

The Workplace of Tomorrow The "On-Demand" Economy and Implications for Workers Compensation

NCCI Annual Issues Symposium Orlando, FL May 14, 2015

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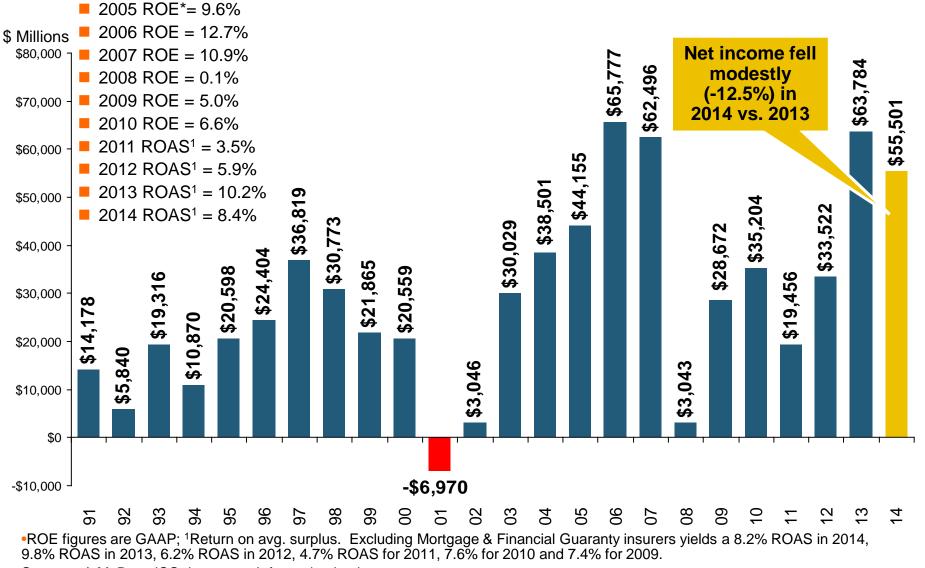
P/C Insurance Industry Financial Overview

2014: Second-Best Year in the Post-Crisis Era

Modest CATs, Strong Markets Workers Comp Improvement Helped Too

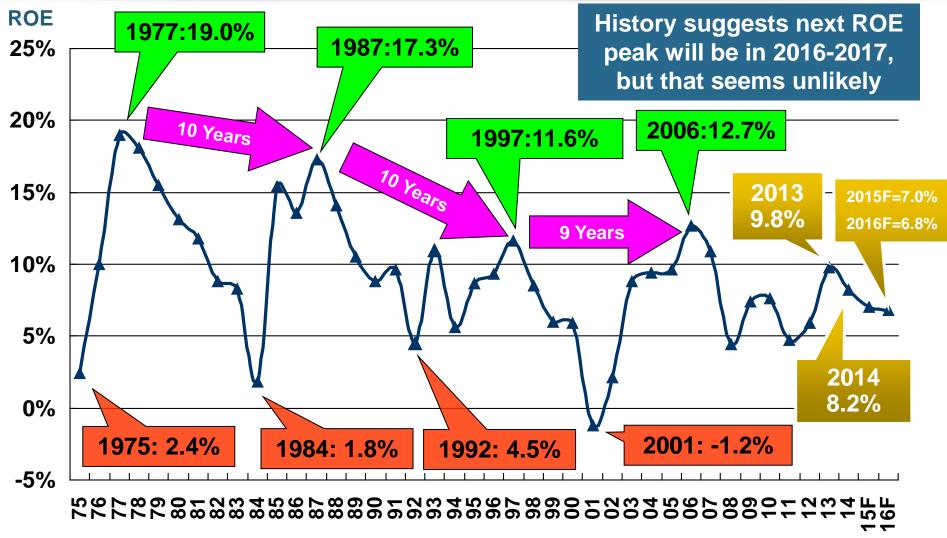
P/C Industry Net Income After Taxes 1991–2014

NSURANCE



Sources: A.M. Best, ISO; Insurance Information Institute

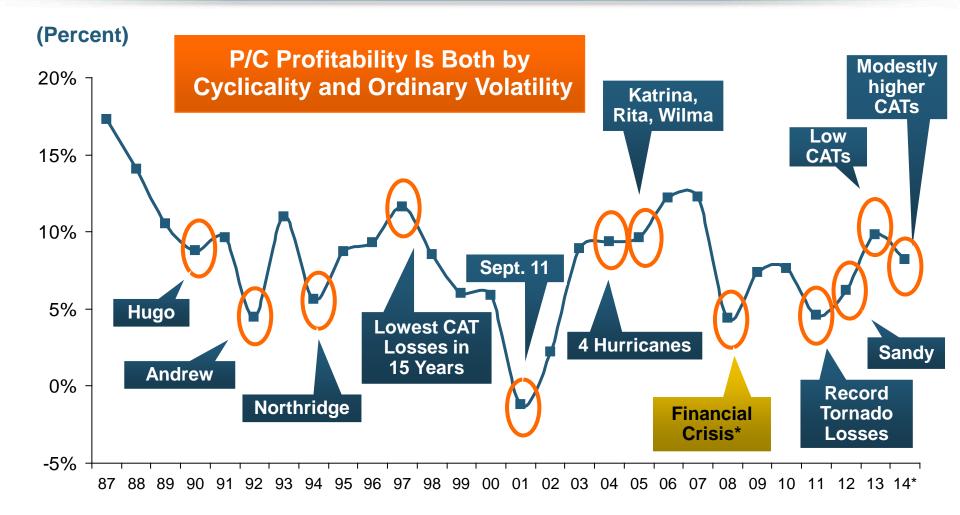
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2016F



*Profitability = P/C insurer ROEs. 2011-14 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

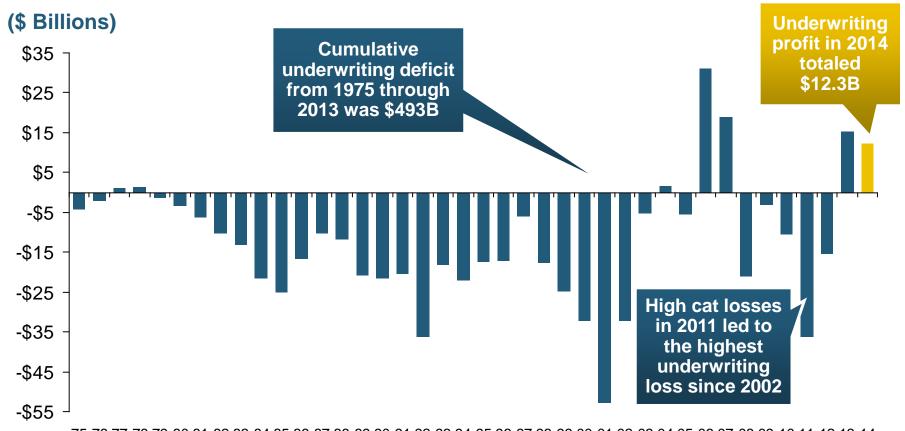
ROE: Property/Casualty Insurance by Major Event, 1987–2014



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

Underwriting Gain (Loss) 1975–2014*

INSURANCE INFORMATION INSTITUTE



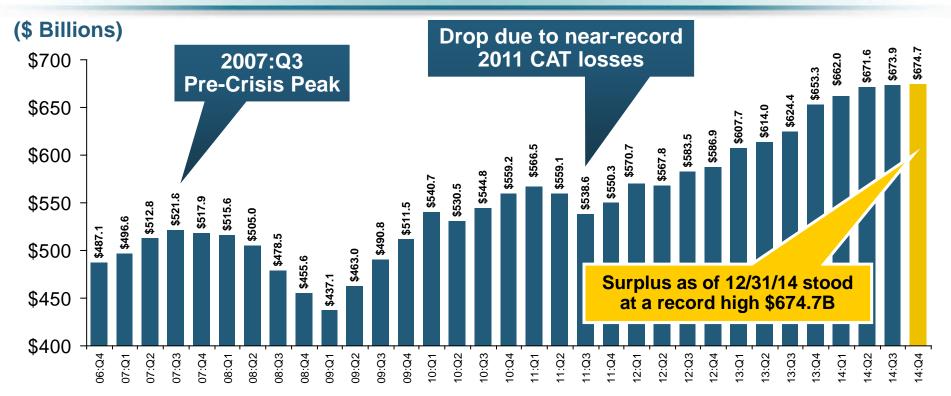
75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12 13 14

Large Underwriting Losses Are *NOT* Sustainable in Current Investment Environment

* Includes mortgage and financial guaranty insurers in all years. Sources: A.M. Best, ISO; Insurance Information Institute.

Policyholder Surplus, 2006:Q4–2014:Q4



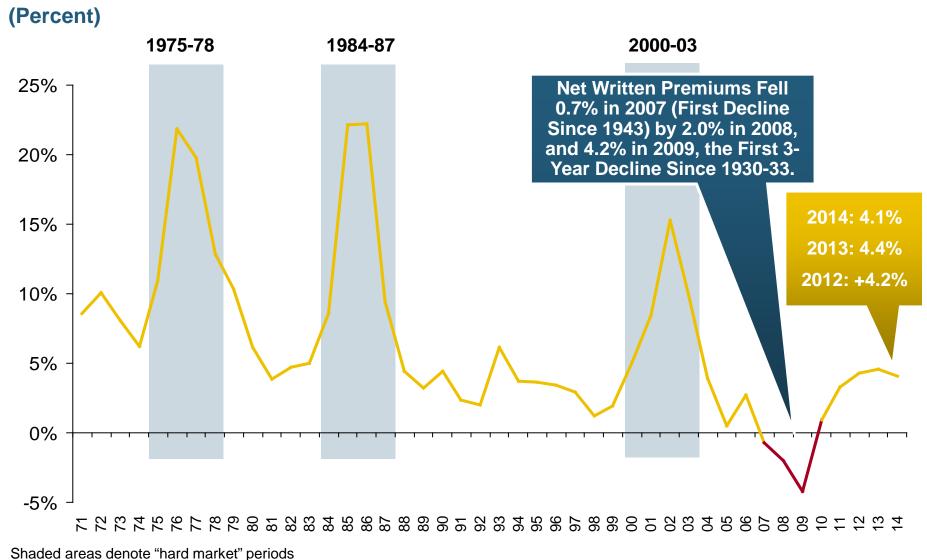


The industry now has \$1 of surplus for every \$0.74 of NPW, close to the strongest claims-paying status in its history.

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 . Sources: ISO, A.M .Best.

