



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

NCCI Annual Issues Symposium

Orlando, FL

May 5, 2016

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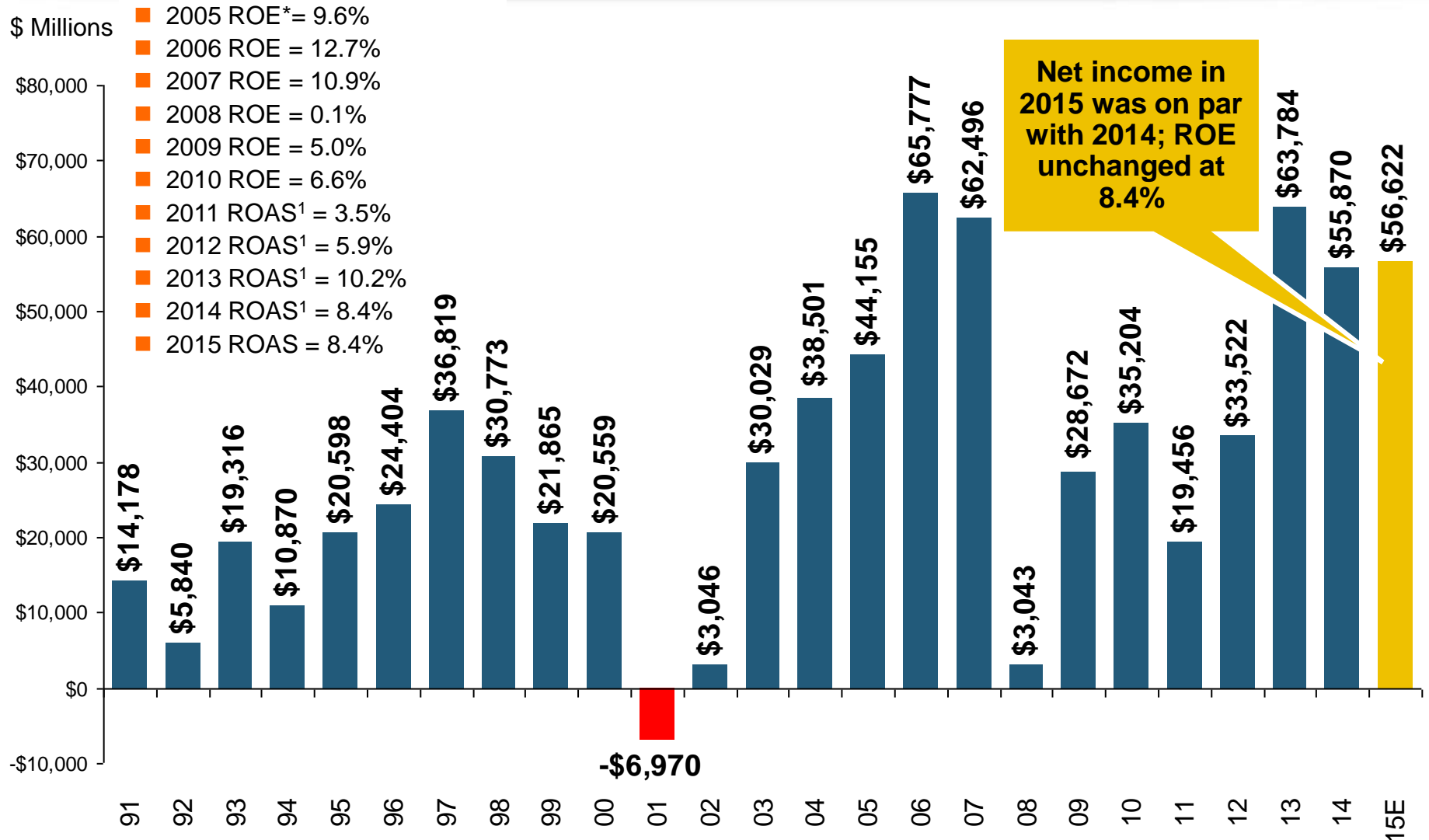
P/C Insurance Industry Financial Overview

**2015: Second-Best Year in the
Post-Crisis Era & Carbon Copy of 2014**

Modest CATs, Reserve Releases

Workers Comp Helped Too

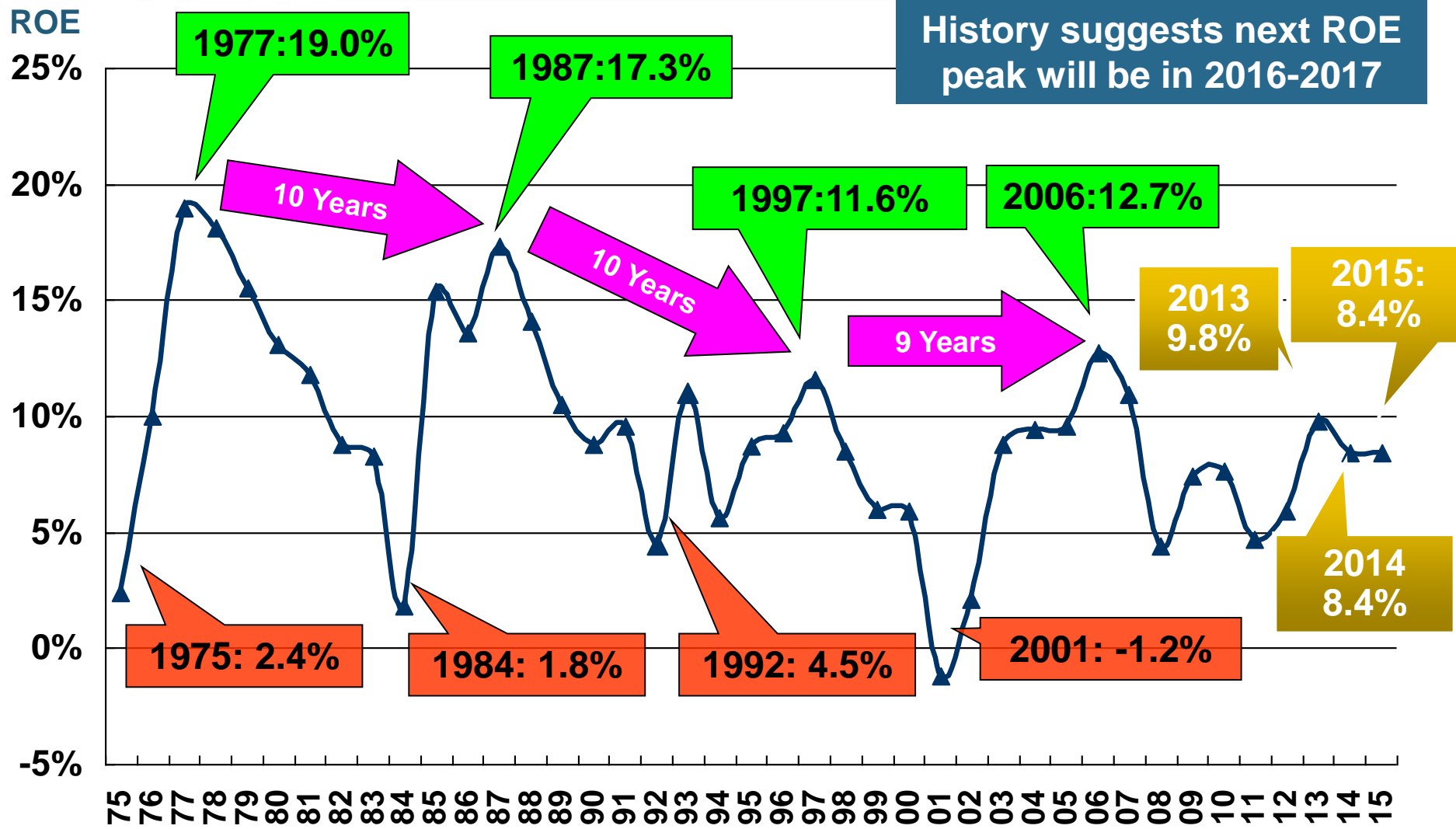
P/C Industry Net Income After Taxes 1991–2015



*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

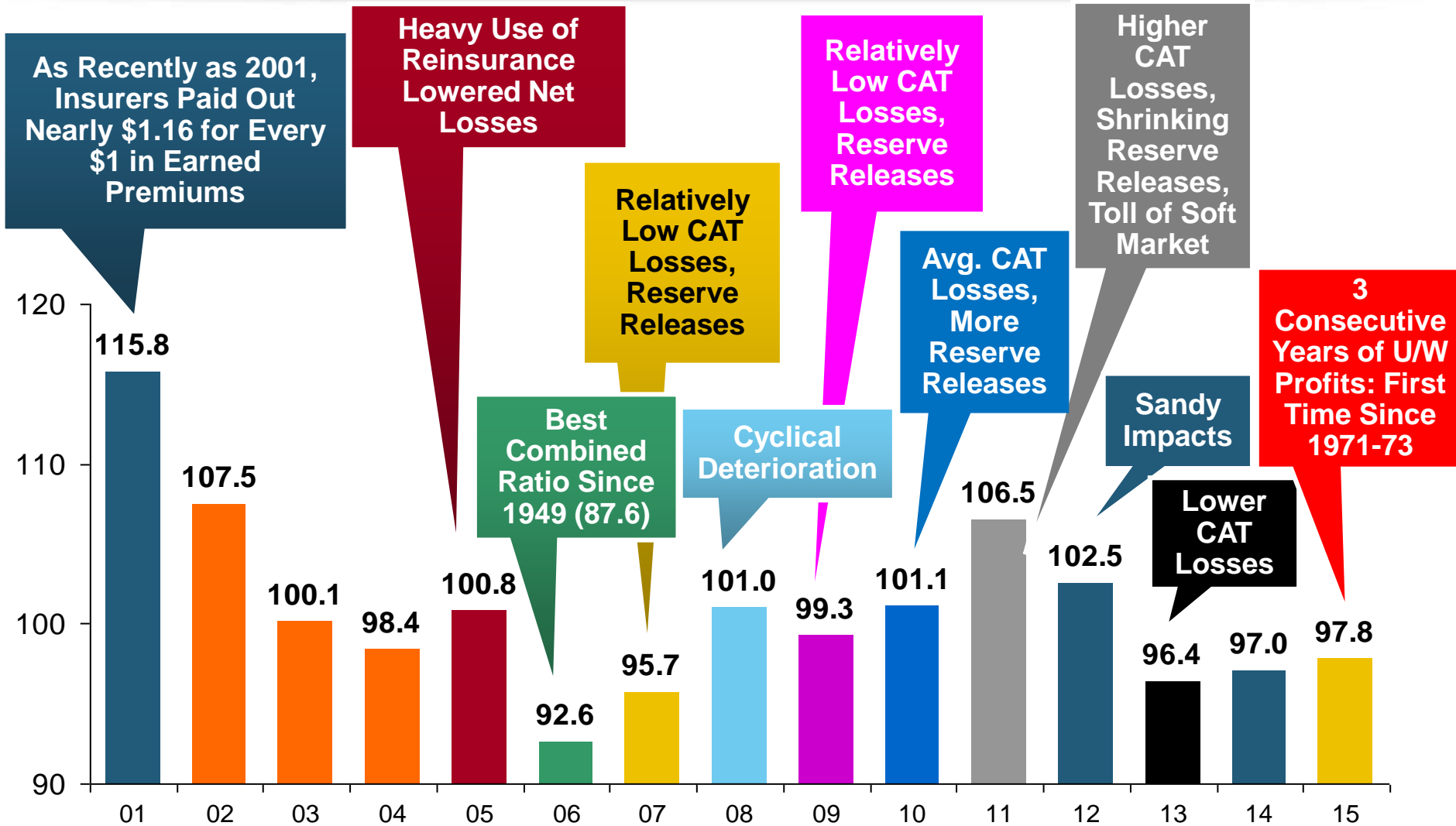
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2015



*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*

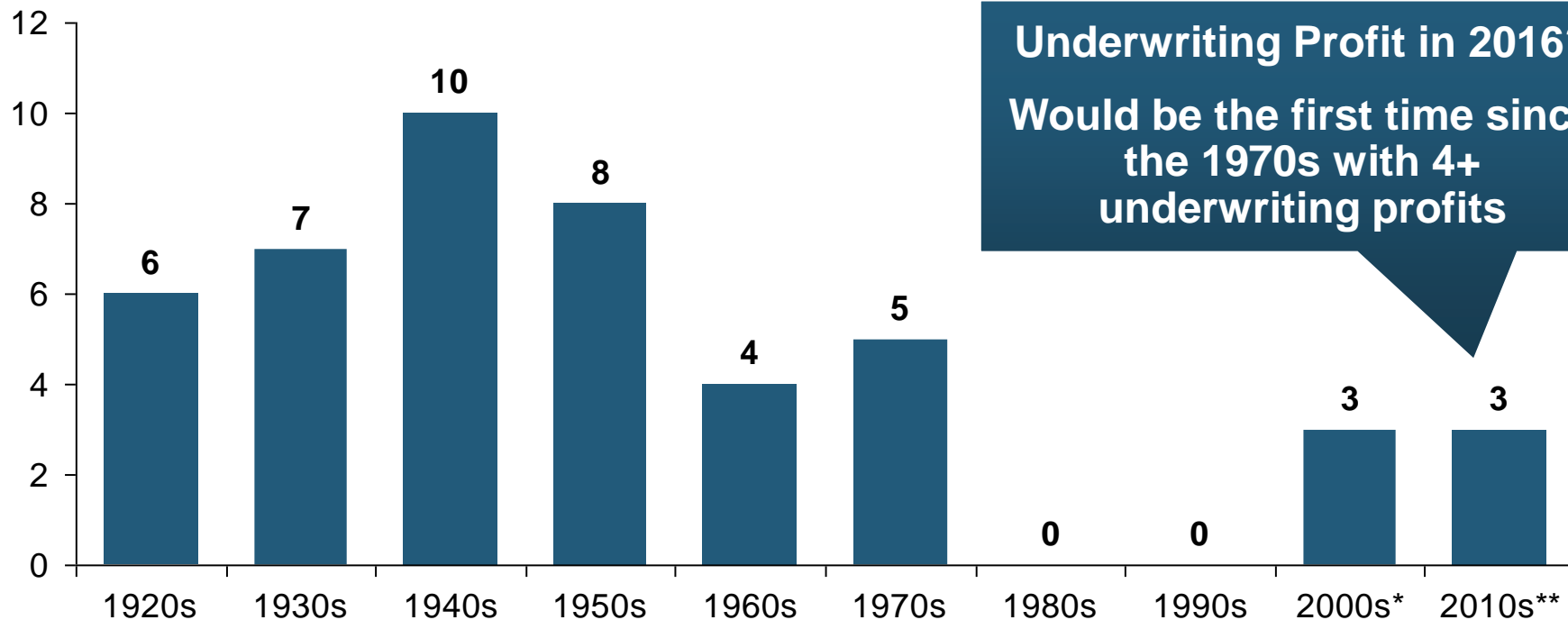


* Excludes Mortgage & Financial Guaranty insurers 2008--2014. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014: = 97.0.

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

Number of Years with Underwriting Profits



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.

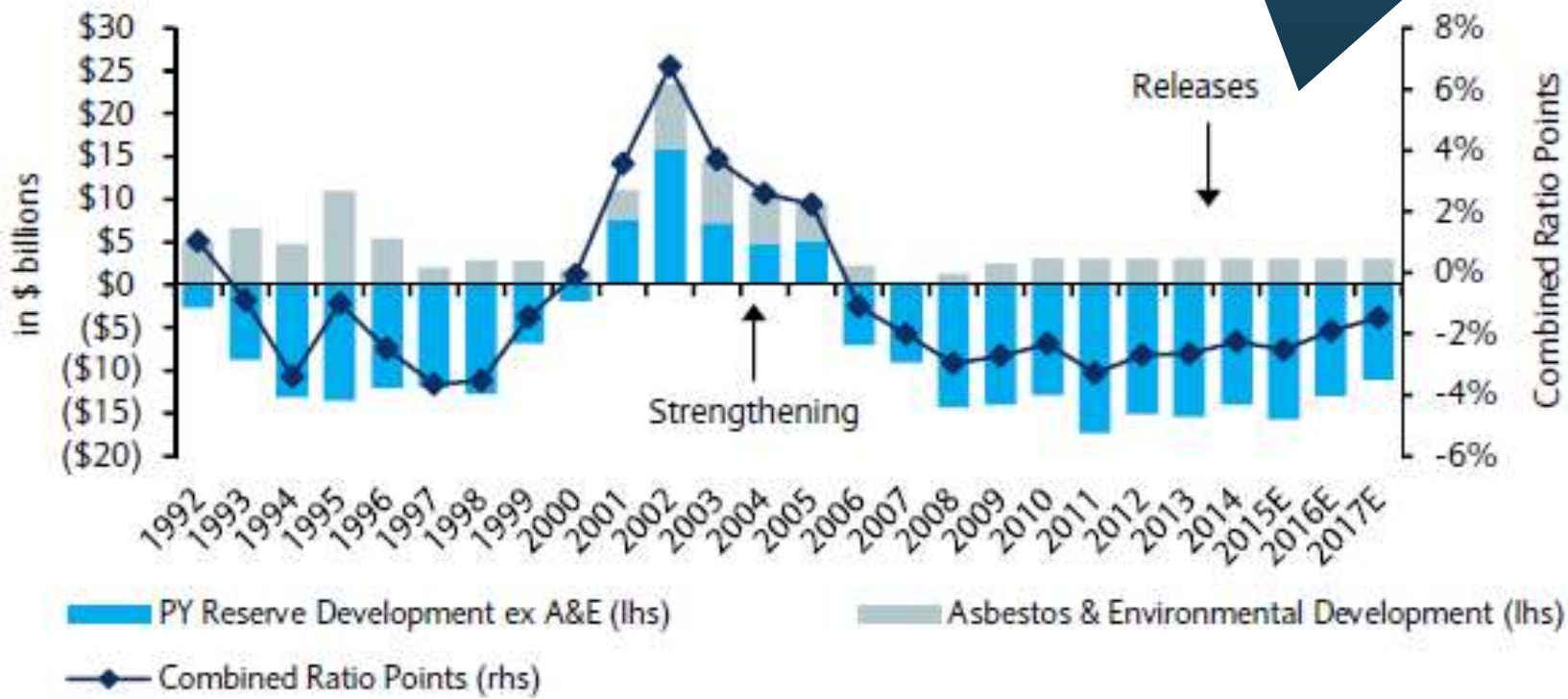
Note: Data for 1920–1934 based on stock companies only.

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

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

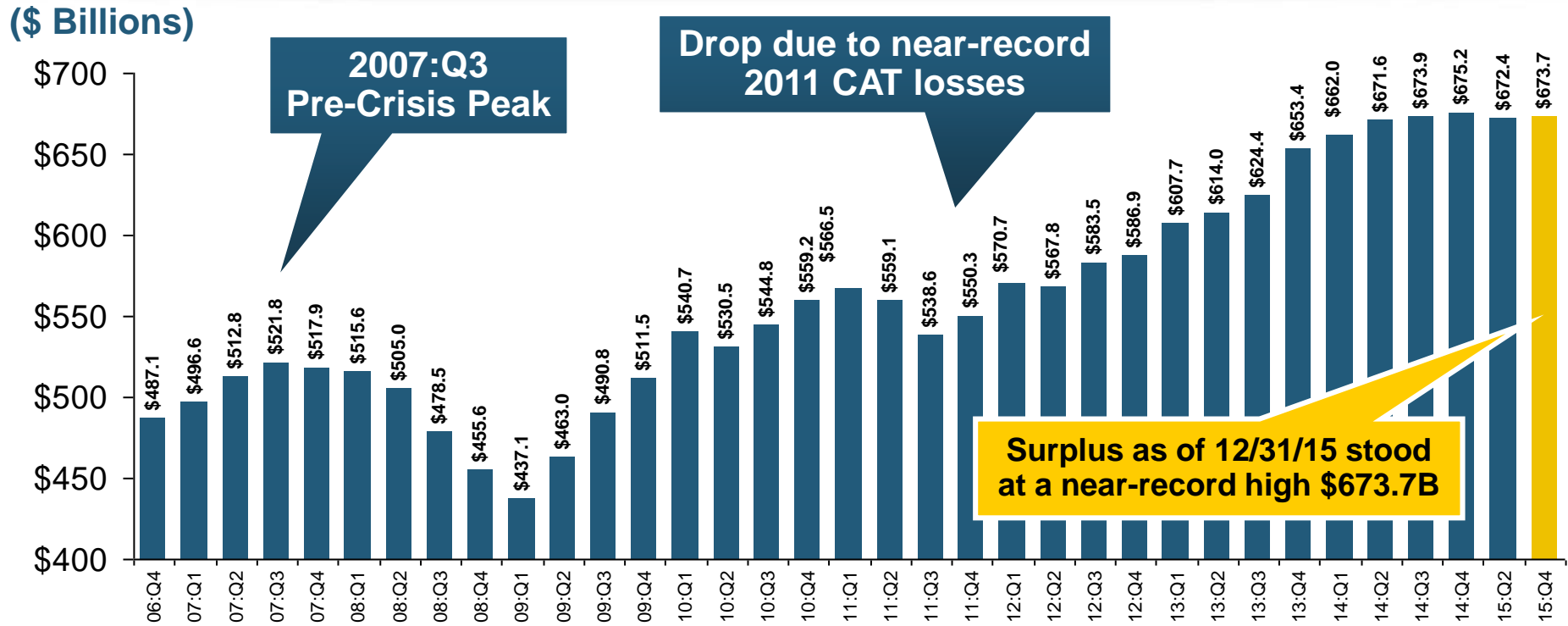
Reserve releases are expected to gradually taper off slowly, but will continue to benefit the bottom line and combined ratio through at least 2017

Reserve Change



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

Policyholder Surplus, 2006:Q4–2015:Q4



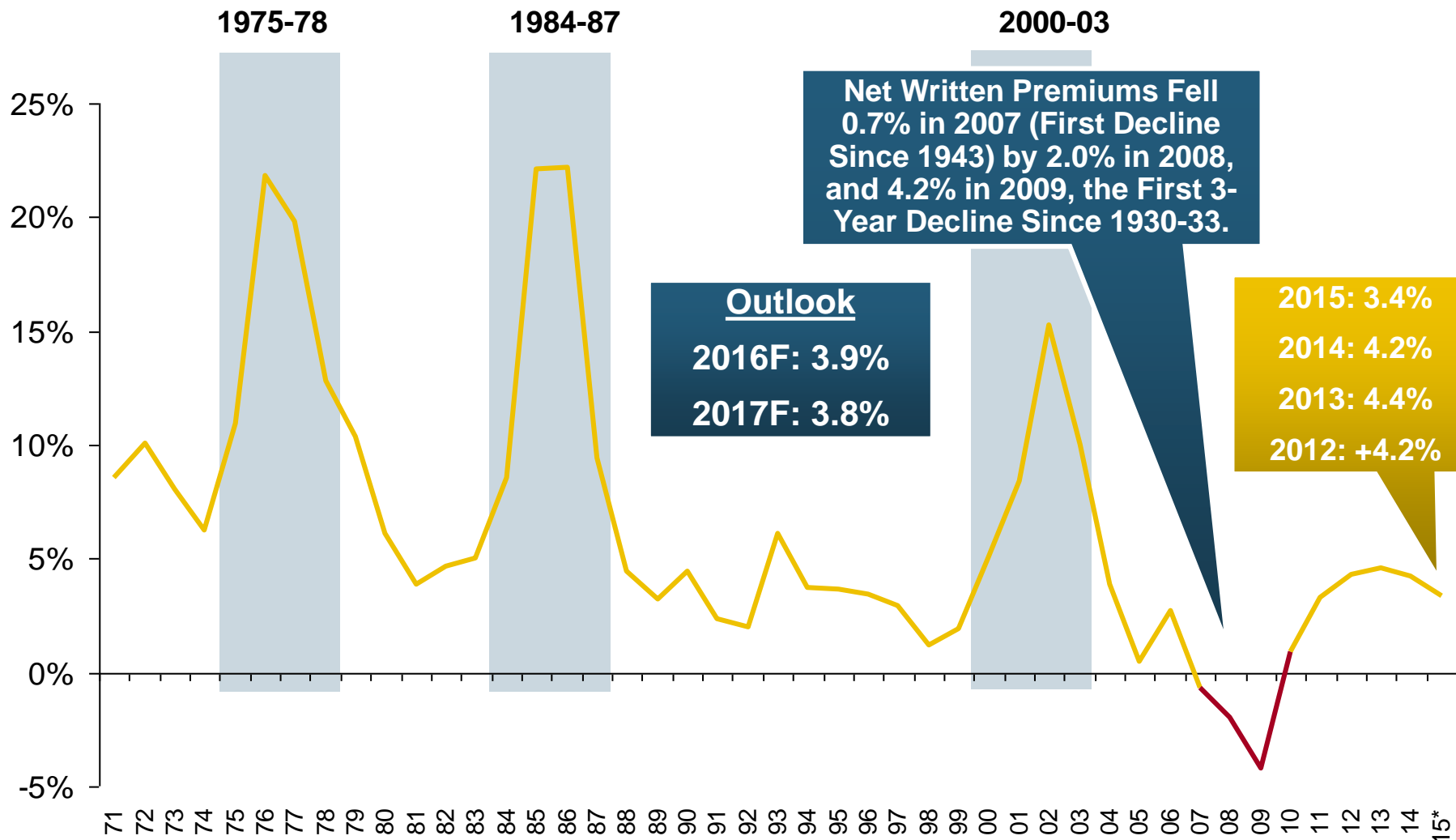
The industry now has \$1 of surplus for every \$0.76 of NPW, close to the strongest claims-paying status in its history.

