



Overview & Outlook for the Commercial P/C Insurance Industry

Trends, Challenges & Opportunities

Target Markets Mid-Year Conference

Atlanta, GA

May 6, 2015

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Insurance Information Institute ♦ 110 William Street ♦ New York, NY 10038

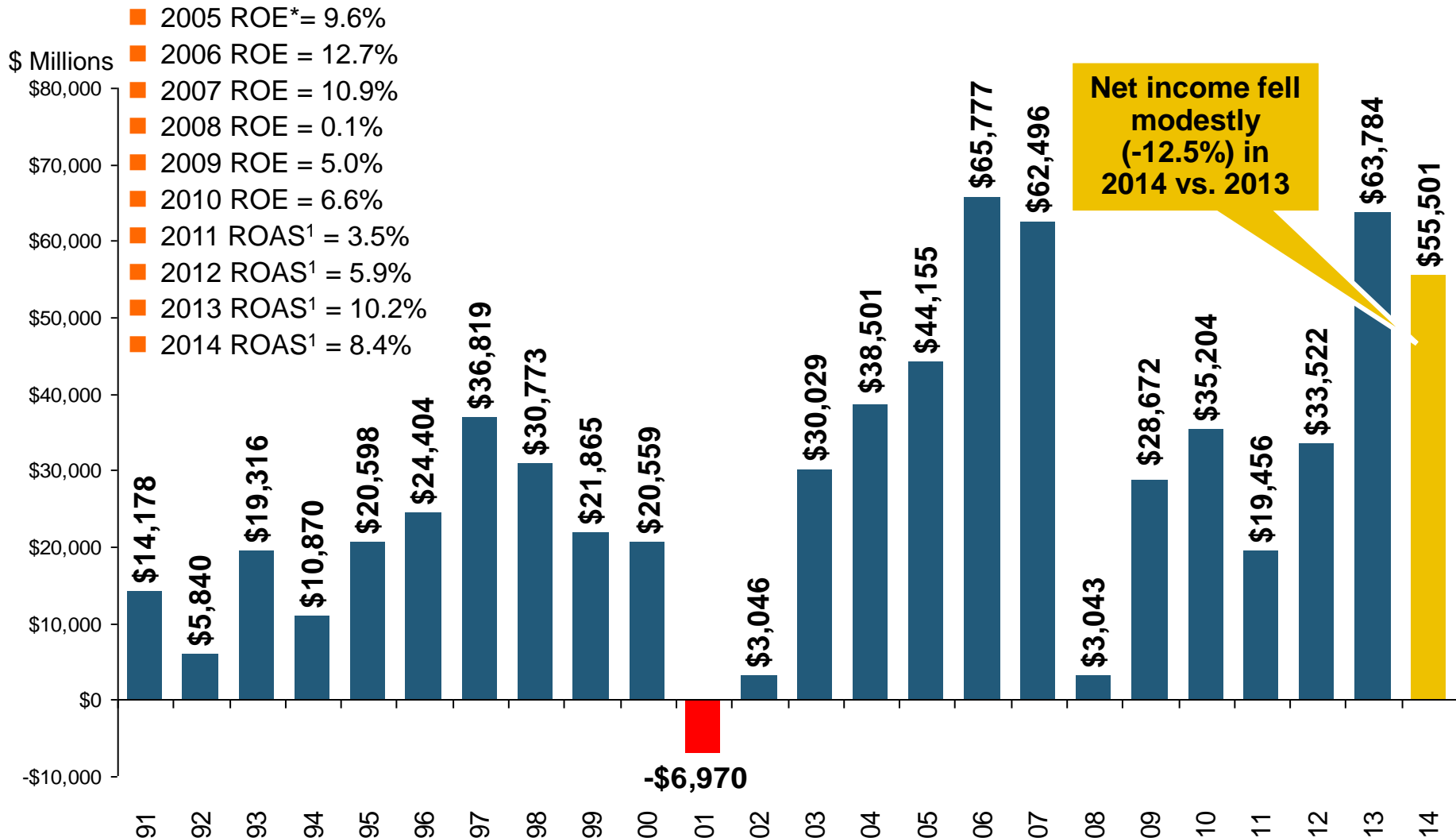
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Insurance Industry: *Financial Update & Outlook*

2014 Was a Reasonably Good Year
2015: A Repeat of 2014?

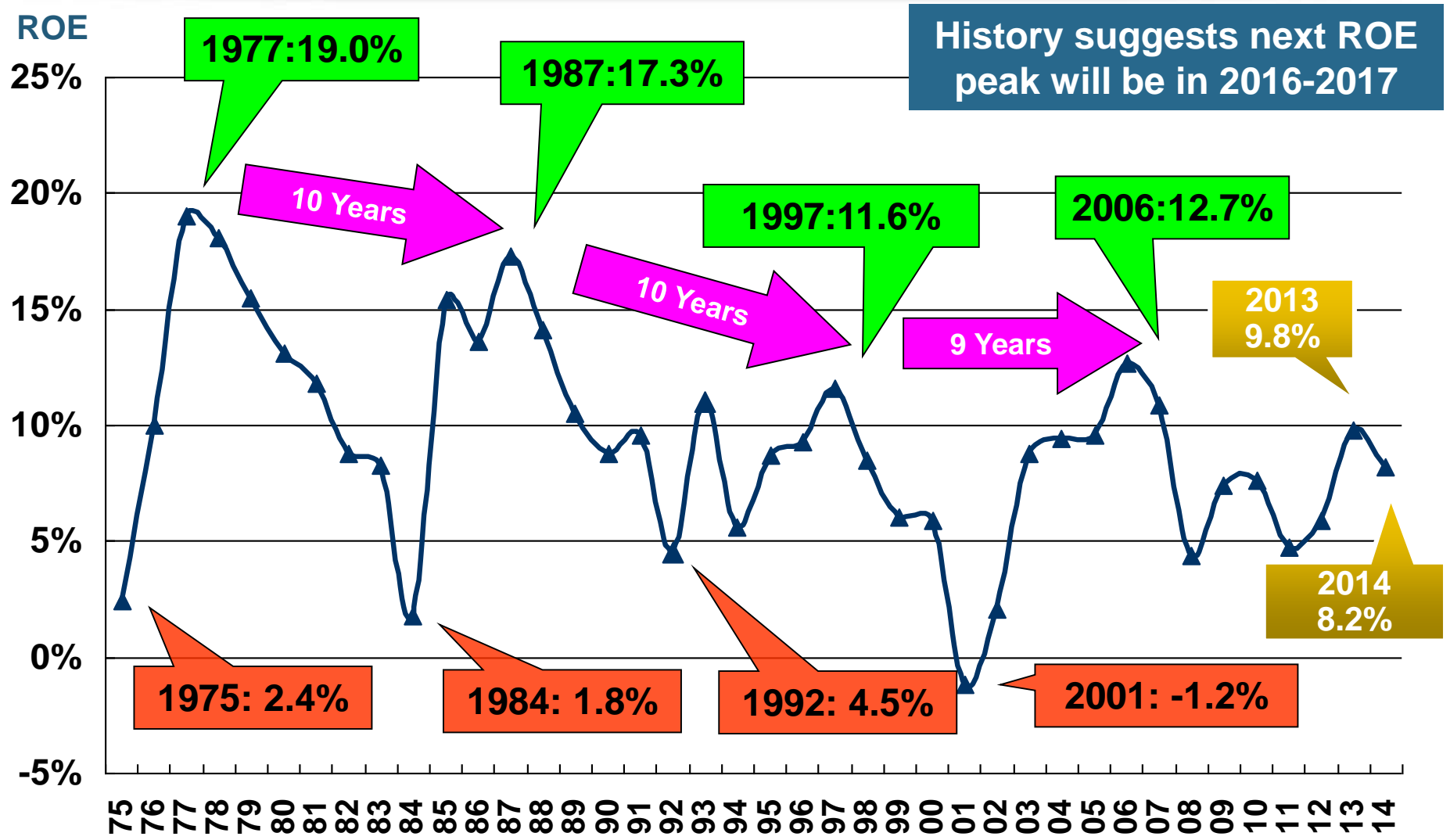
P/C Industry Net Income After Taxes 1991–2014



*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

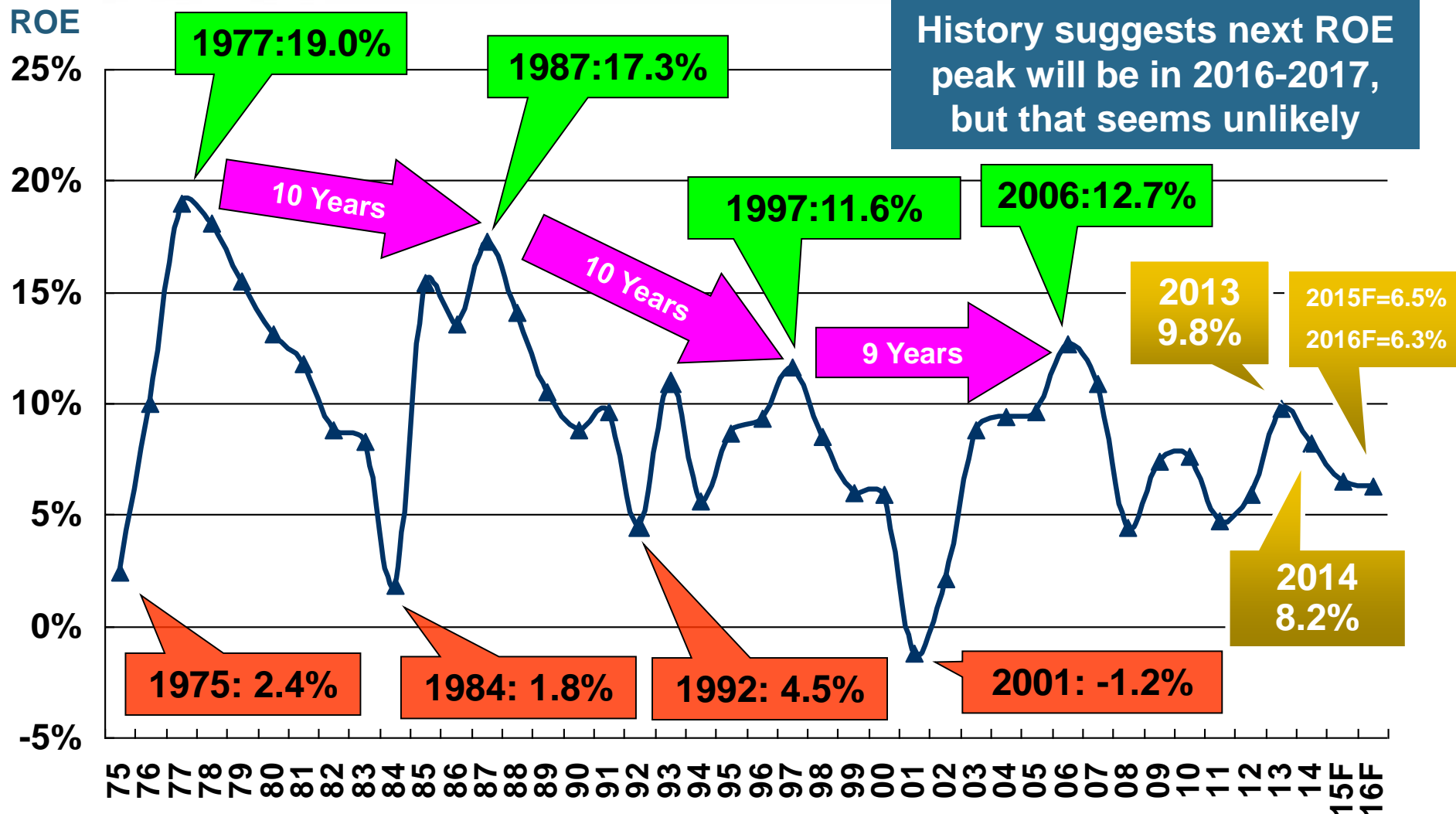
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2014*



*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.

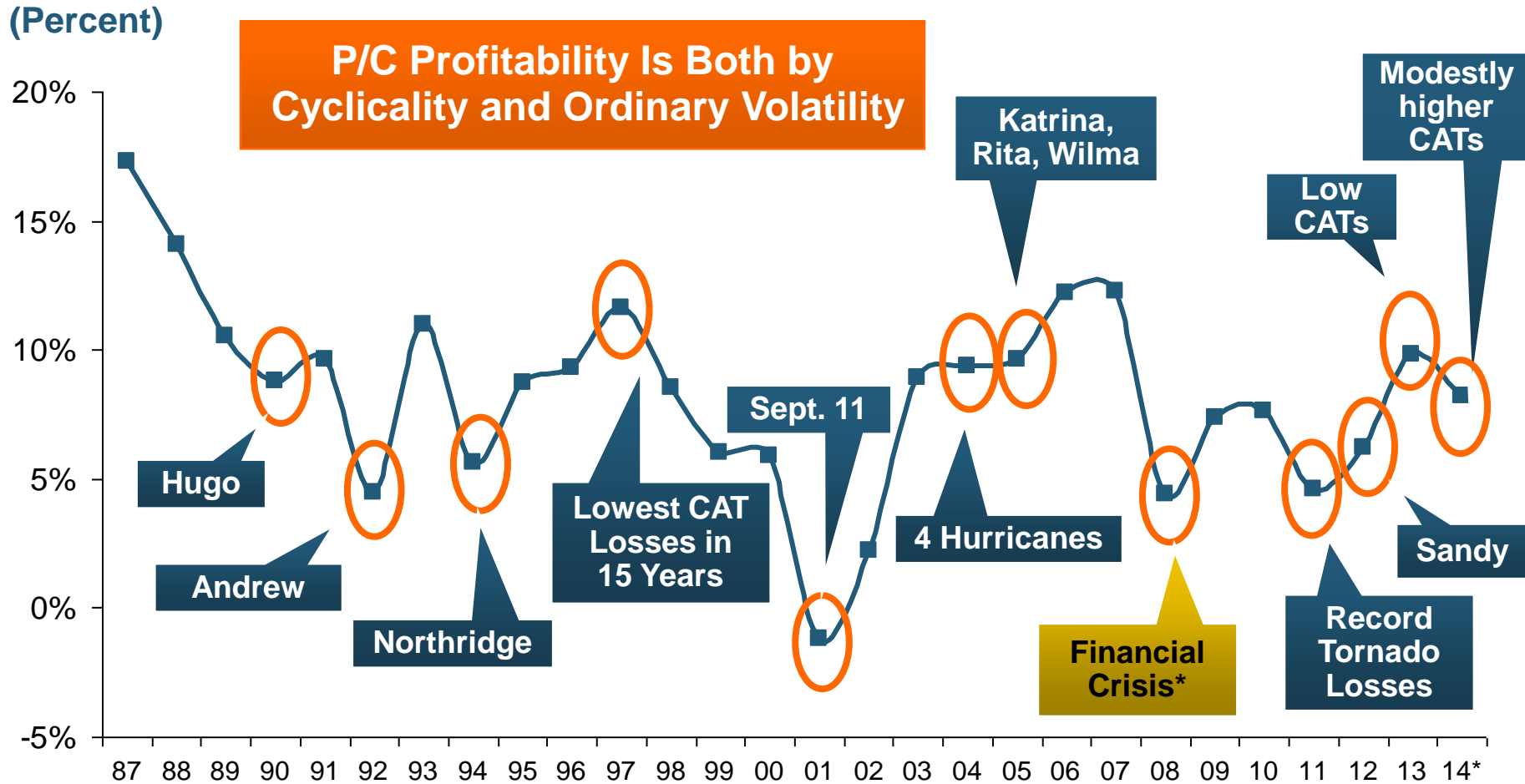
Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2016F



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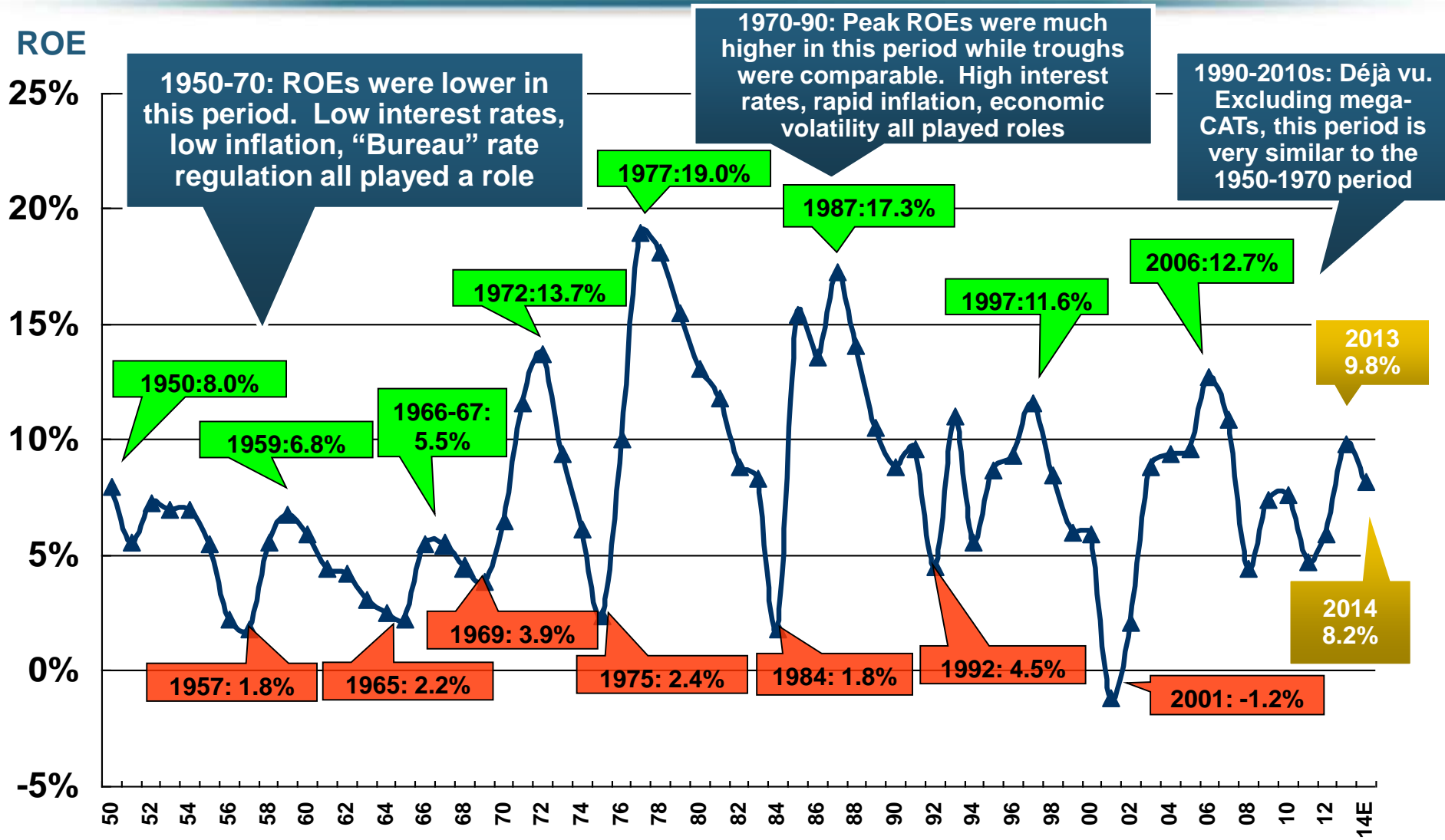
Source: Insurance Information Institute; NAIC, ISO, A.M. Best, Conning

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



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

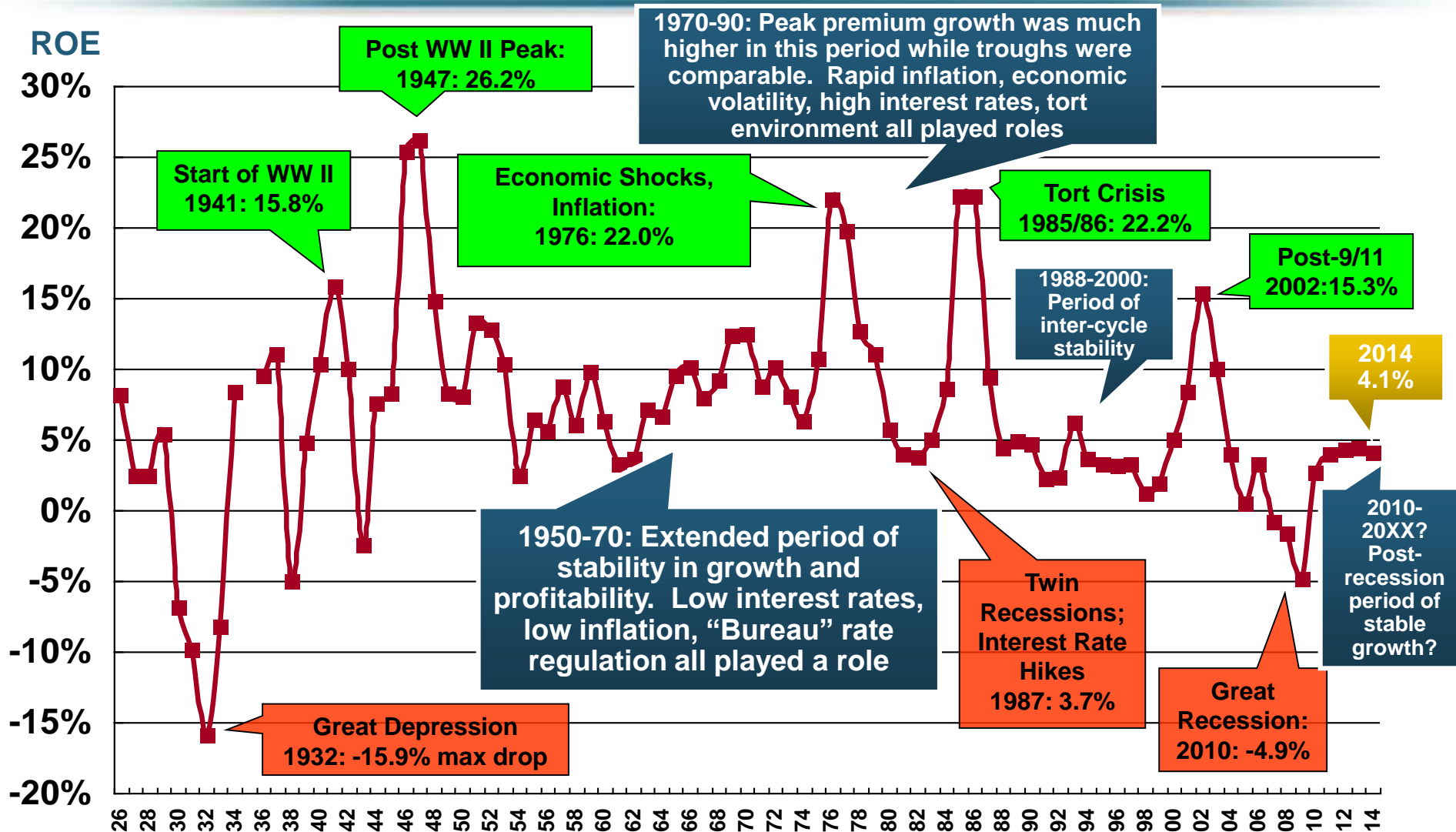
Back to the Future: Profitability Peaks & Troughs in the P/C Insurance Industry, 1950 – 2014*



*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.

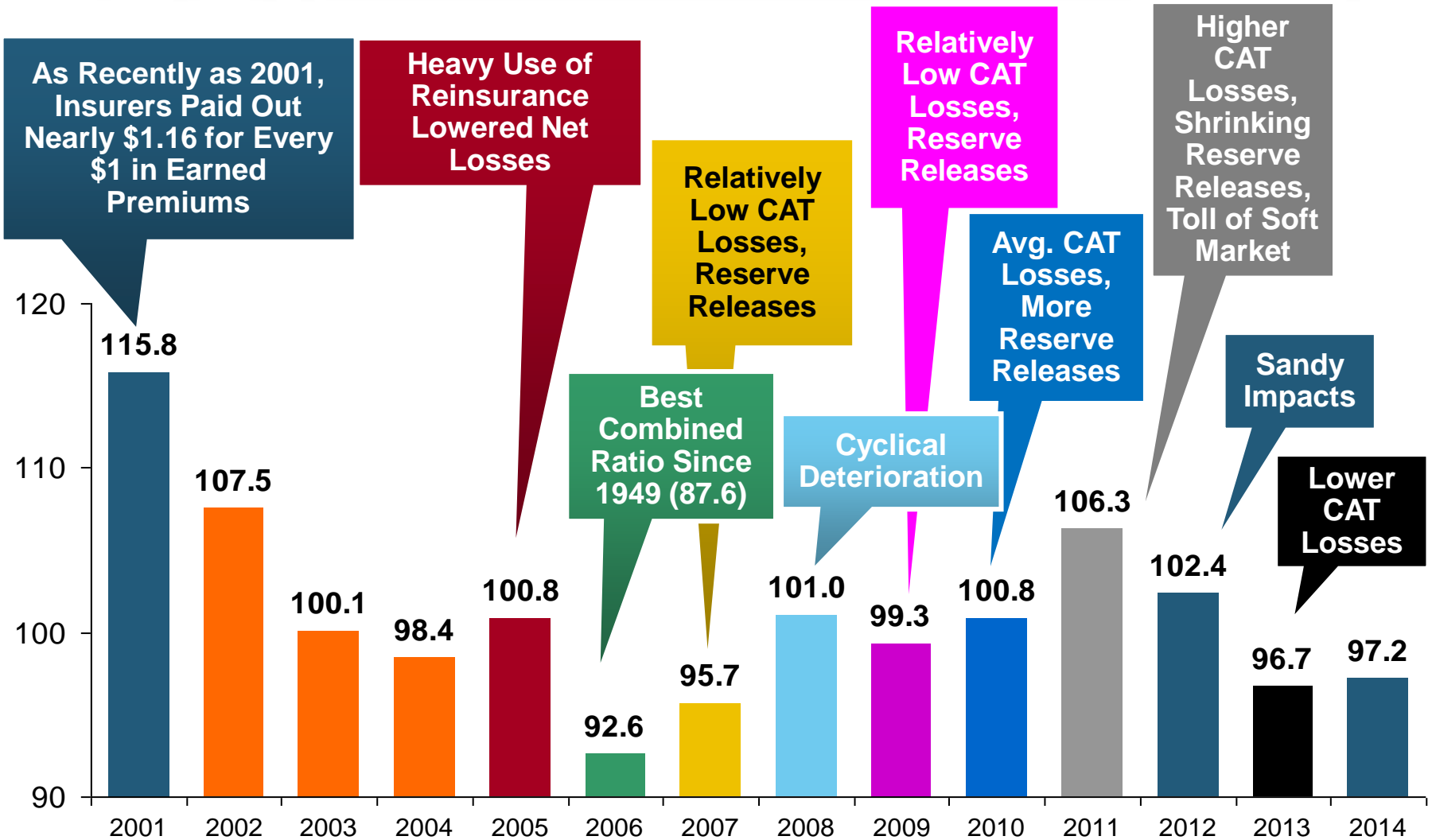
Source: Insurance Information Institute; NAIC, ISO, A.M. Best.

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



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

P/C Insurance Industry Combined Ratio, 2001–2014*



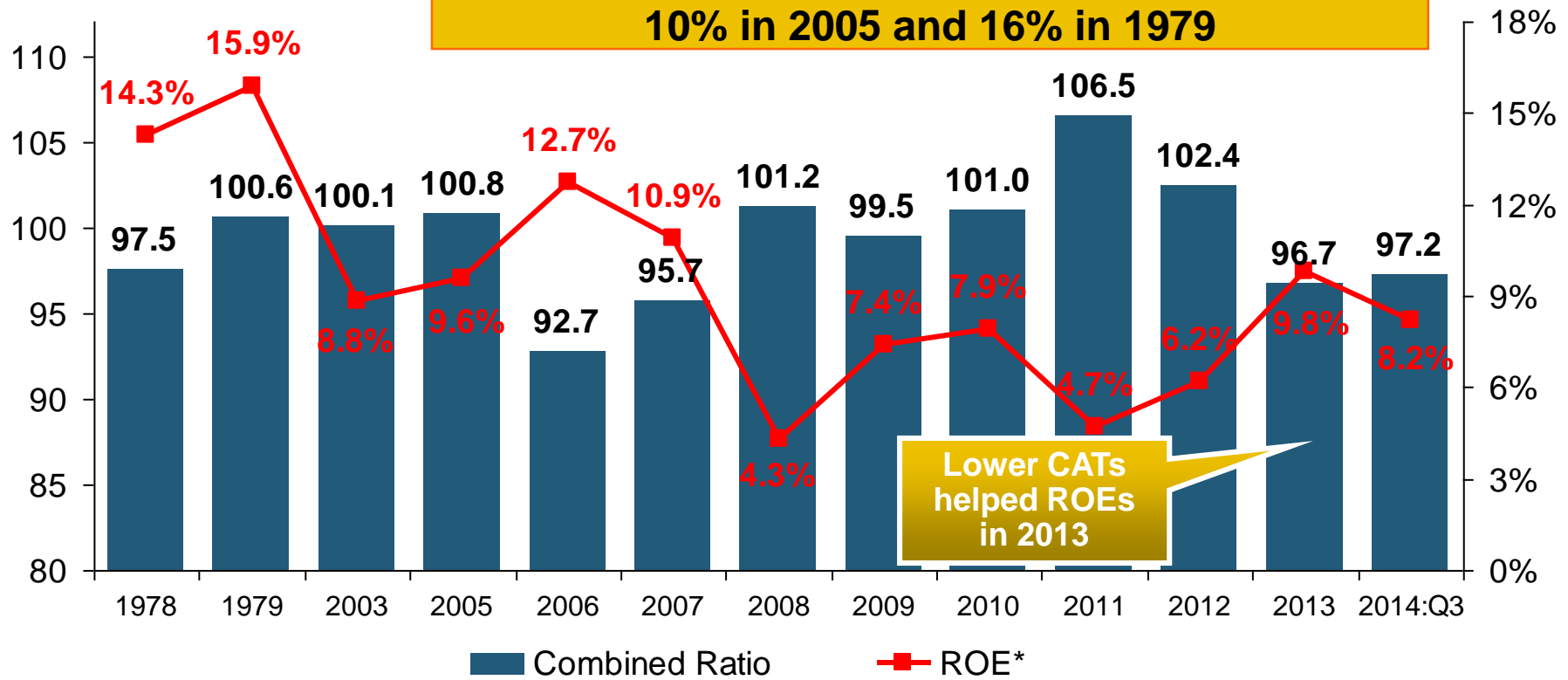
* Excludes Mortgage & Financial Guaranty insurers 2008--2014. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014: = 97.0.

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

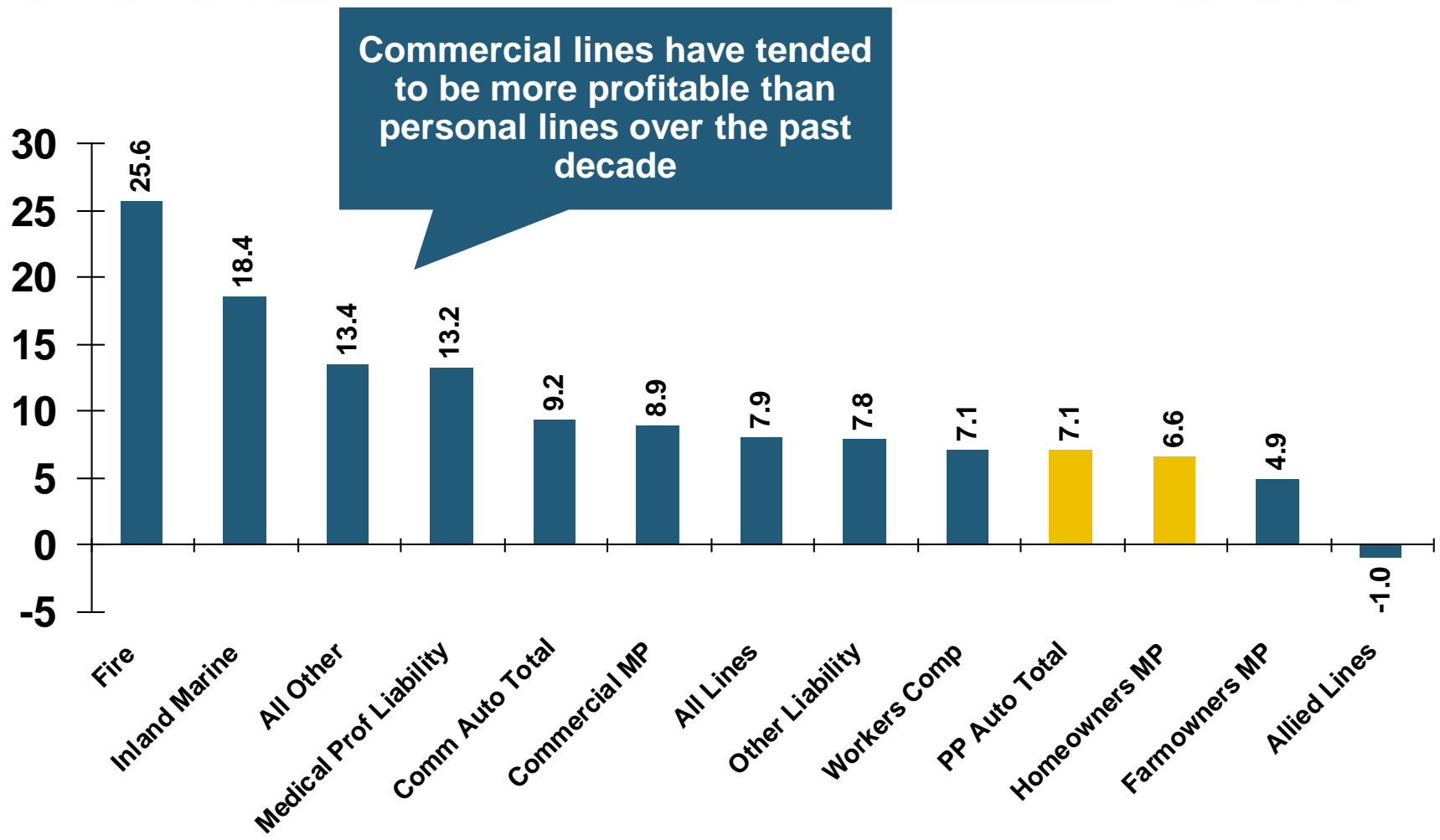


Lower CATs helped ROEs in 2013

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

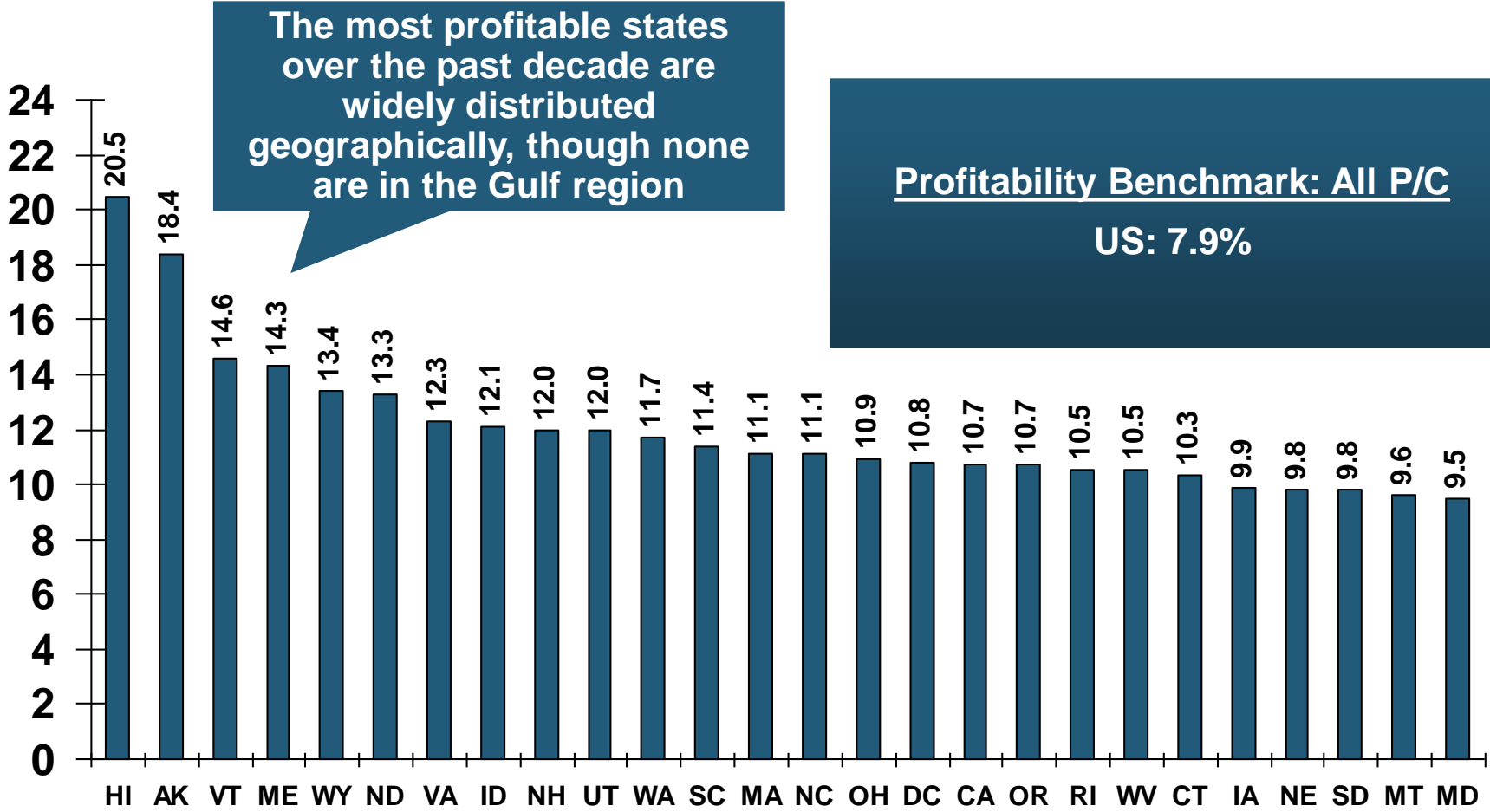
* 2008 -2014 figures are return on average surplus and exclude mortgage and financial guaranty insurers. 2014 combined ratio including M&FG insurers is 97.0; 2013 = 96.1; 2012 =103.2, 2011 = 108.1, ROAS = 3.5%.
Source: Insurance Information Institute from A.M. Best and ISO Verisk Analytics data.

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



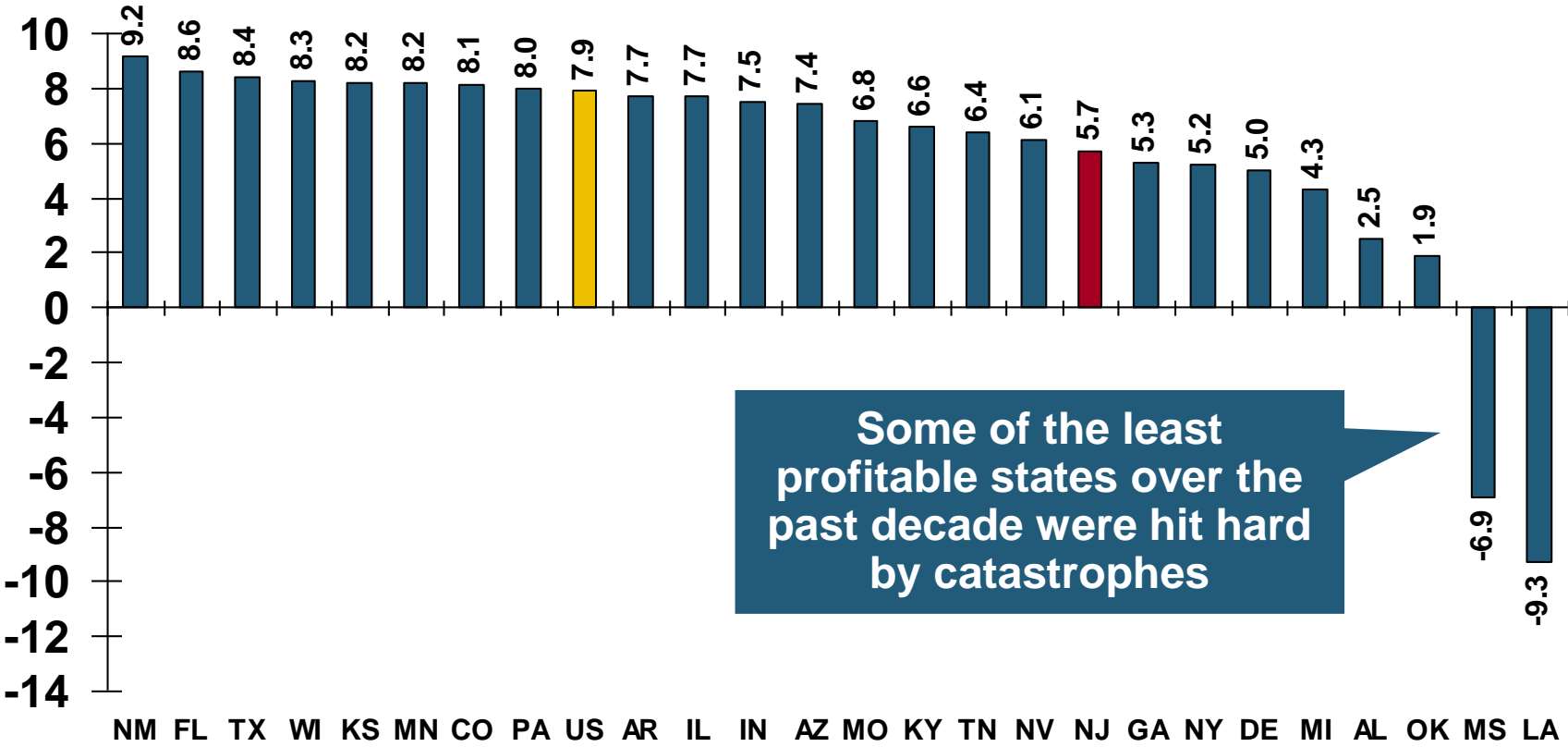
Source: NAIC; Insurance Information Institute.

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



Source: NAIC; Insurance Information Institute.

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



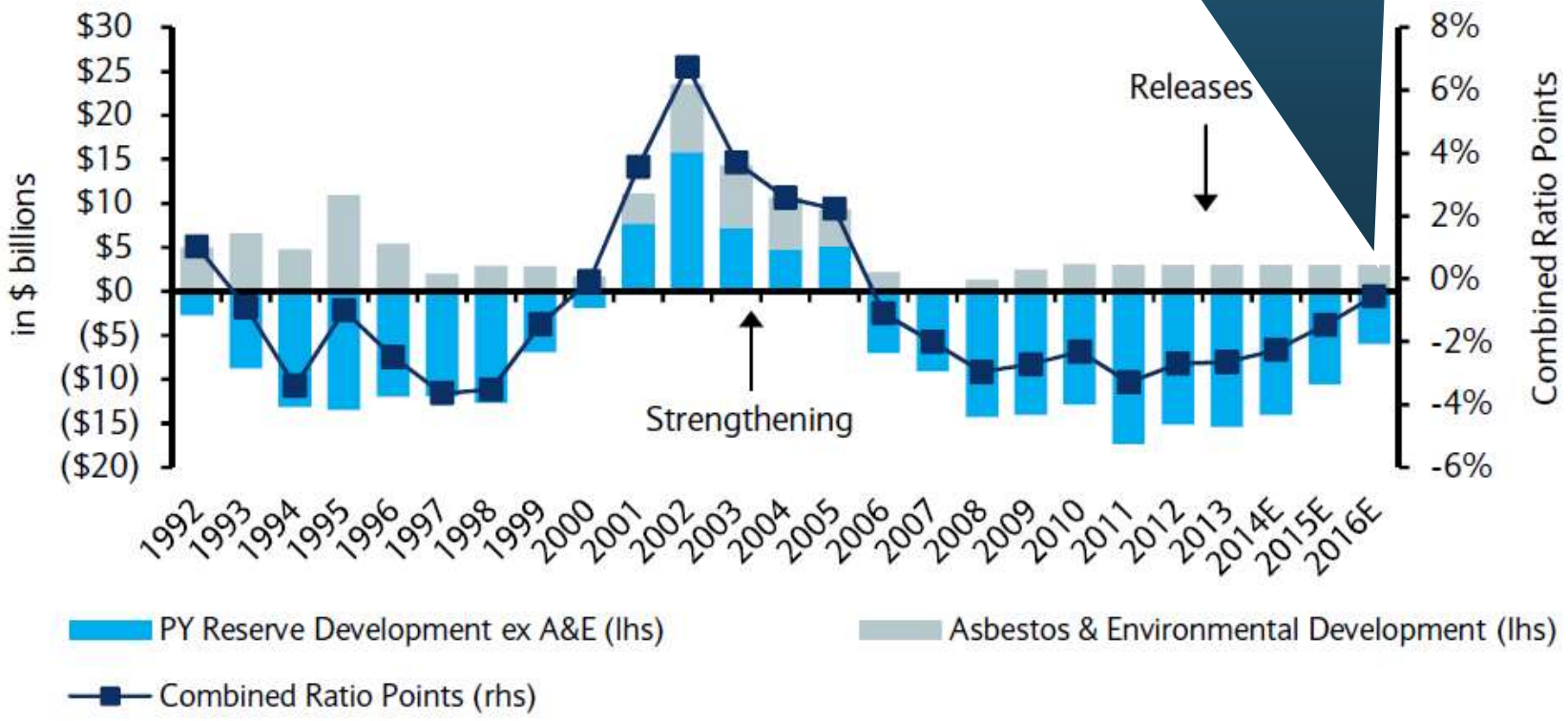
Some of the least profitable states over the past decade were hit hard by catastrophes

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



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

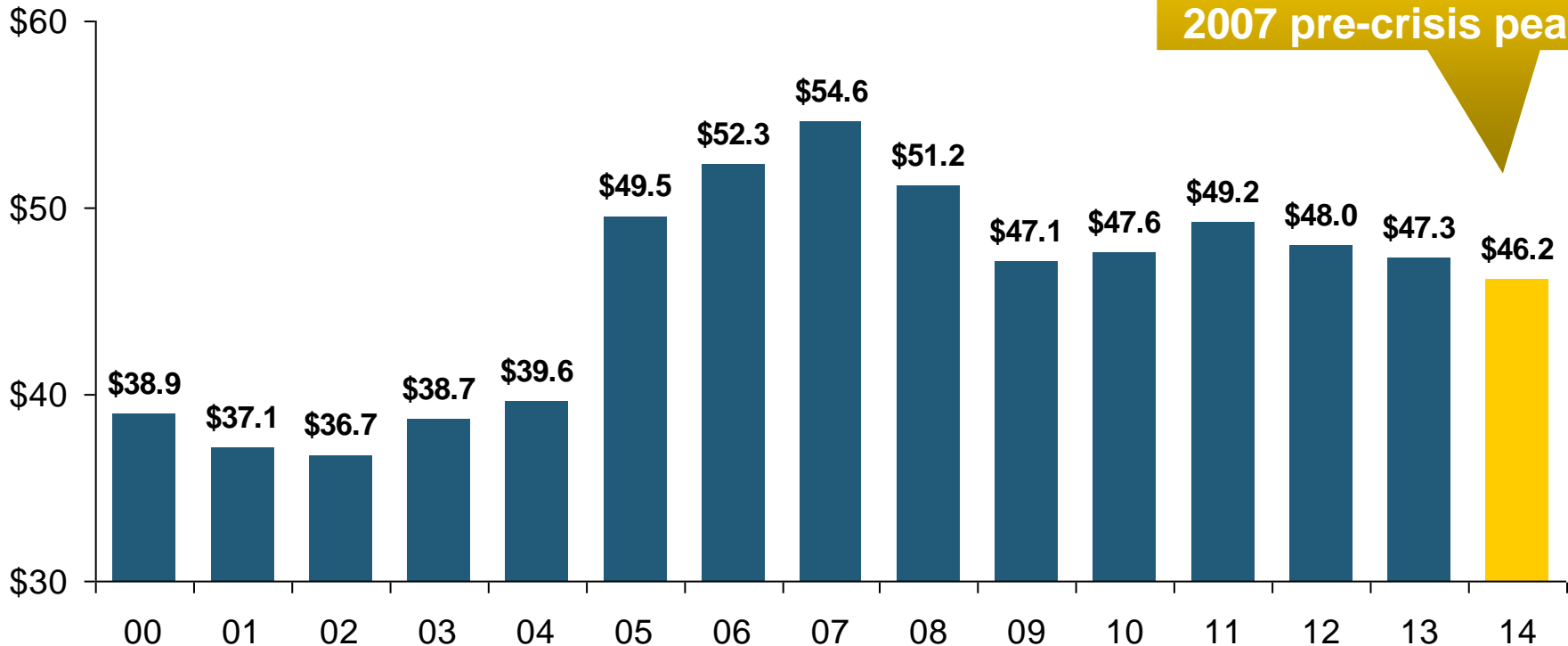
**INVESTMENTS:
THE NEW REALITY**

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

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

Property/Casualty Insurance Industry Investment Income: 2000–2014¹

(\$ Billions)



Investment earnings are still below their 2007 pre-crisis peak

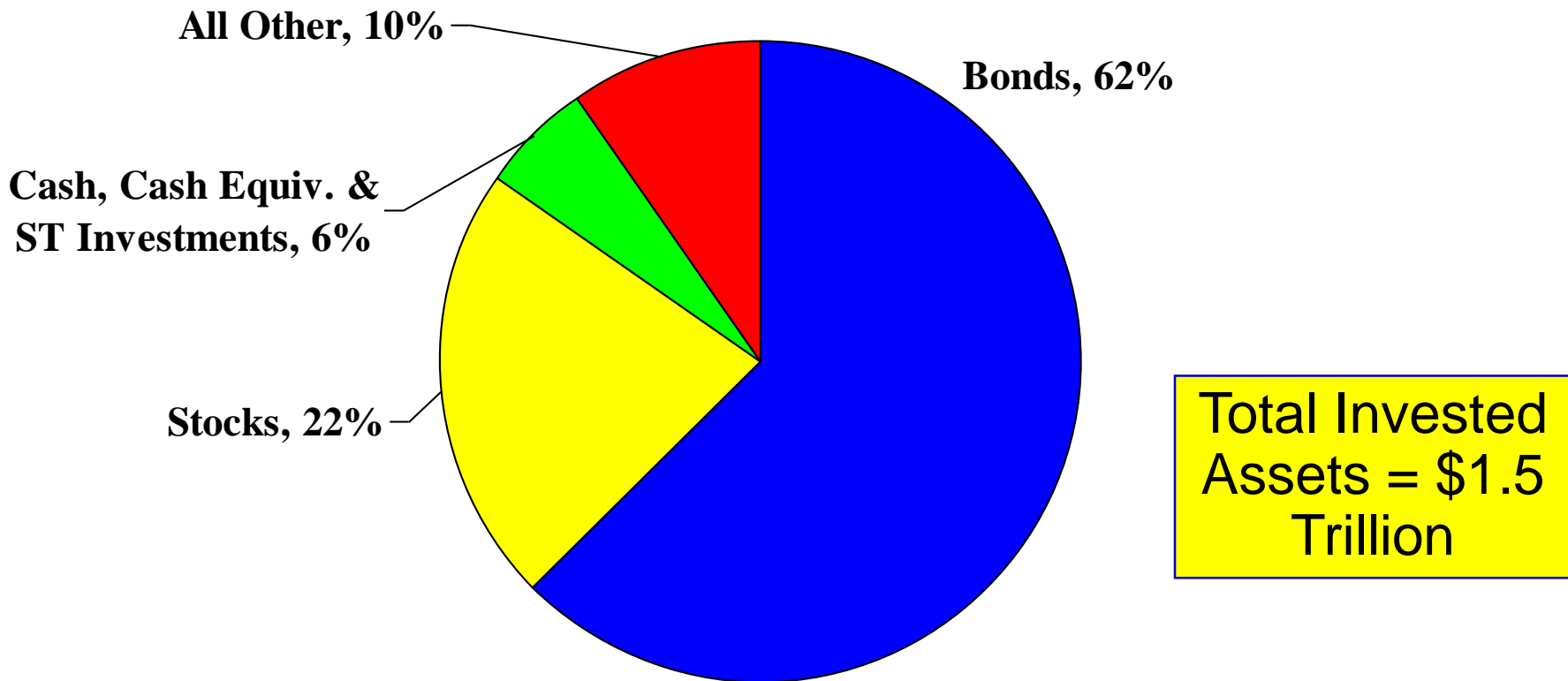
Due to persistently low interest rates, investment income fell in 2012, 2013 and 2014.

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

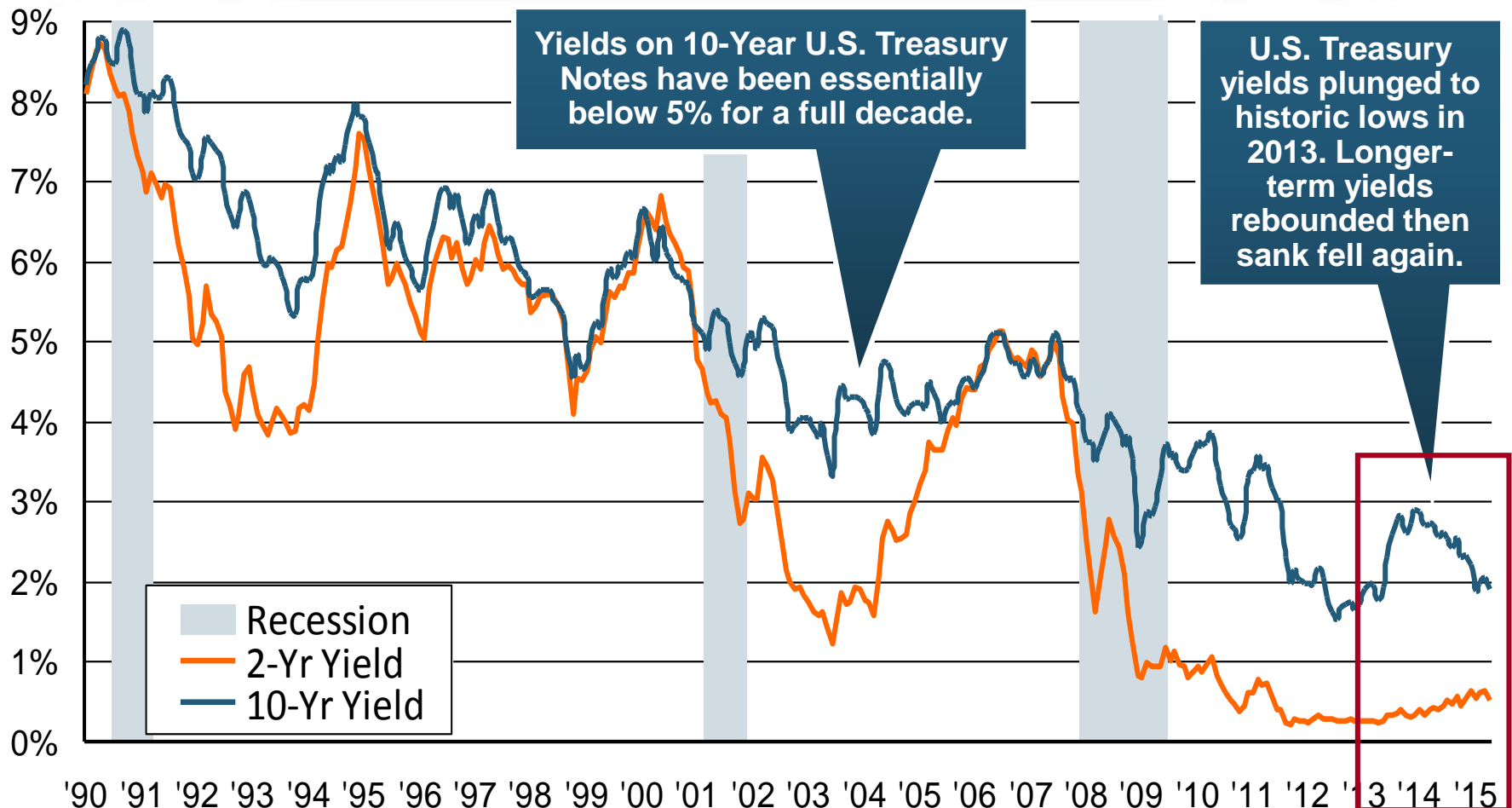
*2014 figure is estimated based on annualized data through Q3.

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

\$ Billions



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



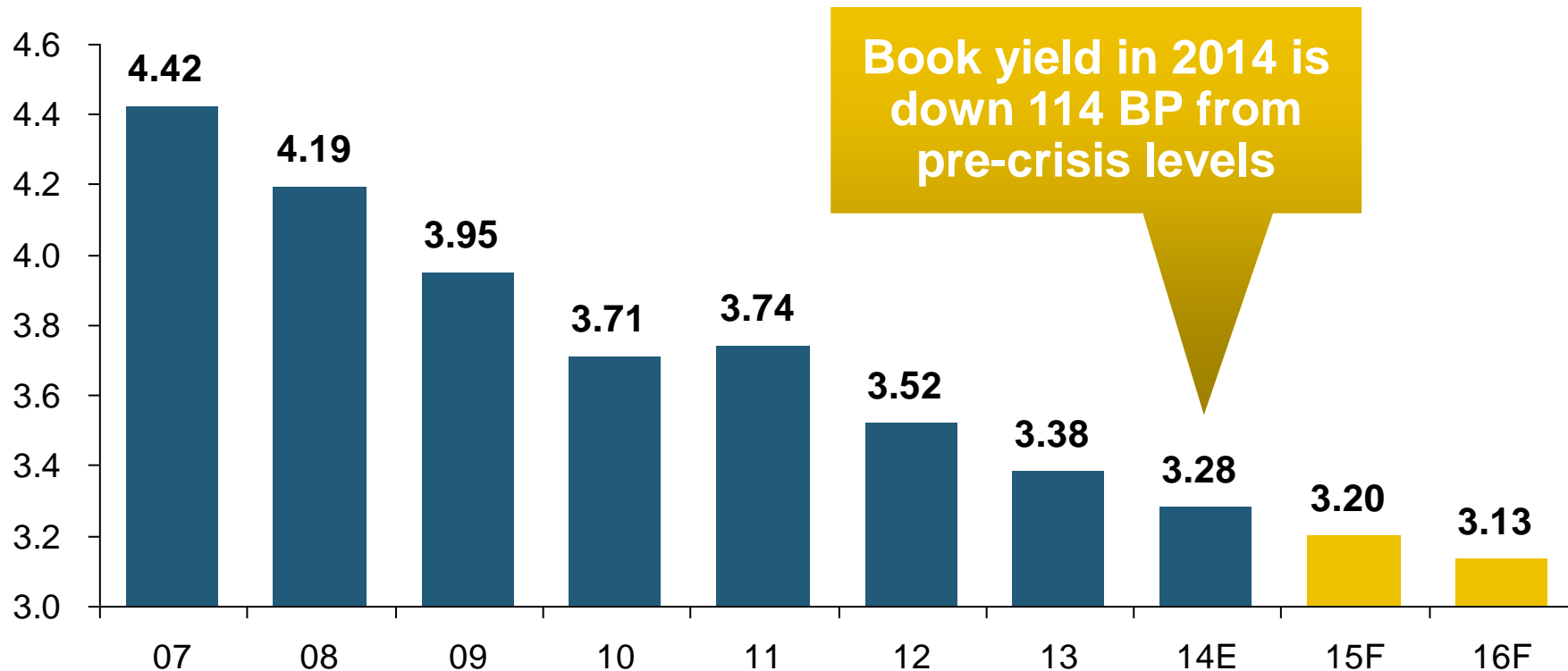
Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, constant maturity, nominal rates, through Apr 17, 2015.

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

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

(Percent)



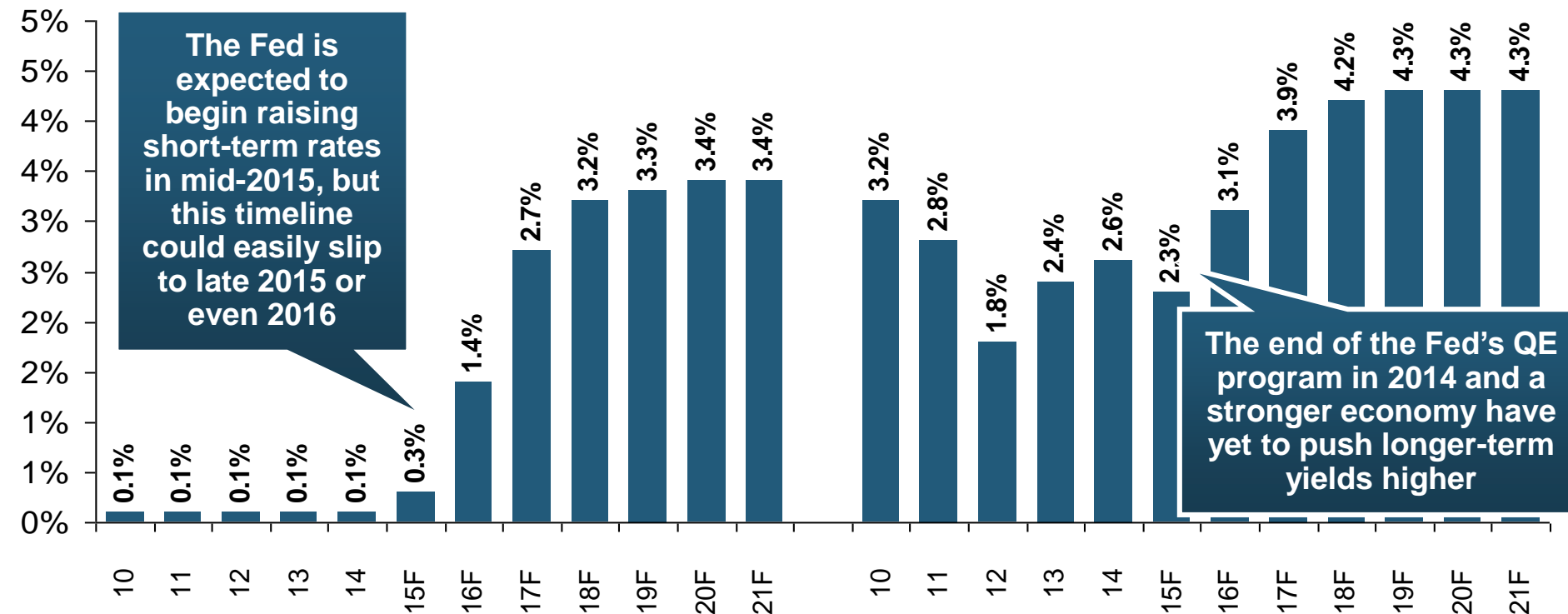
The yield on invested assets continues to decline as returns on maturing bonds generally still exceed new money yields. The end of the Fed's QE program in Oct. 2014 should allow some increase in longer maturities while short term interest rate increases are unlikely until mid-to-late 2015

Interest Rate Forecasts: 2015 – 2021

Yield (%)

3-Month Treasury

10-Year Treasury

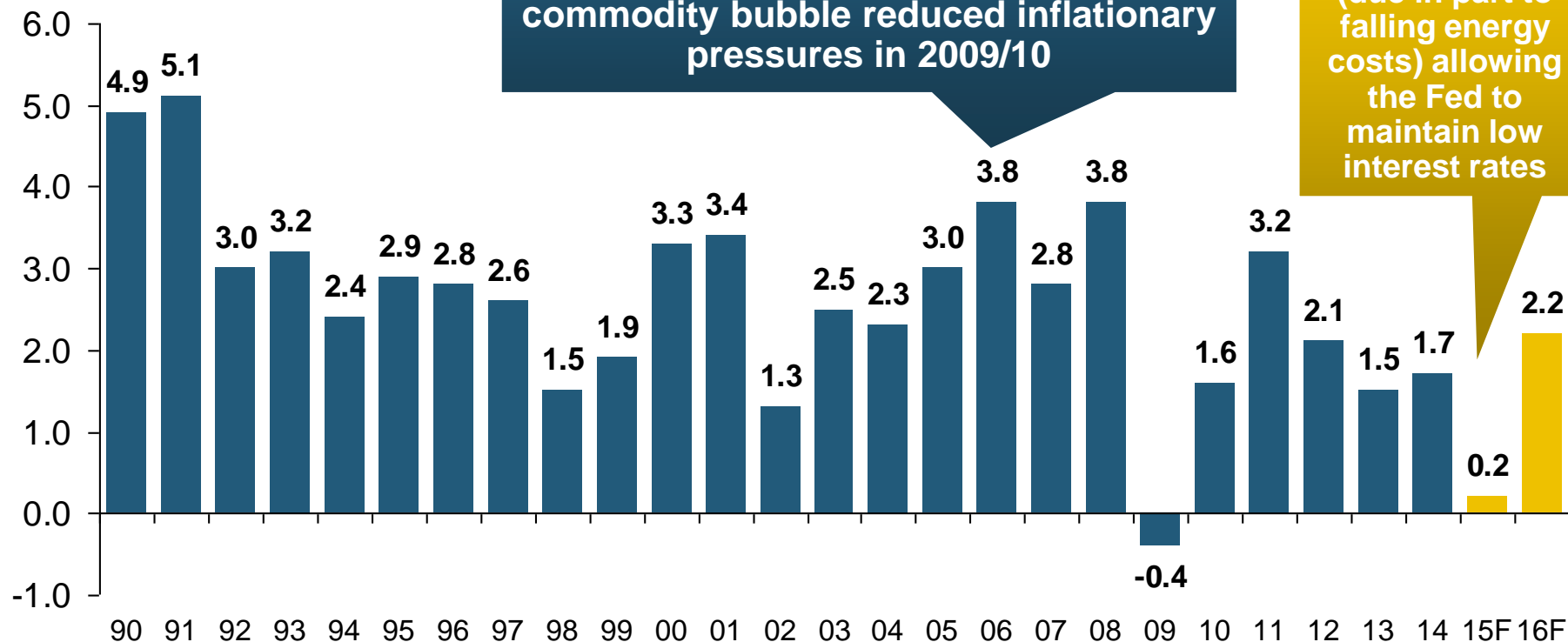


A Full Normalization of Interest Rates Is Unlikely Until 2018 or Later, More than a Decade After the Onset of the Financial Crisis

Sources: Federal Reserve Board of Governors (historical); Blue Chip Economic Indicators (4/15 for 2015 and 2016; for 2017-2021 3/15 issue); Insurance Info. Institute.

