



Casualty Market Overview & Outlook

Trends, Challenges & Opportunities

Insurance Information Institute

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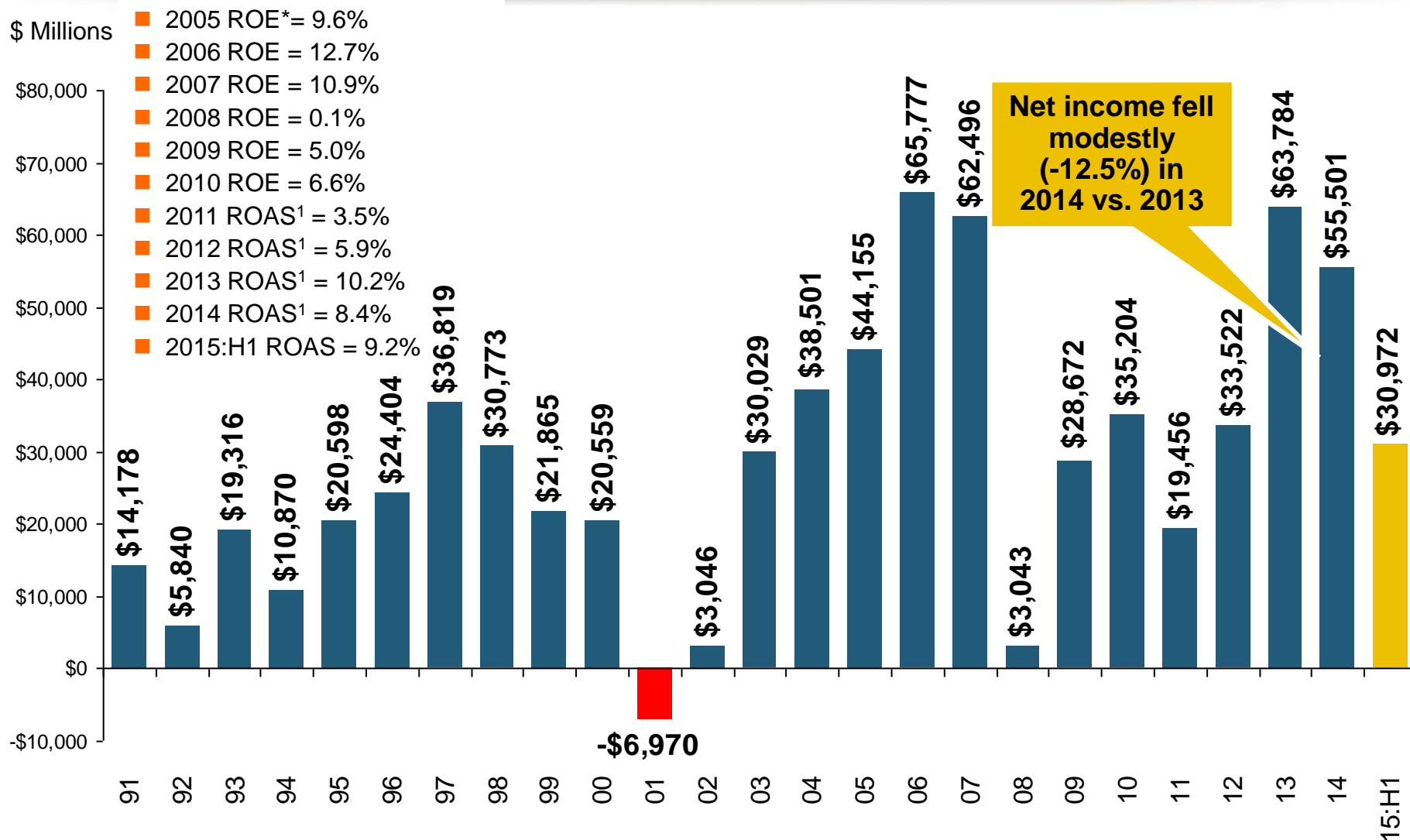
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P/C Insurance Industry Financial Performance

**2015 is Shaping Up to Be a
Reasonably Good Year
*A Repeat of 2014?***

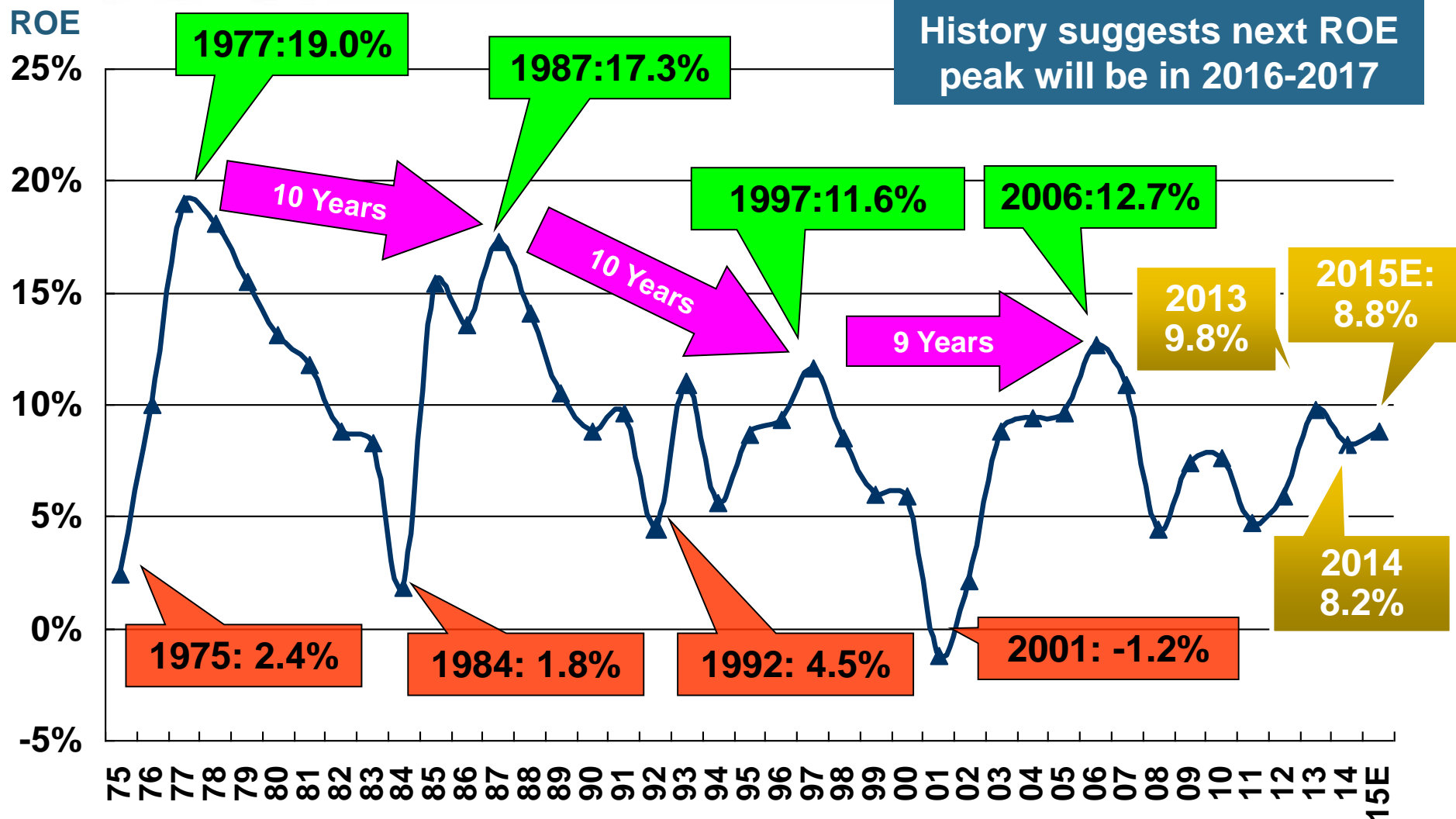
P/C Industry Net Income After Taxes 1991–2015:H1



*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.

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

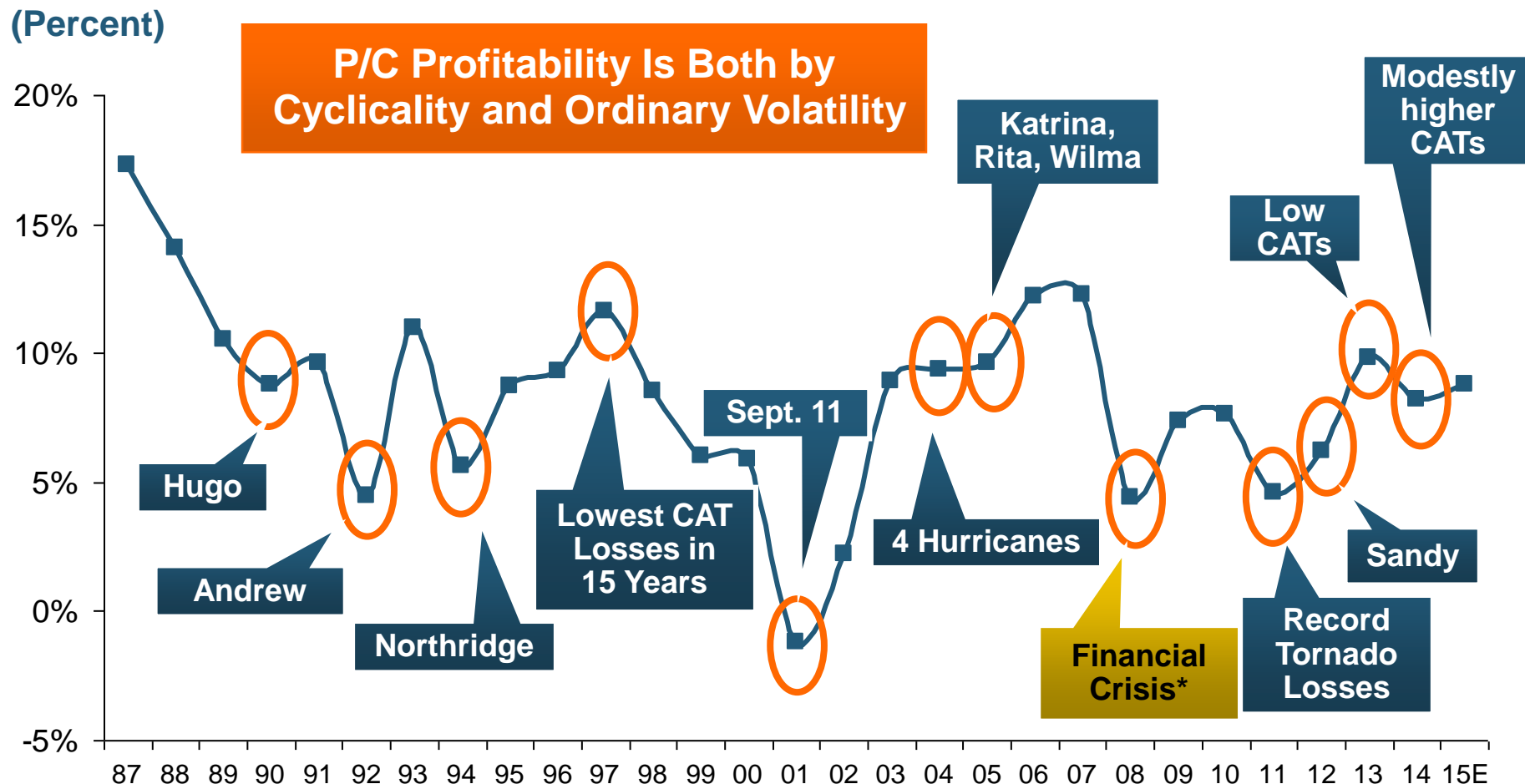
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2015E



*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.

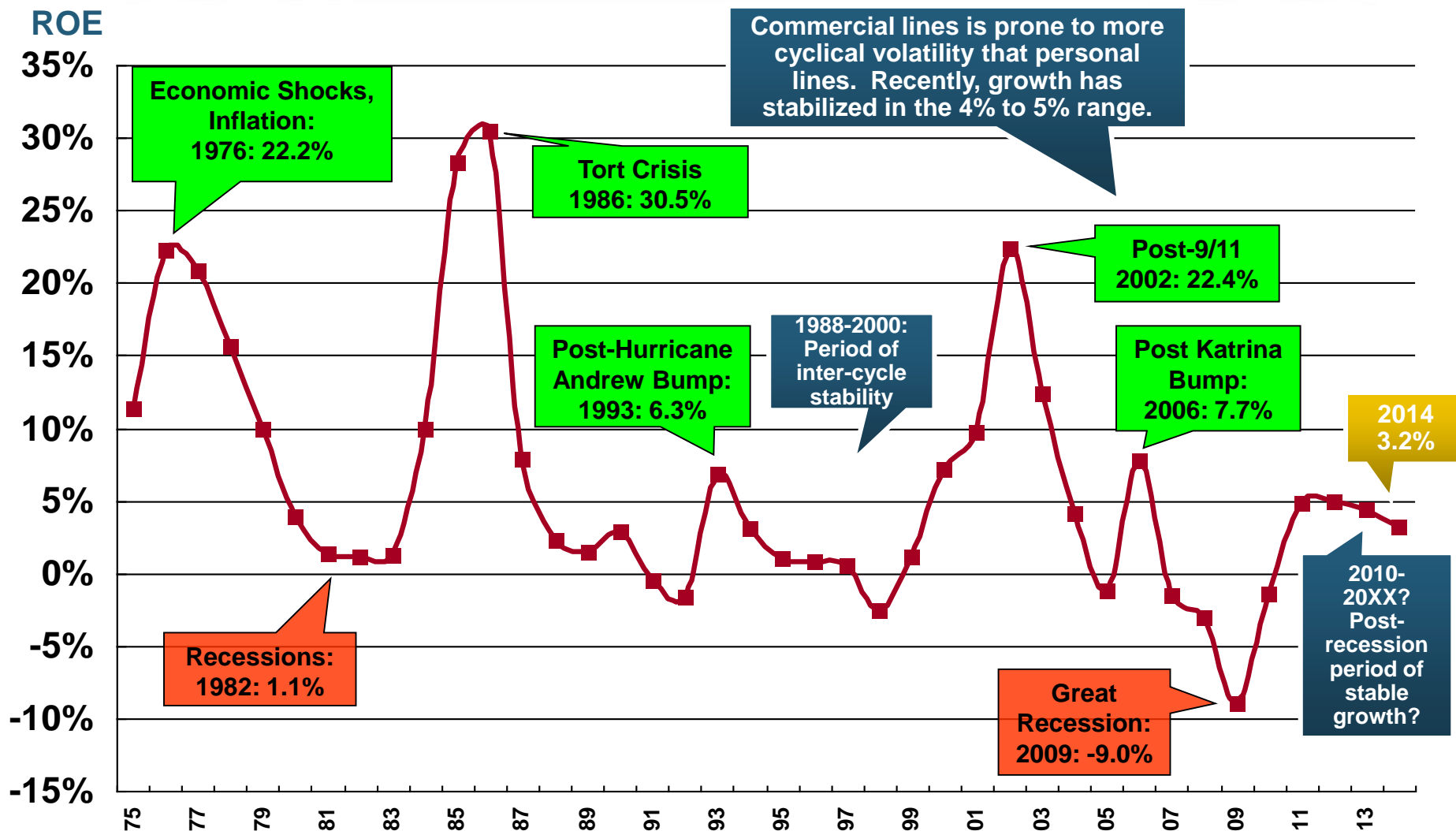
Source: Insurance Information Institute; NAIC, ISO, A.M. Best, Conning

ROE: Property/Casualty Insurance by Major Event, 1987–2015E



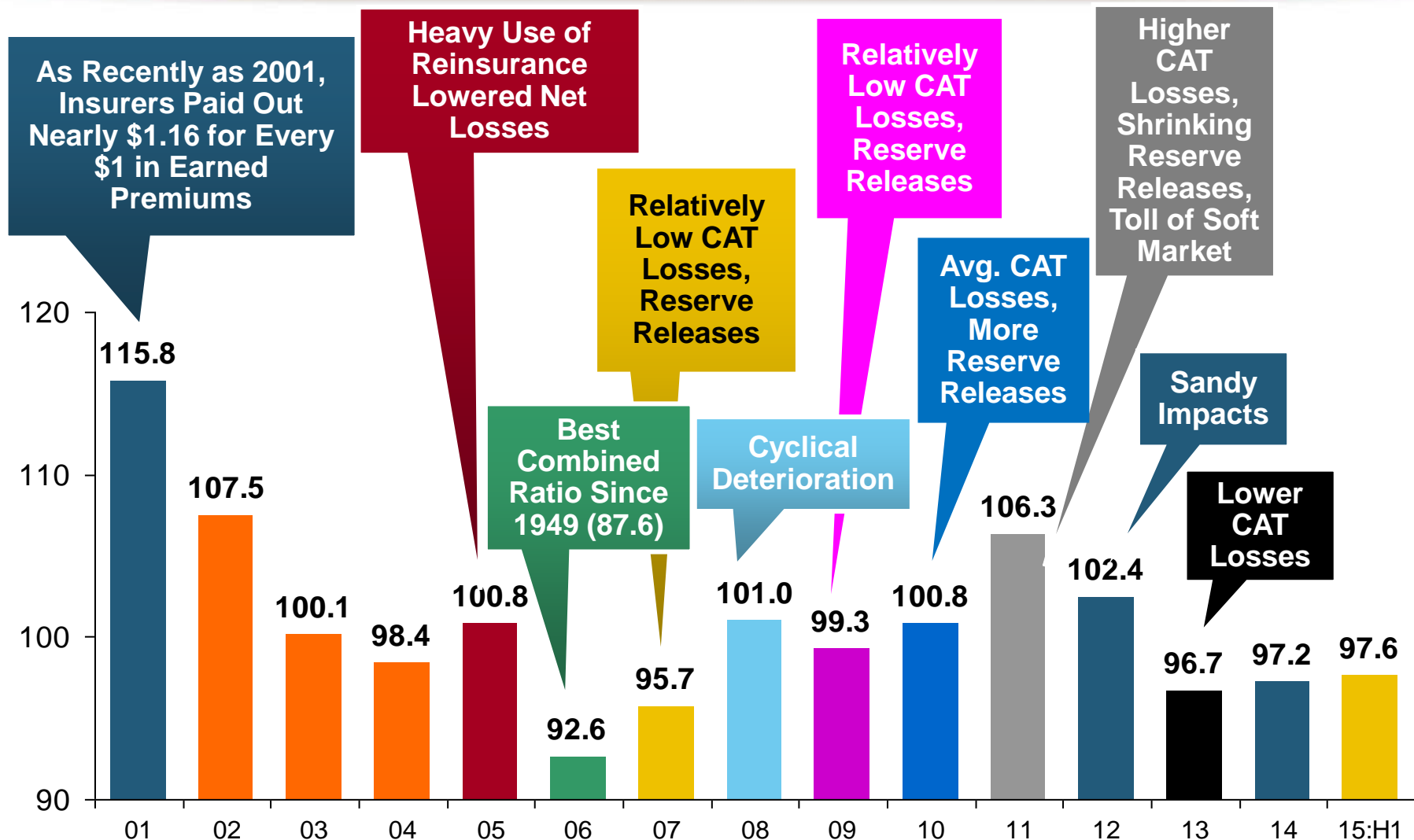
* Excludes Mortgage & Financial Guarantee in 2008 – 2014.
Sources: ISO, *Fortune*; Insurance Information Institute.

Commercial Lines NPW Premium Growth: 1975 – 2014



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

P/C Insurance Industry Combined Ratio, 2001–2015:H1*



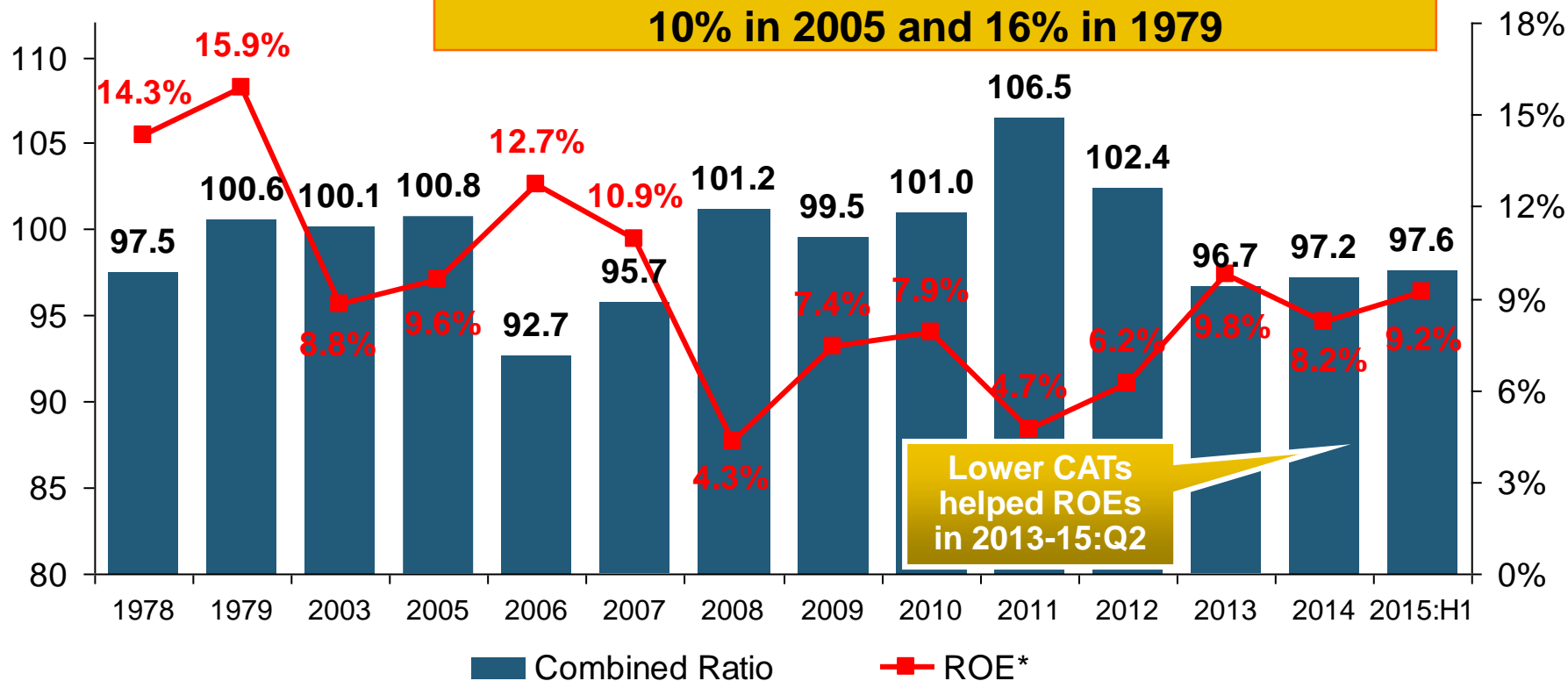
* Excludes Mortgage & Financial Guaranty insurers 2008--2014. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014: = 97.0.

Sources: A.M. Best, ISO.

A 100 Combined Ratio Isn't What It Once Was: Investment Impact on ROEs

Combined Ratio / ROE

A combined ratio of about 100 generates an ROE of ~7.0% in 2012/13, ~7.5% ROE in 2009/10, 10% in 2005 and 16% in 1979



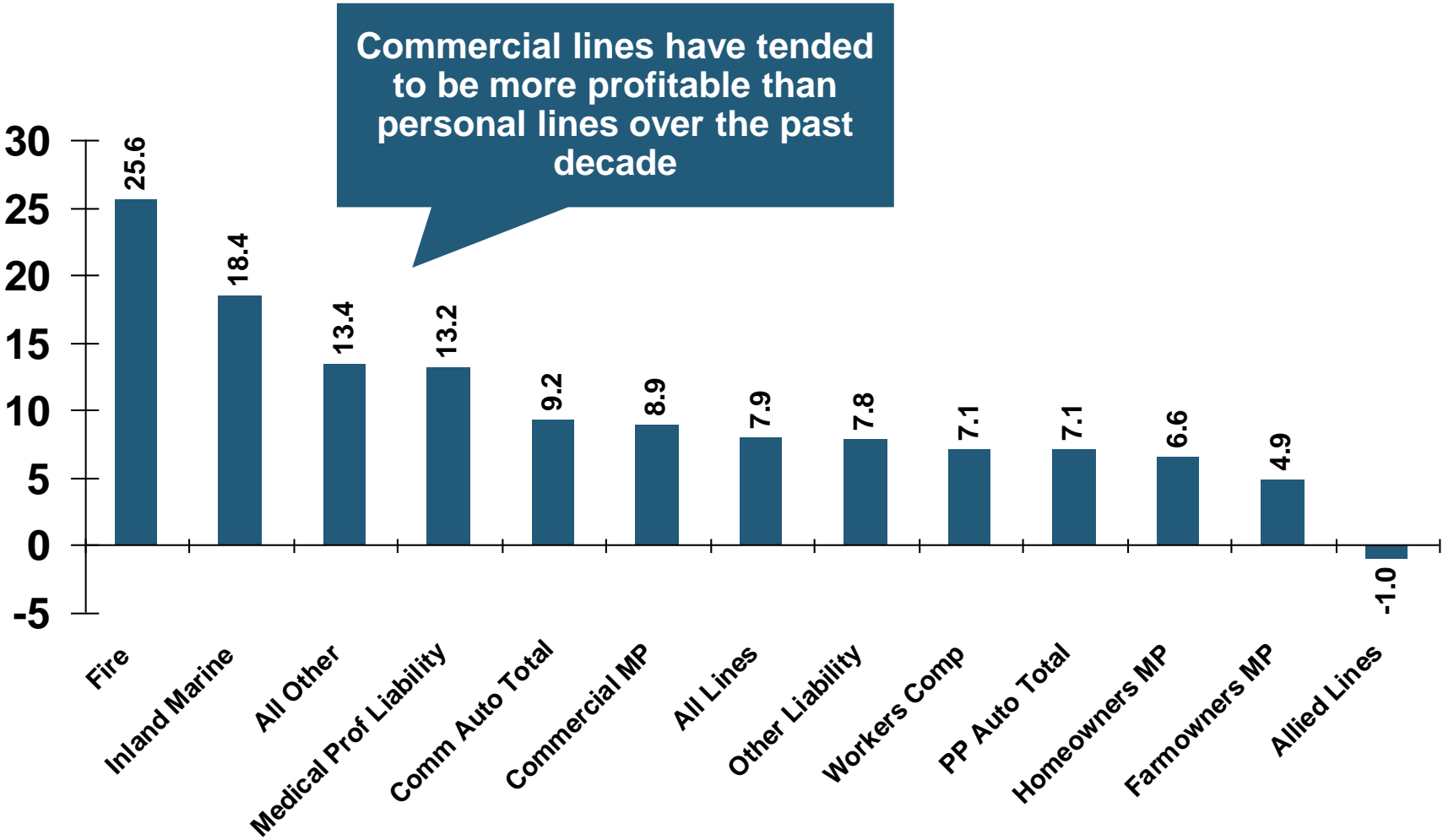
**Lower CATs
helped ROEs
in 2013-15:Q2**

Combined Ratios Must Be Lower in Today's Depressed Investment Environment to Generate Risk Appropriate ROEs

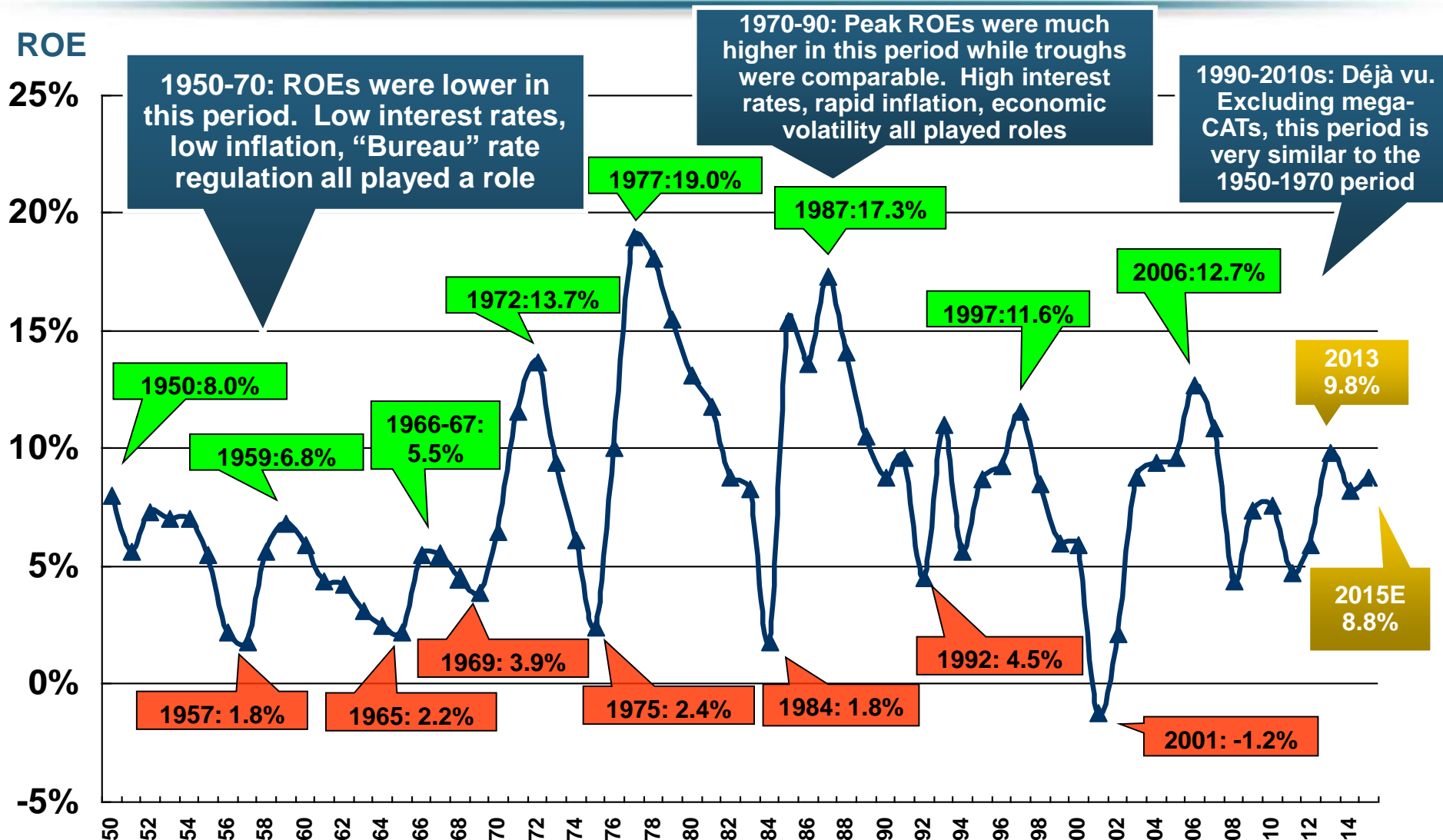
* 2008 -2014 figures are return on average surplus and exclude mortgage and financial guaranty insurers. 2014 combined ratio including M&FG insurers is 97.0; 2013 = 96.1; 2012 =103.2, 2011 = 108.1, ROAS = 3.5%.

Source: Insurance Information Institute from A.M. Best and ISO Verisk Analytics data.

Return on Net Worth (RNW) All Lines: 2004-2013 Average



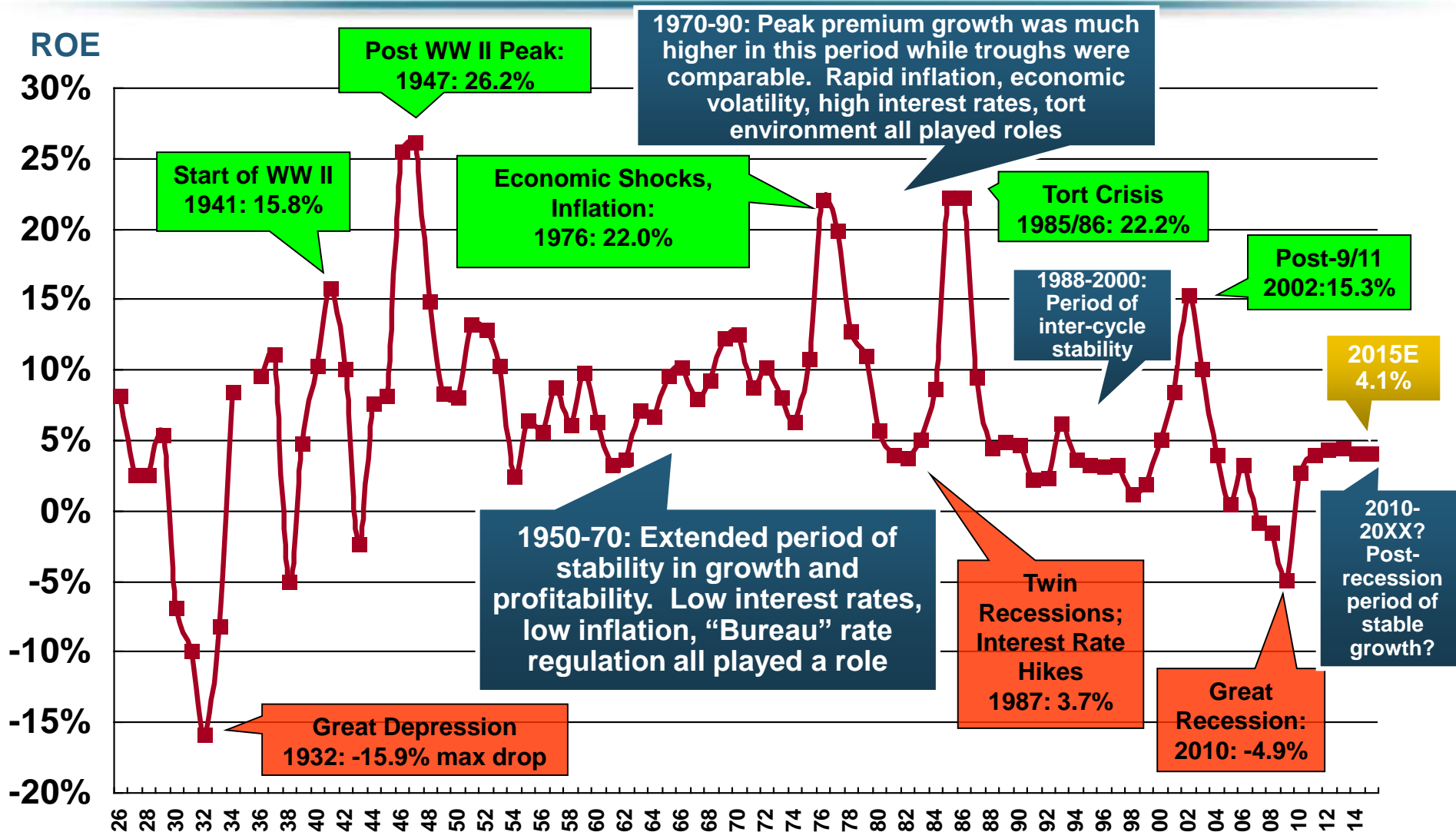
Back to the Future: Profitability Peaks & Troughs in the P/C Insurance Industry, 1950 – 2015E*



*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.

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



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

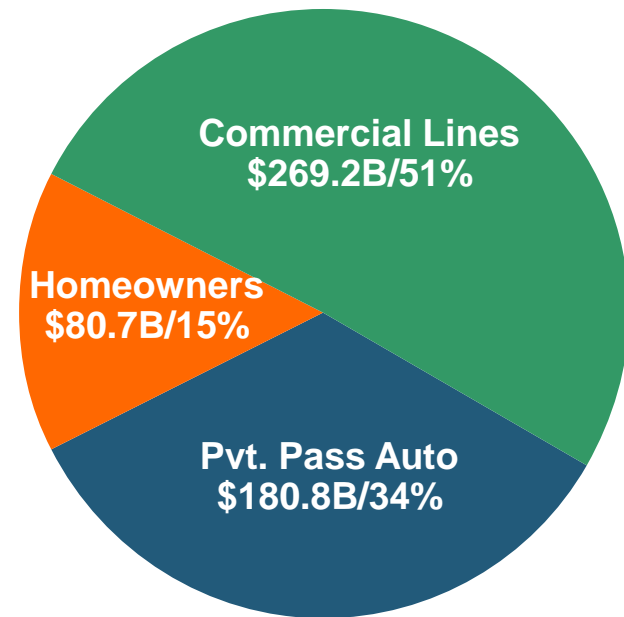
Source: A.M. Best; Insurance Information Institute.

Distribution of Direct Premiums Written by Segment/Line, 2013

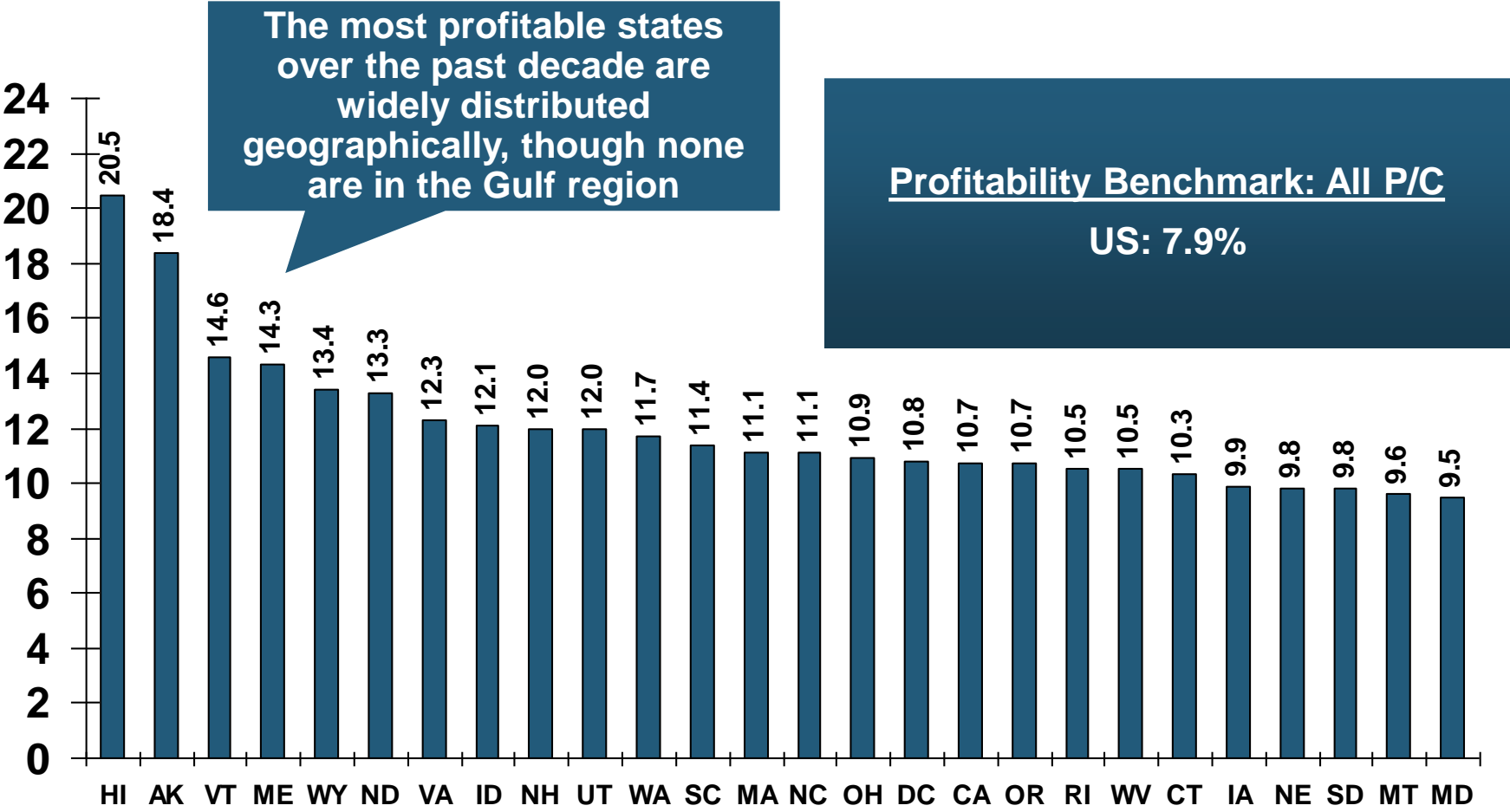
Distribution Facts

- Personal/Commercial lines split has been about 50/50 for many years
- Pvt. Passenger Auto is by far the largest line of insurance and is currently the most important source of industry profits
- Billions of additional dollars in homeowners insurance premiums are written by state-run residual market plans

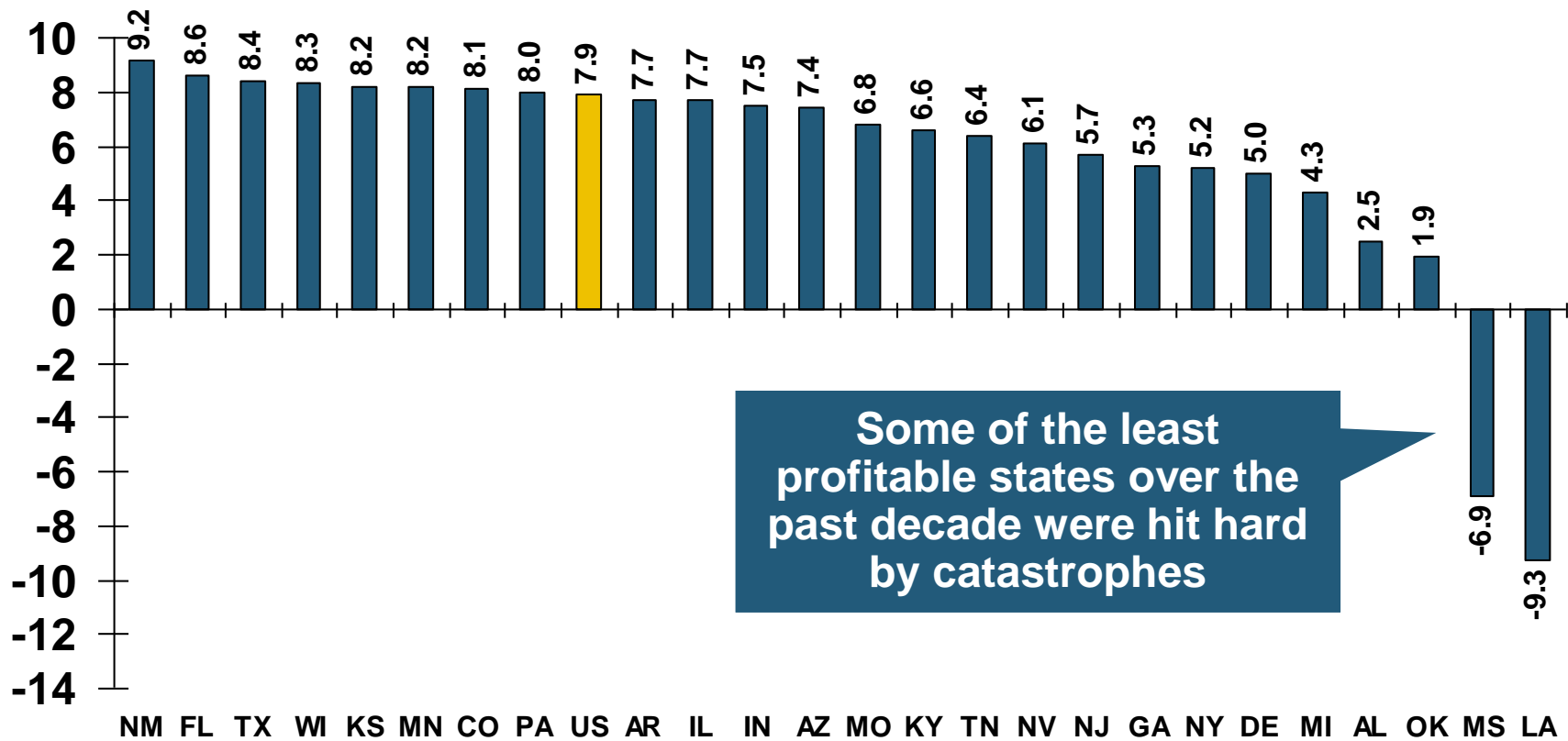
2013



RNW All Lines by State, 2004-2013 Average: Highest 25 States



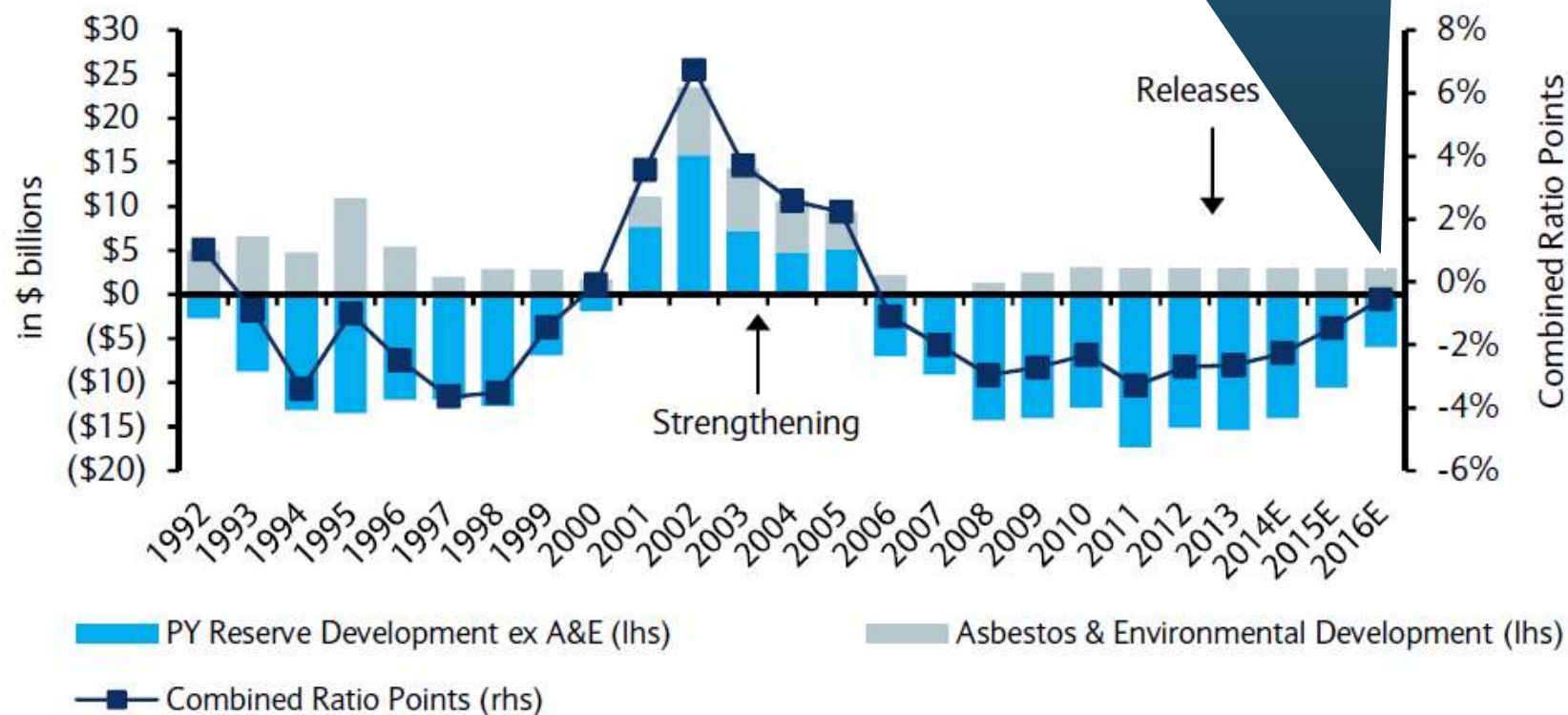
RNW All Lines by State, 2004-2013 Average: Lowest 25 States



P/C Insurance Loss Reserve Development, 1992 – 2016E*

Reserve Change

Reserve releases are expected to gradually taper off, but will continue to benefit the bottom line and combined ratio through at least 2016



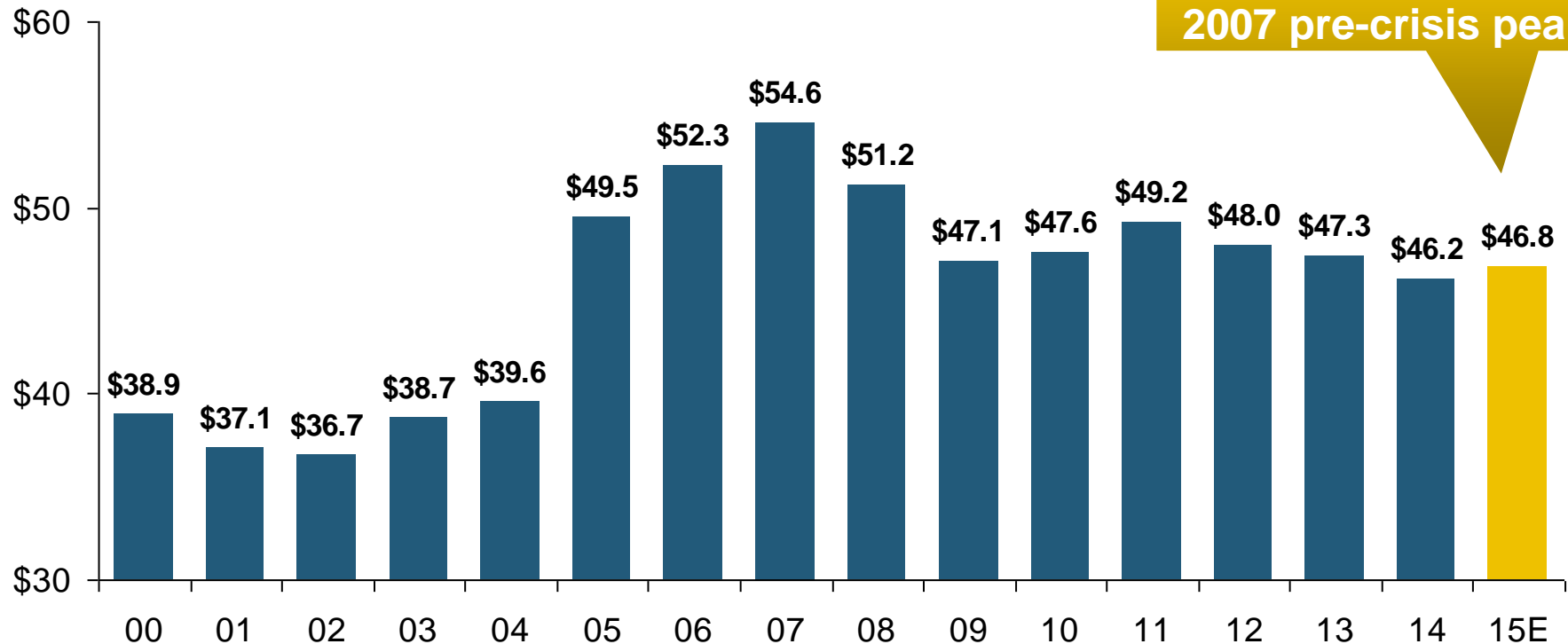
INVESTMENTS: THE NEW REALITY

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

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

Property/Casualty Insurance Industry Investment Income: 2000–2015E¹

(\$ Billions)



Investment earnings
are still below their
2007 pre-crisis peak

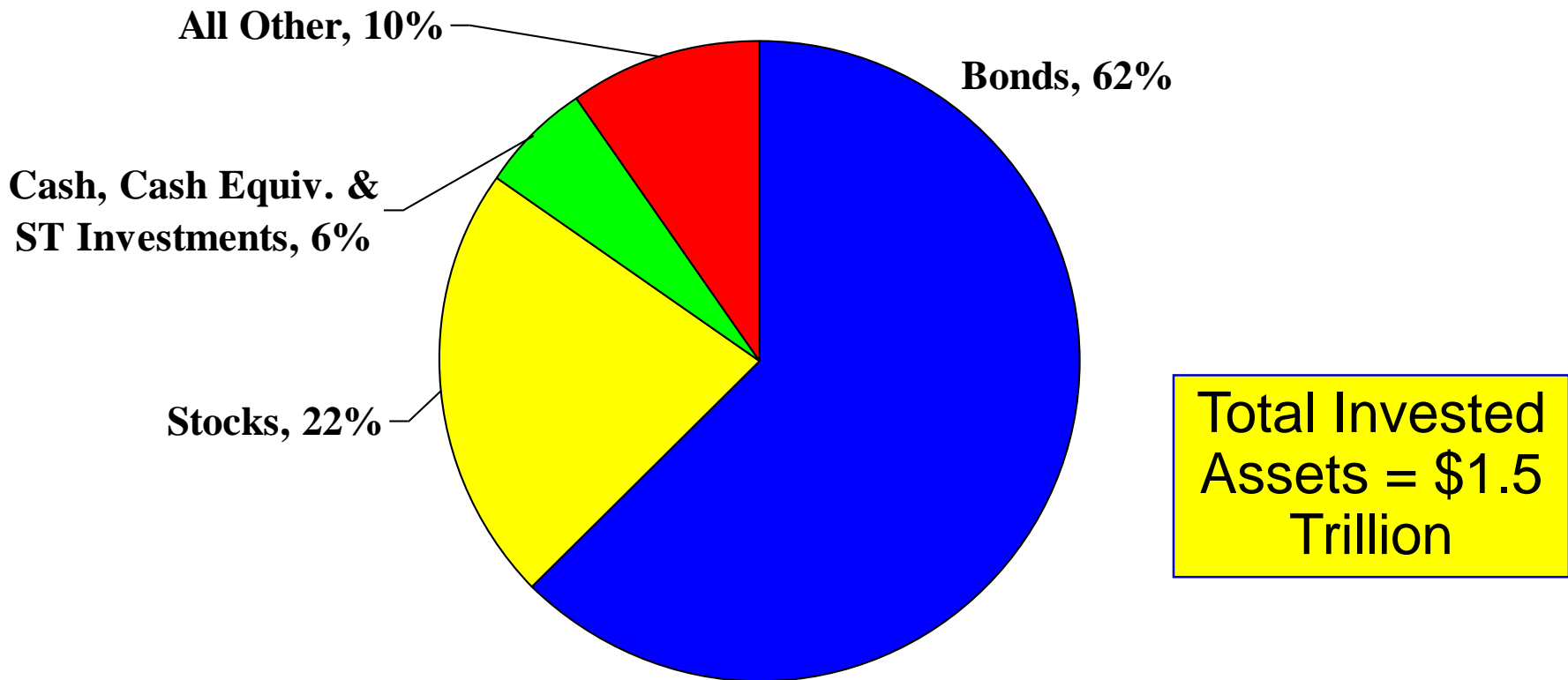
**Due to persistently low interest rates,
investment income fell in 2012, 2013 and 2014.**

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

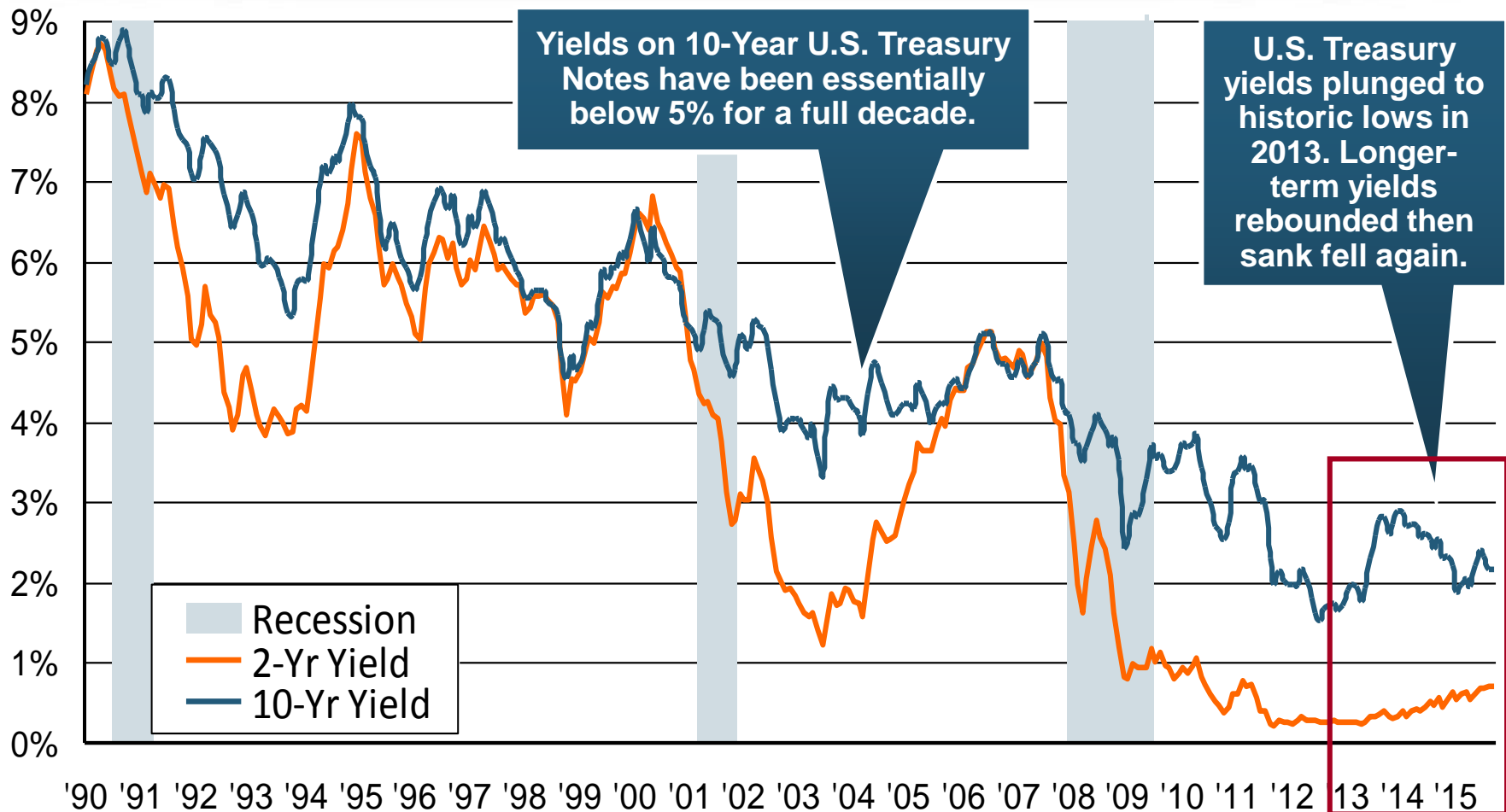
*2015 figure is estimated based on annualized data through Q2.