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.

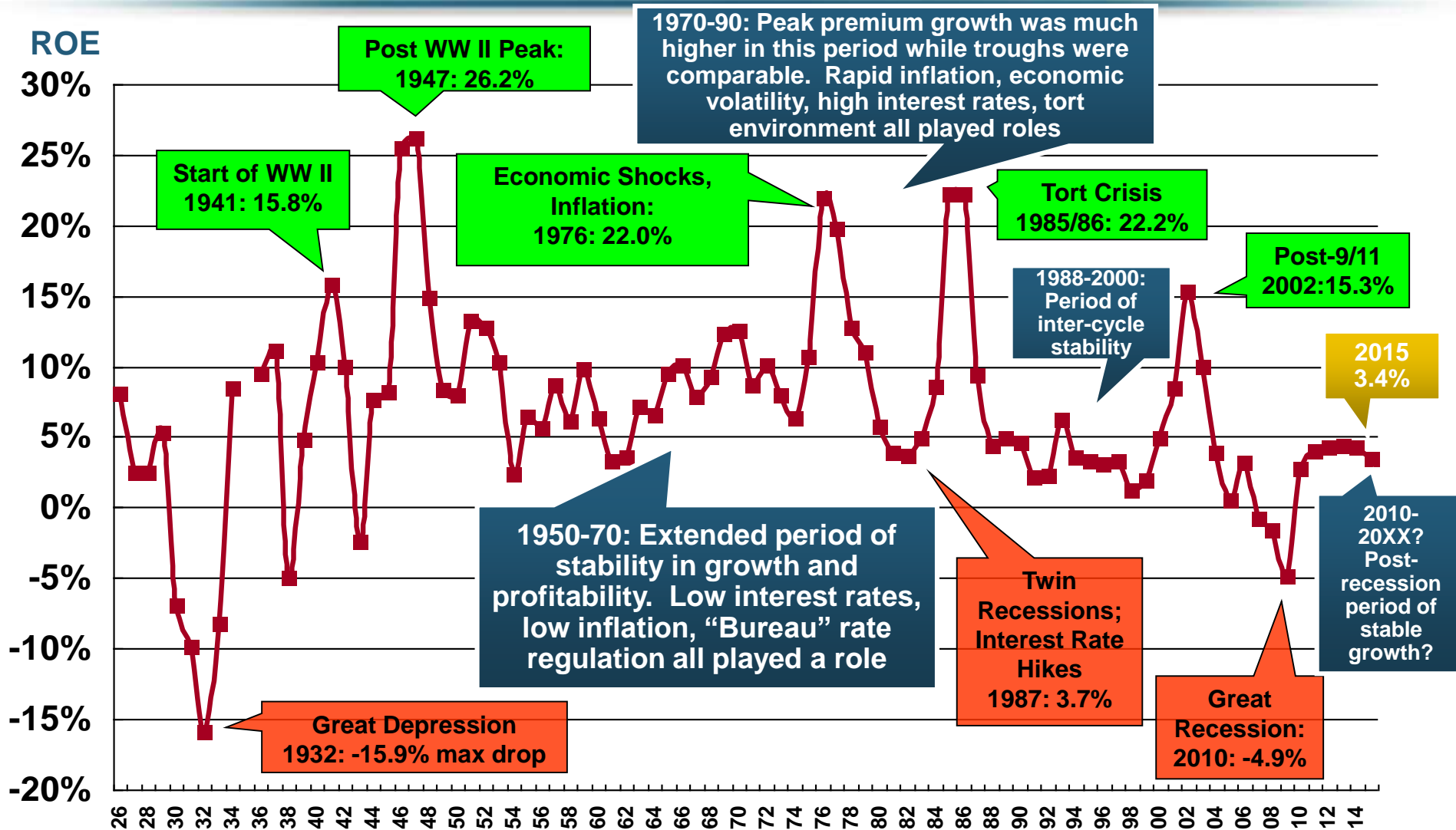
Net Premium Growth (All P/C Lines): Annual Change, 1971—2015

(Percent)



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

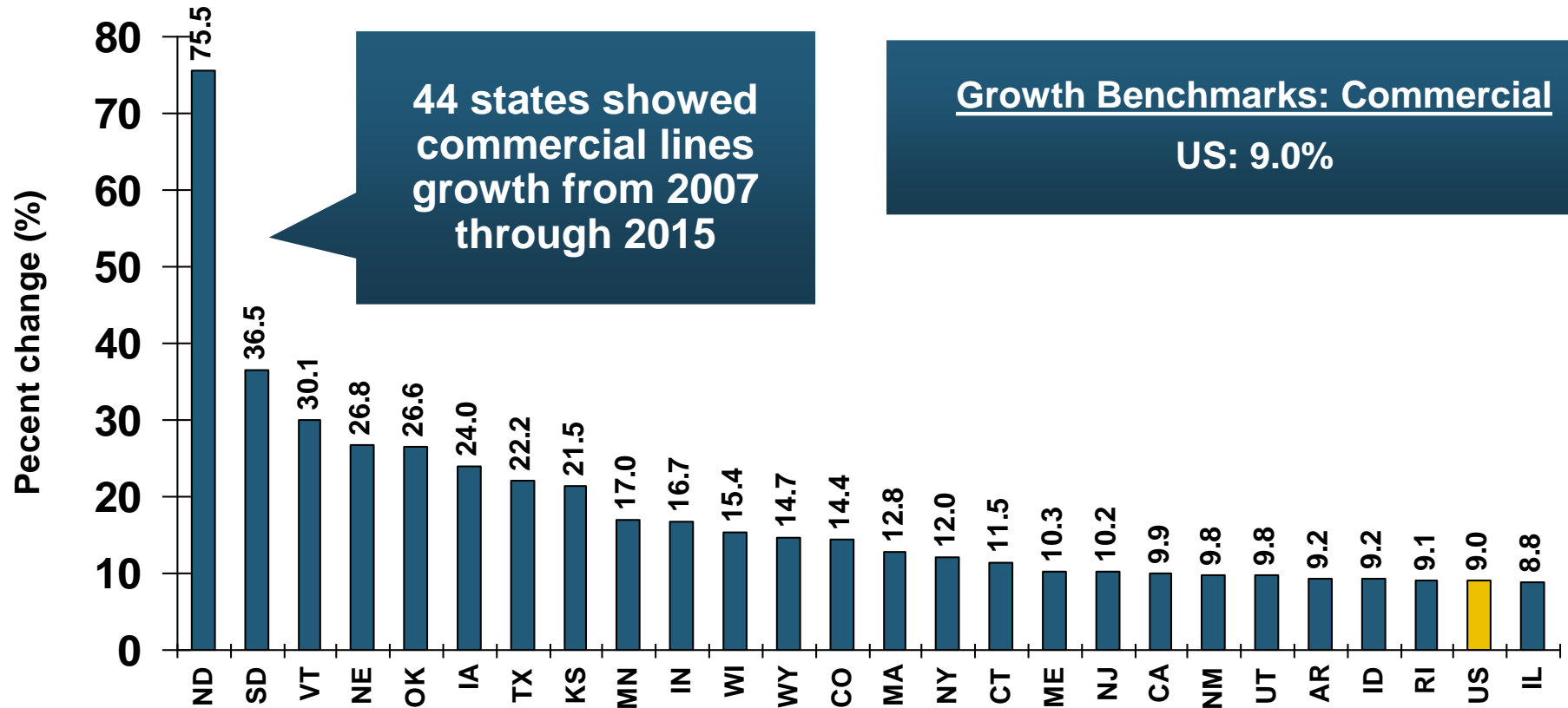


Note: Data through 1934 are based on stock companies only. Data include state funds beginning in 1998.

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

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

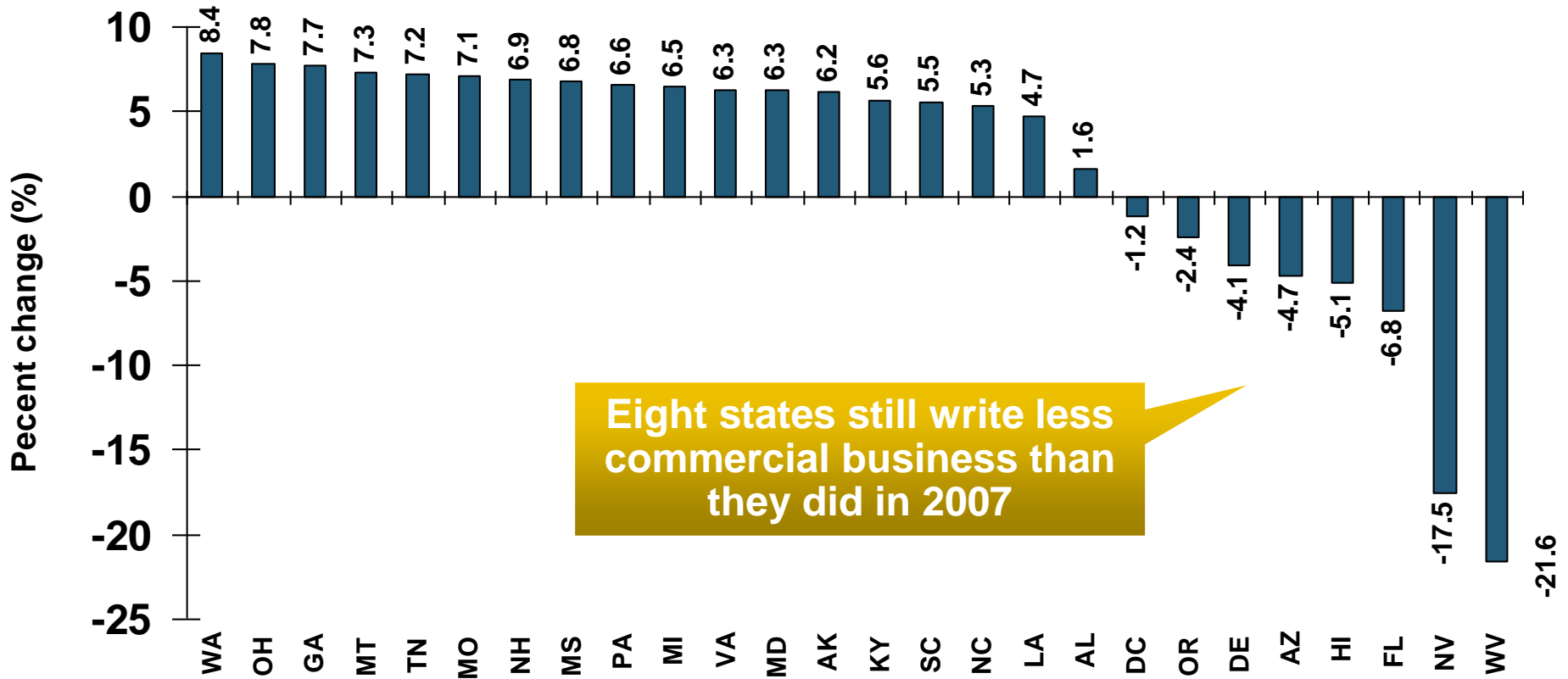
Top 25 States



Sources: NAIC via SNL Financial; Insurance Information Institute.

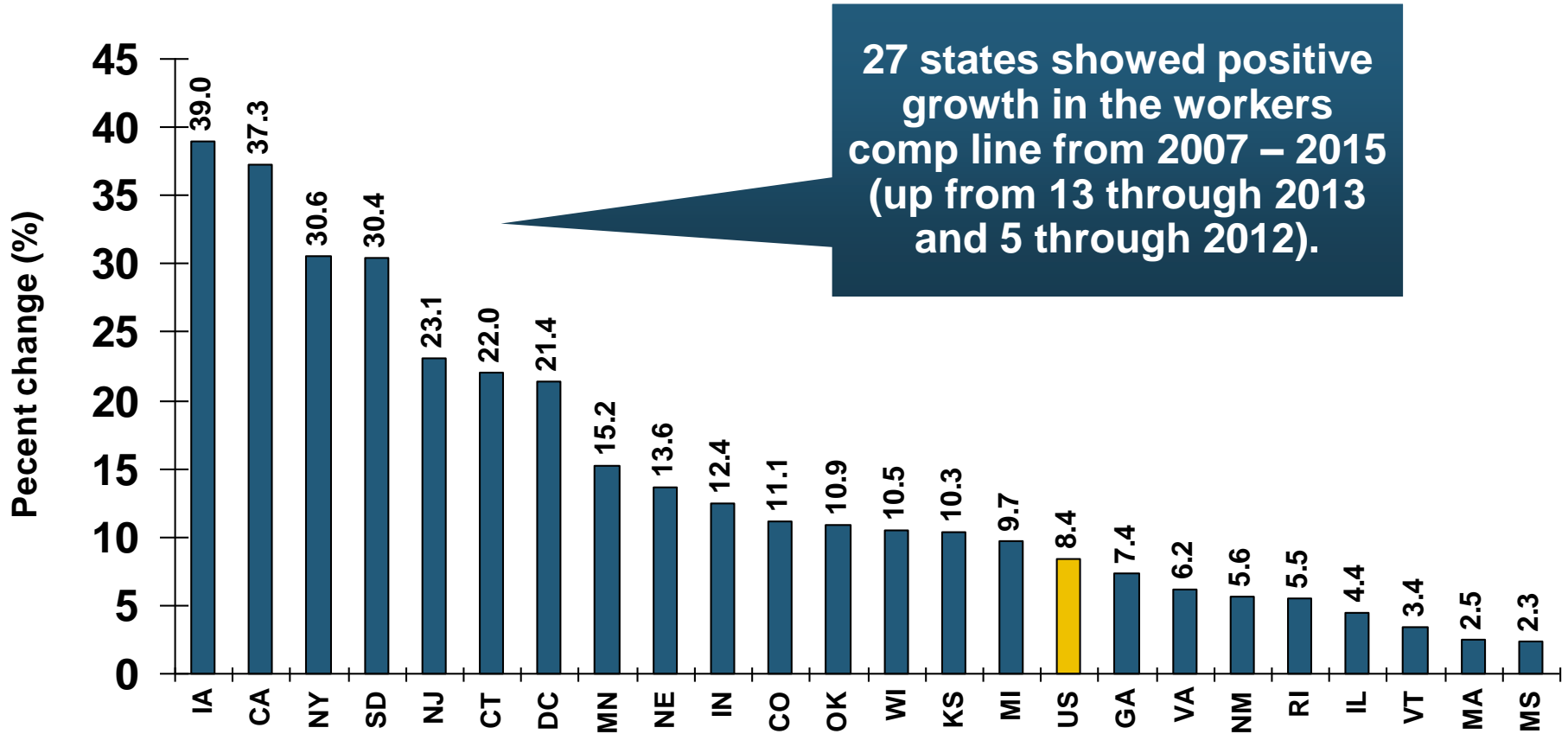
Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2015

Bottom 25 States



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

Top 25 States

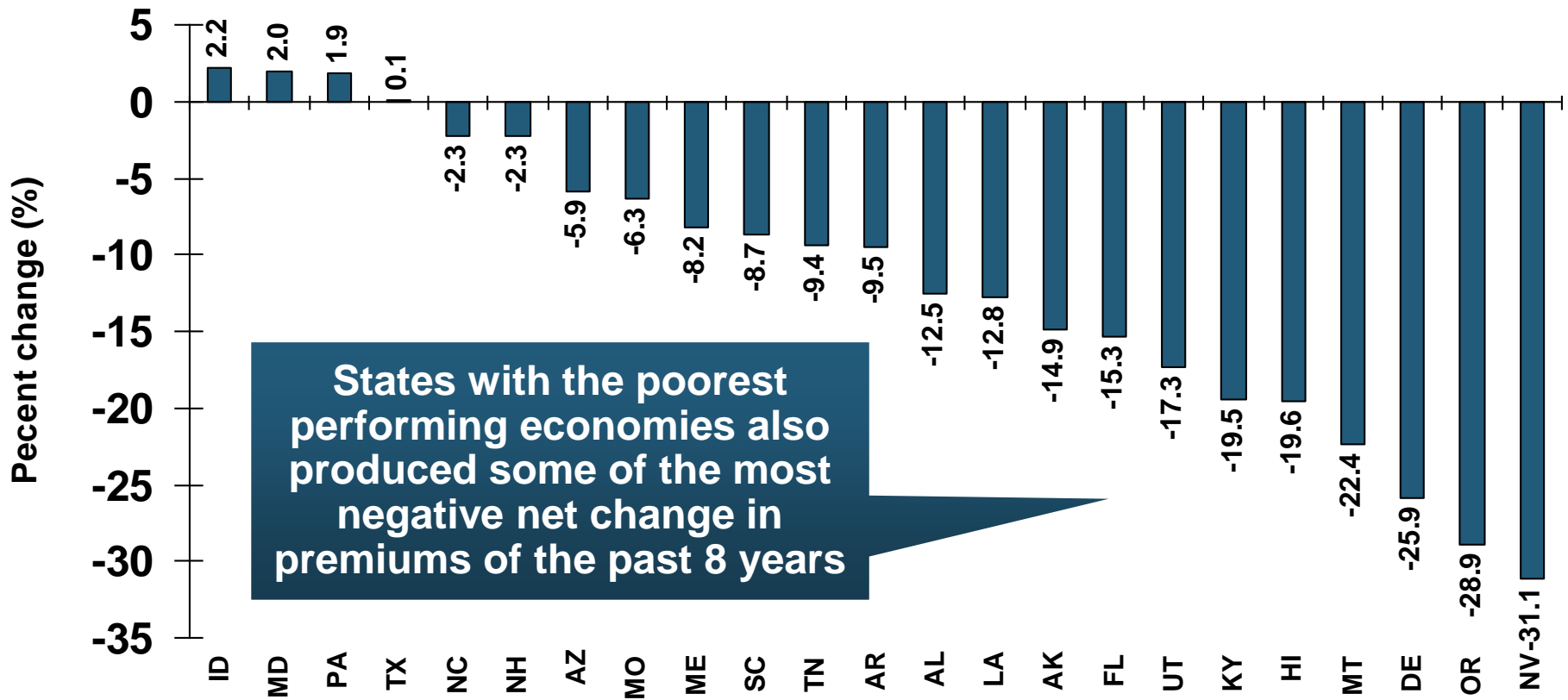


*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

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

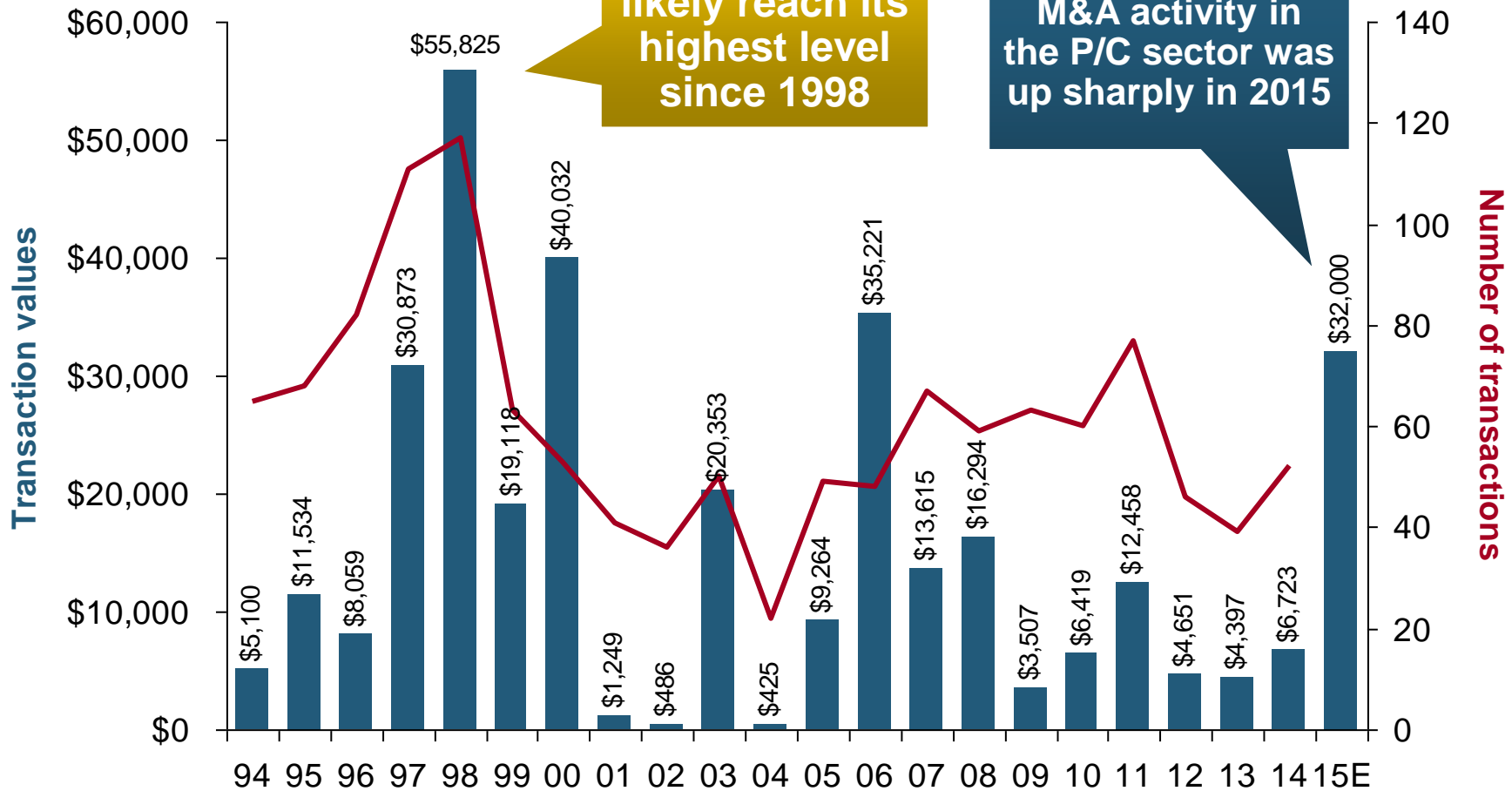


*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

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)

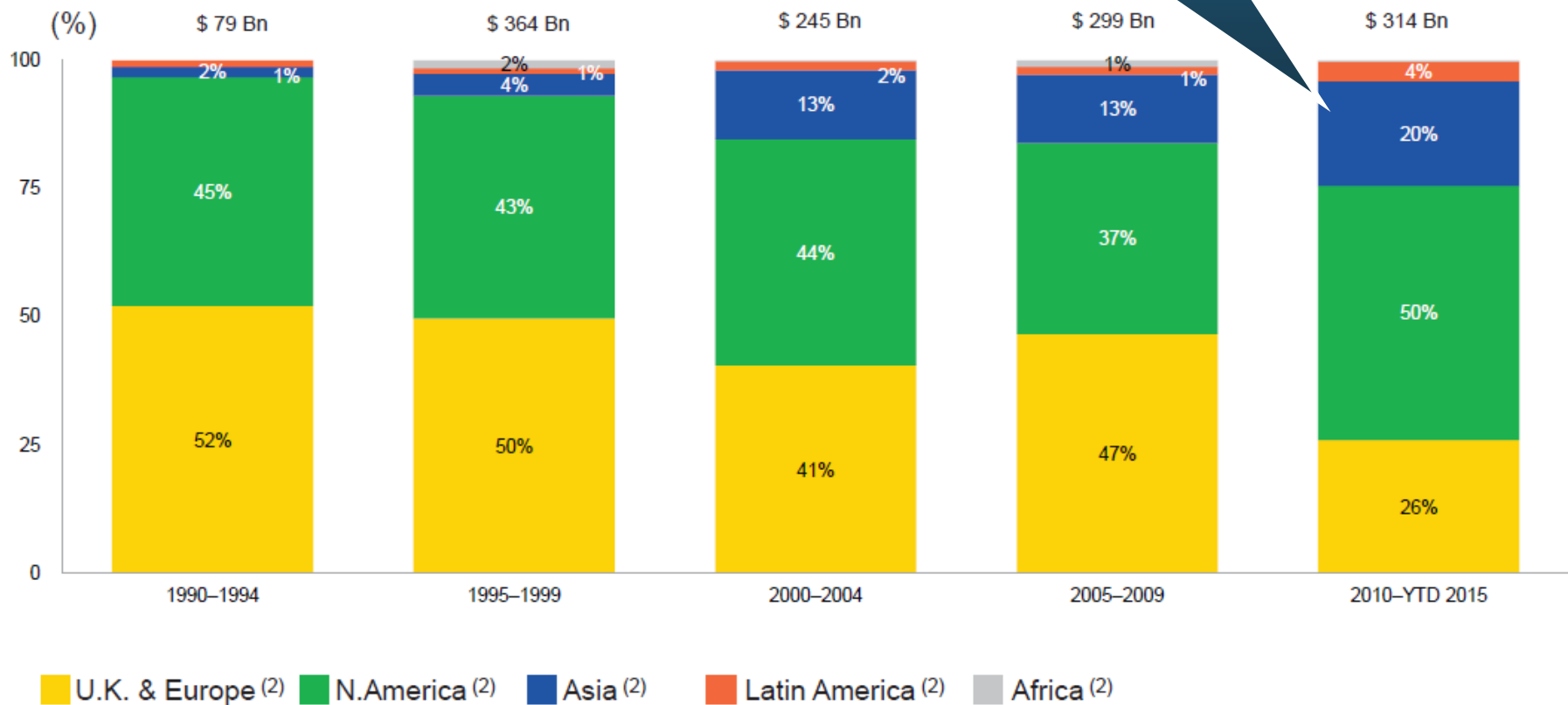
(\$ Millions)



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

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

Asian, N. American deal volumes were up sharply in 2015



Notes
 1. Split based on target's region
 2. Values exclude assumed liabilities

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.

