

## Trends, Challenges and Opportunities in the P/C Insurance Industry in 2017 & Beyond Focus on Ohio Markets

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## P/C (Re)Insurance Industry Financial Overview

## The Past Few Years Have Been Very Similar and Reasonably Good

### P/C Industry Net Income After Taxes 1991–2016:Q2

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•ROE figures are GAAP; <sup>1</sup>Return 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; 2015E is annualized figure based actual figure through Q3 of \$44.0 Sources: A.M. Best, ISO; Insurance Information Institute

## Profitability Peaks & Troughs in the P/C ; Insurance Industry, 1975 – 2016:H1

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mortgage and financial guaranty insurers.

Source: Insurance Information Institute; NAIC, ISO, A.M. Best, Conning

# ROE: Property/Casualty Insurance by Major Event, 1987–2016:H1



\* Through 2016:H1. Excludes Mortgage & Financial Guarantee in 2008 – 2014. Sources: ISO, *Fortune*; Insurance Information Institute.

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#### P/C Insurance Industry ROE: Magnitude of Cyclicality, Volatility Changes Over Time, 1950-2015



## P/C Insurance Industry Combined Ratio, 2001–2016:Q2\*





\* Excludes Mortgage & Financial Guaranty insurers 2008--2014. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014: = 97.0.

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

## Number of Years with Underwriting Profits by Decade, 1920s–2010s



Underwriting Profits Were Common Before the 1980s (40 of the 60 Years Before 1980 Had Combined Ratios Below 100) – But Then They Vanished. Not a Single Underwriting Profit Was Recorded in the 25 Years from 1979 Through 2003

\* 2009 combined ratio excl. mort. and finl. guaranty insurers was 99.3, which would bring the 2000s total to 4 years with an u/w profit. \*\*Data for the 2010s is for the period 2010 through 2015.

Note: Data for 1920–1934 based on stock companies only.

Sources: Insurance Information Institute research from A.M. Best Data.

## P/C Insurance Loss Reserve Development, INSURANCE 1992 – 2017E\*



Source: A.M. Best; Barclays research for estimates.

# Policyholder Surplus, 2006:Q4–2016:Q2





## 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 . Sources: ISO, A.M .Best.

The P/C insurance industry entered 2016 in very strong financial condition.

# US Policyholder Surplus: 1975–2016\*



#### (\$ Billions)



## The Premium-to-Surplus Ratio Stood at \$0.76:\$1 as of 12/31/15, a Near Record Low (at Least in Recent History)

\* As of 6/3016.

Source: A.M. Best, ISO, Insurance Information Institute.

#### RNW All Lines, 2005-2014 Average: Highest 25 States



#### RNW All Lines, 2005-2014 Average: Lowest 25 States



#### (Percent)



## Net Premium Growth (All P/C Lines): Annual Change, 1971—2016:Q2



Sources: A.M. Best (1971-2013), ISO (2014-16).

#### NPW Premium Growth: Peaks & Troughs in the P/C Insurance Industry, 1926 – 2015



Note: Data through 1934 are based on stock companies only. Data include state funds beginning in 1998. Source: A.M. Best; Insurance Information Institute.

## Commercial Lines NPW Premium Growth: 1975 – 2015E





Note: Data include state funds beginning in 1998. Source: A.M. Best; Insurance Information Institute.

## U.S. INSURANCE MERGERS AND ACQUISITIONS, P/C SECTOR, 1994-2015 (1)



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

Source: Conning proprietary database.

## Non-Life Insurance: Global Real (Inflation Adjusted) Premium Growth, 2015



Source: Swiss Re, sigma, No. 3/2016.



## Profitability and Growth in Ohio P/C Insurance Markets

## Analysis by Line and Nearby State Comparisons

## RNW All Lines: OH vs. U.S., 2005–2014



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## RNW Comm. Auto: OH vs. U.S., 2005–2014



Source: NAIC.

