1.
Source: ISO/PCI Fast Track data; Insurance Information Institute
Hurricane Harvey, Irma & Maria Will Make 2017 Among the Most CAT Years Ever

Sources: NASA, National Hurricane Center
Record traditional capacity, alternative capital and low CAT activity have pressured reinsurance prices; ROEs are down only very modestly. High CATs in the US in 2017 will likely stabilize reinsurance pricing in impacted areas.

*As of January 1 each year.
Regional Property Catastrophe ROL Index: 1990 – 2017*

Reinsurance pricing has been under pressure for years. Will elevated CAT activity in 2017 reverse this trend?

Record traditional capacity, alternative capital and low CAT activity have pressured reinsurance prices; ROEs are down only very modestly

*As of January 1 each year.
US Reinsurance Pricing Is Sensitive to CAT Activity, but Volatility Has Been Subdued with Low CATs, Record Capacity in Recent Years

*As of January 1 each year.

Alternative capacity has grown 263% since 2008. It has more than tripled in the past six years.

Source: Aon Benfield Analytics; Insurance Information Institute.
Flood Risk

2017 Is Another Disastrous Year for the NFIP

*How Will the NFIP Be Reformed During the Countdown to Reauthorization?*
Before Harvey and Irma, the NFIP was already $24.9B in debt. Harvey NFIP claims are expected total $7-$10B with Irma adding to this total. NFIP will need to borrow, likely pushing its debt load well above $35B.

NFIP policies-in-force are down by nearly 750,000—or 13.2%—from 5.70 million in 2009 to 4.95 million as of mid-2017.

*As of June 30, 2017
Sources: NFIP/FEMA accessed 9/18/17 at: https://www.fema.gov/total-policies-force-calendar-year; USC Risk and Uncertainty Management Center.
Residential NFIP Penetration Rates, August 2016

Most US homeowners lack flood insurance

Source: NFIP accesses 9/18/17 at: https://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=3d76edf9bd0642109b60ffaceead76fd
Residential NFIP Penetration Rates, August 2016

Few Houston-area residents had flood insurance. FL residents were much better prepared. Penetration rates are relatively high in coastal SC.

Source: NFIP accesses 9/18/17 at: https://fema.maps.arcgis.com/home/webmap/viewer.html?webmap=3d76edf9bd0642109b60ffaceead76fd
Proposed Reforms to the NFIP

HR 1422: Flood Insurance Modernization Act of 2017
- Would clarify that flood policies written by private insurers satisfy the mandatory purchase requirements (i.e., are viewed as on par with NFIP policies) for federally-backed mortgages

HR 2874: 21st Century Flood Reform Act
- Focuses on enhancing financial stability of NFIP
- Eliminates prohibition against private insurers participating in WYO programs from also offering private flood insurance
- Would prohibit NFIP from offering policies after 1/1/2021 on new structures in flood hazard zones

HR 1558: Repeatedly Flooded Communities Preparation Act
- Requires accountability from communities with repeat flooding problems (1% of claims account for 25% - 30% of losses)
- Communities must develop mitigation plans
The Strength of the Economy Will Greatly Influence Insurer Exposure Base Across Most Lines

How Will “Trumponomics” Impact the Industry?
Profitability & Politics

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

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
Awakening America’s “Animal Spirits”

Economic Policy and the Insurance Industry

The Strength of the Economy Will Greatly Influence Insurer Exposure Base Across Most
US Real GDP Growth*

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

*Estimates/Forecasts from Blue Chip Economic Indicators.*
Source: US Department of Commerce, Blue Economic Indicators 9/17; Insurance Information Institute.


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?

Donald J. Trump @realDonaldTrump - 5h
Great optimism in America – and the results will be even better!

Optimism Among U.S. CEOs Shows Biggest Increase... Optimism among chief executive officers of some of the largest U.S. companies jumped in the first quarter by the most since the economy was emerging from the last ...
bloomberg.com

Donald J. Trump @realDonaldTrump - 6h
JOBS, JOBS, JOBS!