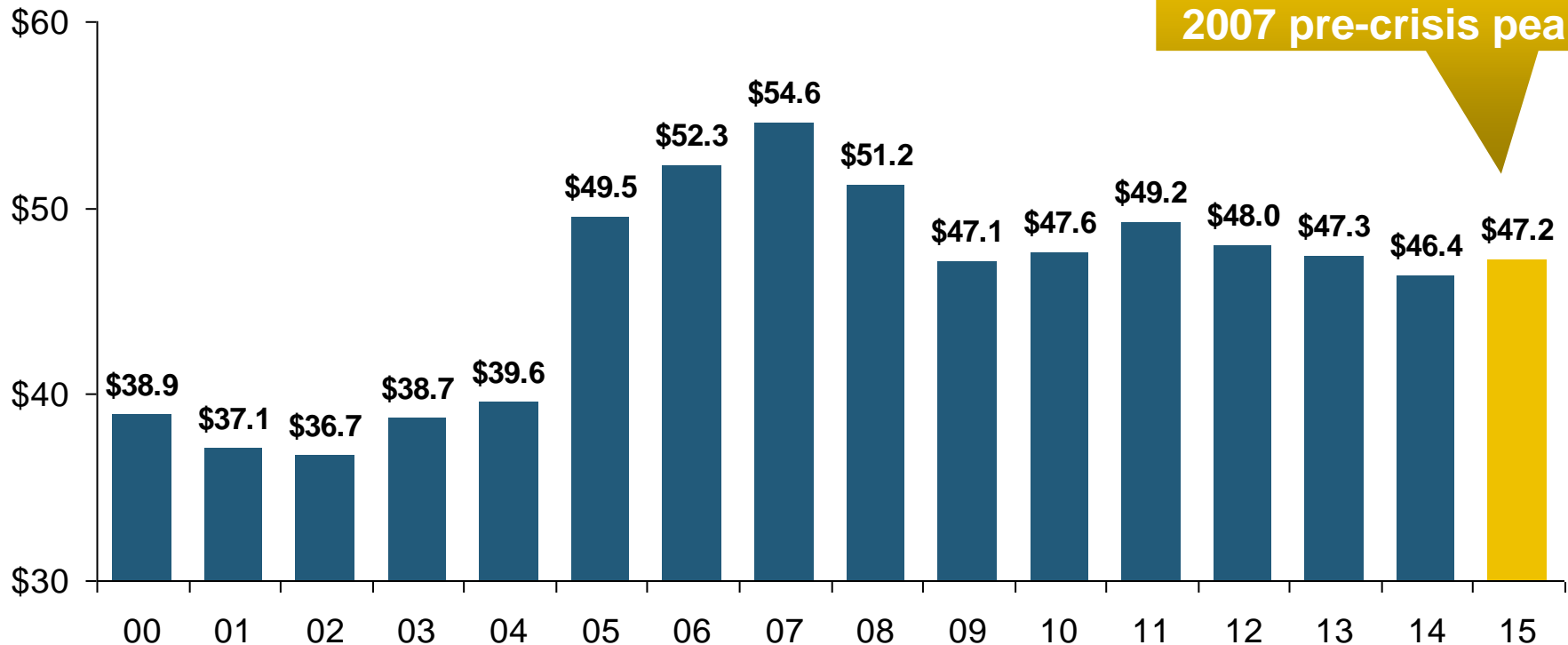
INVESTMENTS: THE NEW REALITY

**Investment Performance is a Key
Driver of Profitability**

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

Property/Casualty Insurance Industry Investment Income: 2000–2015¹

(\$ Billions)

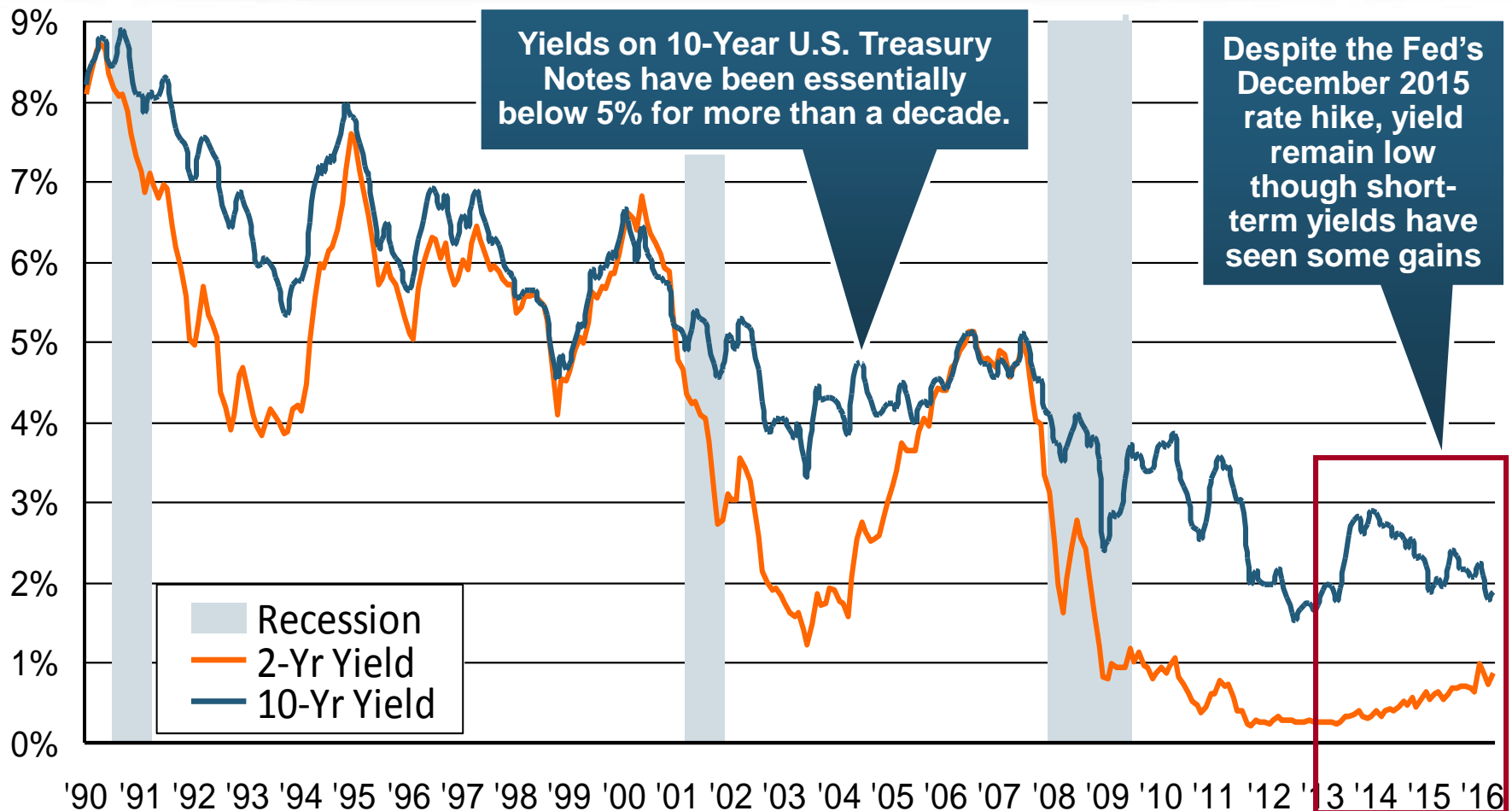


Investment earnings are still below their 2007 pre-crisis peak

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*

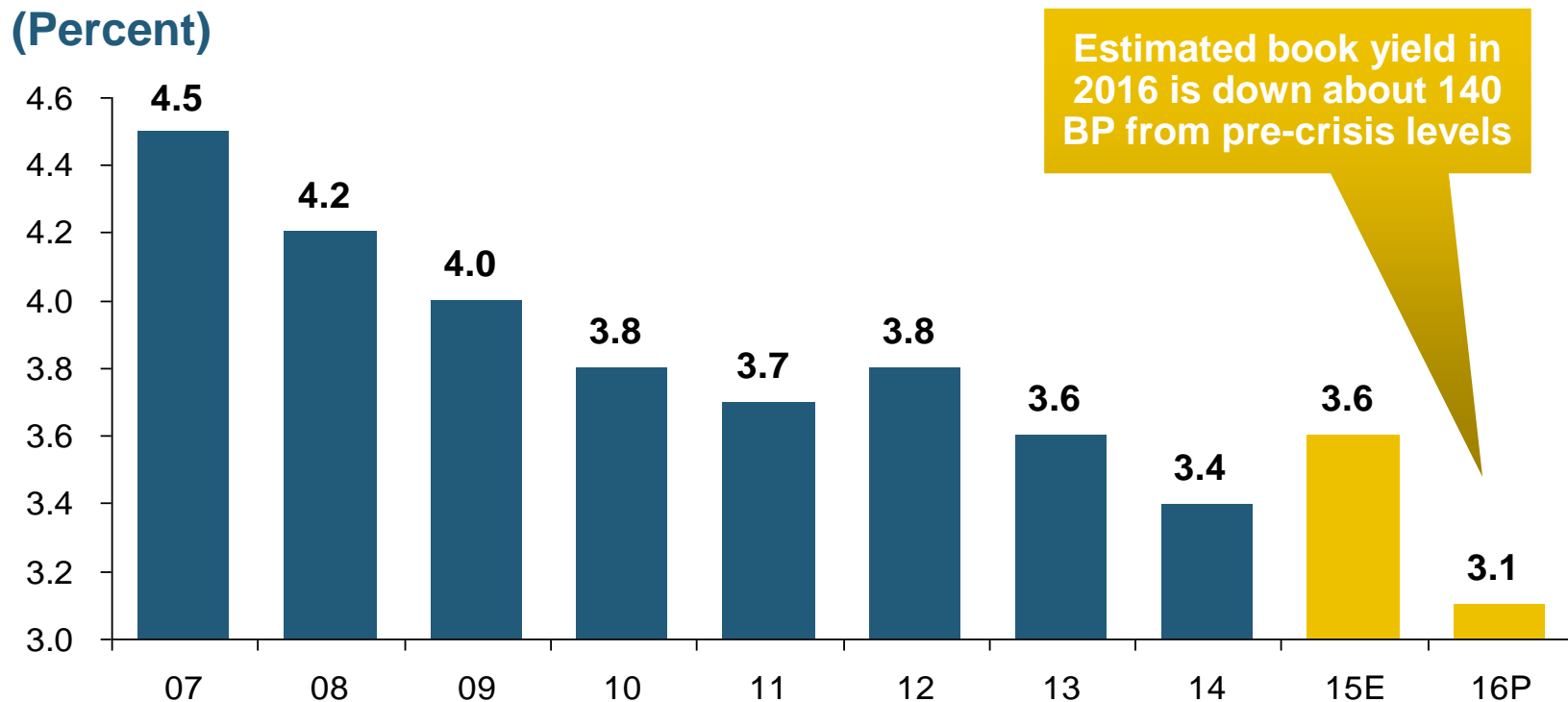


Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, constant maturity, nominal rates, through March 2016.

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

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



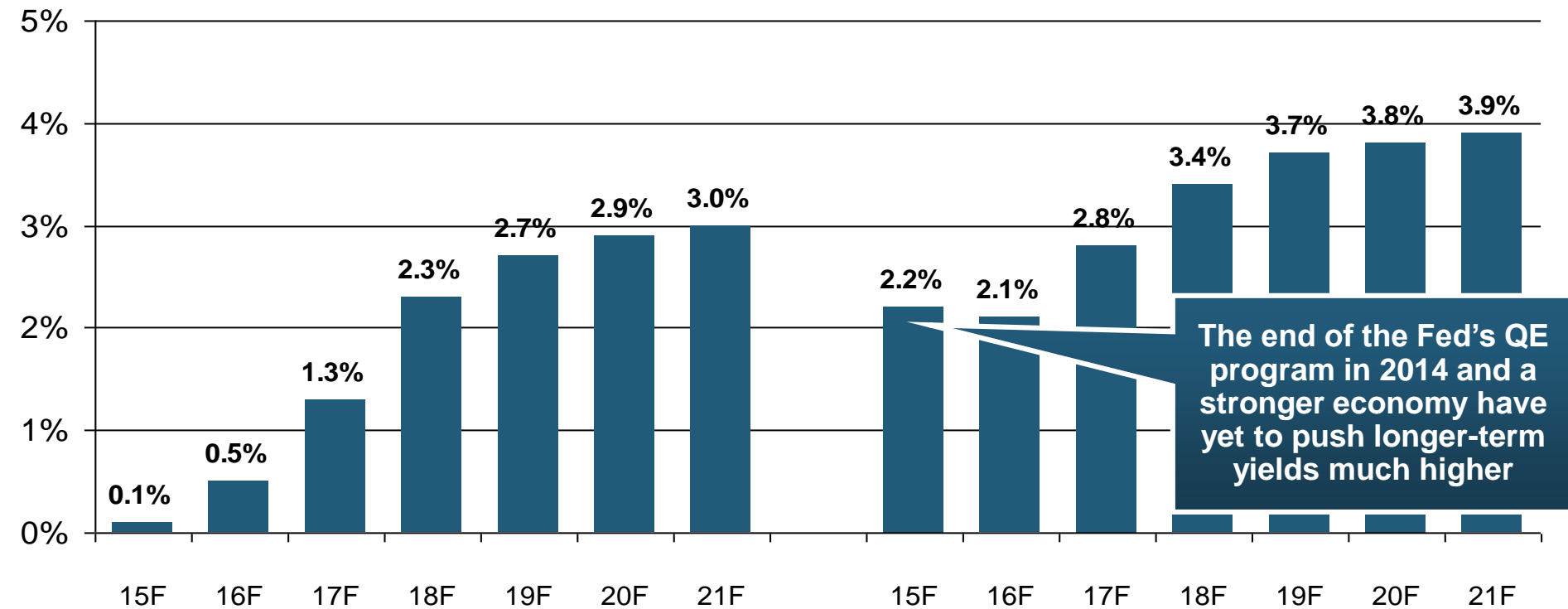
The yield on invested assets remains low relative to pre-crisis yields. The Fed's plan to raise interest rates in late 2015 has pushed up some yields, albeit quite modestly.

Interest Rate Forecasts: 2016 – 2021

Yield (%)

3-Month Treasury

10-Year Treasury

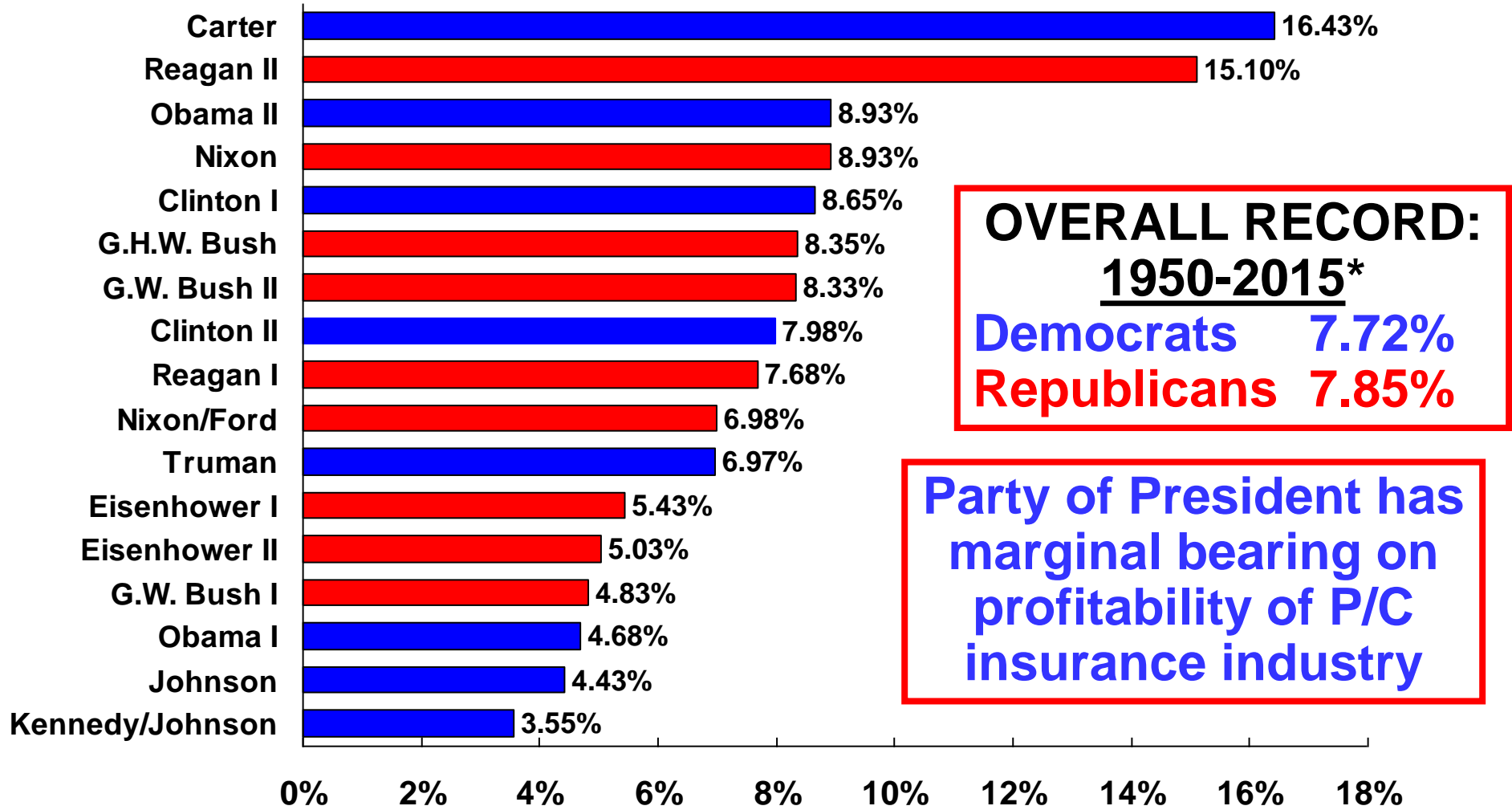


A full normalization of interest rates is unlikely until 2019, more than a decade after the onset of the financial crisis.

Profitability & Politics

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

P/C Insurance Industry ROE by Presidential Administration, 1950-2014*

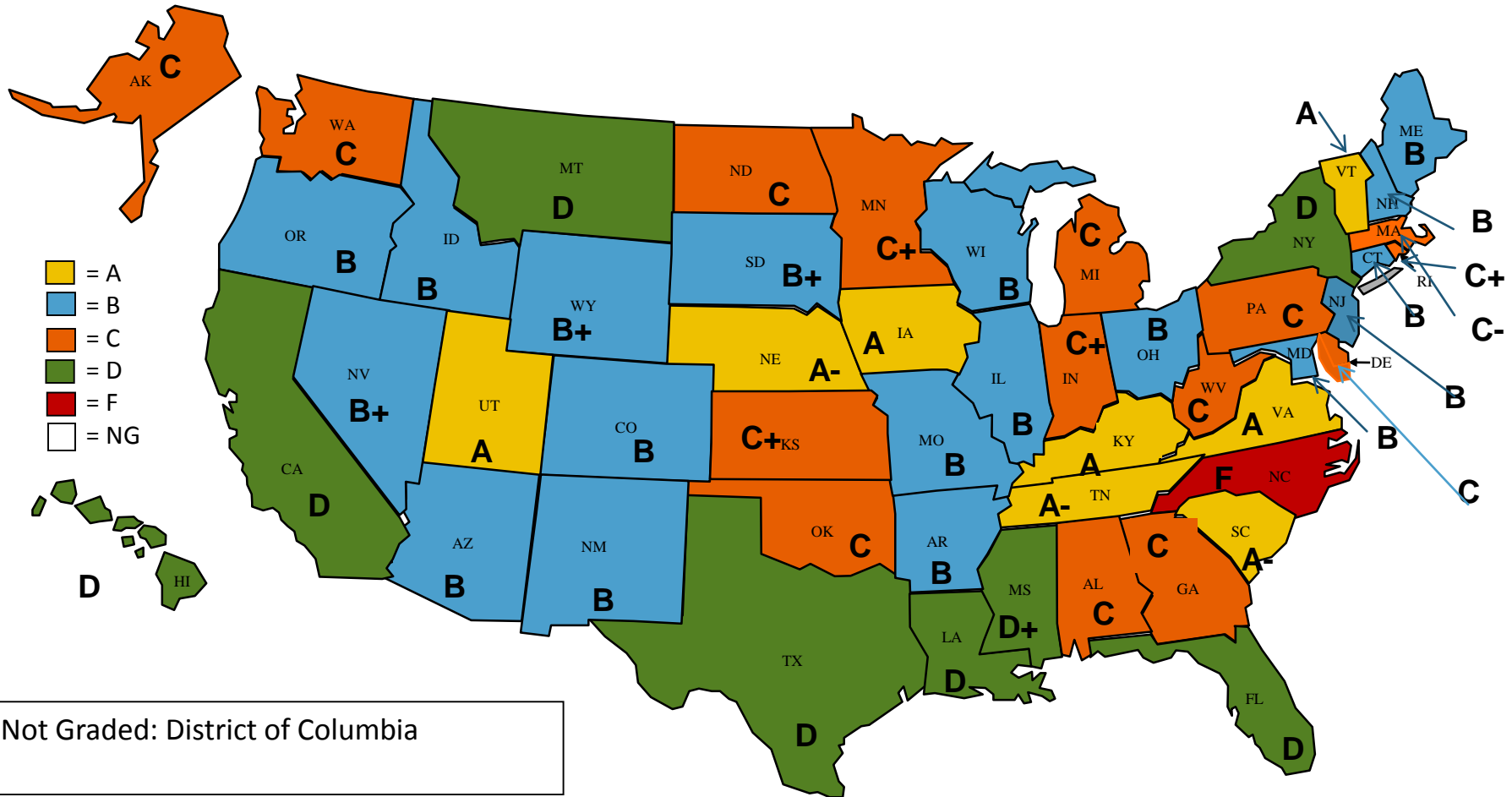


*Truman administration ROE of 6.97% based on 3 years only, 1950-52;. Source: Insurance Information Institute

