

The Shape of Things to Come for P/C Insurance Markets and the American Workplace

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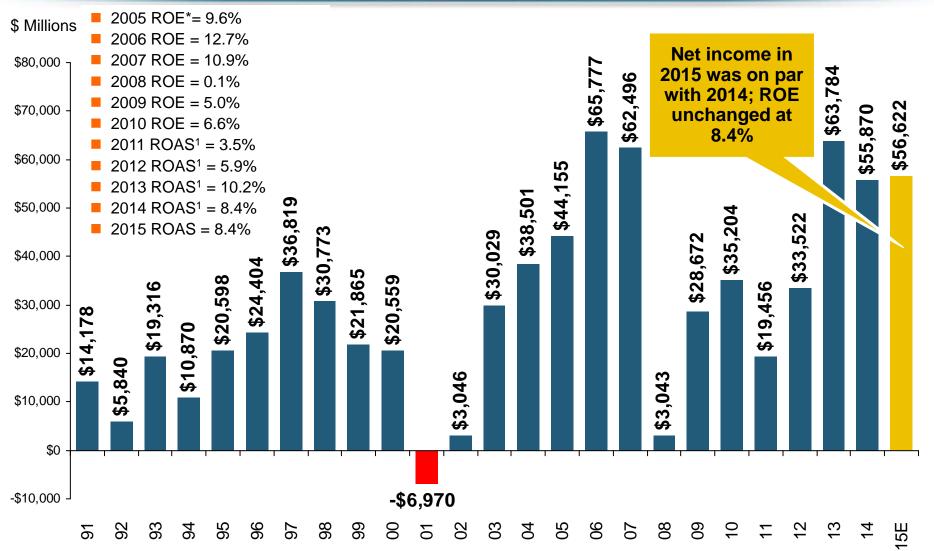


P/C Insurance Industry Financial Overview

2015: Second-Best Year in the Post-Crisis Era & Carbon Copy of 2014 Modest CATs, Reserve Releases Workers Comp Helped Too

P/C Industry Net Income After Taxes 1991–2015

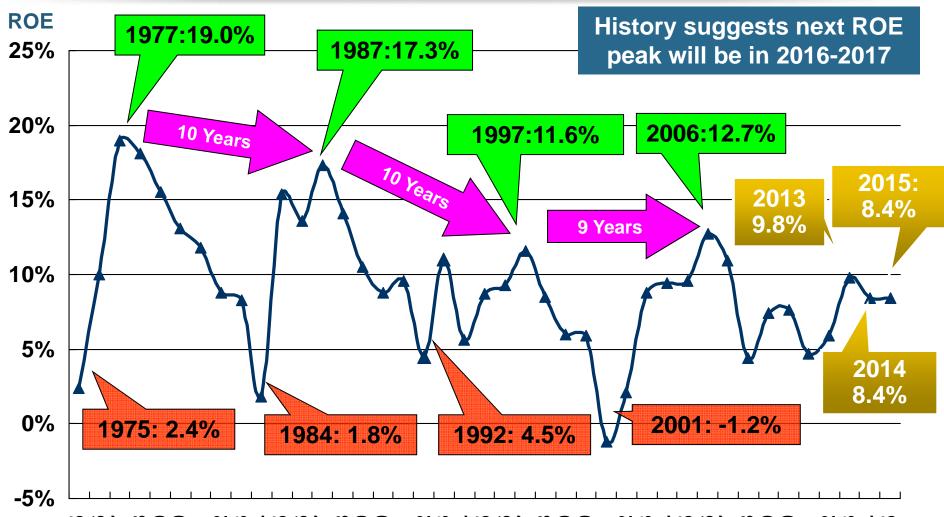




•ROE figures are GAAP; ¹Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 8.2% ROAS in 2014, 9.8% ROAS in 2013, 6.2% ROAS in 2012, 4.7% ROAS for 2011, 7.6% for 2010 and 7.4% for 2009; 2015E is annualized figure based actual figure through Q3 of \$44.0 Sources: A.M. Best, ISO; Insurance Information Institute

Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2015



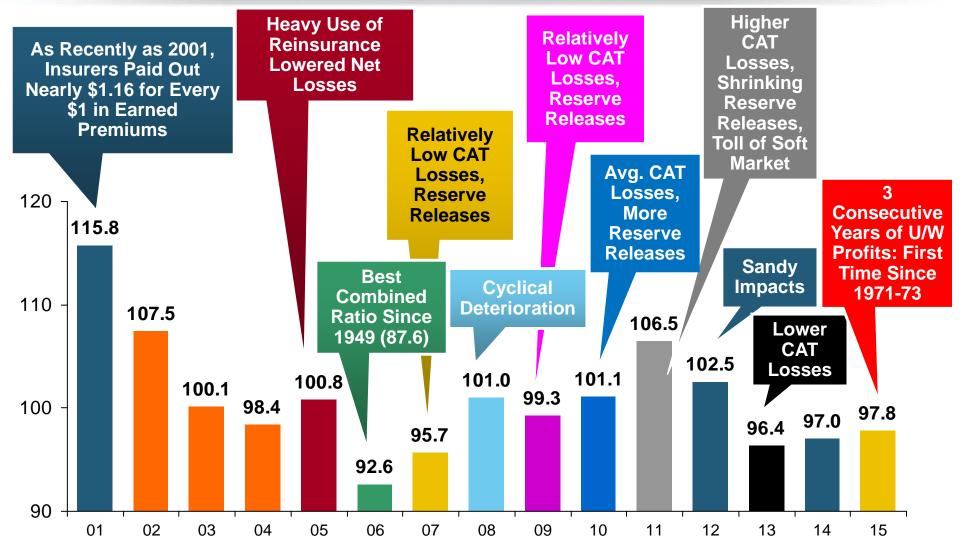


*Profitability = P/C insurer ROEs. 2011-15 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.

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

P/C Insurance Industry Combined Ratio, 2001–2015*





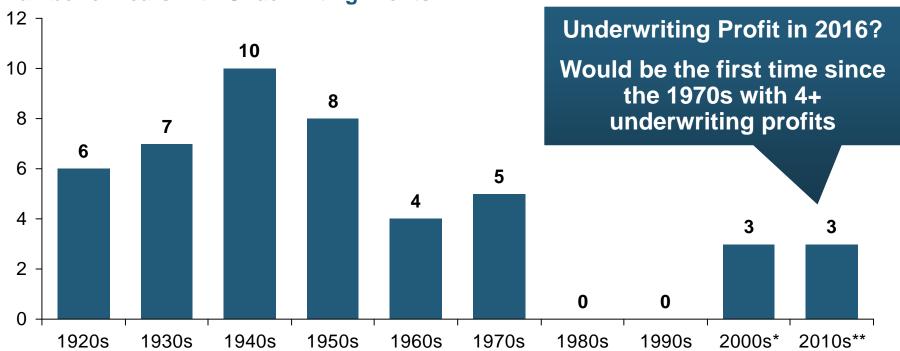
^{*} Excludes Mortgage & Financial Guaranty insurers 2008--2014. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014: = 97.0.

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.

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

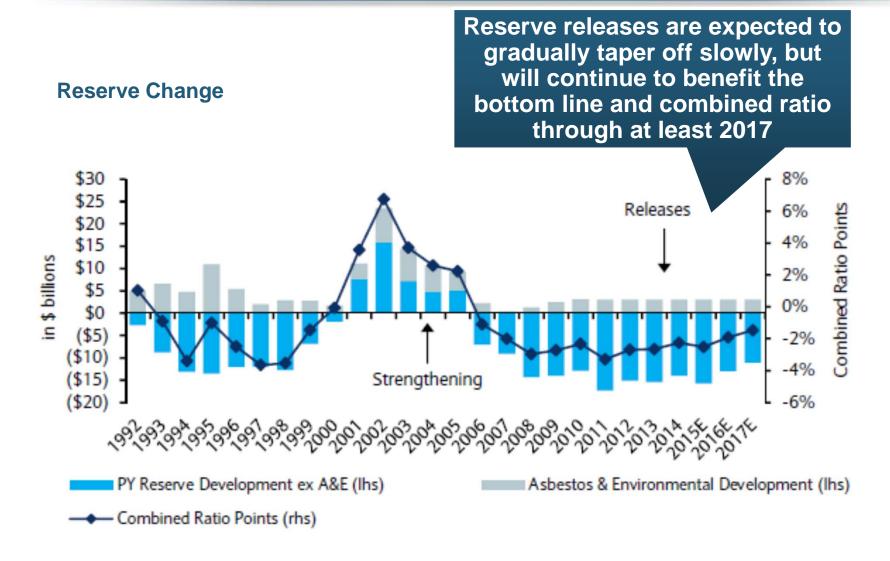
Sources: Insurance Information Institute research from A.M. Best Data.

^{* 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.

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

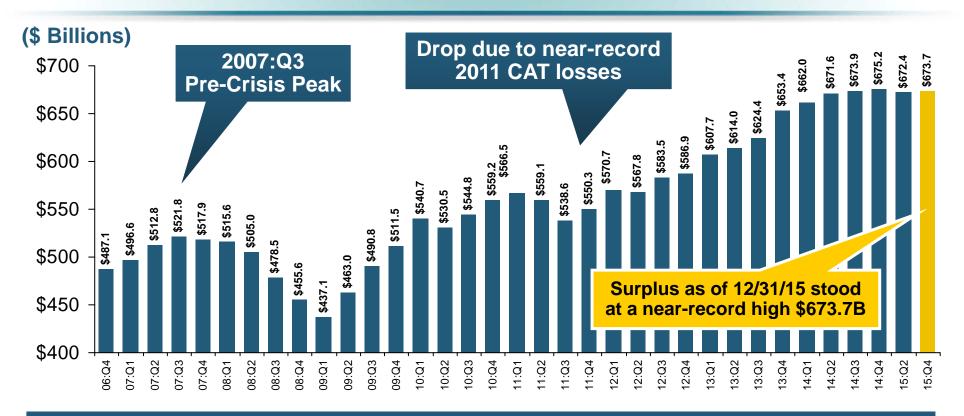




Source: A.M. Best; Barclays research for estimates.

Policyholder Surplus, 2006:Q4–2015:Q4





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

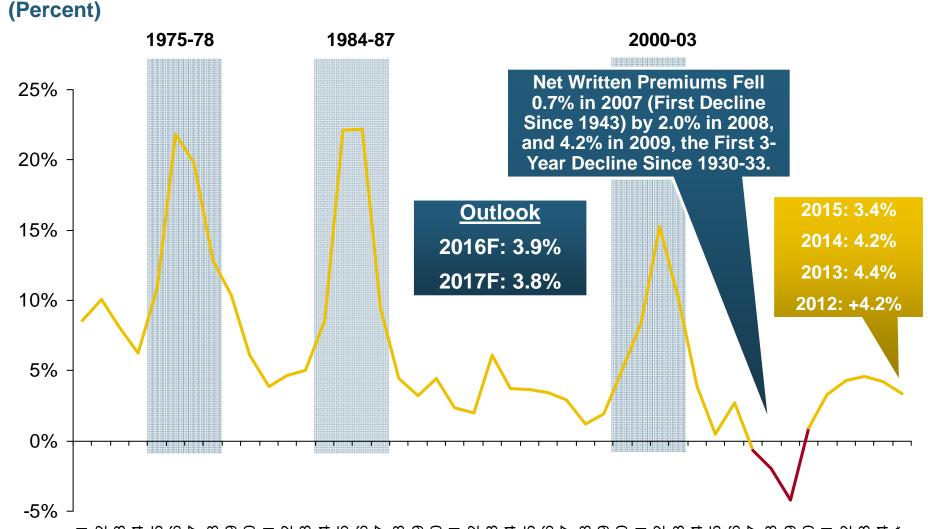
2010:Q1 data includes \$22.5B of paid-in capital from a holding company parent for one insurer's investment in a non-insurance business.