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

\$ Billions



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

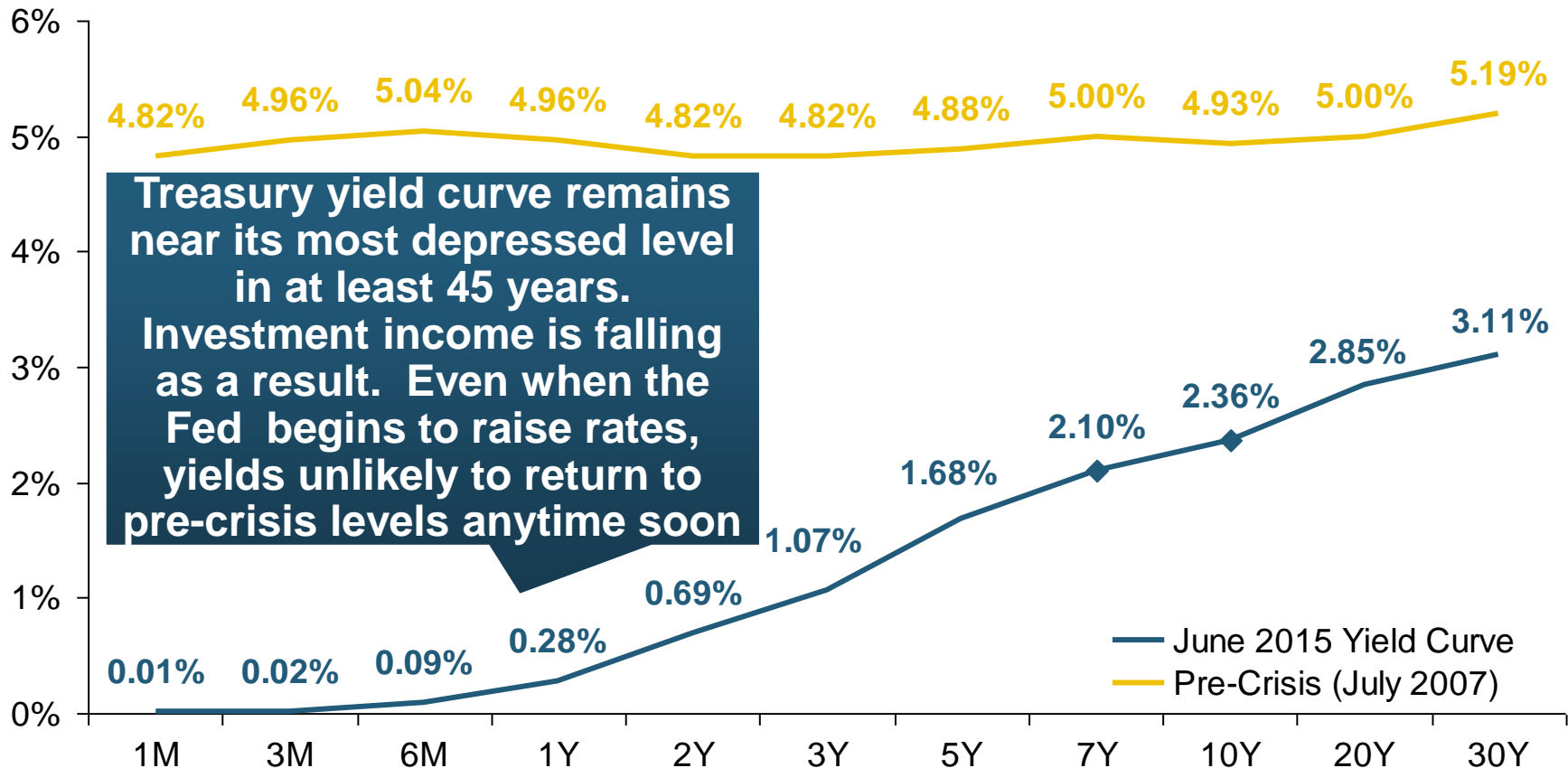


Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

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

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

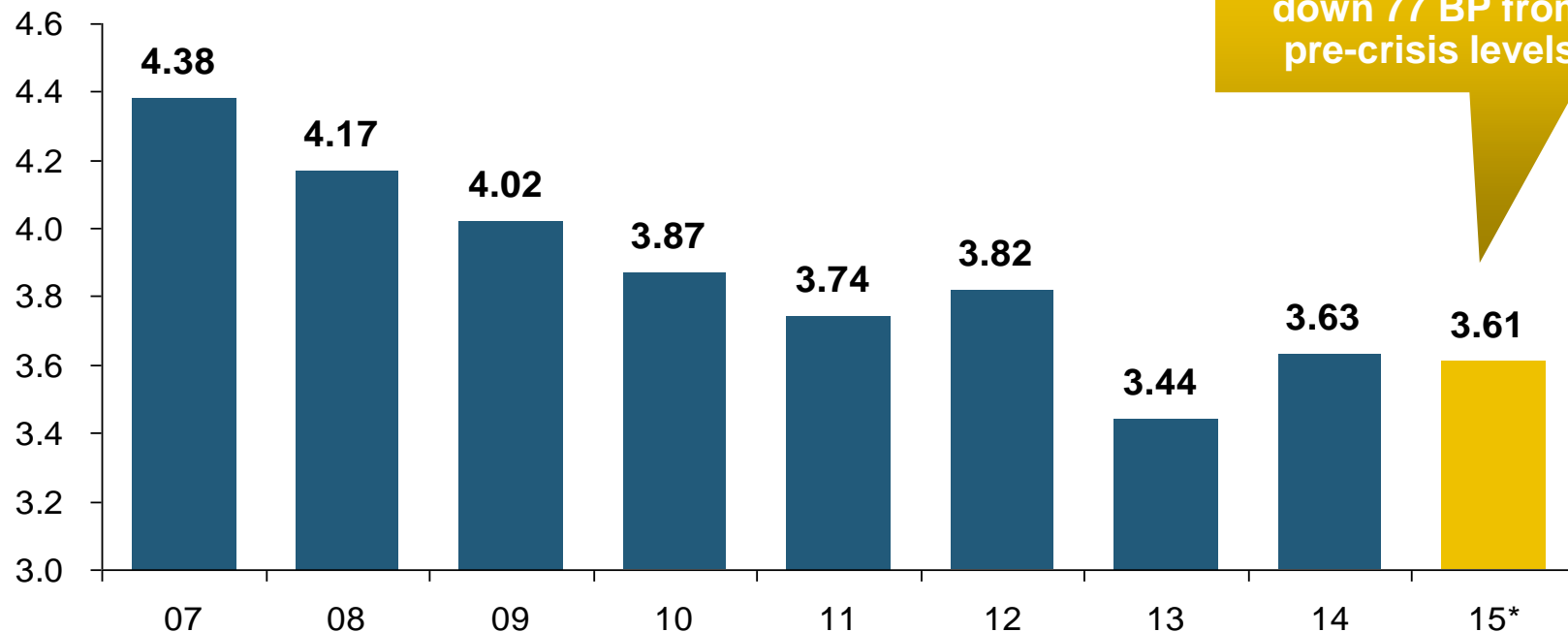
Treasury Yield Curves: Pre-Crisis (July 2007) vs. June 2015



The Fed Is Actively Signaling that it Is Likely to Begin Raising Rates Later in 2015 but Only Very Gradually

Net Yield on Property/Casualty Insurance Invested Assets, 2007–2015*

(Percent)



Book yield in 2015 is down 77 BP from pre-crisis levels

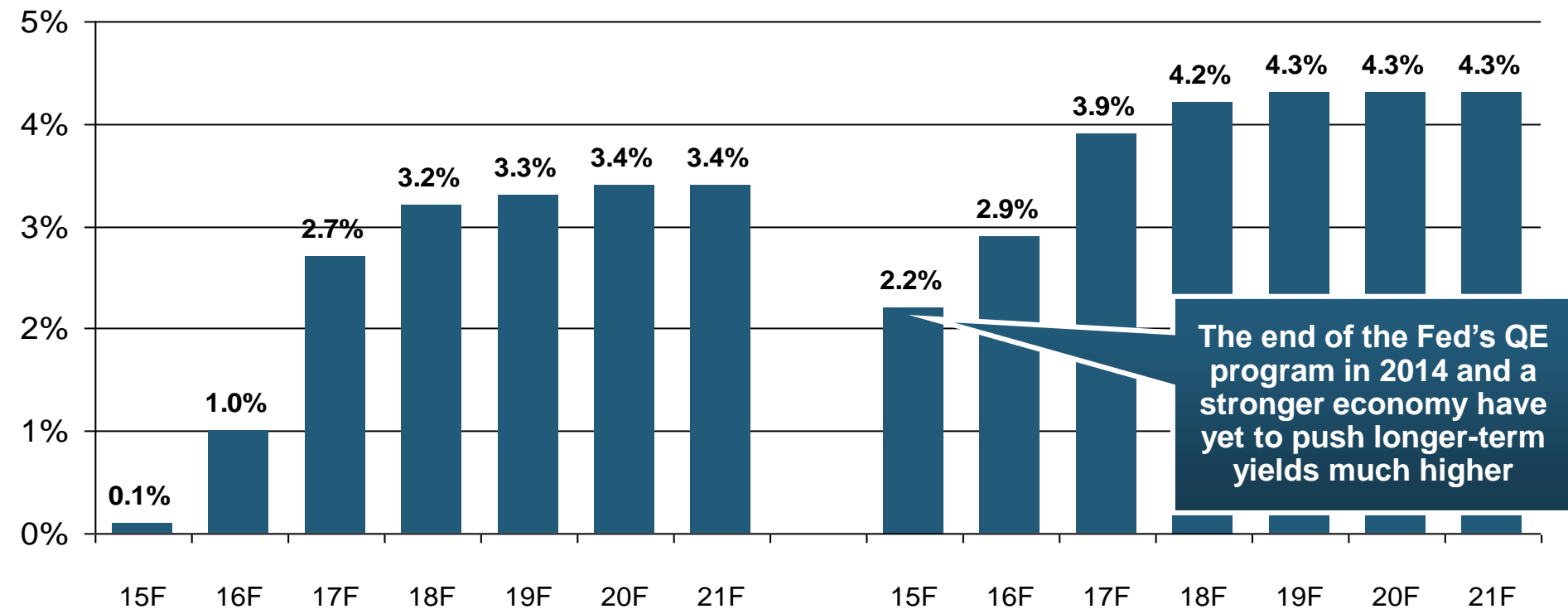
The yield on invested assets remains low relative to pre-crisis yields. The Fed's plan to raise interest rates in late 2015 has already pushed up some yields, albeit quite modestly.

Interest Rate Forecasts: 2015 – 2021

Yield (%)

3-Month Treasury

10-Year Treasury



A full normalization of interest rates is unlikely until 2018, more than a decade after the onset of the financial crisis.

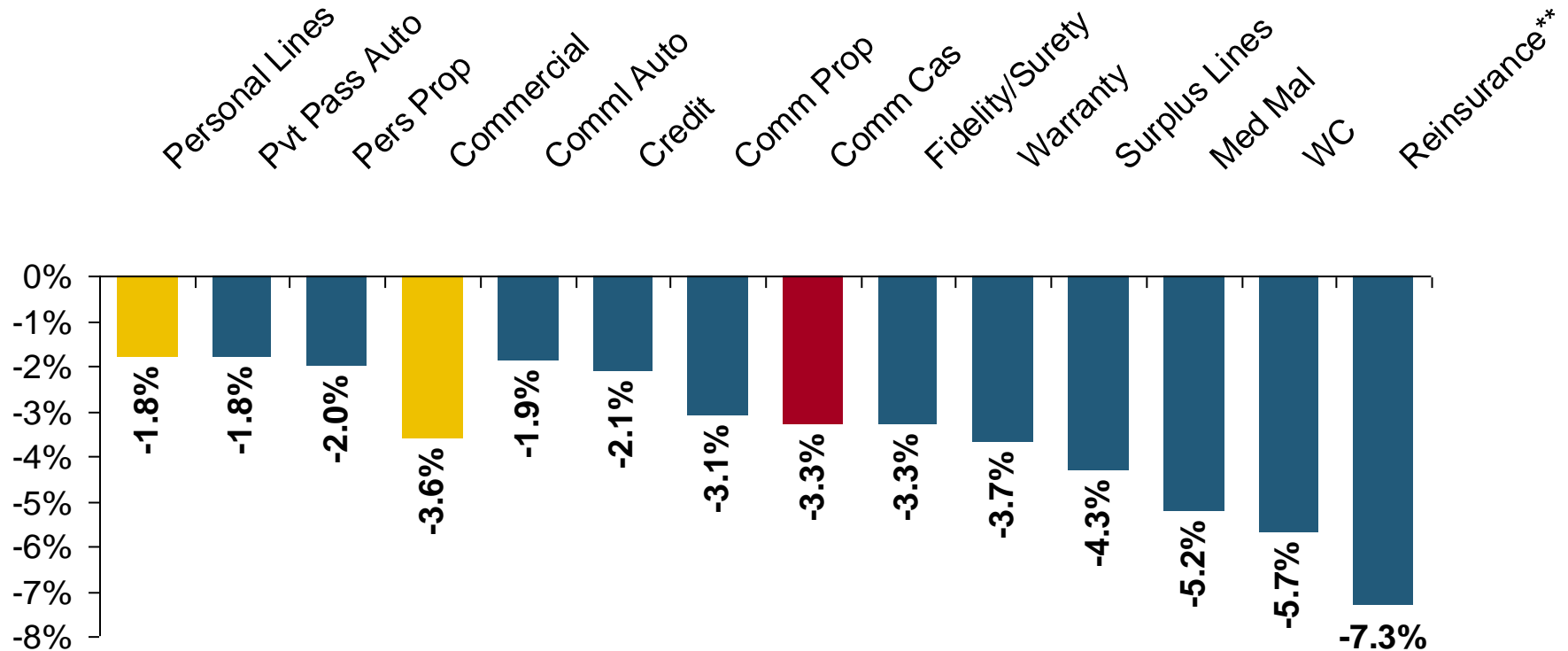
Annual Inflation Rates, (CPI-U, %), 1990–2016F

Annual Inflation Rates (%)



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

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



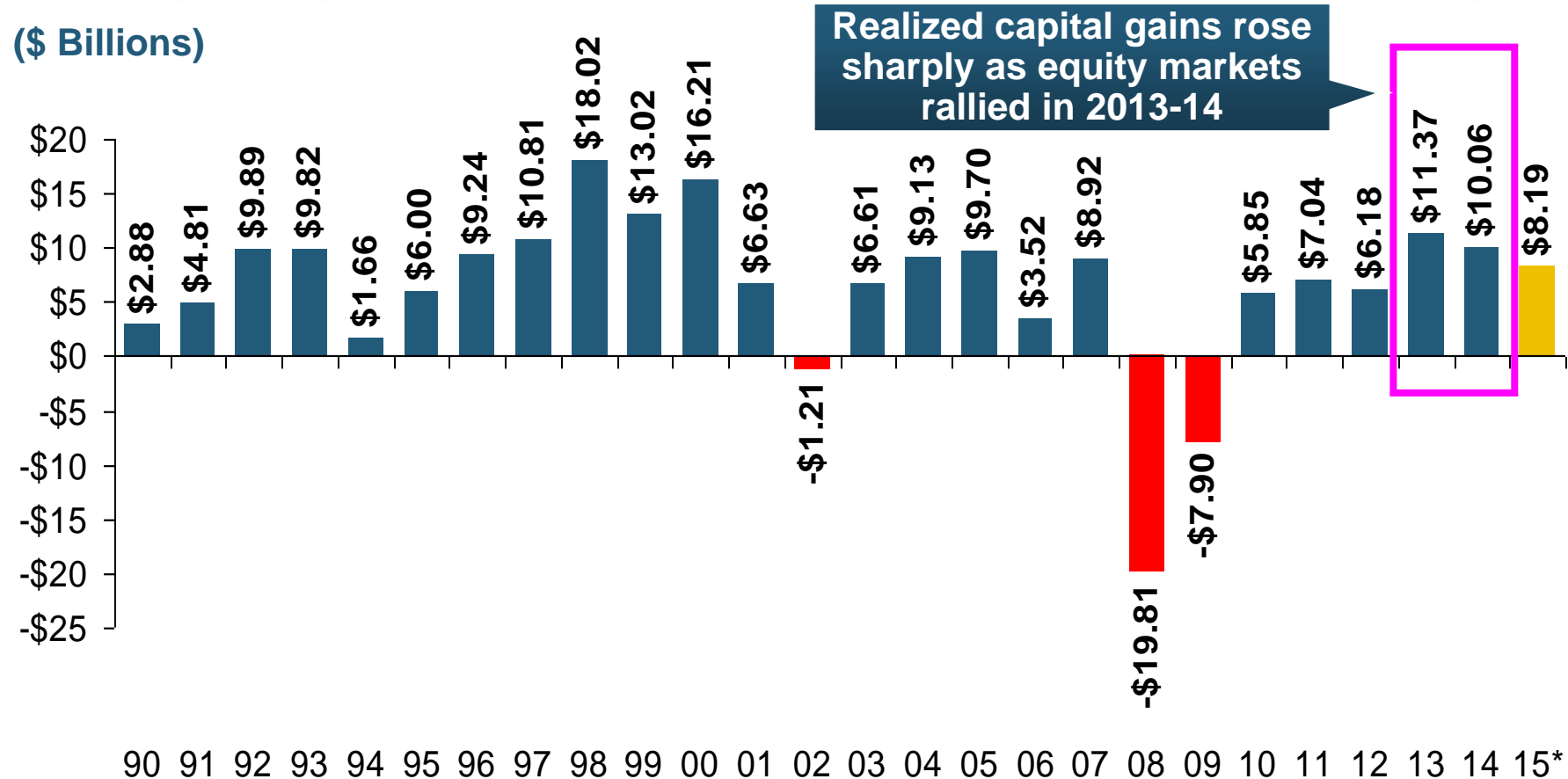
Lower Investment Earnings Place a Greater Burden on Underwriting and Pricing Discipline

*Based on 2008 Invested Assets and Earned Premiums

**US domestic reinsurance only

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

P/C Insurer Net Realized Capital Gains/Losses, 1990-2015:Q2



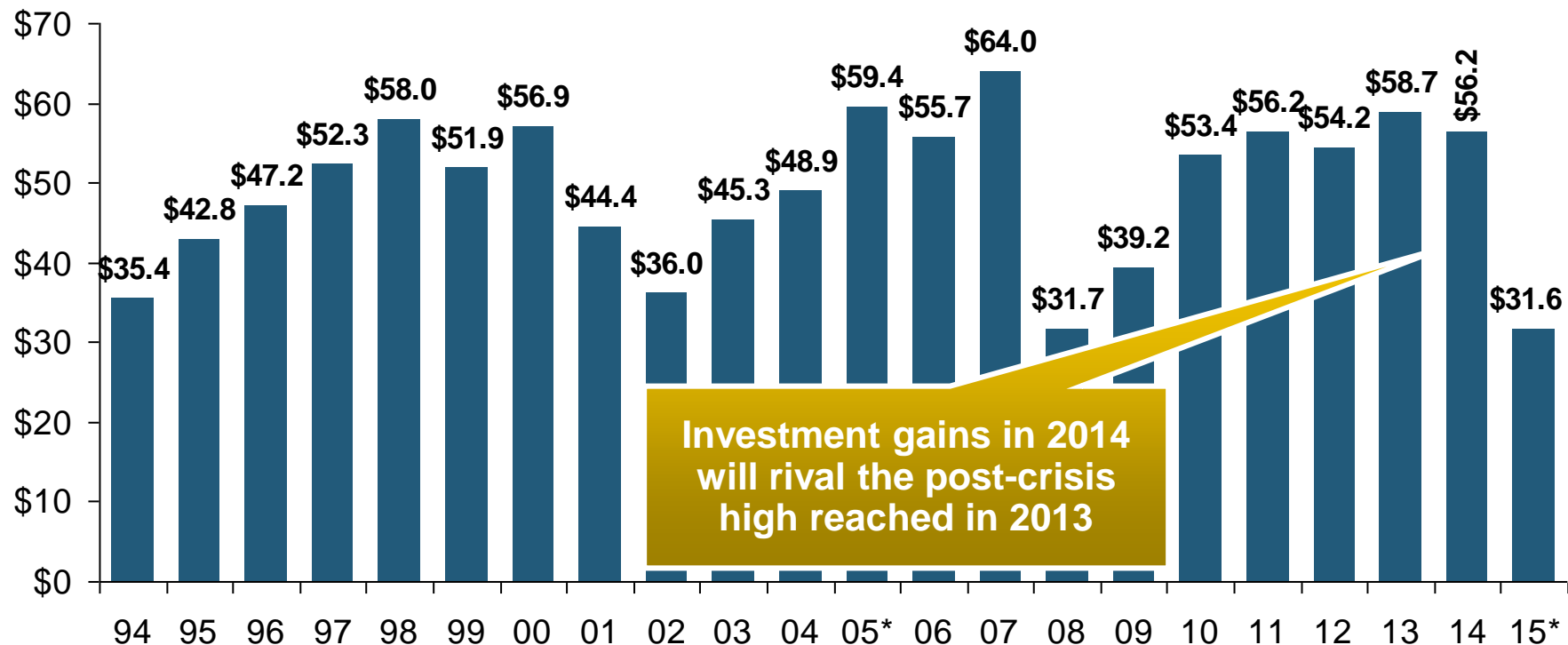
Insurers Posted Net Realized Capital Gains in 2010 - 2014 Following Two Years of Realized Losses During the Financial Crisis. Realized Capital Losses Were a Primary Cause of 2008/2009's Large Drop in Profits and ROE.

*Through Q2 2015.

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

Property/Casualty Insurance Industry Investment Gain: 1994–2015:Q2¹

(\$ Billions)



Total Investment Gains Were Down Slightly in 2014 as Low Interest Rates Pressured Investment Income but Realized Capital Gains Remained Robust

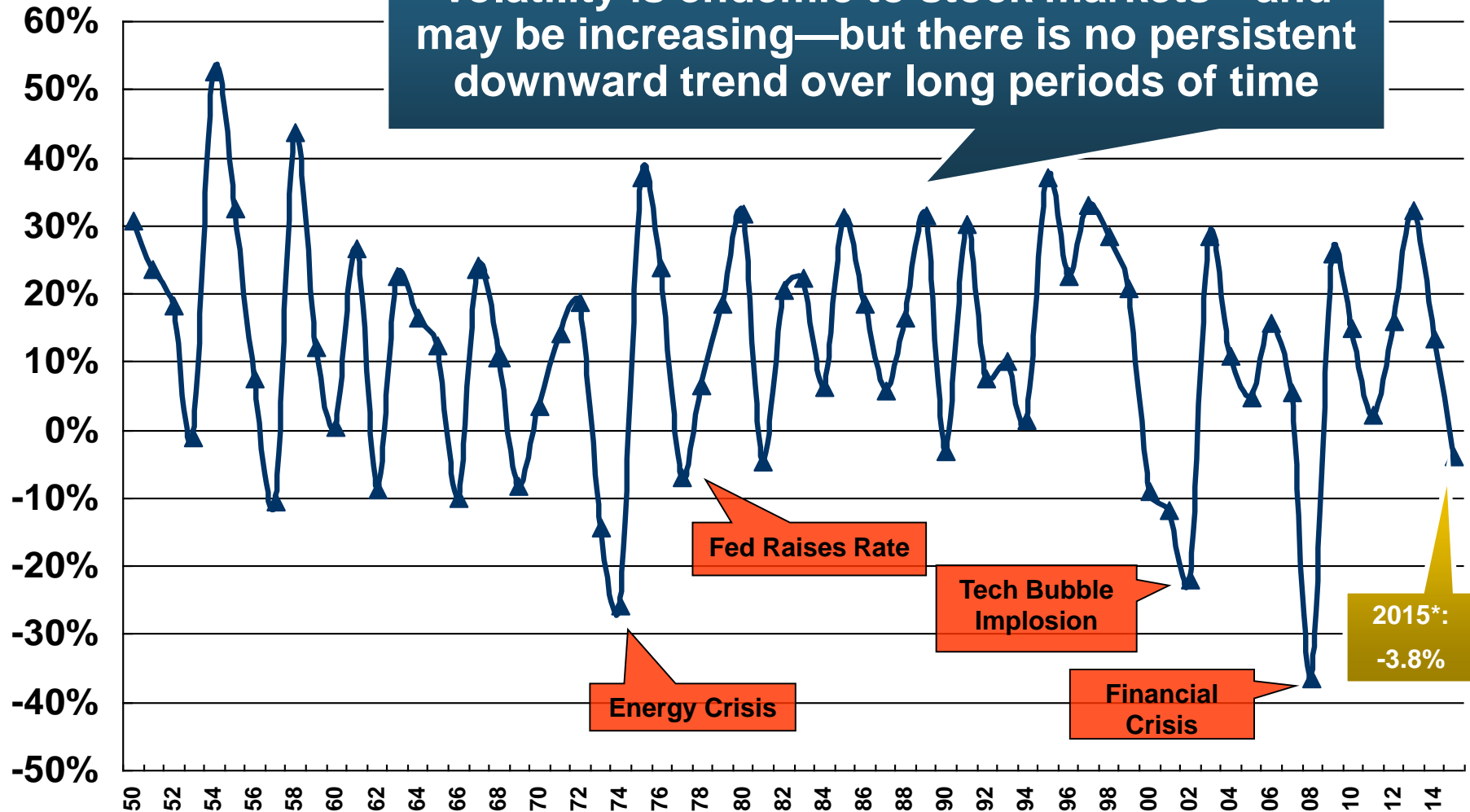
¹ Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.

* 2005 figure includes special one-time dividend of \$3.2B; 2015 figure is through Q2 2015.

Sources: ISO, SNL; Insurance Information Institute.

S&P 500 Index Returns, 1950 – 2015*

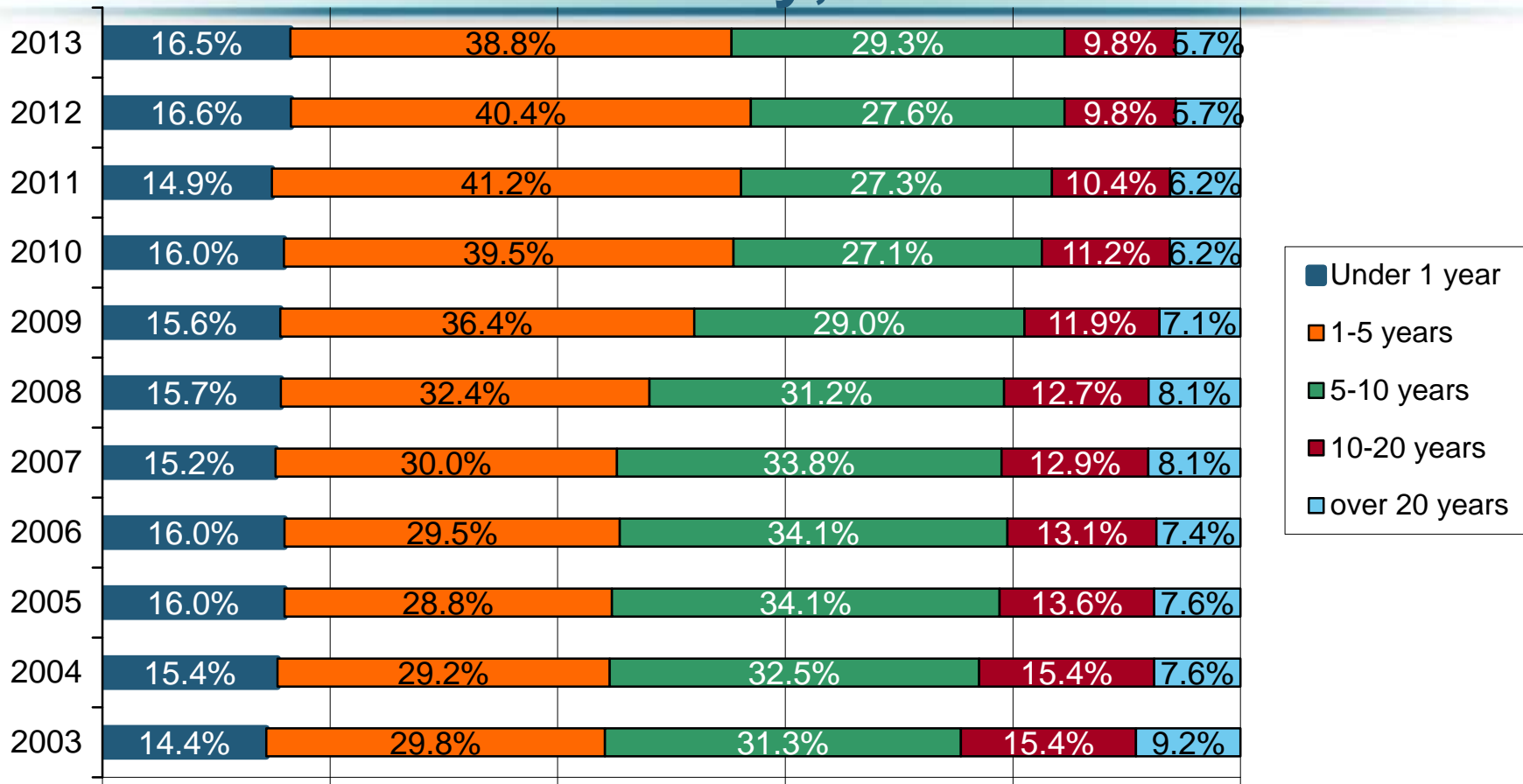
Annual Return



*Through Oct. 6, 2015.

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

Distribution of Bond Maturities, P/C Insurance Industry, 2003-2013



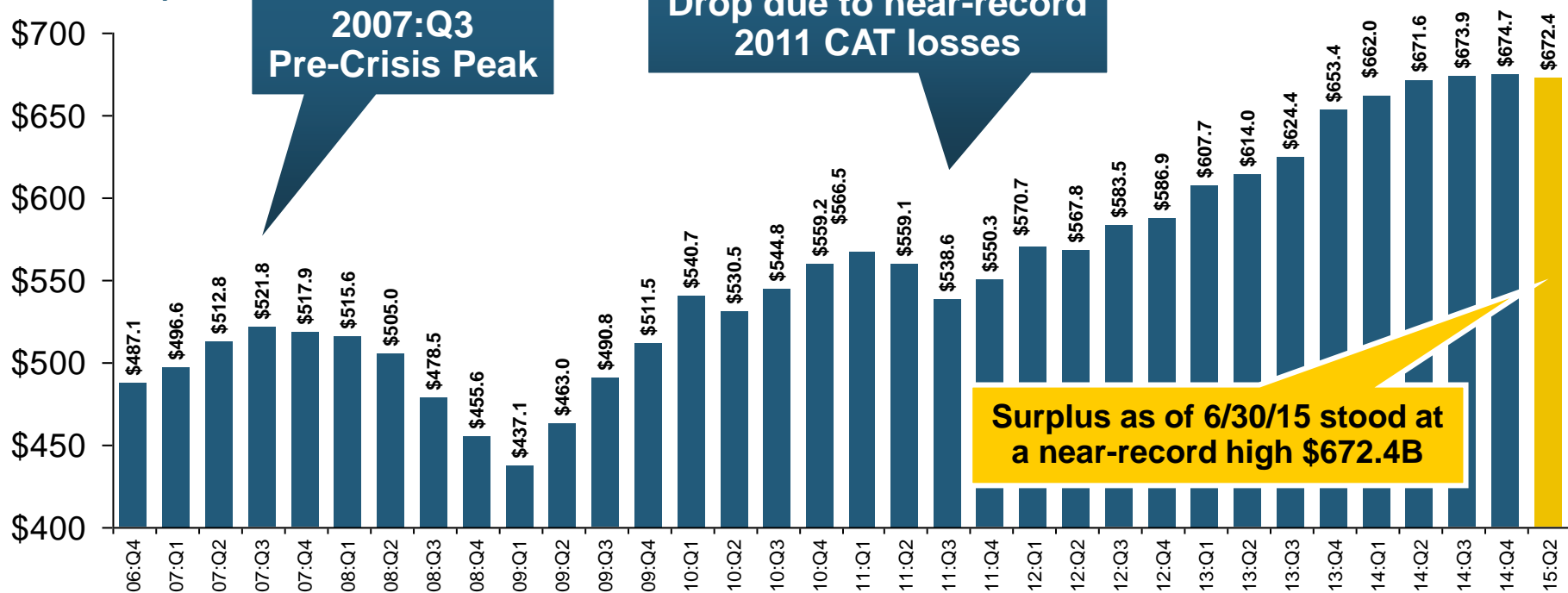
The main shift over these years has been from bonds with longer maturities to bonds with shorter maturities. The industry first trimmed its holdings of over-10-year bonds (from 24.6% in 2003 to 15.5% in 2012) and then trimmed bonds in the 5-10-year category (from 31.3% in 2003 to 27.6% in 2012). Falling average maturity of the P/C industry's bond portfolio is contributing to a drop in investment income along with lower yields.

CAPITAL/CAPACITY

**Capital Accumulation Has
Multiple Impacts**

Policyholder Surplus, 2006:Q4–2015:Q2

(\$ Billions)



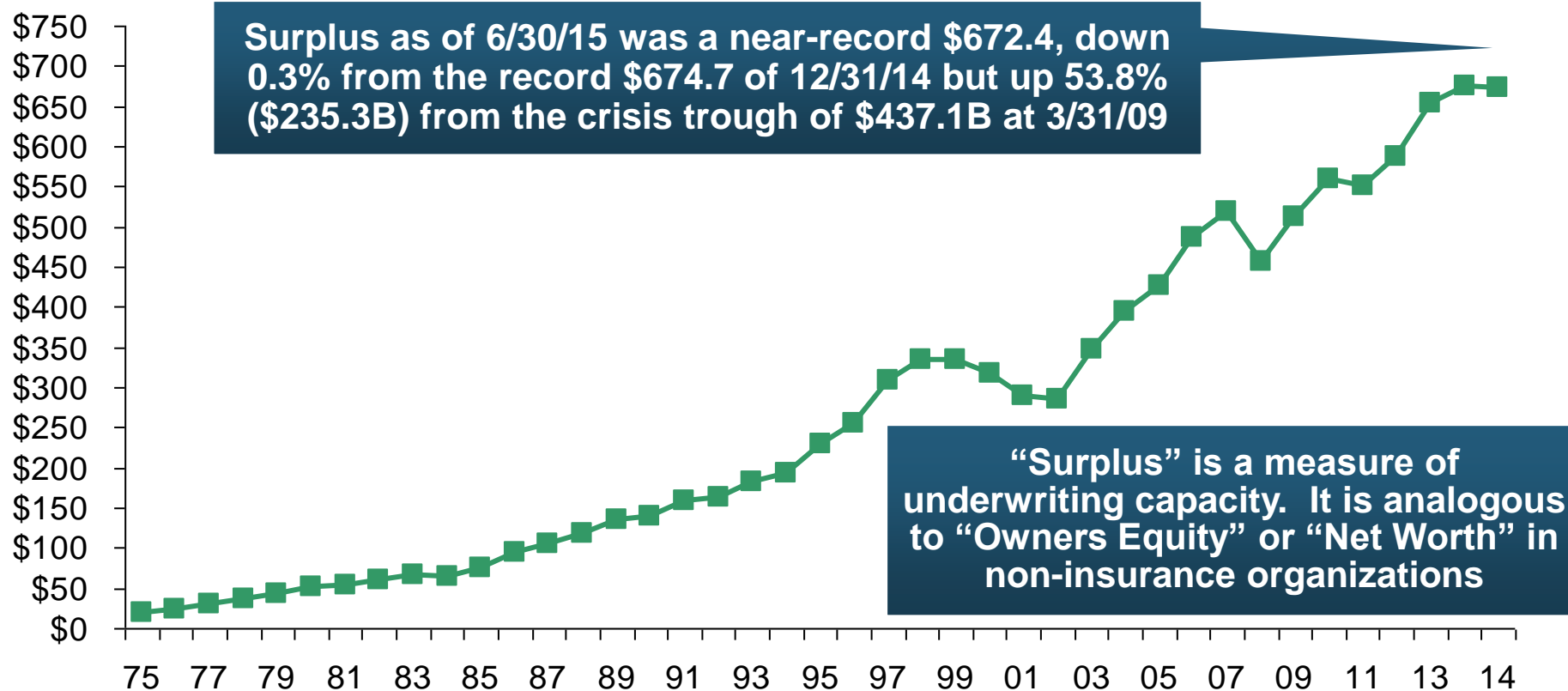
The industry now has \$1 of surplus for every \$0.73 of NPW, close to the strongest claims-paying status in its history.

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 2015 in very strong financial condition.

US Policyholder Surplus: 1975–2015:Q2*

(\$ Billions)



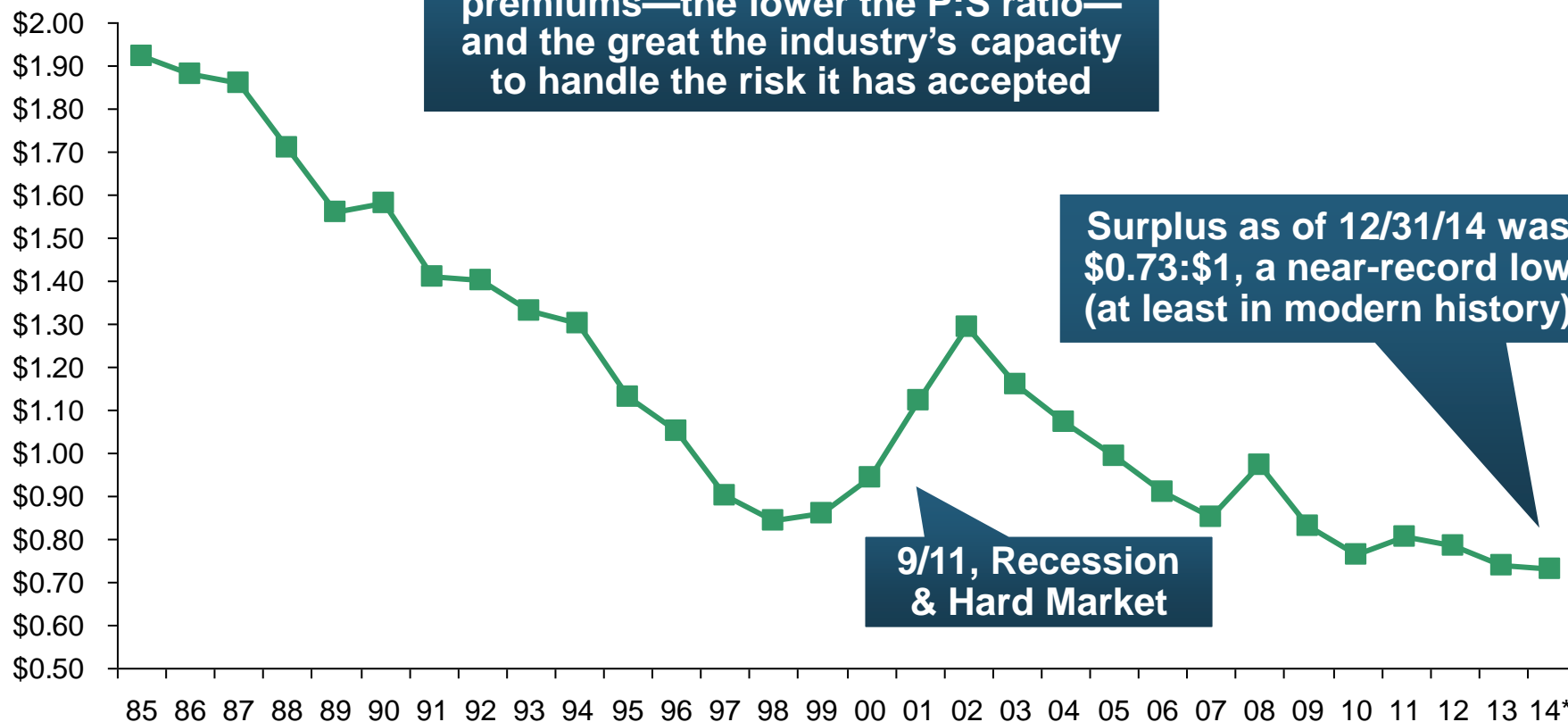
The Premium-to-Surplus Ratio Stood at \$0.76:\$1 as of 6/30/15, a Near Record Low (at Least in Recent History)

*As of 6/30/15.

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

Premium-to-Surplus Ratio: 1985–2014*

(Ratio of NWP to PHS)

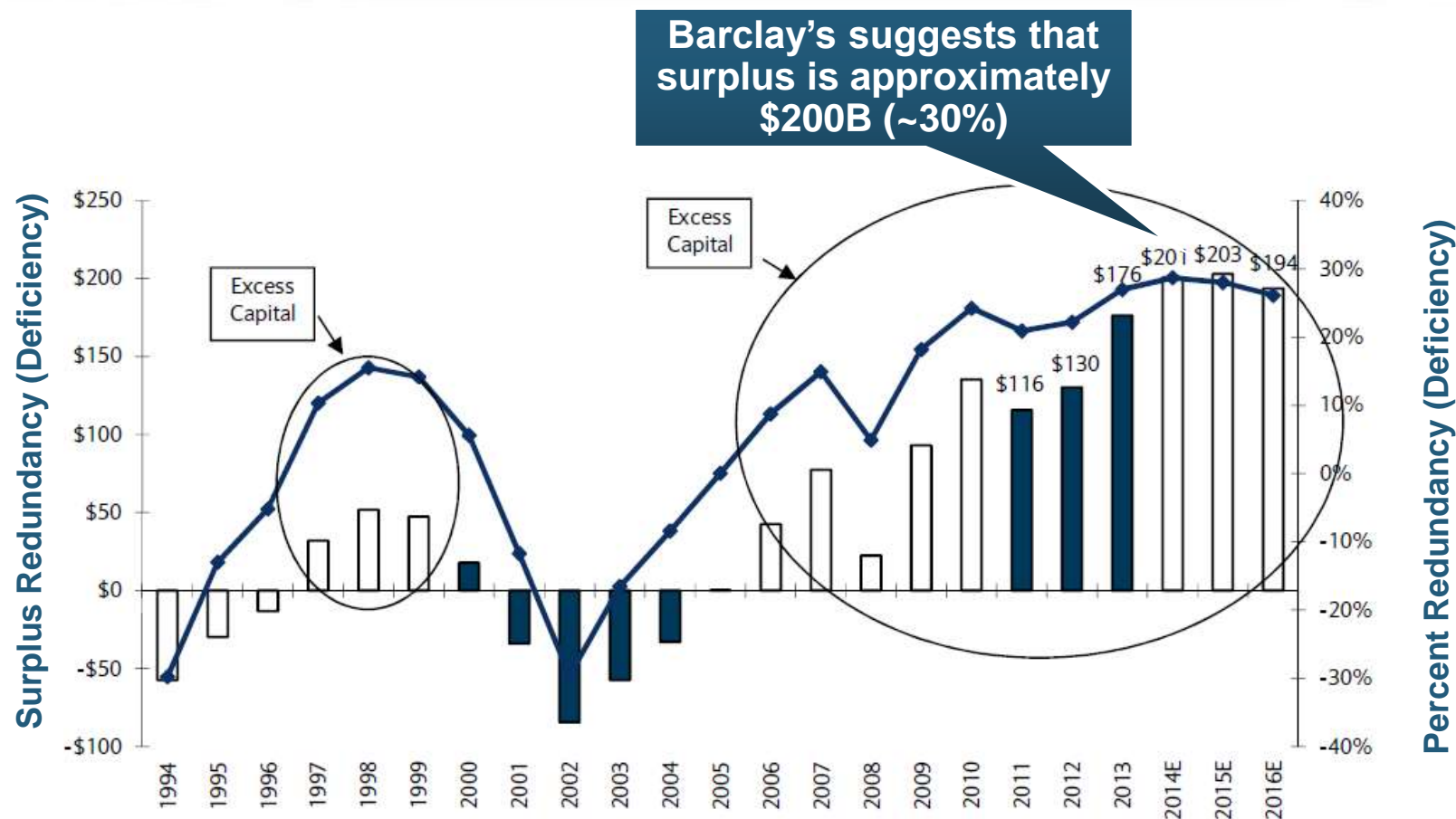


**The Premium-to-Surplus Ratio Stood at \$0.73:\$1 as of
12/31/14, a Record Low (at Least in Recent History)**

* As of 12/31/14.

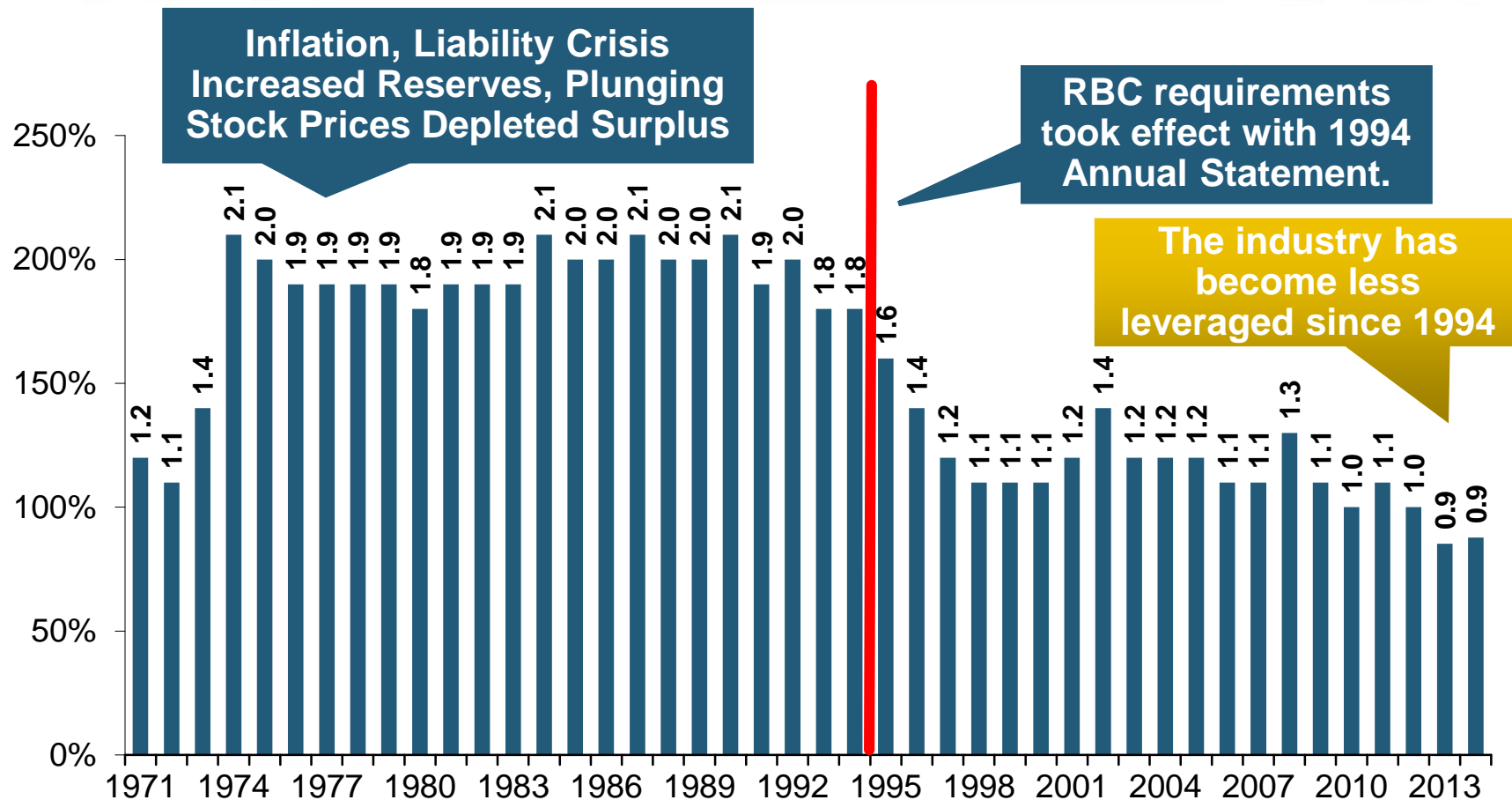
Source: A.M. Best, ISO, Insurance Information Institute.

US P/C Insurance Industry Excess Capital Position: 1994–2016E



The Industry's Strong Capital Position Suggests Insurers Are in a Good Position to Increase Risk Appetite, Repurchase Shares and Pursue Acquisitions

P/C Industry: Loss Reserve-to-Surplus Ratio, 1971-2014



The Property/Casualty Industry Adjusted Its Risk Portfolio in Response to Risk-Based Capital Requirements Implemented in 1994.

Alternative Capital

**New Investors Continue to Change
the Reinsurance Landscape**

Trickle Down Into Casualty Lines?

Global Reinsurance Capital (Traditional and Alternative), 2006 - 2014

Total reinsurance capital reached a record \$570B in 2013, up 68% from 2008.

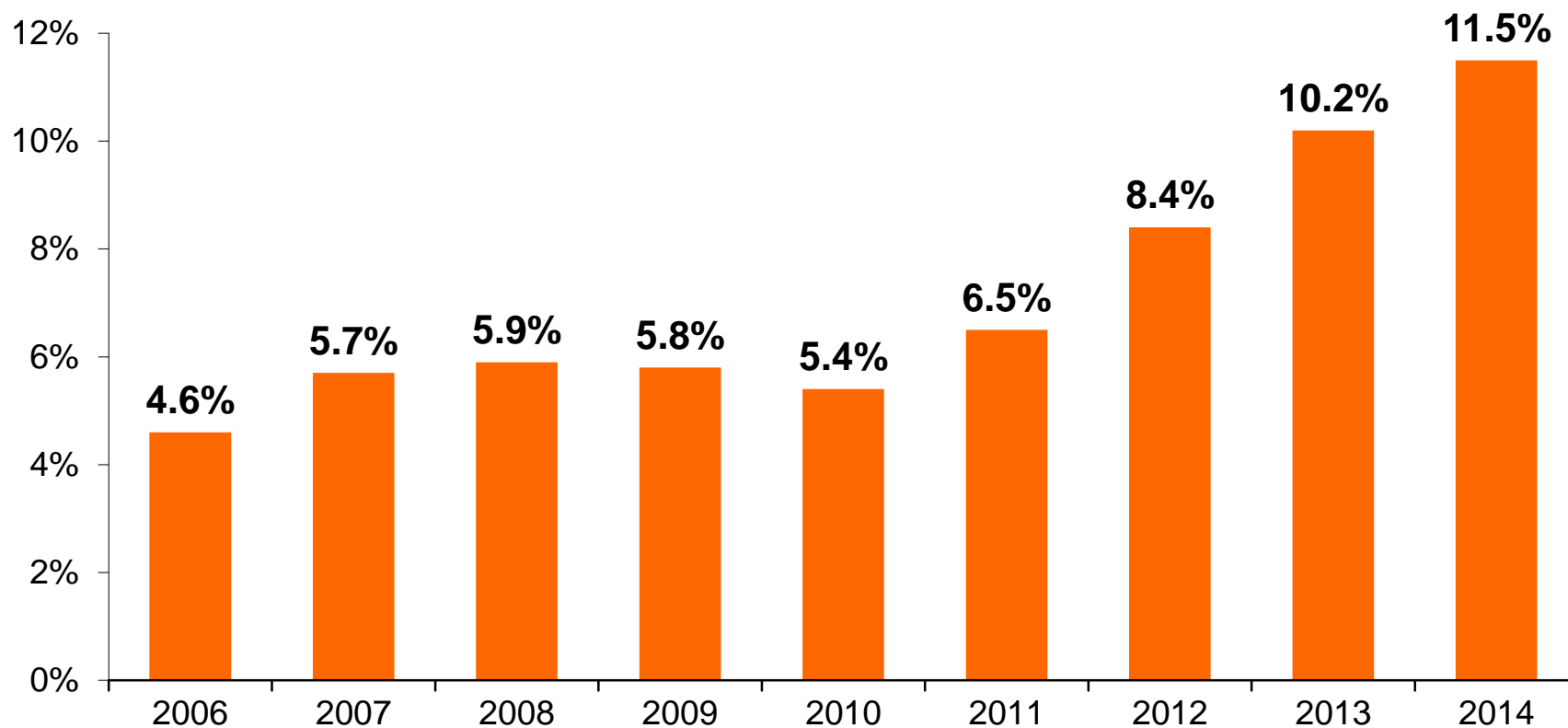


But alternative capacity has grown 210% since 2008, to \$50B. It has more than doubled in the past three years.

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.

Alternative Capital as a Percentage of Traditional Global Reinsurance Capital

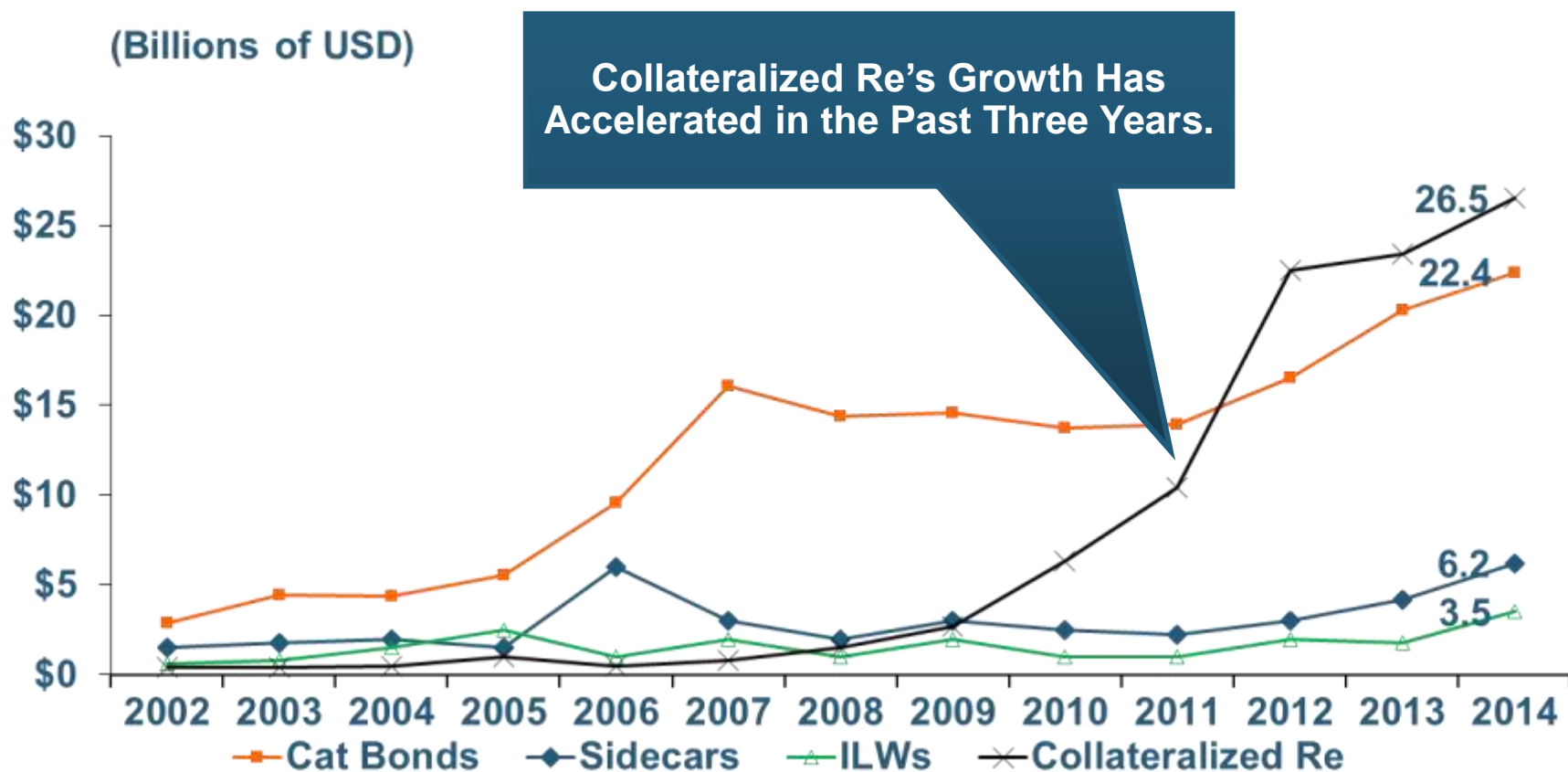


Alternative Capital's Share of Global Reinsurance Capital Has More Than Doubled Since 2010.

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.

Growth of Alternative Capital Structures, 2002 - 2014



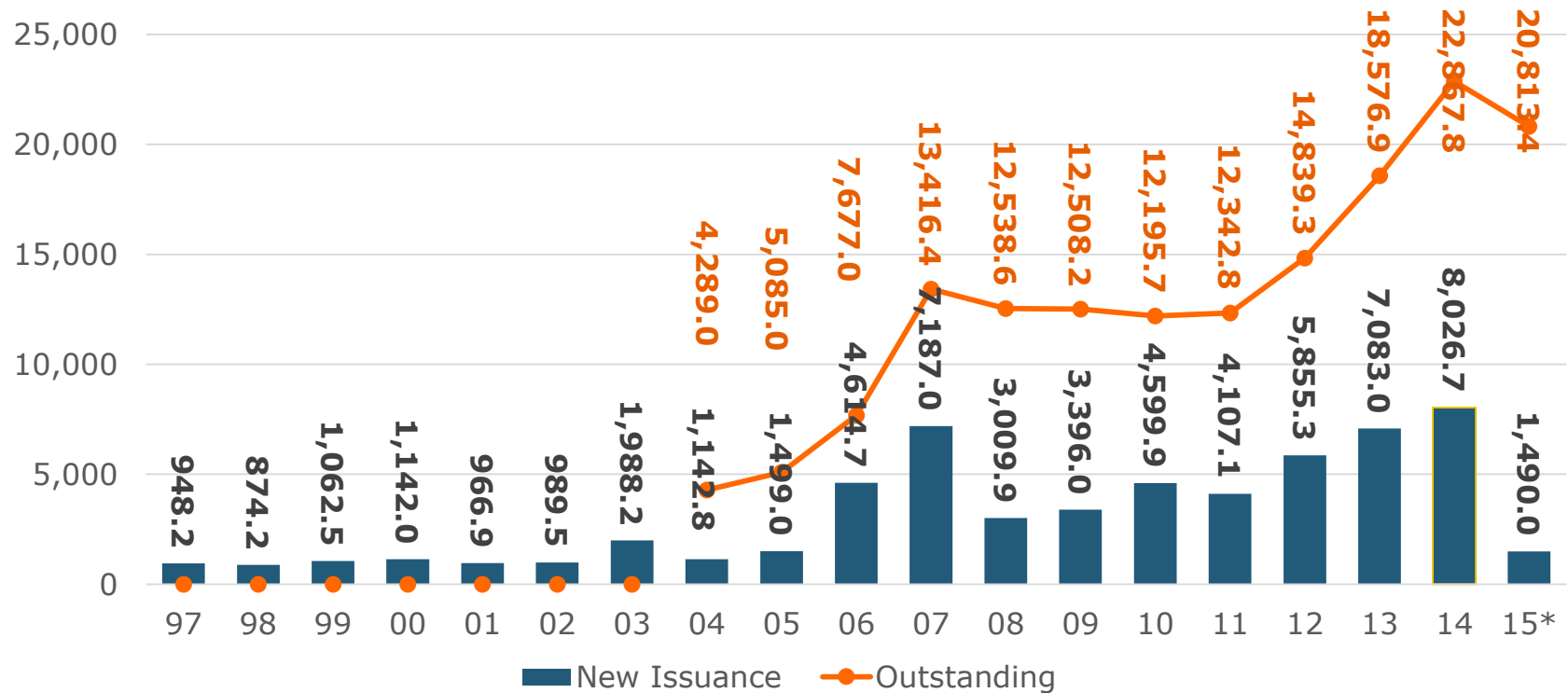
Collateralized Reinsurance and Catastrophe Bonds Currently Dominate the Alternative Capital Market.

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.

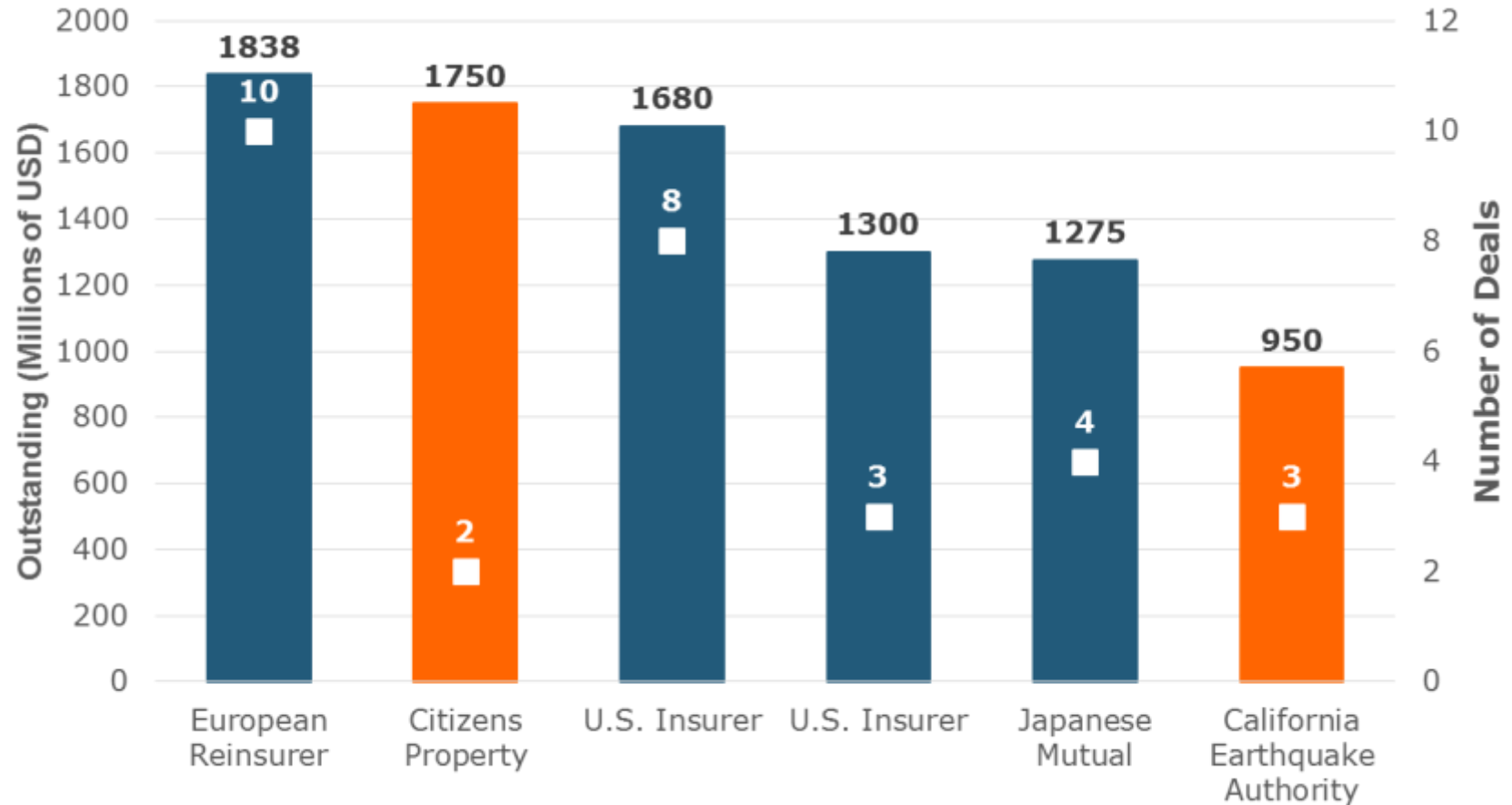
Catastrophe Bond Issuance and Outstanding: 1997-2015:Q1

Risk Capital Amount (\$ Millions)



2014 Has Seen the Largest Cat Bond Ever - \$1.5 Billion (Florida Citizens). Bond Issuance Set a Record.

Largest Sponsors of ILS, Year-End 2014



Two of the Largest ILS Issuers Are Government-Sponsored Insurers. Nine Government-Related Insurers Have \$4.6 Billion in Outstanding Securities.