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

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

2015 Property and Casualty Insurance Regulatory Report Card





Labor Markets Trends:
Recovery Continues in 2016

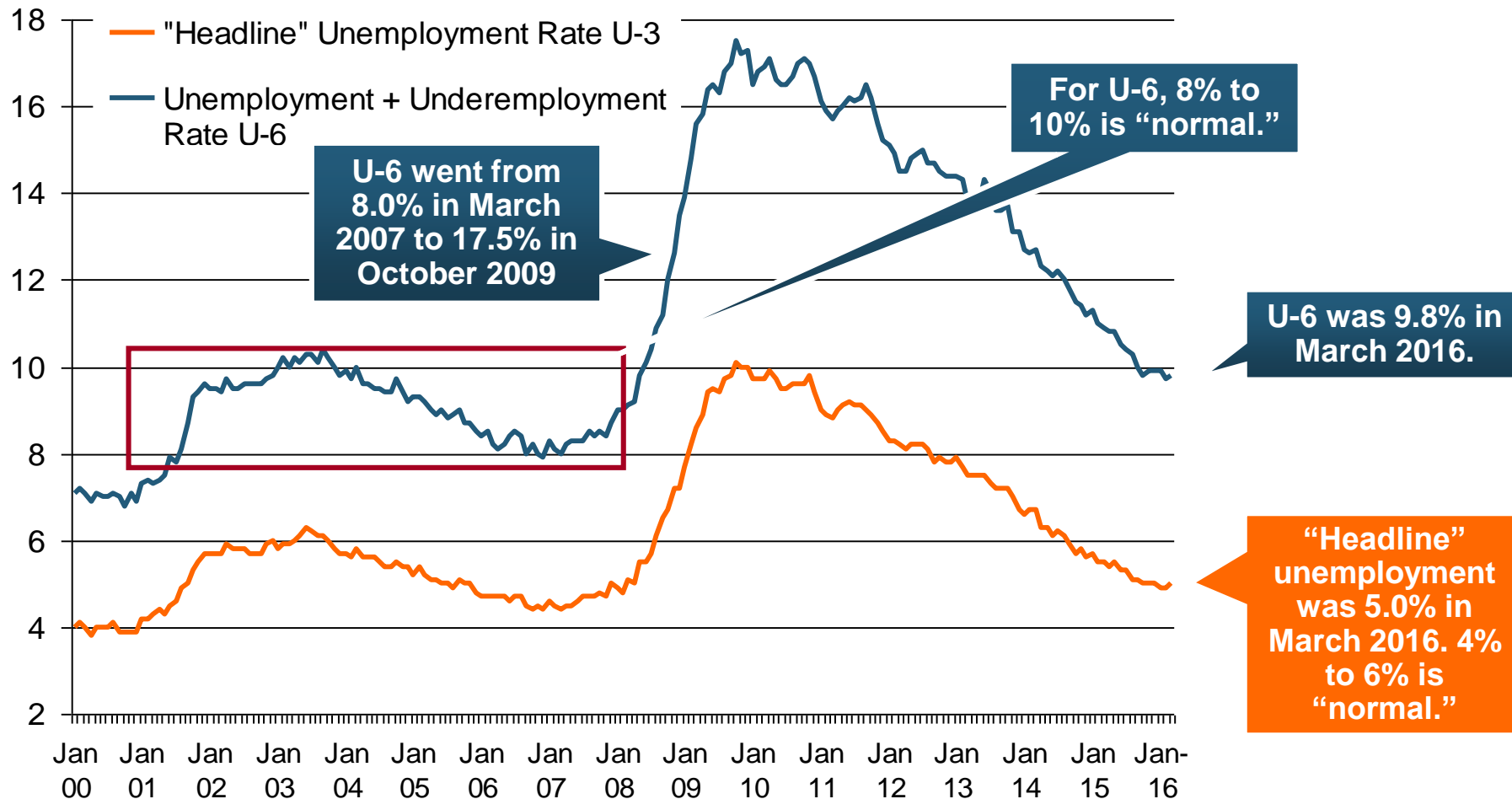
2015

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

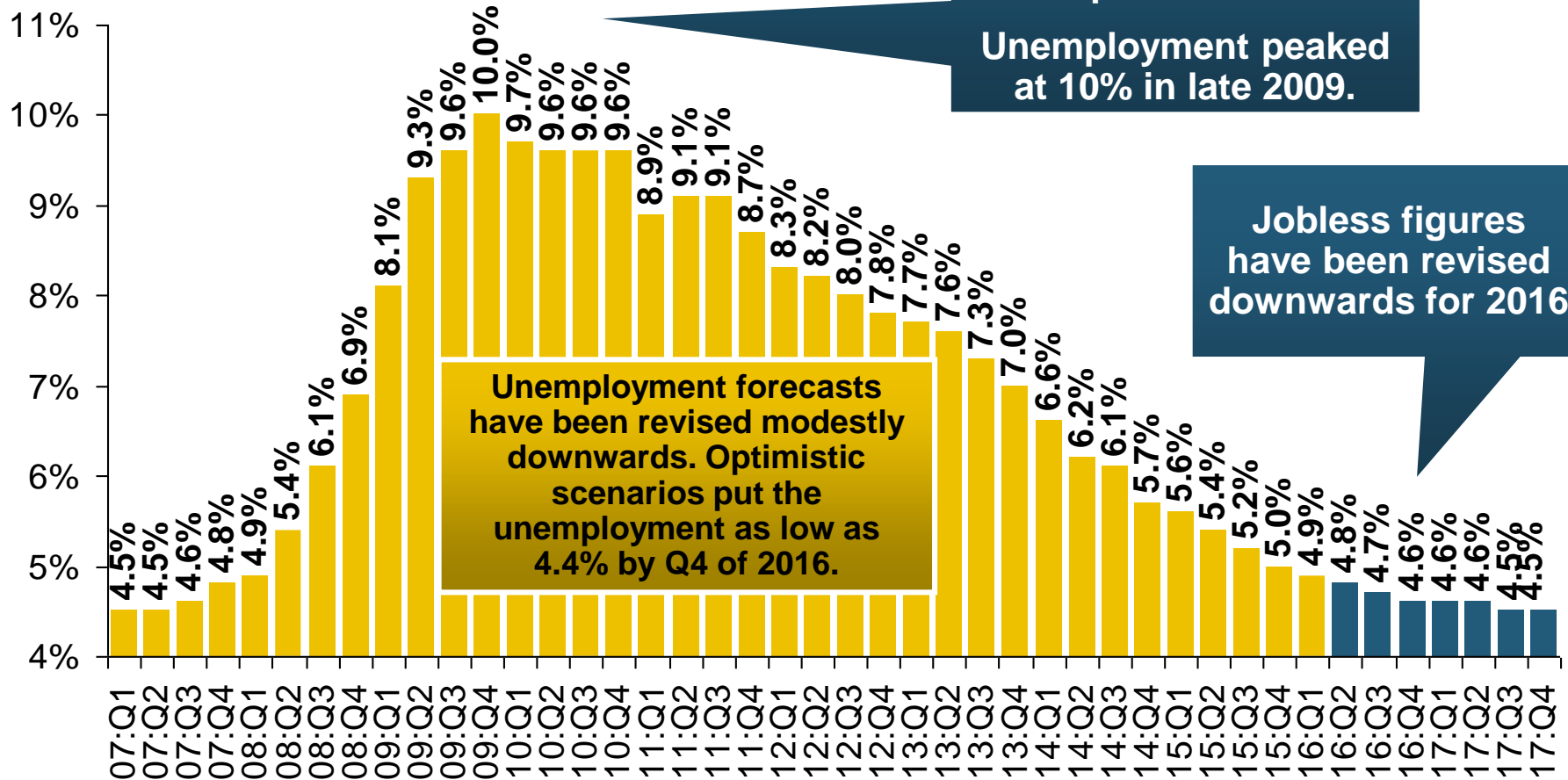
January 2000 through March 2016, Seasonally Adjusted (%)



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

US Unemployment Rate Forecast

2007:Q1 to 2017:Q4F*



Rising unemployment eroded payrolls and WC's exposure base.
Unemployment peaked at 10% in late 2009.

Jobless figures have been revised downwards for 2016

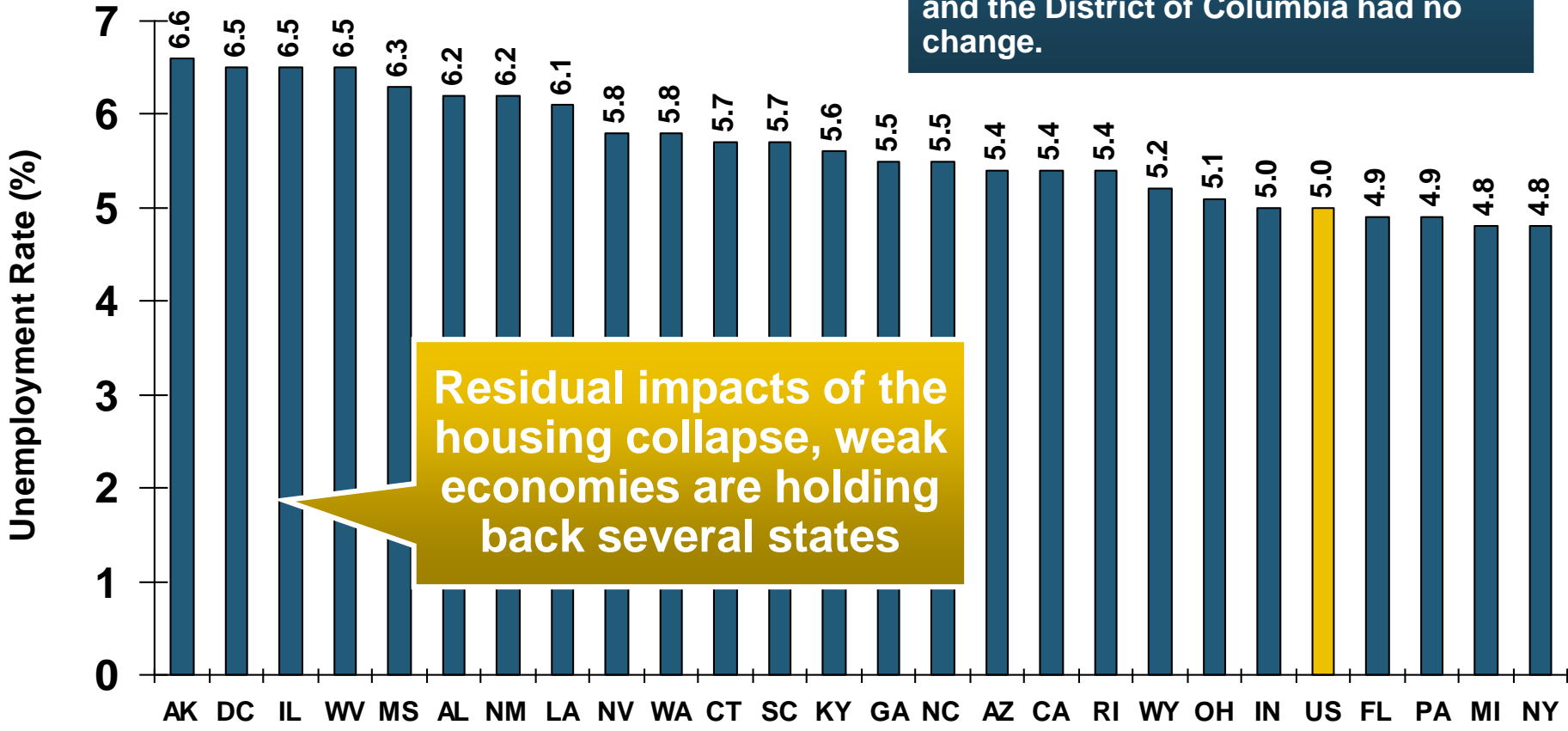
Unemployment forecasts have been revised modestly downwards. Optimistic scenarios put the unemployment as low as 4.4% by Q4 of 2016.

* Yellow = actual; Blue = forecasts

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*

In March, 21 states had over-the-month unemployment rate decreases, 15 states had increases, and 14 states and the District of Columbia had no change.

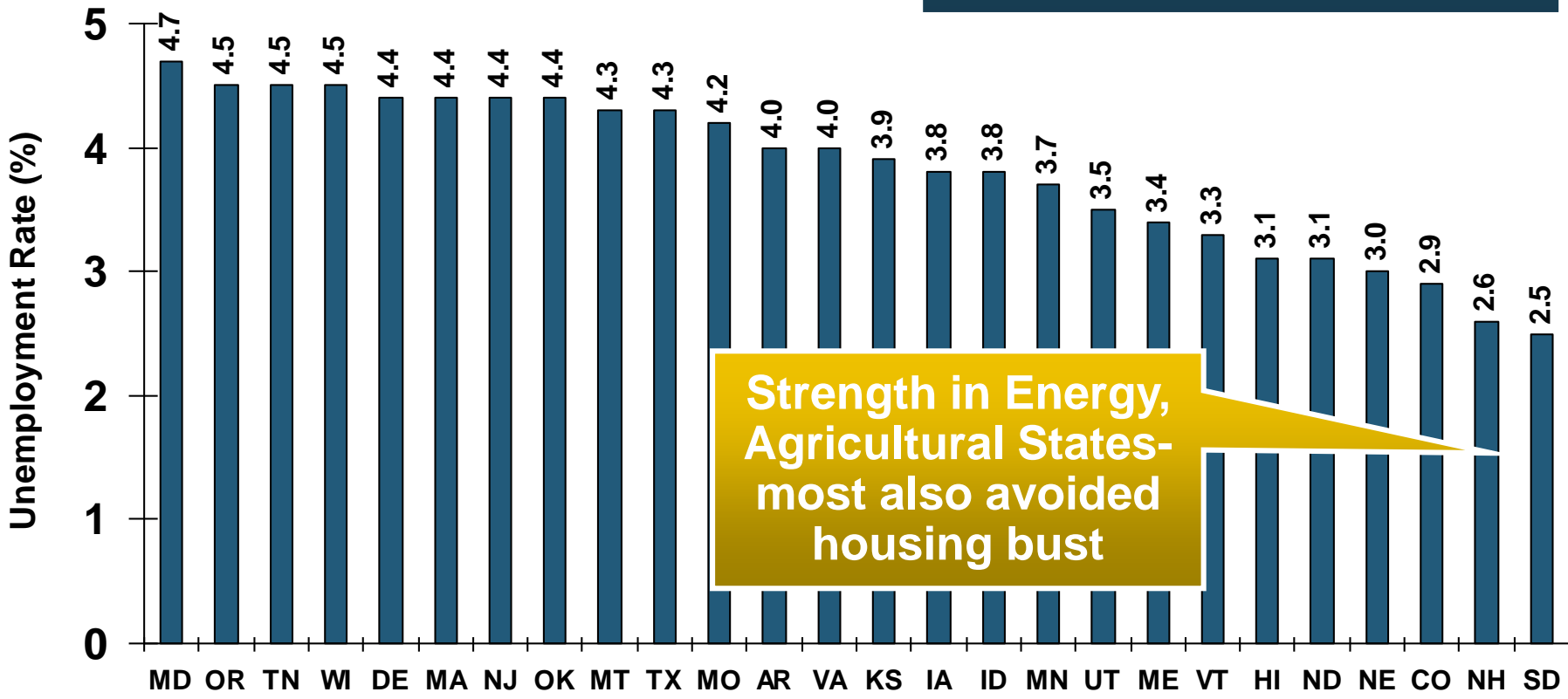


Residual impacts of the housing collapse, weak economies are holding back several states

*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*

In March, 21 states had over-the-month unemployment rate decreases, 15 states had increases, and 14 states and the District of Columbia had no change.

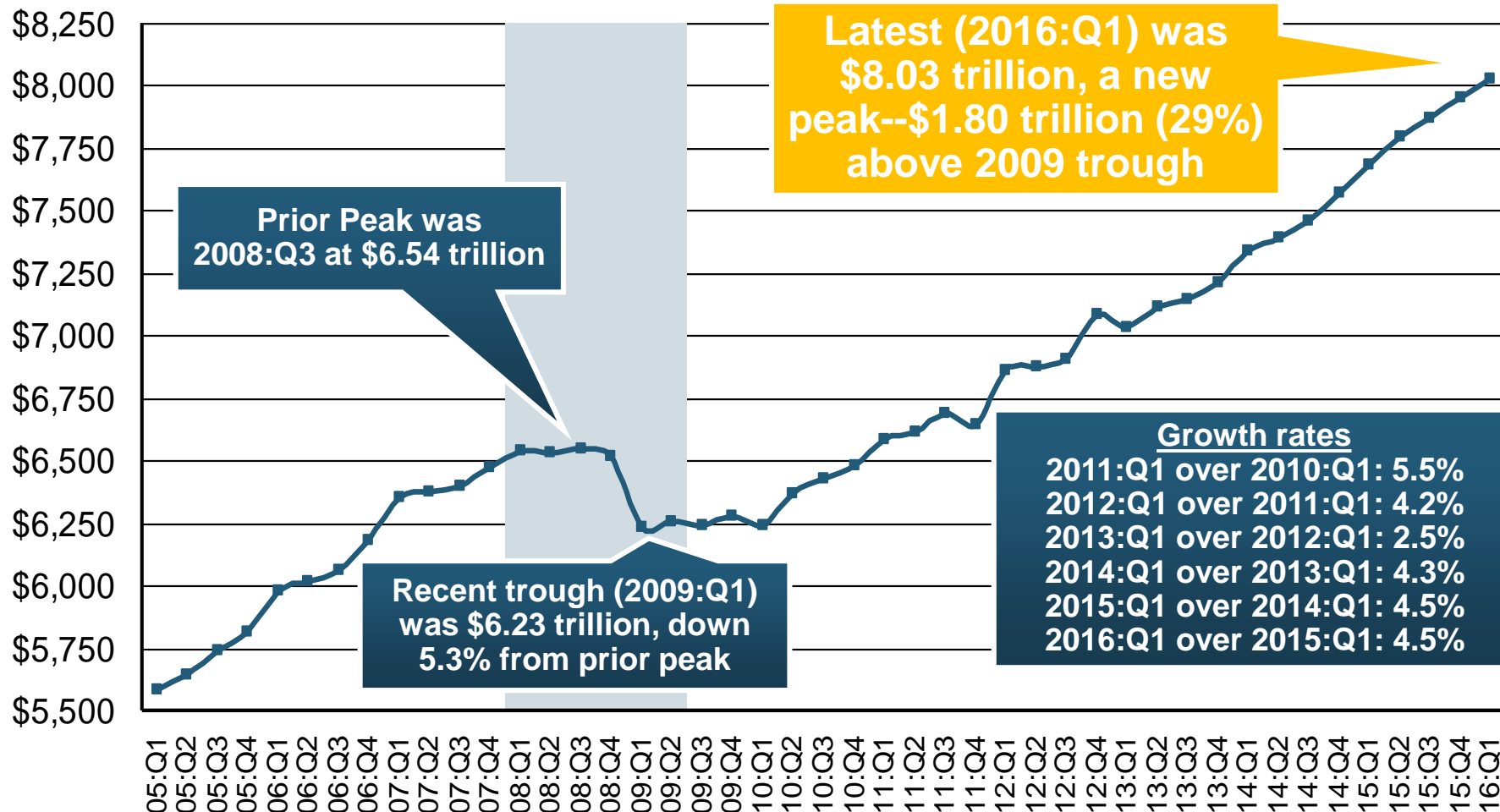


Strength in Energy, Agricultural States-most also avoided housing bust

*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

Billions



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

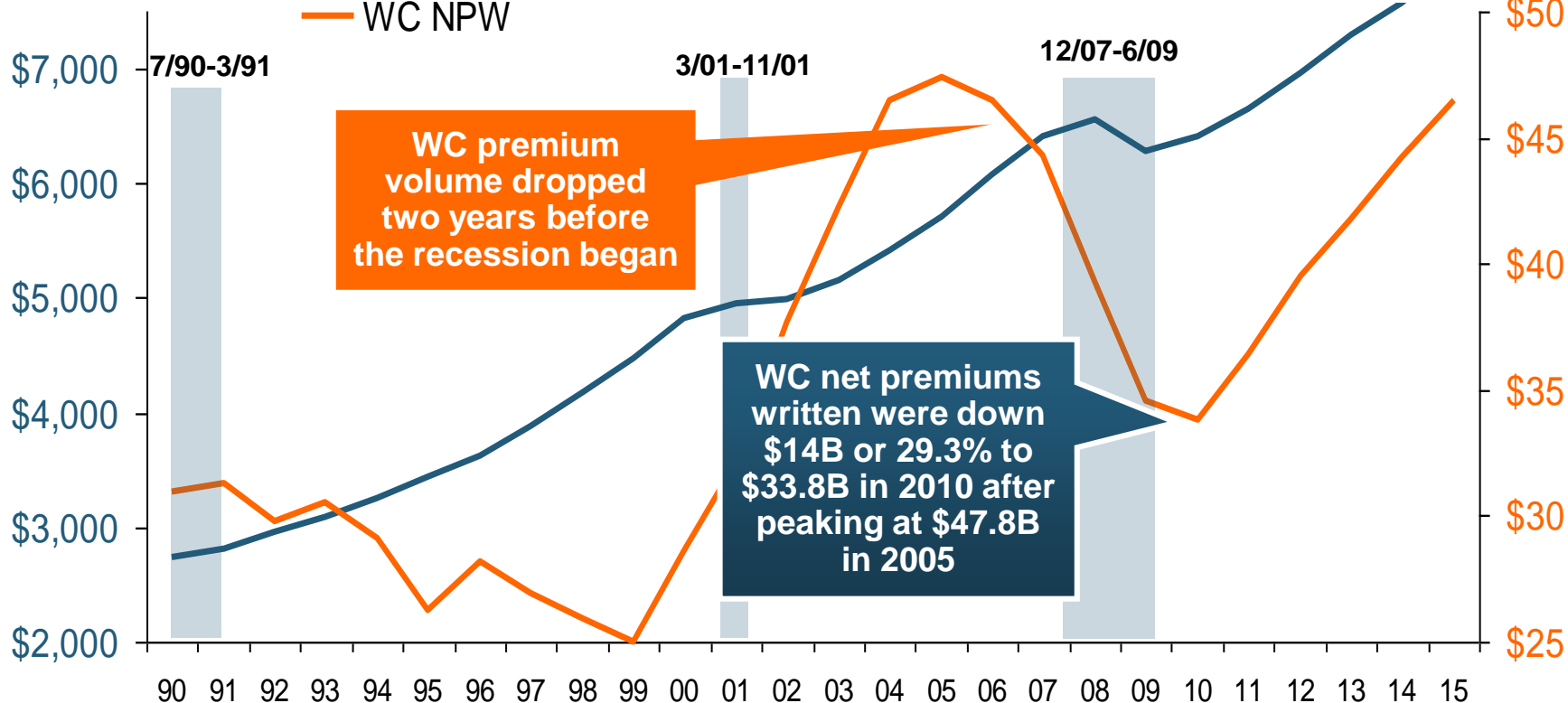
Payroll Base*

WC NWP

\$Billions

\$Billions

— Wage & Salary Disbursements
— WC NPW



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.

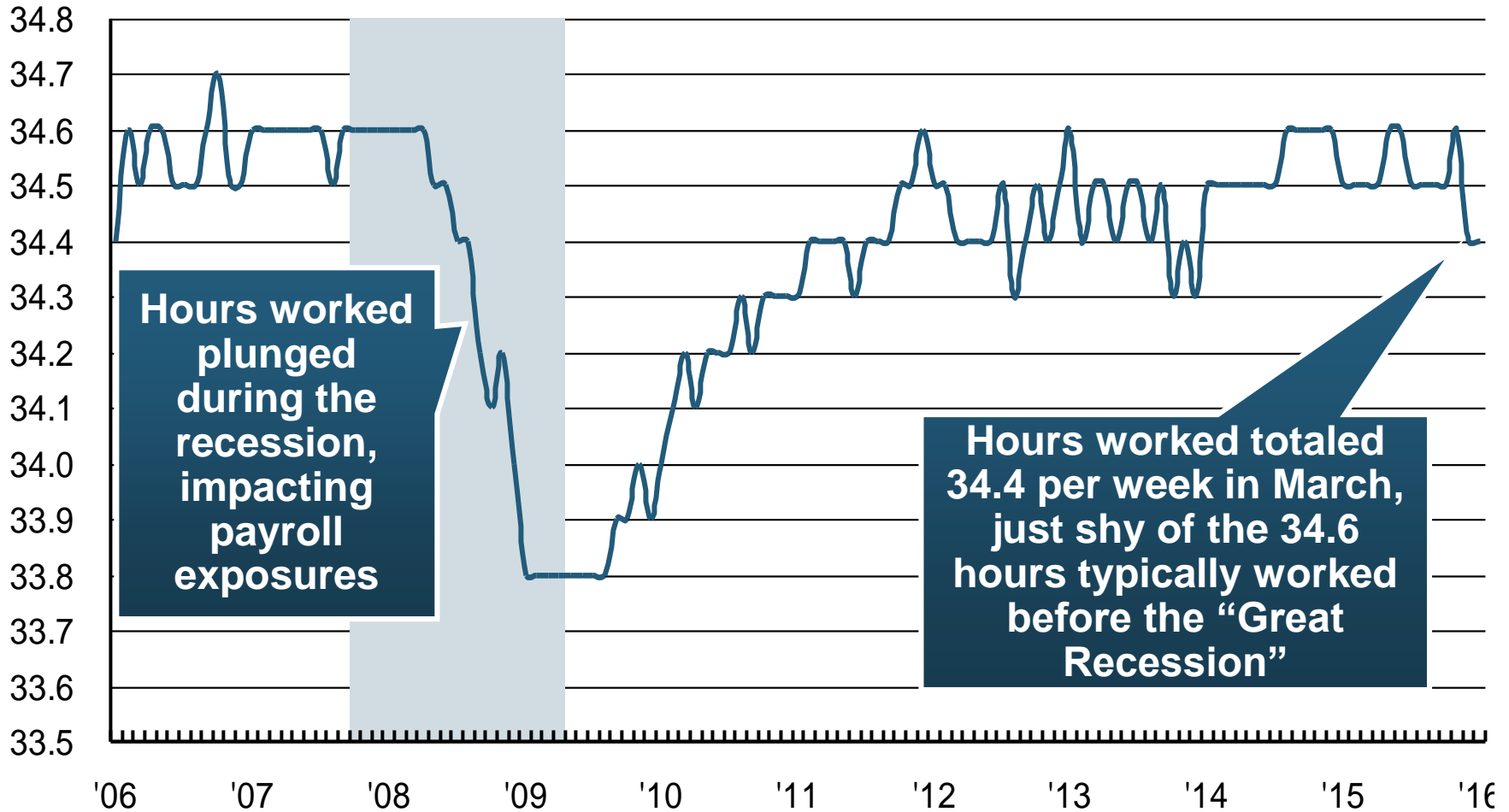


POSITIVE LABOR MARKET DEVELOPMENTS

Key Factors Driving Workers Compensation Exposure

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

(Hours Worked)