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

Sources: ISO, A.M .Best.

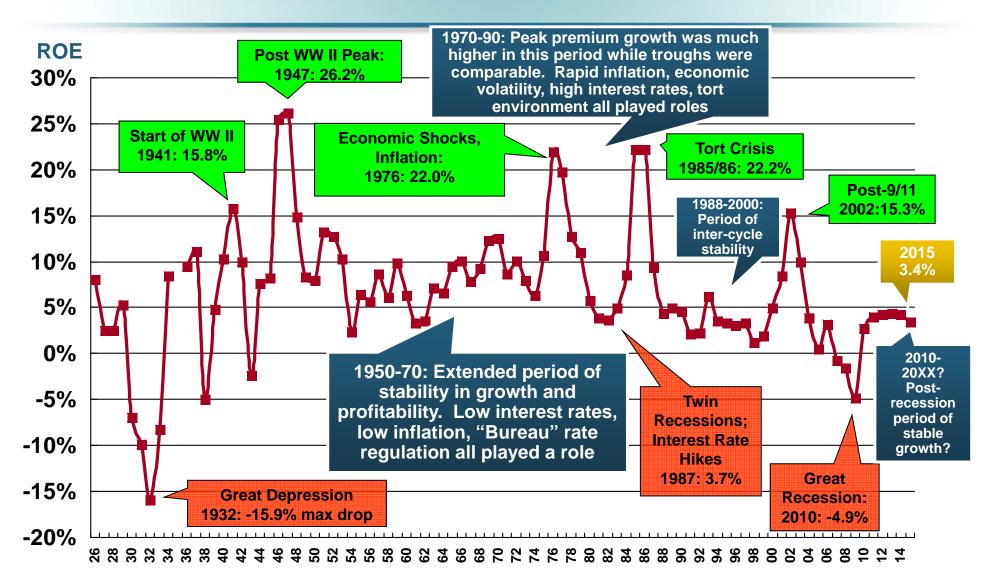
Net Premium Growth (All P/C Lines): Annual Change, 1971—2015





Shaded areas denote "hard market" periods Sources: A.M. Best (1971-2013), ISO (2014-15).

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

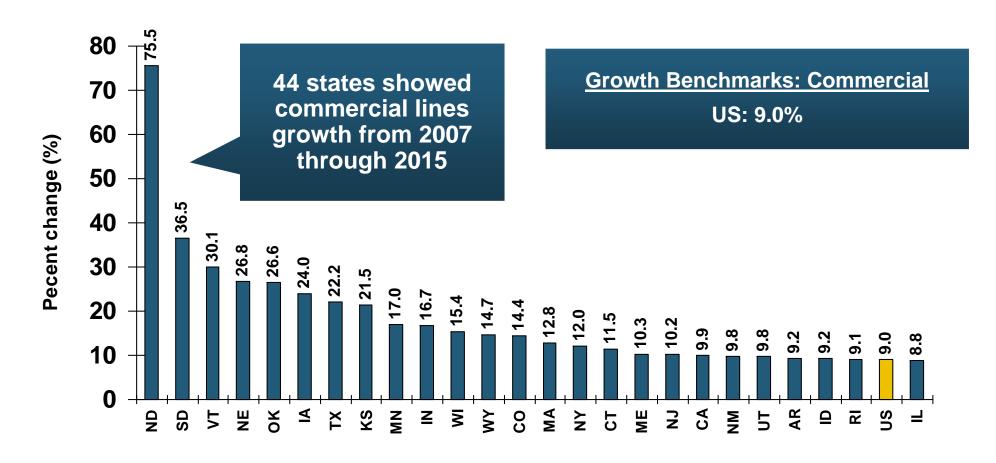


Note: Data through 1934 are based on stock companies only. Data include state funds beginning in 1998. Source: A.M. Best: Insurance Information Institute.

Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2015



Top 25 States

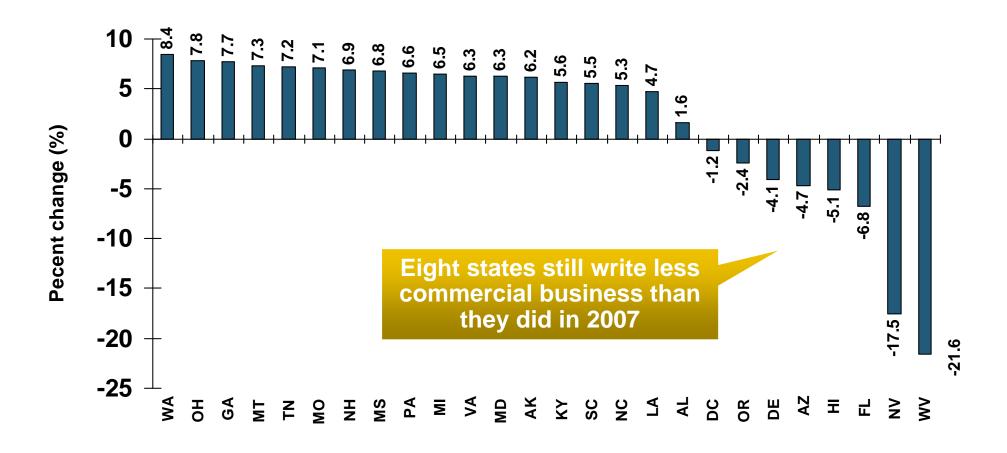


Sources: NAIC via SNL Financial; Insurance Information Institute.

Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2015



Bottom 25 States

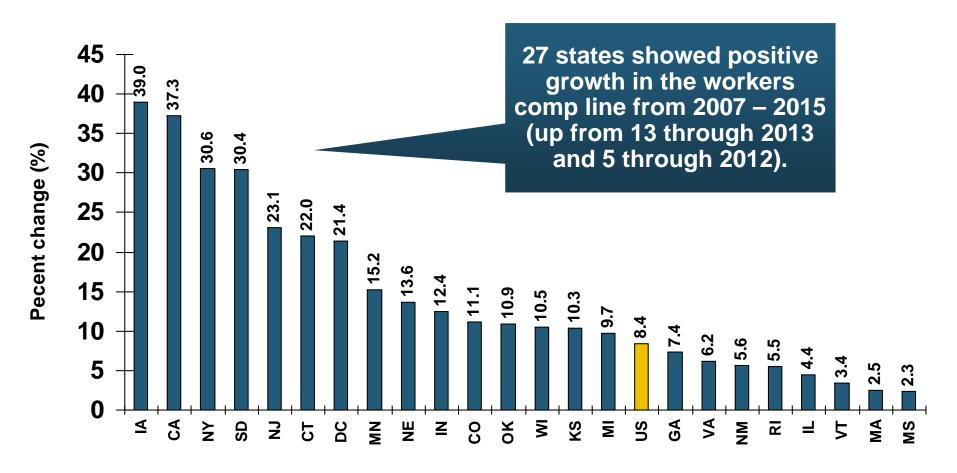


Sources: NAIC via SNL Financial; Insurance Information Institute.

Direct Premiums Written: Workers' Comp Percent Change by State, 2007-2015*



Top 25 States

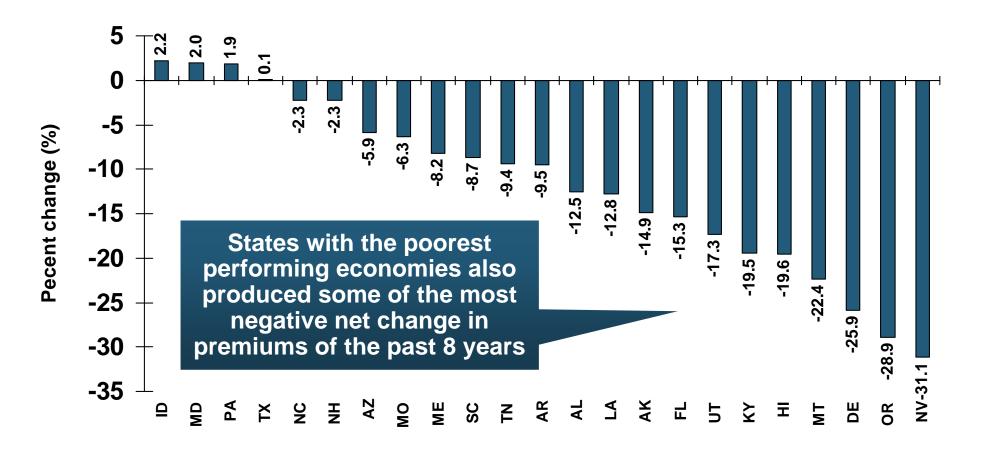


^{*}Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period. Sources: NAIC data, sourced from S&P Global Market Intelligence; Insurance Information Institute.

Direct Premiums Written: Worker's Comp Percent Change by State, 2007-2015*



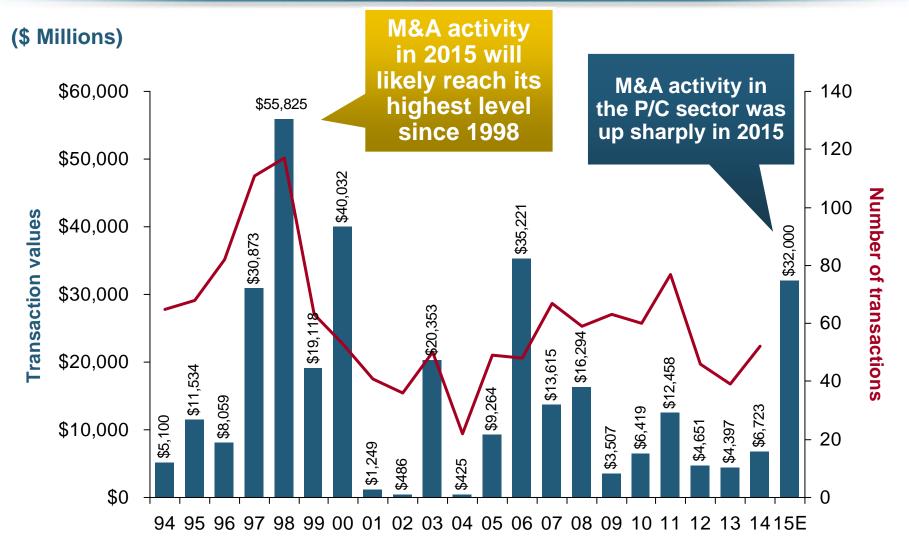
Bottom 25 States



^{*}Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period. Sources: NAIC data, sourced from S&P Global Market Intelligence; Insurance Information Institute.

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



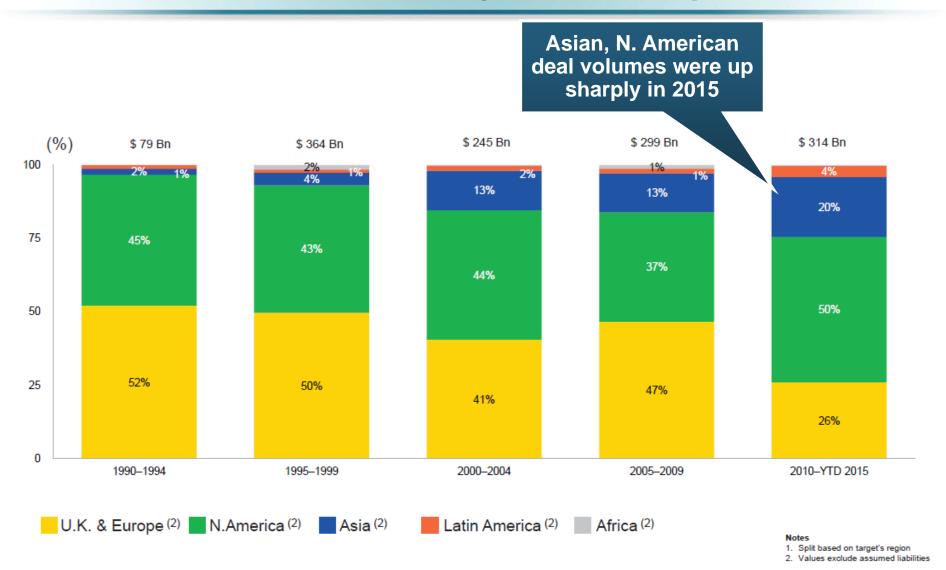


(1) Includes transactions where a U.S. company was the acquirer and/or the target.