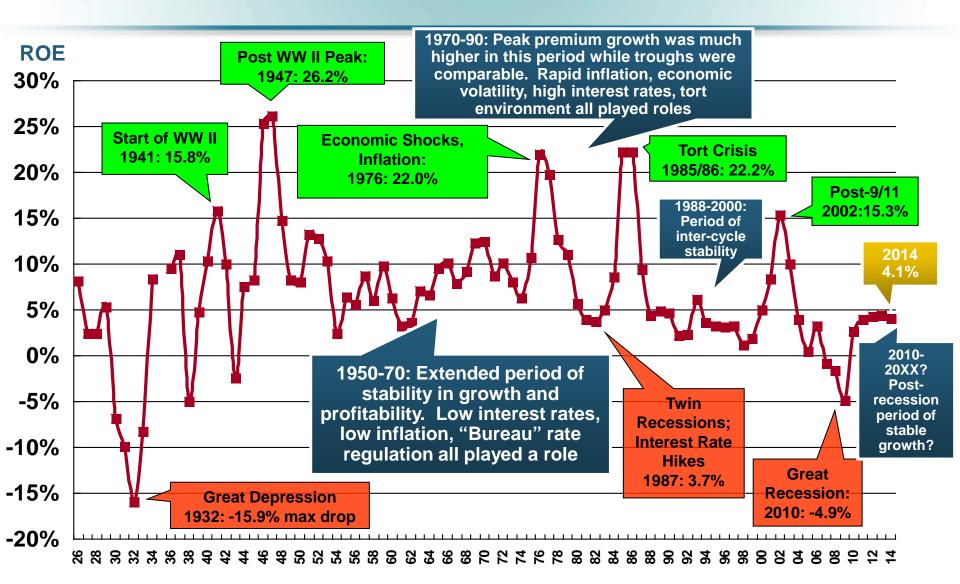
The P/C insurance industry entered 2015 in very strong financial condition.

Net Premium Growth (All P/C Lines): Annual Change, 1971—2014



Sources: A.M. Best (1971-2013), ISO (2014), Insurance Information Institute.

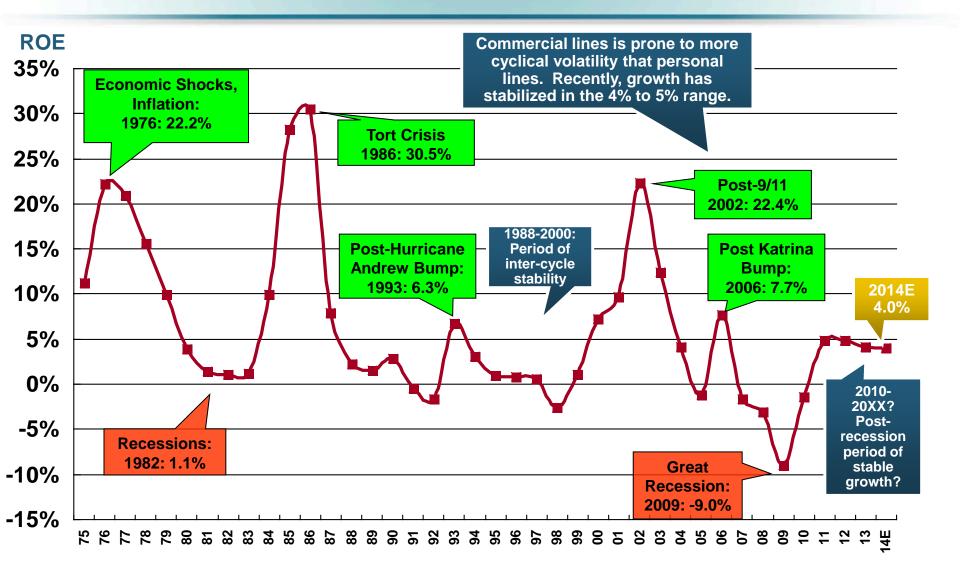
NPW Premium Growth: Peaks & Troughs in the P/C Insurance Industry, 1926 – 2014



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 – 2014E



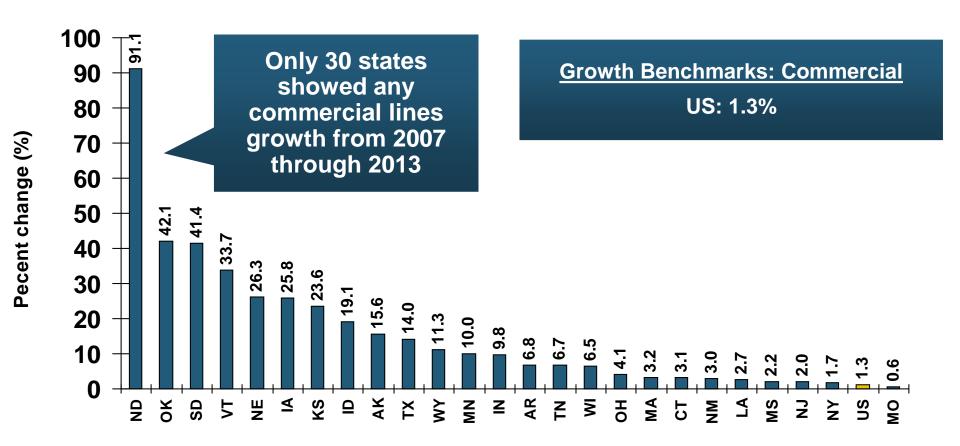


Note: Data include state funds beginning in 1998. Source: A.M. Best; Insurance Information Institute.

Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2013



Top 25 States

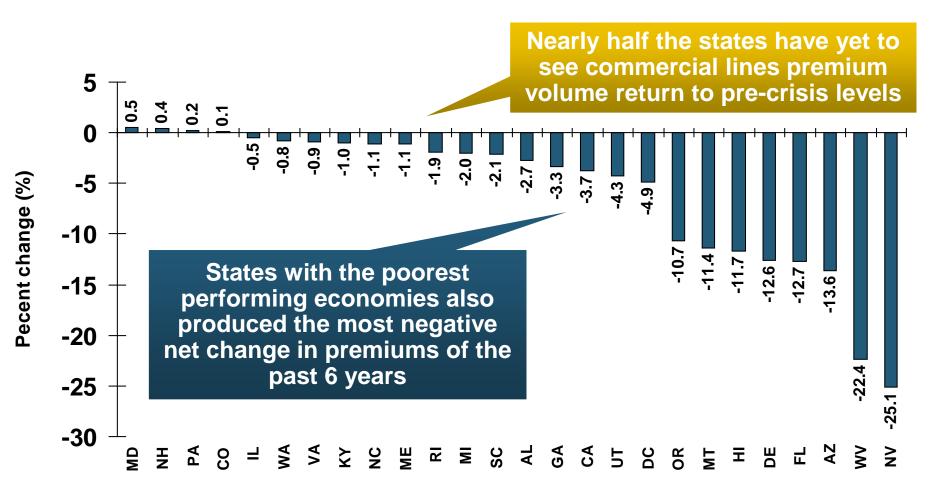


Sources: SNL Financial LLC.; Insurance Information Institute.

Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2013



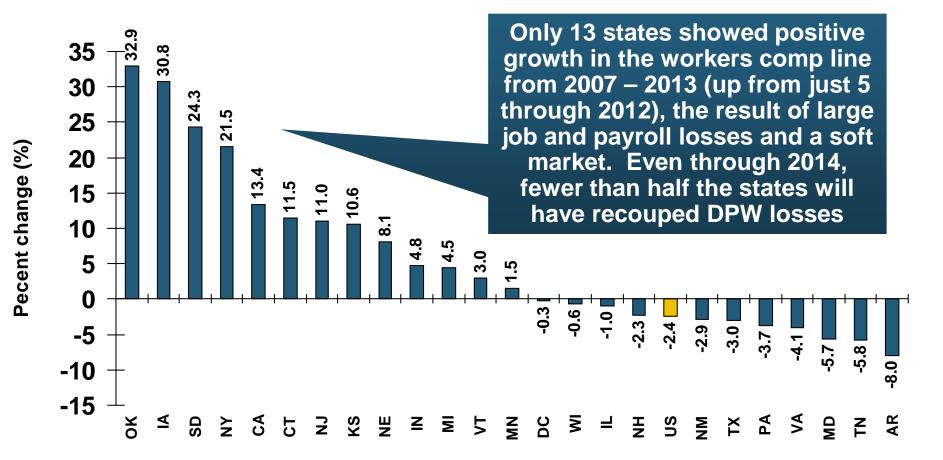
Bottom 25 States



Sources: SNL Financial LLC.; Insurance Information Institute.

Direct Premiums Written: Workers' Comp

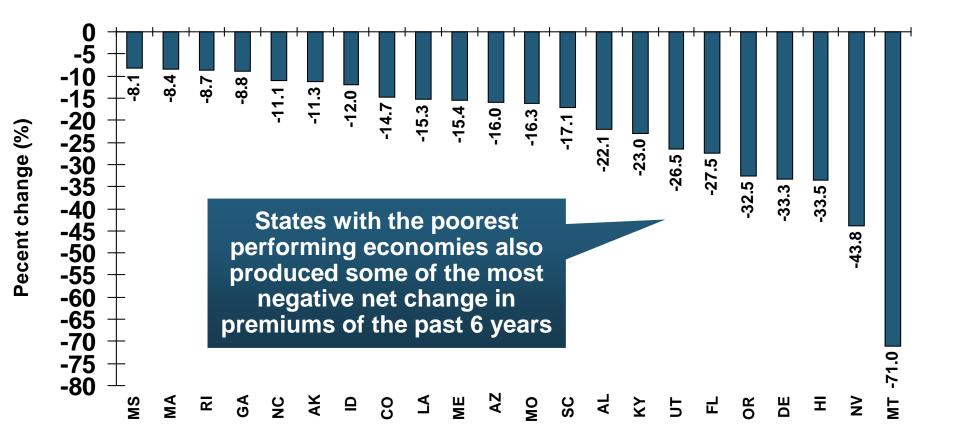
Top 25 States



*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period. Sources: SNL Financial LC.; Insurance Information Institute.

Direct Premiums Written: Worker's Comp

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: SNL Financial LC.; Insurance Information Institute.

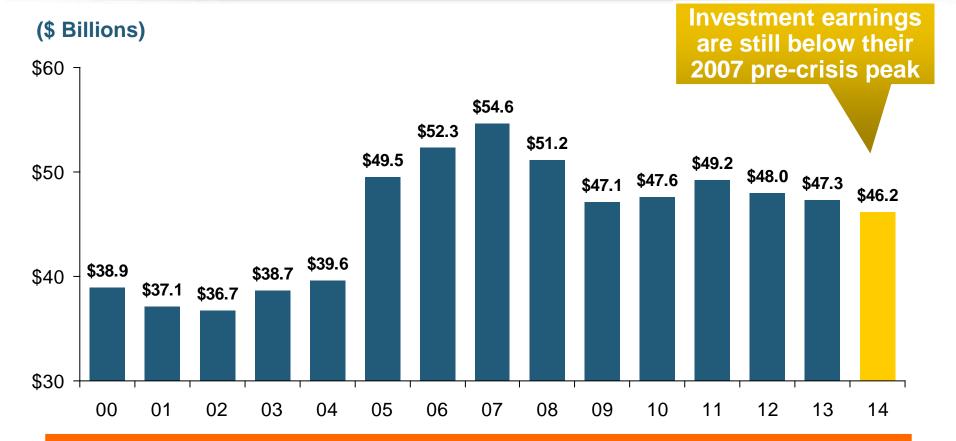


INVESTMENTS: THE NEW REALITY

Investment Performance is a Key Driver of Profitability

Low Yields Have an Especially Large Influence on Profitability of Long-Tailed Lines Like WC

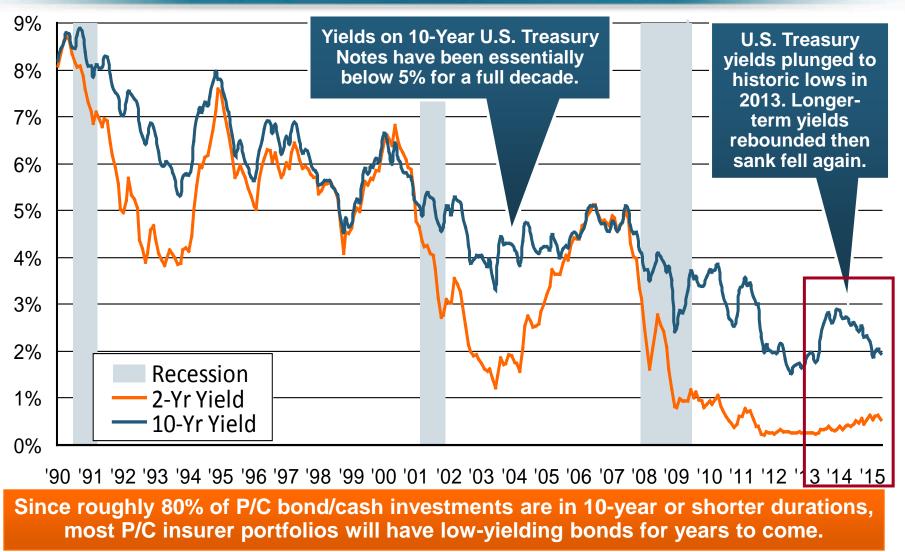
Property/Casualty Insurance Industry Investment Income: 2000–2014¹



Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014.