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

Annual Inflation Rates (%)

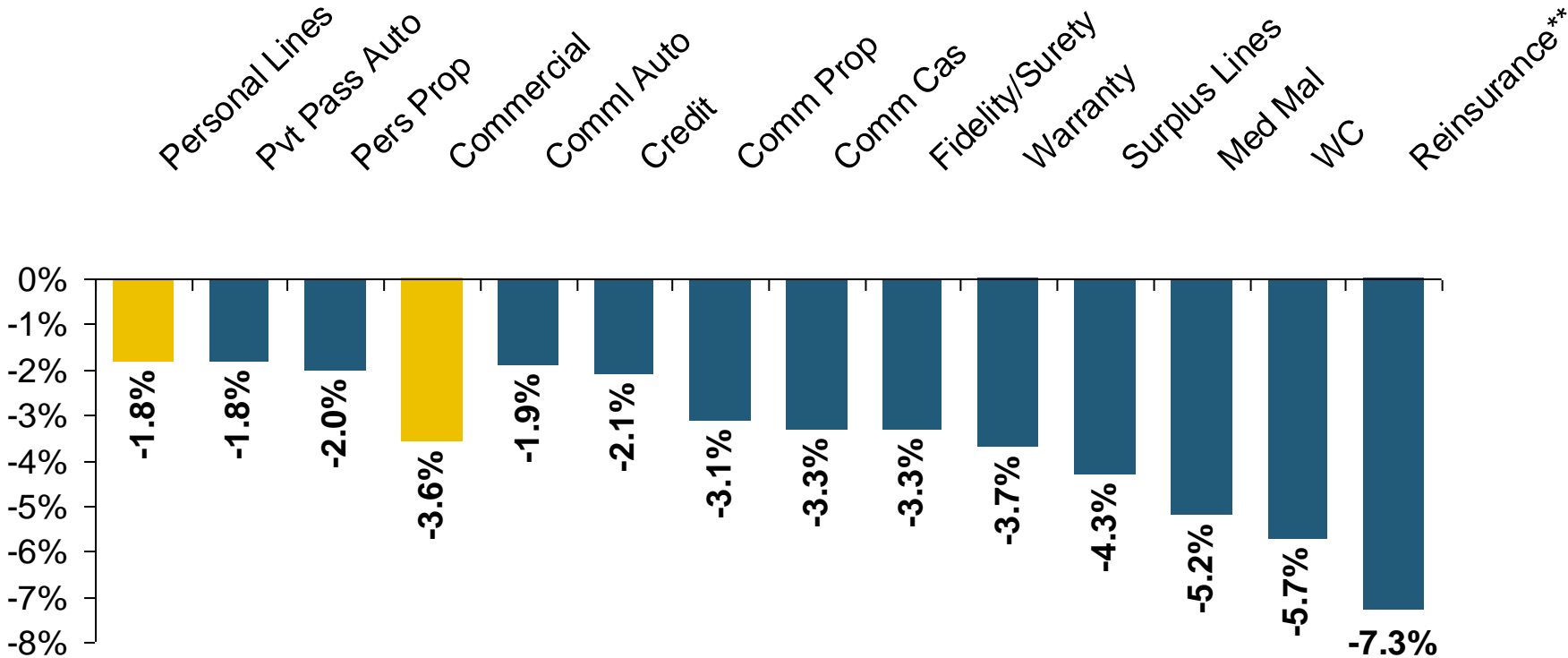


Inflation peaked at 5.6% in August 2008 on high energy and commodity crisis. The recession and the collapse of the commodity bubble reduced inflationary pressures in 2009/10

Inflationary expectations have slipped (due in part to falling energy costs) allowing the Fed to maintain low interest 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

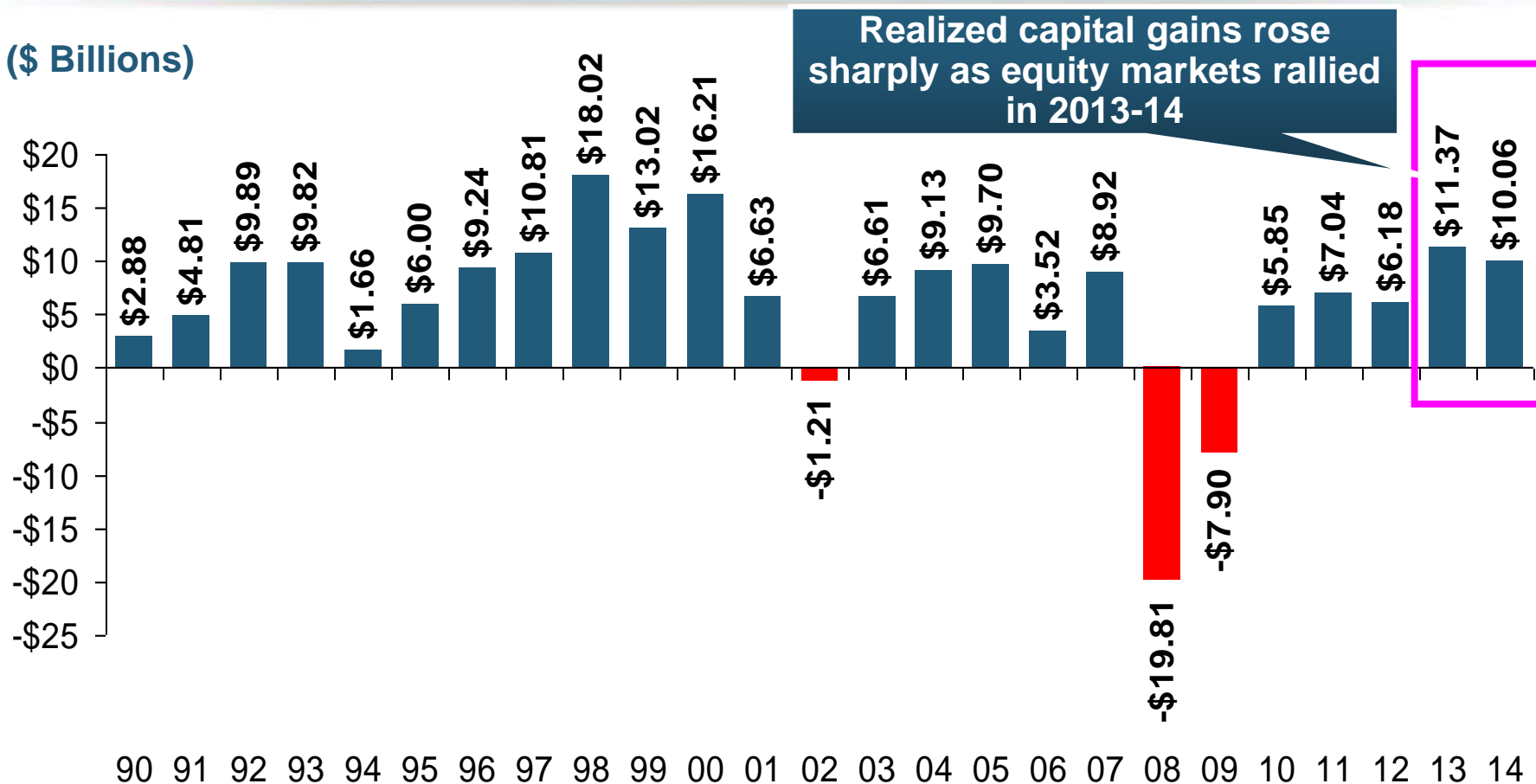
*Based on 2008 Invested Assets and Earned Premiums

**US domestic reinsurance only

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

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

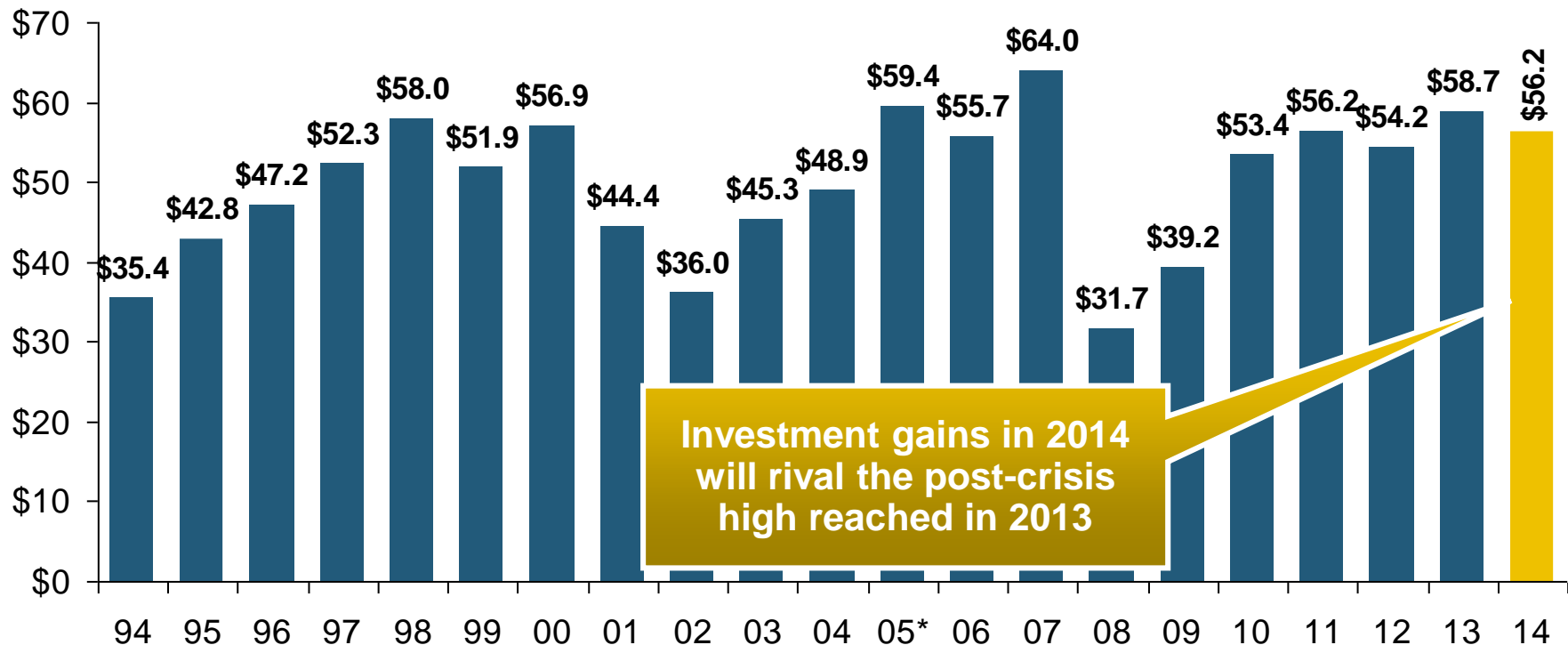
(\$ Billions)



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

Property/Casualty Insurance Industry Investment Gain: 1994–2014¹

(\$ Billions)



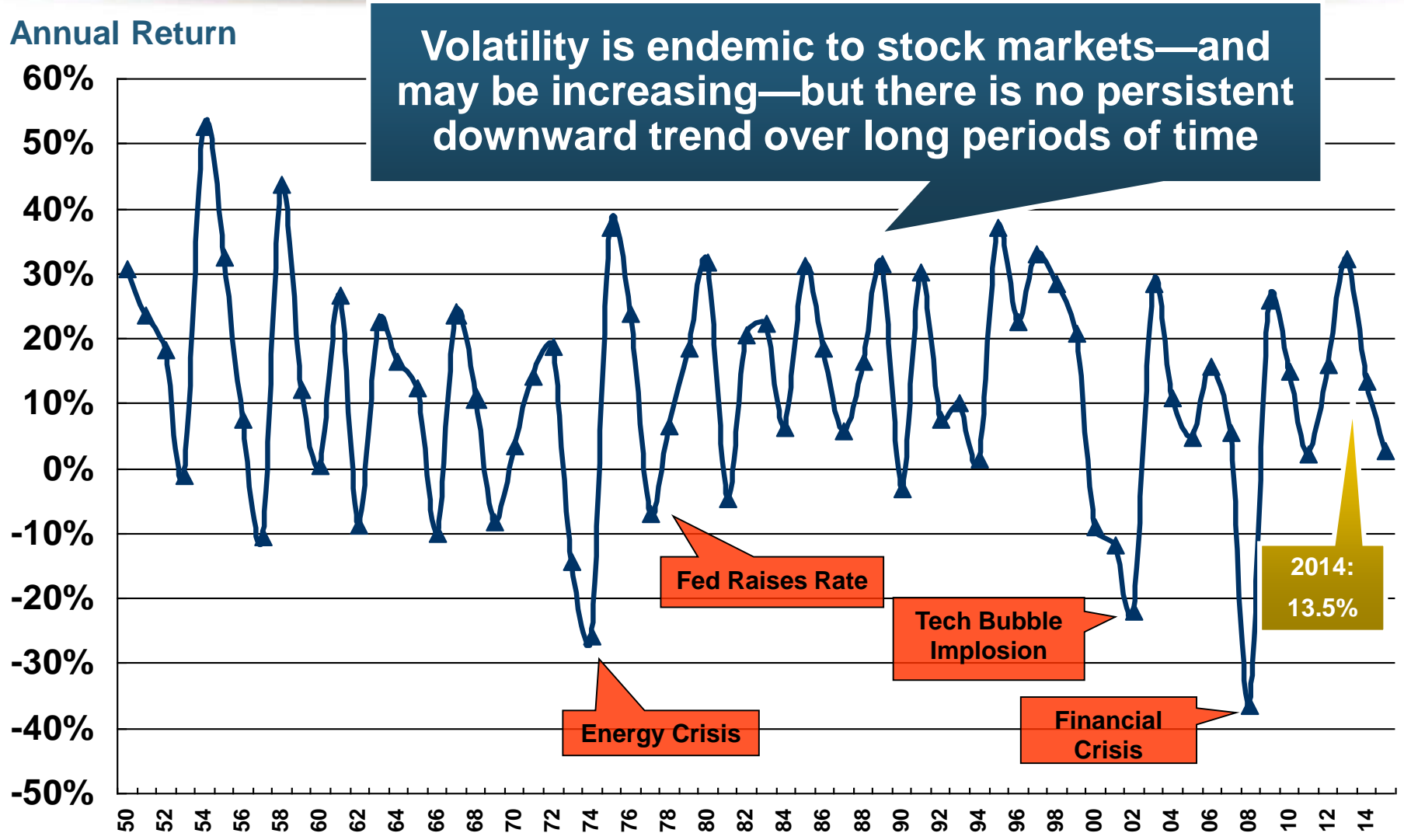
Total Investment Gains Were Down Slightly in 2014 as Low Interest Rates Pressured Investment Income but Realized Capital Gains Remained Robust

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;

Sources: ISO; Insurance Information Institute.

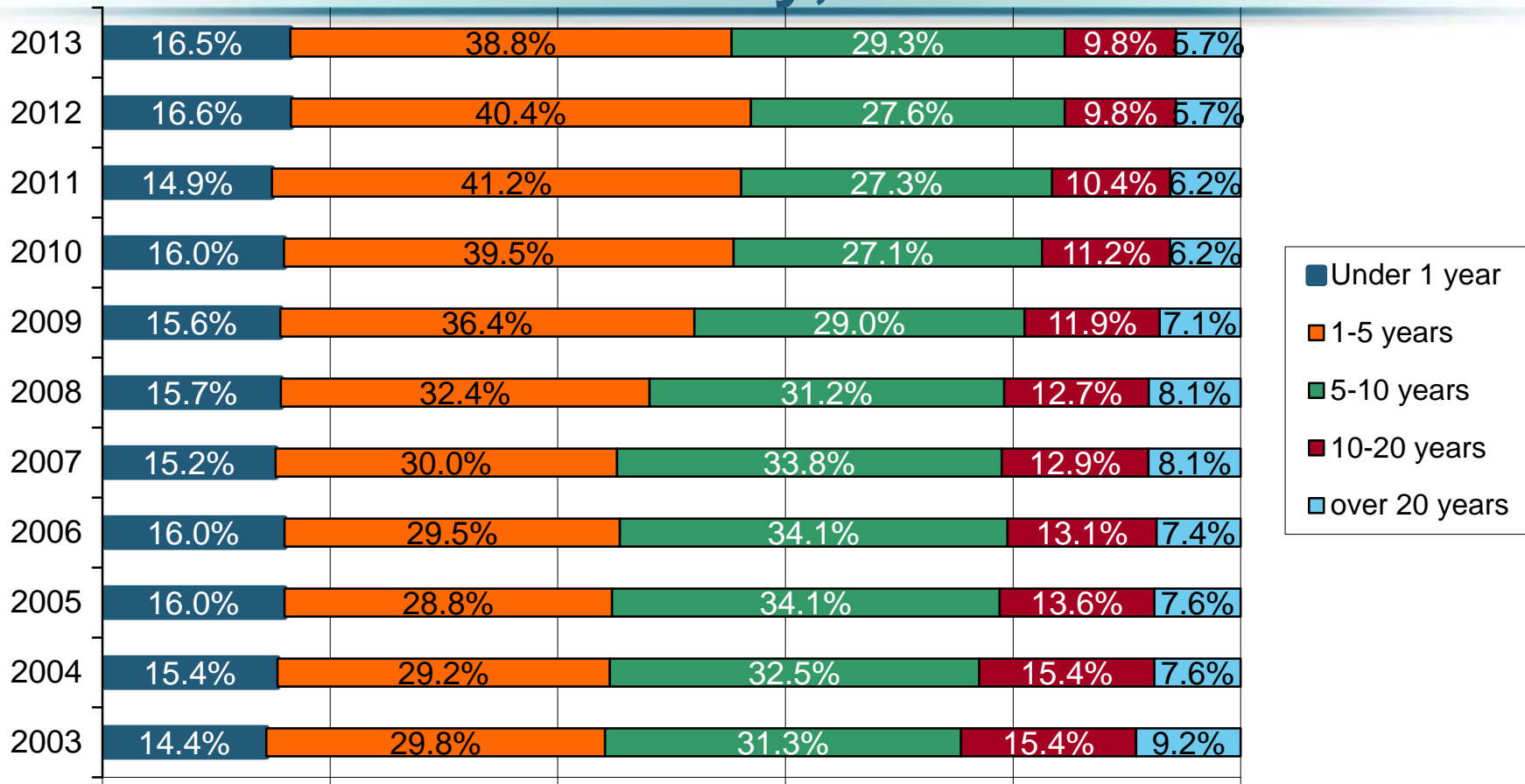
S&P 500 Index Returns, 1950 – 2015*



*Through April 28, 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

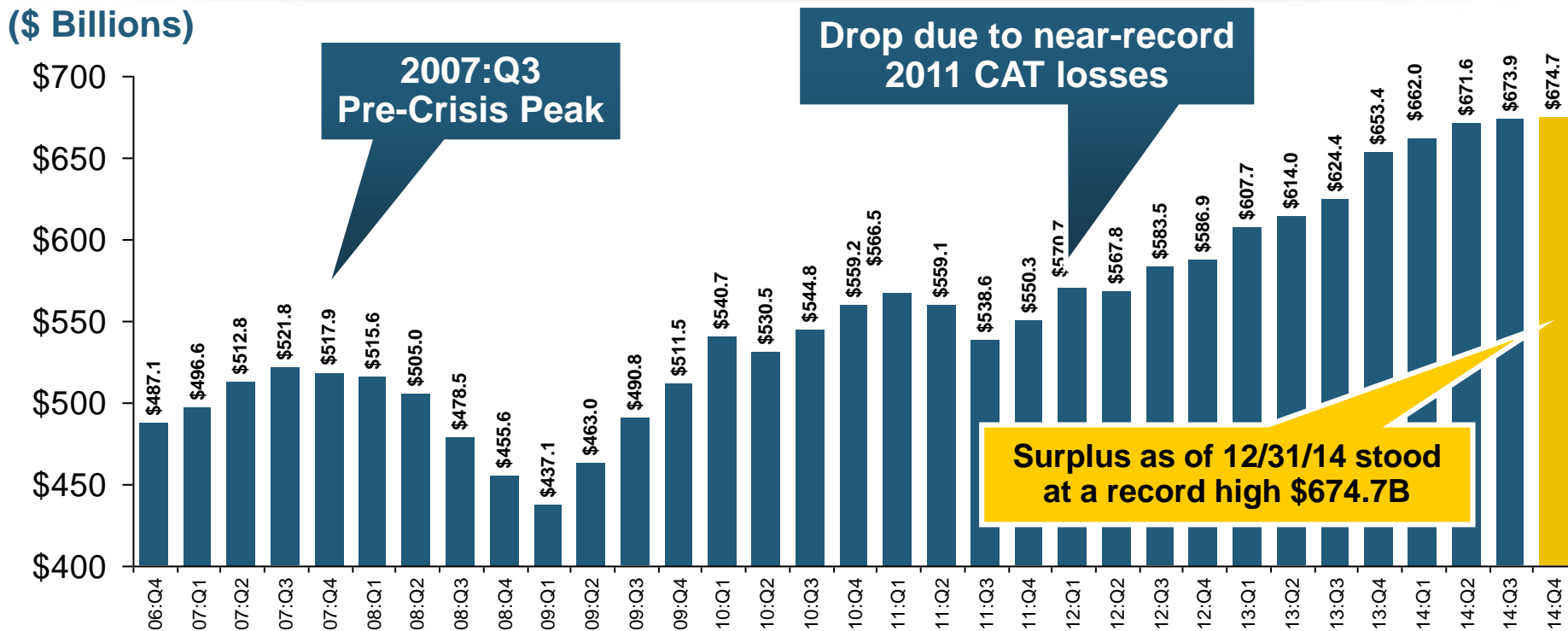


The main shift over these years has been from bonds with longer maturities to bonds with shorter maturities. The industry first trimmed its holdings of over-10-year bonds (from 24.6% in 2003 to 15.5% in 2012) and then trimmed bonds in the 5-10-year category (from 31.3% in 2003 to 27.6% in 2012). Falling 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:Q4–2014:Q4



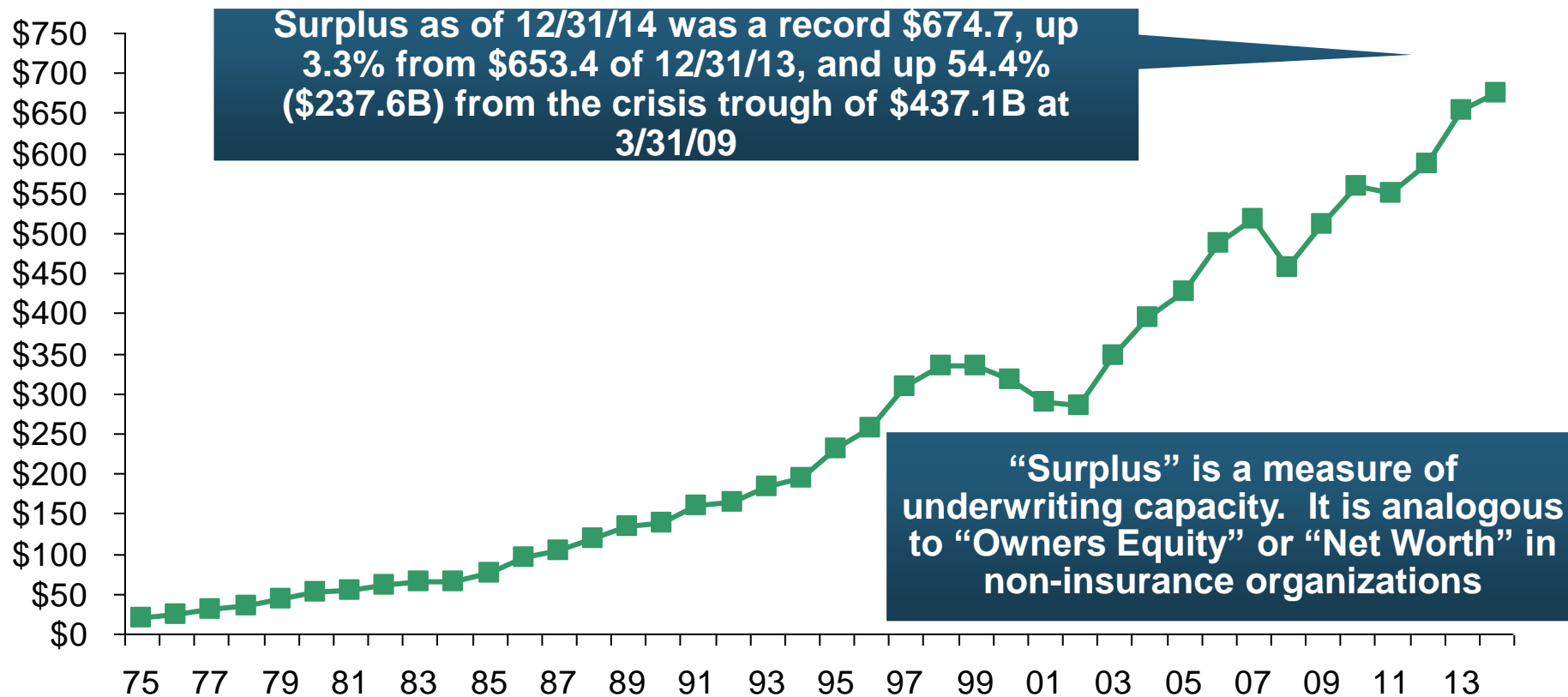
The industry now has \$1 of surplus for every \$0.73 of NPW, close to the strongest claims-paying status in its history.

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: 1975–2014*

(\$ Billions)



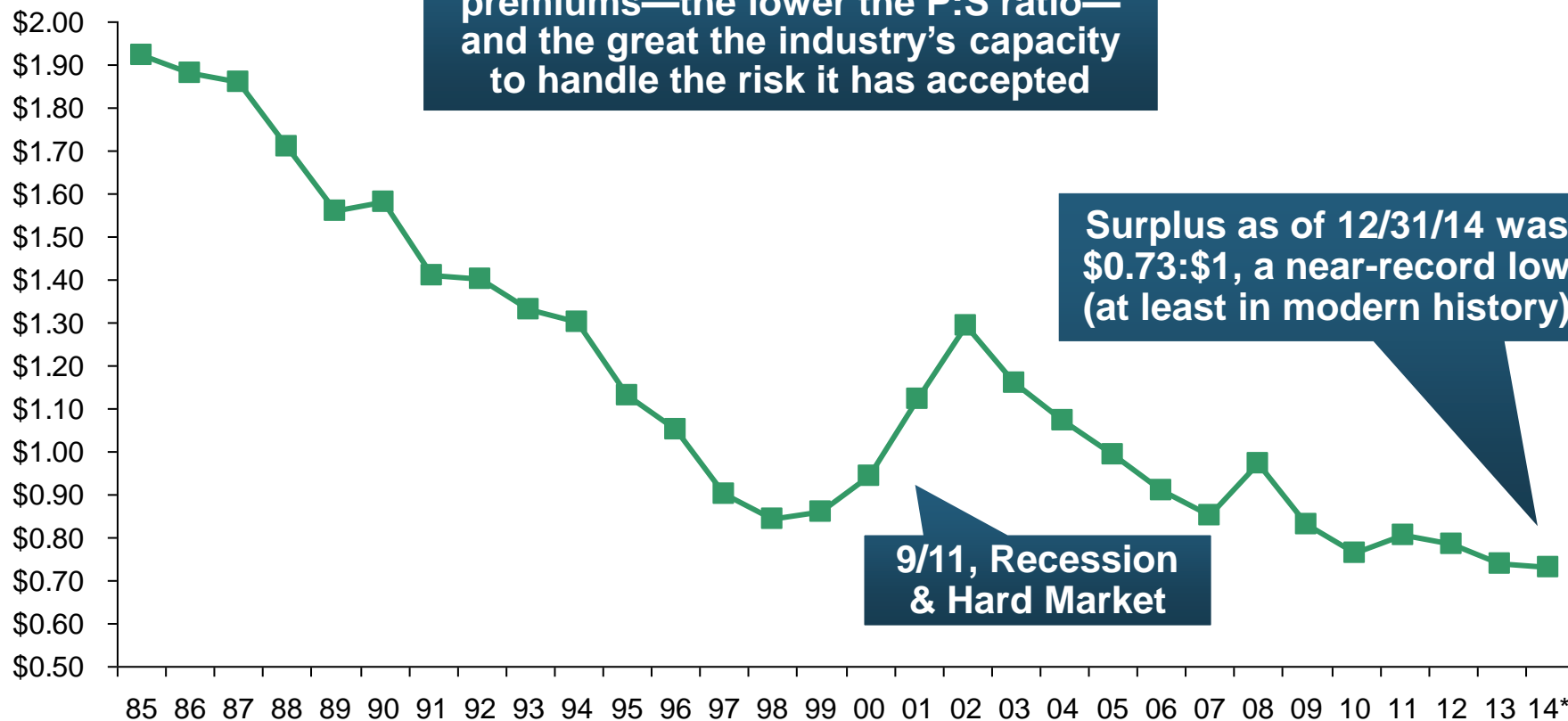
The Premium-to-Surplus Ratio Stood at \$0.73:\$1 as of 12/31/14, a Near Record Low (at Least in Recent History)

* As of 12/31/14.

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

Premium-to-Surplus Ratio: 1985–2014*

(Ratio of NWP to PHS)

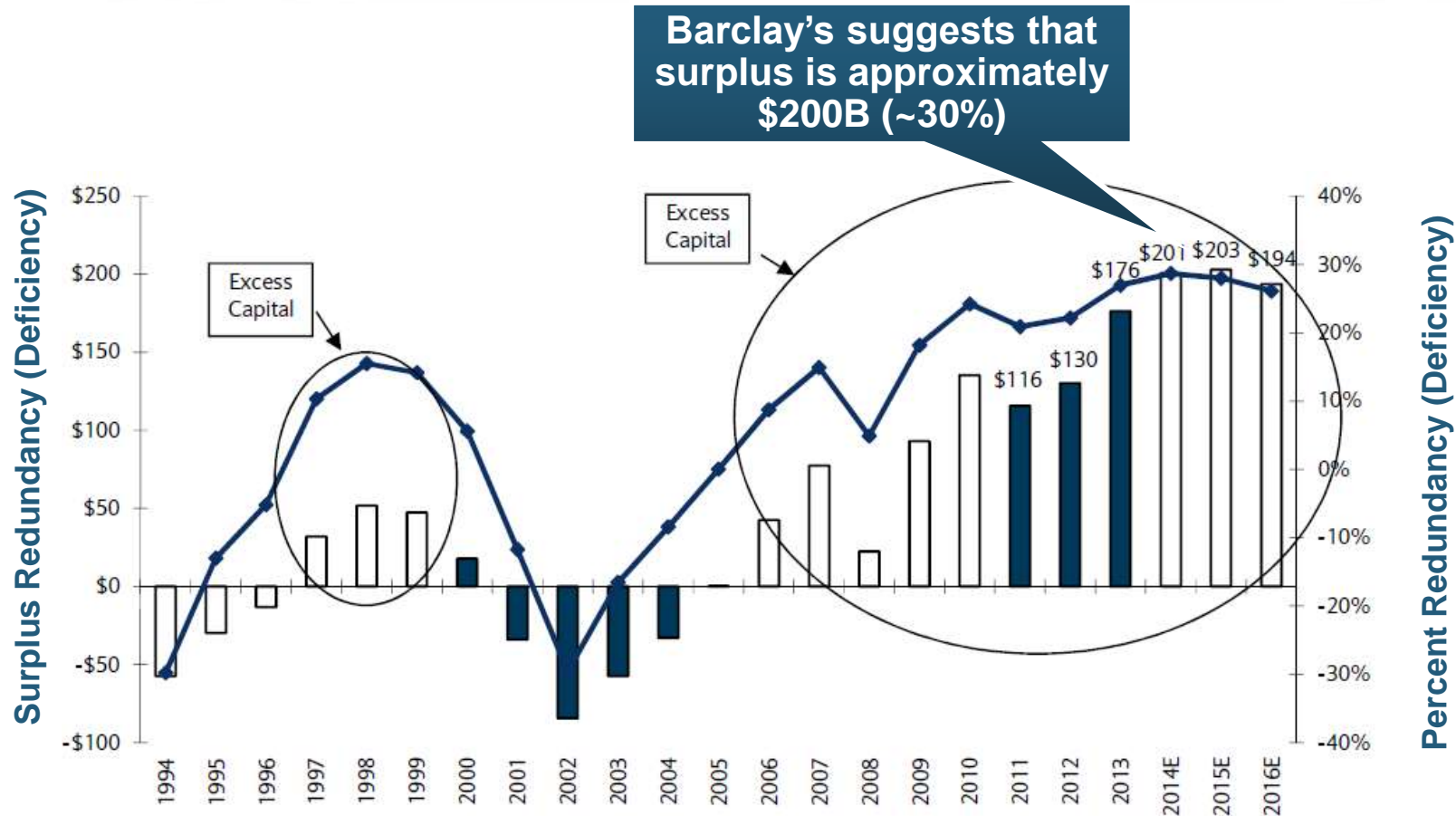


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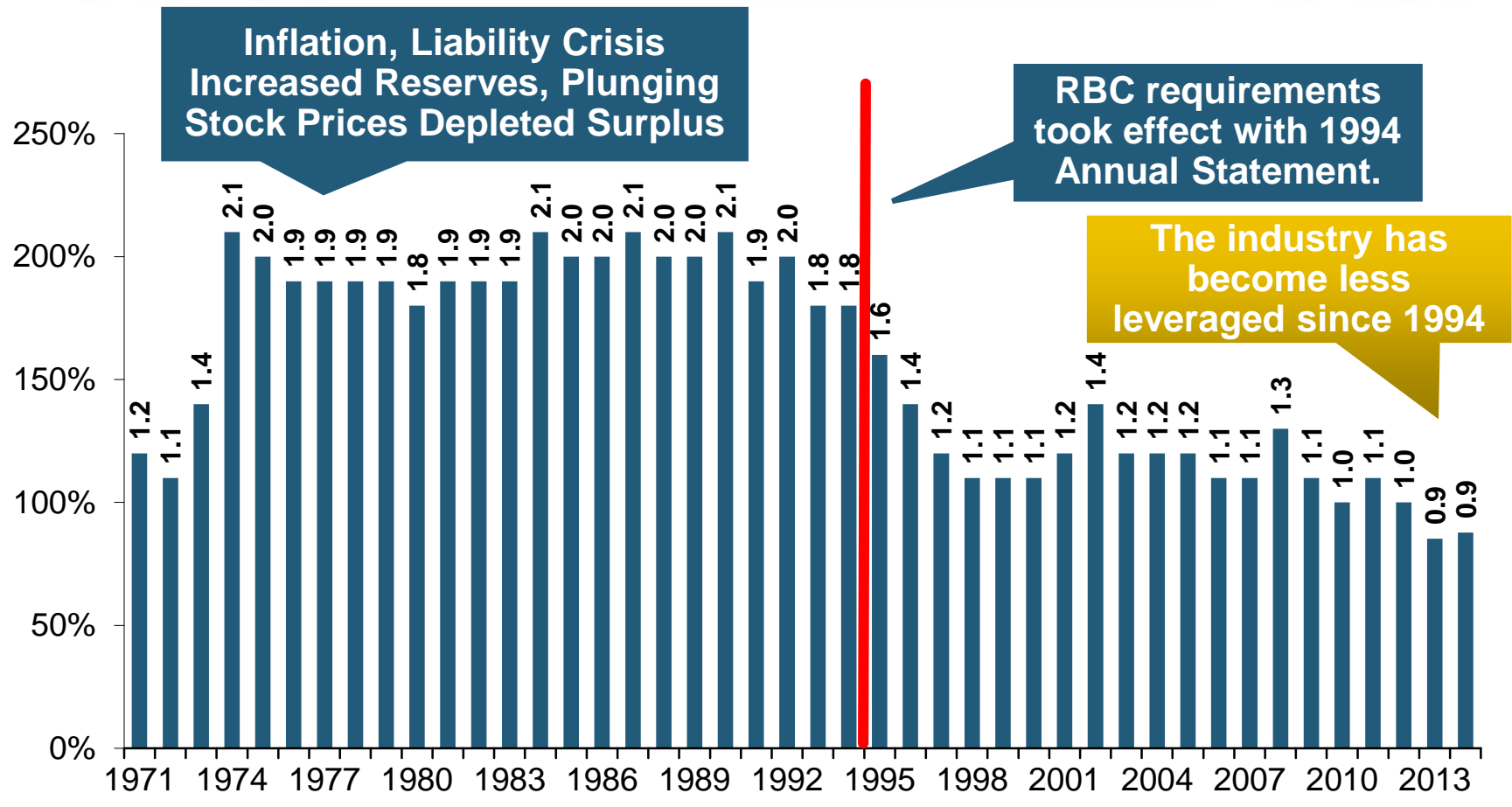
Source: A.M. Best, ISO, Insurance Information Institute.

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.

Source: Calculations from A.M. Best and ISO data by Insurance Information Institute.

Alternative Capital

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

***First I.I.I. White Paper on Issue Was
Released in March 2015***

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

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

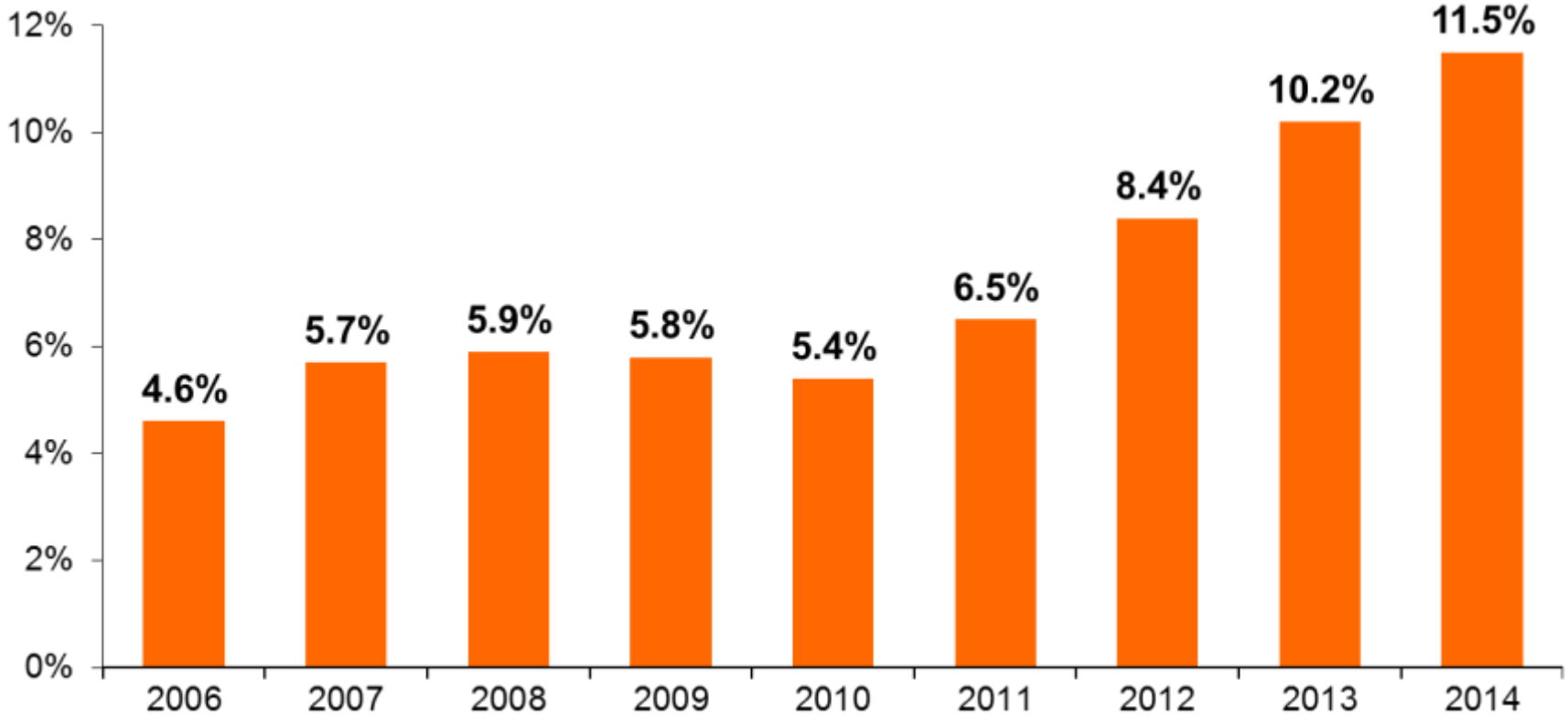


But alternative capacity has grown 210% since 2008, to \$50B. It has more than doubled in the past three years.

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

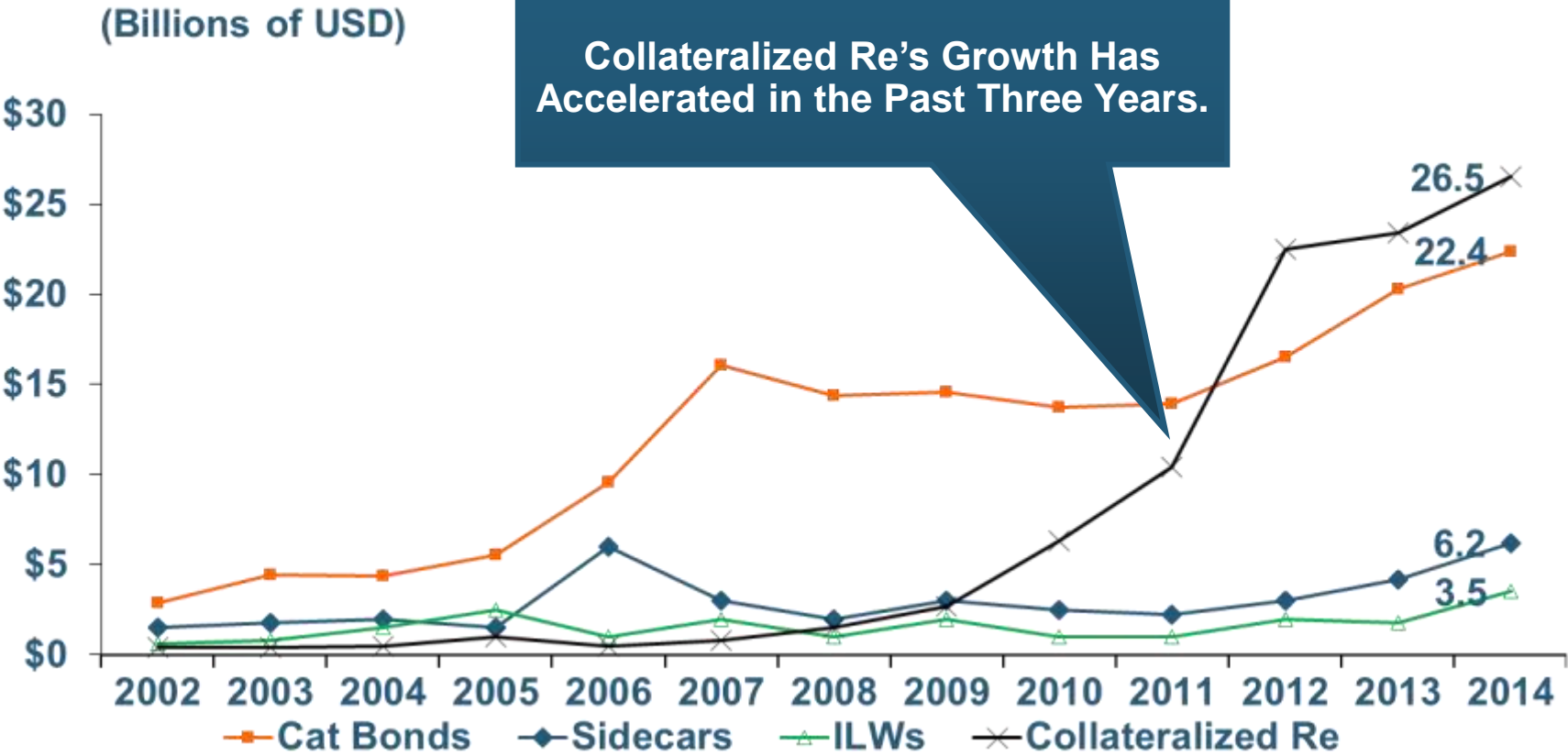


Alternative Capital's Share of Global Reinsurance Capital Has More Than Doubled Since 2010.

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.

Growth of Alternative Capital Structures, 2002 - 2014

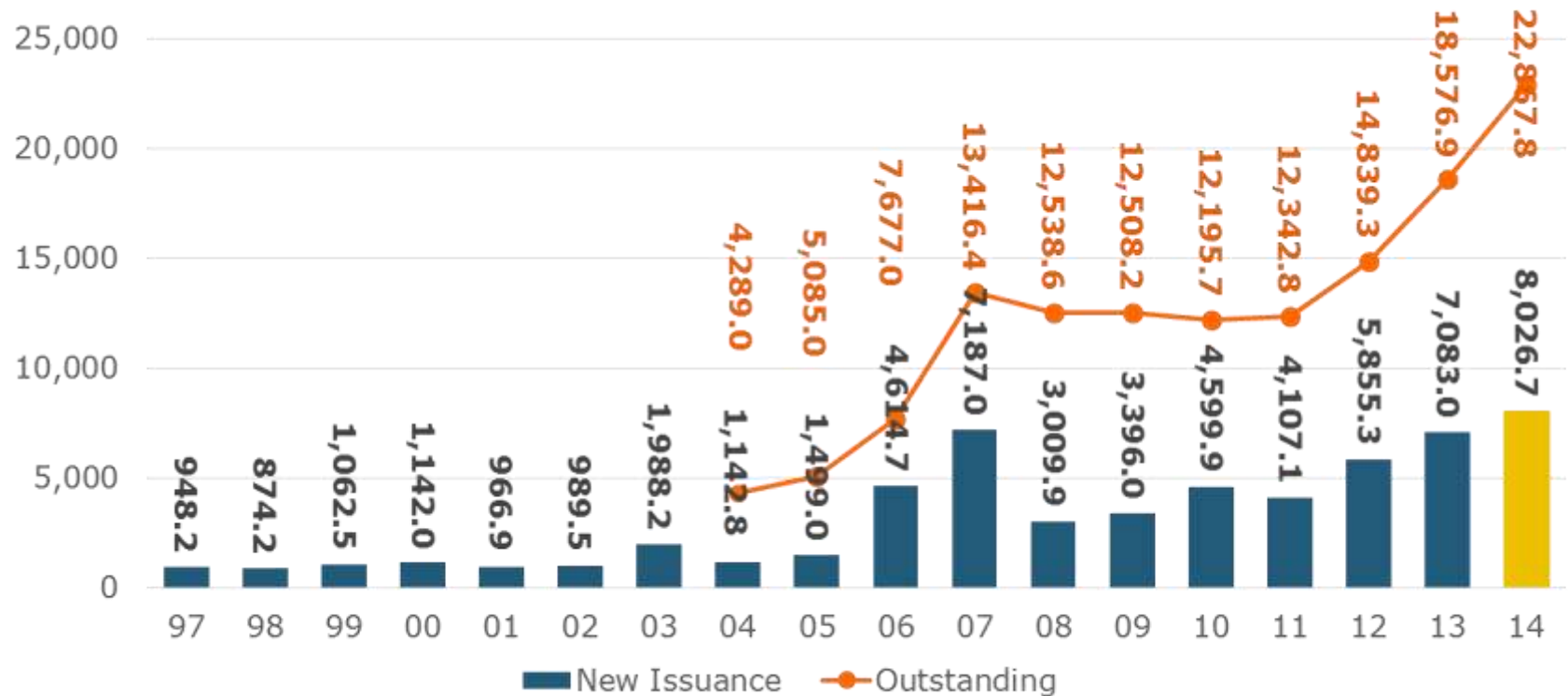


Collateralized Reinsurance and Catastrophe Bonds Currently Dominate the Alternative Capital Market.

2014 data is as of June 30, 2014.
 Source: Aon Benfield Analytics; Insurance Information Institute.

Catastrophe Bond Issuance and Outstanding: 1997-2014

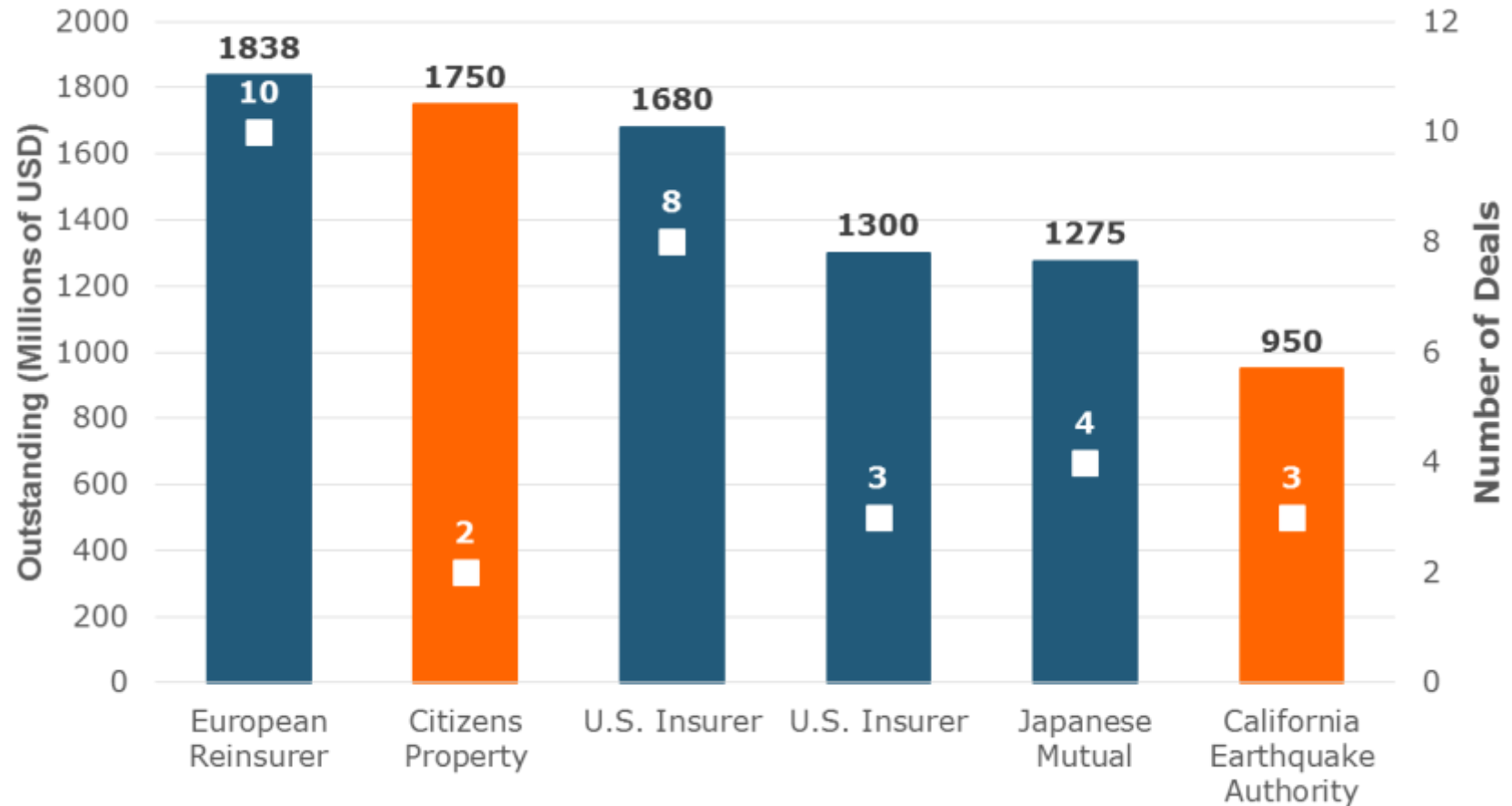
Risk Capital Amount (\$ Millions)



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

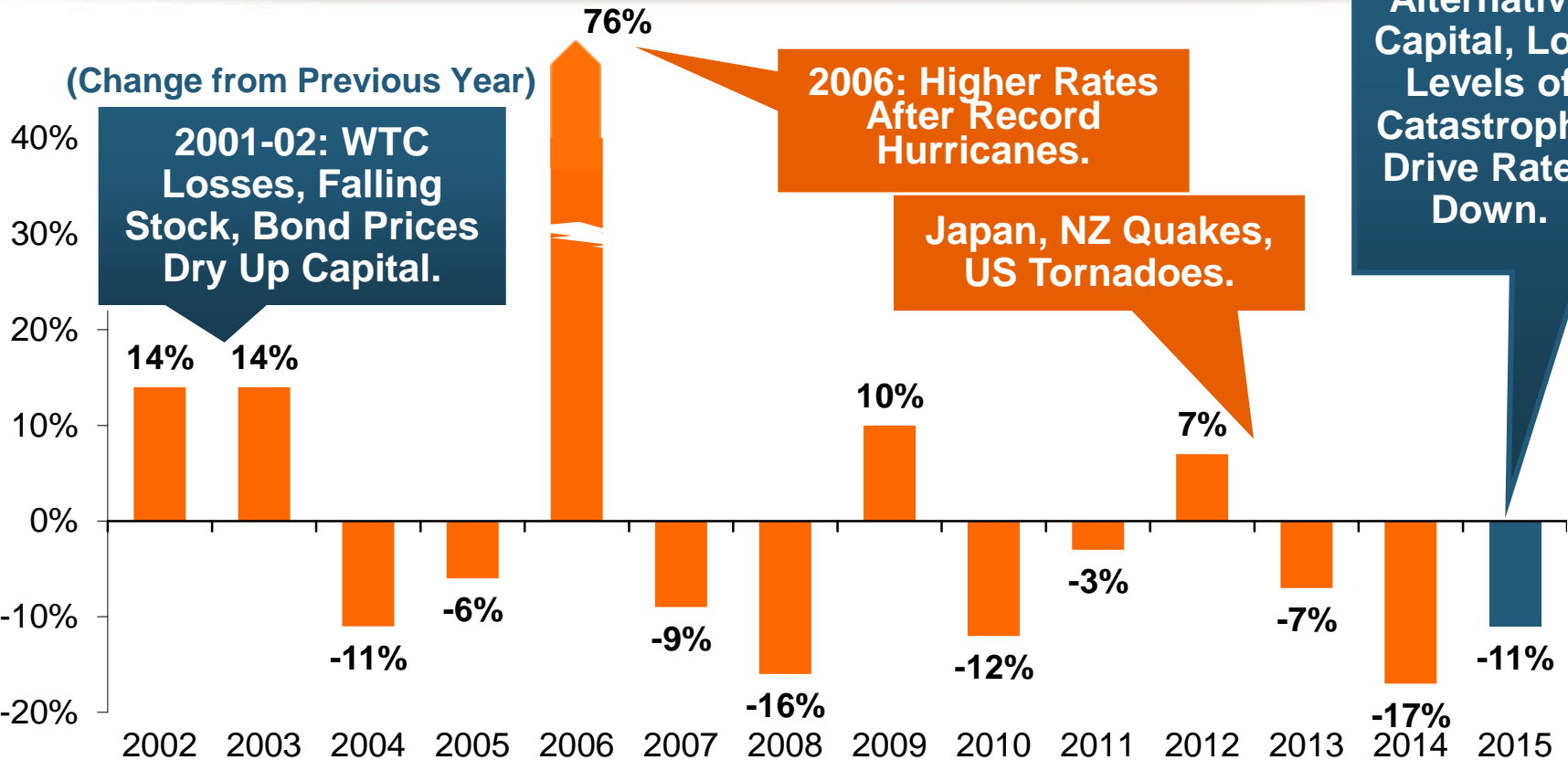
Source: Guy Carpenter.

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.

Reinsurance Pricing: Change in Rate on Line for Cat Business

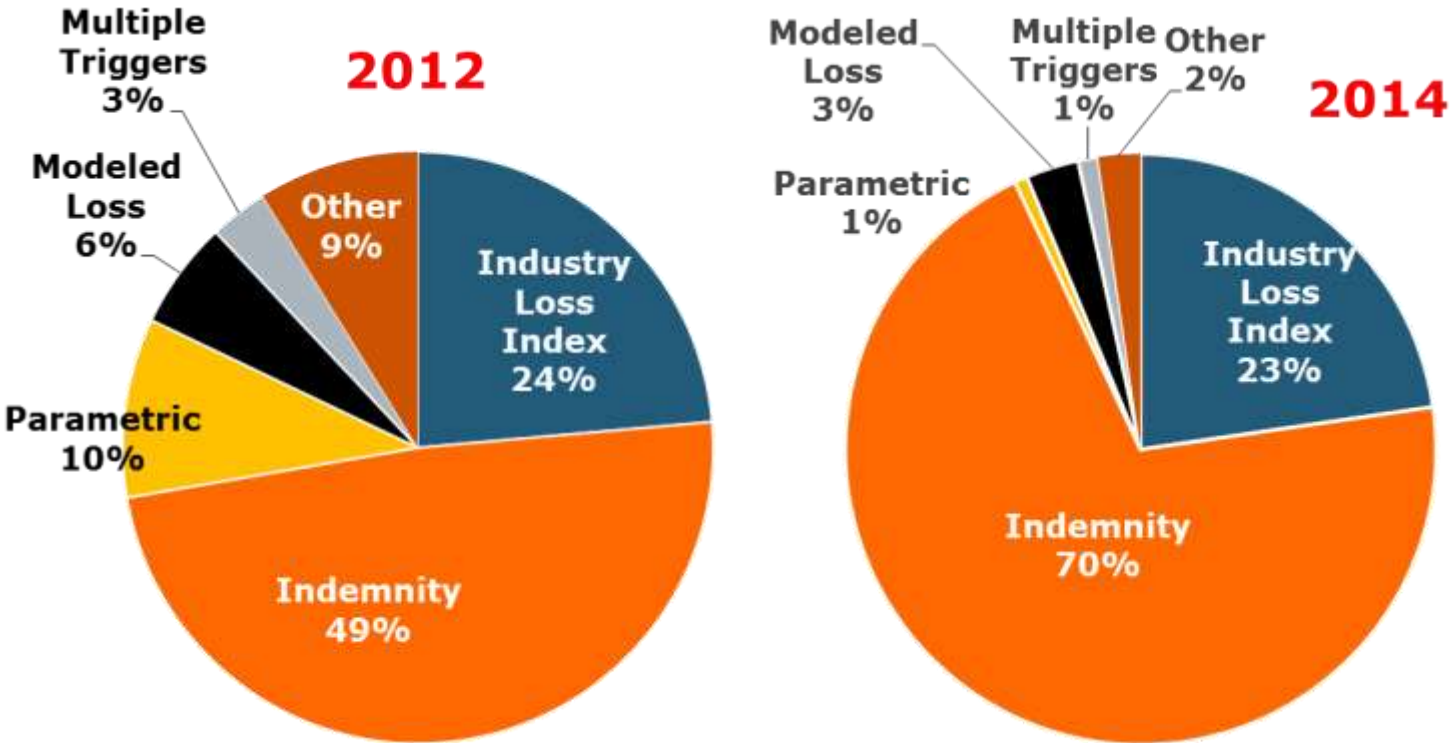


Alternative Capital, Low Levels of Catastrophe Drive Rates Down.

Catastrophe Prices Fell 11 Percent on January 1 Renewals, Driven by Emergence of New Capital, Mild Catastrophe Losses.

2014 reflects change through June 30 from prior year end. 2015 is for January 1 renewals..
 Source: Guy Carpenter; Insurance Information Institute.

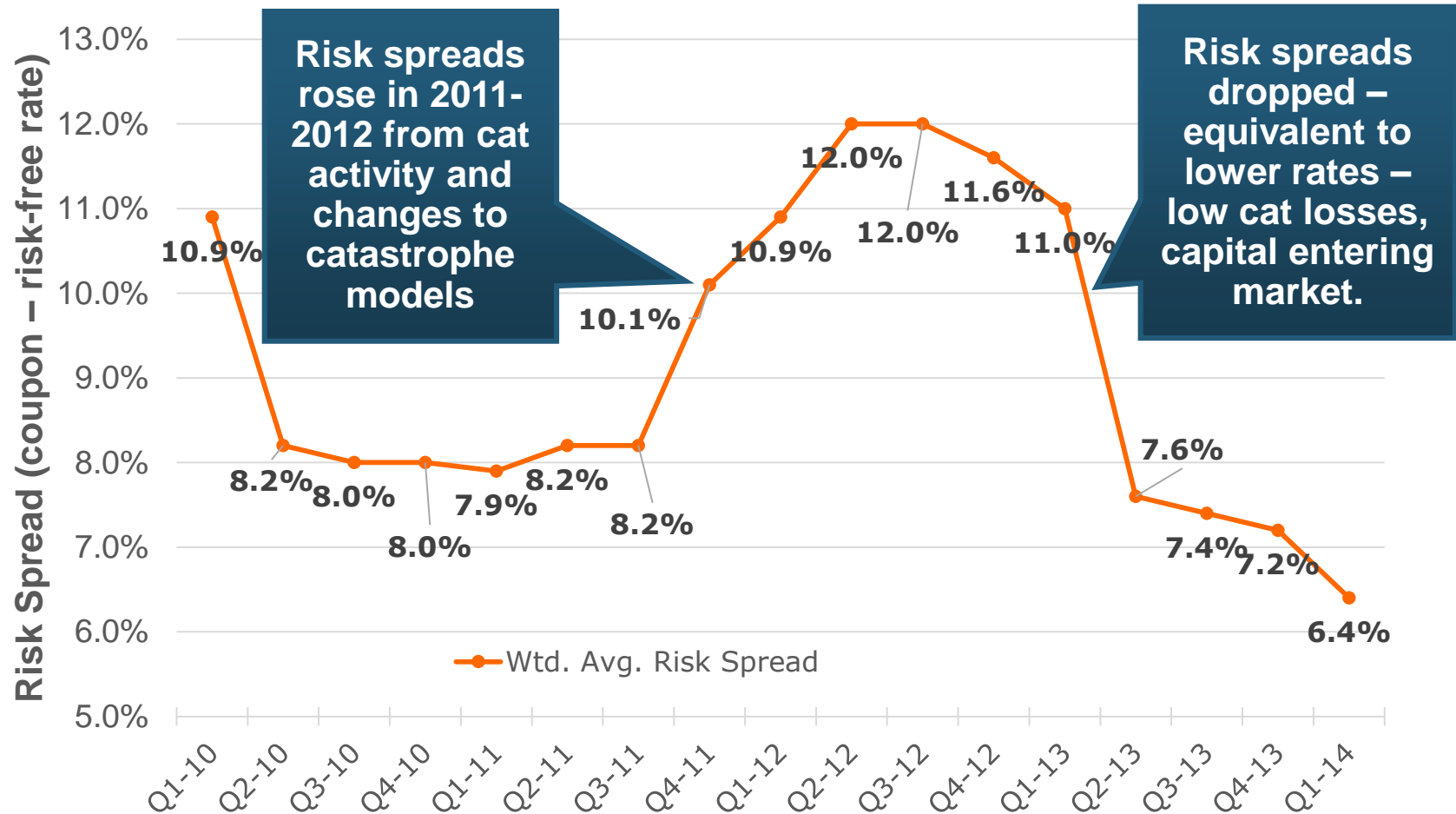
ILS Issuance by Trigger



Terms Are Shifting Away From ‘Objective’ Triggers (Favored by Investors) Toward Indemnity Trigger (Favored by Insurers).

Source: Artemis.bm; Insurance Information Institute.

U.S. Wind-Exposed Risk Premium* 2010:Q1 to 2014: Q1



* Trailing 12-month average

SOURCE: Willis Capital Markets, Insurance Information Institute.

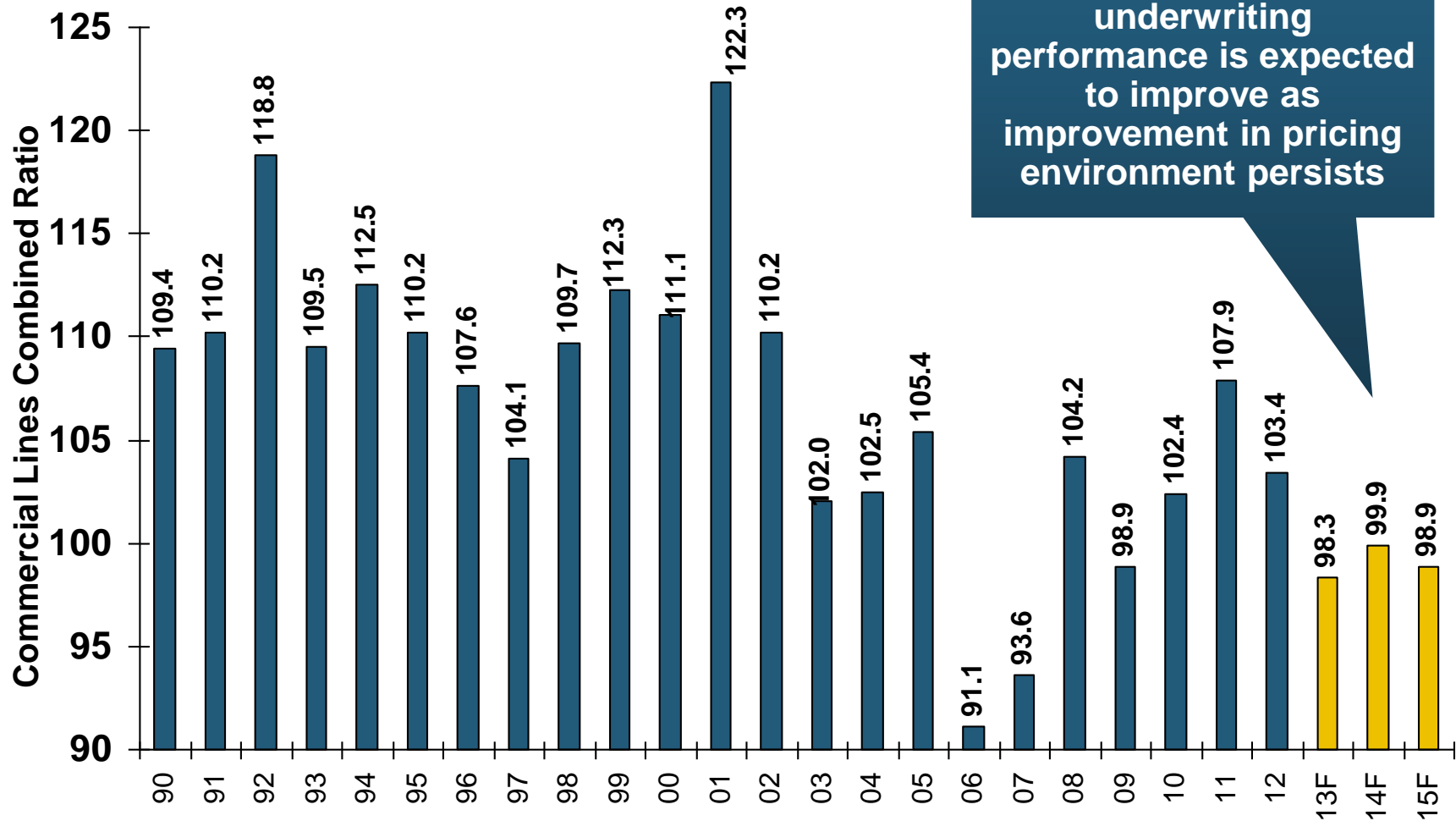
Questions Arising from Influence of Alternative Capital

- **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/ROIs Fall?**
- **Will There Be Spillover Into Casualty Reinsurance?**
- **Will Alternative Capital Drive Consolidation?**



Performance by Segment

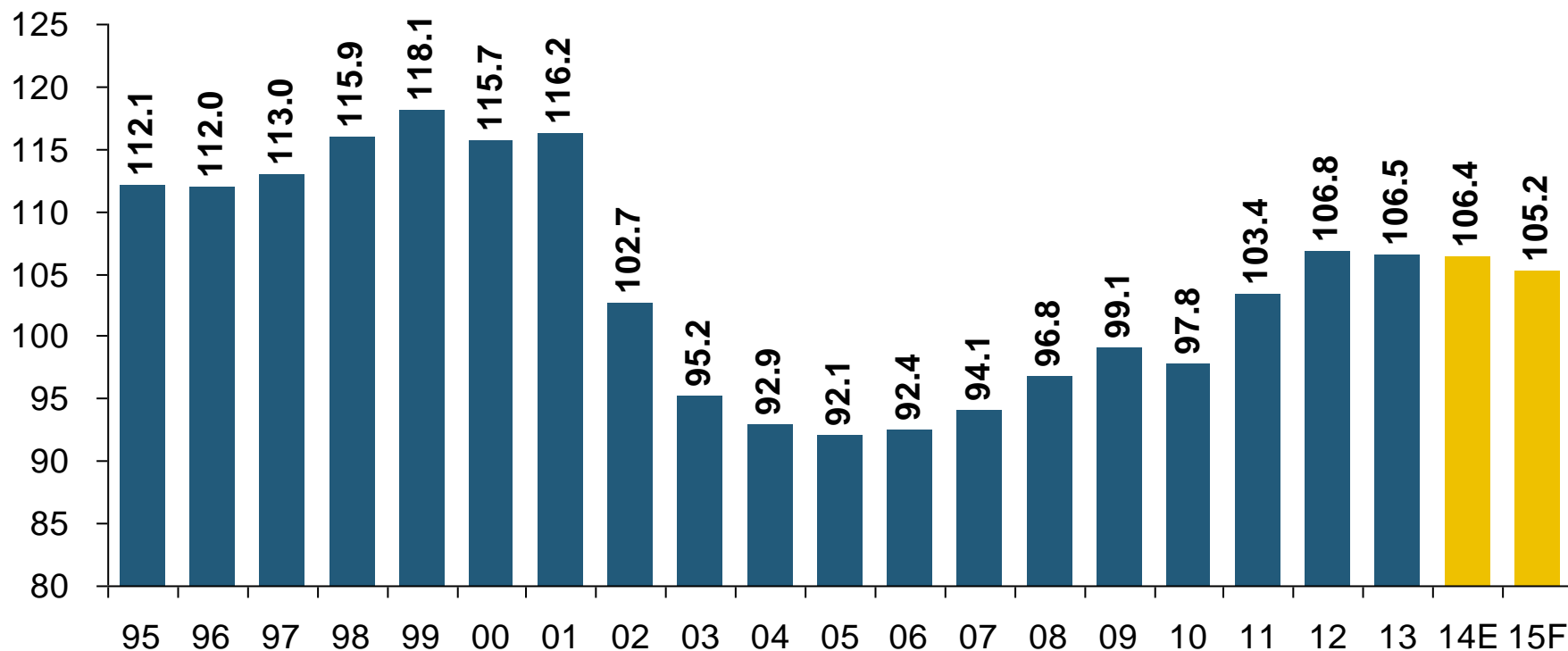
Commercial Lines Combined Ratio, 1990-2015F*



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

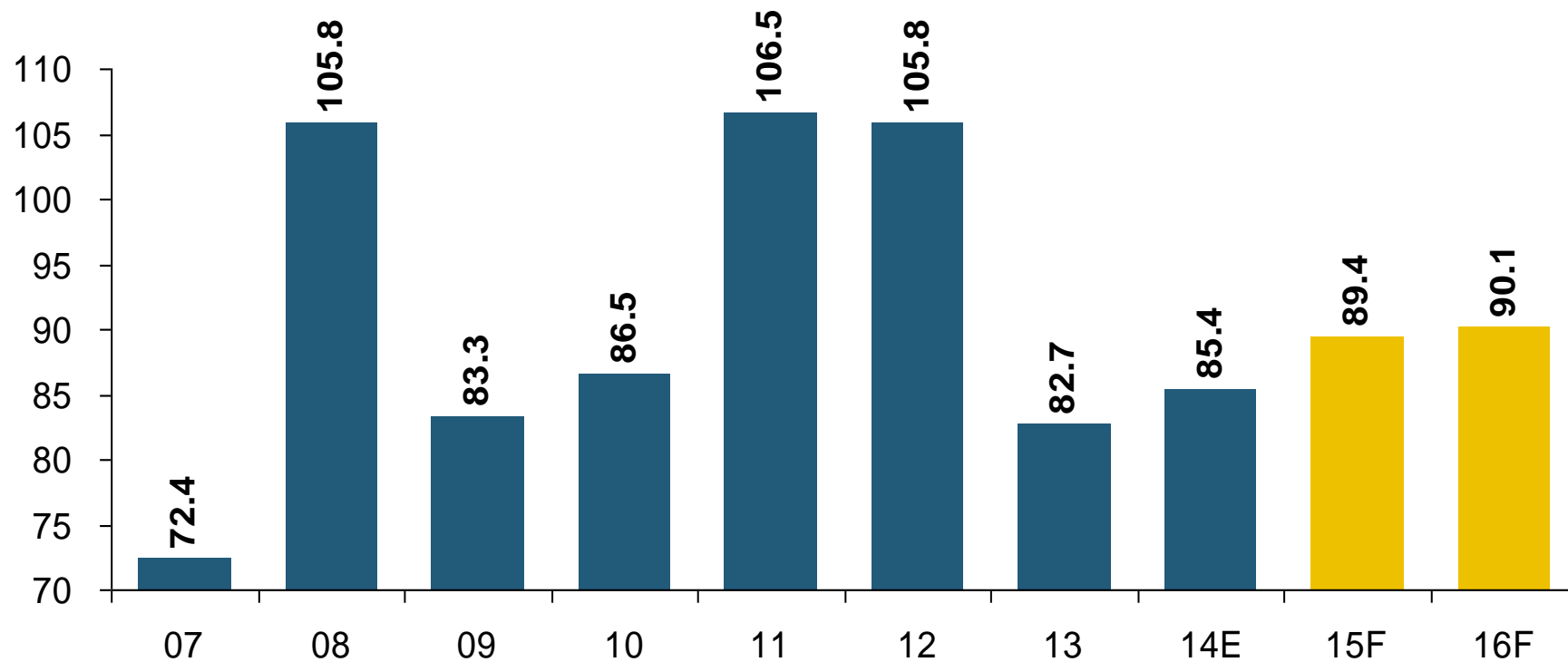
Source: A.M. Best (1990-2014F); Conning (2015F) Insurance Information Institute.