Source: Conning proprietary database; 2015 I.I.I. estimate.

M&A Activity Is Shifting Toward North America and Asia and Away from Europe





Source: Thomson Reuters as of Oct. 2015 from Geneva Association Newsletter *Insurance and Finance*, Jan. 2016, presentation "Facts vs. Sentiment: Deals in the Insurance Sector," by Aviva CEO Mark Wilson.



INVESTMENTS: THE NEW REALITY

Investment Performance is a Key Driver of Profitability

Depressed Yields Will Necessarily Influence Underwriting & Pricing

Property/Casualty Insurance Industry Investment Income: 2000–2015¹



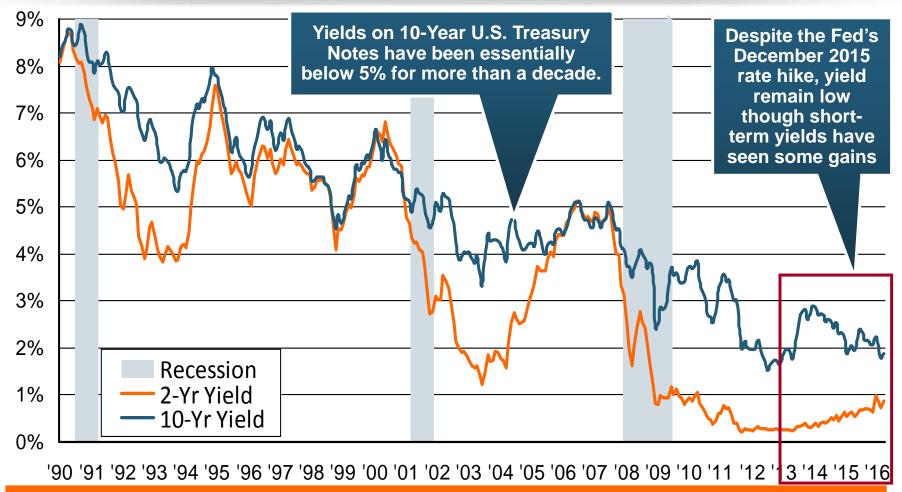


Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014 but showed a small (1.9%) increase in 2015—a trend that may continue.

¹ 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*



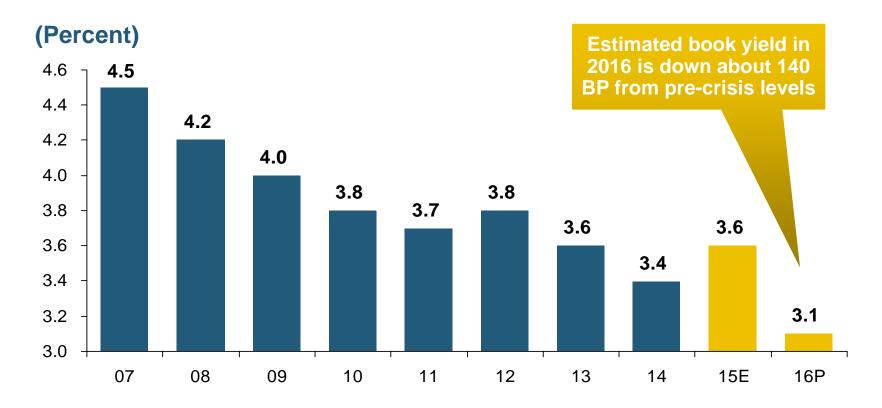


Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

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

^{*}Monthly, constant maturity, nominal rates, through March 2016.

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

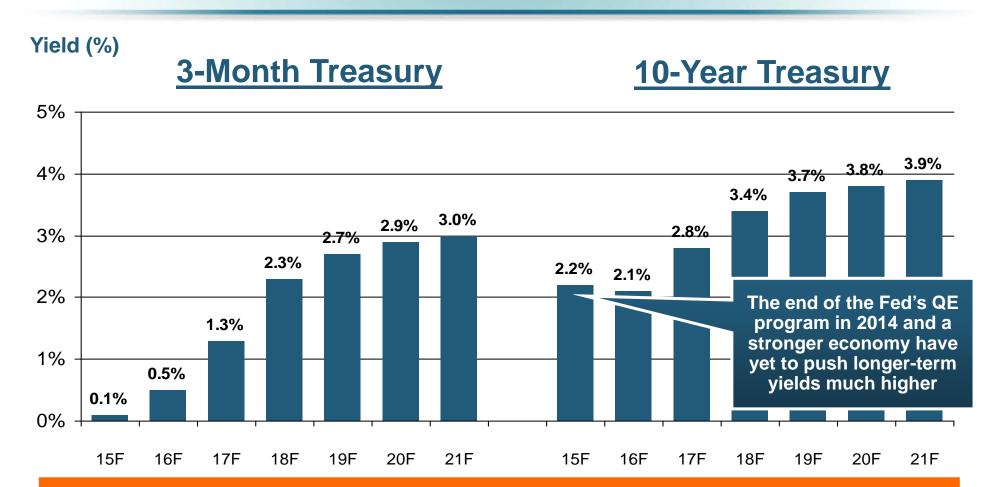


The yield on invested assets remains low relative to pre-crisis yields. The Fed's plan to raise interest rates in late 2015 has pushed up some yields, albeit quite modestly.

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

Interest Rate Forecasts: 2016 - 2021





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 (4/16 for 2016 and 2017; for 2018-2021 3/16 issue); Insurance Info. Institute.

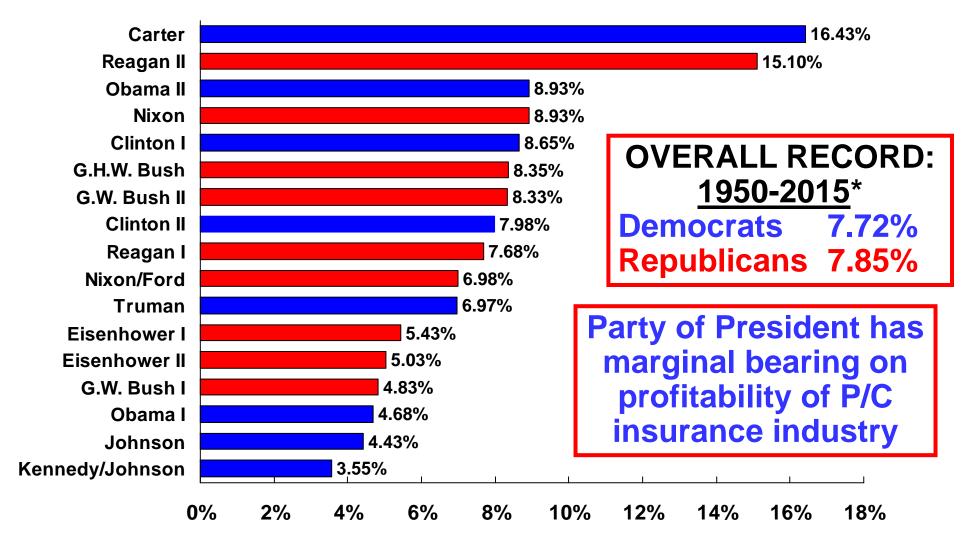


Profitability & Politics

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

P/C Insurance Industry ROE by Presidential Administration, 1950-2015*





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

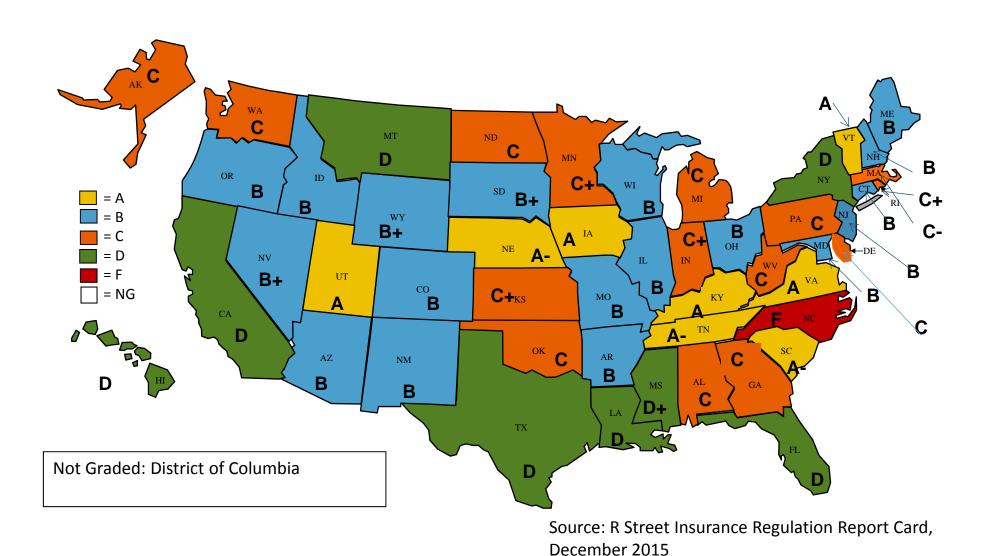
Trump vs. Clinton: Issues that Matter to P/C Insurers



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.	Keynesian Philosophy: 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

2015 Property and Casualty Insurance Regulatory Report Card







Labor Markets Trends: Recovery Continues in 2016

2015

Largest Job Gains in Many Years

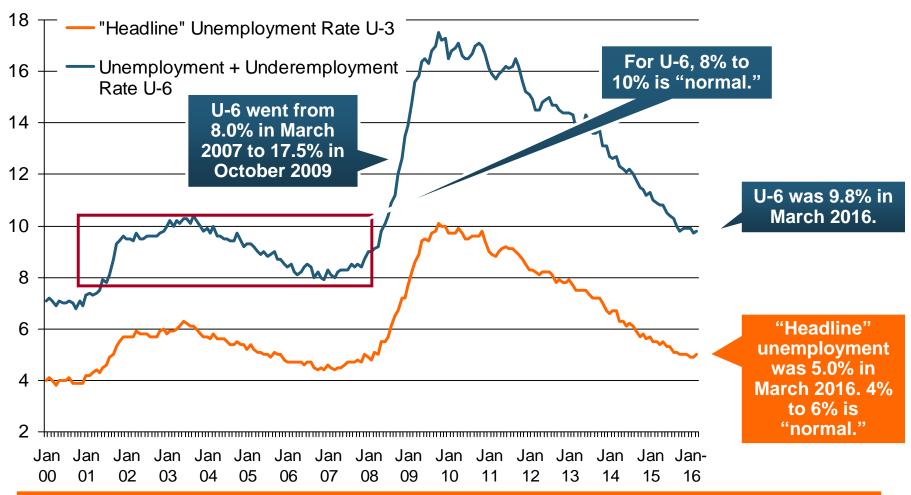
Unemployment Rate Fell to Lowest Level Since 2008

Payrolls Expanded to Record High

Unemployment and Underemployment Rates: Still Falling



January 2000 through March 2016, Seasonally Adjusted (%)

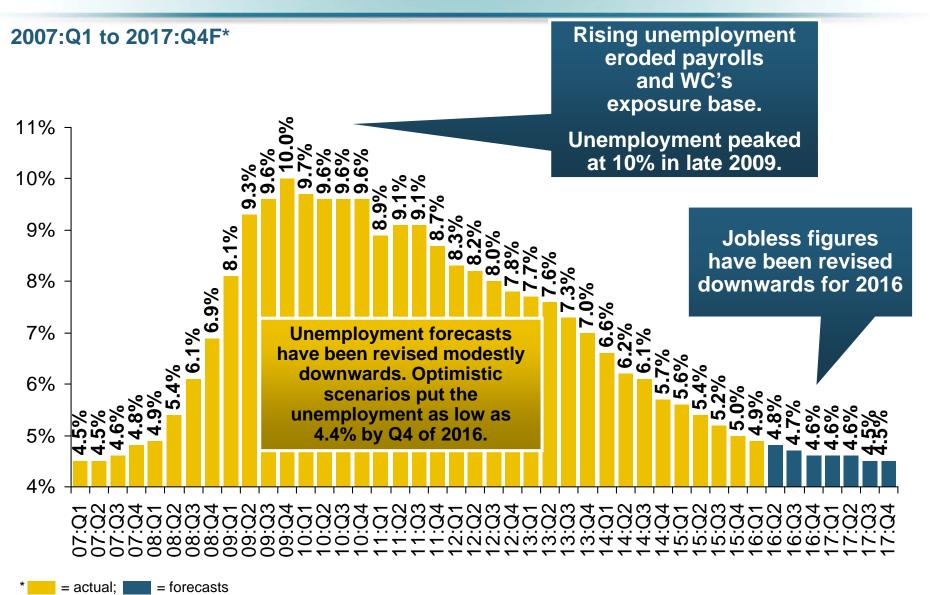


High unemployment and underemployment constrained overall economic growth for years, but the job market is clearly improving.

