



**P/C Insurance in the  
Post-Crisis World:  
*Opportunities and Challenges in  
U.S. and Texas Markets***

**Insurance Council of Texas  
Annual Insurance Symposium  
Austin, TX**

**July 18, 2013**

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

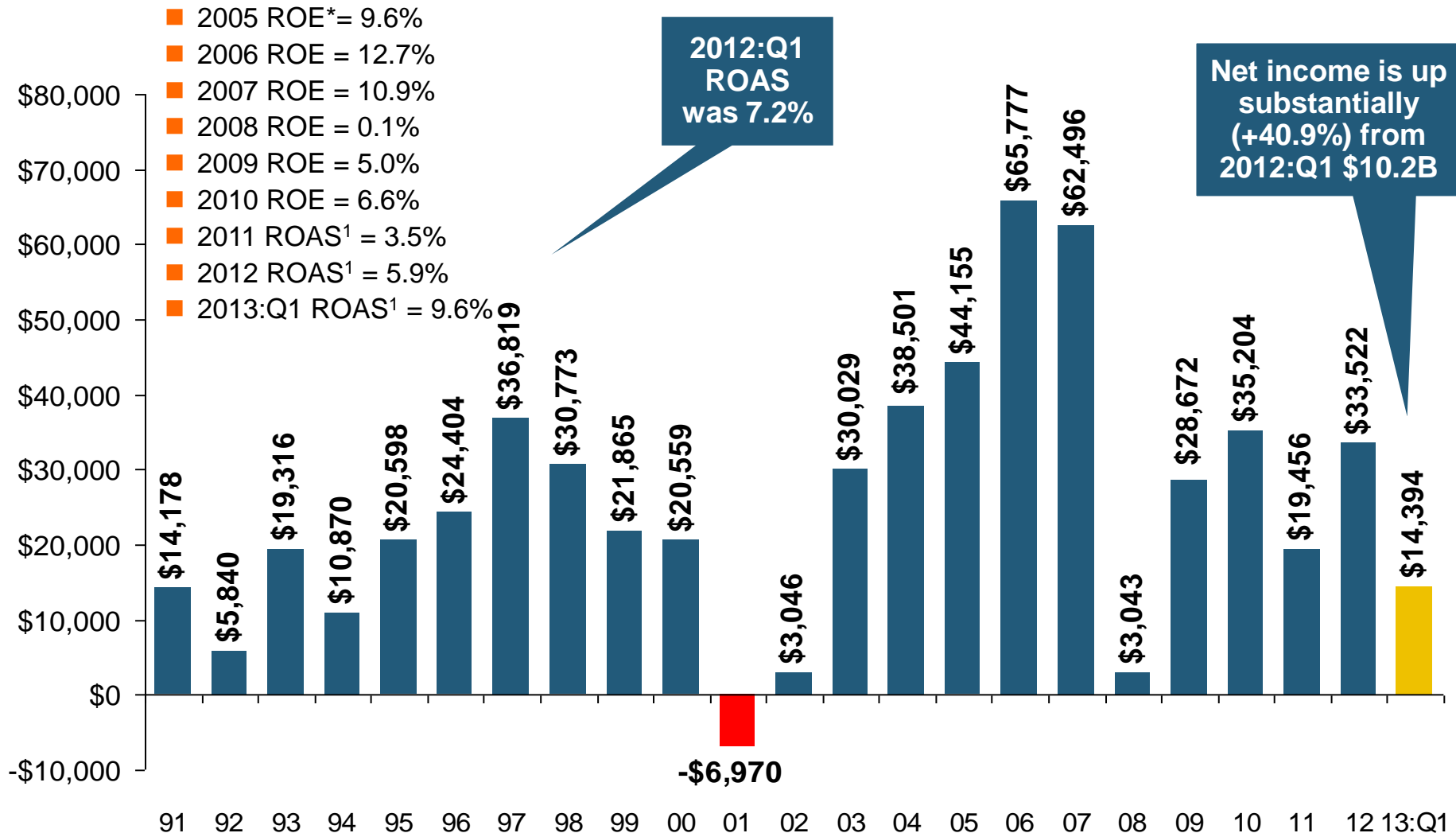
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# P/C Insurance Industry Financial Overview

**Profit Recovery in 2012 After  
High CAT Losses; Ultimate  
Impact of Sandy Still Unclear**

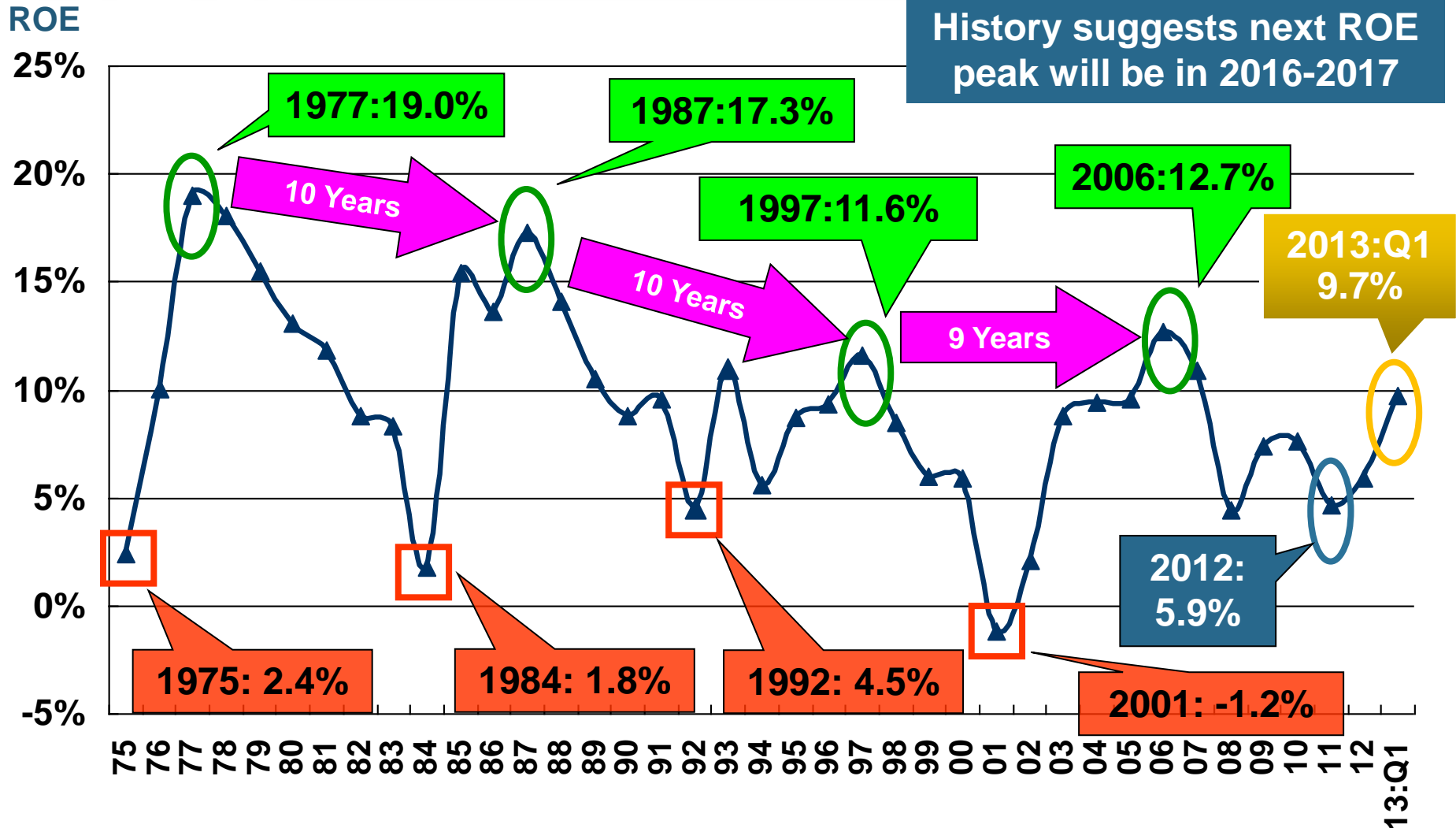
# P/C Net Income After Taxes 1991–2013:Q1 (\$ Millions)



\*ROE figures are GAAP; <sup>1</sup>Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 9.7% ROAS in 2013:Q1, 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 – 2013:Q1\*

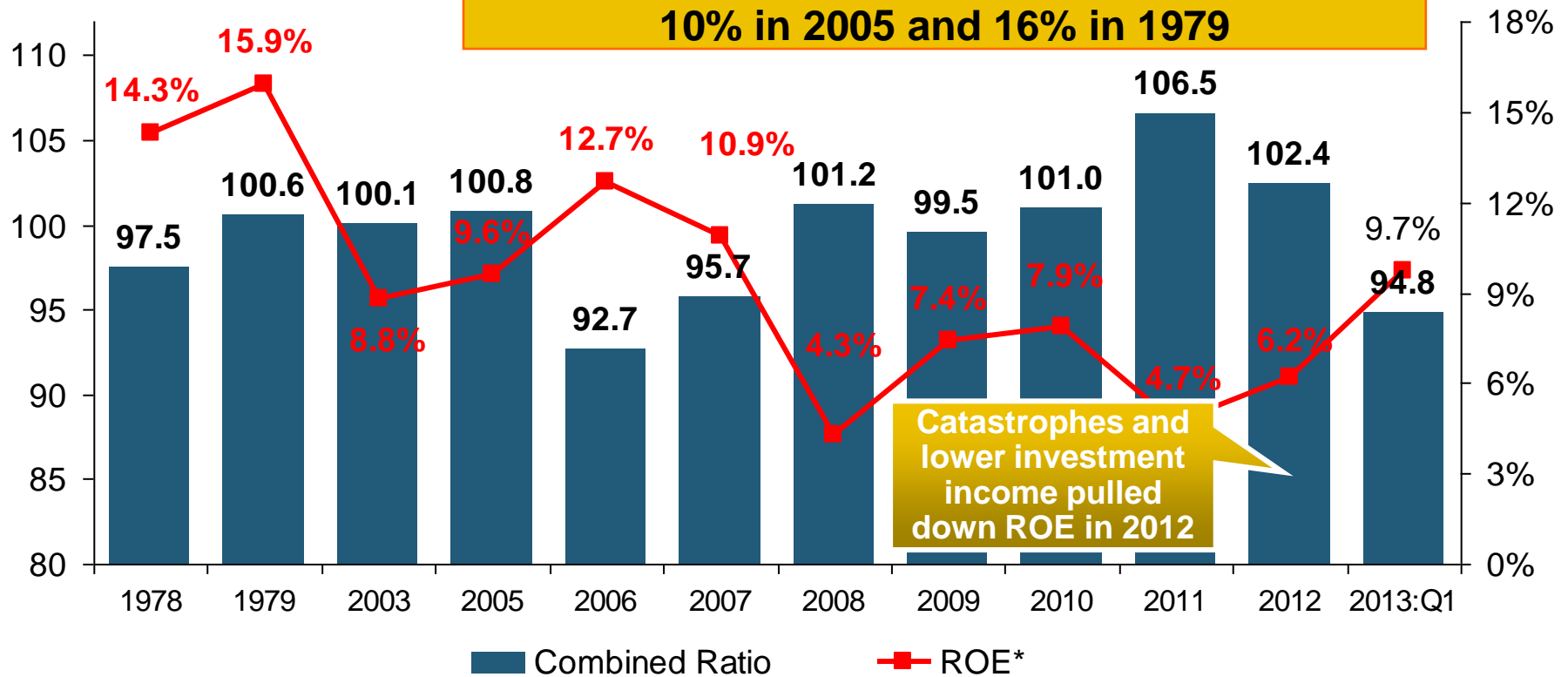


\*Profitability = P/C insurer ROEs. 2011-13 figures are estimates based on ROAS data. Note: Data for 2008-2013 exclude mortgage and financial guaranty insurers.

# 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, ~7.5% ROE in 2009/10, 10% in 2005 and 16% in 1979



Catastrophes and lower investment income pulled down ROE in 2012

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

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

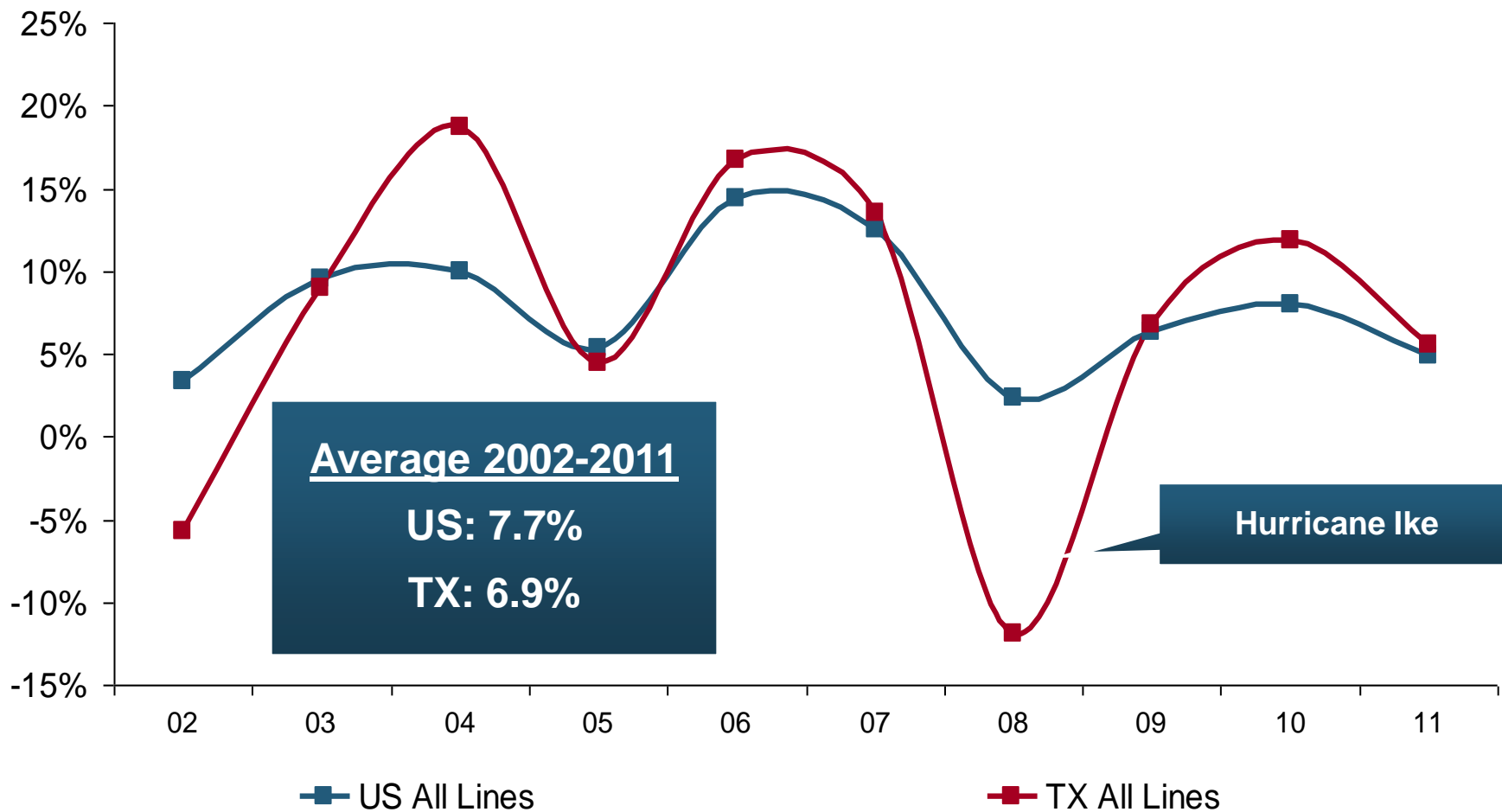


# Profitability and Growth in the Texas P/C Insurance Markets

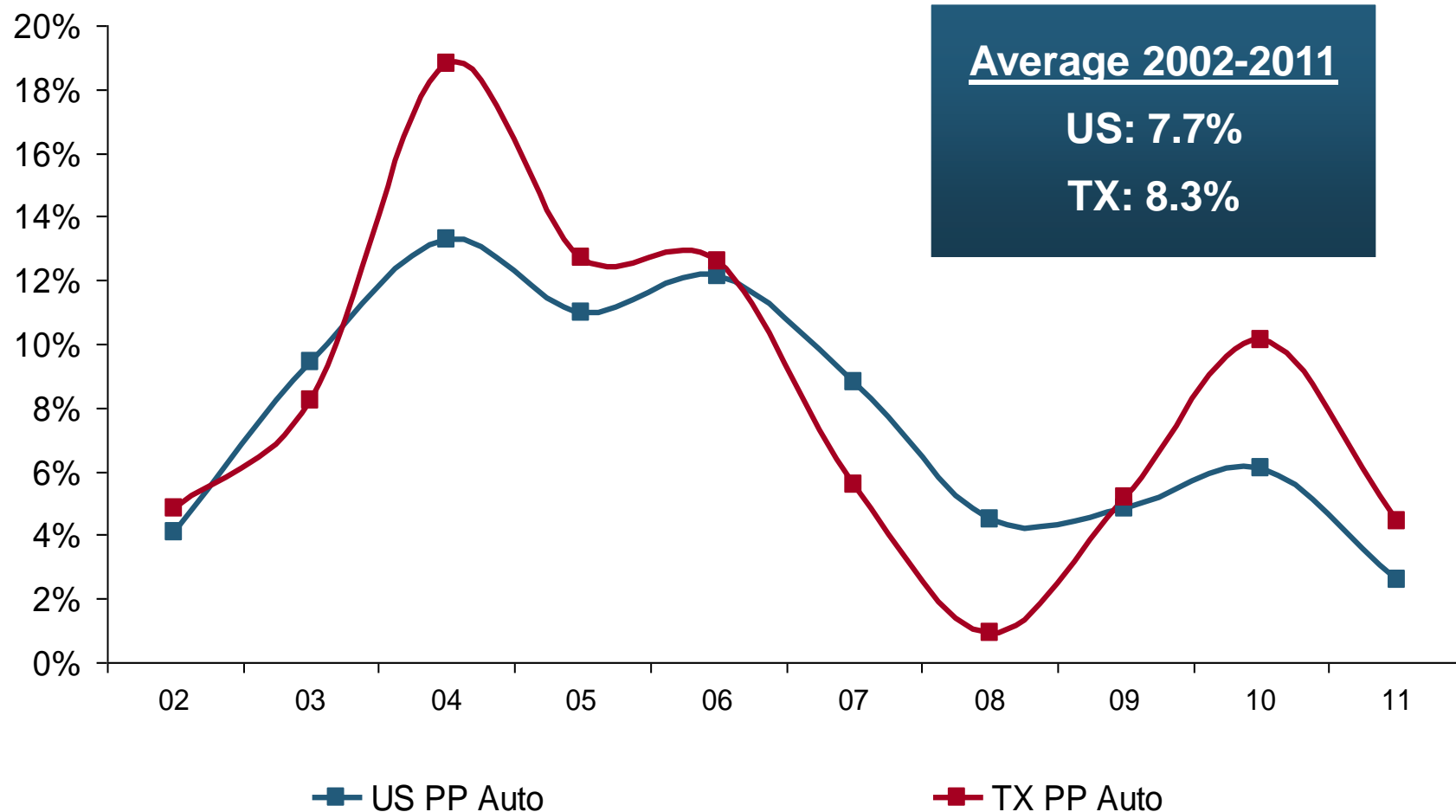
## Analysis by Line and Nearby State Comparisons

# RNW All Lines: TX vs. U.S., 2002-2011

(Percent)



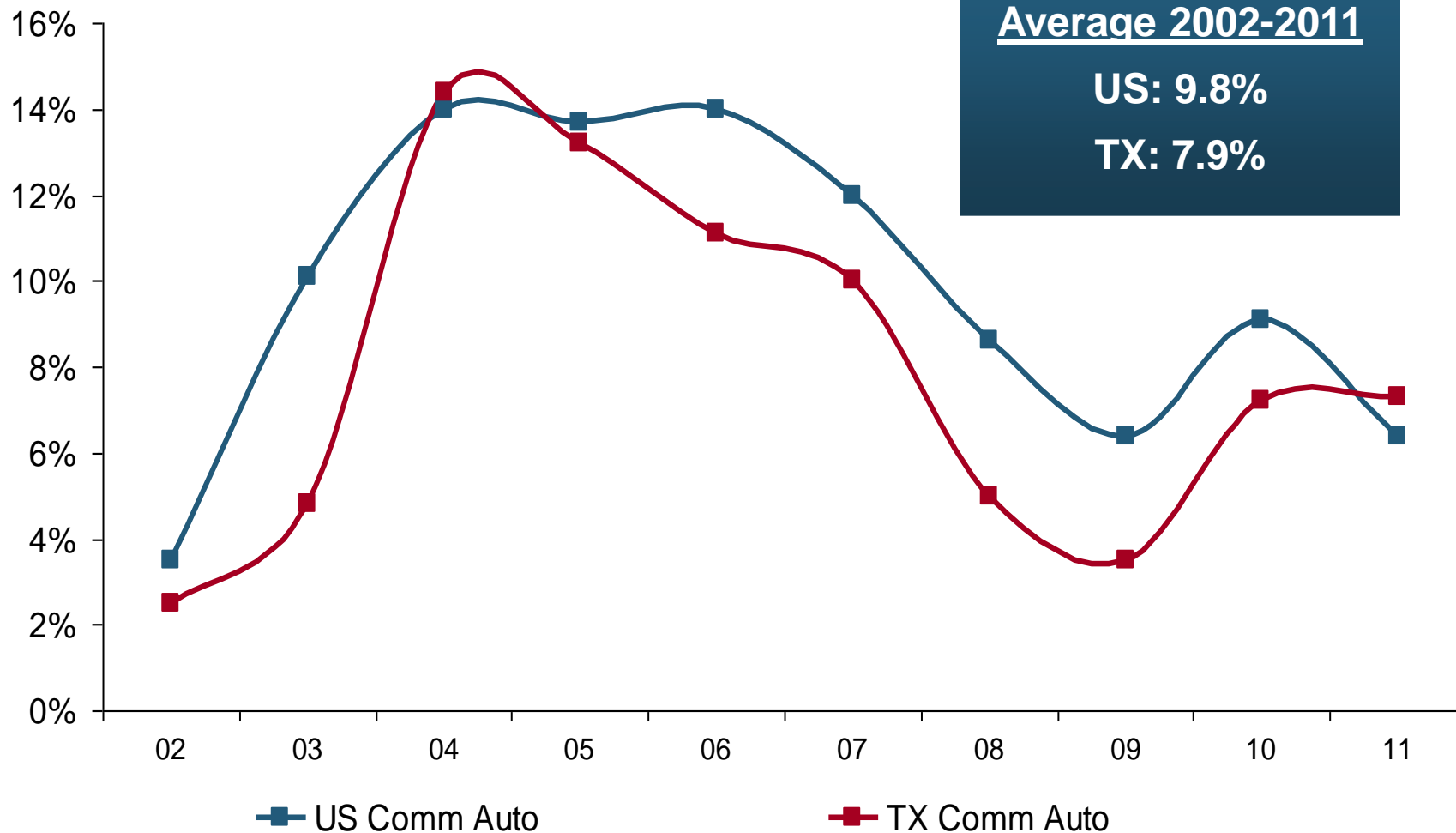
# RNW PP Auto: TX vs. U.S., 2002-2011





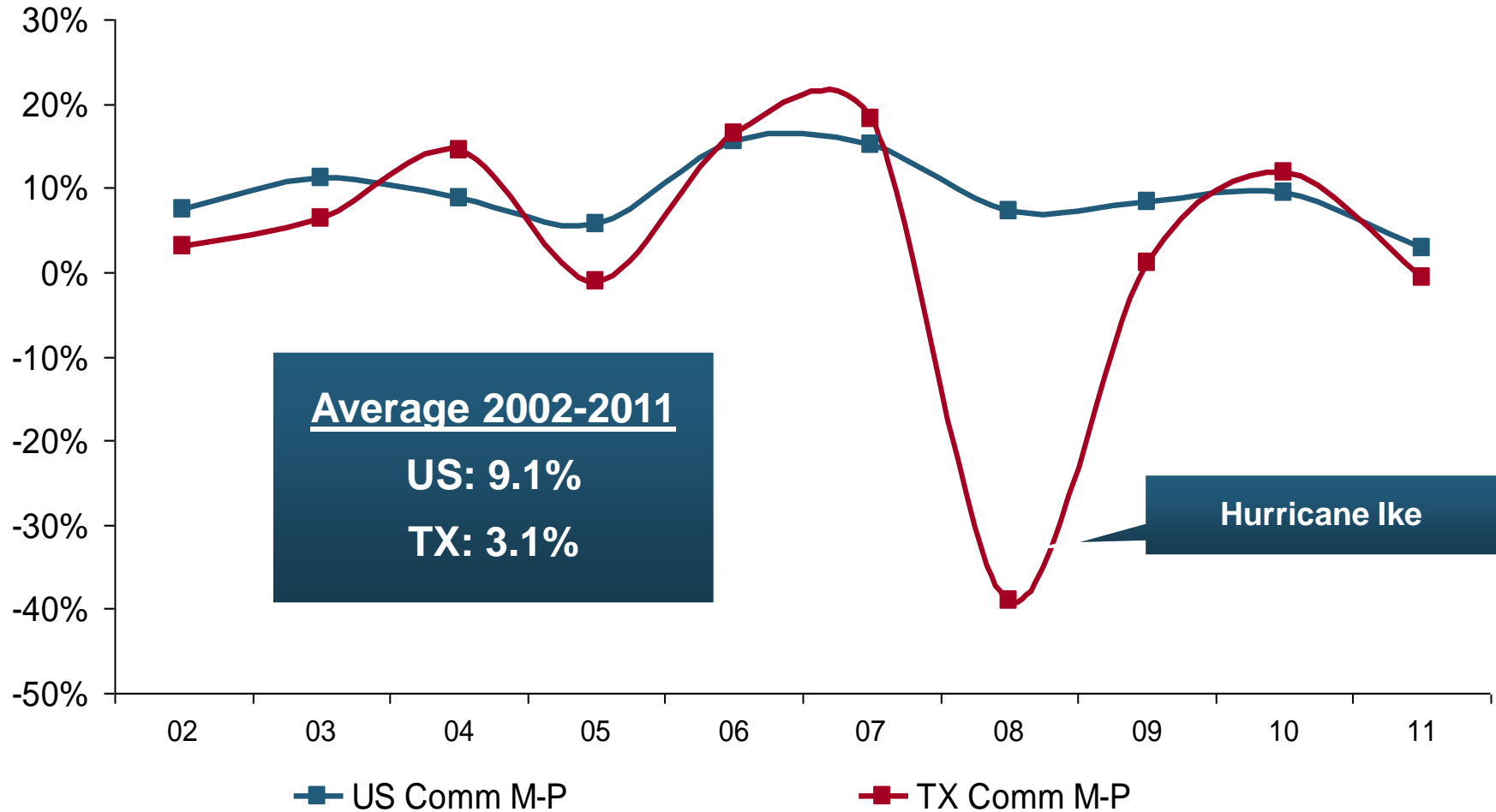
# RNW Comm. Auto: TX vs. U.S., 2002-2011

(Percent)



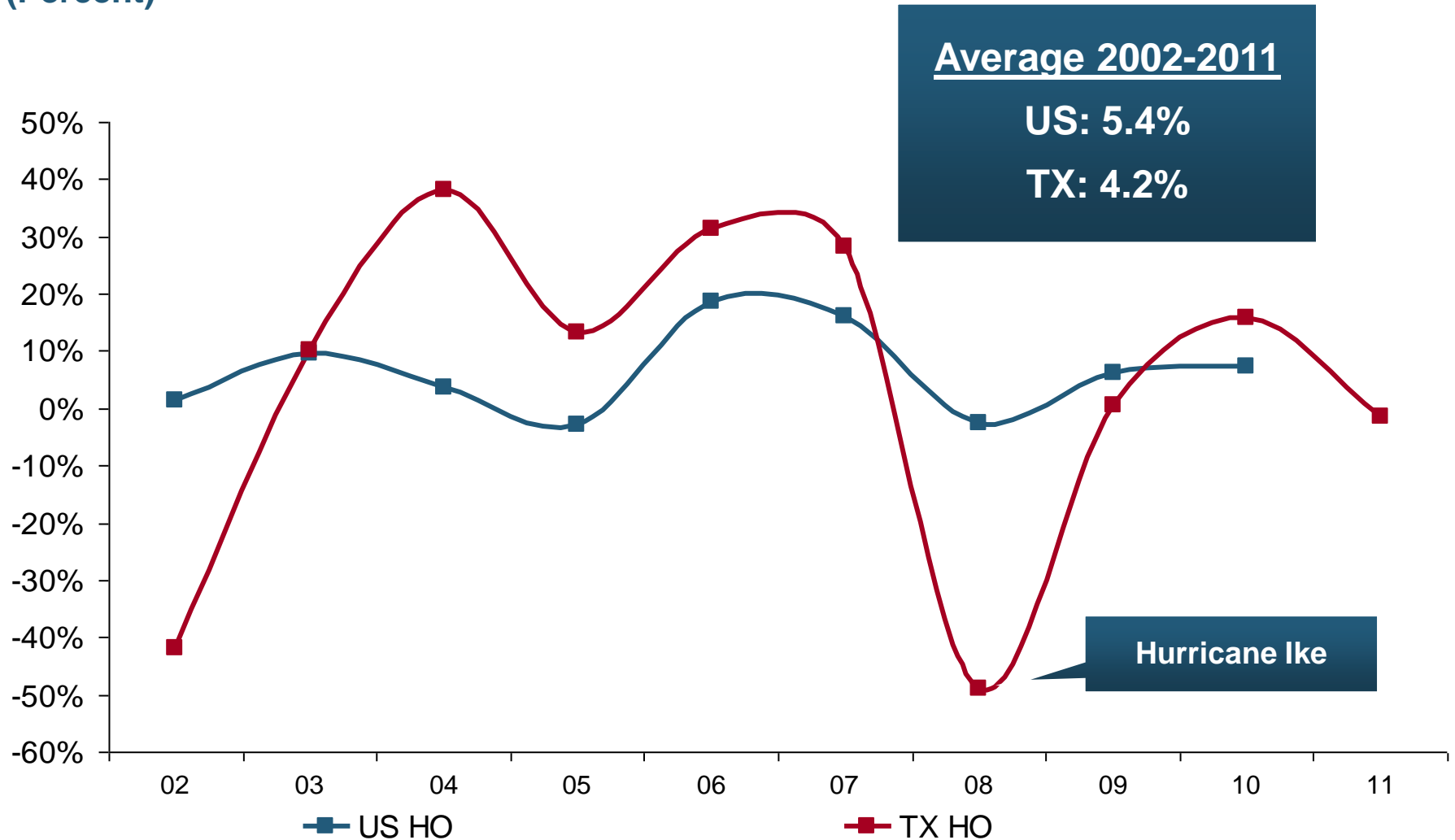
# RNW Comm. Multi-Peril: TX vs. U.S., 2002-2011

(Percent)



# RNW Homeowners: TX vs. U.S., 2002-2011

(Percent)



# Top Ten Most Expensive And Least Expensive States For Homeowners Insurance, 2010

**Texas ranked as the most expensive state for homeowners insurance in 2010, with an average expenditure of \$1,560.**

Rank (1)	Most expensive states	HO average premium (2)	Rank	Least expensive states	HO average premium (2)
1	<b>Texas (2)</b>	<b>\$1,560</b>	1	Idaho	\$500
2	Louisiana (3)	1,546	2	Oregon	535
3	Florida (4)	1,544	3	Utah	558
4	Oklahoma	1,246	4	Wisconsin	563
5	Mississippi	1,217	5	Washington	595
6	Rhode Island	1,092	6	Ohio	614
7	Kansas	1,066	7	Delaware	636
8	District Of Columbia	1,065	8	Arizona	666
9	Connecticut	1,052	9	Maine	676
10	Alabama	1,050	10	South Dakota	678

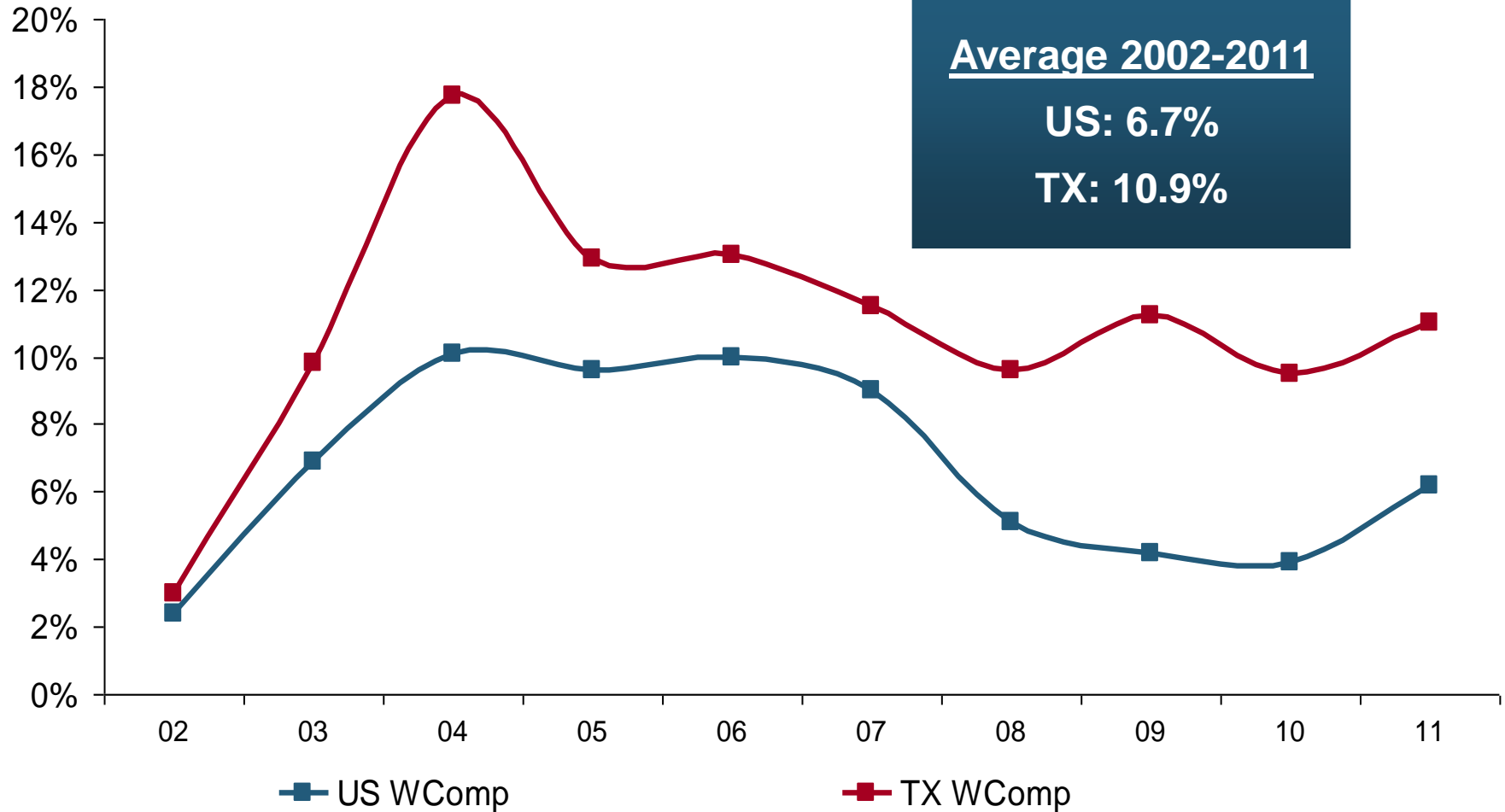
- (1) Based on the HO-3 homeowner package policy for owner-occupied dwellings, 1 to 4 family units. Provides “all risks” coverage (except those specifically excluded in the policy) on buildings and broad named-peril coverage on personal property, and is the most common package written.
- (2) The Texas Department of Insurance developed home insurance policy forms that are similar but not identical to the standard forms. Note: Average premium=Premiums/exposure per house years. A house year is equal to 365 days of insured coverage for a single dwelling. The NAIC does not rank State Average Expenditures and does not endorse any conclusions drawn from this data.
- (3) Policies written by Citizens Property Insurance (Louisiana), are not included.
- (4) Policies written by Citizens Property Insurance (Florida), are not included.