Commercial Auto Combined Ratio: 1993–2015F



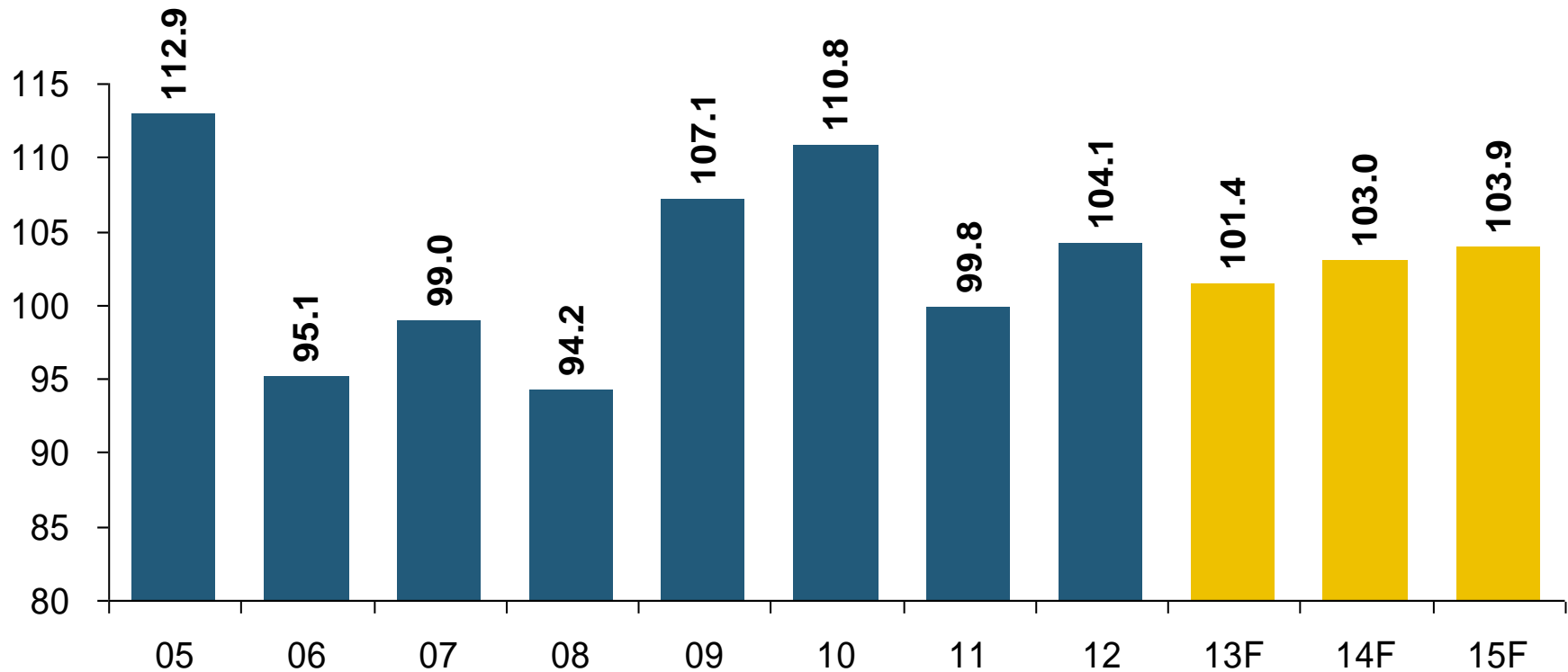
Commercial Auto is Expected to Improve Only Slowly as Rate Gains Barely Offset Adverse Frequency and Severity Trends

Commercial Property Combined Ratio: 2007–2016F



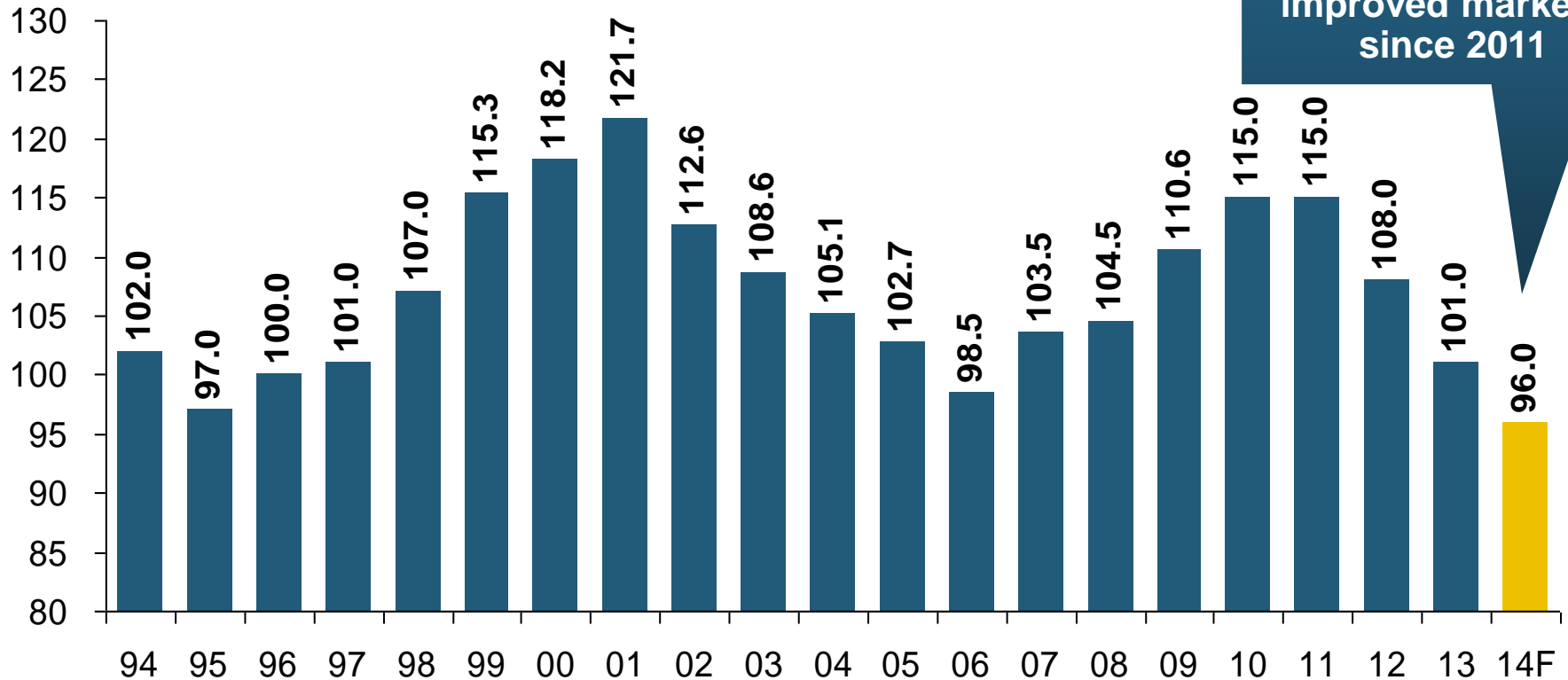
Commercial Property Underwriting Performance Has Been Volatile in Recent Years, Largely Due to Fluctuations in CAT Activity

General Liability Combined Ratio: 2005–2015F



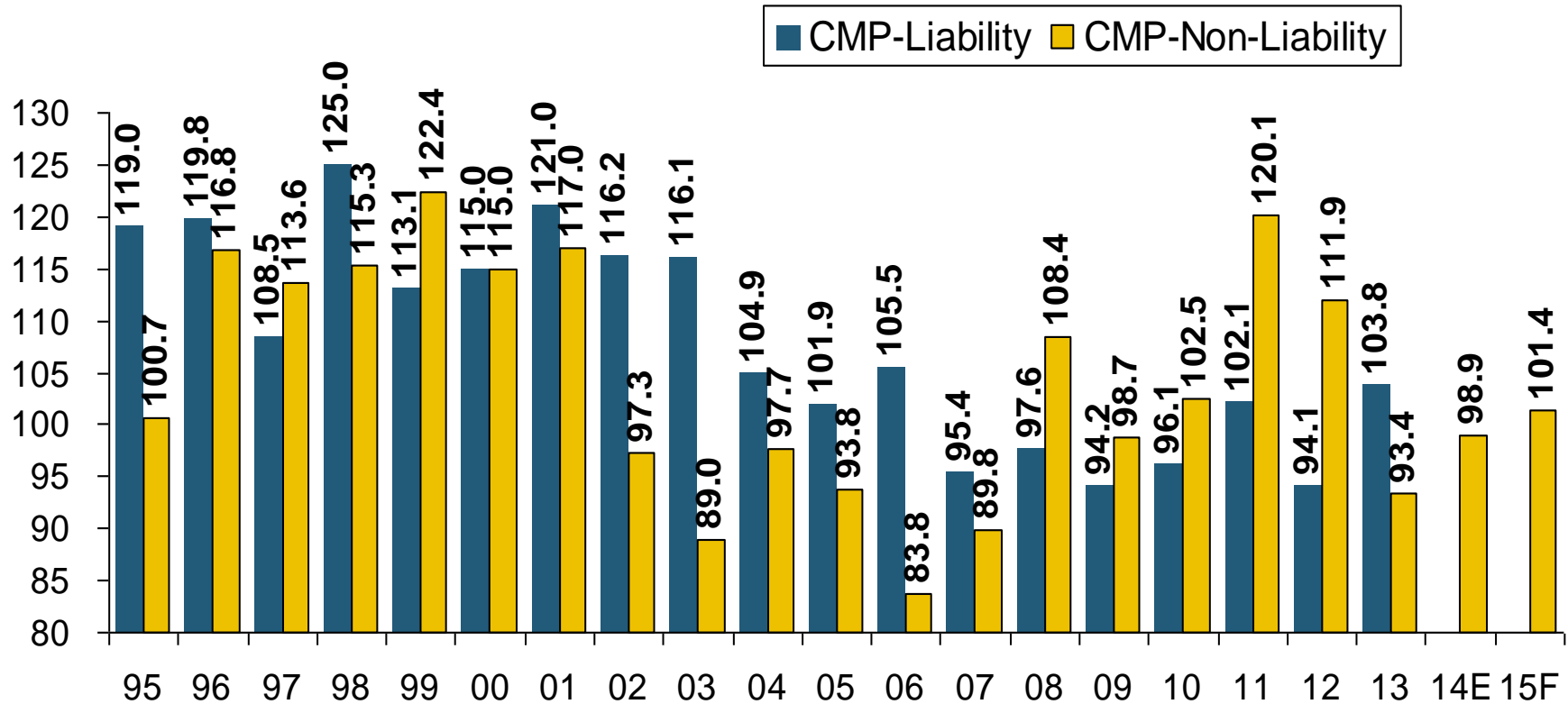
**Commercial General Liability Underwriting
Performance Has Been Volatile in Recent Years**

Workers Compensation Combined Ratio: 1994–2014E



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.

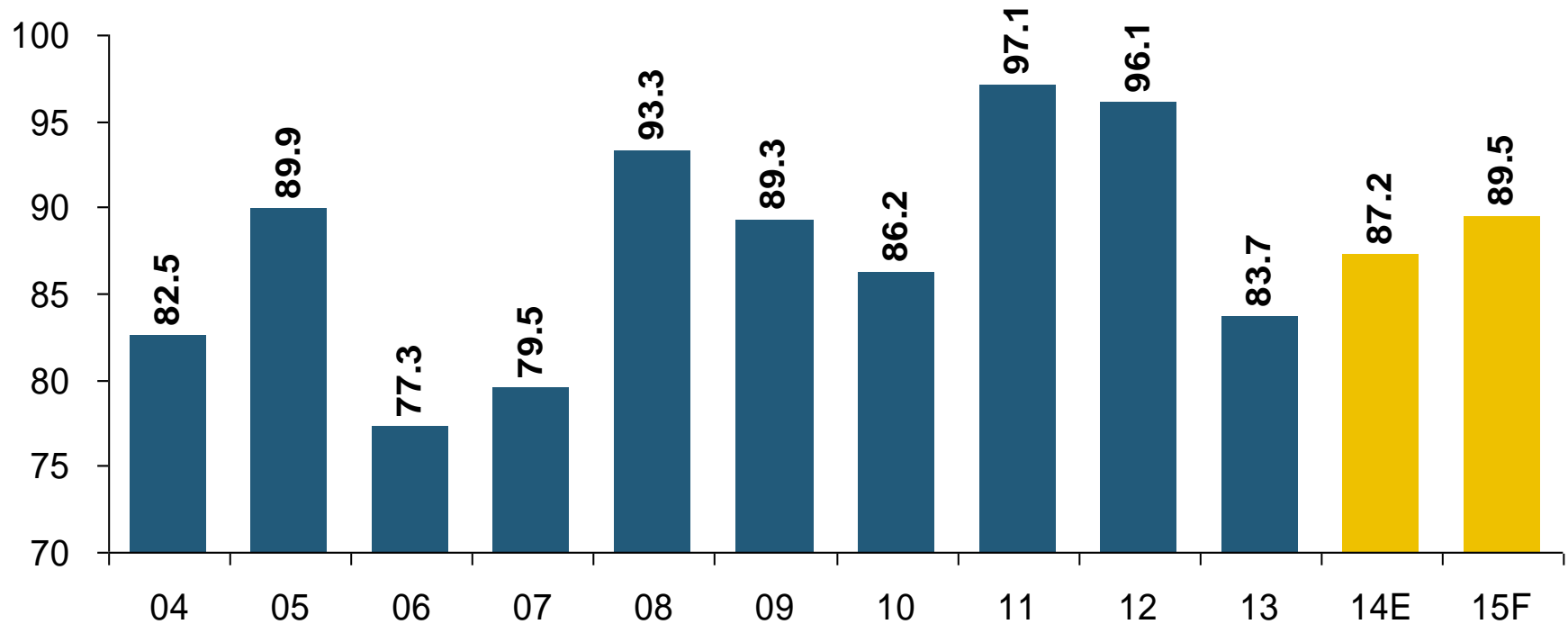
Commercial Multi-Peril Combined Ratio: 1995–2015F



Commercial Multi-Peril Underwriting Performance is Expected to Improve in 2013 Assuming Normal Catastrophe Loss Activity

*2014E-2015F figures are Conning figures for the combined liability and non-liability components..
Sources: A.M. Best; Conning; Insurance Information Institute.

Inland Marine Combined Ratio: 2004–2015F



**Inland Marine Underwriting Performance Has Been
Consistently Strong for Many Years**

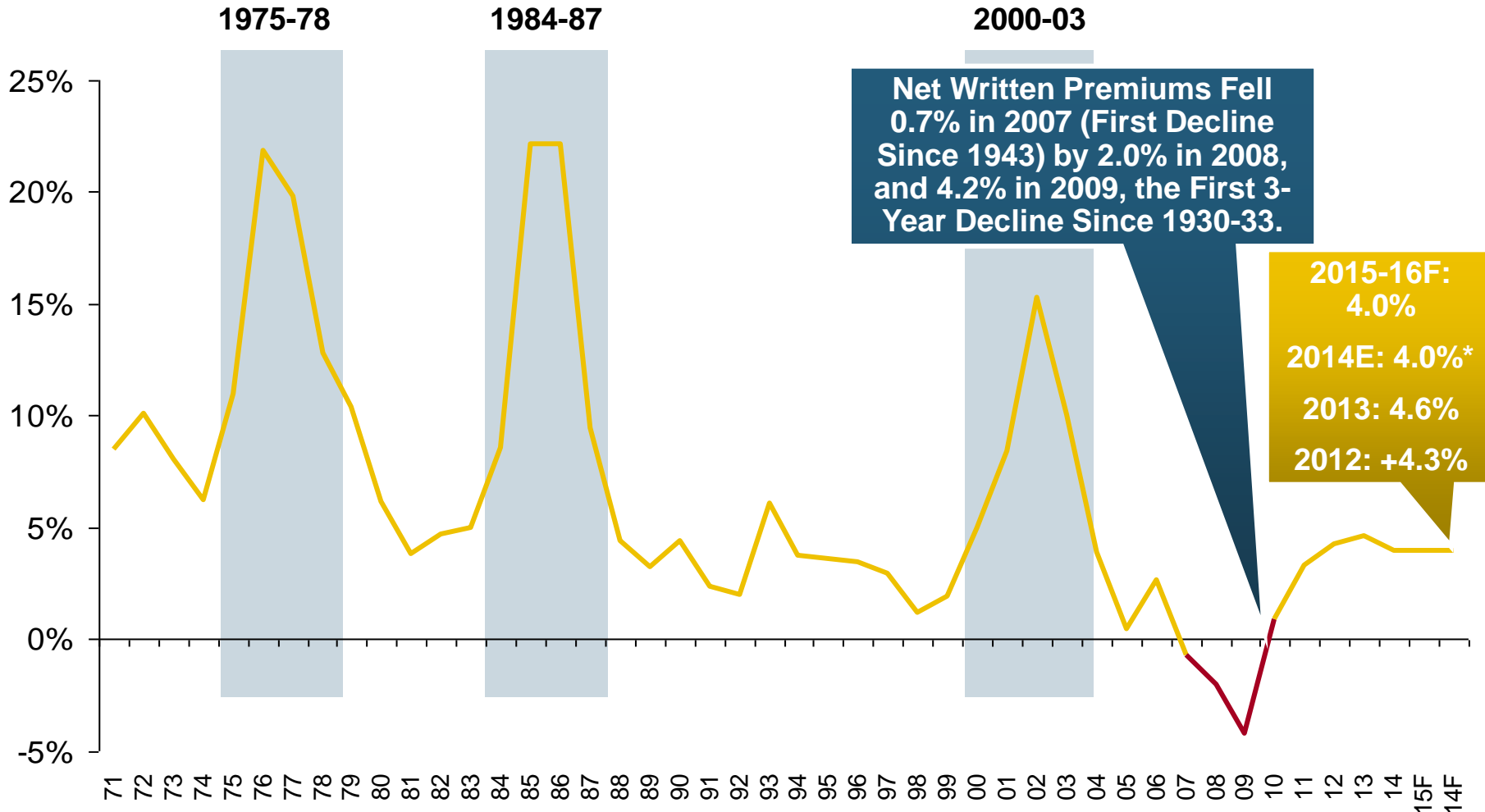
Growth Analysis by State and Business Segment

Post-Crisis Paradox?

***Premium Growth Rates Vary
Tremendously by State***

Net Premium Growth: Annual Change, 1971—2016F

(Percent)



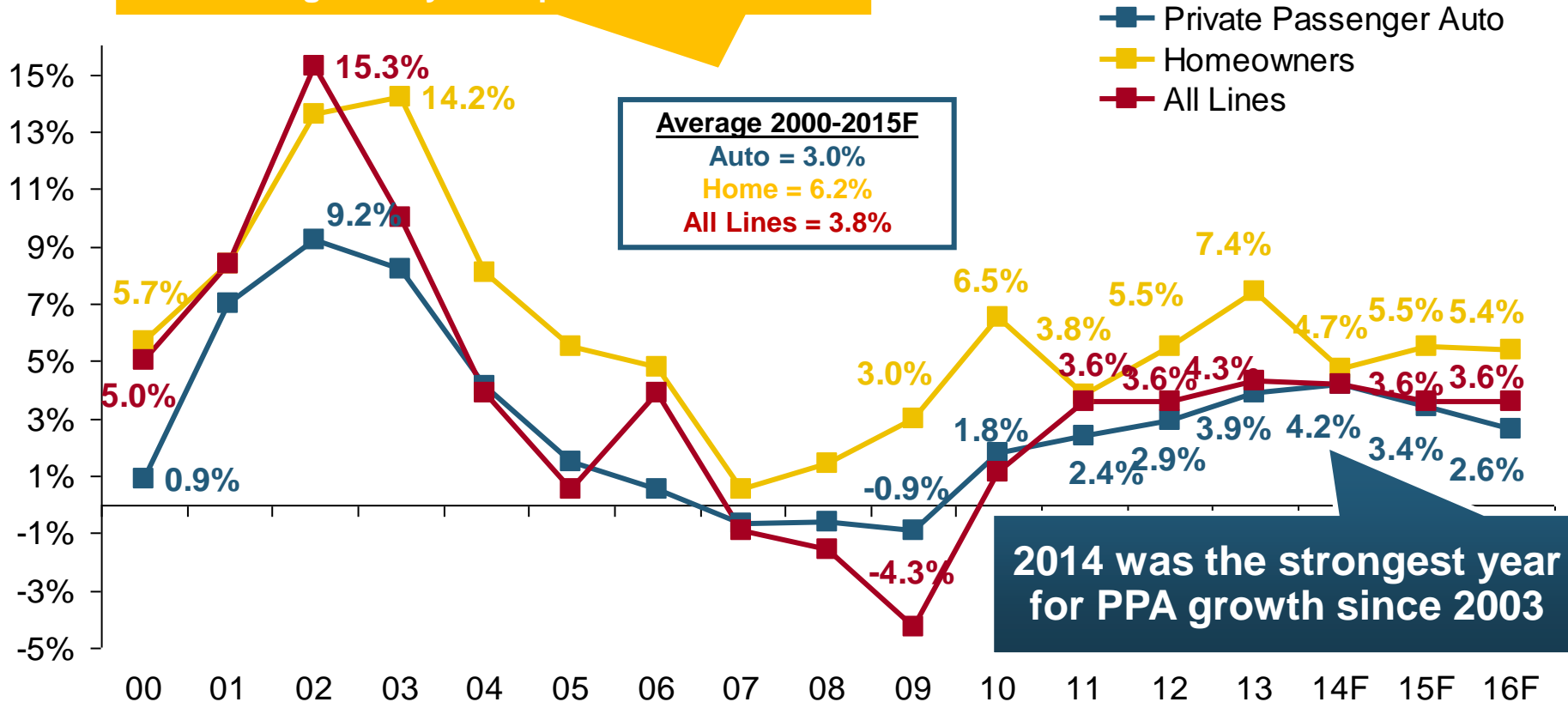
*Actual figure based on data through Q3 2014.

Shaded areas denote "hard market" periods

Sources: A.M. Best (historical and forecast), ISO, Insurance Information Institute.

Auto & Home vs. All Lines, Net Written Premium Growth, 2000–2016F

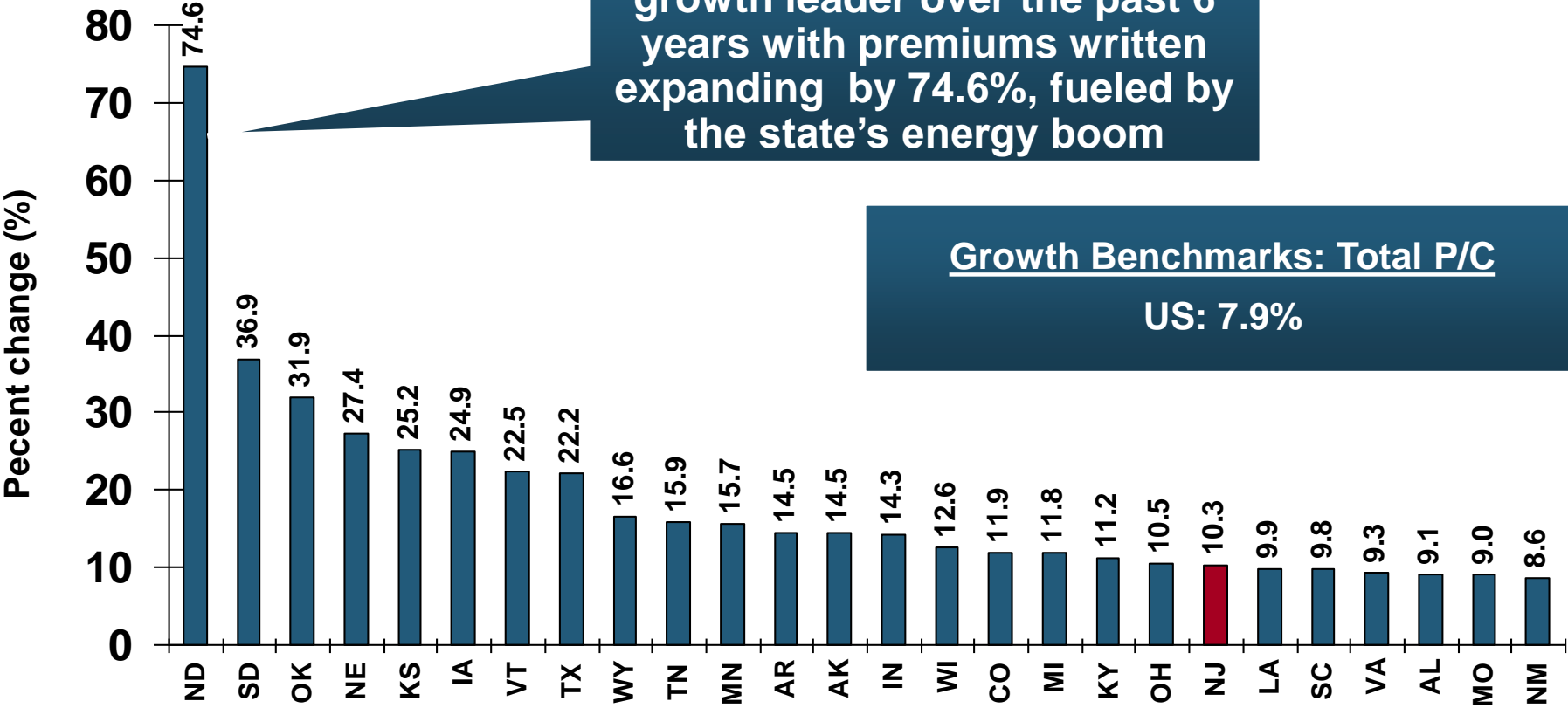
While homeowners insurance has grown faster than auto over the past decade, auto is generally more profitable



Direct Premiums Written: Total P/C Percent Change by State, 2007-2013

Top 25 States

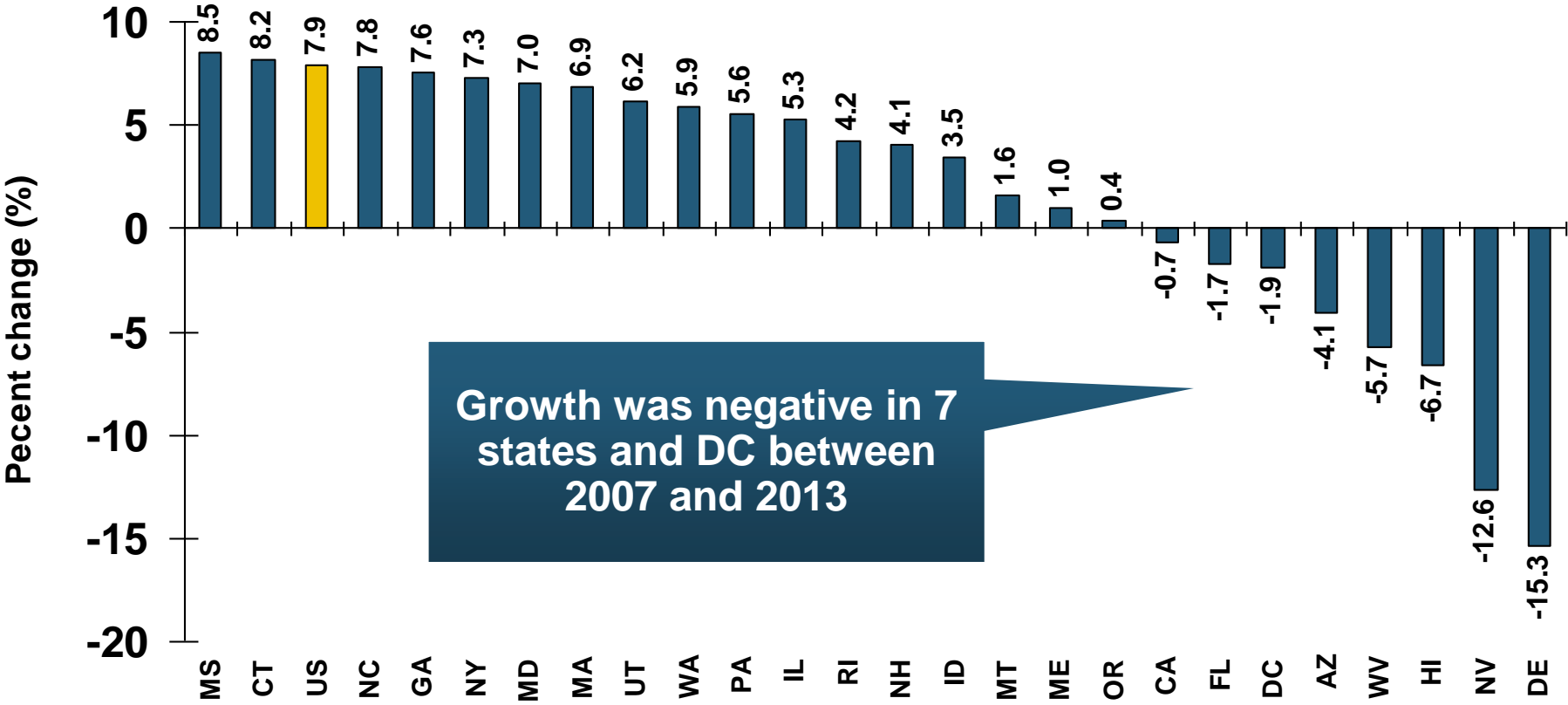
North Dakota was the country's growth leader over the past 6 years with premiums written expanding by 74.6%, fueled by the state's energy boom



Sources: SNL Financial LC.; Insurance Information Institute.

Direct Premiums Written: Total P/C Percent Change by State, 2007-2013

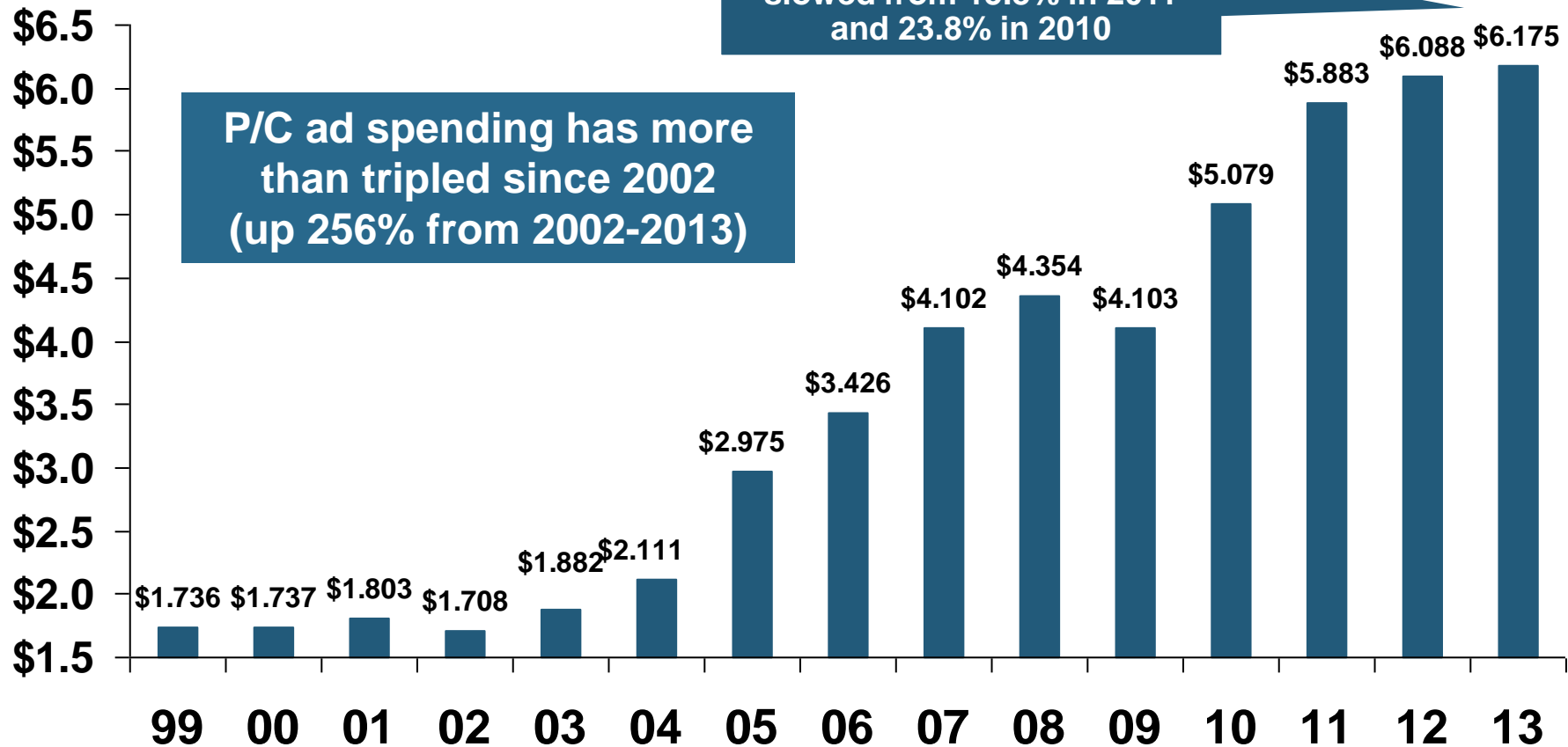
Bottom 25 States



Sources: SNL Financial LC.; Insurance Information Institute.

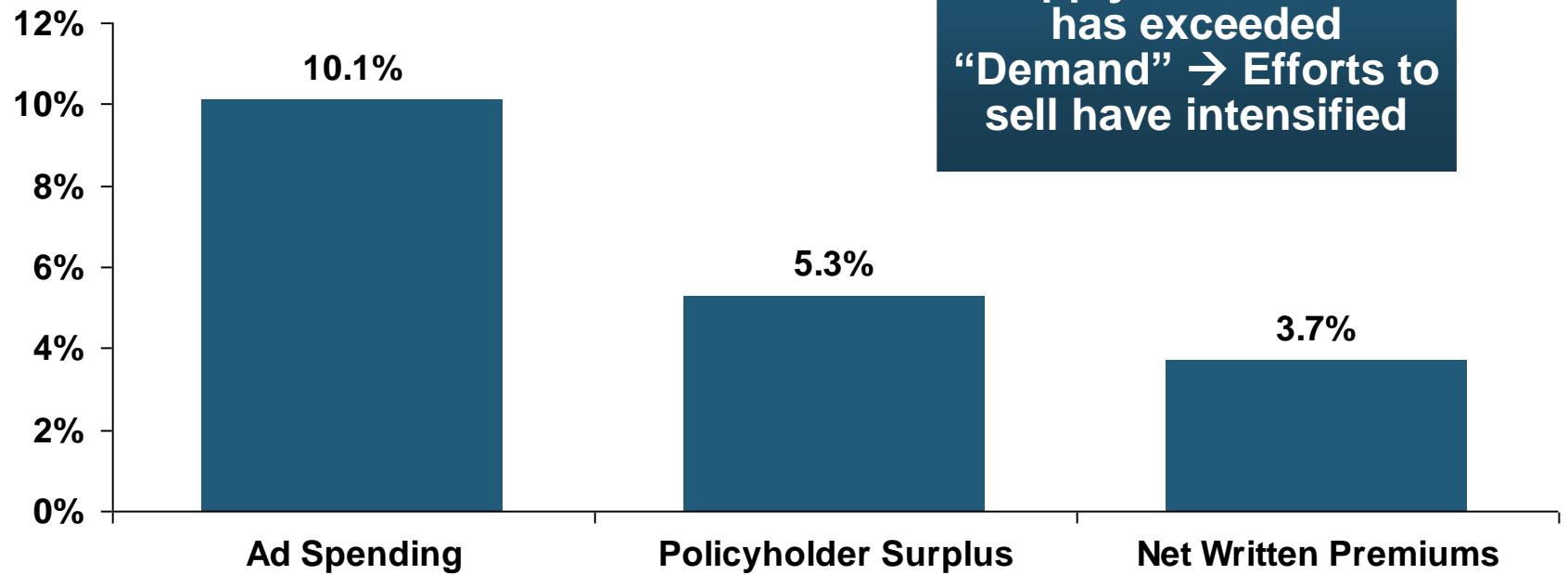
Advertising Expenditures by P/C Insurance Industry, 1999-2013

\$ Billions



Growth in Premiums, Capacity vs. Growth in Advertising Expenditures, 2000 – 2013

Average Annual Percent Change (%)



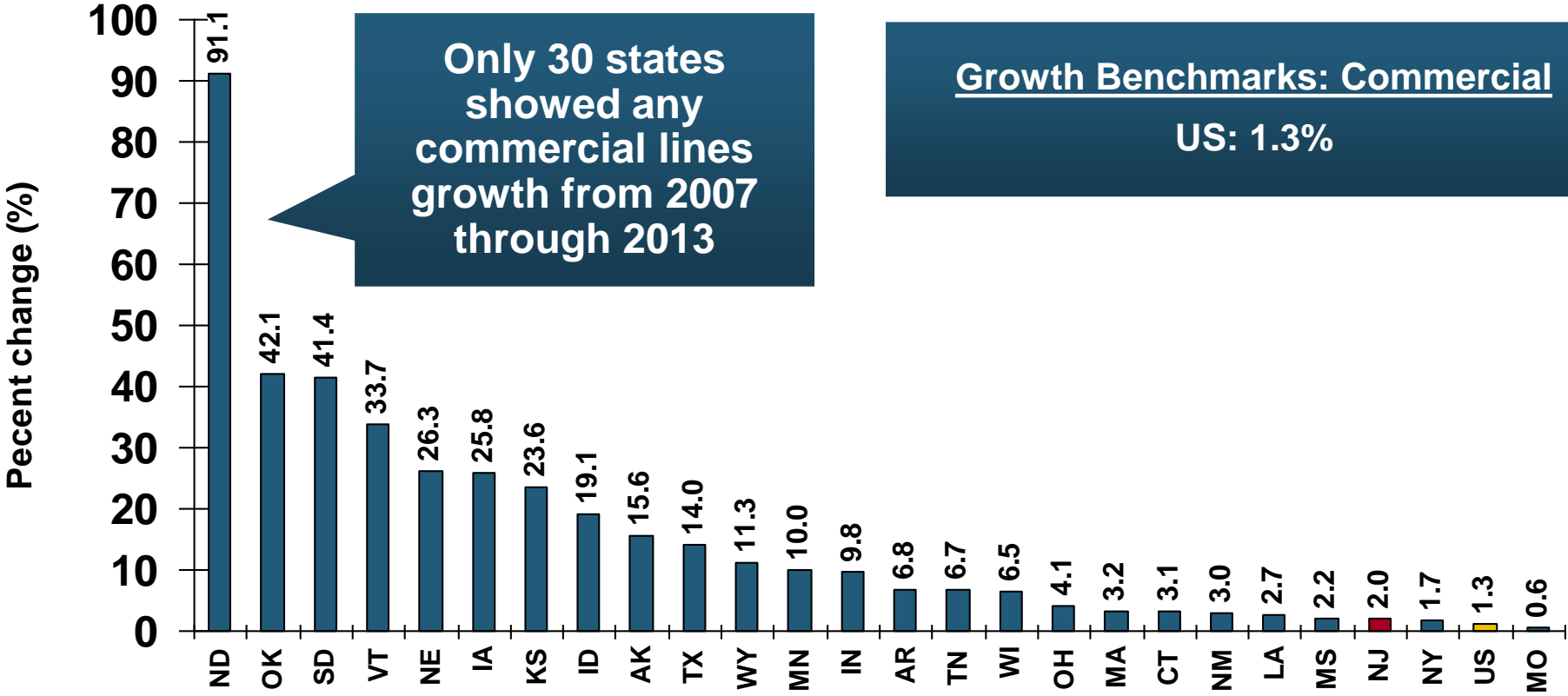
Growth in the “Supply” of insurance has exceeded “Demand” → Efforts to sell have intensified

Overall Growth in Ad Spending has greatly exceeded growth in capacity (policyholder surplus) or premium growth. This suggests that there are diminishing returns to advertising.

Sources: Insurance Information Institute analysis from A.M. Best data.

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

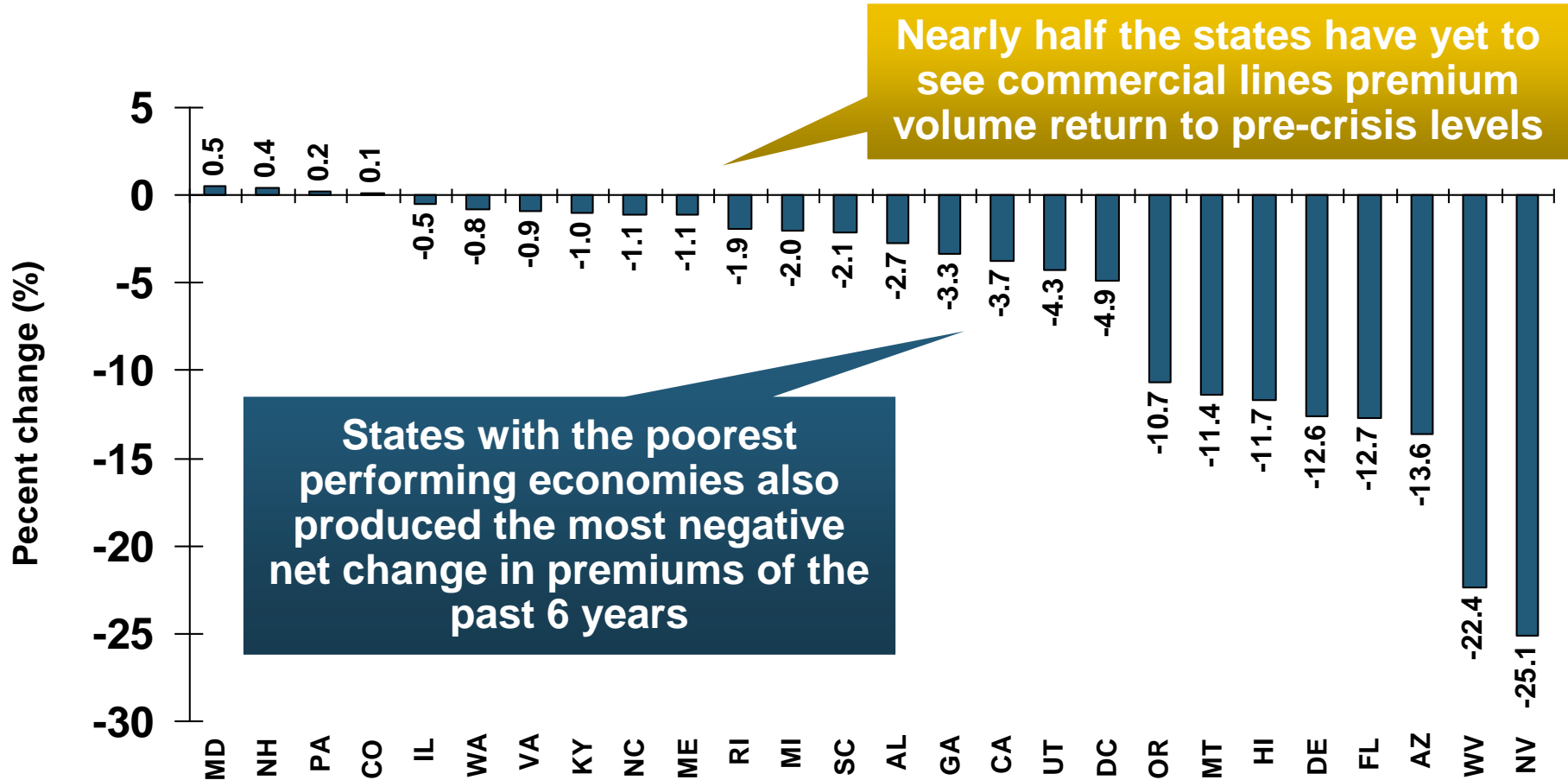
Top 25 States



Sources: SNL Financial LLC.; Insurance Information Institute.

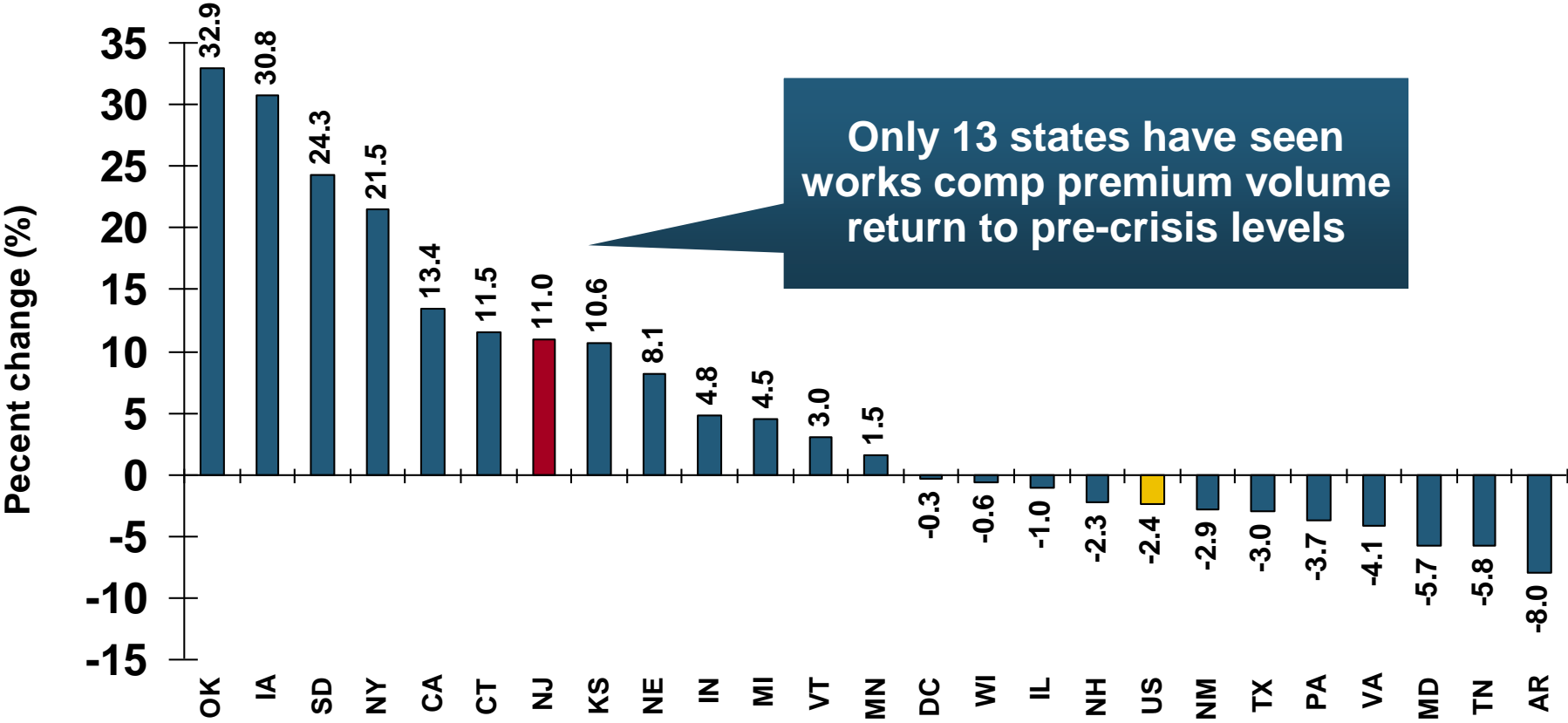
Direct Premiums Written: Comm. Lines Percent Change by State, 2007-2013

Bottom 25 States



Direct Premiums Written: Workers' Comp Percent Change by State, 2007-2013*

Top 25 States



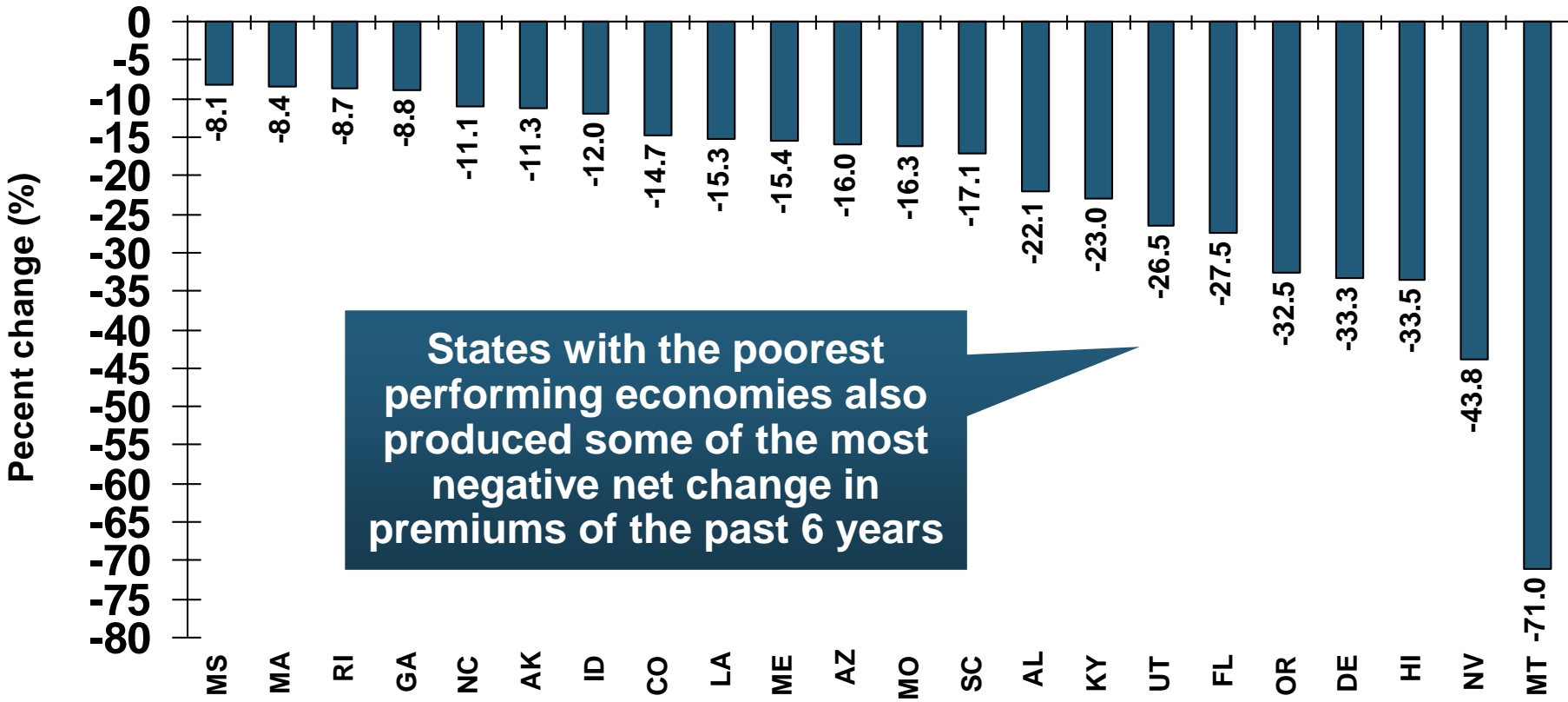
*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

Sources: SNL Financial LC.; Insurance Information Institute.

Direct Premiums Written: Worker's Comp Percent Change by State, 2007-2013*



Bottom 25 States



States with the poorest performing economies also produced some of the most negative net change in premiums of the past 6 years

*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.

Percentage of Carriers Using Predictive Analytics by Major P/C Line, 2013

Predictive analytics is more like to be used in personal lines, but commercial lines use is growing

82% of insurers report using predicative analytics in at least one line. 18% do not use it all.

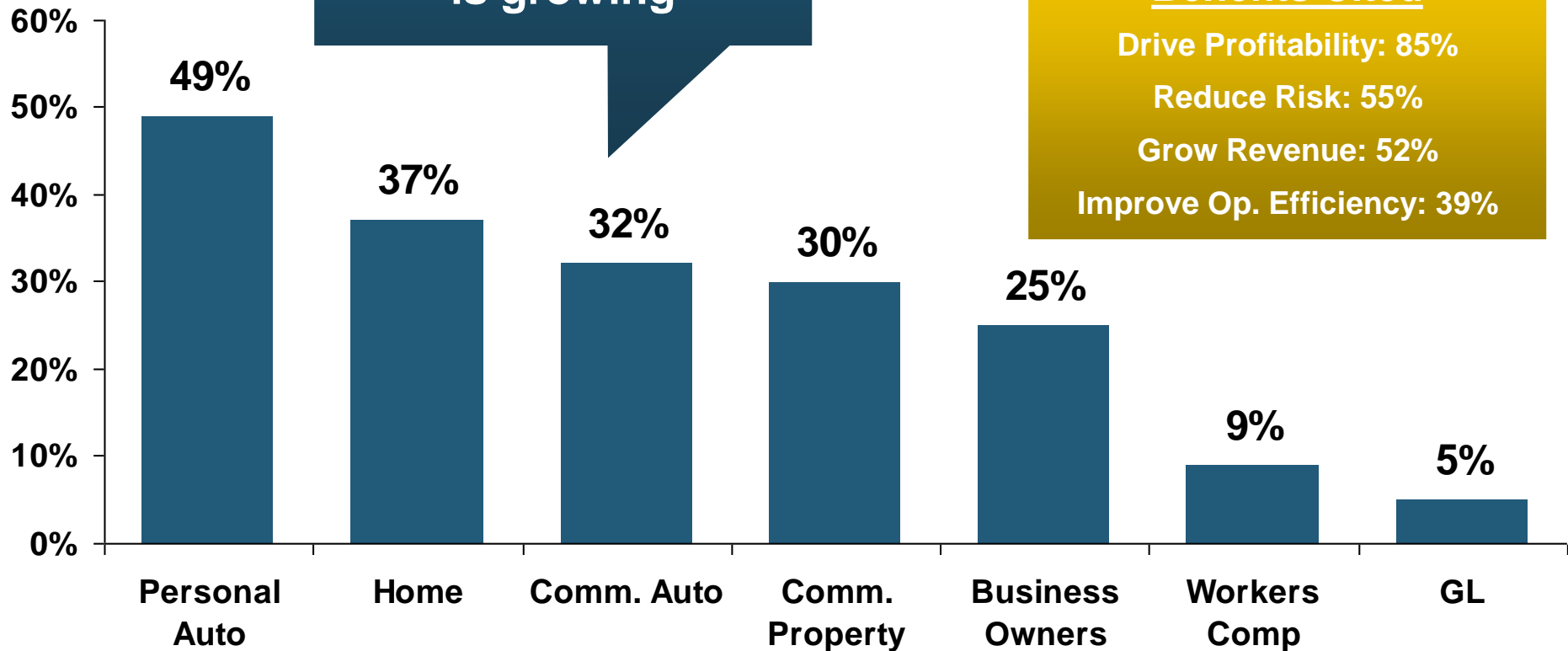
Benefits Cited

Drive Profitability: 85%

Reduce Risk: 55%

Grow Revenue: 52%

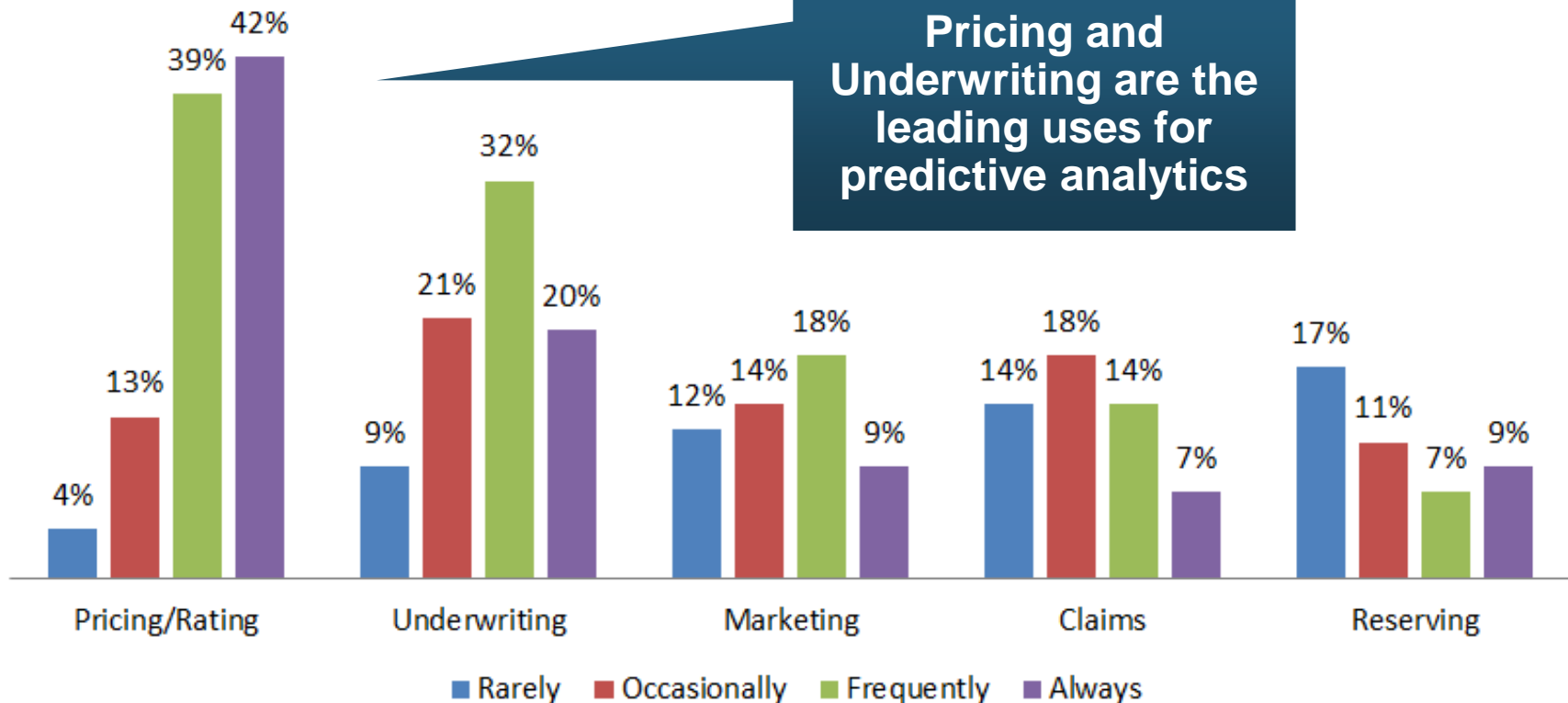
Improve Op. Efficiency: 39%



Uses of Predictive Analytics by Function

Uses of Predictive Modeling

Pricing and Underwriting are the leading uses for predictive analytics

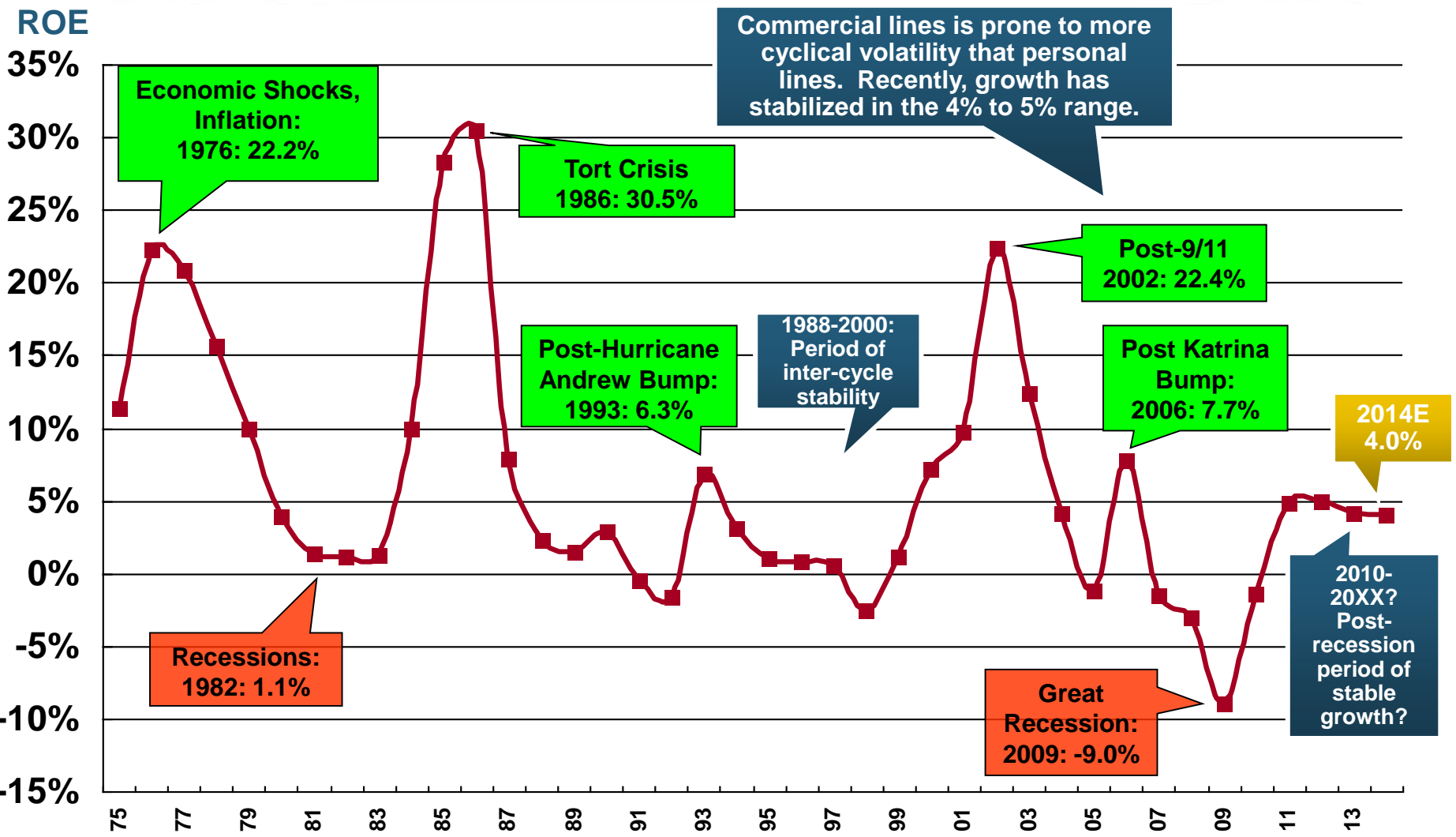


Source: Earnix/ISO September 2013 Survey

Commercial Lines Pricing Trends

**Survey Results Suggest
Commercial Pricing Is Mixed**

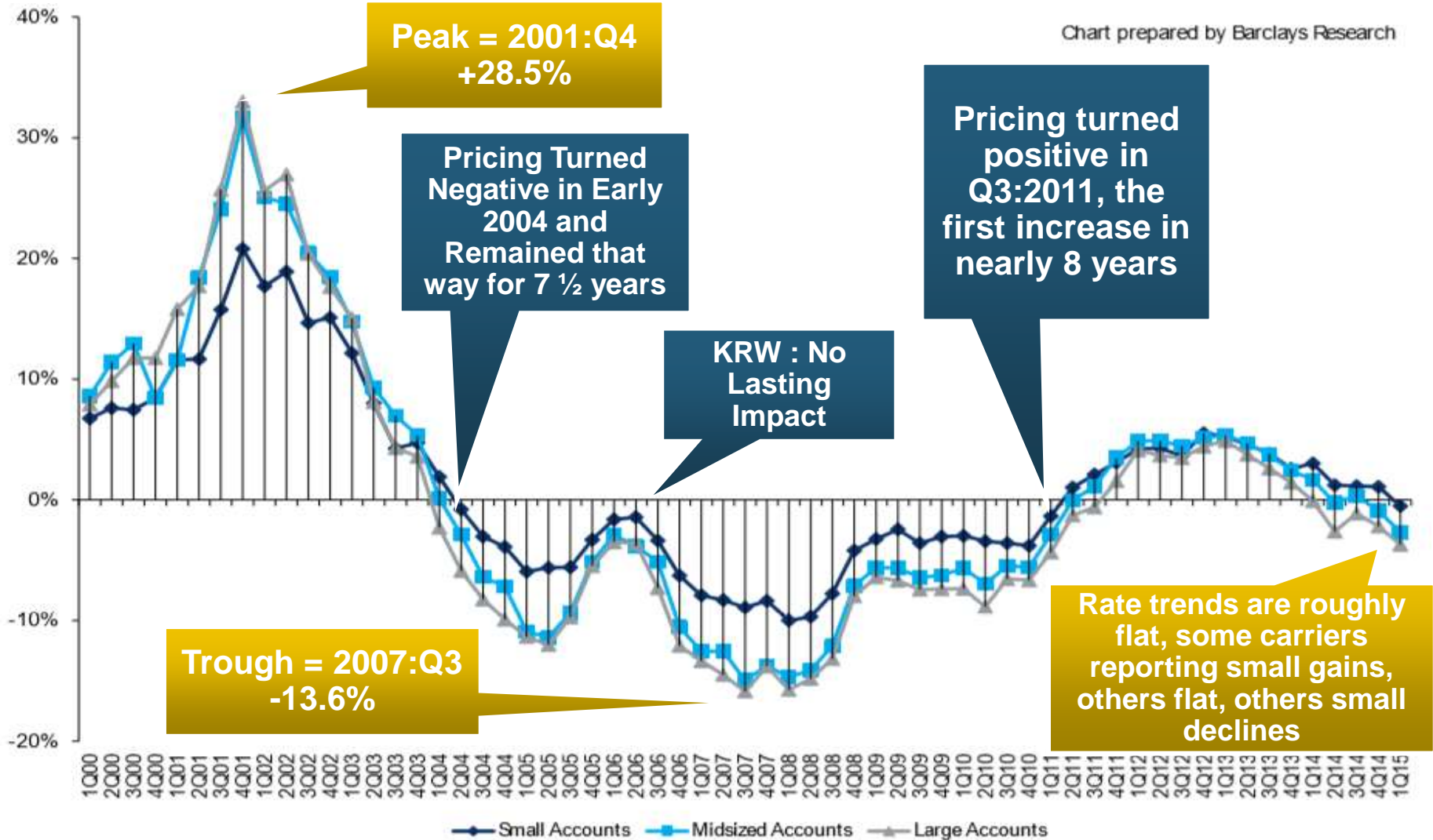
Commercial Lines NPW Premium Growth: 1975 – 2014E



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

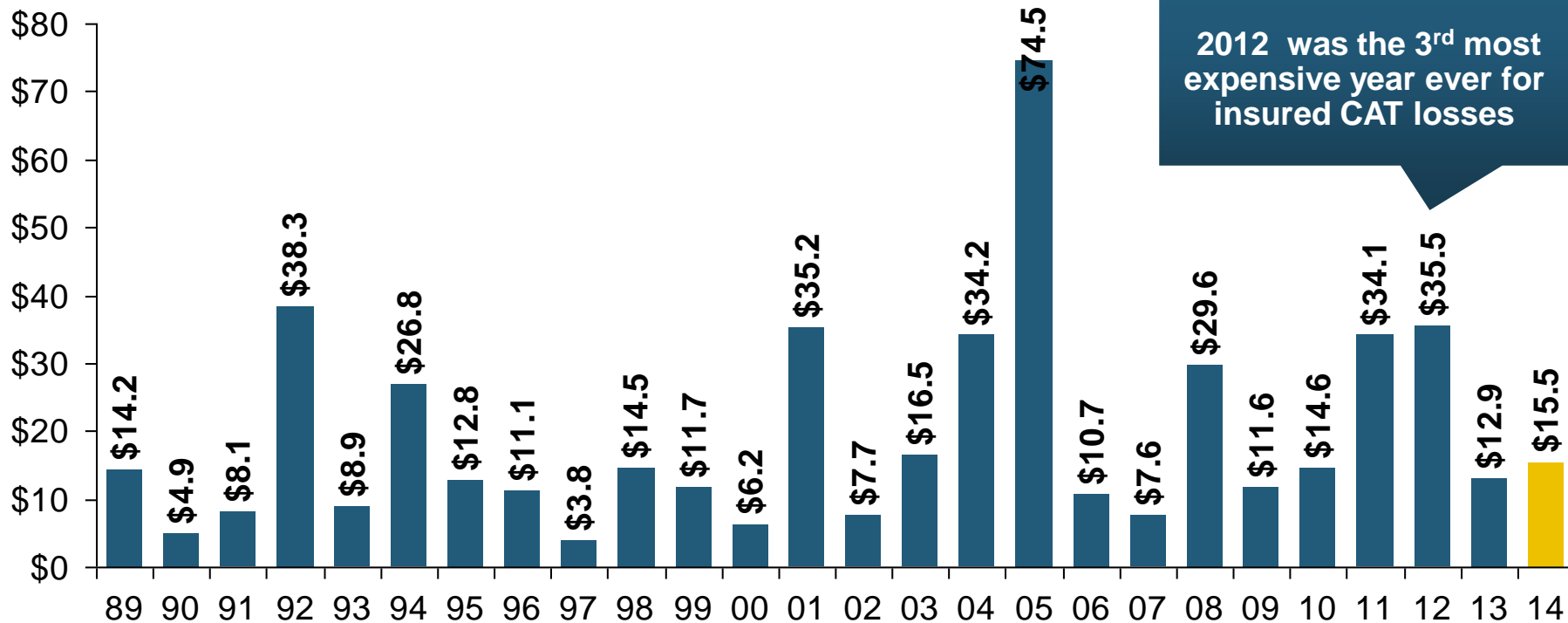
U.S. Insured Catastrophe Loss Update

**2013/14 Experienced Below Average CAT
Activity After Very High CAT Losses in
2011/12**

***Winter Storm Losses Far Above Average in
2014 and 2015***

U.S. Insured Catastrophe Losses

(\$ Billions, \$ 2013)



2012 was the 3rd most expensive year ever for insured CAT losses

2013/14 Were Welcome Respite from 2011/12, among the Costliest Years for Insured Disaster Losses in US History. Longer-term Trend is for more—not fewer—Costly Events

\$15.5 billion in insured CAT losses in 2014

*Through 12/31/14.

Note: 2001 figure includes \$20.3B for 9/11 losses reported through 12/31/01 (\$25.9B 2011 dollars). Includes only business and personal property claims, business interruption and auto claims. Non-prop/BI losses = \$12.2B (\$15.6B in 2011 dollars.)

Sources: Property Claims Service/ISO; Insurance Information Institute.

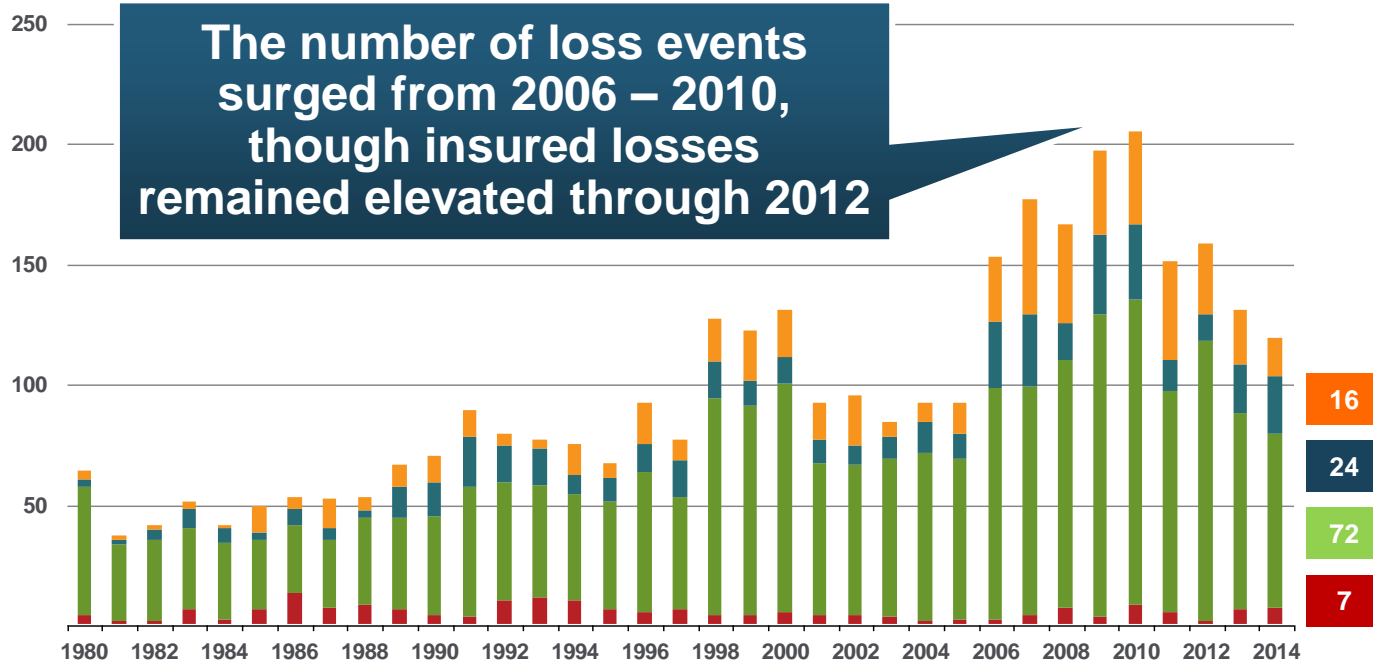
Loss events in the US, 1980 – 2014

Number of events

Number of Events

**2014 Total:
119 Events**

The number of loss events surged from 2006 – 2010, though insured losses remained elevated through 2012



- **Geophysical events**
(Earthquake, tsunami, volcanic activity)
- **Meteorological events**
(Tropical storm, extratropical storm, convective storm, local storm)
- **Hydrological events**
(Flood, mass movement)
- **Climatological events**
(Extreme temperature, drought, forest fire)

16
24
72
7

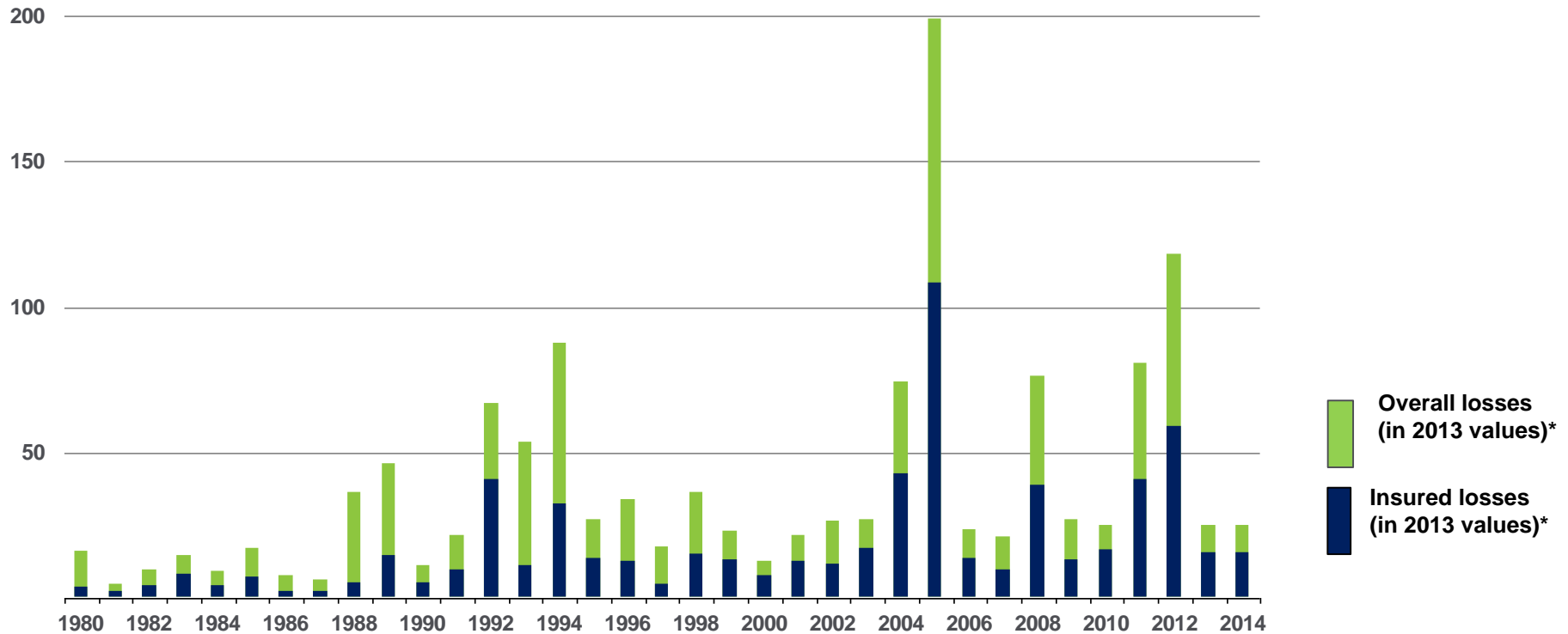
Source: Geo Risks Research, NatCatSERVICE

Loss Events in the US, 1980 – 2014

Overall and insured losses

Overall losses totaled US\$ 25bn; Insured losses totaled US\$ 15.3bn

\$ Billions



*Losses adjusted to inflation based on CPI.