# RNW Comm. Multi-Peril: OH vs. U.S., 2005–2014



Source: NAIC.

## RNW Homeowners: OH vs. U.S., 2005–2014



Source: NAIC.

### All Lines: 10-Year Average RNW OH and **MINIFORMATIC** Nearby States, 2005–2014



### PP Auto: 10-Year Average RNW OH and Nearby States, 2005–2014



## Top Ten Most Expensive and Least Expensive States for Automobile Insurance, 2013<sup>1</sup>

Rank	Most Expensive States	Average Expenditu re	Rank	Least Expensive States	Average Expenditure
1	New Jersey	\$1,254.10	1	Idaho	\$553.38
2	D.C.	1,187.49	2	Iowa	572.14
3	New York	1,181.86	3	South Dakota	580.99
4	Louisiana	1,146.29	4	Maine	592.82
5	Florida	1,143.83	5	North Dakota	604.58
6	Michigan	1,131.40	6	Wisconsin	621.05
7	Delaware	1,101.12	7	Indiana	621.71
8	Rhode Island	1,066.25	8	North Carolina	624.76
9	Connecticut	1,011.27	9	Nebraska	638.74
10	Massachusetts	1,007.98	10	Wyoming	639.71

#### Ohio Ranked 40<sup>th</sup> in Average Expenditure for Auto Insurance in 2013. The Average Expenditure was \$659.37.

<sup>1</sup>Based on average automobile insurance expenditures. Source: © 2016 National Association of Insurance Commissioners.

## Comm. Auto: 10-Year Average RNW OH and Nearby States, 2005–2014



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### Comm. M-P: 10-Year Average RNW OH and Nearby States, 2005–2014



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## Homeowners: 10-Year Average RNW OH & Nearby States, 2005–2014

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## Top Ten Most Expensive and Least Expensive States for Homeowners Insurance, 2013<sup>1</sup>

Rank	Most Expensive States	HO Average Premium	Rank	Least Expensive States	HO Average Premium	
1	Florida	\$2,115	1	Idaho	\$561	
2	Texas <sup>2</sup>	1,837	2	Oregon	568	
3	Louisiana	1,822	3	Utah	609	
4	Oklahoma	1,654	4	Wisconsin	665	
5	Mississippi	1,395	5	Washington	676	
6	Kansas	1,343	6	Nevada	687	
7	Rhode Island	1,334	7	Delaware	709	
8	Alabama	1,323	8	Arizona	724	
9	Connecticut	1,274	9	Ohio	763	
10	Massachusetts	1,263	10	Maine	776	
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#### Ohio Ranked as the 9<sup>th</sup> Least Expensive State for Homeowners Insurance in 2013, with an Average Expenditure of \$763

<sup>1</sup> Includes policies written by Citizens Property Insurance Corp. (Florida) and Citizens Property Insurance Corp. (Louisiana), Alabama Insurance Underwriting Association, Mississippi Windstorm Underwriting Association, North Carolina Joint Underwriting Association and South Carolina Wind and Hail Underwriting Association. Other southeastern states have wind pools in operation and their data may not be included in this chart. Based on the HO-3 homeowner package policy for owner-occupied dwellings, 1 to 4 family units. Provides "all risks" coverage (except those specifically excluded in the policy) on buildings and broad namedperil coverage on personal property, and is the most common package written.

<sup>2</sup> The Texas Department of Insurance developed home insurance policy forms that are similar but not identical to the standard forms. In addition, due to the Texas Windstorm Association (which writes wind-only policies) classifying HO-1, 2 and 5 premiums as HO-3, the average premium for homeowners insurance is artificially high.

Note: Average premium=Premiums/exposure per house years. A house year is equal to 365 days of insured coverage for a single dwelling. The NAIC does not rank state average expenditures and does not endorse any conclusions drawn from this data. Source: ©2016 National Association of Insurance Commissioners (NAIC). Reprinted with permission. Further reprint or distribution strictly prohibited without written permission of NAIC.