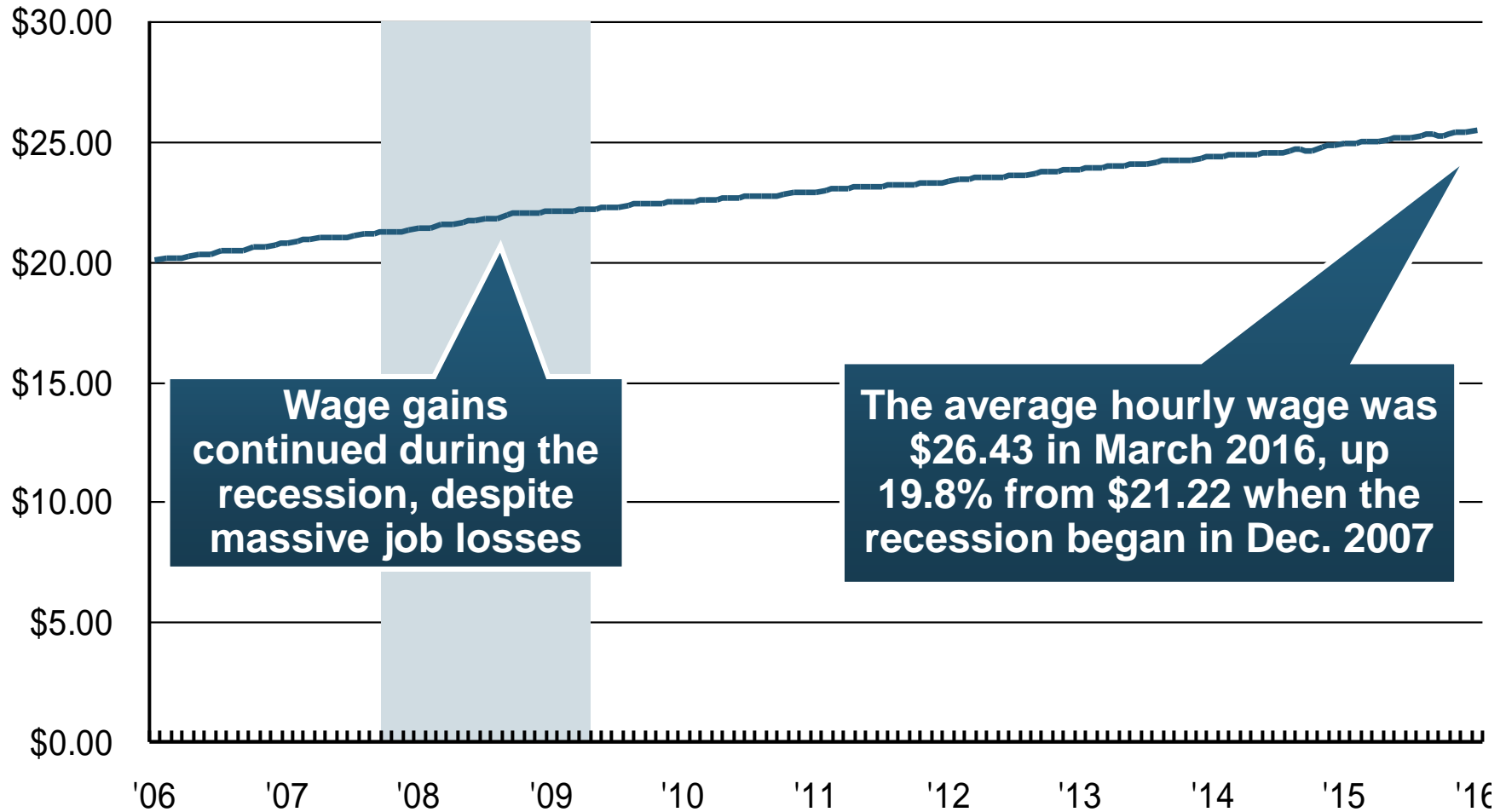
*Seasonally adjusted

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

(Hourly Wage)



*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.

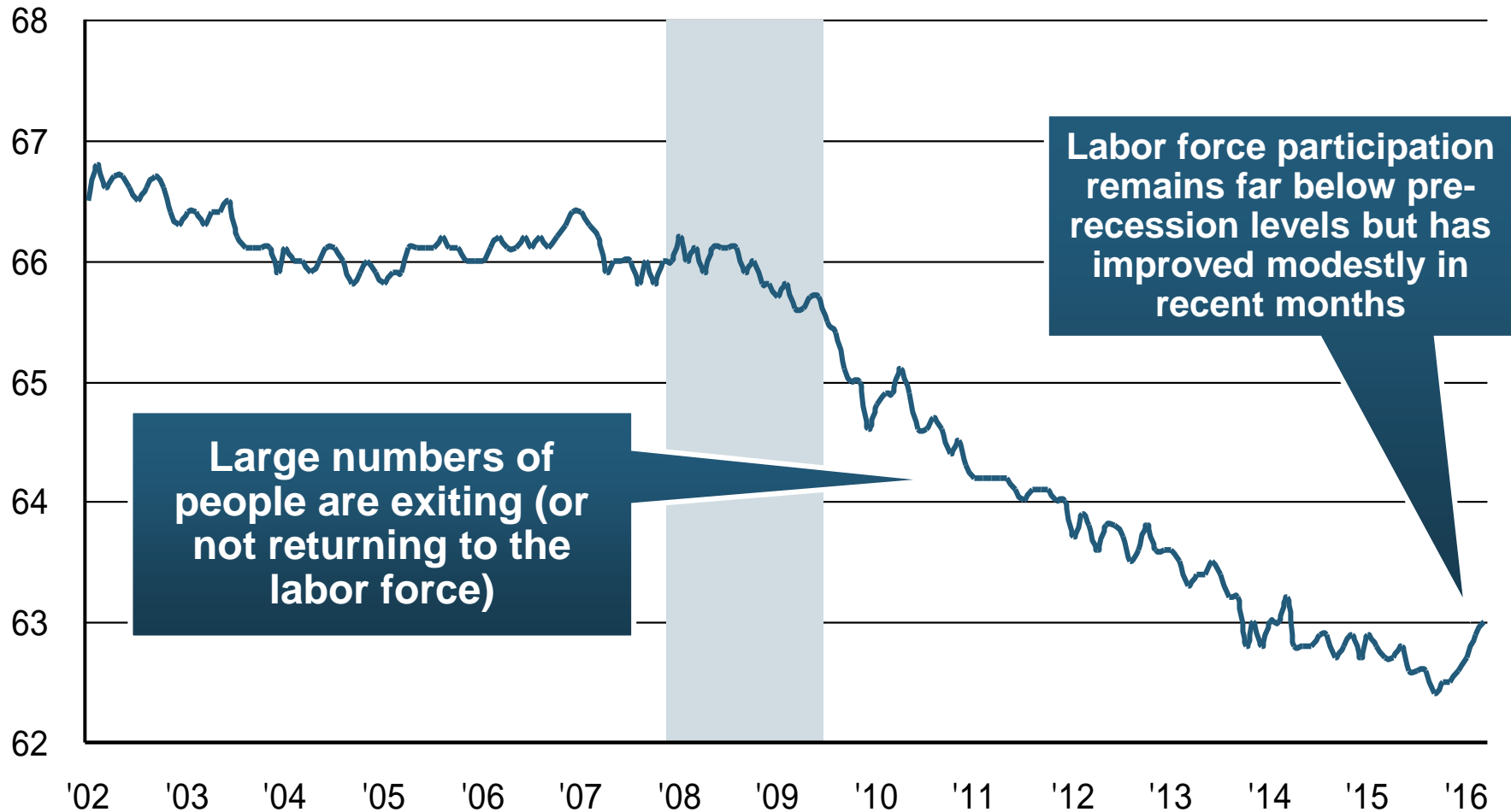


ADVERSE LONG-TERM LABOR MARKET DEVELOPMENTS

**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



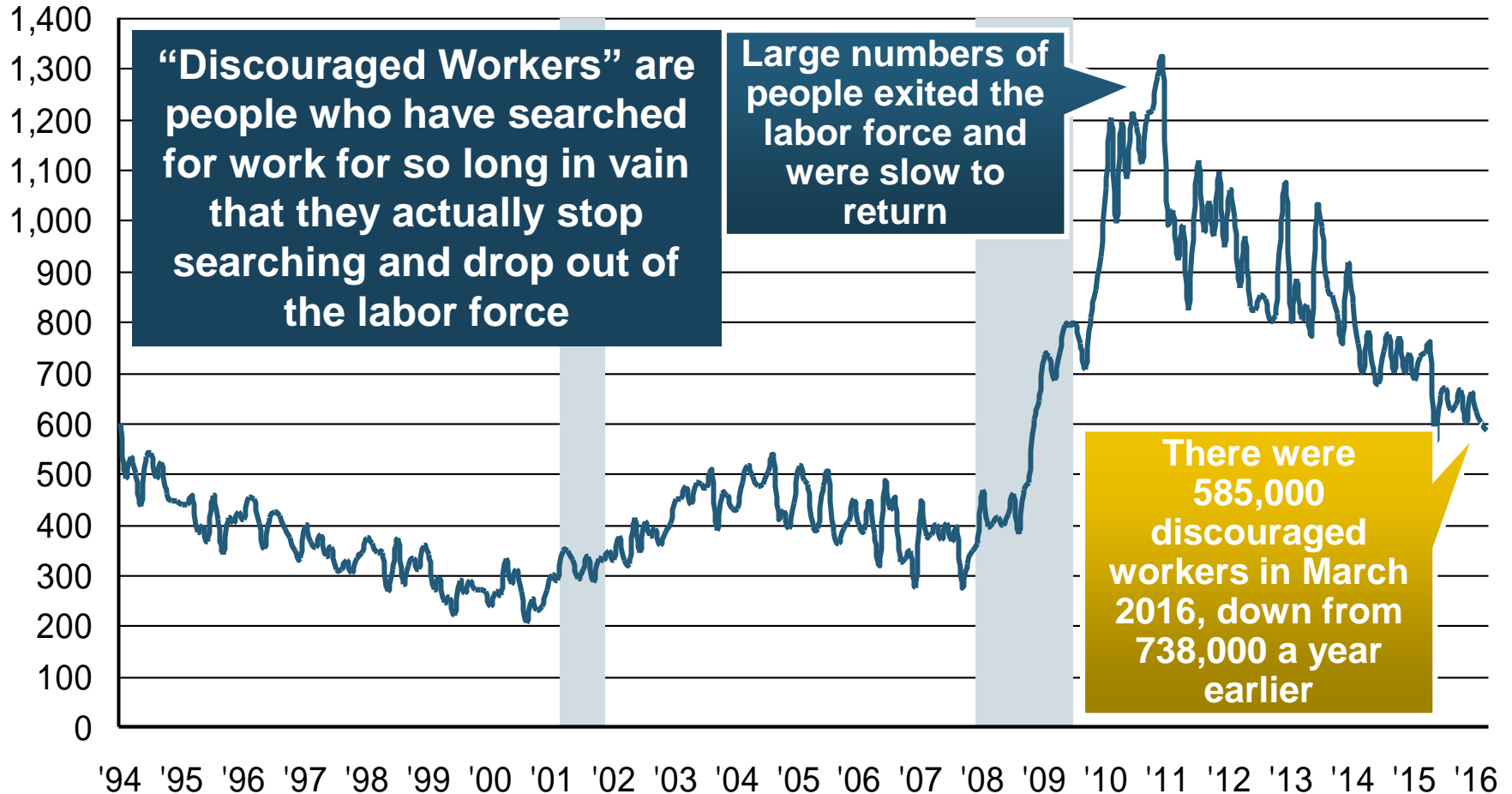
*Defined as the percentage of working age persons in the population who are employed or actively seeking work.

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

Thousands



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.

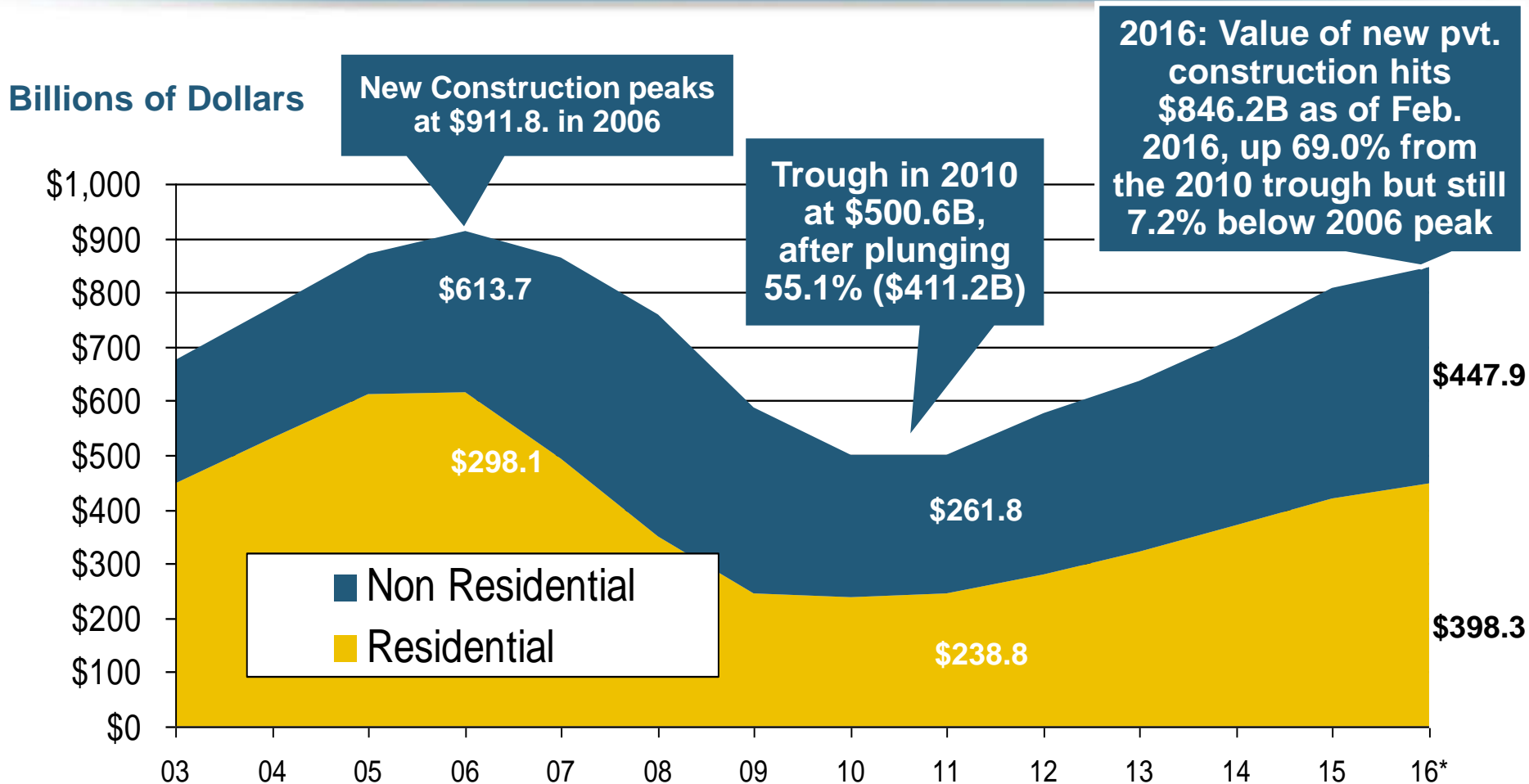
Sources: Bureau of Labor Statistics <http://www.bls.gov/news.release/empsit.a.htm> ; NBER (recession dates); Ins. Info. Inst.



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*



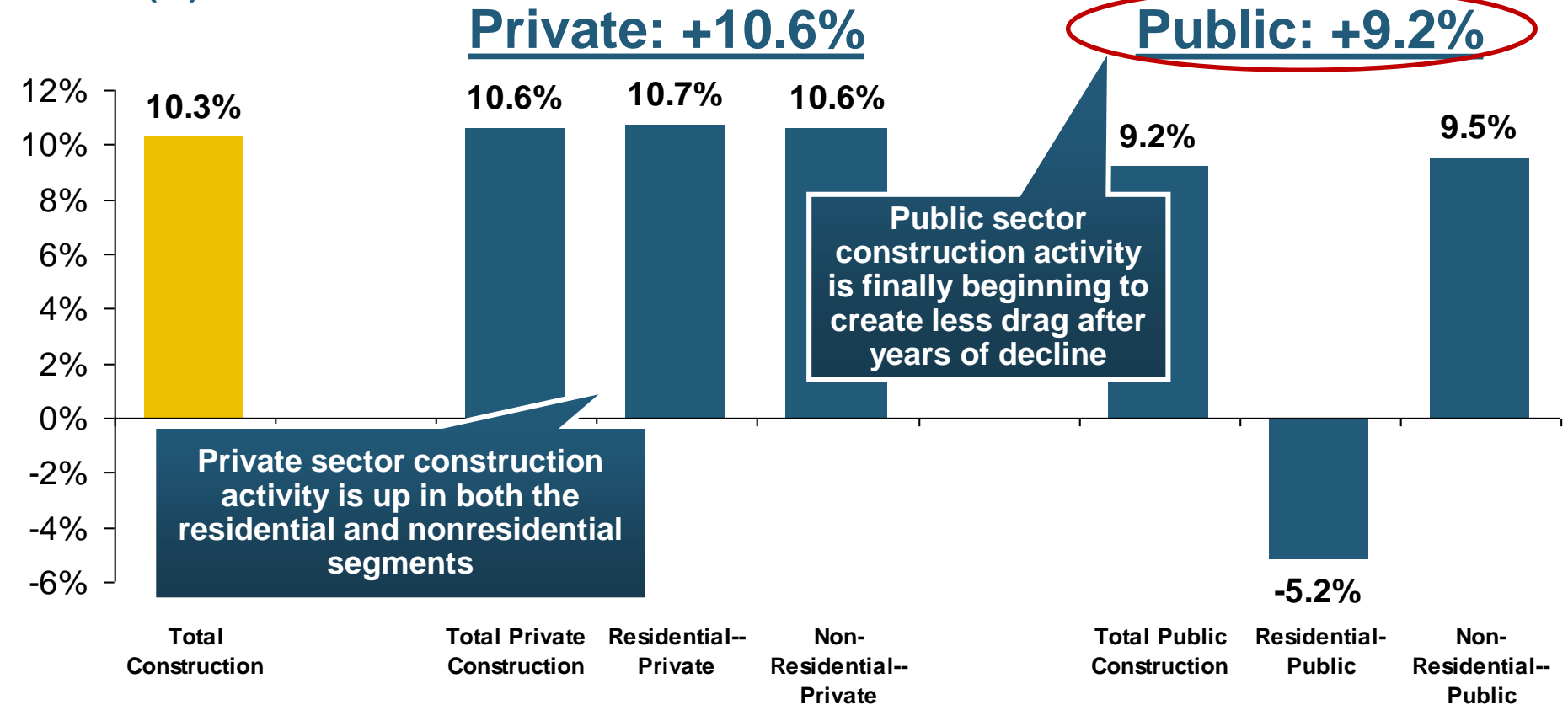
Private Construction Activity Is Moving in a Positive Direction though Remains Well Below Pre-Crisis Peak; Residential Dominates

*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*

Growth (%)



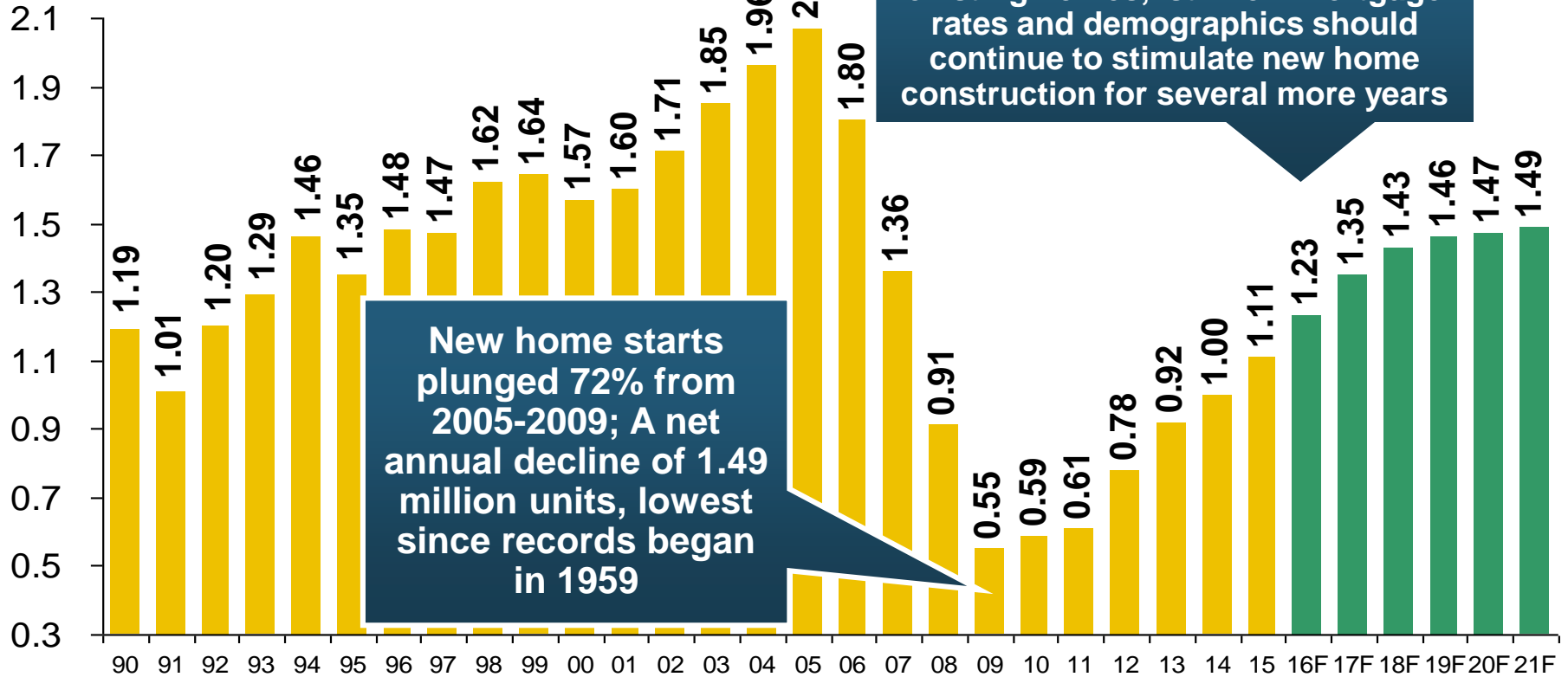
Overall construction activity is up again after languishing in early 2015; state/local government sector may be recovering as budget woes ease in some jurisdictions.

*seasonally adjusted data through February 2016.