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

U.S. Treasury Security Yields: A Long Downward Trend, 1990–2015*

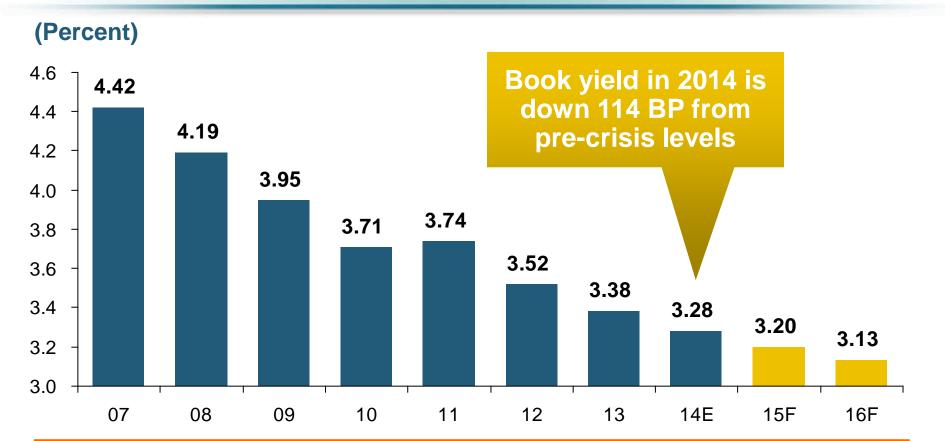


*Monthly, constant maturity, nominal rates, through April 2015.

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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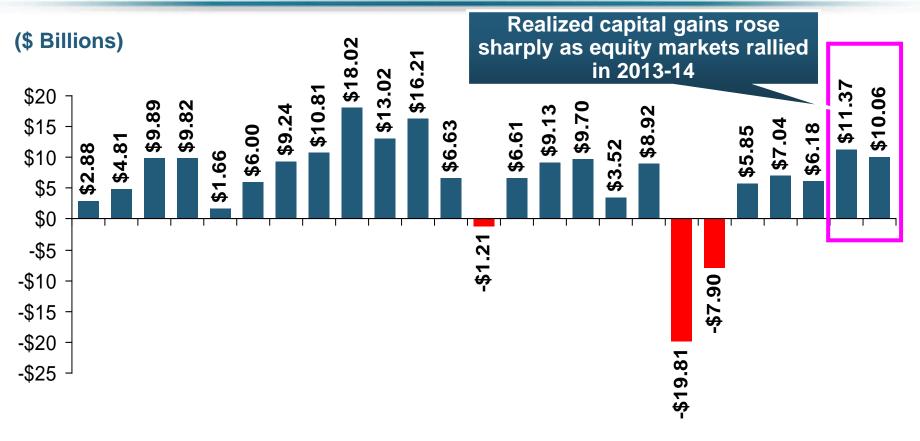
Book Yield on Property/Casualty Insurance Invested Assets, 2007–2016F



The yield on invested assets continues to decline as returns on maturing bonds generally still exceed new money yields. The end of the Fed's QE program in Oct. 2014 should allow some increase in longer maturities while short term interest rate increases are unlikely until mid-to-late 2015

Sources: Conning.

P/C Insurer Net Realized Capital Gains/Losses, 1990-2014



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

Insurers Posted Net Realized Capital Gains in 2010 - 2014 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

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



<u>2015</u>

Non-Financial Challenges and Criticisms of Workers Comp

A Number of Issues Have Stirred Interest in Workers Compensation in the First Part of 2015

Challenges Raised in the Workers Comp Line

- INSURANCE INFORMATION INSTITUTE
- Opt Out Legislation: Coalition of large employers is aggressively pushing for legislation that would allow them to forego purchasing WC coverage in favor of creating their own programs while also seeking to specify the criteria for claiming and the size of benefits
 - Allowed in TX for many years and passed in OK in 2014
 - Failed in TN in 2015; Lobbying in AL, FL, GA, NC, SC
- Challenges to Exclusive Remedy: Assertion that after reforms in several states the WC "Grand Bargain" has been breached and that benefits are now insufficient
 - Objective of trial lawyers is to tap into the tort system

Recent Challenges Raised in the Workers Comp Line (continued)



- ProPublica/NPR Attack Series: "The Demolition of Workers Comp" (Published in March 2015)
- Thesis: WC benefits have been hollowed out and that workers were often no longer well served by the system
 - Claims 33 states watered down benefits under the guise of reform
- Series relied on a number of anecdotal cases of claimants who believed they were adversely impacted
- I.I.I. made forceful rebuttal focusing on:
 - Magnitude of insurer payouts to injured workers
 - Material improvements in workplace safety, in part due to WC incentives
 - Benefits of cost controls without compromising outcomes

http://www.iii.org/article/a-letter-to-the-editor-about-workers-compensation23



Labor Markets Trends: Recovery Continues in 2015

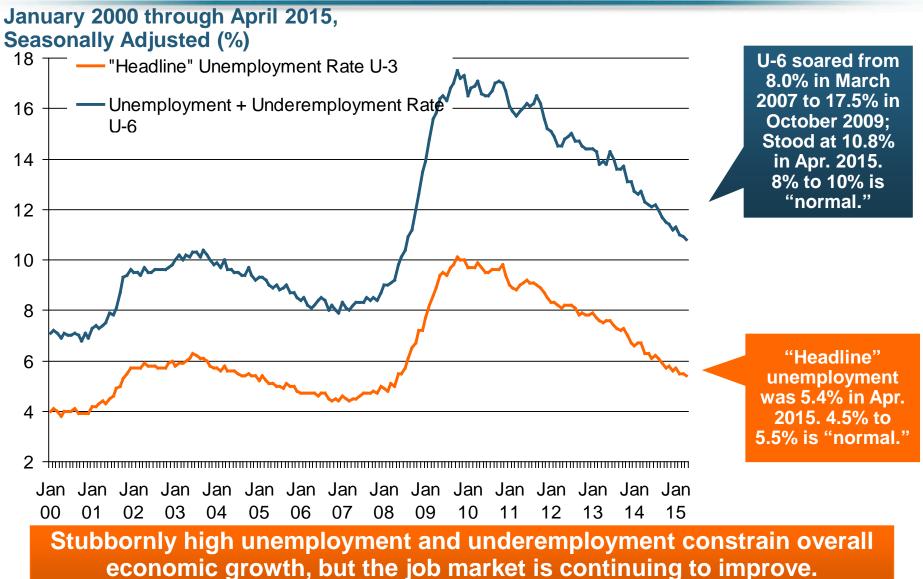
<u>2014</u>

Largest Increase in Jobs Since 1997 Unemployment Rate Fell to Lowest Level Since 2008

Payrolls Expanded to Record High

Unemployment and Underemployment Rates: Still Too High, But Falling

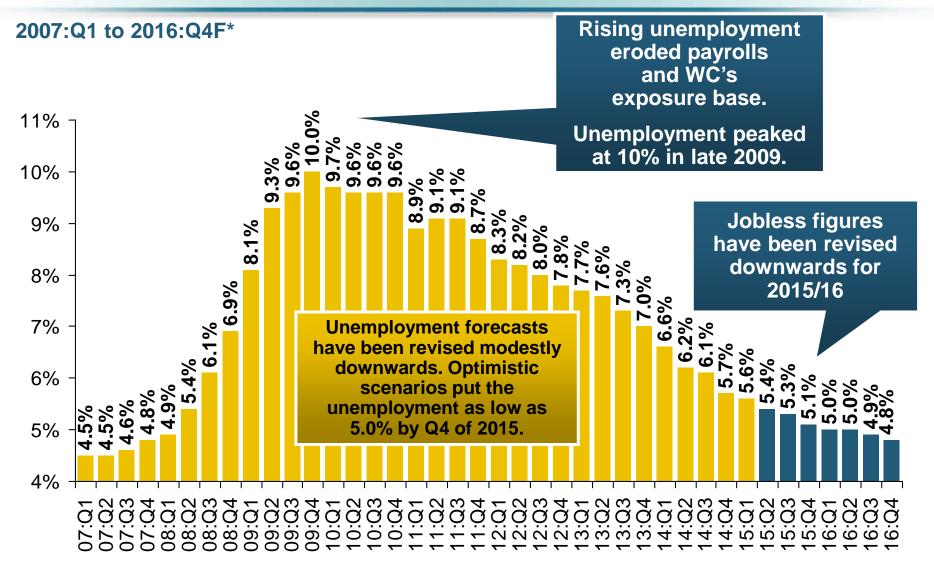




Source: US Bureau of Labor Statistics; Insurance Information Institute.

US Unemployment Rate Forecast

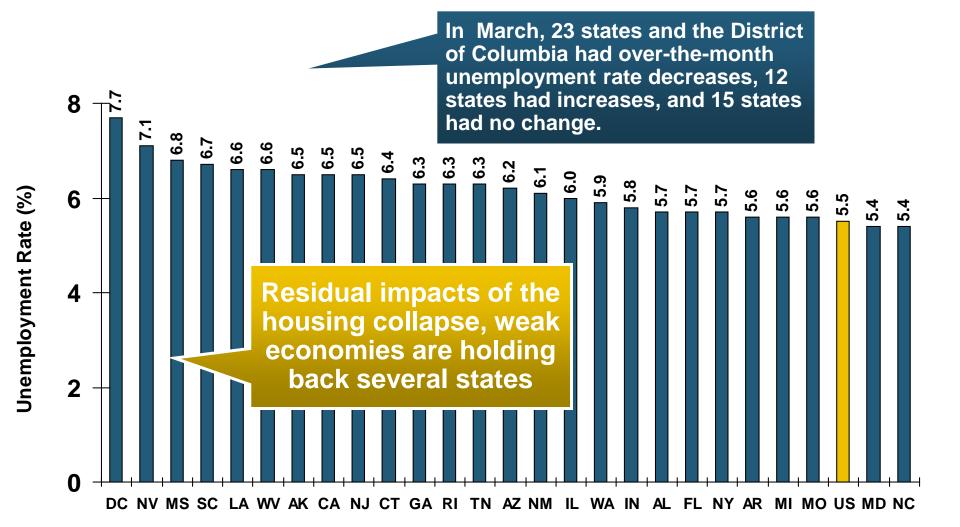




= actual; = forecasts

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (5/15 edition); Insurance Information Institute.