# All Lines DWP Growth: OH vs. U.S., 2006–2015



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### Commercial Lines DWP Growth: OH vs. U.S., 2006–2015





## Personal Lines DWP Growth: OH vs. U.S., THINSURANCE 2006–2015



### Private Passenger Auto DWP Growth: OH vs. U.S., 2006–2015



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### Homeowner's MP DWP Growth: OH vs. U.S., 2006–2015

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### Homeowner's MP DWP Growth: OH vs. U.S., 2006–2015





Source: SNL Financial.



# INVESTMENTS: THE NEW REALITY

Investment Performance is a Key Driver of Profitability

**Depressed Yields Will Necessarily Influence Underwriting & Pricing** 

### S&P 500 Index Returns, 1950 – 2016\*



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\*Through Oct. 12 2016.

Source: NYU Stern School of Business: http://pages.stern.nyu.edu/~adamodar/New\_Home\_Page/datafile/histretSP.html Ins. Info. Inst.

### Property/Casualty Insurance Industry Investment Income: 2000–2016:Q2<sup>1</sup>



Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014 but showed a small (1.9%) increase in 2015 another drop in 2016 seems likely.

\*Annualized figure based on actual Q2:2016 net investment income earned of \$22.067B.

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

### U.S. Treasury Security Yields: A Long Downward Trend, 1990–2016\*



\*Monthly, constant maturity, nominal rates, through August 2016.

Sources: Federal Reserve Bank at <u>http://www.federalreserve.gov/releases/h15/data.htm</u>. National Bureau of Economic Research (recession dates); Insurance Information Institute.

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### Distribution of Invested Assets: P/C Insurance Industry, 2013



Source: Insurance Information Institute Fact Book 2015, A.M. Best.

### 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 late 2015 has pushed up some yields, albeit quite modestly.

Sources: A.M. Best; 2015E-2016P figures from A.M. Best P/C Review and Preview, Feb. 2016; Insurance Information Institute





# A full normalization of interest rates is unlikely until 2019, more than a decade after the onset of the financial crisis.

Sources: Blue Chip Economic Indicators (10/16 for 2016 and 2017; for 2018-2021 10/16 issue); Insurance Info. Institute.

### Annual Inflation Rates, (CPI-U, %), 1990–2017F

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#### Slack in the U.S. economy and falling energy prices suggests that inflationary pressures should remain subdued for an extended period of times

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators, 10/16 (forecasts).

### P/C Insurer Net Realized Capital Gains/Losses, 1990-2016:Q2



90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16\*

Insurers Posted Net Realized Capital Gains in 2010 - 2015 Following Two Years of Realized Losses During the Financial Crisis. Realized Capital Losses Were a Primary Cause of 2008/2009's Large Drop in Profits and ROE.

\*Annualized based on actual of \$4.438B through Q2 2016 Sources: A.M. Best, ISO; Insurance Information Institute. NSURANCE

### Property/Casualty Insurance Industry Investment Gain: 1994–2016:Q2<sup>1</sup>

(\$ Billions)



#### Total Investment Gains Were Flat in 2015 as Investment Income Rose Marginally and Realized Capital Gains Fell Slightly

 <sup>1</sup> Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.
\* 2005 figure includes special one-time dividend of \$3.2B; 2016 figure is annualized based on actual Q2 2016 figure of \$26.505B. Sources: ISO, SNL; Insurance Information Institute.

#### Reduction in Combined Ratio Necessary to Offset 1% Decline in Investment Yield to Maintain Constant ROE, by Line\*





#### Lower Investment Earnings Place a Greater Burden on Underwriting and Pricing Discipline

\*Based on 2008 Invested Assets and Earned Premiums

\*\*US domestic reinsurance only

Source: A.M. Best; Insurance Information Institute.