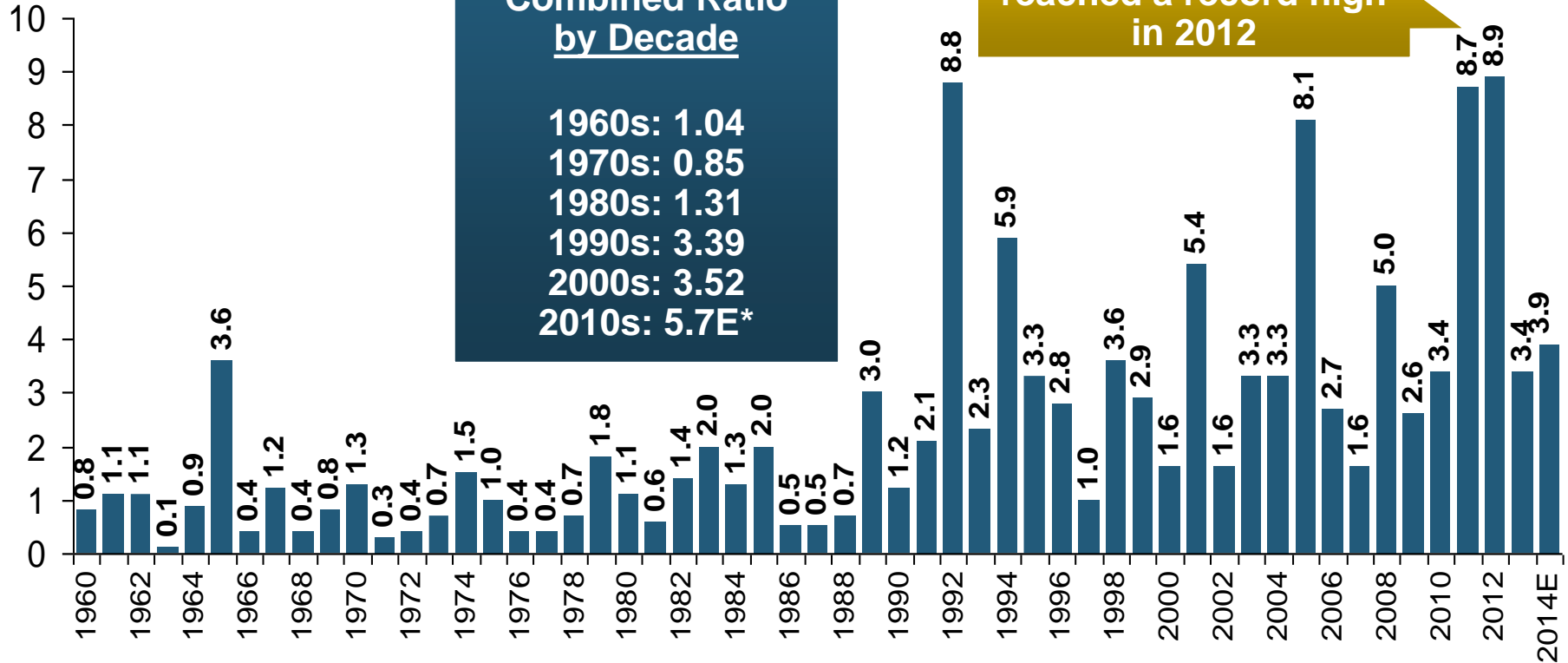
Combined Ratio Points Associated with Catastrophe Losses: 1960 – 2014E*

Combined Ratio Points

Avg. CAT Loss Component of the Combined Ratio by Decade

1960s: 1.04
 1970s: 0.85
 1980s: 1.31
 1990s: 3.39
 2000s: 3.52
 2010s: 5.7E*

Catastrophe losses as a share of all losses reached a record high in 2012



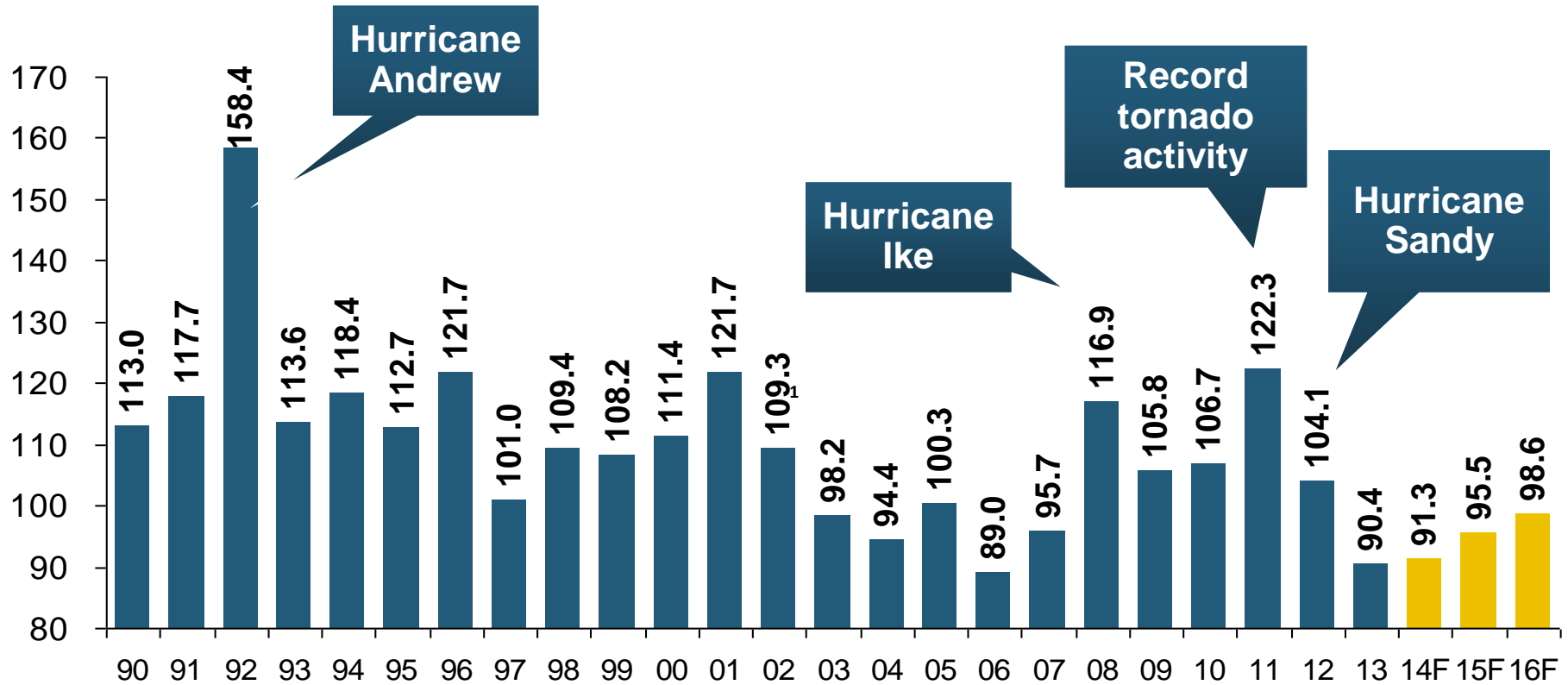
The Catastrophe Loss Component of Private Insurer Losses Has Increased Sharply in Recent Decades

*2010s represent 2010-2014.

Notes: Private carrier losses only. Excludes loss adjustment expenses and reinsurance reinstatement premiums. Figures are adjusted for losses ultimately paid by foreign insurers and reinsurers.

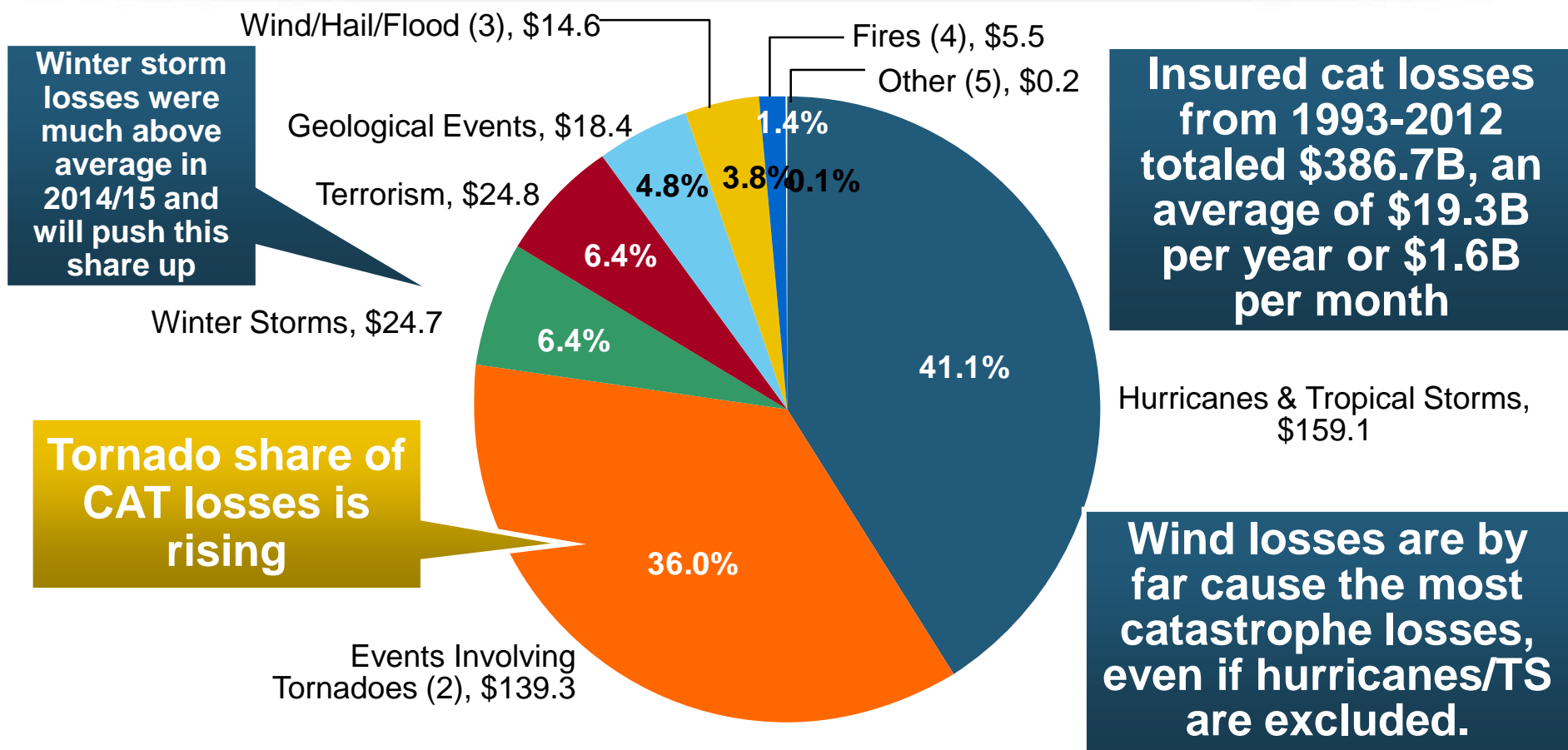
Source: ISO (1960-2011); A.M. Best (2012) Insurance Information Institute (2013-14).

Homeowners Insurance Combined Ratio: 1990–2016F



Homeowners Performance in 2011/12 Impacted by Large Cat Losses but Lower CATs Helped 2013/14. Extreme Regional Variation Can Be Expected Due to Local Catastrophe Loss Activity

Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1994–2013¹



Winter storm losses were much above average in 2014/15 and will push this share up

Insured cat losses from 1993-2012 totaled \$386.7B, an average of \$19.3B per year or \$1.6B per month

Tornado share of CAT losses is rising

Wind losses are by far cause the most catastrophe losses, even if hurricanes/TS are excluded.

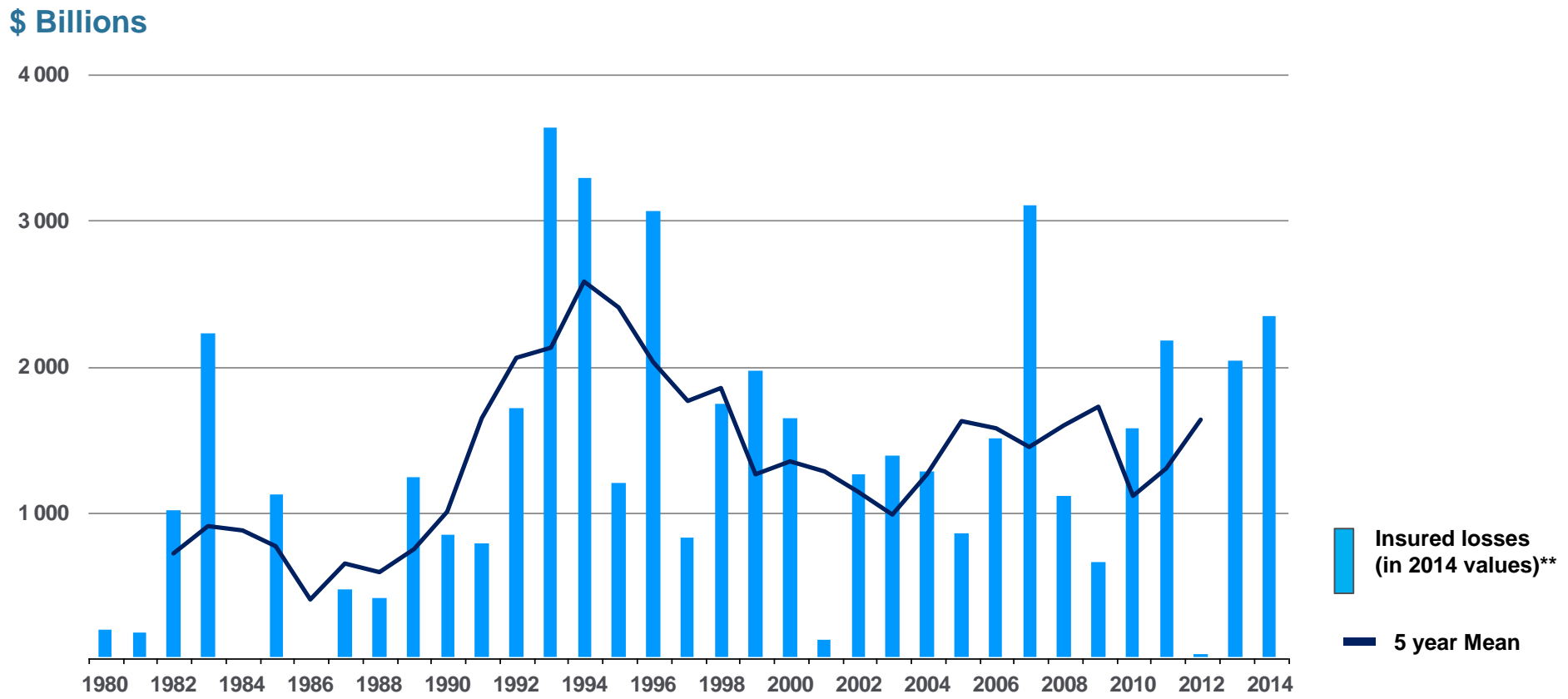
1. Catastrophes are defined as events causing direct insured losses to property of \$25 million or more in 2013 dollars.
2. Excludes snow.
3. Does not include NFIP flood losses
4. Includes wildland fires
5. Includes civil disorders, water damage, utility disruptions and non-property losses such as those covered by workers compensation.

Source: ISO's Property Claim Services Unit.

Loss events in the US, 1980 – 2014

Insured losses due to winter storms*

Overall losses in 2014 totaled \$3.7B; Insured losses totaled \$ 2.4B
Preliminary figures for 2015 suggest \$2.3B in insured winter storm losses.



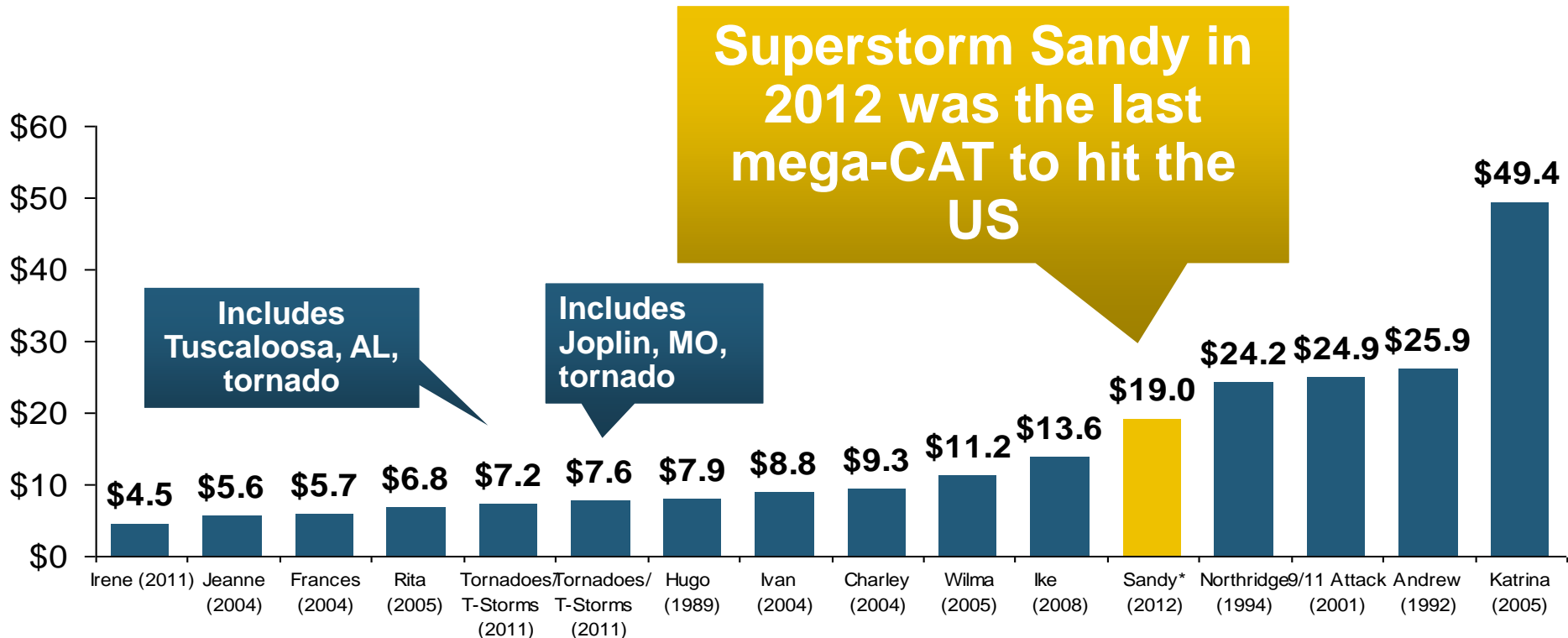
Source: Property Claim Services, MR NatCatSERVICE.

*Winter storms include winter damage, blizzard, snow storm and cold wave

**Losses adjusted to inflation based on country CPI

Top 16 Most Costly Disasters in U.S. History

(Insured Losses, 2013 Dollars, \$ Billions)



12 of the 16 Most Expensive Events in US History Have Occurred Over the Past Decade

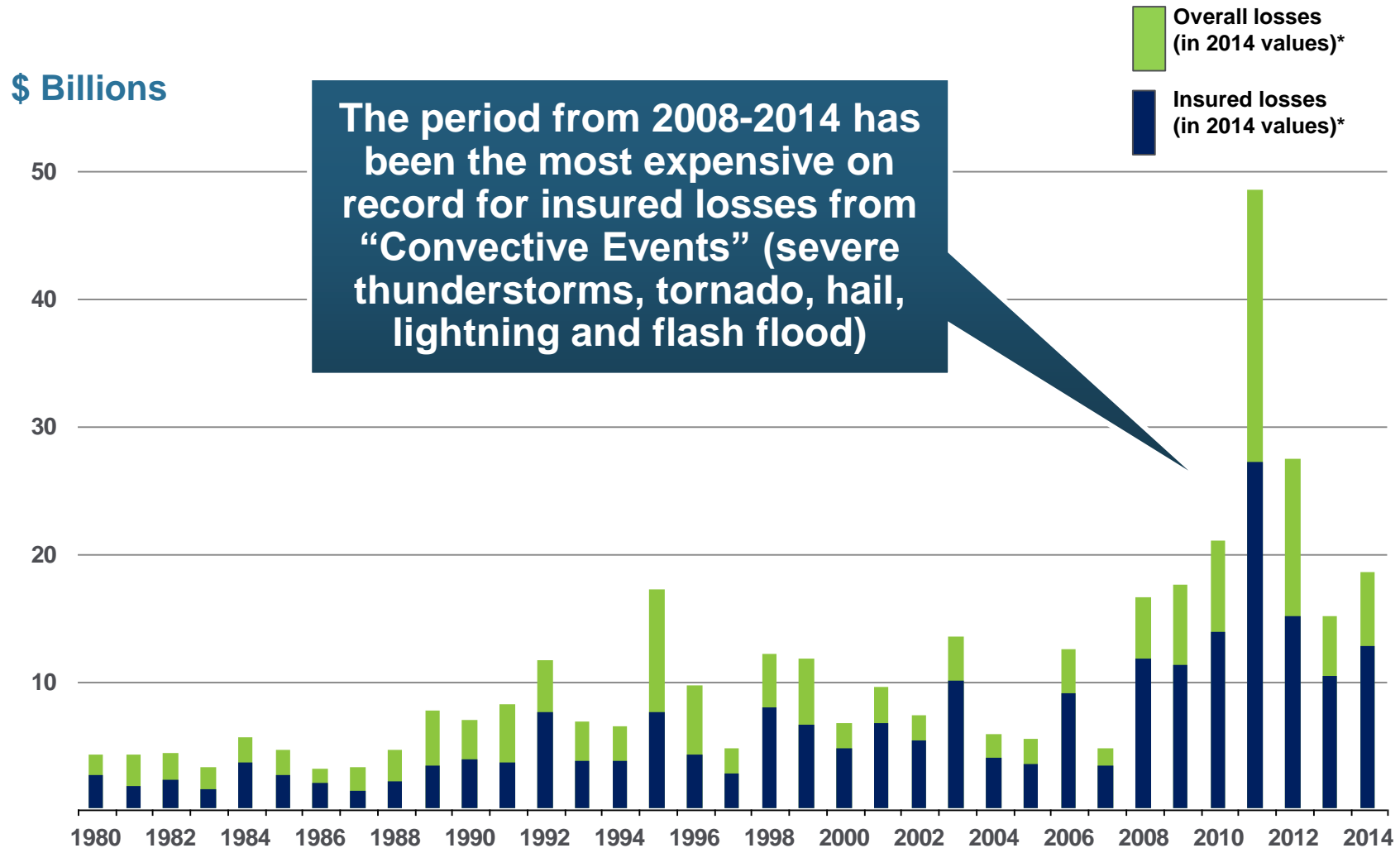
Natural Disaster Losses in the US, 2014

Based on perils

As of January, 2015	Number of Events	Fatalities	Estimated Overall Losses (US \$m)	Estimated Insured Losses (US \$m)
Severe Thunderstorm	62	98	17,000	12,300
Winter Storm, winter damage, cold wave, snow storm	13	115	3,700	2,300
Flood, flash flood, storm surge	20	5	1,800	500
Earthquake & Geophysical, landslides	11	45	750	150
Tropical Cyclone	2	1	95	Minor market losses
Wildfire, Heat, & Drought	11	2	1,700	Minor market losses
Totals	119	266	25,000	15,300

Convective Loss Events in the US

Overall and insured losses, 1980 – 2014



*Losses adjusted to inflation based on CPI

Source: Geo Risks Research, NatCatSERVICE

Analysis contains:

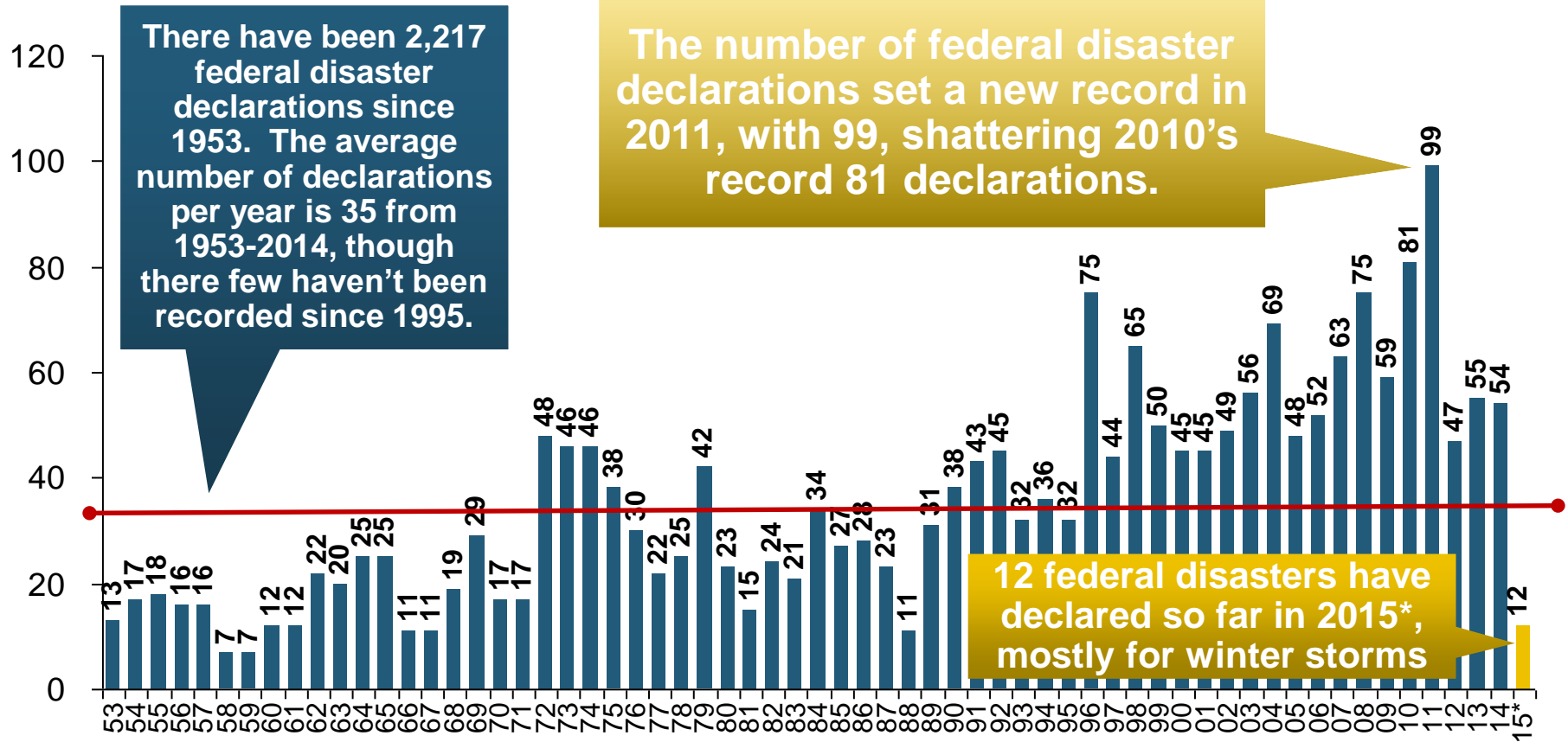
severe storm, tornado, hail, flash flood and lightning



Federal Disaster Declarations Patterns: 1953-2015

**Disaster Declarations Set New
Records in Recent Years**

Number of Federal Major Disaster Declarations, 1953-2015*

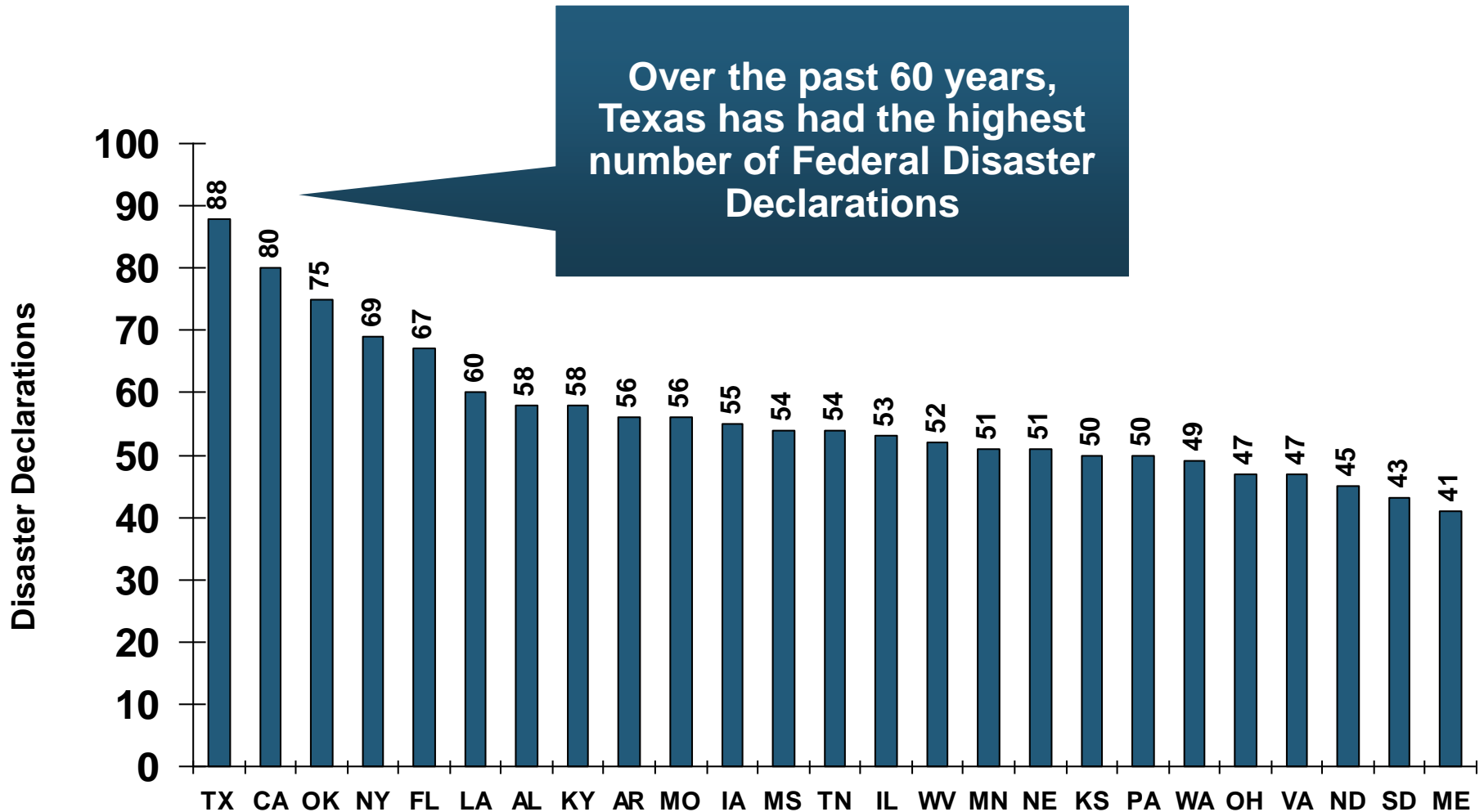


The Number of Federal Disaster Declarations Is Rising and Set New Records in 2010 and 2011 Before Dropping in 2012-2014

*Through May1, 2015.

Source: Federal Emergency Management Administration; <http://www.fema.gov/disasters>; Insurance Information Institute.

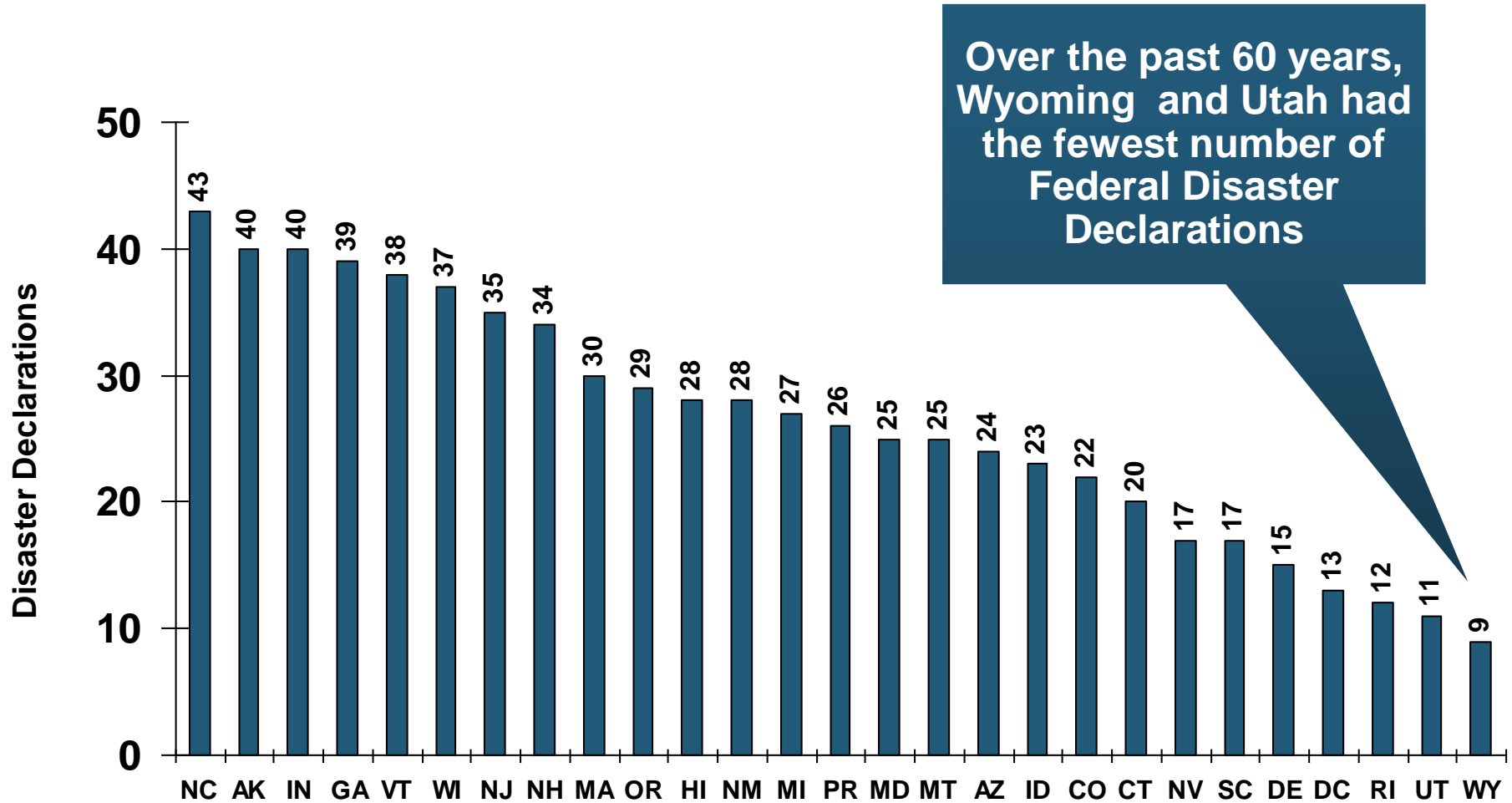
Federal Disasters Declarations by State, 1953 – 2015: Highest 25 States*



*Through May 1, 2015. Includes Puerto Rico and the District of Columbia.

Source: FEMA: http://www.fema.gov/news/disaster_totals_annual.fema; Insurance Information Institute.

Federal Disasters Declarations by State, 1953 – 2015: Lowest 25 States*

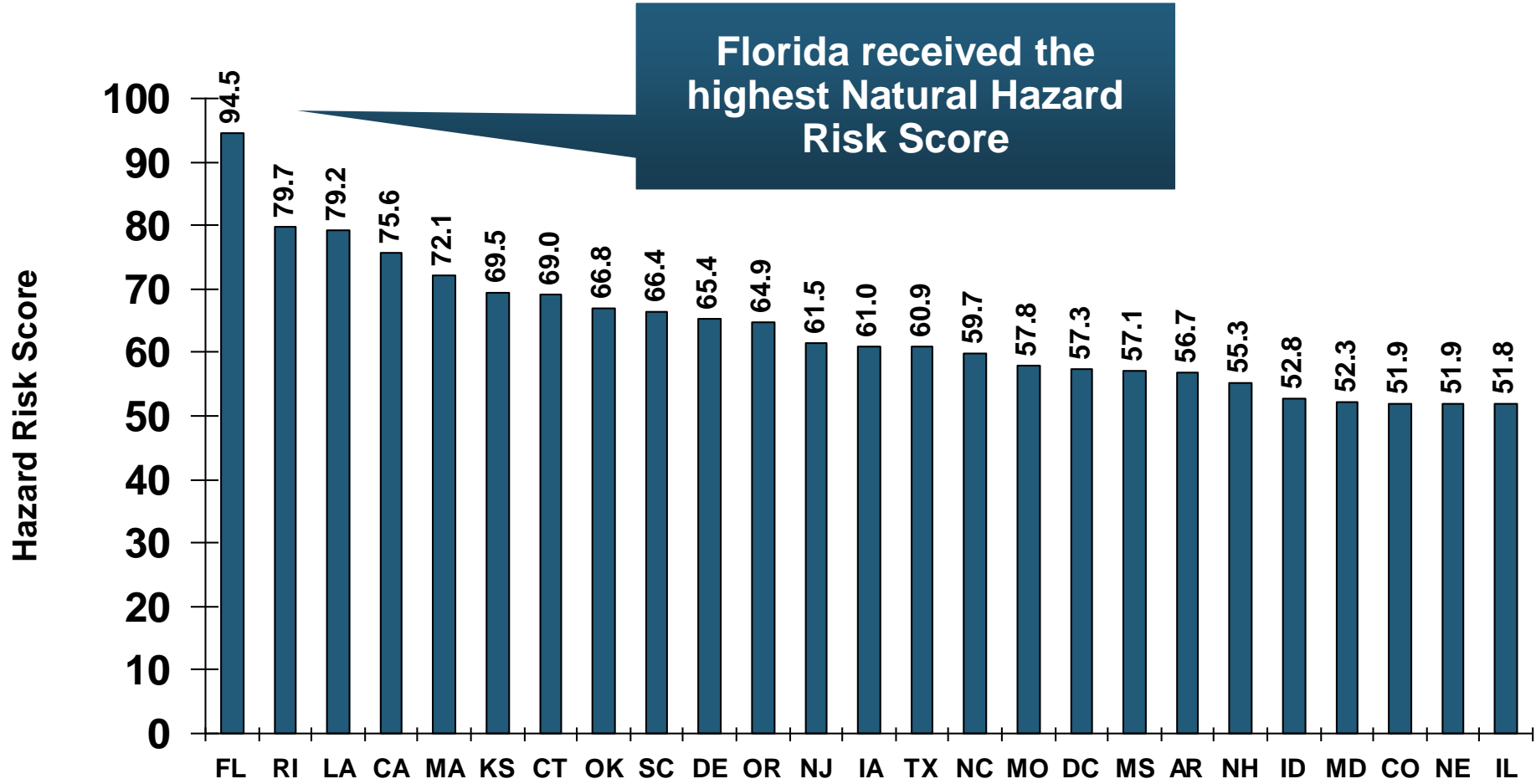


*Through May 1, 2015. Includes Puerto Rico and the District of Columbia.

Source: FEMA: http://www.fema.gov/news/disaster_totals_annual.fema; Insurance Information Institute.

Natural Hazard Risk Scores, 2014

Highest 25 States*



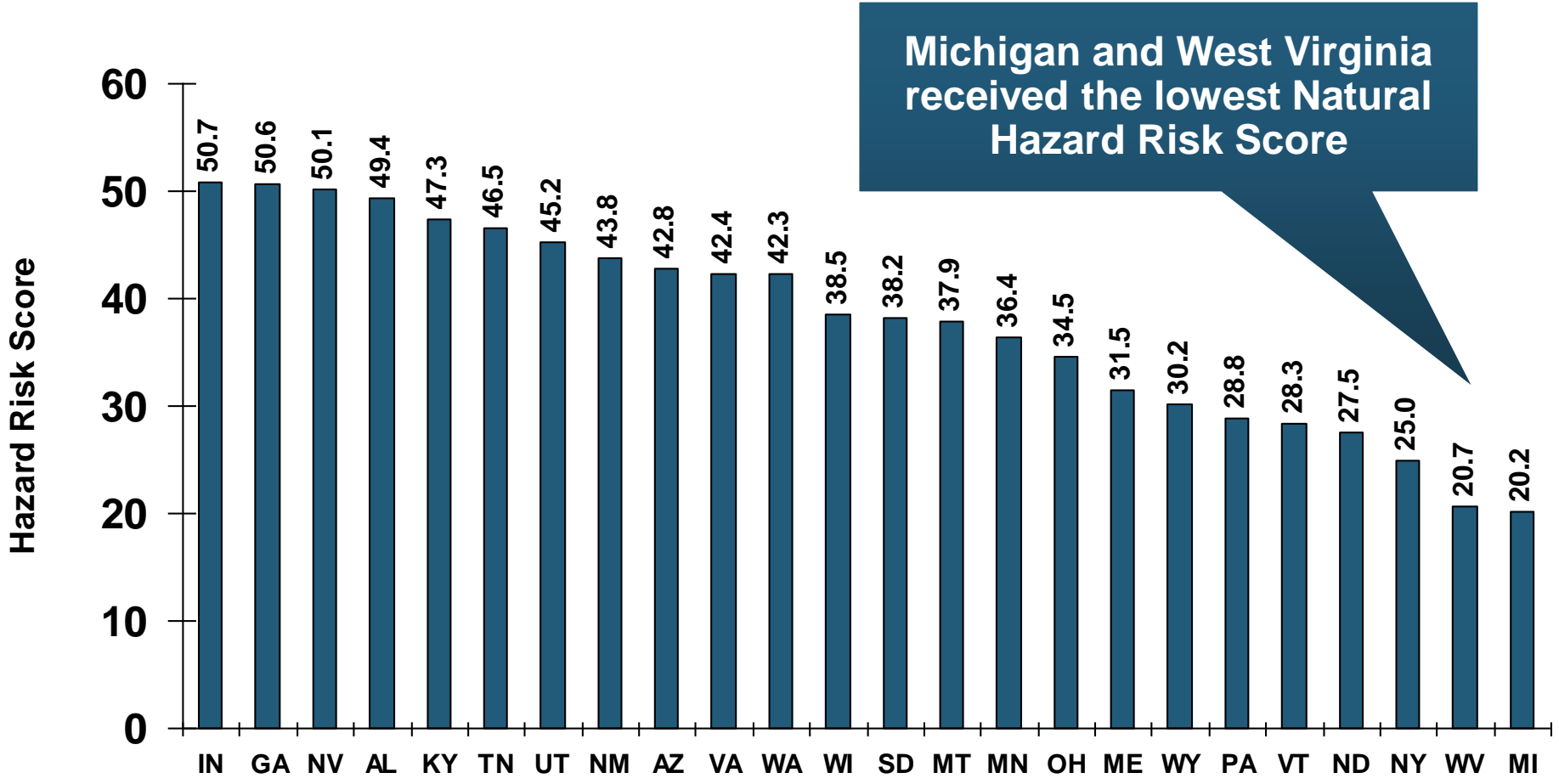
Note: Score is based on data on 9 natural hazards: flood, wildfire, tornado, storm surge, earthquake, straight-line wind, hurricane, wind, hail and sinkhole.

*Analysis Includes DC. Excludes Alaska and Hawaii due to limited natural hazard risk data.

Sources: CoreLogic release "CoreLogic Identifies US States at Highest Risk of Property Damage Loss from Natural Hazards," Sept. 10, 2014; Insurance Information Institute.

Natural Hazard Risk Scores, 2014

Bottom 24 States*



Michigan and West Virginia received the lowest Natural Hazard Risk Score

Note: Score is based on data on 9 natural hazards: flood, wildfire, tornado, storm surge, earthquake, straight-line wind, hurricane, wind, hail and sinkhole.

*Analysis Includes DC. Excludes Alaska and Hawaii due to limited natural hazard risk data.

Sources: CoreLogic release "CoreLogic Identifies US States at Highest Risk of Property Damage Loss from Natural Hazards," Sept. 10, 2014; Insurance Information Institute.



Riots, Civil Commotion and Insurance

**Damage to Insured Properties is
Generally Covered Under Standard
Property and Auto Policies**

***Baltimore Riots Have Officially Been
Designated a PCS CAT Event***

Insurance Coverage for Riots and Civil Commotions: Home, Auto and Business

- Auto, homeowners, and business insurance policies generally include coverage for property losses caused by riots and civil commotions
- Homeowners policies pay to repair, or rebuild, an insured home if its structure is damaged or destroyed as the result of a riot or civil commotion, as well as to replace the homeowner's personal belongings if they are damaged or stolen during the event.
 - ◆ If the home is rendered uninhabitable by the damage caused by a riot or civil commotion, policyholders can file an additional living expenses (ALE) claim to finance their temp. housing expenses until the residence has been repaired.
- The optional comprehensive coverage on an auto insurance policy reimburses losses to a vehicle due to damage caused by falling objects, fire, riots and vandalism, among other things.
- Standard business property insurance policies provide coverage for the structure of the building as well as the contents inside, and cover losses arising from riots or civil commotion. Business interruption (BI) coverage, whereby the policyholder can file a claim for lost income, is usually only triggered when the insured business incurs direct physical damage.

Top 10 Insured Loss Events from Riots and Civil Commotion*

Year	Deaths	Date	State	Insured Loss When Occurred	Insured Losses (2014 \$MM)
1992	14	Apr 29 - May 4	CA	775,000,000	1,307.7
1980	62	May 17 - 19	FL	65,250,000	187.5
1967	48	Jul 23 - 31	MI	41,500,000	294.2
1965	87	11-Aug	CA	38,000,000	285.6
1977	99	Jul 13 - 14	NY	28,000,000	109.4
1967	47	Jul 12 - 21	NJ	11,000,000	78.0
1966	20	12-Jul	IL	4,000,000	29.2
1971	63	Jun 13 - 15	NM	3,000,000	17.5
1977	11	Jul 13 - 14	NY	2,000,000	7.8
1968	77	Jul 23 - 24	OH	1,500,000	10.2

April 2015 Baltimore riots were designated a PCS CAT event on April 29 but loss estimates are not yet available (2014 Ferguson riots did not receive PCS designation)



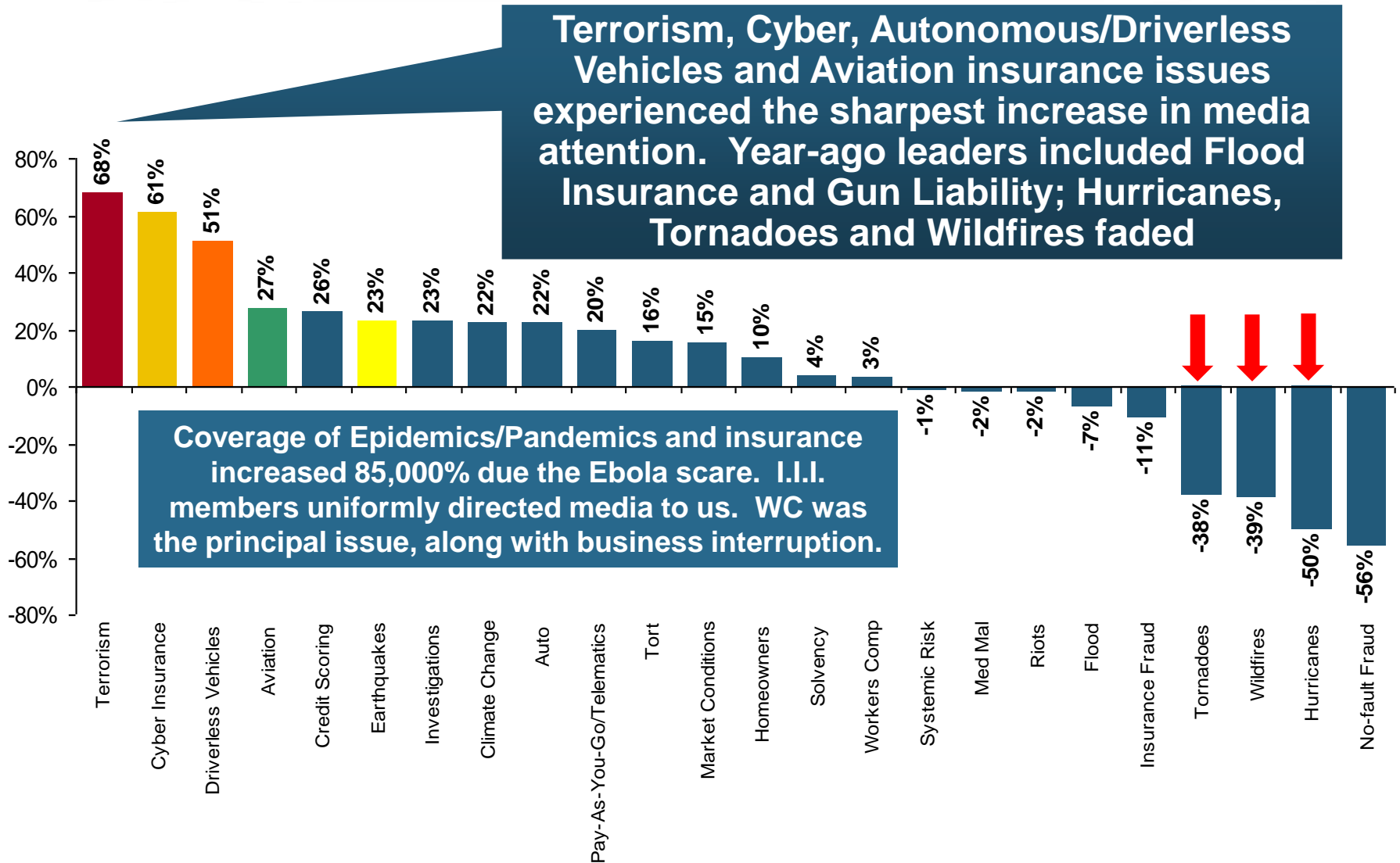
Top Insurance Issues:
What's Hot, What's Not

**No Dominant Even in 2014, but
Some Key Commercial Lines
Issues Spiked**

Terrorism, TRIA & Cyber

I.I.I. Media Index, P/C, 2014 vs 2013

Percent increase/decrease from previous year



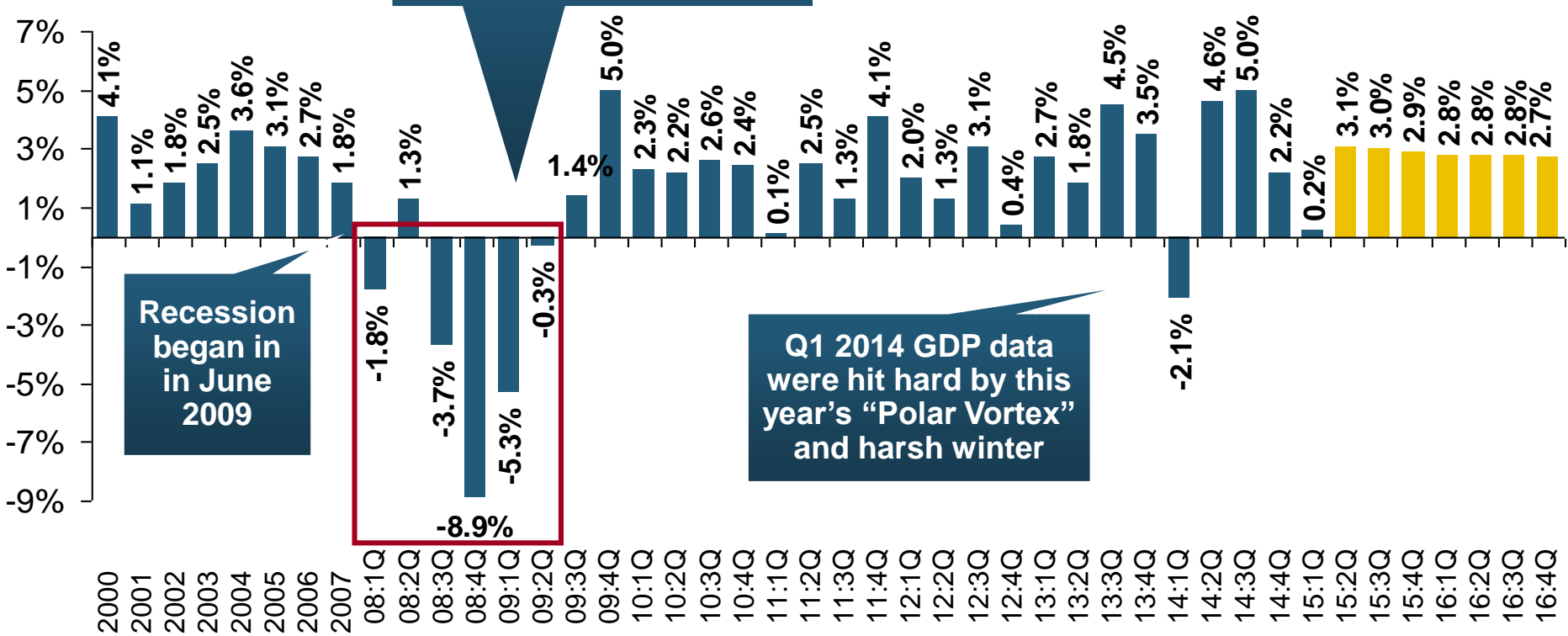
Source: Insurance Information Institute based on a search of Lexis/Nexis.

**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*

Real GDP Growth (%)



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

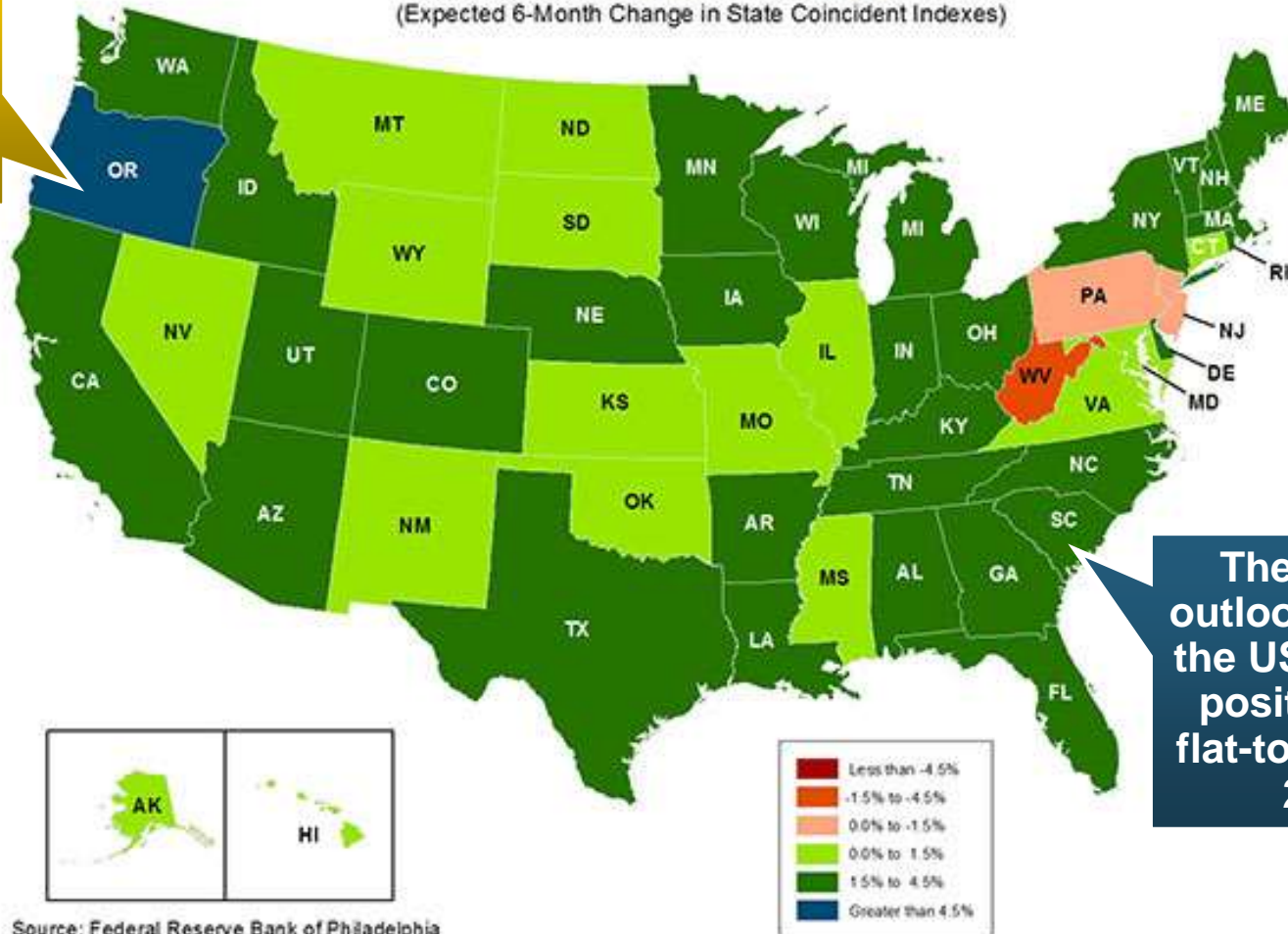
* Estimates/Forecasts from Blue Chip Economic Indicators.

Source: US Department of Commerce, Blue Economic Indicators 4/15; Insurance Information Institute.

State-by-State Leading Indicators through August 2015

Growth in the West is finally beginning to pick up

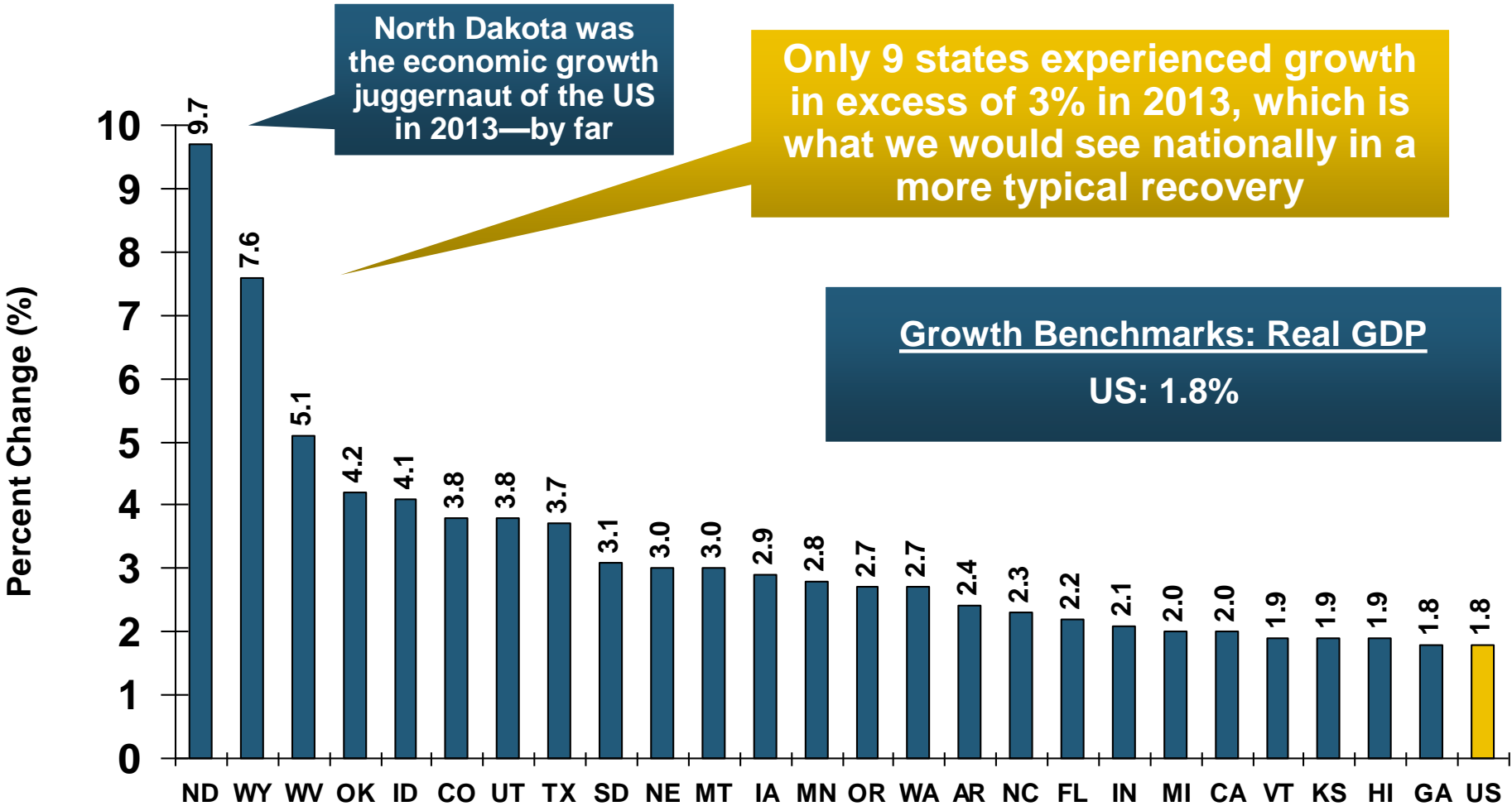
February 2015 State Leading Indexes
(Expected 6-Month Change in State Coincident Indexes)



The economic outlook for most of the US is generally positive, though flat-to-negative for 2 states

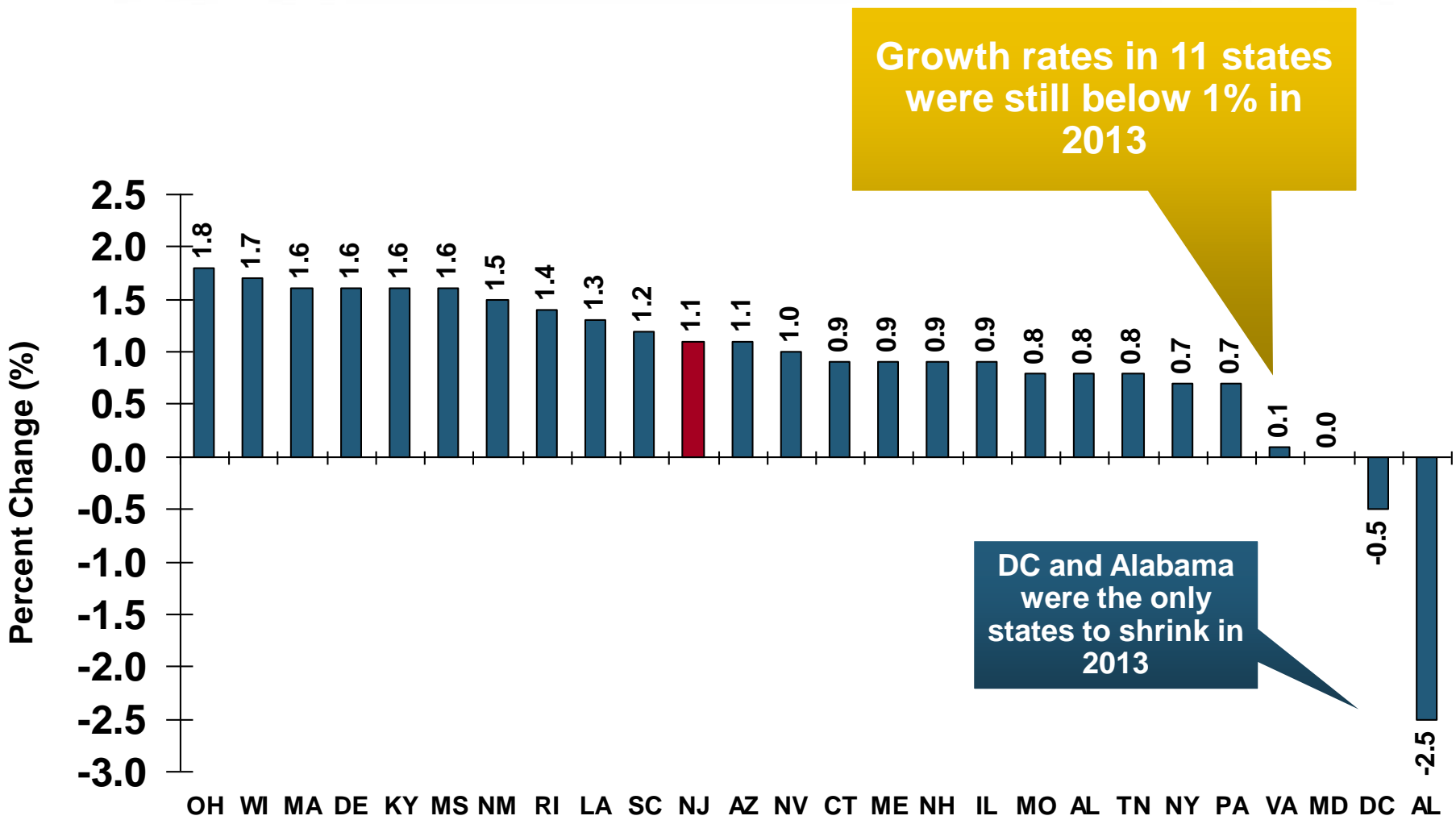
Source: Federal Reserve Bank of Philadelphia

Real GDP by State Percent Change, 2013: Highest 25 States



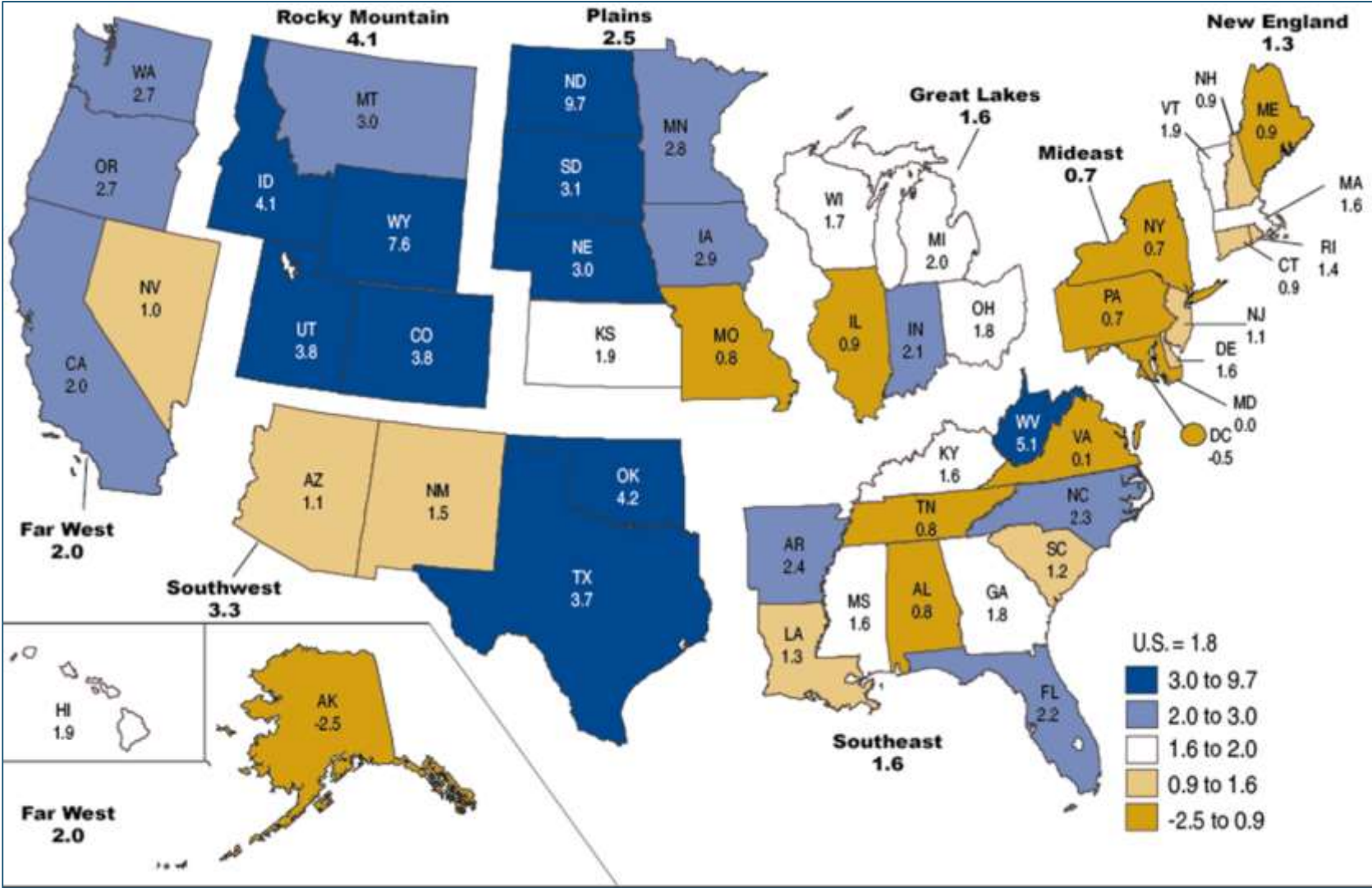
Sources: [U.S. Bureau of Economic Analysis](#); Insurance Information Institute.

Real GDP by State Percent Change, 2013: Lowest 25 States



Sources: [US Bureau of Economic Analysis](#); Insurance Information Institute.

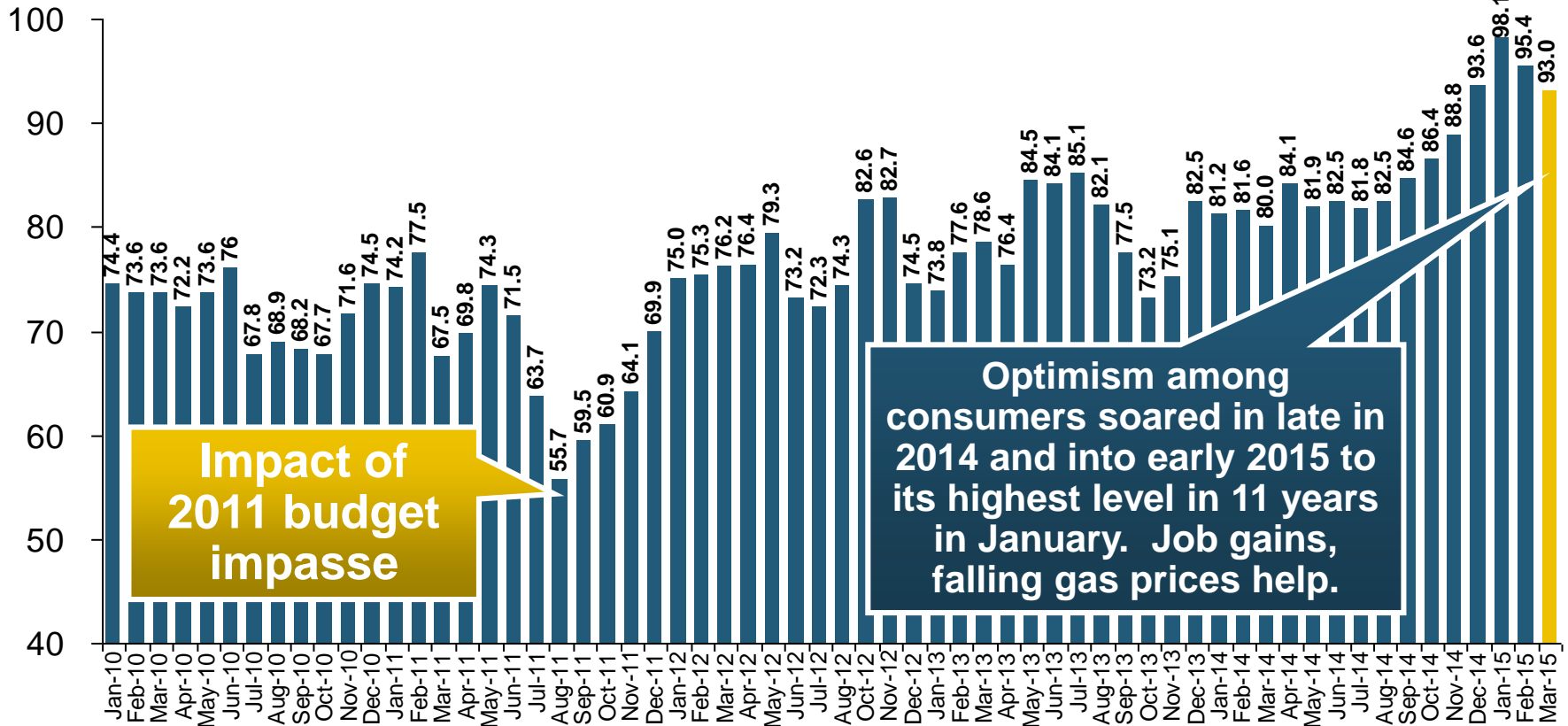
Percent Change in Real GDP by State, 2013



Sources: [US Bureau of Economic Analysis](http://www.bea.gov); Insurance Information Institute.