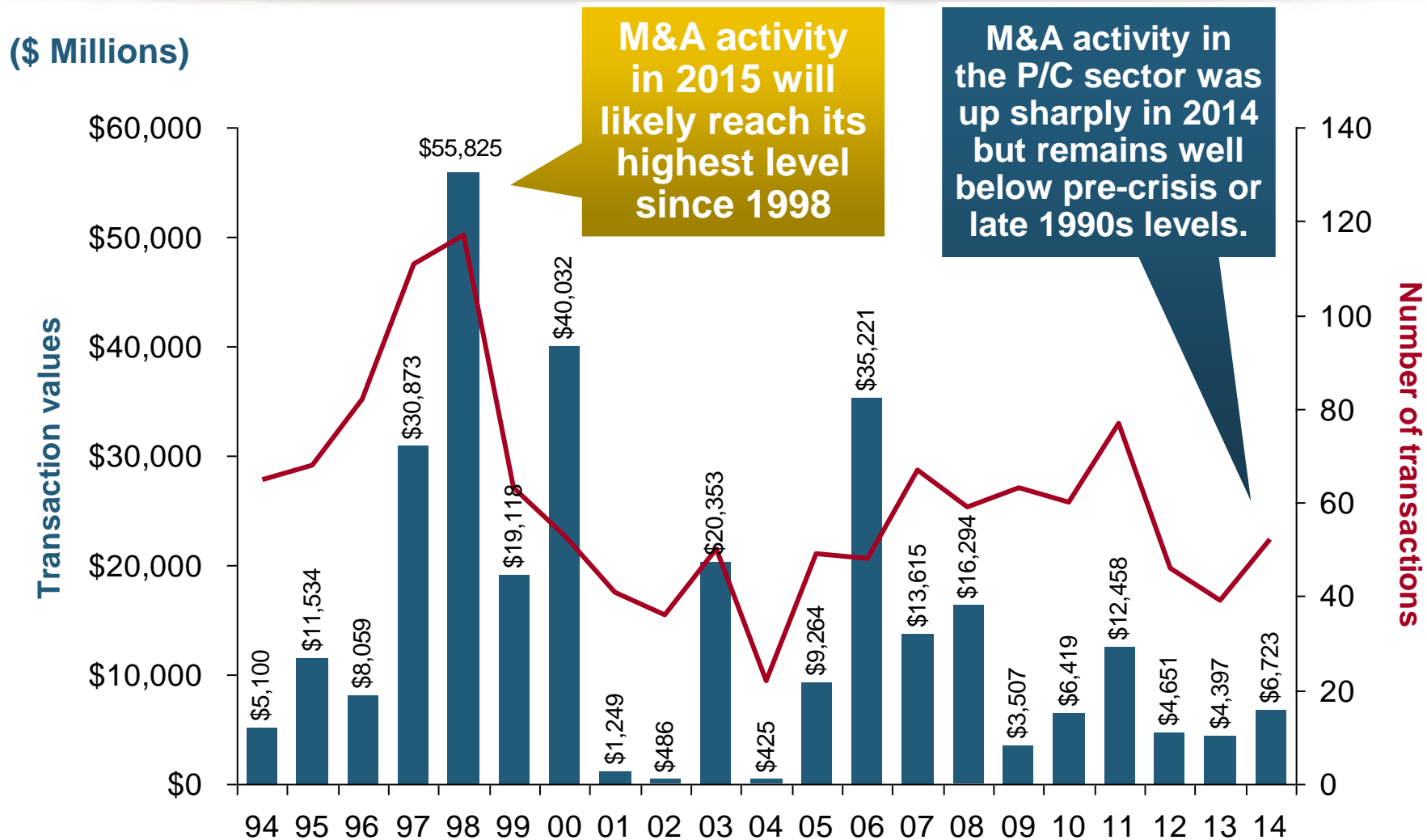
Questions Arising from Influence of Alternative Capital

- **What Will Happen When Investors Face Large-Scale Losses?**
- **What Happens When Interest Rates Rise?**
- **Does ILS Have a Higher Propensity to Litigate?**
- **How Much Lower Will Risk Premiums Shrink/ROLs Fall?**
- **Will There Be Spillover Into Casualty Reinsurance?**
- **Will Alternative Capital Drive Consolidation?**

M&A UPDATE: *A PATH TO GROWTH?*

**Are Capital Accumulation, Drive
for Growth and Scale Stimulating
M&A Activity?**

U.S. INSURANCE MERGERS AND ACQUISITIONS, P/C SECTOR, 1994-2014 (1)



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

Top Global P&C M&As in 2014 - YTD 2015



Acquirer	Target	Transaction Value
ACE (Switzerland)	Chubb (US)	\$28,300
Exor (Italy)	PartnerRe Ltd. (Bermuda)	\$6,900
Zurich (Switzerland)	RSA (UK)	8,000
XL Group plc (Ireland)	Catlin Group Ltd. (Bermuda)	4,200
RenaissanceRe Holdings Ltd. (Bermuda)	Platinum Underwriters Holdings Ltd. (Bermuda)	1,900
Fairfax Financial Holdings Ltd. (Canada)	Brit Insurance Holdings NV (Netherlands)	1,880
Desjardins Financial Corp. (Canada)	State Farm's property/casualty and life insurance operations in Canada (Canada)	1,500
TPG Capital LP	The Warranty Group, Inc. (Canada)	1,500
Fosun International Ltd. (China)	Caixa Seguros e Saude SGPA SA (Portugal)	1,360
Progressive Corp.	ARX Holding Corp.	875
Assured Guaranty Ltd. (Bermuda)	Radian Asset Assurance, Inc.	810
Mapfre S.A. (Spain)	German and Italiana operations of Direct Line Insurance Group plc (Germany/Italy)	701
Validus Holdings Ltd. (Bermuda)	Western World Insurance Group, Inc.	690
ACE Ltd. (Switzerland)	P&C business from Itau Seguros S.A. (Brazil)	685

Update: Alleghany Corp. announced in May 2015 that it is considering the sale of TransAtlantic Holding Co. (TransRe).

*Source: Conning; Insurance information Institute.

Recent M&A Transactions Involving Lloyd's and Bermuda Re/Insurers

Date	Acquirer	Target	Deal Value \$ Billion
Dec 2012	Aquiline	Equity Redstar	0.1
Jun 2013	Enstar/Stone Point	Atrium	0.2
Jul 2013	Enstar/Stone Point	Torus	0.7
Aug 2013	Ian Beaton and Management	Ark Syndicate Management	0.4
Aug 2013	Lancashire	Cathedral	0.4
Aug 2013	AmTrust	Sagicor	0.1
Sep 2013	ANV	Jubilee Managing Agency	N/A
Dec 2013	Sompo	Canopus	1.0
Feb 2014	Qatar Insurance Company	Antares	0.2
Jul 2014	BTG Pactual	Ariel Re	0.4
Nov 2014	RenaissanceRe	Platinum Underwriters	1.9
Dec 2014	XL Group	Catlin	4.1
Jan 2015	PartnerRe	AXIS	11.0*
Feb 2015	Fairfax Financial Holdings	Brit	1.9

*Deal was not complete as of 6/4/15 and a rival bid from Italian investment firm Exor was still under consideration.

Source: Swiss Re *sigma* 3/2015; Insurance information Institute.

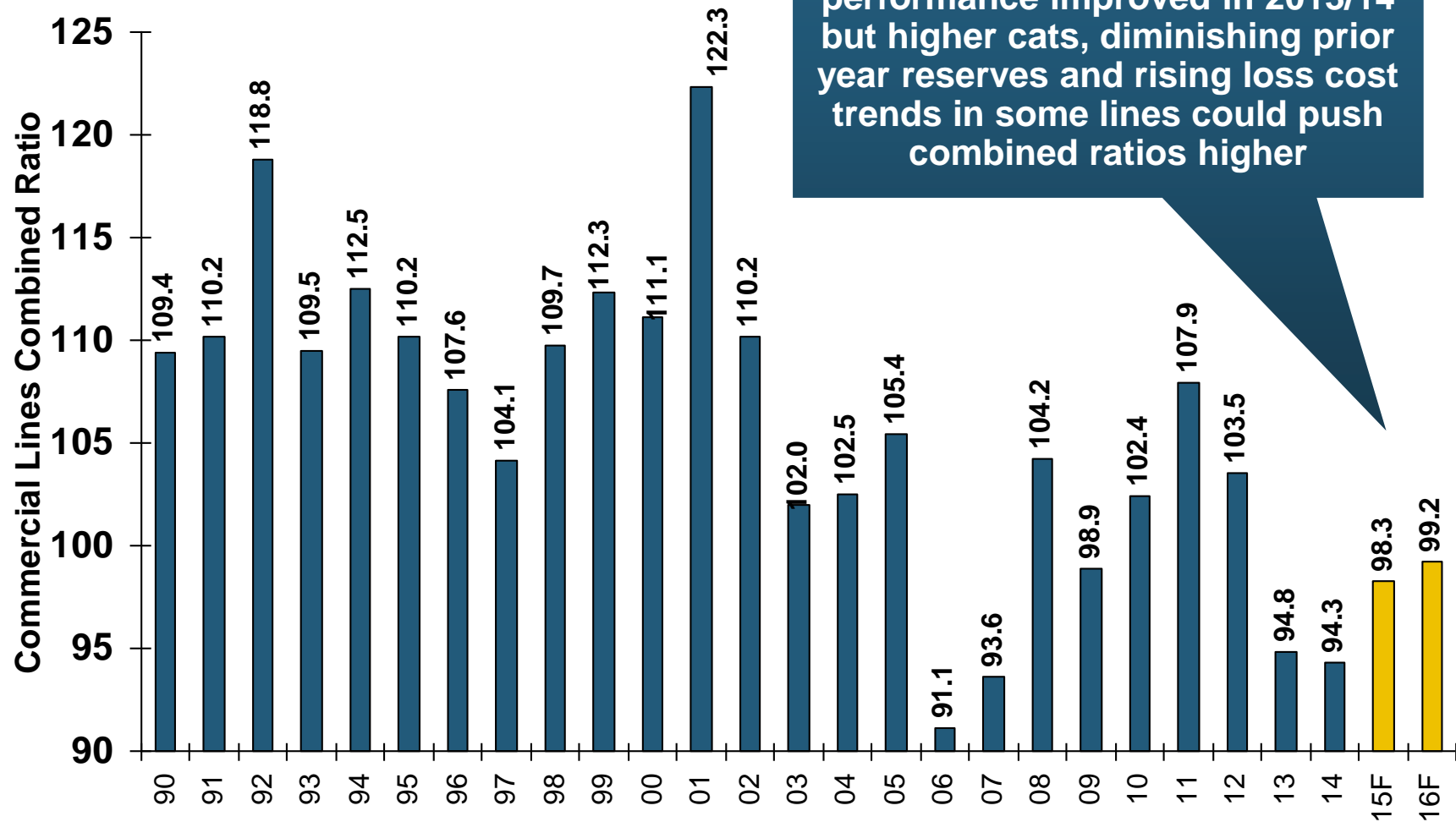
What's Driving Global Insurance M&A Activity and Will It Continue?

- **Excess Capital in Global Reinsurance and Primary Commercial Insurance in US**
 - ◆ (Re)Insurers, like corporations in many industry, are sitting are large amounts of cash accumulated since the Global Financial Crisis that earns very little
- **Alternative Capital**
- **Slow Top Line (Premium) Growth**
- **Slowdown in Pace of Earnings Growth/ROE**
- **Low Interest Rates Make Debt Financing for Acquisitions Attractive**
 - ◆ Concern that interest rates in US may soon rise so best to act now
- **Desire to Achieve Economies of Scale**
- **Peer Pressure/Momentum**
 - ◆ Management concerns about being “left out”

Performance by Segment

Key Casualty Lines

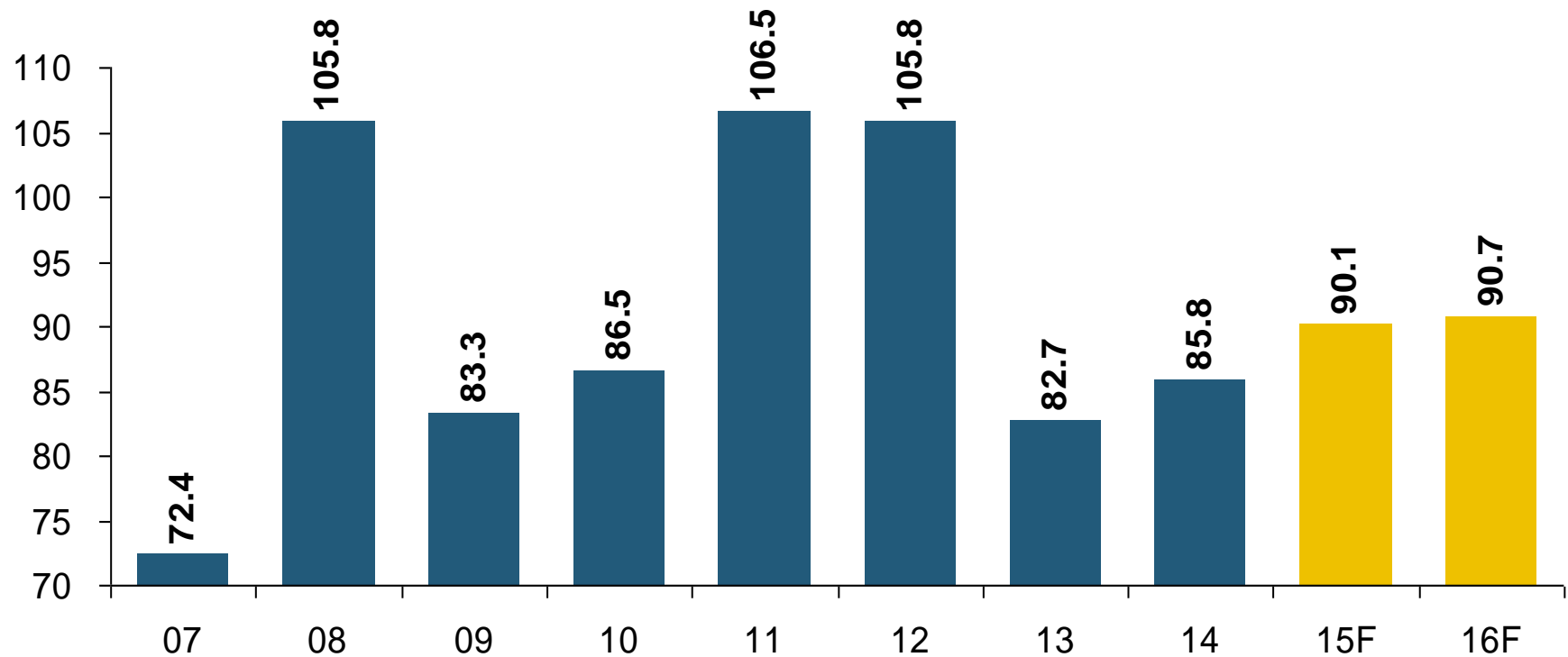
Commercial Lines Combined Ratio, 1990-2016F*



*2007-2012 figures exclude mortgage and financial guaranty segments.

Source: A.M. Best (1990-2014); Conning (2015-16F) Insurance Information Institute.

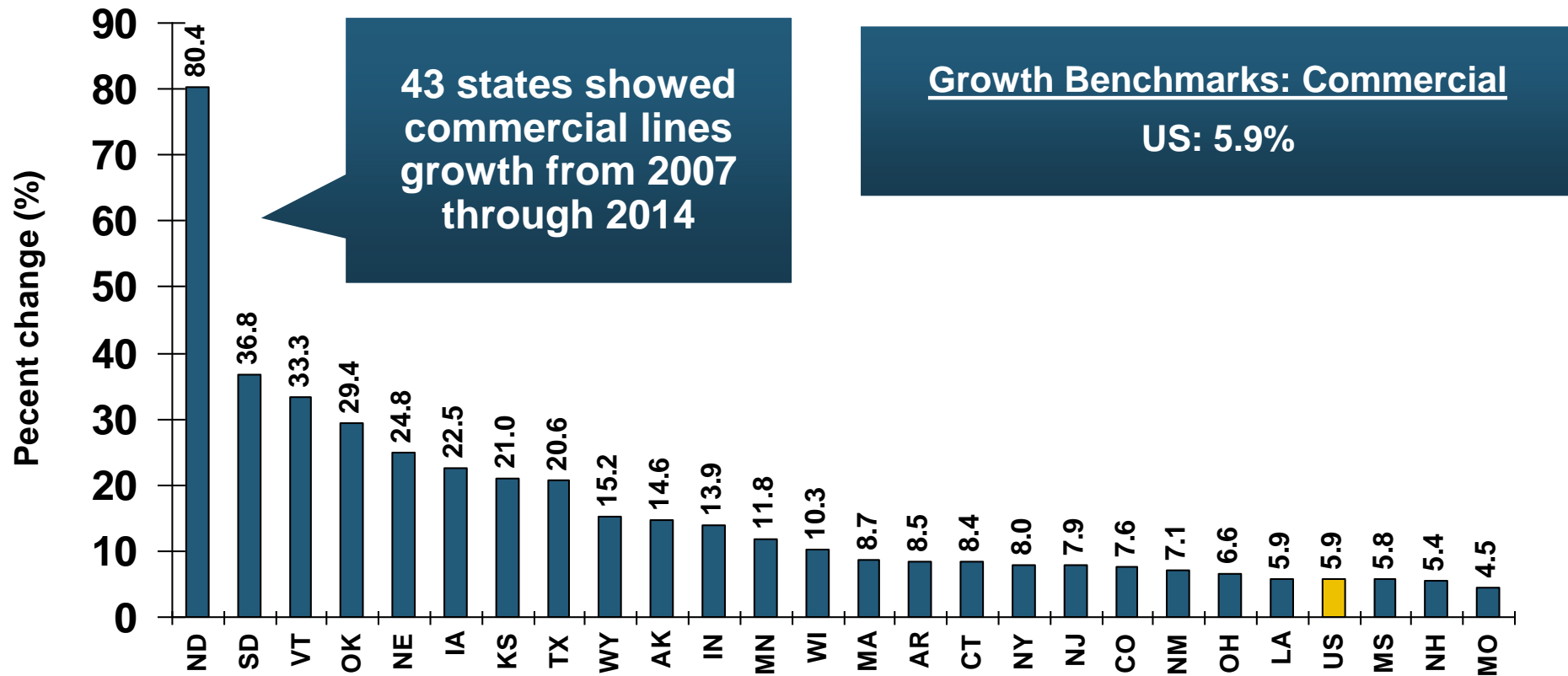
Commercial Property Combined Ratio: 2007–2016F



**Commercial Property Underwriting Performance
Has Been Volatile in Recent Years, Largely Due to
Fluctuations in CAT Activity**

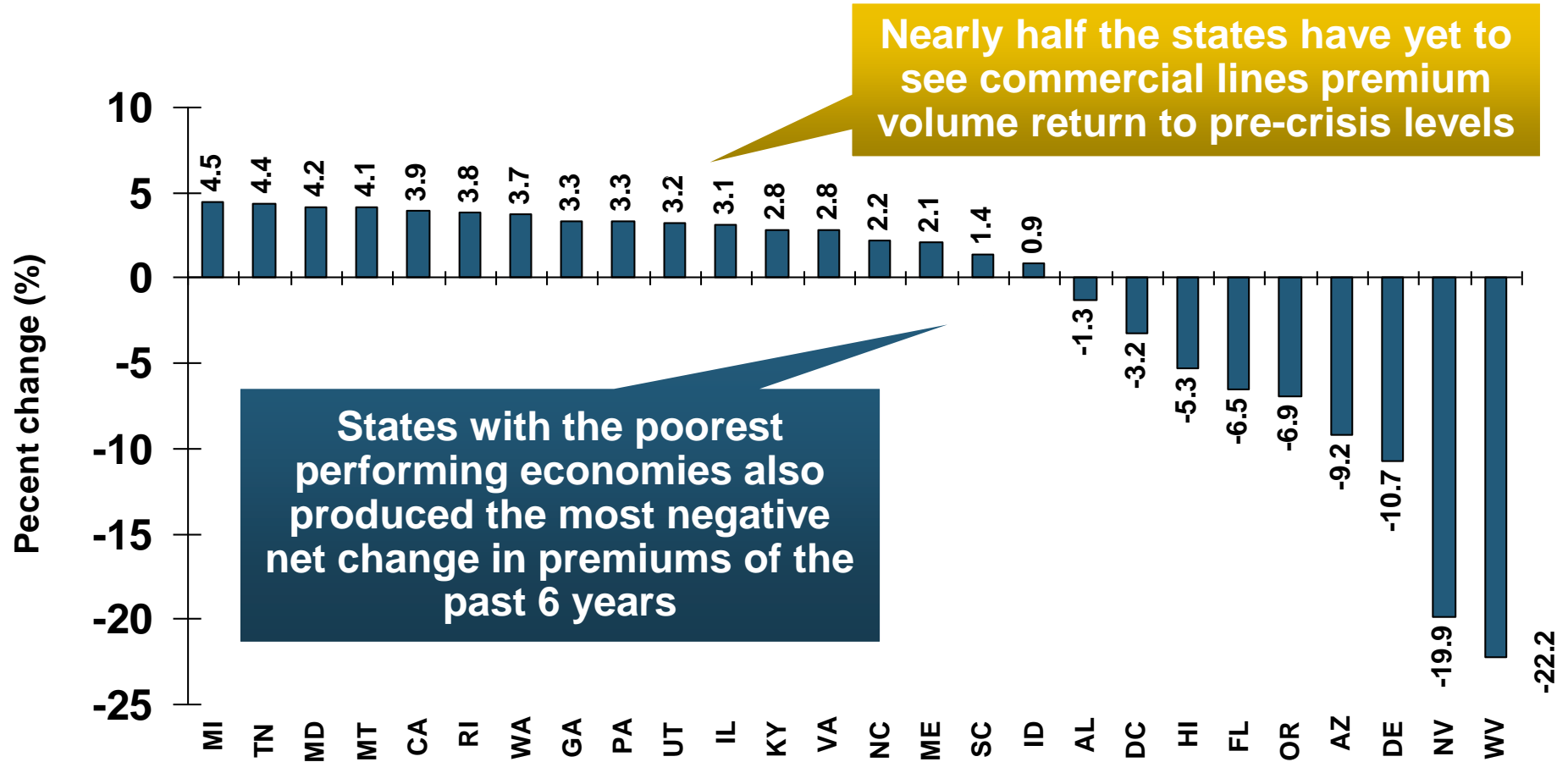
Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2014

Top 25 States



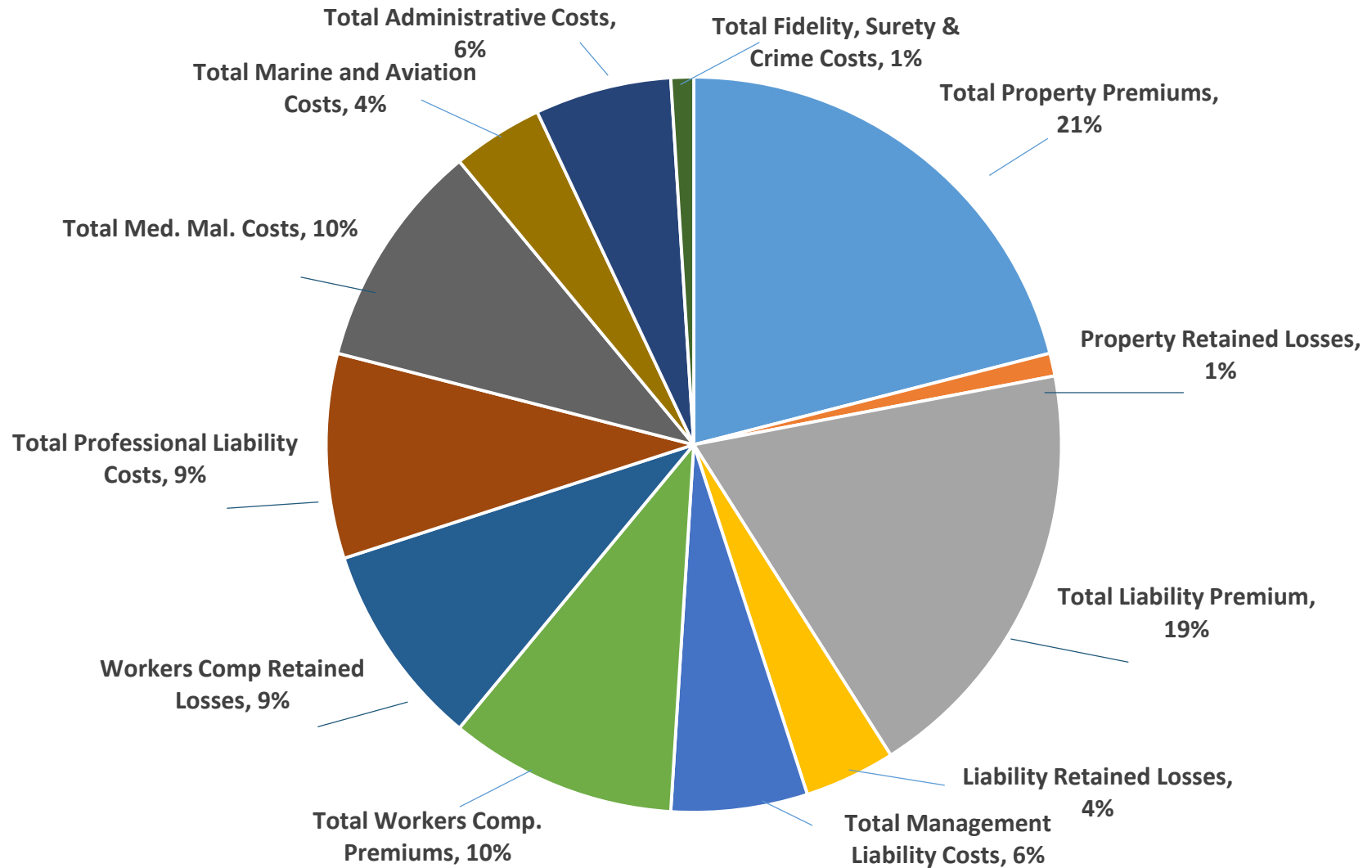
Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2014

Bottom 25 States



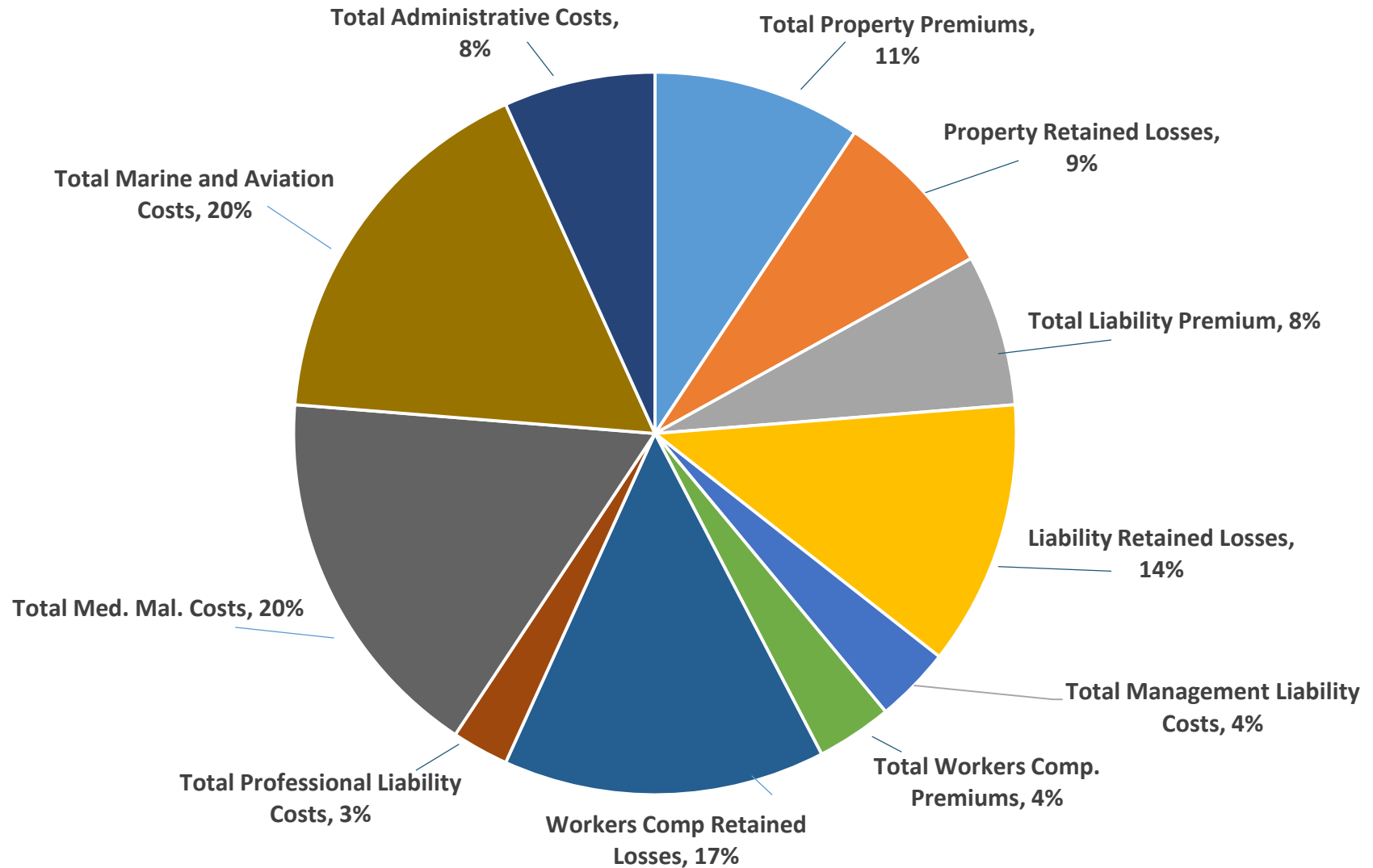
How the Risk Dollar is Spent

(U.S. Firms with Revenues Under \$1 Bill)



How the Risk Dollar is Spent

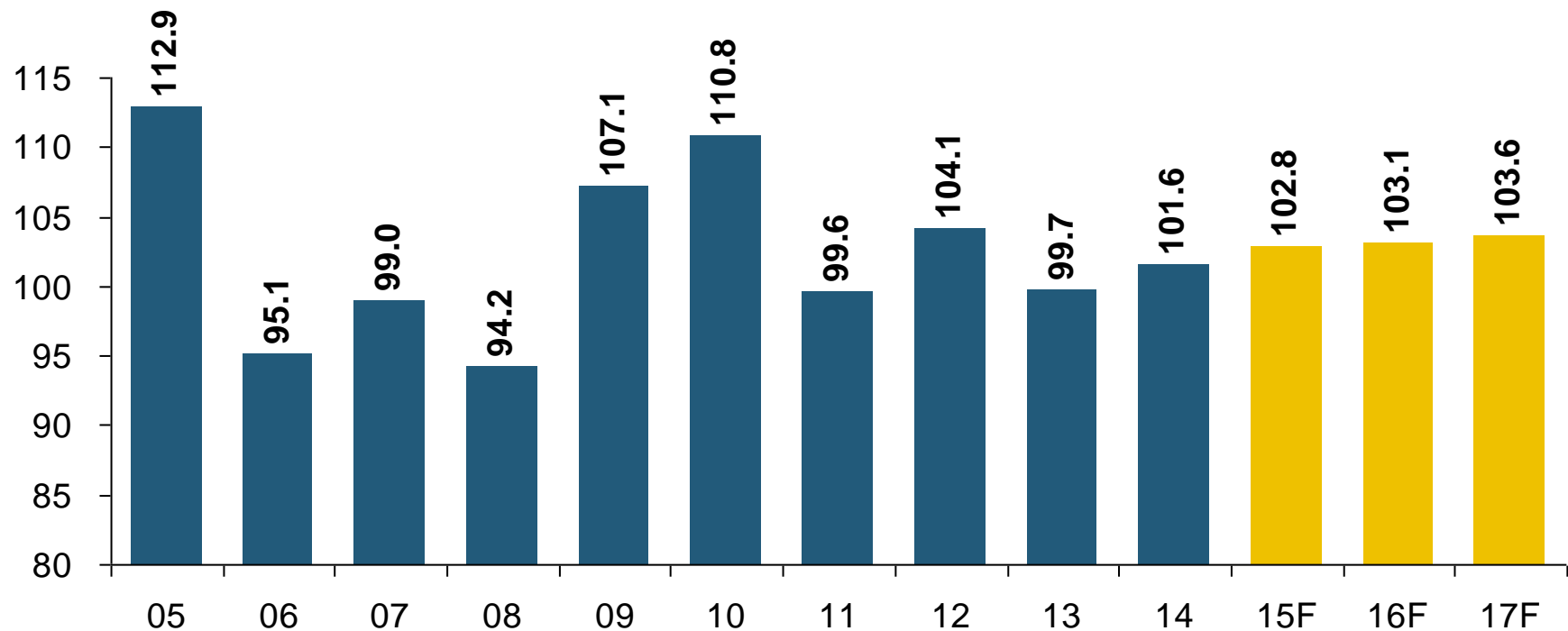
(U.S. Firms with Revenues Over \$1 Bill)



General Liability Operating Environment

General Liability Results Are Mixed

General Liability Combined Ratio: 2005–2017F

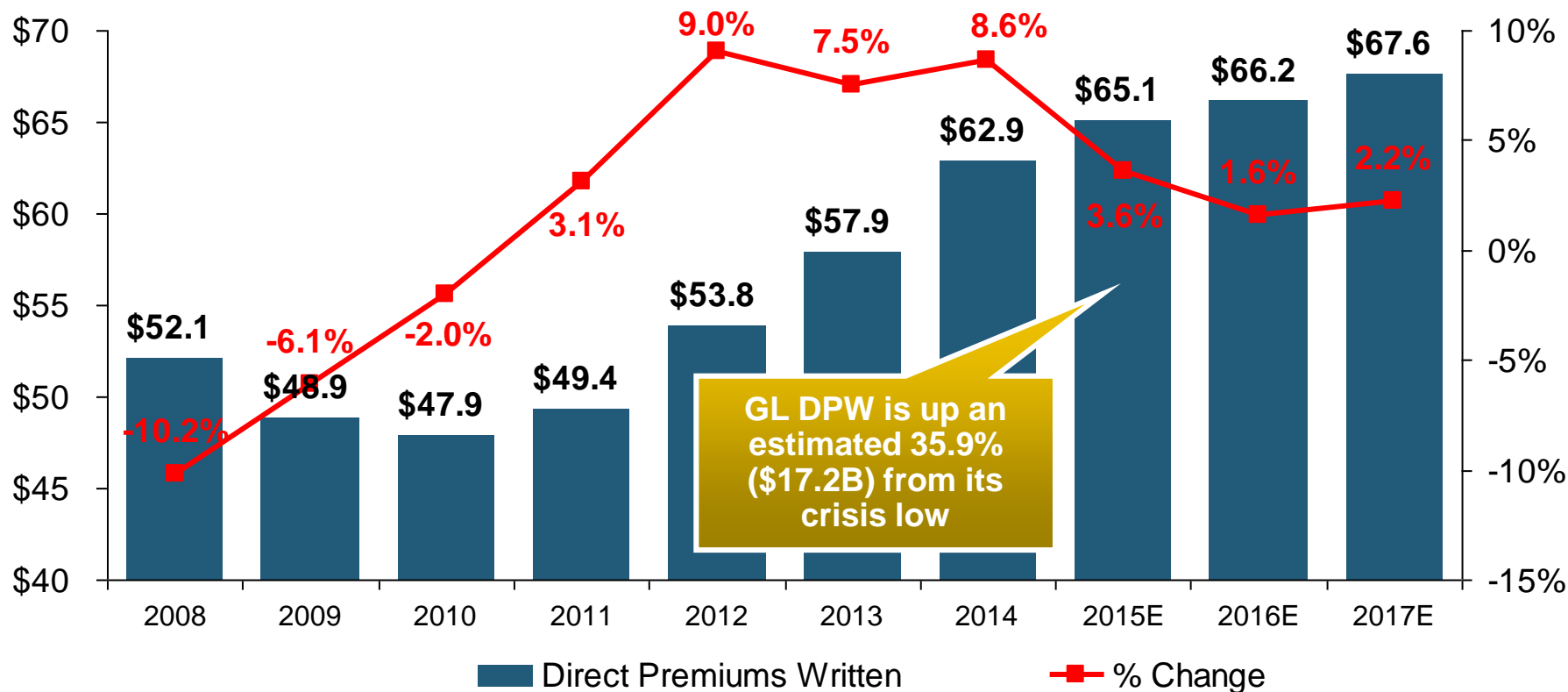


**Commercial General Liability Underwriting
Performance Was Volatile but May Be Stabilizing**

General Liability: DWP Volume and Growth, 2008 – 2017F

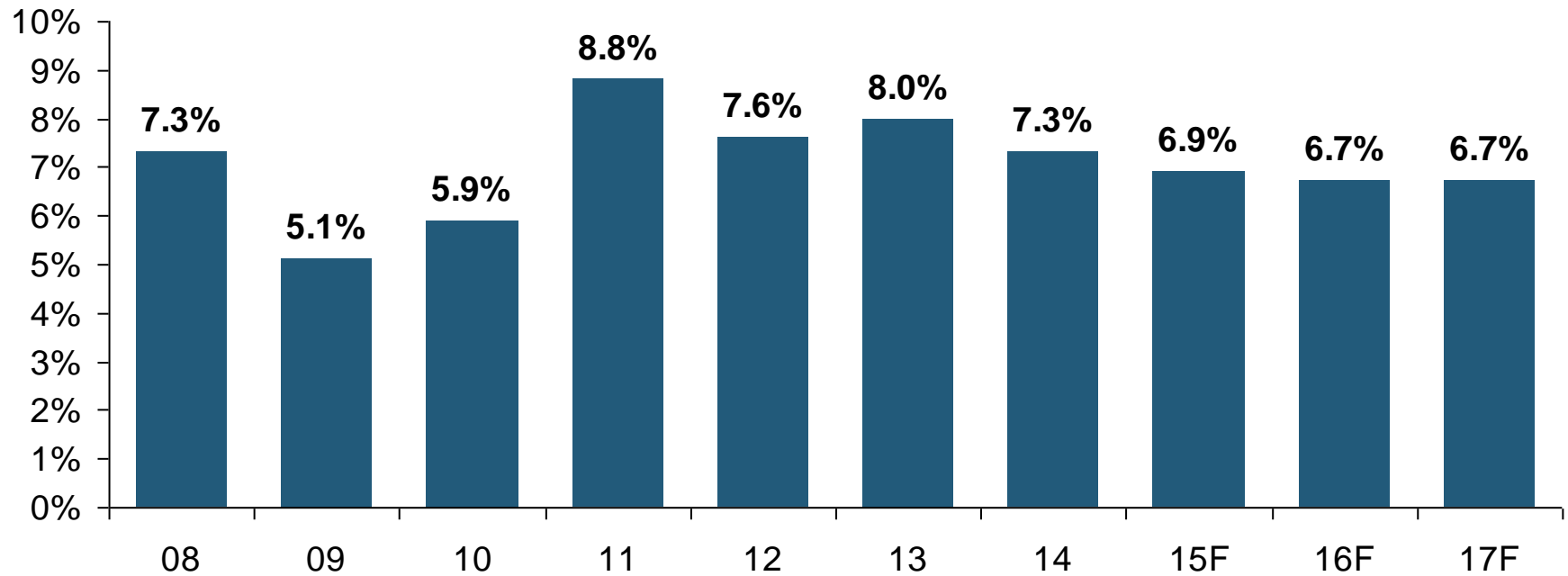
DPW (\$ Bill)

% Change



GL Premium Volumes Continue to Grow Albeit at a Slower Pace

General Liability: Return on GAAP Equity: 2008–2017F



General Liability Profitability Is Stable but Below Its 2011 Peak

General Liability: Incurred Loss Trends and Outlook

■ FREQUENCY

- ◆ Decreasing low single digit in 2015-2017
- ◆ Reported occurrence form other liability claim counts down by 11.8% and up 10.0% for claims-made form
- ◆ Some reports of rising loss frequency, esp. EPLI and non-profit D&O

■ SEVERITY

- ◆ Up low-to-mid single digits in 2015-2017
- ◆ Analysis of paid losses to claim counts suggests trend of rising average loss severity
- ◆ Inflation in hospital and medical costs continues to outpace overall CPI, contributing to loss severity



Commercial Auto Operating Environment

Commercial Auto Outlook Is Cloudy

■ EXPOSURE

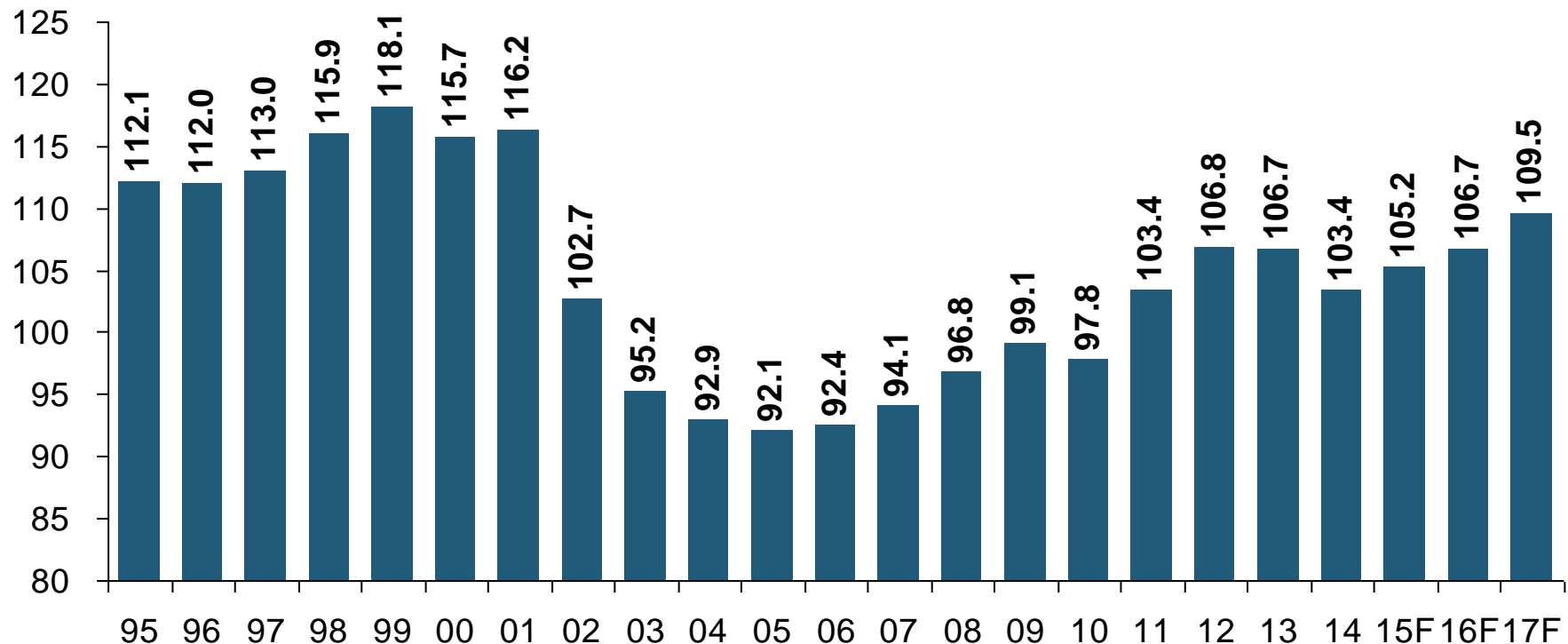
- ◆ Heavy and light truck sales expected to rise 4% - 5% in 2015
- ◆ Truck tonnage (ATA) is up 3.3% YTD (August)
- ◆ Transportation Network Companies (TNCs)
 - TNCs such as Uber, Lyft will need to seek solutions
 - Regulatory environment for TNCs uncertain



■ FREQUENCY

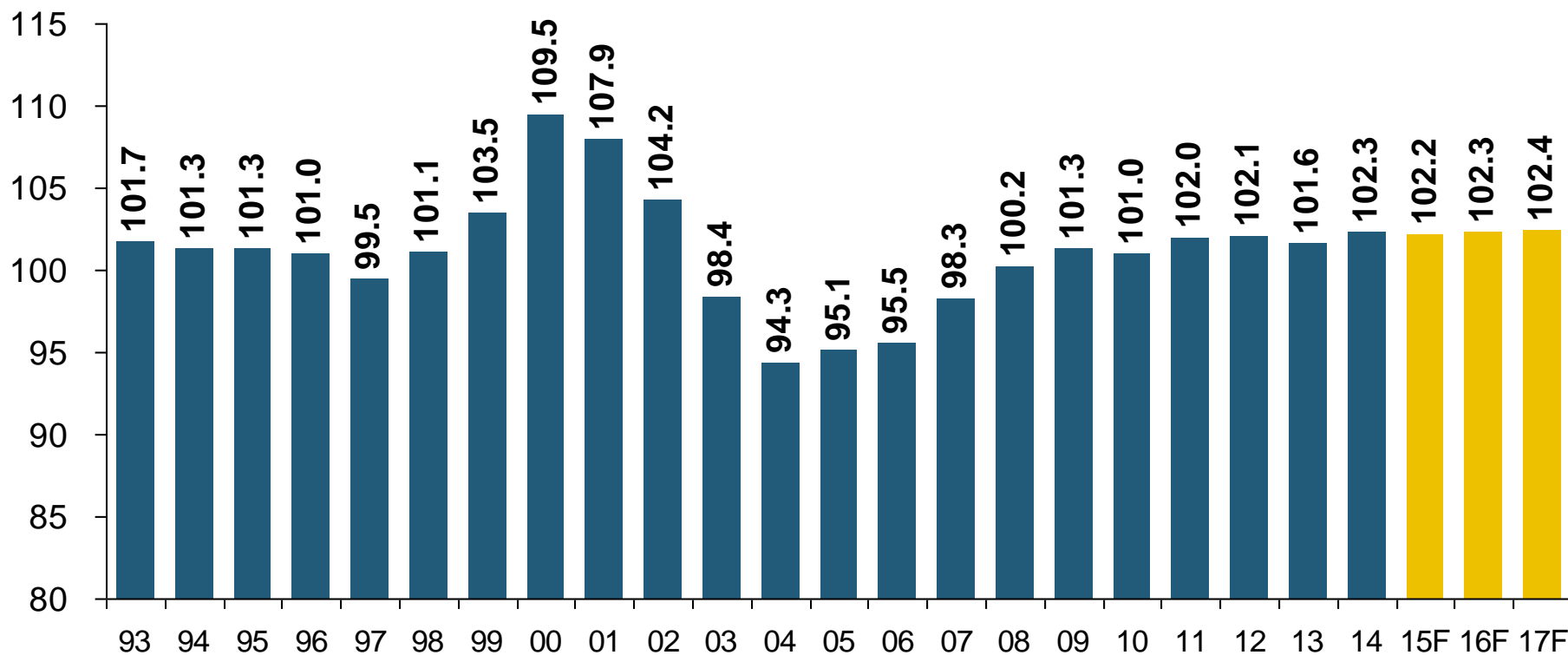
- ◆ Overall frequency flat to +1% for 2015-2017 (Conning)
- ◆ Miles driven is up in commercial fleets
- ◆ Non-fatal injuries for truck drivers appears to be increasing
- ◆ ATA: Trucker shortage; Need 89,000 new trucks each year for next decade (10% of current 890,000 employed truckers)

Commercial Auto Combined Ratio: 1993–2017F



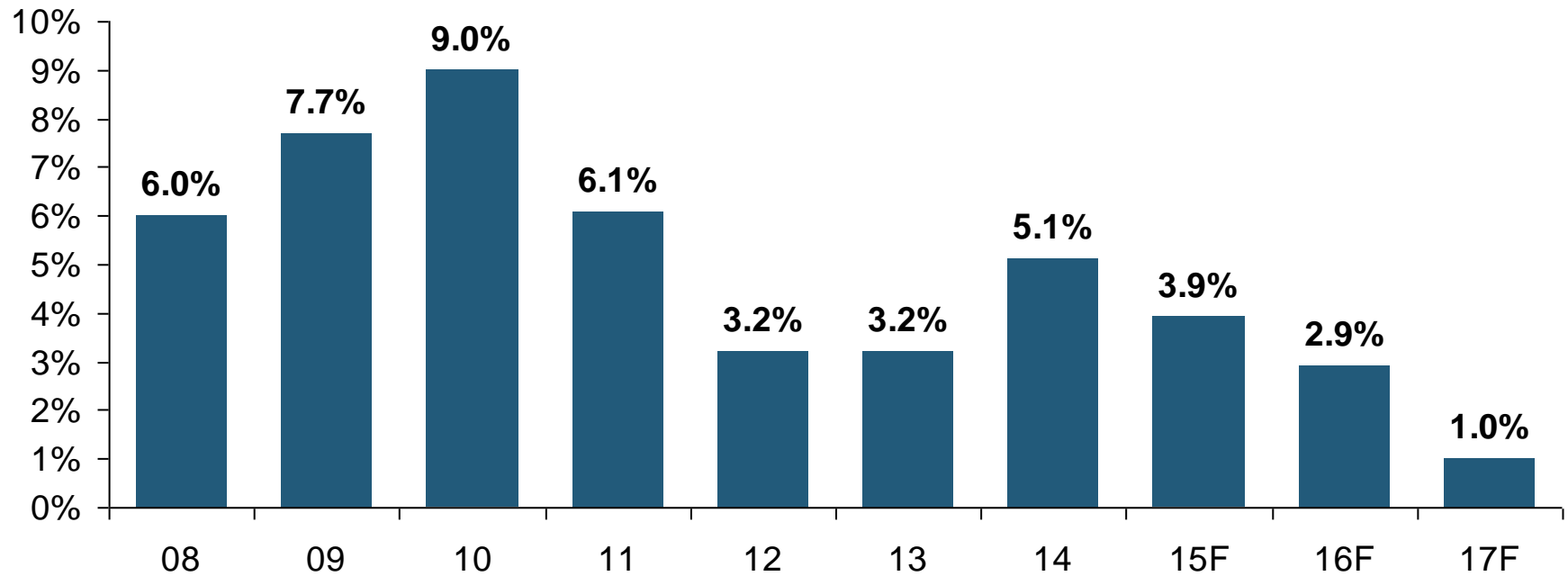
Commercial Auto is Expected to Improve Only Slowly as Rate Gains Barely Offset Adverse Frequency and Severity Trends

Private Passenger Auto Combined Ratio: 1993–2017F



Private Passenger Auto Underwriting Performance Is Exhibiting Remarkable Stability

Commercial Auto: Return on GAAP Equity: 2008–2017F

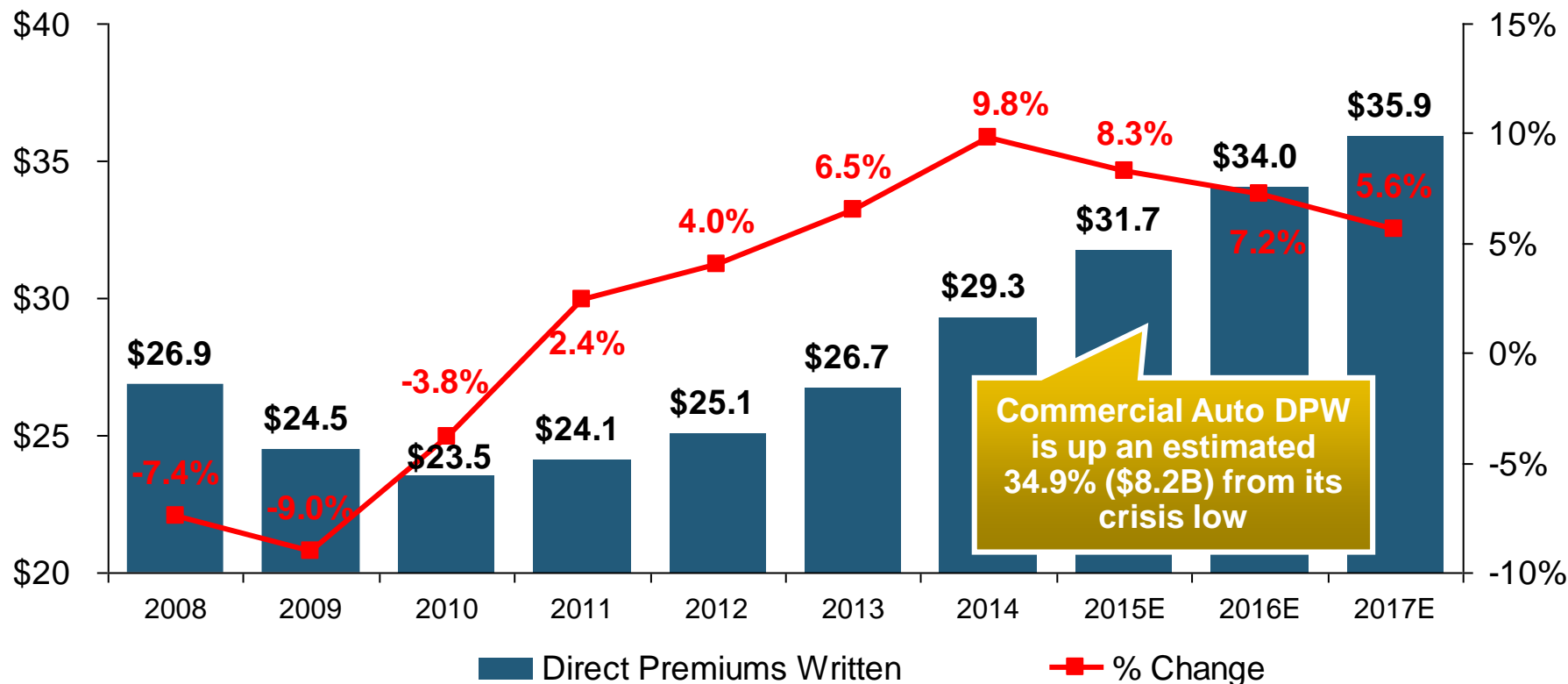


Commercial Auto Margins Could Shrink if Underwriting Deteriorates

Commercial Auto: DWP Volume and Growth, 2008 – 2017F

DPW (\$ Bill)

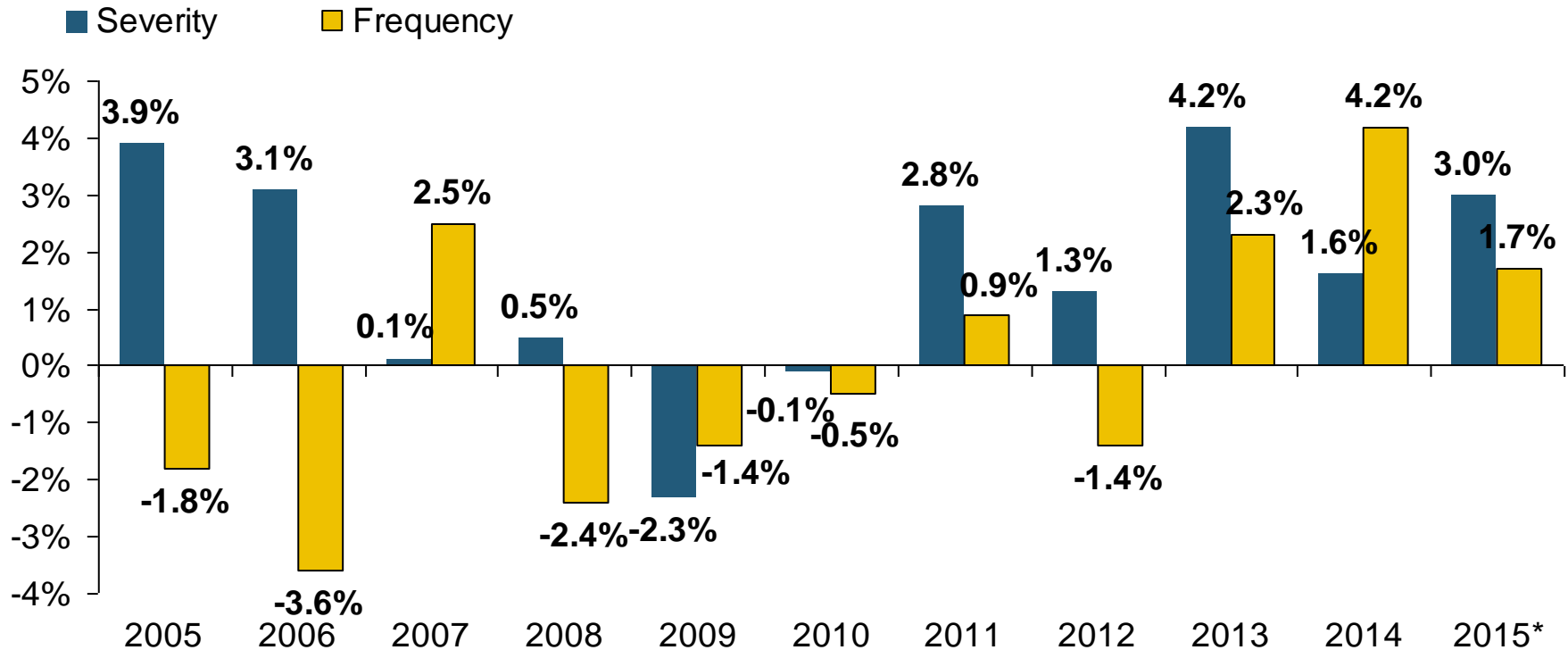
% Change



Commercial Auto Premium Volumes Continue to Grow Albeit at a Slower but Still-Healthy Pace

Collision Coverage: Severity & Frequency Trends Are Both Higher in 2015*

Annual Change, 2005 through 2015*



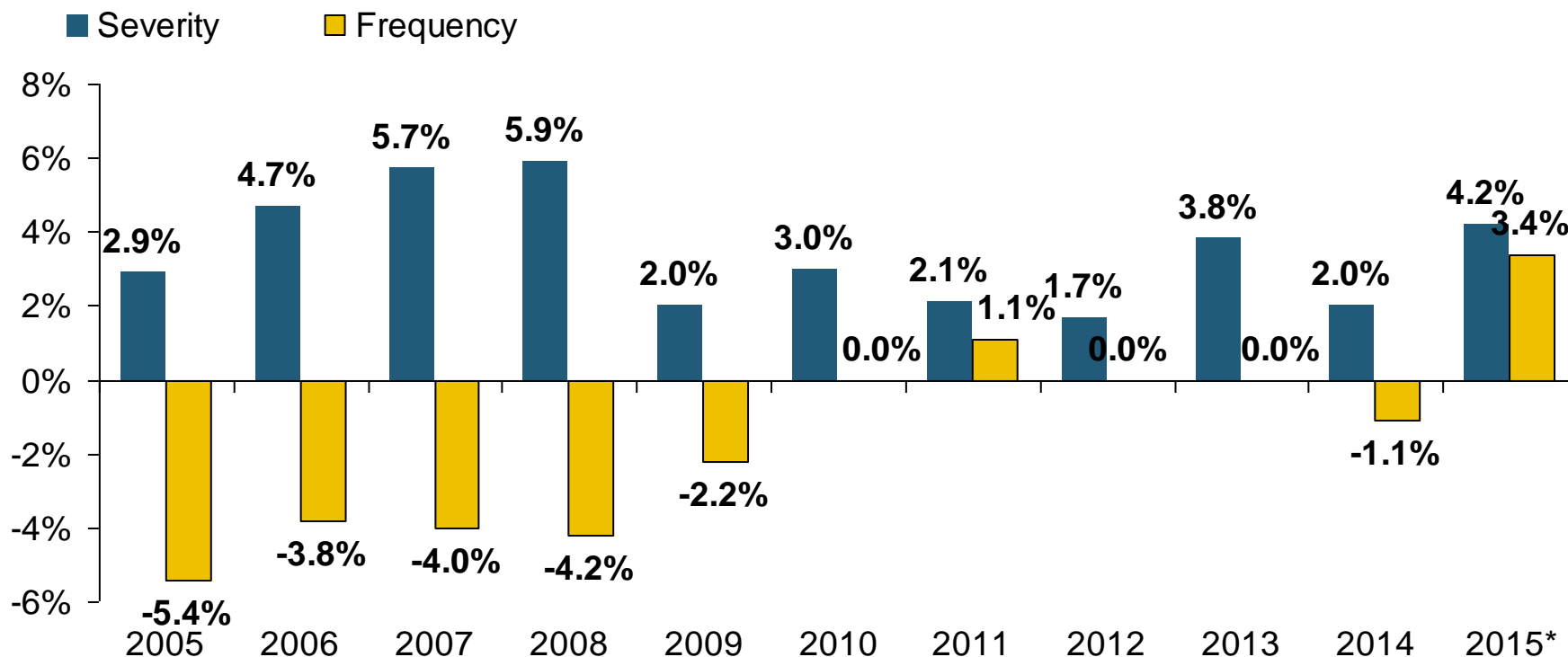
The Recession, High Fuel Prices Helped Temper Frequency and Severity, But this Trend Will Likely Be Reversed Based on Evidence from Past Recoveries

*2015 figure is for the 4 quarters ending with 2015:Q1.

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

Bodily Injury: Severity Trend Is Up, Frequency Decline Has Ended—Rising?

Annual Change, 2005 through 2015:Q1*

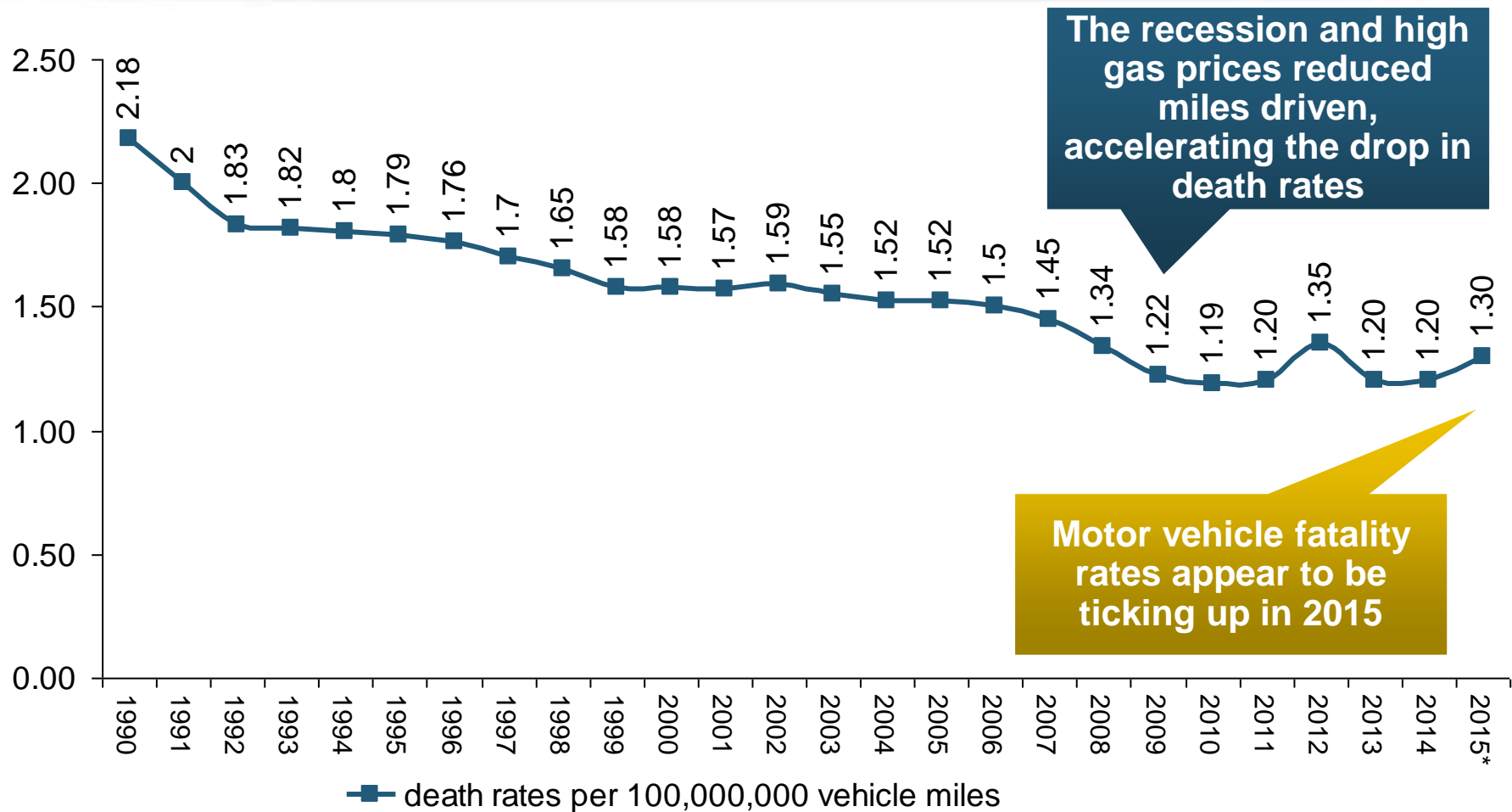


Cost Pressures Will Increase if BI Frequency and Severity Trends Persist

*2015 figure is for Q1 2015 over Q1 2014.