Source: US Bureau of Labor Statistics; Insurance Information Institute.

US Unemployment Rate Forecast

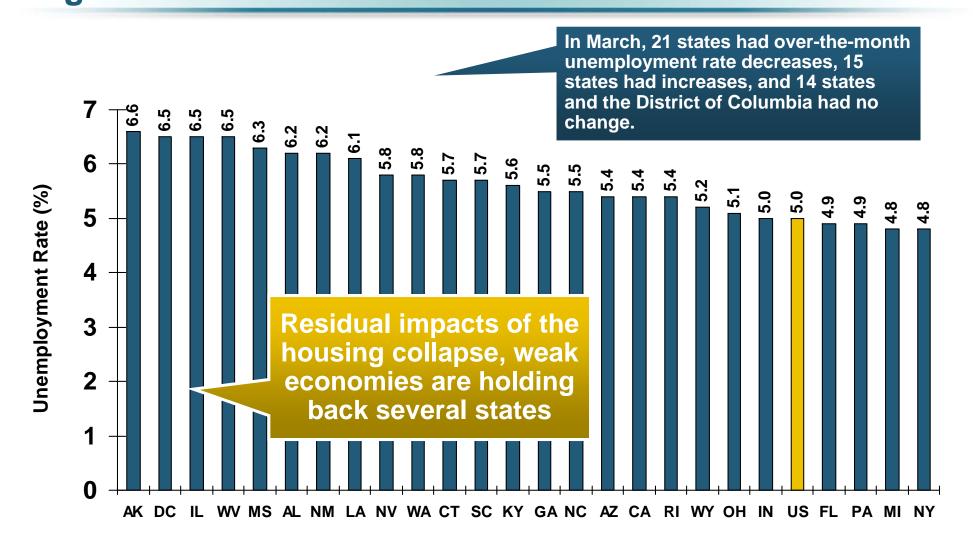




Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (4/16 edition); Insurance Information Institute.

Unemployment Rates by State, March 2016: Highest 25 States*



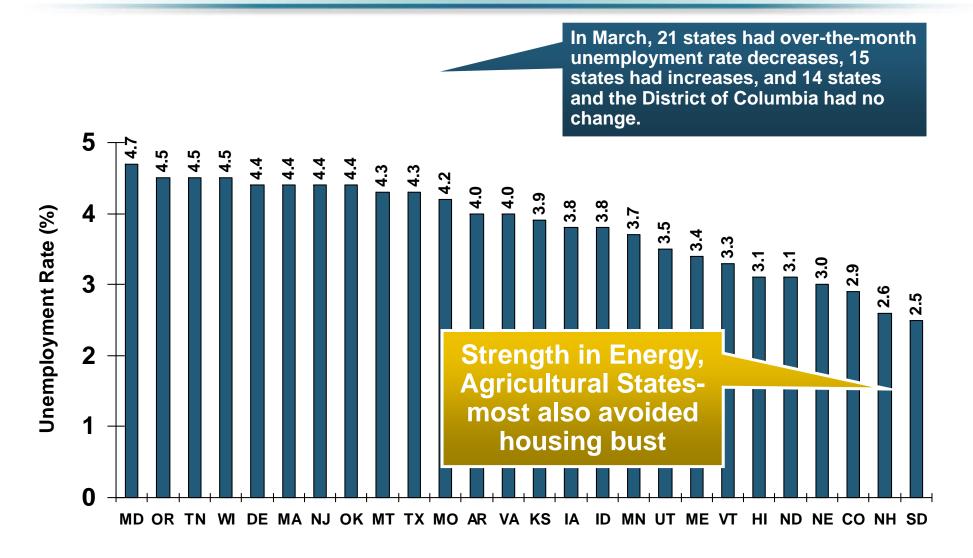


^{*}Provisional figures for March 2016, seasonally adjusted.

Sources: US Bureau of Labor Statistics; Insurance Information Institute.

Unemployment Rates by State, March 2016: Lowest 25 States*

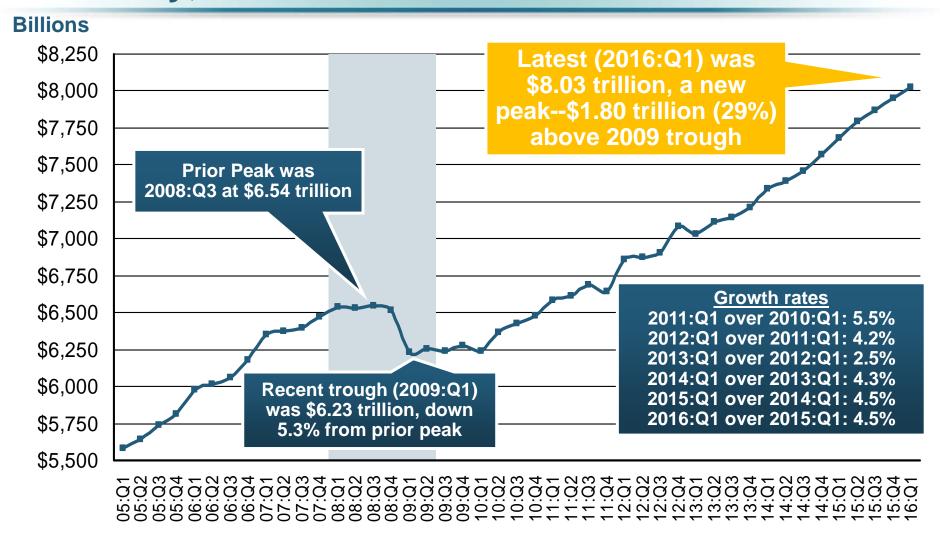




^{*}Provisional figures for March 2016, seasonally adjusted. Sources: US Bureau of Labor Statistics; Insurance Information Institute.

Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2016:Q1



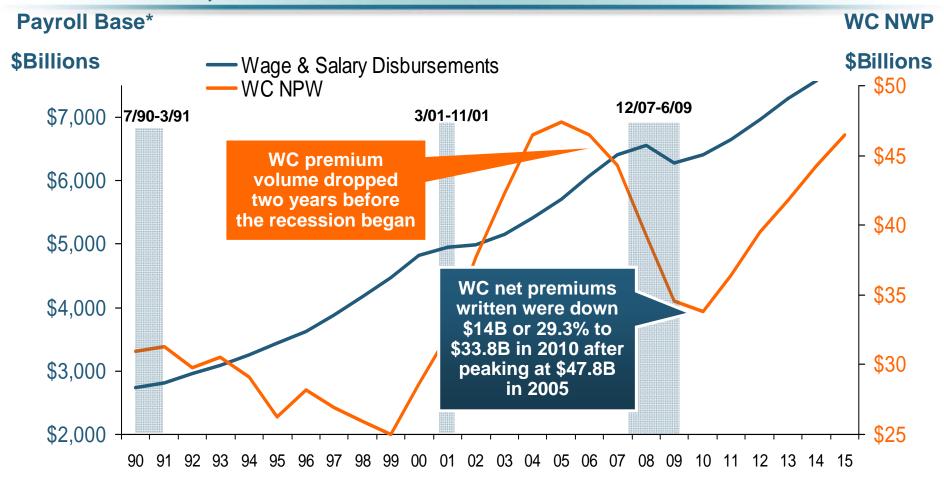


Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

Sources: http://research.stlouisfed.org/fred2/series/WASCUR; National Bureau of Economic Research (recession dates); Insurance Information Institute.

Payroll vs. Workers Comp Net Written Premiums, 1990-2015E





Continued payroll growth and rate gains suggest WC NWP will grow again in 2016.

^{*}Private employment; Shaded areas indicate recessions. WC premiums are from NCCI through 2014; I.I.I. estimate for 2015. Sources: NBER (recessions); Federal Reserve Bank of St. Louis at http://research.stlouisfed.org/fred2/series/WASCUR (annualized as of Q4 2015); NCCI; I.I.I.



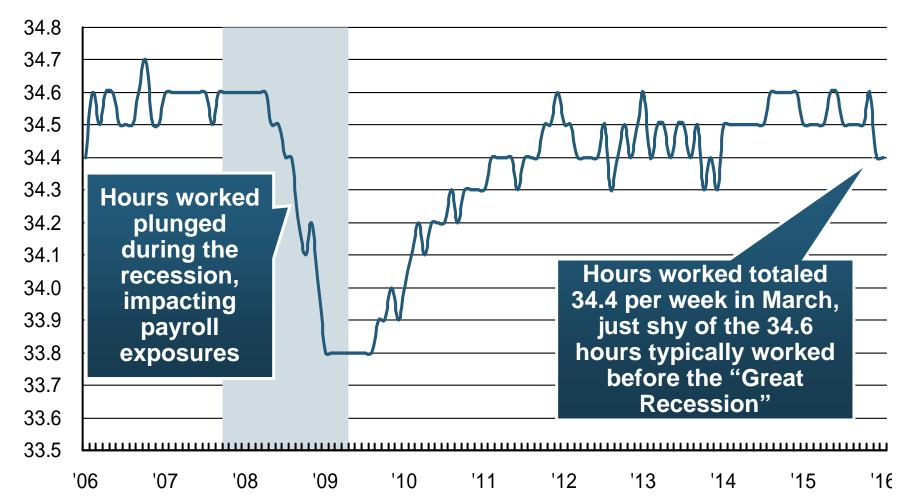
POSITIVE LABOR MARKET DEVELOPMENTS

Key Factors Driving Workers Compensation Exposure

Average Weekly Hours of All Private Workers, March 2006—March 2016







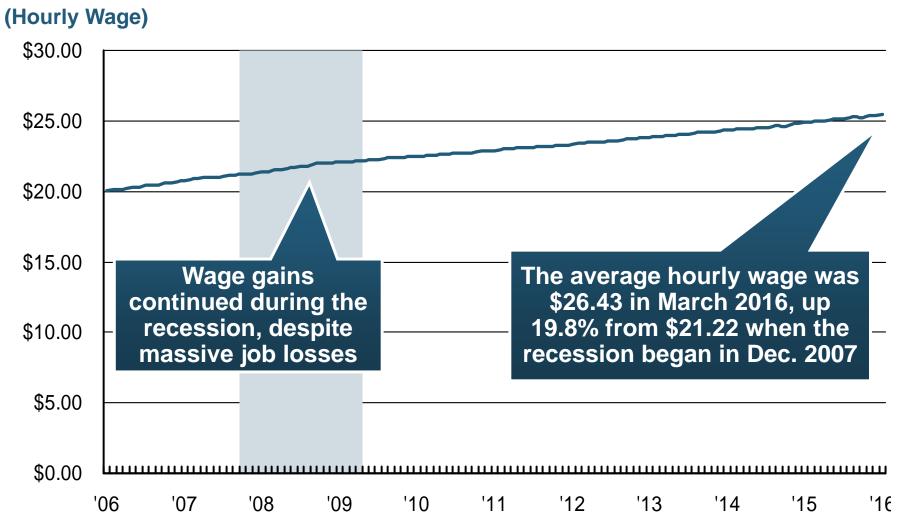
^{*}Seasonally adjusted

Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics at http://www.bls.gov/data/#employment; National Bureau of Economic Research (recession dates): Insurance Information Institute.