Unemployment Rates by State, March 2015: Highest 25 States*

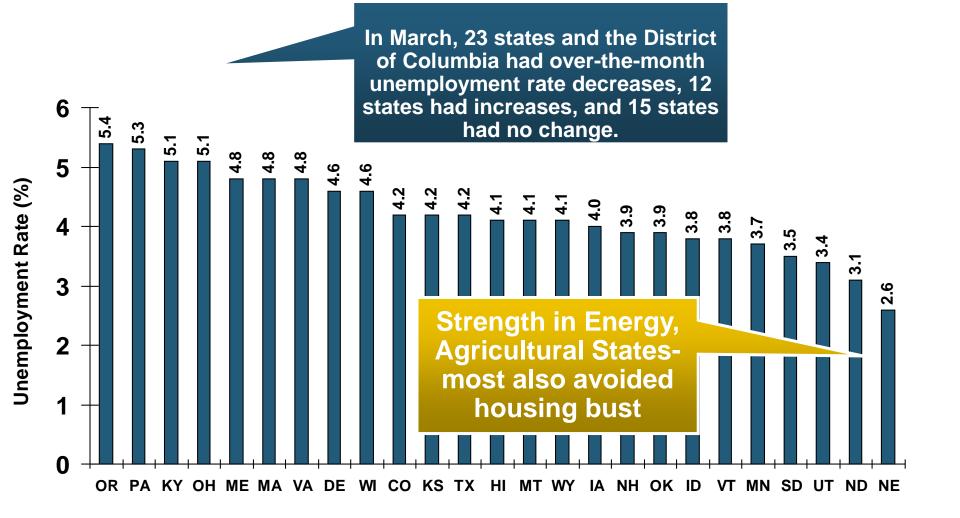


*Provisional figures for March 2015, seasonally adjusted.

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

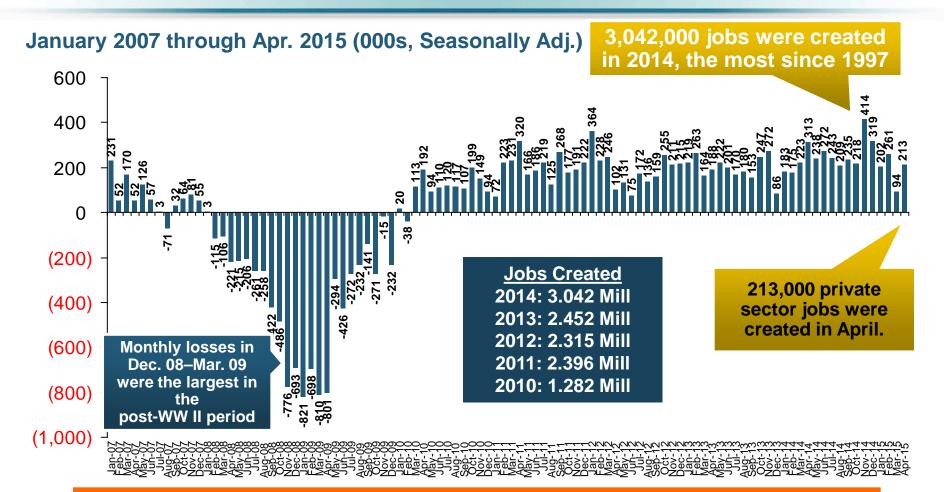
Unemployment Rates by State, March 2015: Lowest 25 States*





*Provisional figures for March 2015, seasonally adjusted. Sources: US Bureau of Labor Statistics; Insurance Information Institute.

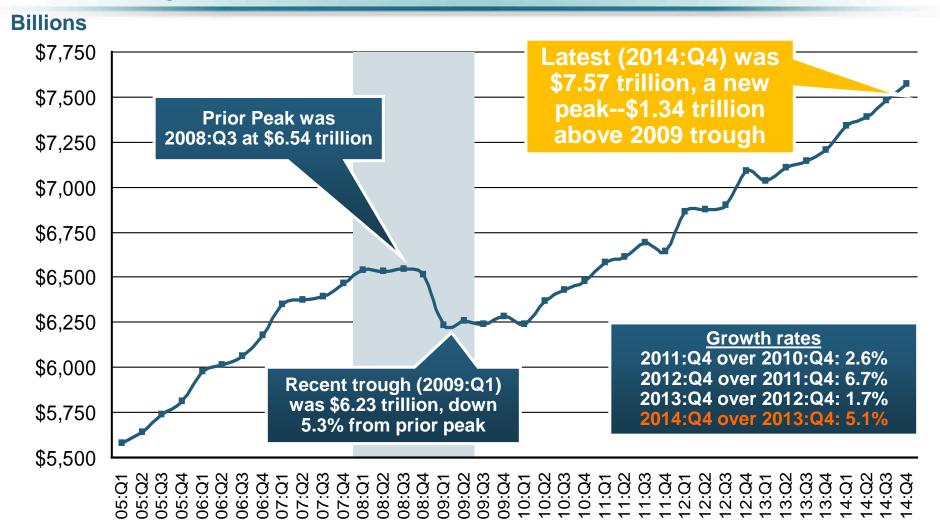
Monthly Change in Private Employment



Private Employers Added 11.97 Million Jobs Since Jan. 2010 After Having Shed 5.01 Million Jobs in 2009 and 3.76 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)

Source: US Bureau of Labor Statistics: <u>http://www.bls.gov/ces/home.htm;</u> Insurance Information Institute

Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2014:Q4

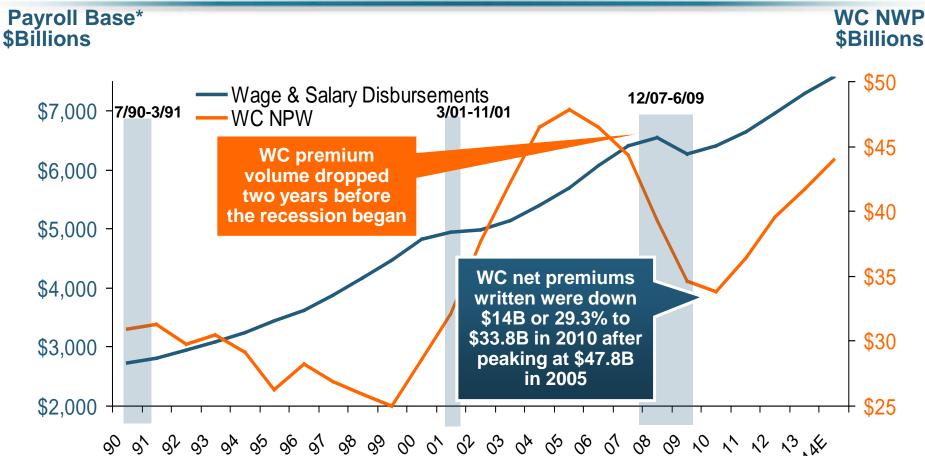


Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

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

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Payroll vs. Workers Comp Net Written Premiums, 1990-2014P



Continued Payroll Growth and Rate Gains Suggest WC NWP Will Grow Again in 2015

*Private employment; Shaded areas indicate recessions. WC premiums for 2014 are I.I.I. estimates.. Sources: NBER (recessions); Federal Reserve Bank of St. Louis at <u>http://research.stlouisfed.org/fred2/series/WASCUR</u>; NCCI; I.I.I.

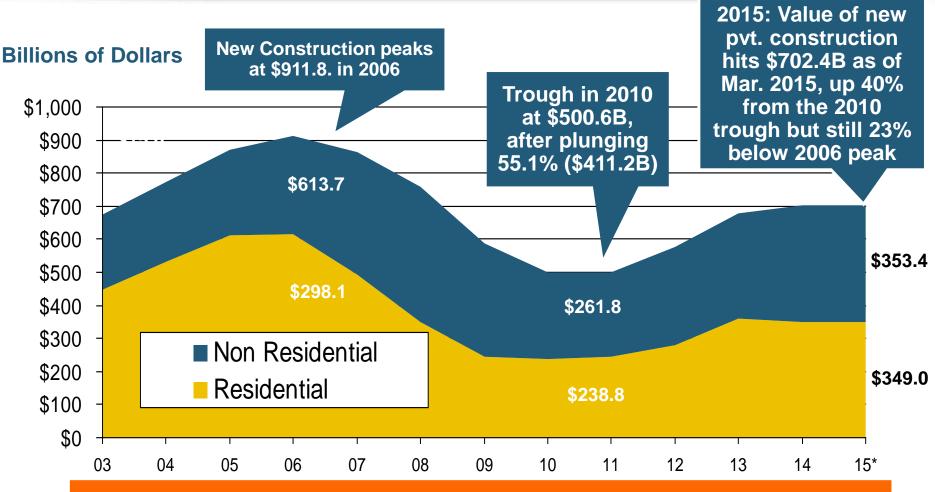
INSURANCE



CONSTRUCTION, MANUFACTURING & ENERGY OUTLOOK

Key Sectors Critical to the Economy and the P/C Insurance Industry

Value of New Private Construction: Residential & Nonresidential, 2003-2015*



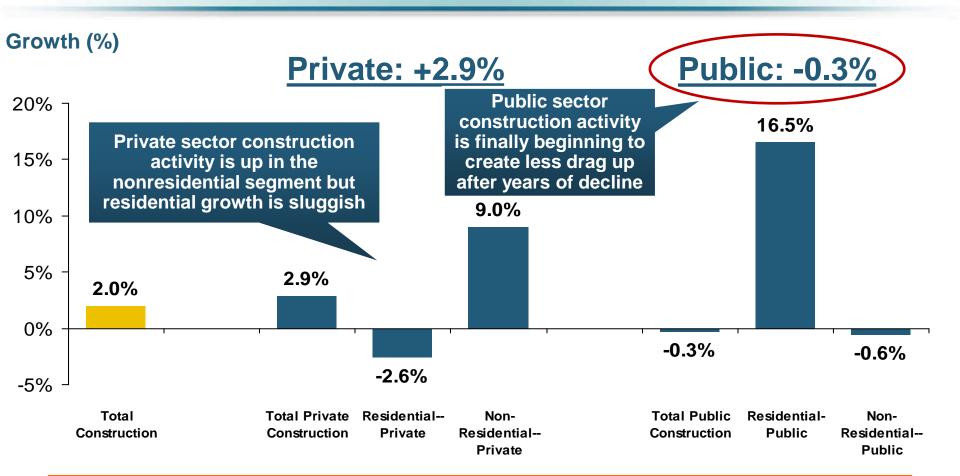
Private Construction Activity Is Moving in a Positive Direction though Remains Well Below Pre-Crisis Peak; Residential Dominates

*2015 figure is a seasonally adjusted annual rate as of March.