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

Death Rates per 100,000,000 Vehicle miles, 1990-2015*



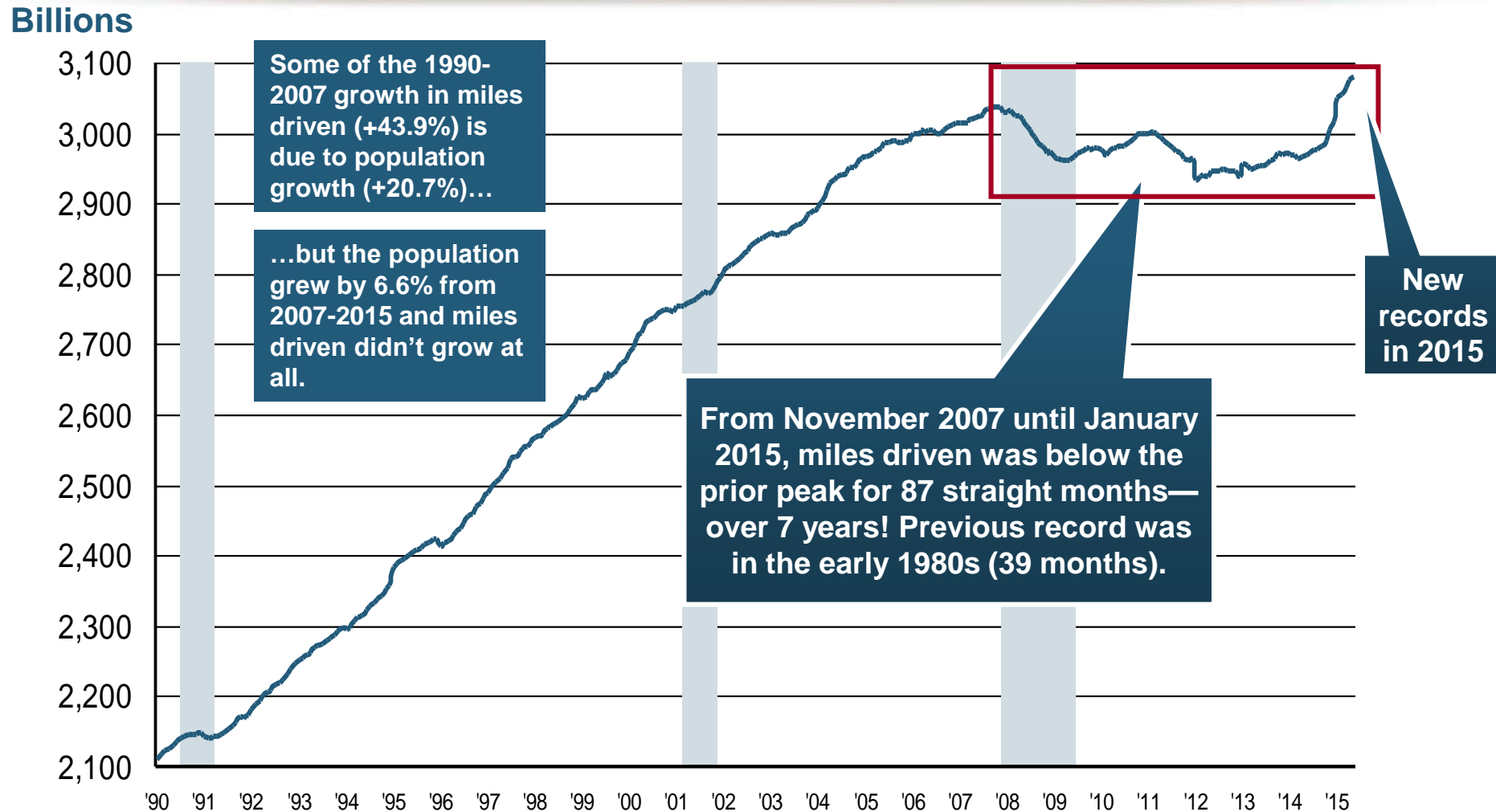
Vehicle death rates fell by nearly half between 1990 and 2010

*Projected rate for 2015 based on date through June 2015.
Source: National Safety Council; Insurance Information Institute.

Driving Trends, Gas Prices

Back Behind the Wheel...

America is Driving More Again: Total Miles Driven*, 1990–2015



*Moving 12-month total. The 2015 data are through May 2015, the latest available.

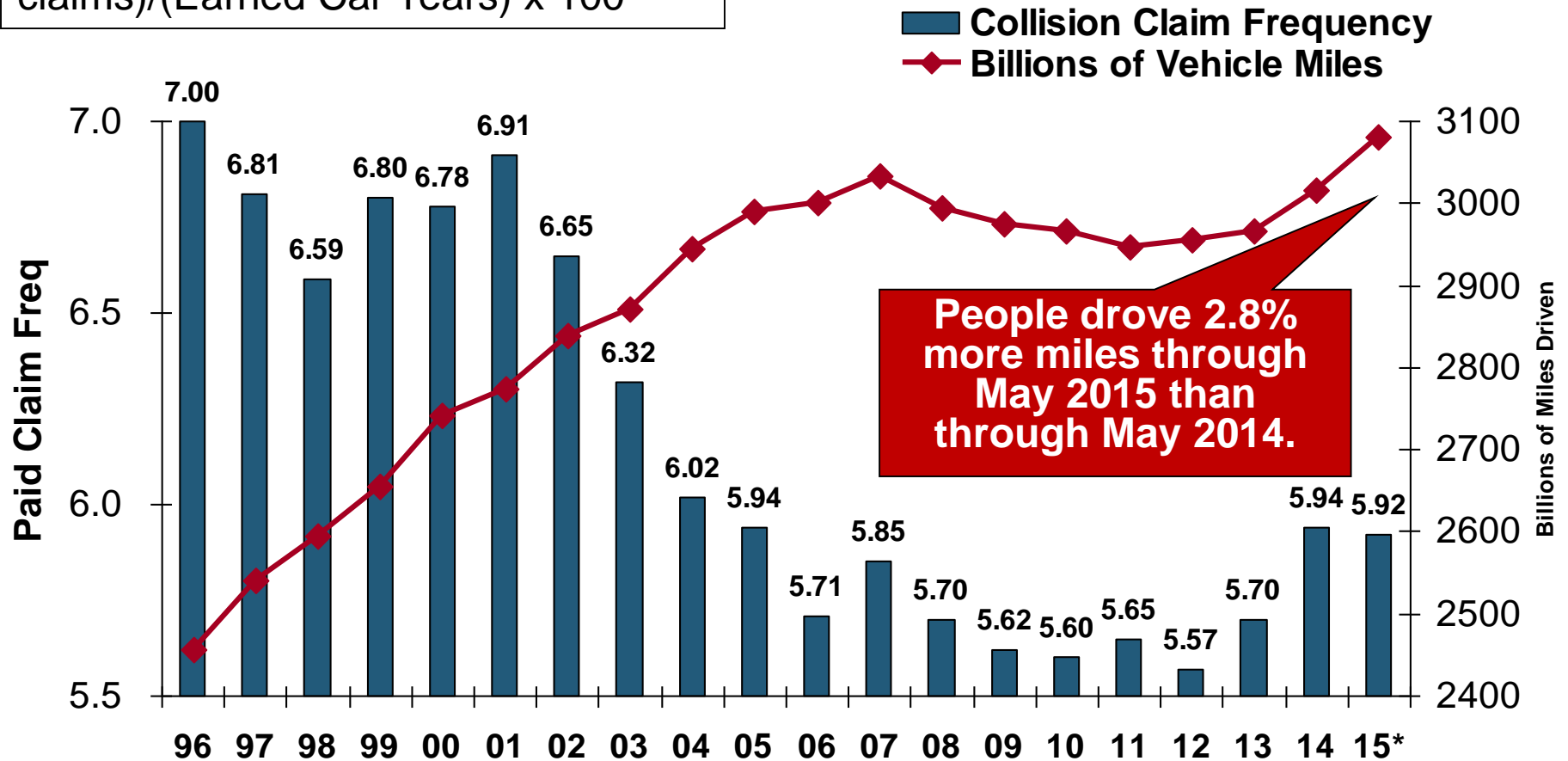
Note: Recessions indicated by gray shaded columns.

Sources: Federal Highway Administration (http://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm);

National Bureau of Economic Research (recession dates); Insurance Information Institute.

Do Changes in Miles Driven Affect Auto Collision Claim Frequency?

Paid Claim Frequency = (No. of paid claims)/(Earned Car Years) x 100



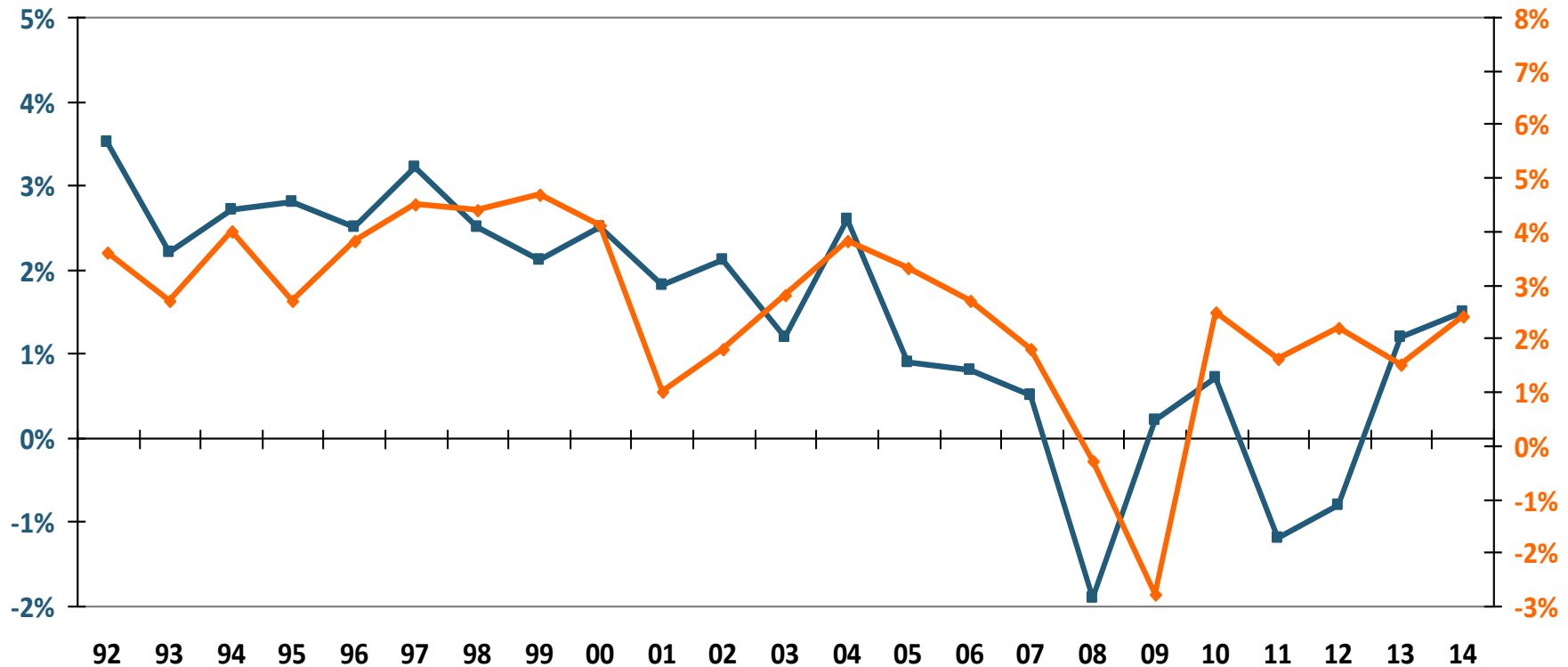
Sources: Federal Highway Administration (<http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm>); ISO Fast Track Monitoring System, *Private Passenger Automobile Fast Track Data*: 1st Qtr. 2015 and earlier reports. *2015 ISO figure is for 12 months ending 2015 Q1. FHA data for 2015 is 12-month moving average ending May 2015.

% Change in Real US GDP vs. % Change in Total Miles Driven

Percent Change in
Total Miles Driven

■ % change in total miles driven ◆ % change in real US GDP

% Change in
Real US GDP*



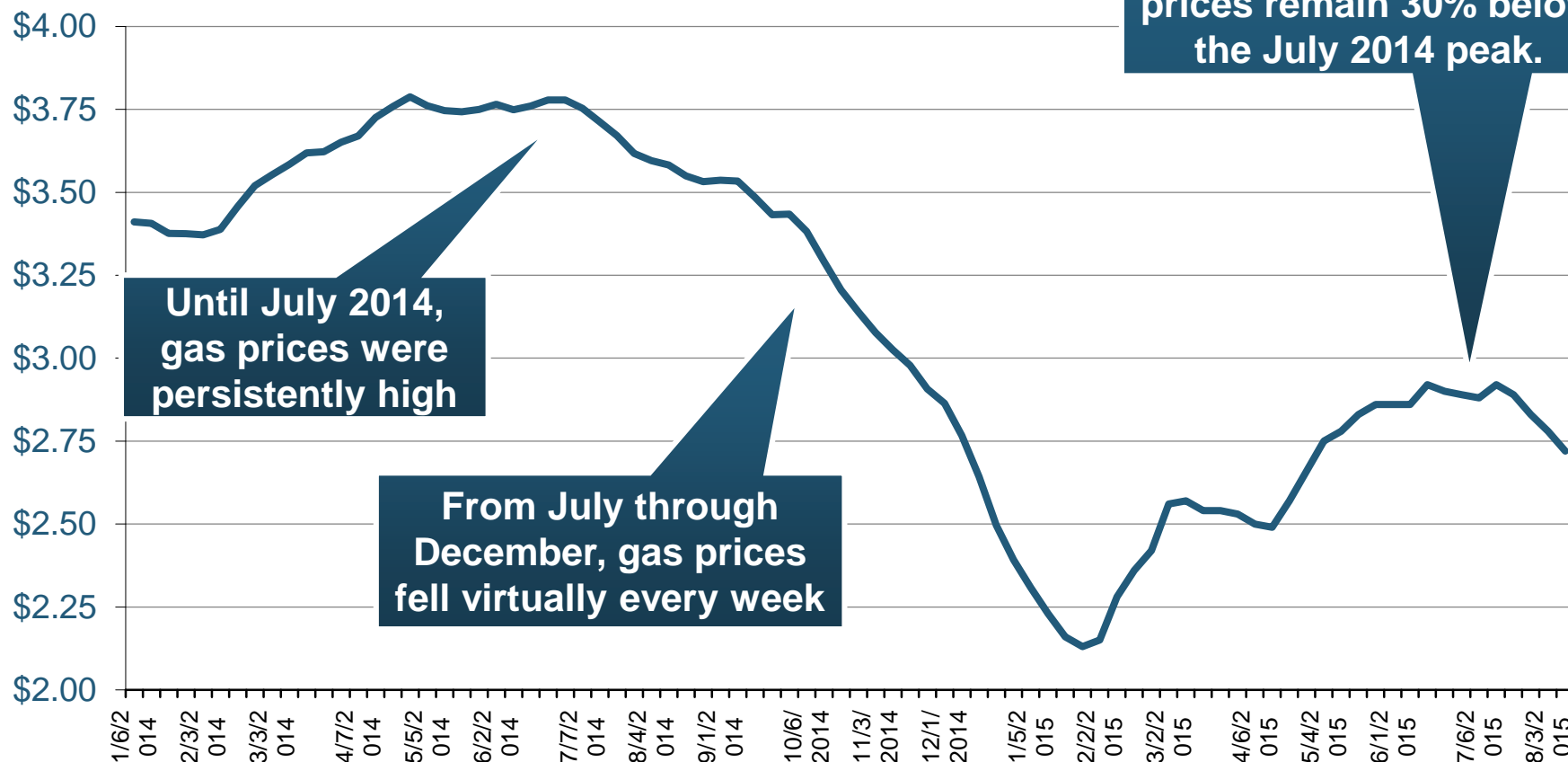
The percent change in miles driven tracked the growth of the national economy fairly well. If this holds, miles driven will continue to rise.

*Data are annual rates

Sources: Federal Highway Administration (http://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm); www.bea.gov (real GDP); I.I.I.

The Price of Gas, Weekly, 2014-2015

Avg. Price /Gallon



Gas Prices Fell 34% Over the Second Half of the 2014

Price is U.S. All Grades All Formulations Retail Gasoline Prices, through August 10, 2015

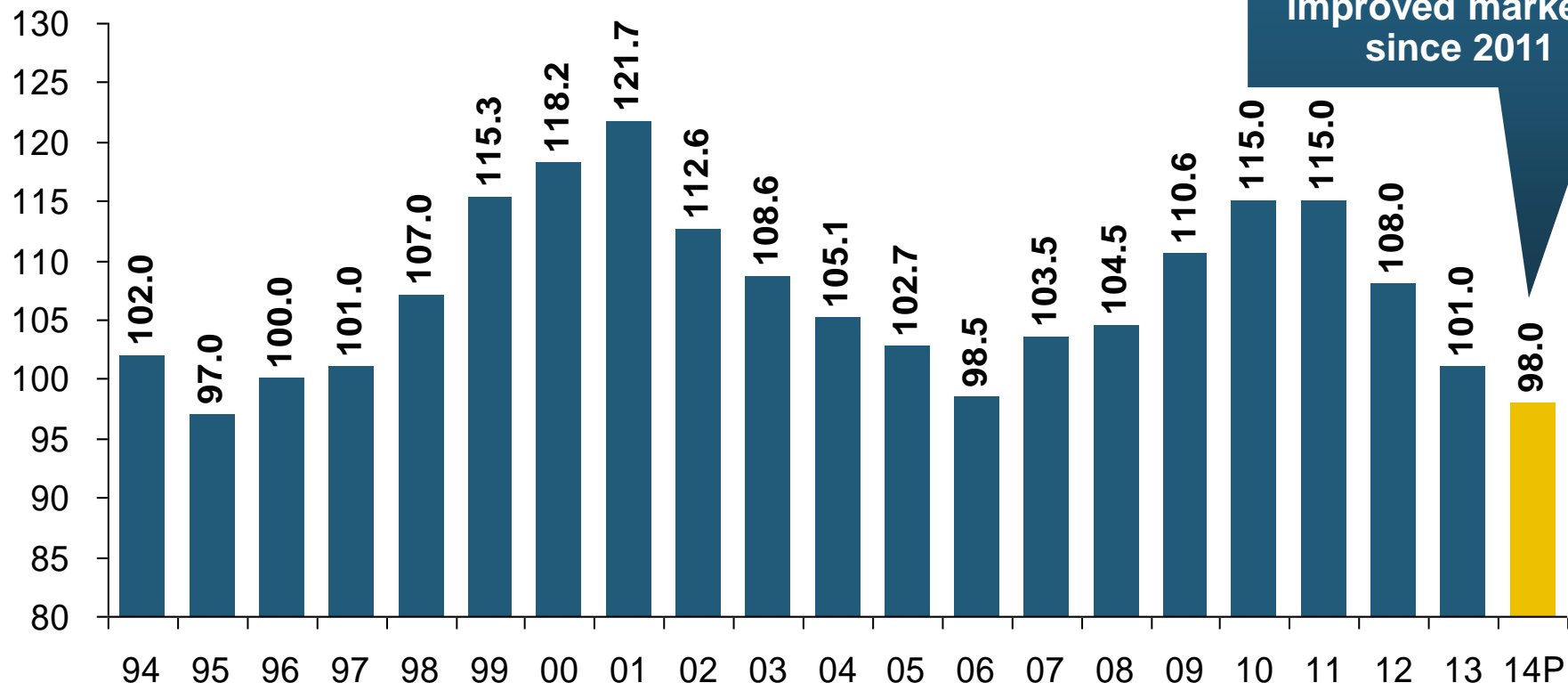
Sources: Federal Energy Administration (<http://www.eia.gov/petroleum/gasdiesel/>); I.I.I.



Workers Compensation Operating Environment

**Workers Comp Results Have Improved
Substantially in Recent Years**

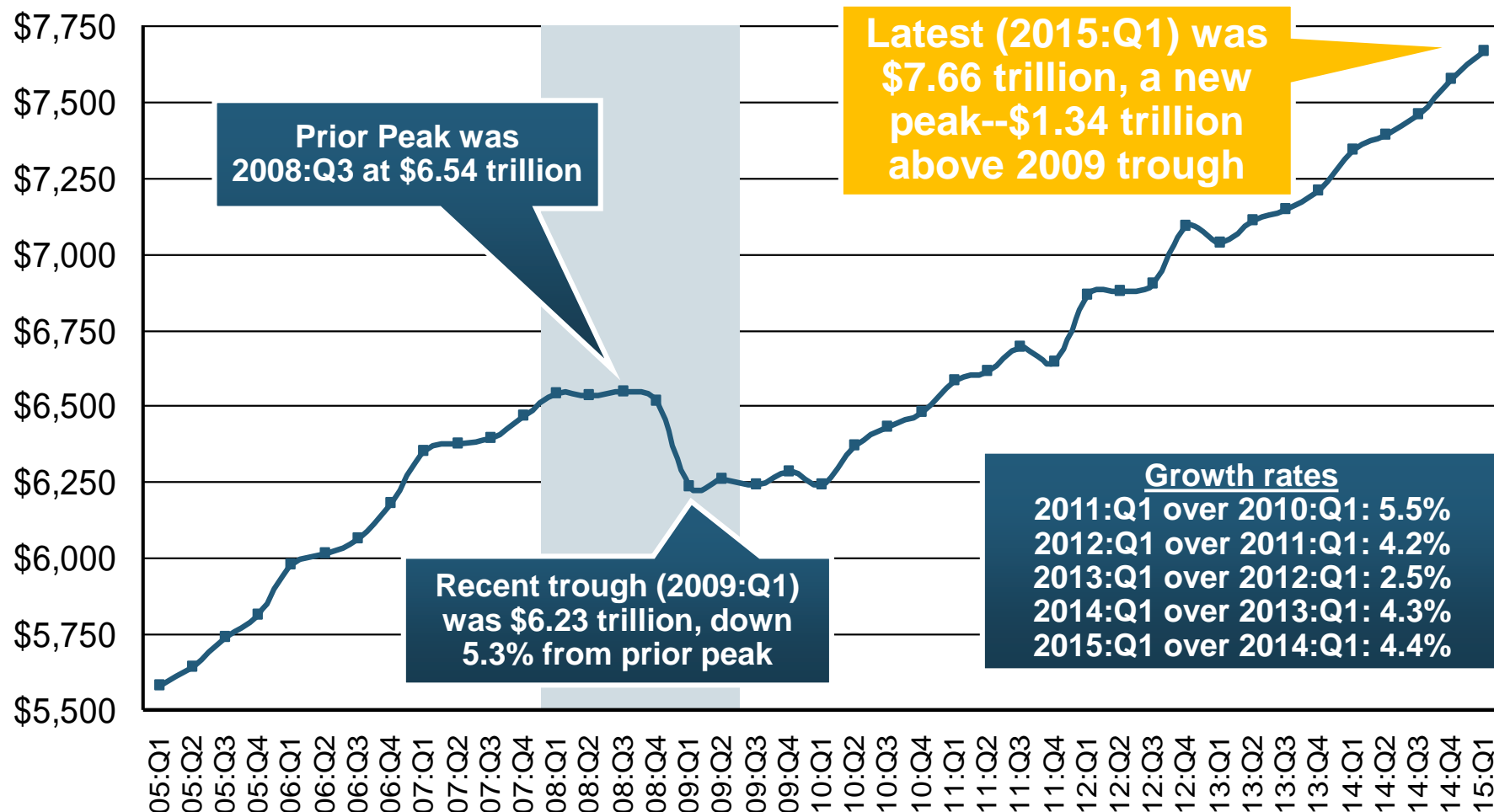
Workers Compensation Combined Ratio: 1994–2014P



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

Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2015:Q1

Billions



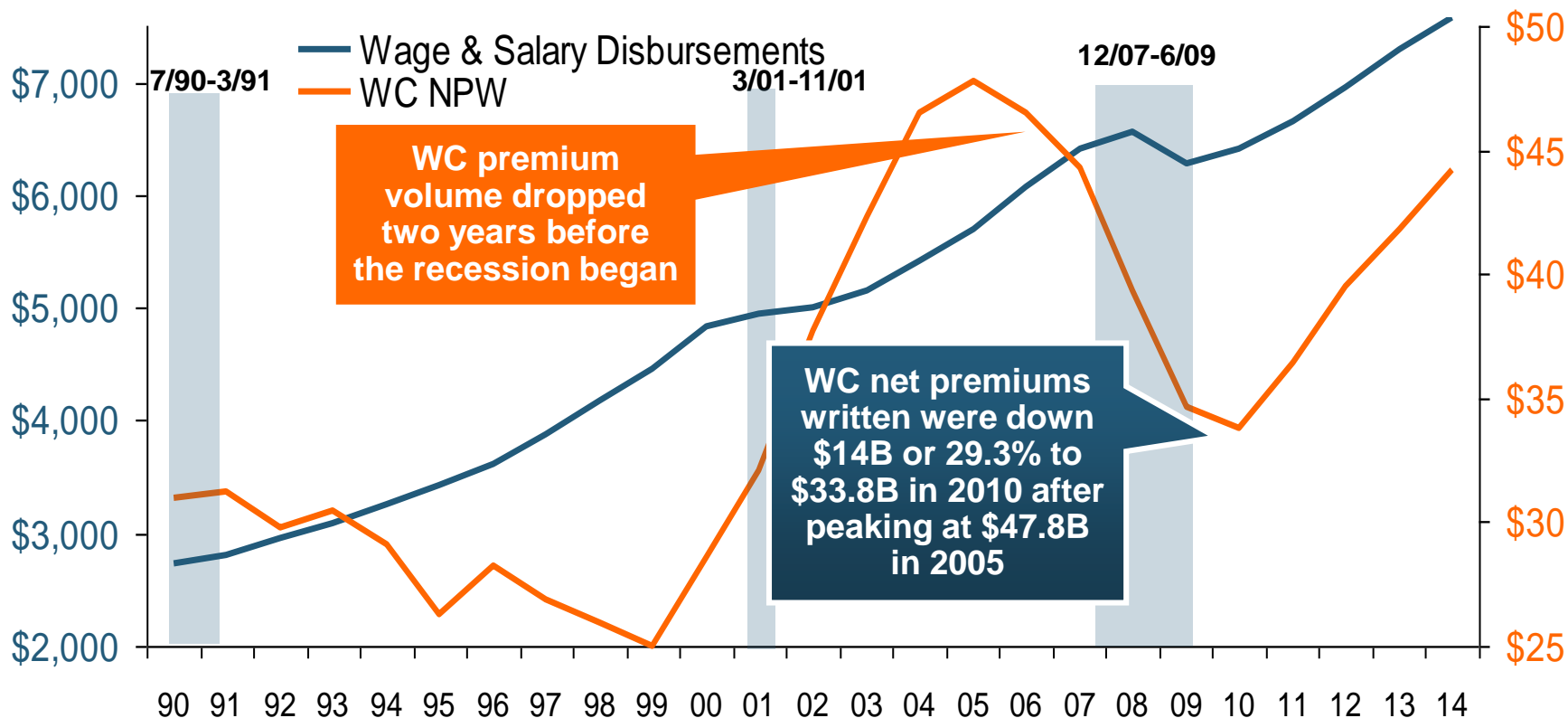
Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

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, 1990-2014P

Payroll Base*
\$Billions

WC NWP
\$Billions



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

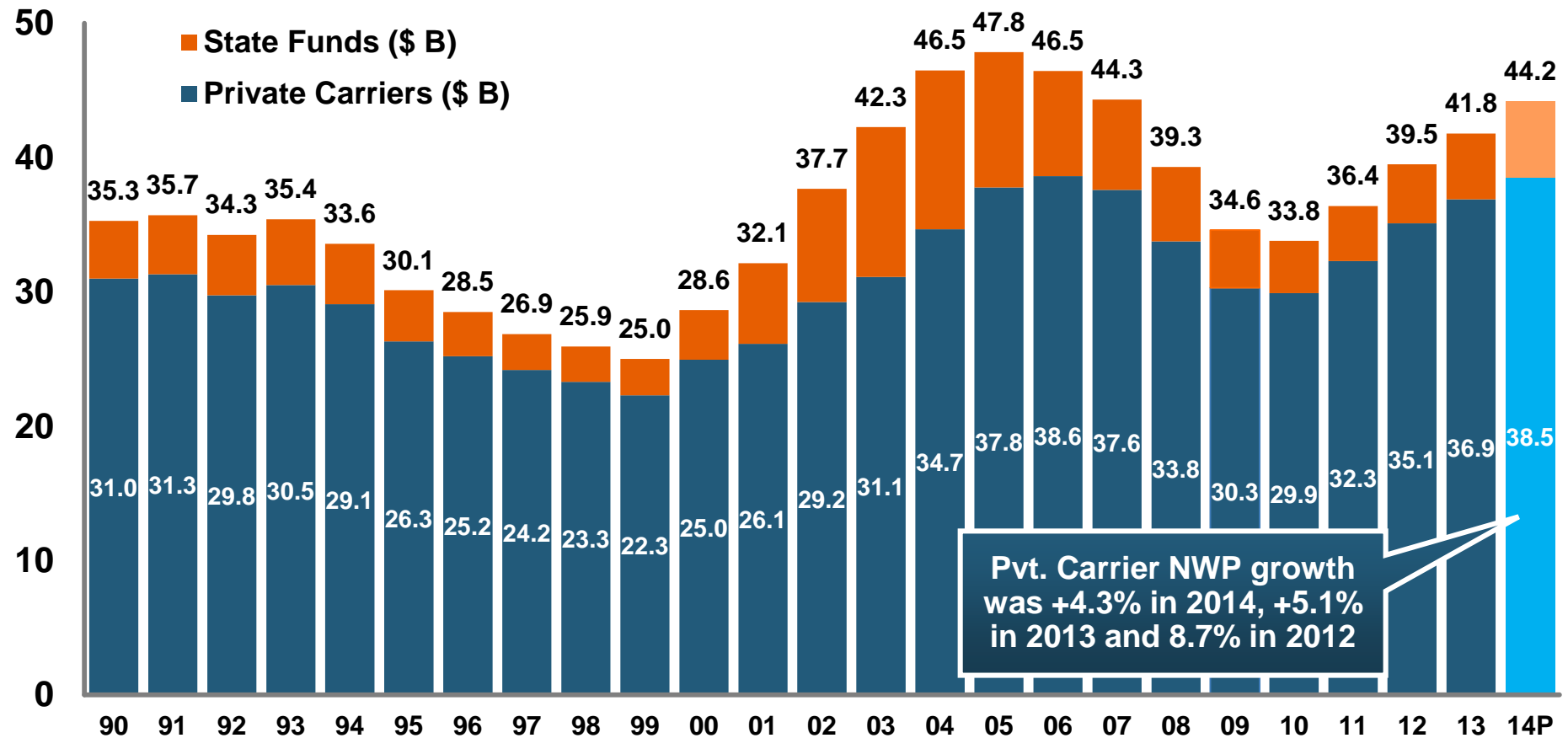
*Private employment; Shaded areas indicate recessions. WC premiums for 2014 are from NCCI.

Sources: NBER (recessions); Federal Reserve Bank of St. Louis at <http://research.stlouisfed.org/fred2/series/WASCUR> ; NCCI; I.I.I.

Workers Compensation Premium: Fourth Consecutive Year of Increase

Net Written Premium

\$ Billions



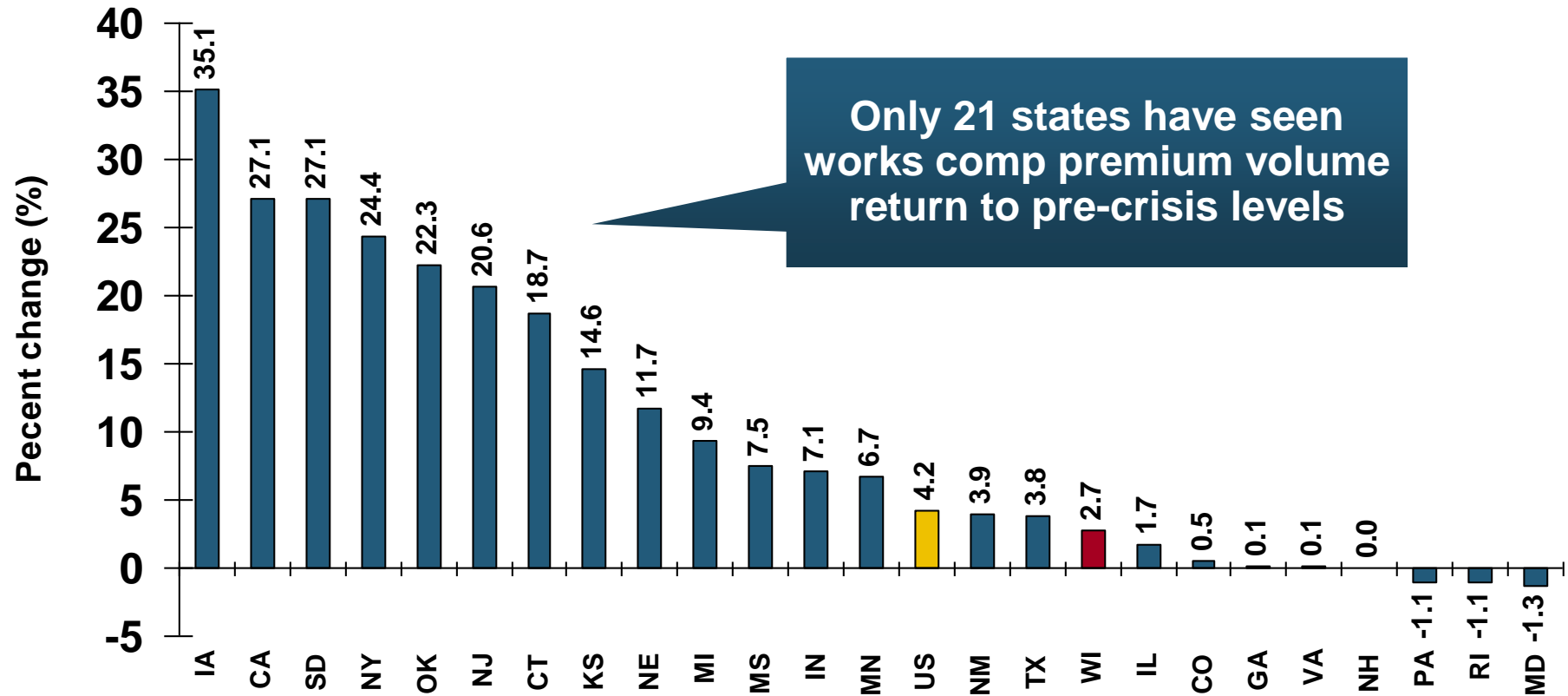
p Preliminary

Source: NCCI from Annual Statement Data.

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

Direct Premiums Written: Workers' Comp Percent Change by State, 2007-2014*

Top 25 States

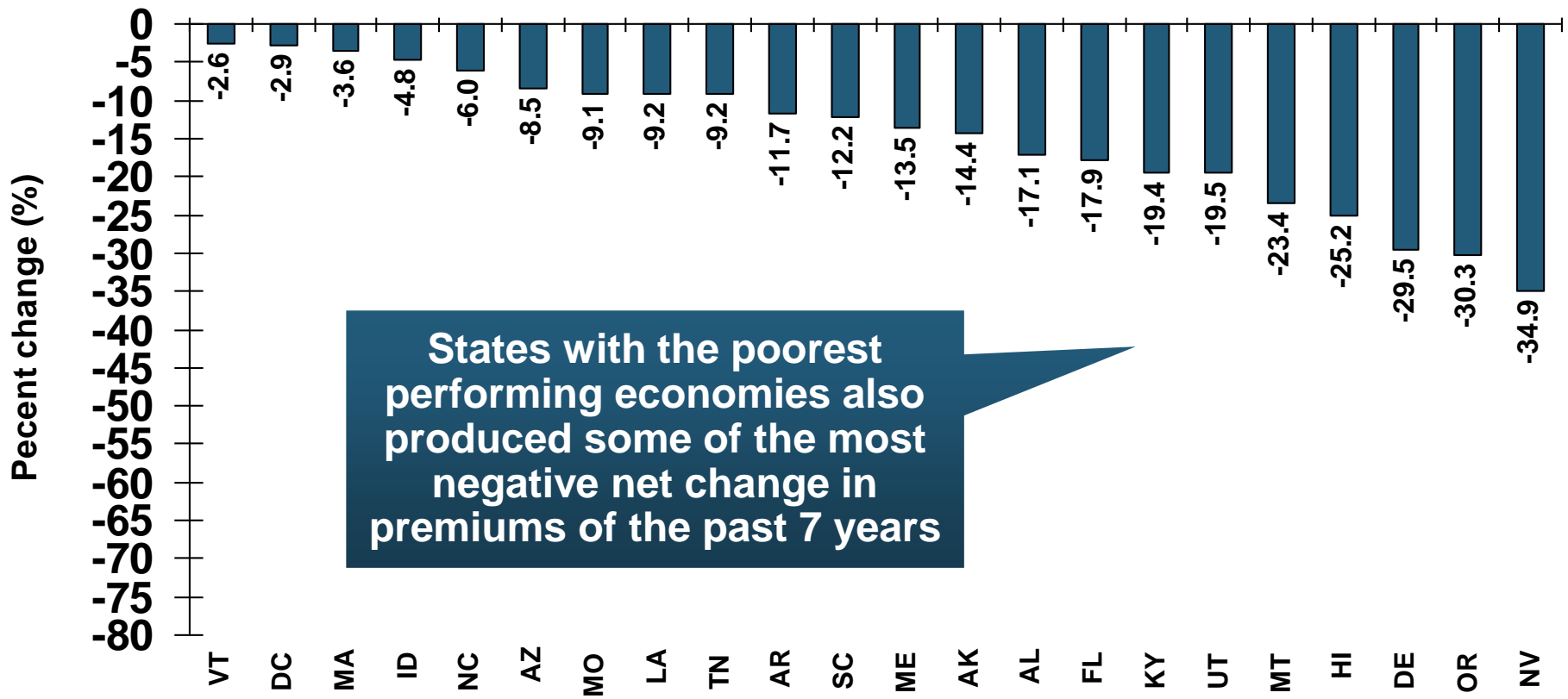


*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

Sources: SNL Financial LC.; Insurance Information Institute.

Direct Premiums Written: Worker's Comp Percent Change by State, 2007-2014*

Bottom 25 States

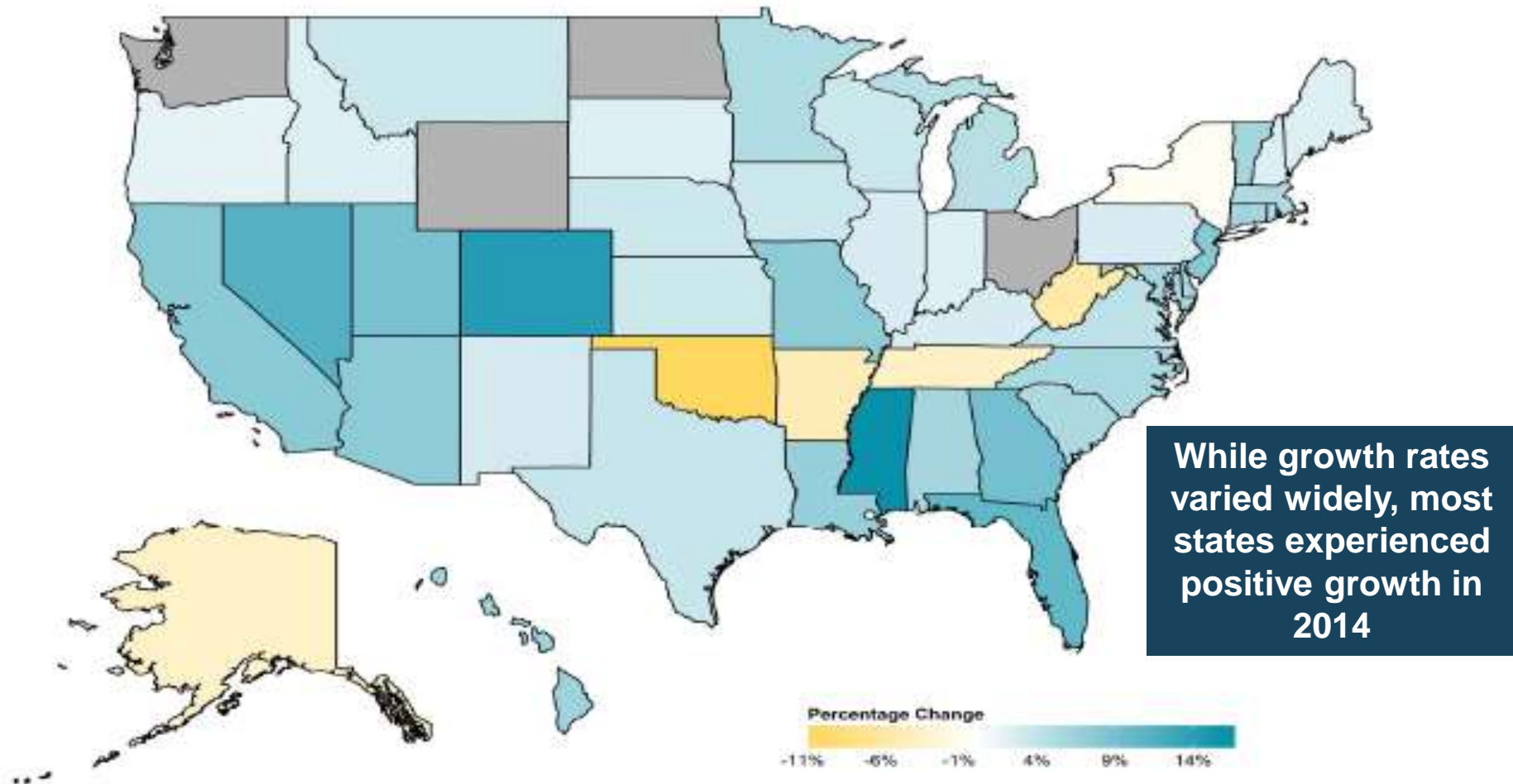


*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

Sources: SNL Financial LC.; Insurance Information Institute.

2014 Workers Compensation Direct Written Premium Growth, by State*

PRIVATE CARRIERS: Overall 2014 Growth = +4.6%



*Excludes monopolistic fund states (in gray): OH, ND, WA and WY.

Source: NCCI.

Workers Compensation Components of Written Premium Change, 2013 to 2014

Written Premium Change from 2013 to 2014

Net Written Premium—Countrywide	+4.6%
Direct Written Premium—Countrywide	+4.6%
Direct Written Premium—NCCI States	+4.5%
Components of DWP Change for NCCI States	
Change in Carrier Estimated Payroll	+4.7%
Change in Bureau Loss Costs and Mix	-1.4%
Change in Carrier Discounting	+0.4%
Change in Other Factors	+0.8%
Combined Effect	+4.5%

Growth is now almost entirely payroll driven

Sources: Countrywide: Annual Statement data.

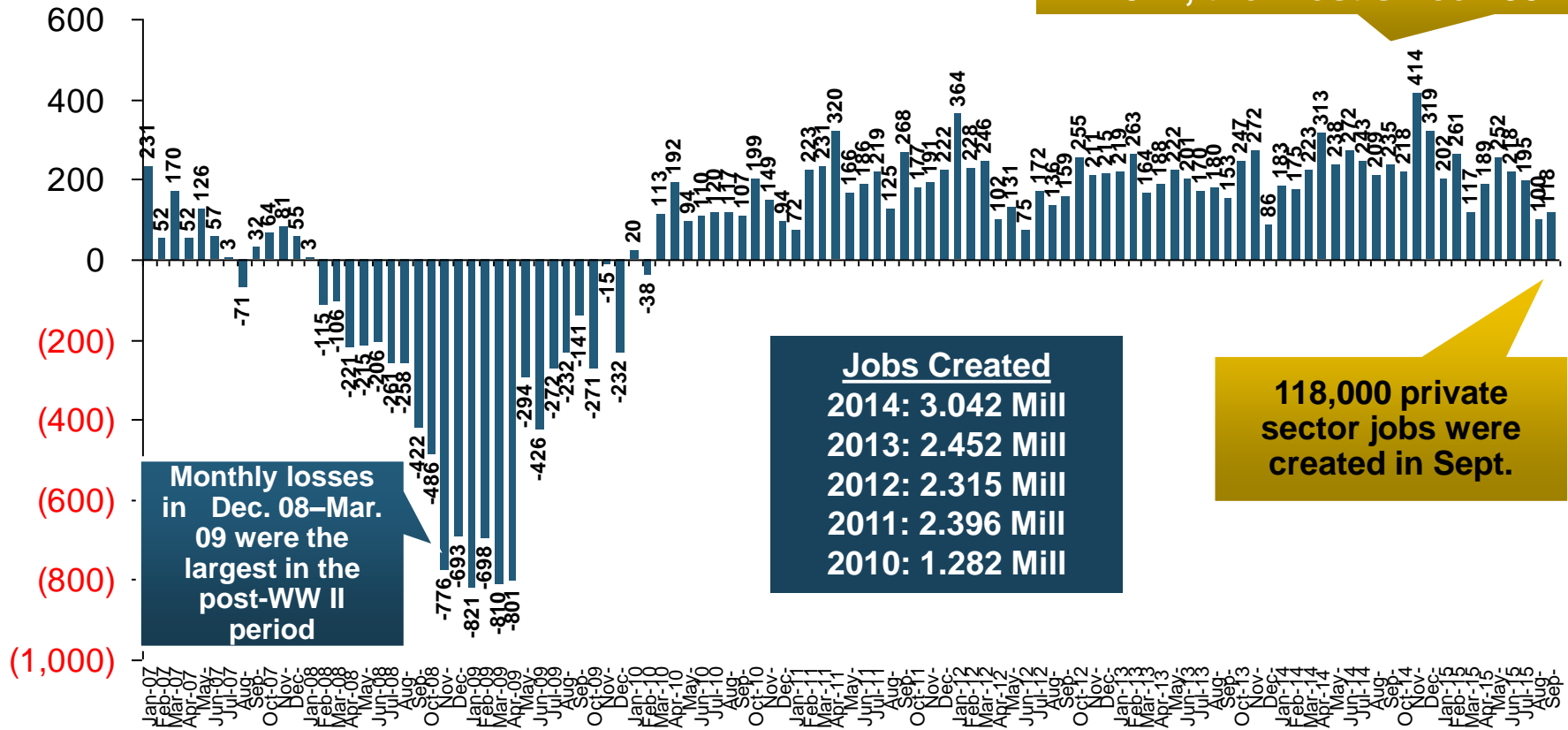
NCCI States: Annual Statement Statutory Page 14 for all states where NCCI provides ratemaking services.

Components: NCCI Policy data.

Monthly Change in Private Employment

January 2007 through Sept. 2015 (000s, Seasonally Adj.)

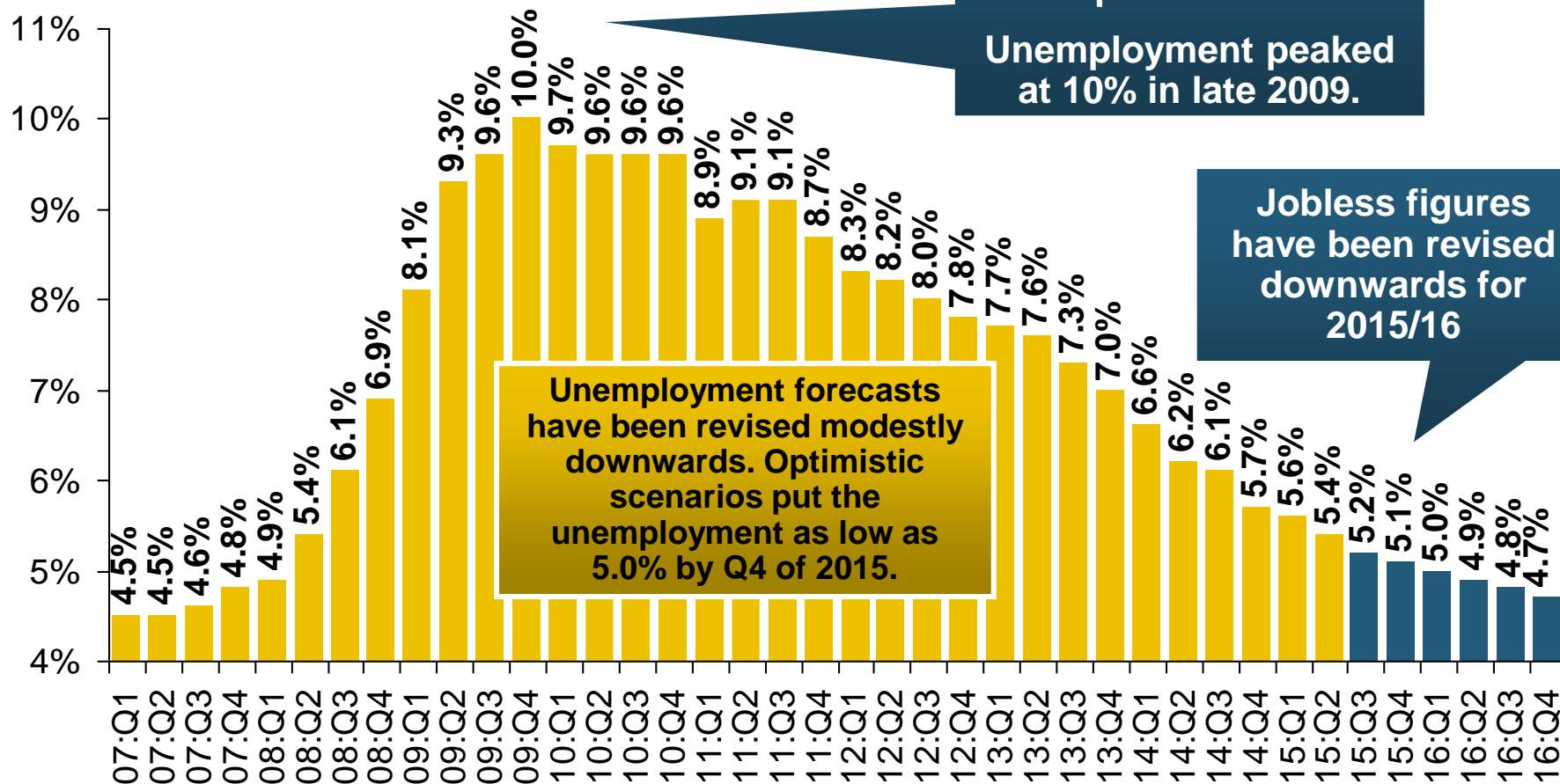
3,042,000 jobs were created in 2014, the most since 1997



Private Employers Added 13.03 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)

US Unemployment Rate Forecast

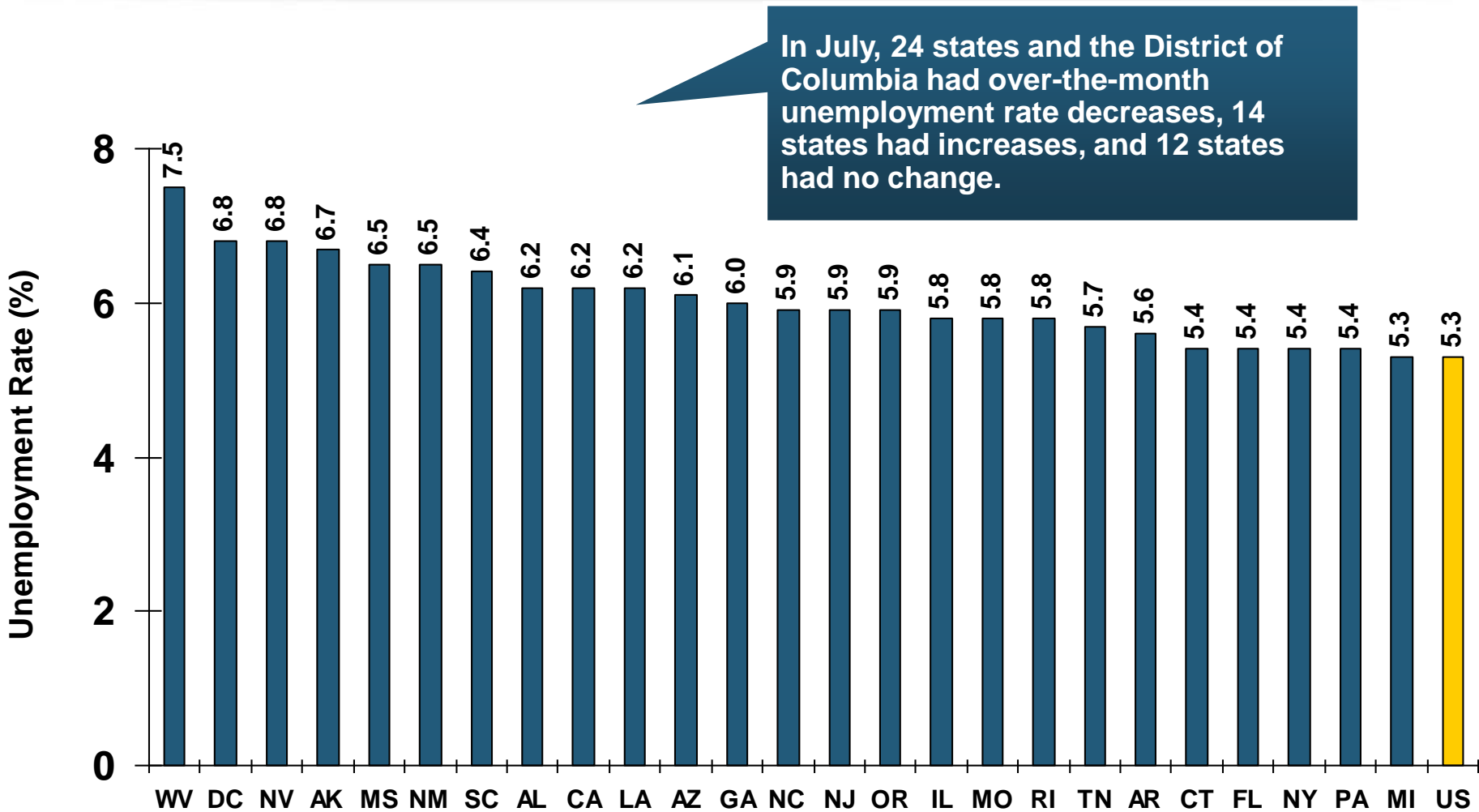
2007:Q1 to 2016:Q4F*



* ■ = actual; ■ = forecasts

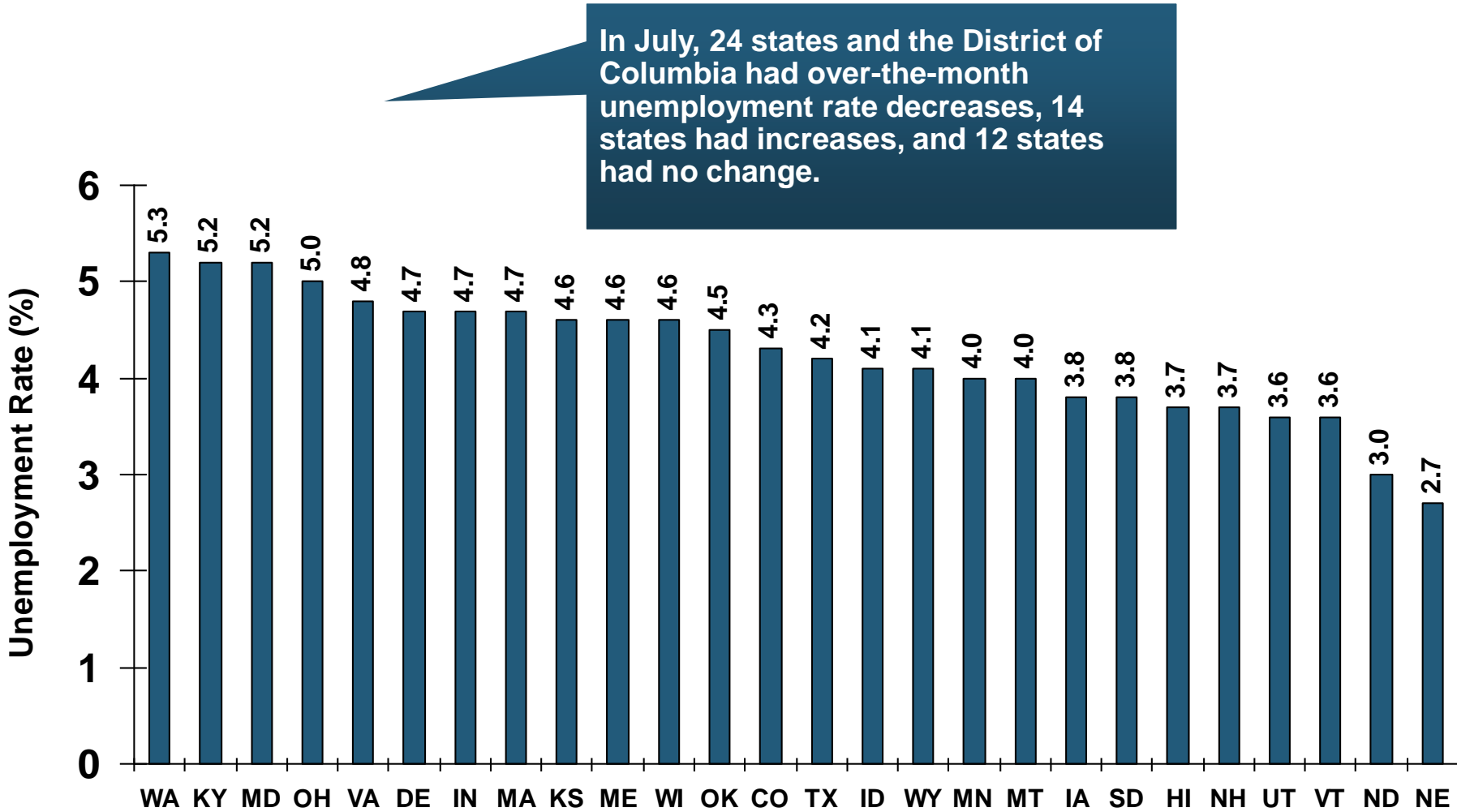
Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (9/15 edition); Insurance Information Institute.

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



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

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

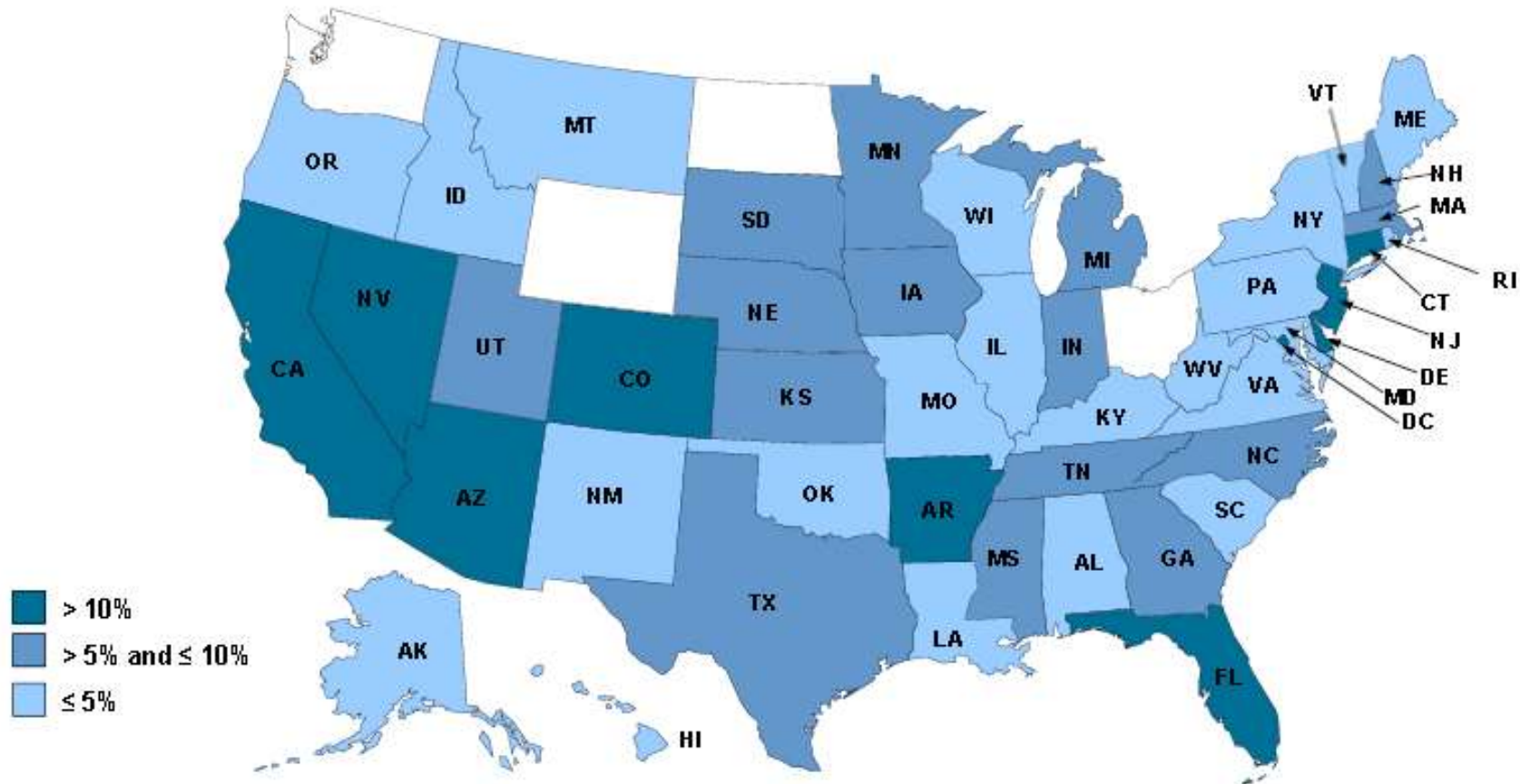


*Provisional figures for July 2015, seasonally adjusted.
Sources: US Bureau of Labor Statistics; Insurance Information Institute.