# THE ECONOMY

### The Strength of the Economy Will Greatly Influence Insurer Exposure Base Across Most Lines

### **US Real GDP Growth\***





# Demand for Insurance Should Increase in 2016 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 10/16; Insurance Information Institute.

### **US Unemployment Rate Forecast**





= actual; = forecasts

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (10/16 edition); Insurance Information Institute.

### Continued Business Investment Will Spur Modest Commercial Exposure Growth



#### Business investment was a major drag on the economy in 2016 and adversely impacts commercial property and liability insurance exposures. Growth should begin a modest recovery in 2017.

Sources: Blue Chip Economic Indicators, 10/2016 (history and forecasts for 2016 and 2017, 10/2016 for forecasts for 2018-2022; Insurance Information Institute.



# **Profitability & Politics**

# How Is Profitability Affected by the President's Political Party?



\*Truman administration ROE of 6.97% based on 3 years only, 1950-52;. Source: Insurance Information Institute

### Trump vs. Clinton: Issues that Matter to P/C Insurers



Issue	Trump	Clinton
Economy	Supply Side-Like Philosophy: Lower taxes→Faster real GDP growth; Deficits likely grow as tax cuts are combined with targeted increased spending on Homeland Security, Defense, etc.	<b>Keynesian Philosophy:</b> More government spending on infrastructure, education, social services; Deficits likely increase as tax increases likely difficult to pass
Interest Rates	May trend higher with larger deficits; Shift from monetary policy to fiscal focus (tax cuts, government spending)	Status quo at the Fed; Net impact on interest rates unclear
Taxes	Favors lower tax rates for corporate and personal income tax rates; Tax code overhaul?	Unlikely to reduce taxes or embark on major overhaul of tax code
International Trade	Protectionist Tendencies (appeal primarily to manufacturing sector)	Has criticized Trans-Pacific Partnership but is a realist on international matters
Tort System	Doesn't like trial lawyers but seems to like filing lawsuits	Status Quo
Health Care	ACA should be repealed & replaced	Incremental Change



# 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

# Return on Net Worth: All P-C Lines vs. Homeowners & Pvt. Pass. Auto, 1990-2014\*



#### Pvt.Pass. Auto Has Consistently Outperformed the P-C Industry as a Whole. Homeowners Volatility is Associated Primarily With Coastal Exposure Issues

\*Latest available.

\*\*Excludes 1992, the year of Hurricane Andrew. If 1992 is included the resulting homeowners RNW is 1.9% Sources: NAIC; Insurance Information Institute.

### RNW Pvt. Passenger Auto, 2005-2014 Average: Highest 25 States











#### RNW Homeowners Insurance, 2005-2014 Average: Highest 25 States



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### RNW Homeowners Insurance, 2005-2014 Average: Lowest 25 States



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# Personal Lines Underwriting Performance

Auto, Home Underwriting Performance Exhibit Periods of Both Stability and Volatility

### Private Passenger Auto Combined Ratio: 1993–2017F



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.

### 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 (1990-2014); Insurance Information Institute (2015E-17F).



# Loss Ratio Comparisons

# Auto, Home Exhibit Wide Variety Across States



# Claim Trends in Private Passenger Auto Insurance

# Rising Frequencies and Severities in Many Coverages Will that Pattern Be Sustained?

### Return on Net Worth: Personal Auto, 2005–2014





# Auto Insurance Profitability Has Been Stuck at Low Levels.

Source: National Association of Insurance Commissioners.

### Auto Insurance Net Combined Ratios, Yearly, 2005-2015



#### Loss Ratios Have Been Rising for A Decade. 2015 Return on Net Worth Is Likely Close to Zero or Negative.

Sources: National Association of Insurance Commissioners data, sourced from S&P Global Market Intelligence; Insurance Information Institute.