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.
The NFIB’s Index of Small Business Optimism remains near recent highs, but slipped in June as hopes for significant regulatory and tax reform fade.

Outlook: Small businesses are much more optimistic about the future.

Source: National Federal of Independent Business; Wells Fargo Research.
Auto/Light Truck Sales, 1999-2023F

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%.

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.

Sales have returned to pre-crisis levels

Job growth and improved credit market conditions boosted auto sales to near record levels in recent years

Truck, SUV purchases remain strong but have slumped a bit

Construction Spending: Jan. 1990 – July 2017 ($ Bill)

Private (but not public) construction spending remains relatively strong. Public construction spending could benefit from a boost in infrastructure investment.

Source: US Dept. of Commerce; Wells Fargo Securities.
New Private Housing Starts, 1990-2023F

(Millions of Units)

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

New Home Sales: By Region
Jan. 1989 – July 2017 (thousands, annual rate)

New home sales are strongest in the South, West.

Source: US Dept. of Commerce; Wells Fargo Securities.
Rising unemployment eroded payrolls and WC’s exposure base.

Unemployment peaked at 10% in late 2009.

Jobless figures have been revised downwards for 2017/18

Unemployment forecasts have been revised modestly downwards. Optimistic scenarios put the unemployment as low as 4.2% by Q4 2017 and 3.8% by Q4 2018.

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (10/17 edition); Insurance Information Institute.

* = actual; = forecasts
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; Insurance Information Institute.
How Might the Trump Presidency Impact the Insurance Industry?
Trumponomics: The Essential Elements

5 Elements

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

Most of these have direct impacts for insurers
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
    - MetLife, Prudential and even AIG’s 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

- Climate, Energy and Environmental
  - Withdrawal from Paris Accord demonstrates that climate change no longer a priority
  - Personal Lines: Diminished subsidies for green energy (solar in homes), electric vehicles, etc.
  - Carbon-based and carbon emitting industries will benefit from reduced pressure on climate issue
  - Investment in energy infrastructure now easier
  - US energy exports are rising
  - Rollback/moratoria on a wide range of environmental regulations that will benefit many sectors of the economy
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.
USI 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 but 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>

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)

"Hard" markets often tend to occur during recessionary periods

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

Aug. 2017 reading of 8.1% is up from 6.5% a year earlier. Current rate trend is strongest since 2002-03.

*Percentage change from same month in prior year; through Aug. 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.
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 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%.

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

Sources: A.M. Best (1990-2014); Insurance Information Institute (2015-17F).
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.
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
Homeowners Insurance Combined Ratio: 1990–2017F

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 (1990-2015); USC RUM Center (2016E-17F).
Private Passenger Auto Underwriting Performance Is Showing the Strains of Rising Frequency (and Severity) Trends in Many States

Sources: A.M. Best (1990-2015); USC RUM Center (2016E-17F).
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 2017*

Annual Change, 2005 through 2017*

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 2017 Q1.
Source: ISO/PCI Fast Track data; Insurance Information Institute
Collision Loss Ratio Trending Upward: Private Passenger Auto, 2010 – 2017*

Loss Ratio

Collision Loss Ratios are Trending Steadily Upward

*2017 figure is for the 4 quarters ending in 2017:Q1
Source: ISO/PCI Fast Track data; Insurance Information Institute
Bodily Injury: Severity Trend Is Up, Frequency Decline Has Ended—Rising?

Annual Change, 2005 through 2017*

Cost Pressures Will Increase if BI Frequency and Severity Trends Persist

*2017 figure is for the 4 quarters ending 2017:Q1.
Source: ISO/PCI Fast Track data; Insurance Information Institute
Property Damage Liability: Severity and Frequency Are Up

Annual Change, 2005 through 2017*

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

*2017 figure is for the 4 quarters ending 2017:Q1.
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…
America is Driving More Again: 2000-2016

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

Sources: Federal Highway Administration; National Bureau of Economic Research (recession dates); Insurance Information Institute.
Why Are People Driving More Miles? 
Is it Jobs?  2006-2016:Q4