Note: Average premium=Premiums/exposure per house years. A house year is equal to 365 days of insured coverage for a single dwelling. The NAIC does not rank state average expenditures and does not endorse any conclusions drawn from this data.

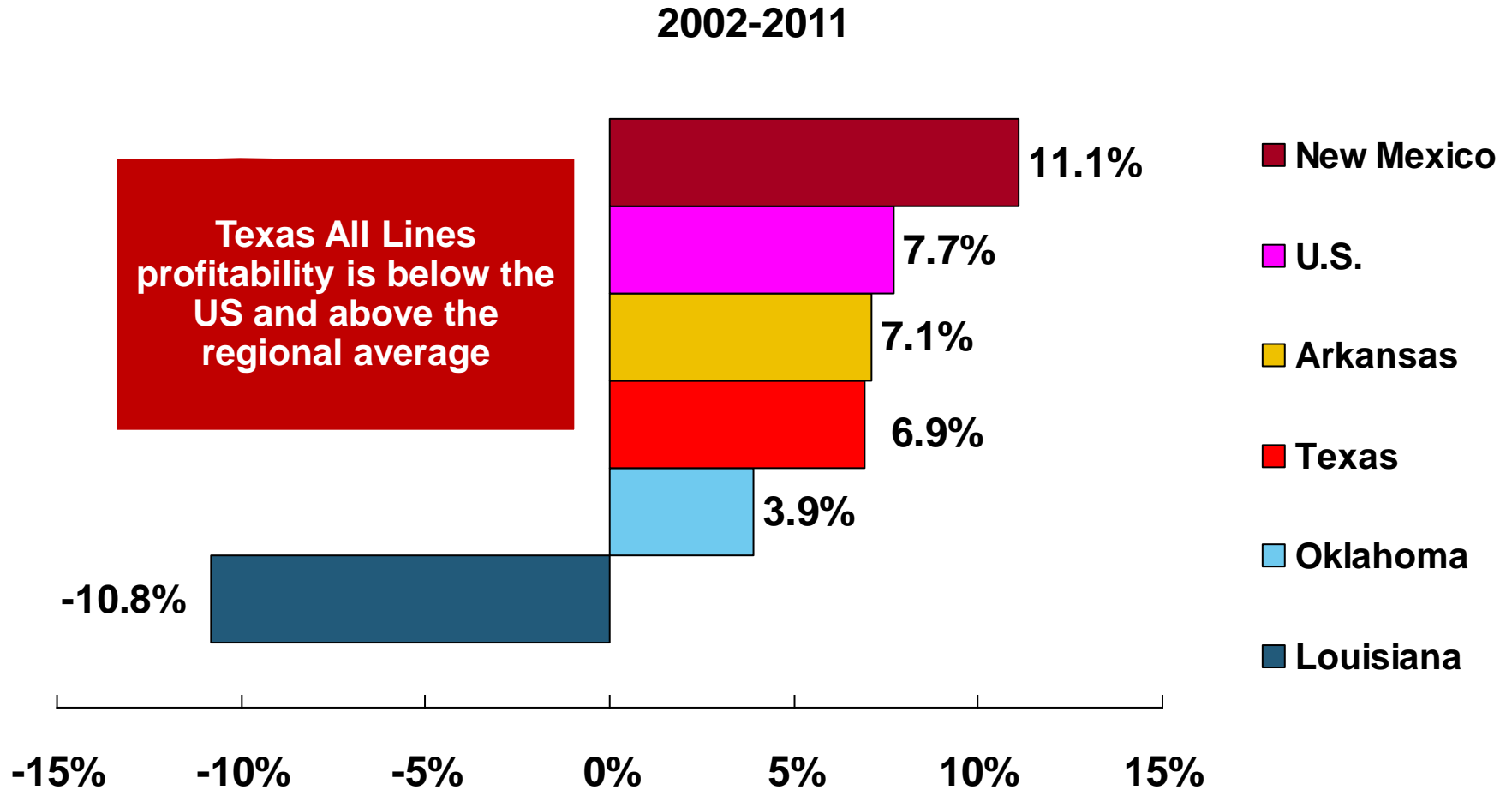
Source: © 2012 National Association of Insurance Commissioners (NAIC). Reprinted with permission. Further reprint or distribution strictly prohibited without written permission of NAIC.

# RNW Workers Comp: TX vs. U.S., 2002-2011

(Percent)



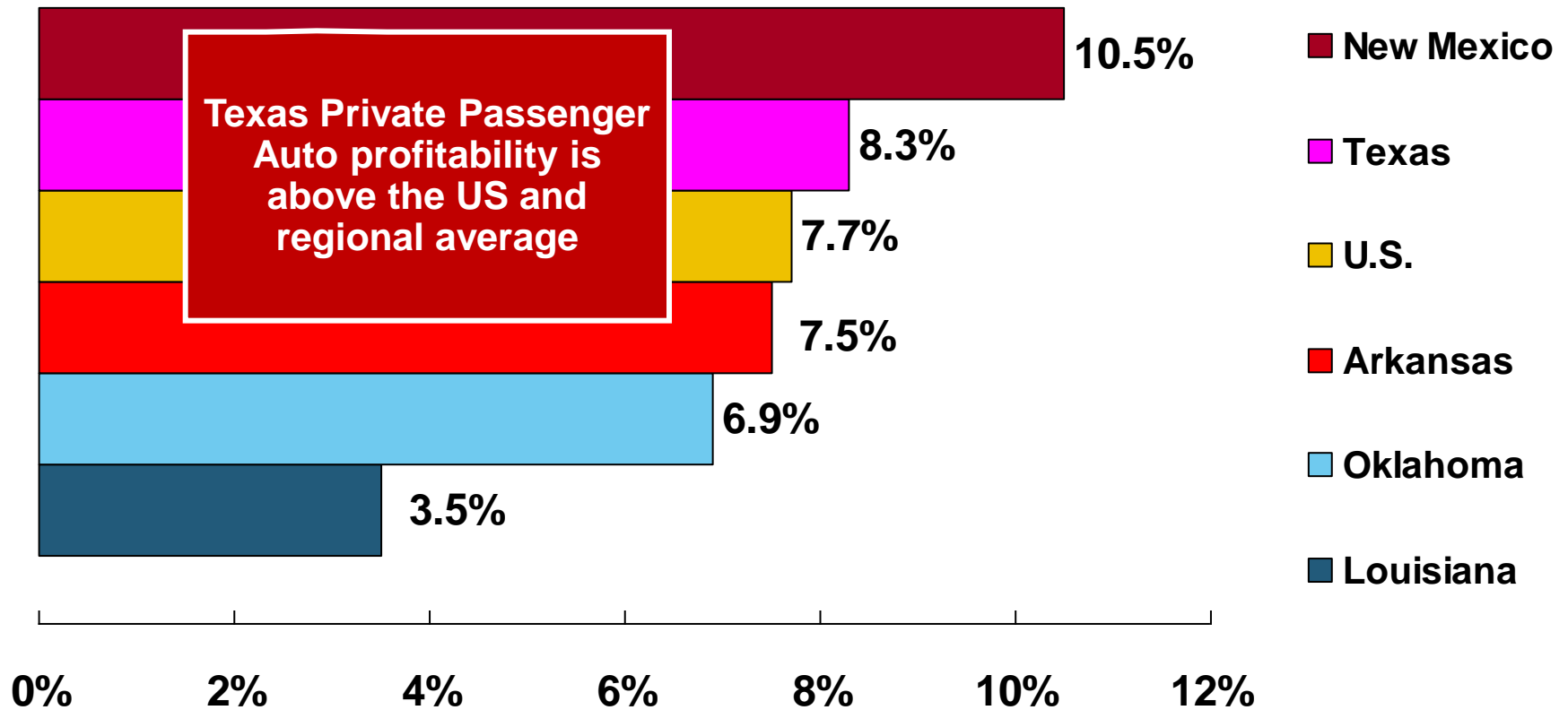
# All Lines: 10-Year Average RNW TX & Nearby States



Source: NAIC, Insurance Information Institute

# PP Auto: 10-Year Average RNW TX & Nearby States

2002-2011



Source: NAIC, Insurance Information Institute

# Top Ten Most Expensive And Least Expensive States For Automobile Insurance, 2010 (1)

Rank	Most expensive states	Average expenditure	Rank	Least expensive states	Average expenditure
1	New Jersey	\$1,157.30	1	South Dakota	\$525.16
2	District of Columbia	1,133.87	2	North Dakota	528.81
3	Louisiana	1,121.46	3	Iowa	546.59
4	New York	1,078.88	4	Idaho	547.78
5	Florida	1,036.76	5	Maine	582.29
6	Delaware	1,030.98	6	Nebraska	592.69
7	Rhode Island	984.95	7	North Carolina	599.90
8	Connecticut	965.22	8	Wisconsin	613.37
9	Maryland	947.70	9	Ohio	619.46
10	Michigan	934.60	10	Wyoming	621.08

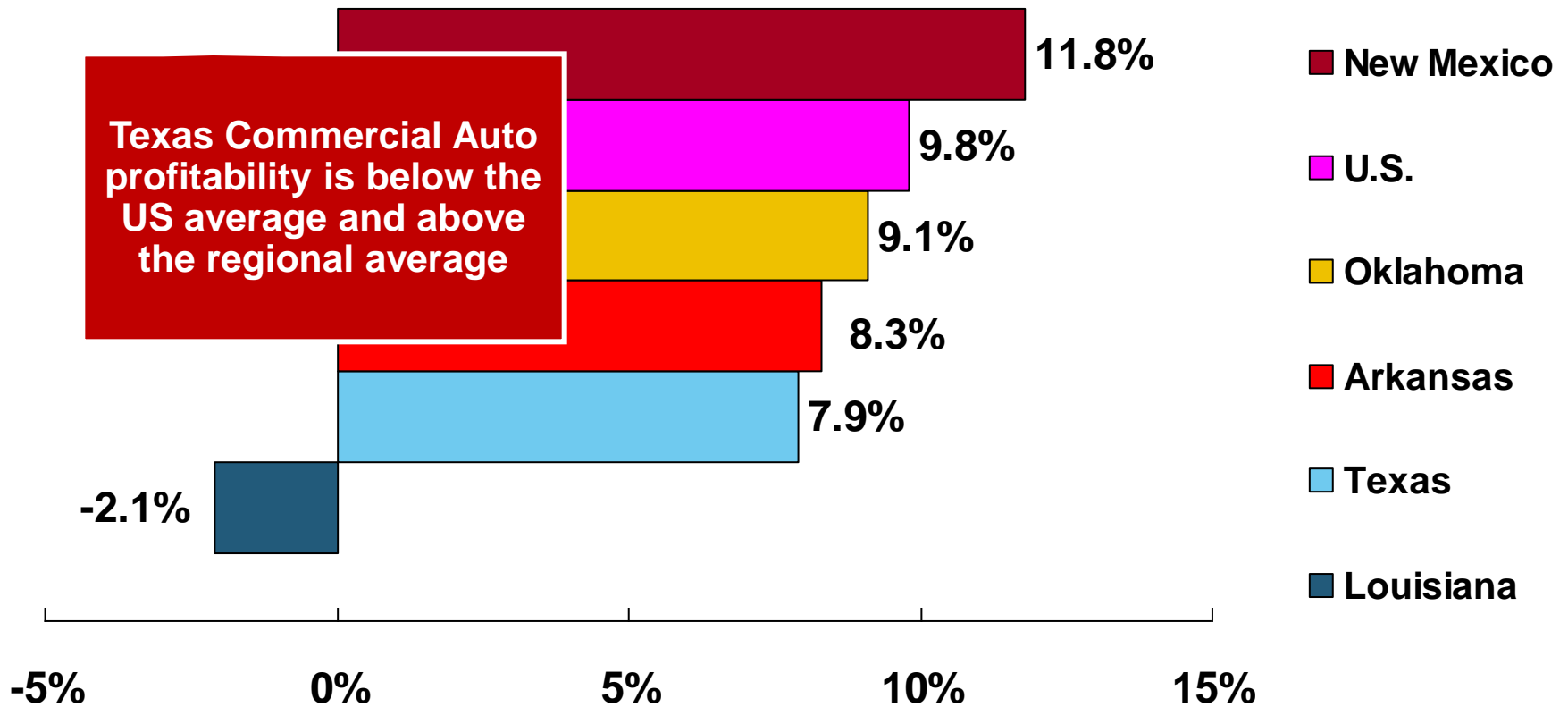
**Texas ranked as the 14th most expensive state in 2010, with an average expenditure for auto insurance of \$848.11.**

(1) Based on average automobile insurance expenditures.



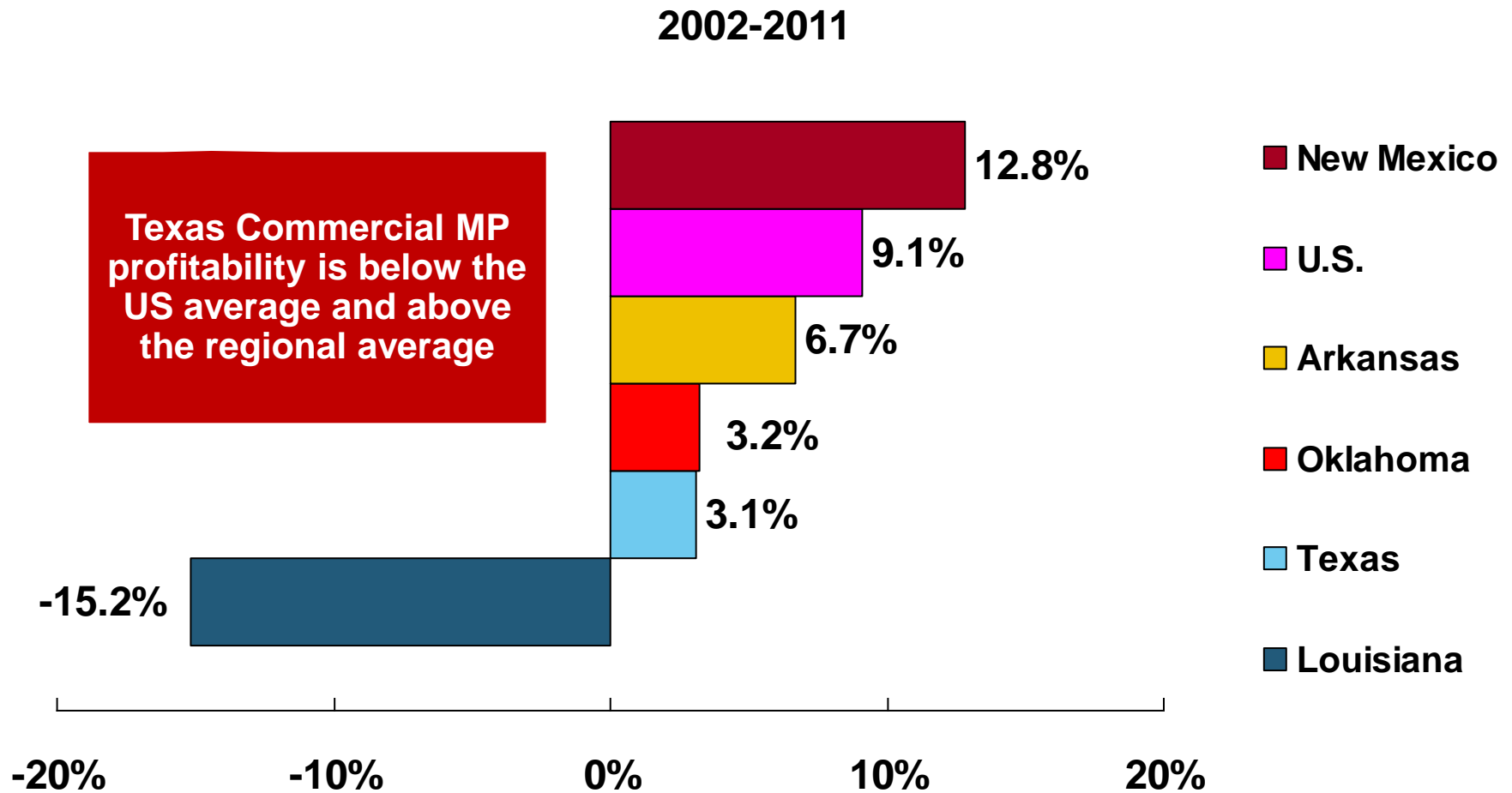
# Comm. Auto: 10-Year Average RNW TX & Nearby States

2002-2011



Source: NAIC, Insurance Information Institute

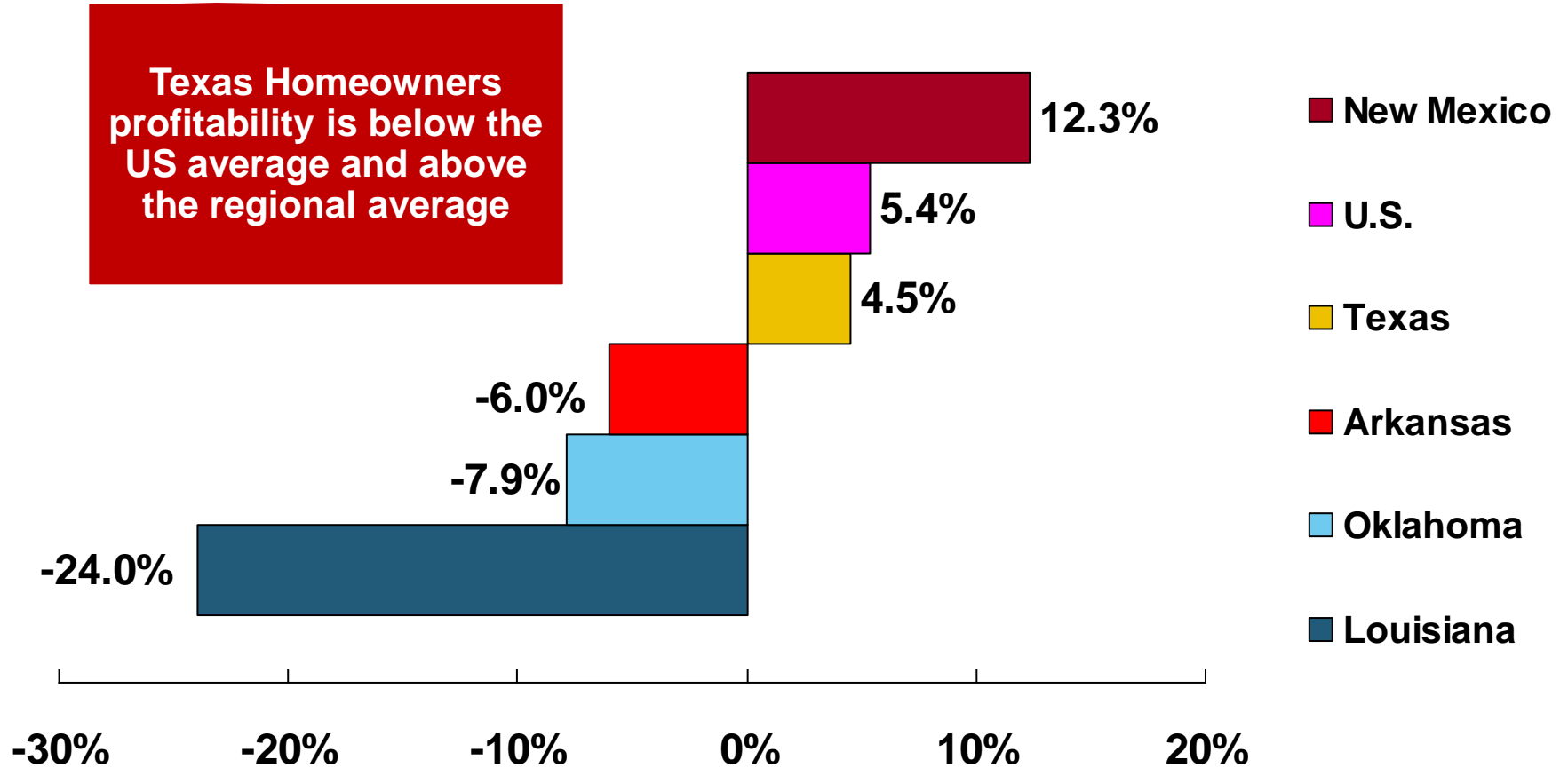
# Comm. M-P: 10-Year Average RNW TX & Nearby States



Source: NAIC, Insurance Information Institute

# Homeowners: 10-Year Average RNW TX & Nearby States

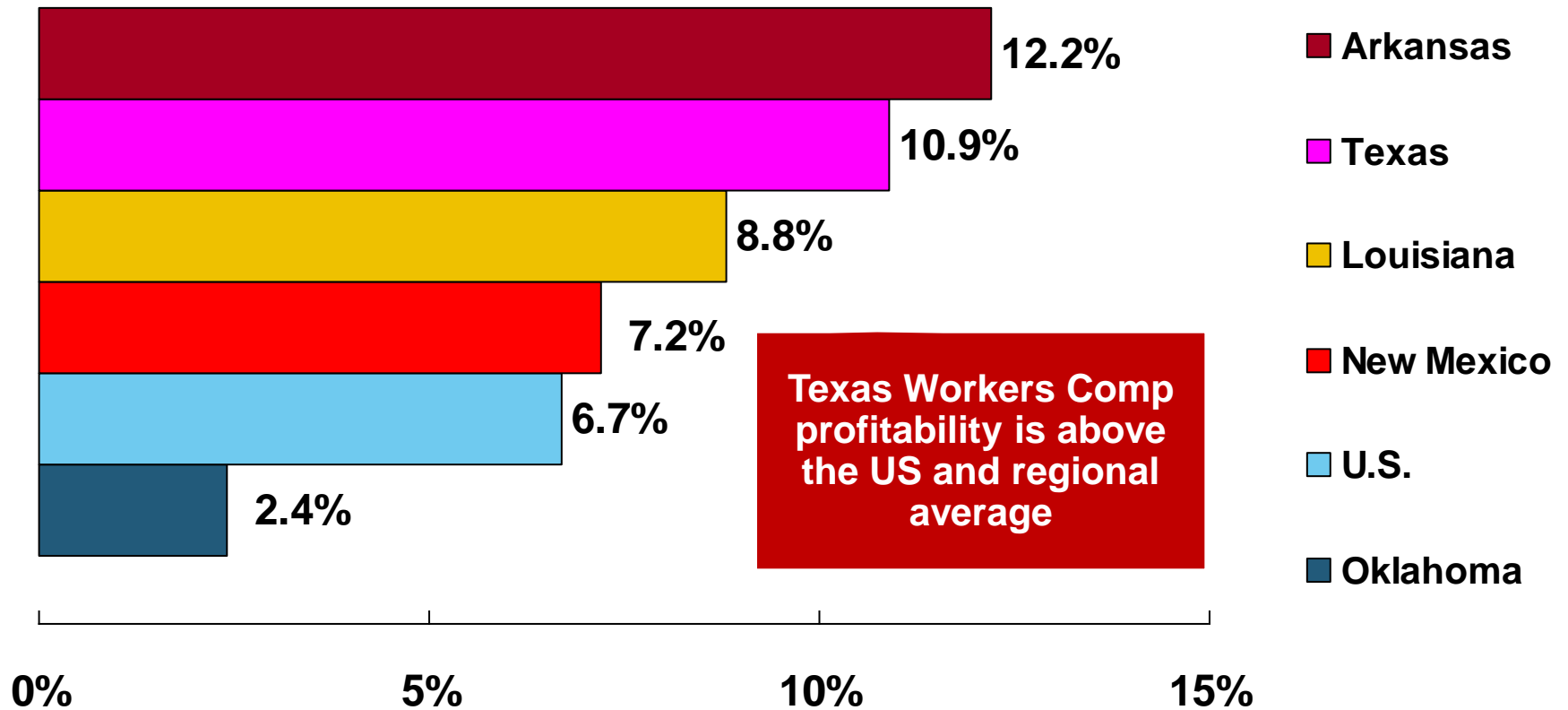
2002-2011



Source: NAIC, Insurance Information Institute

# Workers Comp: 10-Year Average RNW TX & Nearby States

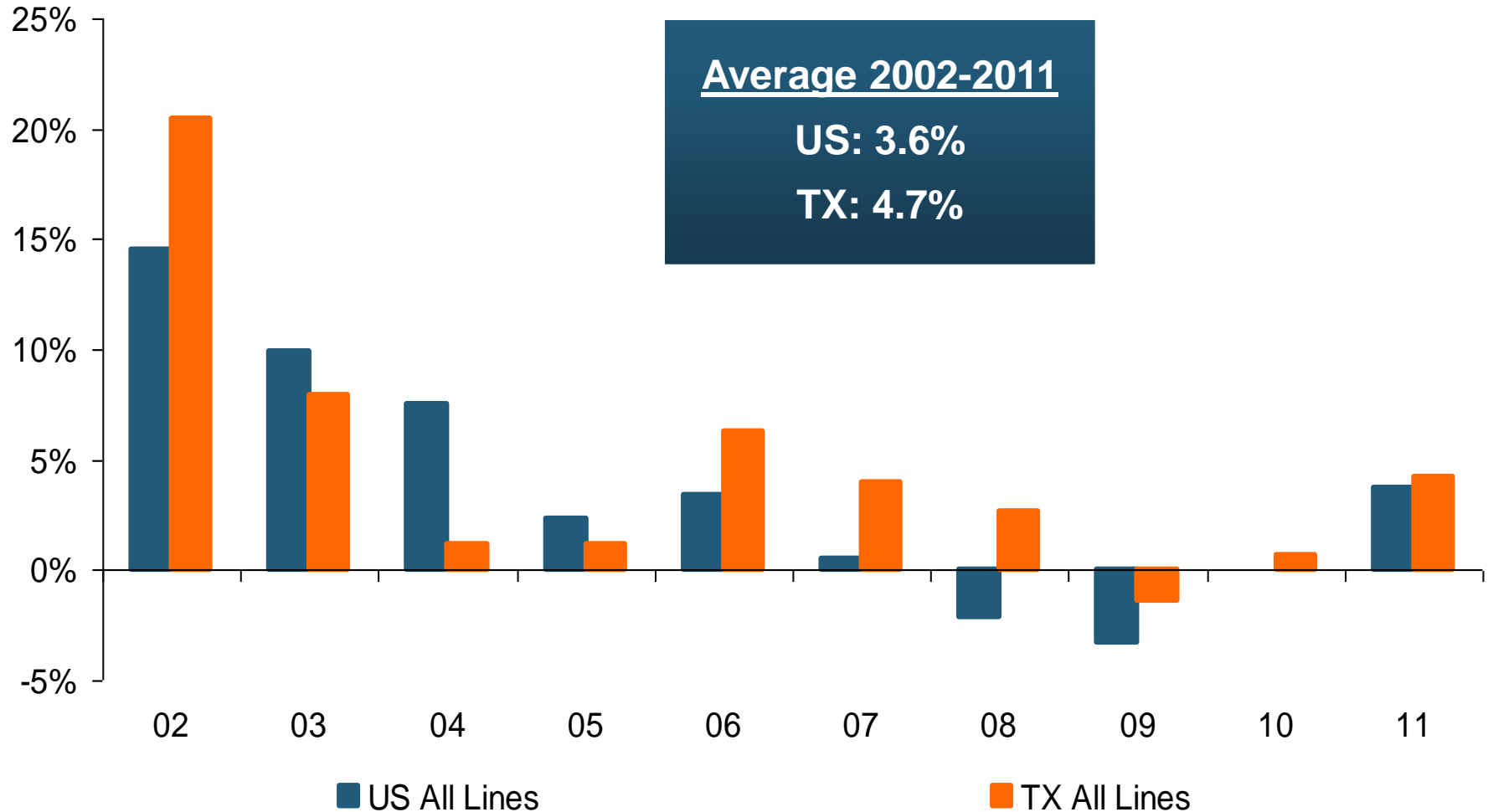
2002-2011



Source: NAIC, Insurance Information Institute

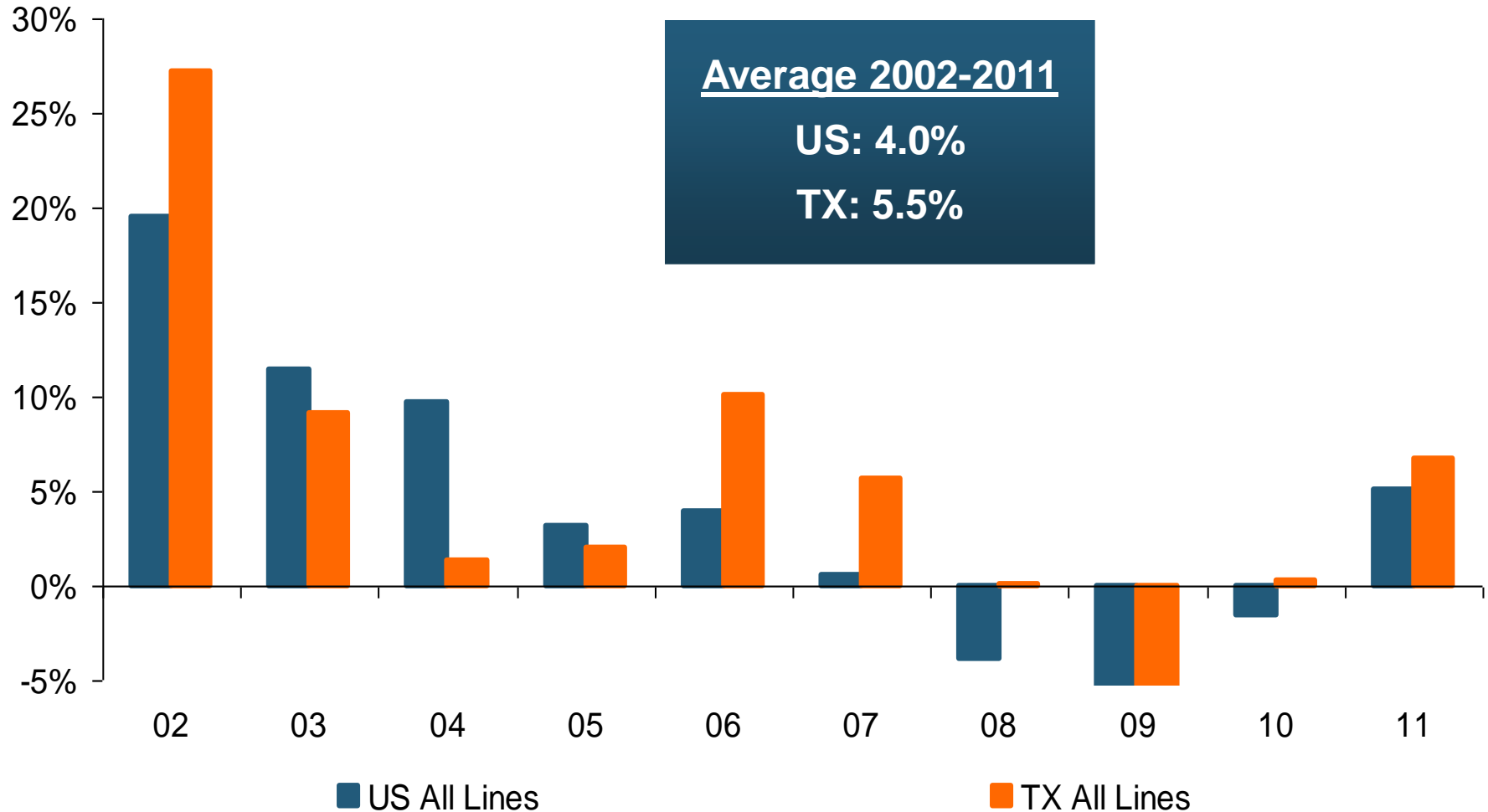
# All Lines DWP Growth: TX vs. U.S., 2002-2011