Consumer Sentiment Survey (1966 = 100)

January 2010 through March 2015



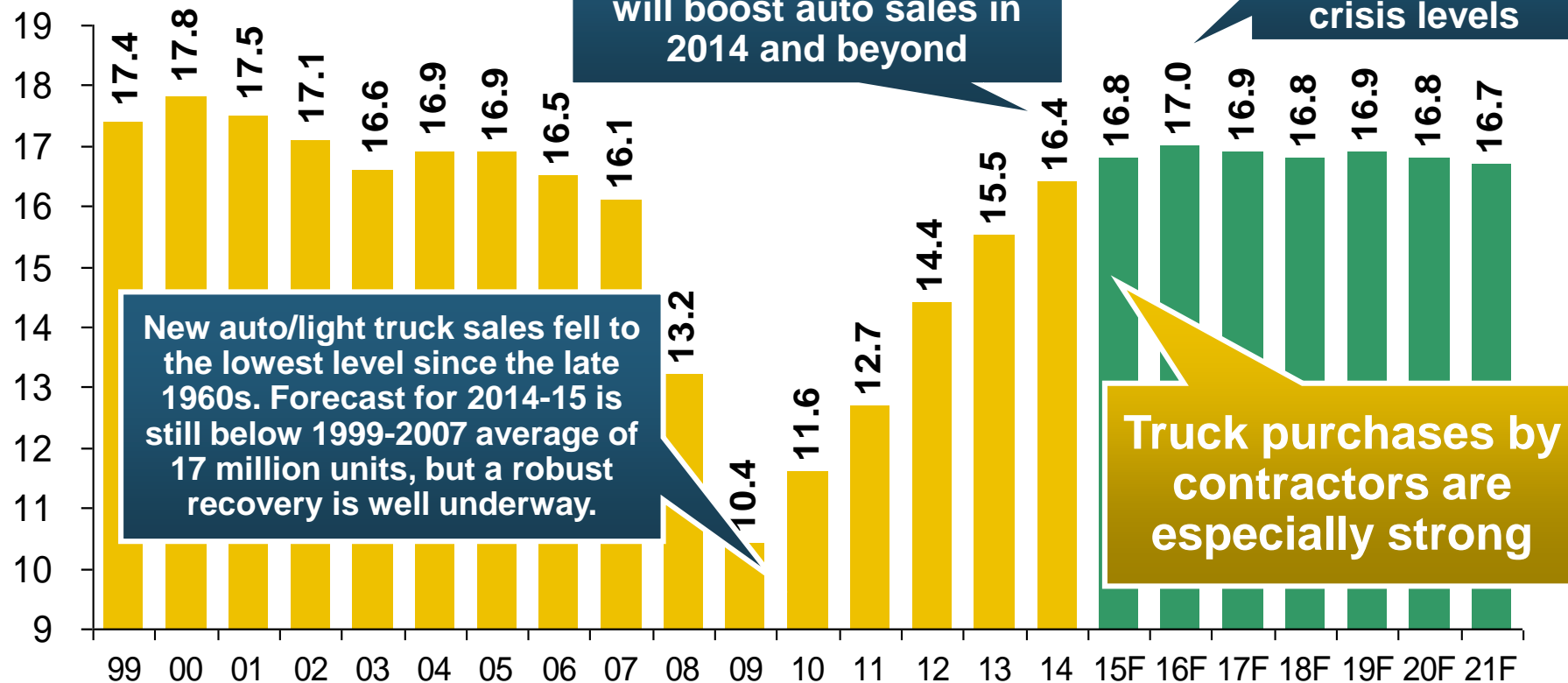
Impact of 2011 budget impasse

Optimism among consumers soared in late in 2014 and into early 2015 to its highest level in 11 years in January. Job gains, falling gas prices help.

Consumer confidence had been low for years amid high unemployment, falling home prices and other factors adversely impact consumers, but improved substantially over the past 2+ years, as job growth and falling energy prices aid consumers

Auto/Light Truck Sales, 1999-2021F

(Millions of Units)



Job growth and improved credit market conditions will boost auto sales in 2014 and beyond

Sales have returned to pre-crisis levels

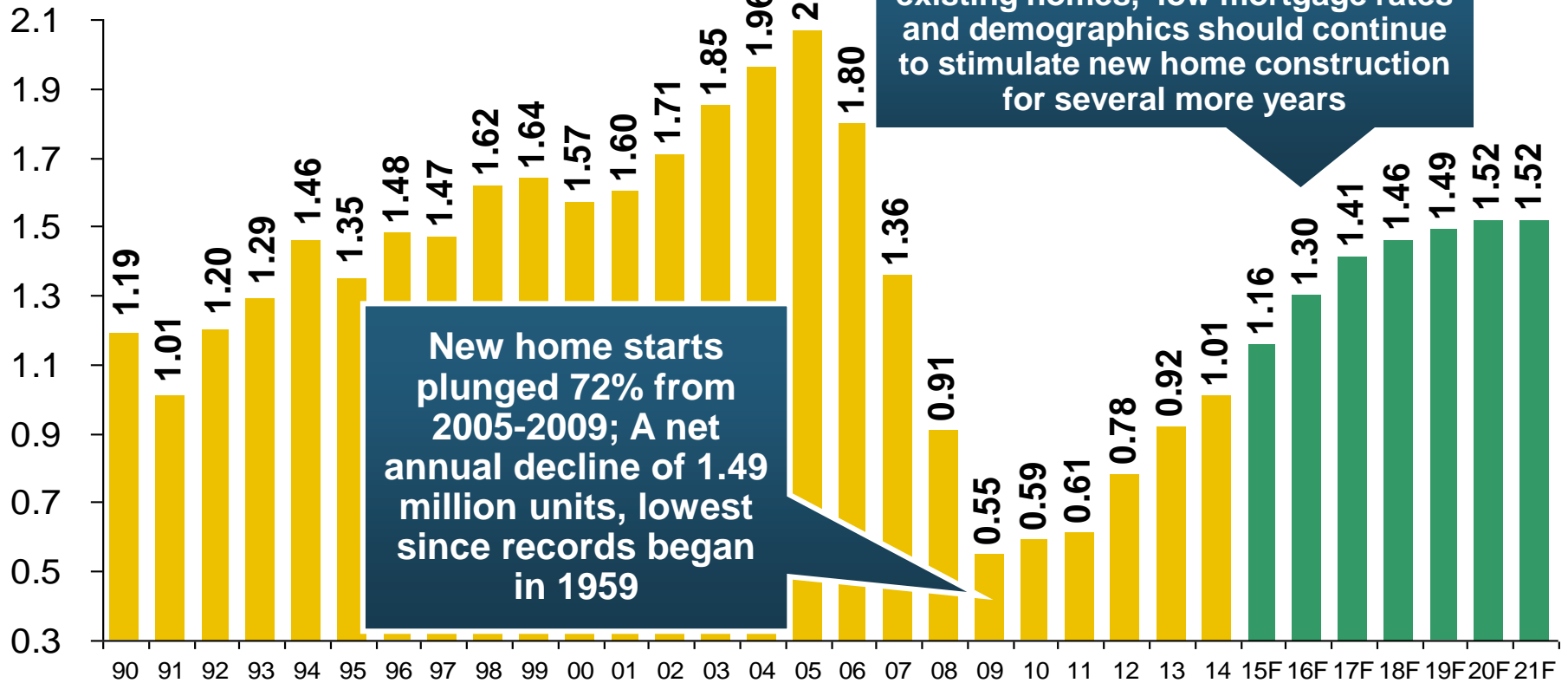
New auto/light truck sales fell to the lowest level since the late 1960s. Forecast for 2014-15 is still below 1999-2007 average of 17 million units, but a robust recovery is well underway.

Truck purchases by contractors are especially strong

Yearly car/light truck sales will likely continue at current levels, in part replacing cars that were held onto in 2008-12. New vehicles will generate more physical damage insurance coverage but will be more expensive to repair. PP Auto premium might grow by 5% - 6%.

New Private Housing Starts, 1990-2021F

(Millions of Units)

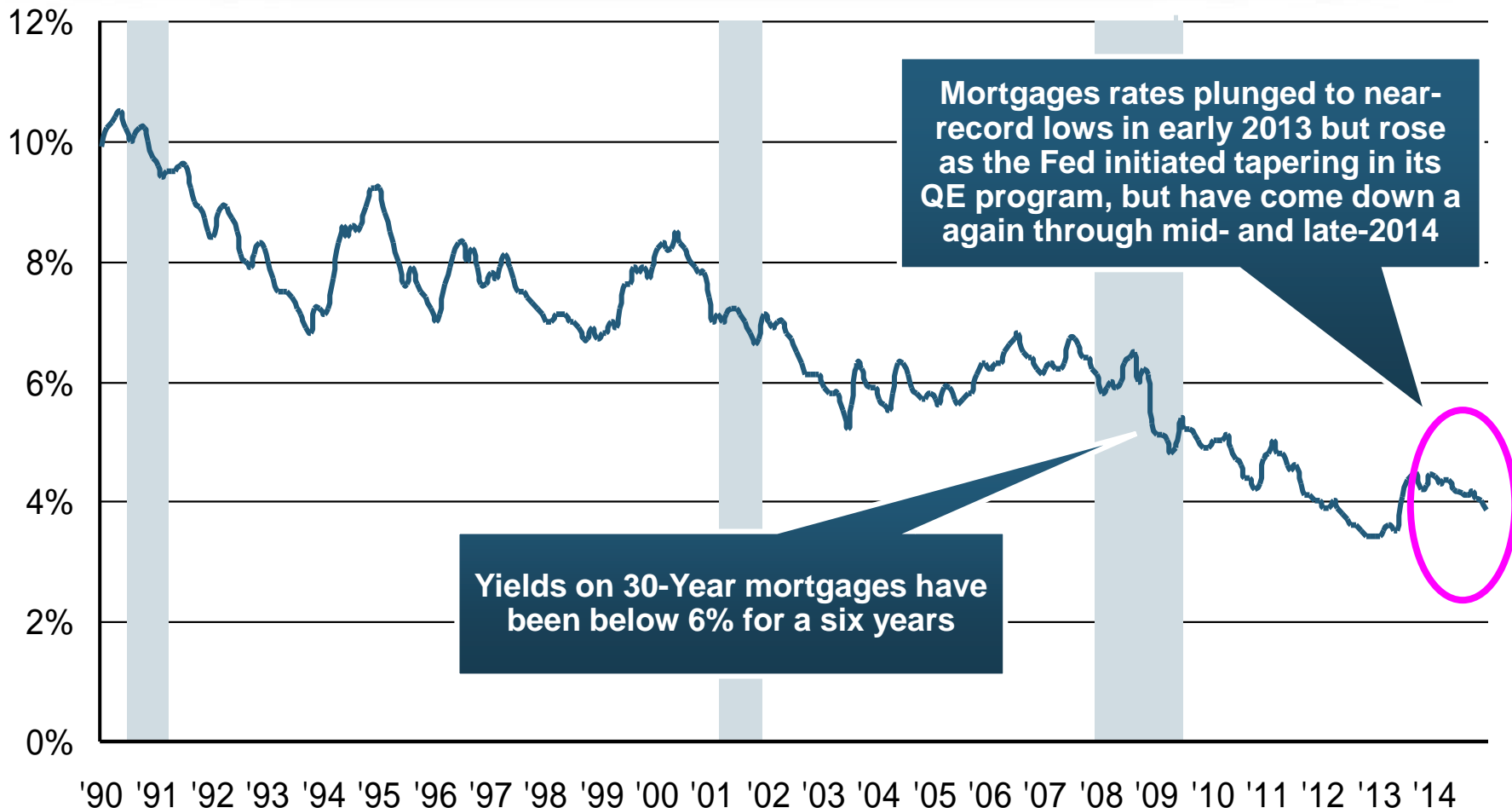


Job growth, low inventories of existing homes, low mortgage rates and demographics should continue to stimulate new home construction for several more years

New home starts plunged 72% from 2005-2009; A net annual decline of 1.49 million units, lowest since records began in 1959

Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the “Great Recession” Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Interest Rate on Convention 30-Year Mortgages: Up a Bit, 1990–2014*



Mortgage interest rates remain low by historical standards, aiding the housing recovery. Changes in Fed policy could push rates up modestly later in 2015.

*Monthly, through Dec. 2014.

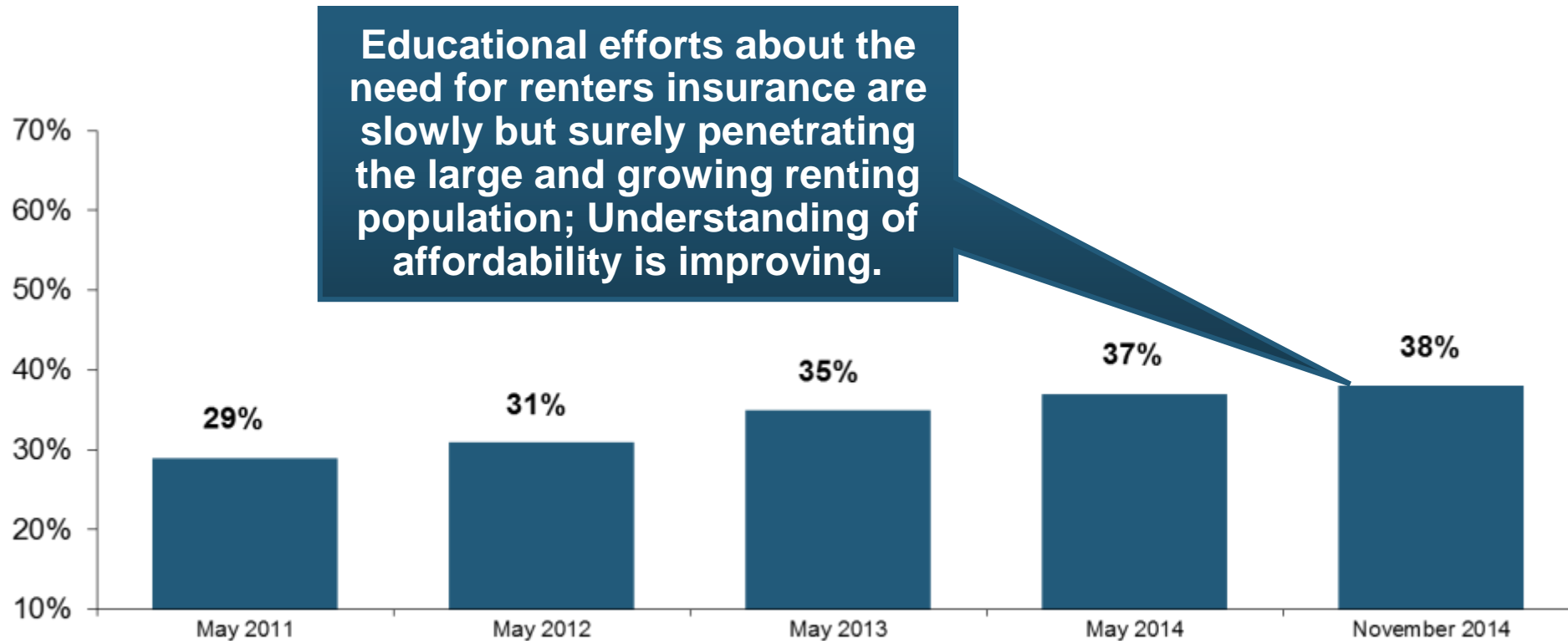
Note: Recessions indicated by gray shaded columns.

Sources: Federal Reserve Bank at <http://www.federalreserve.gov/releases/h15/data.htm>.

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

I.I.I. Poll: Renters Insurance

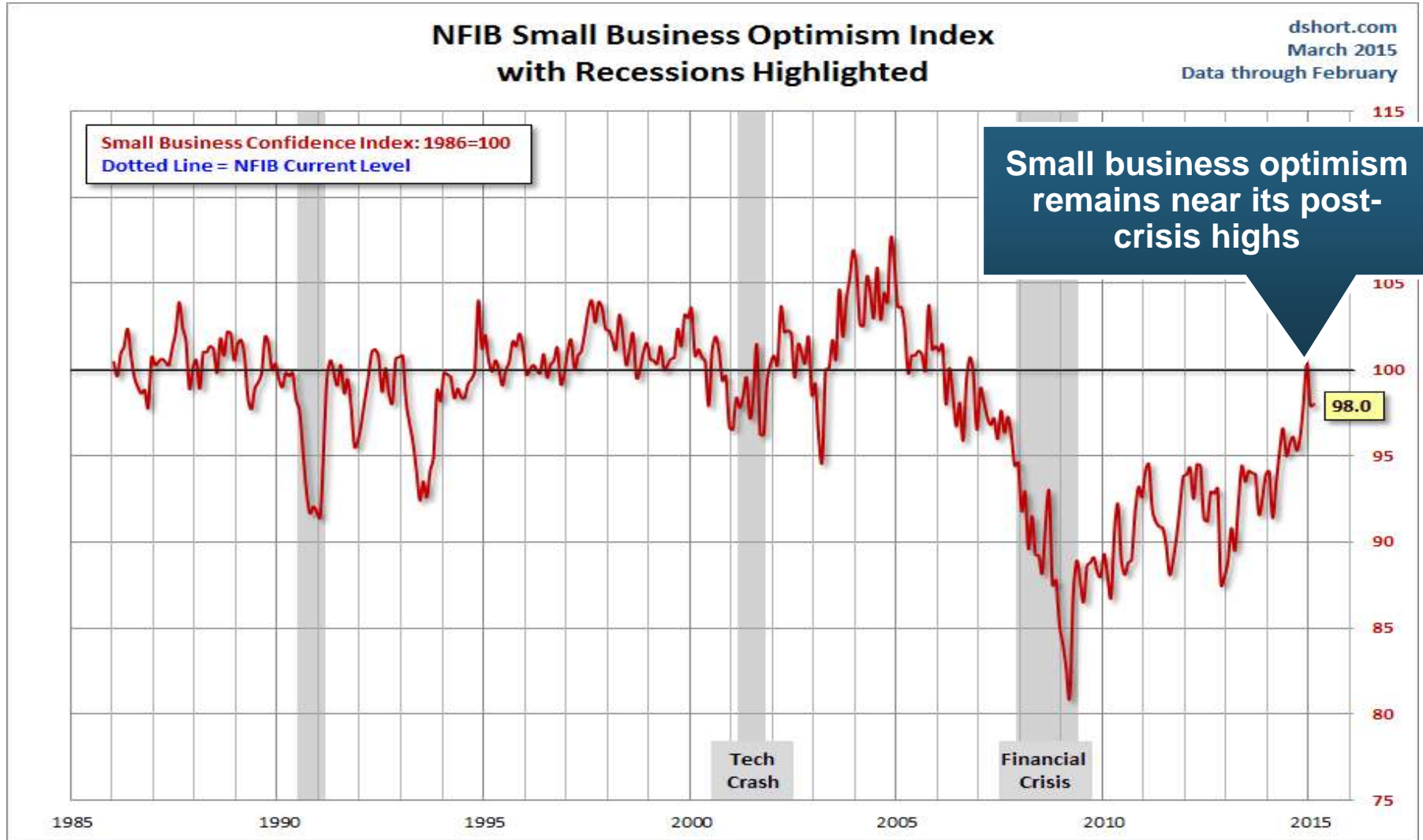
Percentage of Renters Who Have Renters Insurance, 2011-2014



Percentage Of Renters With Renters Insurance Is Increasing.

NFIB Small Business Optimism Index

January 1985 through February 2015

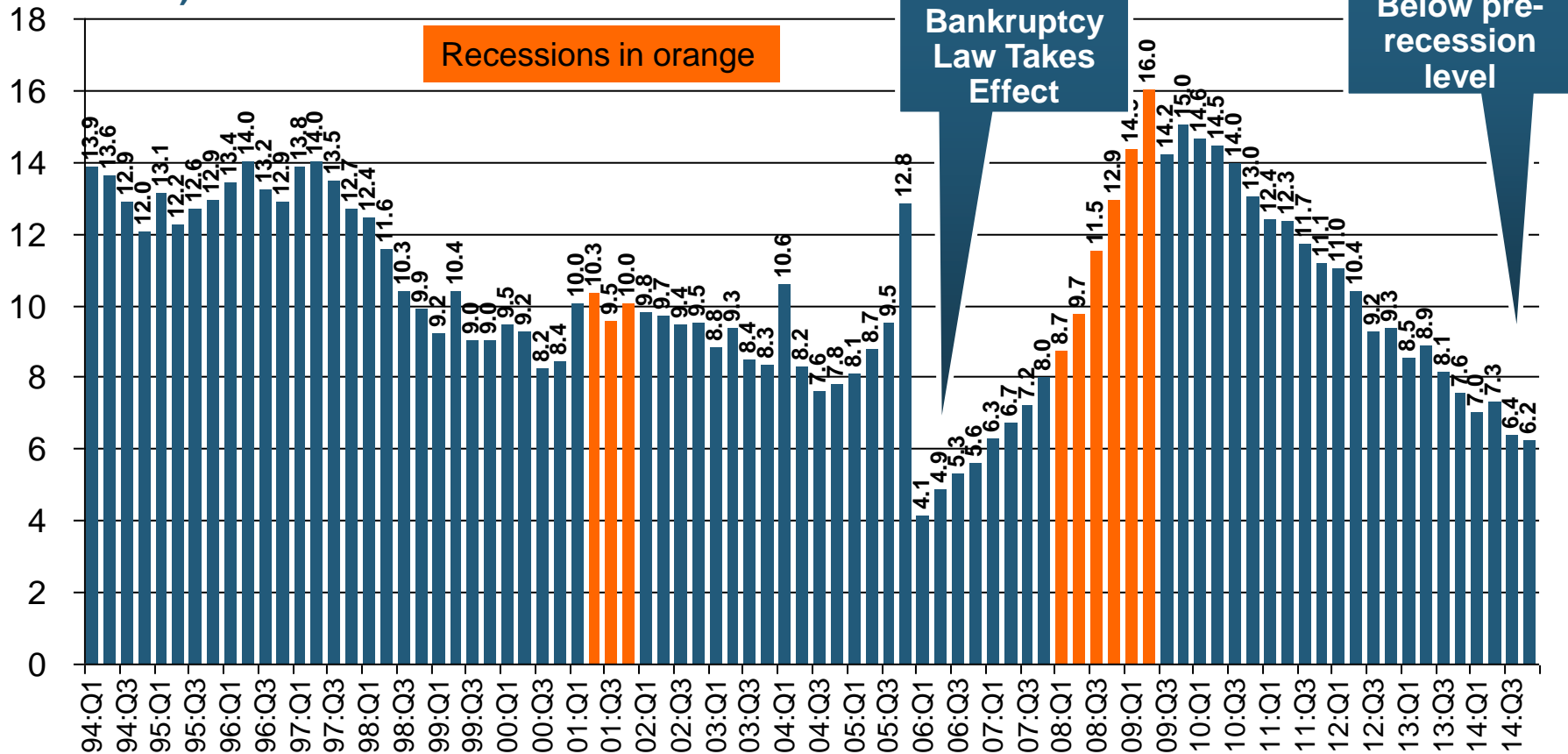


Source: National Federation of Independent Business at <http://www.advisorperspectives.com/dshort/charts/indicators/Sentiment.html?NFIB-optimism-index.gif> ; Insurance Information Institute.

Business Bankruptcy Filings: Still Falling

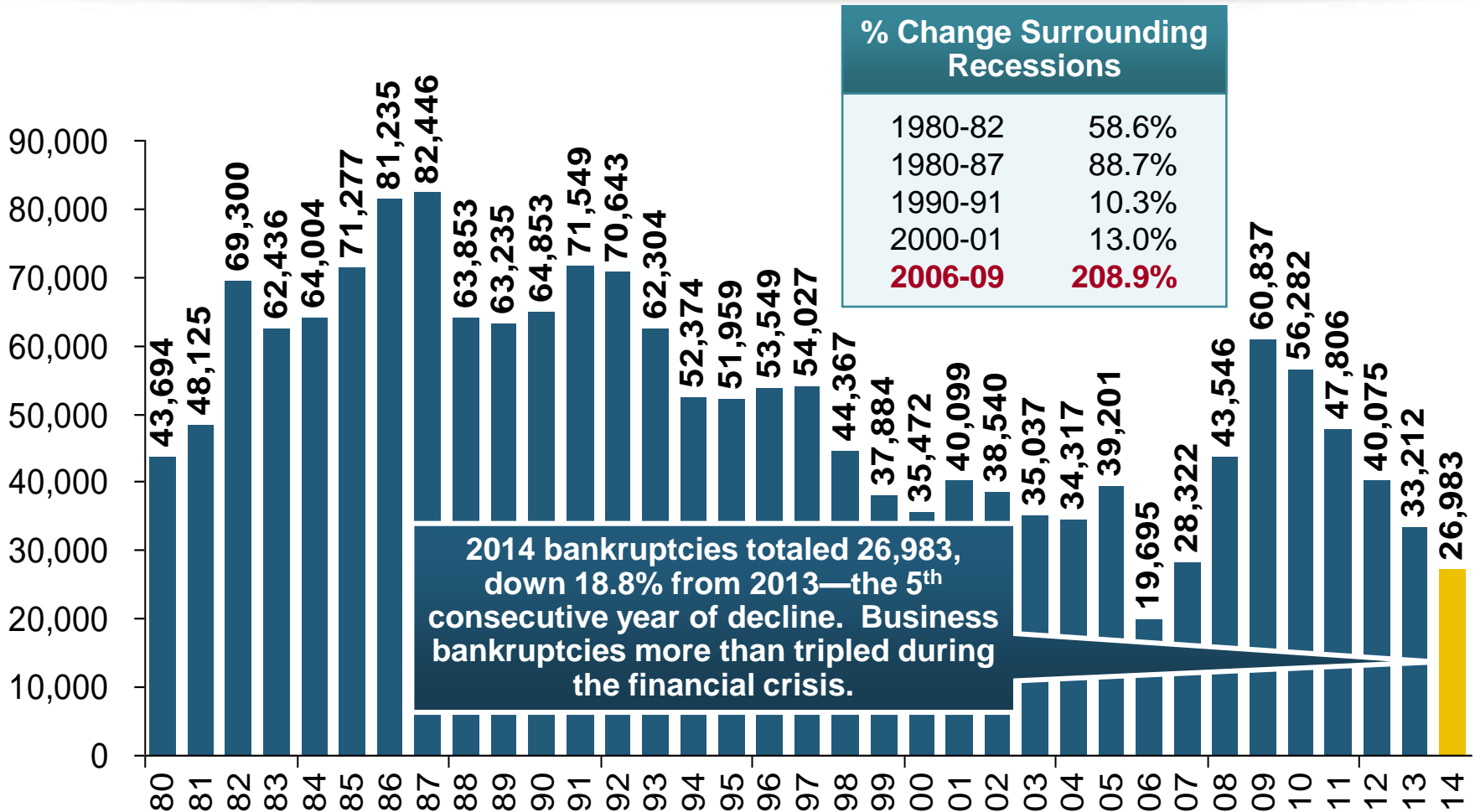
(1994:Q1 – 2014:Q4)

(Thousands)



Business bankruptcies in 2014 were below both the Great Recession levels and the 2003:Q3-2005:Q1 period (the best five-quarter stretch in the last 20 years). Bankruptcies restrict exposure growth in all commercial lines.

Business Bankruptcy Filings, 1980-2014



Significant Exposure Implications for All Commercial Lines as Business Bankruptcies Begin to Decline

Sources: American Bankruptcy Institute (1980-2012) at <http://www.abiworld.org/AM/AMTemplate.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=61633>; 2013-14 data from United States Courts at <http://news.uscourts.gov>; Insurance Information Institute.

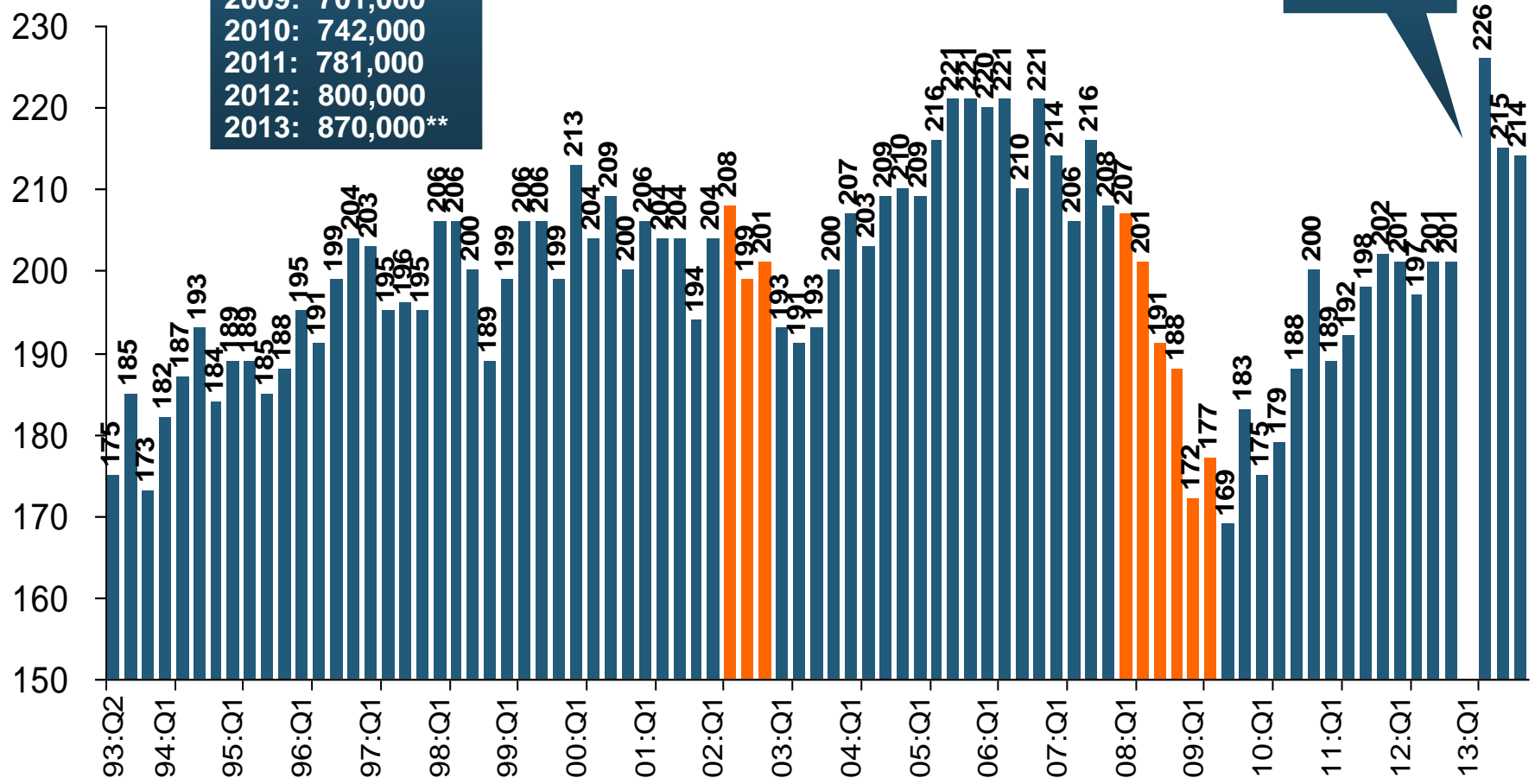
Private Sector Business Starts: 1993:Q2 – 2013:Q4* As Strong as Ever?

Recessions in orange

2013:Q1
578,000
business
starts*

Business Starts	
2006:	861,000
2007:	844,000
2008:	787,000
2009:	701,000
2010:	742,000
2011:	781,000
2012:	800,000
2013:	870,000**

Thousands



*Data posted Apr 29, 2014, the latest available; a classification change in 2013:Q1 resulted in a report of 578,000 businesses started in that quarter. Seasonally adjusted. **2014 number assumes 1st quarter equaled average of other three quarters

Sources: Bureau of Labor Statistics, <http://www.bls.gov/news.release/cewbd.t08.htm>. NBER (recession dates)

12 Industries for the Next 10 Years: Insurance Solutions Needed

Health Care

Health Sciences

Energy (Traditional)

Alternative Energy

Petrochemical

Agriculture

Natural Resources

Technology (incl. Biotechnology)

Light Manufacturing

Inourced Manufacturing

Export-Oriented Industries

Shipping (*Rail, Marine, Trucking, Pipelines*)



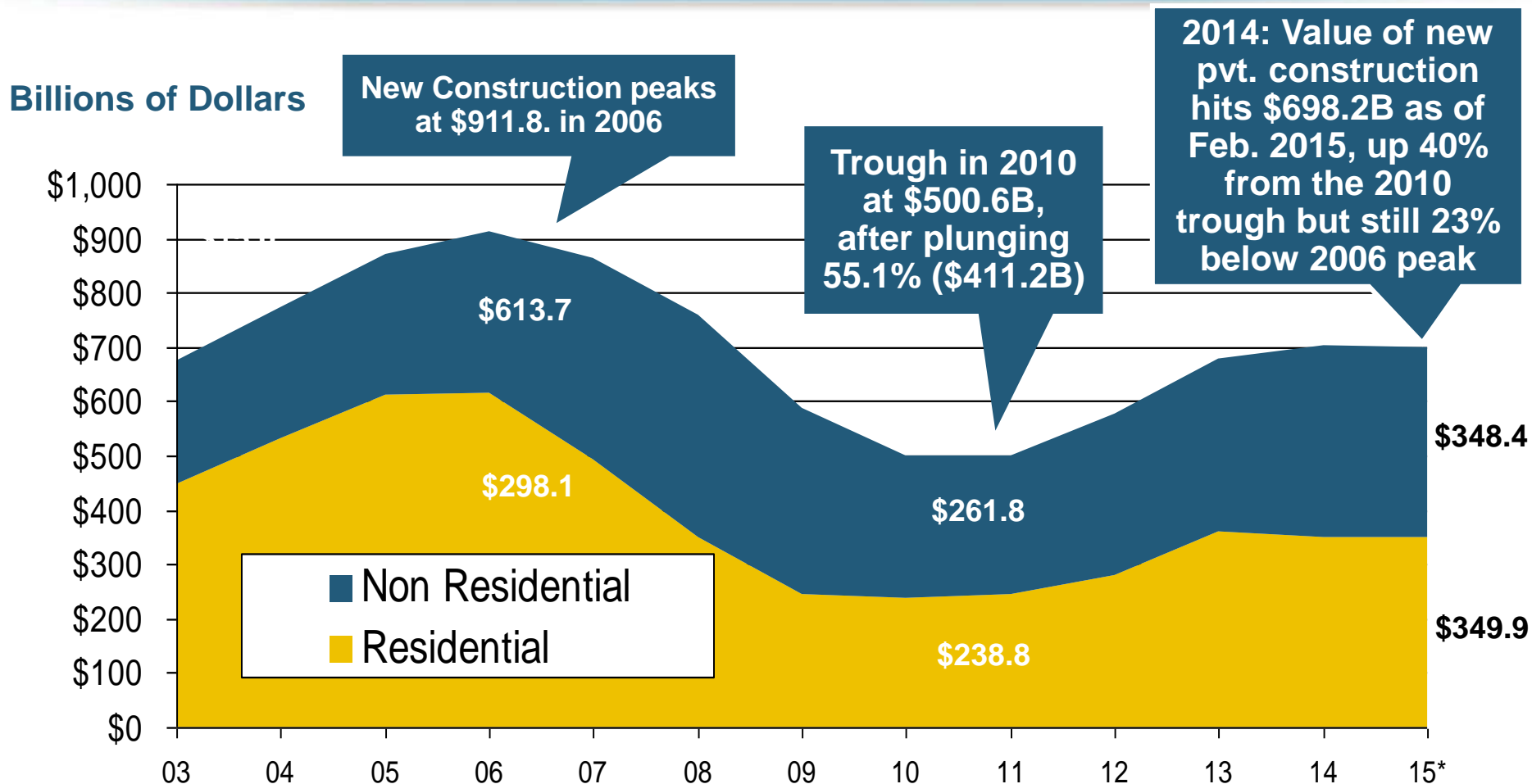
Many industries are poised for growth, though insurers' ability to capitalize on these industries varies widely



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, 2003-2015*



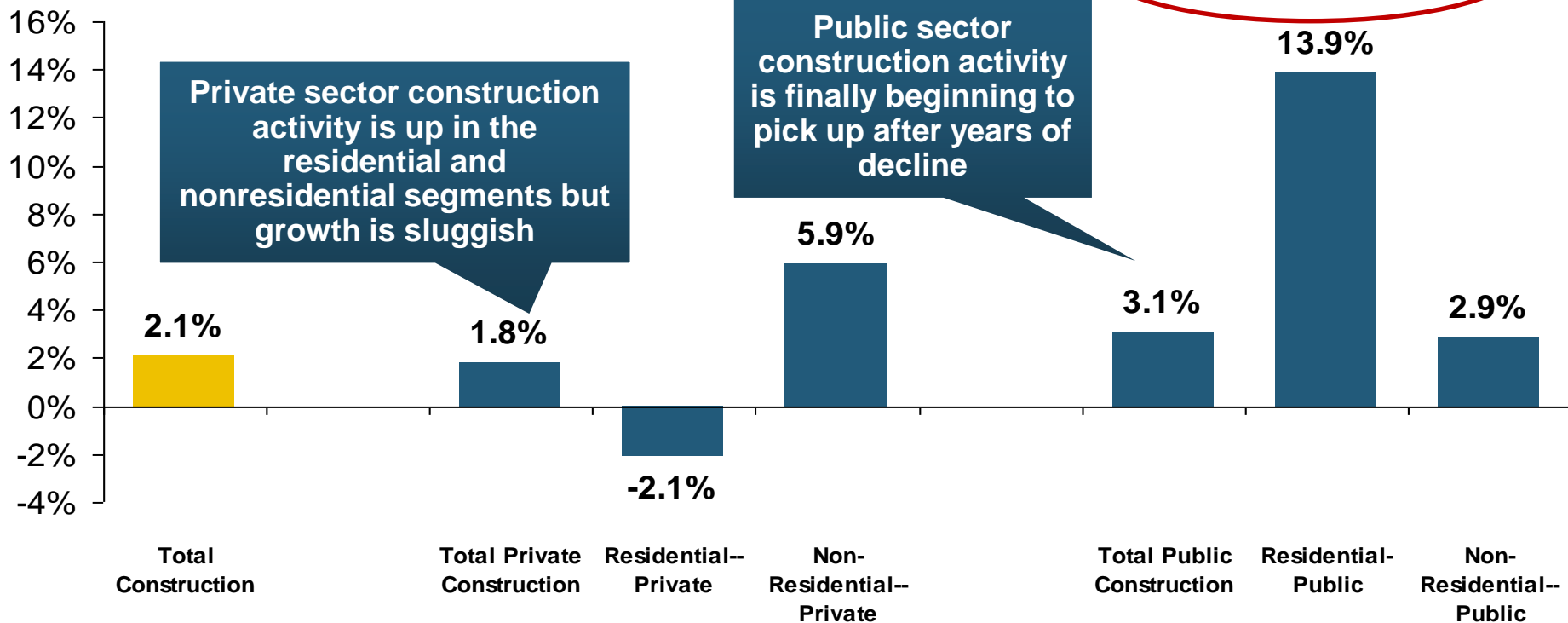
Private Construction Activity Is Moving in a Positive Direction though Remains Well Below Pre-Crisis Peak; Residential Dominates

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

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

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

Growth (%)



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

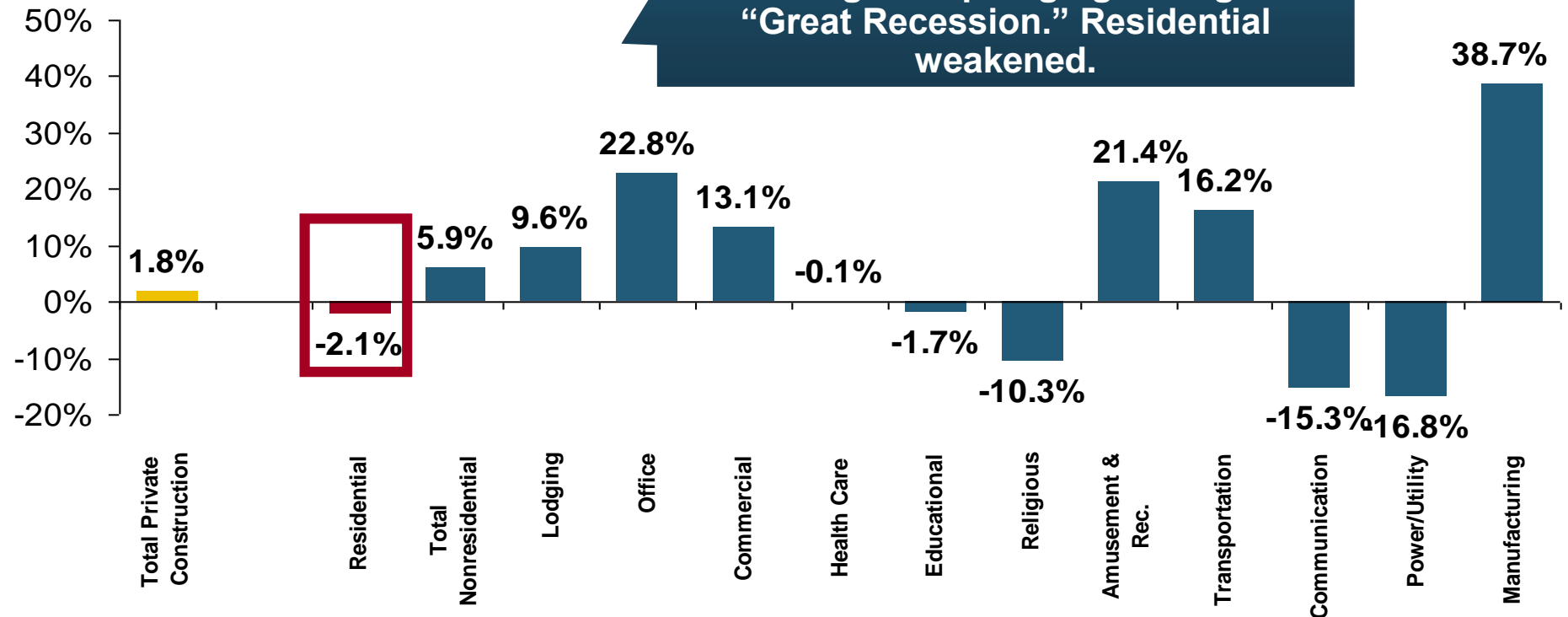
*seasonally adjusted

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

Value of Private Construction Put in Place, by Segment, Feb. 2015 vs. Feb. 2014*

Growth (%)

Led by the Manufacturing and Office segments, Private nonresidential sector construction activity continues to rising after plunging during the “Great Recession.” Residential weakened.

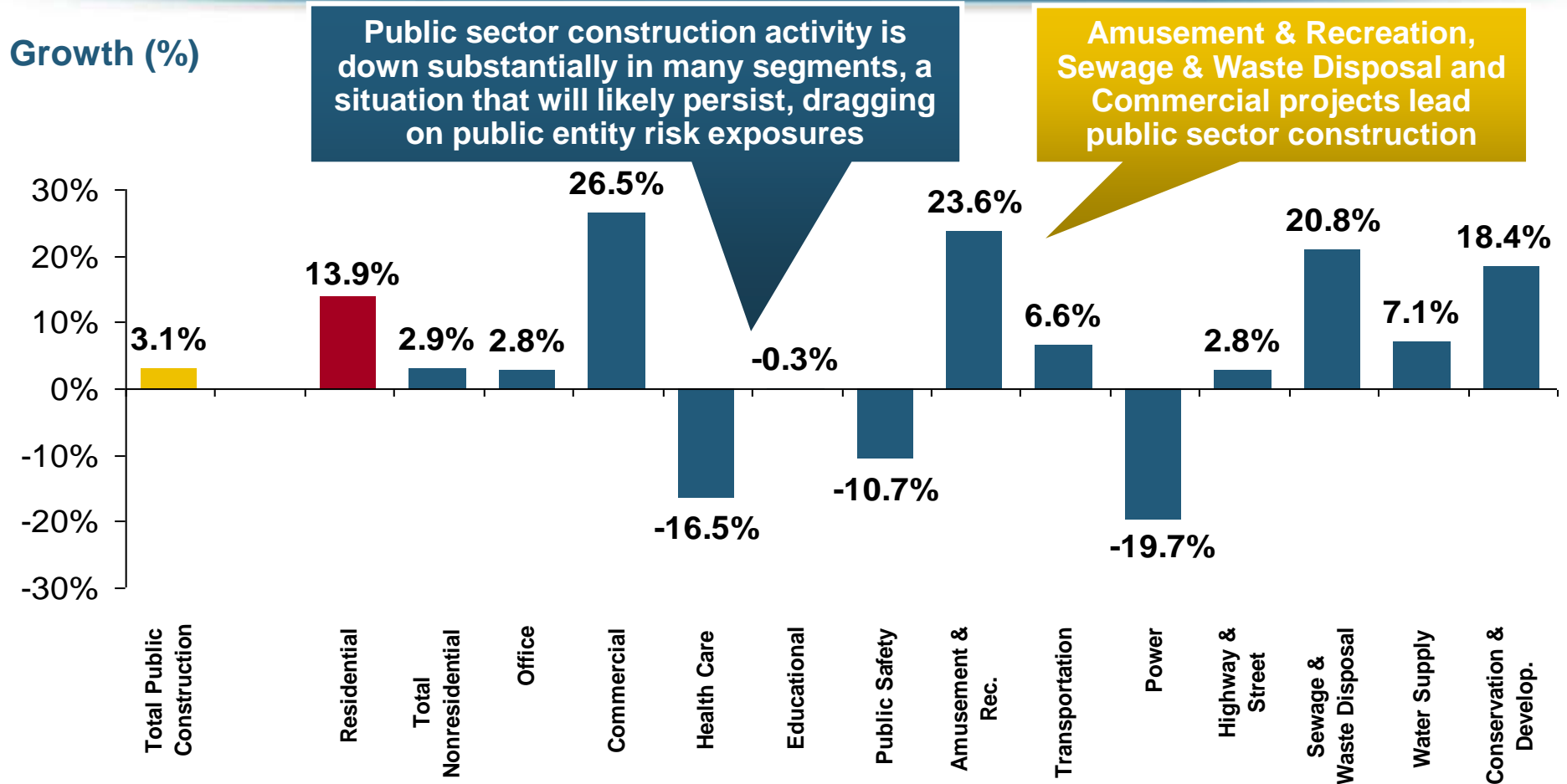


Private Construction Activity is Up in Many Segments, though the Key Residential Construction Sector Weakened in Late 2014/Early 2015; Mixed Outlook for 2015, though Expansion Should Continue

*seasonally adjusted

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

Value of Public Construction Put in Place, by Segment, Feb. 2015 vs. Feb. 2014*



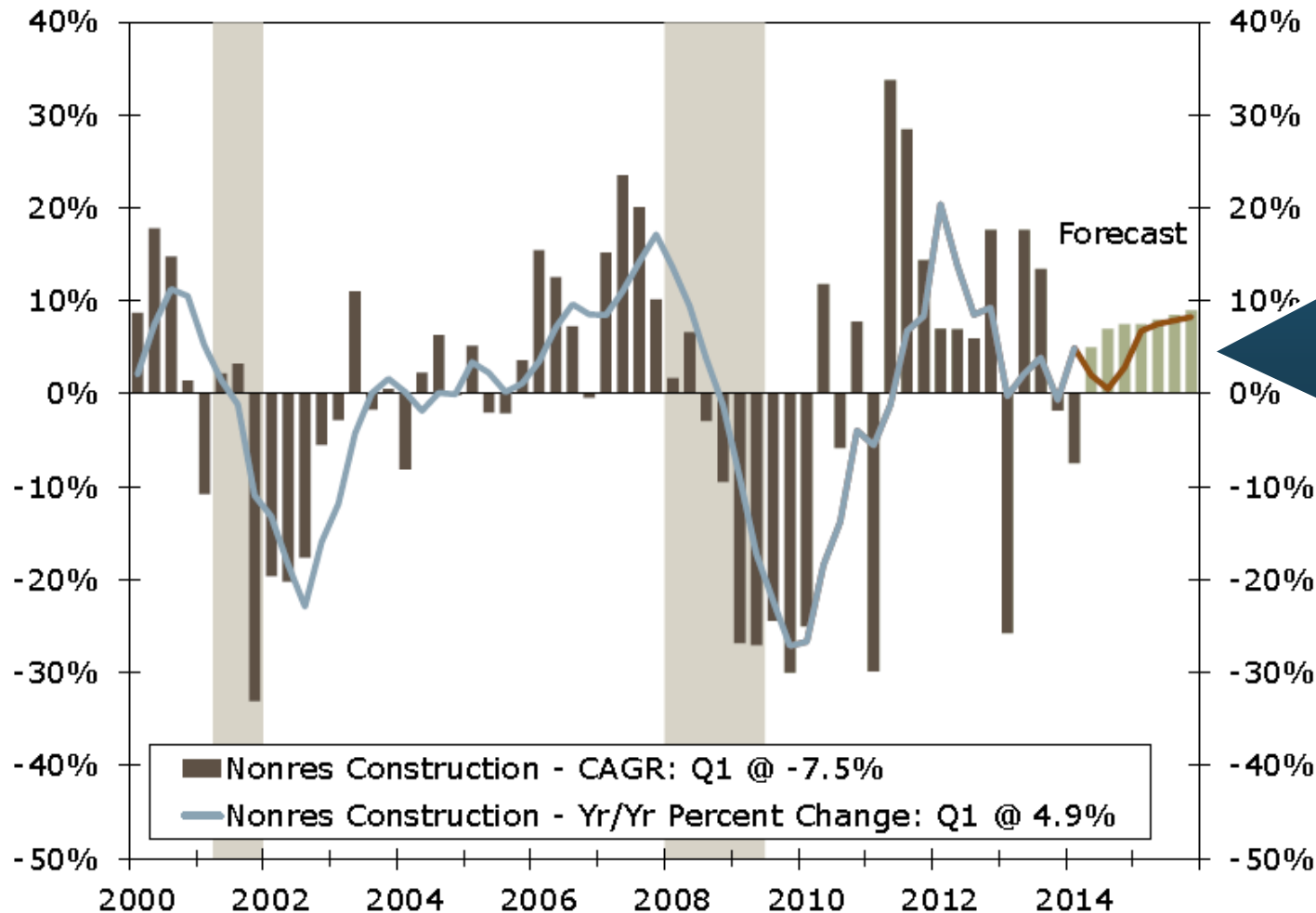
Public Construction Activity is Beginning to Recover from its Long Contraction which Will Drive Demand in Many Commercial Insurance Lines

*seasonally adjusted

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

Real (Inflation-Adjusted) Nonresidential Construction, 2000-2014*

(Bar = CAGR; Line = Y/Y Growth Rate)

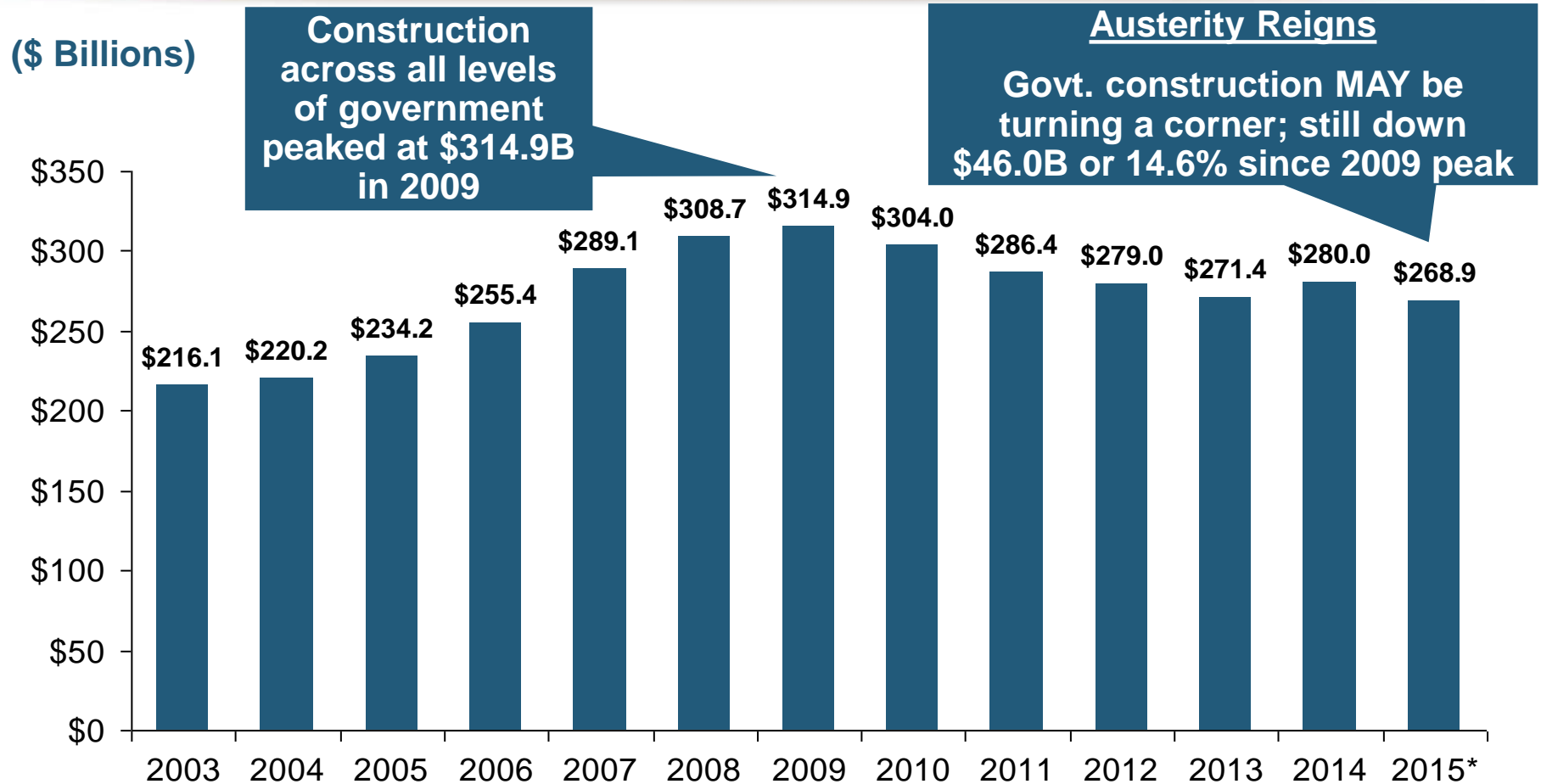


Construction activity has generally been positive since late 2010 but has occasionally been erratic. Forecast is for slowing improving growth

*Through Q1 2014.

Source: US Dept. of Commerce; Wells Fargo Securities (June 6, 2014 research report).

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



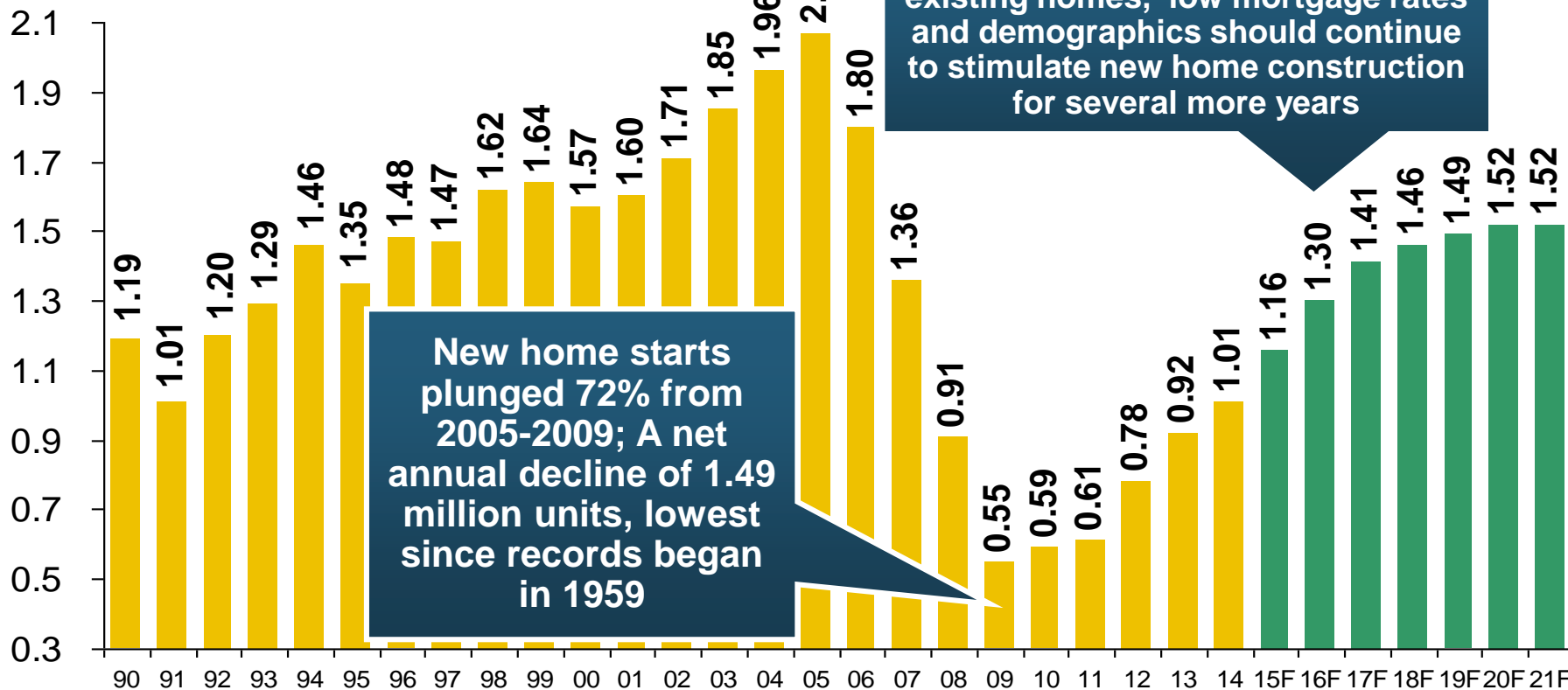
Government Construction Spending Peaked in 2009, Helped by Stimulus Spending, but Contracted As State/Local Governments Grappled with Deficits and Federal Sequestration

*2014 figure is a seasonally adjusted annual rate as of December; http://www.census.gov/construction/c30/historical_data.html

Sources: US Department of Commerce; Insurance Information Institute.

New Private Housing Starts, 1990-2021F

(Millions of Units)



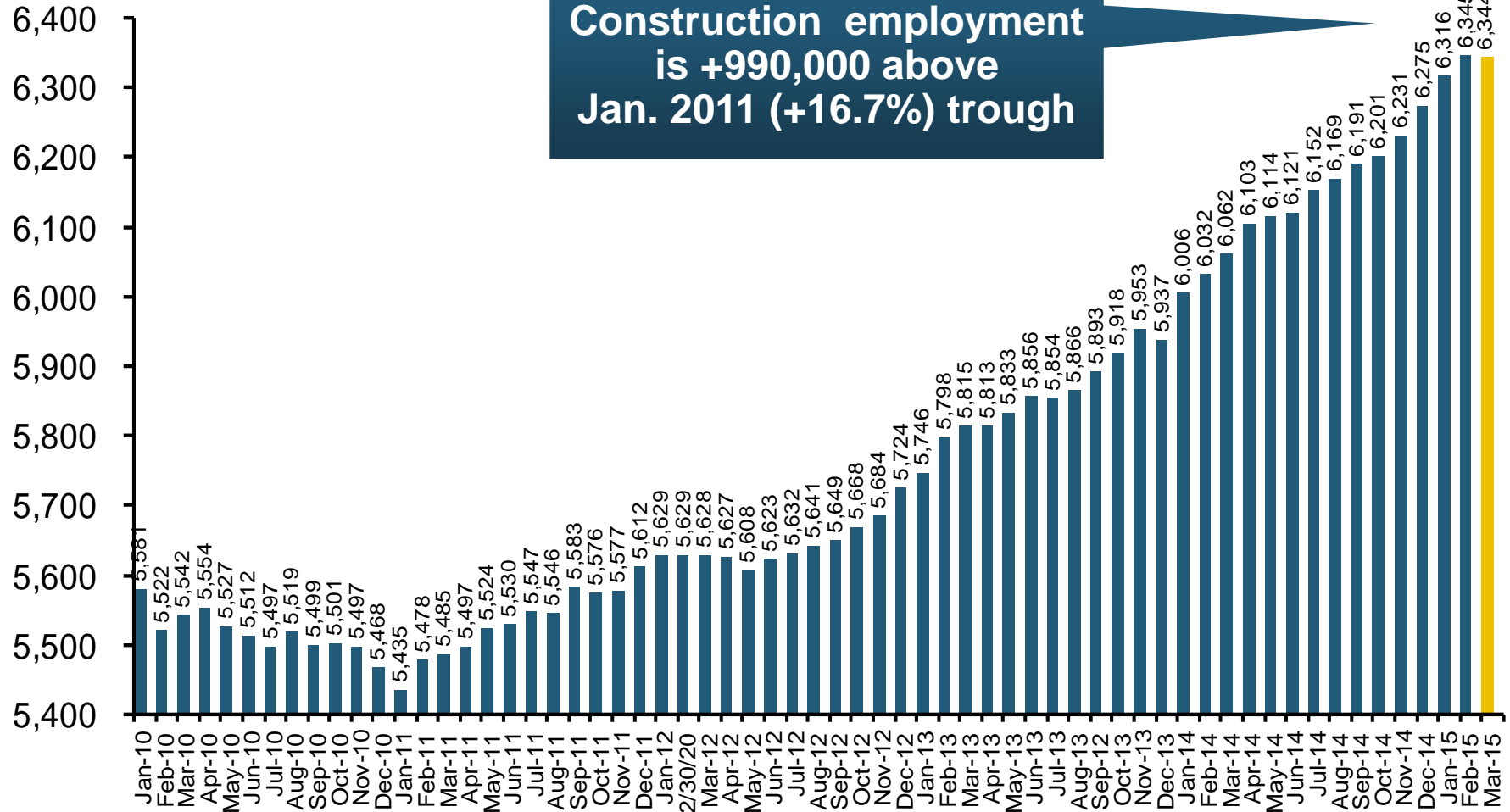
Job growth, low inventories of existing homes, low mortgage rates and demographics should continue to stimulate new home construction for several more years

New home starts plunged 72% from 2005-2009; A net annual decline of 1.49 million units, lowest since records began in 1959

Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the “Great Recession” Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Construction Employment, Jan. 2010—March 2015*

(Thousands)

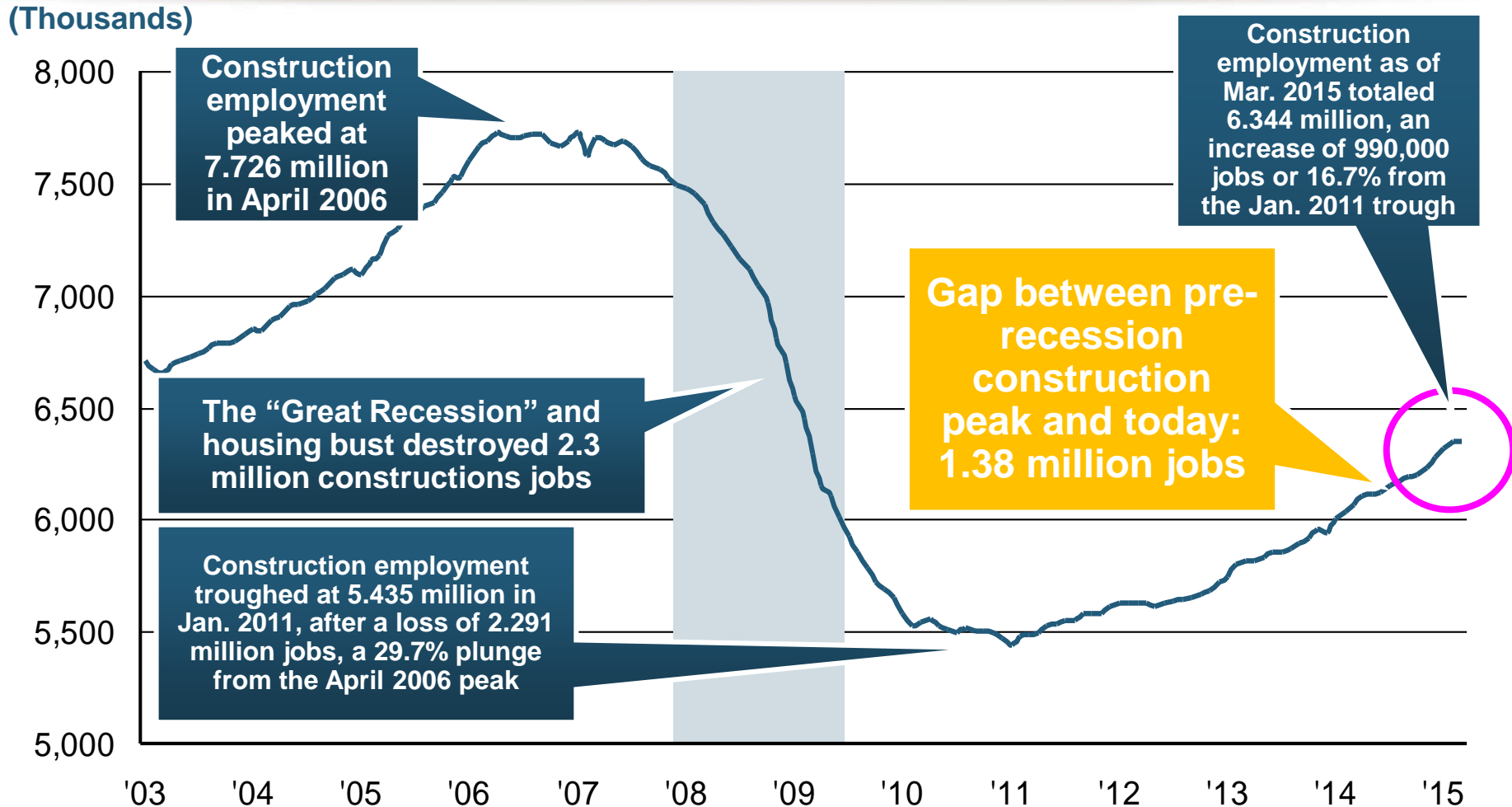


Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.

*Seasonally adjusted.

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

Construction Employment, Jan. 2003–March 2015



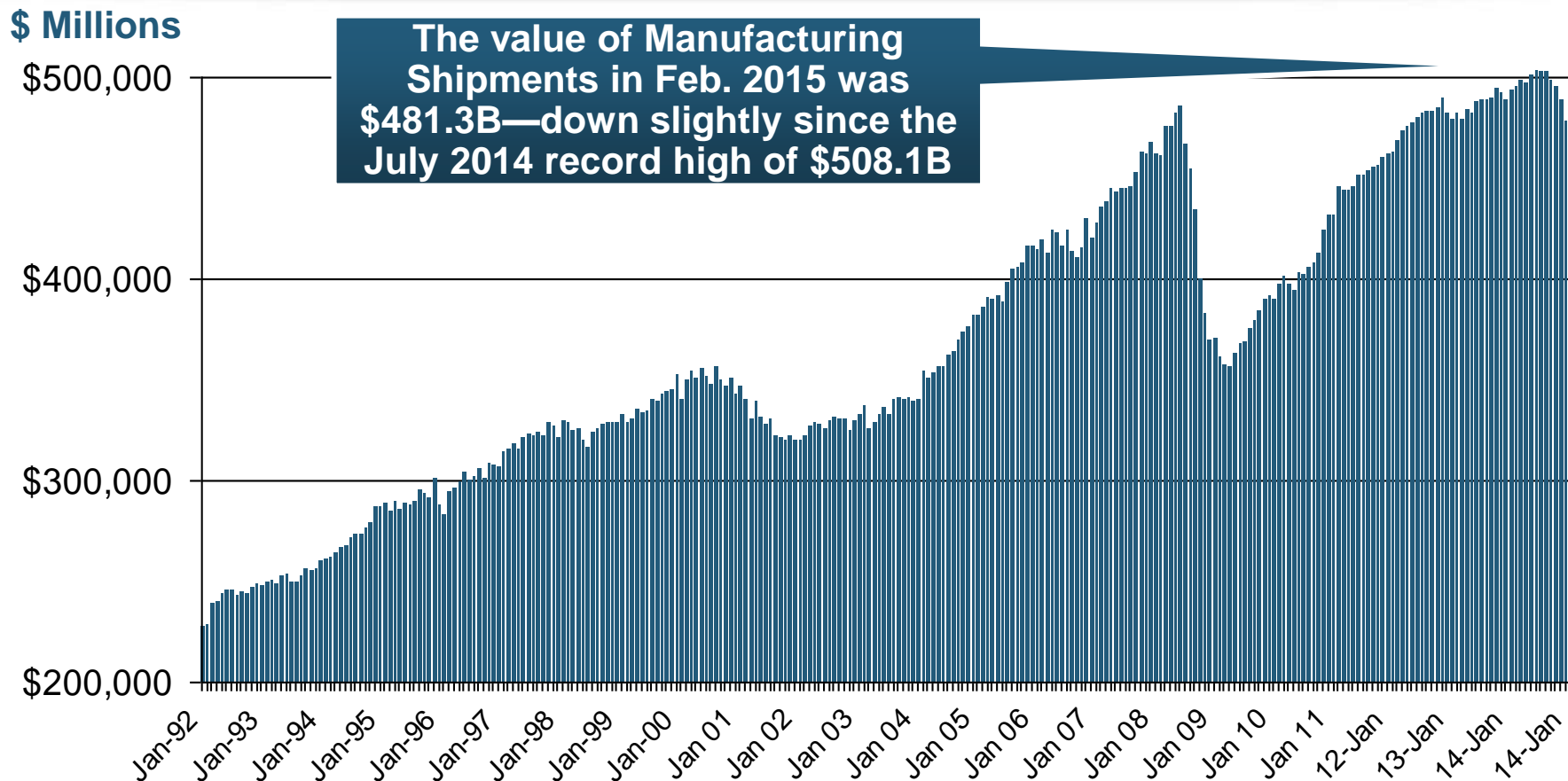
The Construction Sector Was a Growth Leader in 2014 as the Housing Market, Private Investment and Govt. Spending Recover. WC Insurers Will Benefit.

Note: Recession indicated by gray shaded column.
Sources: U.S. Bureau of Labor Statistics; Insurance Information Institute.