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

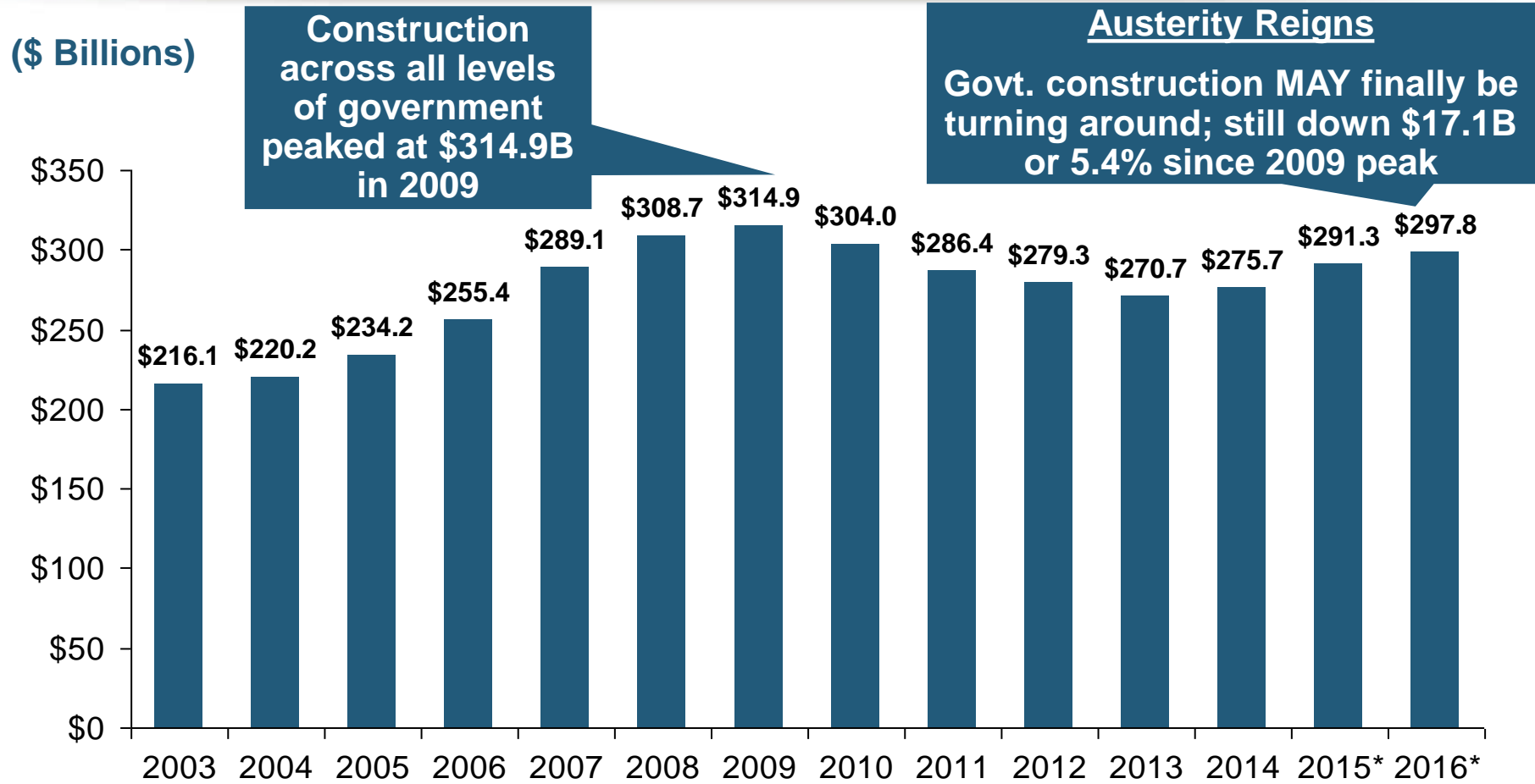
New Private Housing Starts, 1990-2021F

(Millions of Units)



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

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



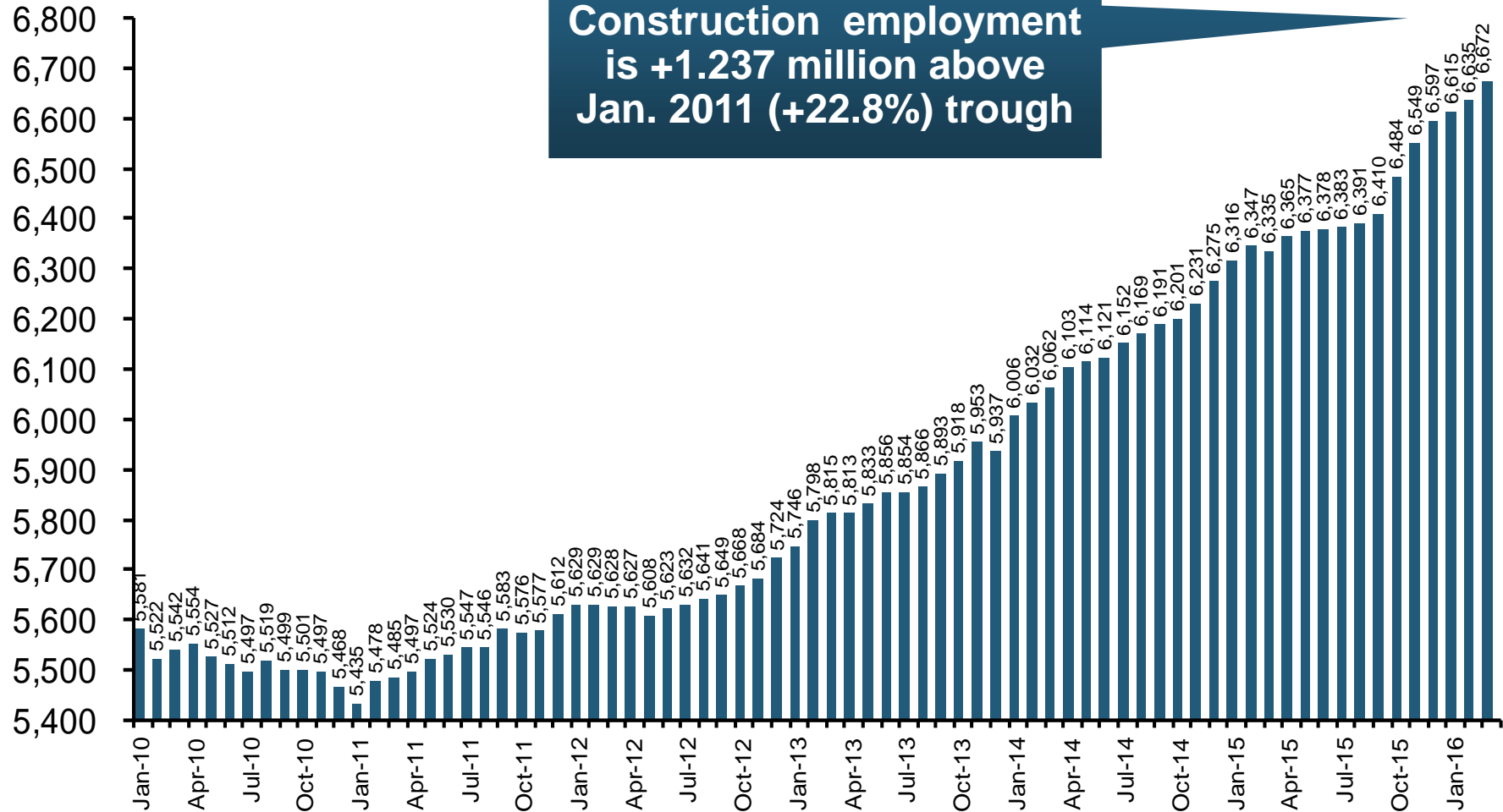
Government construction spending peaked in 2009, helped by stimulus spending, but contracted as state/local governments grappled with deficits and federal sequestration--only now recovering.

*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*

(Thousands)

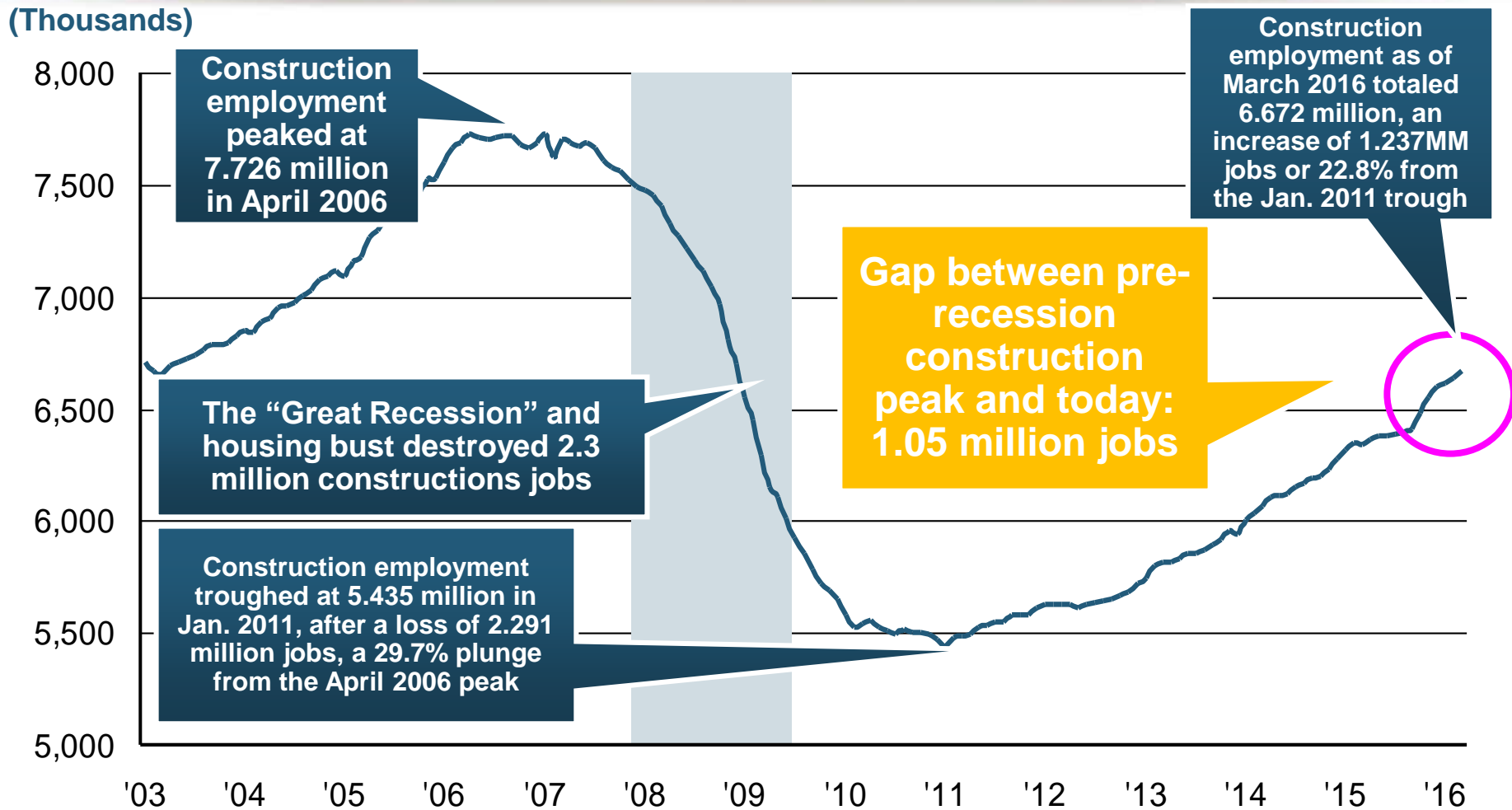


Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.

*Seasonally adjusted.

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

Construction Employment, Jan. 2003–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.

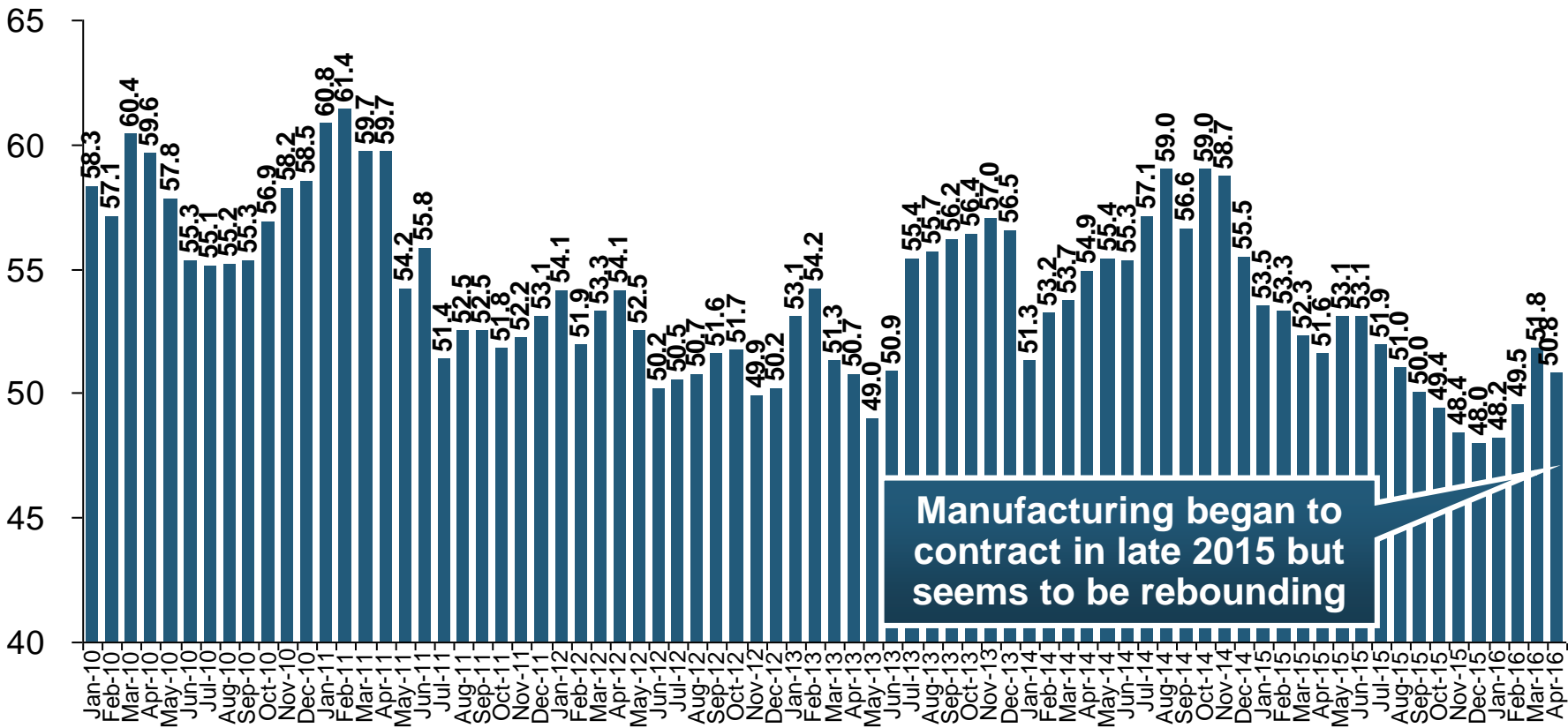
Sources: U.S. Bureau of Labor Statistics; Insurance Information Institute.

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**

ISM Manufacturing Index (Values > 50 Indicate Expansion)

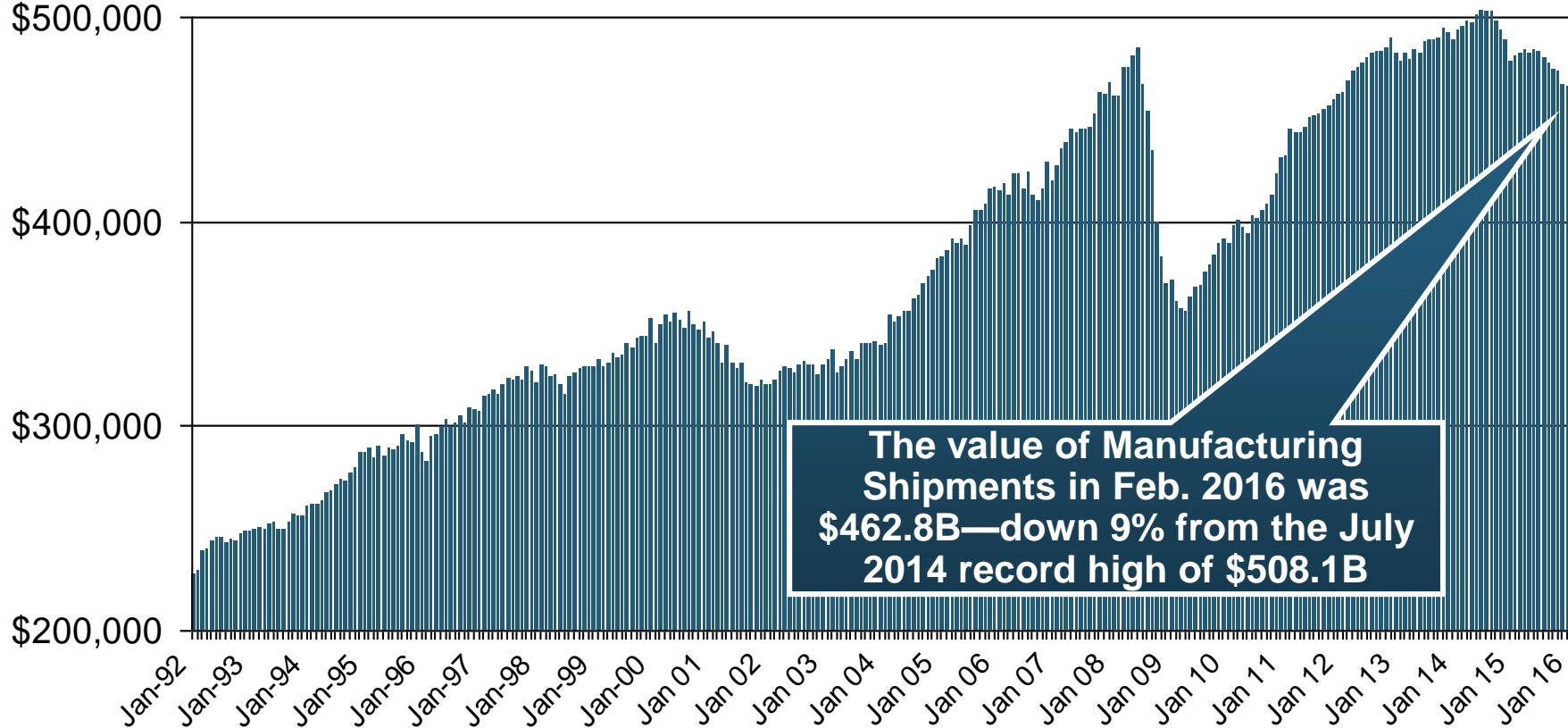
January 2010 through April 2016



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.

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

\$ Millions
\$500,000



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.

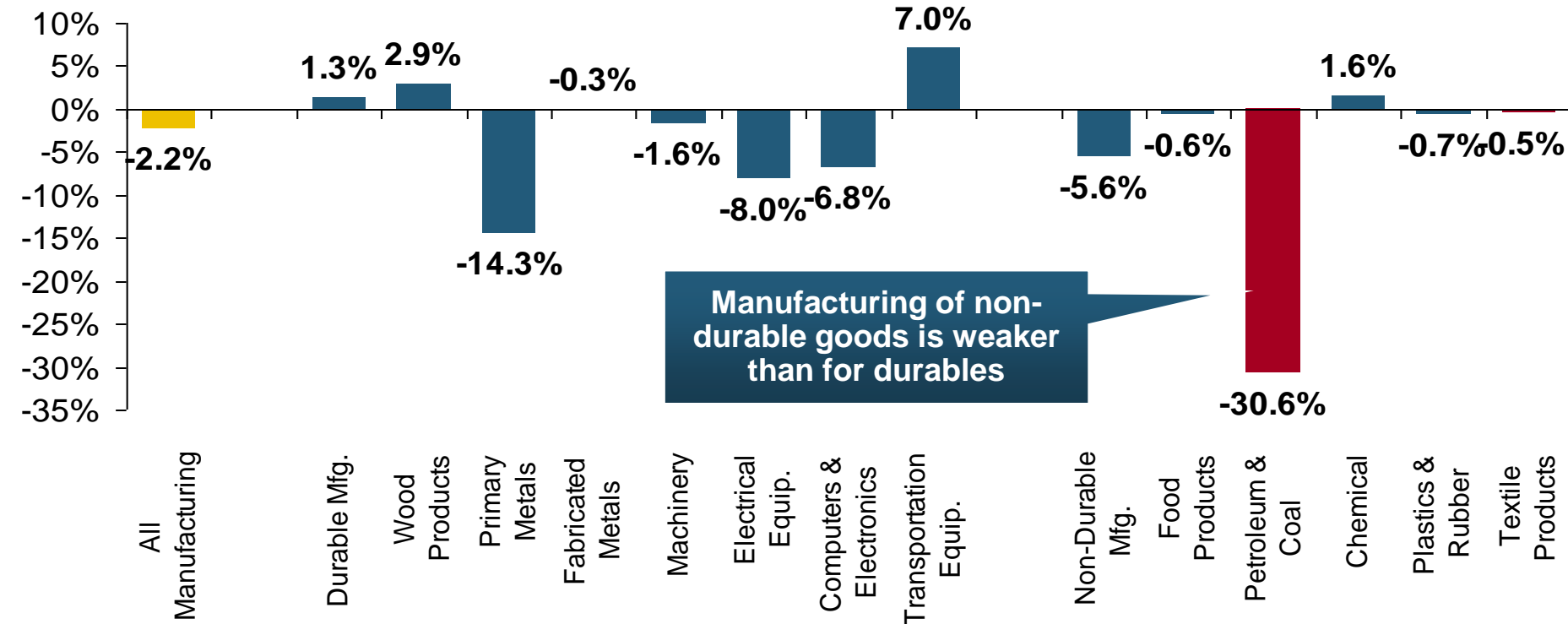
Source: U.S. Census Bureau, *Full Report on Manufacturers' Shipments, Inventories, and Orders*, <http://www.census.gov/manufacturing/m3/>

Manufacturing Growth for Selected Sectors, 2016 vs. 2015*

Growth (%)

Durables: +1.3%

Non-Durables: -5.3%

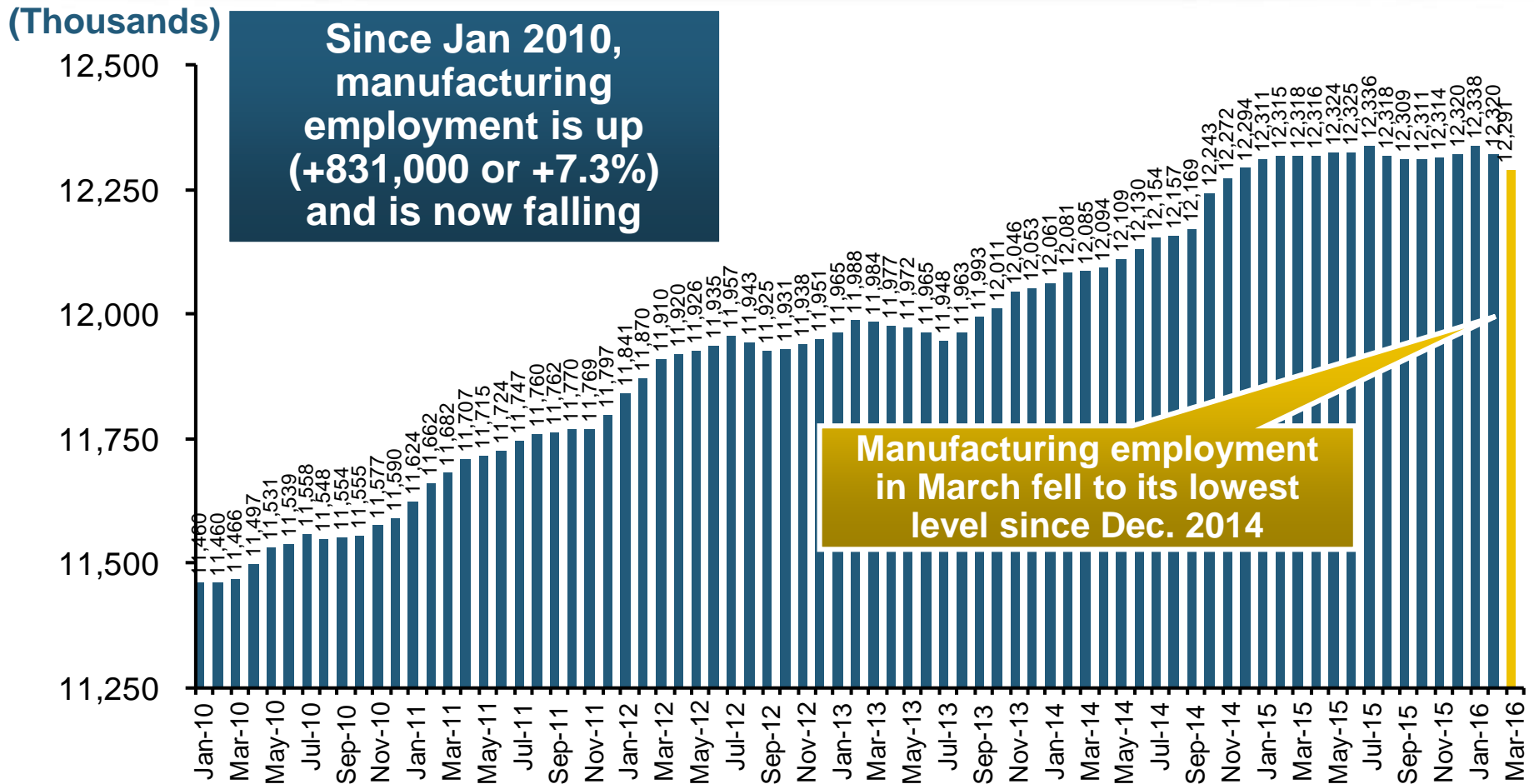


Manufacturing is contracting across a number of sectors, especially petroleum and coal. Adverse exposure impacts are likely for: WC, commercial property, commercial auto and certain liability coverages.

*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.