(Percent)



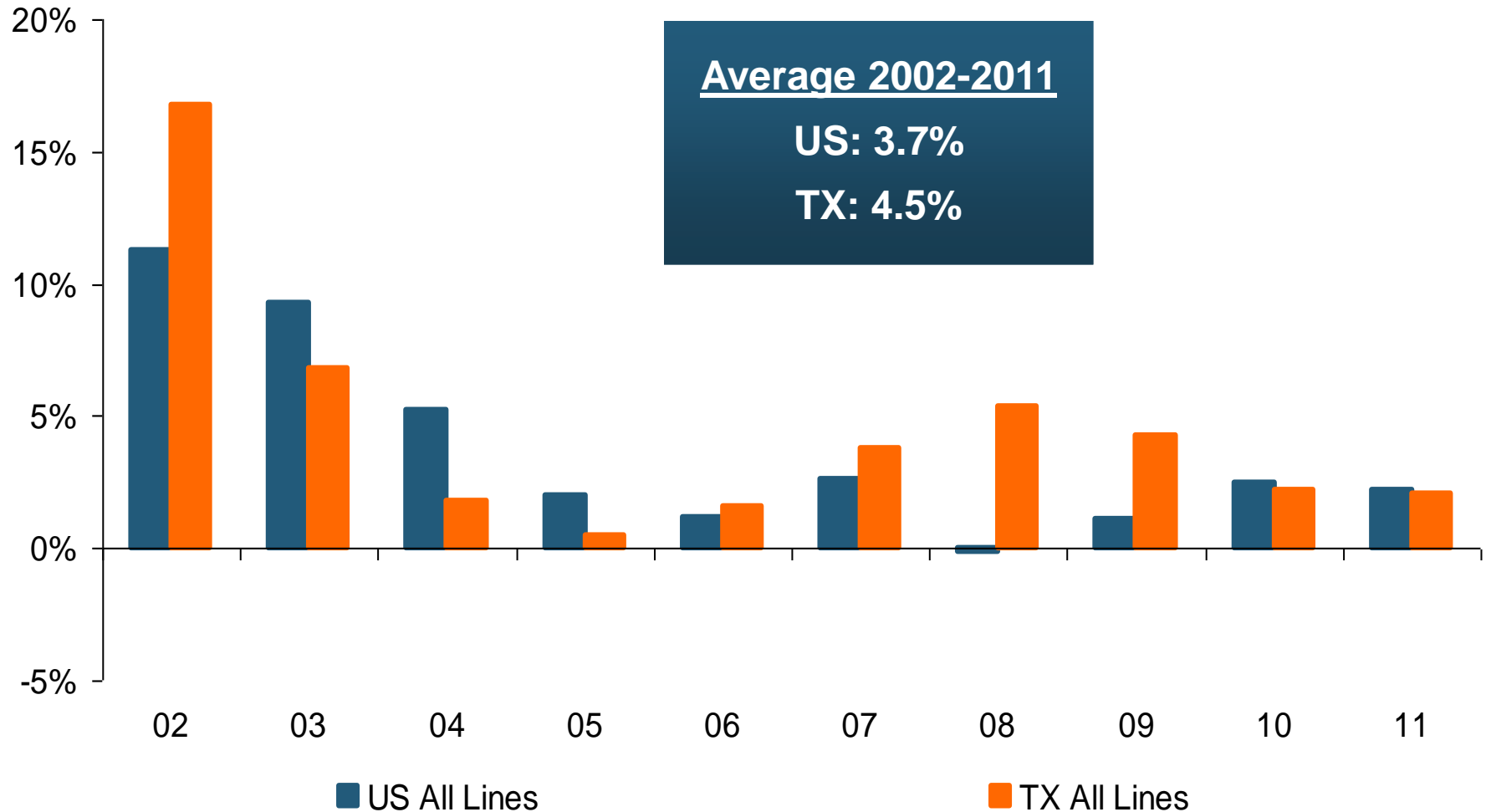
# Comm. Lines DWP Growth: TX vs. U.S., 2002-2011

(Percent)



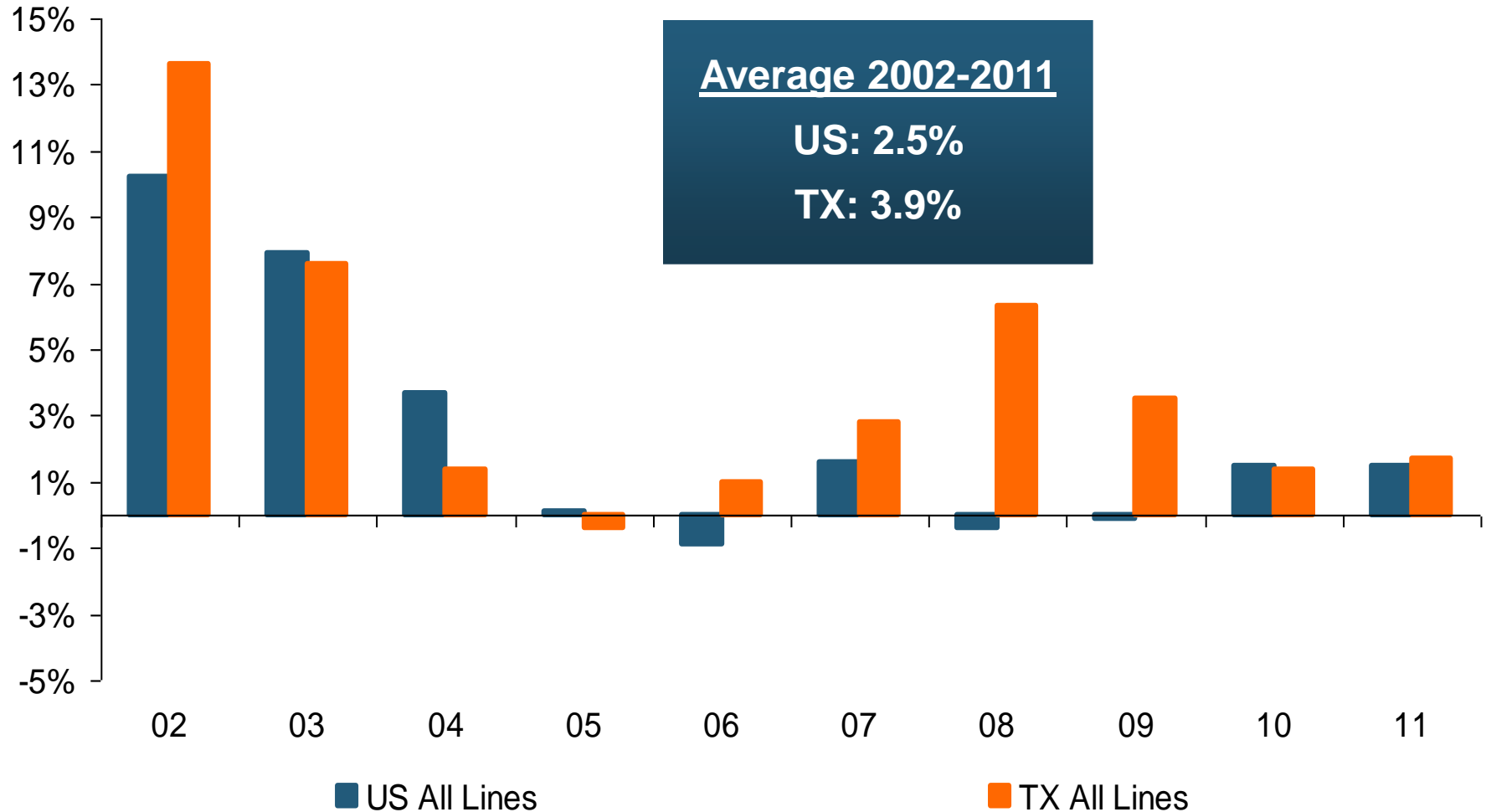
# Personal Lines DWP Growth: TX vs. U.S., 2002-2011

(Percent)



# Private Passenger Auto DWP Growth: TX vs. U.S., 2002-2011

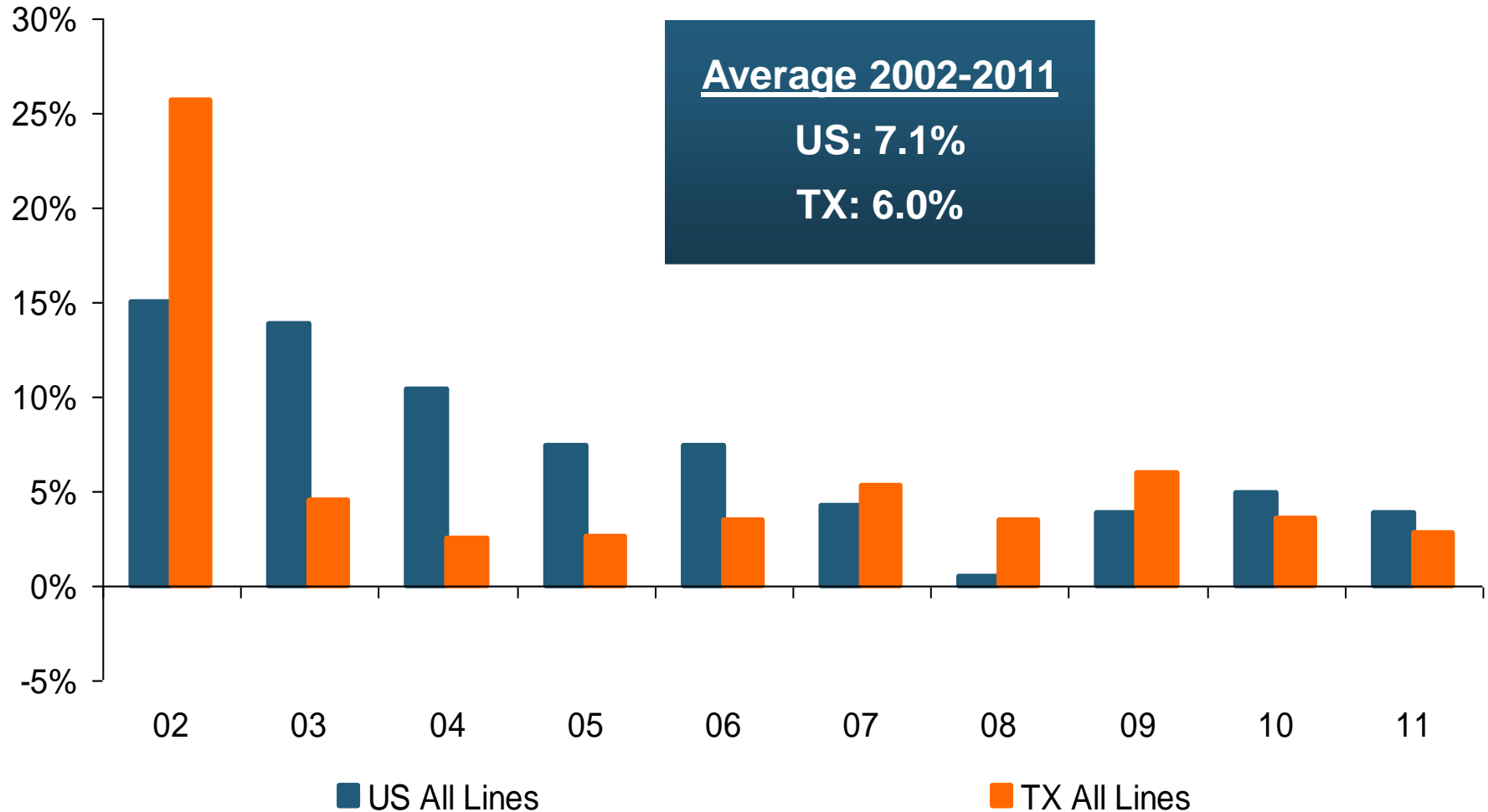
(Percent)





# Homeowners DWP Growth: TX vs. U.S., 2002-2011

(Percent)



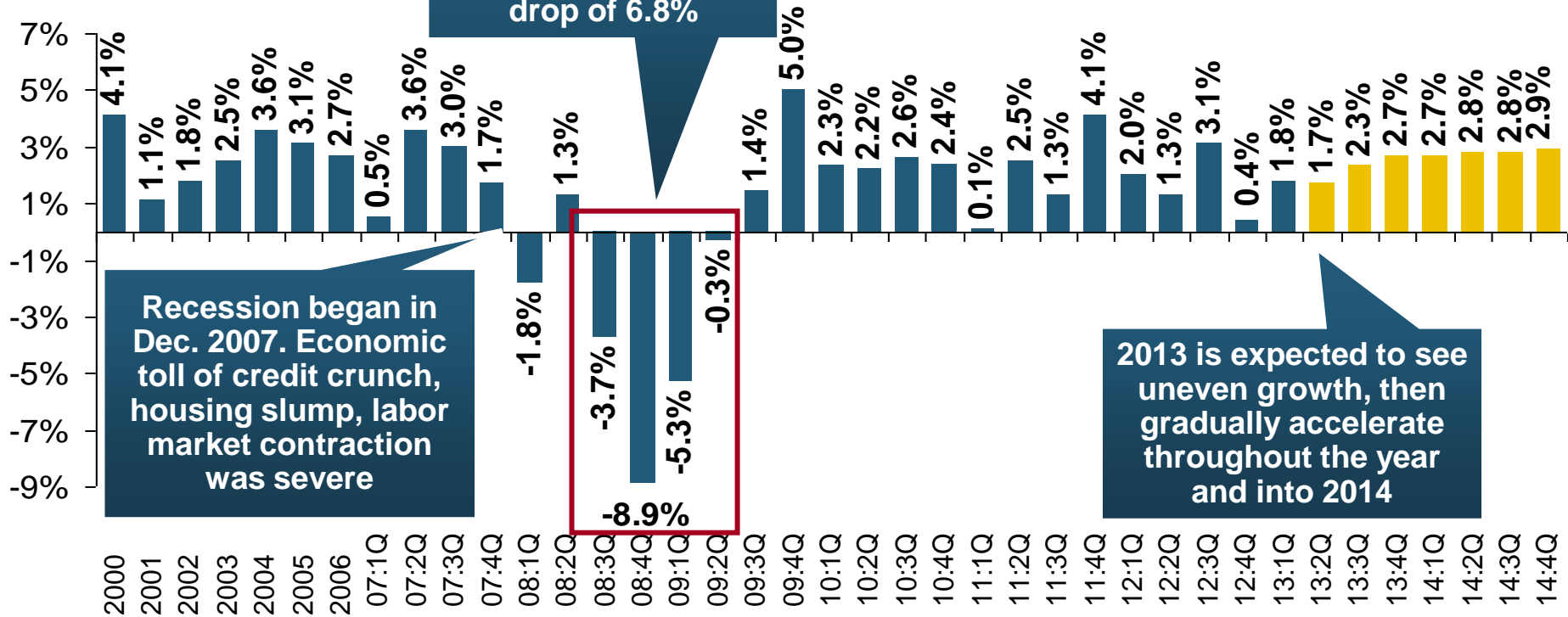


# The Strength of the Economy Will Influence P/C Insurer Growth Opportunities

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

# US Real GDP Growth\*

Real GDP Growth (%)

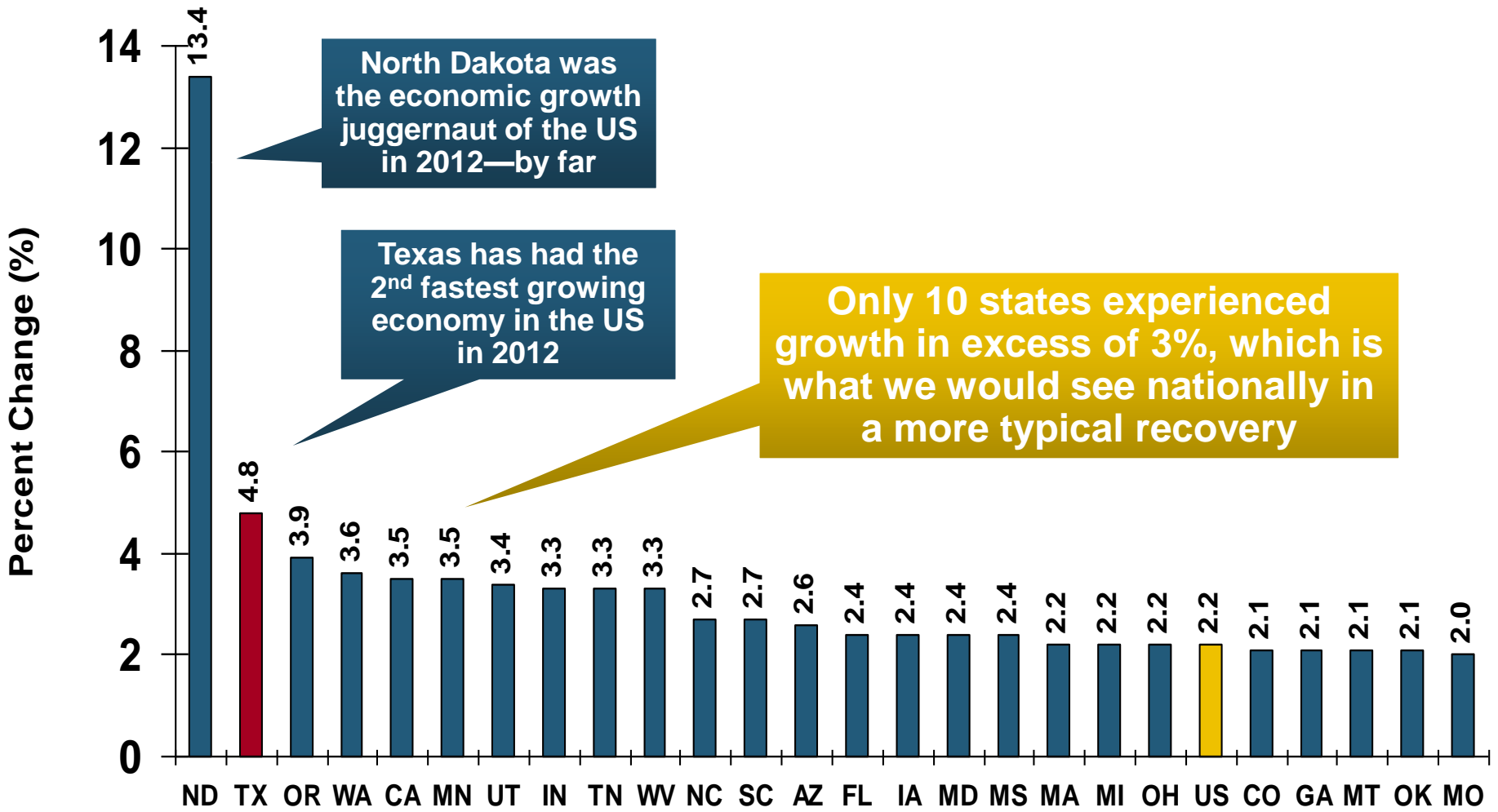


**Demand for Insurance Continues To Be Impacted by Sluggish Economic Conditions, but the Benefits of Even Slow Growth Will Compound and Gradually Benefit the Economy Broadly**

\* Estimates/Forecasts from Blue Chip Economic Indicators.

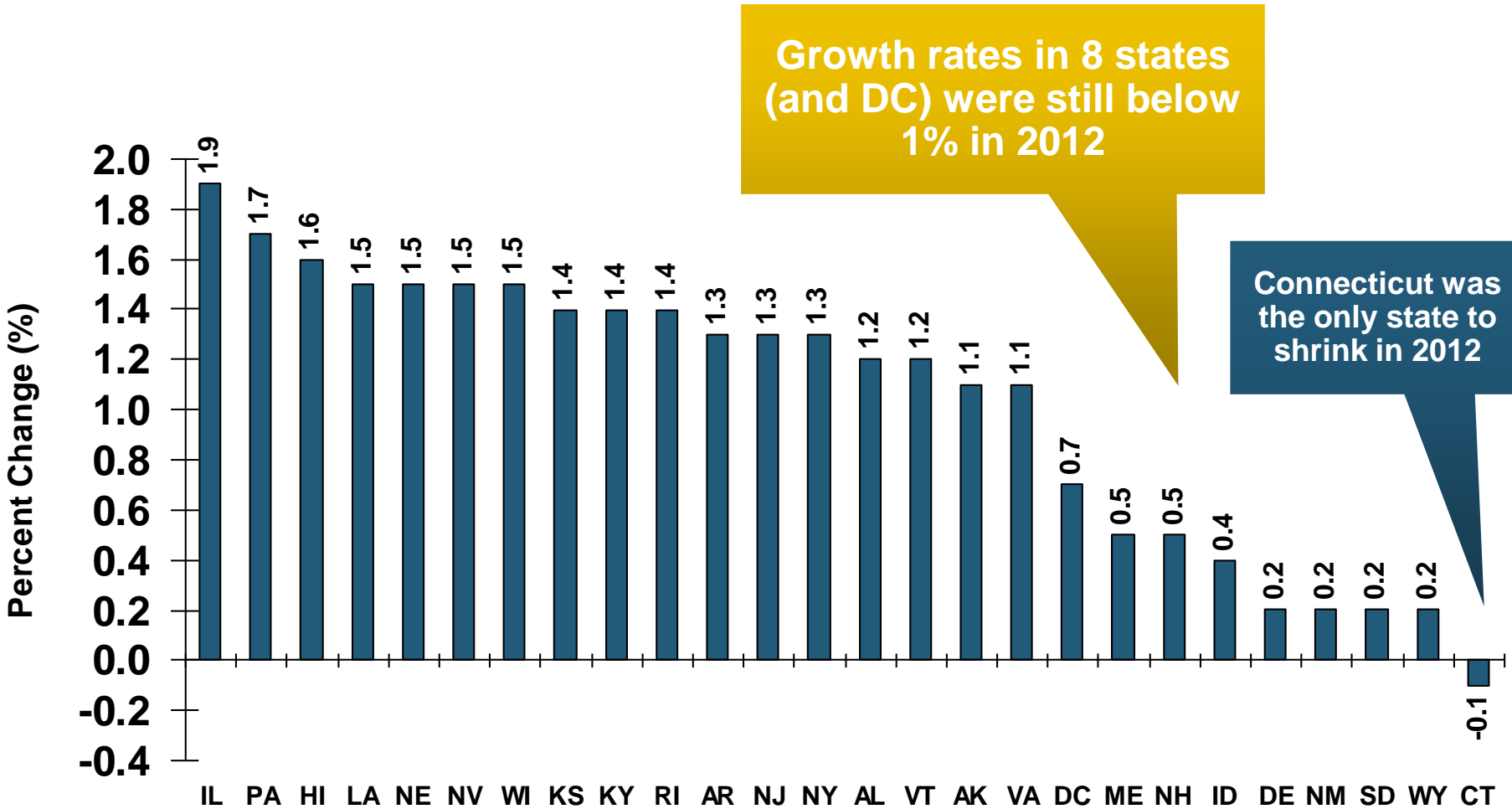
Source: US Department of Commerce, Blue Economic Indicators 7/13; Insurance Information Institute.

# Real GDP by State Percent Change, 2012: Highest 25 States



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

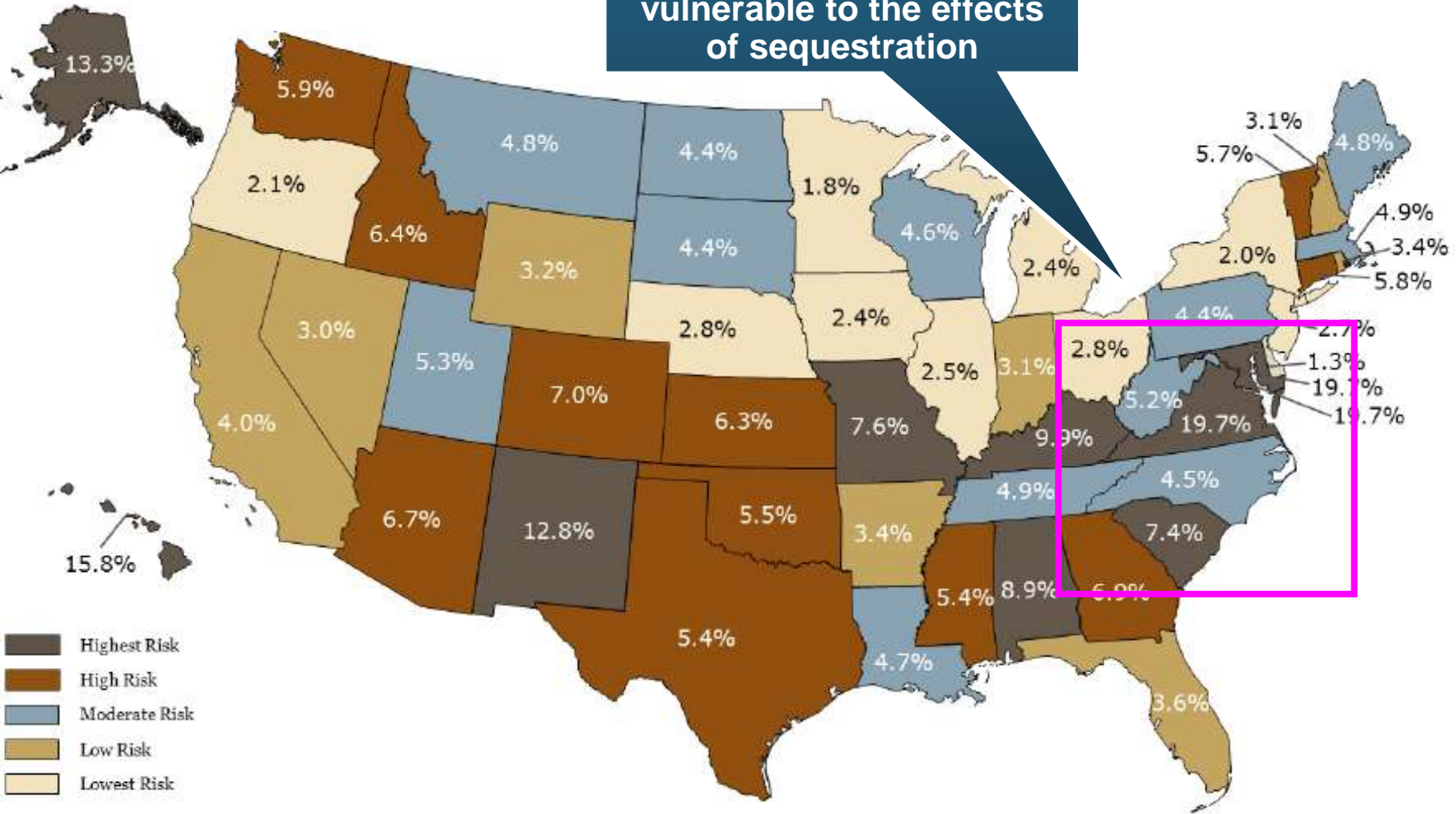
# Real GDP by State Percent Change, 2012: Lowest 25 States



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

# Federal Spending as a Share of State GDP: Vulnerability to Sequestration Varies

Some Mid-Atlantic and Southern state are more vulnerable to the effects of sequestration

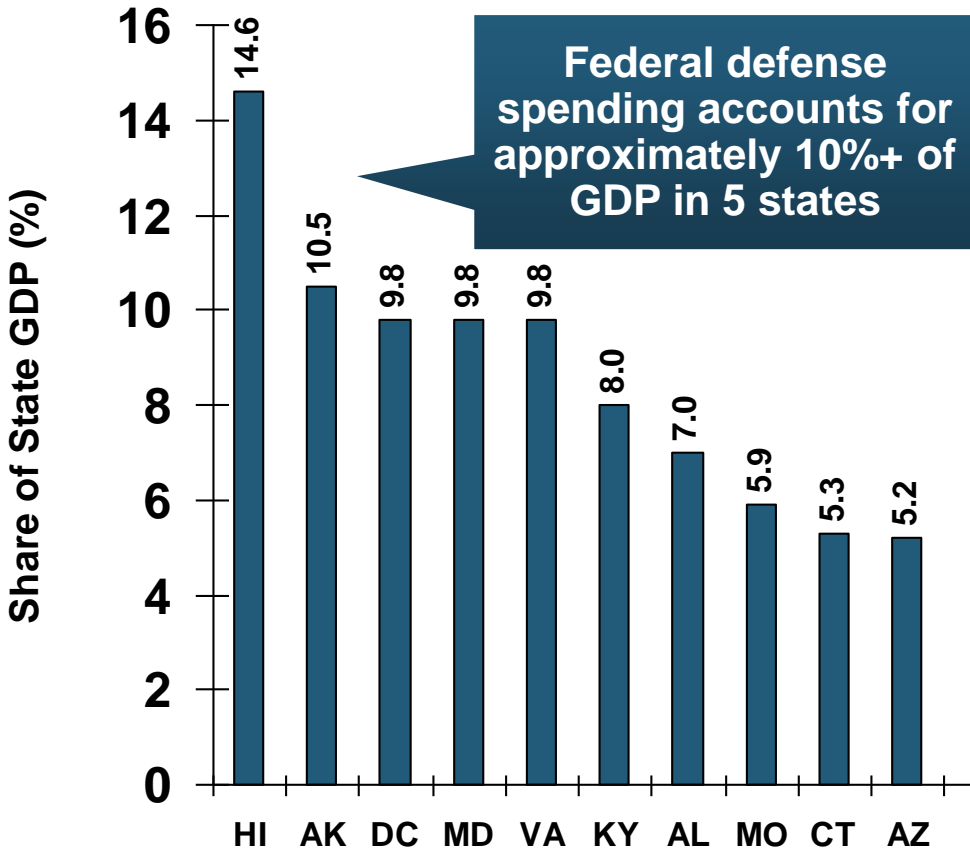


Sources: Pew Center on the States (2012) *Impact of the Fiscal Cliff on the States*; Wells Fargo; Insurance Information Institute.