Average Hourly Wage of All Private Workers, March 2006—March 2016





^{*}Seasonally adjusted

Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics at http://www.bls.gov/data/#employment; National Bureau of Economic Research (recession dates): Insurance Information Institute.



ADVERSE LONG-TERM LABOR MARKET DEVELOPMENTS

Key Factors Harming Workers Compensation Exposure and the Overall Economy

Labor Force Participation Rate, Jan. 2002—March 2016*



Labor Force Participation as a % of Population



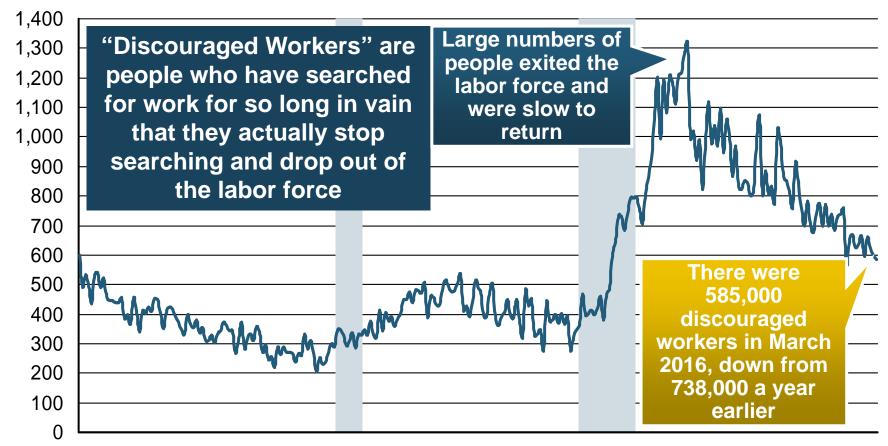
^{*}Defined as the percentage of working age persons in the population who are employed or actively seeking work. Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics at http://www.bls.gov/data/; National Bureau of Economic Research (recession dates); Insurance Information Institute.

Number of "Discouraged Workers," Jan. 2002—March 2016







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

In recent good times, the number of discouraged workers ranged from 200,000-400,000 (1995-2000) or from 300,000-500,000 (2002-2007).

Notes: Recessions indicated by gray shaded columns. Data are seasonally adjusted.

Sources: Bureau of Labor Statistics http://www.bls.gov/news.release/empsit.a.htm; NBER (recession dates); Ins. Info. Inst.

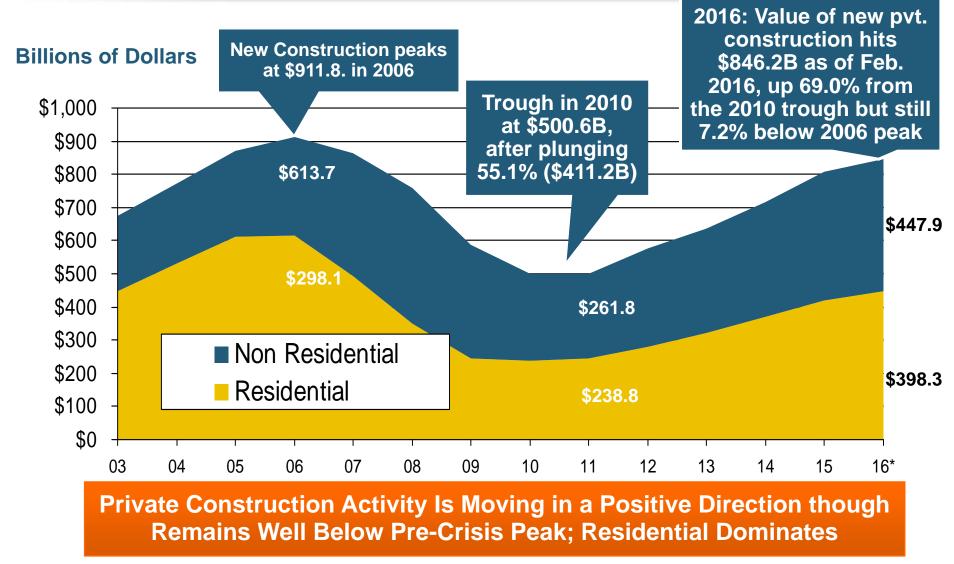


CONSTRUCTION INDUSTRY OVERVIEW & OUTLOOK

The Construction Sector Is Critical to the Economy and the P/C Insurance Industry

Value of New Private Construction: Residential & Nonresidential, 2003-2016*



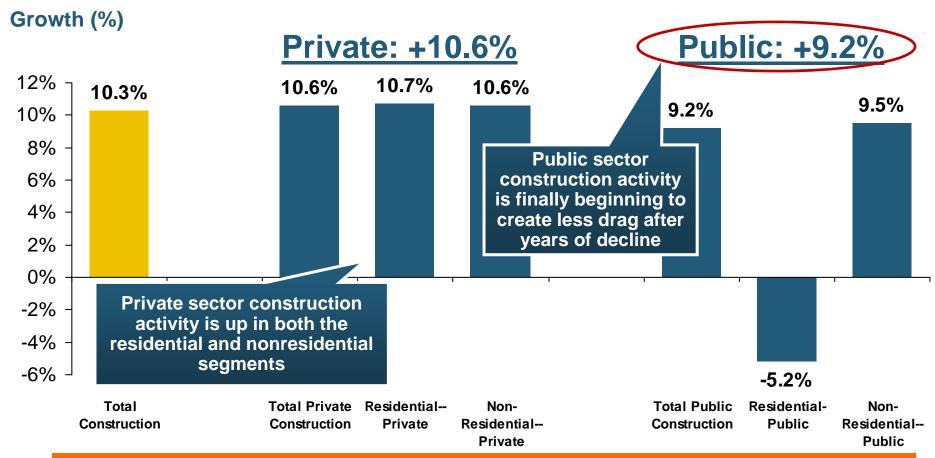


*2016 figure is a seasonally adjusted annual rate as of February.

Sources: US Department of Commerce http://www.census.gov/construction/c30/c30index.html; Insurance Information Institute.

Value of Construction Put in Place, 2016 vs. 2015*



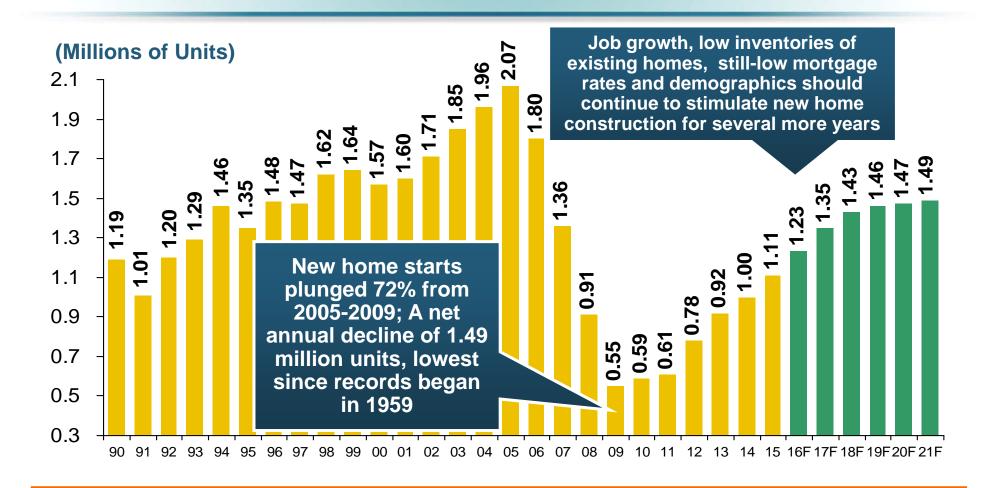


Overall construction activity is up again after languishing in early 2015; state/local government sector may be recovering as budget woes ease in some jurisdictions.

^{*}seasonally adjusted data through February 2016. Source: U.S. Census Bureau, http://www.census.gov/construction/c30/c30index.html; Insurance Information Institute.

New Private Housing Starts, 1990-2021F



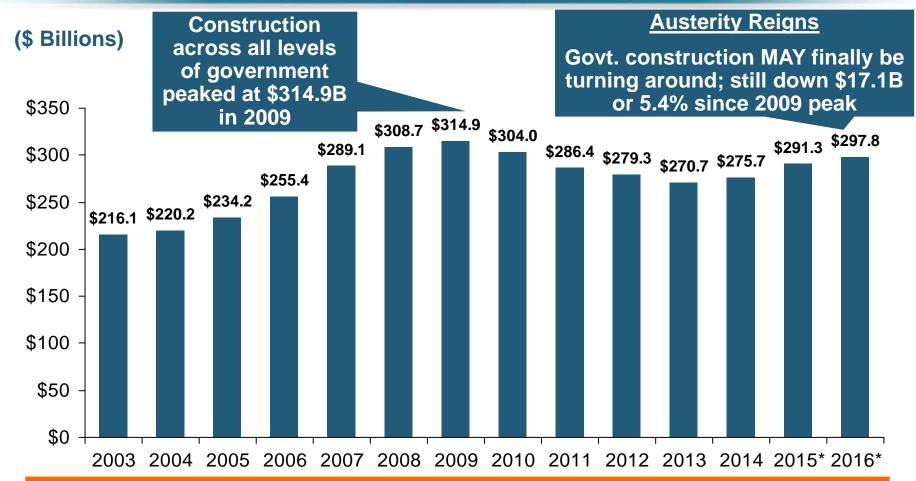


Insurers are continuing to see meaningful exposure growth in the wake of the "Great Recession"; Construction is a potent driver of workers comp exposure.

Source: U.S. Department of Commerce; Blue Chip Economic Indicators (4/16 for 2016-17; 3/16 for 2018-21F; Insurance Information Institute.

Value of New Federal, State and Local Government Construction: 2003-2016*



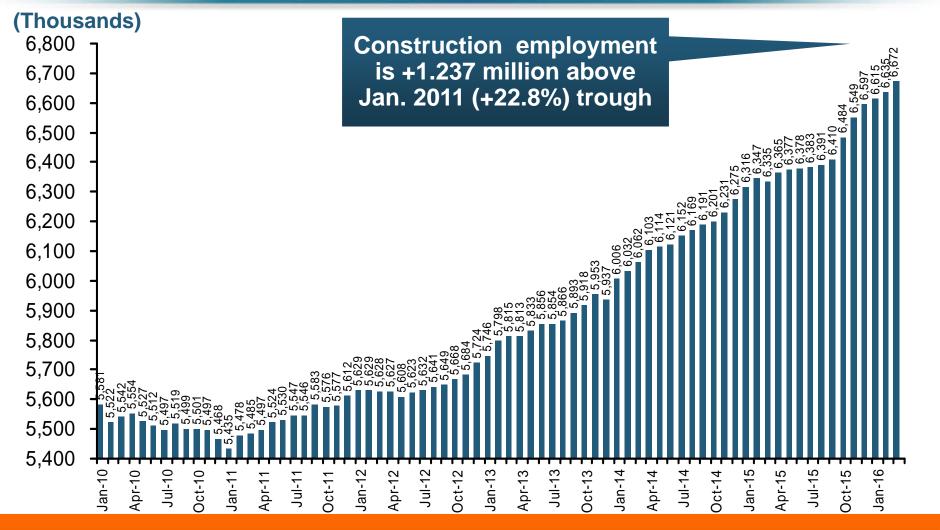


Government construction spending peaked in 2009, helped by stimulus spending, but contracted as state/local governments grappled with deficits and federal sequestration--only now recovering.