MANUFACTURING SECTOR OVERVIEW & OUTLOOK

**The U.S. Is Experiencing a Mini
Manufacturing Renaissance but
Headwinds from Weak Export
Markets and Strong Dollar**

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



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

* Seasonally adjusted; Data published Apr. 2, 2015.

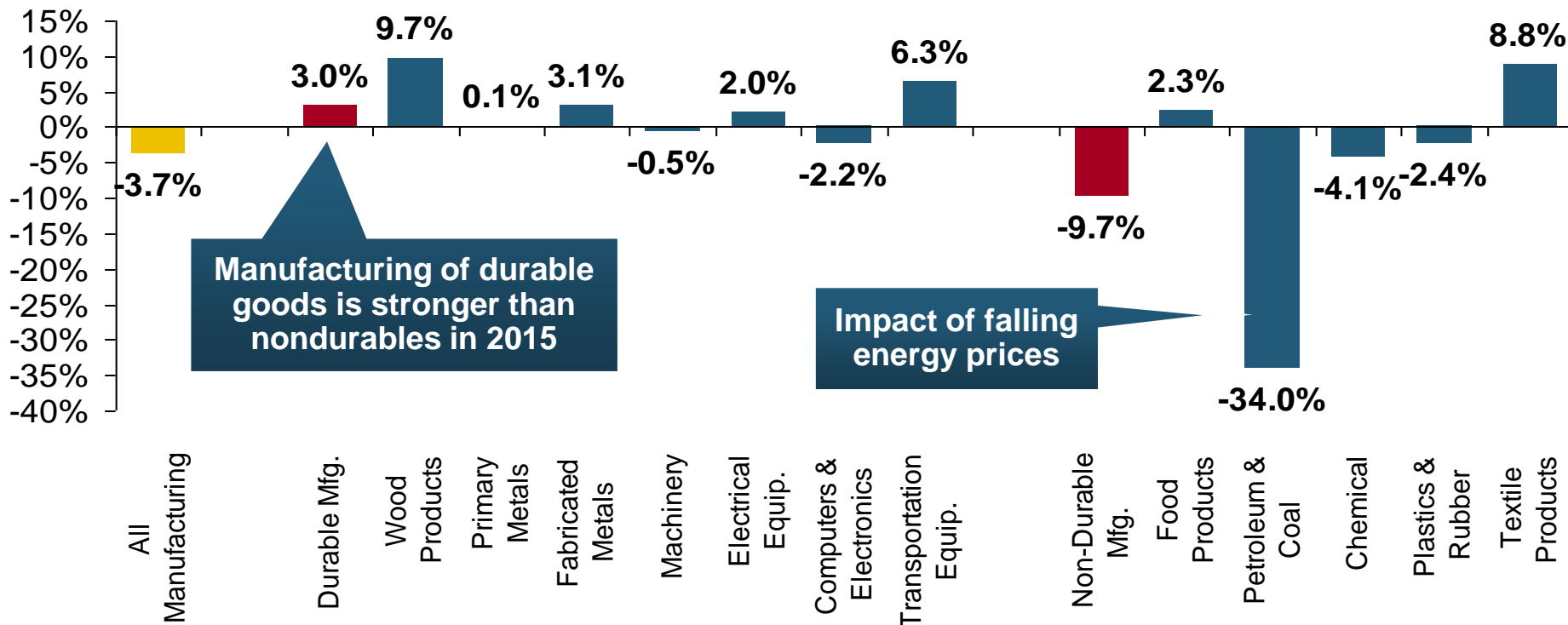
Source: U.S. Census Bureau, *Full Report on Manufacturers' Shipments, Inventories, and Orders*, <http://www.census.gov/manufacturing/m3/>

Manufacturing Growth for Selected Sectors, 2015 vs. 2014*

Growth (%)

Durables: +3.0%

Non-Durables: -9.7%

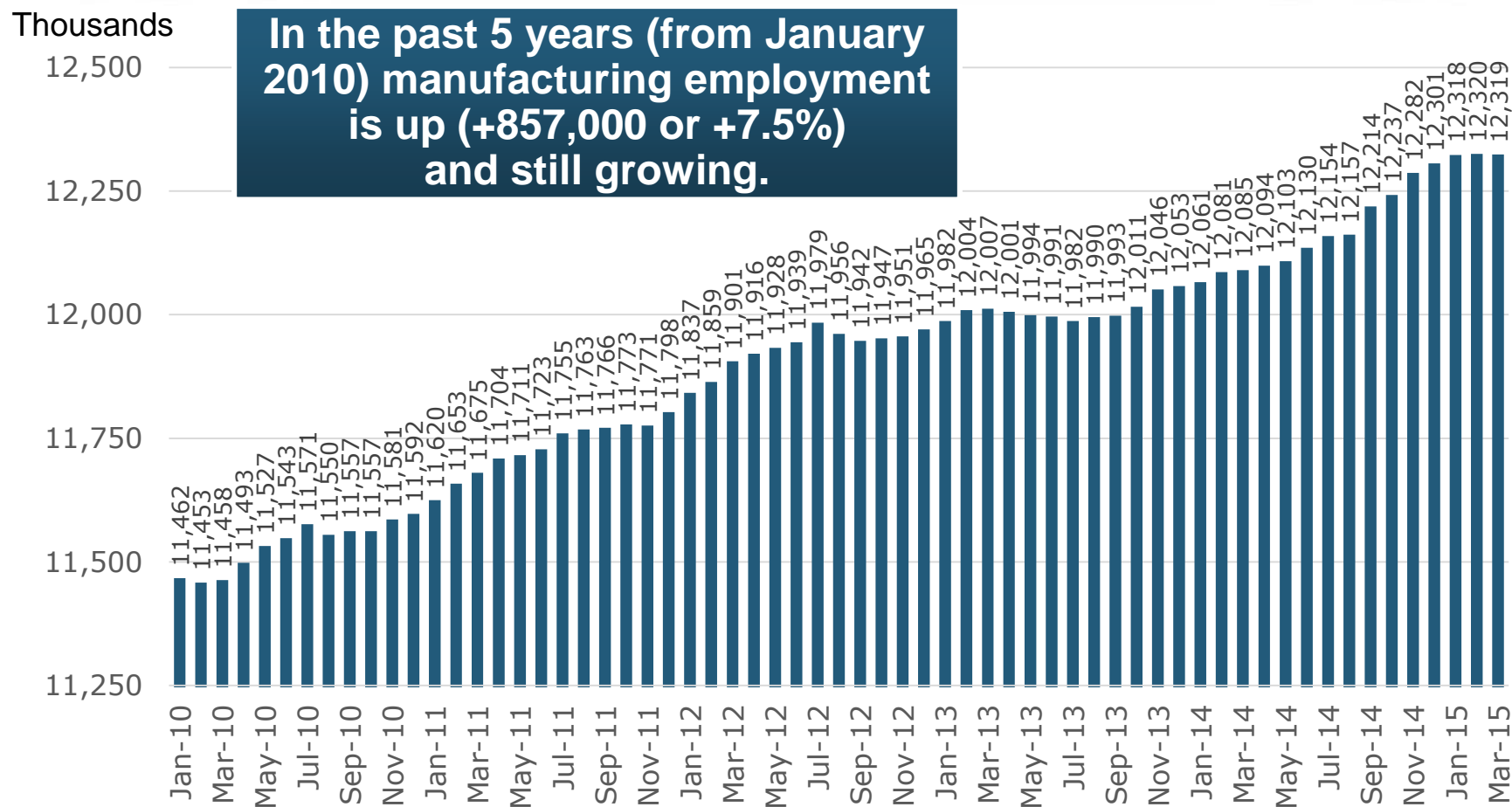


Manufacturing Is Expanding in Many Sectors But Declining Energy Prices Are Dragging Down Industry Figures. Continued Growth Across a Number of Sectors that Will Contribute to Growth in Insurable Exposures Including: WC, Commercial Property, Commercial Auto and Many Liability Coverages

*Seasonally adjusted; Data are YTD comparing data through February 2015 to the same period in 2014.

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

Manufacturing Employment, January 2010—March 2015*



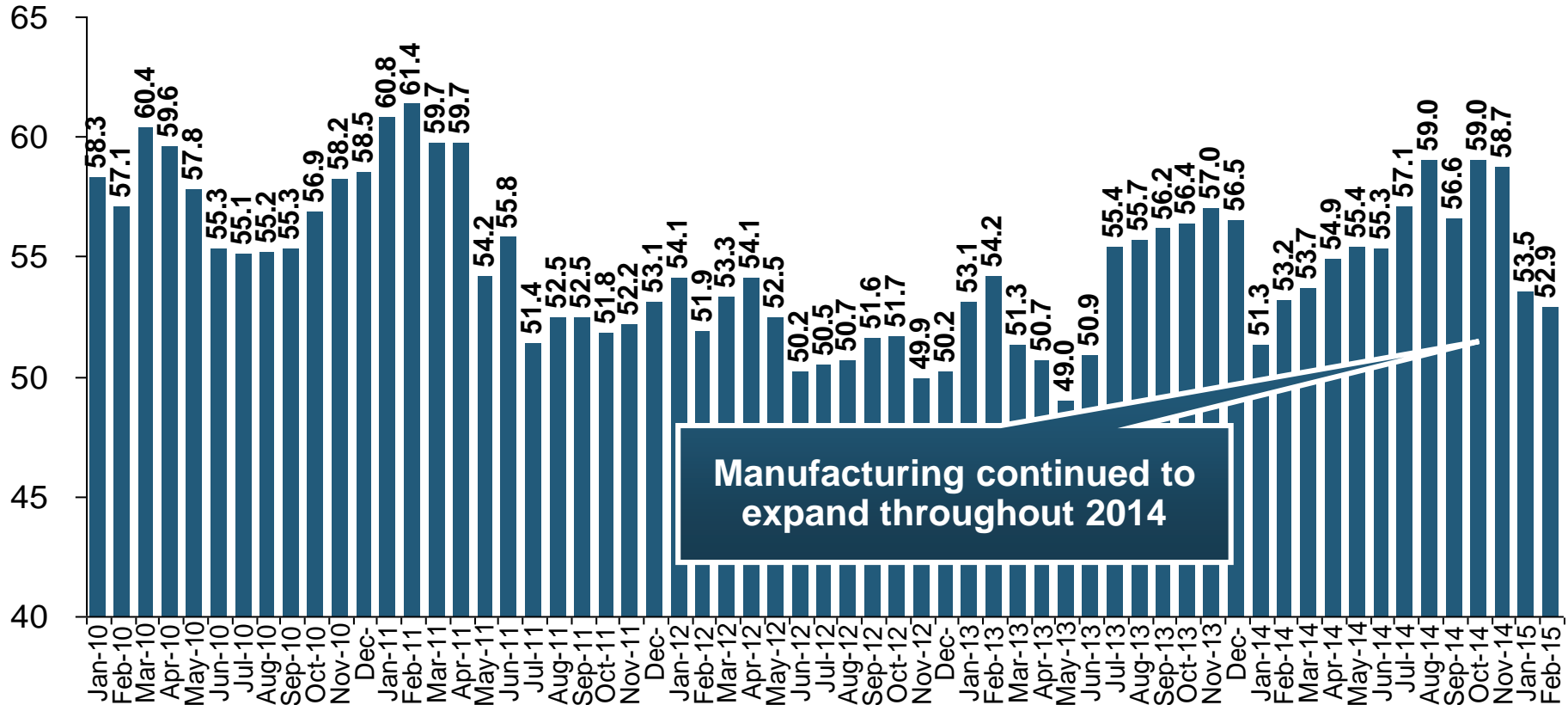
Manufacturing employment is a surprising source of strength in the economy. Employment in the sector is at a multi-year high.

*Seasonally adjusted; Feb. and Mar. 2015 are preliminary

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

ISM Manufacturing Index (Values > 50 Indicate Expansion)

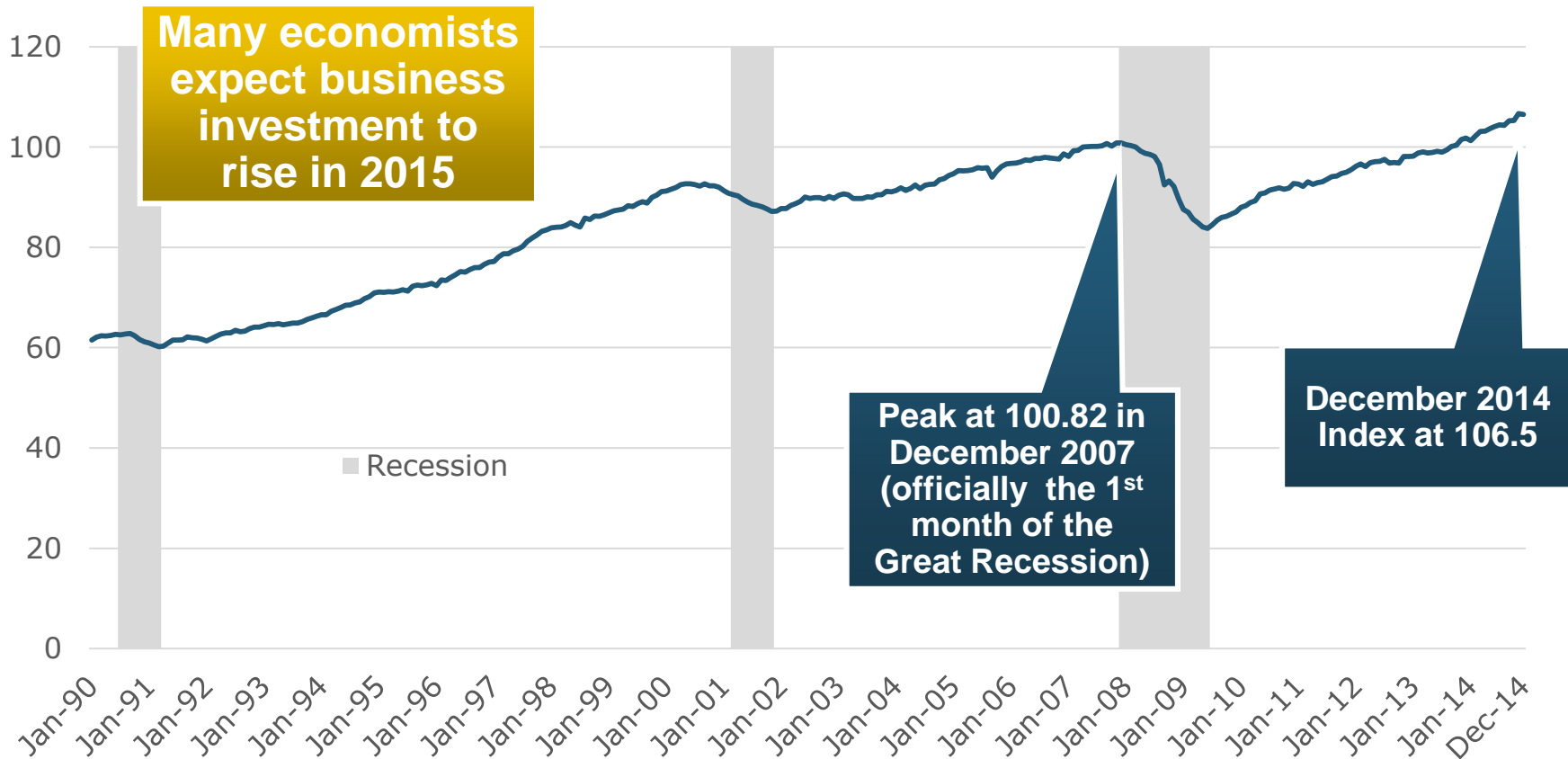
January 2010 through February 2015



Manufacturing continued to expand throughout 2014

The manufacturing sector expanded for 60 of the 62 months from Jan. 2010 through Feb. 2015. Pace of recovery has been uneven due to economic turbulence in the U.S., Europe and China.

Index of Total Industrial Production:* A Near Peak as of December 2014



Insurance exposures for industrial production will continue growing in 2015, and commercial insurance premium volume with them. Y-o-Y growth to December 2014 was 4.6%. Both production and premium volume growth for 2015 should exceed this.

*Monthly, seasonally adjusted, through December 2014 (which is preliminary). Index based on year 2007 = 100

Sources: Federal Reserve Board at http://www.federalreserve.gov/releases/g17/ipdisk/ip_sa.txt.
National Bureau of Economic Research (recession dates); Insurance Information Institute.

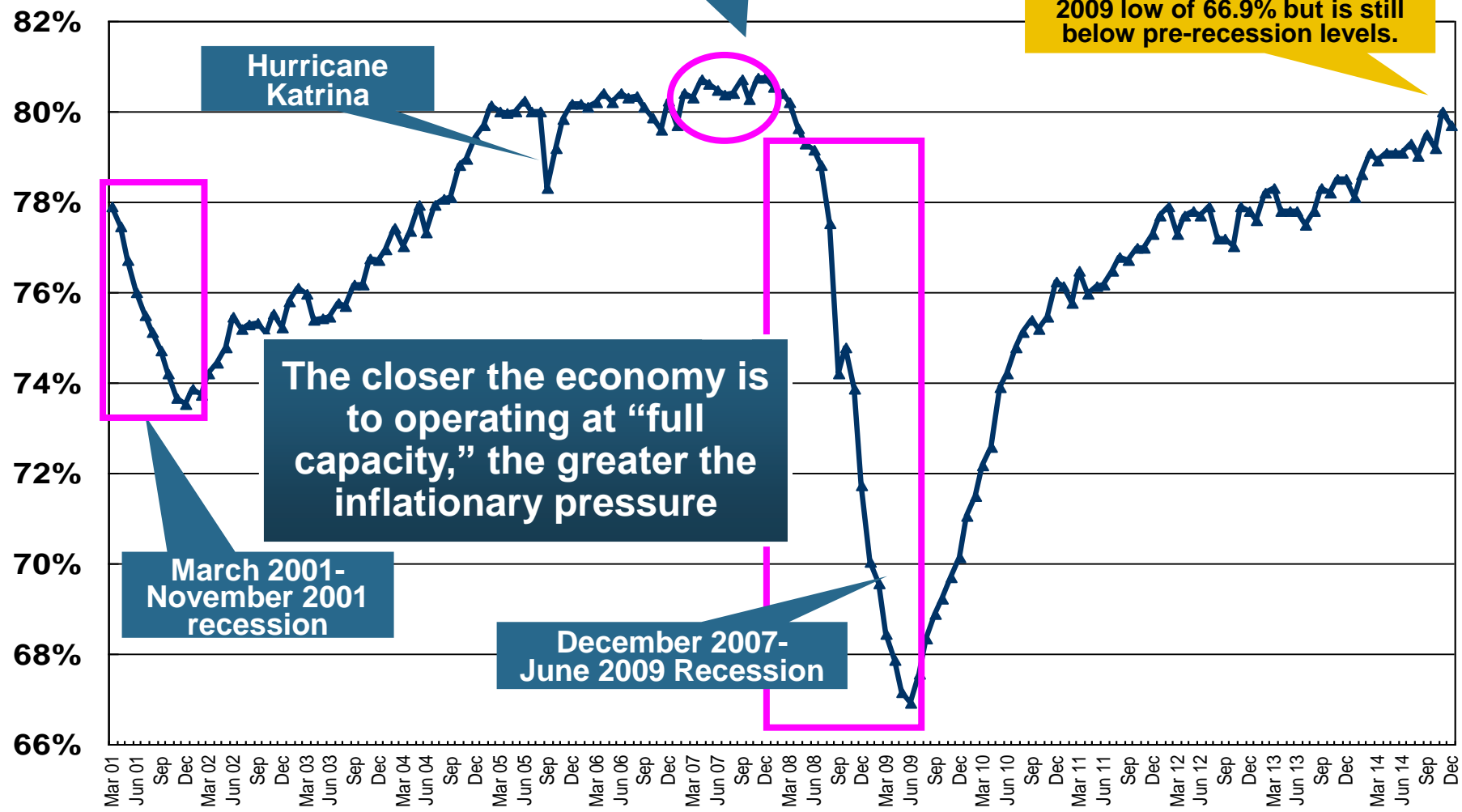
Recovery in Capacity Utilization is a Positive Sign for Commercial Exposures

March 2001 through Dec. 2014

Percent of Industrial Capacity

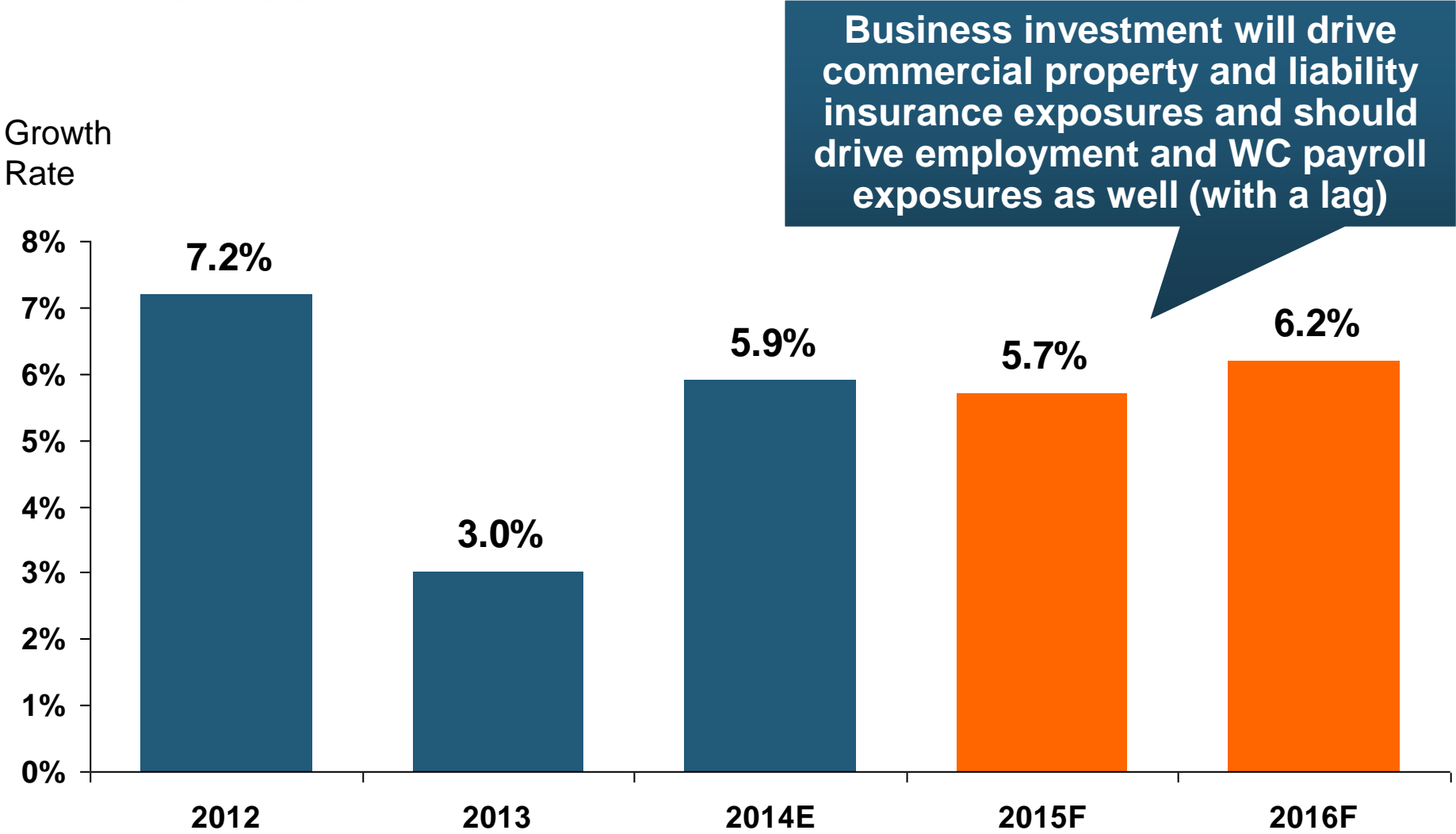
“Full Capacity”

The US operated at 79.7% of industrial capacity in Dec. 2014, well above the June 2009 low of 66.9% but is still below pre-recession levels.



Source: Federal Reserve Board statistical releases at <http://www.federalreserve.gov/releases/g17/Current/default.htm>.

Business Fixed Investment is Forecast to Grow Steadily in 2015-16, Fueling Commercial Exposure Growth



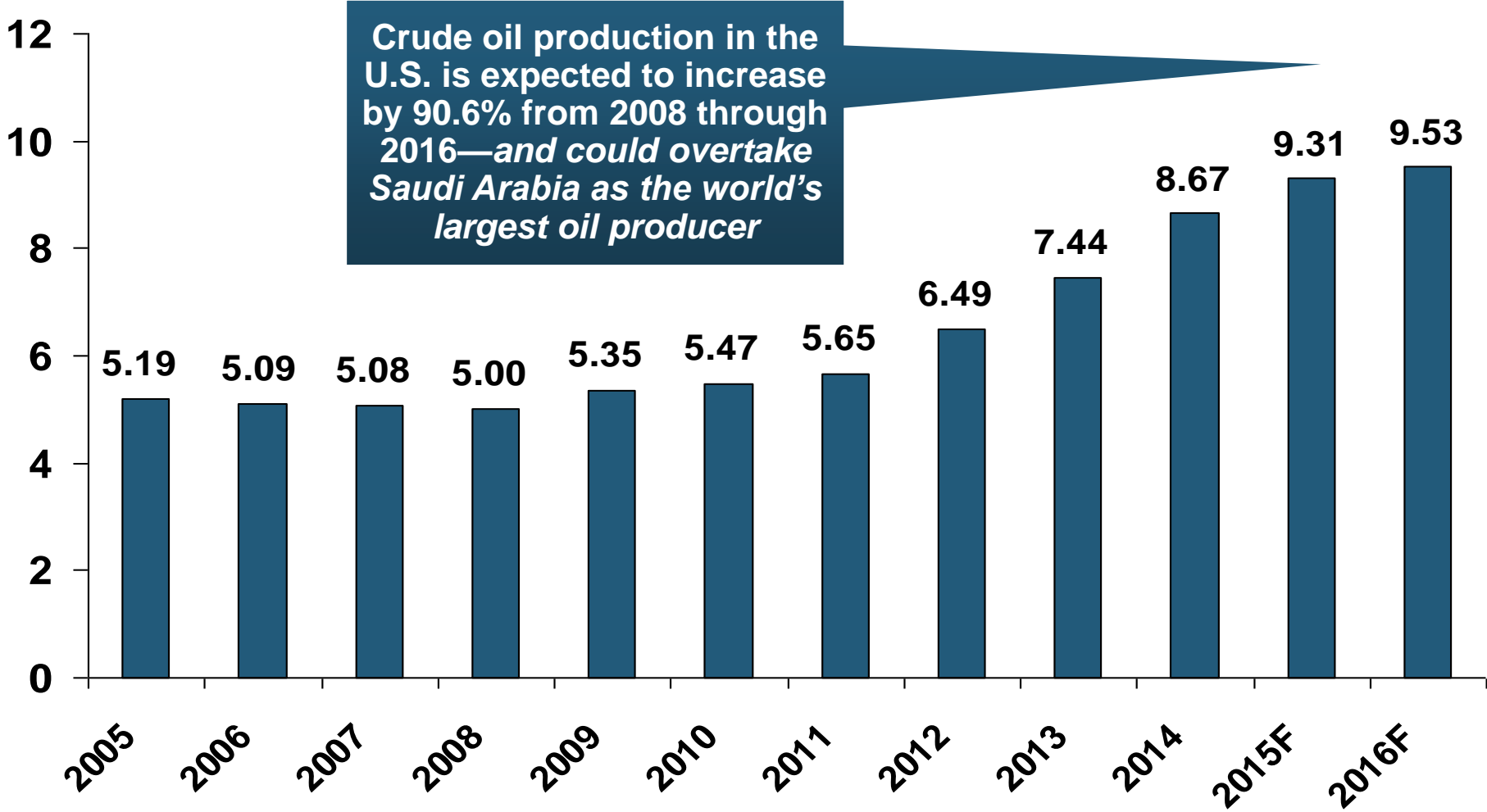
Sources: Wells Fargo Economic Group; Insurance Information Institute.

**ENERGY SECTOR: OIL & GAS
INDUSTRY FUTURE IS BRIGHT
BUT VOLATILE**

**US Is Becoming an Energy
Powerhouse but Fall in Prices
Will Have Negative Impact**

U.S. Crude Oil Production, 2005-2016P

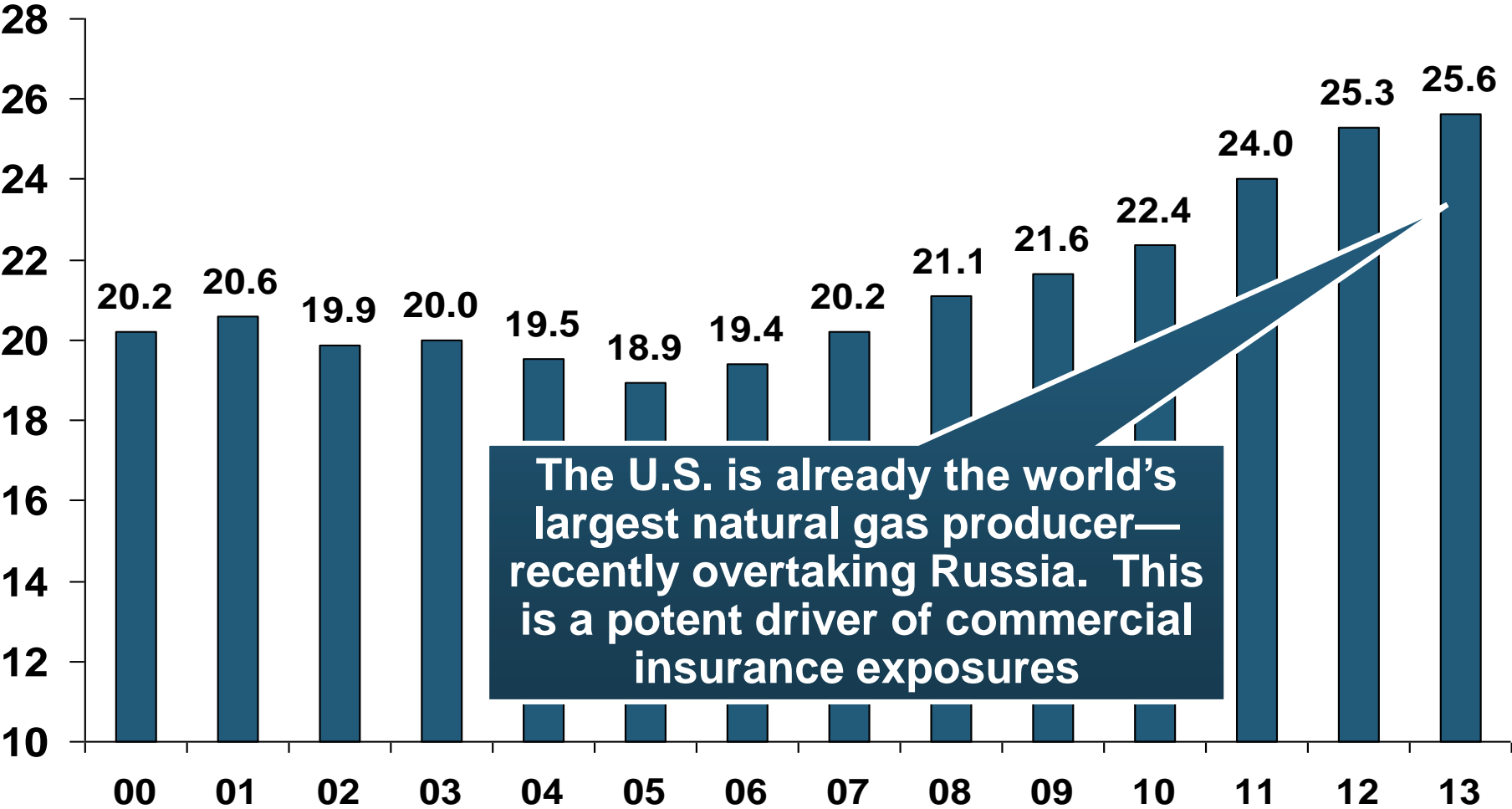
Millions of Barrels per Day



Source: Energy Information Administration, *Short-Term Energy Outlook* (January 15, 2015) , Insurance Information Institute.

U.S. Natural Gas Production, 2000-2013

Trillions of Cubic Ft. per Year



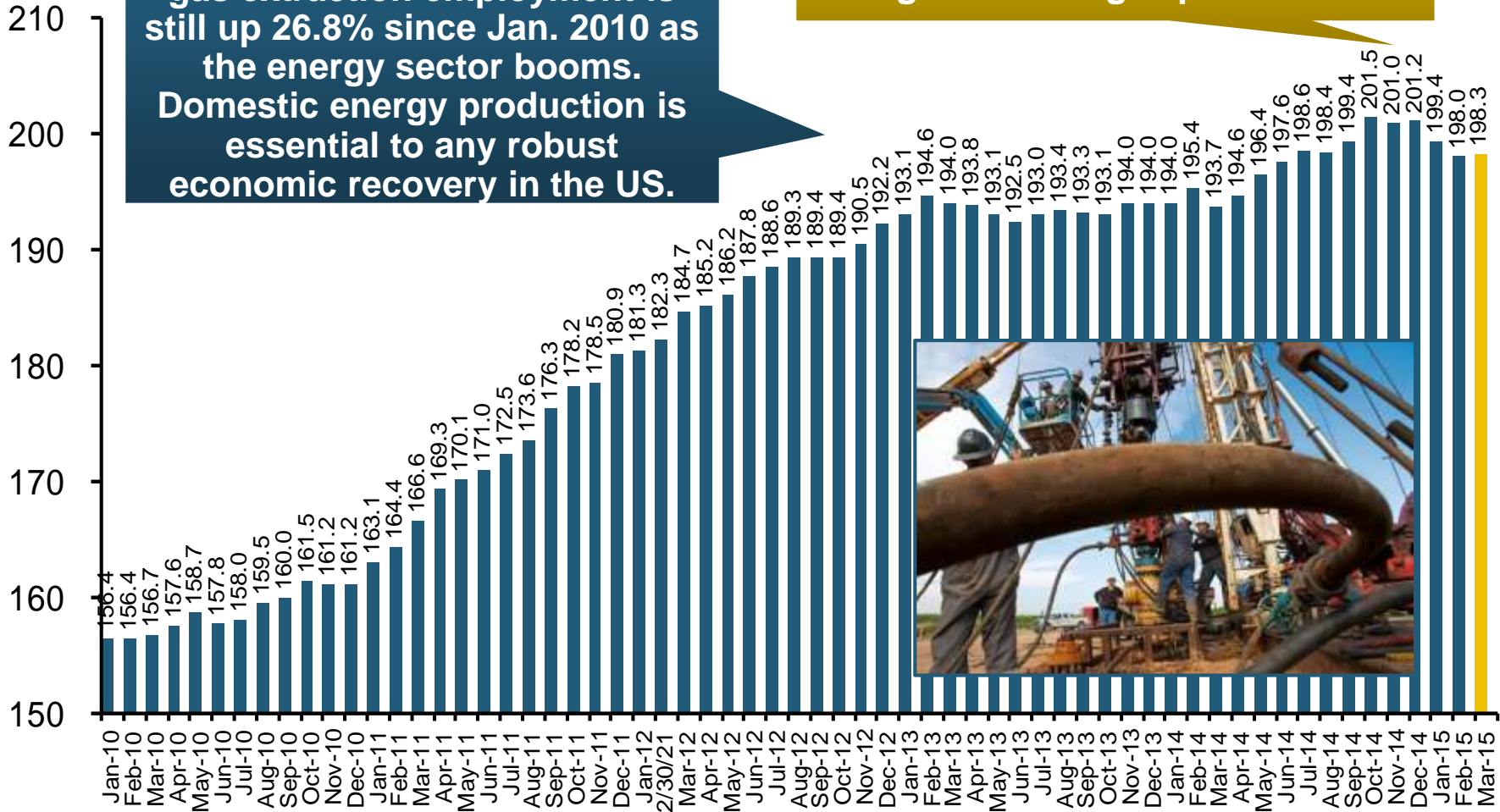
Source: Energy Information Administration, *Short-Term Energy Outlook* (April 8, 2014) , Insurance Information Institute.

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

(Thousands)

Despite recent declines, Oil and gas extraction employment is still up 26.8% since Jan. 2010 as the energy sector booms. Domestic energy production is essential to any robust economic recovery in the US.

After peaking at its highest level since 1986, O&G employment is falling as oil and gas prices decline



*Seasonally adjusted

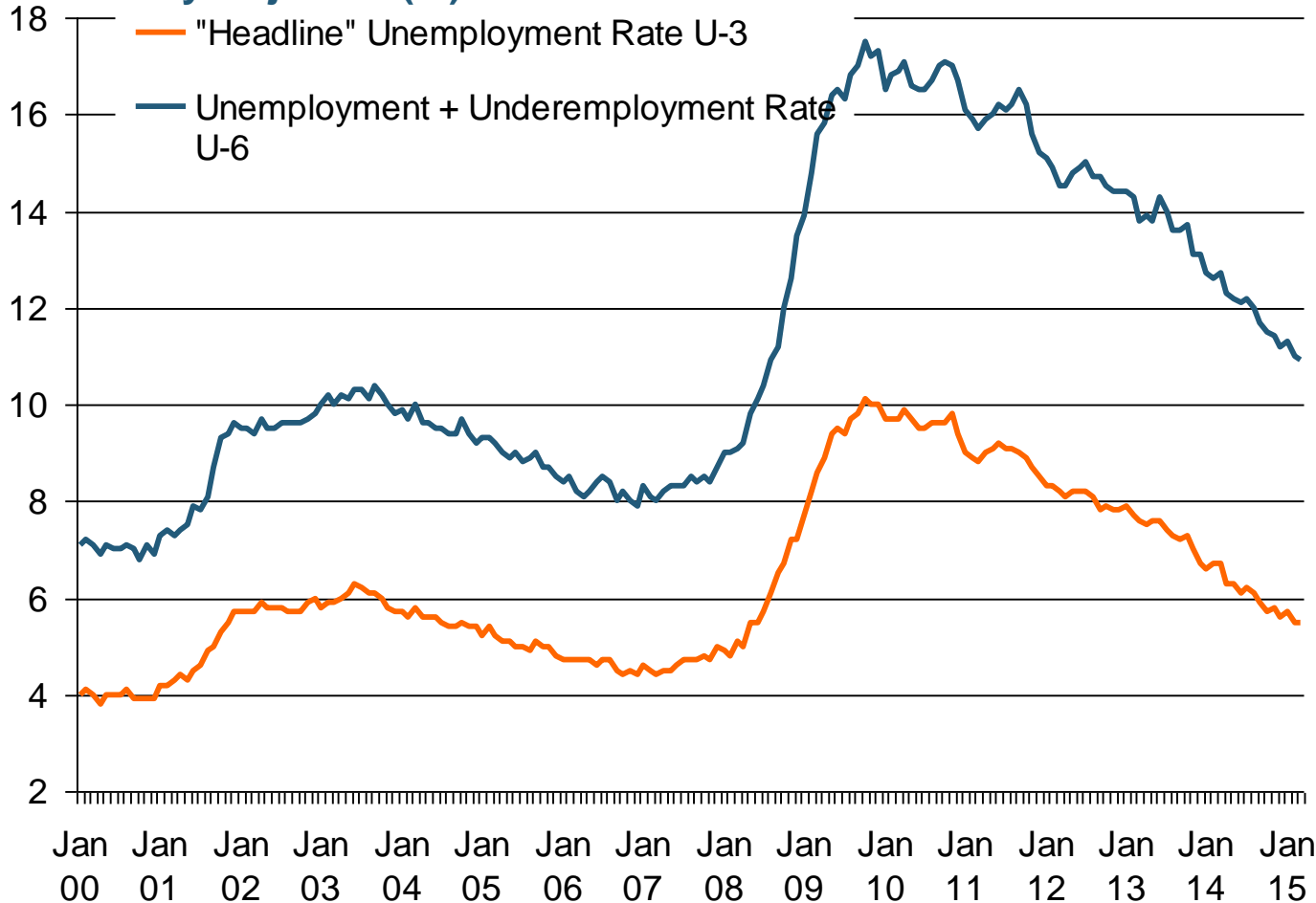
Sources: US Bureau of Labor Statistics at <http://data.bls.gov>; Insurance Information Institute.

Labor Market Trends

Massive Job Losses Sapped the Economy and Commercial/Personal Lines Exposure, But Trend Has Greatly Improved

Unemployment and Underemployment Rates: Still Too High, But Falling

January 2000 through March 2015,
Seasonally Adjusted (%)



U-6 soared from 8.0% in March 2007 to 17.5% in October 2009; Stood at 10.9% in Mar. 2015. 8% to 10% is "normal."

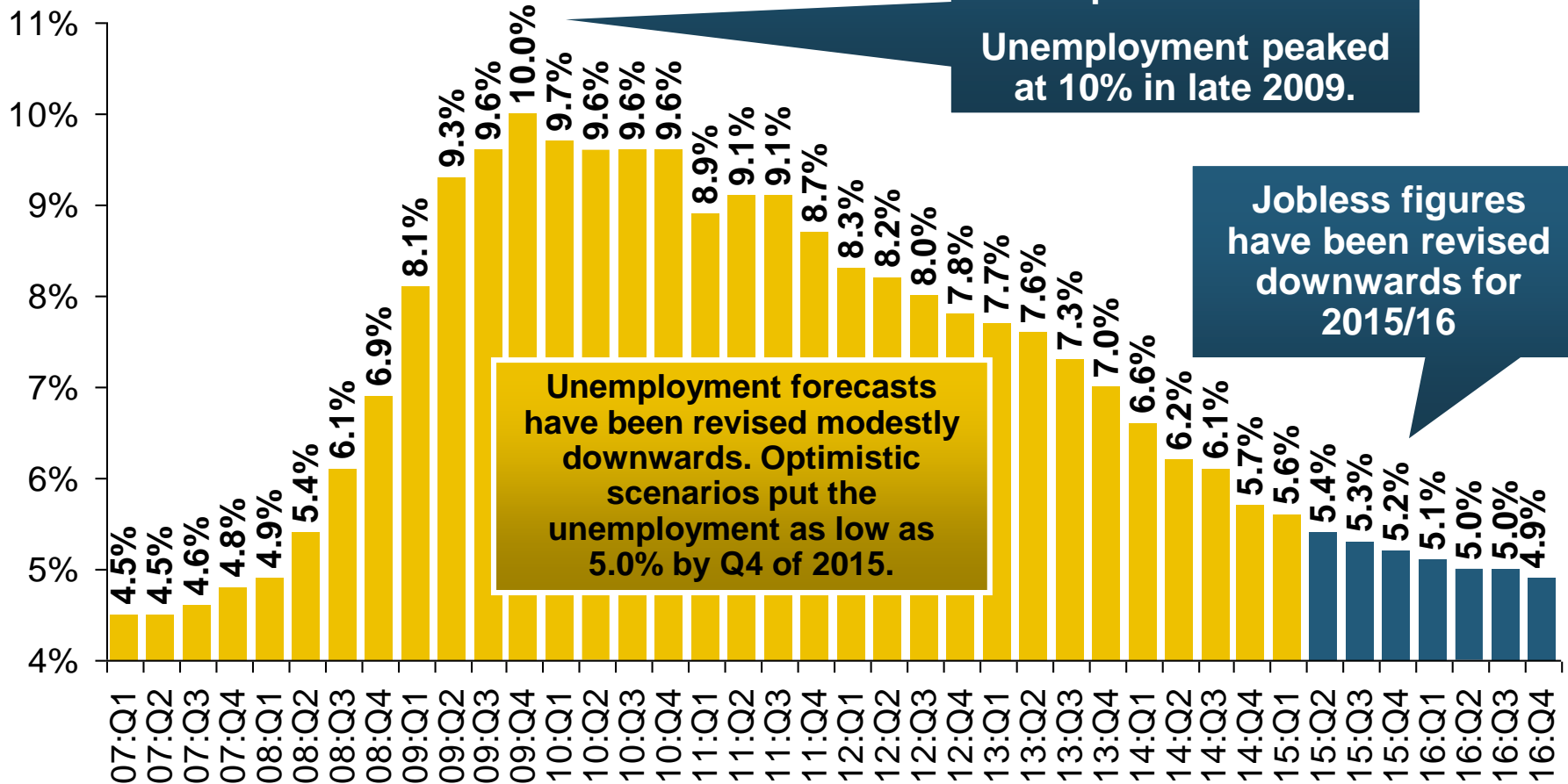
"Headline" unemployment was 5.5% in Mar. 2015. 4.5% to 5.5% is "normal."

Stubbornly high unemployment and underemployment constrain overall economic growth, but the job market is now clearly improving.

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

US Unemployment Rate Forecast

2007:Q1 to 2016:Q4F*



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

Jobless figures have been revised downwards for 2015/16

Unemployment forecasts have been revised modestly downwards. Optimistic scenarios put the unemployment as low as 5.0% by Q4 of 2015.

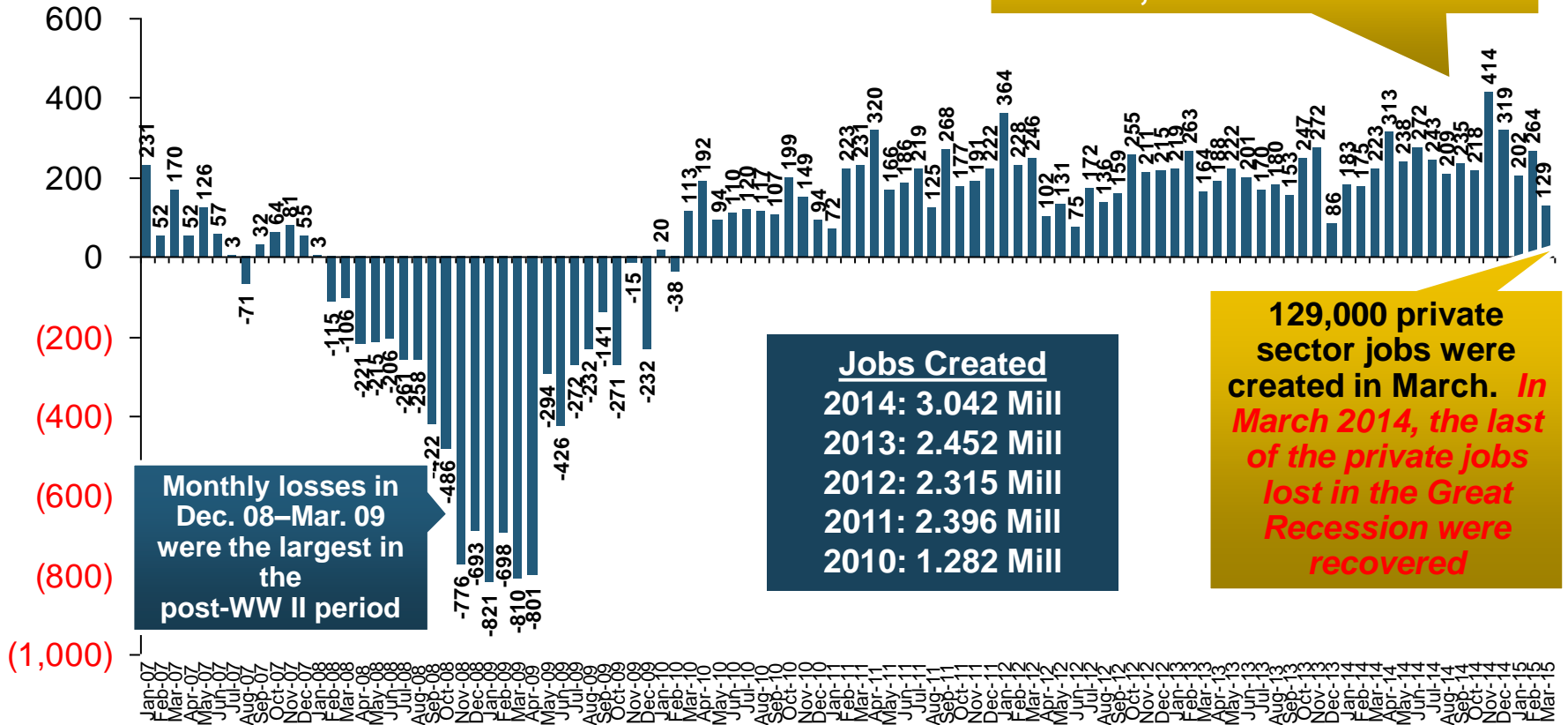
* = actual; = forecasts

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (4/15 edition); Insurance Information Institute.

Monthly Change in Private Employment

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

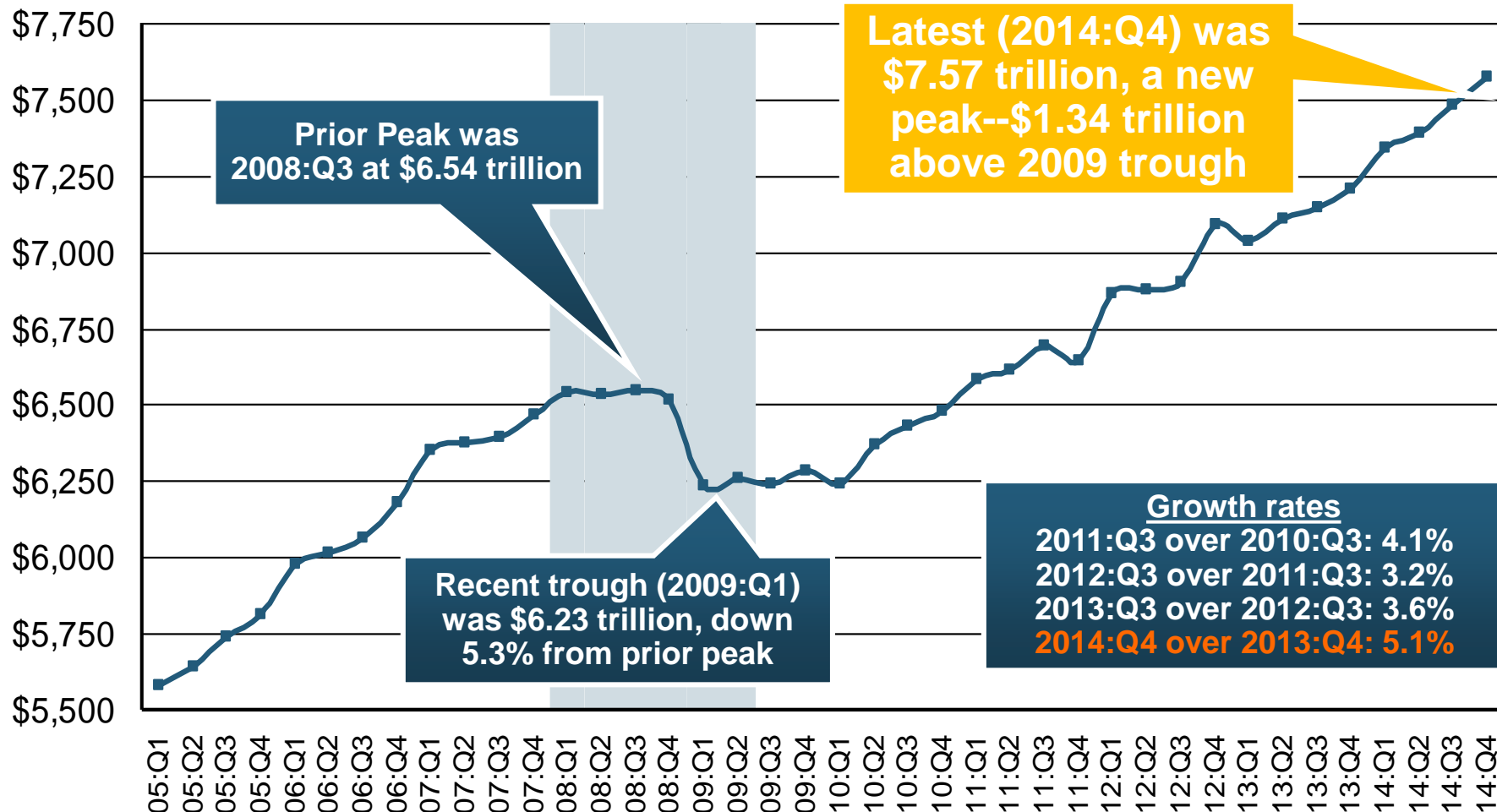
3,042,000 jobs were created in 2014, the most since 1997



Private Employers Added 11.20 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)

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

Billions



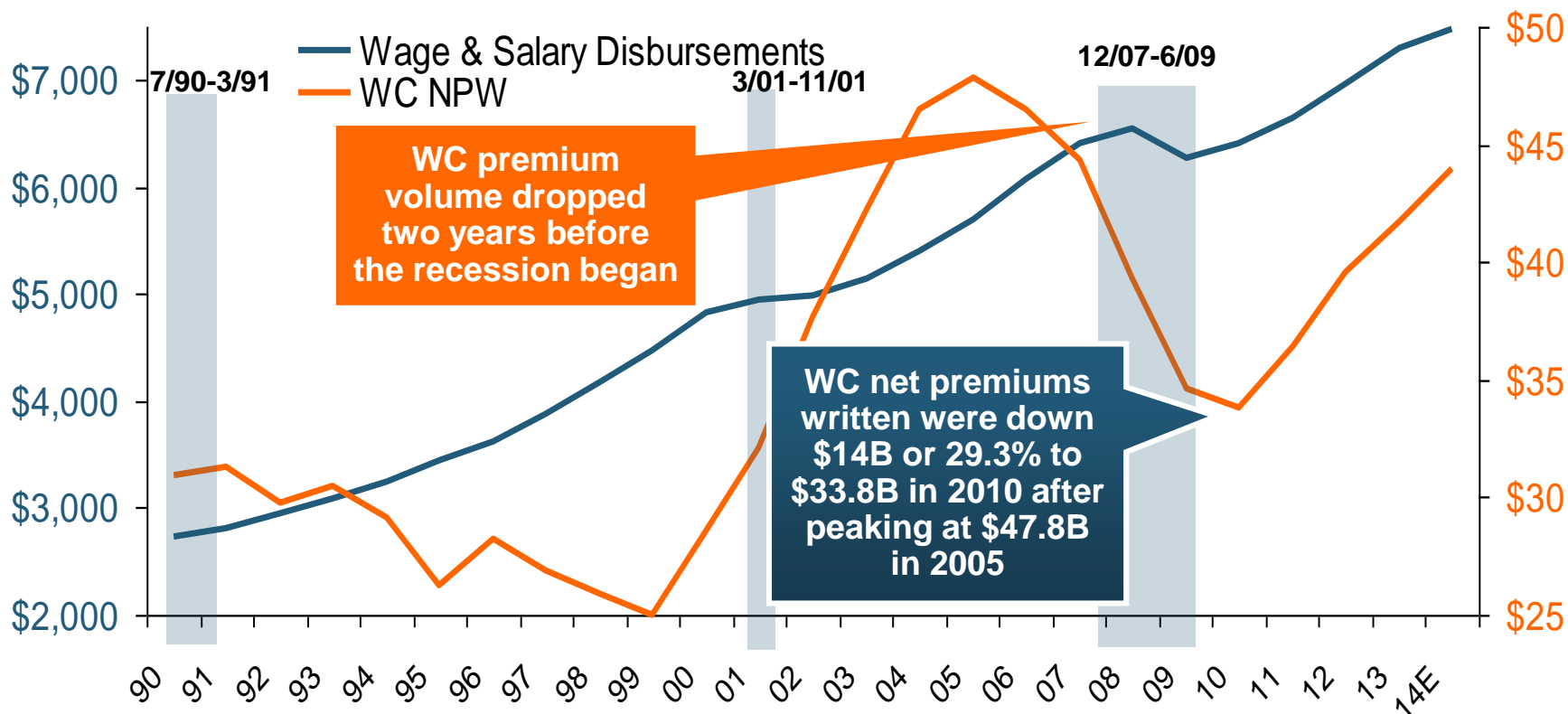
Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

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



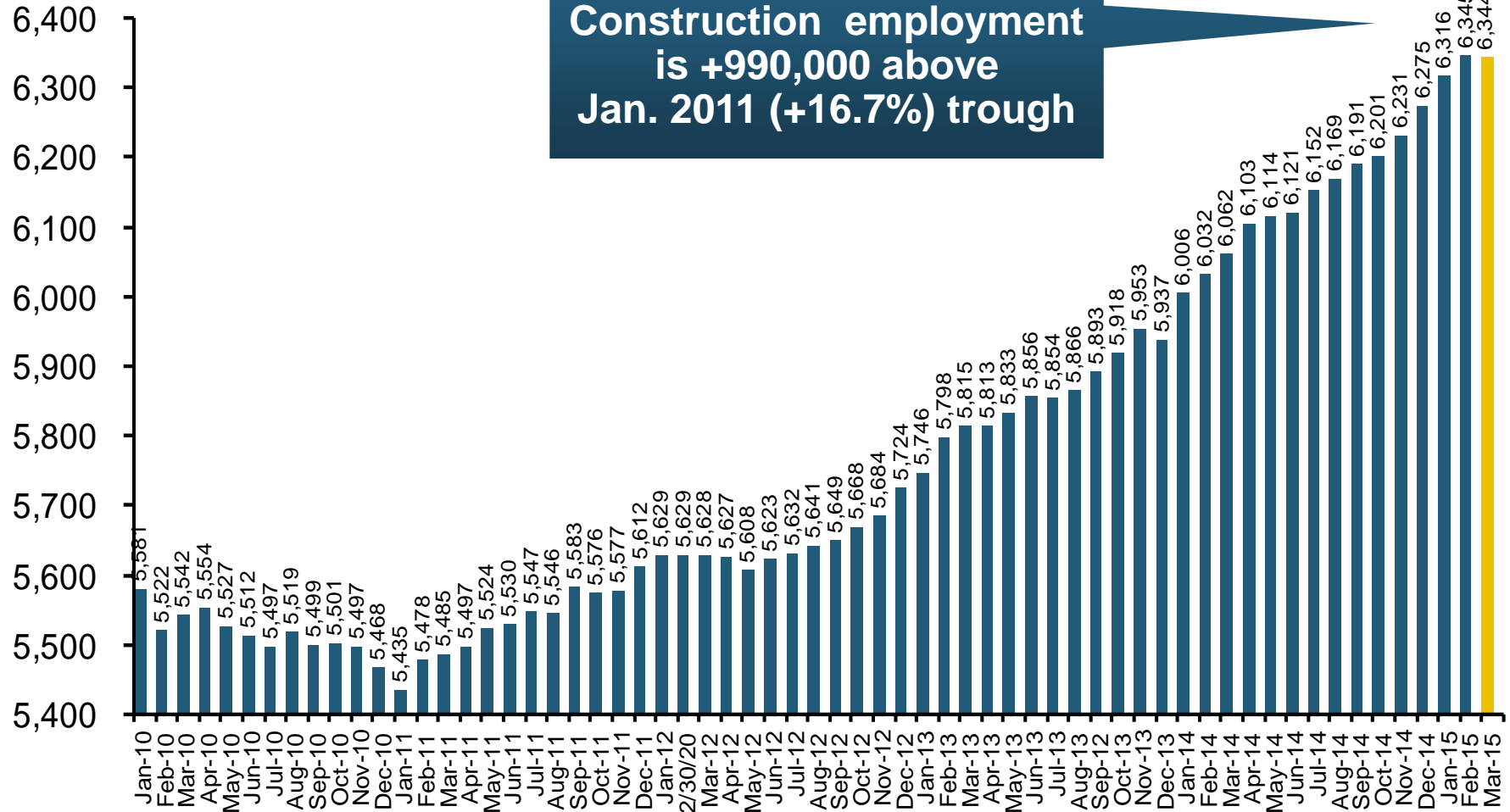
Continued Payroll Growth and Rate Gains Suggest WC NWP Will Grow Again in 2015

*Private employment; Shaded areas indicate recessions. WC premiums for 2014 are I.I.I. estimates..

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

Construction Employment, Jan. 2010—March 2015*

(Thousands)

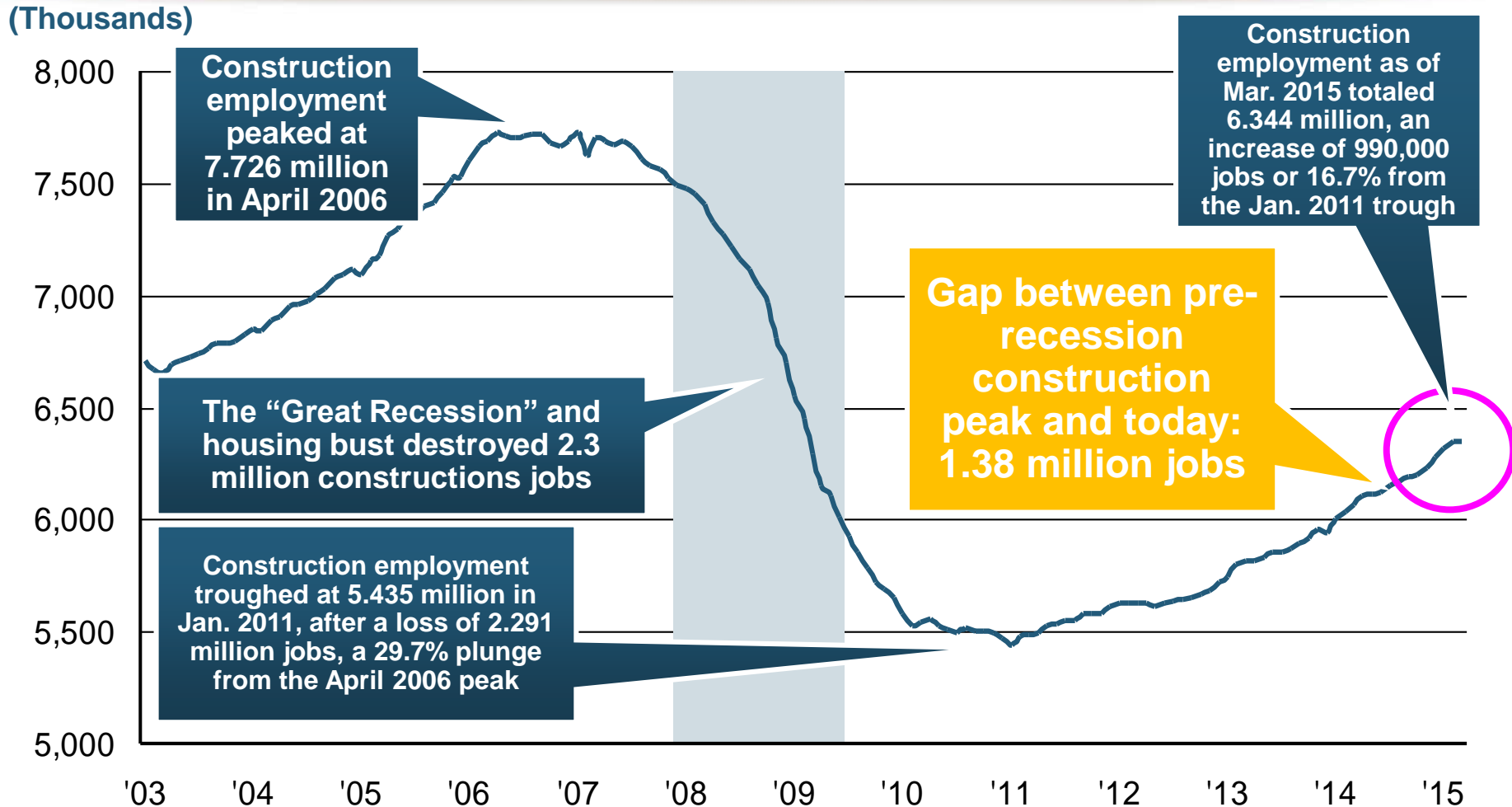


Construction and manufacturing employment constitute 1/3 of all WC payroll exposure.

*Seasonally adjusted.

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

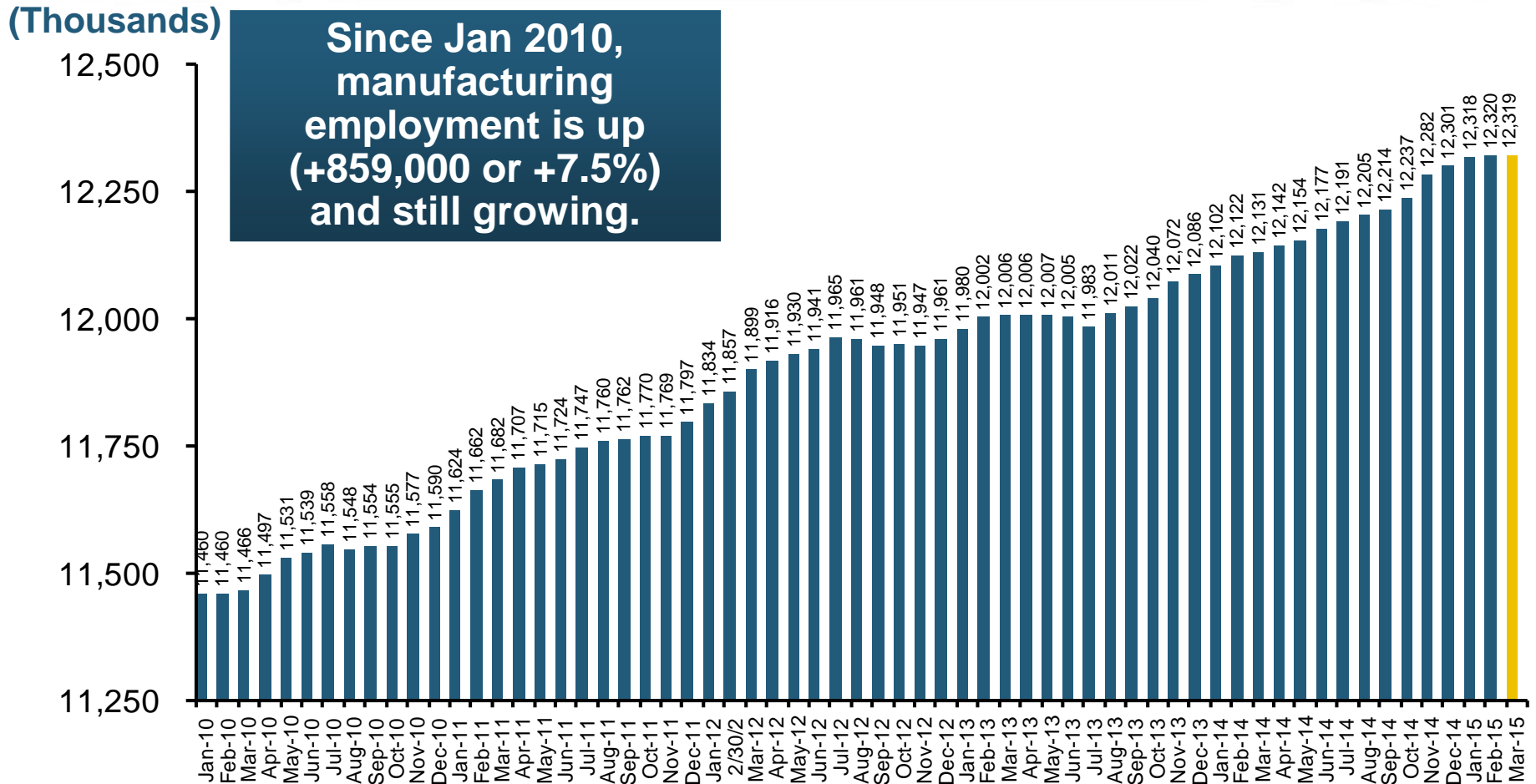
Construction Employment, Jan. 2003–March 2015



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

Note: Recession indicated by gray shaded column.
Sources: U.S. Bureau of Labor Statistics; Insurance Information Institute.

Manufacturing Employment, Jan. 2010—March 2015*



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

*Seasonally adjusted.

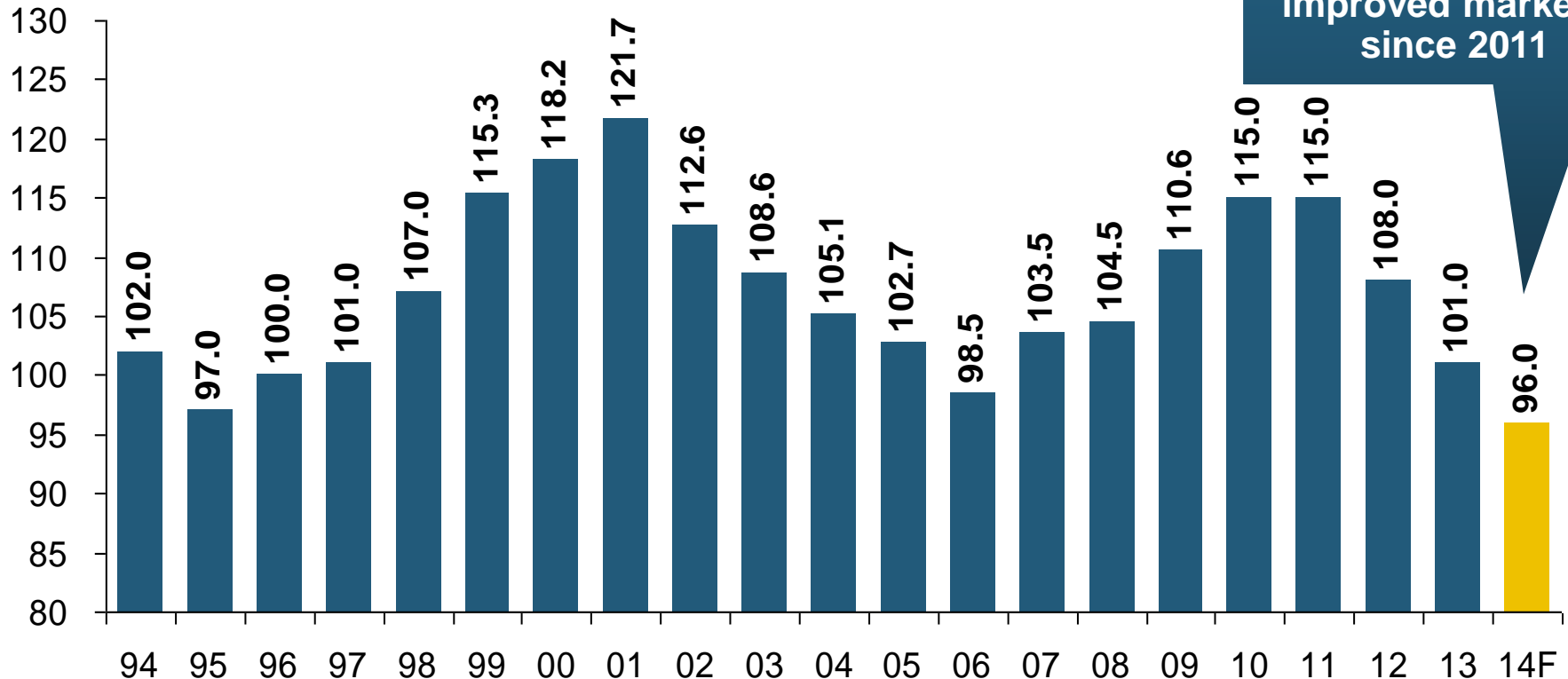
Sources: US Bureau of Labor Statistics at <http://data.bls.gov>; Insurance Information Institute.