Billions of Miles Driven in Prior Year

Miles Driven (left axis)  
# Employed (right axis)

Miles driven is now rising more rapidly than employment

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.
More People Working and Driving
=> More Collisions, 2006-2016:Q3

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

Recession

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

Sources: Seasonally Adjusted Employed from Bureau of Labor Statistics; Rolling 4-Qtr. Avg. Frequency from Insurance Services Office; Insurance Information Institute.
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.
Commercial Lines Performance

Survey Results Suggest Commercial Pricing Has Flattened Out, with Impacts on Growth

- Economic Shocks, Inflation: 1976: 22.2%
- Tort Crisis 1986: 30.5%
- Post-Hurricane Andrew Bump: 1993: 6.3%
- Post-Katrina Bump: 2006: 7.7%
- 1982: 1.1%
- Great Recession: 2009: -9.0%
- Post-9/11 2002: 22.4%

Note: Data include state funds beginning in 1998.
Source: A.M. Best; Insurance Information Institute.
CIAB: Average Commercial Rate Change, All Lines, (1Q:2004–2Q:2017)

(Percent)

Q2 2011 marked the last of 30th consecutive quarter of price declines

Pricing as of Q2:2017 remained somewhat negative

KRW Effect

Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.

Source: Council of Insurance Agents & Brokers; Insurance Information Institute
Change in Commercial Rate Renewals, by Line: 2017:Q2

Major Commercial Lines Renewals Were General Down in Q2:2017; Only Commercial Auto Saw Material Gains

<table>
<thead>
<tr>
<th>Line</th>
<th>Percentage Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Property</td>
<td>-3.6%</td>
</tr>
<tr>
<td>General Liability</td>
<td>-2.7%</td>
</tr>
<tr>
<td>Workers Comp</td>
<td>-2.7%</td>
</tr>
<tr>
<td>Business Interruption</td>
<td>-2.0%</td>
</tr>
<tr>
<td>Umbrella</td>
<td>-1.4%</td>
</tr>
<tr>
<td>Construction</td>
<td>-1.2%</td>
</tr>
<tr>
<td>Surety</td>
<td>0.1%</td>
</tr>
<tr>
<td>D&amp;O</td>
<td>0.2%</td>
</tr>
<tr>
<td>EPL</td>
<td>0.2%</td>
</tr>
<tr>
<td>Commercial Auto</td>
<td>6.1%</td>
</tr>
</tbody>
</table>

Commercial Auto is the only major line with positive renewals. WC is renewing downward.

Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially. Source: Council of Insurance Agents and Brokers; Insurance Information Institute.
Commercial Lines Combined Ratio, 1990-2017F*

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); USC RUM Center (2016E-17F).
Workers Compensation Combined Ratio: 1994–2016P

WC results have improved markedly since 2011

Workers Comp Results Began to Improve in 2012. Underwriting Results Deteriorated Markedly from 2007-2010/11 and Were the Worst They Had Been in a Decade.

Sources: A.M. Best (1994-2009); NCCI (2010-2016P) and are for private carriers only.
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.
THE ‘INTERNET OF THINGS’

Capturing Economic Value Amid a Shifting Insurer Value Chain
The Internet of Things and the Insurance Industry

- The “Internet of Things” will create trillions in economic value throughout the global economy by 2025
- What opportunities, challenges will this create for insurers?
- What are the impact on the insurance industry “value chain”?

Sources: McKinsey Global Institute, *The Internet of Things: Mapping the Value Beyond the Hype*, June 2015; Insurance Information Institute.
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 TECHNOLOGY: 
FIN TECH ZEROES IN

Number and Value of Deals Is Increasing

In Search of the Elusive Insurance ‘Unicorn’
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!
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/
Top 25 P/C Insurers by Direct Written Premium, 2015

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

Sources: NAIC from CB Insights at [https://www.cbinsights.com/blog/largest-pc-insurers-rank-startup-investments/](https://www.cbinsights.com/blog/largest-pc-insurers-rank-startup-investments/)
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/
Distribution Trends

Distribution by Channel Type Continues to Evolve Around the World
Independent agents steadily lost market share from the early 1980s through the early 2000s across all P/C lines, made some gains in the mid-2000s, but then lost share again in the late 2000s. Loss rate has slowed in in the 2010s. Direct channels include exclusive agency companies, direct marketers and direct sales (e.g., internet).