### A Half Century of Auto Insurance: Frequency vs. Severity



#### In the Long Run, Frequency Falls. Severity Increases.



Sources: Insurance Institute for Highway Safety, Insurance Services Office, Insurance Information Institute.

#### Why Personal Auto Loss Ratios are Rising: Severity & Frequency by Coverage, 2015 vs. 2014



Across All Personal Coverage Types (Except Comprehensive) in 2015, Frequency and Severity Rose. This Pattern is Likely to Continue in 2016.

Source: ISO/PCI Fast Track data; Insurance Information Institute.

### 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 Q1. Source: ISO/PCI *Fast Track* data; Insurance Information Institute

### Collision Loss Ratio Trending Upward: Private Passenger Auto, 2010 – 2016\*

Loss Ratio



#### **Collision Loss Ratios are Trending Steadily Upward**

\*2016 figure is for 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 2016\*



### Cost Pressures Will Increase if BI Frequency and Severity Trends Persist

\*2016 figure is for Q1. Source: ISO/PCI *Fast Track* data; Insurance Information Institute

# Property Damage Liability: Severity and Frequency Are Up





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

\*2016 figure is for Q1. Source: ISO/PCI *Fast Track* data; Insurance Information Institute

# Comprehensive Coverage: Frequency and Severity Trends Are Volatile



### Weather Creates Volatility for Comprehensive Coverage

\*2016 figure is for Q1. Source: ISO/PCI *Fast Track* data; Insurance Information Institute



## A Few Factors Driving Adverse Private Passenger Auto Loss Trends

## More People Driving, Lower Gas Prices, Higher Speed Limits...

## Why Are People Driving More Miles? Jobs? 2006 - 2015



Sources: Federal Highway Administration (<u>http://www.fhwa.dot.gov/policyinformation/travel\_monitoring/tvt.cfm</u>); Seasonally Adjusted Employed from Bureau of Labor Statistics; Insurance Institute for Highway Safety; Insurance Information Institute.

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## More People Working and Driving => More Collisions, 2006-2016





they drive to work, helping drive claim frequency higher.

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

## Change in Auto Fatalities by State: Especially Severe in Georgia





SOURCE: Estimates from National Safety Council.



## **Personal Lines Growth Drivers**

Rate and Exposure are Both Presently Important Growth Drivers

## Monthly Change in Auto Insurance Prices, 1991–2016\*





'90 '91 '92 '93 '94 '95 '96 '97 '98 '99 '00 '01 '02 '03 '04 '05 '06 '07 '08 '09 '10 '11 '12 '13 '14 '15 '16

\*Percentage change from same month in prior year; through July 2016; 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.

# Average Expenditures\* on Auto Insurance, 1994-2015E





### Across the U.S., auto insurance expenditures fell by 0.8% in 2008 and 0.5% in 2009 but rose 0.5% in 2010, 0.8% in 2011, 2.3% in 2012 and 3.3% in 2013; I.I.I. estimate is for +3.4% in 2014 and 2015.

\* The NAIC data are per-vehicle (actually, per insured car-year) Sources: NAIC for 1994-2013; Insurance Information Institute estimates for 2014-2015 based on CPI and other data.

## Private Passenger Auto Insurance Net Written Premium, 2000–2017F



## Homeowners Insurance Net Written Premium, 2000–2016F







# Personal Lines: Economic and Demographic Considerations

Auto, Home Are Sensitive to Underlying Economic Conditions

## New Private Housing Starts, 1990-2022F



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 (10/16 for 2016-17; 10/16 for 2018-22F; Insurance Information Institute.

## Auto/Light Truck Sales, 1999-2022F

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Yearly car/light truck sales will likely continue at current levels, in part replacing cars that were held onto in 2008-12. PP Auto premium might grow by 3.5% - 5%.

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (10/16 for 2016-17; 10/16 for 2018-21F; Insurance Information Institute7

## Number of Registered Passenger Vehicles in US, 1999 – 2015E



Sources: Bureau of Transportation Statistics; Barclays Capital estimates, August 2015.