*2016 figure is a seasonally adjusted annual rate as of February; http://www.census.gov/construction/c30/historical_data.html Sources: US Department of Commerce; Insurance Information Institute.

Construction Employment, Jan. 2010—March 2016*



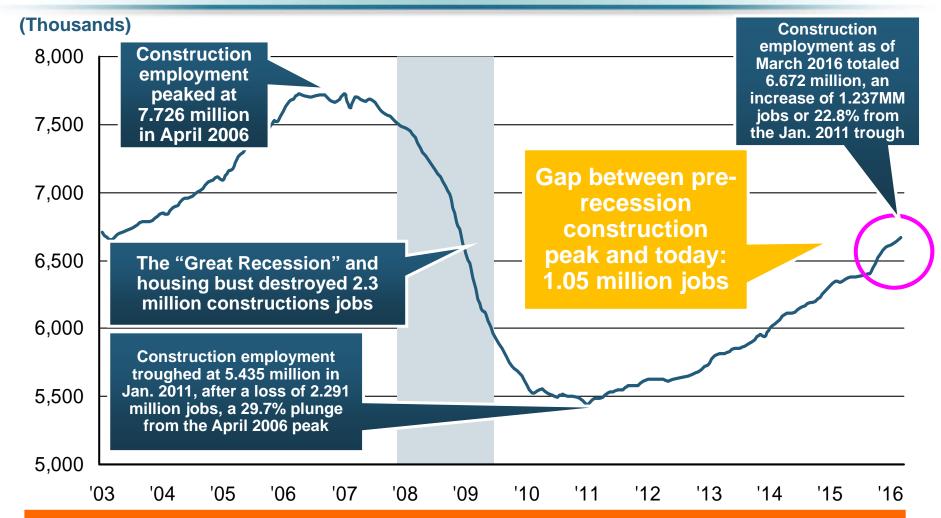


Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.

^{*}Seasonally adjusted.

Construction Employment, Jan. 2003–March 2016





The construction sector was a growth leader in 2014-16 as the housing market, private investment, and govt. spending recover. WC insurers continue to benefit.

Note: Recession indicated by gray shaded column.

Sources: U.S. Bureau of Labor Statistics; Insurance Information Institute.

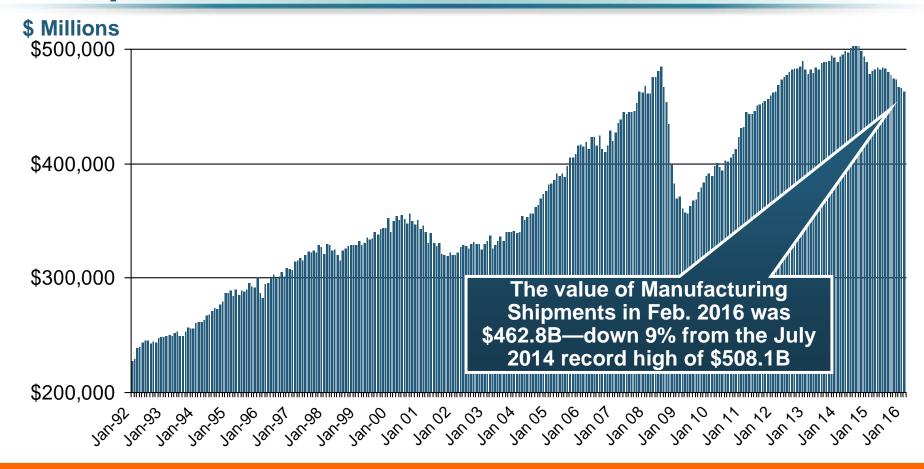


MANUFACTURING & ENERGY SECTOR OVERVIEW & OUTLOOK

The U.S. Manufacturing and Energy Sectors Are Being Buffeted by a High Dollar, Weak Export Markets and Plunging Oil Prices

Dollar Value* of Manufacturers' Shipments Monthly, Jan. 1992—Feb. 2016





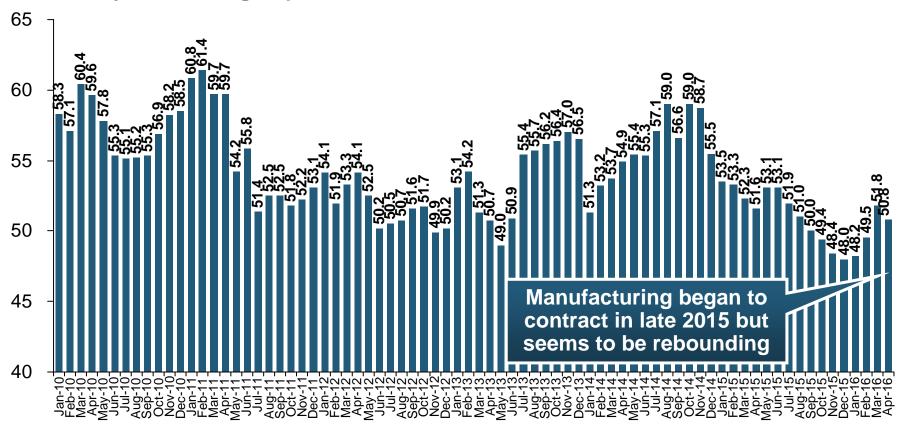
Weakness abroad, falling energy prices and a strong dollar are hurting the manufacturing sector, especially exports. Manufacturing growth leads to gains in many commercial exposures: WC, commercial auto, marine, property, and various liability coverages.

^{*} Seasonally adjusted; Data published Apr. 4, 2016. Source: U.S. Census Bureau, Full Report on Manufacturers' Shipments, Inventories, and Orders, http://www.census.gov/manufacturing/m3/

ISM Manufacturing Index (Values > 50 Indicate Expansion)



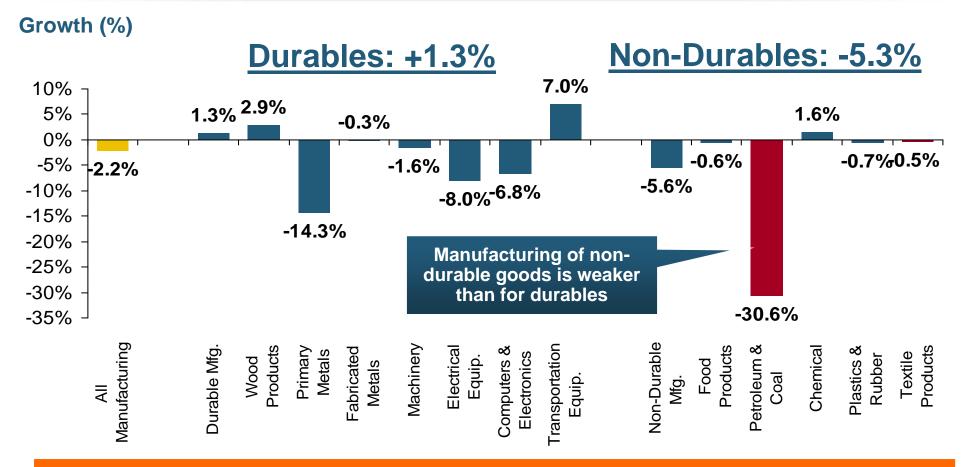
January 2010 through April 2016



The manufacturing sector expanded for 70 of the 76 months from Jan. 2010 through Apr. 2016. Manufacturing sector has weakened recently due to weakness abroad, strong dollar and collapse in oil prices.

Manufacturing Growth for Selected Sectors, 2016 vs. 2015*



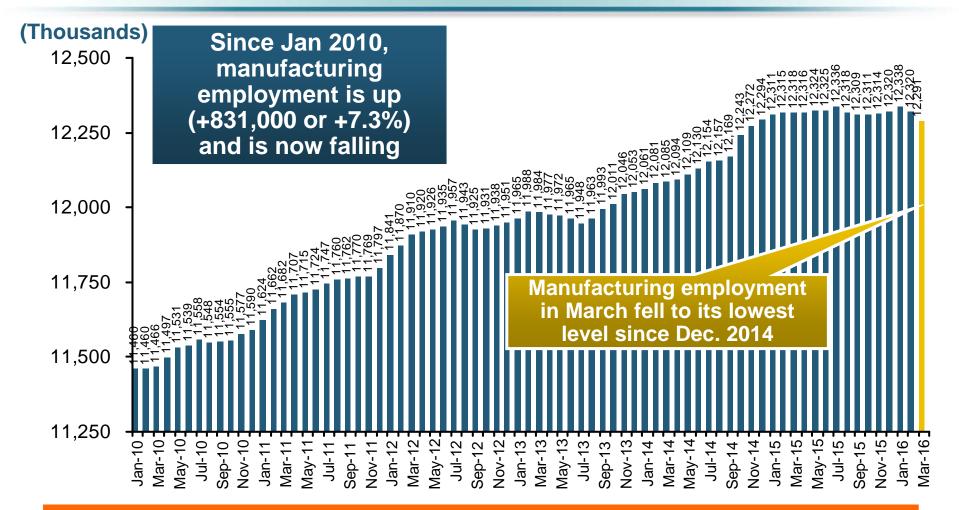


Manufacturing is contracting across a number of sectors, especially petroleum and coal. Adverse exposure impacts are likely for: WC, commercial property, commercial auto and certain liability coverages.

^{*}Seasonally adjusted; Date are YTD comparing data through February 2016 to the same period in 2015. Source: U.S. Census Bureau, *Full Report on Manufacturers' Shipments, Inventories, and Orders,* http://www.census.gov/manufacturing/m3/

Manufacturing Employment, Jan. 2010—March 2016*





Manufacturing employment has been a surprising source of strength in the economy. Global economic weakness, falling oil prices have hurt.

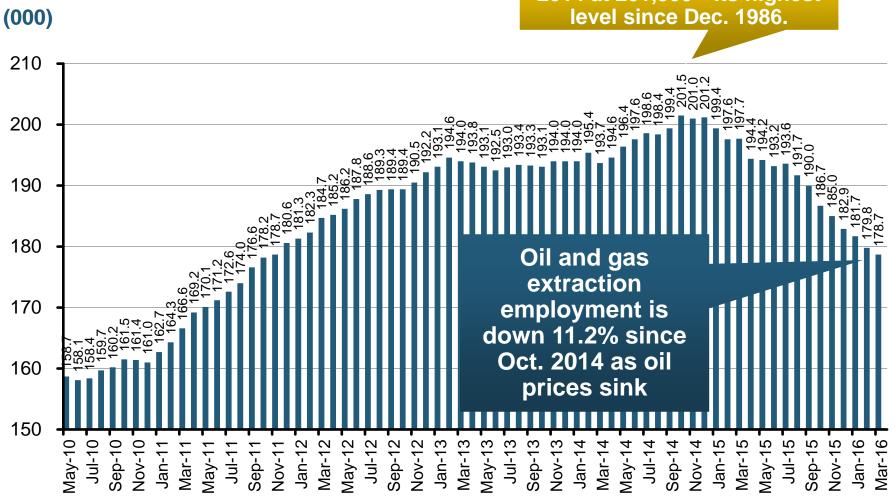
Sources: US Bureau of Labor Statistics at http://data.bls.gov; Insurance Information Institute.