Workers Compensation Operating Environment

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

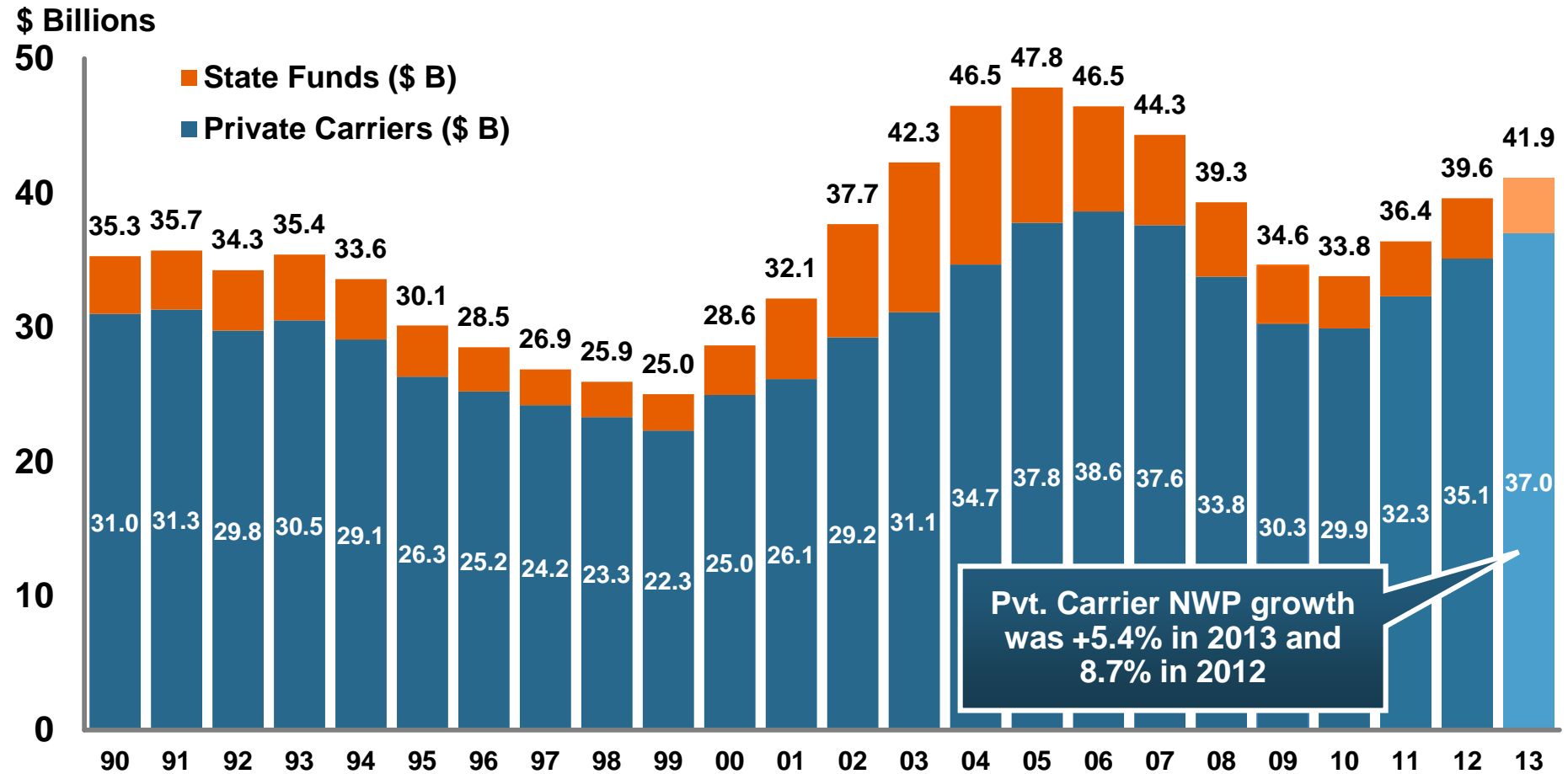
Workers Compensation Combined Ratio: 1994–2014E



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.

Workers Compensation Premium: Third Consecutive Year of Increase

Net Written Premium



p Preliminary

Source: 1990–2013p Private Carriers, Annual Statement Data, NCCI.

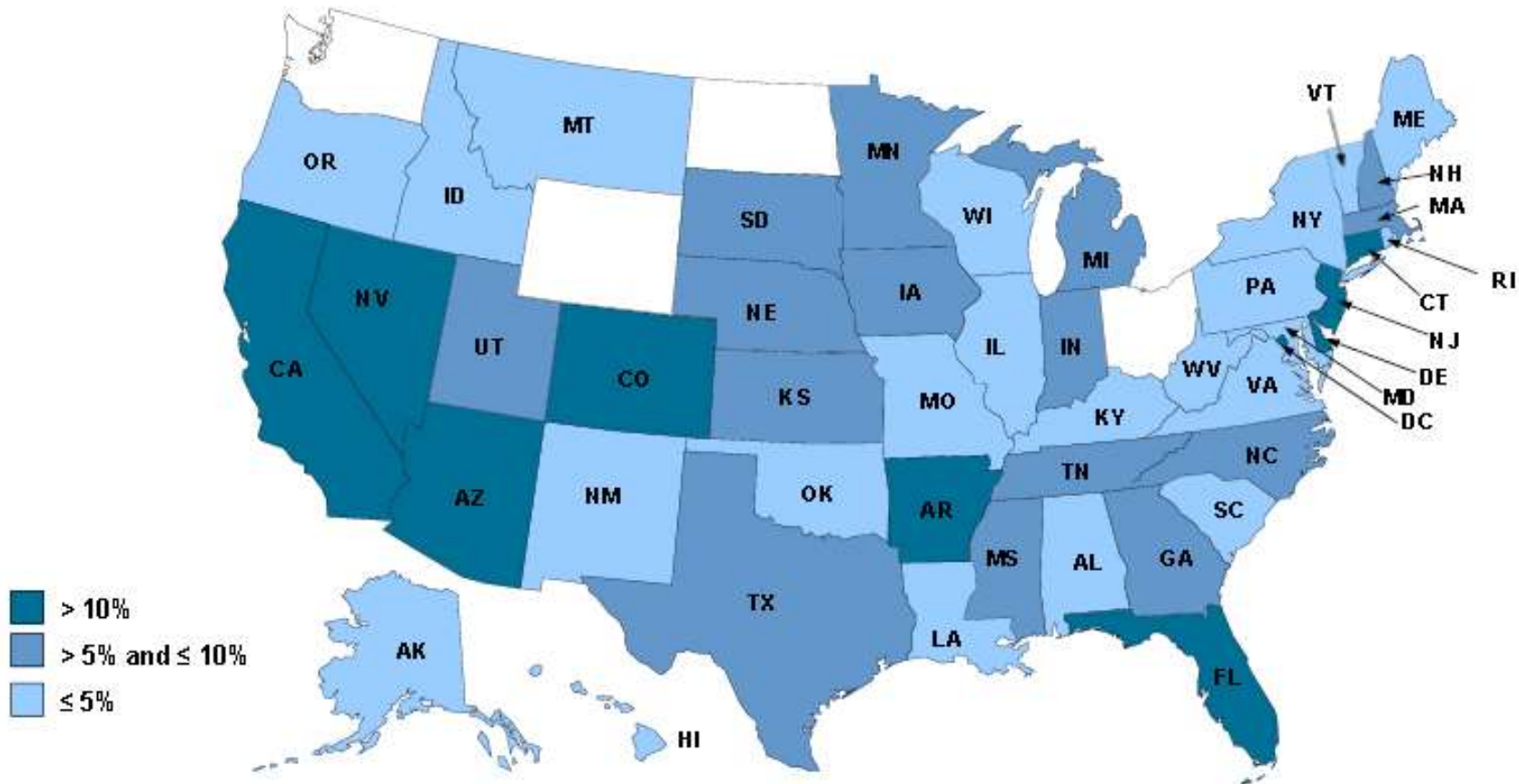
1996–2013p State Funds: AZ, CA, CO, HI, ID, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, UT Annual Statements

State Funds available for 1996 and subsequent

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

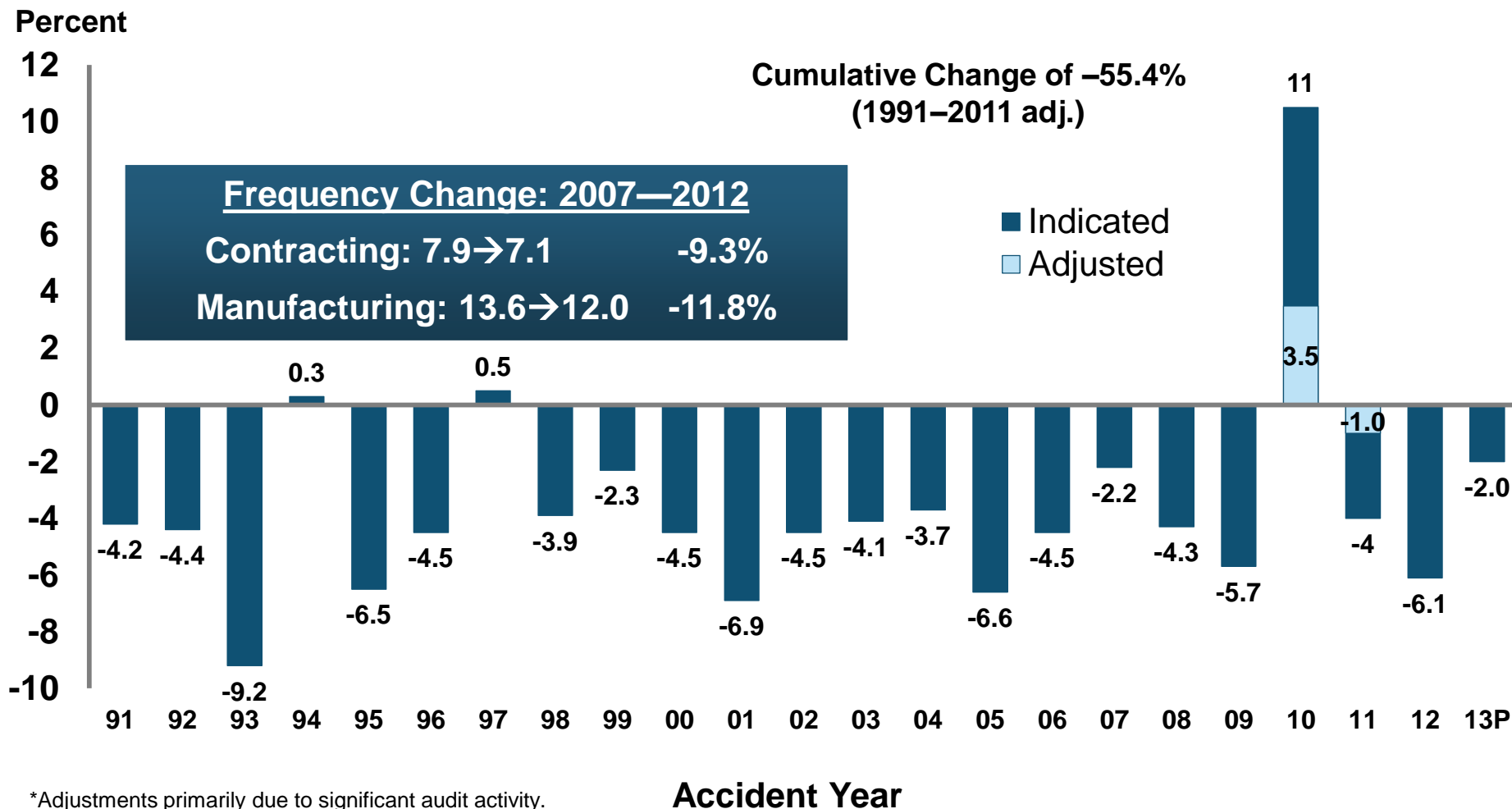


*Excludes monopolistic fund states (in white): OH, ND, WA and WY.

Source: NCCI.

Workers Compensation Lost-Time Claim Frequency Declined in 2013

Lost-Time Claims



*Adjustments primarily due to significant audit activity.

2013p: Preliminary based on data valued as of 12/31/2013

1991–2012: Based on data through 12/31/2012, developed to ultimate

Based on the states where NCCI provides ratemaking services, including state funds; excludes high deductible policies

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

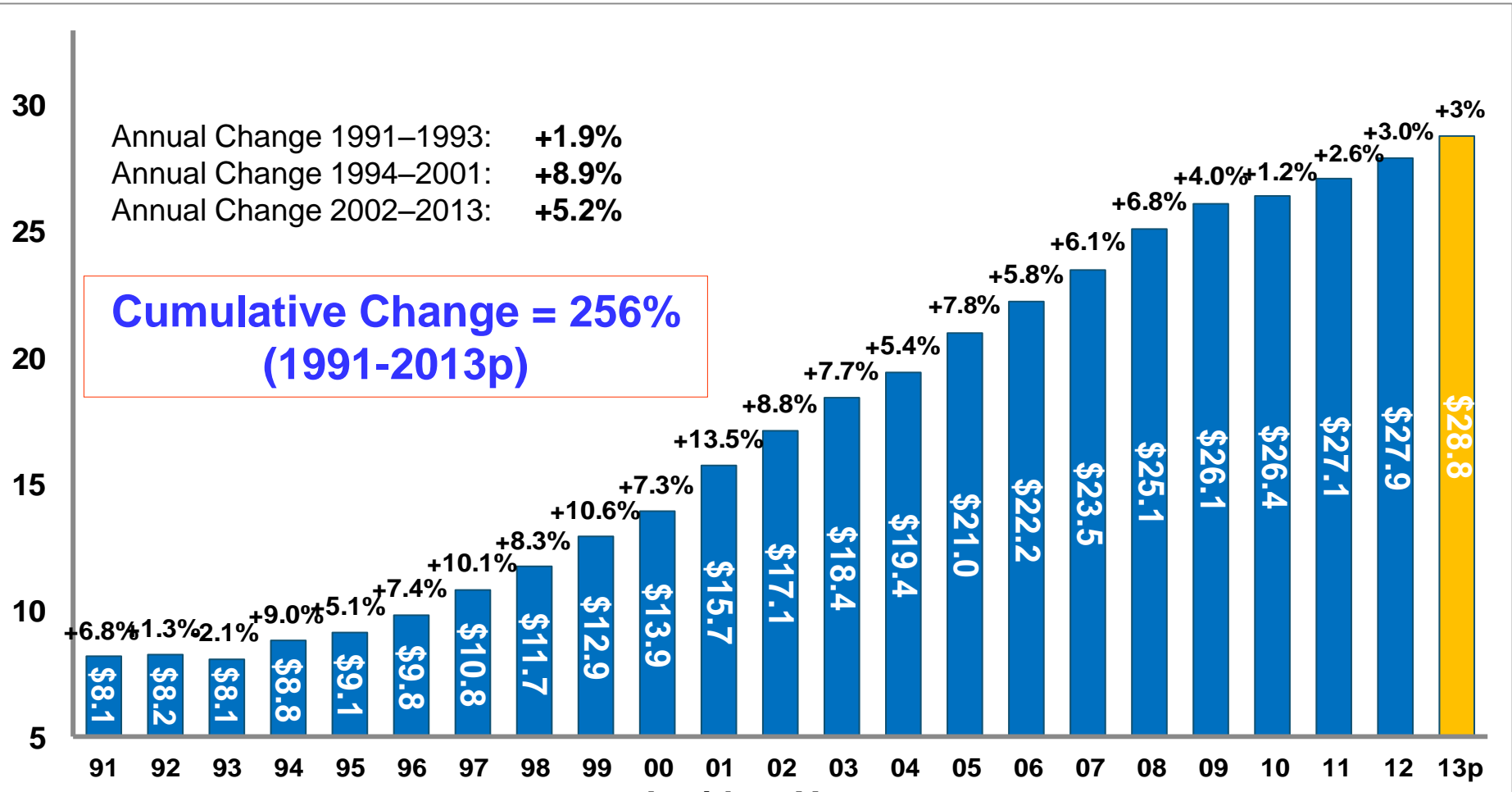
Source: NCCI.

Workers Compensation Medical Severity Moderate Increase in 2013



Medical Claim Cost (\$000s)

Average Medical Cost per Lost-Time Claim

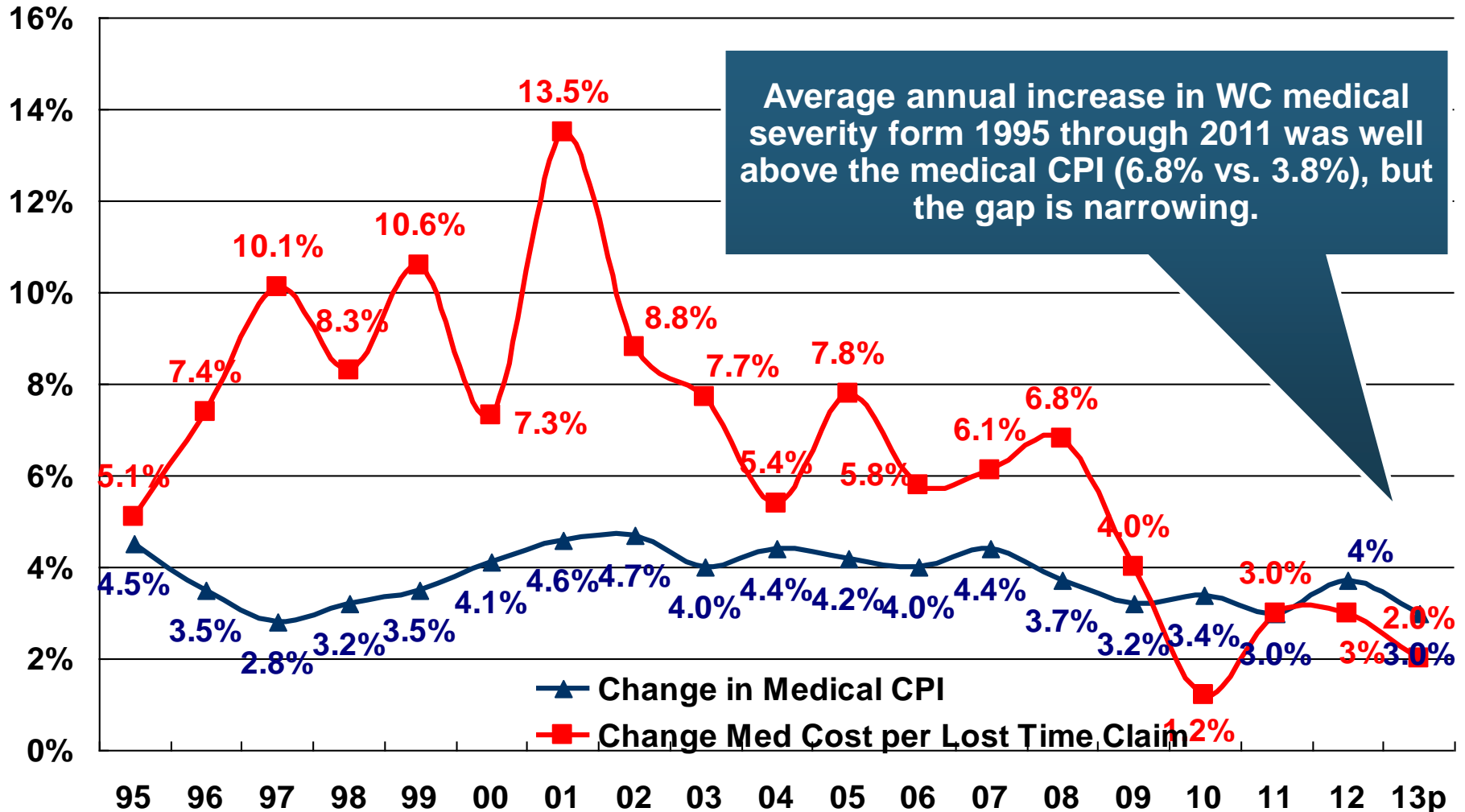


2013p: Preliminary based on data valued as of 12/31/2013.

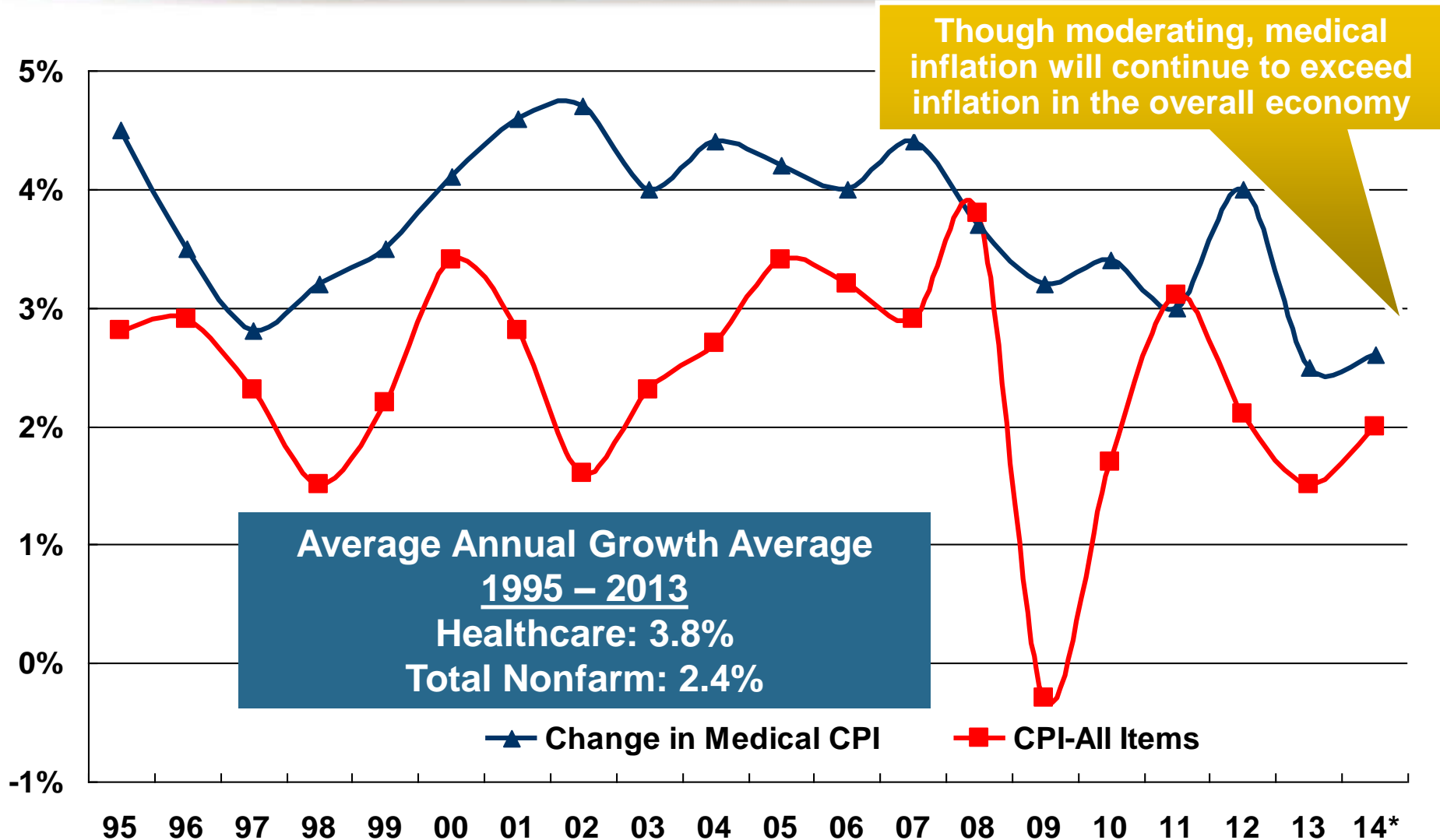
1991-2012: Based on data through 12/31/2012, developed to ultimate

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

WC Medical Severity Generally Outpaces the Medical CPI Rate



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



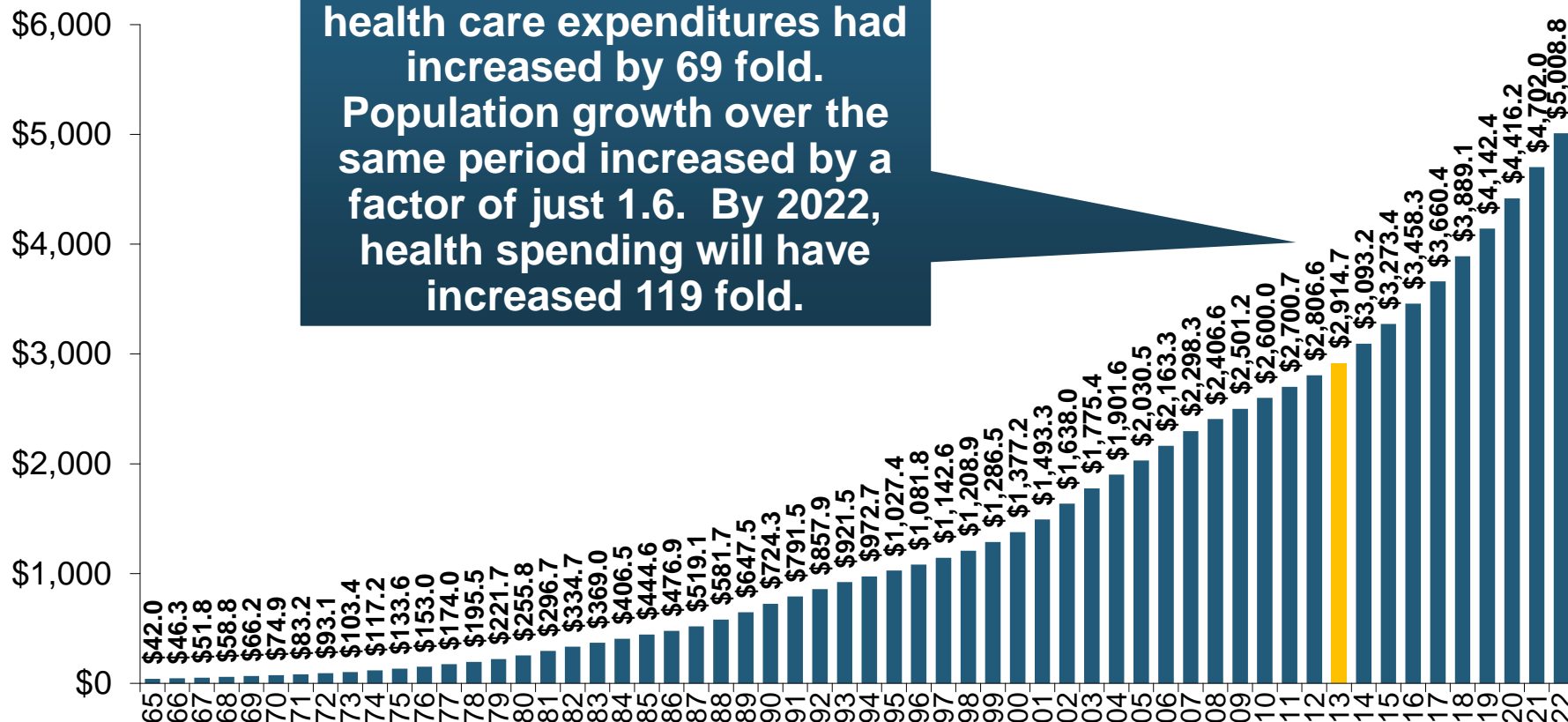
*July 2014 compared to July 2013.

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.

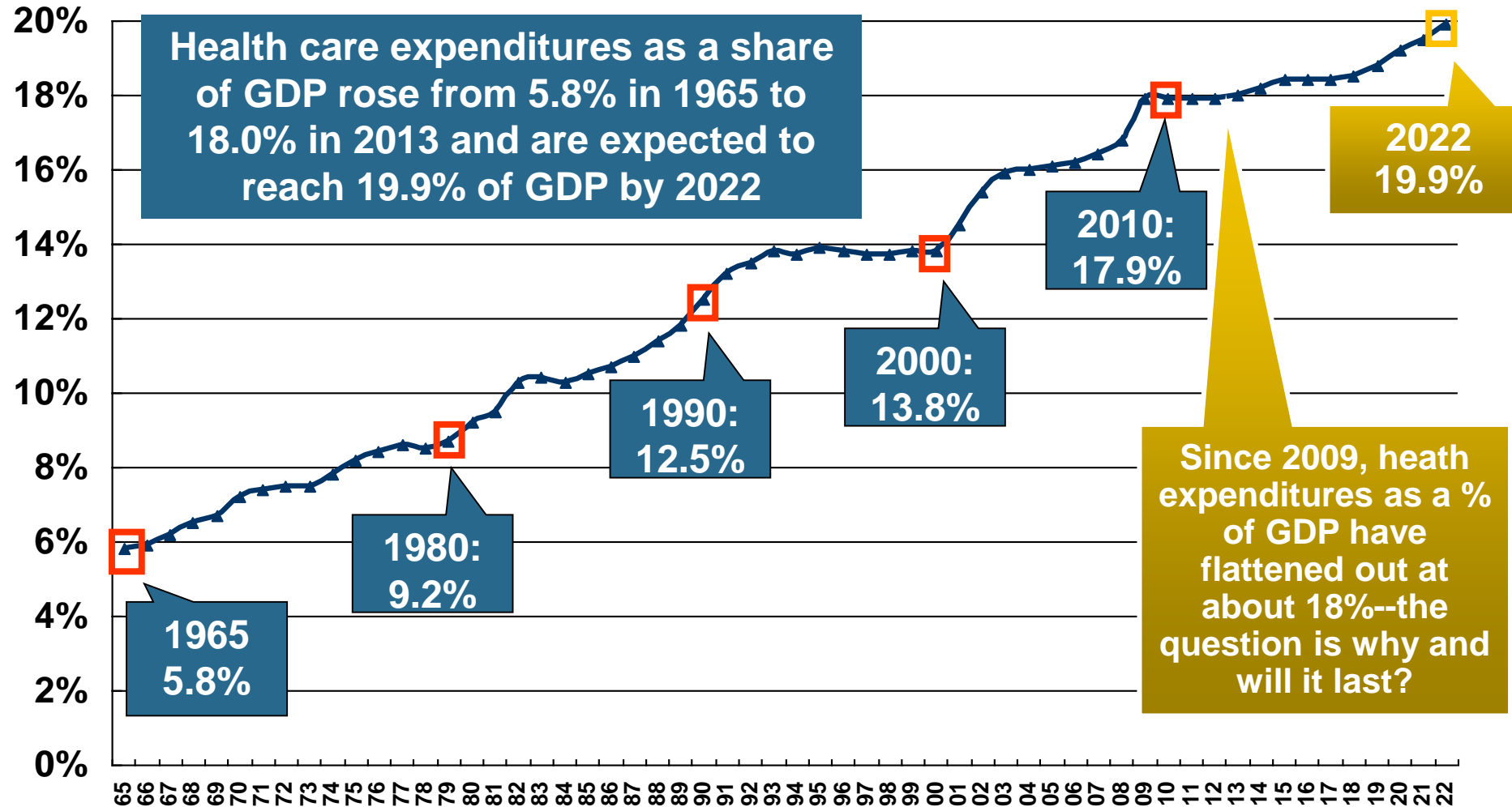


U.S. health care expenditures have been on a relentless climb for most of the past half century, far outstripping population growth, inflation of GDP growth

Sources: Centers for Medicare & Medicaid Services, Office of the Actuary at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html> accessed 3/14/14; Insurance Information Institute.

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

% of GDP



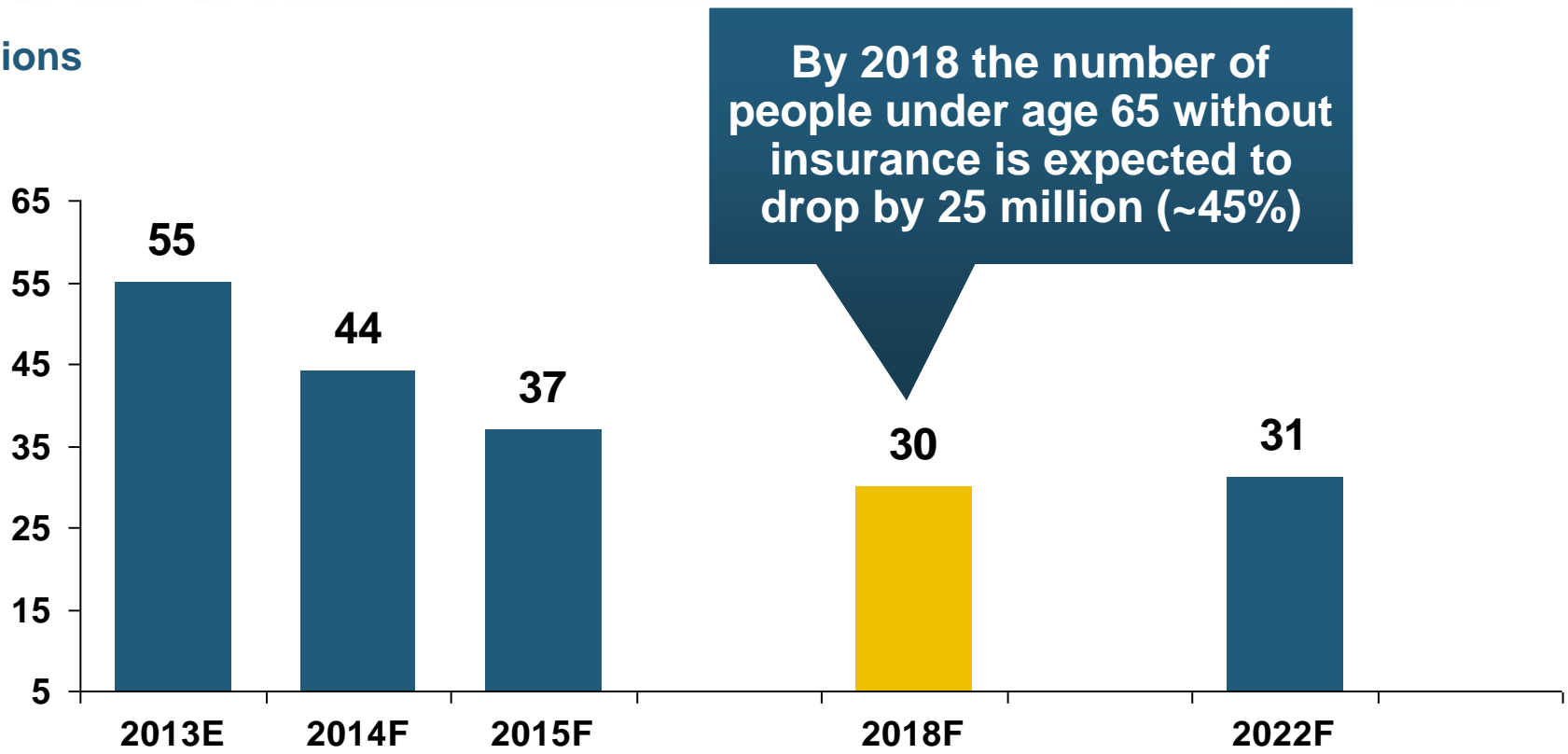
Sources: Centers for Medicare & Medicaid Services, Office of the Actuary at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html> accessed 3/14/14; Insurance Information Institute.

The Affordable Care Act & Implications for P/C Insurance

**The ACA Is Now Being Fully
Implemented; Consequences for P/C
Insurance Are Yet to Be Determined**

Projected Number of People with No Health Insurance, 2013—2022*

Millions



The projected decline in the uninsured population is very sensitive to the enrollment rate under the Affordable Care Act

*Under age 65.

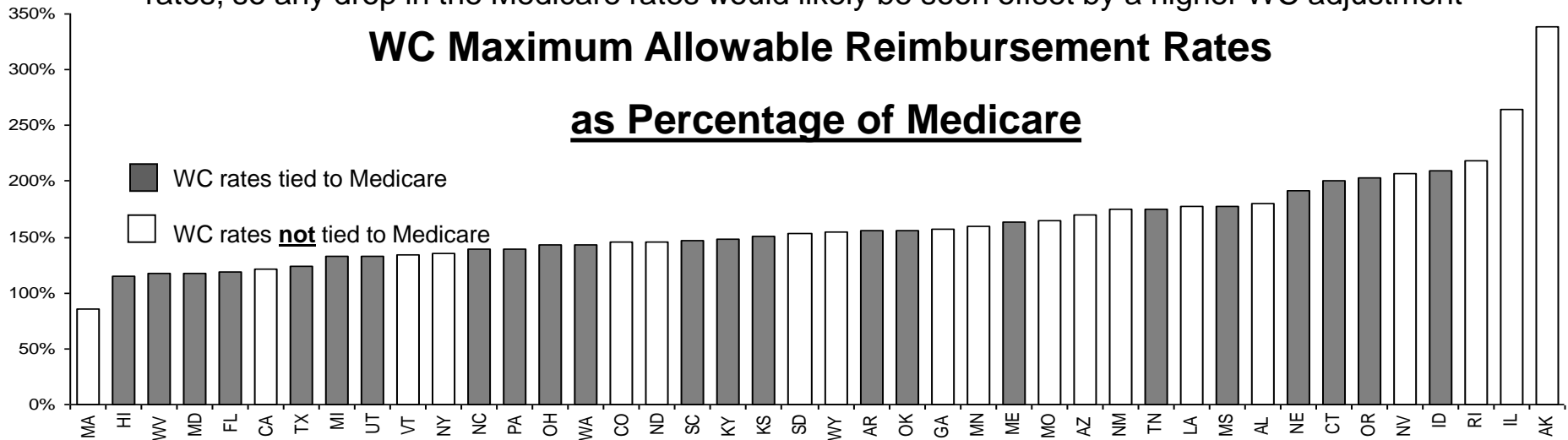
Sources: Centers for Medicare & Medicaid Services, Office of the Actuary at <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected.html> accessed 3/14/14; Insurance Information Institute.

A Few Potential Impacts of the ACA on Workers Compensation

Issue	Concern	Contravening Argument
Surge in People Covered by Health Insurance	<ul style="list-style-type: none"> • System is overwhelmed • MD shortage • Patient care adversely impacted 	<ul style="list-style-type: none"> • Over time, people will have access to preventative care, improving the general health of the population • Greater use of PA's, etc.
Electronic Health Records	<ul style="list-style-type: none"> • Cost 	<ul style="list-style-type: none"> • Computerization of patient data could help flag issues and improve risk management and improve patient outcomes
Claim Shifting	<ul style="list-style-type: none"> • Provider/patient may prefer claim handled via WC system 	<ul style="list-style-type: none"> • Reduction in uninsured population reduces shifting
Reimbursement Rates	<ul style="list-style-type: none"> • Cuts in MC reimbursement rates could make docs less willing to take WC claims 	<ul style="list-style-type: none"> • Impact would be short-lived. All MC-linked states already boost WC reimbursements

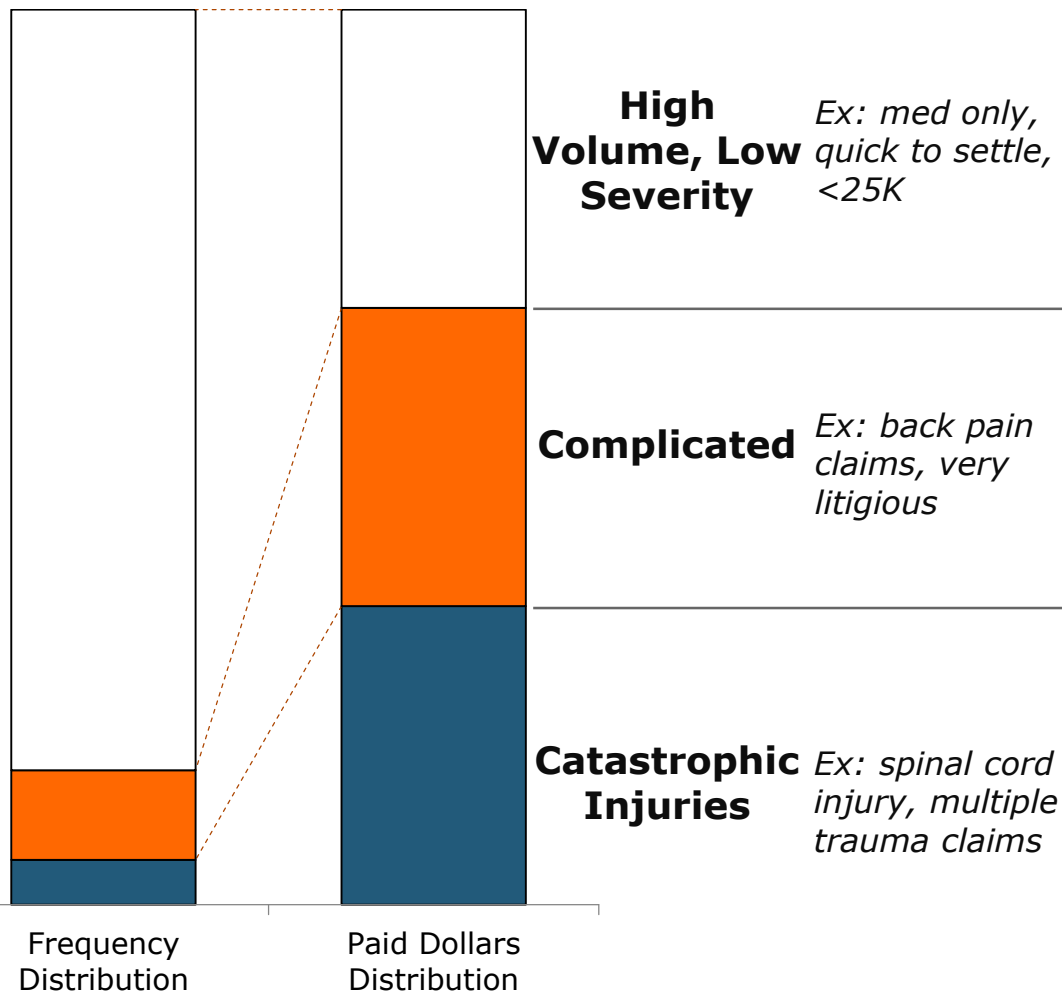
ACA Impact on WC May Occur via Changes in Rates Set by State Regulators

- WC rates often tied to Medicare but can change for reasons independent of this link
- There could be both positive and negative effects of a cut in Medicare rates on WC performance in states which tie reimbursement to Medicare
 - WC reimbursement rates would go down
 - Doctors may be unwilling to see WC patients:
 - 64% of Dr.'s surveyed said they would stop accepting new Medicare patients if planned rate cuts go through; some of these same doctors may also refuse WC patients if WC rates also decrease
- These effects would likely be short lived
 - All states which tie their fee schedules to Medicare already increase the Medicare rates to set WC rates, so any drop in the Medicare rates would likely be soon offset by a higher WC adjustment



PPACA May Have Distinct Impacts on WC Depending on Claim Frequency/Severity

Industry Portfolio by Claim Type (Relative Volume by Claim Frequency & Paid Dollars)



Potential ACA Impact

- Expanded coverage may shift some small claims to the health insurance system (+)
- Physician access problems could lead to indemnity increases and may bleed into the complicated cases (-)
- Preventative care and early record keeping decreases WC comorbidities (+)
- Soft tissue treatments, a large portion of "slow burn claims," may decrease in cost (+)
- No significant impacts

1. Could slow the growth in WC medical care costs

- IPAB recommendations and PCORI reports, plus Medicare changes, could have beneficial effects on cost and treatment effectiveness

2. Could ACA be first step in federal regulation of insurance products and markets?

- Will regulation like that requiring products to be priced to meet Medical Loss Ratios be applied to WC?
- Will cost-control mechanisms such as the Independent Payment Advisory Board be developed for WC?
- Will WC insurers lose their limited exemption from anti-trust laws that they have had under McCarran-Ferguson since 1945?

Potential Impacts of the ACA on Medical Professional Liability

Issue	Concern	Contravening Argument
Surge in People Covered by Health Insurance	<ul style="list-style-type: none"> • System is overwhelmed • Doctors spend less time on patients • Patient care adversely impacted 	<ul style="list-style-type: none"> • Over time, people will have access to preventative care, improving the general health of the population • People are receiving care already via suboptimal channels • Less use of ERs
Electronic Health Records	<ul style="list-style-type: none"> • Digitization could create a treasure trove of data for plaintiff attorneys 	<ul style="list-style-type: none"> • Computerization of patient data could help flag issues and improve risk management and improve patient outcomes
MPL Claim Severity	<ul style="list-style-type: none"> • More large verdicts will 	<ul style="list-style-type: none"> • ACA will help contain system costs

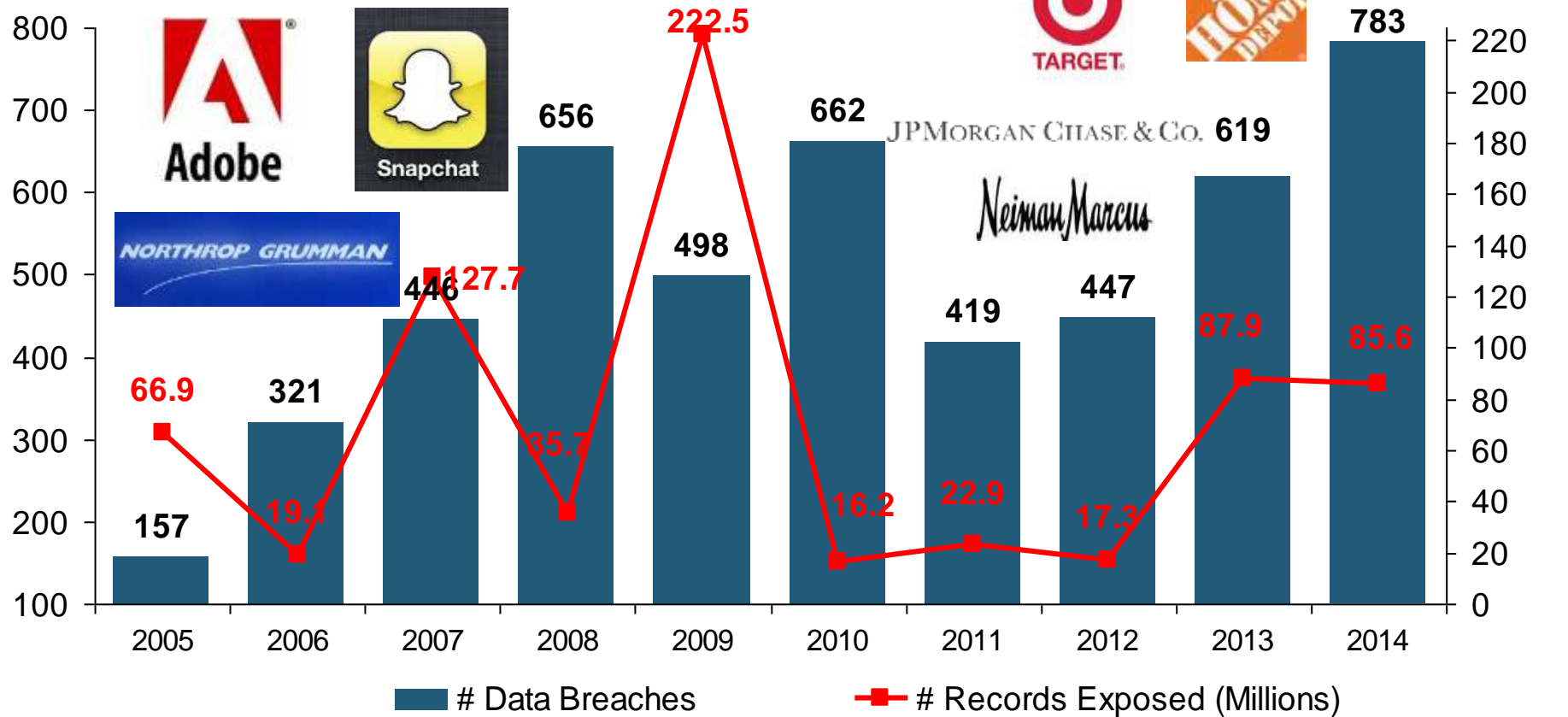
CYBER RISK & CYBER INSURANCE

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

***Rapidly Increasing Interest from
Businesses, Media & Public Policymakers***

Data Breaches 2005-2014, by Number of Breaches and Records Exposed

Data Breaches/Millions of Records Exposed

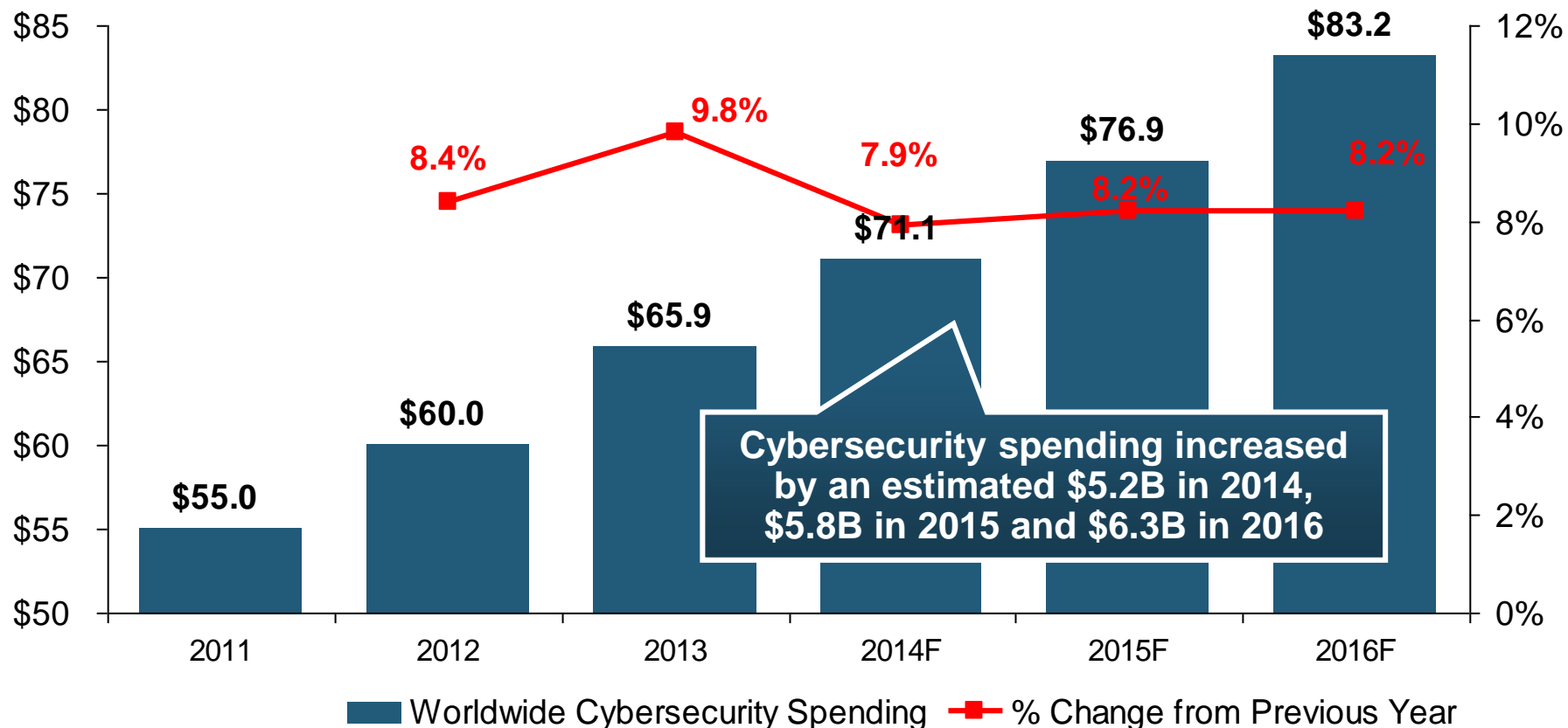


The Total Number of Data Breaches Rose 28% While the Number of Records Exposed Was Relatively Flat (-2.6%)

* 2014 figures as of Jan. 12, 2014 from the ITRC.
Source: Identity Theft Resource Center.

Worldwide Cybersecurity Spending, 2011- 2016F

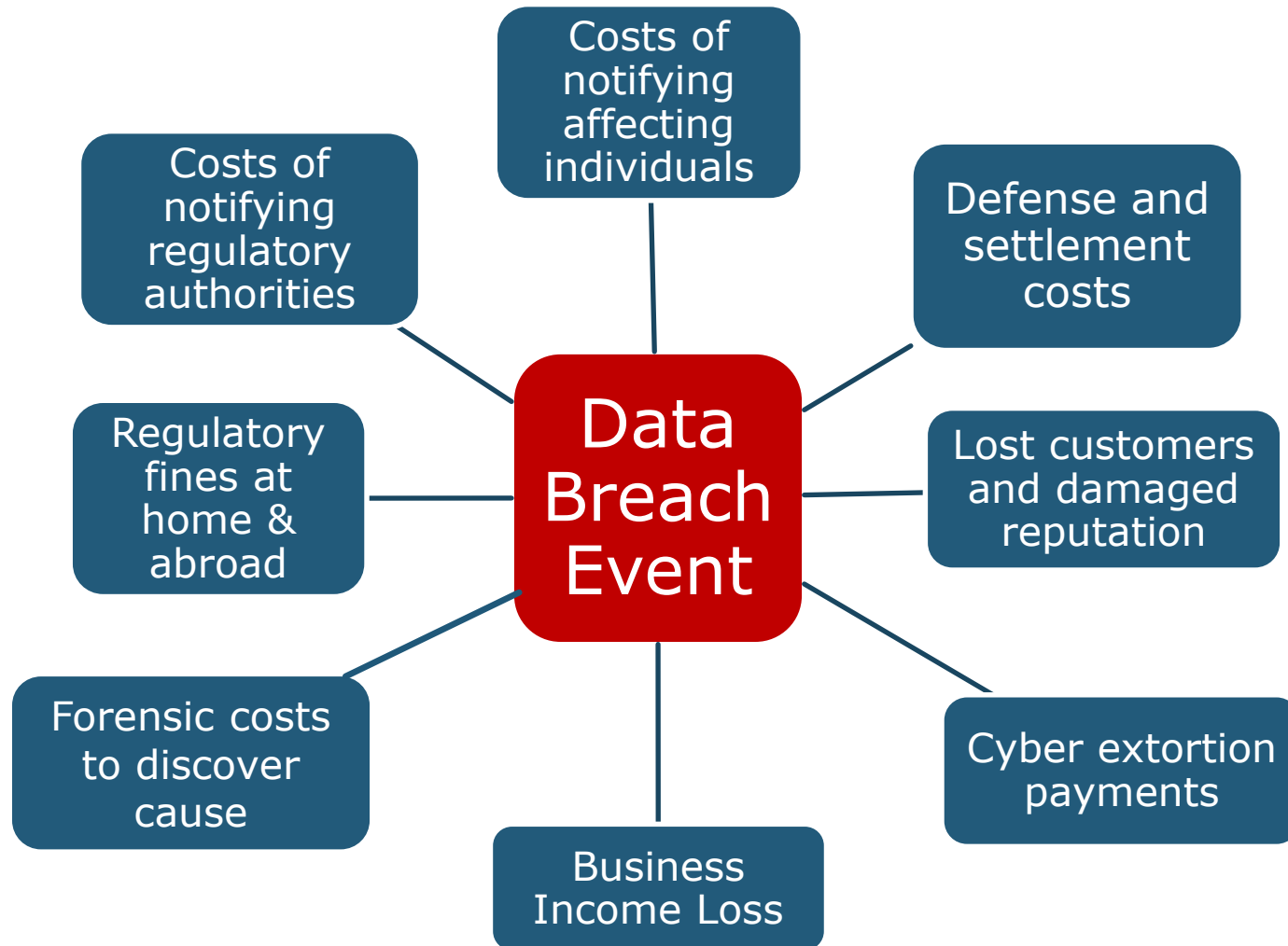
(\$ Billions)



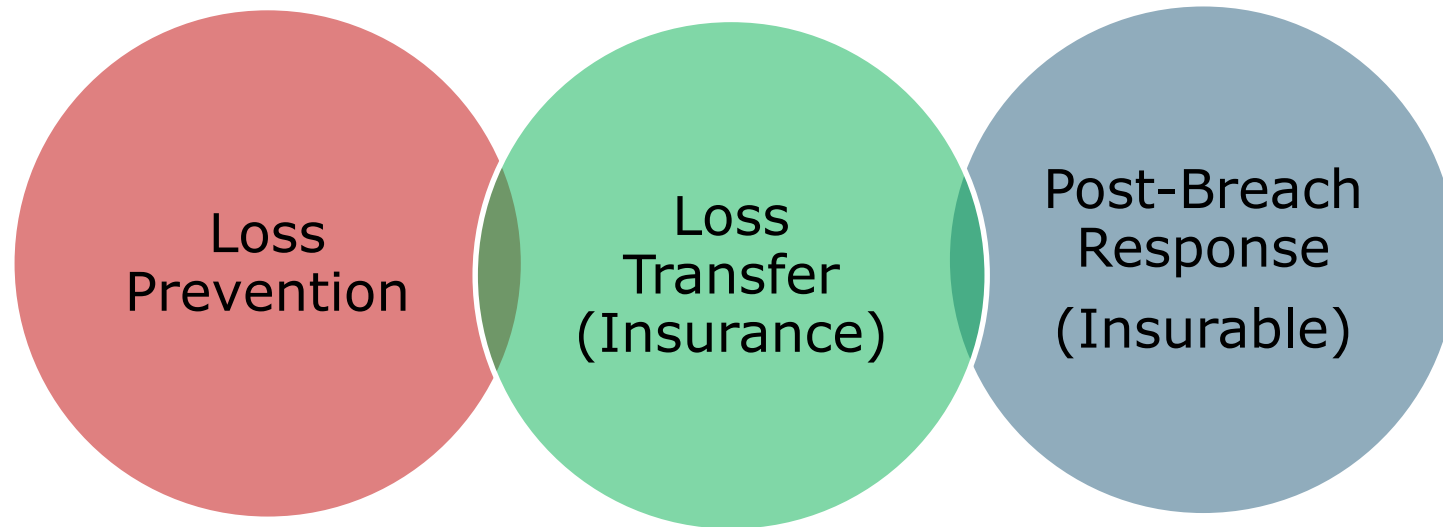
Cybersecurity spending increased by an estimated \$5.2B in 2014, \$5.8B in 2015 and \$6.3B in 2016

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

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. Released its Second Cyber Report in 2014: *Cyber Risk: The Growing Threat*



CYBER RISKS: THE GROWING THREAT

JUNE 2014

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- I.I.I.'s 2nd report on cyber risk released June 2014
- 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
- **3rd Report in Q2 2015**

INDUSTRY DISRUPTORS

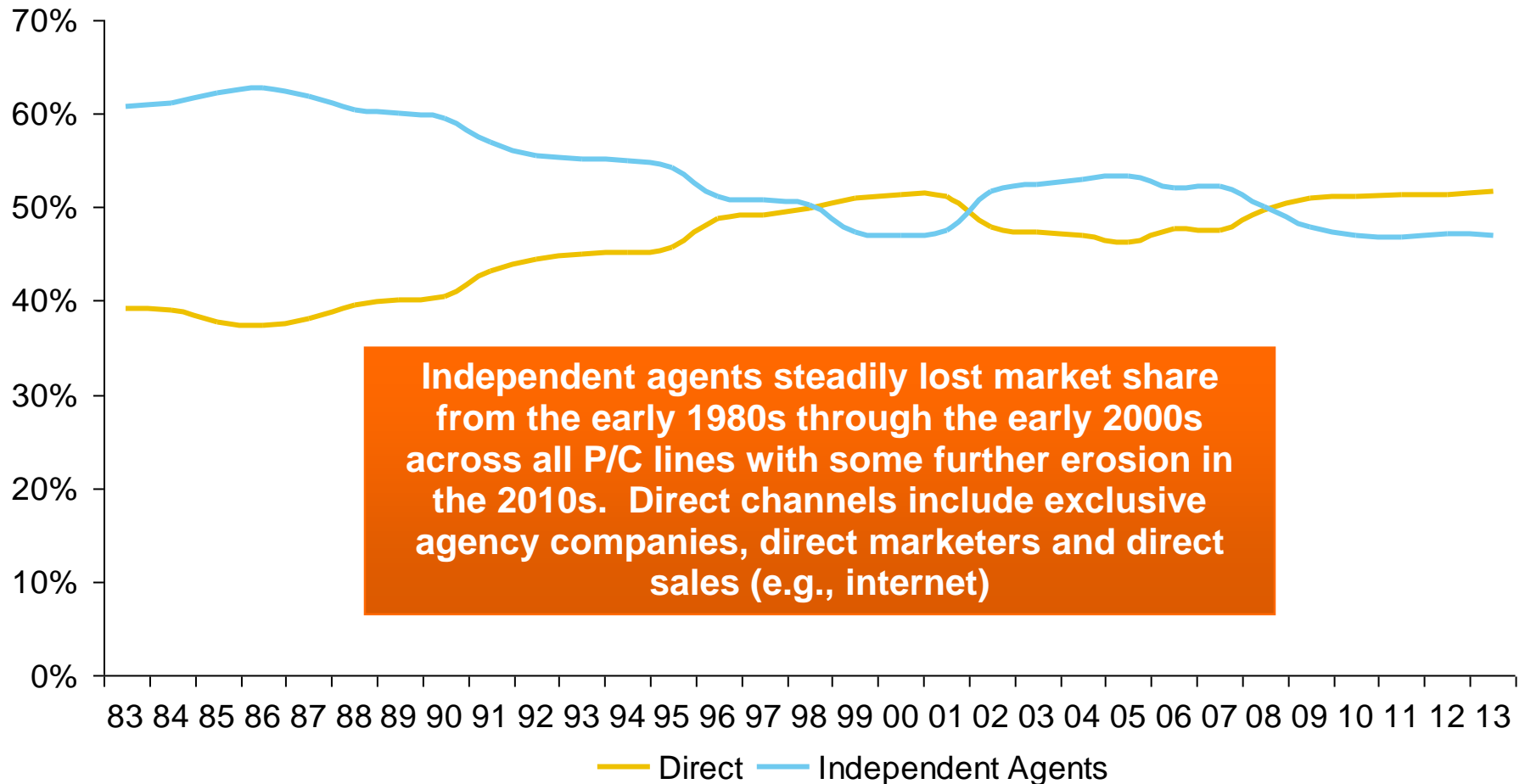
**Technology, Society and
the Economy Are All
Changing at a Rapid Pace**

Thoughts on the Future

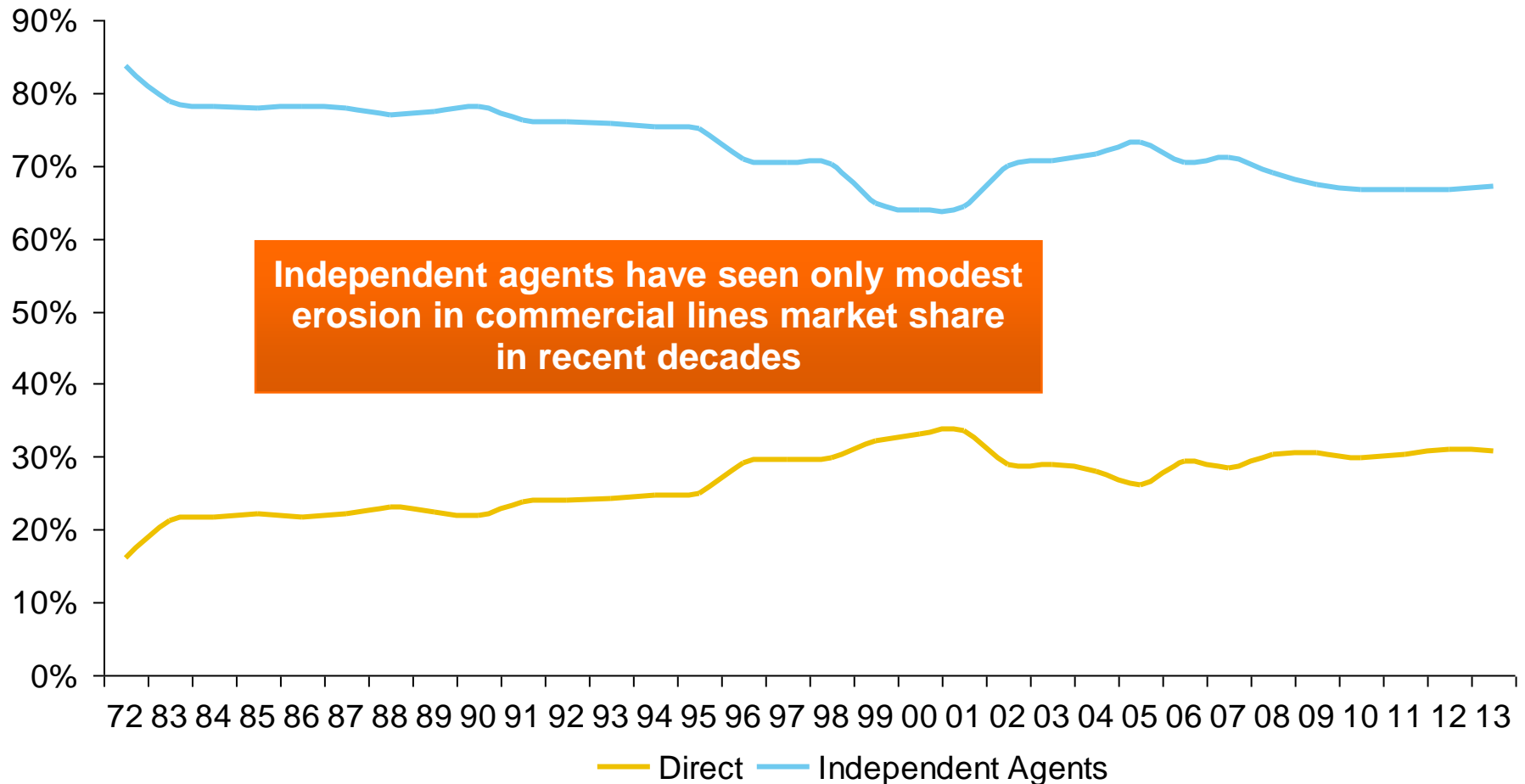
DISTRIBUTION TRENDS

**Distribution by Channel Type
Continues to Evolve Rapidly**

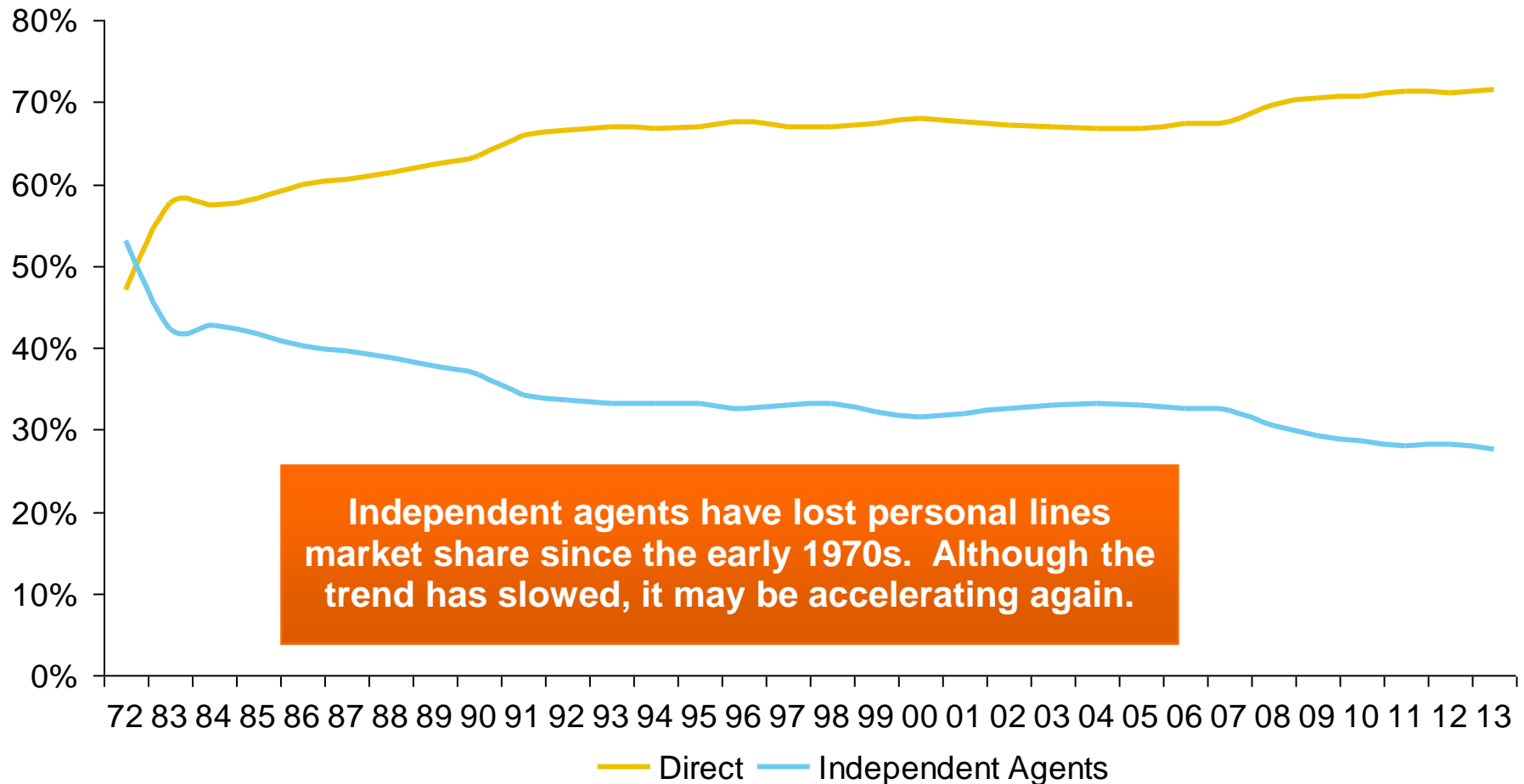
All P/C Lines Distribution Channels, Direct vs. Independent Agents



Commercial P/C Distribution Channels, Direct vs. Independent Agents



Personal Lines Distribution Channels, Direct vs. Independent Agents

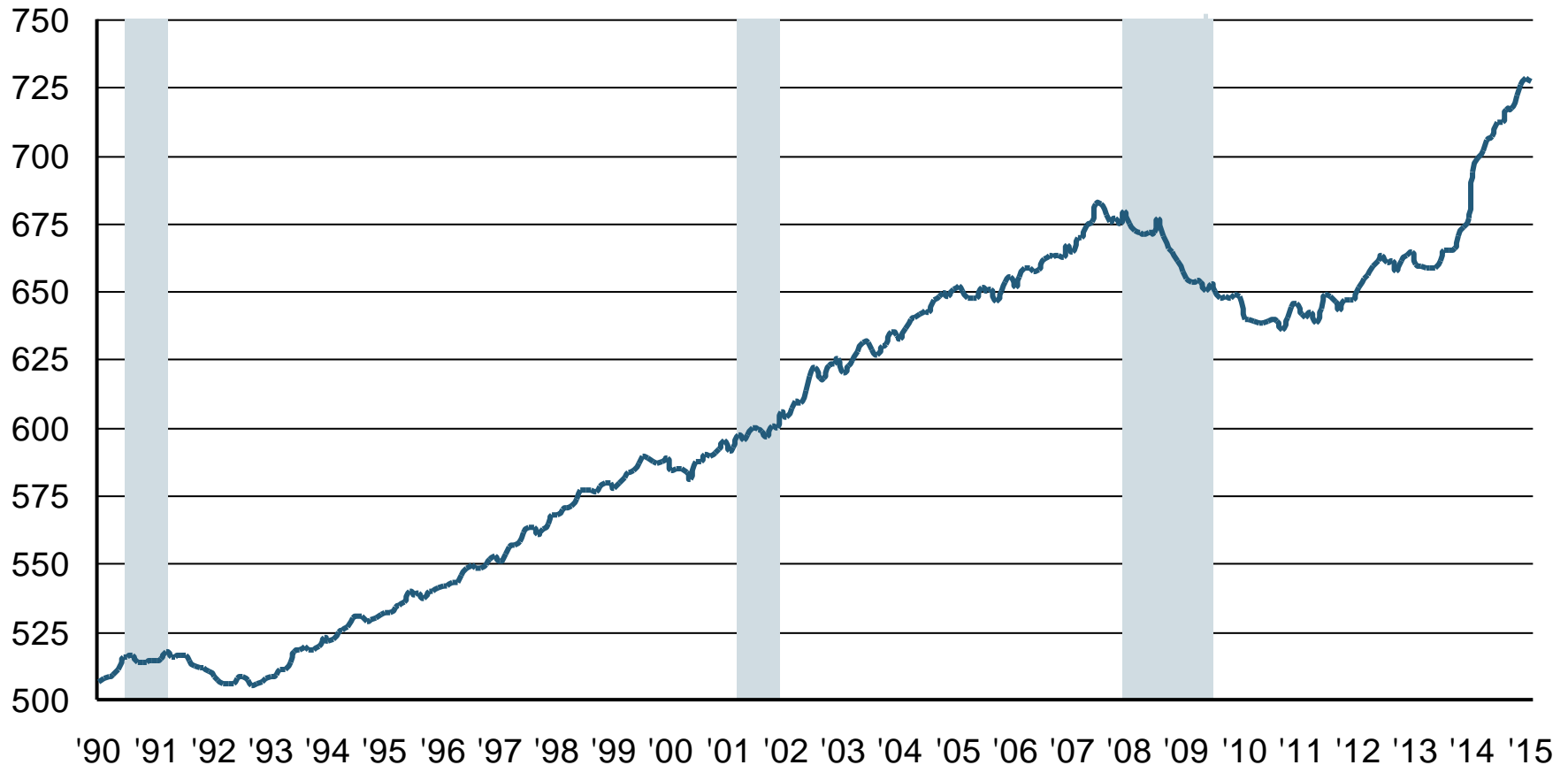


DISTRIBUTION DEMOGRAPHICS

**Employment Among Agents and
Brokers Has Recovered but
Consolidation Trends Will
Persist**

U.S. Employment in Insurance Agencies & Brokerages: 1990–2015*

Thousands



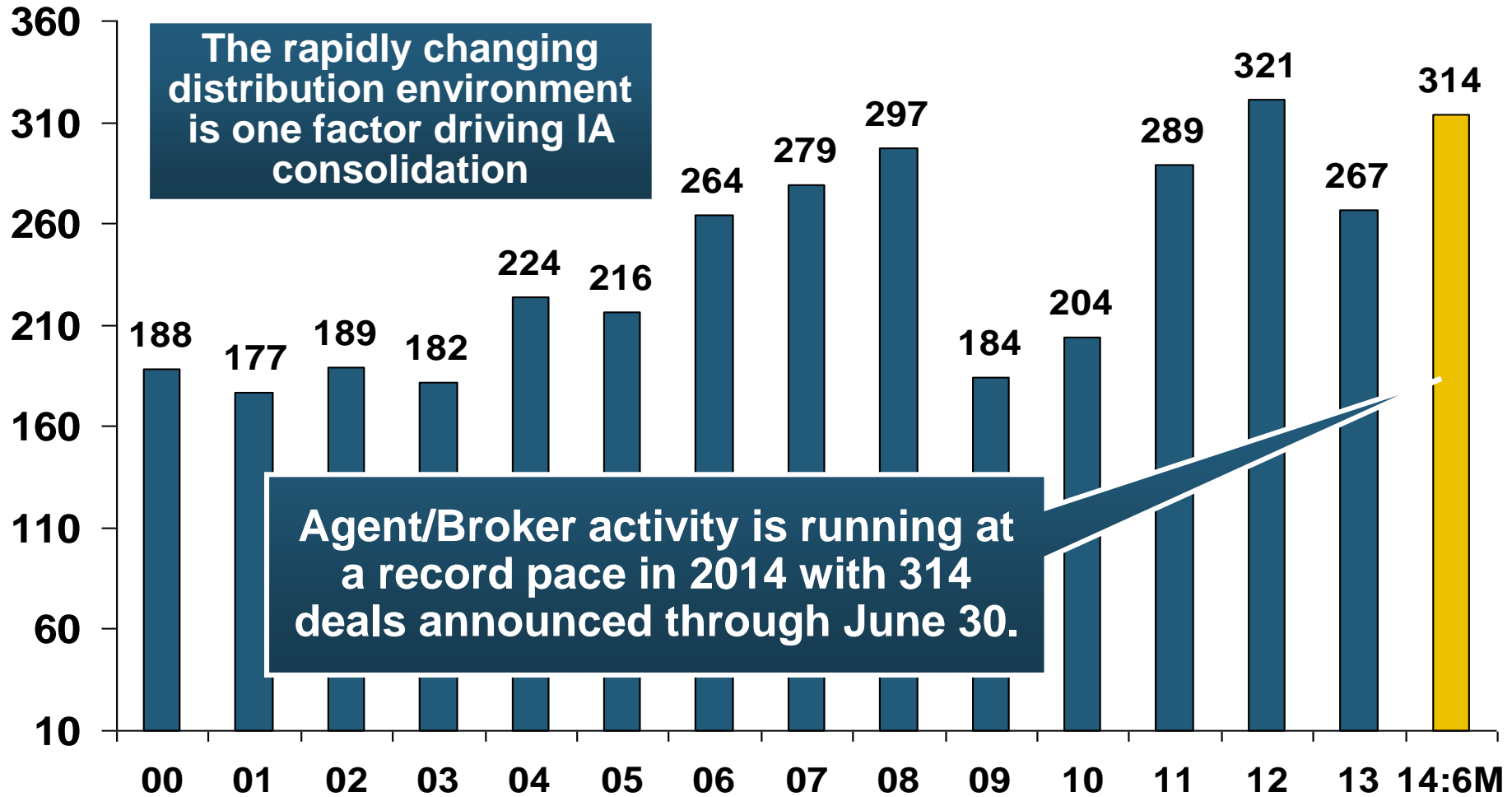
*As of January 2015; not seasonally adjusted. Includes all types of insurance.