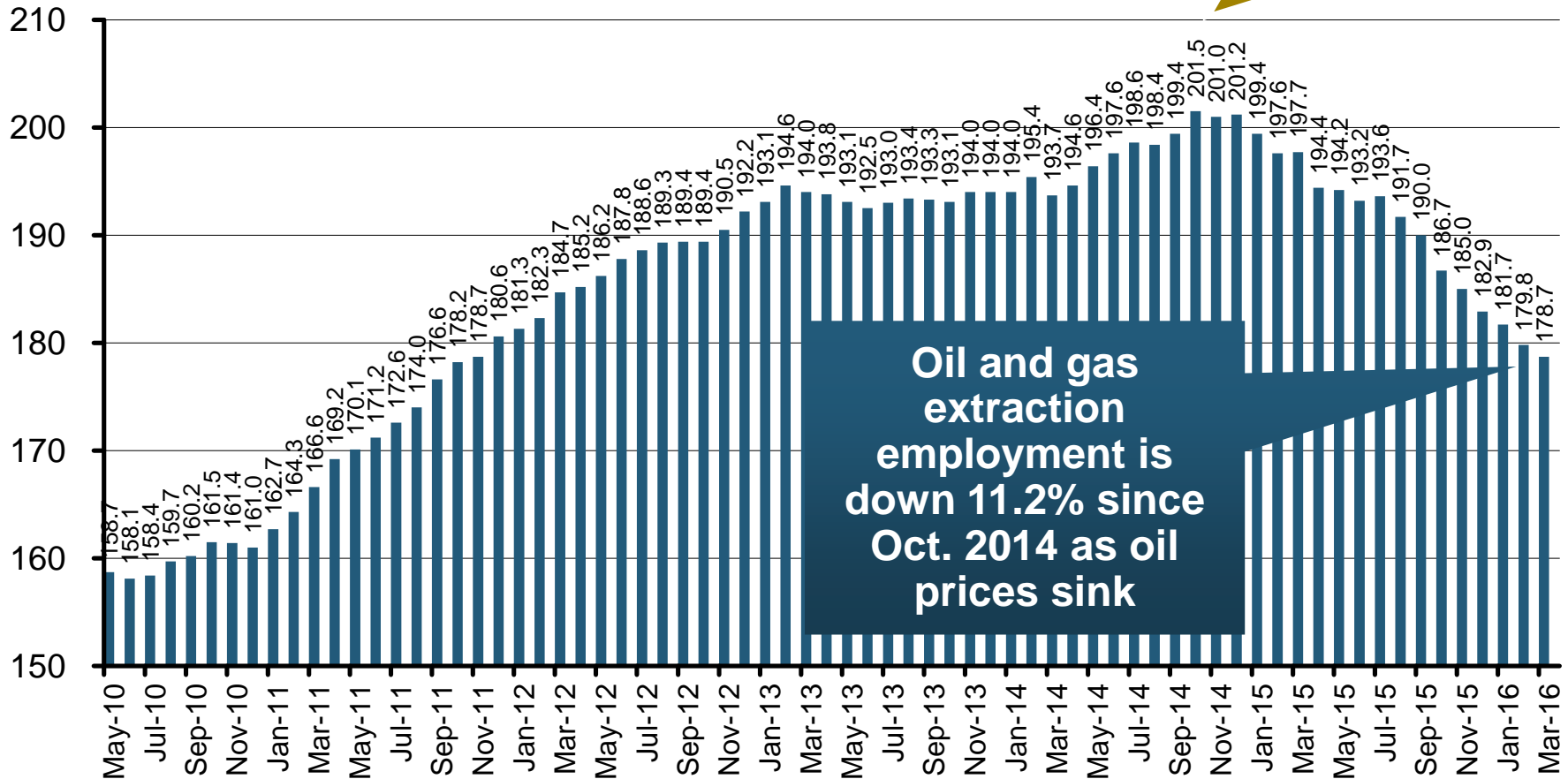
*Seasonally adjusted.

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

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

(000)

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



Oil and gas extraction employment is down 11.2% since Oct. 2014 as oil prices sink

*Seasonally adjusted

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



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

the Sharing economy

BookMooch
New life for Old books

GEARCOMMONS

peer2peer
FINANCE ASSOCIATION

HourlyNerd

ParkatmyHouse.com

LendingClub

fiverr®

zopa™

BookMooch
New life for Old books

airbnb

zipcar.

thredUP

TransferWise

TaskRabbit

Bla Bla Car

POSTMATES

Instacart

RelayRides

LiQUIDSPACE™

BOATBOUND

lyft

Shared Earth

E lance

oDesk

Girl Meets Dress.com

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



REUTERS

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 TaskRabbit, and cleaning service Homejoy.***

--Reuters, June 18, 2015



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

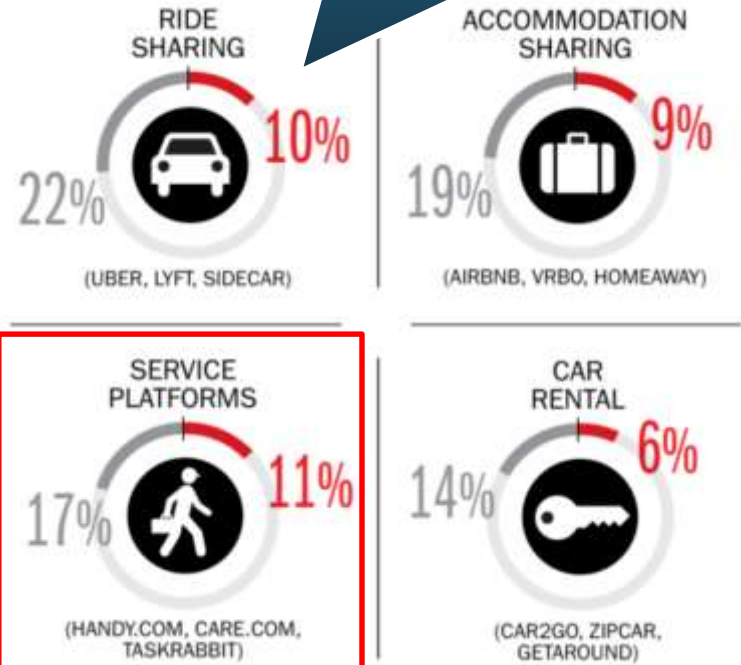
Americans involved



MOST OFFERERS ARE ALSO USERS.
TOTAL PARTICIPATION IS 44%

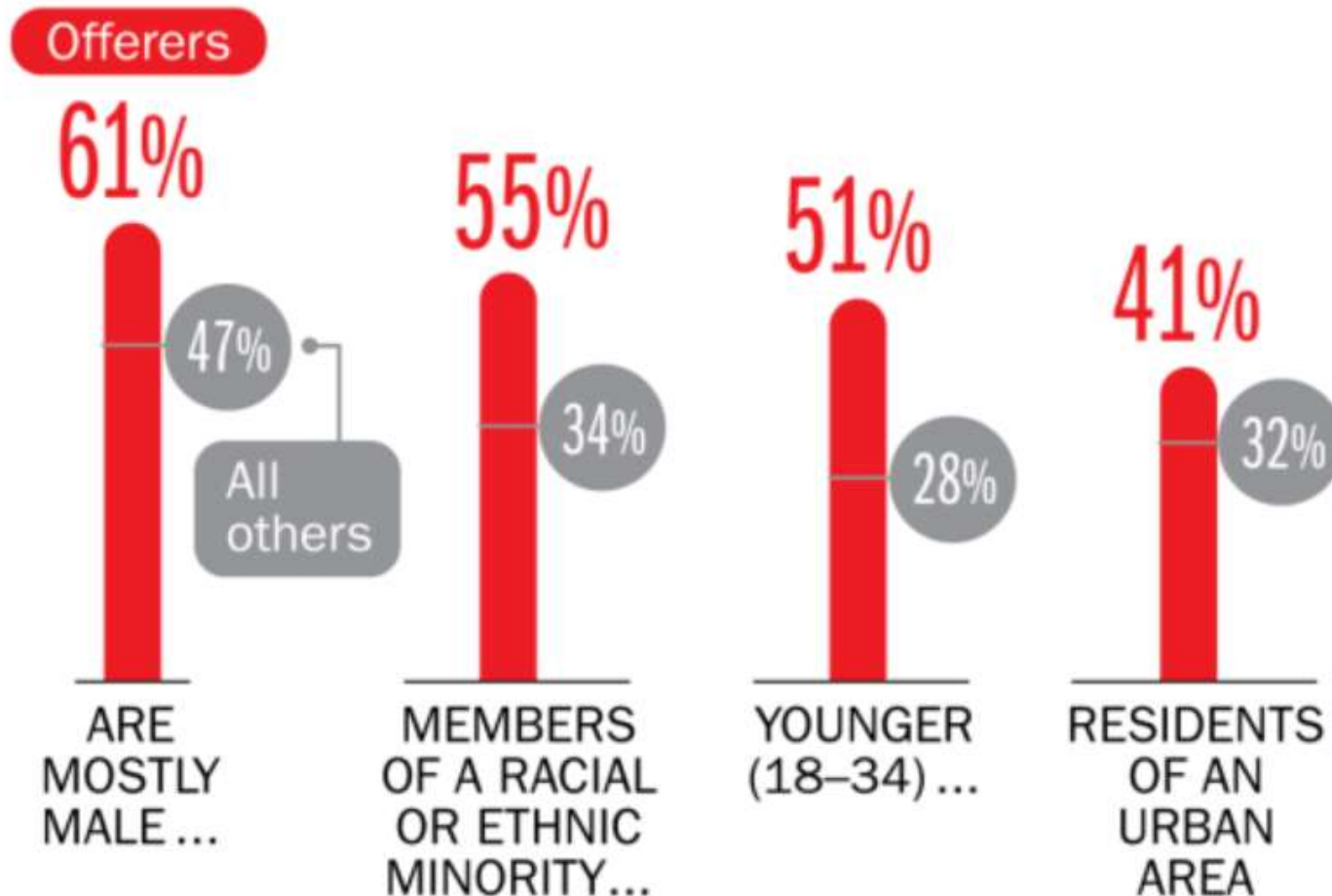
About 22% of Americans have offered services in the sharing economy.

Drivers have significant WC exposures



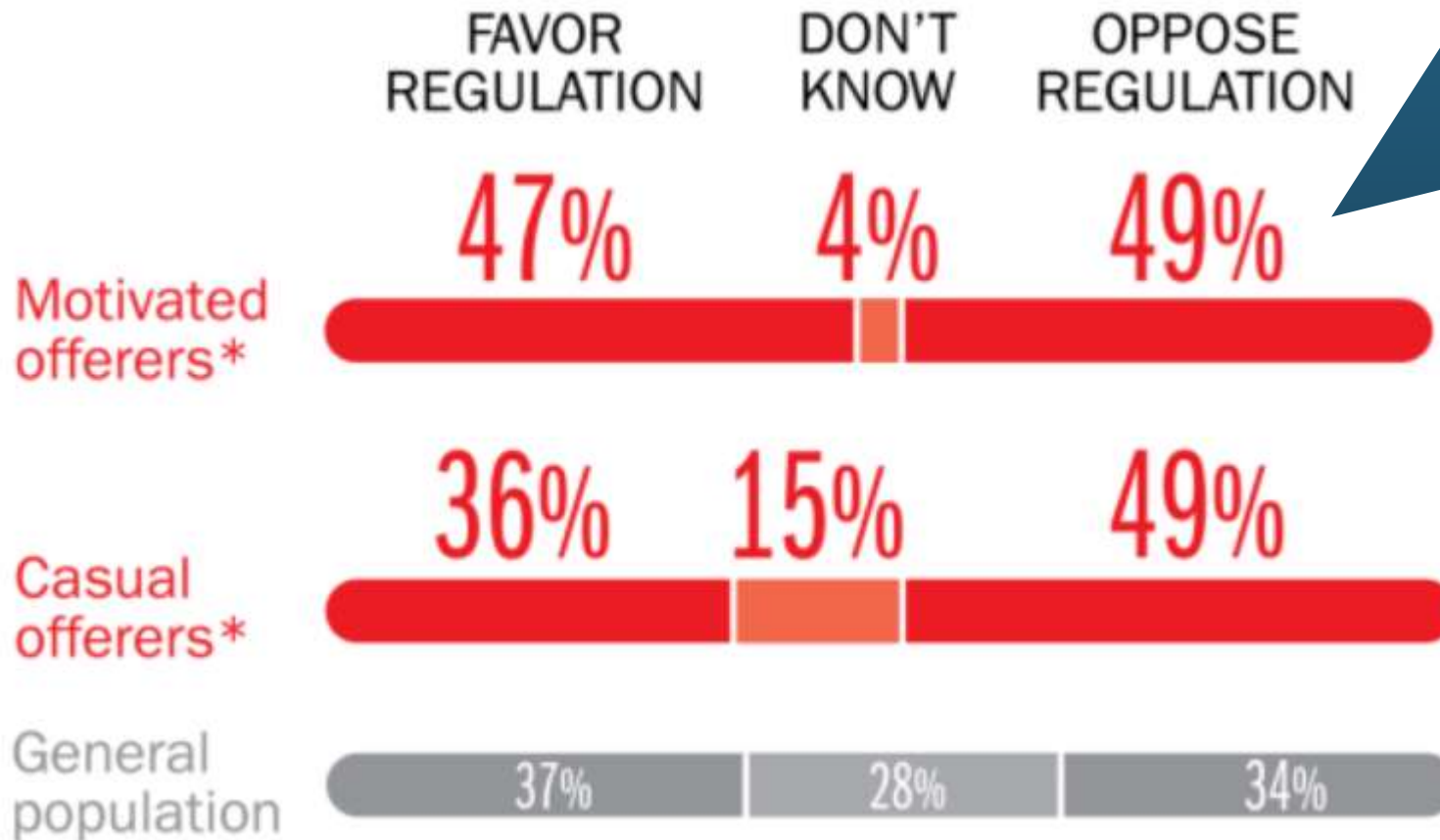
Service platforms have the most direct link to WC; 11% of Americans have offered their services

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.

Opinions Are Split on Whether the Sharing Economy Needs More Regulation



The most frequent offerers of services though online platforms are equally divided over the need for more regulation

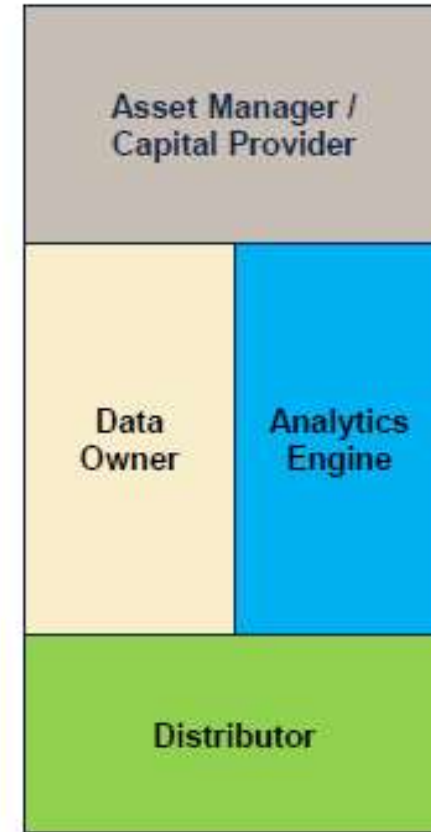
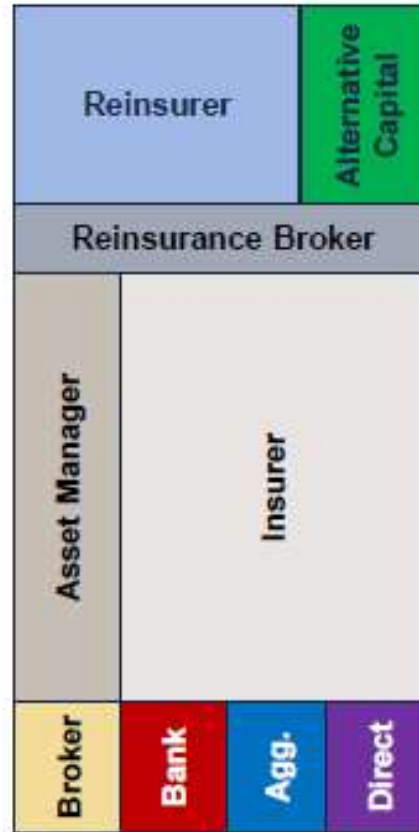
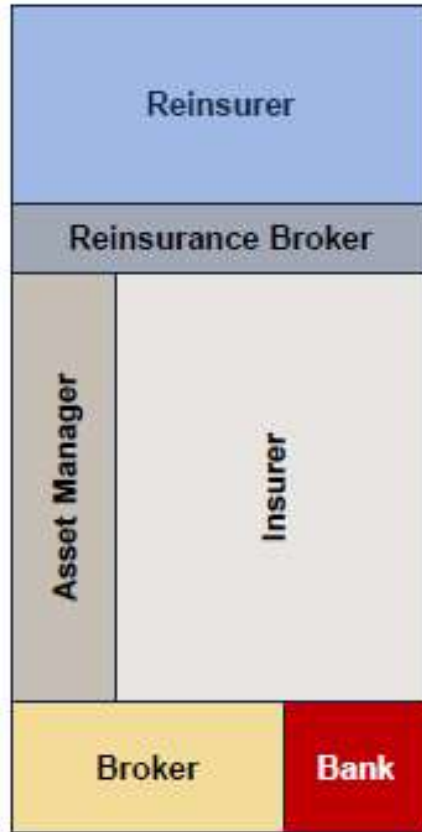
Sources: The SelfEmployed.com accessed at <https://www.theselected.com/gig-economy/infographic-inside-the-new-economy/> based on a poll by Time magazine, Bursten-Marsteller and The Aspen Institute; Insurance Information Institute.



THE 'INTERNET OF THINGS'

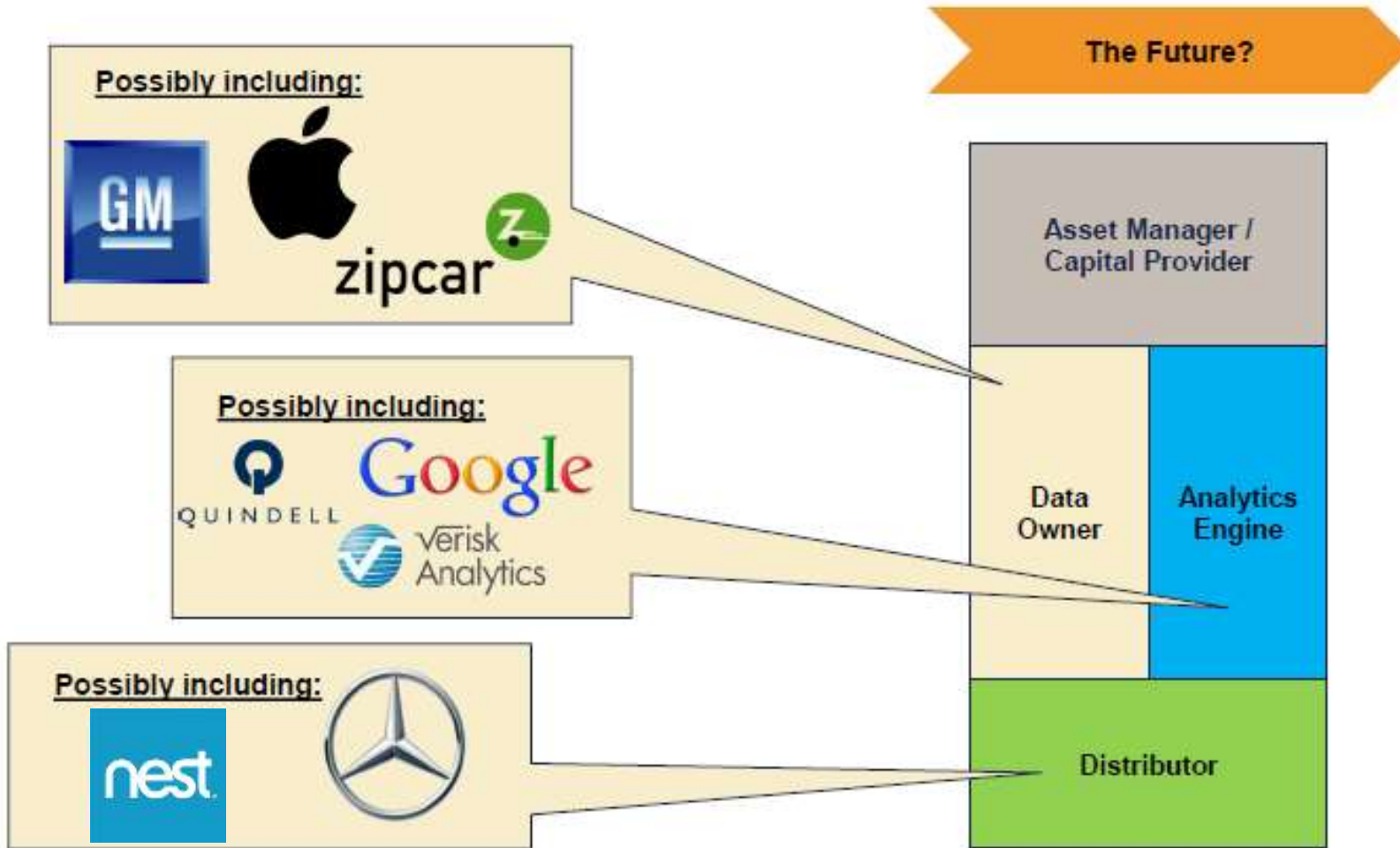
Capturing Economic Value Amid a Shifting Insurer Value Chain

The Internet of Things and the Insurance Industry Value Chain



The insurance industry value chain is changing for many reasons.

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?**



OCCUPATIONAL DEATHS IN TRANSPORTATION: IS TECHNOLOGY THE SOLUTION?

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



Hacking Your Ride:

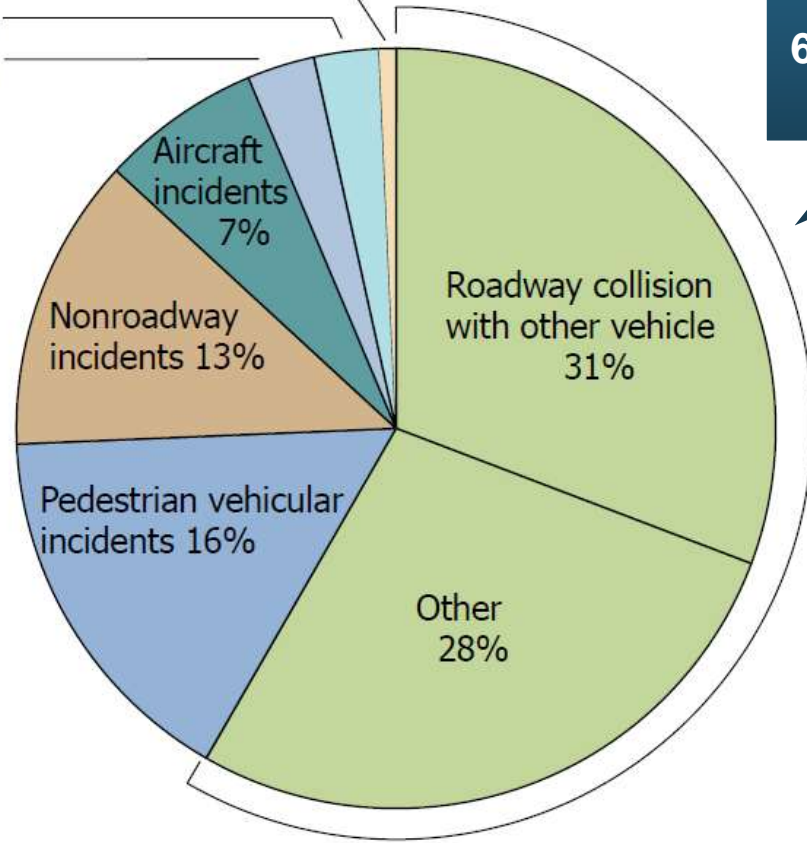
Transportation Safety and Risk

#RiskyRide

SXSW
March 13, 2016, Austin, TX

Fatal Occupational Injuries Due to Transportation Incidents

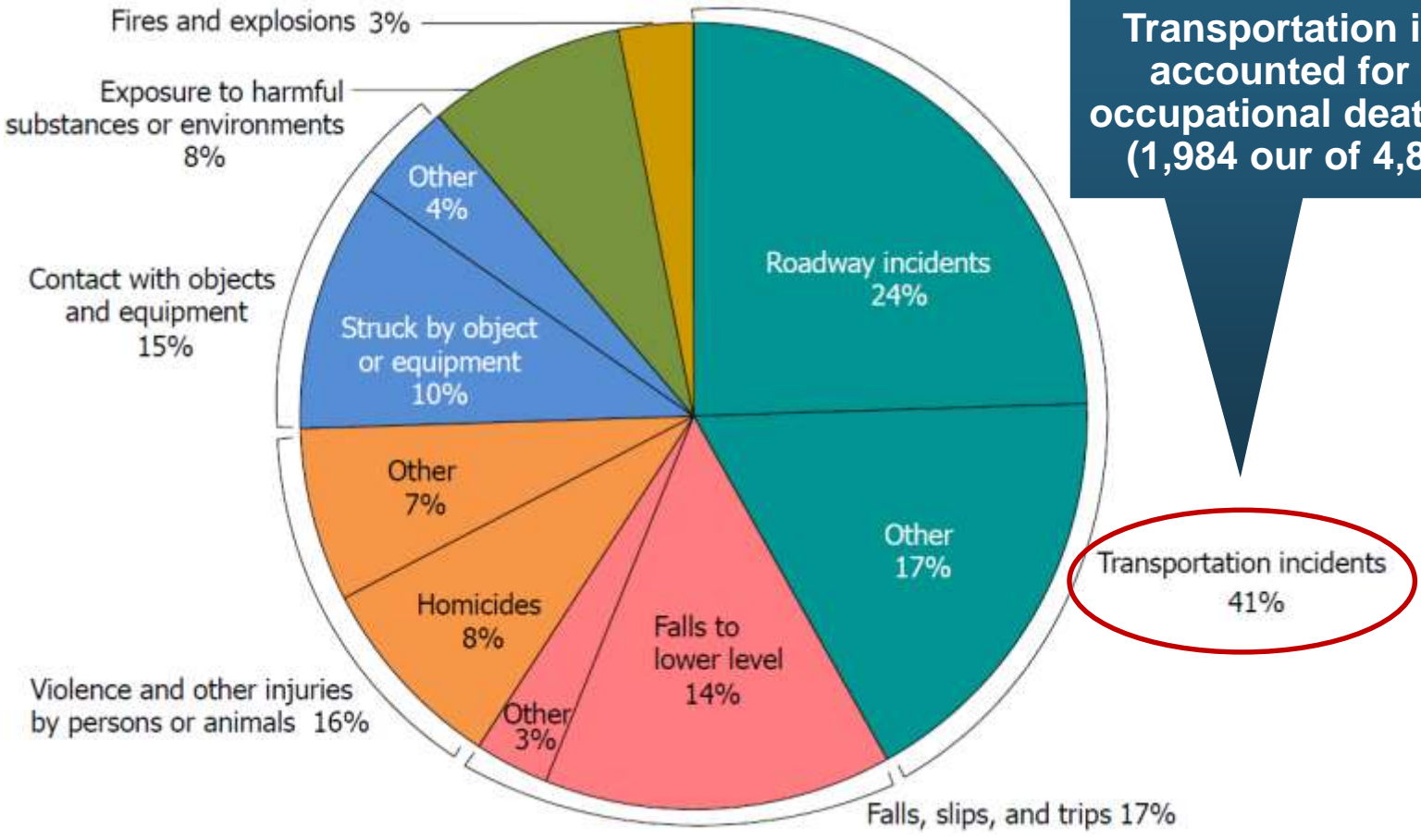
Other 1%
Water vehicle incidents 3%
Rail vehicle incidents 3%