2013 Workers Compensation Direct Written Premium Growth, by State*

PRIVATE CARRIERS: Overall 2013 Growth = +5.4%

While growth rates varied widely, all states experienced positive growth in 2013



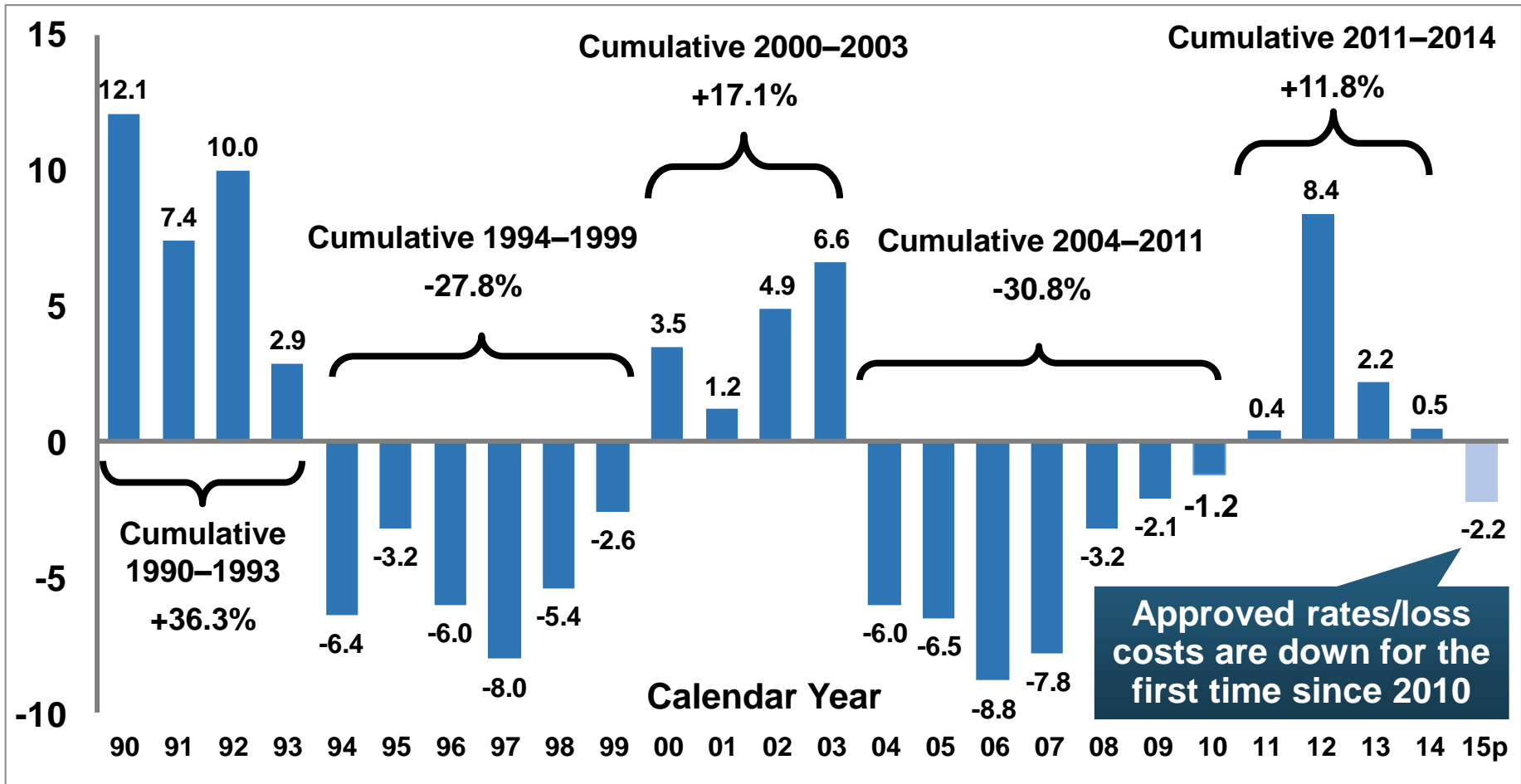
*Excludes monopolistic fund states (in white): OH, ND, WA and WY.

Source: NCCI.

WC Approved Changes in Bureau Premium Level (Rates/Loss Costs)

By Effective Date for Total Market

Percent



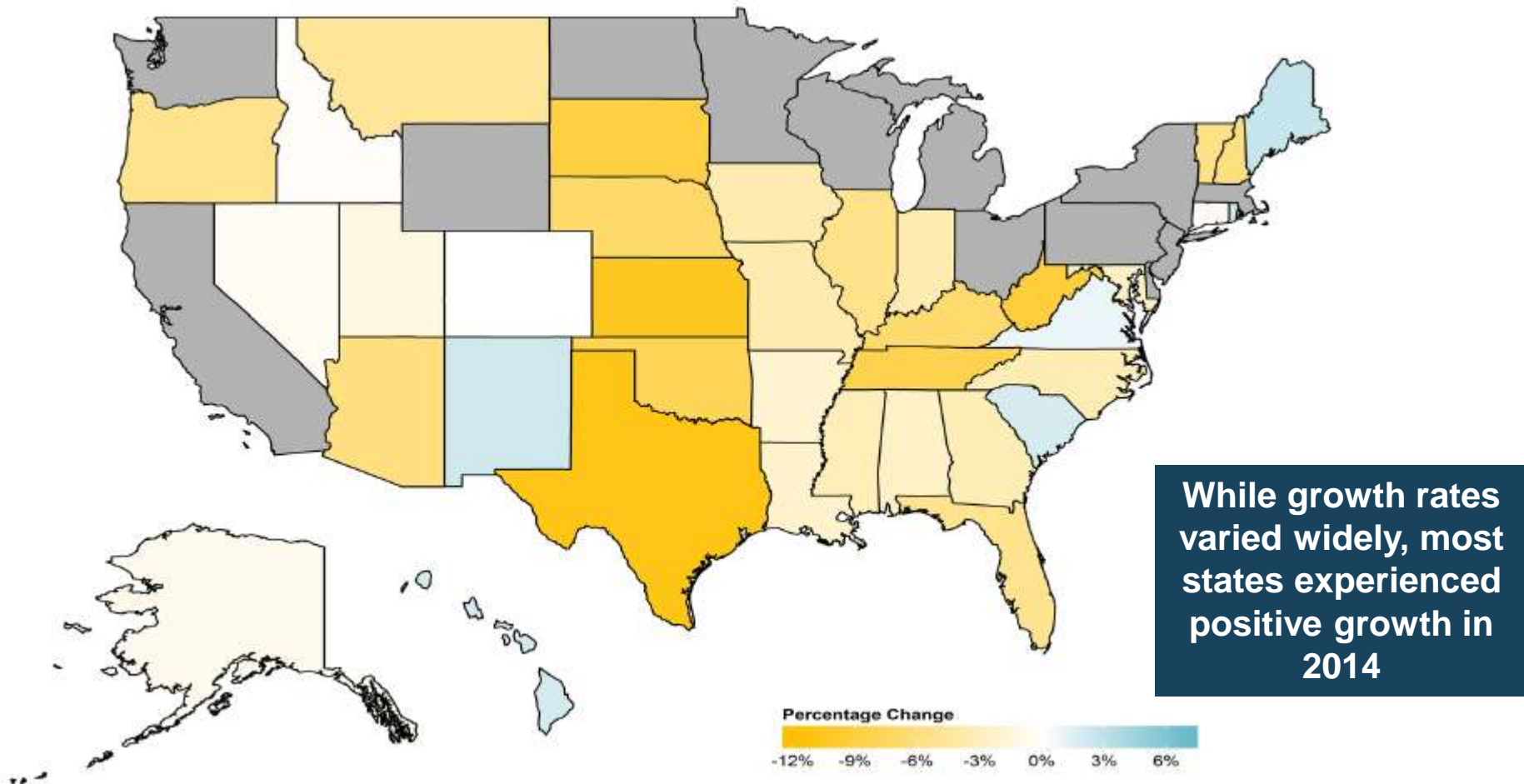
*States approved through 4/24/15.

Note: Bureau premium level changes are countrywide approved changes in advisory rates, loss costs and assigned risk rates as filed by applicable rating organization, relative to those previously approved.

Source: NCCI.

WC Approved or Filed and Pending Change in NCCI Premium Level by State

Latest Change for Voluntary Market

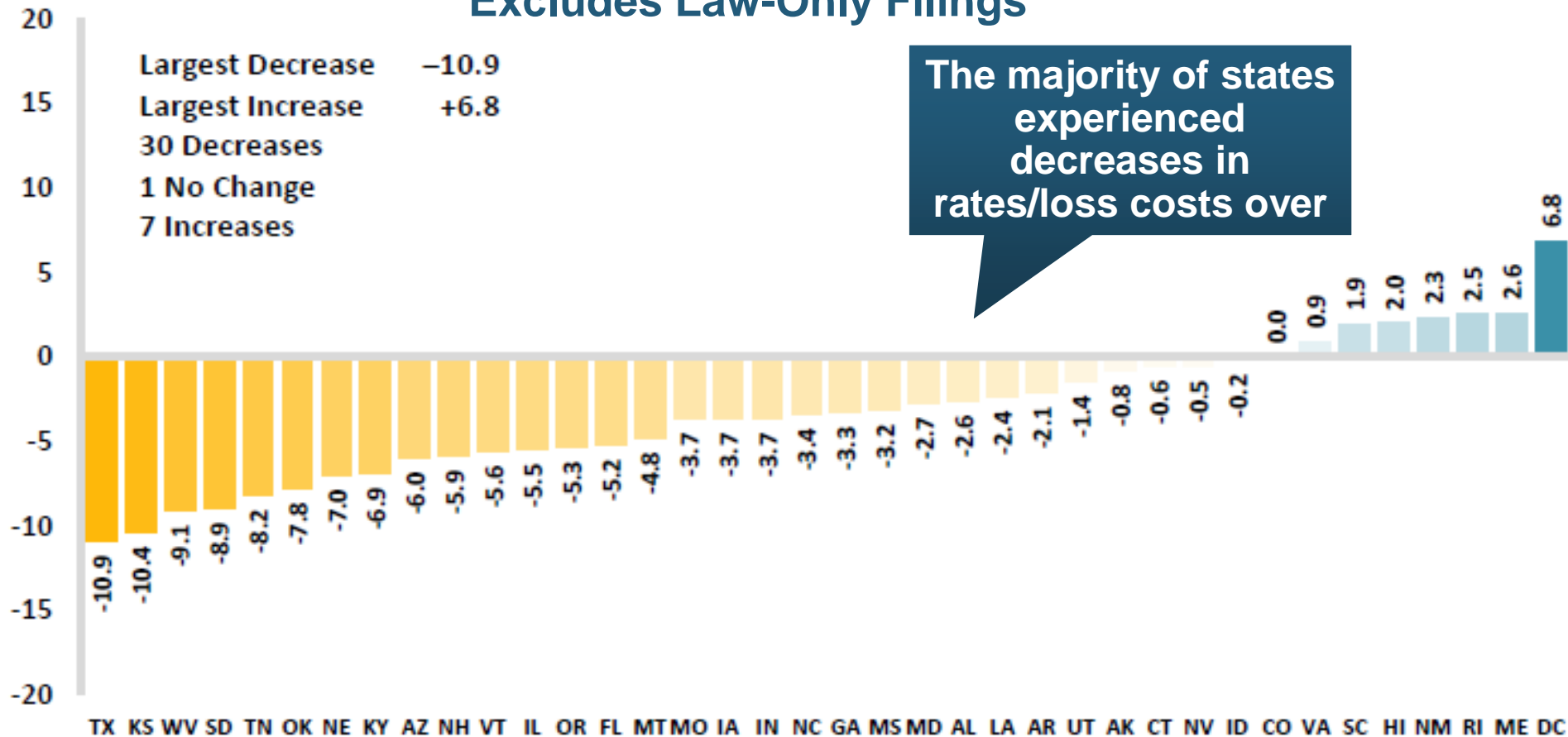


*Excludes monopolistic fund states (in gray): OH, ND, WA and WY.

Source: NCCI.

WC Approved or Filed and Pending Change in NCCI Premium Level by State

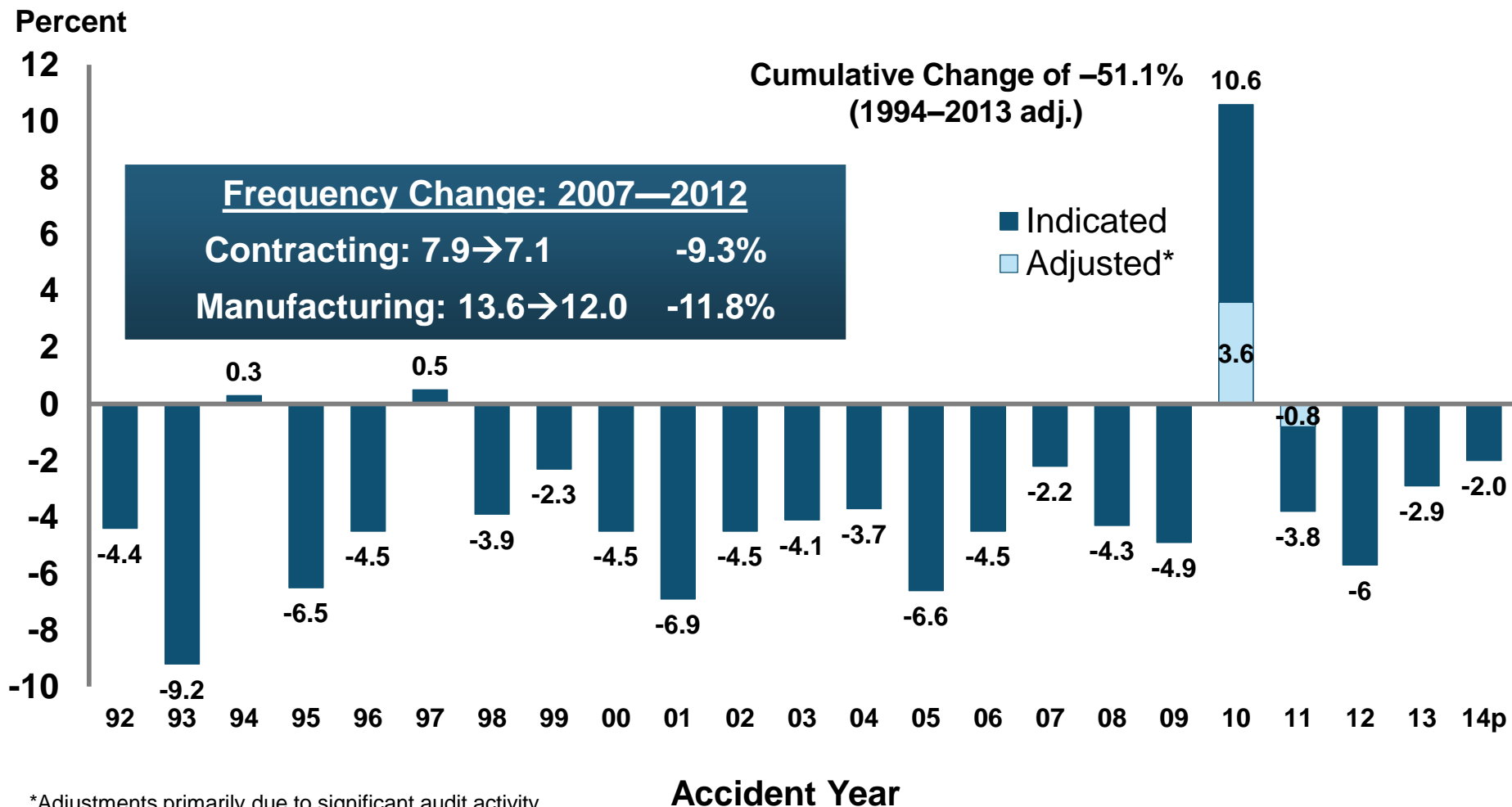
Latest Change for Voluntary Market Excludes Law-Only Filings



Note: Premium level changes are approved changes are approved or filed and pending changes in advisory rates, loss costs and rating values as of 4/24/15 as filed by applicable rating organization, relative to those previously approved. SC is filed and pending. IN and NC are in cooperation with state rating bureaus.

Source: NCCI.

Workers Compensation Lost-Time Claim Frequency Declined in 2014



*Adjustments primarily due to significant audit activity.

2014p: Preliminary based on data valued as of 12/31/2014.

Source: NCCI Financial Call data, developed to ultimate and adjusted to current wage and voluntary loss cost level; Excludes high deductible policies; 1994-2013: Based on data through 12/31/13. Data for all states where NCCI provides ratemaking services, excluding WV.

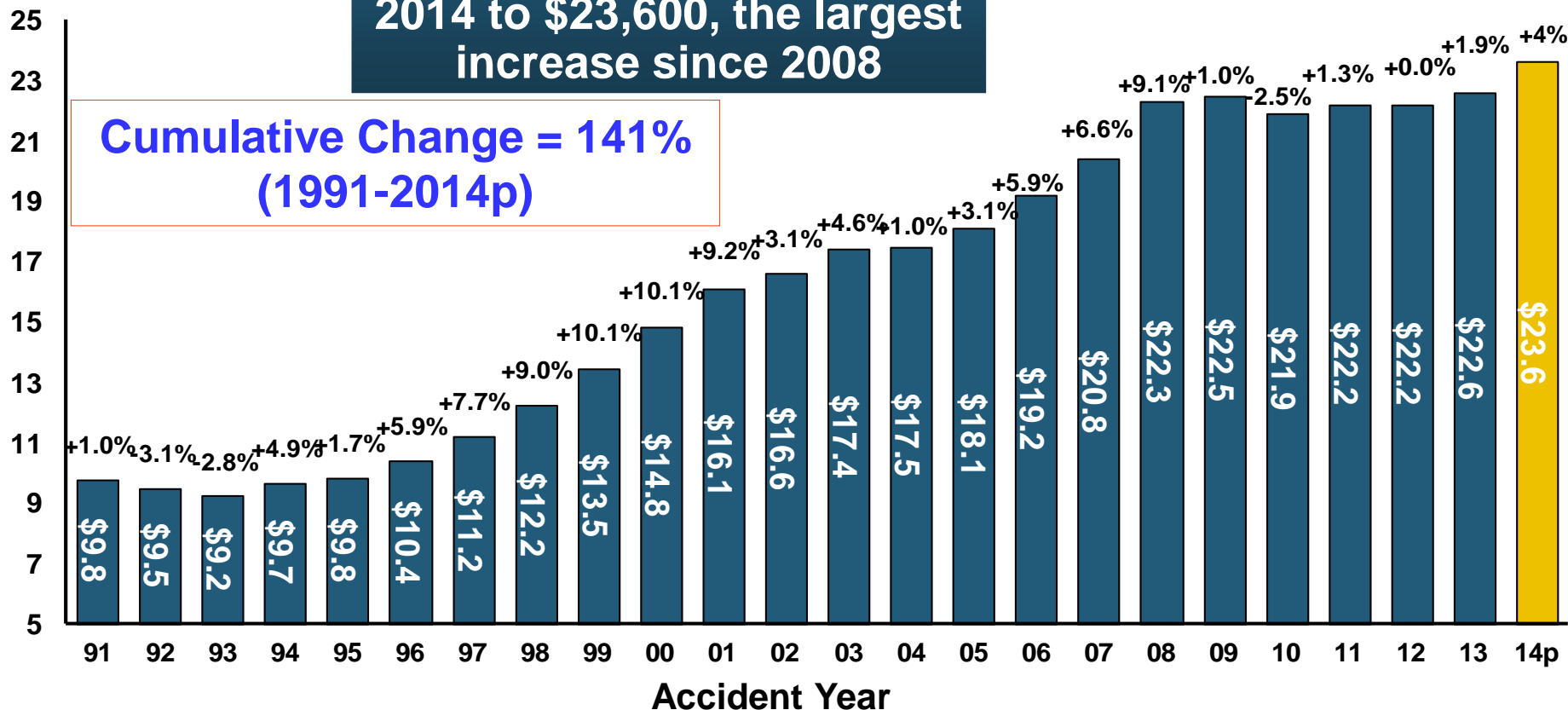
Frequency is the number of lost-time claims per \$1M pure premium at current wage and voluntary loss cost level

Workers Comp Indemnity Claim Costs: Modest Increase in 2014

Average Indemnity Cost per Lost-Time Claim

Average indemnity costs per claim were up 4% in 2014 to \$23,600, the largest increase since 2008

Cumulative Change = 141%
(1991-2014p)

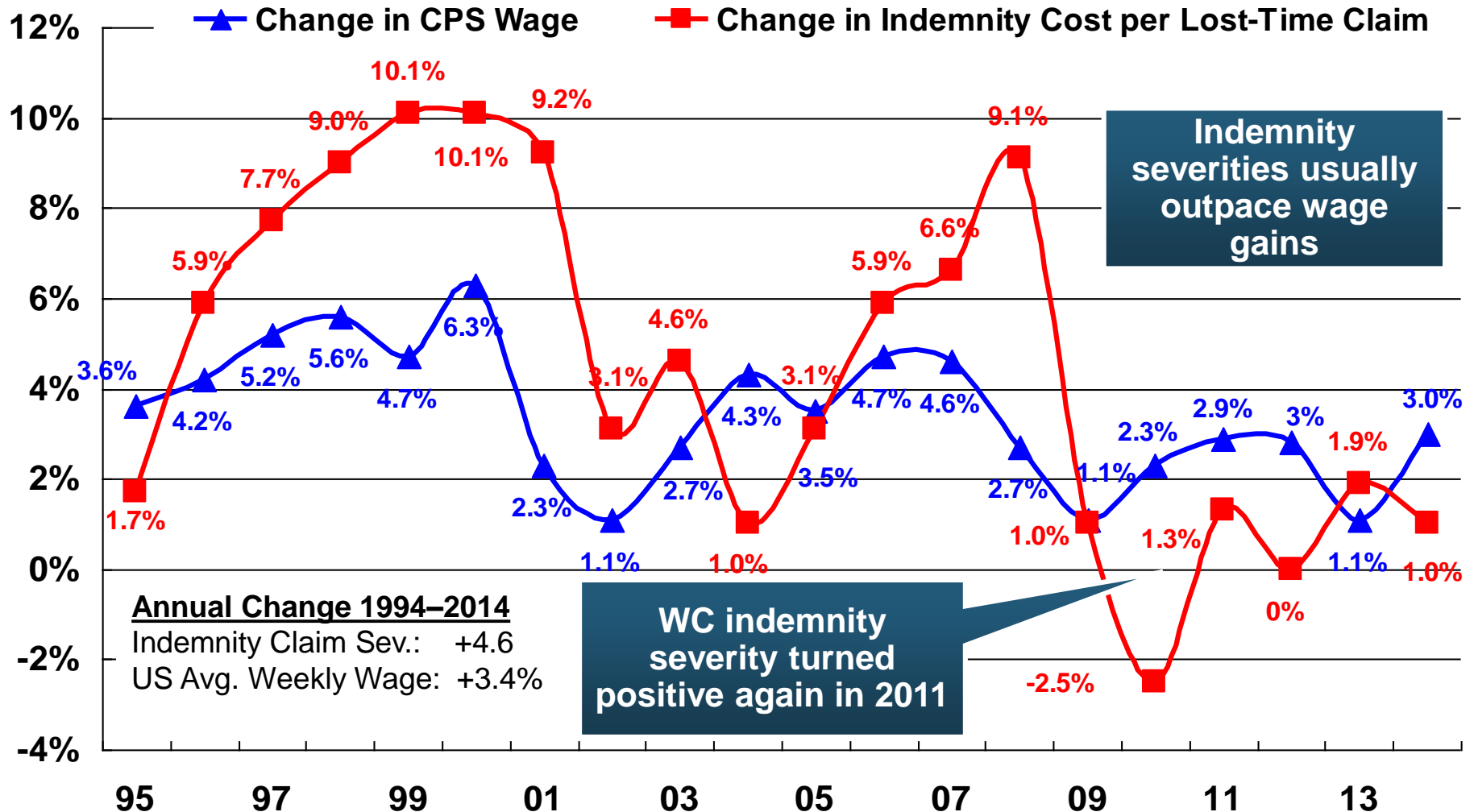


2014p: Preliminary based on data valued as of 12/31/2014.

1991-2013: Based on data through 12/31/2013, developed to ultimate

Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.

WC Indemnity Severity vs. Wage Inflation, 1995 -2014p



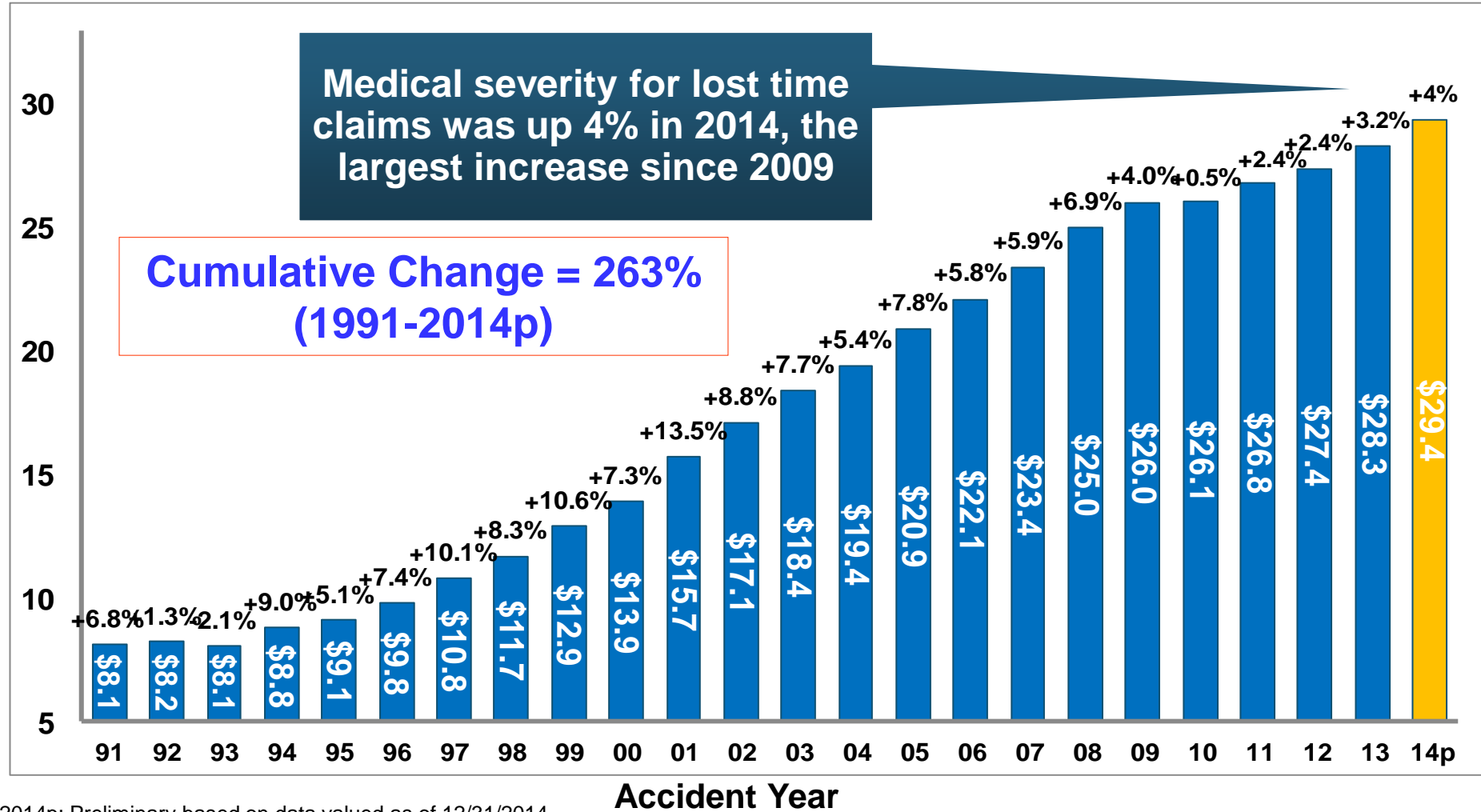
2014p: Preliminary based on data valued as of 12/31/2014; 1991-2010: Based on data through 12/31/2010, developed to ultimate. Based on the states where NCCI provides ratemaking services. Excludes the effects of deductible policies. CPS = Current Population Survey.

Source: NCCI

Workers Compensation Medical Severity: Moderate Increase in 2014

Medical
Claim Cost (\$000s)

Average Medical Cost per Lost-Time Claim

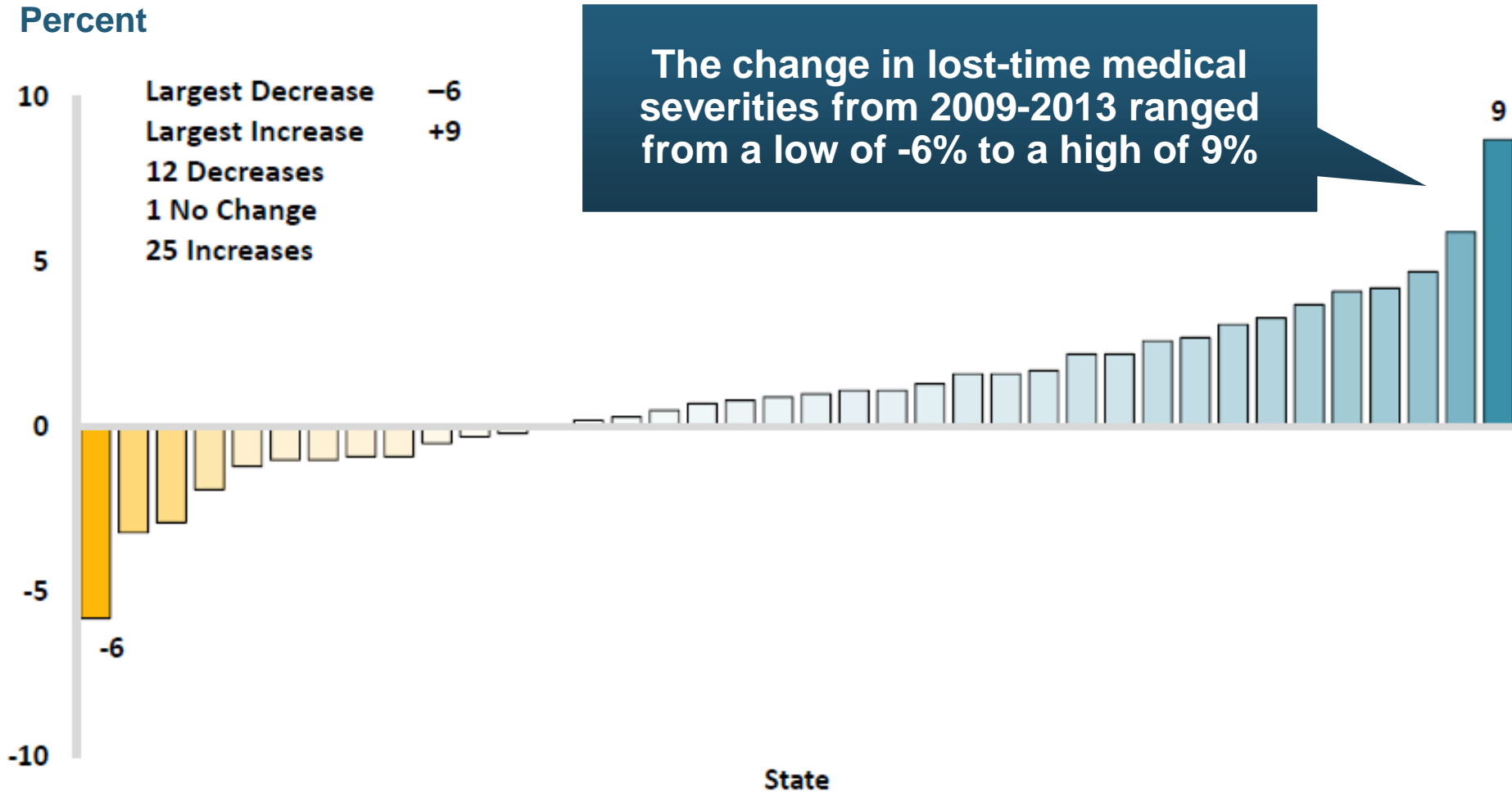


2014p: Preliminary based on data valued as of 12/31/2014.

1991-2013: Based on data through 12/31/2013, developed to ultimate

Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.

Workers Comp Change in Medical Severity by State, Avg. Annual Change, 2009-2013



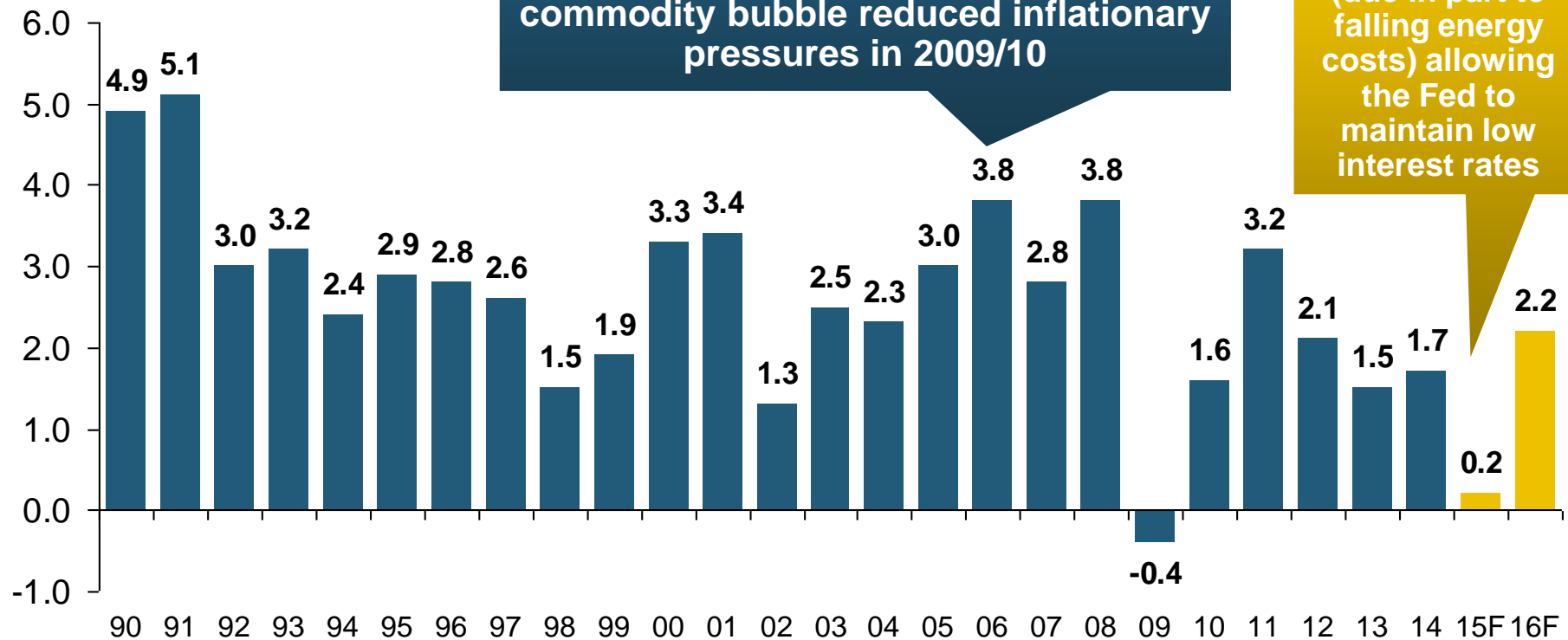
Source: NCCI's Analysis of Frequency and Severity of Claims Across the Country as of 12/31/13 on ncci.com.

Values reflect methodology and state data underlying the most recent rate/lost cost filing.

TX changes are for the years 2010-2013.

Annual Inflation Rates, (CPI-U, %), 1990–2016F

Annual Inflation Rates (%)

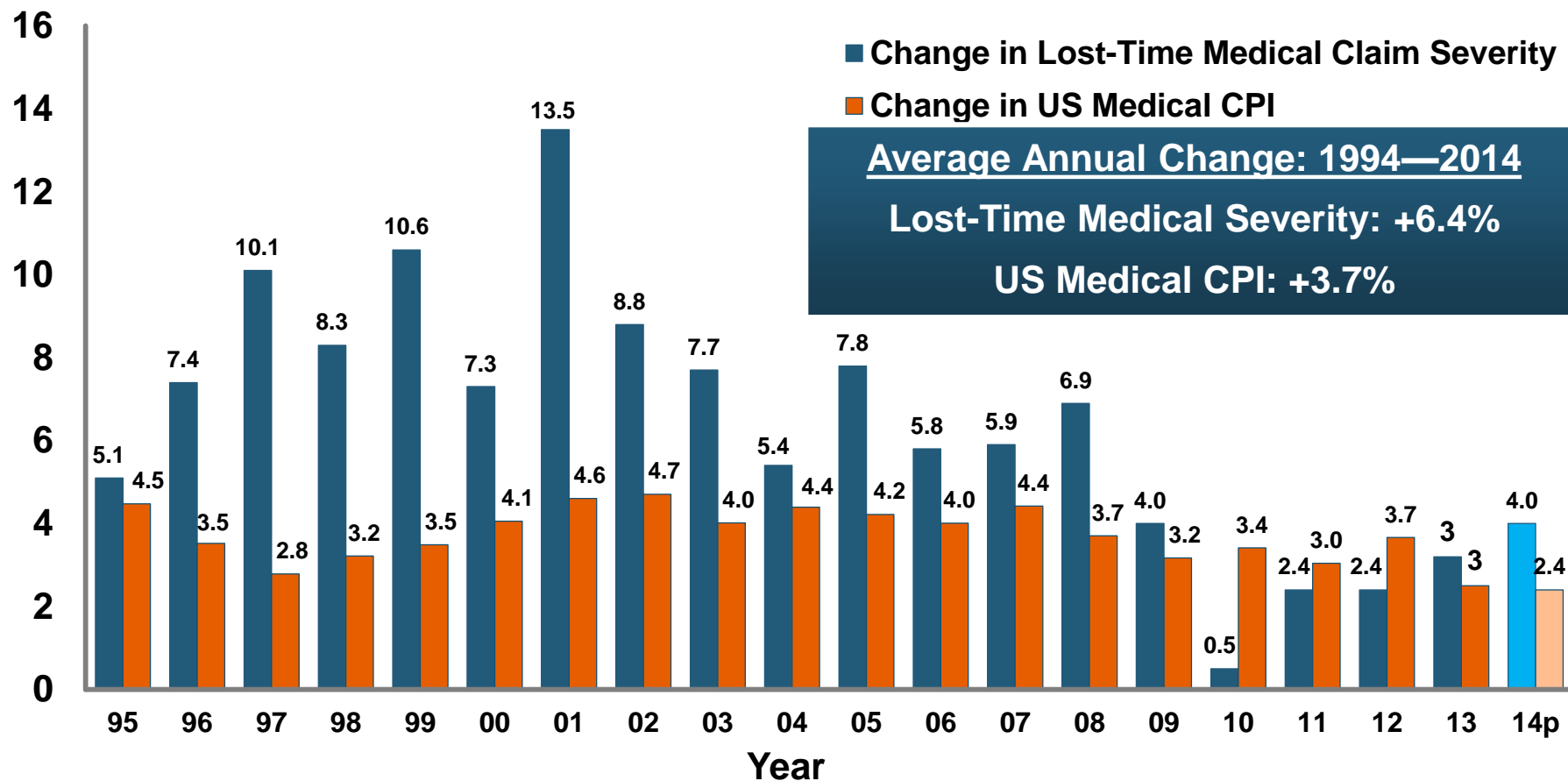


Slack in the U.S. economy and falling energy prices suggests that inflationary pressures should remain subdued for an extended period of times

Workers Compensation Change in Medical Severity

Comparison to Change in Medical Consumer Price Index (CPI)

Percent Change



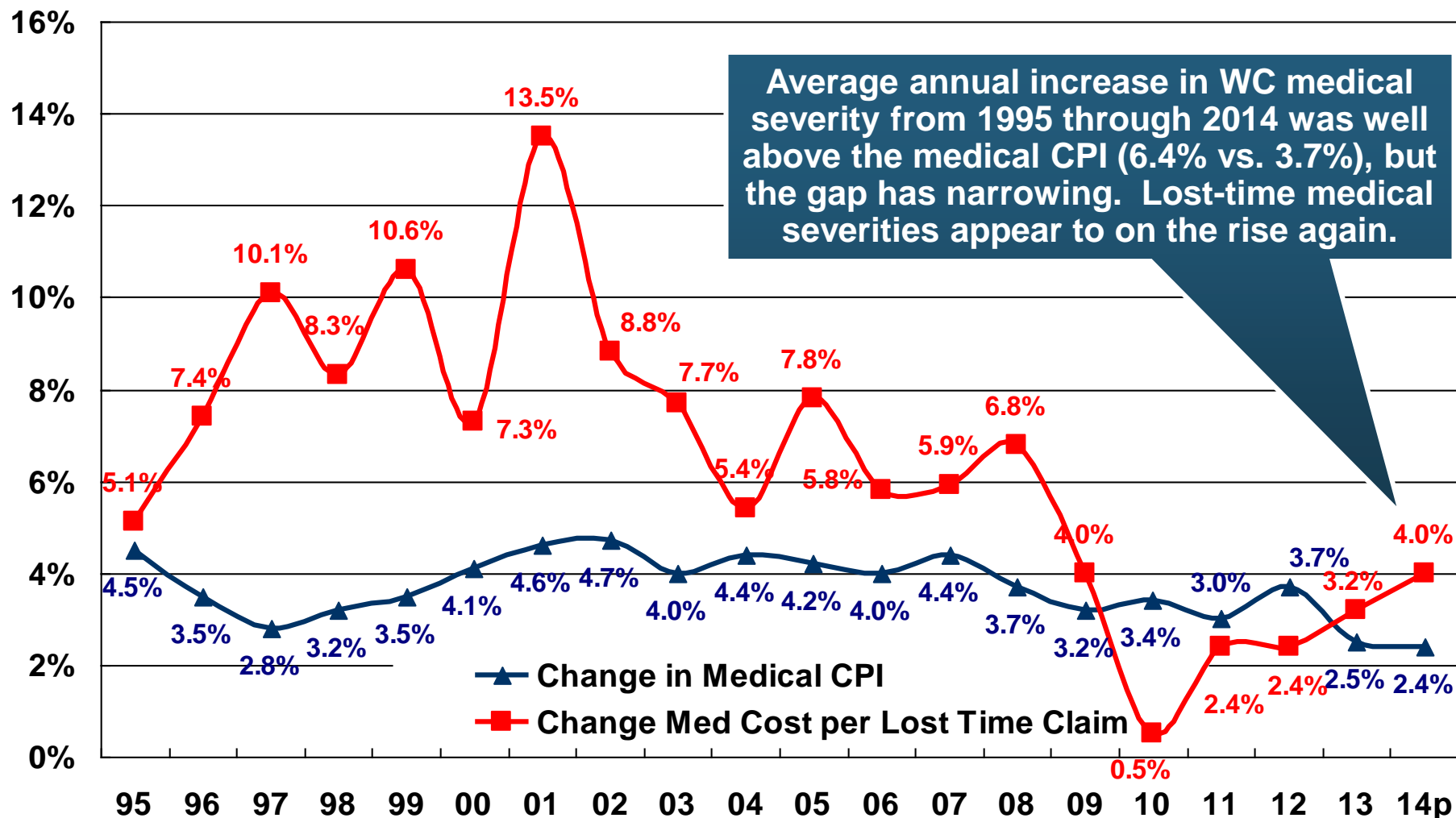
2014p: Preliminary based on data valued as of 12/31/2014.

Sources: Severity: 1995-2013: Based on data through 12/31/2013, developed to ultimate

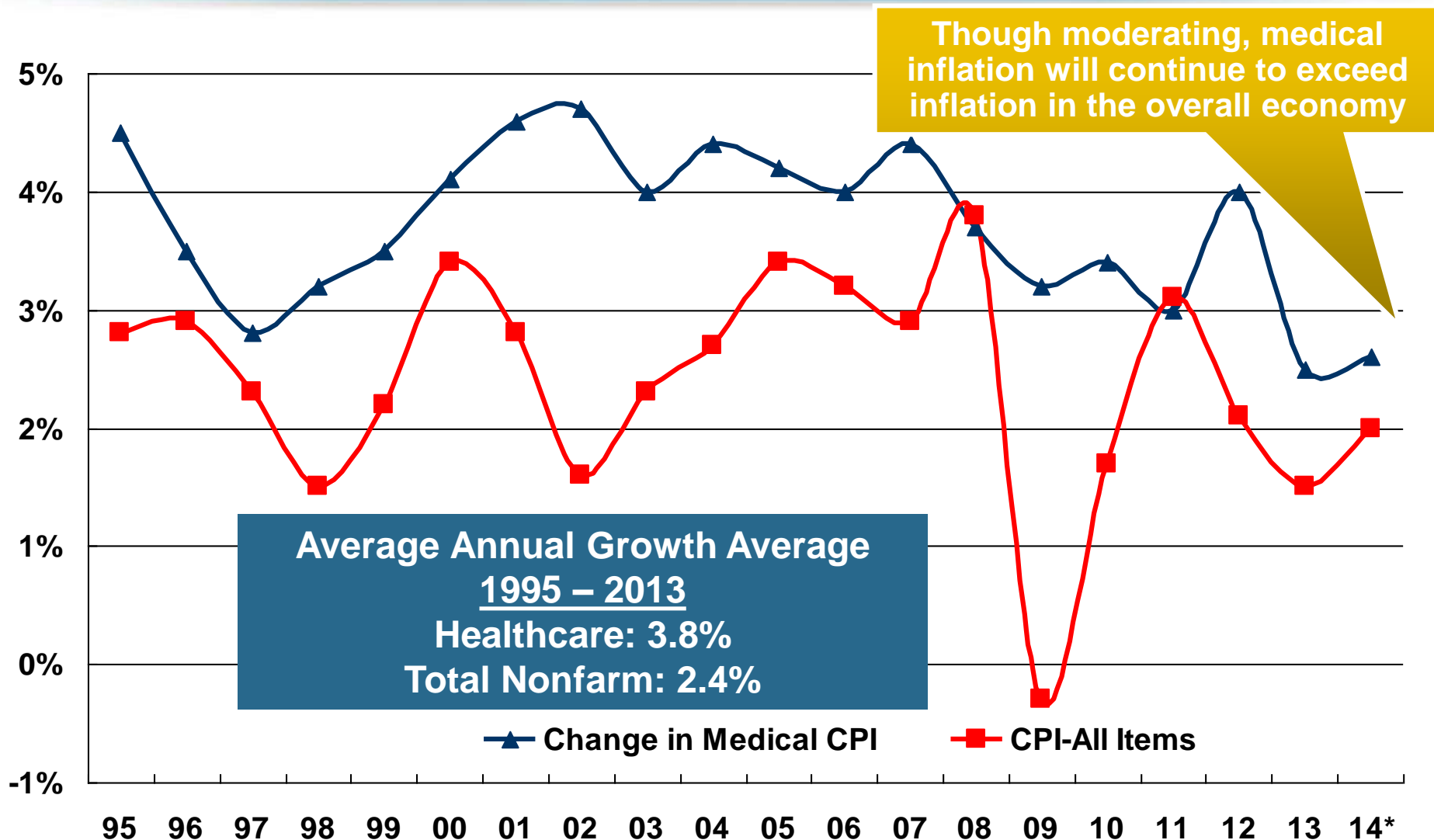
Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.

US Medical CPI: US Bureau of Labor Statistics.

WC Medical Severity Generally Outpaces the Medical CPI Rate



Medical Cost Inflation vs. Overall CPI, 1995 – 2014*



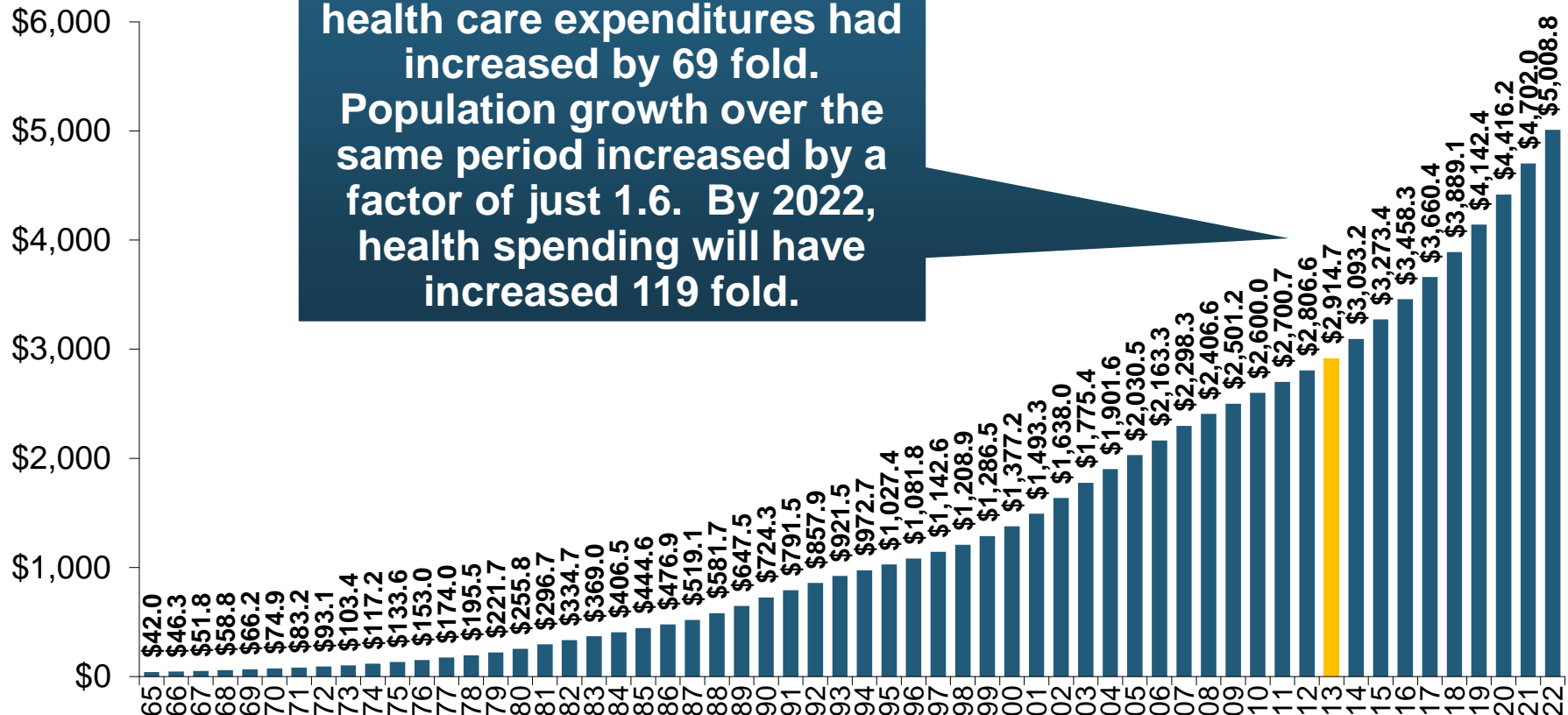
*July 2014 compared to July 2013.

Sources: Med CPI from US Bureau of Labor Statistics, WC med severity from NCCI based on NCCI states.

U.S. Health Care Expenditures, 1965–2022F

\$ Billions

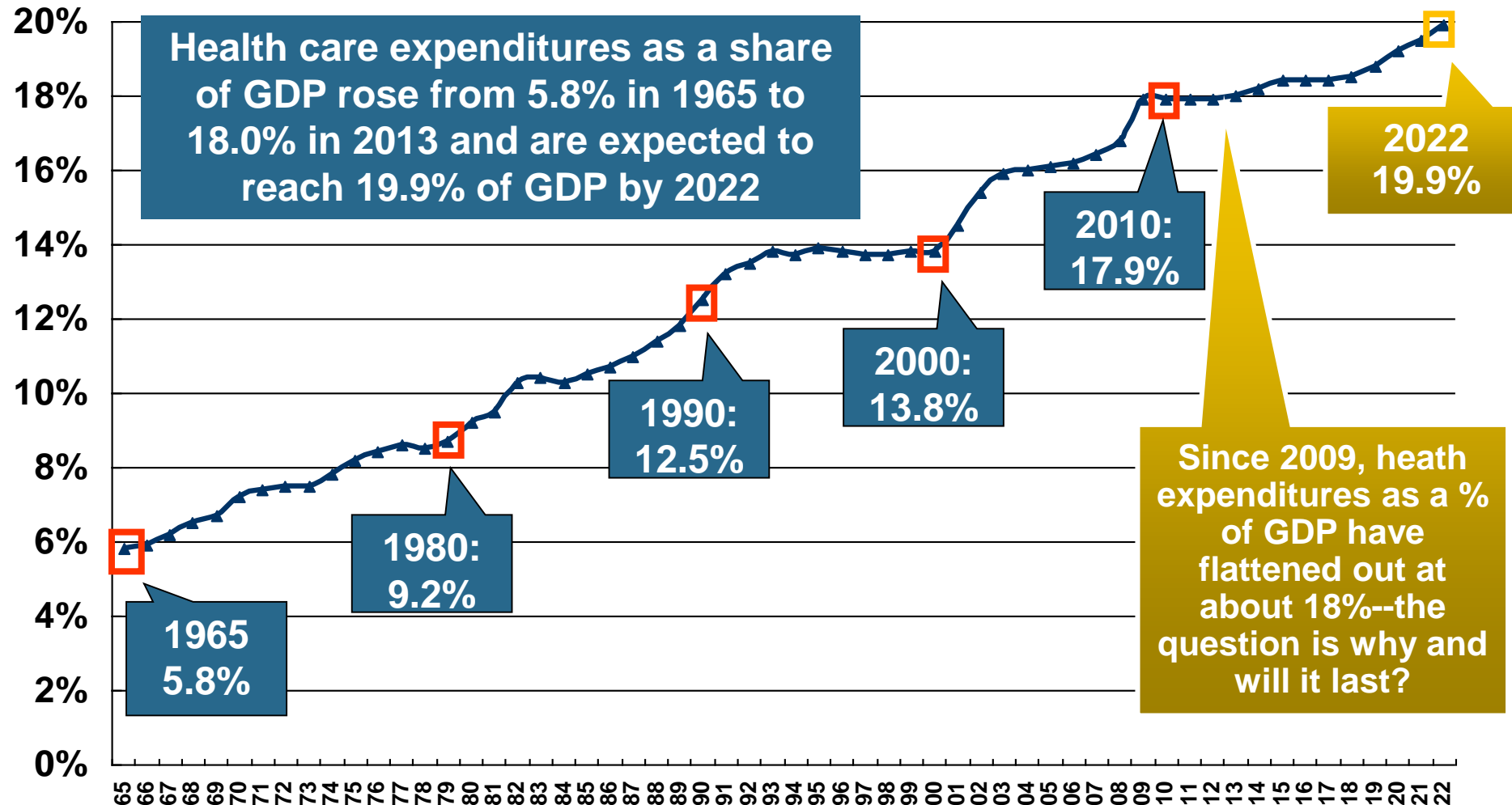
From 1965 through 2013, US health care expenditures had increased by 69 fold. Population growth over the same period increased by a factor of just 1.6. By 2022, health spending will have increased 119 fold.



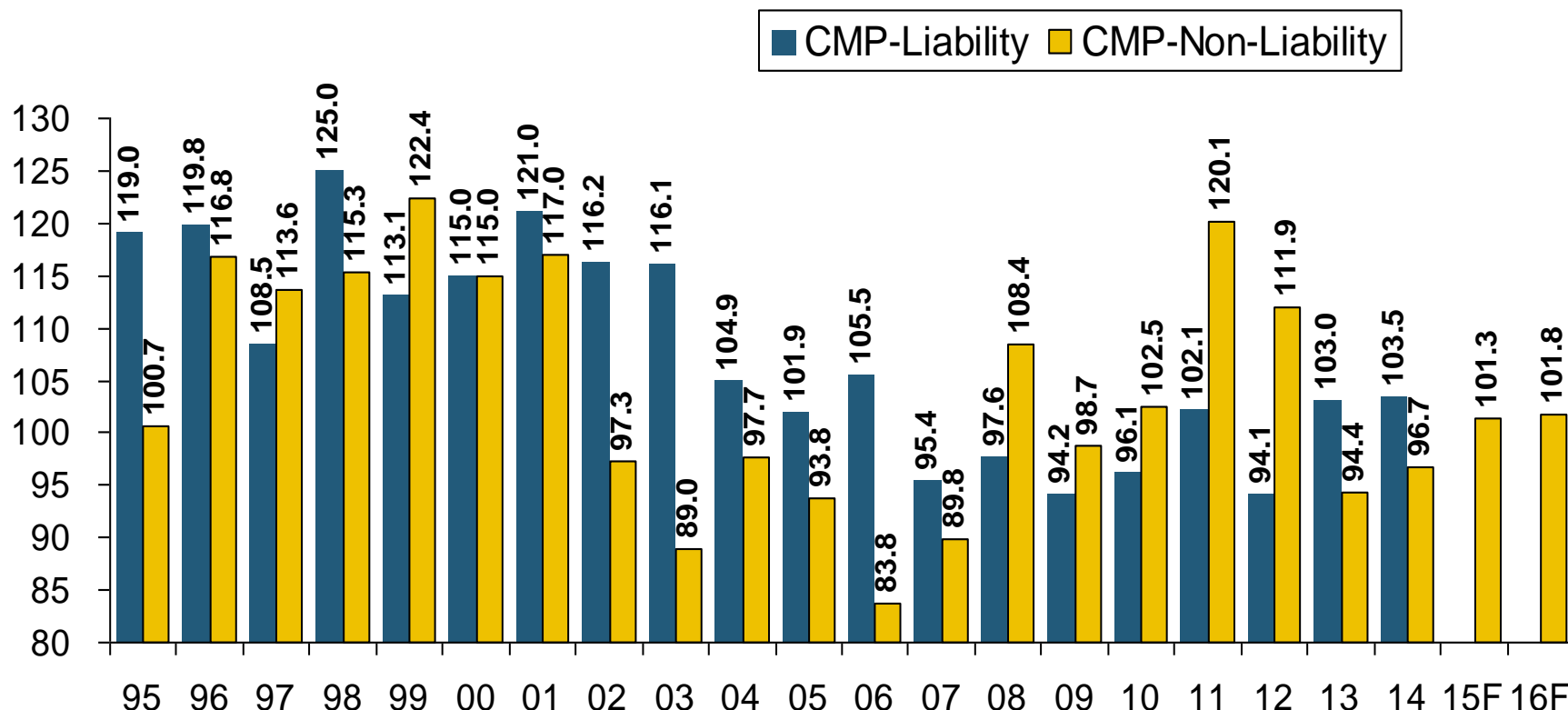
U.S. health care expenditures have been on a relentless climb for most of the past half century, far outstripping population growth, inflation of GDP growth

National Health Care Expenditures as a Share of GDP, 1965 – 2022F*

% of GDP



Commercial Multi-Peril Combined Ratio: 1995–2016F



Commercial Multi-Peril Underwriting Performance is Expected to Remains Stable in 2015 Assuming Normal Catastrophe Loss Activity

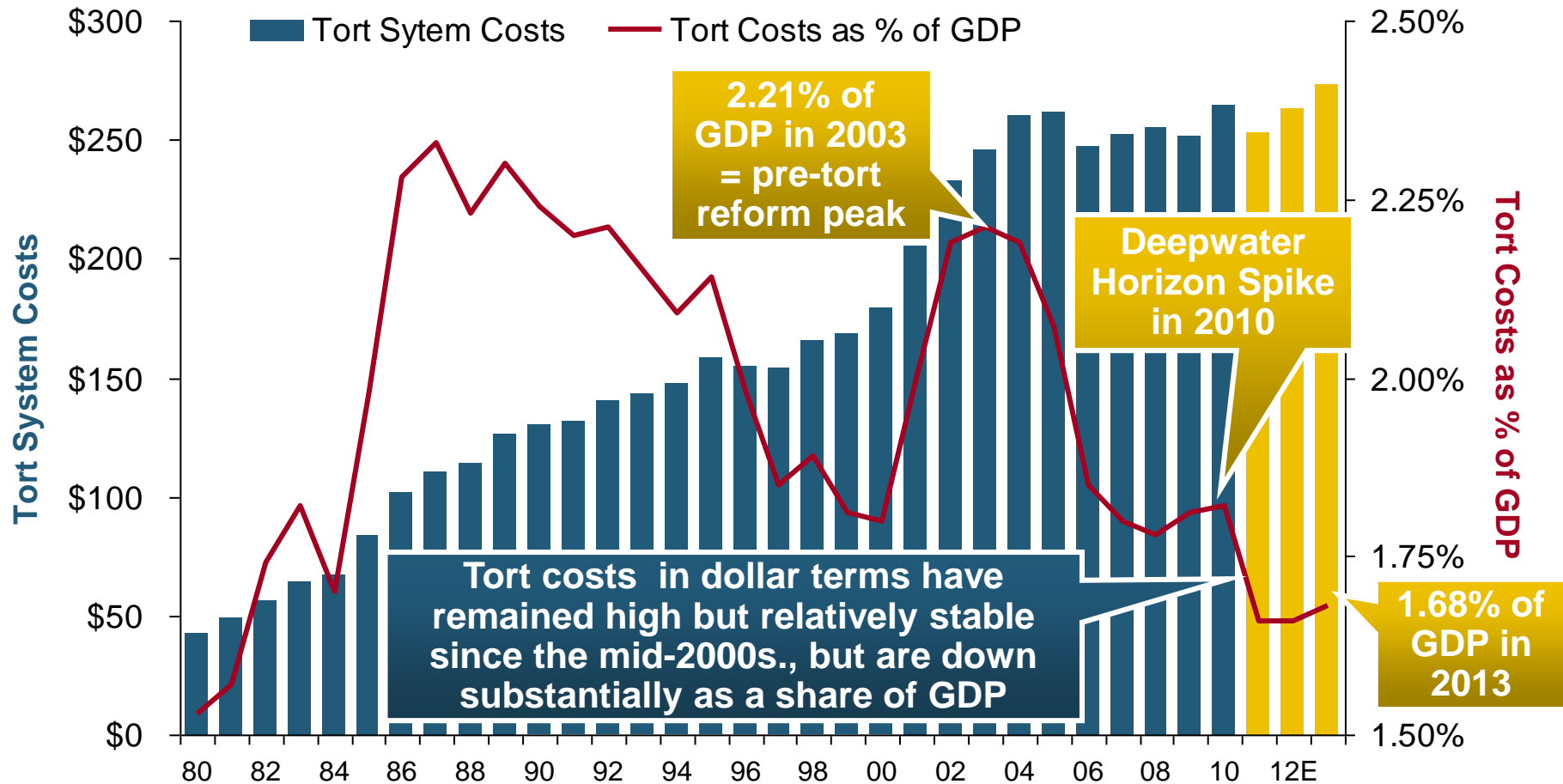
*2015F-2016F figures are Conning figures for the combined liability and non-liability components.
Sources: A.M. Best; Conning; Insurance Information Institute.