^{*}Seasonally adjusted.

Employment in Oil & Gas Extraction, Jan. 2010—March 2016*



Employment peaked in Oct. 2014 at 201,500—its highest level since Dec. 1986.



^{*}Seasonally adjusted



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





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

Regulatory Issues Abound as Well, With Implications for Insurance Coverages



CALIFORNIA REPUBLIC



In California, Uber Driver Is Employee, Not Contractor

A driver for Uber is an **employee**, **not a contractor**, according to a California
Ruling that eventually could push up costs
'for the smartphone-based ride hailing service
and hurt the closely watched start-up's valuation.

The California Labor Commissioner's decision could ripple through the burgeoning industry of providing services via smartphones, with potential implications for other "crowdsourced" services such as Uber rival Lyft, chore service Task Rabbit, and cleaning service Home joy.

--Reuters, June 18, 2015

Percent of Americans Who Have Engaged in the "Gig/Sharing Economy" by Transaction



Americans involved



MOST OFFERERS ARE ALSO USERS. TOTAL PARTICIPATION IS 44%

About 22% of Americans have offered services in the sharing economy.

Drivers have significant WC exposures



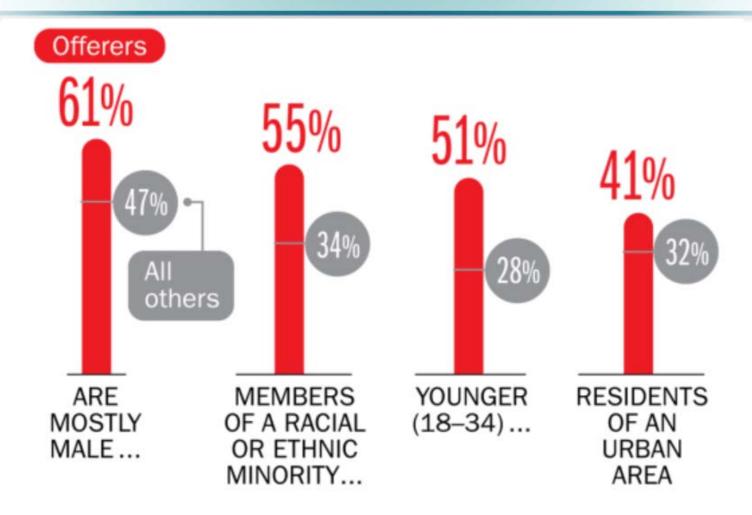




Service platforms have the most direct link to WC; 11% of Americans have offered their services

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

Americans Who Offer Services in the Sharing/Gig Economy Are Statistically More Prone to Workplace Injury INSURANCE INSURANCE

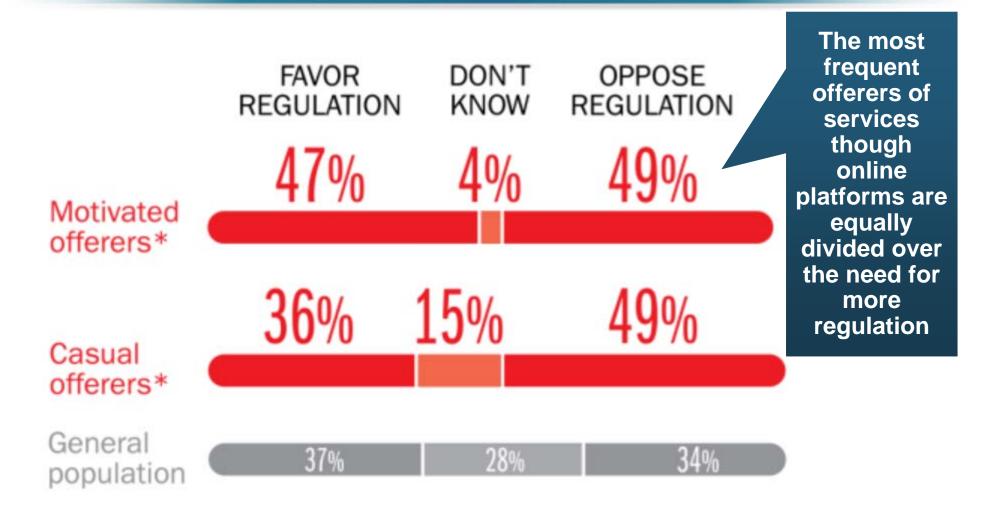


Young, urban minority males are the most likely to offer their services in the sharing economy.

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

Opinions Are Split on Whether the Sharing Economy Needs More Regulation





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

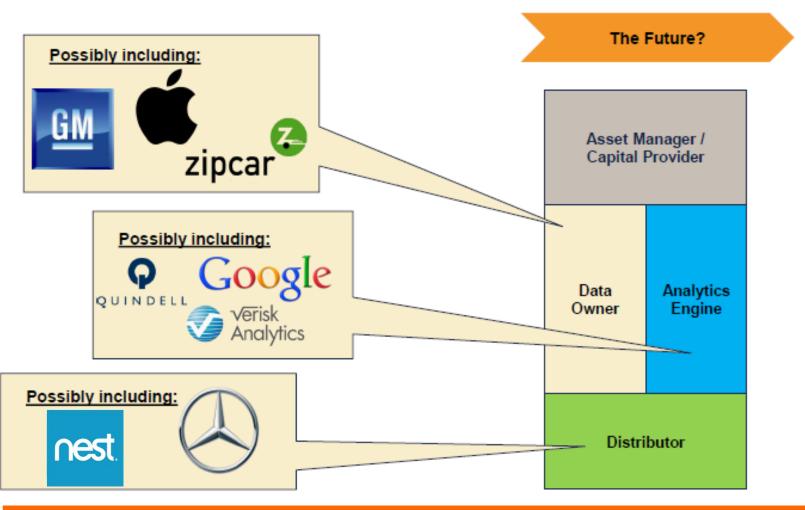


THE 'INTERNET OF THINGS'

Capturing Economic Value Amid a Shifting Insurer Value Chain

The Internet of Things and the Insurance Industry Value Chain



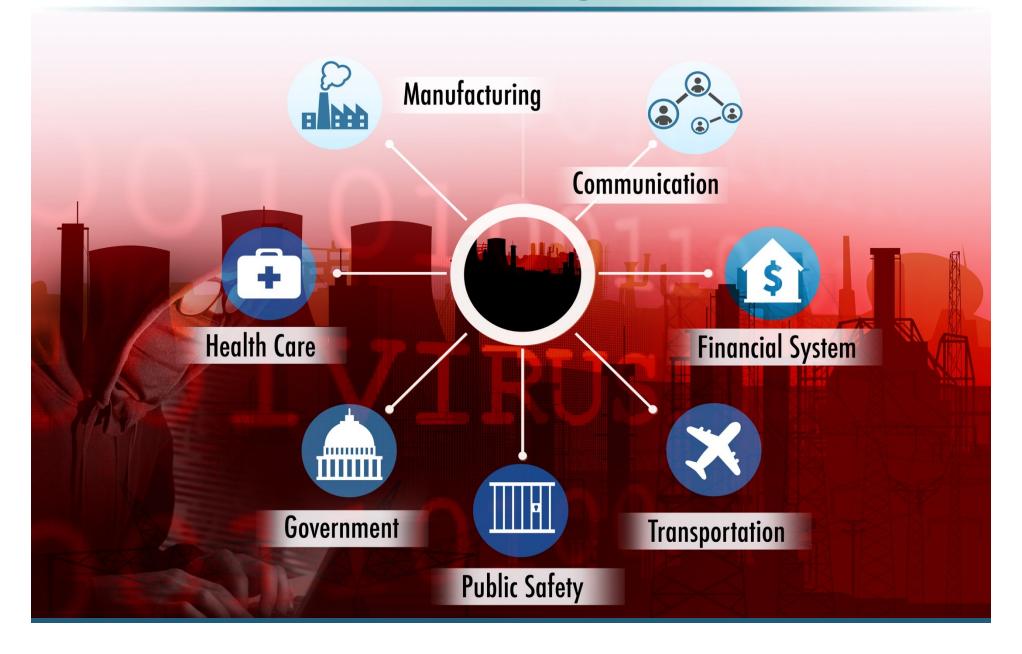


Who owns the data? Where does It flow? Who does the analytics? Who is the capital provider?

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

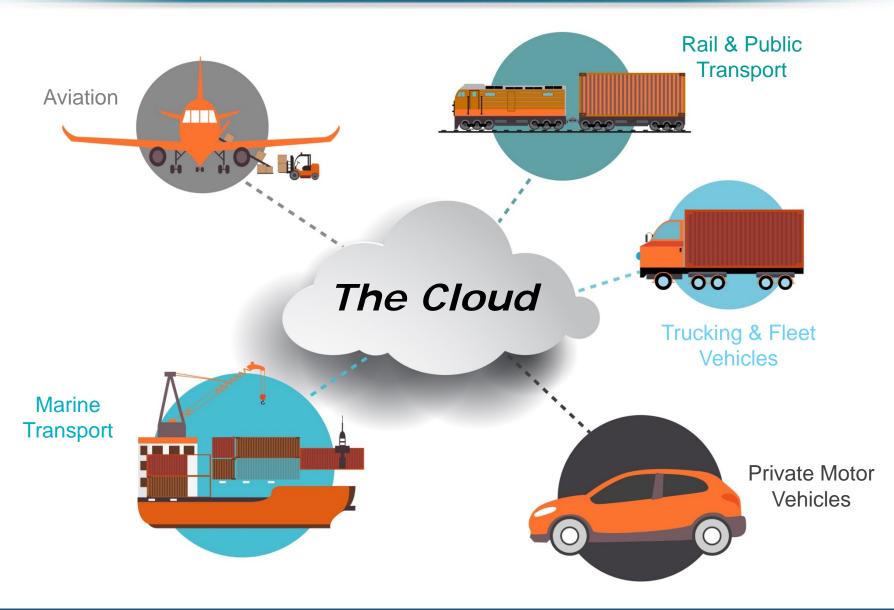
The 'Internet of Things' and 'The Insurance-Net of Things'





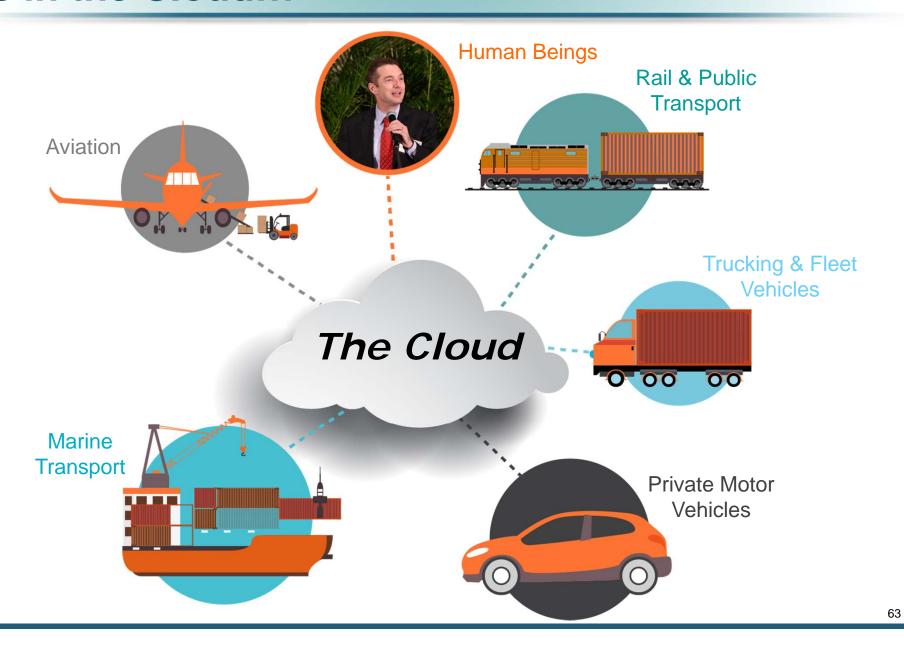
The Insurance Industry's Future Is in the Cloud...