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

Value of Construction Put in Place, March 2015 vs. March 2014*



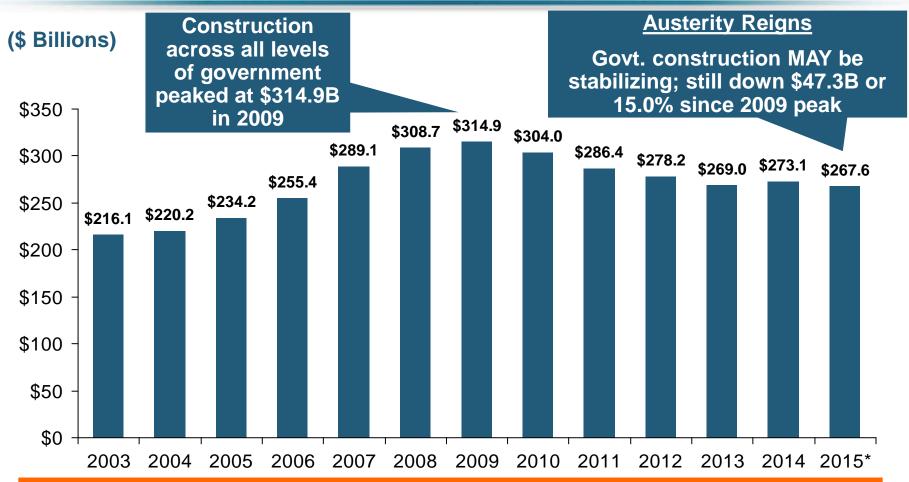


Overall Construction Activity is Up, But Growth In the Private Sector Slowed in Late 2014 While Picking Up in the State/Local Sector Government Sector as Budget Woes Ease in Some Jurisdictions

*seasonally adjusted

Source: U.S. Census Bureau, <u>http://www.census.gov/construction/c30/c30index.html</u>; Insurance Information Institute.

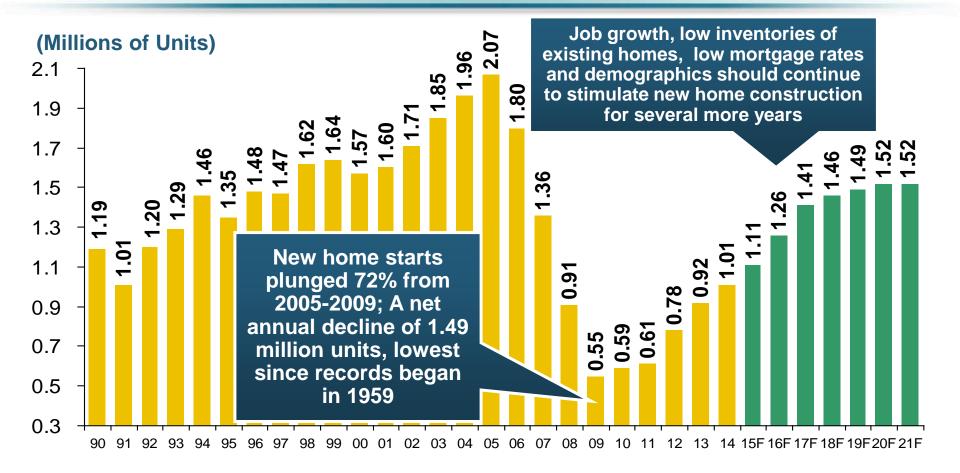
Value of New Federal, State and Local Government Construction: 2003-2015*



Government Construction Spending Peaked in 2009, Helped by Stimulus Spending, but Contracted As State/Local Governments Grappled with Deficits and Federal Sequestration

*2015 figure is a seasonally adjusted annual rate as of March; <u>http://www.census.gov/construction/c30/historical_data.html</u> Sources: US Department of Commerce; Insurance Information Institute.

New Private Housing Starts, 1990-2021F



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 (5/15 and 3/15); Insurance Information Institute.

Construction Employment, Jan. 2010—April 2015*





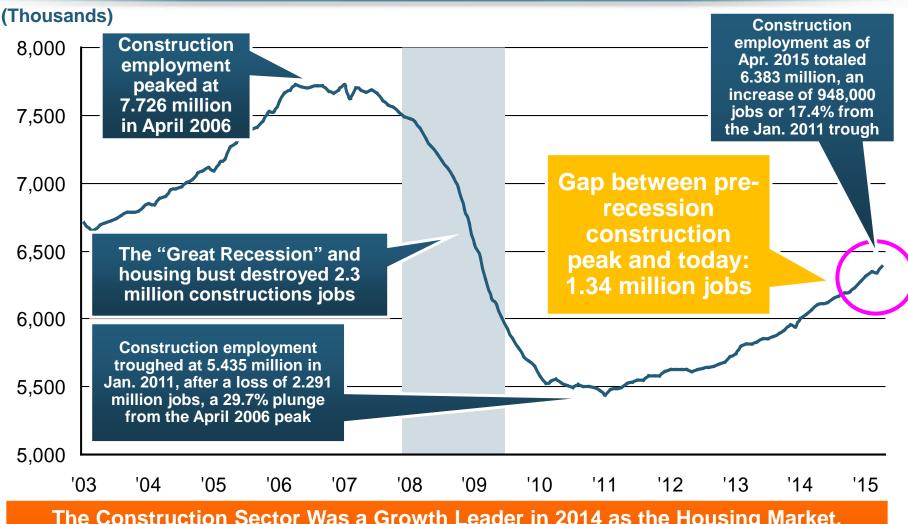
Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.

*Seasonally adjusted.

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

Construction Employment, Jan. 2003–April 2015





The Construction Sector Was a Growth Leader in 2014 as the Housing Market, Private Investment and Govt. Spending Recover. WC Insurers Will Benefit.

Note: Recession indicated by gray shaded column.

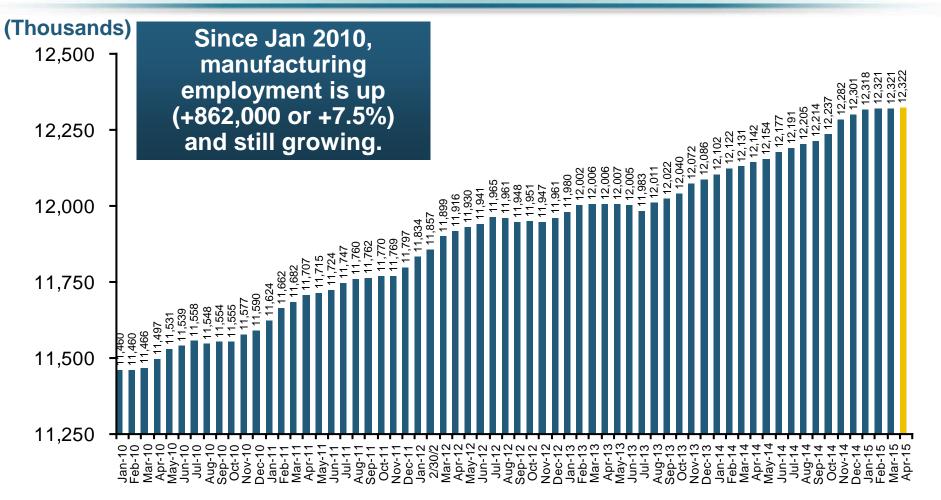
Sources: U.S. Bureau of Labor Statistics; Insurance Information Institute.



MANUFACTURING SECTOR

A Potent Driver of Jobs, Workers Comp Payroll Exposure America's Manufacturing Renaissance Has Hit a Rough Patch with the High Dollar and Collapse in Oil Prices

Manufacturing Employment, Jan. 2010—April 2015*



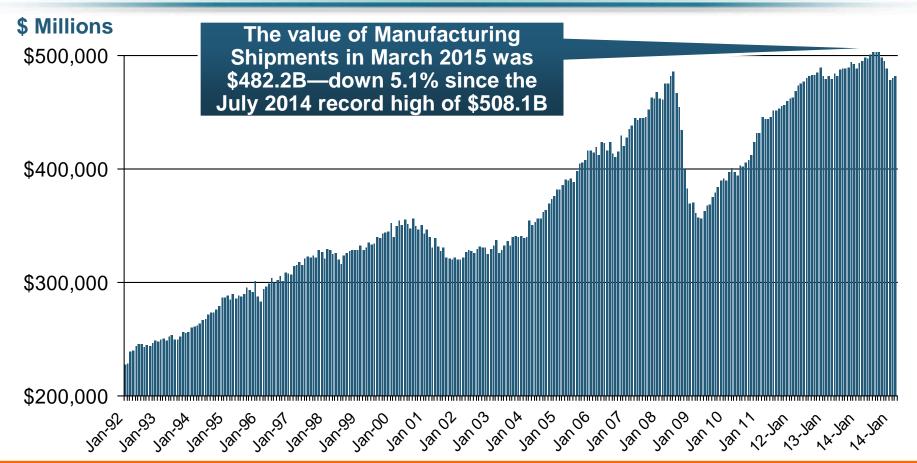
Manufacturing employment is a surprising source of strength in the economy. Employment in the sector is at a multi-year high.

*Seasonally adjusted.

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

Dollar Value* of Manufacturers' Shipments Monthly, Jan. 1992—March 2015

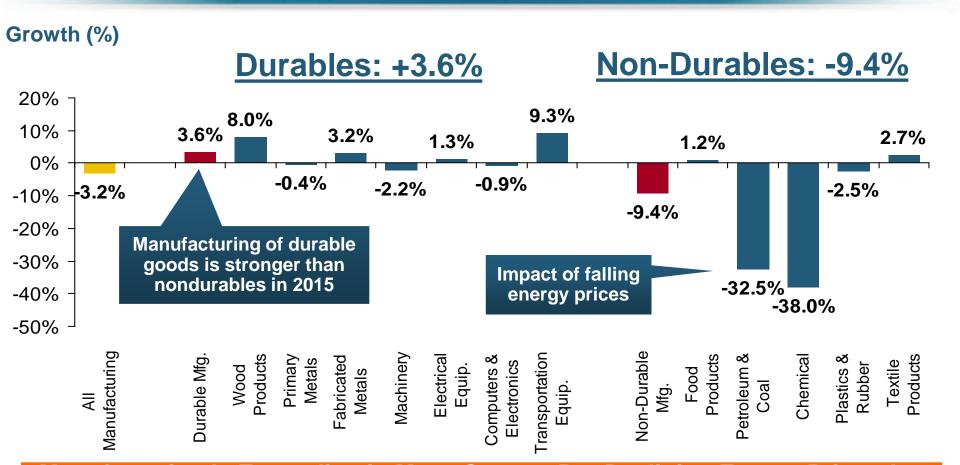




Monthly shipments in March 2015 are similar to pre-crisis (July 2008) peak but has declined in recent months due to the strong US dollar and weakness abroad. Manufacturing is energy-intensive and growth leads to gains in many commercial exposures: WC, Commercial Auto, Marine, Property, and various Liability Coverages.