Umbrella/Excess

Are Risks Purchasing Enough Coverage?

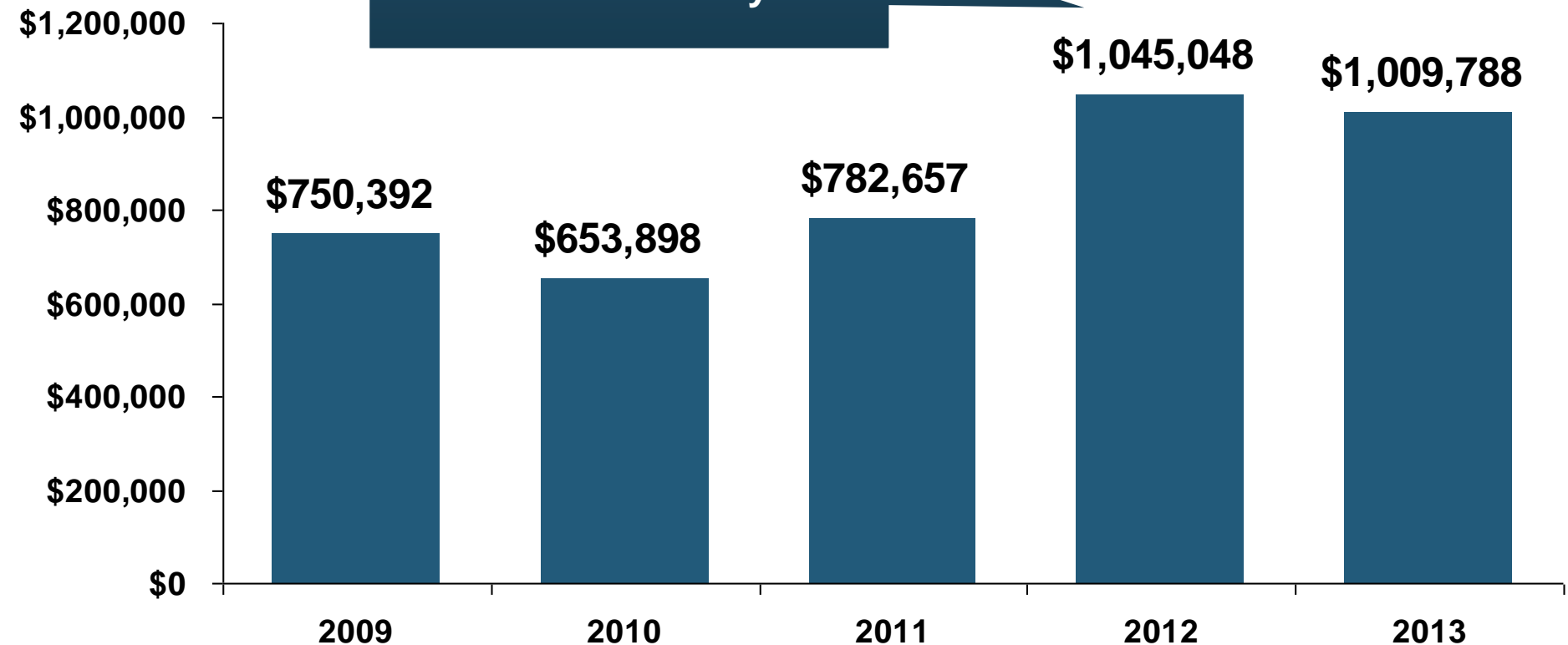
Over the Last Three Decades, Total Tort Costs as a % of GDP Appear Somewhat Cyclical, 1980-2013E

(\$ Billions)



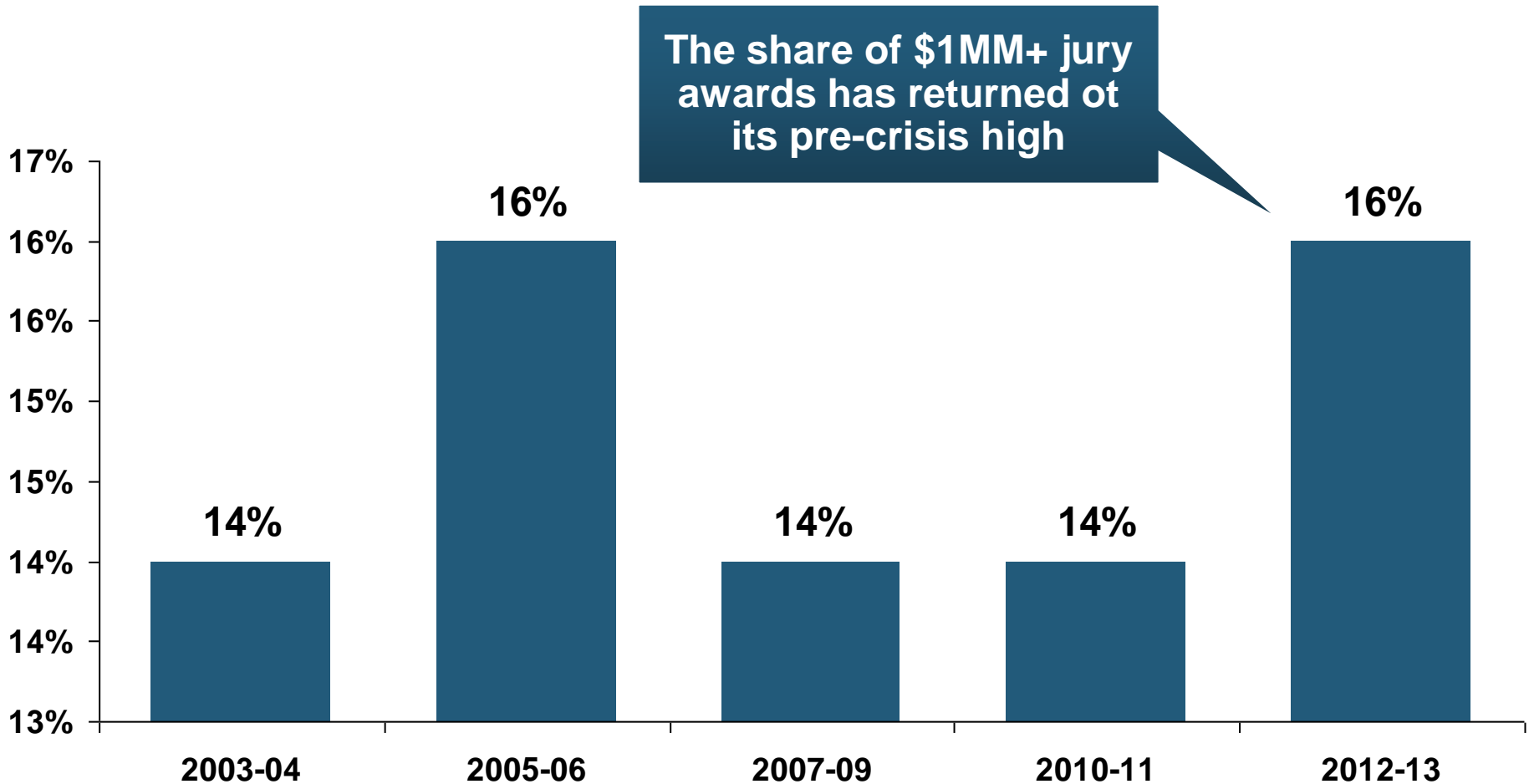
Average Personal Injury Jury Award, 2009 – 2013

Average awards in
Personal Injury cases
have increased by more
than 1/3 in recent years



Source: *Current Award Trends in Personal Injury*, 54th Edition; Insurance Information Institute.

Percent of Personal Injury Jury Awards Over \$1 Million, 2003 – 2013*

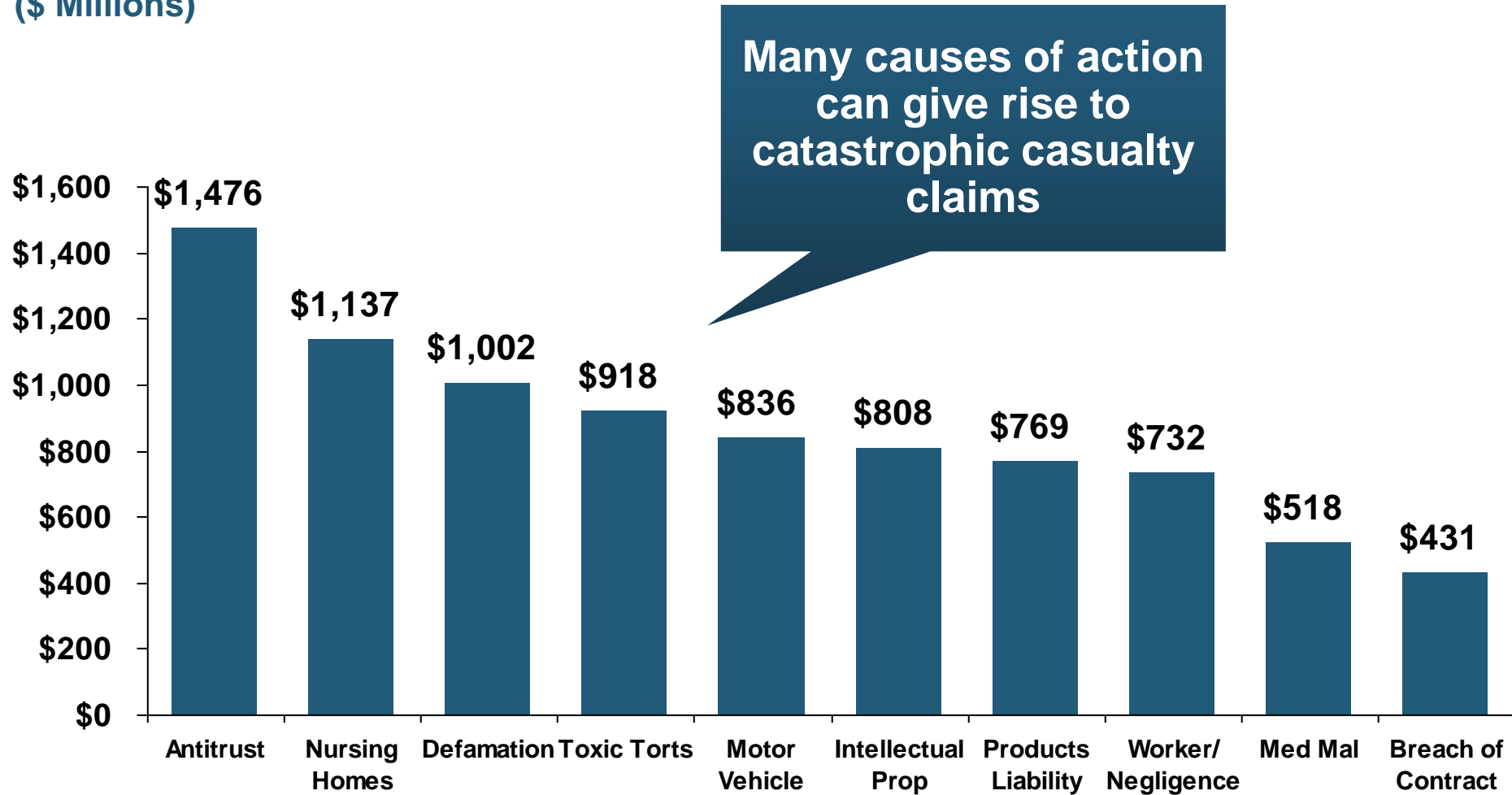


*Latest available.

Source: *Current Award Trends in Personal Injury*, 53rd and 54th Editions; Insurance Information Institute.

Dollar Value of Top 100 Verdicts in 2013 by Cause of Action, 2013

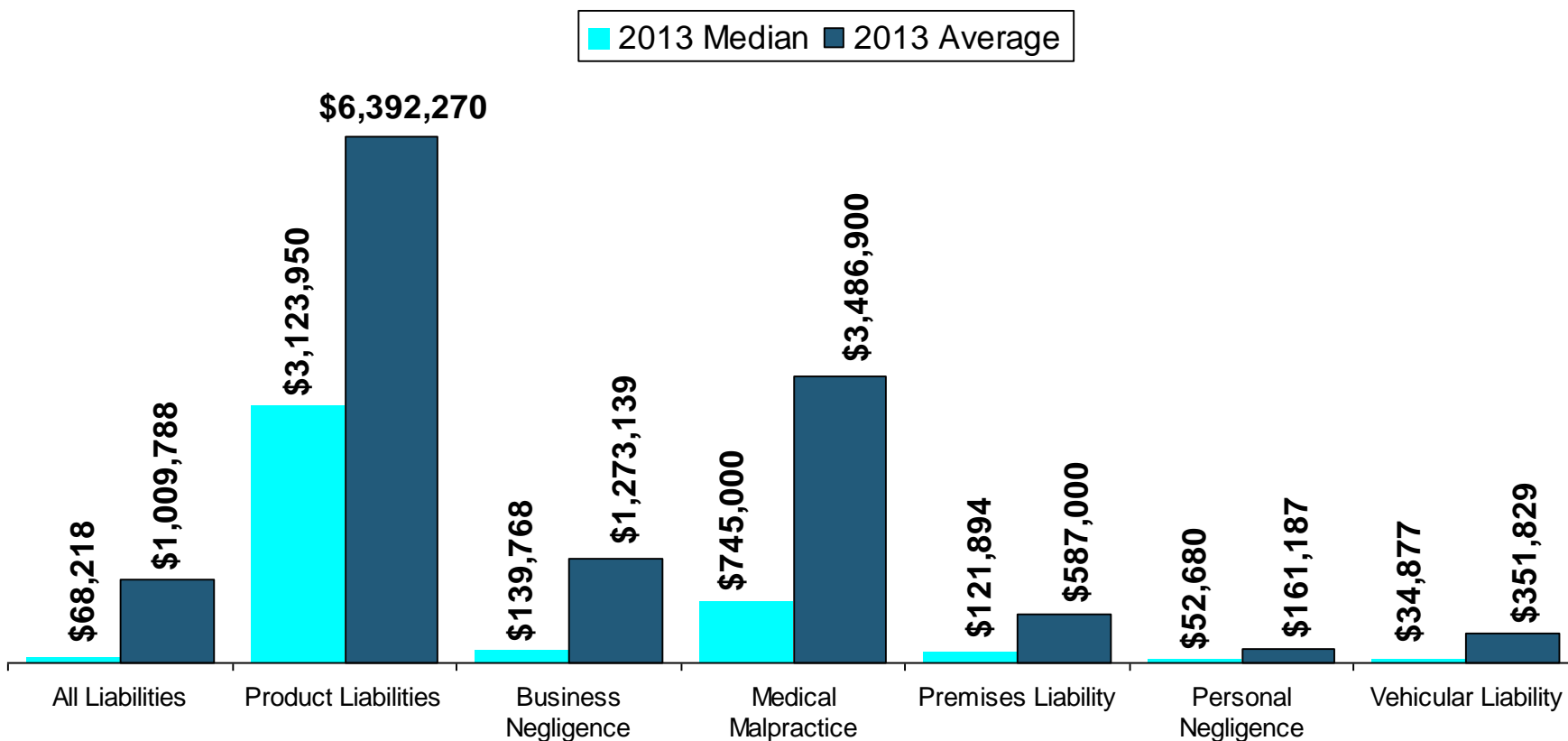
(\$ Millions)



Source: VerdictSearch as cited in *Reevaluating Excess Casualty Protection as Liability Losses Increase*, Marsh Risk Management Research Briefing, Oct. 2014.

Median and Average Personal Injury Jury Award by Type of Liability, 2013

Products Liability and Medical Malpractice cases tend to have among the highest jury awards



Source: *Current Award Trends in Personal Injury*, 54th Edition; Insurance Information Institute.

Defense Costs and Cost Containment Expenses as a Percent of Incurred Losses, 2011 – 2013*

(\$000)

	2011		2012		2013	
	Amount	As a percent of incurred losses	Amount	As a percent of incurred losses	Amount	As a percent of incurred losses
Products liability	\$1,140,230	72.0%	\$873,860	114.7%	\$1,166,236	75.1%
Medical malpractice	1,793,296	57.5	1,686,009	45.7	1,656,049	53.3
Commercial multiple peril (2)	1,896,935	37.6	2,022,739	46.0	2,096,543	37.7
Other liability	4,464,140	25.0	4,959,838	24.8	4,914,106	25.4
Workers compensation	3,087,836	12.6	3,071,093	12.3	3,012,719	12.3
Commercial auto liability	960,961	10.3	1,091,434	10.4	1,207,596	10.7
Private passenger auto liability	3,960,967	6.2	4,353,427	6.7	4,600,395	6.8
All liability lines	\$17,304,365	13.8%	\$18,058,400	13.9%	\$18,653,644	14.0%

(1) Net of reinsurance, excludes state funds.

(2) Liability portion only.

Defense and Cost Containment expenses have edged up slightly in recent years

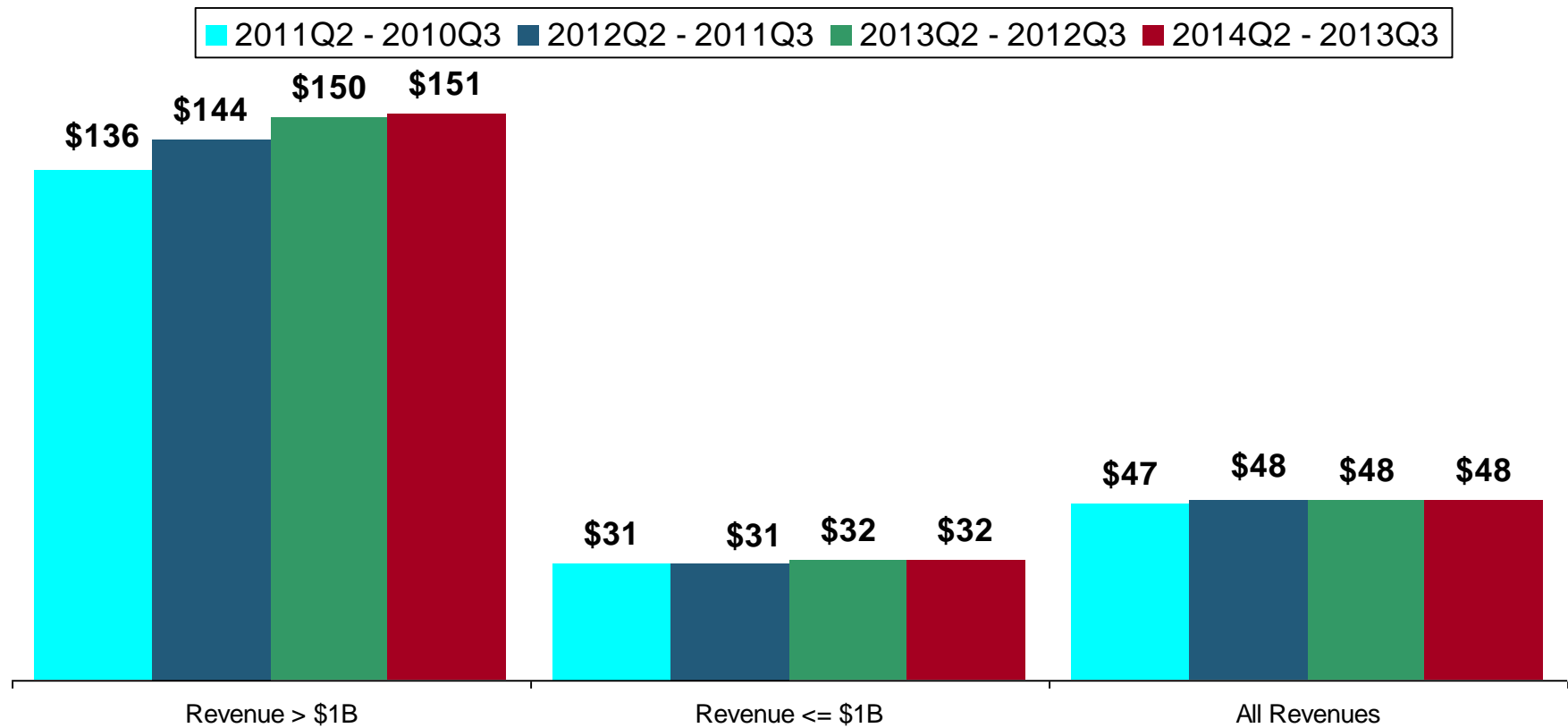
*Latest available.

Source: SNL Financial; Insurance Information Institute.

Average Total Excess/Umbrella Limits Purchased, By Revenue Size

Average excess/umbrella limits purchased are flat

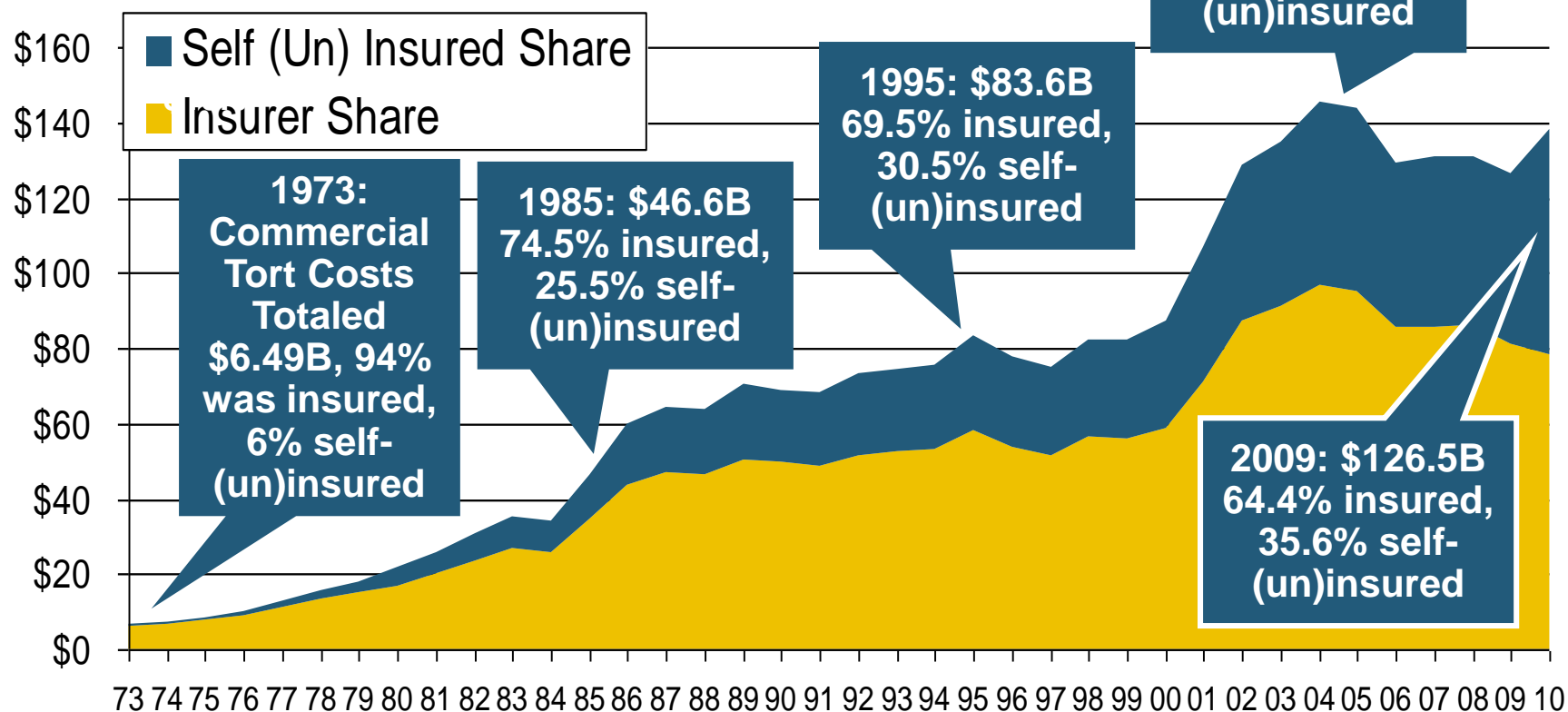
(\$ Millions)



Source: *Reevaluating Excess Casualty Protection as Liability Losses Increase*, Marsh Risk Management Research Briefing, Oct. 2014.

Commercial Lines Tort Costs: Insured vs. Self-(Un)Insured Shares, 1973-2010

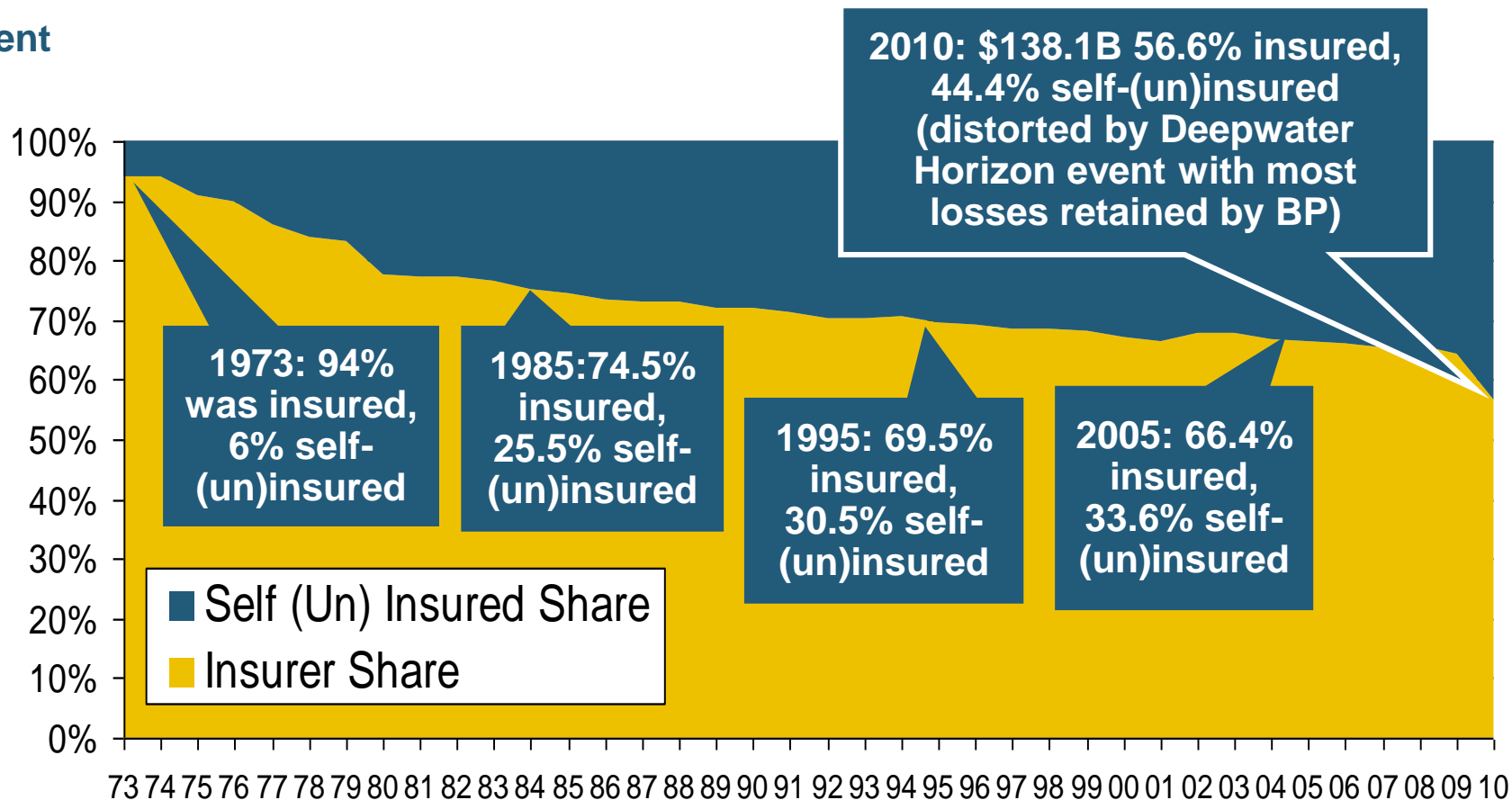
Billions of Dollars



Tort Costs and the Share Retained by Risks Both Grew Rapidly from the mid-1970s to mid-2000s, When Tort Costs Began to Fall But Self-Insurance Shares Continued to Rise

Commercial Lines Tort Costs: Insured vs. Self-(Un)Insured Shares, 1973-2010

Percent



The Share of Tort Costs Retained by Risks Has Been Steadily Increasing for Nearly 40 Years. This Trend Contributes Has Left Insurers With Less Control Over Pricing.

Business Leaders Ranking of Liability Systems in 2015

■ Best States

1. Delaware
2. Vermont
3. Nebraska
4. Iowa
5. New Hampshire
6. Idaho
7. North Carolina
8. Wyoming
9. South Dakota
10. Utah

New in 2015

- Vermont
- New Hampshire
- North Carolina
- South Dakota

Drop-offs

- Minnesota
- Kansas
- Virginia
- North Dakota

■ Worst States

41. Arkansas
42. Missouri
43. Mississippi
44. Florida
45. New Mexico
46. Alabama
47. California
48. Illinois
49. Louisiana
50. West Virginia

Newly Notorious

- Arkansas
- Missouri

Rising Above

- Oklahoma
- Montana

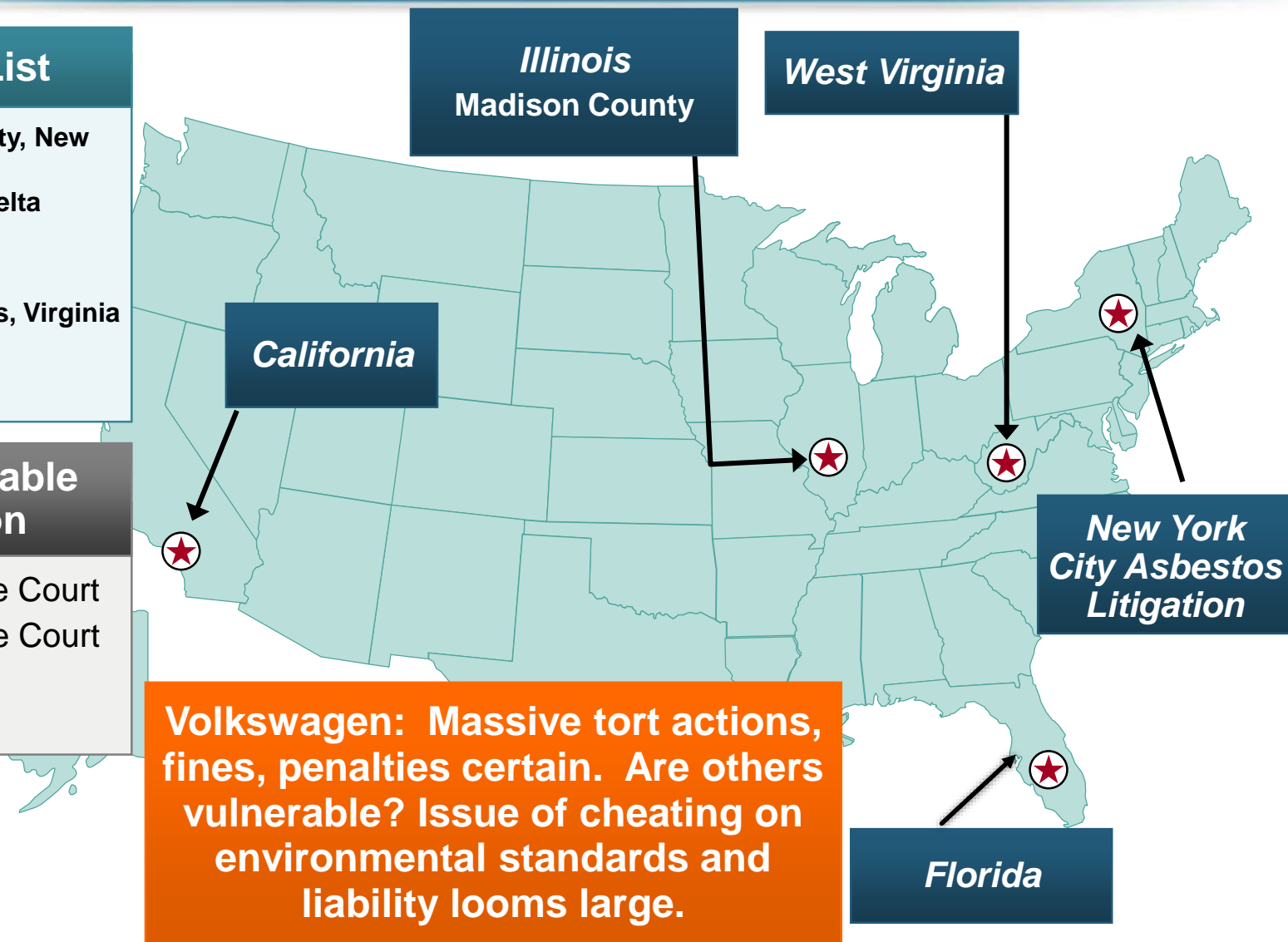
The Nation's Judicial "Hellholes": 2014/2015

Watch List

- Atlantic County, New Jersey
- Mississippi Delta
- Montana
- Nevada
- Newport News, Virginia
- Philadelphia, Pennsylvania

Dishonorable Mention

- AL Supreme Court
- PA Supreme Court

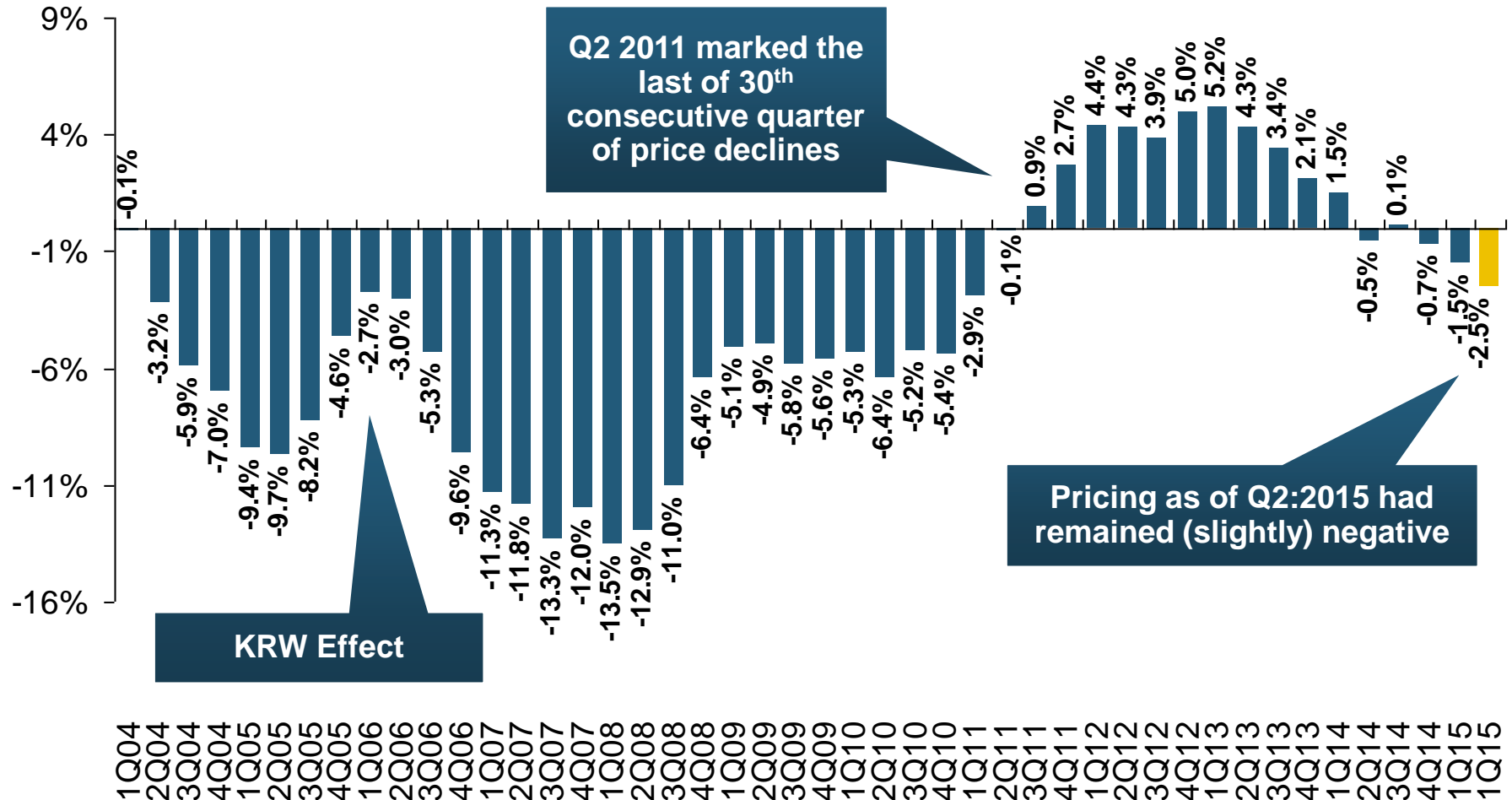


Pricing Trends

**Survey Results Suggest
Commercial Pricing Has
Flattened**

CIAB: Average Commercial Rate Change, All Lines, (1Q:2004–2Q:2015)

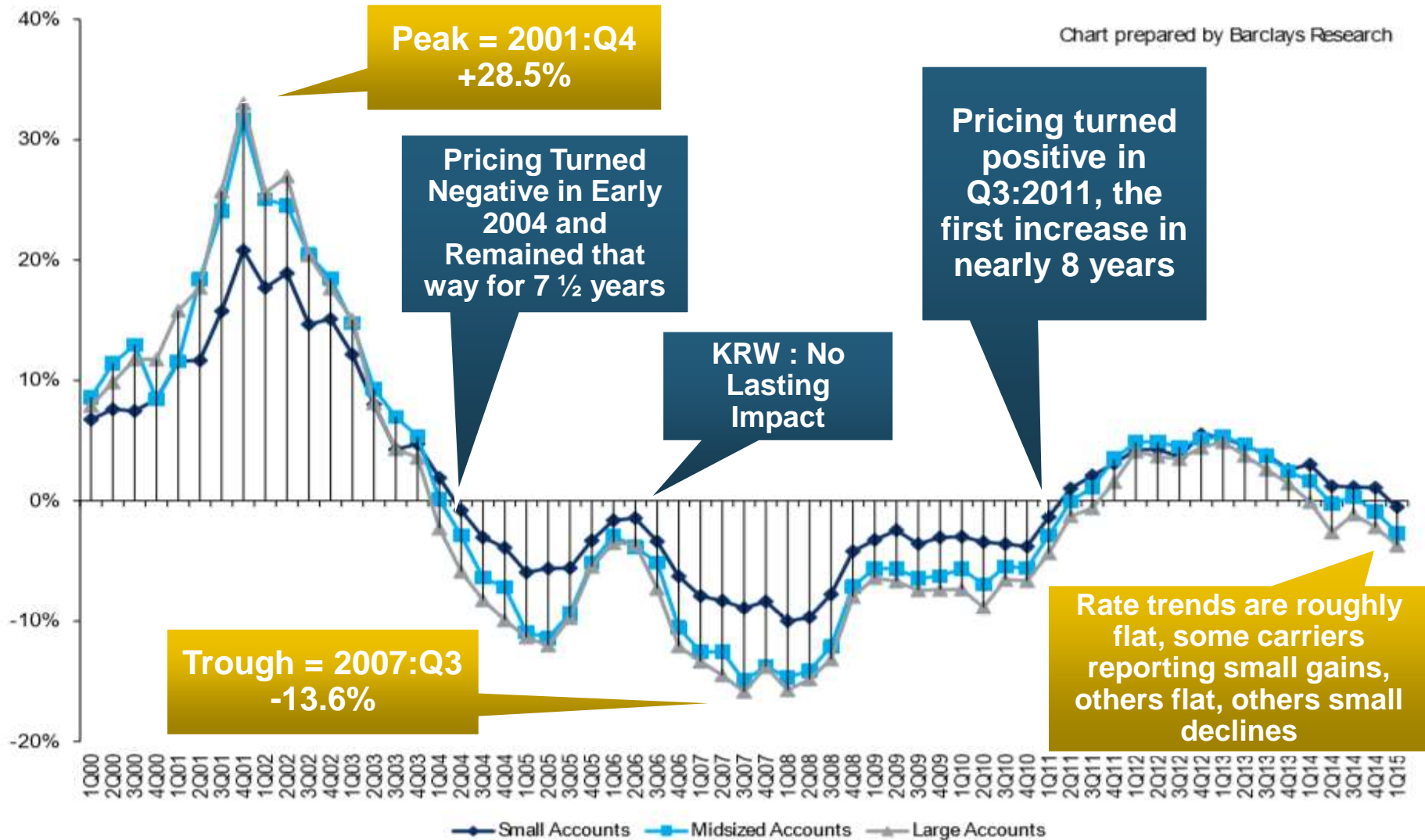
(Percent)



Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.
Source: Council of Insurance Agents & Brokers; Insurance Information Institute

Change in Commercial Rate Renewals, by Account Size: 1999:Q4 to 2015:Q1

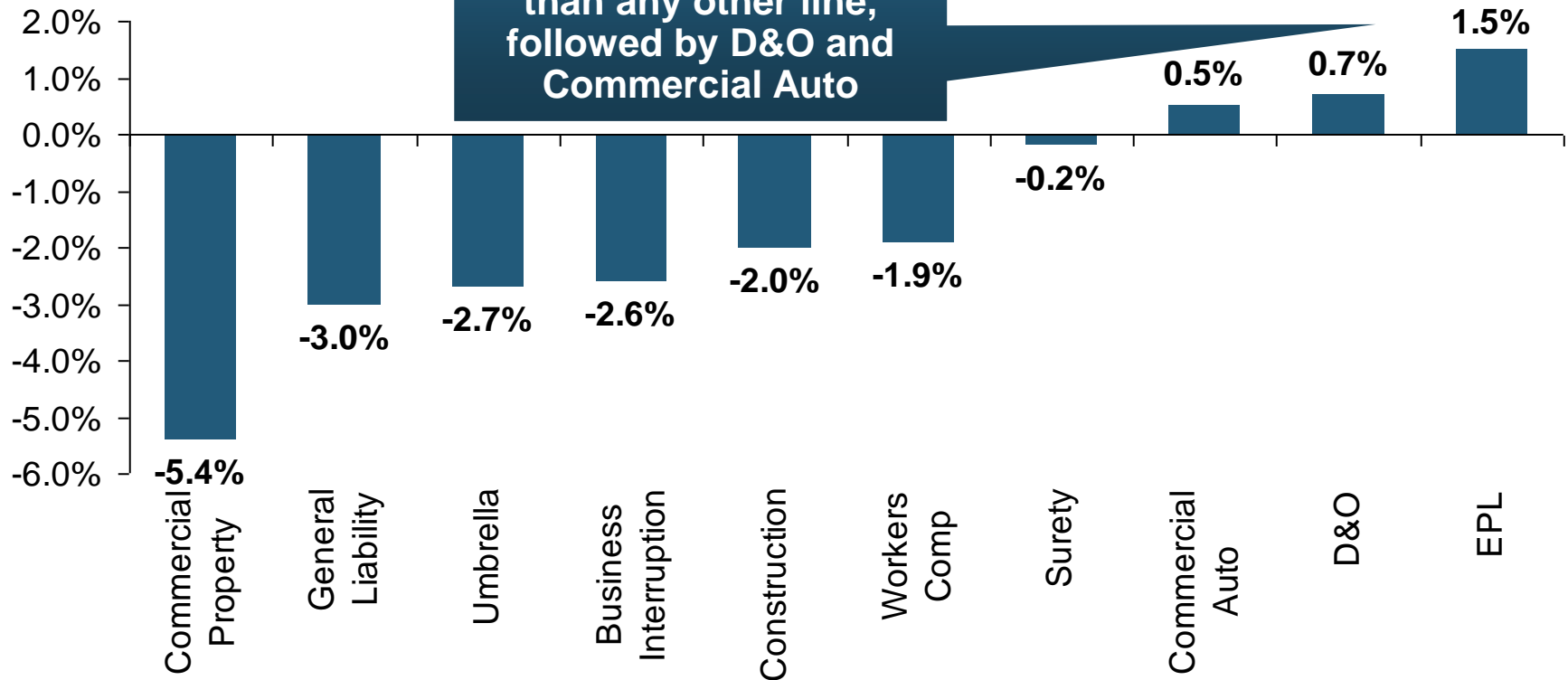
Percentage Change (%)



Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, *potentially substantially*.
Source: Council of Insurance Agents and Brokers; Barclay's Capital; Insurance Information Institute.

Change in Commercial Rate Renewals, by Line: 2015:Q2

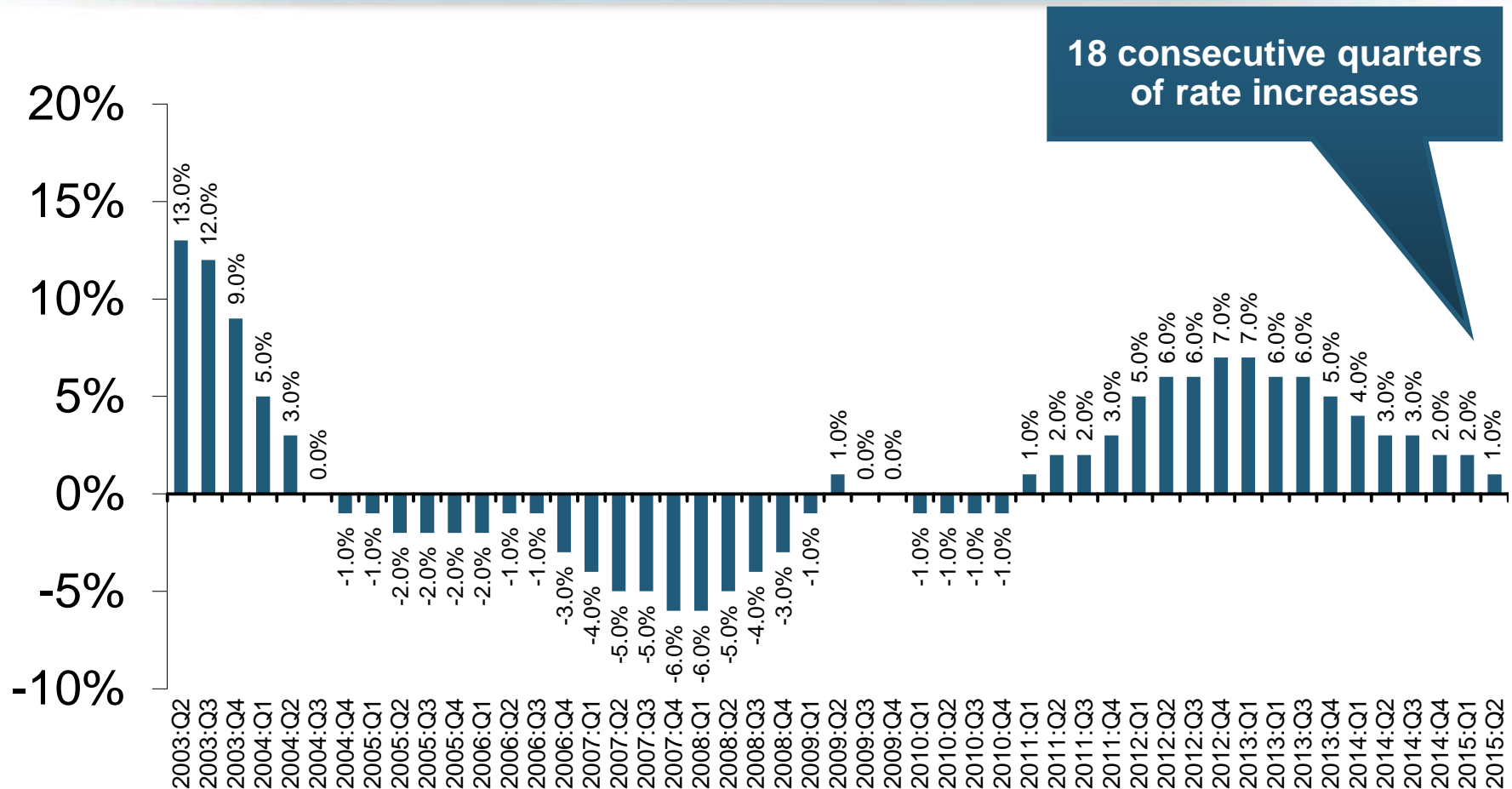
Percentage Change (%)



Major Commercial Lines Renewals Were Mixed to Flat in Q2:2015; EPL, D&O and Commercial Auto Led the Way

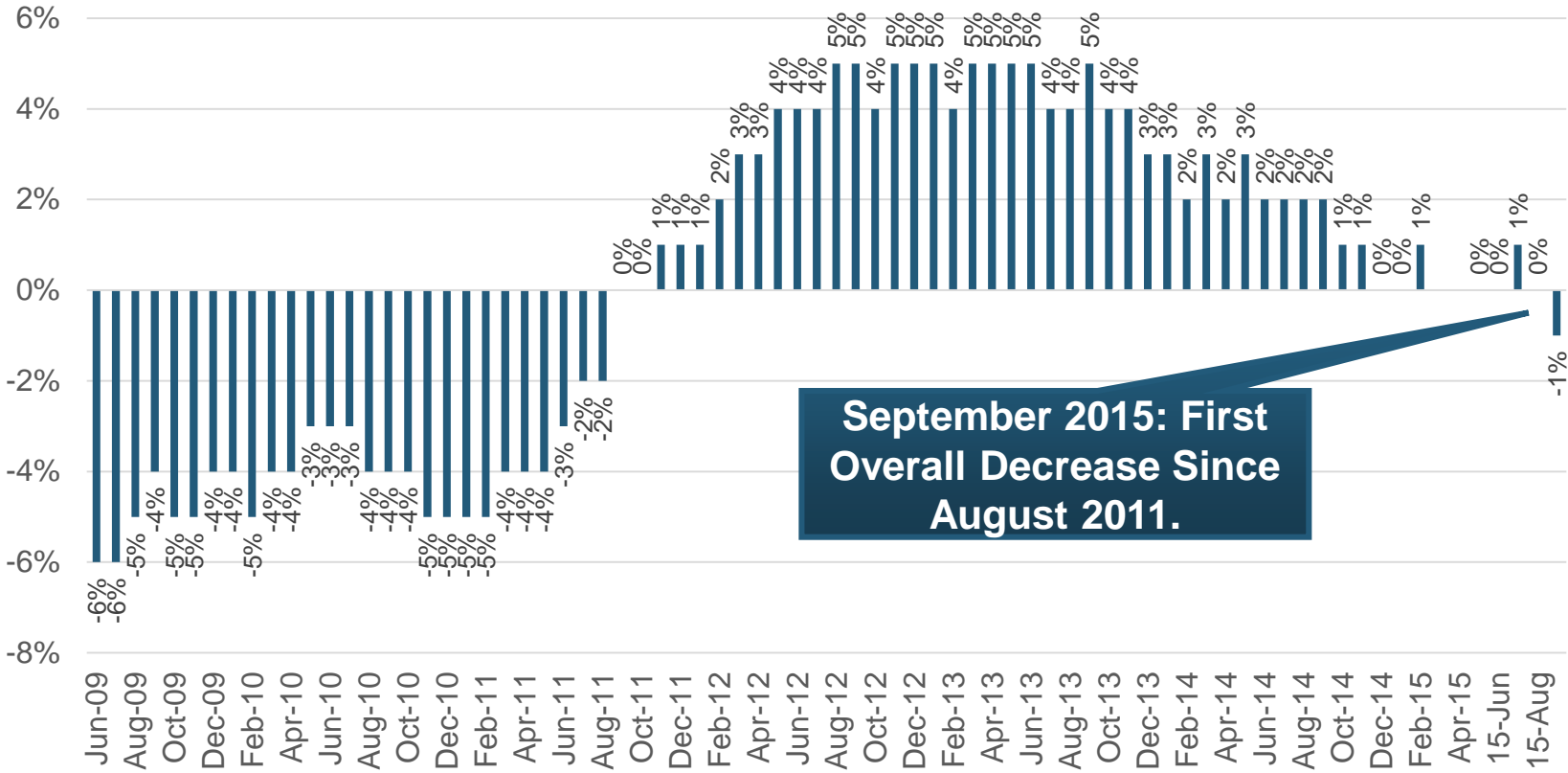
Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.
Source: Council of Insurance Agents and Brokers; Insurance Information Institute.

Towers Watson: Commercial Lines Rate Change by Qtr (vs. Year Earlier)



Hard Market (Such As It Is) Appears to Have Passed Its Peak.

MarketScout: Commercial Lines Rate Change by Month (vs. Yr. Earlier) Since 6/09

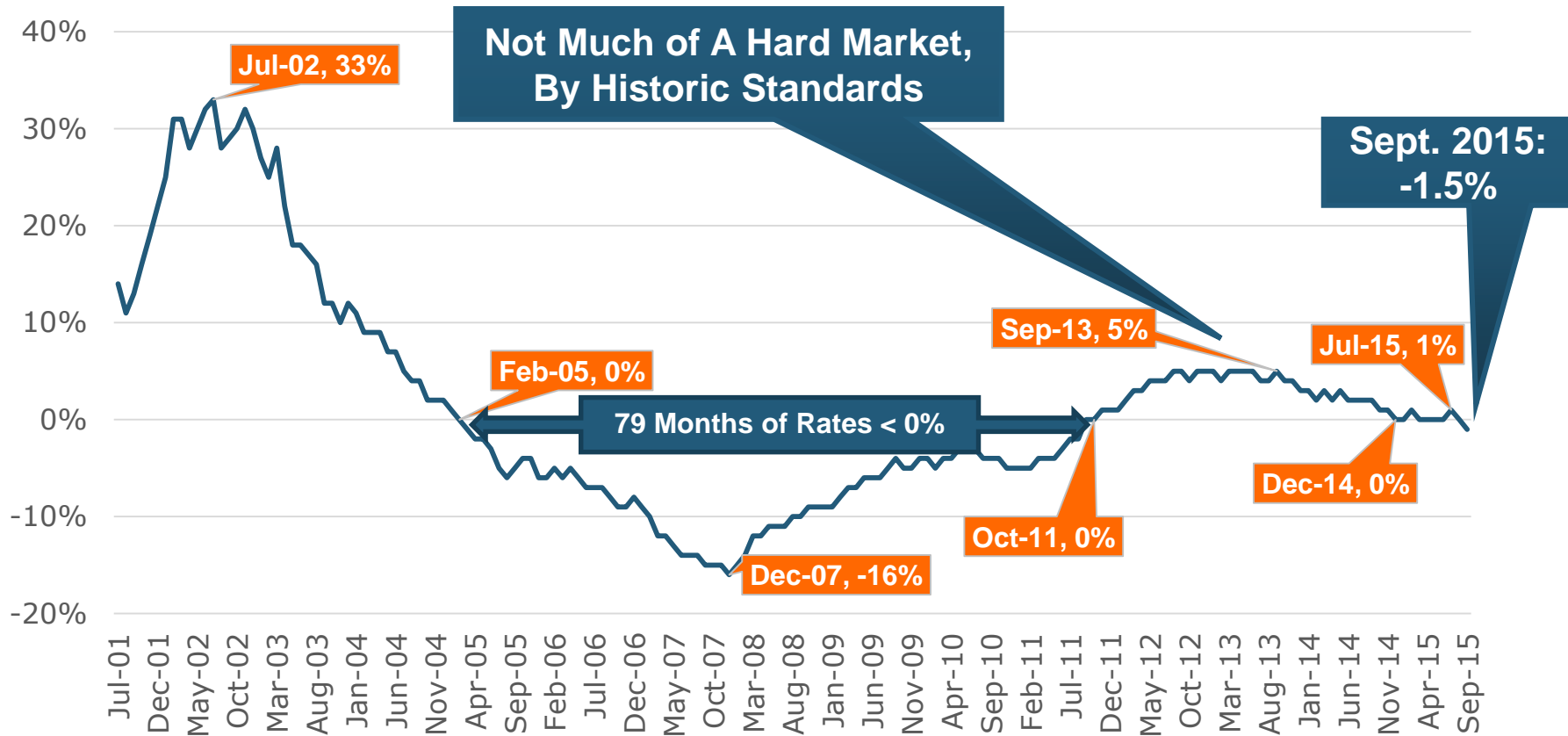


September 2015: First Overall Decrease Since August 2011.

Rate Change Has Been 0% or 1% Since October 2014.

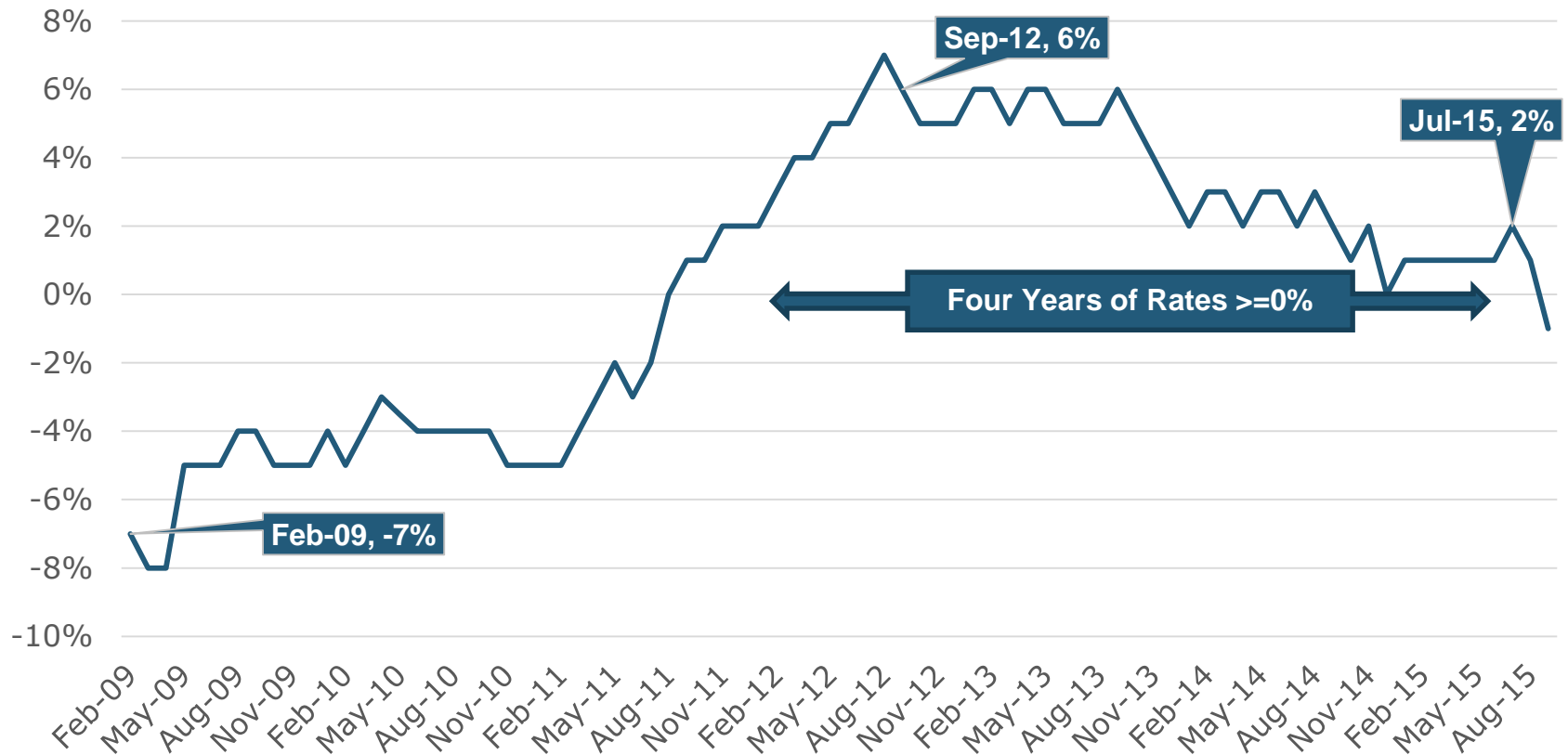
SOURCE: MarketScout, Insurance Information Institute.