The Insurance Industry's Future Is in the Cloud...





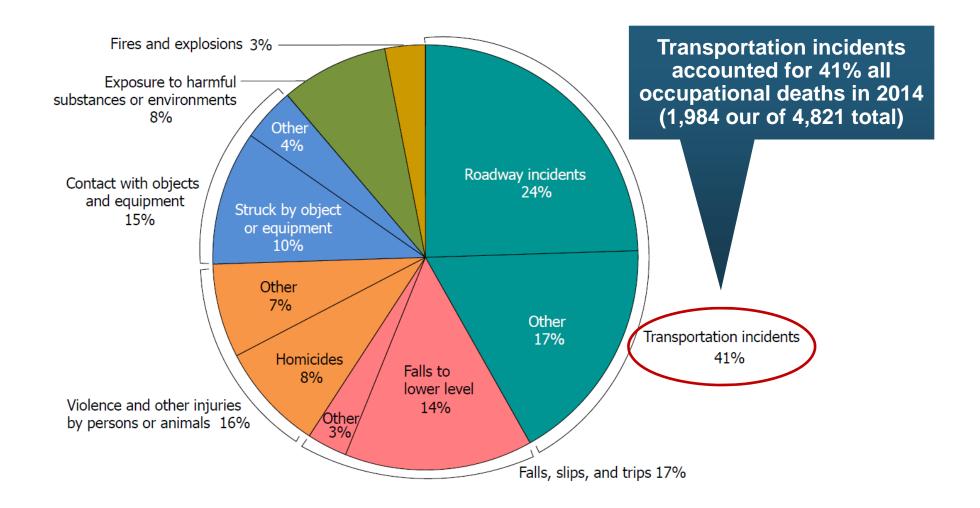


OCCUPATIONAL DEATHS IN TRANSPORTATION: IS TECHNOLOGY THE SOLUTION?

Technology Promises Safer Vehicles, Highways But How Much of this Is Silicon Valley Hype?

Fatal Occupational Injuries by Event: Transportation Accidents Lead by Far

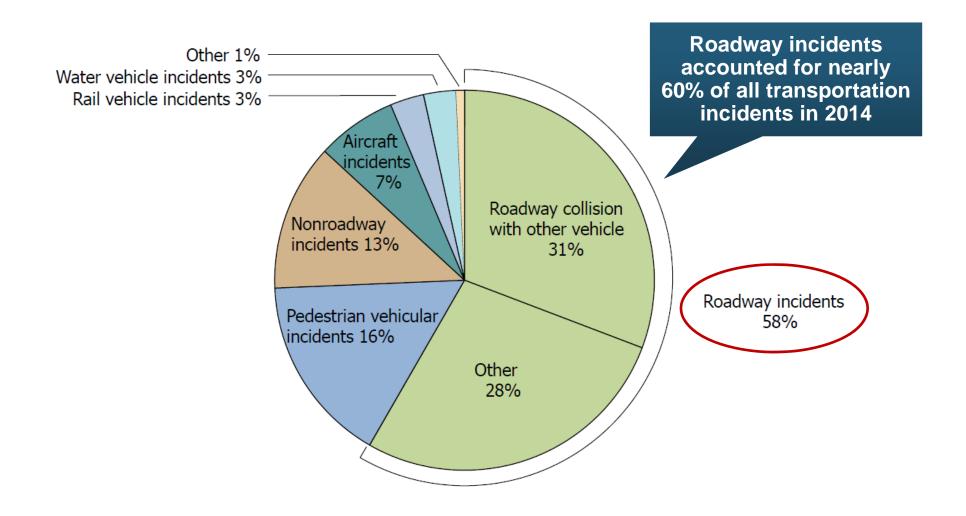




Source: US Bureau of Labor Statistics http://www.bls.gov/iif/oshwc/cfoi/cfch0013.pdf; Insurance Information Institute.

Fatal Occupational Injuries Due to Transportation Incidents

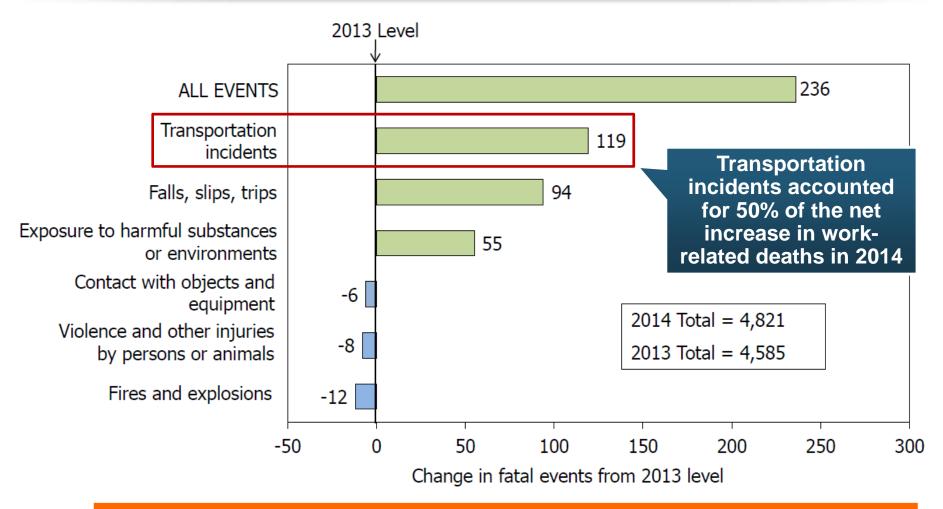




Source: US Bureau of Labor Statistics http://www.bls.gov/iif/oshwc/cfoi/cfch0013.pdf; Insurance Information Institute.

Transportation Incidents Accounted for the Majority of Occupation Deaths in 2014



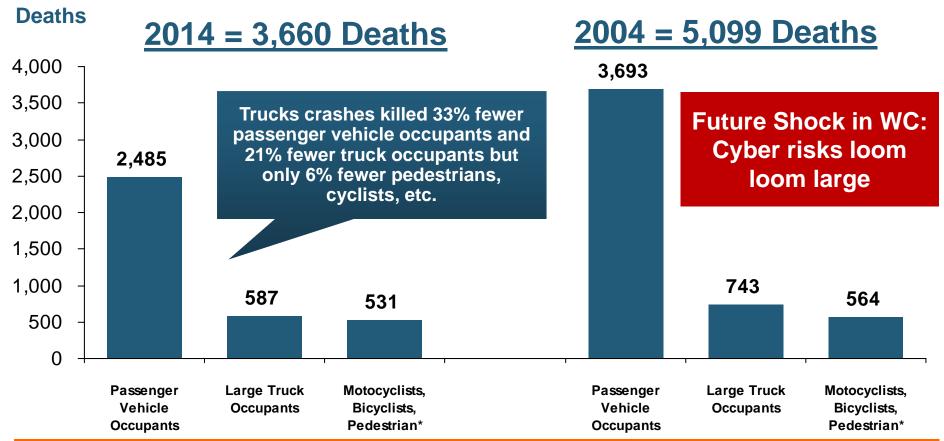


New technologies make reducing occupation deaths and injuries from transportation incidents relatively "low-hanging fruit."

Source: US Bureau of Labor Statistics http://www.bls.gov/iif/oshwc/cfoi/cfch0013.pdf; Insurance Information Institute.

Deaths Involving Crashes with Large Trucks: Room for Improvement





Despite improvements (-28% from 2004-2014), truck crashes kill thousands of people every year. New technology could radically reduce occupational and non-occupational injuries and deaths from truck crashes.

Source: Source: IIHS analysis of data from the U.S. Department of Transportation's Fatality Analysis Reporting System (FARS) at http://www.iihs.org/iihs/topics/t/large-trucks/fatalityfacts/large-trucks; Insurance Information Institute.

^{*}includes Other and Unknown.







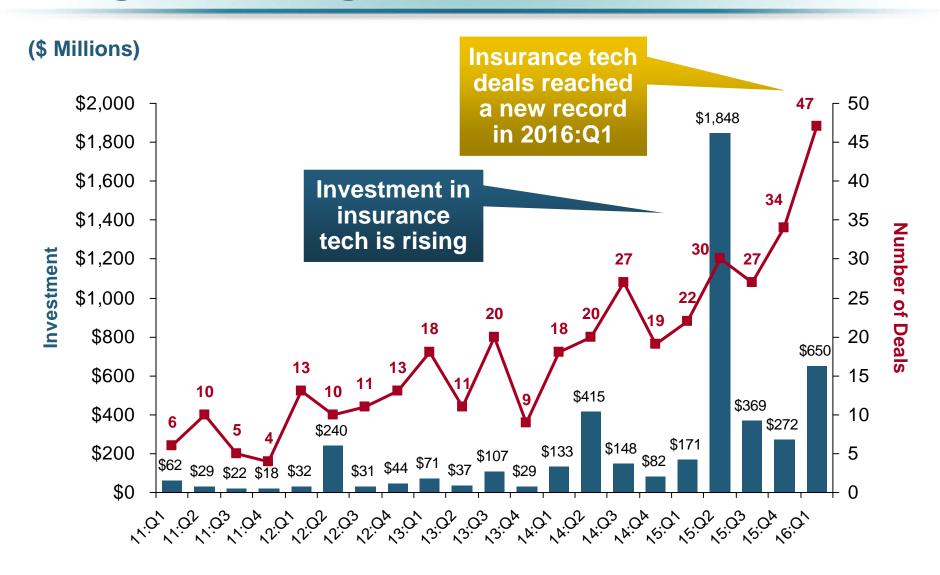
INSURANCE TECHNOLOGY: FIN TECH ZEROES IN

Number and Value of Deals Is Increasing

In Search of the Elusive Insurance 'Unicorn'

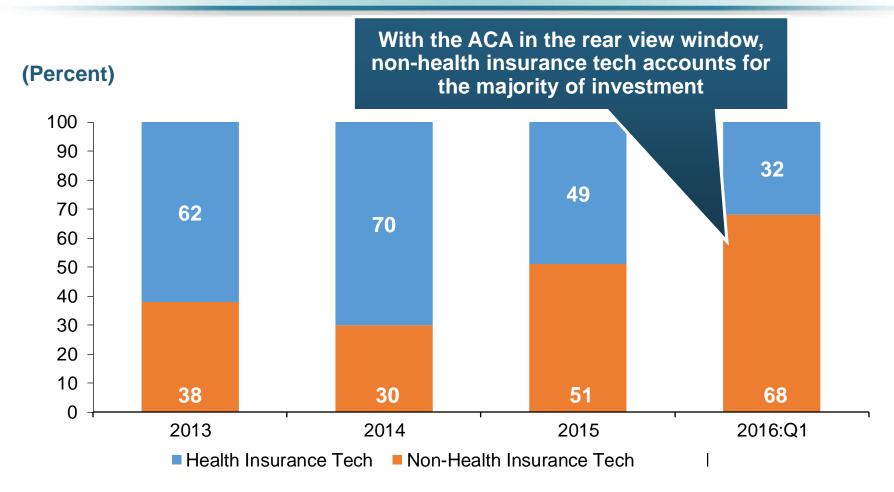
Insurance Technology Financing Trend: Change Is Coming





Insurance Tech Activity by Area of Interest, 2013 – 2016:Q1





Silicon Valley and the venture capital community have the insurance industry in their sights. Most will fail. Some will succeed.

Source: CB Insights at https://www.cbinsights.com/blog/insurance-tech-overview-q1-2016/; Insurance Information Institute.



Insurance Information Institute Online:

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