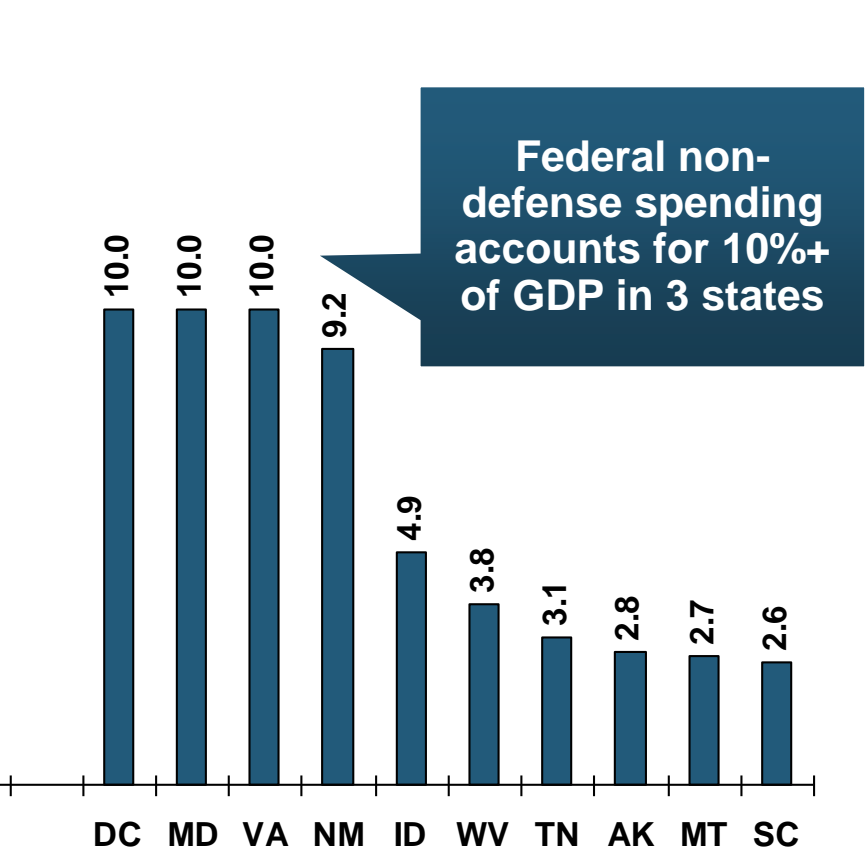
# Defense and Non-Defense Federal Spending as a Share of State GDP: Top 10 States\*



## Defense Spending



## Non-Defense Spending



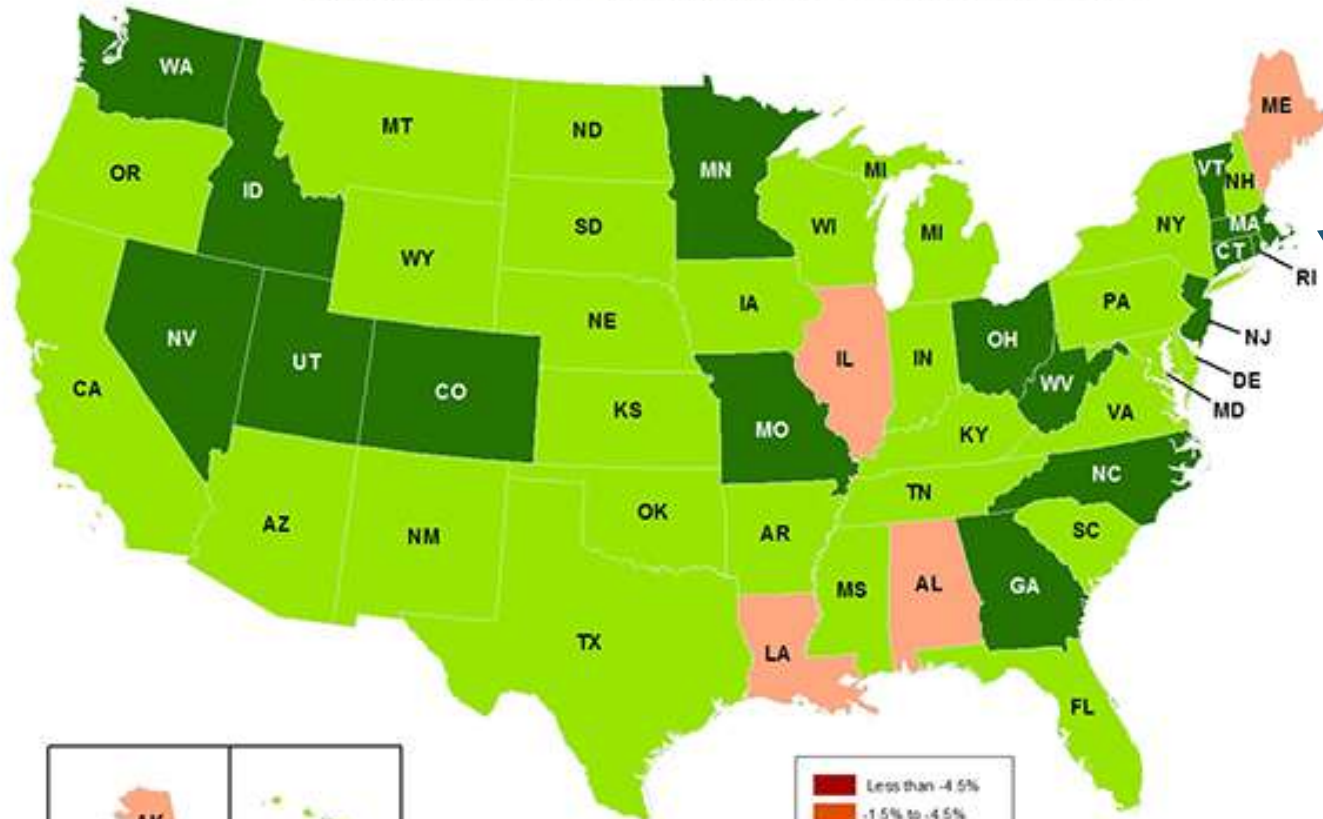
**Sequestration Could Adversely Impact Commercial Insurance Exposures Directly at Defense Contractors and Indirectly in Impacted Communities**

\*As of 2010.

Sources: Pew Center on the States (2012) *Impact of the Fiscal Cliff on the States*; Wells Fargo Securities; Insurance Information Institute.

# State-by-State Leading Indicators through 2013:Q2

January 2013 State Leading Indexes: 6-Month Forecast



The economic outlook for most of New England is relatively strong, suggesting future strength in the creation of insurable exposures

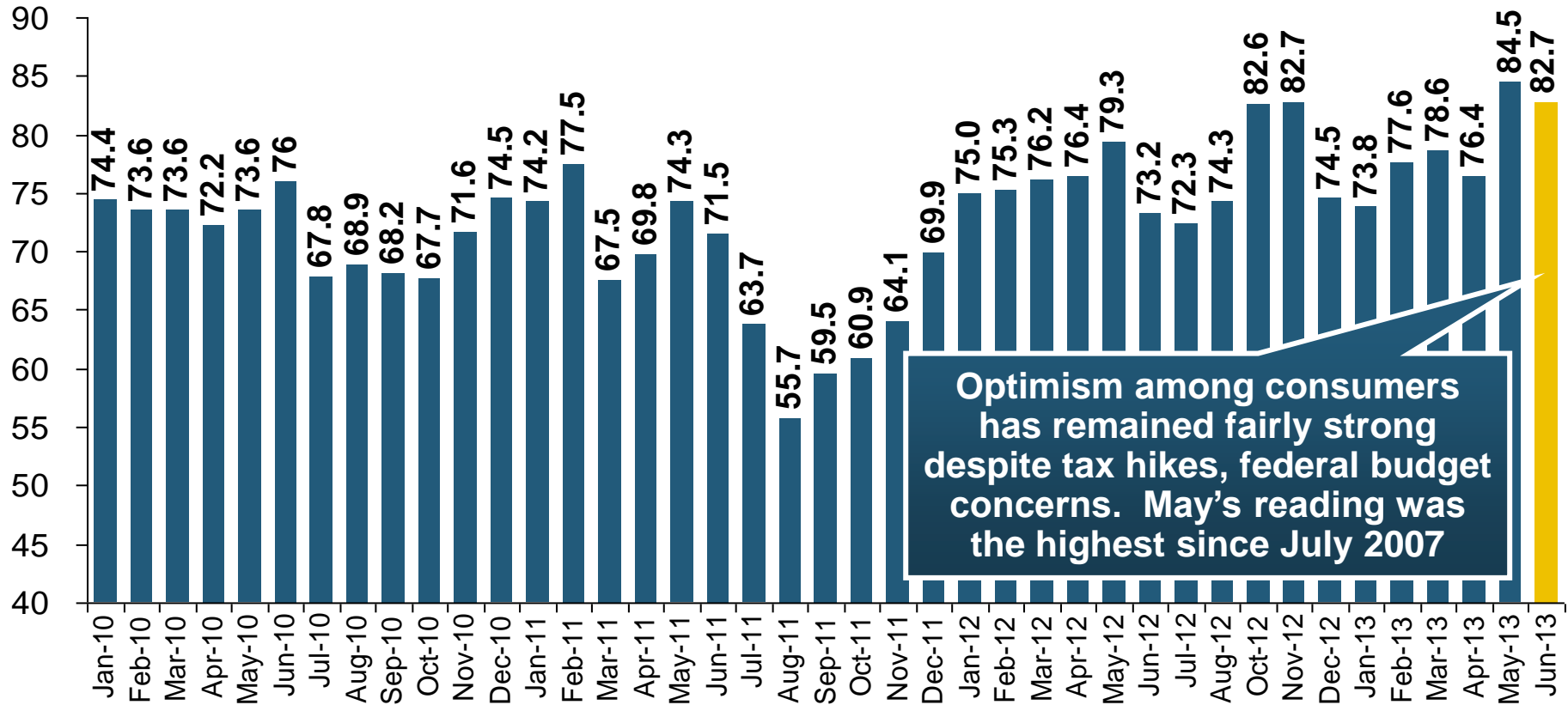


Source: Federal Reserve Bank of Philadelphia



# Consumer Sentiment Survey (1966 = 100)

## January 2010 through June 2013

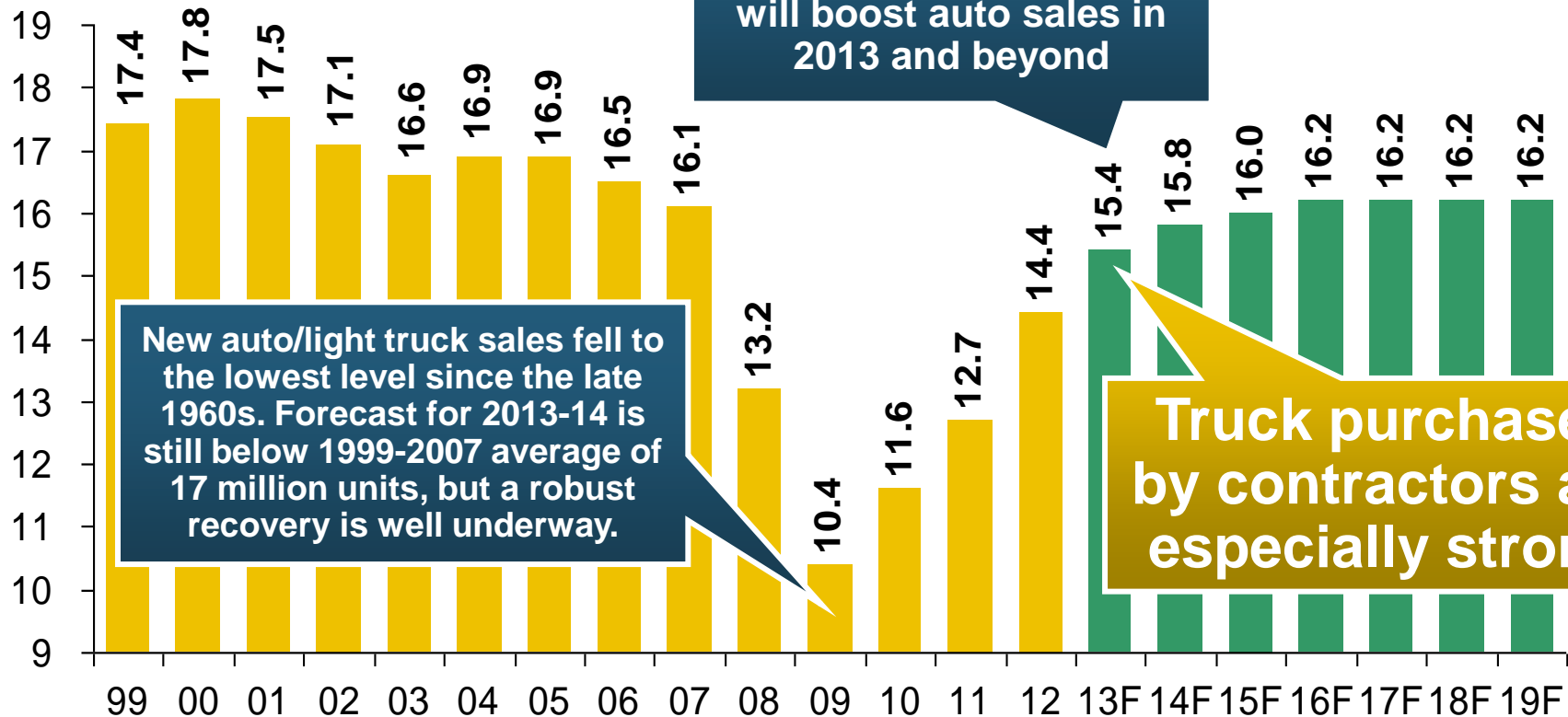


Optimism among consumers has remained fairly strong despite tax hikes, federal budget concerns. May's reading was the highest since July 2007

**Consumer confidence has been low for years amid high unemployment, falling home prices and other factors adversely impact consumers, but improved substantially over the past two years**

# Auto/Light Truck Sales, 1999-2019F

(Millions of Units)



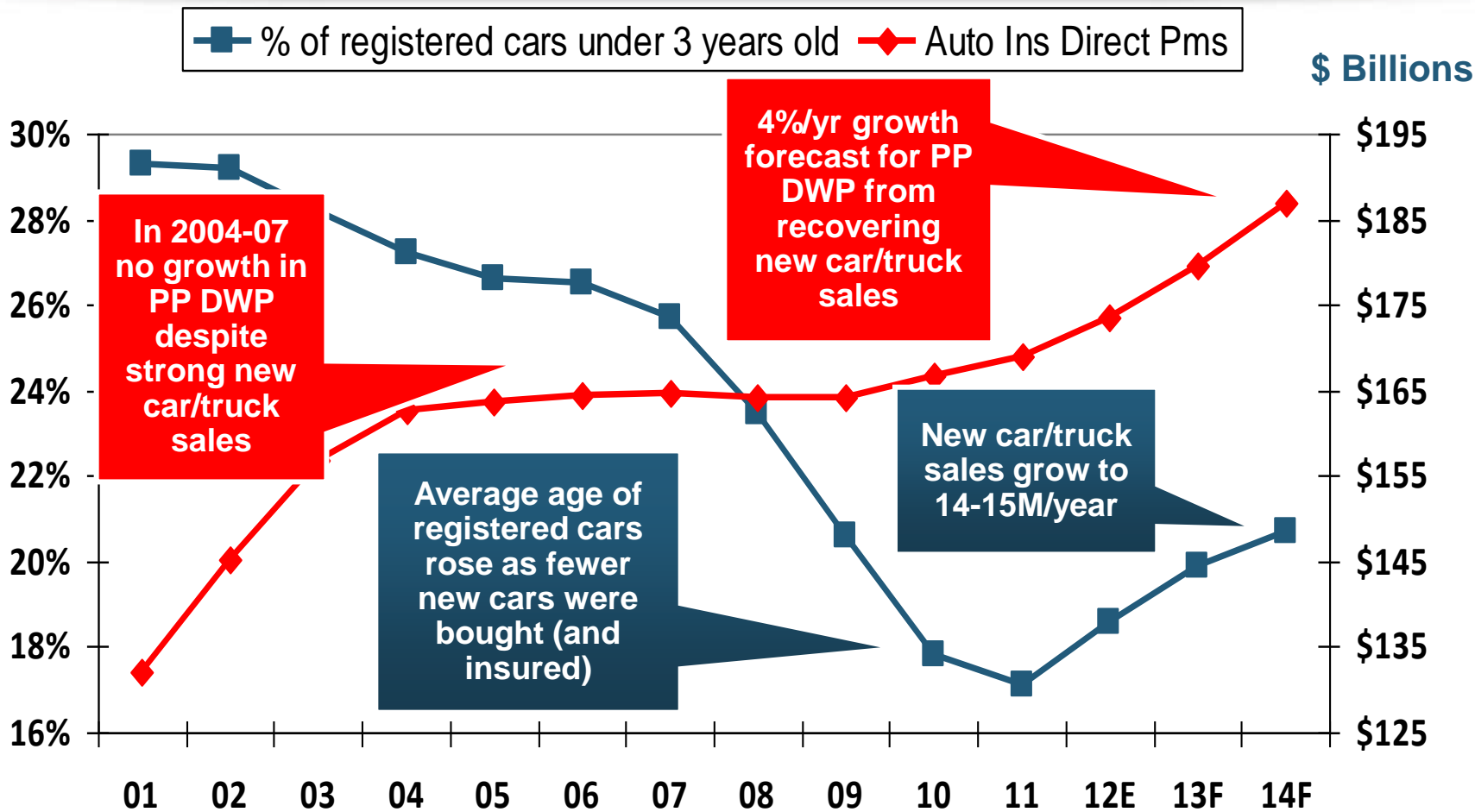
Job growth and improved credit market conditions will boost auto sales in 2013 and beyond

New auto/light truck sales fell to the lowest level since the late 1960s. Forecast for 2013-14 is still below 1999-2007 average of 17 million units, but a robust recovery is well underway.

Truck purchases by contractors are especially strong

**Car/Light Truck Sales Will Continue to Recover from the 2009 Low Point, Bolstering the Auto Insurer Growth and the Manufacturing Sector Along With Workers Comp Exposures**

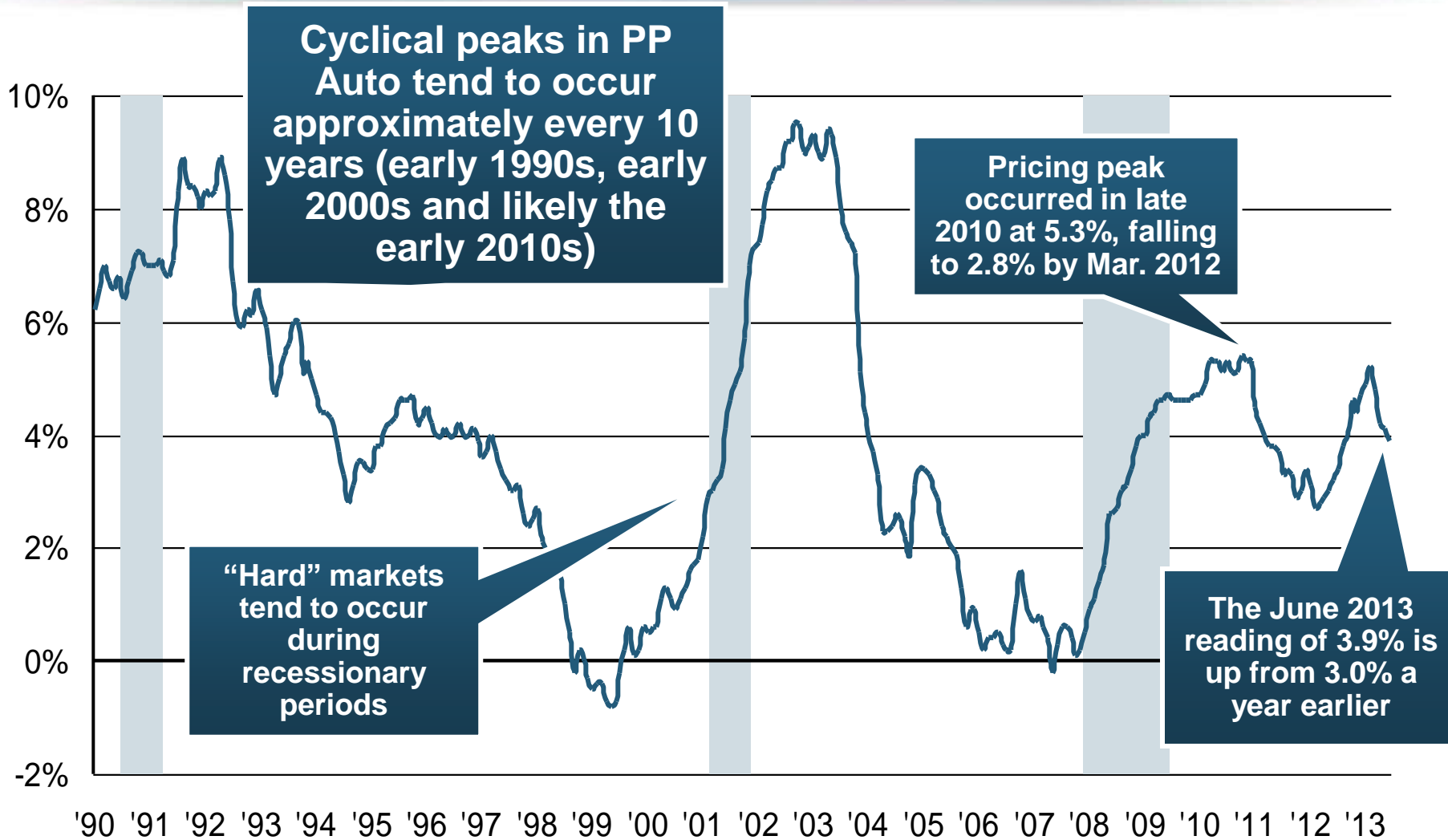
# Personal Auto Insurance Direct Written Premiums vs. Recently-Registered Cars



**PP DWP, flat from 2004-2009, is rising again. Conning forecasts growth at 3.5% in 2013 and 4.0% in 2014.**

Sources: AIPSO Facts (various issues); SNL Financial; Conning Research & Consulting, *Property-Casualty Forecast and Analysis*, First Quarter 2012; Insurance Information Institute.

# Monthly Change\* in Auto Insurance Prices, 1991–2013\*



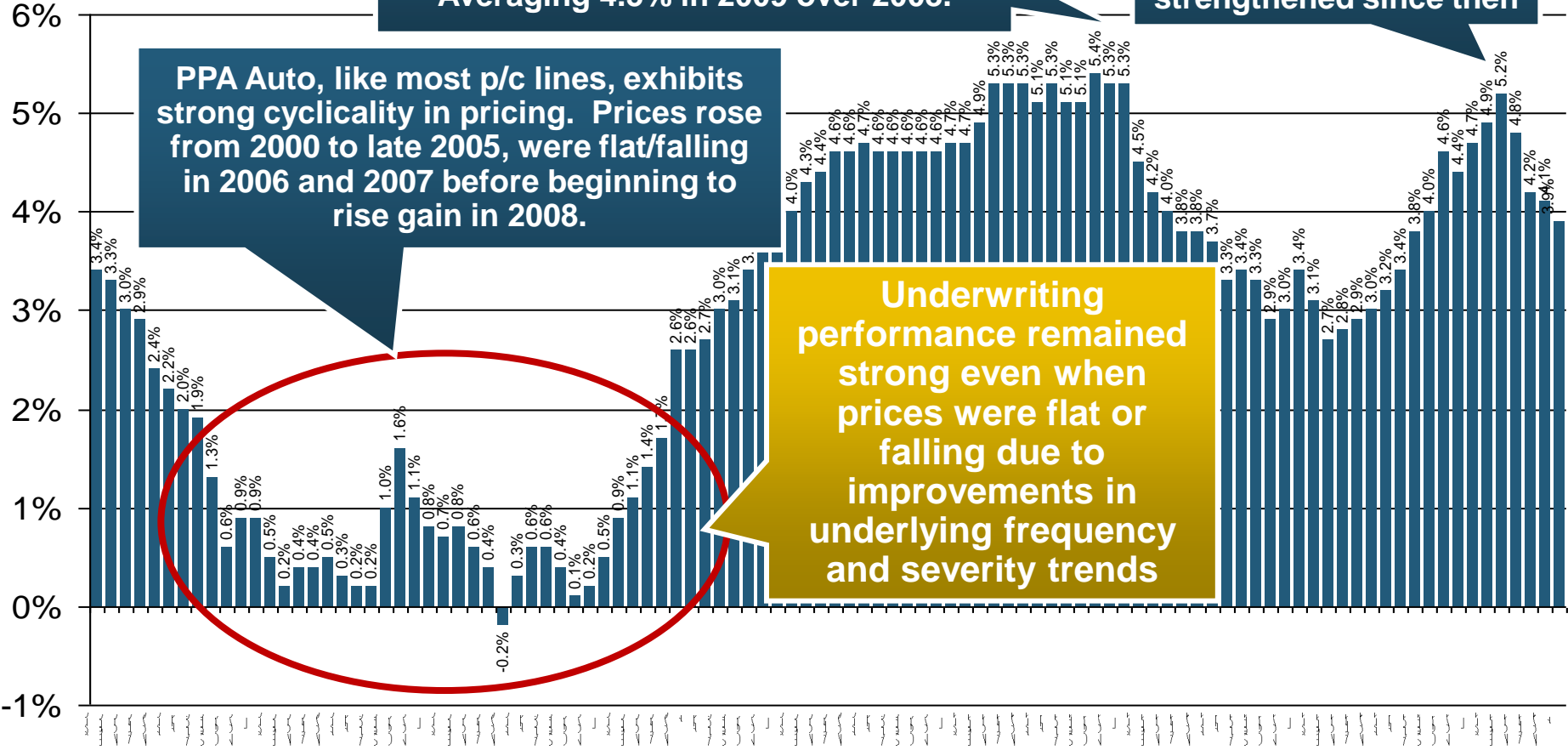
\*Percentage change from same month in prior year; through June 2013; seasonally adjusted

Note: Recessions indicated by gray shaded columns.

Sources: US Bureau of Labor Statistics; National Bureau of Economic Research (recession dates); Insurance Information Institutes.

# Monthly Change\* in Auto Insurance Prices, January 2005 - June 2013

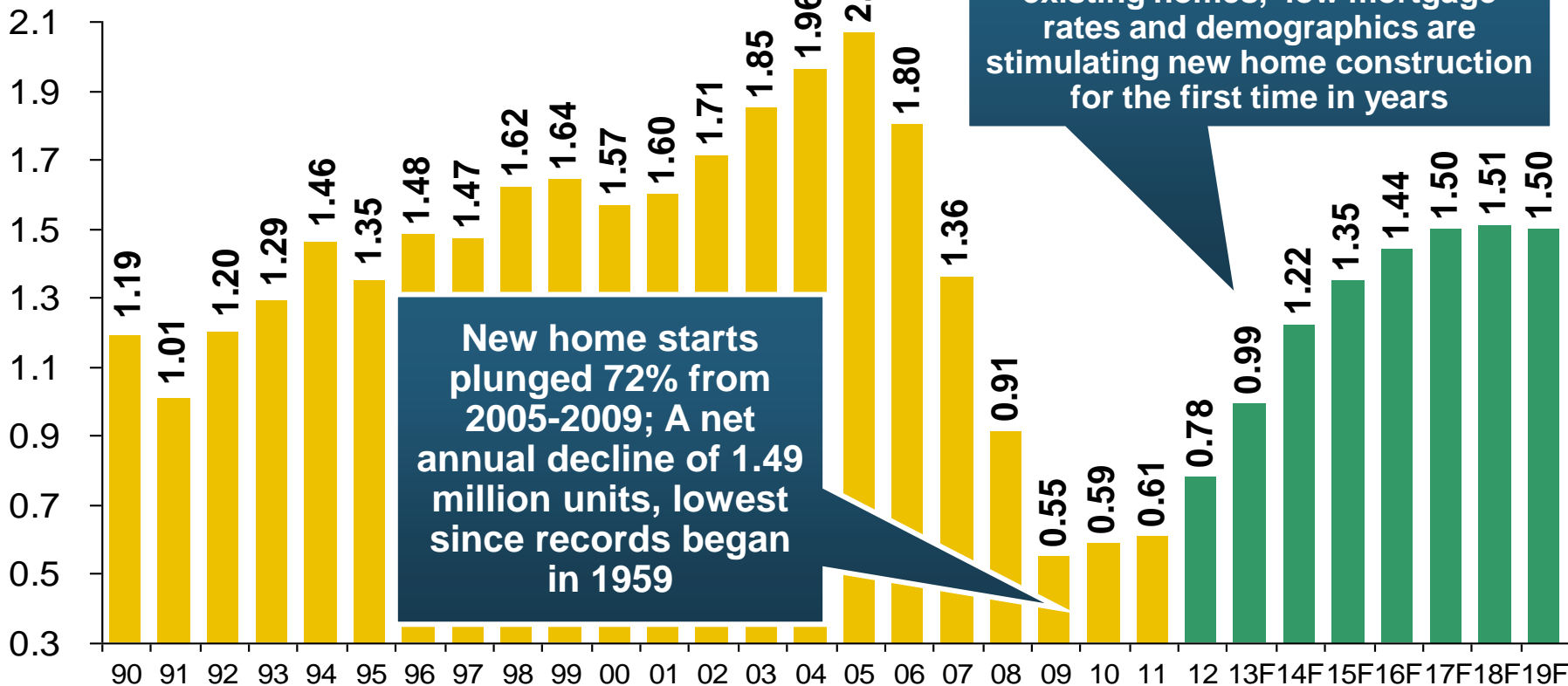
(Percent Change from same month, prior year)



\*Percentage change from same month in prior year, seasonally adjusted.  
Sources: US Bureau of Labor Statistics; Insurance Information Institute

# New Private Housing Starts, 1990-2019F

(Millions of Units)

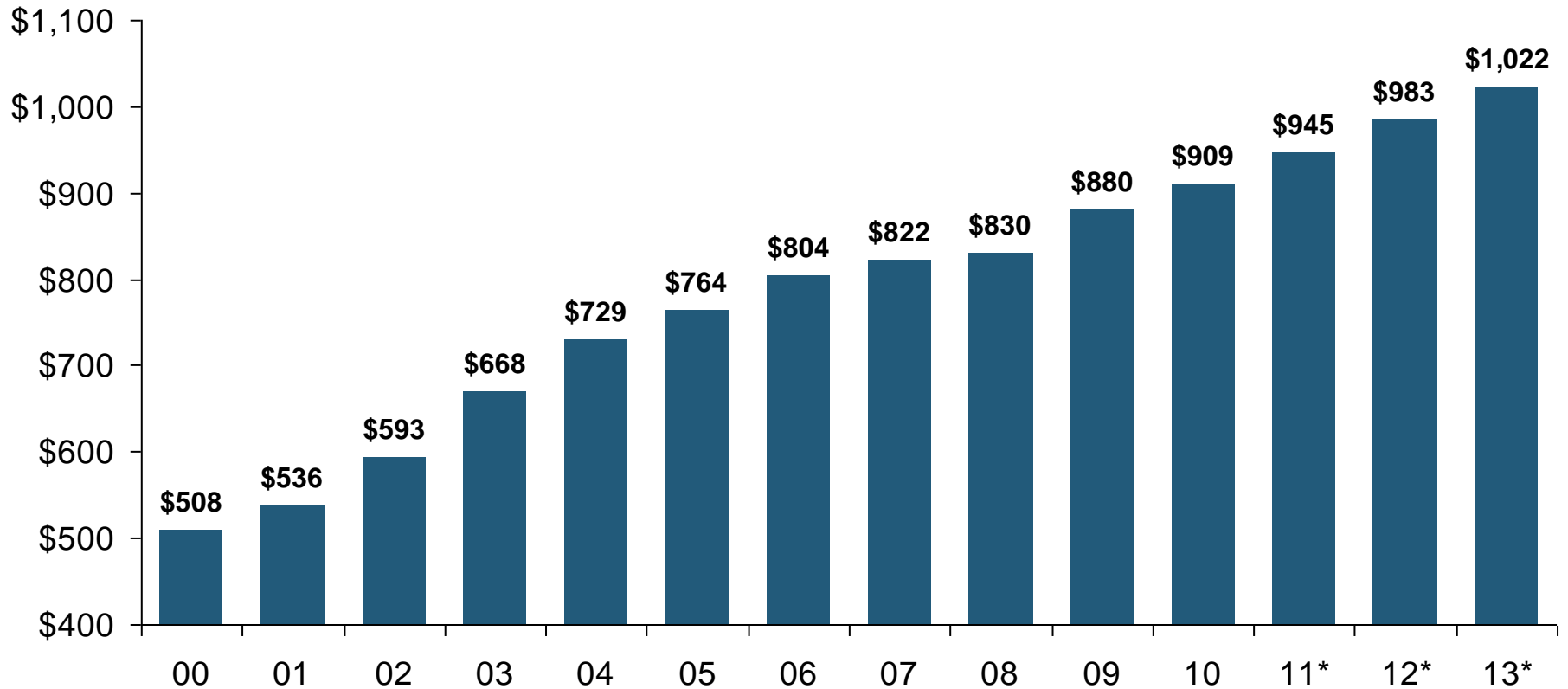


Job growth, low inventories of existing homes, low mortgage rates and demographics are stimulating new home construction for the first time in years

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 Starting to See Meaningful Exposure Growth for the First Time Since 2005 Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure**

# Average Premium for Home Insurance Policies\*\*



**Countrywide Home Insurance Expenditures Increased by an Estimated 4.0% in 2011-2013**

\* Insurance Information Institute Estimates/Forecasts \*\*Excludes state-run insurers.