Source: Insurance Information Institute; based on data from Conning and A.M. Best.
Independent agents have lost significant personal lines market share since the early 1970s. That trend slowed from 2000-2007, but accelerated during the financial crisis, though it may be slowing again.
Independent agent market share in commercial lines has held steady in recent years.

Source: Calculations based on data from A.M. Best.
Can the Industry Close the Talent Gap?
## Overview of Insurance Sector Employment Changes*

<table>
<thead>
<tr>
<th>Insurance Subsector</th>
<th>June 2017 Employment</th>
<th>July 2017 Employment</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Carriers</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P-C Direct</td>
<td>570,500</td>
<td>570,800</td>
<td>+300</td>
</tr>
<tr>
<td>Life Direct</td>
<td>352,600</td>
<td>351,700</td>
<td>-900</td>
</tr>
<tr>
<td>Health/Medical Direct</td>
<td>475,100</td>
<td>476,400</td>
<td>+1,300</td>
</tr>
<tr>
<td>Title &amp; Other Direct</td>
<td>94,300</td>
<td>95,100</td>
<td>+800</td>
</tr>
<tr>
<td>Reinsurers</td>
<td>25,000</td>
<td>25,500</td>
<td>+500</td>
</tr>
<tr>
<td><strong>Others</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agents/Brokers</td>
<td>781,700</td>
<td>785,200</td>
<td>+3,500</td>
</tr>
<tr>
<td>Third-Party Administration</td>
<td>187,400</td>
<td>186,900</td>
<td>-500</td>
</tr>
<tr>
<td>Claims Adjusters</td>
<td>58,200</td>
<td>57,200</td>
<td>-100</td>
</tr>
</tbody>
</table>

*Data are through July 2017 and are preliminary (i.e., subject to later revision); not seasonally adjusted.
Source: U.S. Bureau of Labor Statistics; III
U.S. Employment in the Direct P/C Insurance Industry: 1990–2017*

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

Note: Recessions indicated by gray shaded columns.


*As of July 2017; not seasonally adjusted. Includes all types of insurance.
Note: Recessions indicated by gray shaded columns.
An Update from the Front Lines of the Insurance Industry Talent Wars

Hearing, Seeing and Doing Believing
The Insurance Industry “Talent Wars”

- The insurance industry needs to hire some 400K workers over the next few years

- Should be able to meet that goal

- Industry has ramped up recruiting efforts

- Awareness is increasing of career opportunities
  - Moving beyond perception that most of the industry consists of sales jobs
  - Curriculum updates to reflect increased importance of data analytics, IT
  - Most students (at USC) double major (e.g., Finance, Acctg.)

- More universities offering RMI courses

- More internships, scholarships
Some Recent Hiring Trends at USC

- 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
Some Recent Hiring Trends at USC

- Positions 2016/2017 Grads Hired Into:
  - Underwriting (personal, commercial (now including cyber))
  - Claims
  - Actuarial
  - Data Analytics
  - Software Development, IT, Information Systems
  - Risk Management (e.g., for manufacturing firms)
  - Financial Risk Management, Internal Audit
  - Investment/Portfolio Analyst/M&A Analyst
  - Broker
  - Consulting
  - Government
  - Grad School (mostly Law School)
Where Can Insurers Do Better?

- More internships
  - Including those between sophomore and junior year
  - Semester internships (basically part-time jobs during the school year)
  - Job shadowing (day or two)

- Communicate career paths better; Turn them on!!!

- Communicate what you do to facilitate professional growth → Articulate your investment in them

- Emphasize the many different career opportunities within the insurer and how those who excel are introduced to many of them

- International opportunities (or around the US)

- Discuss tech opportunities

- Visit campuses, students sooner

- Visits from successful alumni
Thank you for your time
and your attention!

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