Note: Recessions indicated by gray shaded columns.

Sources: U.S. Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institute.

Agent/Broker M&A Deals, 2000-2014:6M

Number of Deals





“BIG DATA”

**More and Better Data Combined
with Consumer Interactivity Are
Transforming Many Industries—
*Including Insurance***

Percentage of Carriers Using Predictive Analytics by Major P/C Line, 2013

Predictive analytics is more like to be used in personal lines, but commercial lines use is growing

82% of insurers report using predictive analytics in at least one line. 18% do not use it all.

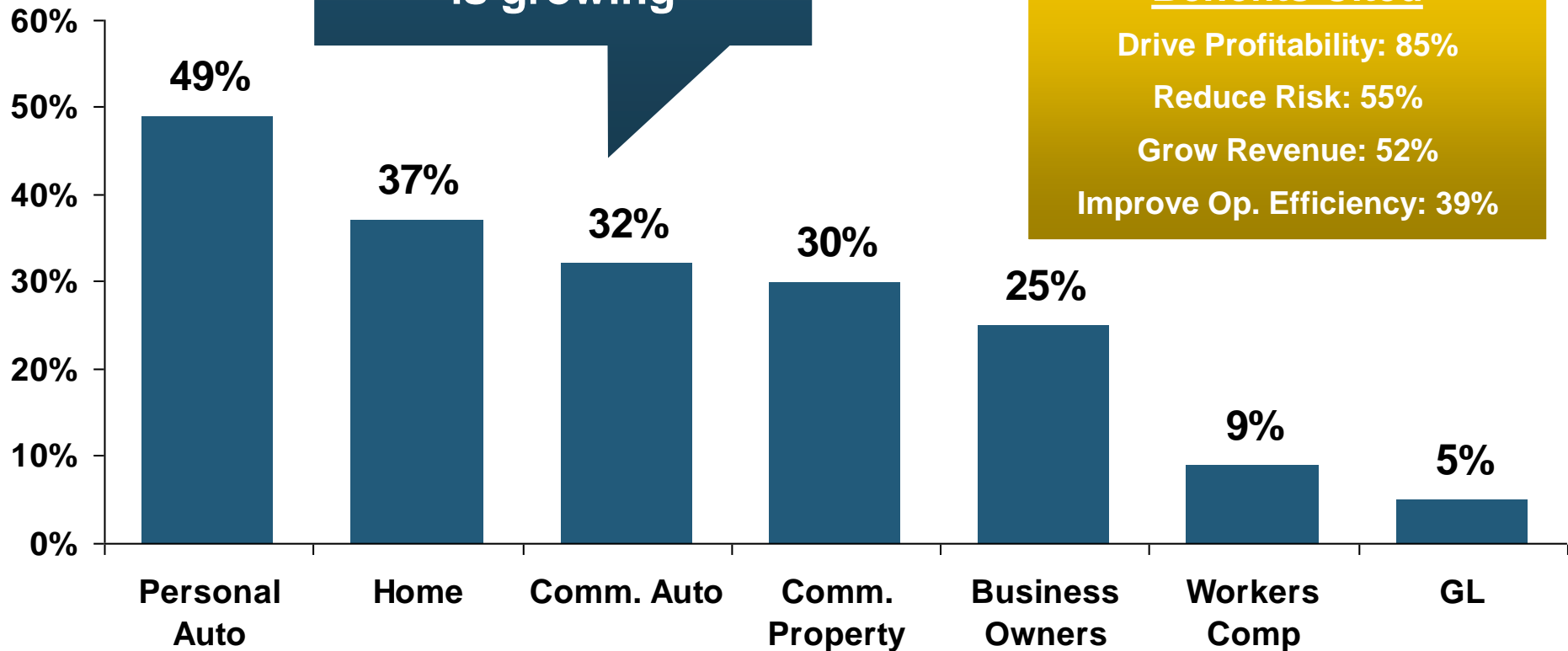
Benefits Cited

Drive Profitability: 85%

Reduce Risk: 55%

Grow Revenue: 52%

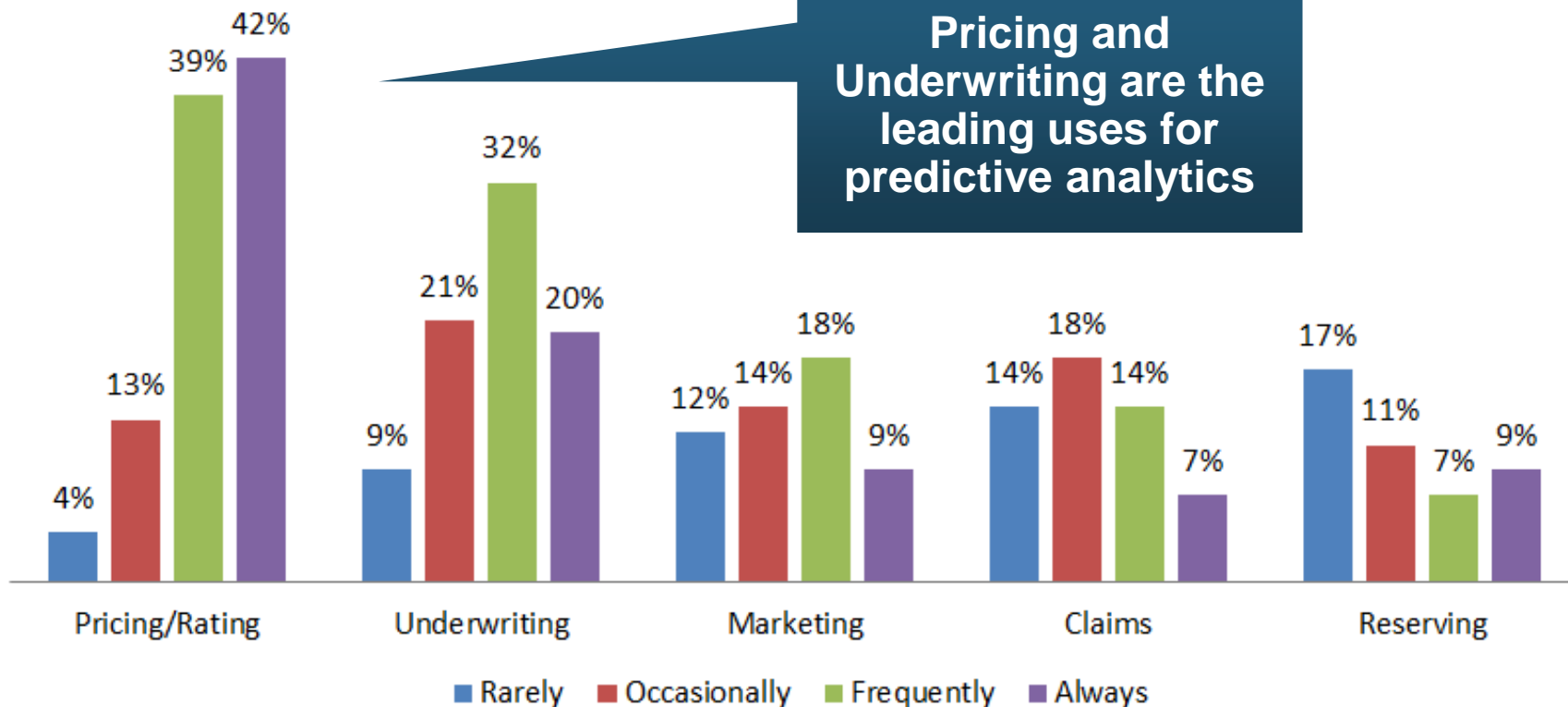
Improve Op. Efficiency: 39%



Uses of Predictive Analytics by Function

Uses of Predictive Modeling

Pricing and Underwriting are the leading uses for predictive analytics



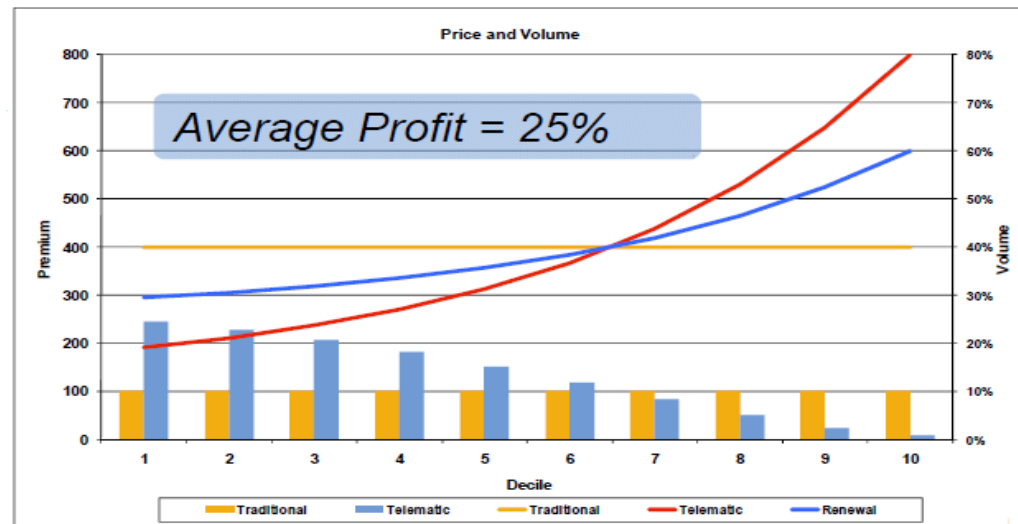
Source: Earnix/ISO September 2013 Survey

Usage-Based Insurance (UBI): Telematics

**UBI Is Catching On Among
Insurers and Consumers, But Is
It a Transient Technology?**

Driving Behavior Data Is Very Predictive

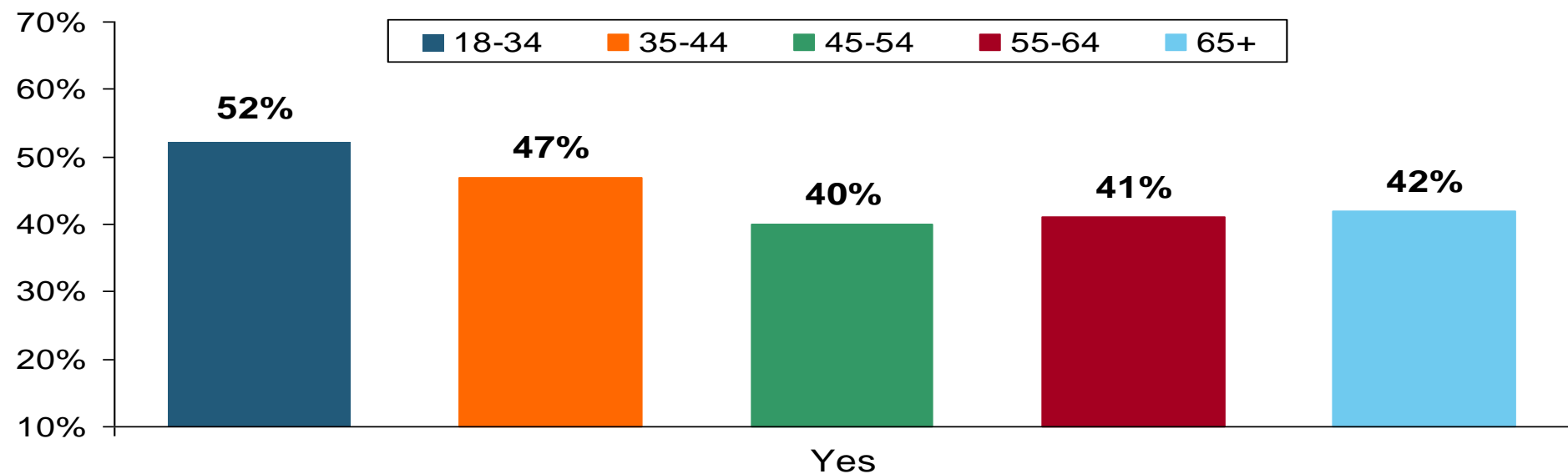
- Provides significant lift above current rating plan
 - ◆ Early programs had discounts of up to 61% and surcharges of 9%, but most companies are not giving such significant rate variation
 - ◆ Difference between indication and selection can help fund technology while still providing marketing effect
 - ◆ Must be matched with policy and claims data to develop predictive models and define lift



Smart implementation helps justify the technology cost

I.I.I. Poll: Telematics

Q. Would you be more likely to install a recording device on your car that allows your insurance company to monitor how many miles you drive, the time of day you drive and how often you make sudden stops if you could get an immediate discount on your auto insurance?¹



Support for telematics device is highest among youngest age group and declines among older people.

¹Asked of those who have auto insurance.



Autonomous/Driverless Vehicles

**Rapid Technological Innovations in
Motor Vehicle Engineering Are
Likely to Transform Auto Insurance
and Product Liability Markets**

Likely Impacts of Successful, Incremental Autonomous Vehicle Technologies

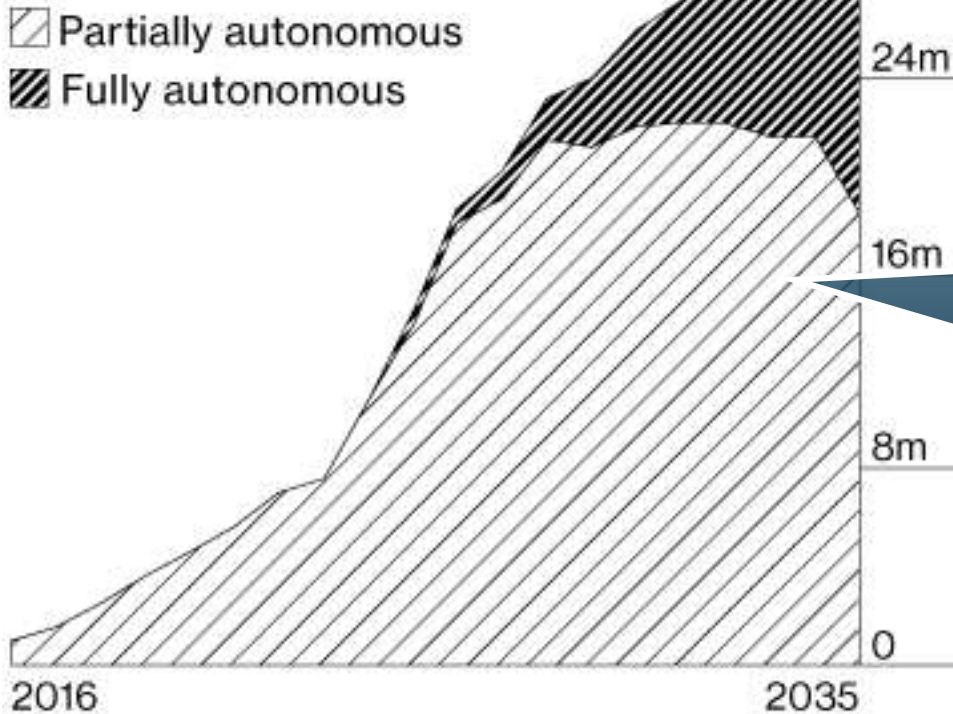
- **Proven Collision Avoidance Technologies Will Likely Become Standard as Major Manufacturers, Google Set 2020-2025 Timeframes for Fully Autonomous**
- **Auto Accident Frequency Will Fall, Possibly Substantially as Share of Cars with New Technology Grows (~20-yrs.)**
 - ◆ Collision, BI, PIP claims should fall
 - ◆ Less litigation (due to fewer claims and “black box” technologies)
- **Historical Analogies to Aviation and Marine Insurance**
 - ◆ Both saw technology radically reduce claim frequency
- **Potential “Leapfrog” Technology Over Usage-Based Insurance (UBI) Technologies Currently Available**
- **Insurance Price Will Be a Major Factor in Adoption Rate**
 - ◆ **90% would consider an autonomous car if premium is 80% lower***

*CarInsurance.com survey <http://www.carinsurance.com/Articles/autonomous-cars-ready.aspx>, Nov. 2013.

Projected Sales of Partially and Fully Autonomous Vehicles through 2035

Hands-Free

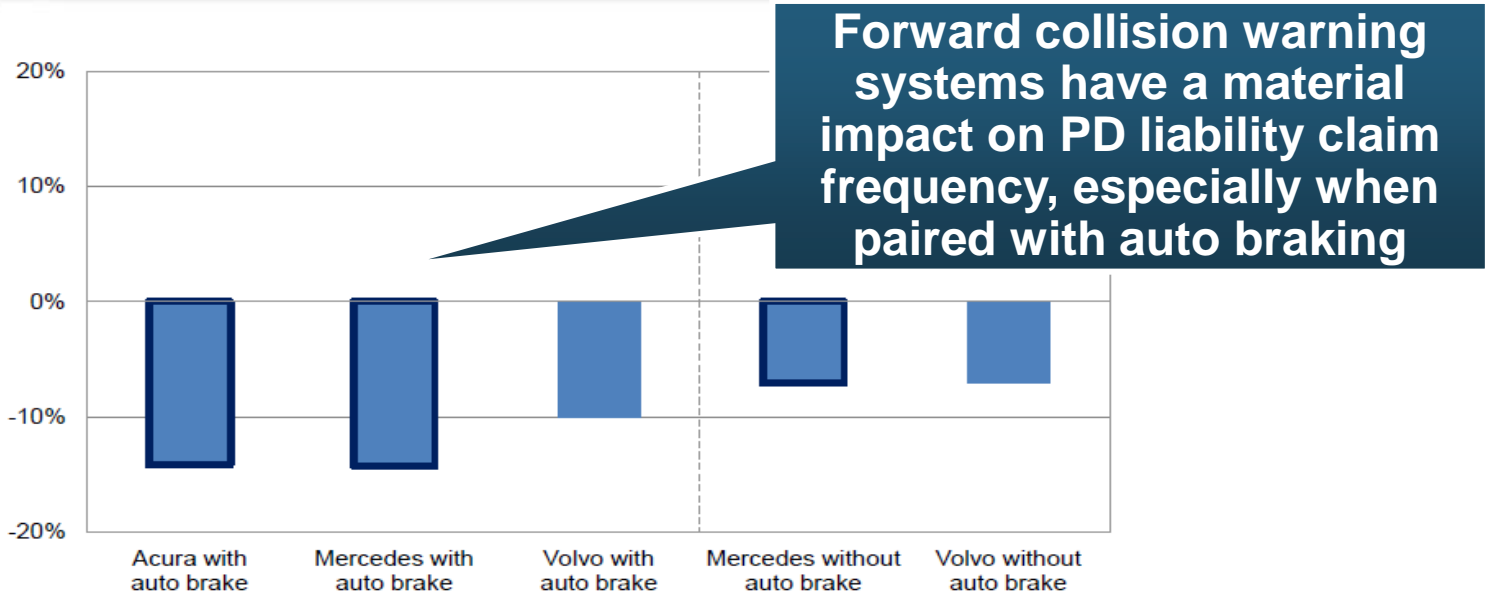
Projected global unit sales of autonomous vehicles over the next 20 years



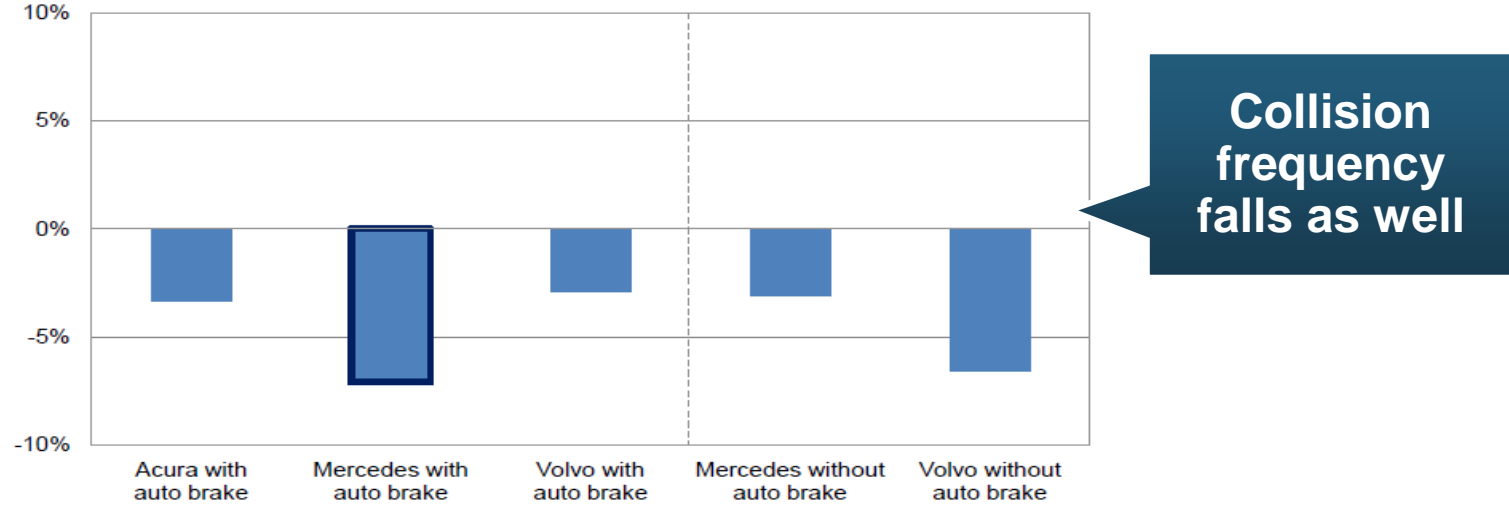
DATA: BOSTON CONSULTING GROUP;
GRAPHIC BY BLOOMBERG BUSINESSWEEK

Impact of Forward Collision Warning With and Without Auto Brake

Property Damage Liability Claim Frequency by Manufacturer



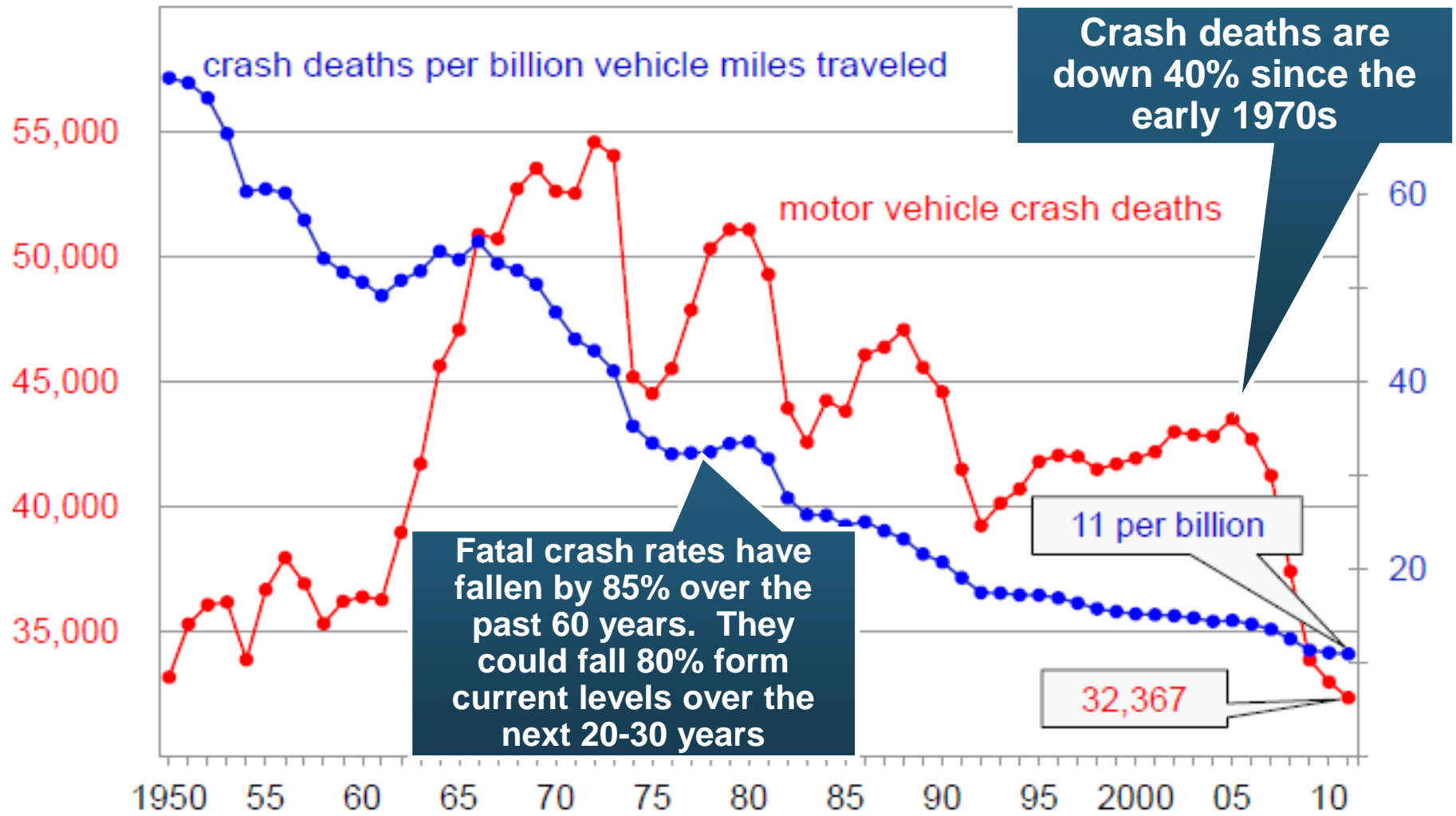
Collision Claim Frequency by Manufacturer



Source: Highway Loss Data Institute and Insurance Institute for Highway Safety presentation by Matthew Moore, *Measuring Crash Avoidance System Effectiveness with Insurance Data*, January 30, 2013; Insurance Information Institute.

Enhanced Vehicle and Road Safety Have Made Driving Much Safer

Motor Vehicle Crash Deaths and Crash Death Rate, 1950-2012



Source: National Highway Transportation Safety Administration as cited in Insurance Institute for Highway Safety presentation by Adrian Lund, Ph.D., *Drivers and Driver Assistance Systems: How Well Do They Match?*, June 18, 2013; Insurance Information Institute.

■ “Peak Auto”

- ◆ Peak vehicle ownership per person/household likely already reached
- ◆ Less interest in auto ownership among youth
- ◆ Preference of youth to live in urban areas, use public transit

■ The “Sharing Economy”: Vehicles & Homes On Demand

- ◆ Vehicles on Demand: Fewer vehicles likely need in the future as the technologies of driverless vehicles and ride sharing (e.g., Uber, Lyft)
- ◆ Dwellings on Demand: Airbnb



■ Disintermediation

- ◆ For commodity products, the power resides with whoever has contact with the customer
- ◆ Fear that tech firms such as Google or Apple or a major retailer such as Walmart or Amazon could disintermediate agency forces (or insurers themselves if regulatory environment were to permit)

■ Big Data

- ◆ Ushering a new era of advanced/predictive analytics which will presumably improve underwriting a pricing
- ◆ Could drive down pricing but also open up new risks to underwrite

■ The Digital Economy

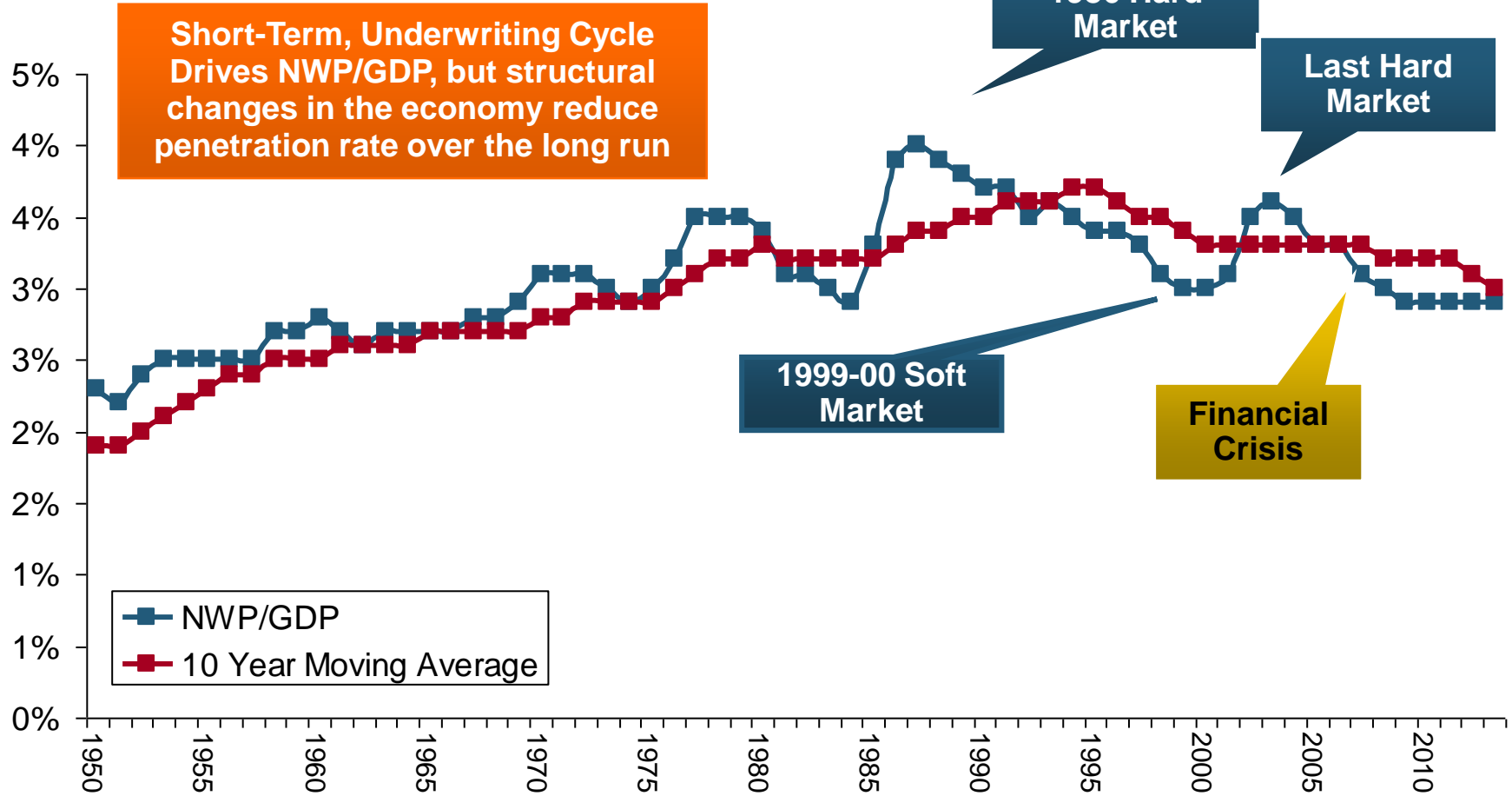
- ◆ Increasing share of GDP is intangible
- ◆ Insuring of “bits and bytes” and associated liability risks is in its infancy compared to “bricks and mortar” products

■ Reduced Relevancy of Insurance

- ◆ Many consumers, given the option, will forego the purchase of insurance (p/c and life/retirement)
- ◆ Mispreception of risk, cost, product complexity, moral hazard due to government subsidies, etc., are all factors
- ◆ Consumer perceptions need to adjusted

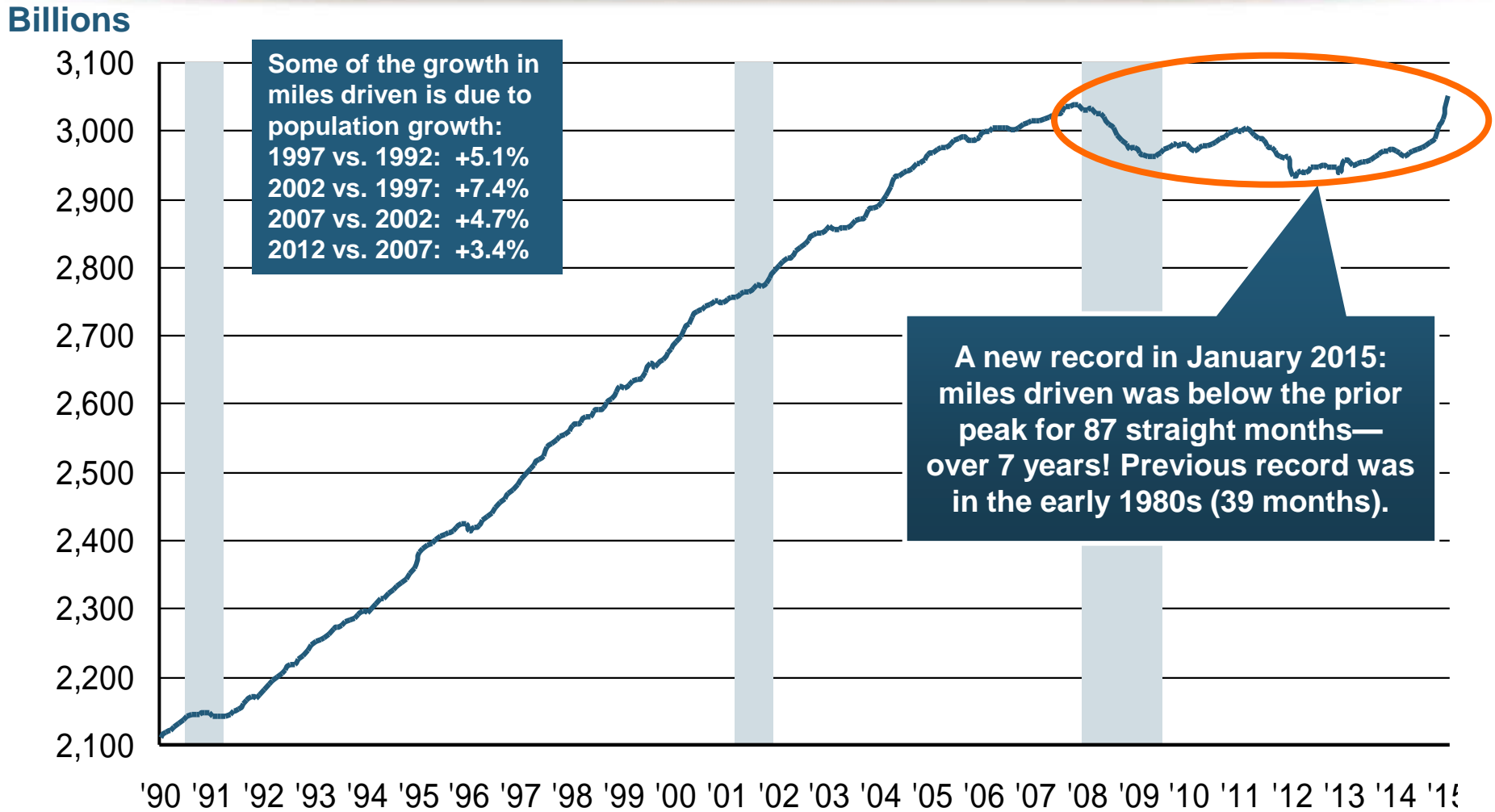
Net Written Premium/GDP

(NWP/Nominal GDP)



Sources: Insurance Information Institute calculation using data from A.M. Best, Bureau of Economic Analysis.

Something Unusual is Happening: Miles Driven*, 1990–2015

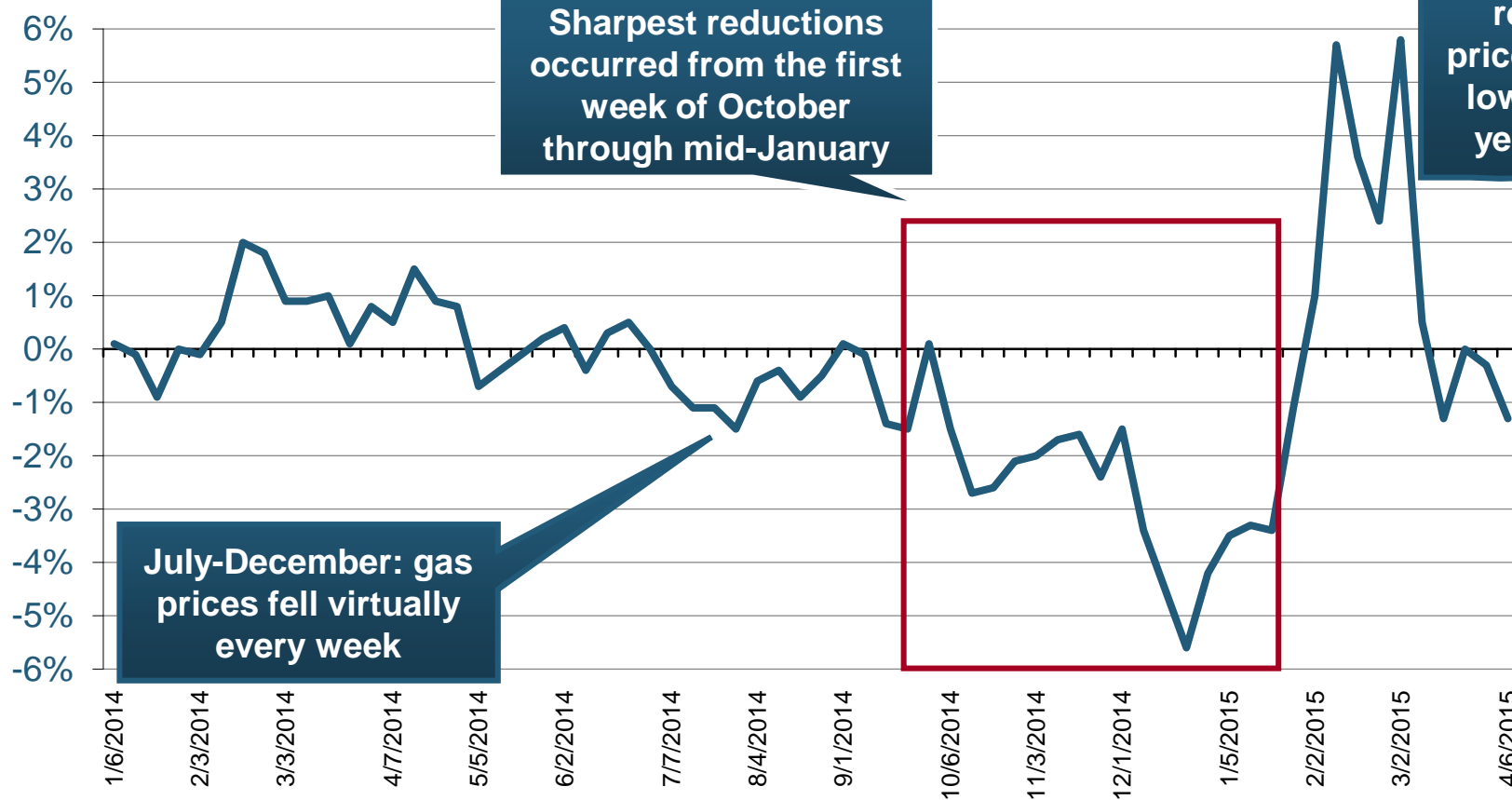


*Moving 12-month total. The 2015 figure is through January 2015, the latest available.
 Note: Recessions indicated by gray shaded columns.

Sources: Federal Highway Administration (http://www.fhwa.dot.gov/policyinformation/travel_monitoring/tvt.cfm);
 National Bureau of Economic Research (recession dates); Insurance Information Institute.

The Price of Gas, Weekly Percent Change, 2014-15

% Change in Avg. Price /Gallon



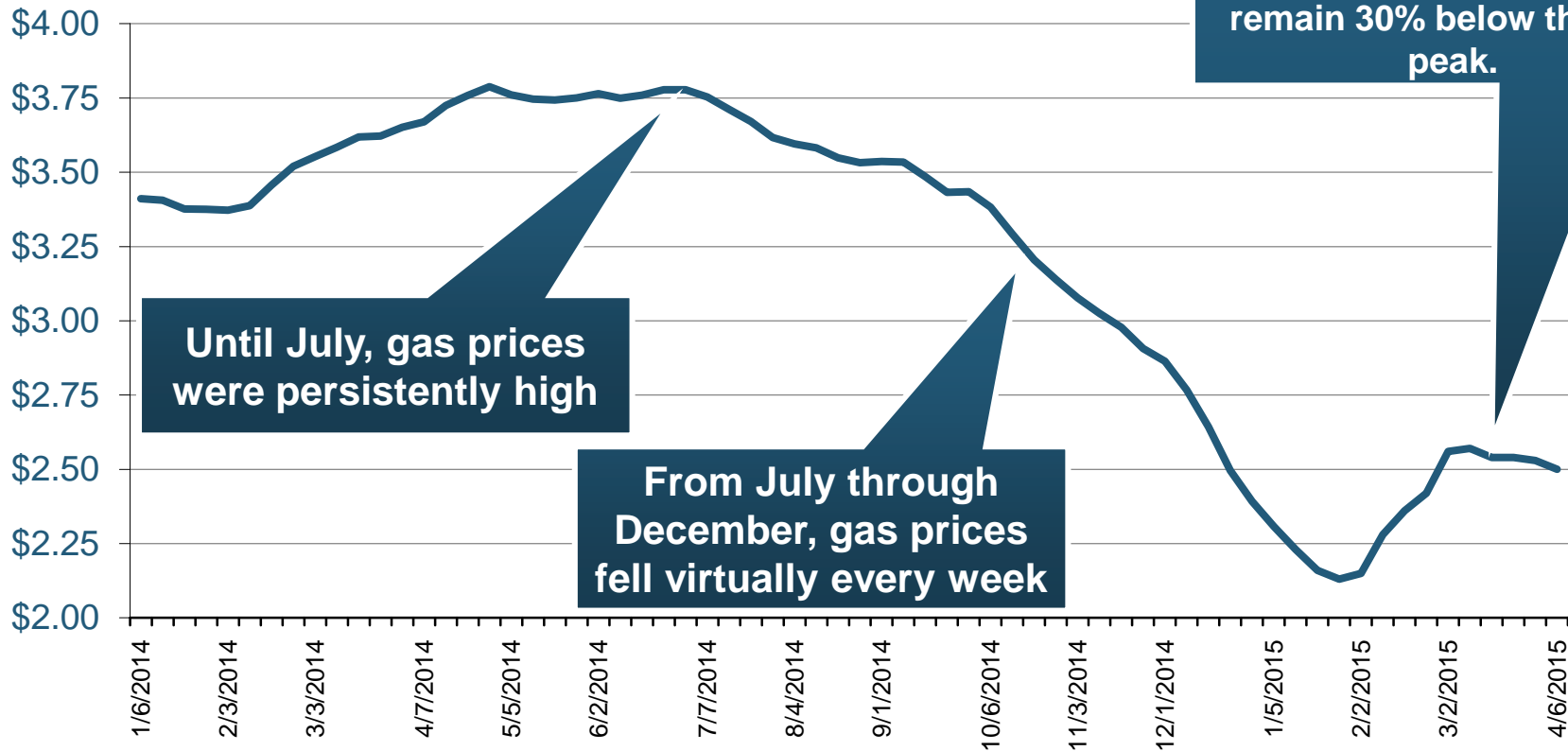
**Over the Course of the Second Half of the 2014 Calendar Year,
Gas Prices Fell 34%.**

Price is Weekly U.S. All Grades All Formulations Retail Gasoline Prices

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

The Price of Gas, 2014-2015

Avg. Price /Gallon



Until July, gas prices were persistently high

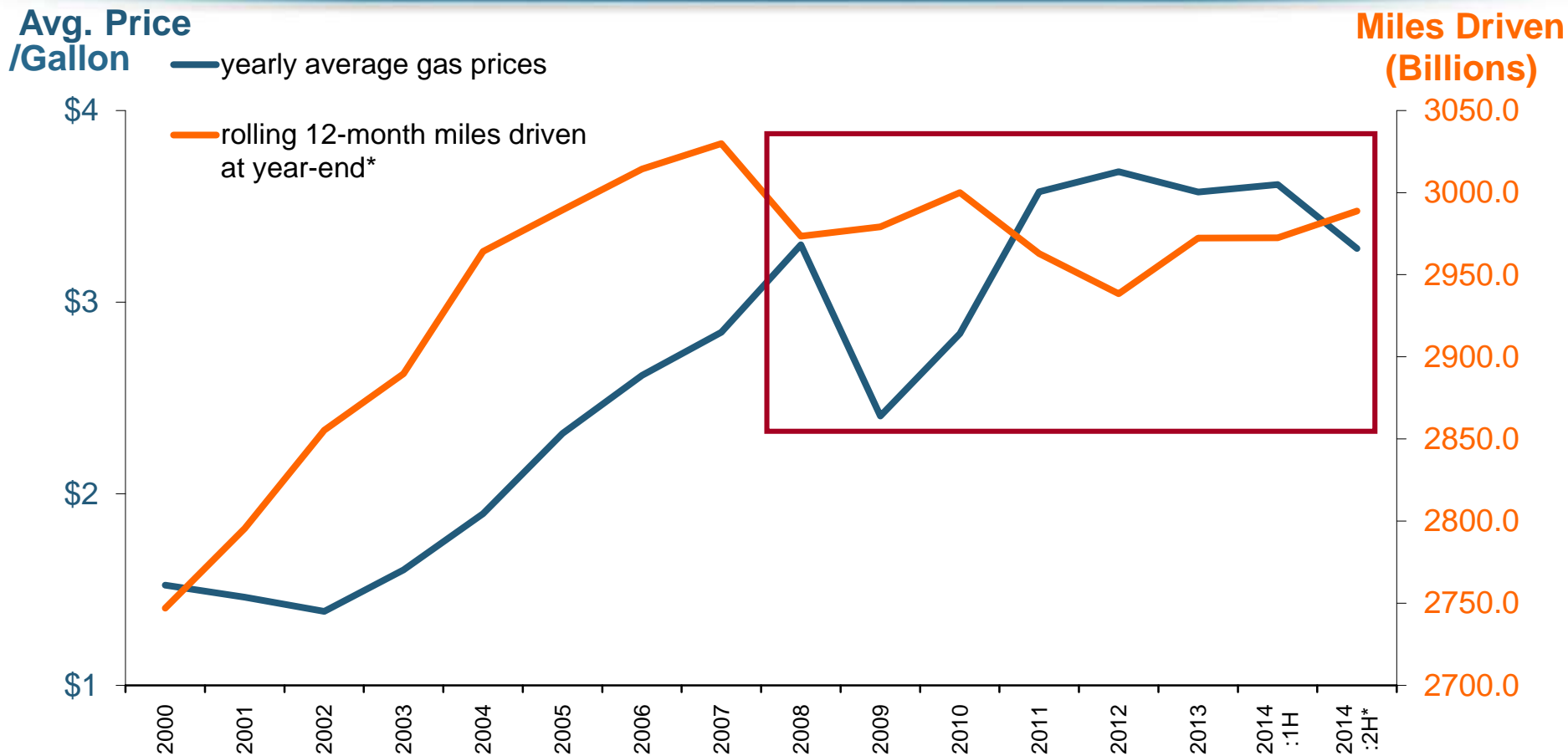
From July through December, gas prices fell virtually every week

Even after rebound, prices remain 30% below the July peak.

Over the Course of the Second Half of the 2014 Calendar Year, Gas Prices Fell 34%.

Price is Weekly U.S. All Grades All Formulations Retail Gasoline Prices
Sources: Federal Energy Administration (<http://www.eia.gov/petroleum/gasdiesel/>); I.I.I.

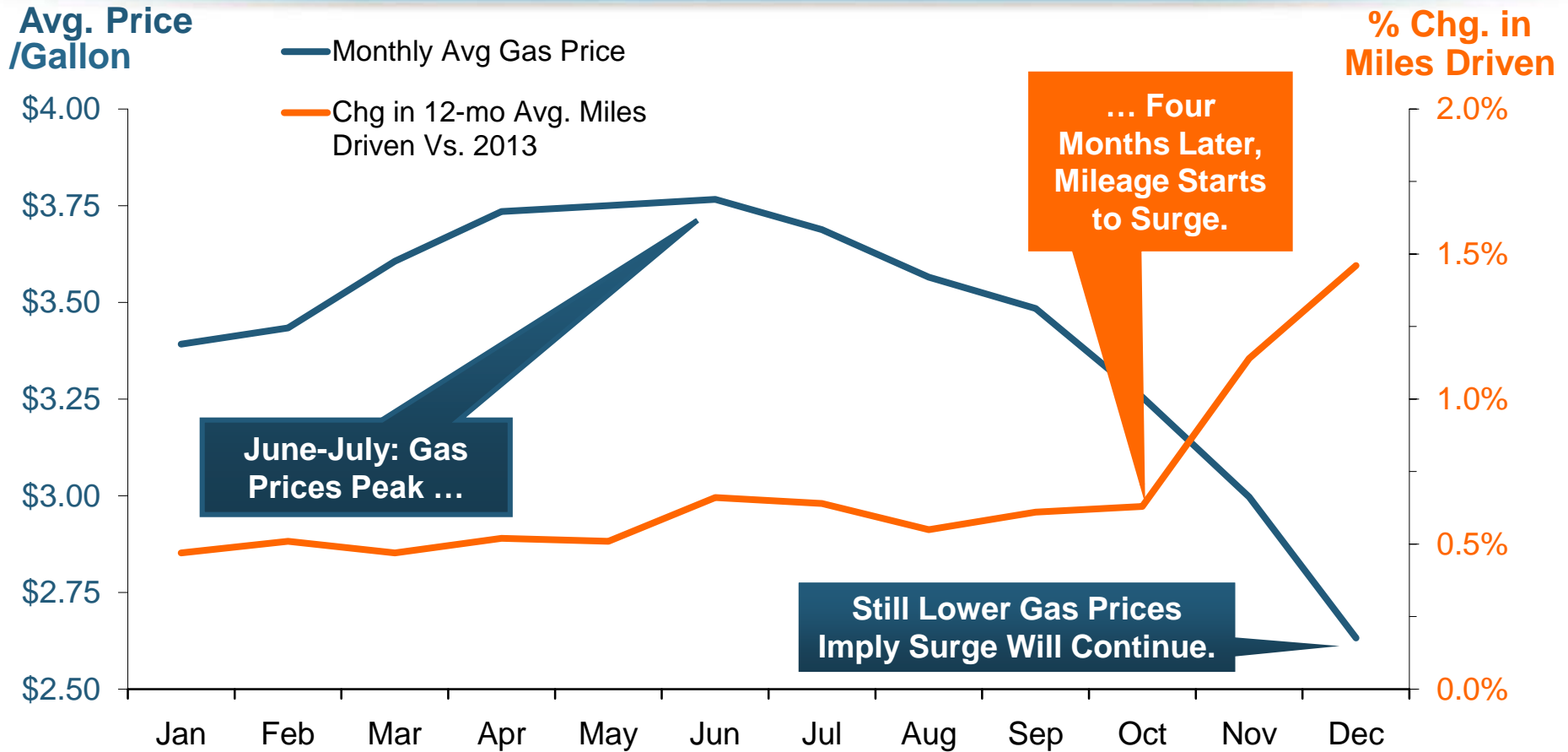
Do Changes in Gas Prices Affect Miles Driven? 2000-2014



Miles driven rose from 2000 to 2007 despite a fairly steady rise in gas prices. Miles driven fell, then recovered (2008-2011) from the Great Recession and tracked flat gas prices in 2011-2014.

Sources: Federal Energy Administration (<http://www.eia.gov/petroleum/gasdiesel/>); *gas prices and miles driven through December
 Federal Highway Administration (<http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm>); I.I.I.

Do Changes in Gas Prices Affect Miles Driven? A Look at 2014



Prior research on the relationship between gas prices and miles driven says that, in the short run, an increase in gas prices produces little change in miles driven. No recent research on the effect of price drops.

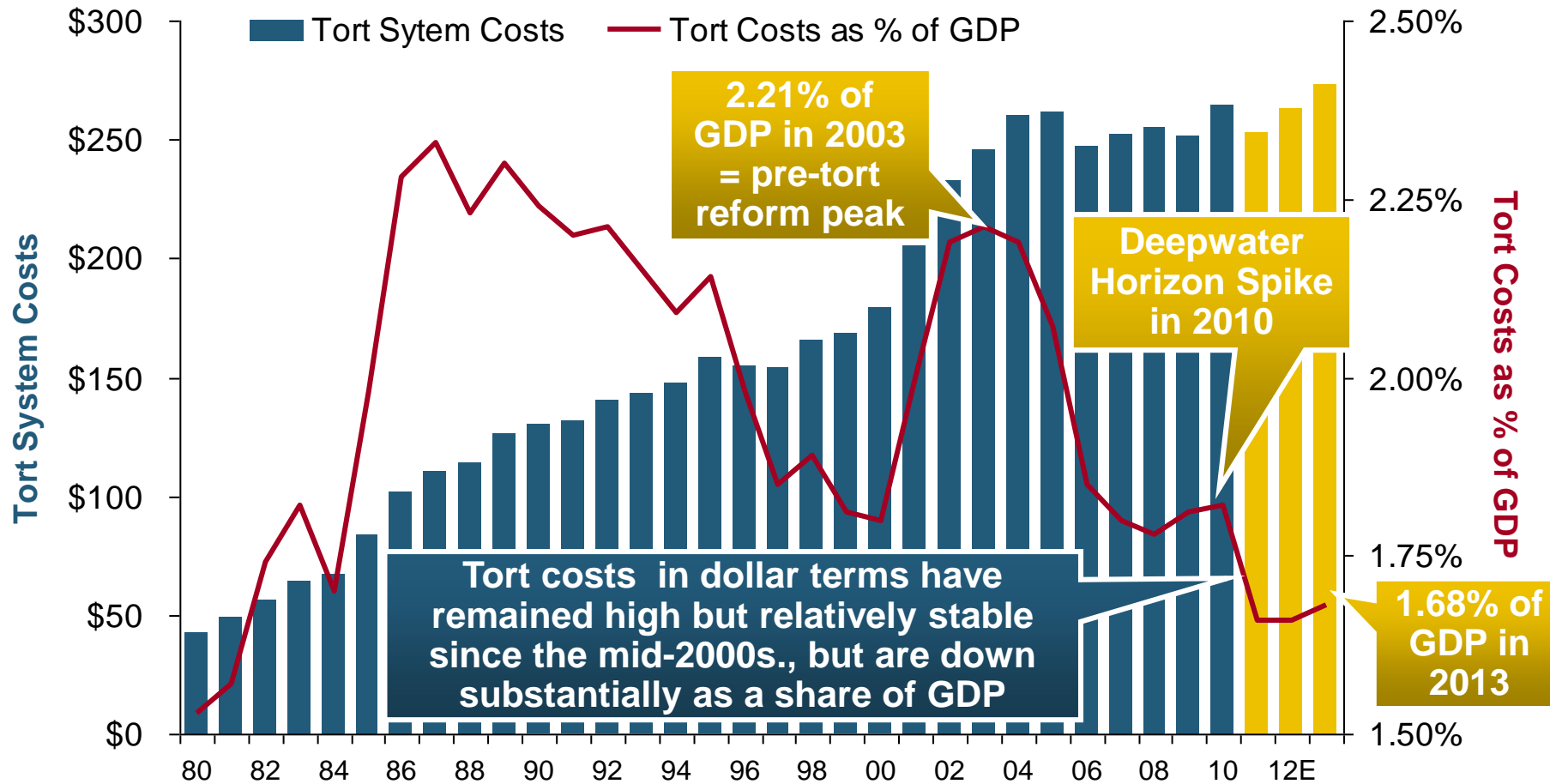
Sources: Federal Energy Administration (<http://www.eia.gov/petroleum/gasdiesel/>); *gas prices and miles driven through December Federal Highway Administration (<http://www.fhwa.dot.gov/ohim/tvtw/tvtpage.cfm>); I.I.I.

Shifting Legal Liability & Tort Environment

Will the Tort Pendulum Swing Against Insurers?

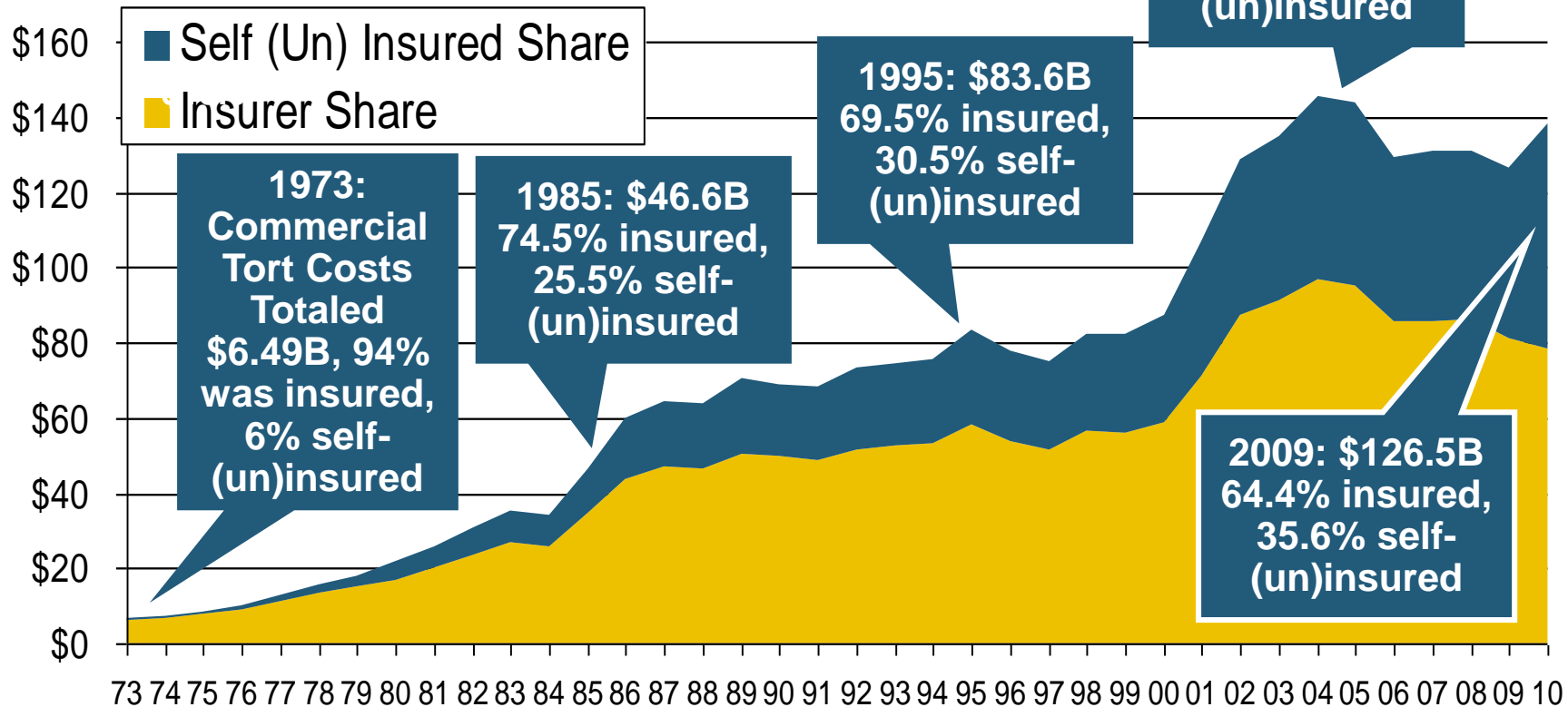
Over the Last Three Decades, Total Tort Costs as a % of GDP Appear Somewhat Cyclical, 1980-2013E

(\$ Billions)



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

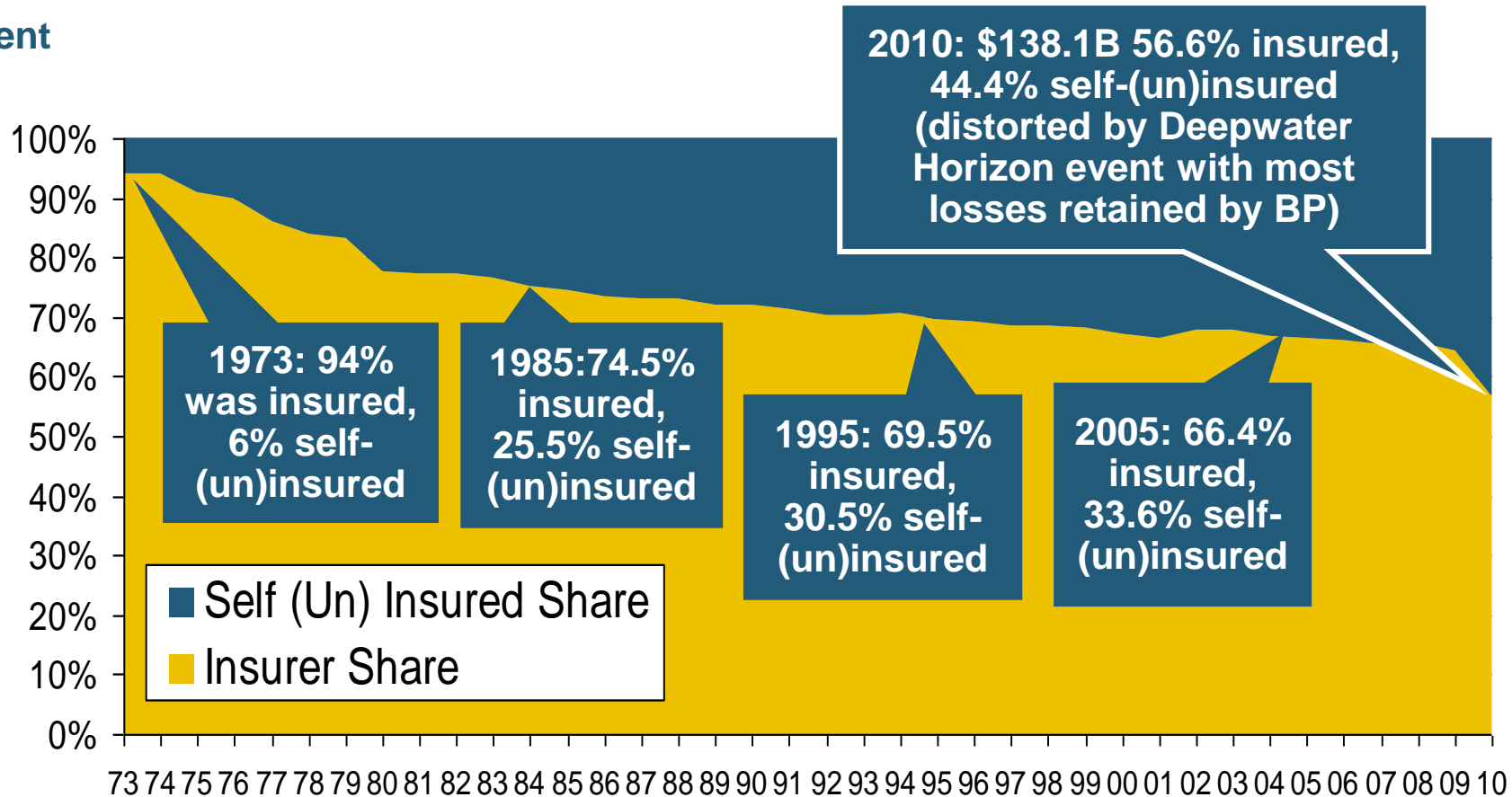
Billions of Dollars



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 2012

Best States

1. Delaware
2. Nebraska
3. Wyoming
4. Minnesota
5. Kansas
6. Idaho
7. Virginia
8. North Dakota
9. Utah
10. Iowa

New in 2012

- Wyoming
- Minnesota
- Kansas
- Idaho

Drop-offs

- Indiana
- Colorado
- Massachusetts
- South Dakota

Worst States

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

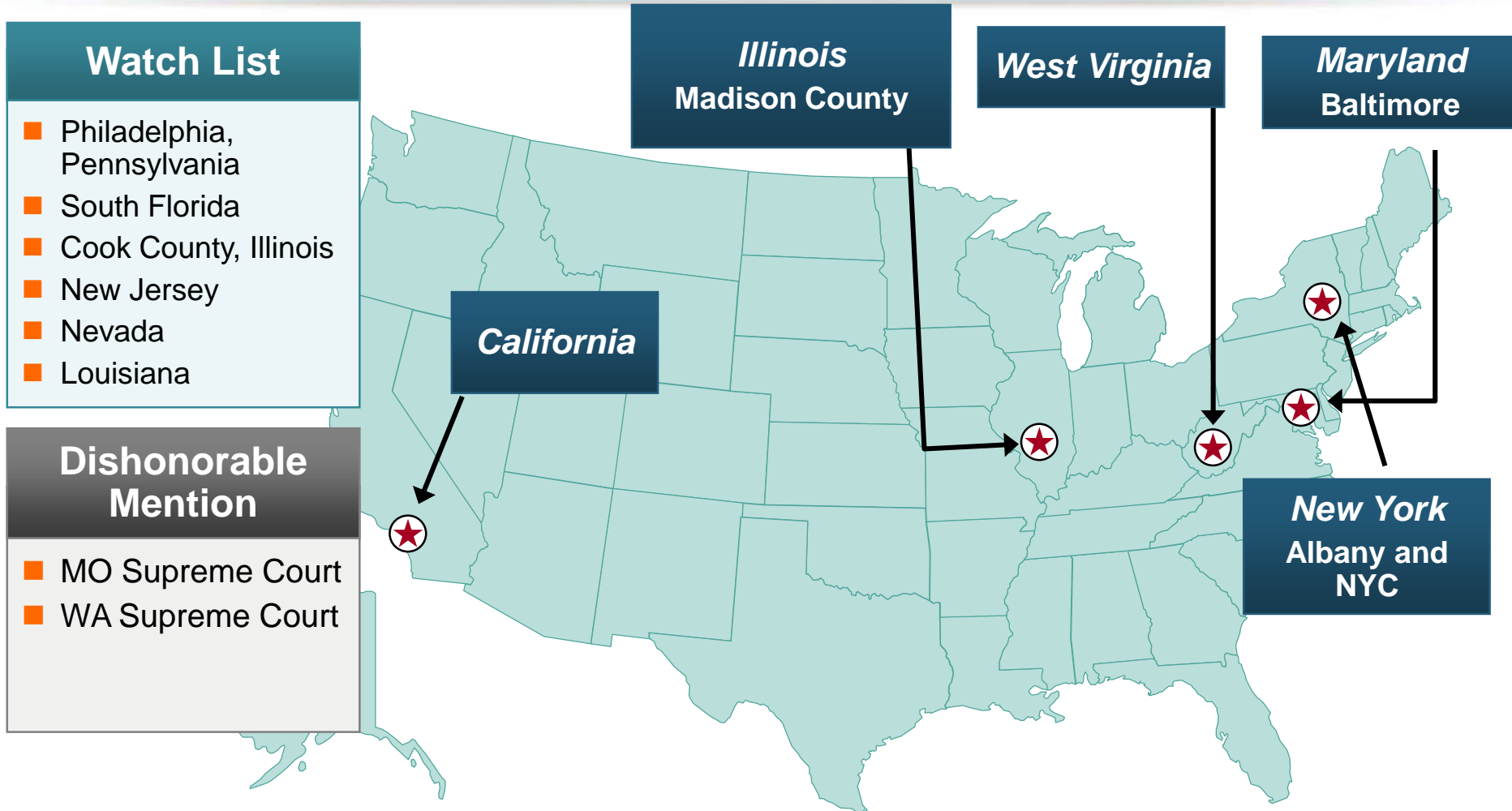
Newly Notorious

- Oklahoma

Rising Above

- Arkansas

The Nation's Judicial Hellholes: 2012/2013



Insurance Information Institute Online:

www.iii.org

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and your attention!*

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