Source: NAIC, Insurance Information Institute estimates for 2011-2013 based on CPI data and other data.

# Construction Employment, Jan. 2010—June 2013\*

(Thousands)

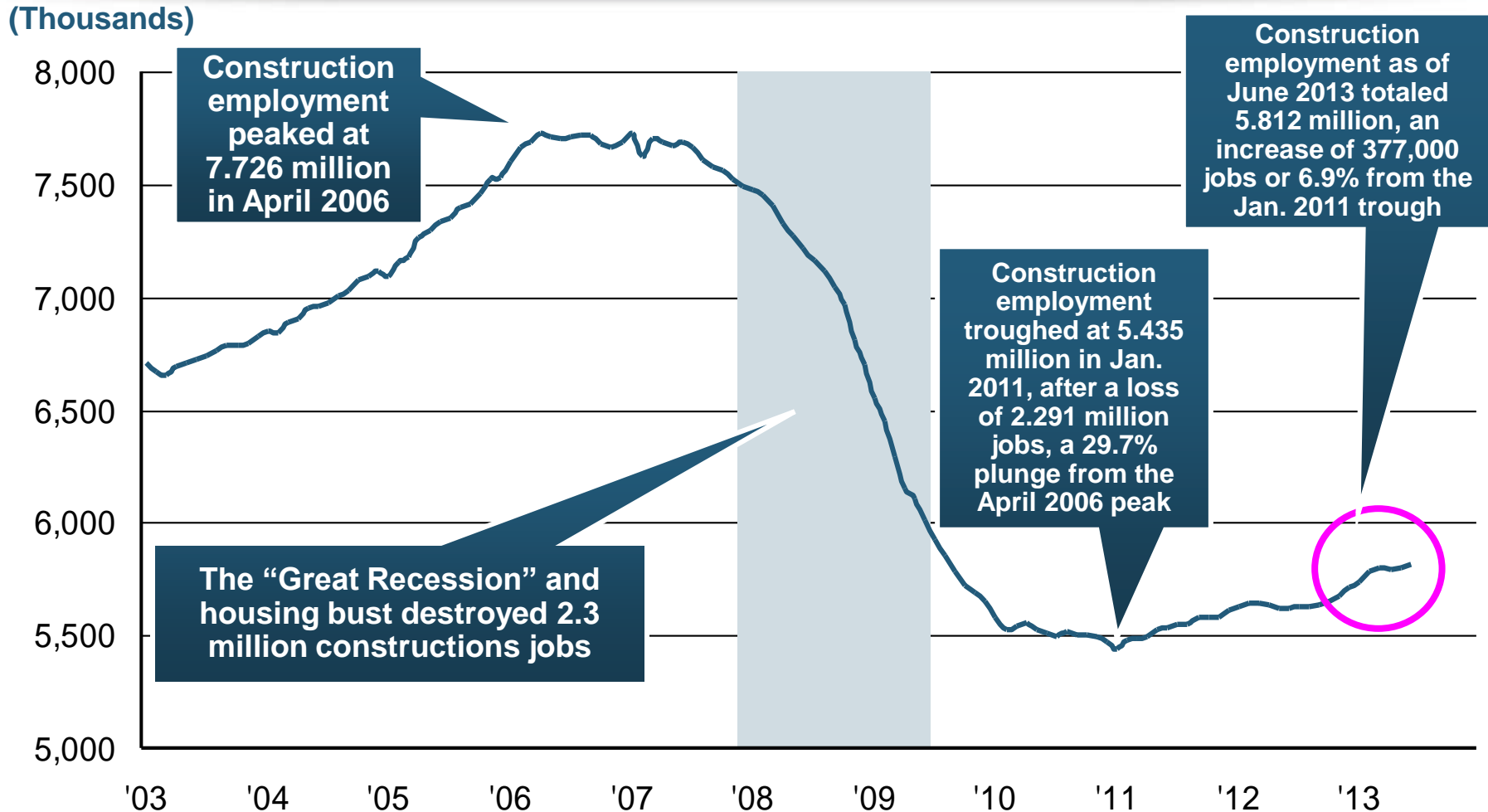


\*Seasonally adjusted

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



# Construction Employment, Jan. 2003–June 2013



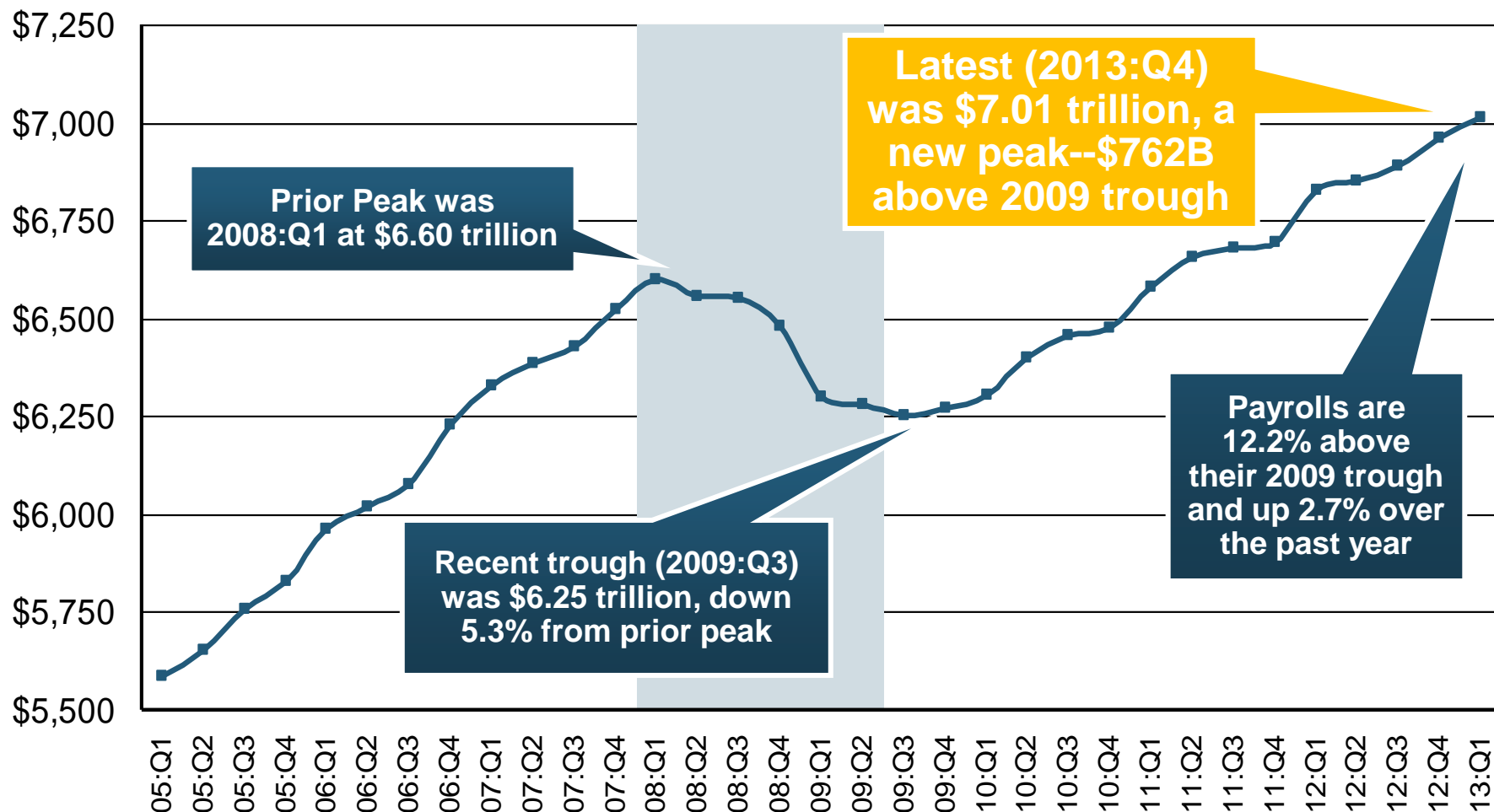
**The Construction Sector Could Be a Growth Leader in 2013 and 2014 as the Housing Market and Private Investment Recover. WC Insurers Will Benefit.**

Note: Recession indicated by gray shaded column.

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

# Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2013:Q1

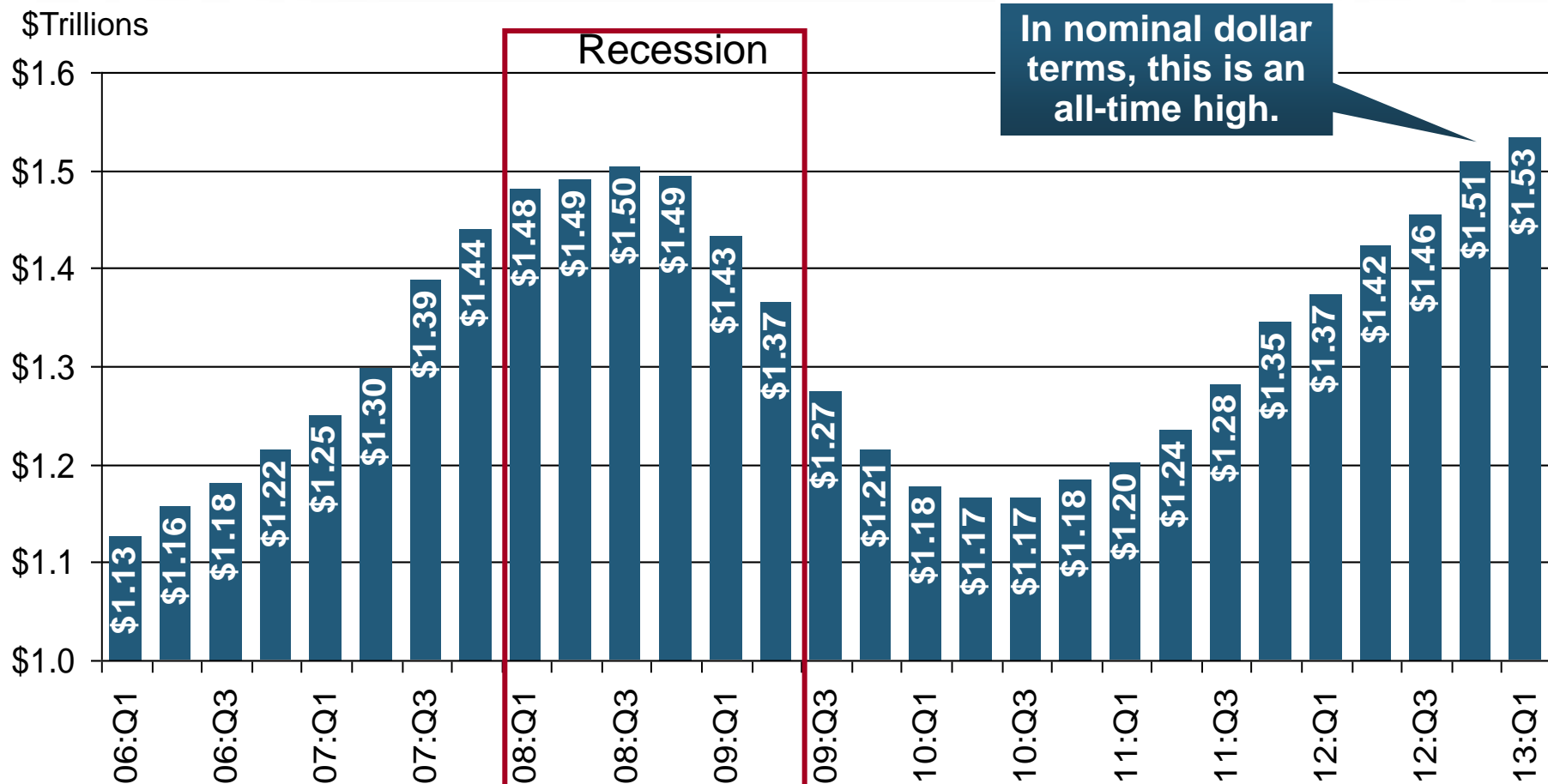
Billions



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

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

# Commercial & Industrial Loans Outstanding at FDIC-Insured Banks, Quarterly, 2006-2013\*

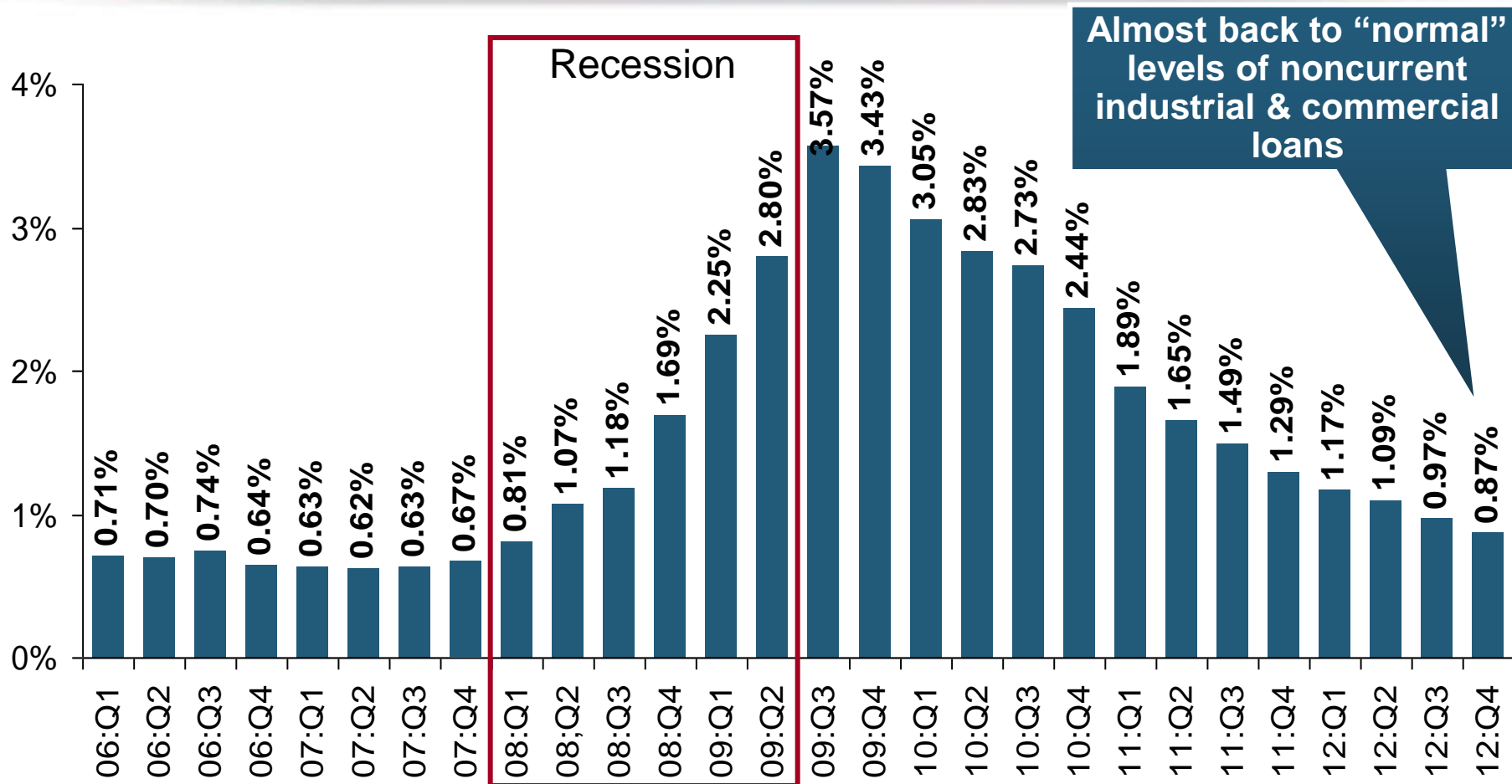


**Outstanding loan volume has been growing for over two years and (as of year-end 2012) surpassed previous peak levels.**

\*Latest data as of 6/14/2013.

Source: FDIC at <http://www2.fdic.gov/qbp/> (Loan Performance spreadsheet); Insurance Information Institute.

# Percent of Non-current Commercial & Industrial Loans Outstanding at FDIC-Insured Banks, Quarterly, 2006-2012:Q4\*



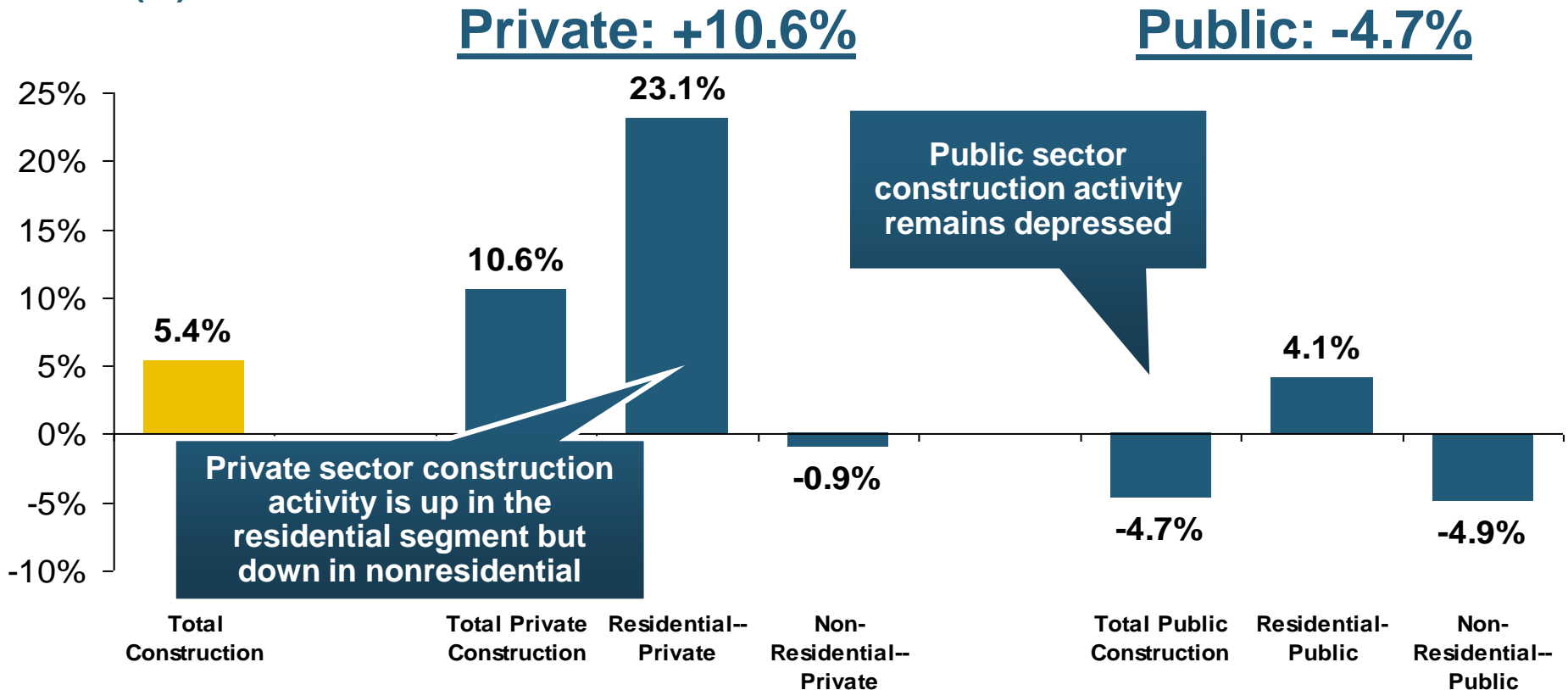
**Non-current loans (those past due 90 days or more or in nonaccrual status) are back to early-recession levels, fueling bank willingness to lend.**

\*Latest data as of 3/18/2013.

Source: FDIC at <http://www2.fdic.gov/qbp/> (Loan Performance spreadsheet); Insurance Information Institute.

# Value of Construction Put in Place, May 2013 vs. May 2012\*

Growth (%)



**Overall Construction Activity is Up, But Growth Is Entirely in the Private Sector as State/Local Government Budget Woes Continue**

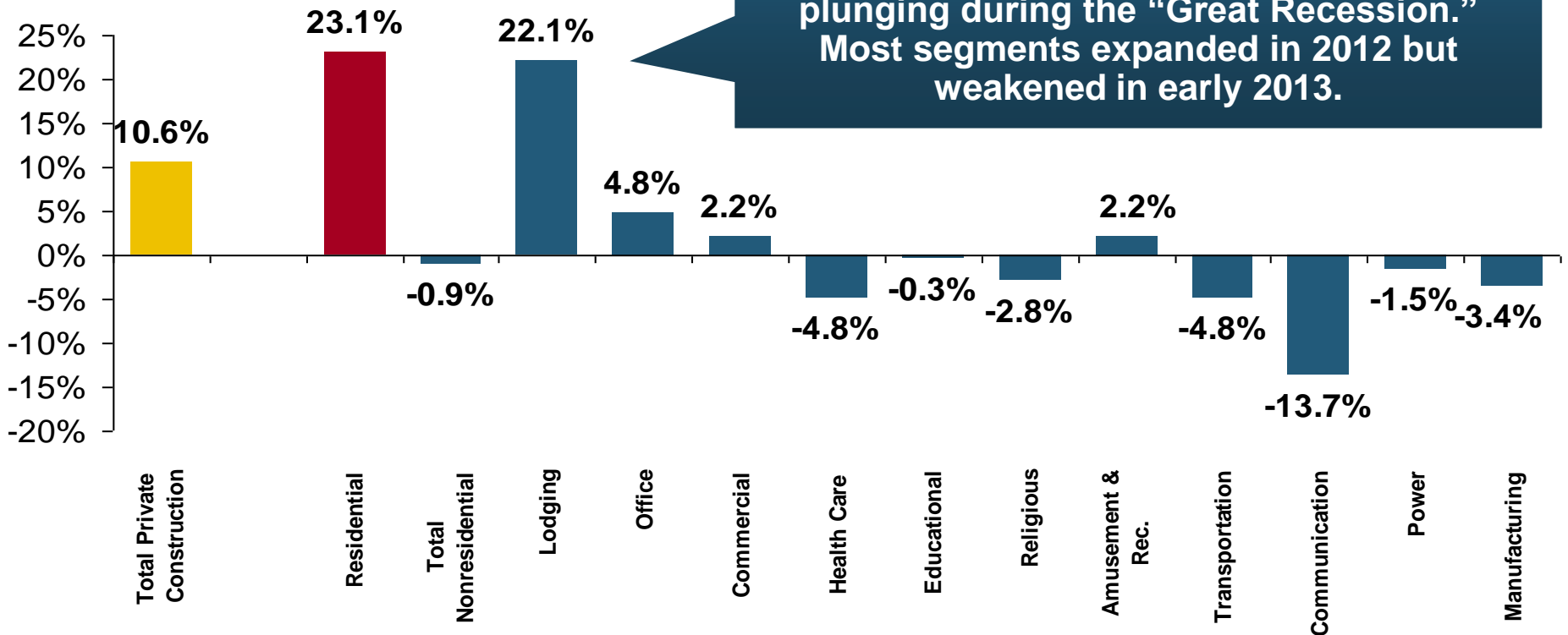
\*seasonally adjusted

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, May 2013 vs. May 2012\*

Growth (%)

Led by the Residential Construction, Lodging and Office segments, Private sector construction activity remains mixed after plunging during the "Great Recession." Most segments expanded in 2012 but weakened in early 2013.



Private Construction Activity is Up in Some Segments, Including the Key Residential Construction Sector, But Weakening in Early 2013

\*seasonally adjusted

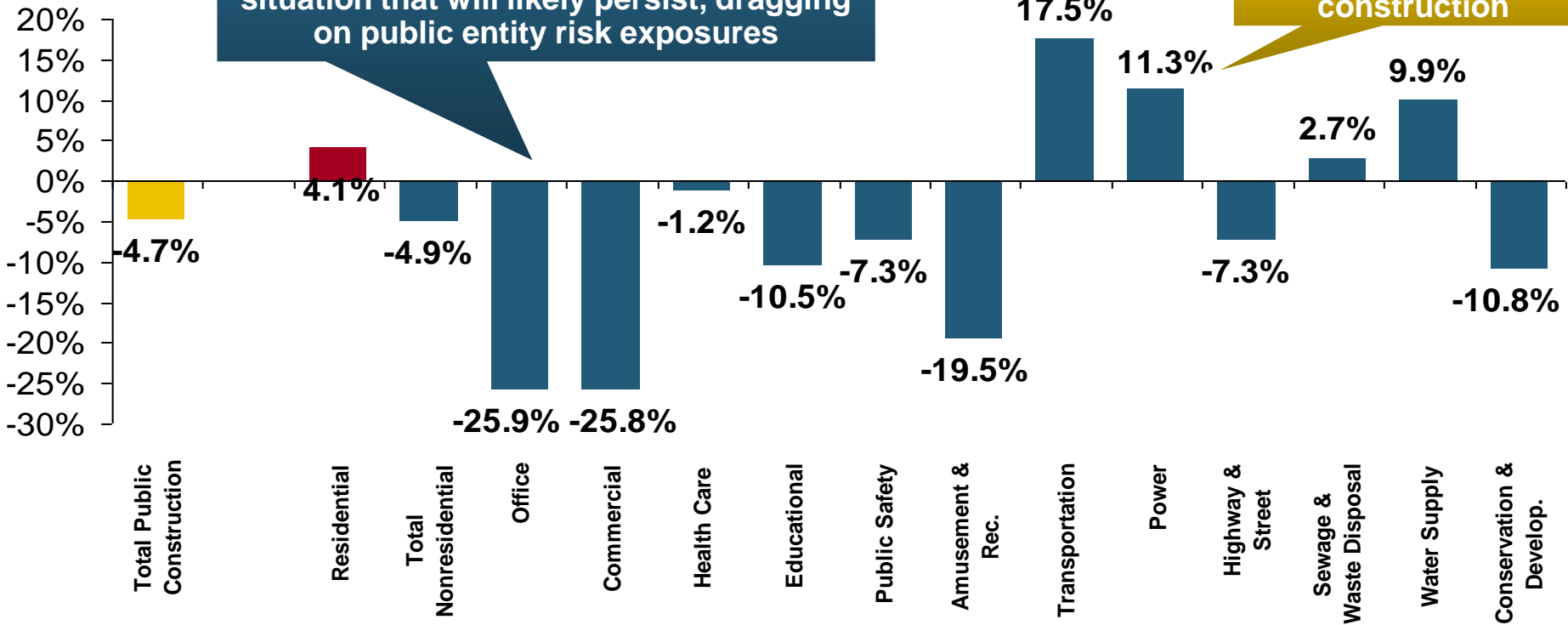
Source: U.S. Census Bureau, <http://www.census.gov/construction/c30/c30index.html> ; Insurance Information Institute.