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# Auto Loans and Other Non-Housing Debt, 2004 – 2015\*

Non-Housing Debt Balance



### Banks are becoming increasingly aggressive in marketing auto loans



## Commercial Lines Underwriting Performance

# Commercial Lines Combined Ratio, 1990-2017F\*

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\*2007-2012 figures exclude mortgage and financial guaranty segments. Source: A.M. Best (1990-2014); Conning (2015E-17F) Insurance Information Institute.

# Commercial Property Combined Ratio: 2007–2017F





Commercial Property Underwriting Performance Has Improved in Recent Years, Largely Due to Diminished CAT Activity

# General Liability Combined Ratio: 2005–2017F



Commercial General Liability Underwriting Performance Has Been Volatile in Recent Years

# Commercial Auto Combined Ratio: 1993–2017F



### Commercial Auto Results Are Challenged as Rate Gains Barely Have Yet to Offset Adverse Frequency and Severity Trends

Sources: A.M. Best (1990-2014); Conning (2015E-2017F); Insurance Information Institute.

## Workers Compensation Combined Ratio: 1994–2015P



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 (2010-2015P) and are for private carriers only; Insurance Information Institute.

## Workers Compensation Premium: Fifth Consecutive Year of Increase





p Preliminary

Source: NCCI from Annual Statement Data.

Includes state insurance fund data for the following states: AZ, CA, CO, HI, ID, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, UT. Each calendar year total for State Funds includes all funds operating as a state fund that year.

## **Workers Compensation Lost-Time Claim Frequency Declined in 2015**



**Accident Year** 

\*Adjustments primarily due to significant audit activity. 2015p: Preliminary based on data valued as of 12/31/2015.

Source: NCCI Financial Call data, developed to ultimate and adjusted to current wage an voluntary loss cost level; Excludes high deductible policies; 1994-2014: Based on data through 12/31/14. Data for all states where NCCI provides ratemaking services, excluding WV. Frequency is the number of lost-time claims per \$1M pure premium at current wage and voluntary loss cost level

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## Workers Compensation Medical Severity: Small Decrease in 2015



**Accident Year** 

2015p: Preliminary based on data valued as of 12/31/2015.

1991-2013: Based on data through 12/31/2014, developed to ultimate Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.



## **Insured Catastrophe Losses**

2013/14 and YTD 2015 Experienced Below Average CAT Activity After Very High CAT Losses in 2011/12 Winter Storm Losses Far Above Average in 2014 and 2015

## **U.S. Insured Catastrophe Losses**



\*Through 6/30/16. 2016 figure stated in 2016 dollars.

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, 1996–2015<sup>1</sup>



- 1. Catastrophes are defined as events causing direct insured losses to property of \$25 million or more in 2015 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.

## Top 3 States for Insured Catastrophe Losses, 1996-2005 (in 2015 Dollars)



Texas, Florida and New York lead the country in insured catastrophe losses over the past 20 years. These 3 states accounted for nearly 1/3 of all insured catastrophe losses over the past two decades

Source: PCS/Verisk for 2016 Insurance Fact Book, Insurance Information Institute.

## Top 16 Most Costly Disasters in U.S. History—Katrina Still Ranks #1



(Insured Losses, 2014 Dollars, \$ Billions)



## 12 of the 16 Most Expensive Events in US History Have Occurred Since 2004

Sources: PCS; Insurance Information Institute inflation adjustments to 2014 dollars using the CPI.

## Convective Loss Events in the US Overall and insured losses, 1980 – 2015



\*Losses adjusted to inflation based on CPI

Source: Geo Risks Research, NatCatSERVICE

Analysis contains:

severe storm, tornado, hail, flash flood and lightning

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## Winter Storm Losses in the US 1980 – 2015 (Overall and Insured Losses)\*



### **\$ Billions**



Source: Property Claim Services, MR NatCatSERVICE.