* Seasonally adjusted; Data published May 4, 2015. Source: U.S. Census Bureau, *Full Report on Manufacturers' Shipments, Inventories, and Orders, http://www.census.gov/manufacturing/m3/*

Manufacturing Growth for Selected Sectors, 2015 vs. 2014*



Manufacturing Is Expanding in Many Sectors But Declining Energy Prices Are Dragging Down Industry Figures. Continued Gortwh Across a Number of Sectors that Will Contribute to Growth in Insurable Exposures Including: WC, Commercial Property, Commercial Auto and Many Liability Coverages

*Seasonally adjusted; Date are YTD comparing data through March 2015 to the same period in 2014. Source: U.S. Census Bureau, Full Report on Manufacturers' Shipments, Inventories, and Orders, http://www.census.gov/manufacturing/m3/

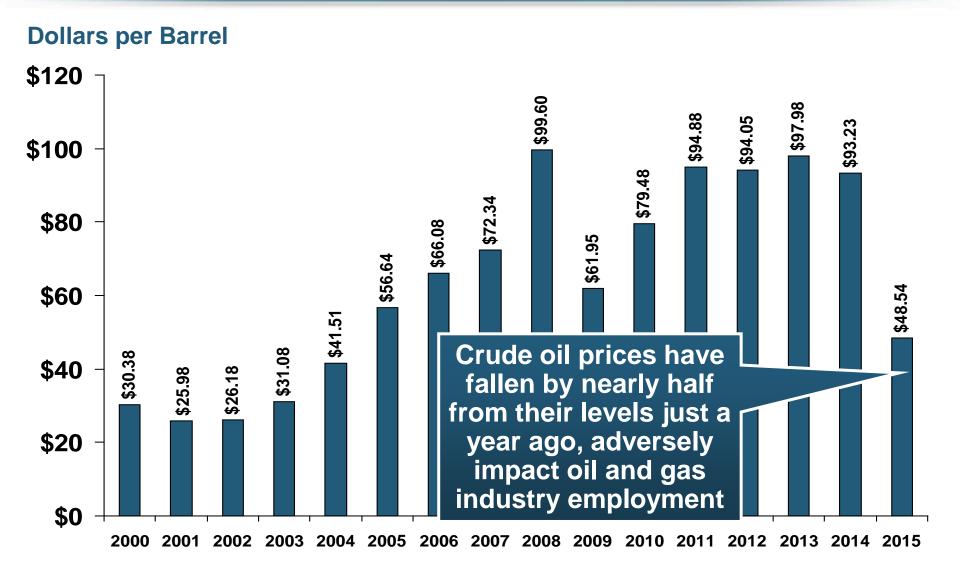


ENERGY SECTOR

America's Energy Boom Has Been a Strong Driver of the Economic Recovery, but Prices Are Falling Workers Comp Have Benefited from the Energy Boom, But Exposures Will Suffer as Energy Prices Swoon

Price of Crude Oil (West Texas Intermediate), 2000 – 2015*



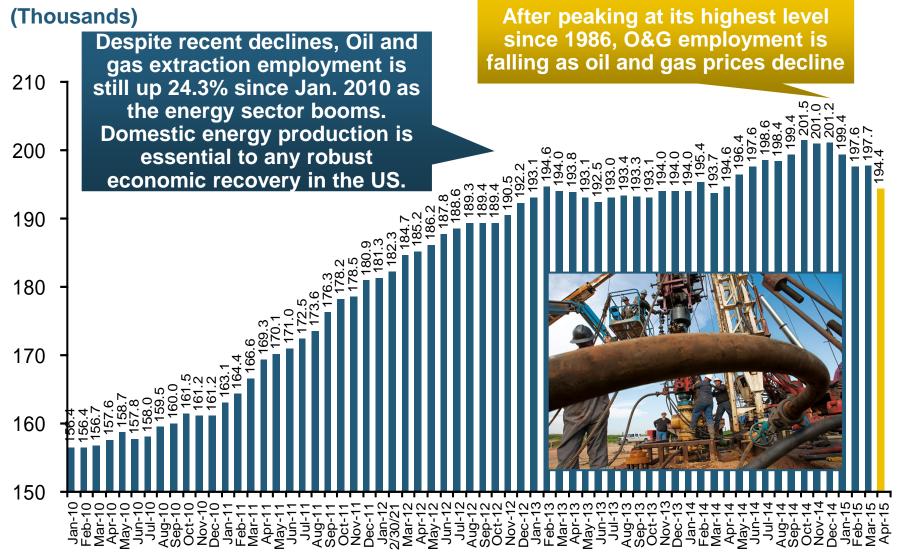


*Through March 2015.

Source: Energy Information Administration; Insurance Information Institute.

Oil & Gas Extraction Employment, Jan. 2010—April 2015*





*Seasonally adjusted

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



POSITIVE LABOR MARKET DEVELOPMENTS

Key Factors Driving Workers Compensation Exposure

Average Weekly Hours of All Private Workers, Mar. 2006—April 2015

(Hours Worked)

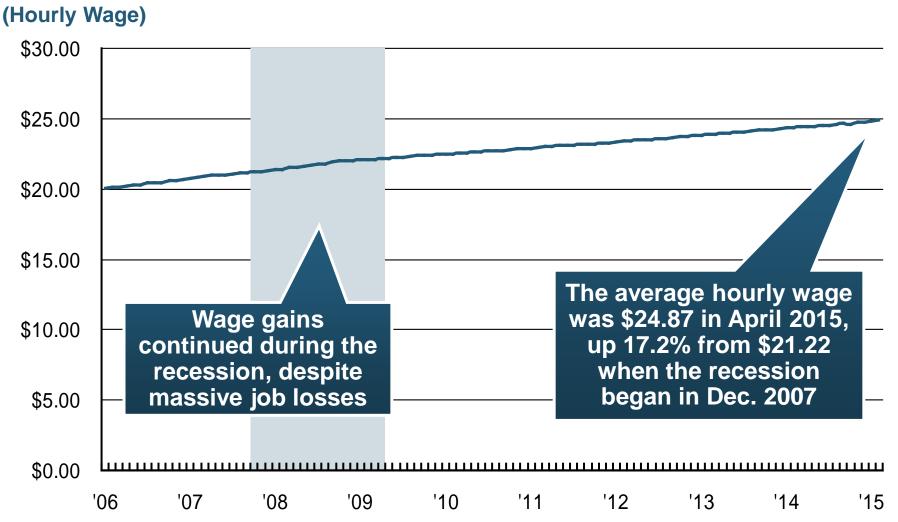


*Seasonally adjusted

Note: Recessions indicated by gray shaded columns.

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

Average Hourly Wage of All Private Workers, Mar. 2006—April 2015



*Seasonally adjusted

Note: Recessions indicated by gray shaded columns.

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



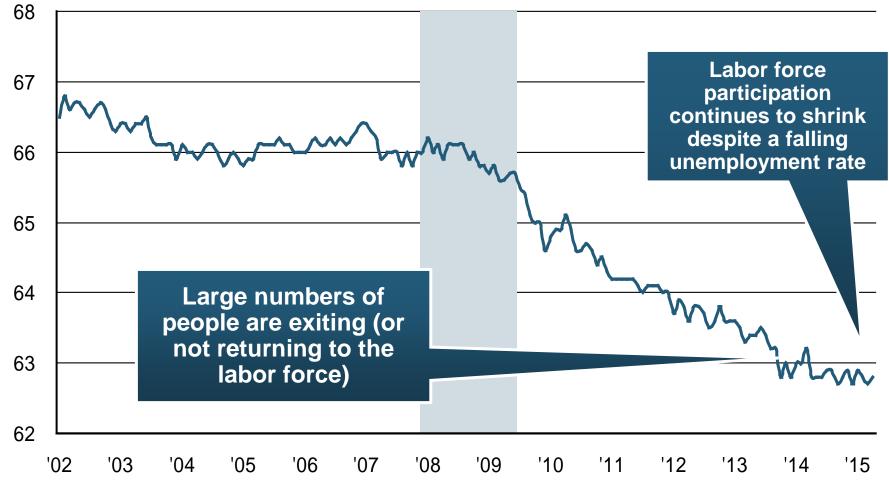
ADVERSE LONG-TERM LABOR MARKET DEVELOPMENTS

Key Factors Harming Workers Compensation Exposure and the Overall Economy

Labor Force Participation Rate, Jan. 2002—April 2015*



Labor Force Participation as a % of Population



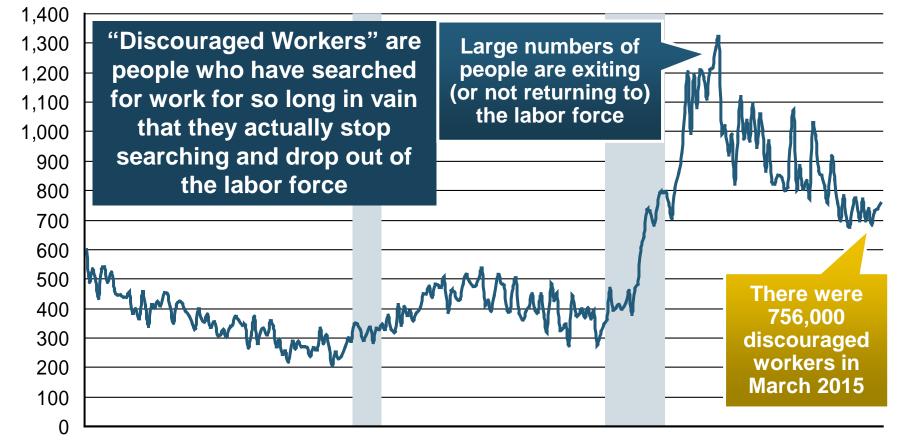
*Defined as the percentage of working age persons in the population who are employed or actively seeking work. Note: Recessions indicated by gray shaded columns.

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

Number of "Discouraged Workers," Jan. 2002—April 2015



Thousands



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

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.



The "On-Demand" (Sharing) Economy

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

Labor on Demand: Huge Implications for the US Economy, Workers & Insurers



The "On-Demand" World is Not New...

R



Companies like Angie's List (established in 1995 and going online in 1999) have been around for decades

The Geek Squad has been around since 1994...

Geek Squad

Peapod sprouted way back in 1989!

- Peapod[®]

Source: Insurance Information Institute.

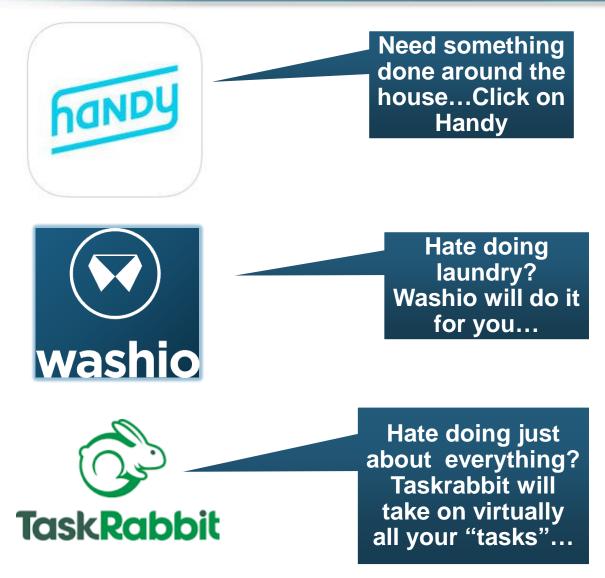
Search the List

Shop Local Offers

Get exclusive discounts

Send a SnapFix Start a project now

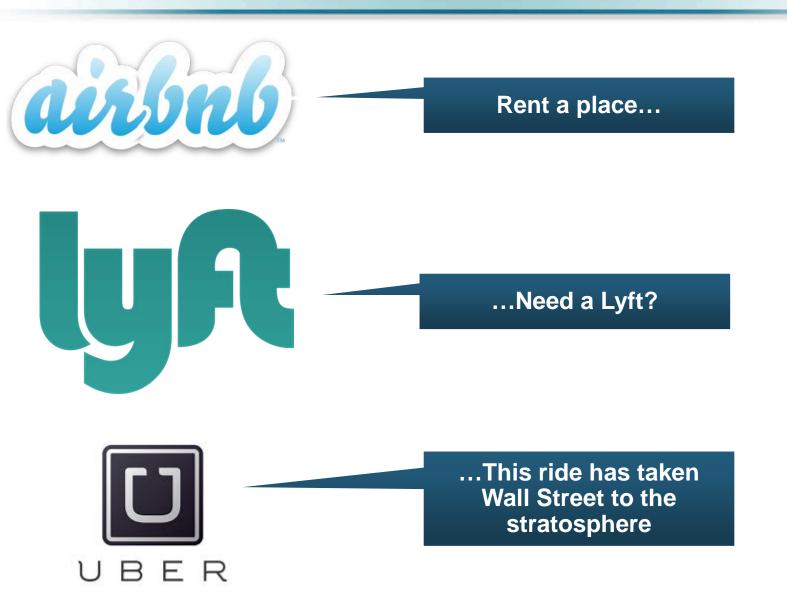
...But the "On-Demand" World is Exploding as Is the Demand for "On-Tap" Workers



You Can Live Your Life with the Swipe of a Finger...