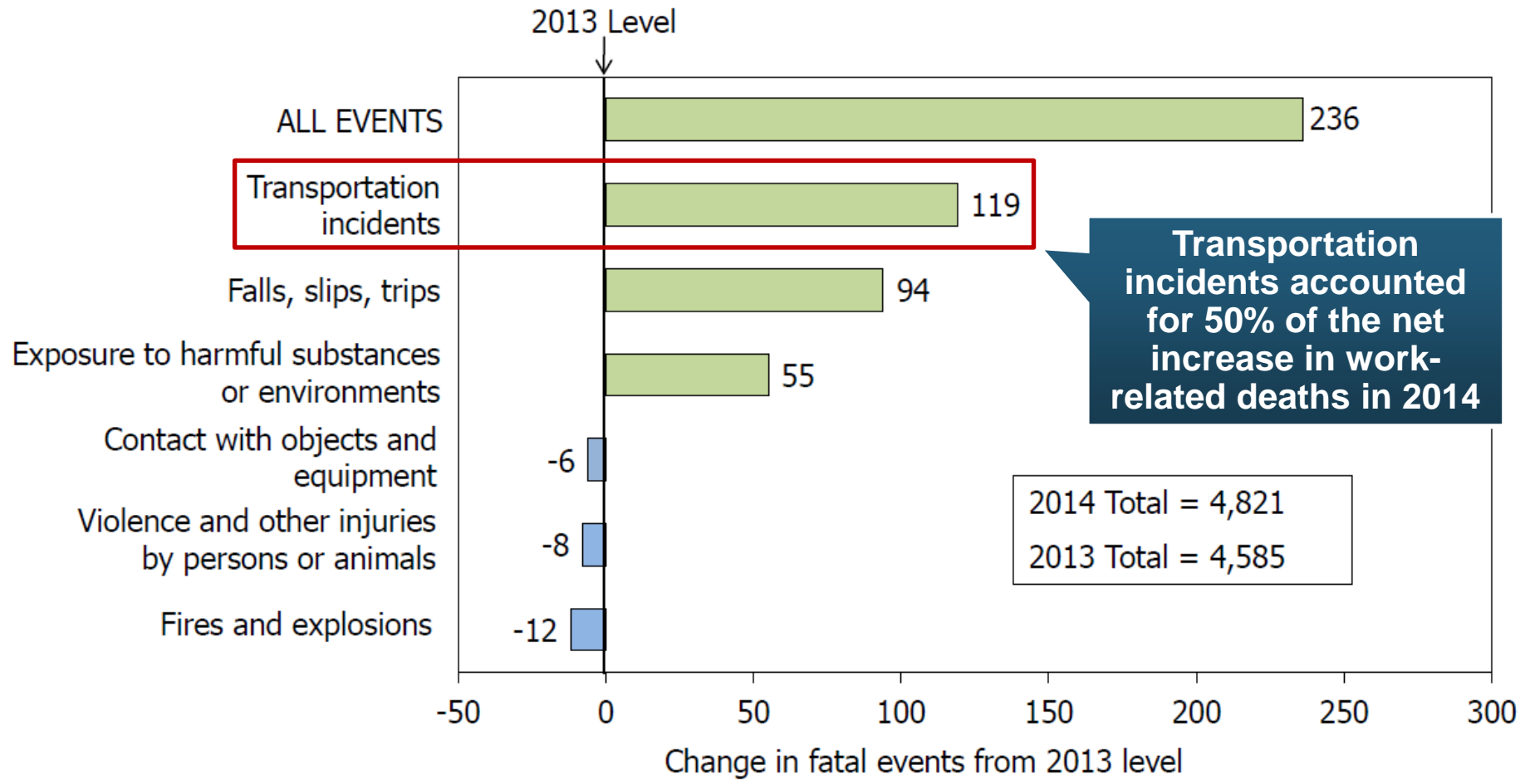
Roadway incidents accounted for nearly 60% of all transportation incidents in 2014

Roadway incidents
58%

Fatal Occupational Injuries by Event: Transportation Accidents Lead by Far



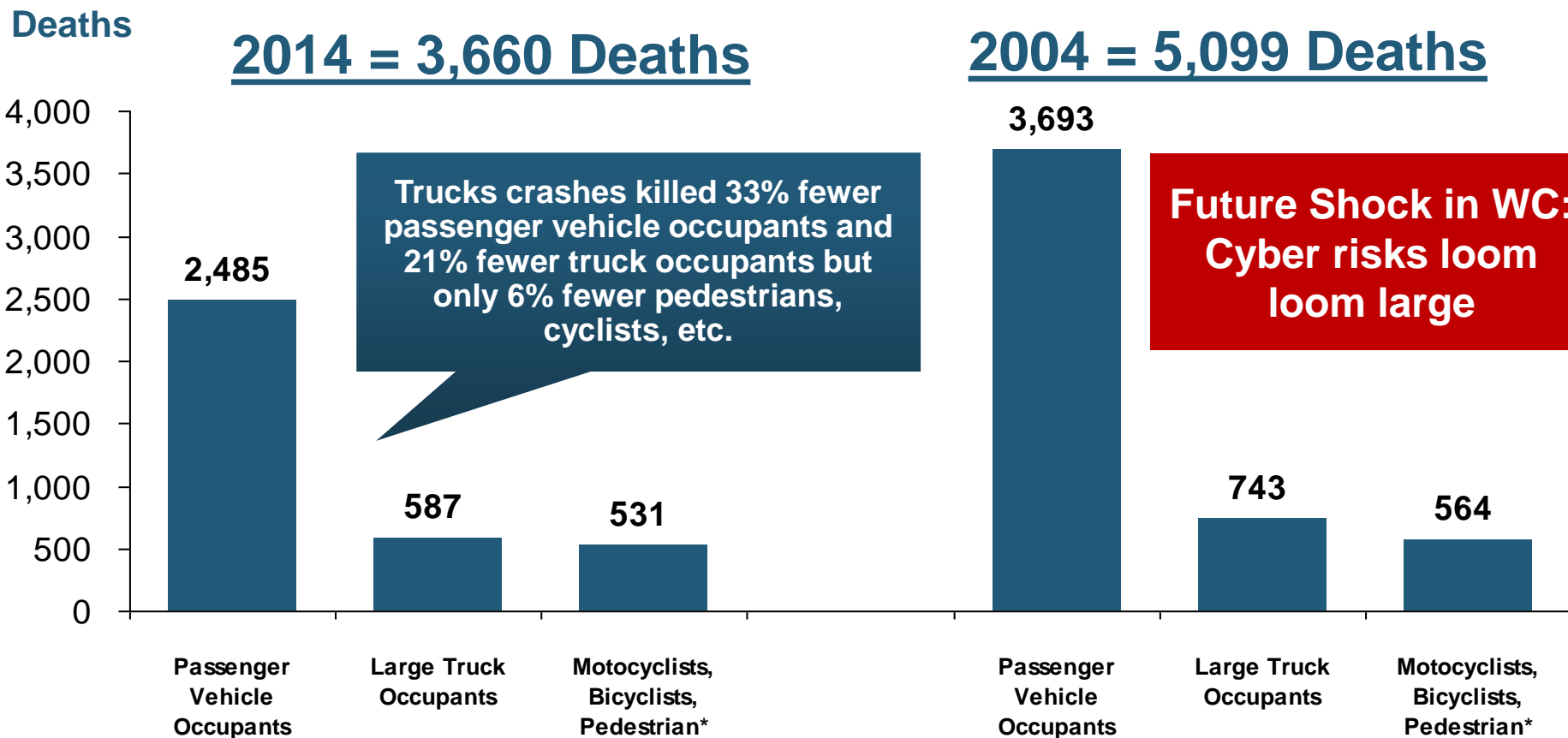
Transportation Incidents Accounted for the Majority of Occupation Deaths in 2014



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/foi/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.

*includes Other and Unknown.

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.



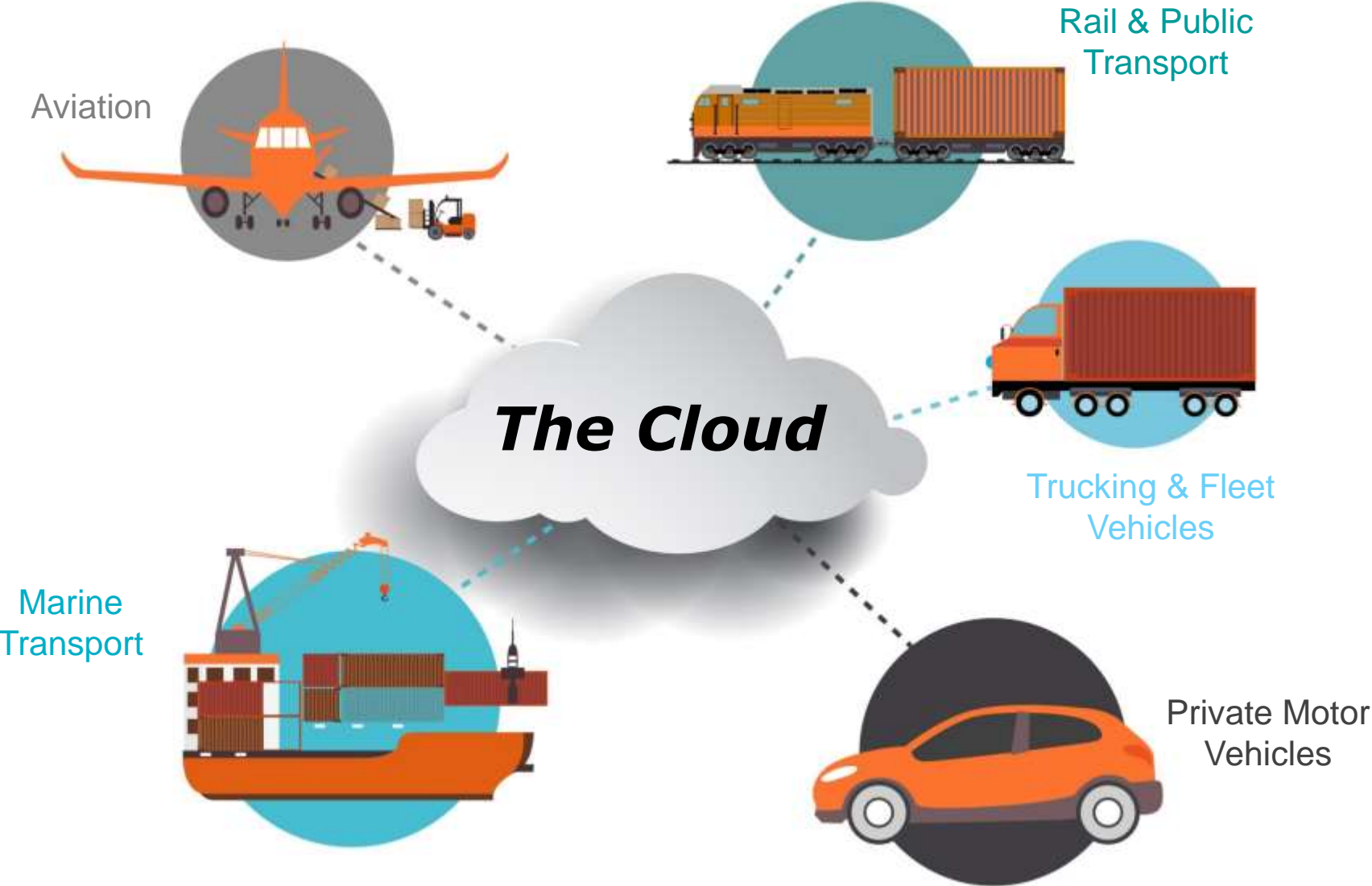
INSURANCE TECHNOLOGY: *FIN TECH ZEROES IN*

Number and Value of Deals Is Increasing

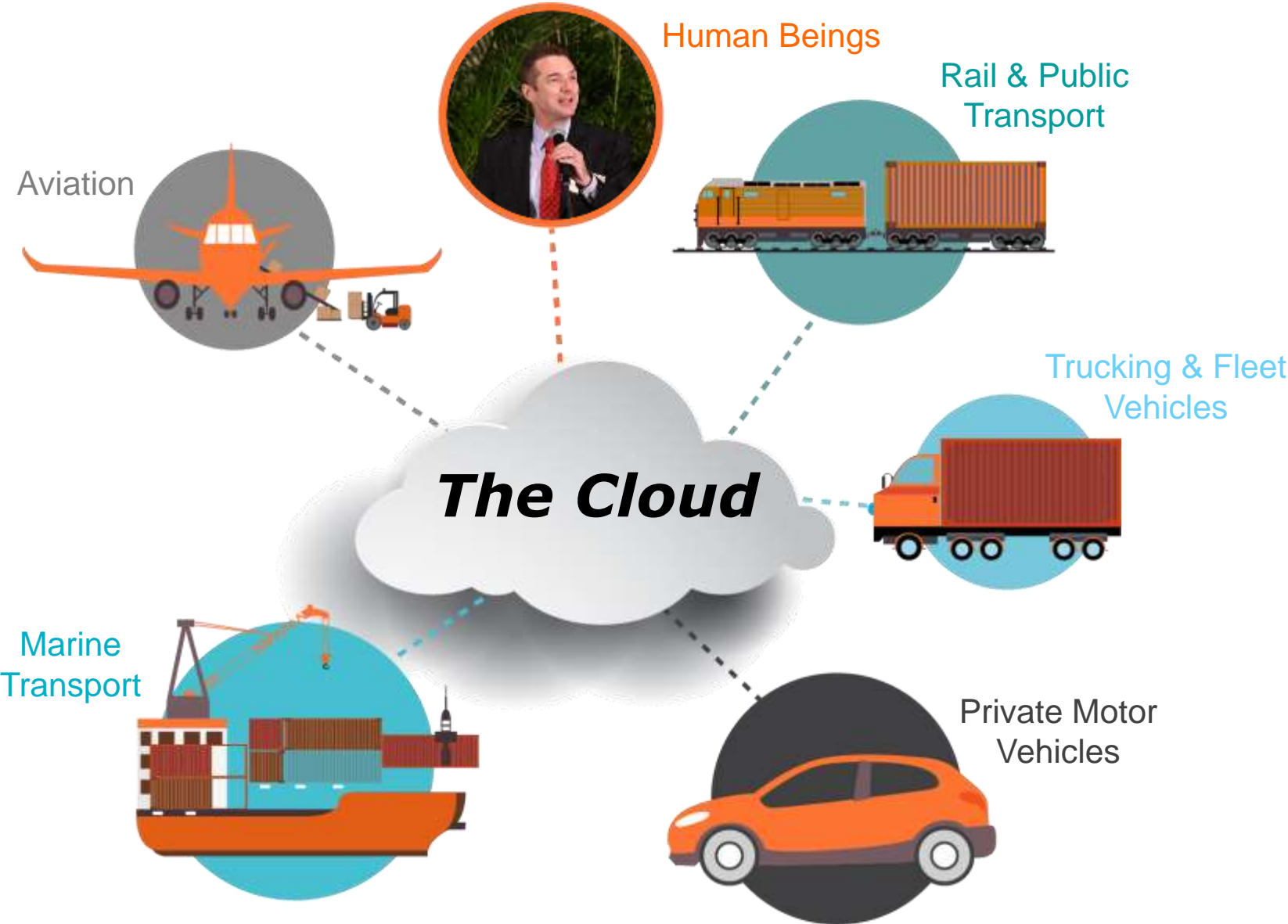
The 'Internet of Things' and 'The Insurance-Net of Things'



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



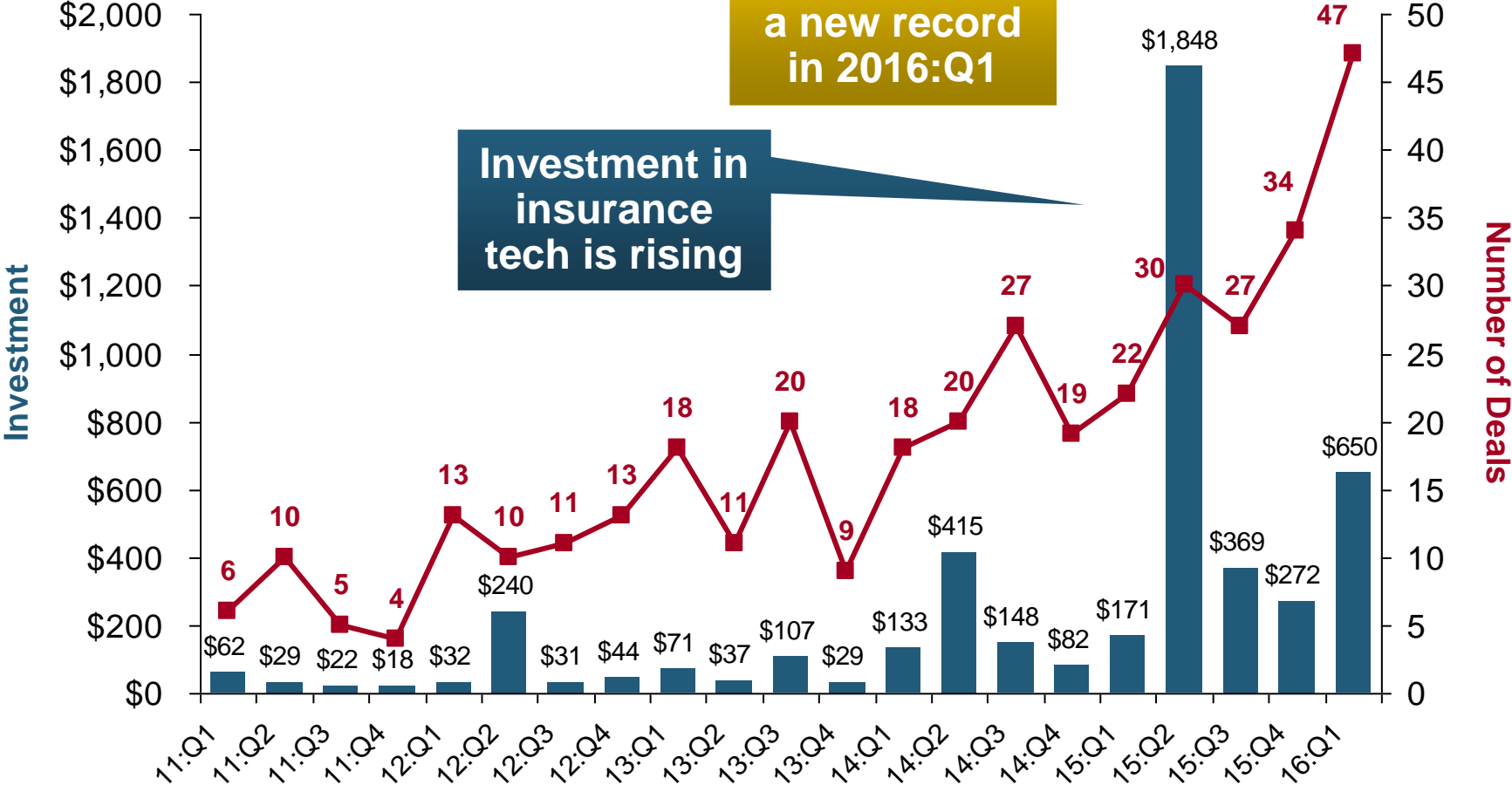
The Insurance Industry's Future Is in the Cloud...



Insurance Technology Financing Trend: Change Is Coming



(\$ Millions)

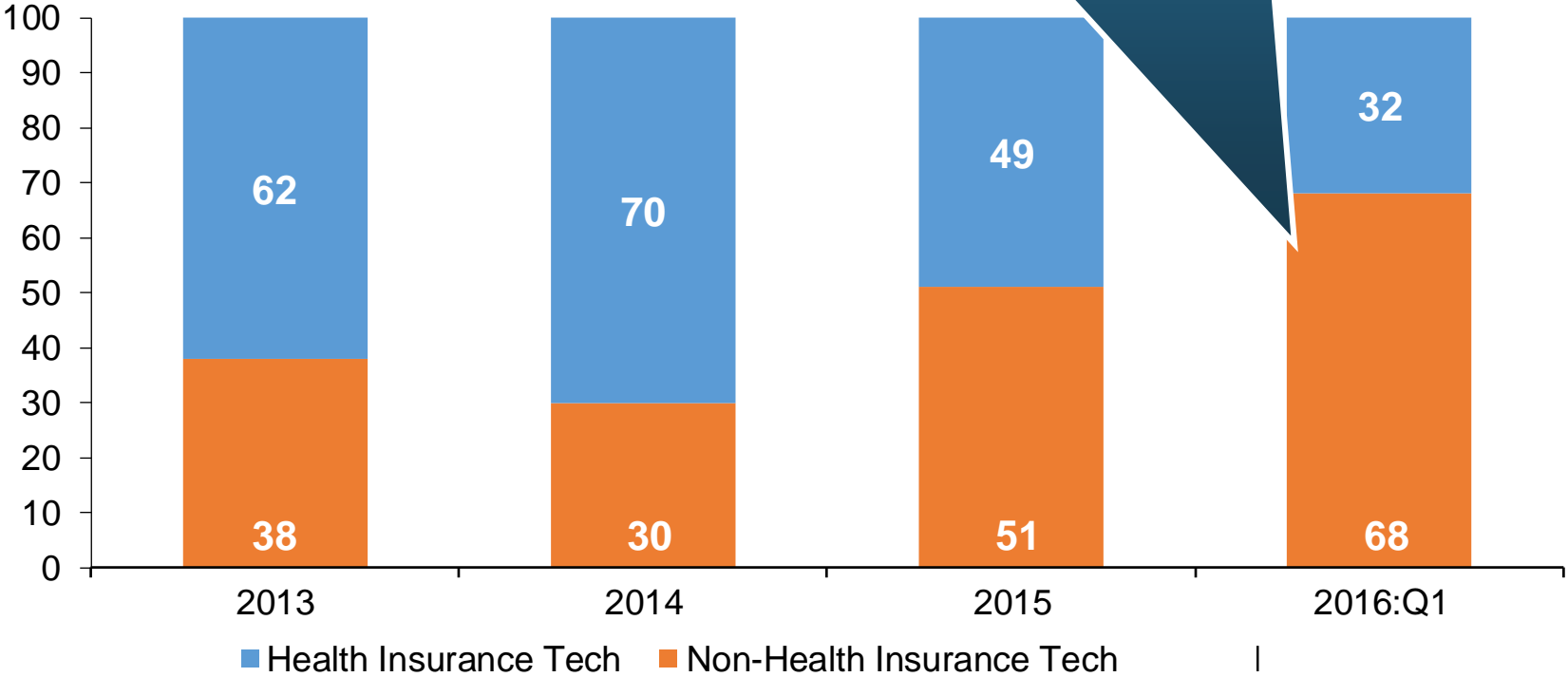


Source: CB Insights at <https://www.cbinsights.com/blog/insurance-tech-overview-q1-2016/>; Insurance Information Institute.

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

(Percent)

With the ACA in the rear view window, non-health insurance tech accounts for the majority of investment



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:

www.iii.org

*Thank you for your time
and your attention!*

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