\*Losses adjusted to inflation based on CPI.

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## Regional Property Catastrophe ROL Index: 1990 – 2016



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

Source: Guy Carpenter; Insurance Information Institute.

## Alternative Capital as a Percentage of Traditional Global Reinsurance Capital



### Alternative Capital's Share of Global Reinsurance Capital Has More Than Doubled Since 2010.

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.



# **INDUSTRY DISRUPTORS**

Technology, Society and the Economy Are All Changing at a Rapid Pace *Thoughts on the Future*
### Media is Obsessed with Driverless Vehicles: Often Predicting the Demise of Auto Insurance



Source: Boston Consulting Group.

### On-Demand/Sharing/Peer-to-Peer Economy Impacts Many Lines of Insurance

- The "On-Demand" Economy is or will impact many segments of the economy important to P/C insurers
  - Auto (personal and commercial)
  - Homeowners/Renters
  - Many Liability Coverages
  - Professional Liability
  - Workers Comp
- Many unanswered insurance questions
- Insurance solutions are increasingly available to fill the many insurance gaps that arise







# The Sharing Economy: An Update

# The On-Demand Economy Will Transform the American Workforce and the P/C Insurance Industry Too

# The Sharing Economy Has Grown— And Attracted Political Scrutiny



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## Political Skepticism About the 'Gig' Economy





"Many Americans are making extra money renting out a spare room, designing a website ... even driving their own car. This on demand or so called 'gig' economy is creating exciting opportunities and unleashing innovation, but it's also raising hard questions about workplace protections and what a good job will look like in the future."

--Hillary Clinton, July 13, 2015 Americans Who Offer Services in the Sharing/Gig Economy Are Statistically More Prone to Workplace Injury



# Young, urban minority males are the most likely to offer their services in the sharing economy.

Sources: The SelfEmployed.com accessed at <u>https://www.theselfemployed.com/gig-economy/infographic-inside-the-new-economy/</u> based on a poll by Time magazine, Bursten-Marsteller and The Aspen Institute; Insurance Information Institute.

# Data Breaches 2005-2015, by Number of Breaches and Records Exposed



The total number of data breaches (+27.5%) hit a record high of 783 in 2014, exposing 85.6 million records. Through June 30, this year has seen 117.6 million records exposed in 400 breaches.\*

\*Figures as of June 30, 2015, from the Identity Theft Resource Center, http://www.idtheftcenter.org/images/breach/ITRCBreachReport2015.pdf



# AUTO TECHNOLOGY & THE FUTURE OF AUTO INSURANCE

The Road to Fully Autonomous Vehicles: Long, Dark and Full of Potholes

Tales of the Death of Auto Insurance Are Greatly Exaggerated

## Media is Obsessed with Driverless Vehicles: Often Predicting the Demise of Auto Insurance



Source: Boston Consulting Group.



Source: Autonomous Consulting as cited in the Financial Times: "Cost of Car Insurance to Plunge With Rise of Driverless Vehicles, June 28, 2016.

# I.I.I. Poll: Auto Insurance



Q. Would you be willing to ride in a driverless car?



The Percentage Willing to Ride in a Driverless Car Rose Slightly; 71% of People Over 64 Were Unwilling to Ride.

Source: Insurance Information Institute Annual Pulse Survey.



#### Q. Would you be willing to ride in a driverless car?



#### The Percentage Willing to Ride in a Driverless Car Remains at 43%; 71% of People Over 64 Were Unwilling to Ride.

Source: Insurance Information Institute Annual Pulse Survey



#### Q. Would you be willing to ride in a driverless car?



#### The Percentage Willing to Ride in a Driverless Car Remains at 43%; 71% of People Over 64 Were Unwilling to Ride.

Source: Insurance Information Institute Annual Pulse Survey.