Some Players in the On-Demand Economy Have Become Household Names



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



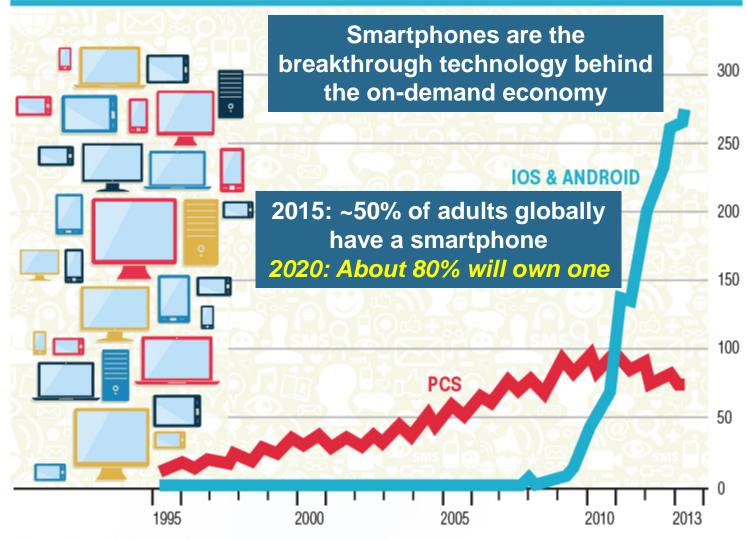


Technology and Employment

What Makes the On-Demand Economy Possible? Why Does It Matter for Insurers?

CHANGING PLATFORMS:

GLOBAL SHIPMENTS OF SMARTPHONES (MILLIONS)

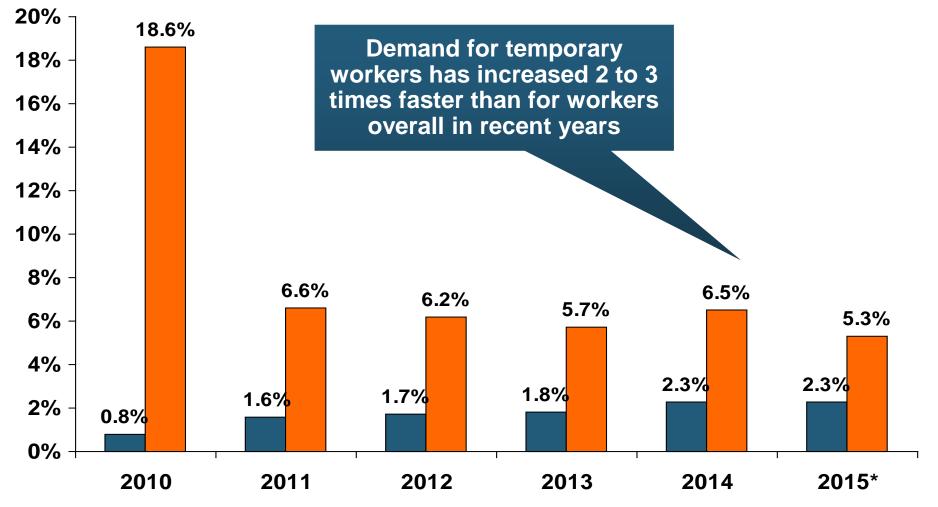


Source: Benedict Evans, Andreessen Horowitz

Growth in Temporary Workers vs. All Nonfarm Employment, 2010-2015*



Annual Percent Change



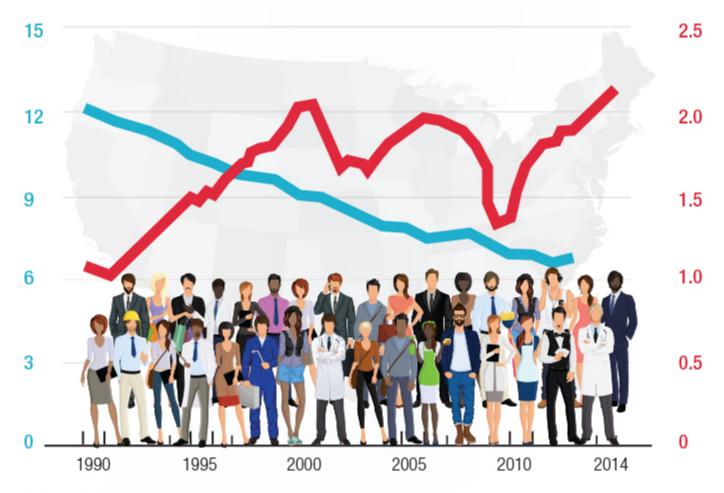
*Through March 2015.

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

THE CASUAL LOOK UNITED STATES, % OF EMPLOYED

PRIVATE-SECTOR UNION MEMBERSHIP

TEMPORARY WORKERS



Source: Bureau of Labor Statistics

The On-Demand Economy American Workers: What Is pening?

- Technology is Fundamentally Transforming How Resources are Allocated and Used in the Economy
- Labor is No Exception to this Transformation
- Technology Offers New Opportunities to Match Labor to Jobs
 - Owners of spare capacity (workers with time and skill) can be paired at low cost with those with a demand for that time and skill
 - Bringing together labor and those who employ labor is not new
 - BUT: Pairing occurs with a speed and breadth never before possible
- Witnessing the Demise of the Traditional Understanding of What is Meant by a "Good" Job
 - Concept born in the Industrial Age (1880-1980), is eroding
 - Disintermediation of the firm as the place where labor, jobs matched

Accelerating Trends that Started with Labor Strife, Globalization and Automation that Began in the 1970s and 1980s

What's In Store for the American Worker, Labor Force and Workers Comp



OPTIMISTIC OUTLOOK

- Technology frees workers from the bonds of centralized, hierarchical institutions (the firm)
- Enhanced coordination of "haves" with "needs" that bypass firms as intermediaries

Who Benefits?

- "<u>Flexers</u>": People who value or require flexibility in work arrangements (stay-at-home parents, retirees, students, disabled)
- Professionals: People with portable skills that can be offered through online platforms (semi and high-skilled trades, professional services)
- Unemployed/Underemployed: Offers at least some opportunity to offer and utilize skills and generate income

What's In Store for the American Worker, Labor Force and Workers Comp



- On-Demand companies are software-driven marketplaces and position themselves as "platforms" rather than "employers"
- Enormous valuations (e.g., \$40B for Uber on \$2B in earnings) reflect the extraction of resources that otherwise would go to benefits, investments in safety, training, etc.
 - Uber's valuation was greater than that of 72% of the S&P500 at YE 2014
 - Valued more than Delta Airlines, Kraft Foods, CBS, Macy's, Hilton, Aflac...
- Jobs reduced to freelanced, temporary "gigs"
- Low skill workers and those who lack flexibility are left further behind
- Workers treated as independent contractors without intrinsic or basic economic rights
- What Is Potentially Lost or Compromised?
 - Stability, Retirement Benefits, Sick Pay, Maternity Leave, Overtime
 - Health Insurance, Liability Coverage, Workers Comp Coverage

Potential Consequences for Insurers



- On-Demand Platforms Have Struggled with Concepts of Liability
- There Has Been a General Resistance to Assuming Liability or Responsibility Unless Compelled to Do So
- Companies Have Sought to Keep as Much Liability as Possible on the Individual Offering their (Contracted) Labor or Resources

Minding the Gap

- Traditional insurance will often not cover a worker engaged in offering labor or resources through these platforms
- E.g., Auto ins. generally won't cover you if you while driving for Uber
- Home ins. won't cover for other than occasional rentals of property
- Unless self-procured, on-demand worker (independent contactors) will generally have no workers comp recourse if injured on the job

Long Legislative and Court Battles Lie Ahead

Insurance Solutions Becoming More Common



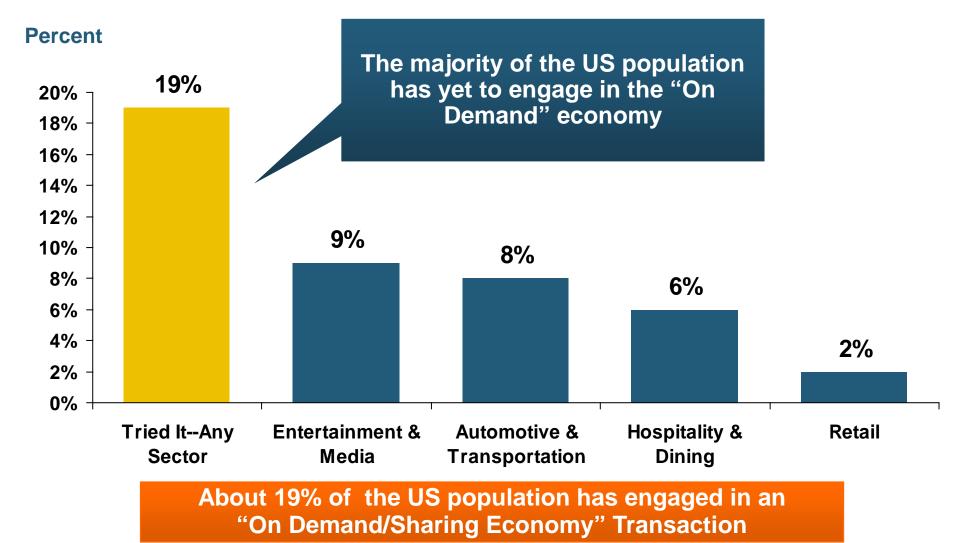
On-Demand Workers

Who Are They?

And Who's Driving Demand for Them?

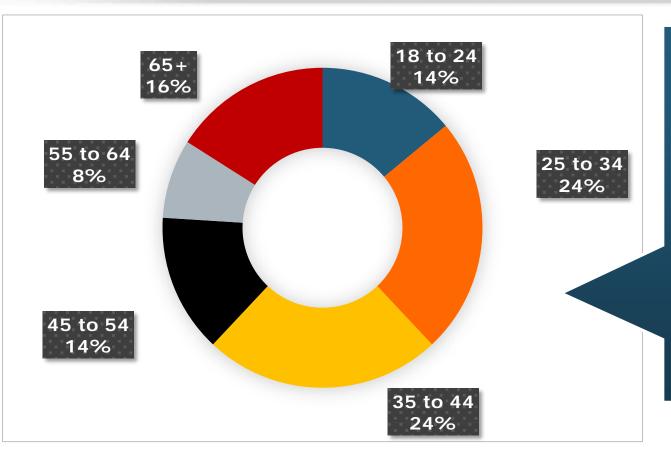
Percent of People Who Have Engaged in an "On Demand/Sharing Economy" Transaction





Sources: PwC survey of 1,000 adults in the U.S., conducted online, December 2014; Insurance Information Institute.