# Value of Public Construction Put in Place, by Segment, May 2013 vs. May 2012\*

Growth (%)

Public sector construction activity is down substantially in most segments, a situation that will likely persist, dragging on public entity risk exposures

Transportation and Power projects lead public sector construction



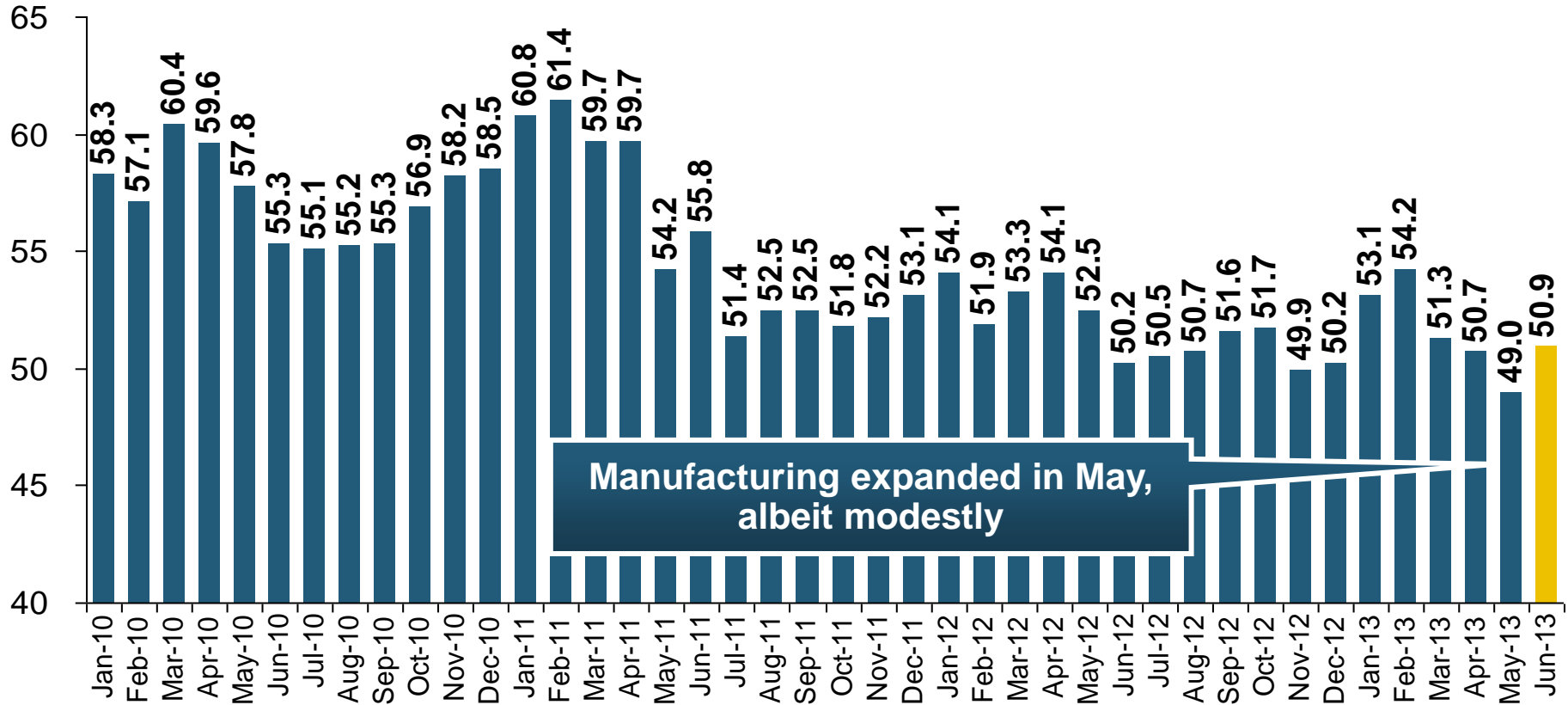
**Public Construction Activity is Down in Many Segments as State and Local Budgets Remain Under Stress; Improvement Possible in 2014.**

\*seasonally adjusted

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

# ISM Manufacturing Index (Values > 50 Indicate Expansion)

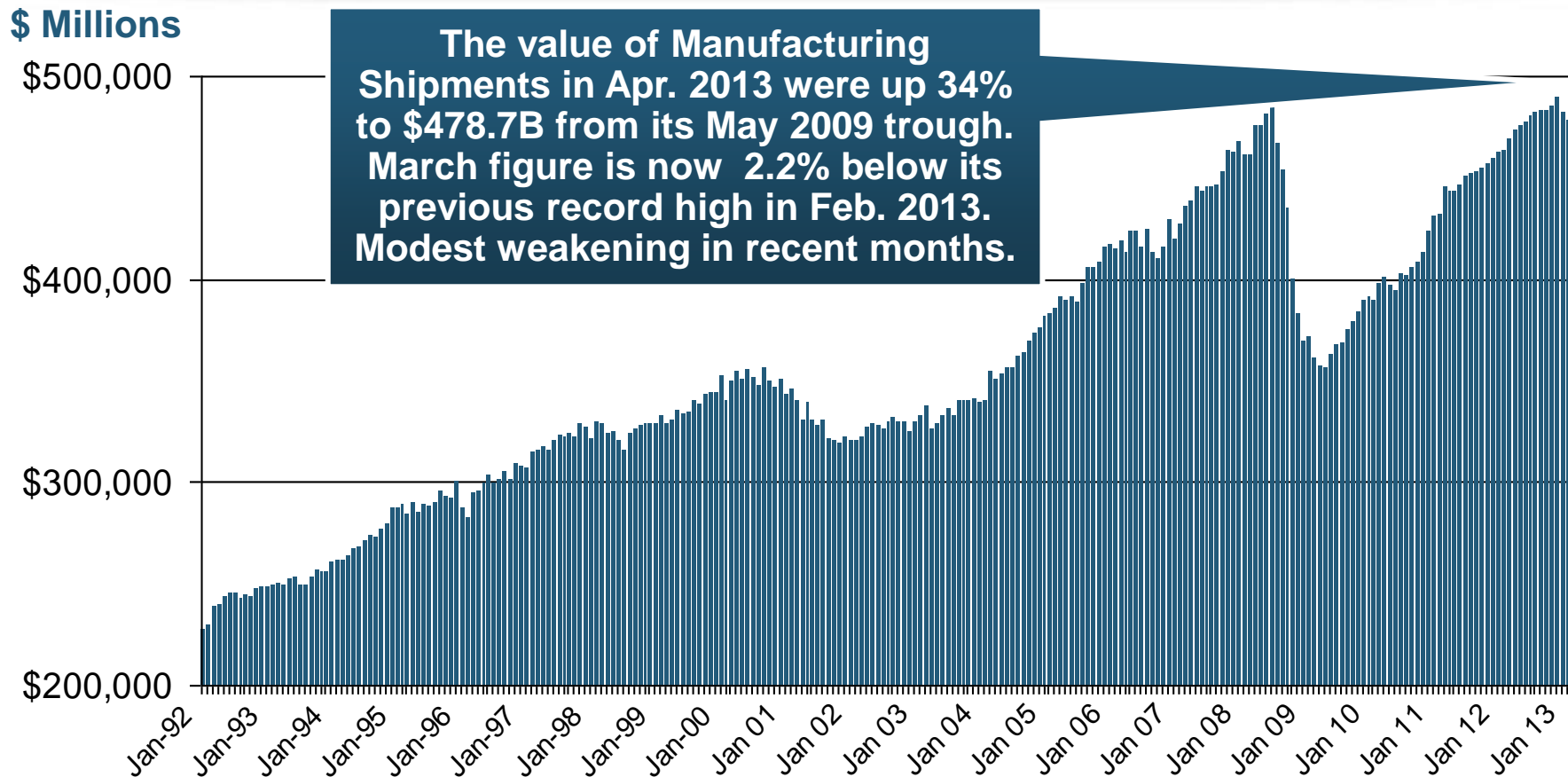
January 2010 through June 2013



The manufacturing sector expanded for 39 of the 42 months from Jan. 2010 through June 2013. Recent weakness stems largely from woes in Europe and a Slowdown in China.



# Dollar Value\* of Manufacturers' Shipments Monthly, Jan. 1992—Apr. 2013



**Monthly shipments in Feb. 2013 exceeded their pre-crisis (July 2008) peak. Trough in May 2009. Growth from trough to Apr. 2013 was 34%. Manufacturing is an energy intensive activity and growth leads to gains in many commercial exposures: WC, Commercial Auto, Marine, Property and Various Liability Coverages**

\*seasonally adjusted

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

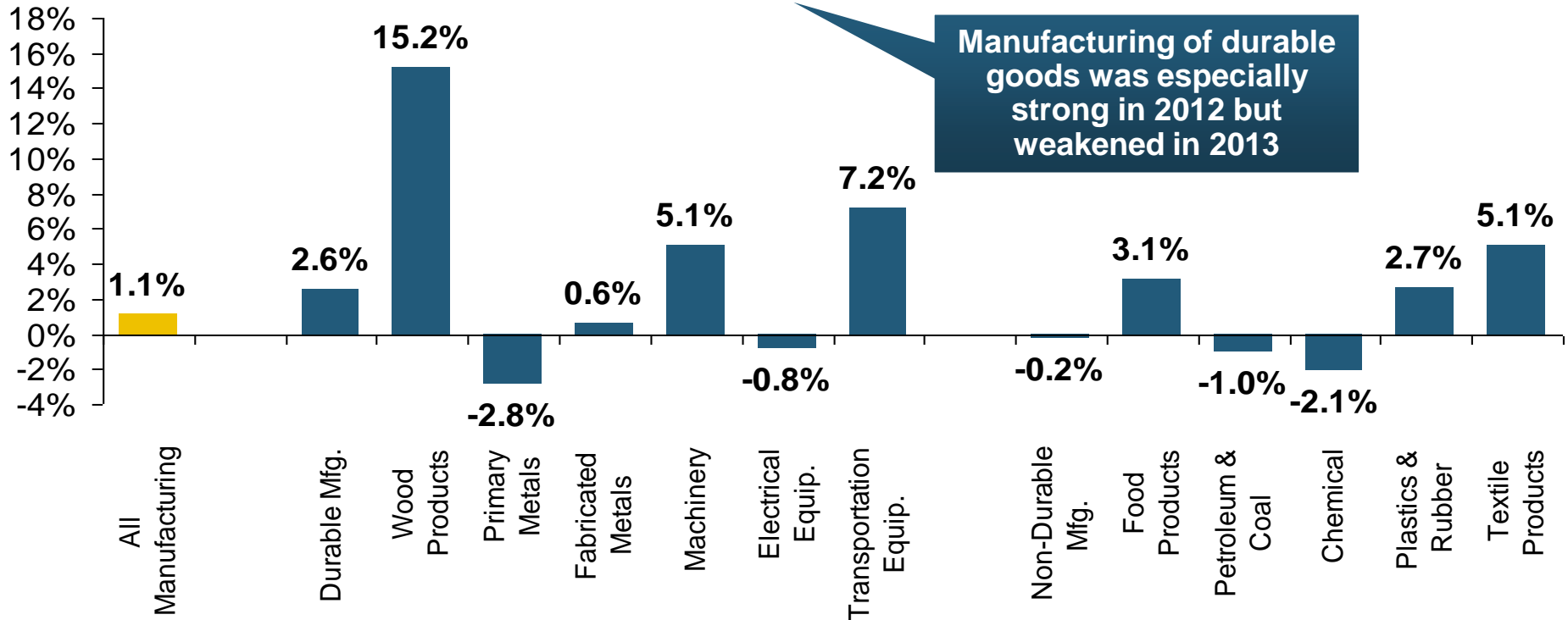
# Manufacturing Growth for Selected Sectors, 2013 vs. 2013\*

Growth (%)

**Durables: +2.6%**

**Non-Durables: -0.2%**

Manufacturing of durable goods was especially strong in 2012 but weakened in 2013



**Manufacturing Is Expanding—Albeit More Slowly—Across a Number of Sectors that Will Contribute to Growth in Insurable Exposures Including: WC, Commercial Property, Commercial Auto and Many Liability Coverages**

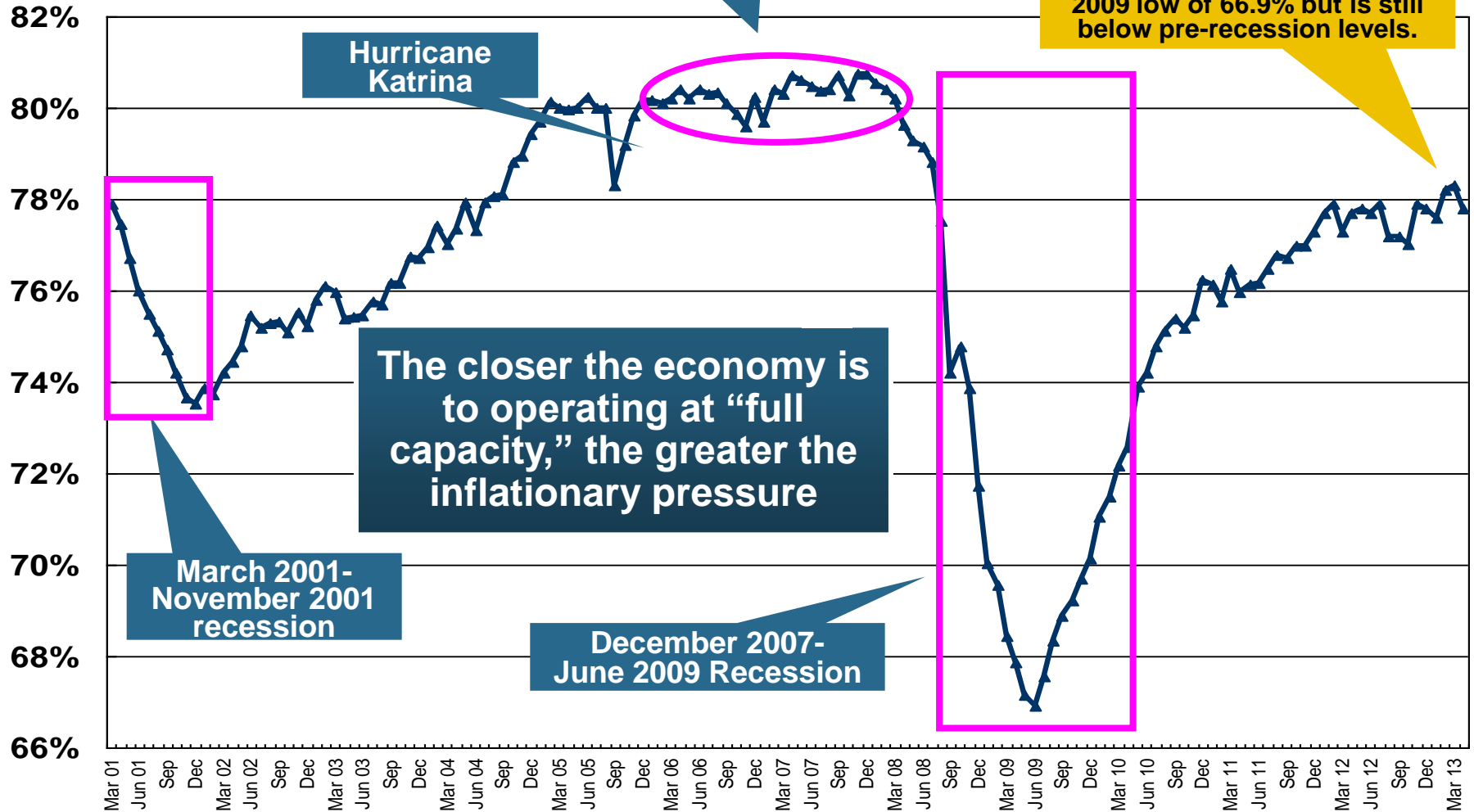
\*Seasonally adjusted; Date are YTD comparing data through May 2013 to the same period in 2012.

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

# Recovery in Capacity Utilization is a Positive Sign for Commercial Exposures

March 2001 through April 2013

Percent of Industrial Capacity



Source: Federal Reserve Board statistical releases at <http://www.federalreserve.gov/releases/q17/Current/default.htm>.

# Manufacturing Employment, Jan. 2010—June 2013\*

(Thousands)

Manufacturing employment is up by more than 500,000 or 4.4% since Jan. 2010—a surprising source of strength in the economy. The sector has weakened recently as US corporations remains cautious and Europe, China slow.

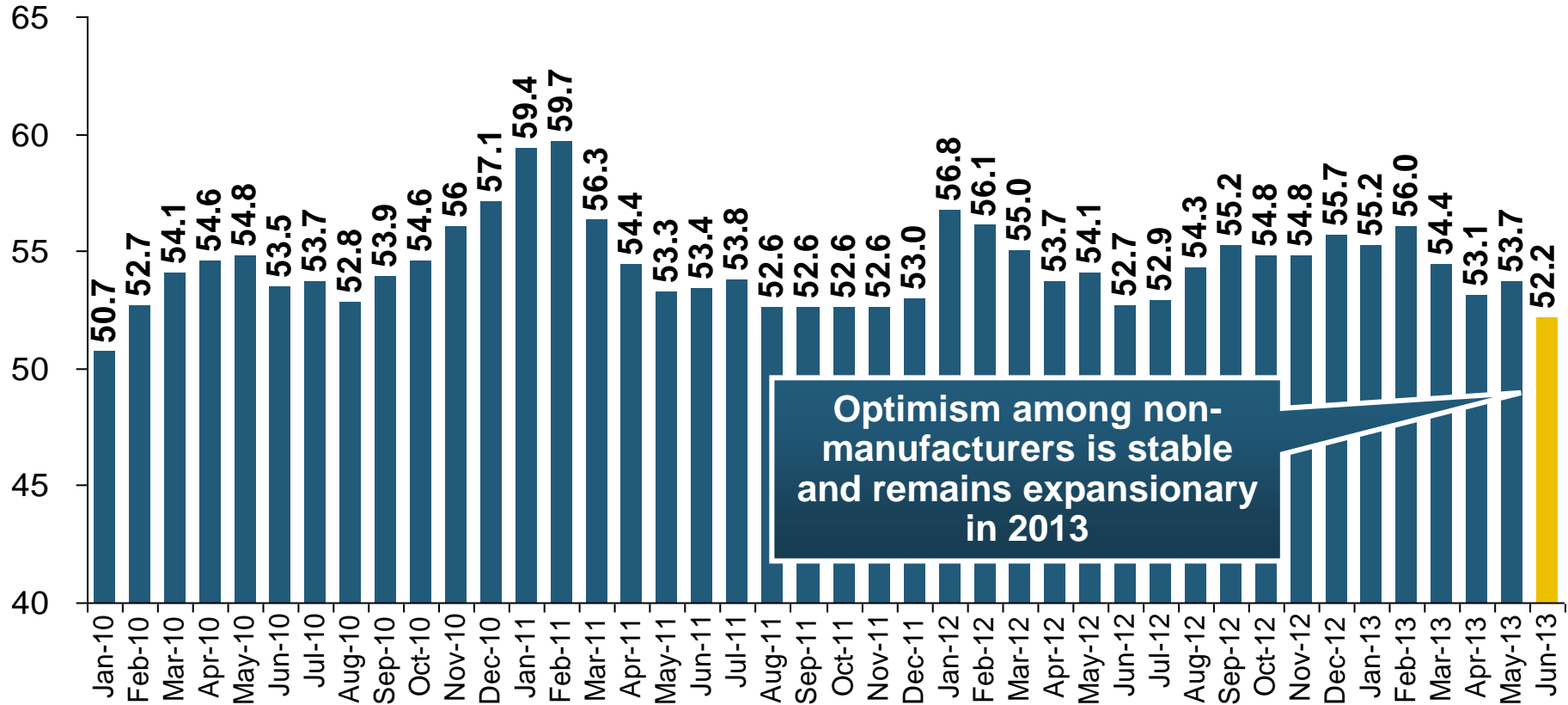


\*Seasonally adjusted

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

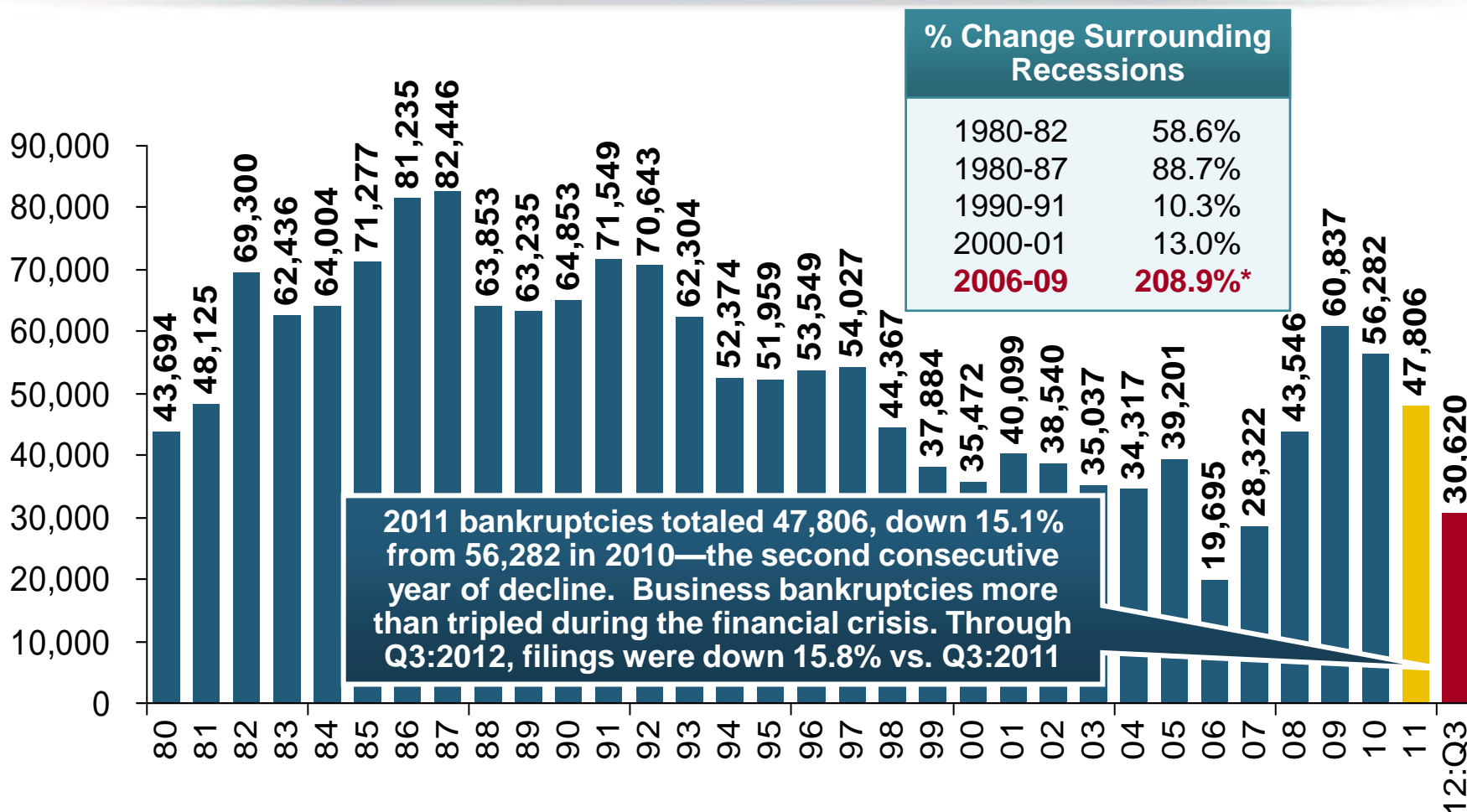
# ISM Non-Manufacturing Index (Values > 50 Indicate Expansion)

January 2010 through June 2013



**Non-manufacturing industries have been expanding and adding jobs. The question is whether this will continue.**

# Business Bankruptcy Filings, 1980-2012:Q3

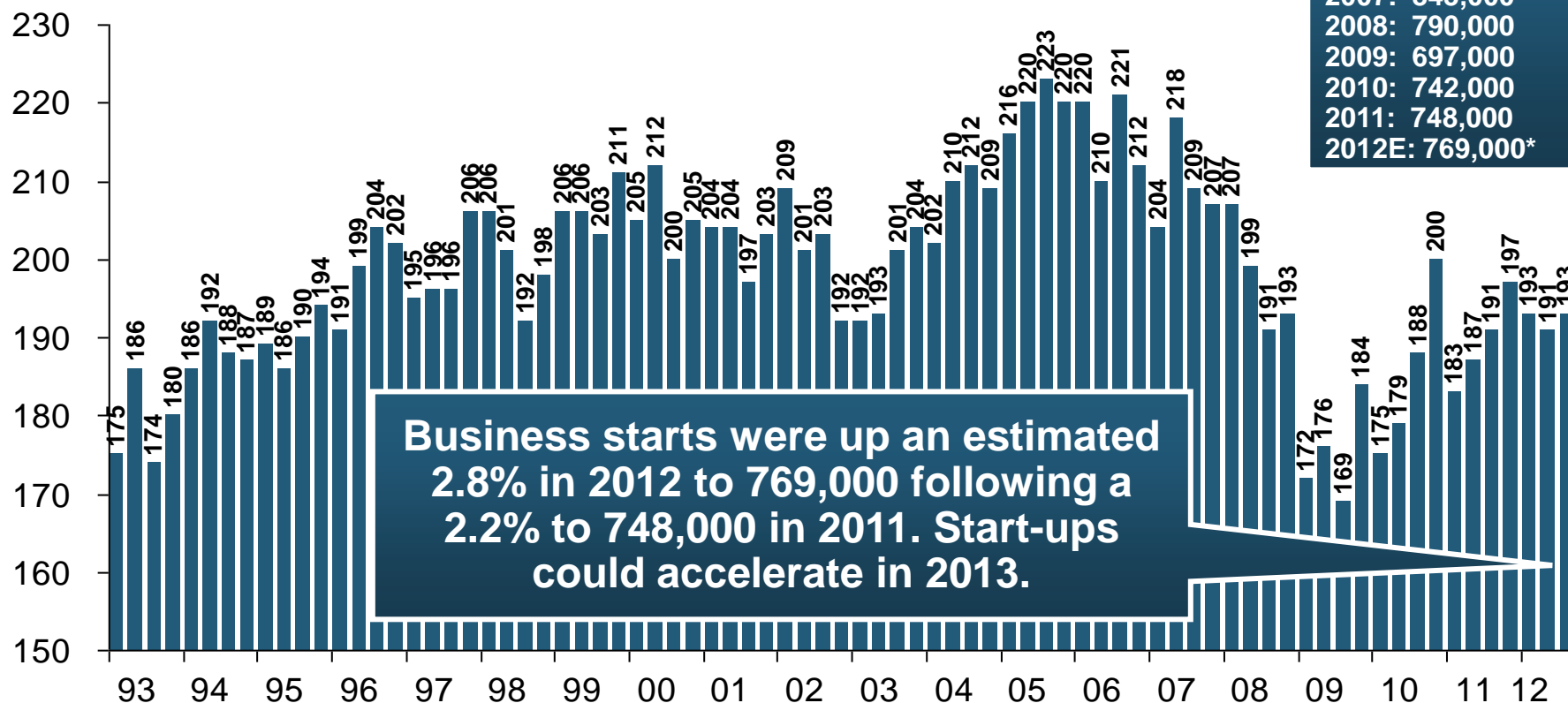


**Significant Exposure Implications for All Commercial Lines as Business Bankruptcies Begin to Decline**

Sources: American Bankruptcy Institute at <http://www.abiworld.org/AM/AMTemplate.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=61633>; Insurance Information Institute

# Private Sector Business Starts, 1993:Q2 – 2012:Q3\*

(Thousands)



Business Starts	
2006:	872,000
2007:	843,000
2008:	790,000
2009:	697,000
2010:	742,000
2011:	748,000
2012E:	769,000*

Business starts were up an estimated 2.8% in 2012 to 769,000 following a 2.2% to 748,000 in 2011. Start-ups could accelerate in 2013.

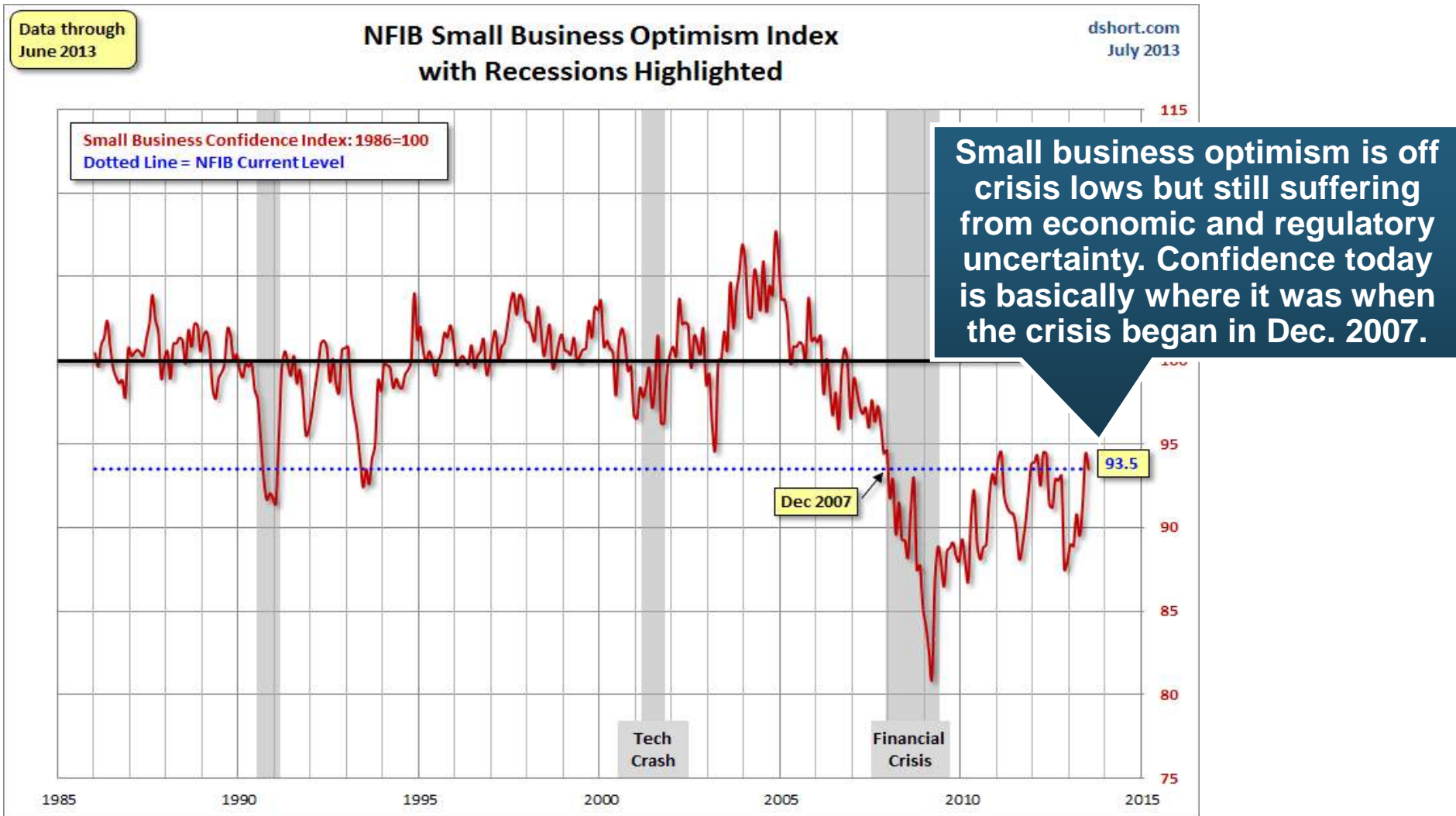
**Business Starts Were Down Nearly 20% in the Recession, Holding Back Most Types of Commercial Insurance Exposure, But Are Recovering Slowly**

\* Data through Sep. 30, 2012 are the latest available as of June 21, 2013; Seasonally adjusted.

Source: Bureau of Labor Statistics, <http://www.bls.gov/news.release/cewbd.t08.htm>.