# I.I.I. Poll: Driverless Cars



Why Americans Would Not Want to Ride in a Driverless Car, May 2016<sup>1</sup>



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

<sup>1</sup> 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.

# I.I.I. Poll: Telematics— Consumers Still Hesitant





Would you allow your auto insurer to collect information about how and when you drive in order to set your auto insurance premium?



More Than Half of Auto Policyholders Would Allow Their Insurer to Collect Their Driving Information in Order to Set Premiums.

<sup>1</sup>Asked of those who have auto insurance. Source: Insurance Information Institute Annual *Pulse* Survey.

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### **Telematics for Your Home:** The Internet of Things

- The home is the next frontier for telematics
- Rapidly becoming a crowded space
- How and with whom will insurers partner?
- Can control increasing array of household systems remotely
  - Heat, A/C
  - Fire, CO detection
  - Security Systems
  - **Cameras/Monitors**
  - Appliances
  - Lighting
  - **Technology is adaptive** 
    - Uses sensors and algorithms to learn about you

homes for real poople.

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every day.









# THE 'INTERNET OF THINGS'

# Capturing Economic Value Amid a Shifting Insurer Value Chain

# The Internet of Things and the Insurance Industry

#### INSURANCE INFORMATION INSTITUTE



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

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"?

# Wearables Show Significant Potential to Reduce Workplace Injury, Death

- Wearables Today Can Monitor:
  - Location
  - Heart rate
  - Temperature
  - Steps/Exertion
  - Sweat
  - Sleep
- In the Near Future Could Monitor:
  - Glucose level
  - Oxygen levels
  - Pain
  - Nausea





iWatch

12:45

## The Internet of Things and the Insurance Industry Value Chain





#### The Insurance Industry Value Chain Is Changing for Many Reasons

Source: Willis Capital Markets & Advisory; 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?

Source: Willis Capital Markets & Advisory; Insurance Information Institute.



# INSURANCE TECHNOLOGY: FIN TECH ZEROES IN

# Number and Value of Deals Is Increasing

In Search of the Elusive Insurance 'Unicorn'

### Insurance Technology Financing Trend: Change Is Coming





### Lemonade: Peer-to-Peer (P2P) Insurance

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	The world's first Peer to Peer	
	insurance carrier	
	WE'VE REDESIGNED INSURANCE FROM THE GROUND UP TO MAKE IT HONEST, INSTANT AND DELIGHTFUL	
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INSURANCE INFORMATION Daniel Schreiber here, with updates from Lemonade.

I'm thrilled to report that a few days ago, by unanimous vote of our board and shareholders, Lemonade became a Public Benefit Corporation, and was also awarded provisional '<u>B-Corp</u>' certification. Both are firsts for an insurance carrier, and are points of tremendous pride for our team.

Rebuilding insurance as a social good, rather than a necessary evil, is now part of our legal mission. Our Chief Behavioral Officer, Professor Dan Ariely, says that "If you tried to create a system to bring out the worst in humans, it would look a lot like the insurance of today." Working in partnership with nonprofits, and baking giving-back into our business model, holds the promise of a better insurance experience, and a more valuable insurance company.

In other news, I'm happy to say that we're putting finishing touches on our product and will be ready to launch in New York within weeks. The final step is for us to get our license, and if all goes to plan, we'll have that shortly. Be sure to follow us on <u>Twitter</u>, <u>Facebook</u>, and <u>LinkedIn</u> to stay in the know.

Until next time, Daniel @daschreiber



# **Distribution Trends**

# Distribution by Channel Type Continues to Evolve Around the World

### All P/C Lines Distribution Channels, Direct vs. Independent Agents, 1983-2014



Source: Insurance Information Institute; based on data from Conning and A.M. Best.



Source: Insurance Information Institute; based on data from Conning and A.M. Best.



#### **Insurance Information Institute Online:**

# www.iii.org

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