Age of People Who are <u>Providing</u> the Sharing/On-Demand Economy



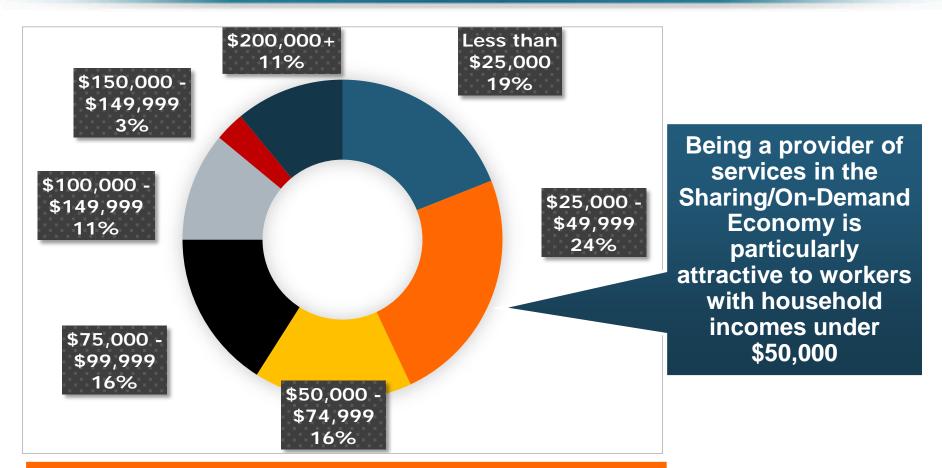
Being a provider of services in the Sharing/On-Demand **Economy is** attractive to workers in the 25-44 age range (who want flexibility in raising families) as well as seniors age 65+ who see the offering their services on-demand as a way to augment retirement income

About 7% of US population are providers in the Sharing Economy, cutting across age and incomes;
51% of those familiar with the concept could see them selves as providers within the next two years.

Sources: PwC survey of 1,000 adults in the U.S., conducted online, December 2014; Insurance Information Institute.

Household Income: <u>Providers</u> of the Sharing/On-Demand Economy





About 7% of US population are providers in the Sharing Economy, cutting across age and incomes;
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Sources: PwC survey of 1,000 adults in the U.S., conducted online, December 2014; Insurance Information Institute.



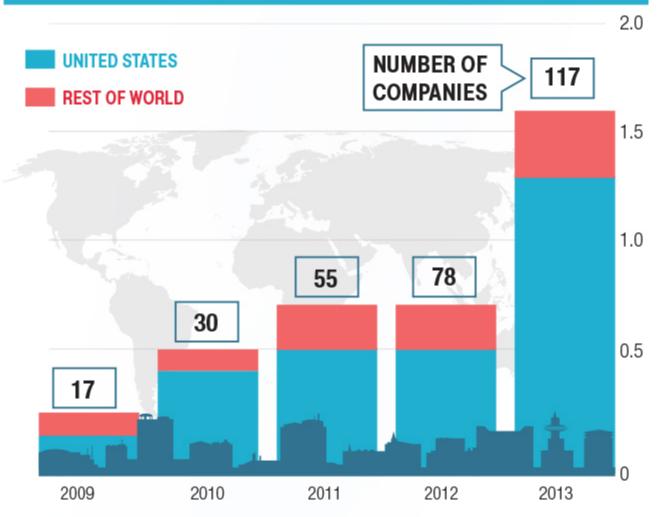
The On-Demand Economy and Wall Street

Wall Street Loves the On-Demand Economy

Labor Markets, Insurance Markets Will Be Impacted

HERE'S AN IDEA

VENTURE-CAPITAL INVESTMENT IN THE ON-DEMAND ECONOMY, \$BN



Source: Crunchbase

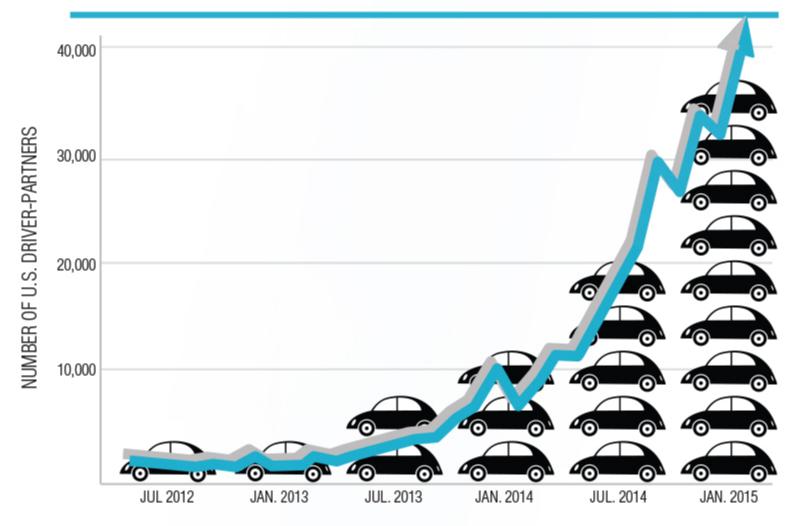


An UBER Case Study

Uber is the Best Known of the On-Demand Companies *Wall Street Loves Uber Vested Interests Hate Uber*

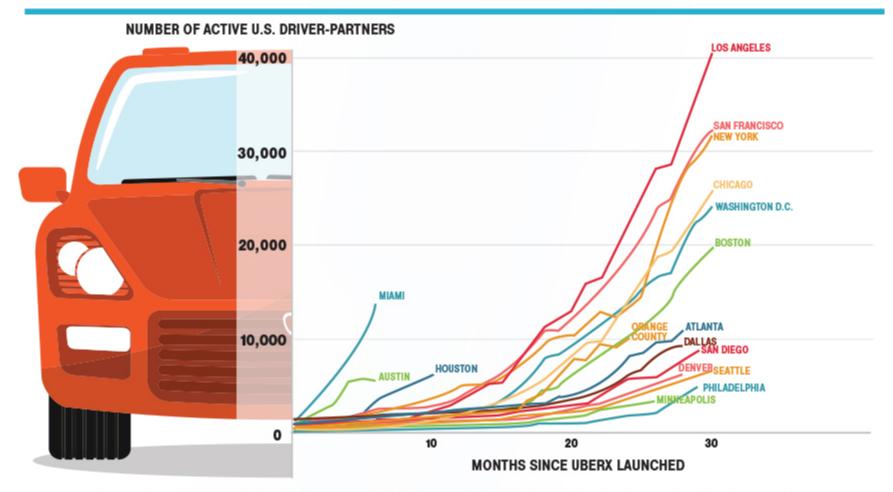


NUMBER OF NEW DRIVER-PARTNERS STARTING EACH MONTH IN THE UNITED STATES



Note: Figure based on U.S. UberBLACK and uberX driver-partners who have joined since June 2012 (303,985 individuals), based on Uber data.

ACTIVE U.S. DRIVER-PARTNERS OVER TIME, BY CITY



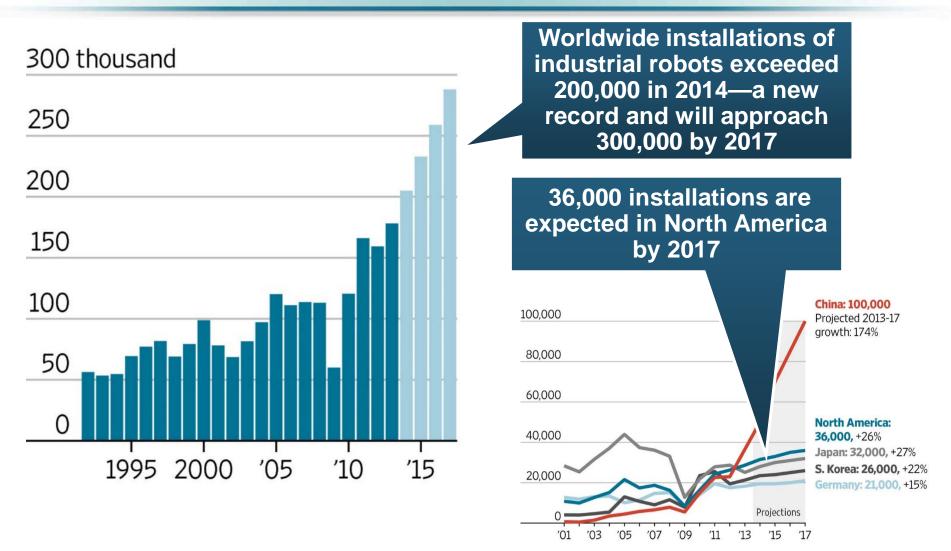
Note: Figure reports the number of U.S. UberBLACK and uberX driver-partners making at least one trip in the specified month, indexed to the number of months since Uber began in the city or June 2012, whichever came later.



Looking Ahead: Disruptive Forces Rule

Technology's Impacts on the Economy, the Workforce and the Insurance Industry Will Be Significant

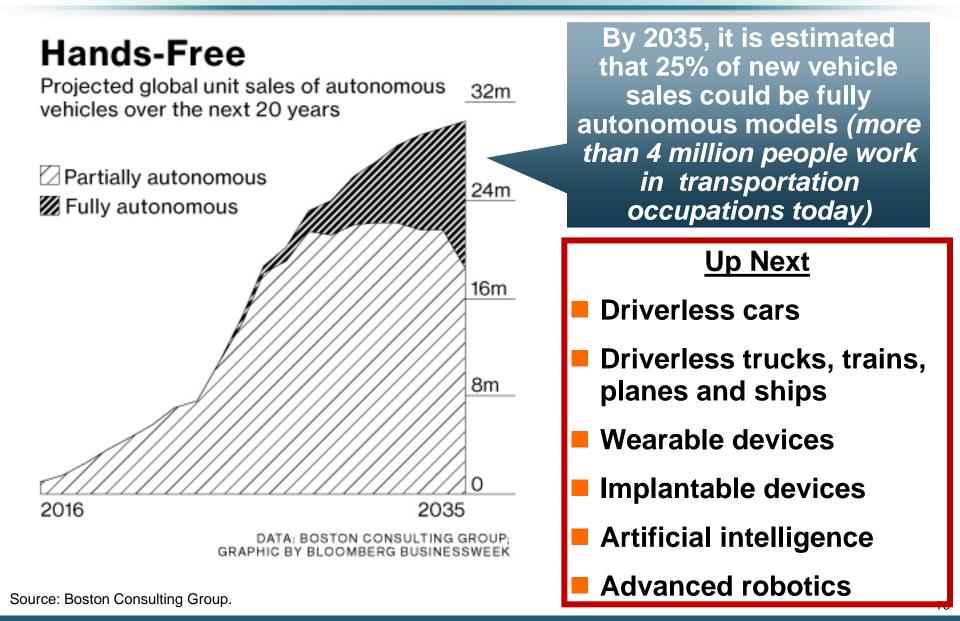
Worldwide Industrial Robot Installations, 1992-2017F



*Estimate.

Sources: Outlook on World Robotics 2014, International Federation of Robotics; Insurance Information Institute.

Future Shock: Many More Transformative Technologies Are Around the Corner





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