# NFIB Small Business Optimism Index

January 1985 through June 2013



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



# 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)



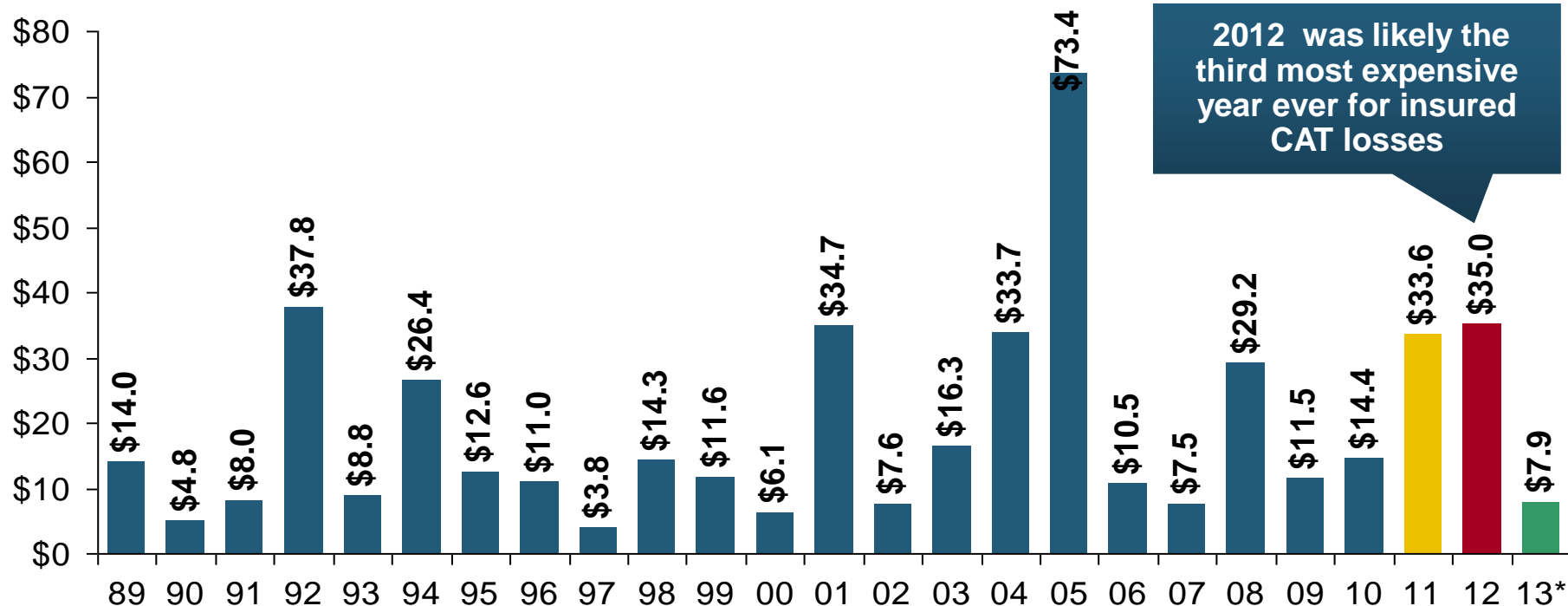
Many industries are poised for growth, though insurers' ability to capitalize on these industries varies widely

# **U.S. Insured Catastrophe Loss Update**

**Catastrophe Losses in Recent Years  
Have Been Very High**

# U.S. Insured Catastrophe Losses

(\$ Billions, 2012 Dollars)



2012 was likely the third most expensive year ever for insured CAT losses

**2012 Was the 3<sup>rd</sup> Highest Year on Record for Insured Losses in U.S. History on an Inflation-Adj. Basis. 2011 Losses Were the 6<sup>th</sup> Highest. YTD 2013 Running Below Average But Q3 Is Typically the Costliest Quarter.**

Record tornado losses caused 2011 CAT losses to surge

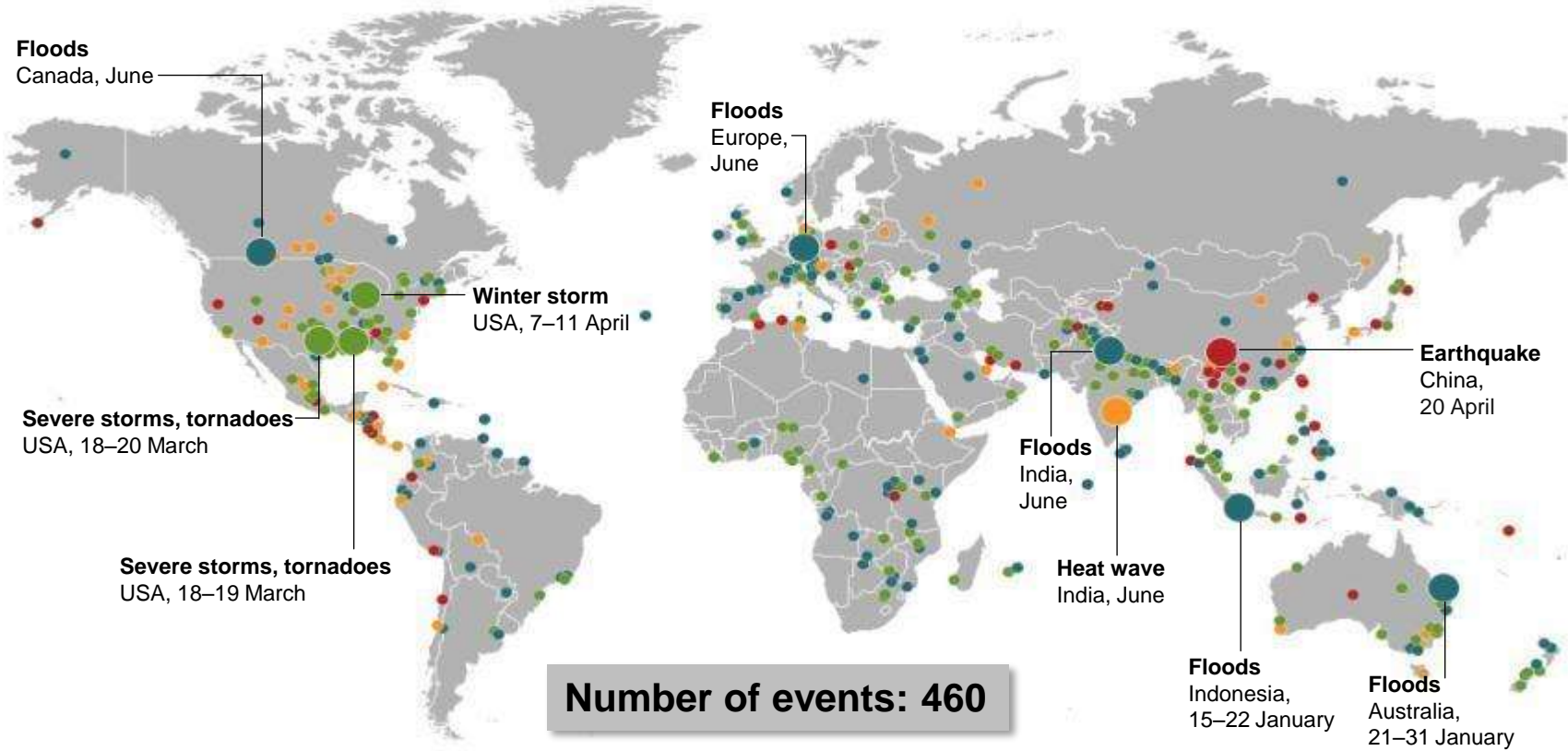
\*Through 6/2/13. Includes \$2.6B for 2013:Q1 (PCS) and \$5.32B for the period 4/1 – 6/2/13 (Aon Benfield Monthly Global Catastrophe Recap).

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.

# Natural Catastrophes January – June 2013

## World map with significant events



- Natural catastrophes
- Selection of significant loss events
- Geophysical events (earthquake, tsunami, volcanic activity)
- Meteorological events (storm)
- Hydrological events (flood, mass movement)
- Climatological events (extreme temperature, drought, wildfire)

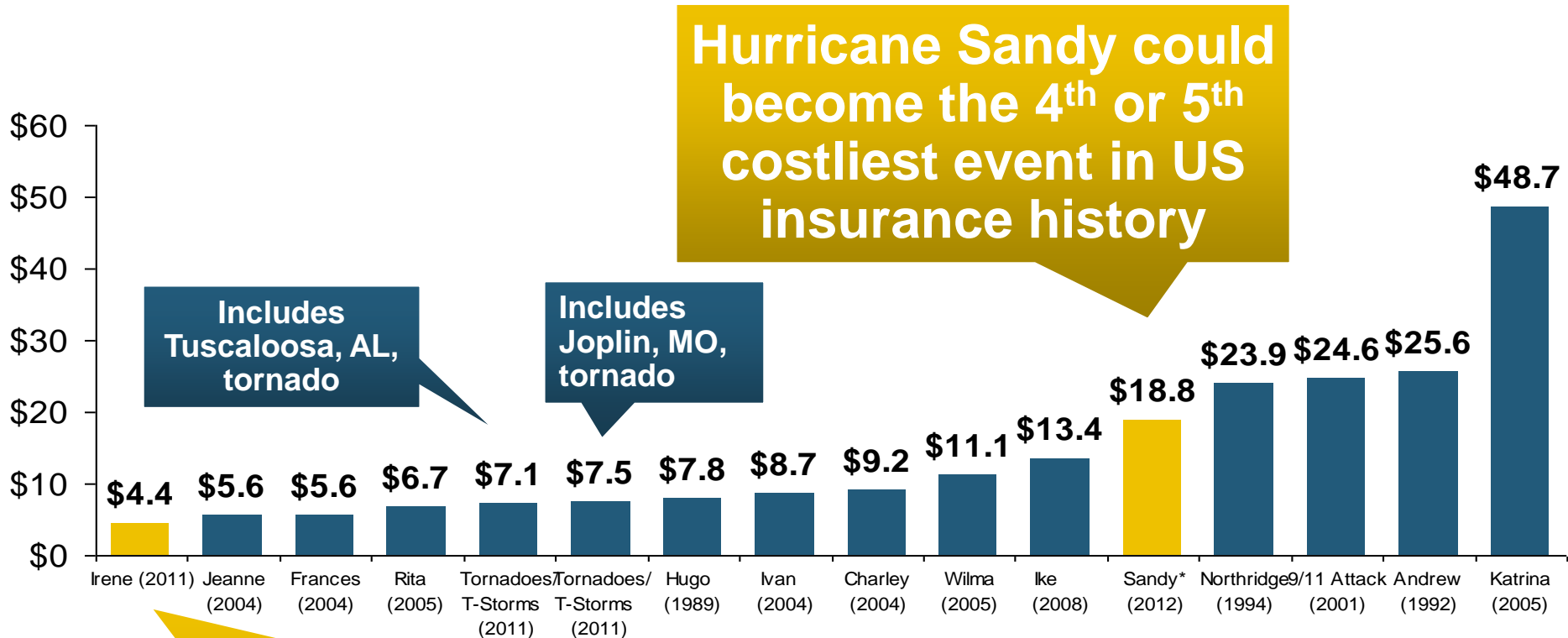
# Moore, OK, Tornado: Media Coverage Was Generally Favorable

- Industry had a highly visible, rapid response as Catastrophe Response Teams massed at the “Command Center” at the First Baptist Church in Moore within 48 hours
- Developed good working relationship with OK Insurance Commissioner John Doak



# Top 16 Most Costly Disasters in U.S. History

(Insured Losses, 2012 Dollars, \$ Billions)



**Hurricane Irene became the 12<sup>th</sup> most expensive hurricane in US history in 2011**

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

\*PCS estimate as of 4/12/13.

Sources: PCS; Insurance Information Institute inflation adjustments to 2012 dollars using the CPI.

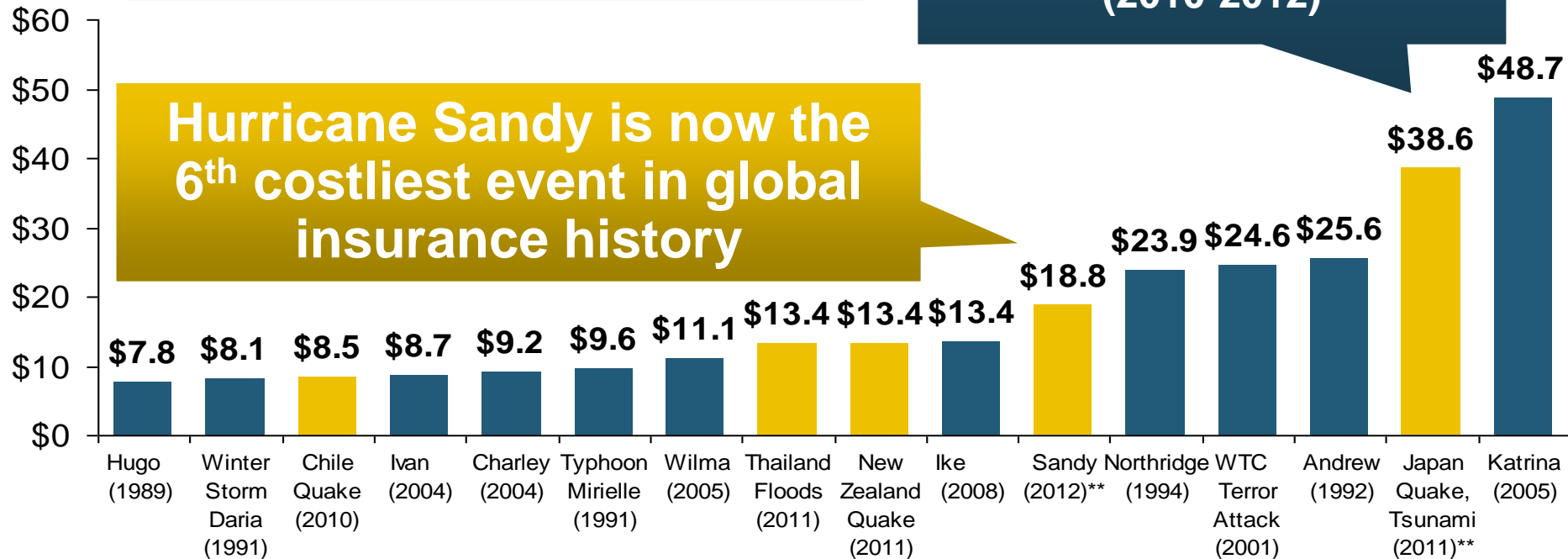
# Top 16 Most Costly World Insurance Losses, 1970-2012\*

(Insured Losses, 2012 Dollars, \$ Billions)

**2012 insured CAT Losses totaled \$60B; Economic losses totaled \$140B, according to Swiss Re**

**5 of the top 14 most expensive catastrophes in world history have occurred within the past 3 years (2010-2012)**

**Hurricane Sandy is now the 6<sup>th</sup> costliest event in global insurance history**



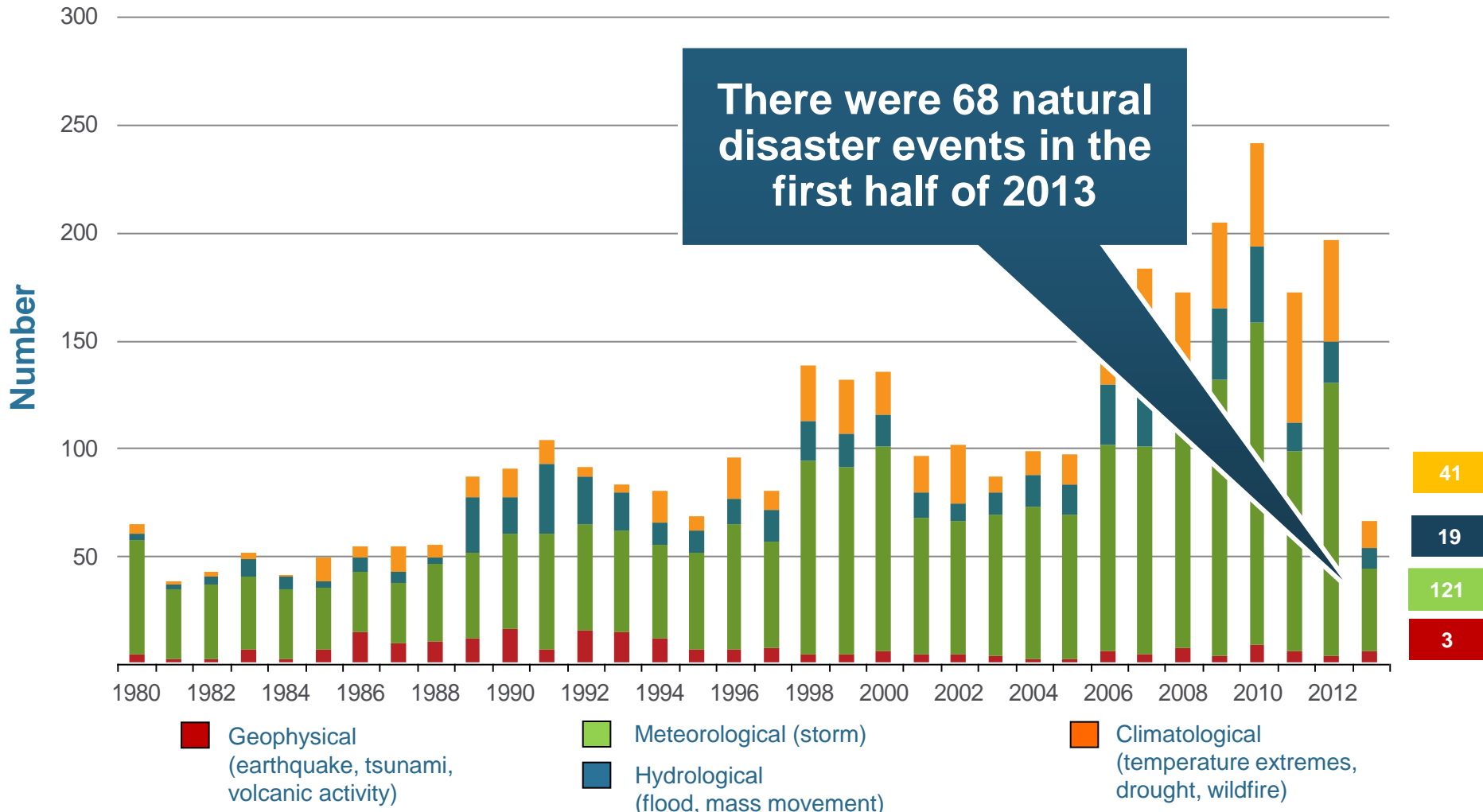
\*Figures do not include federally insured flood losses.

\*\*Estimate based on PCS value of \$18.75B as of 4/12/13.

Sources: Munich Re; Swiss Re; Insurance Information Institute research.

# Natural Disasters in the United States, 1980 – June 2013\*

Number of Events (Annual Totals 1980 – June 2013\*)

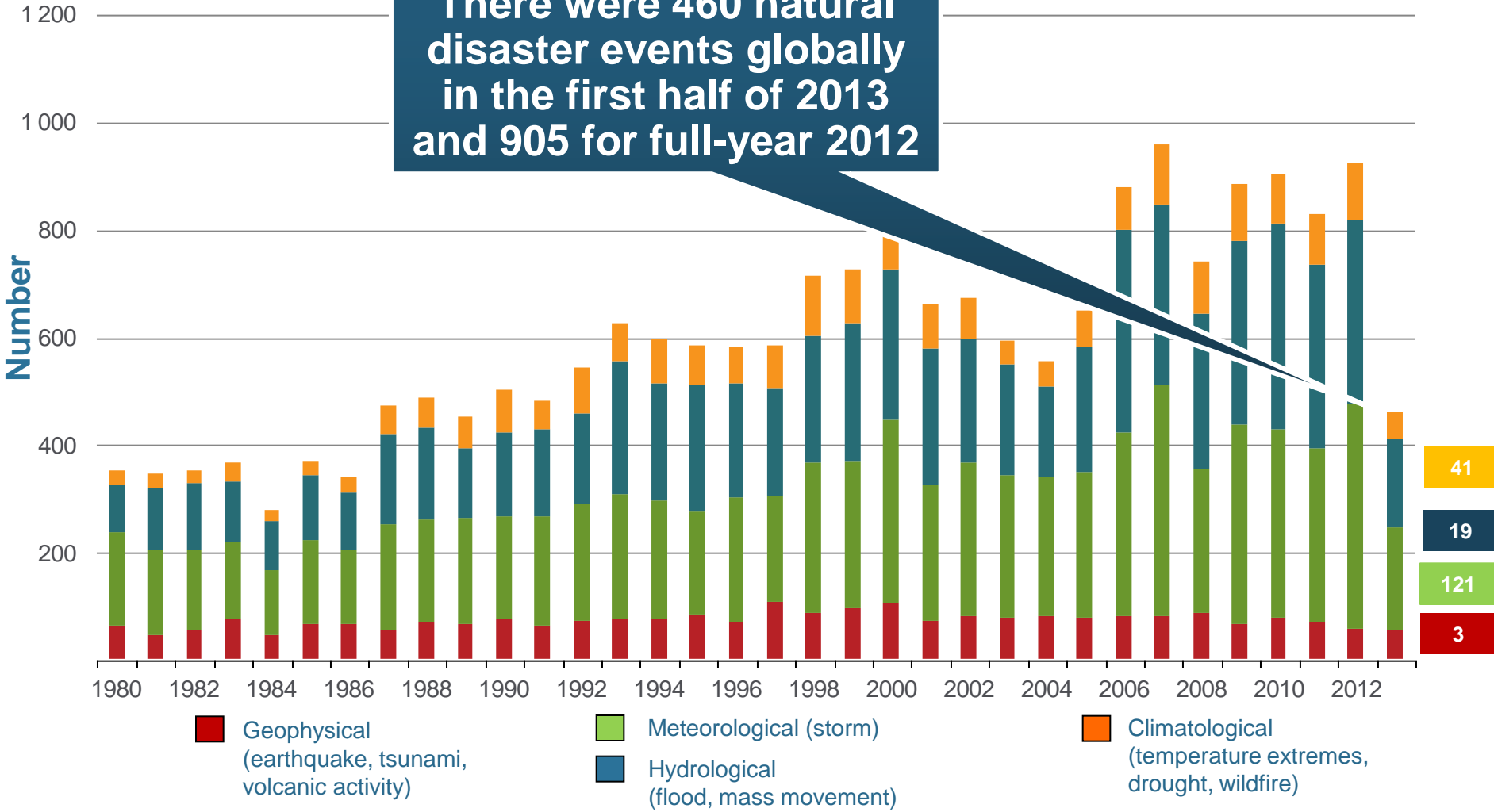


\*Through June 30, 2013.  
Source: MR NatCatSERVICE



# Natural Disasters Worldwide, 1980 – 2013\* (Number of Events)

There were 460 natural disaster events globally in the first half of 2013 and 905 for full-year 2012



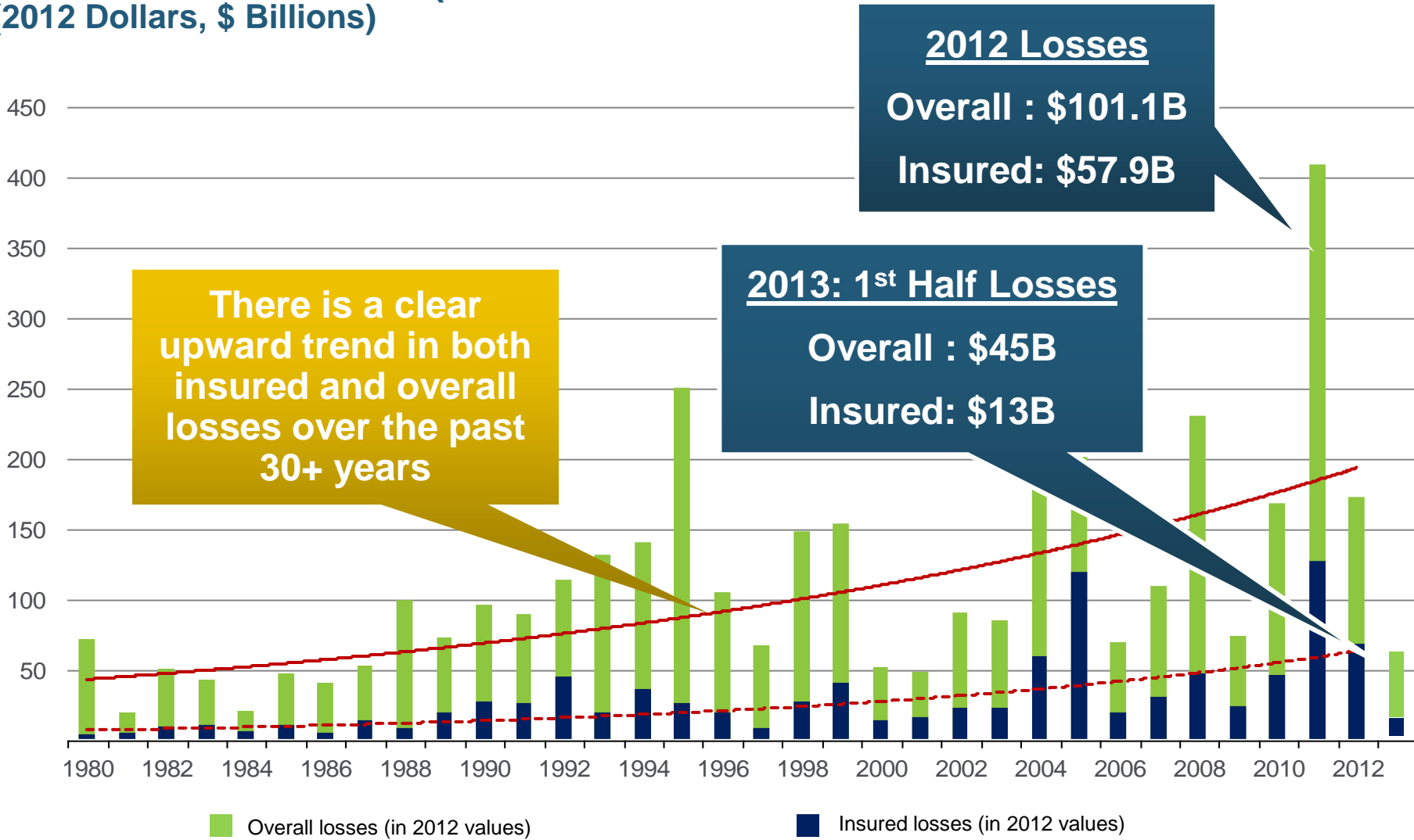
\*Through June 30, 2013.  
Source: MR NatCatSERVICE

# Losses Due to Natural Disasters Worldwide, 1980–2013\* (Overall & Insured Losses)



## (Overall and Insured Losses)

(2012 Dollars, \$ Billions)

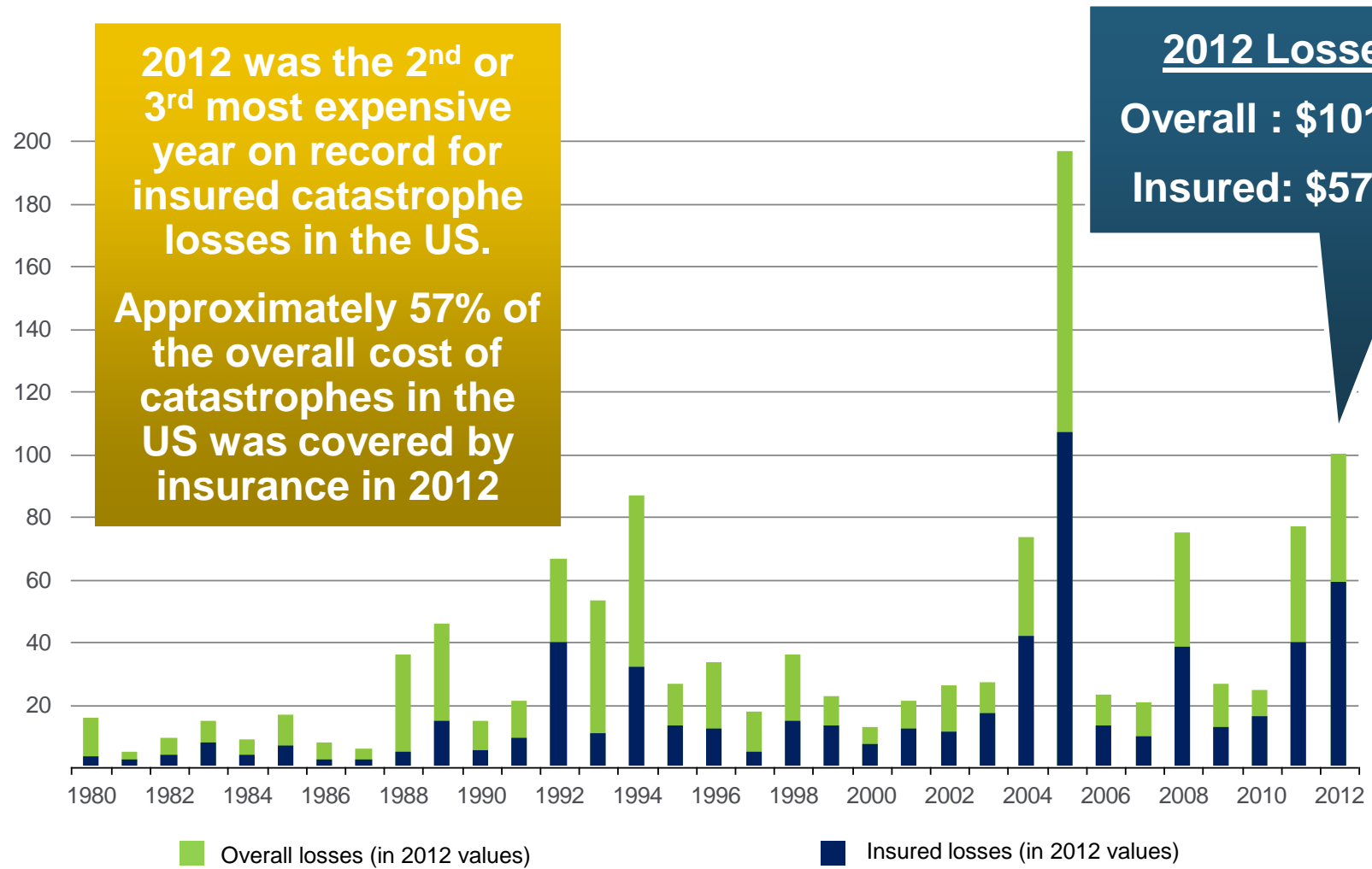


\*Through June 30, 2013.  
Source: MR NatCatSERVICE

# Losses Due to Natural Disasters in the US, 1980–2012 (Overall & Insured Losses)

## (Overall and Insured Losses)

(2012 Dollars, \$ Billions)



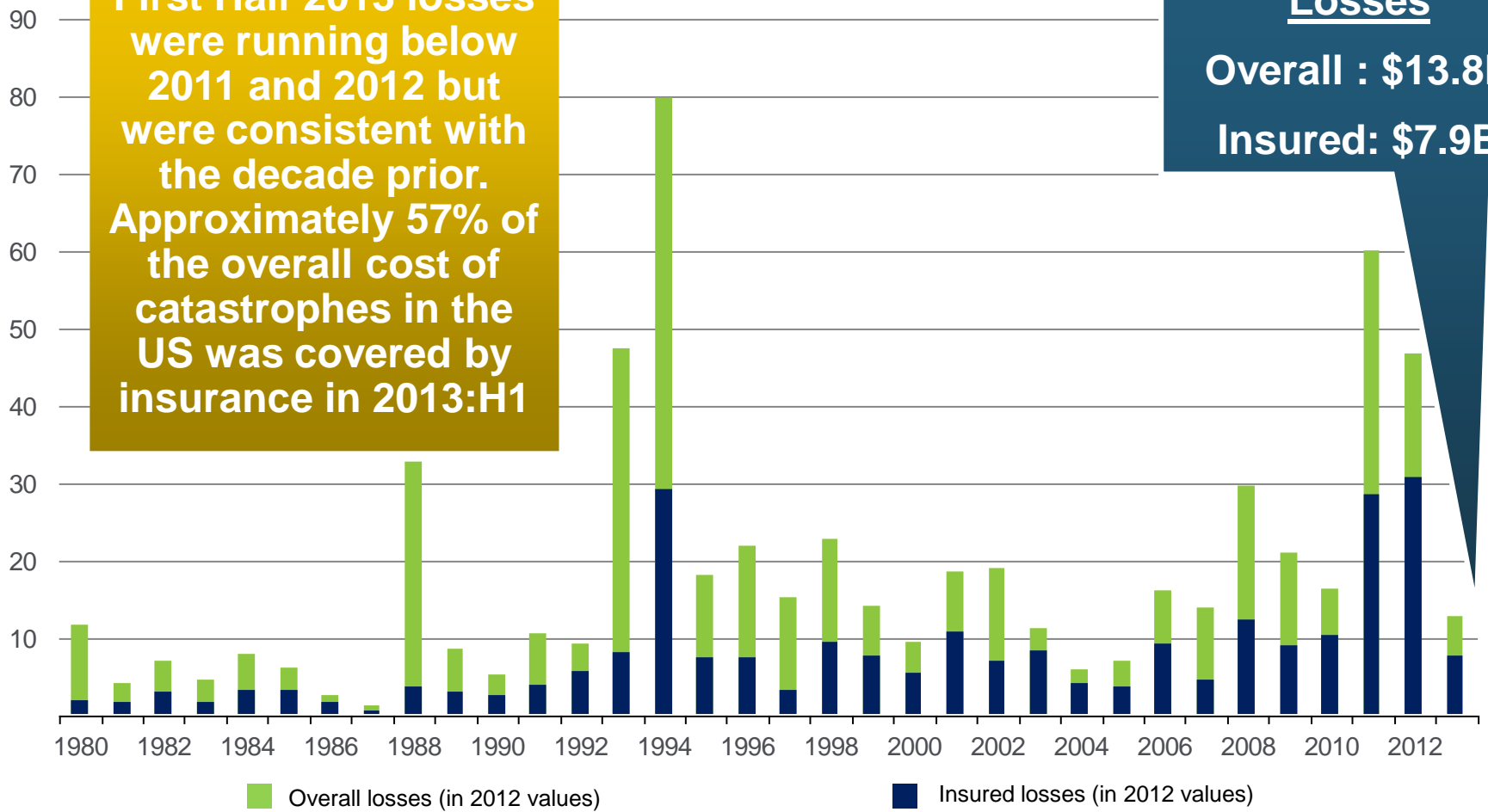
# Losses Due to Natural Disasters in the US, 1980–2013 (Jan.-June Only)

## (Overall and Insured Losses)

(2012 Dollars, \$ Billions)

First Half 2013 losses were running below 2011 and 2012 but were consistent with the decade prior. Approximately 57% of the overall cost of catastrophes in the US was covered by insurance in 2013:H1

**2013 First Half Losses**  
**Overall : \$13.8B**  
**Insured: \$7.9B**



# Natural Disaster Losses in the United States: 2012

As of January 1, 2013	Number of Events	Fatalities	Estimated Overall Losses (US \$m)	Estimated Insured Losses (US \$m)
<b>Tropical Cyclone</b>	4	143	52,240	<b>26,360</b>
<b>Severe Thunderstorm</b>	115	118	27,688	<b>14,914</b>
<b>Drought</b>	2	0	20,000	<b>16,000<sup>†</sup></b>
<b>Wildfire</b>	38	13	1,112	<b>595</b>
<b>Winter Storm</b>	2	7	81	<b>38</b>
<b>Flood</b>	19	3	13	<b>0<sup>††</sup></b>
<b>TOTALS</b>	<b>184</b>	<b>284</b>	<b>\$101,134</b>	<b>\$57,907</b>

Source: MR NatCatSERVICE

† - Includes Federal Crop Insurance Losses. †† - Excludes federal flood.