Commercial Lines Rate Change by Month (vs. Year Earlier)



Rates Are As Stable As They've Been in 15 Years.

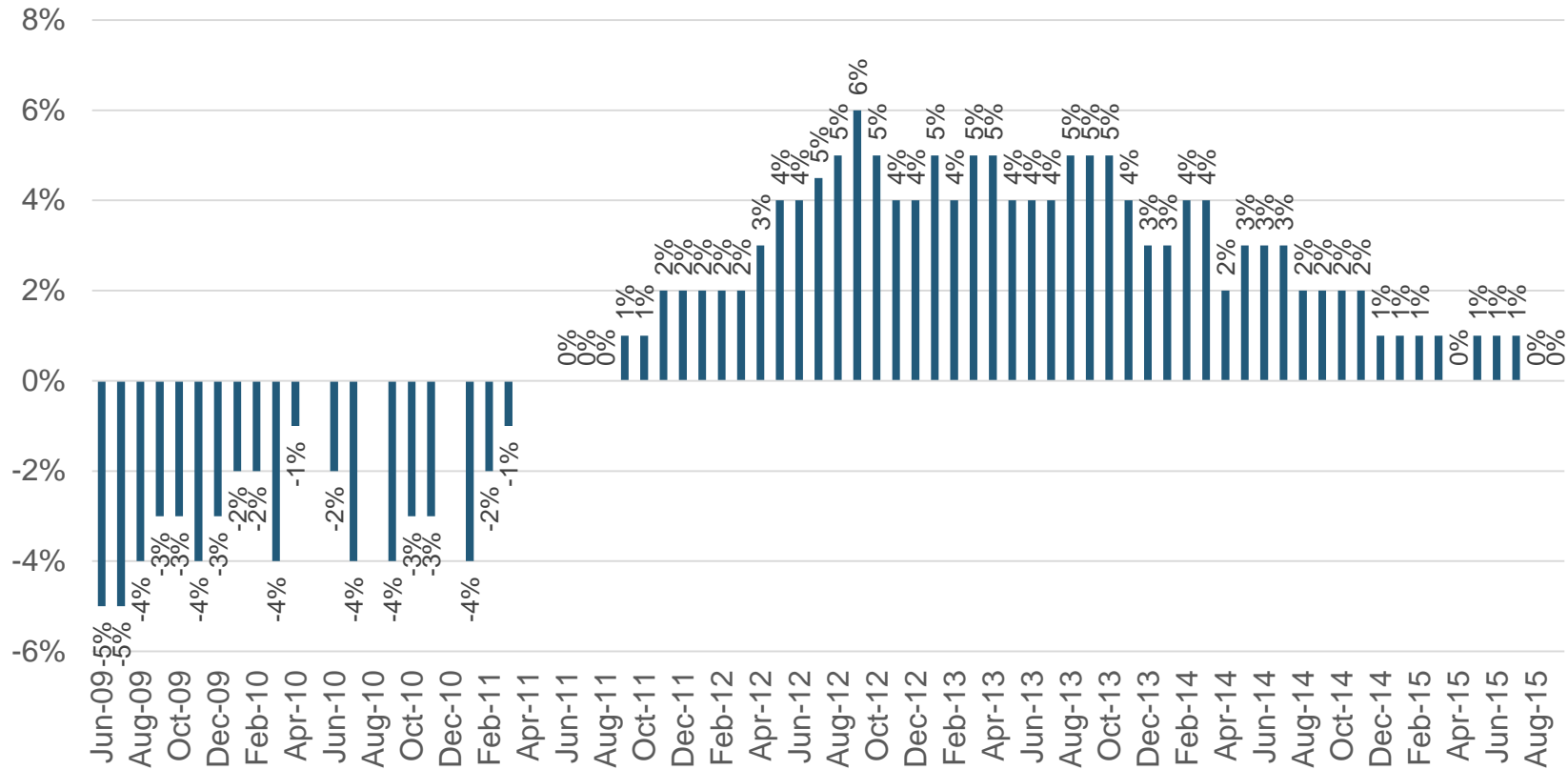
Commercial Property Rate Change by Month (vs. Year Earlier)



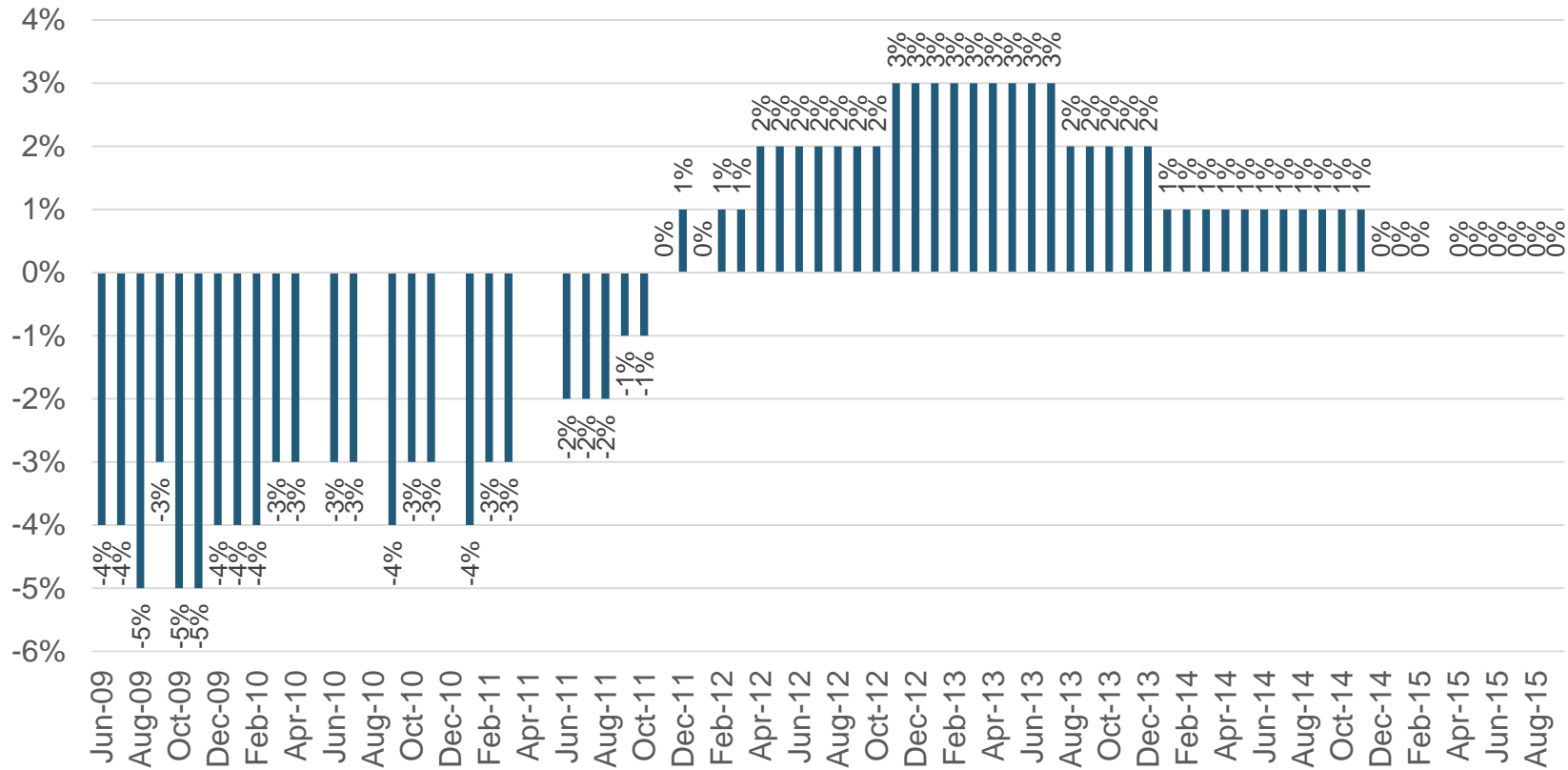
Commercial Property Rates Track Closely With Commercial Rates Overall.

SOURCE: MarketScout, Insurance Information Institute.
Interpolated Commercial Property Estimates for May, August, September 2010.

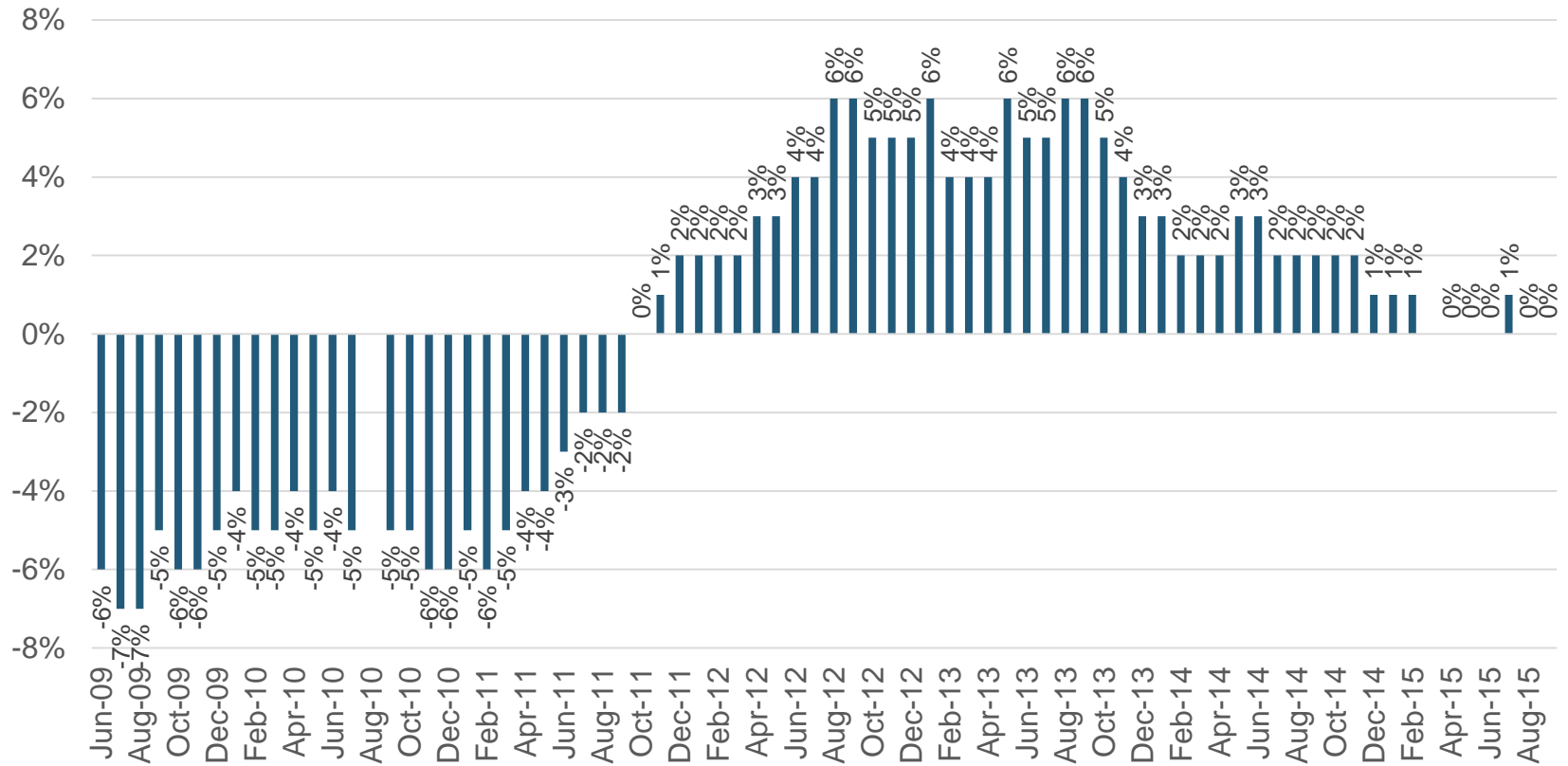
BOP Rate Change by Month (vs. Year Earlier)



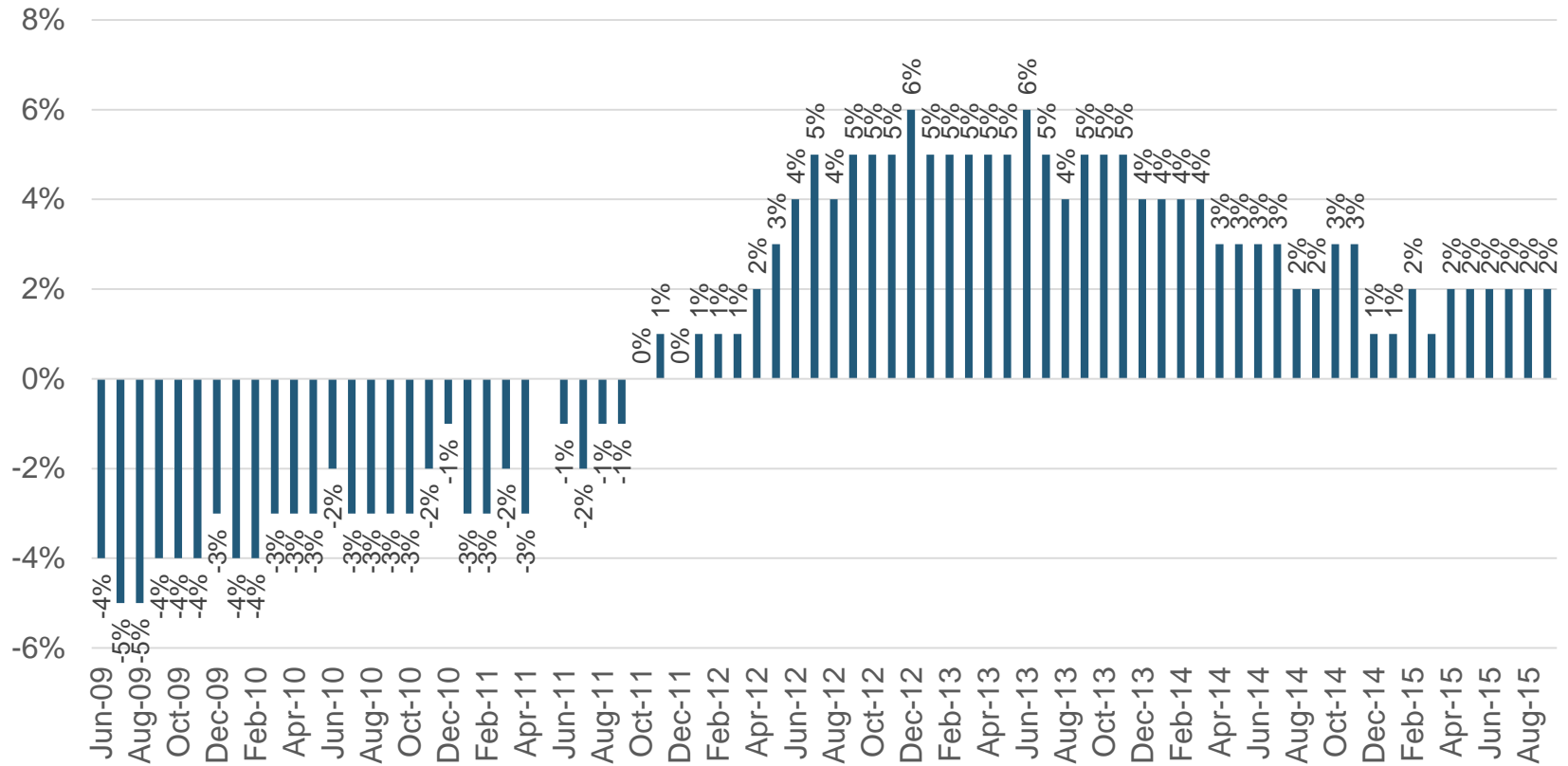
Inland Marine Rate Change by Month (vs. Year Earlier)



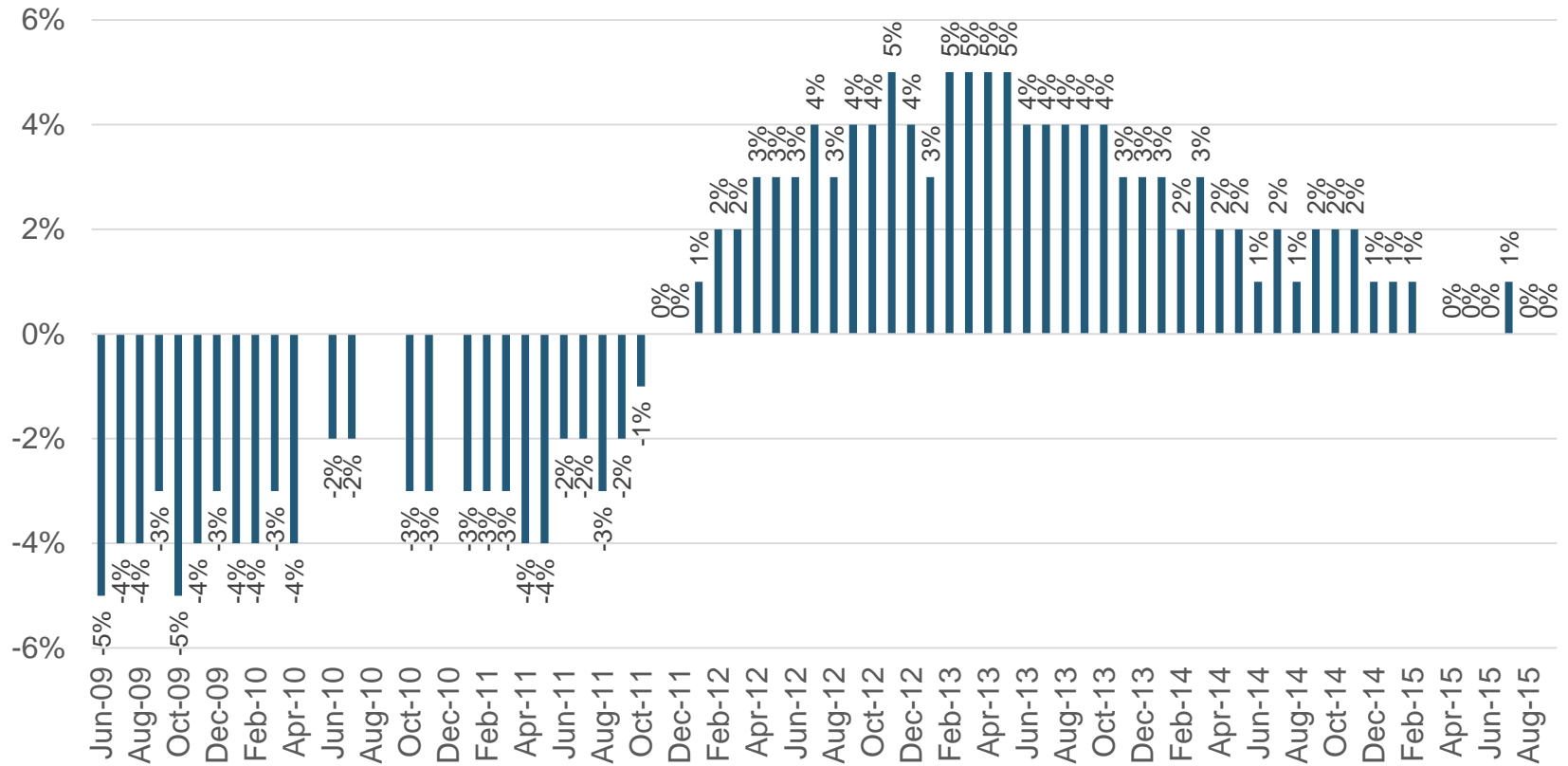
General Liability Rate Change by Month (vs. Year Earlier)



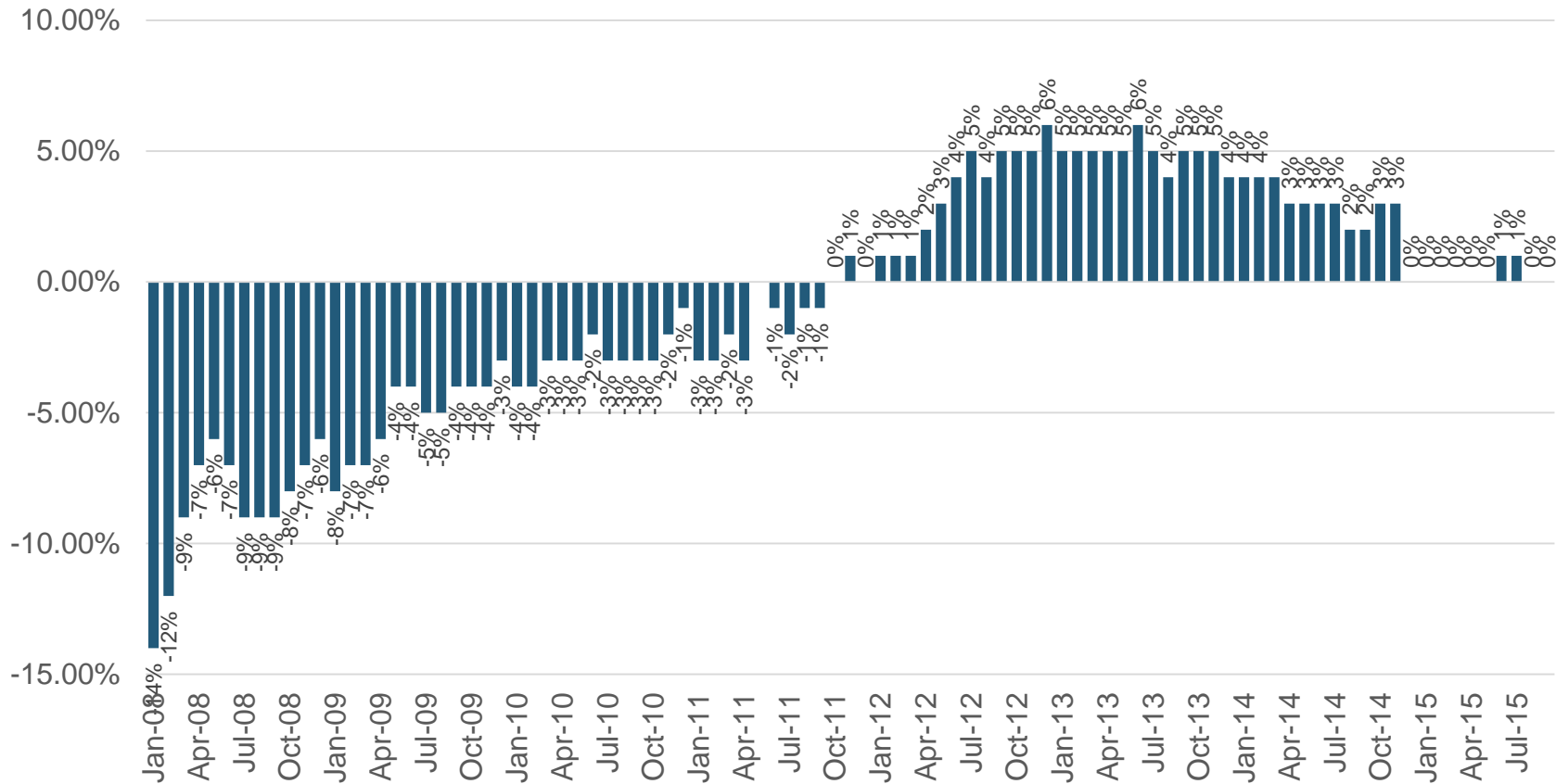
Commercial Auto Rate Change by Month (vs. Year Earlier)



Umbrella/Excess Rate Change by Month (vs. Year Earlier)

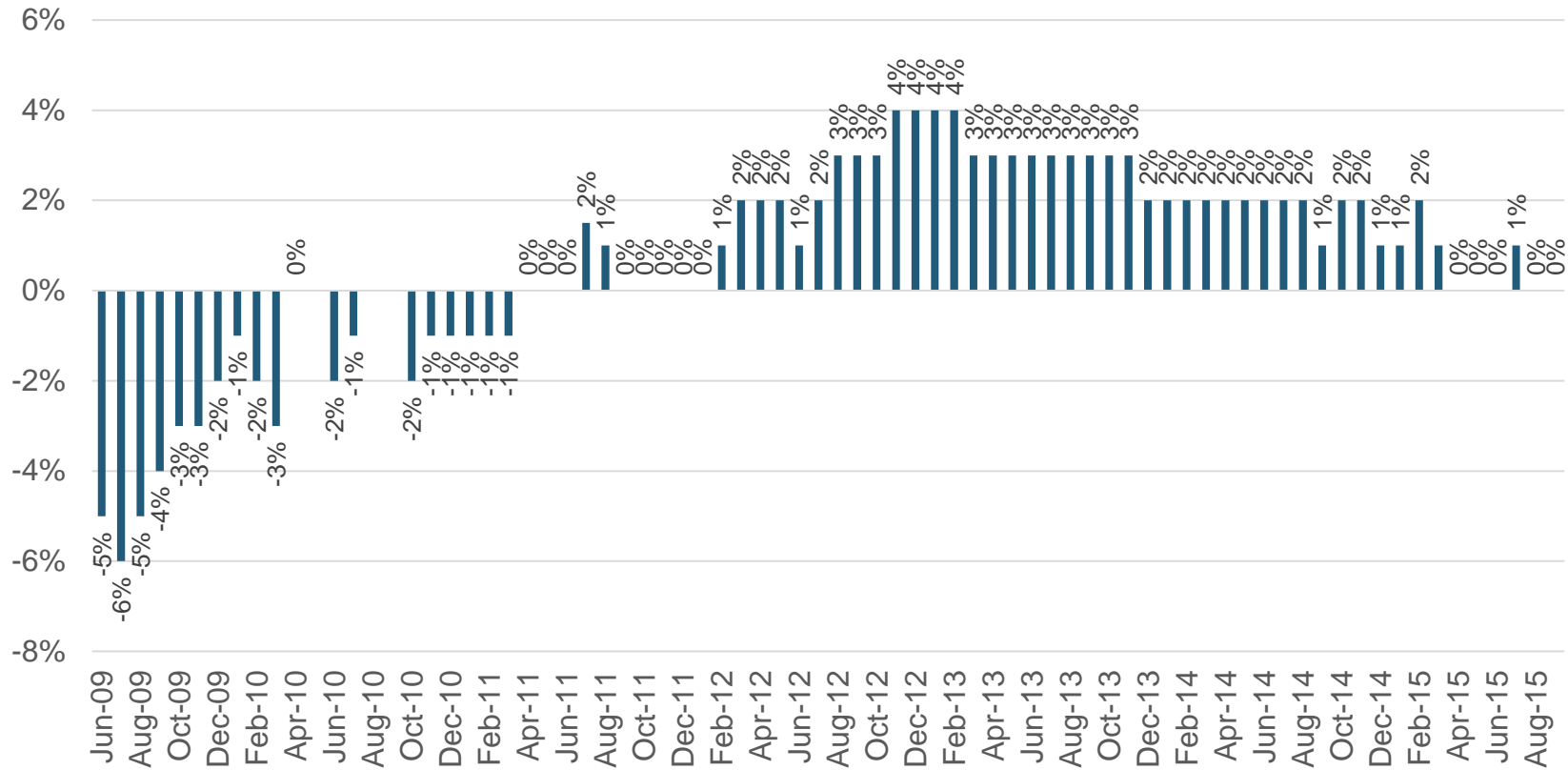


Workers Comp Rate Change by Month (vs. Year Earlier)

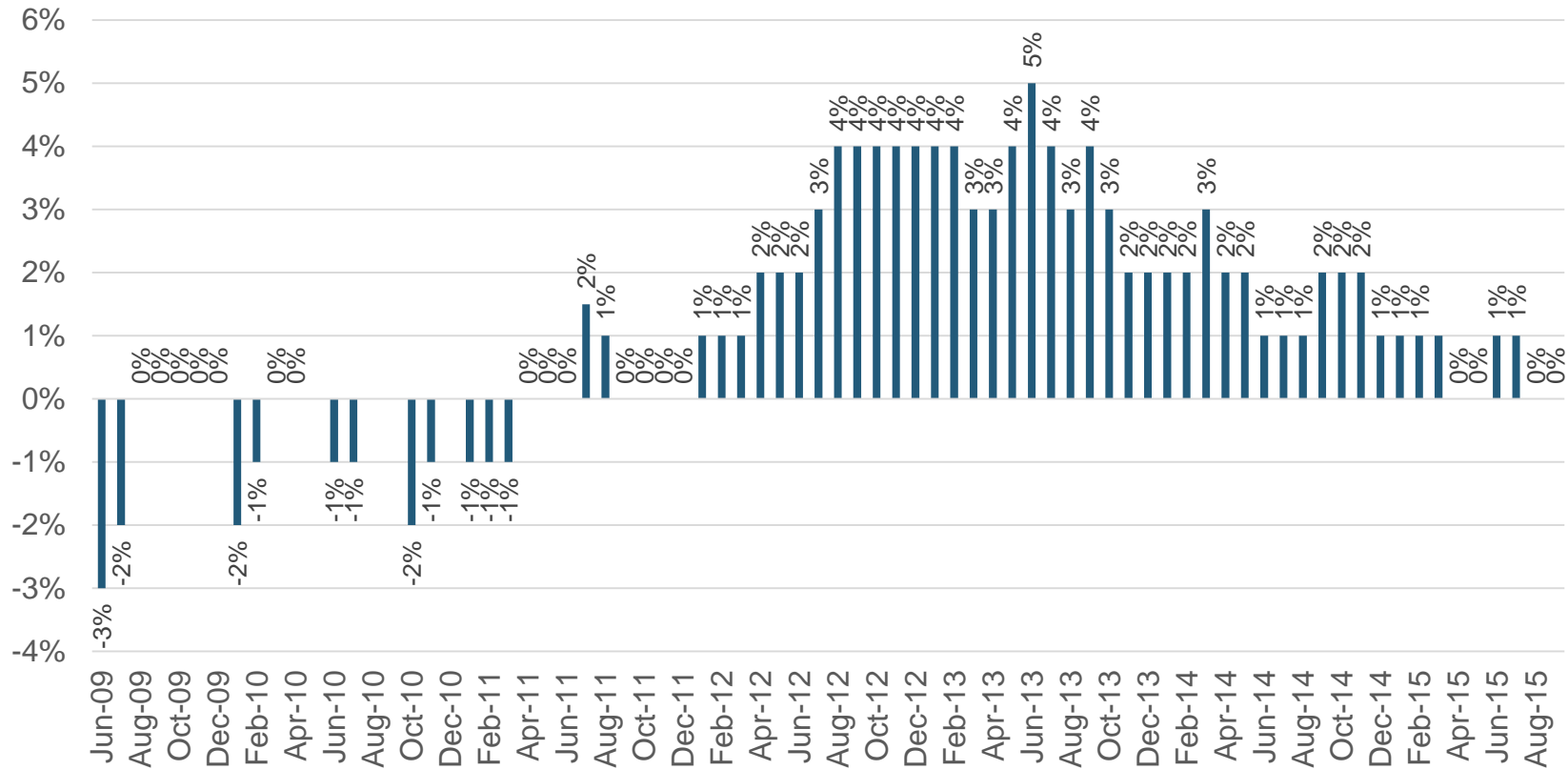


Sources: MarketScout, Insurance Information Institute.

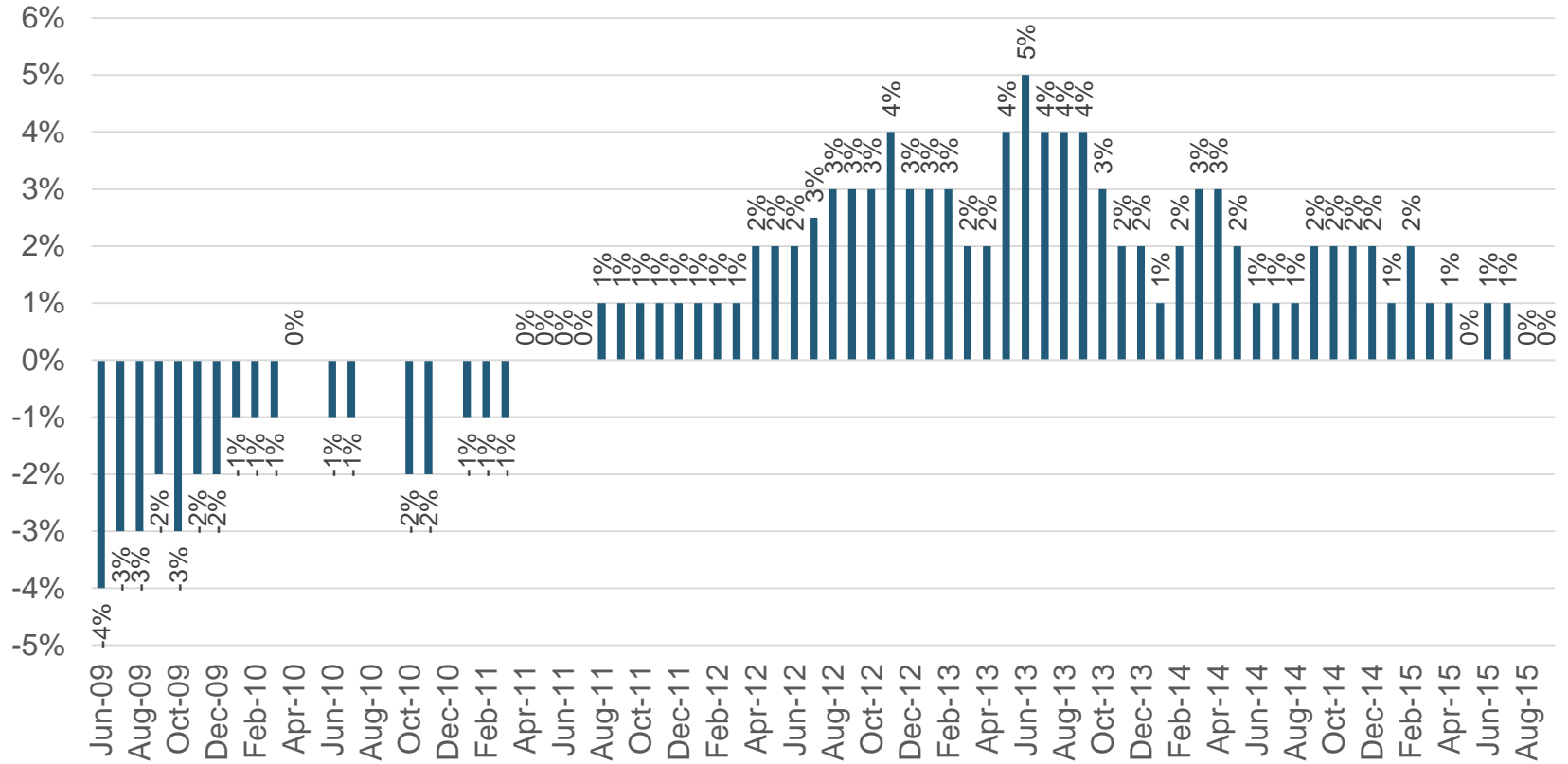
Professional Liability Rate Change by Month (vs. Year Earlier)



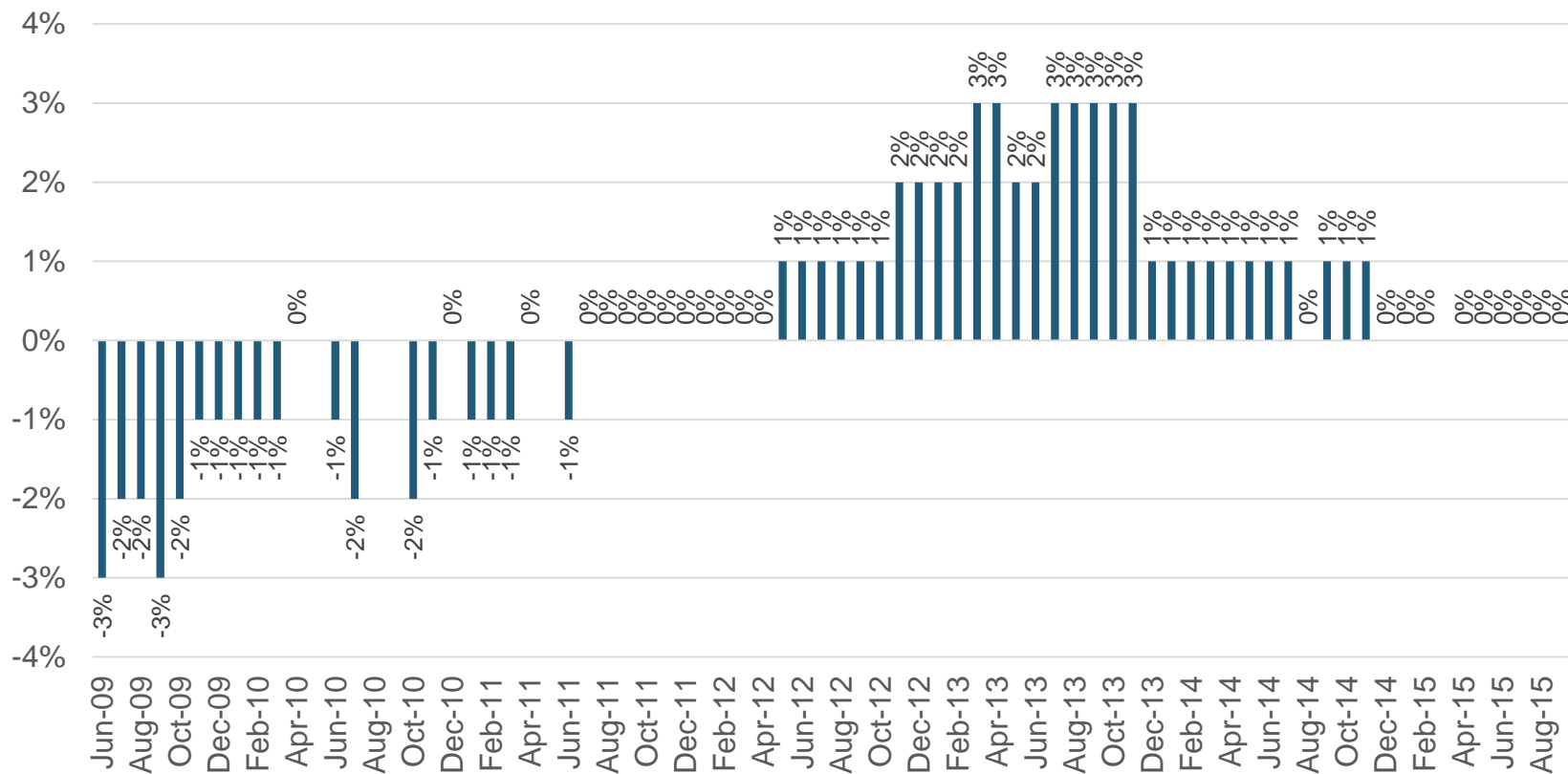
D&O Liability Rate Change by Month (vs. Year Earlier)



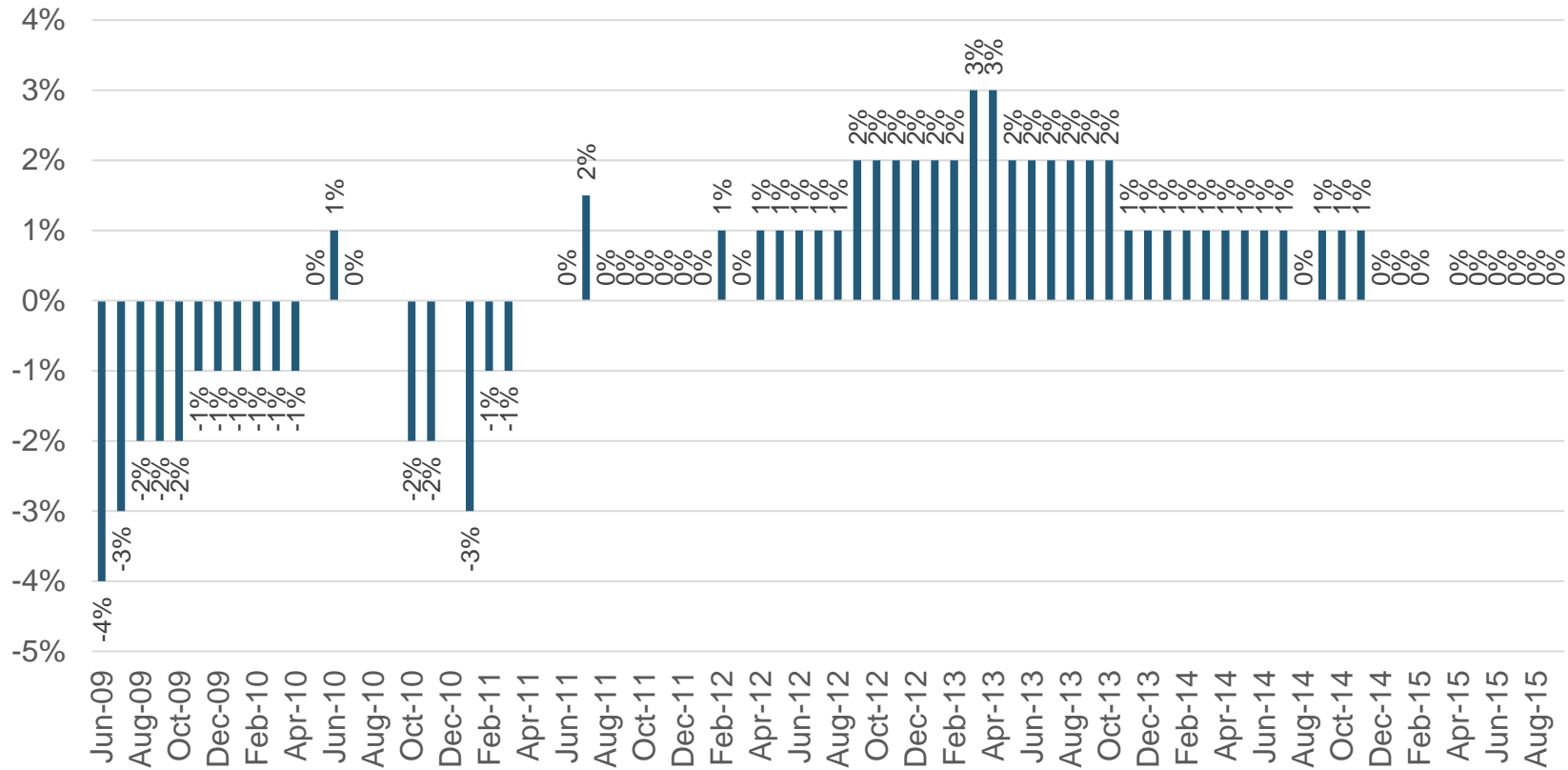
EPLI Rate Change by Month (vs. Year Earlier)



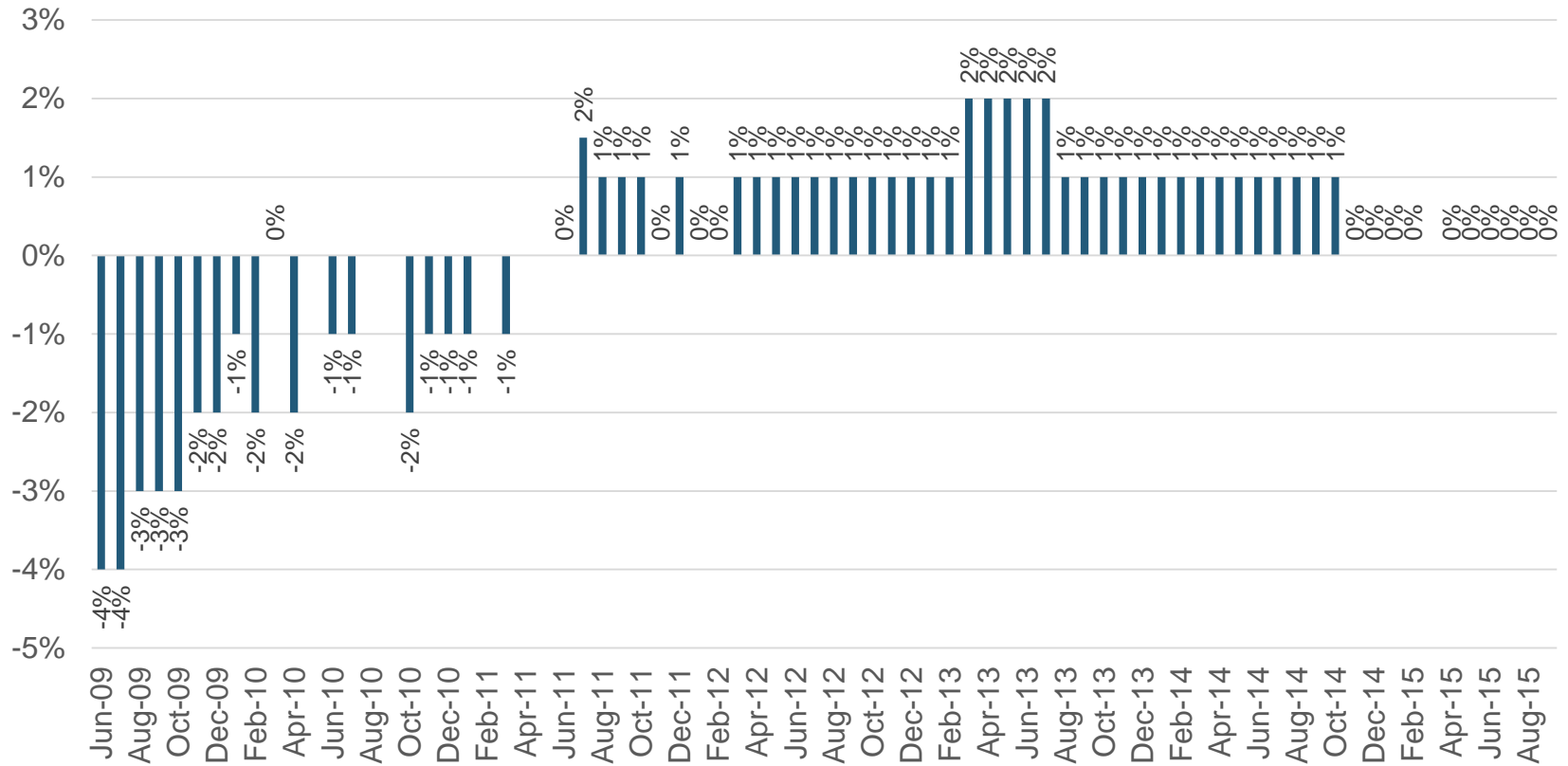
Fiduciary Liability Rate Change by Month (vs. Year Earlier)



Crime Rate Change by Month (vs. Year Earlier)



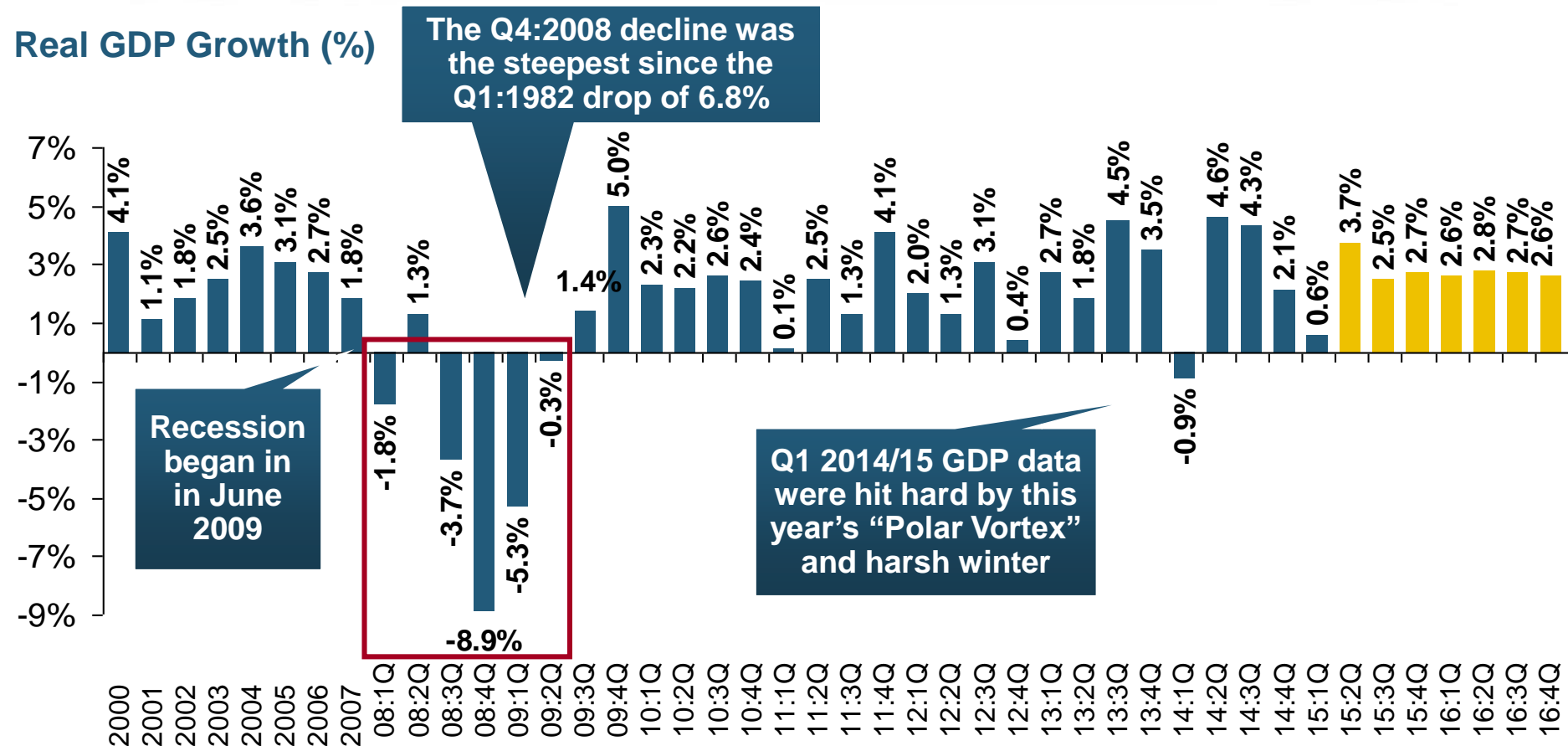
Surety Rate Change by Month (vs. Year Earlier)



The Strength of the Economy Will Influence P/C Insurer Growth Opportunities

**Growth Will Expand Insurer Exposure
Base Across Most Lines**

US Real GDP Growth*



Demand for Insurance Should Increase in 2015 as GDP Growth Accelerates Modestly and Gradually Benefits the Economy Broadly

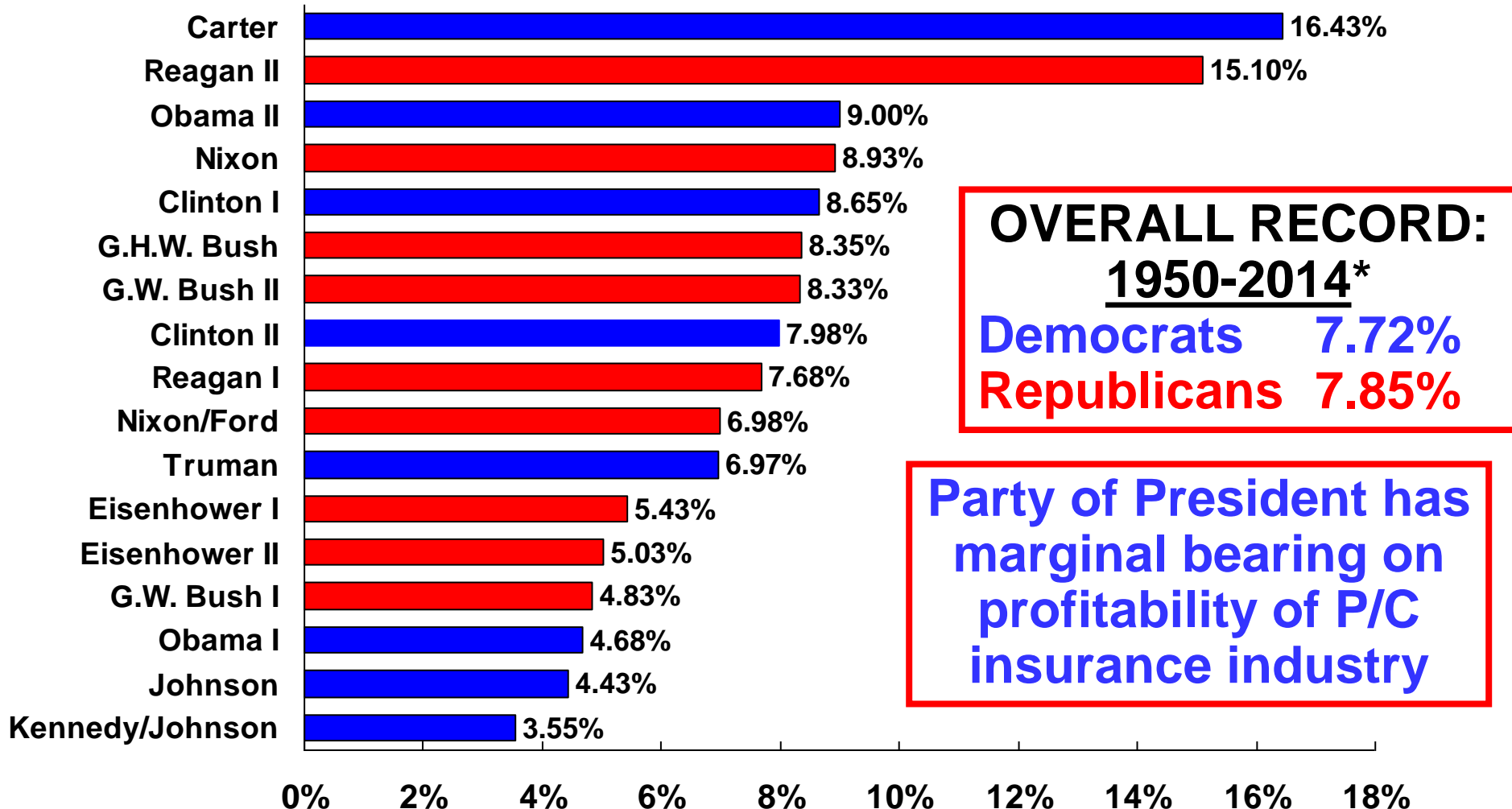
* Estimates/Forecasts from Blue Chip Economic Indicators.

Source: US Department of Commerce, Blue Economic Indicators 9/15; Insurance Information Institute.

Profitability & Politics

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

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

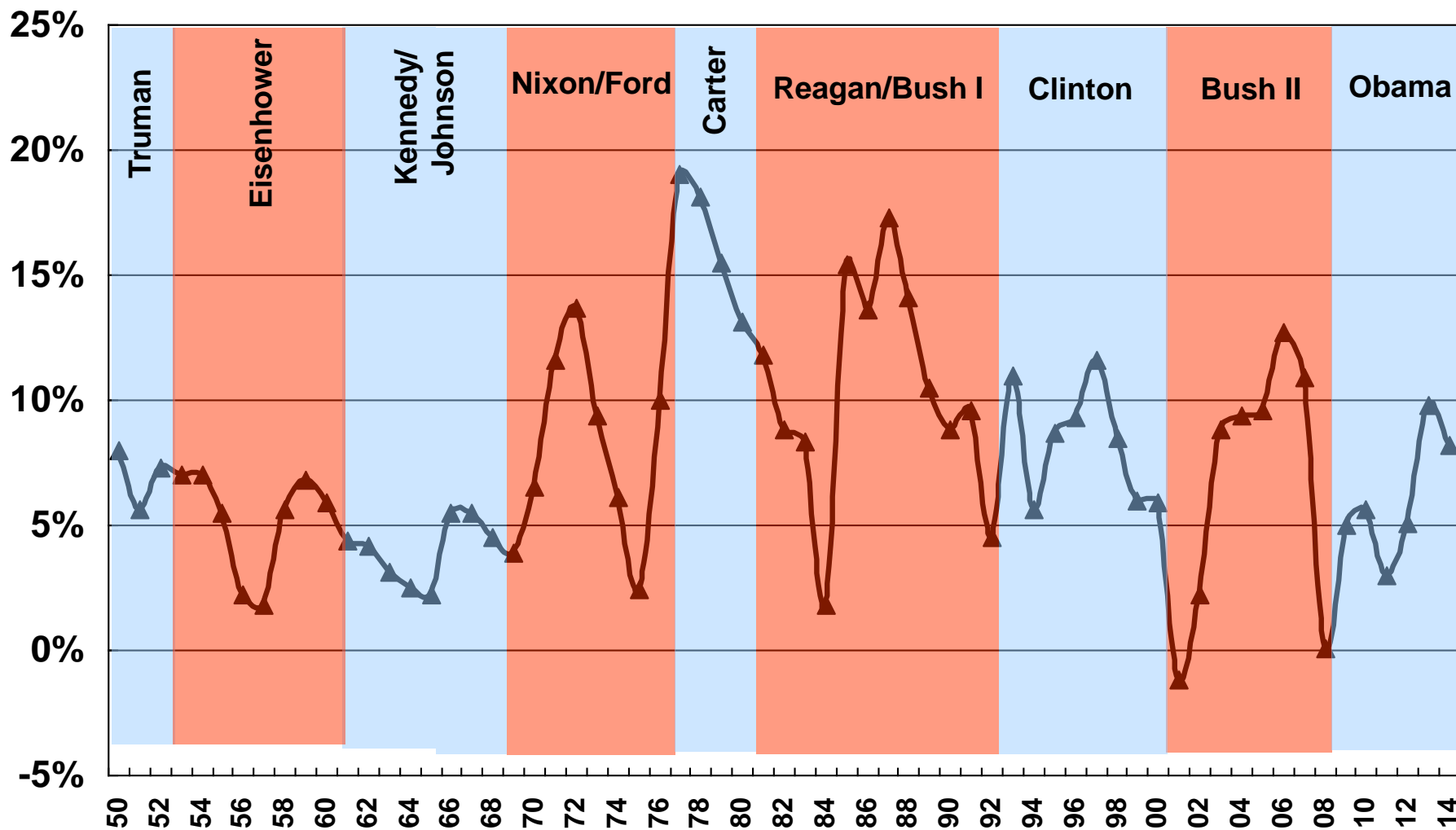


*Truman administration ROE of 6.97% based on 3 years only, 1950-52;.
Source: Insurance Information Institute

P/C Insurance Industry ROE by Presidential Party Affiliation, 1950- 2014

BLUE = Democratic President

RED = Republican President



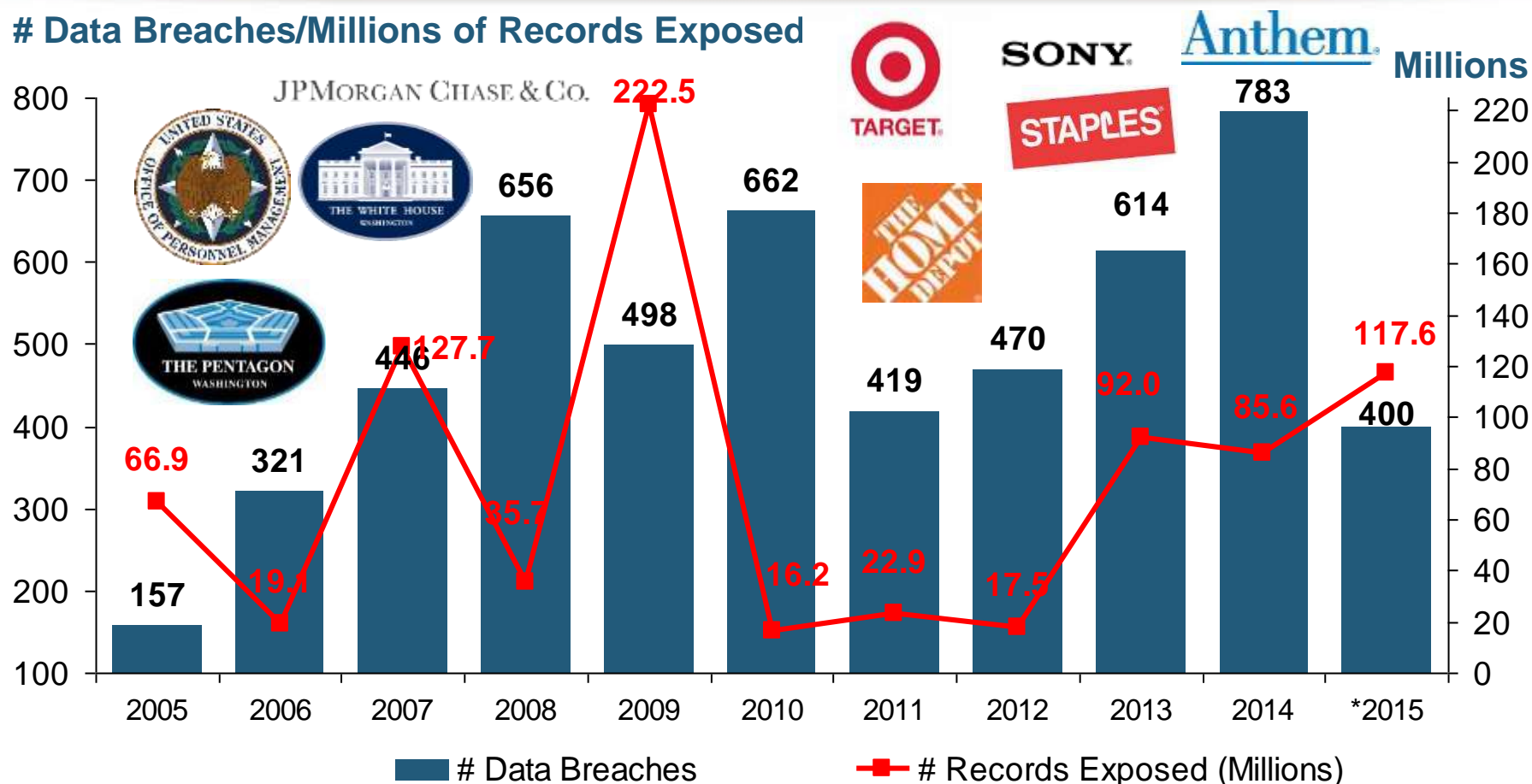
CYBER RISK & CYBER INSURANCE

**Cyber Risk is a Rapidly Emerging
Exposure for Businesses Large and
Small in Every Industry**

***Nonprofits Including Religious
Institutions Are Vulnerable***

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

Data Breaches/Millions of Records Exposed



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

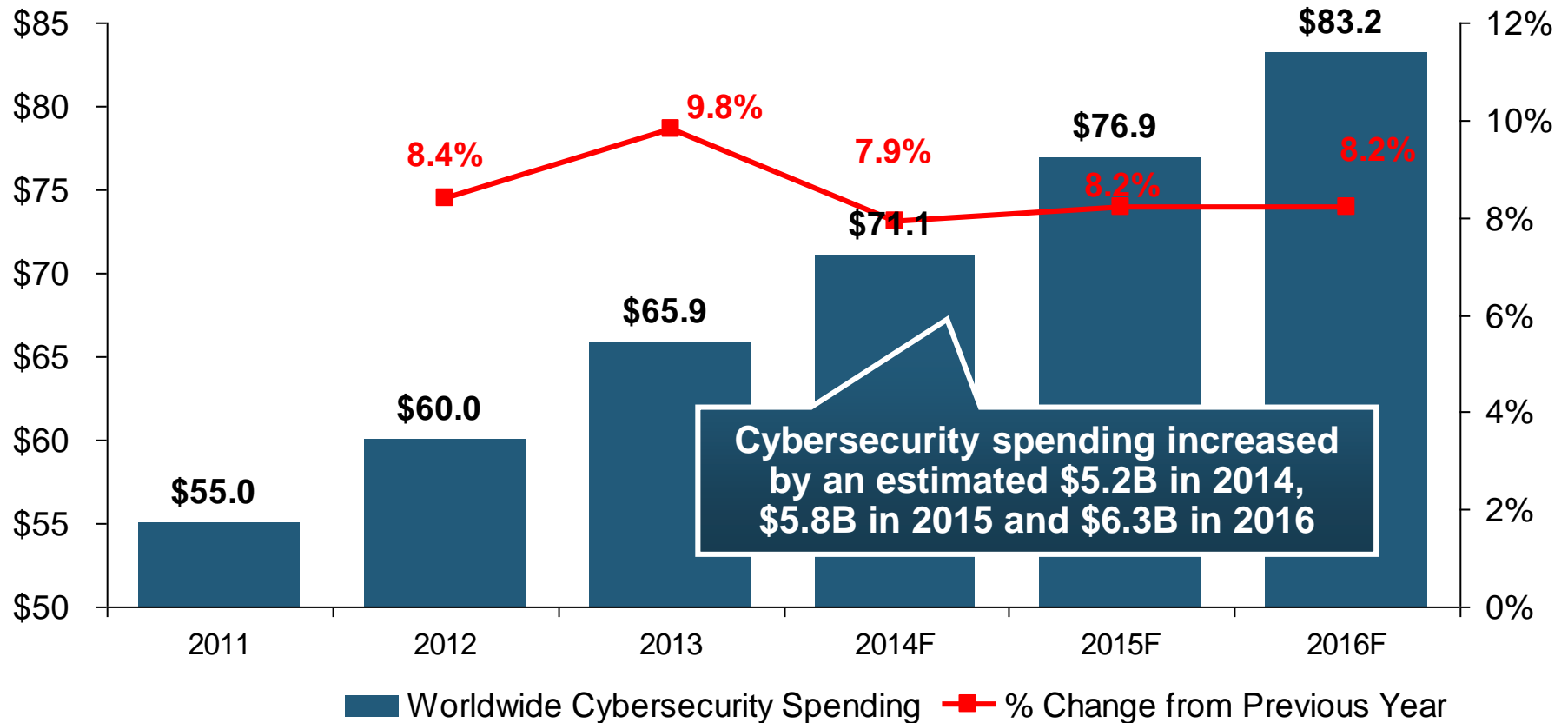
High Profile Data Breaches, 2014-2015

Date	Company	Description of Breach
May 2015	OPM	Hackers broke into U.S. Government Personnel Office stealing personal identifying information of as many as 14 million civilian U.S. government employees.
Mar 2015	Premiera Blue Cross	Data breach compromises financial and medical records of 11 million customers.
Feb 2015	Anthem, Inc	Massive data breach after hackers gained access to corporate data base containing personal information of as many as 80 million current and former U.S. customers and employees.
Dec 2014	Sony Pictures Entertainment	Hacker break-in involving theft of unreleased motion pictures, and theft of more than 25 gigabytes of sensitive data on tens of thousands of Sony employees, including social security numbers, medical and salary information.
Nov 2014	Staples	Point-of-sale (POS) malware attack and breach exposing customer data, and resulting in compromise of 1.2 million records.
Sept 2014	Home Depot	Huge data breach exposes 56 million credit and debit cards and 53 million email addresses.
Aug 2014	Community Health Systems	Cyber attack originating in China resulted in data breach, compromising 4.5 million patient records. Hackers broke into company's computer system by exploiting Heartbleed bug.
June/July 2014	JP Morgan Chase	Massive data breach compromised data associated with 76 million household and 7 million small business accounts. Hackers obtained personal identifying information.
June 2014	PF Changs	Security breach affected customers at 33 restaurants located in 16 states, with potential credit and debit card data stolen.
May 2014	eBay	Massive data breach exposed records of site's 233 million customers, including names, email addresses, physical addresses, phone numbers and birthdates.
Feb 2014	Michaels Stores	Possible fraudulent activity on some U.S. payment cards used at Michaels stores suggests it may have experienced data security attack, exposing 2.6 million records.
Jan 2014	Snapchat	Security breach compromises phone numbers and usernames for 4.6 million accounts.
Jan 2014	Neiman Marcus	Hacker break-in exposed unknown no. of customer cards, compromising est. 1.1 million records.
Nov/Dec 2013	Target	Malware stored on Target's checkout registers led to theft of data from about 40 million credit and debit card accounts and the personal information of up to 70 million customers.

Sources: Identity Theft Resource Center; Insurance Information Institute (I.I.I.) research.

Worldwide Cybersecurity Spending, 2011- 2016F

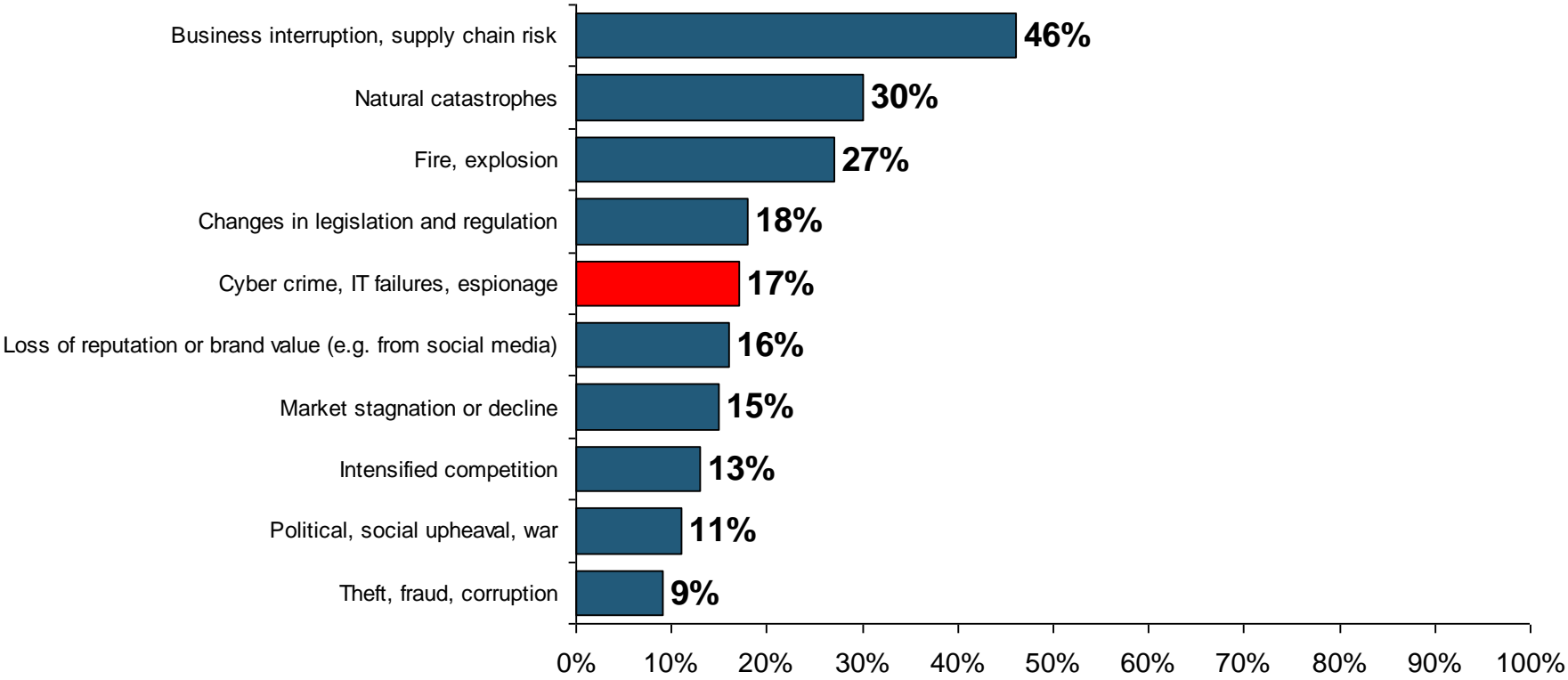
(\$ Billions)



Cybersecurity Spending Is Rising Sharply, Up by About 8%+ Annually through 2016—a Projected Increase of \$12.1 Billion from 2014 to 2016

Top 10 Global Business Risks for 2015

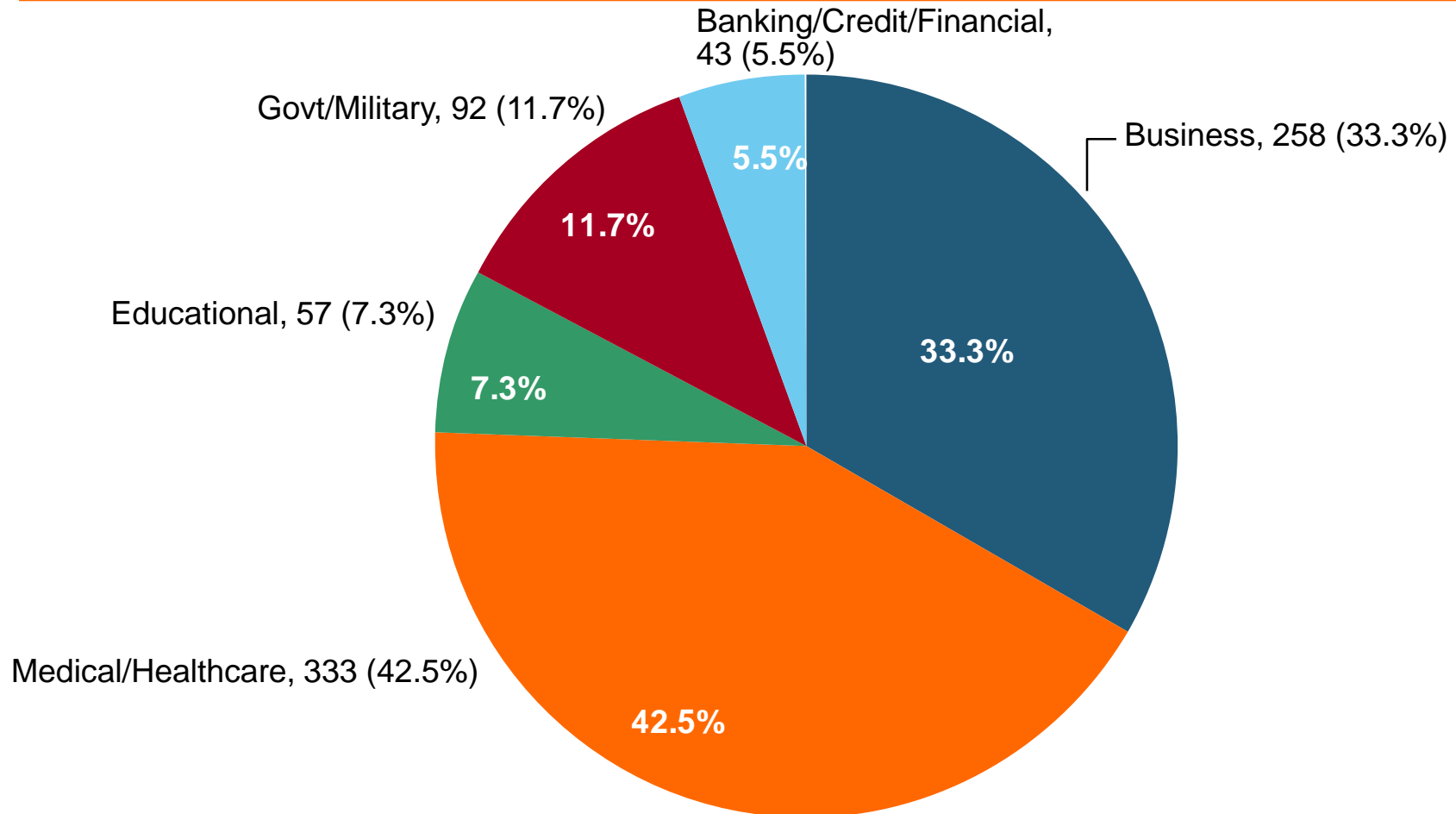
Cyber is one of the most significant movers in this year's Risk Barometer rankings, gaining five percentage points to move into the top 5 global business risks for the first time.



Source: Allianz Risk Barometer on Business Risks 2015

2014 Data Breaches By Business Category, By Number of Breaches

The majority of the 783 data breaches in 2014 affected business and medical/healthcare organizations, according to the Identity Theft Resource Center.



Evolving Threats: Cyber Crime and Cyber Terrorism

State sponsored groups:

- Foreign government sponsored
- Sophisticated and well-funded

Organized cyber criminals:

- Traditional organized crime groups
- Loosely organized global hacker crews

Hacktivists:

- Politically-motivated hackers
- Increasing capabilities

Insiders:

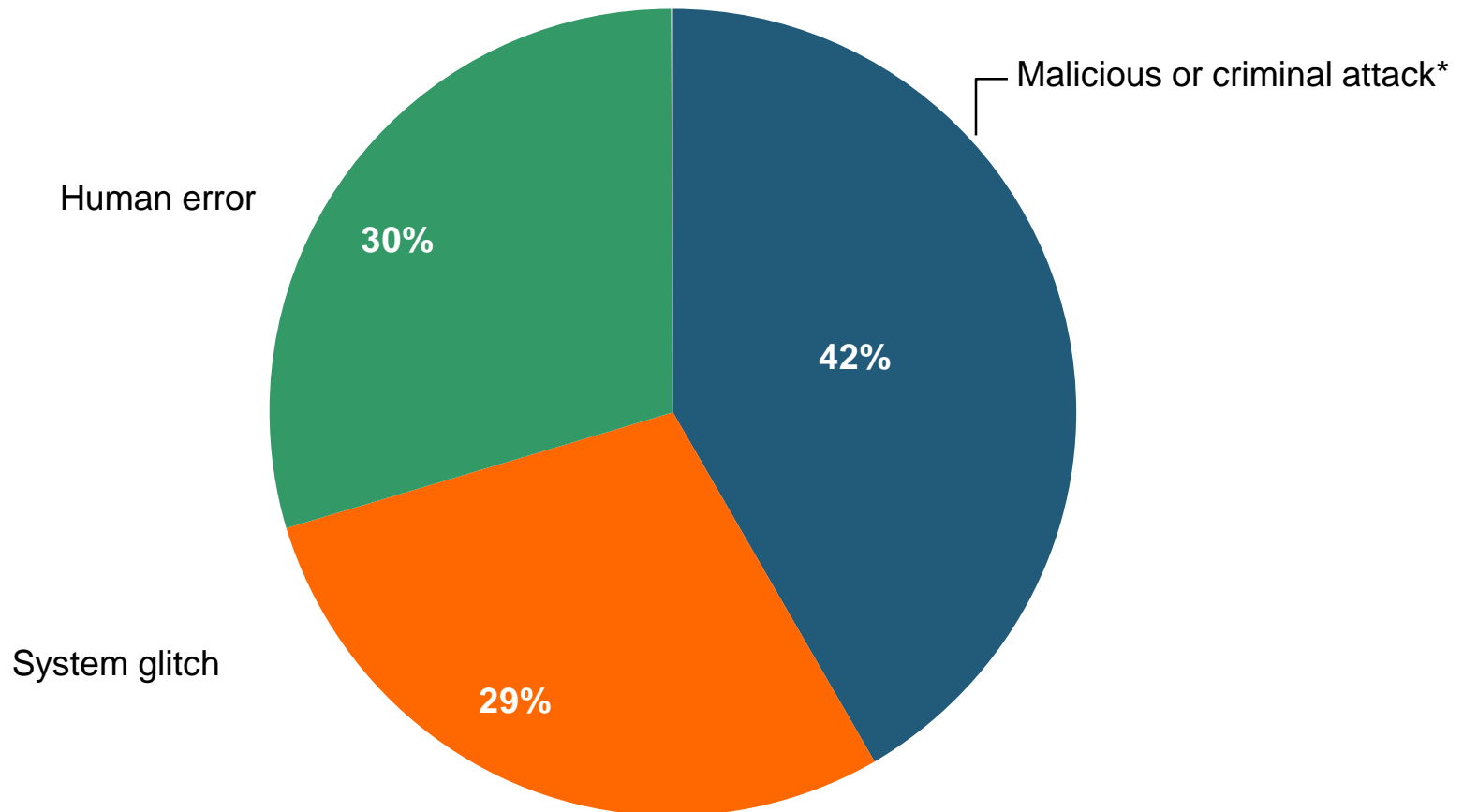
- Easy access to sensitive information
- Difficult to detect

Terrorists:

- Destruction of physical **and** digital assets

Main Causes of Data Breach Globally

Malicious or criminal attacks are most often the cause of data breach globally. Some 42 percent of incidents concern a malicious or criminal attack, while 30 percent concern a negligent employee or contractor (human factor).

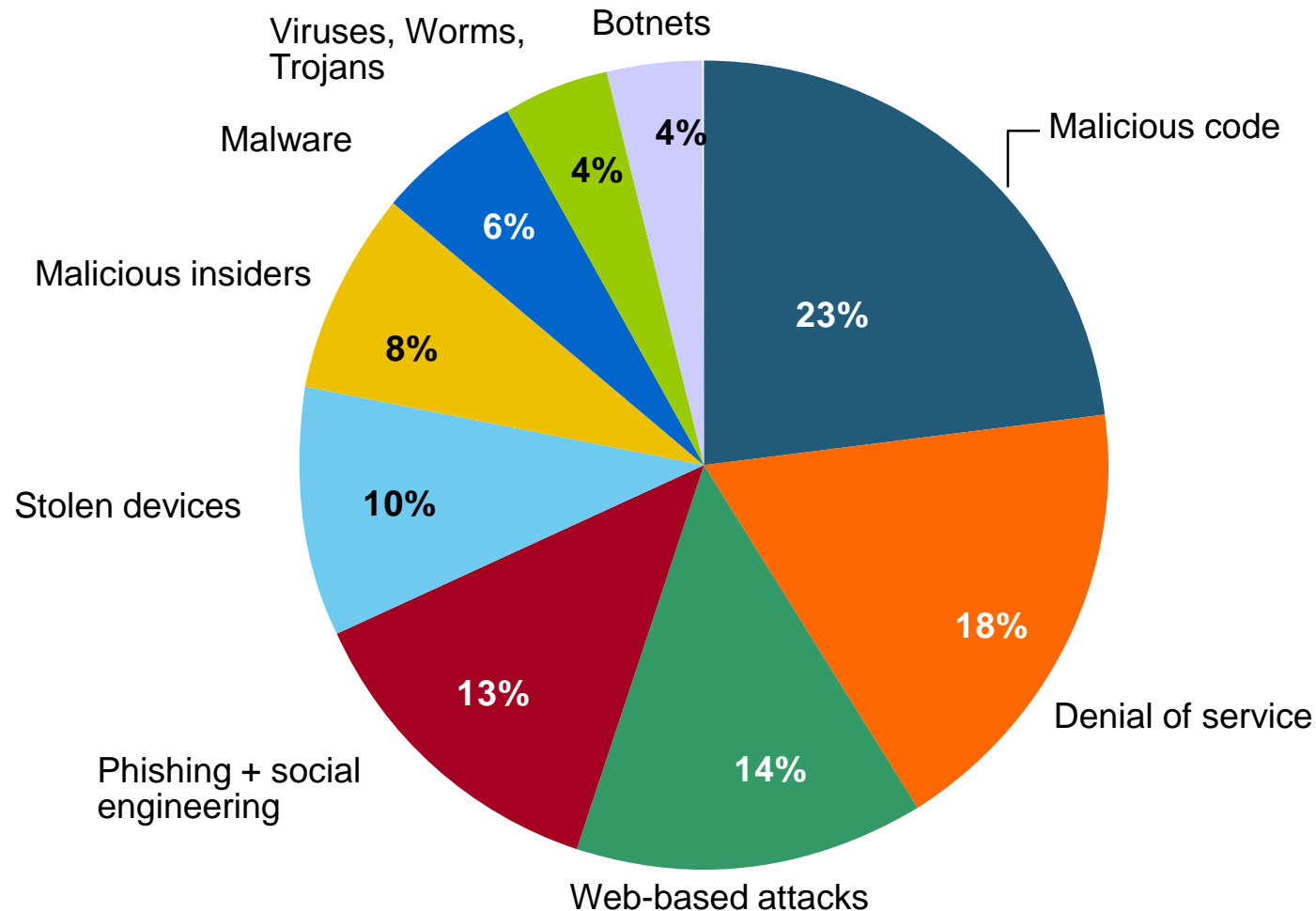


*The most common types of malicious or criminal attacks include malware infections, criminal insiders, phishing/social engineering and SQL injection.

Source: 2014 Cost of a Data Breach Study: Global Analysis, the Ponemon Institute, sponsored by IBM, May 2014

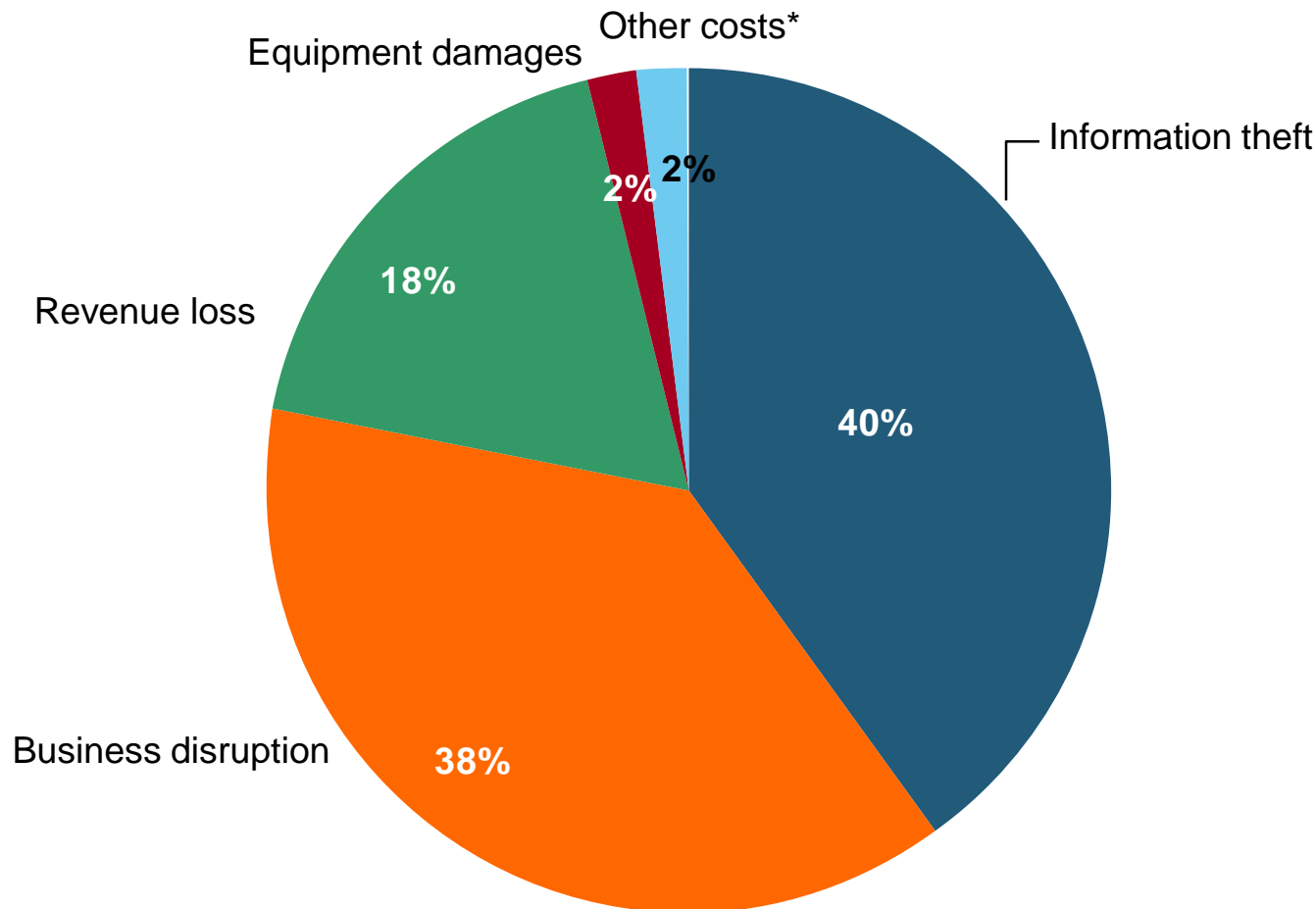
US: Most Costly Types of Cyber Crimes, Fiscal Year 2014

Malicious code, denial of service and web-based attacks account for more than 55 percent of the total annualized cost of cyber crime experienced by 59 U.S. companies.



US: External Cyber Crime Costs: Fiscal Year 2014

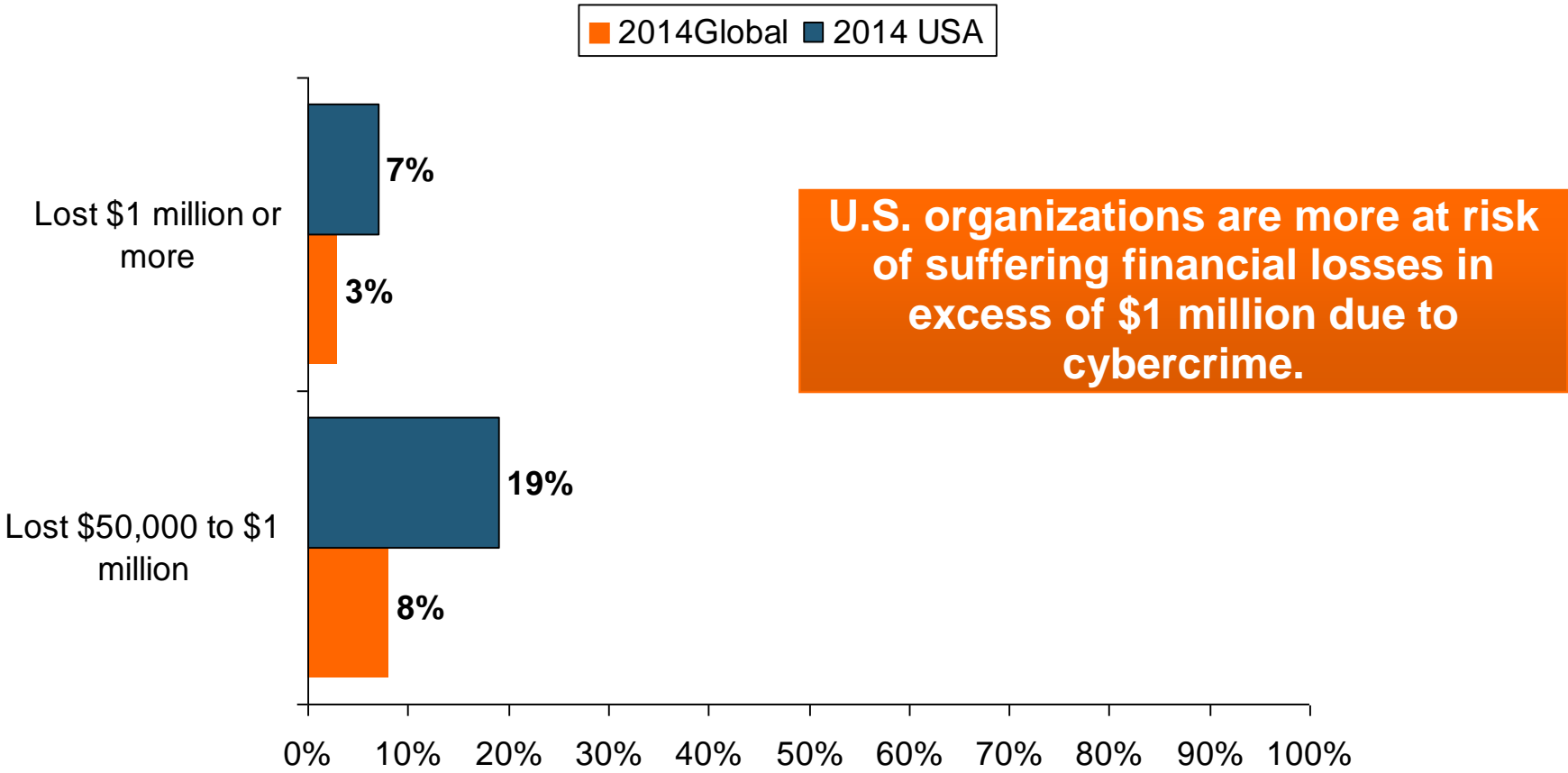
Information theft (40%) and business disruption or lost productivity (38%) account for the majority of external costs due to cyber crime.



* Other costs include direct and indirect costs that could not be allocated to a main external cost category

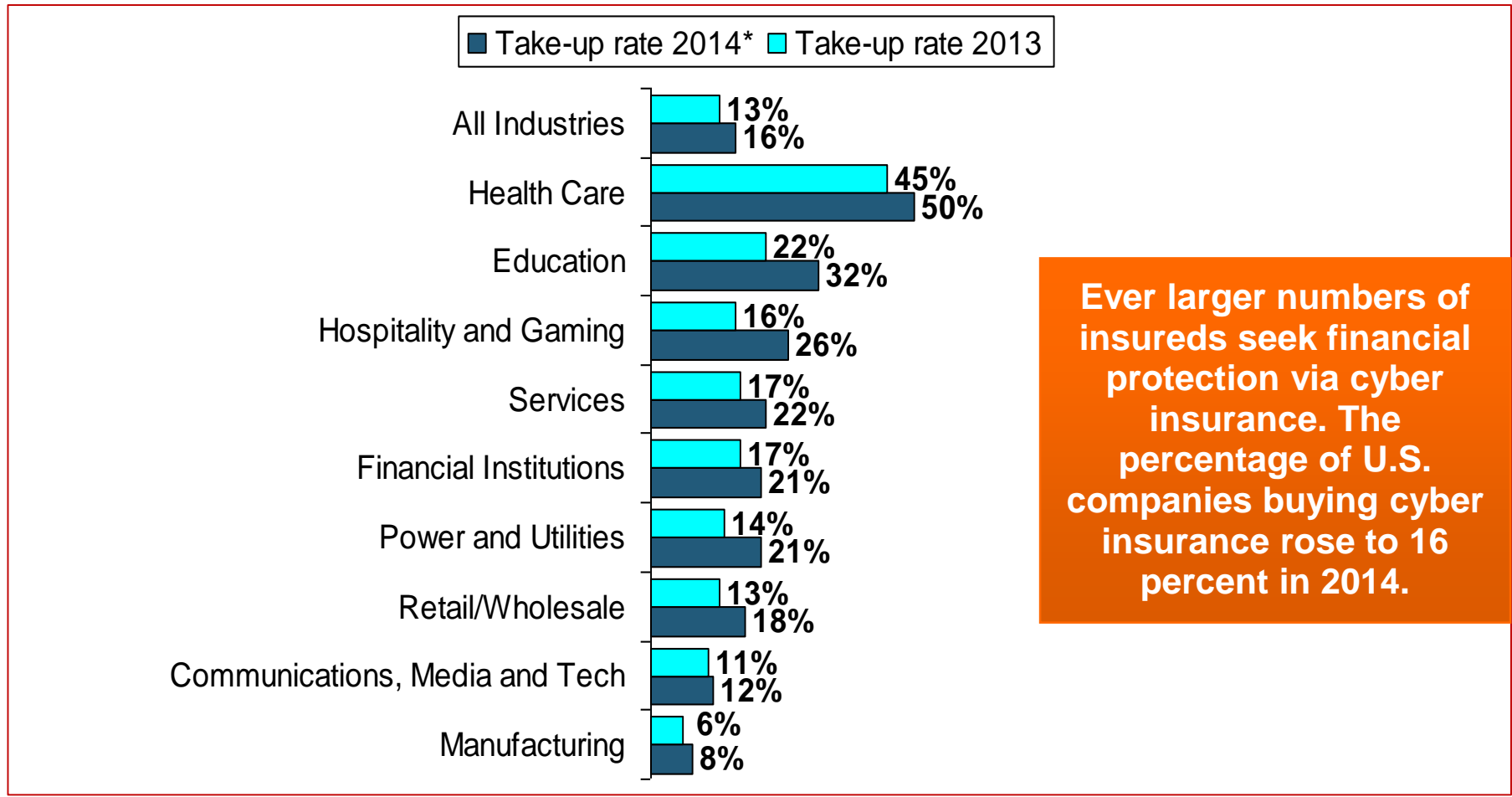
Source: 2014 Cost of Cyber Crime: United States, Ponemon Institute.

PWC Survey: Cybercrime Costs Greater for U.S. Companies



Source: 2014 Global Economic Crime Survey, PWC.

Marsh: Percentage of U.S. Companies Purchasing Cyber Insurance Increased in 2014



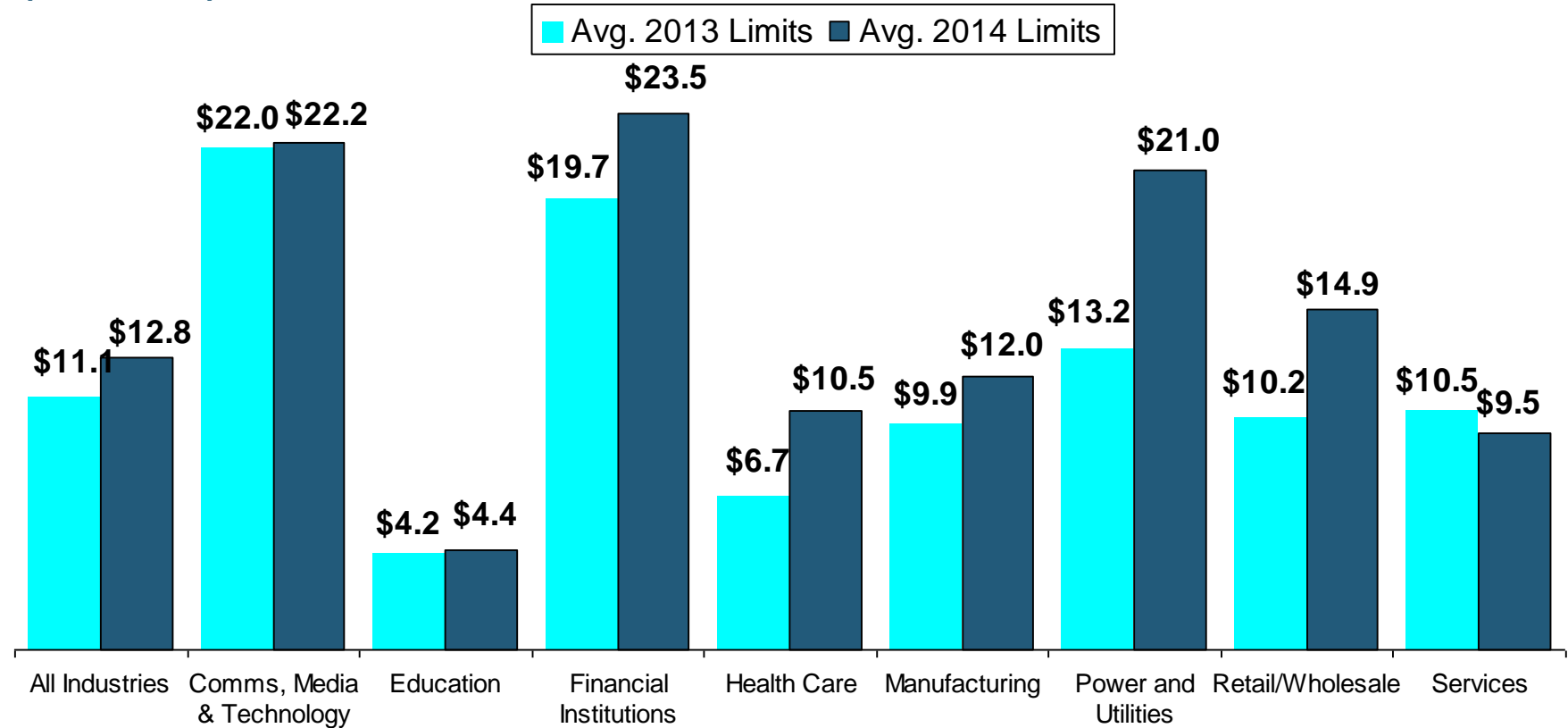
Ever larger numbers of insureds seek financial protection via cyber insurance. The percentage of U.S. companies buying cyber insurance rose to 16 percent in 2014.

*Take-up rate refers to the overall percentage of clients that purchased standalone cyber insurance.
Source: *Benchmarking Trends: As Cyber Concerns Broaden, Insurance Purchases Rise*, Marsh Risk Management Research Briefing, March 2015

Marsh: Total Limits Purchased, By Industry – Cyber Liability, All Revenue Size

Average limits purchased for cyber risk rose to \$12.8 million for all industries and all company sizes in 2014. *Power and utility companies witnessed the sharpest percentage increase in average limits, at 59 percent.*

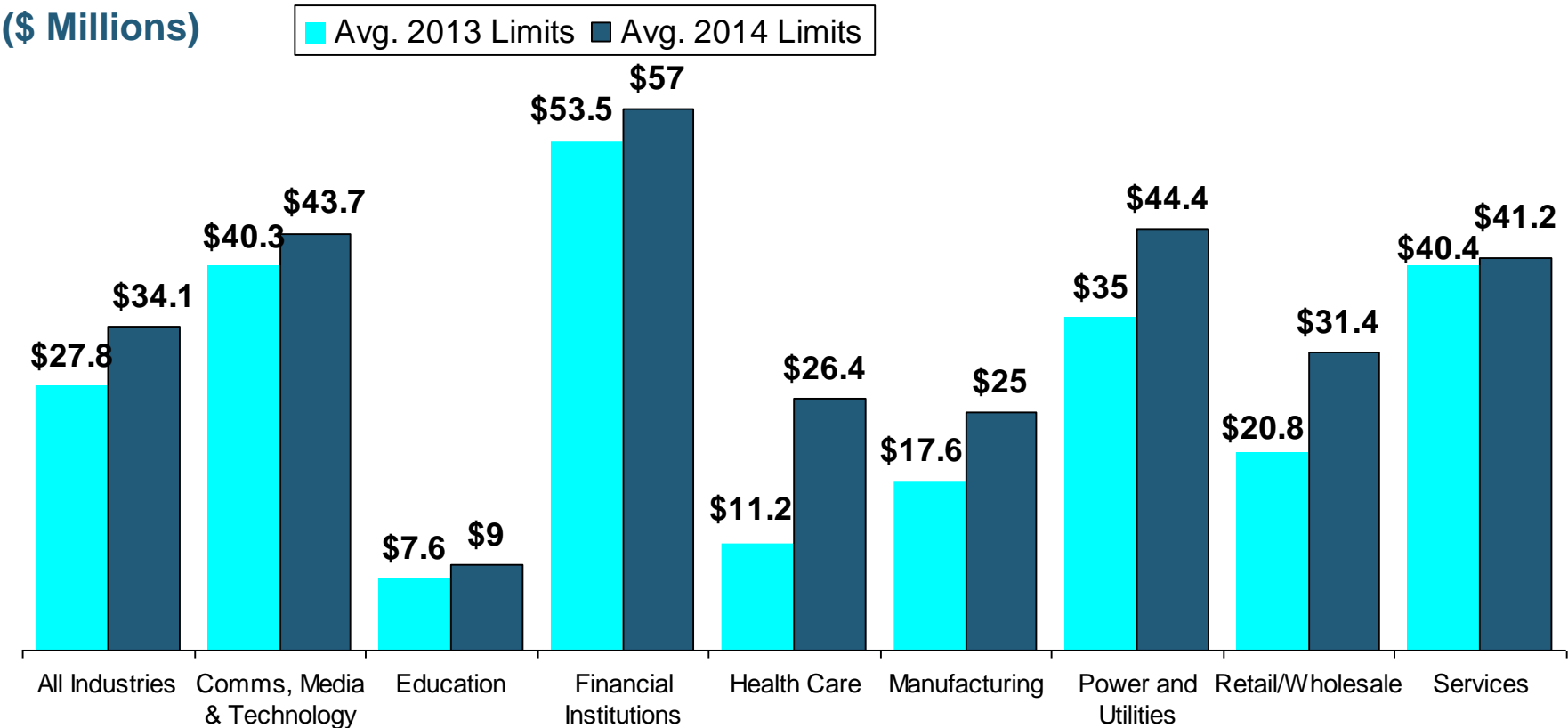
(\$ Millions)



Source: *Benchmarking Trends: As Cyber Concerns Broaden, Insurance Purchases Rise*, Marsh Risk Management Research Briefing, March 2015

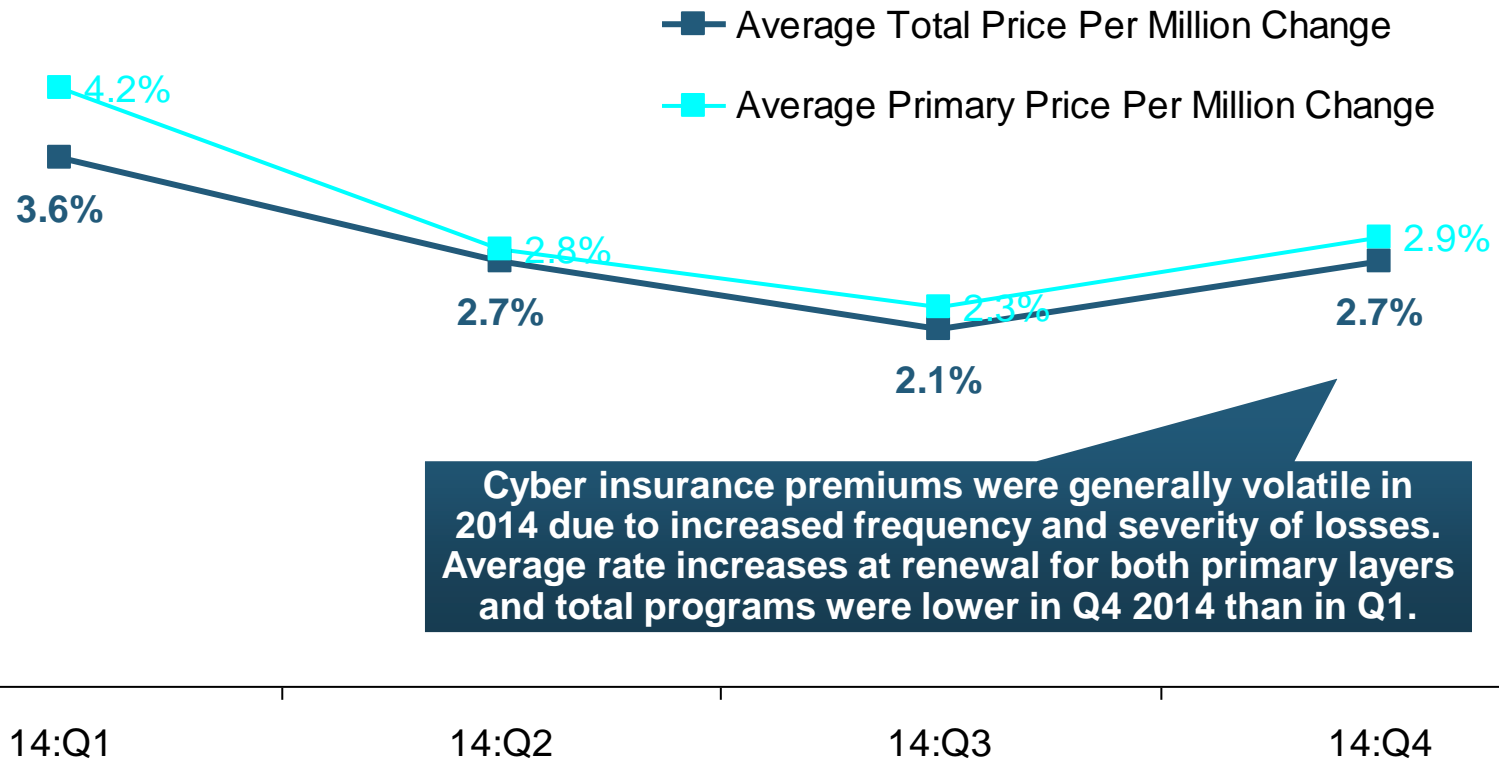
Marsh: Total Limits Purchased, By Industry – Cyber Liability, Revenue \$1 Billion+

Among larger companies, average cyber insurance limits purchased increased by 22 percent to \$34.1 million in 2014, from \$27.8 million in 2013.

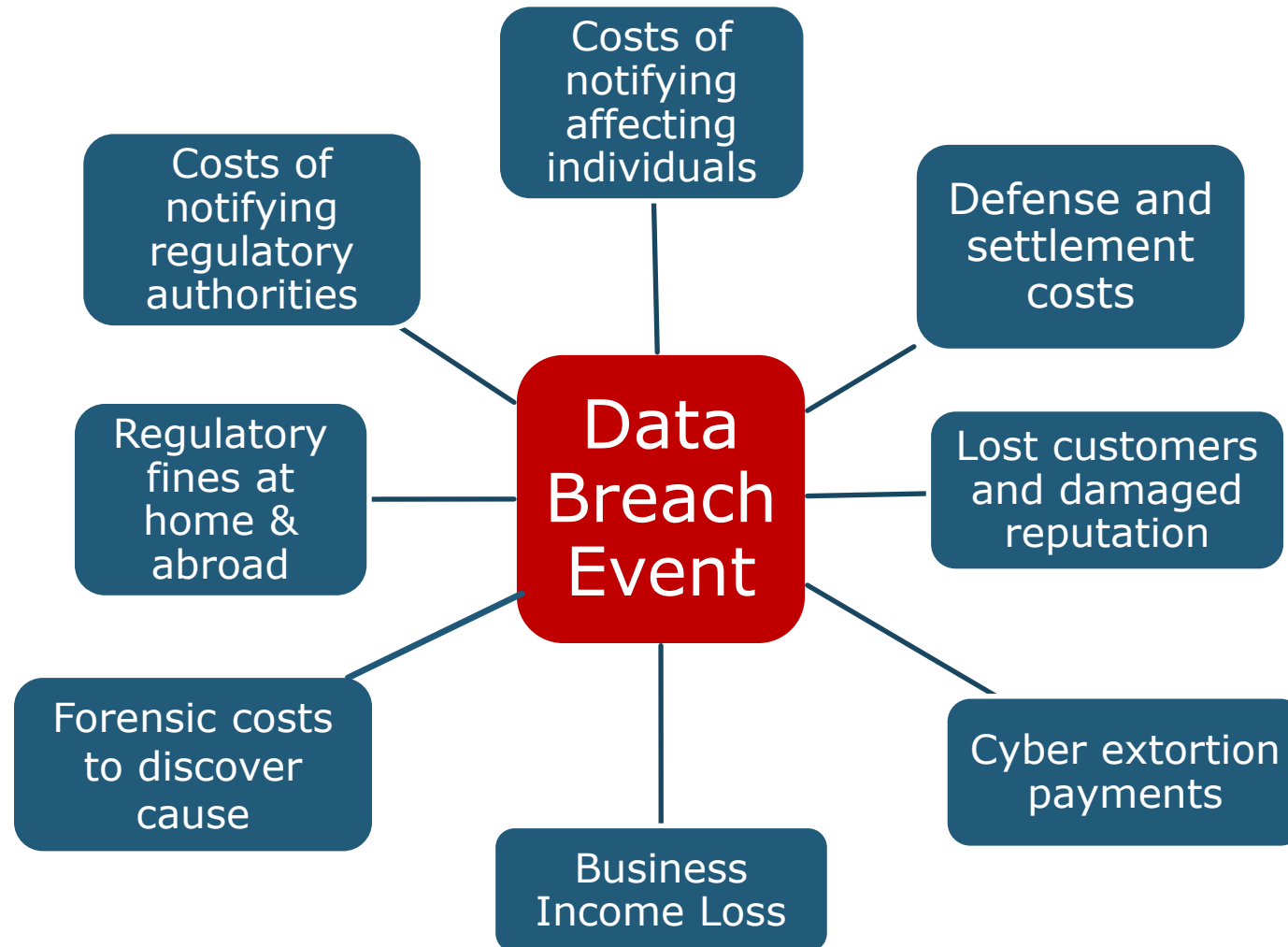


Source: *Benchmarking Trends: As Cyber Concerns Broaden, Insurance Purchases Rise*, Marsh Risk Management Research Briefing, March 2015

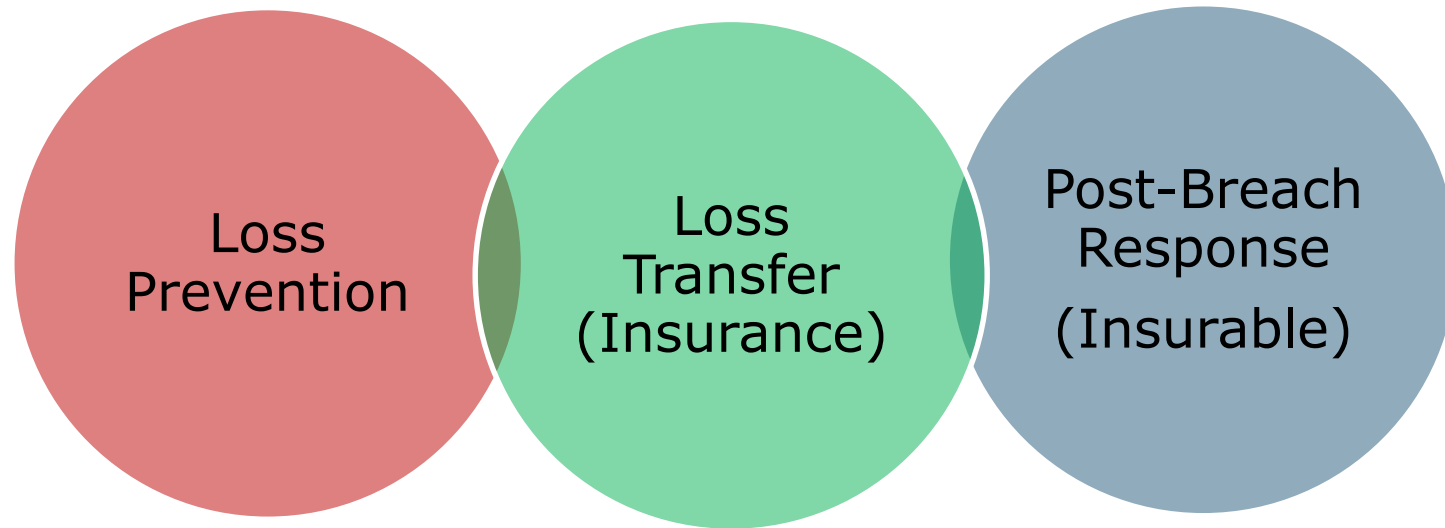
Cyber Liability: Historical Rate (price per million) Changes



Data/Privacy Breach: Many Potential Costs Can Be Insured

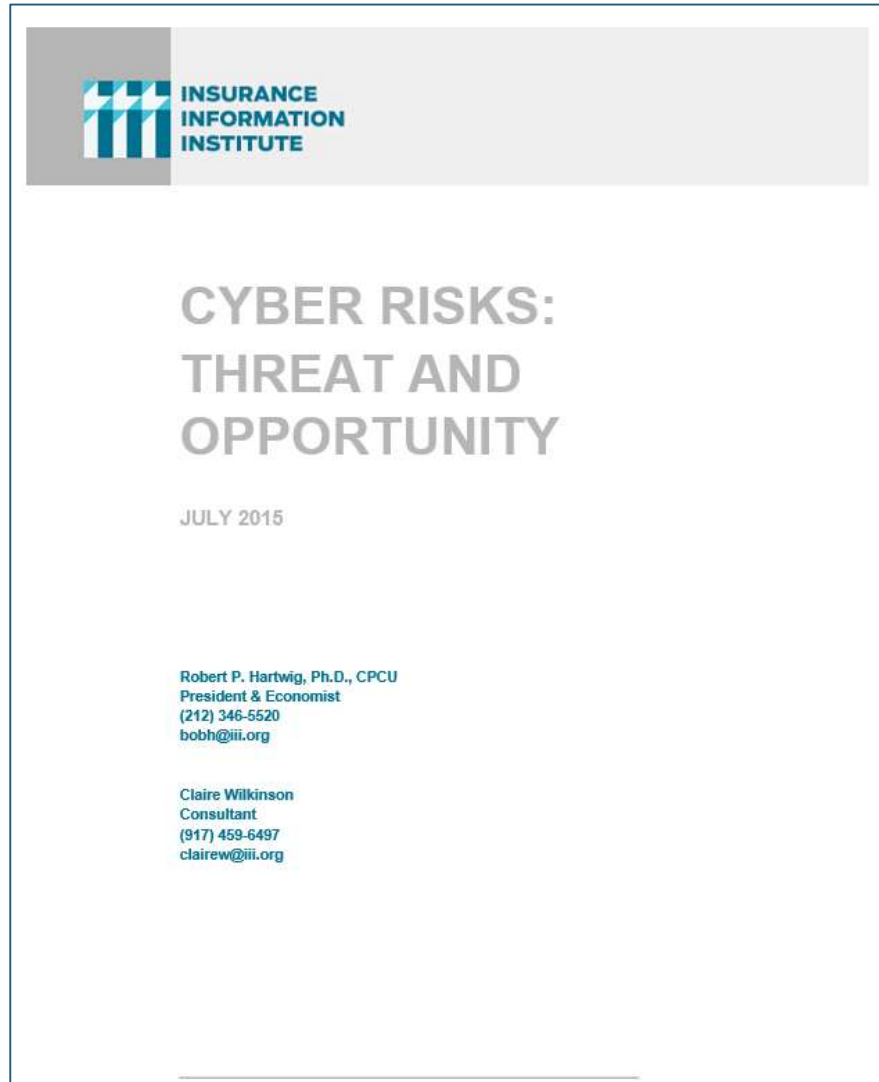


The Three Basic Elements of Cyber Coverage: Prevention, Transfer, Response



Cyber risk management today involves three essential components, each designed to reduce, mitigate or avoid loss. An increasing number of cyber risk products offered by insurers today provide all three.

I.I.I. Will Release its Third Cyber Report in 2015: *Cyber Risks Threat and Opportunity*



- I.I.I.'s 3rd report on cyber risk scheduled for Q3 2015
- Provides information on cyber threats and insurance market solutions
- Global cyber risk overview
 - Quantification of threats by type and industry
- Cyber security and cost of attacks
- Cyber terrorism
- Cyber liability
- Insurance market for cyber risk

INDUSTRY DISRUPTORS

**Technology, Society and
the Economy Are All
Changing at a Rapid Pace**

Thoughts on the Future



Technology and Insurance

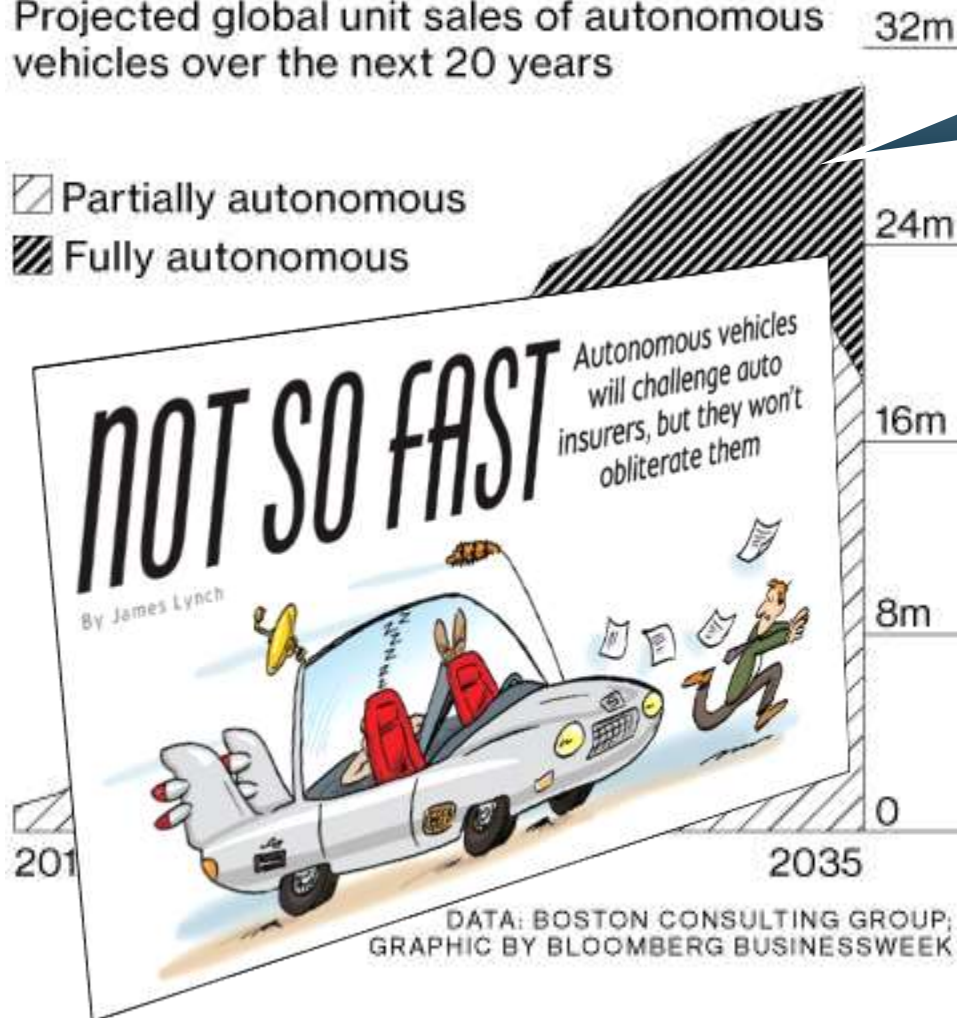
**Rapid Technological Innovations Are
Impacting Many Segments of the
P/C Insurance Industry**

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

Hands-Free

Projected global unit sales of autonomous vehicles over the next 20 years

- ☐ Partially autonomous
☒ Fully autonomous



By 2035, it is estimated that 25% of new vehicle sales could be fully autonomous models

Questions

- Are auto insurers monitoring these trends?
- How are they reacting?
- Will Google take over the industry?
- Will the number of auto insurers shrink?
- How will liability shift?

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



U B E R



A Few Thoughts on the Future of Auto Insurance

- **Global auto insurance premiums written total about \$600B**
 - ◆ ~80% personal, 20% commercial
 - ◆ US accounts for more than 1/3 of this total (about \$210B in 2014)
- **Innovations in automobile safety will, over time, reduced claim frequency but severities could still rise as repair costs escalate**
 - ◆ Claim activity clearly not immune to economy
- **Frequency declines could lead price declines, aiding profitability**
- **More cars, not fewer will be on highways in the US, world**
 - ◆ Exposure (insured car years) grows even as frequency declines
- **Timeline for large numbers of mass produced autonomous vehicles on American highways is wildly optimistic**
 - ◆ Mid-2030s is more likely timeframe; Transition occurring through mid-century
 - ◆ Tech media is enamored with anything involving Google, Apple
- **Auto insurance will be the largest, most important of all P/C lines for many years to come**

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

Will **YOUR** job
be reduced to
an app?

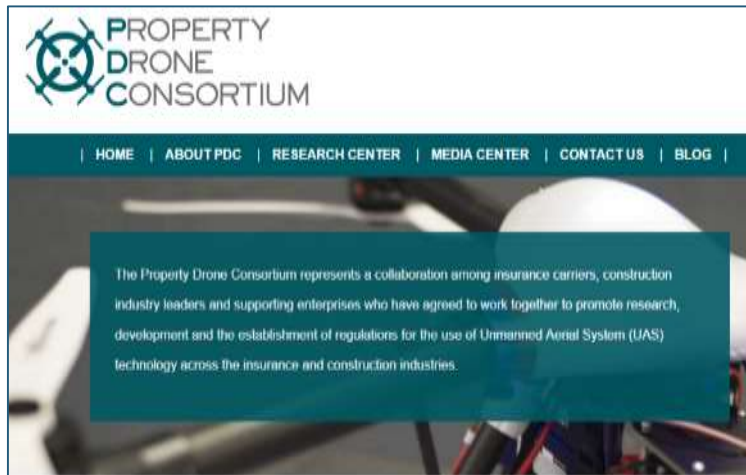
THE WALL STREET JOURNAL.
There's an Uber for Everything Now
Apps do your chores: shopping, parking, cooking, cleaning, packing, shipping and more



Send in the Drones: Potential Rapid Adoption in Industry; Media Loves It



- Drones or Unmanned Aerial Vehicle (UAV) technology is seeing rapid adoption rate in many industries, including insurance
- FAA granting Section 333 exemptions for commercial use and testing of UAS
- At least 5 insurers have received permission to test
- Wide variety of applications: claims, pre-event property inspections...
- Insurers partnering with construction industry to guide R&D and regulation of UAV use via *Property Drone Consortium*: www.propertydrone.org



Insurance Information Institute Online:

www.iii.org

*Thank you for your time
and your attention!*

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