# Natural Disaster Losses in the United States: First Half 2013

As of July 1, 2013	Number of Events	Fatalities	Estimated Overall Losses (US \$m)	Estimated Insured Losses (US \$m)
<b>Severe Thunderstorm</b>	29	66	10,180	6,325
<b>Winter Storm</b>	13	17	2,434	1,255
<b>Flood</b>	10	9	500	Minor
<b>Earthquake &amp; Geophysical</b>	5	0	Minor	Minor
<b>Tropical Cyclone</b>	1	1	Minor	Minor
<b>Wildfire, Heat, &amp; Drought</b>	11	23	700	365
<b>Totals</b>	<b>68</b>	<b>116</b>	<b>13,814</b>	<b>7,945</b>

# Significant Natural Catastrophes, 2012

(Events with \$1 billion economic loss and/or 50 fatalities)



Date	Event	Estimated Economic Losses (US \$m)	Estimated Insured Losses (US \$m)
June – Sept 2012	Central US Drought	20,000	16,000 <sup>†</sup>
March 2 - 3	Thunderstorms	5,000	2,500
April 2 – 4	Thunderstorms	1,550	775
April 13- 15	Thunderstorms	1,800	910
April 28 – 29	Thunderstorms	4,500	2,500
May 25 – 30	Thunderstorms	3,400	1,700
June 6 – 7	Thunderstorms	1,400	1,000
June 11 – 13	Thunderstorms	1,900	950
June 28 – July 2	Thunderstorms	4,000	2,000
August 26 - 30	Hurricane Isaac	2,000	1,220
October 28 - 30	Hurricane Sandy	50,000	25,000 <sup>††</sup>

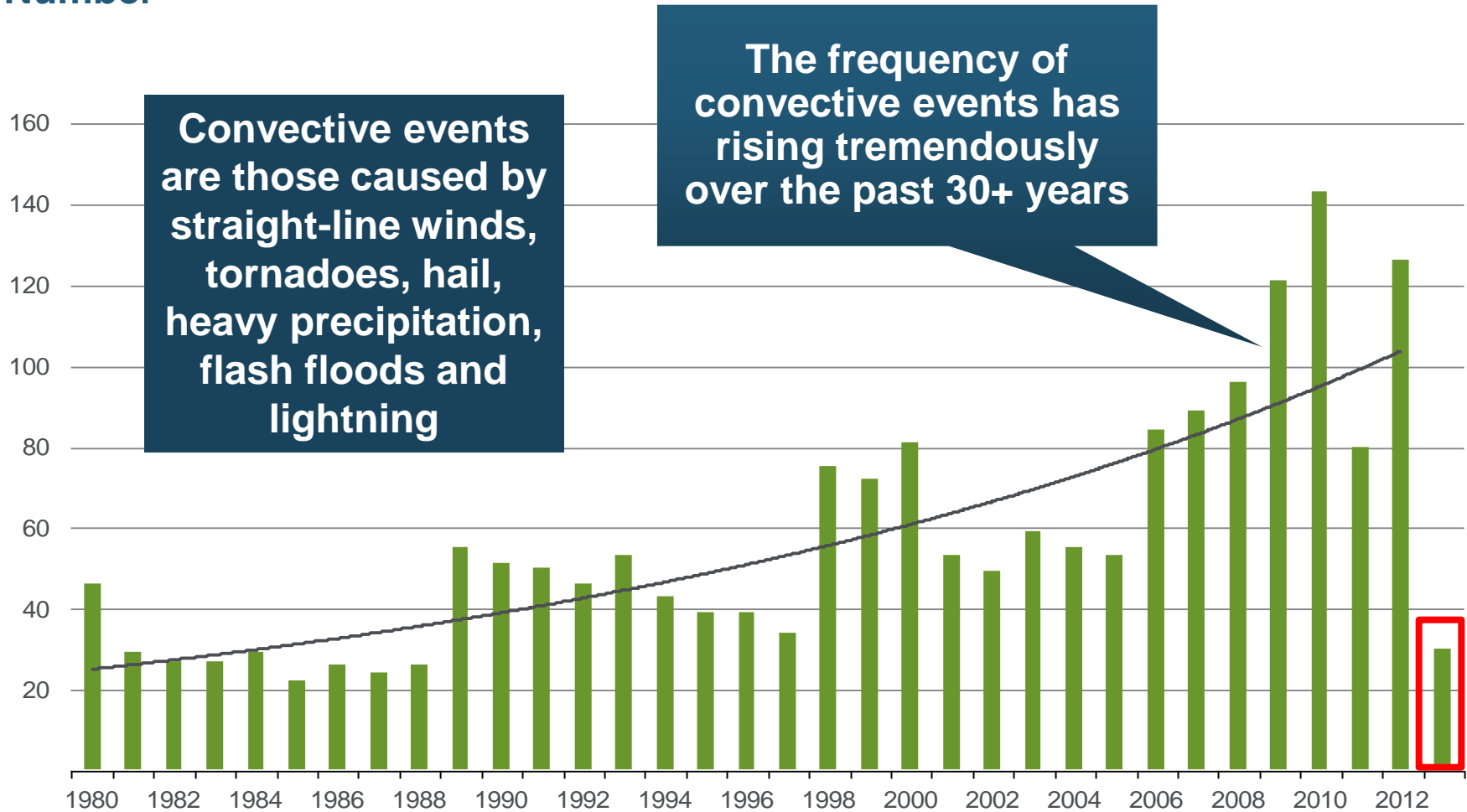
Source: MR NatCatSERVICE

<sup>†</sup> - Includes Federal Crop Insurance Losses.; <sup>††</sup> - Excludes NFIP losses.

# Convective Loss Events in the U.S.

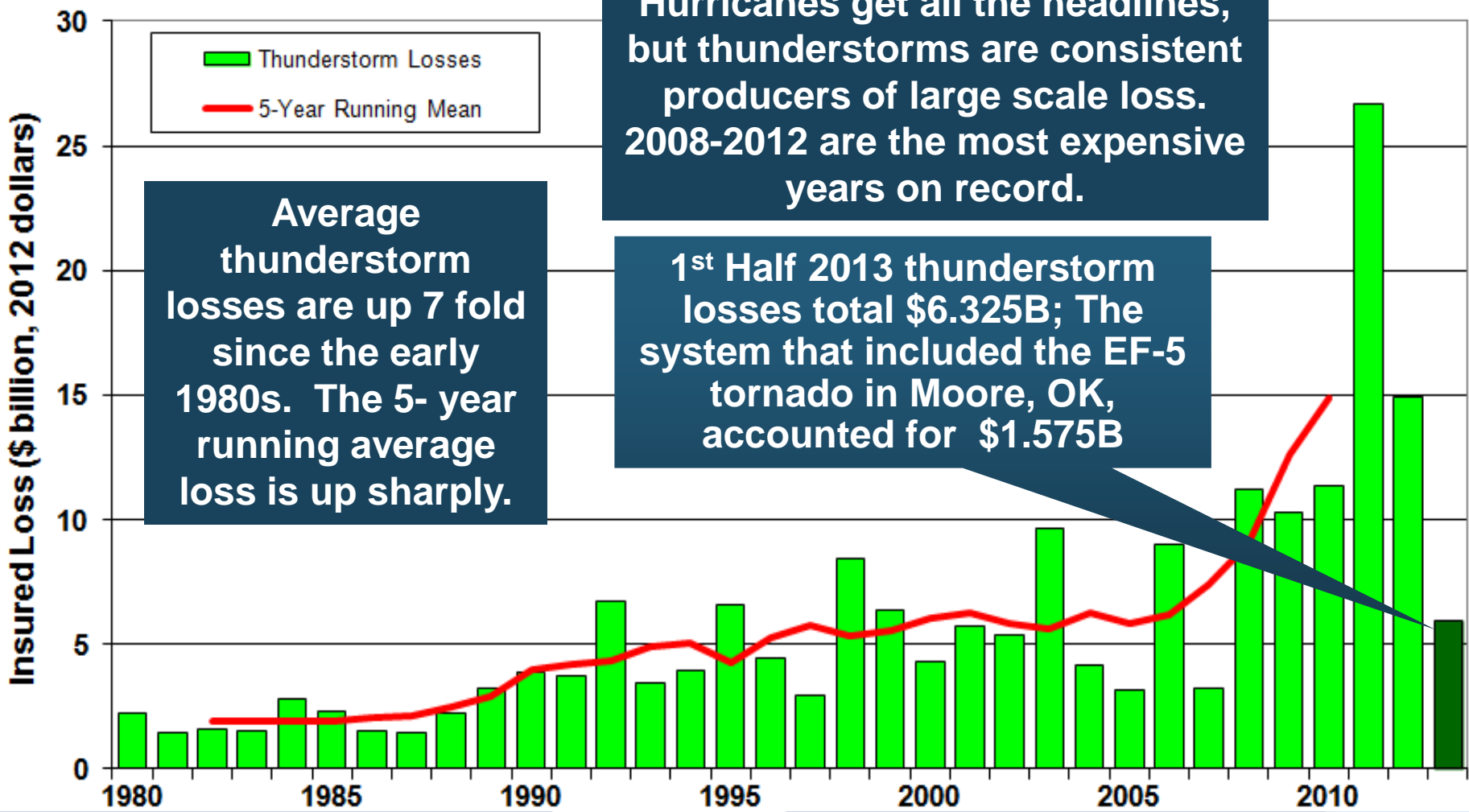
Number of events 1980 – 2012 and First Half 2013

Number





# U.S. Thunderstorm Loss Trends, 1980 – June 30, 2013



**Average thunderstorm losses are up 7 fold since the early 1980s. The 5- year running average loss is up sharply.**

**Hurricanes get all the headlines, but thunderstorms are consistent producers of large scale loss. 2008-2012 are the most expensive years on record.**

**1<sup>st</sup> Half 2013 thunderstorm losses total \$6.325B; The system that included the EF-5 tornado in Moore, OK, accounted for \$1.575B**

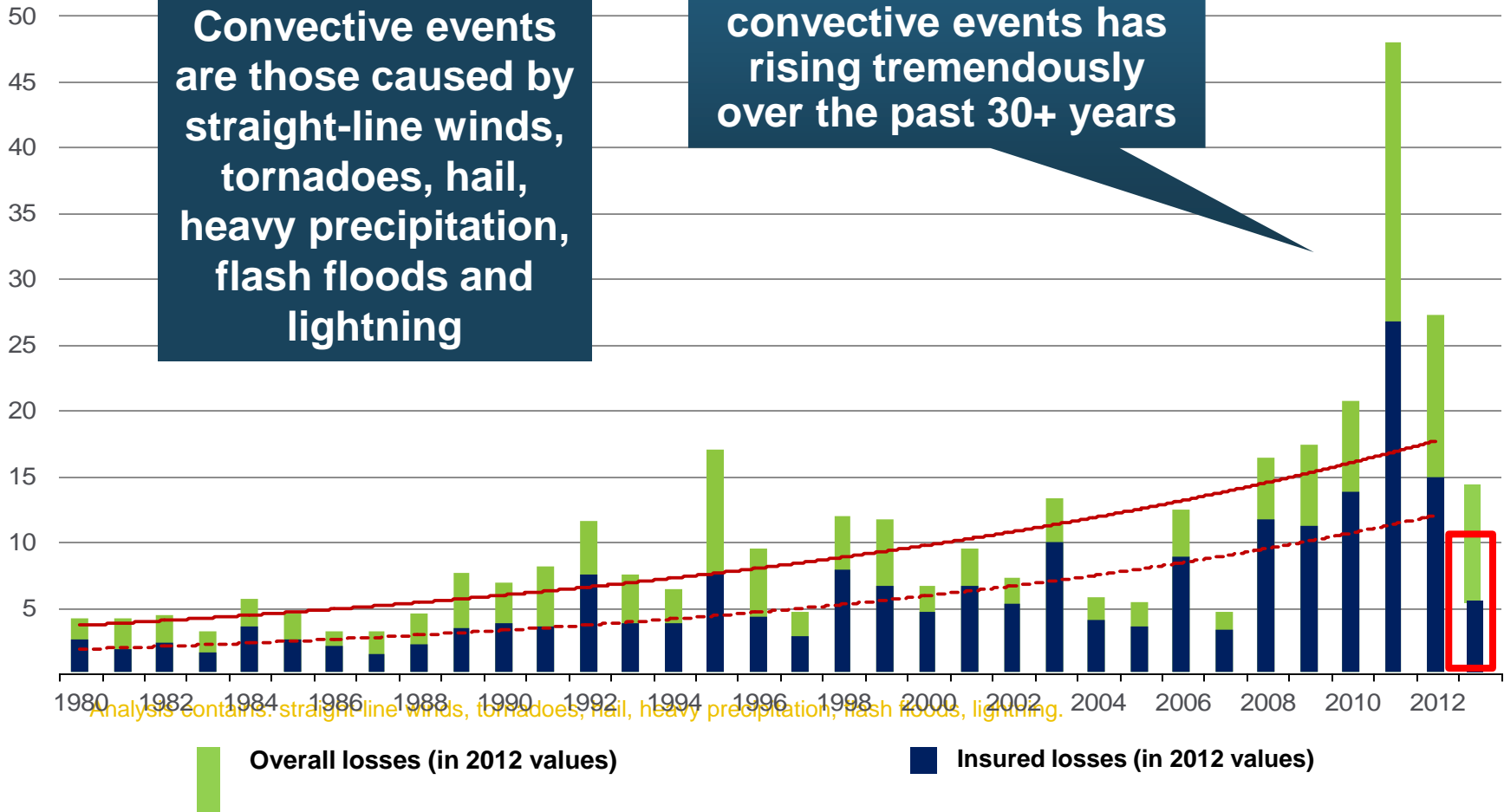
# Convective Loss Events in the U.S.

Overall and insured losses 1980 – 2012 and First Half 2013

(Bill. US\$)

Convective events are those caused by straight-line winds, tornadoes, hail, heavy precipitation, flash floods and lightning

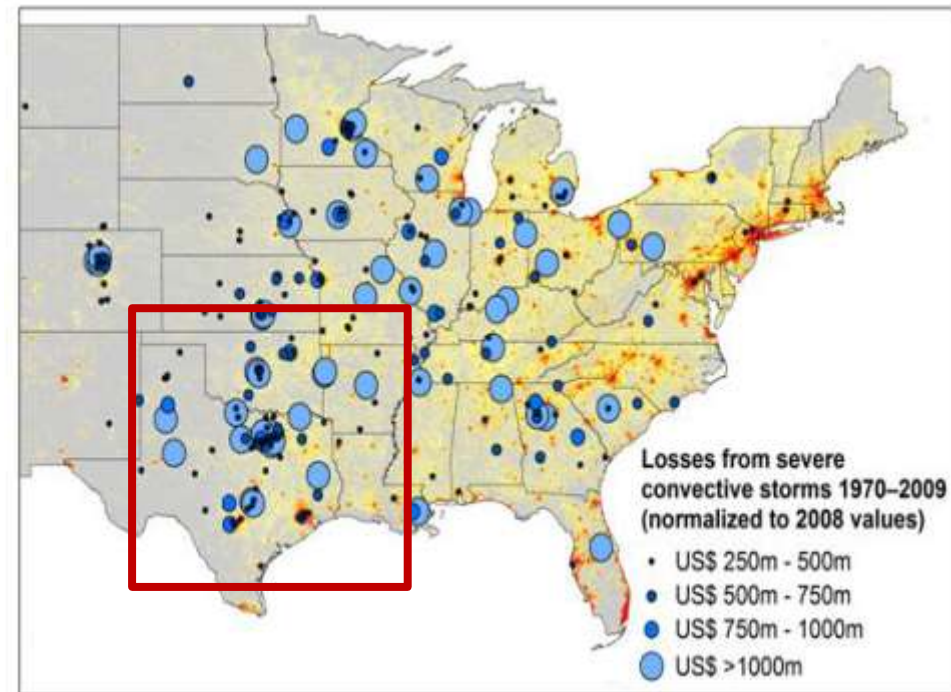
The insured and total economic cost of convective events has rising tremendously over the past 30+ years



# New Research Suggests Increase in Convective Activity Is Costly for Insurers

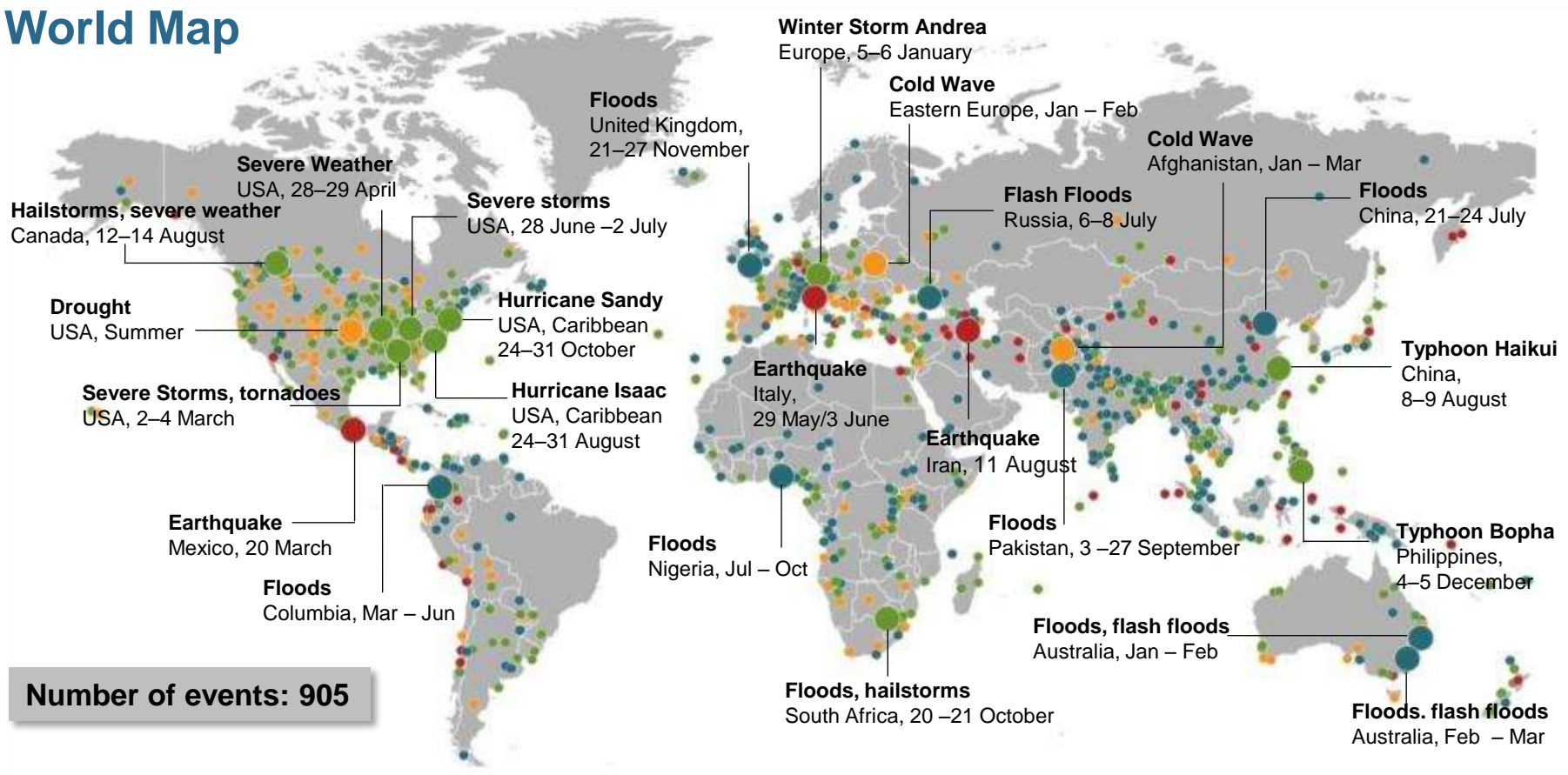
- Study examines convective (hail, tornado, thundersquall and heavy rainfall) events in the US with losses exceeding US\$ 250m in the period 1970–2009 (80% of all losses)
- Past losses are normalized (i.e., adjusted) to currently exposed values
- After normalization there are still increases of losses
- Increases are correlated with the increase in the meteorological potential for severe thunderstorms and its variability

*For the first time research shows that climatic changes have already influenced US thunderstorm losses*



# Natural Loss Events: Full Year 2012

## World Map

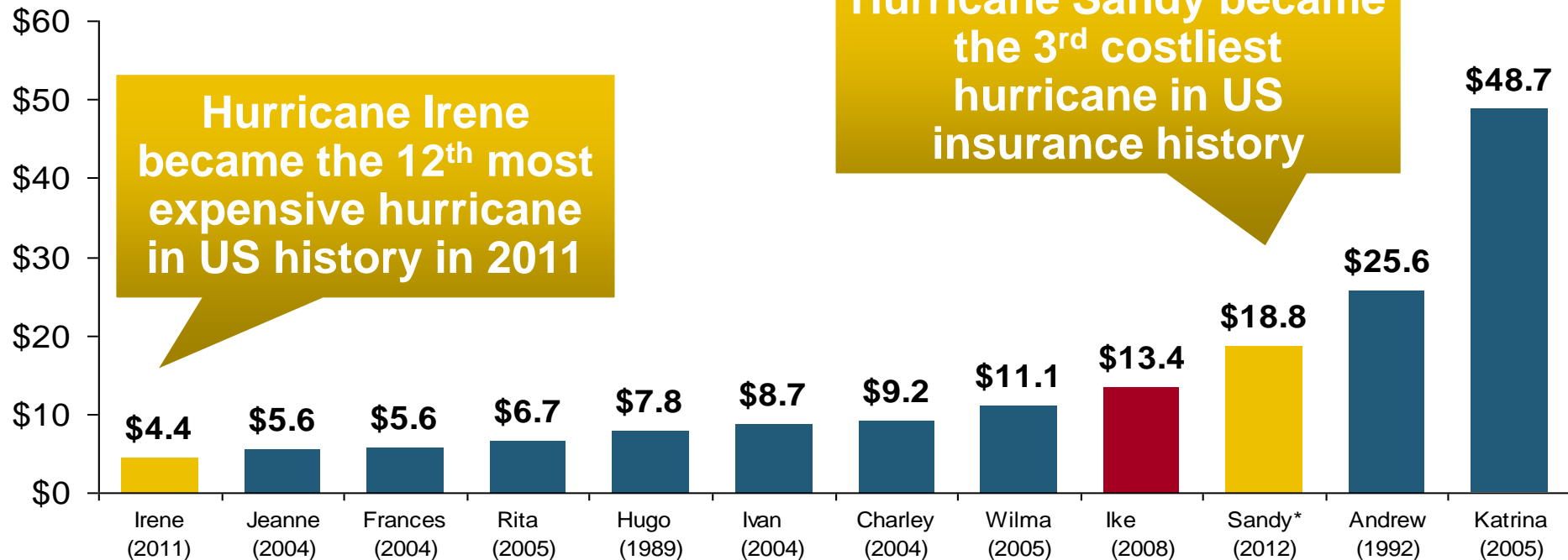


- Natural catastrophes
- Geophysical events (earthquake, tsunami, volcanic activity)
- Hydrological events (flood, mass movement)
- Selection of significant Natural catastrophes
- Meteorological events (storm)
- Climatological events (extreme temperature, drought, wildfire)

# Top 12 Most Costly Hurricanes in U.S. History

(Insured Losses, 2012 Dollars, \$ Billions)

10 of the 12 most costly hurricanes in insurance history occurred over the past 9 years (2004—2012)



\*PCS estimate as of 4/12/13.

Sources: PCS; Insurance Information Institute inflation adjustments to 2012 dollars using the CPI.

# Outlook for 2013 Hurricane Season: 75% Worse Than Average

Forecast Parameter	Median (1981-2010)	2013F
Named Storms	12.0	18
Named Storm Days	60.1	95
Hurricanes	6.5	9
Hurricane Days	21.3	40
Major Hurricanes	2.0	4
Major Hurricane Days	3.9	9
Accumulated Cyclone Energy	92.0	165
Net Tropical Cyclone Activity	103%	175%

# Landfall Probabilities for 2013 Hurricane Season: Above Average

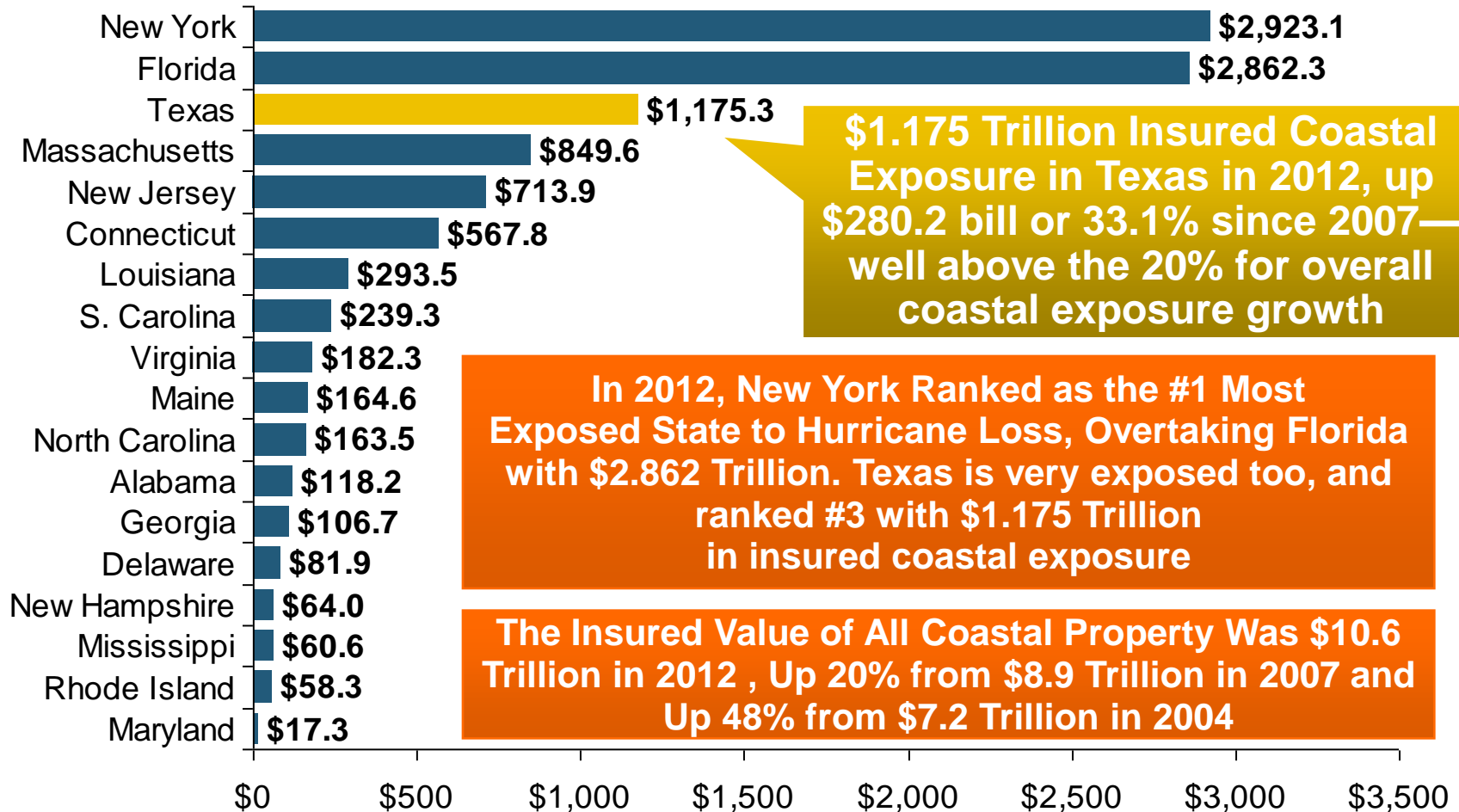
	Average*	2013F
Entire US East & Gulf Coasts	52%	72%
US East Coast Including Florida Peninsula	31%	48%
Gulf Coast from Florida Panhandle to Brownsville	30%	47%
Caribbean	42%	61%

\*Average over the past century.

Source: Philip Klotzbach and Dr. William Gray, Colorado State University, June 2013.

# Total Value of Insured Coastal Exposure in 2012

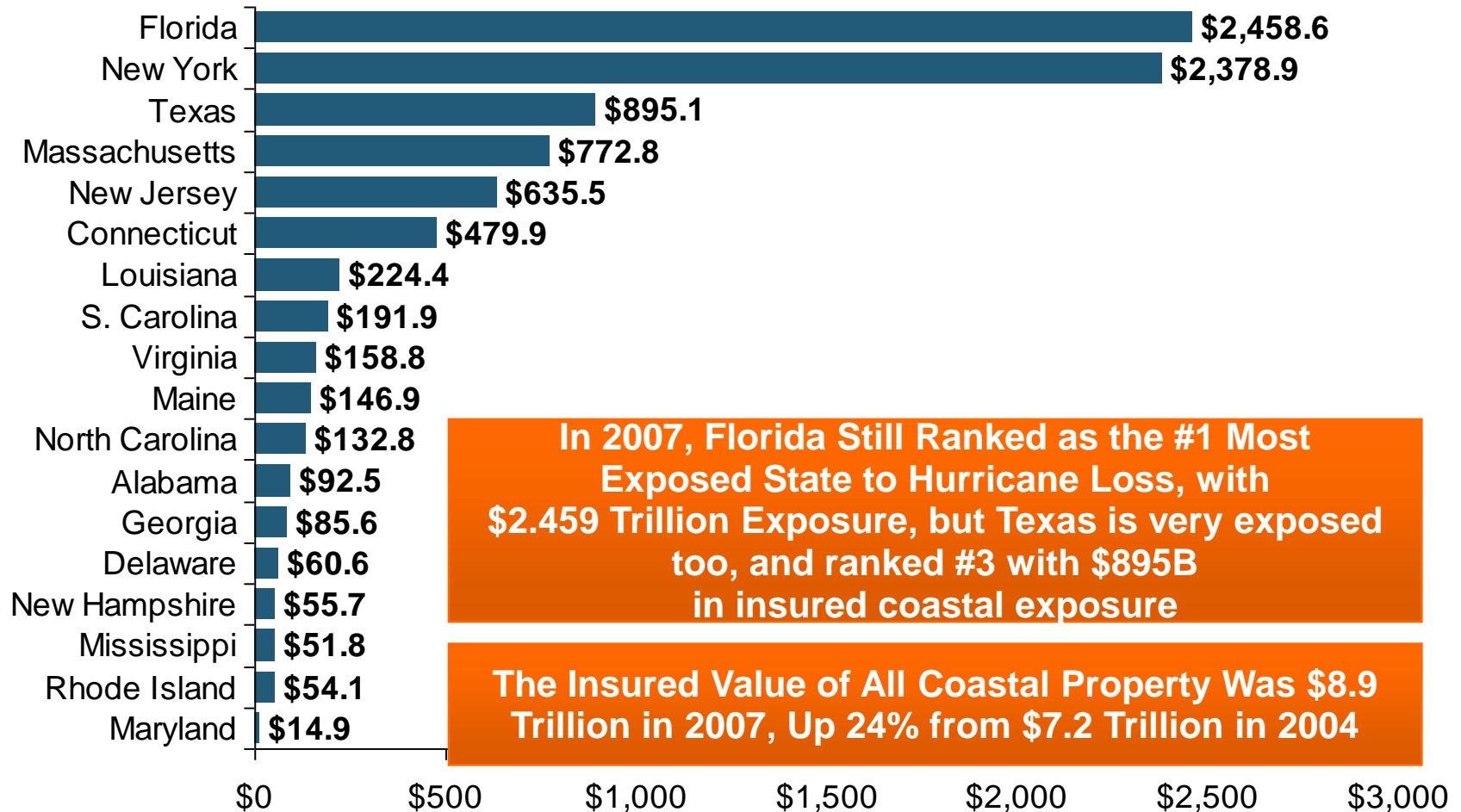
(2012, \$ Billions)





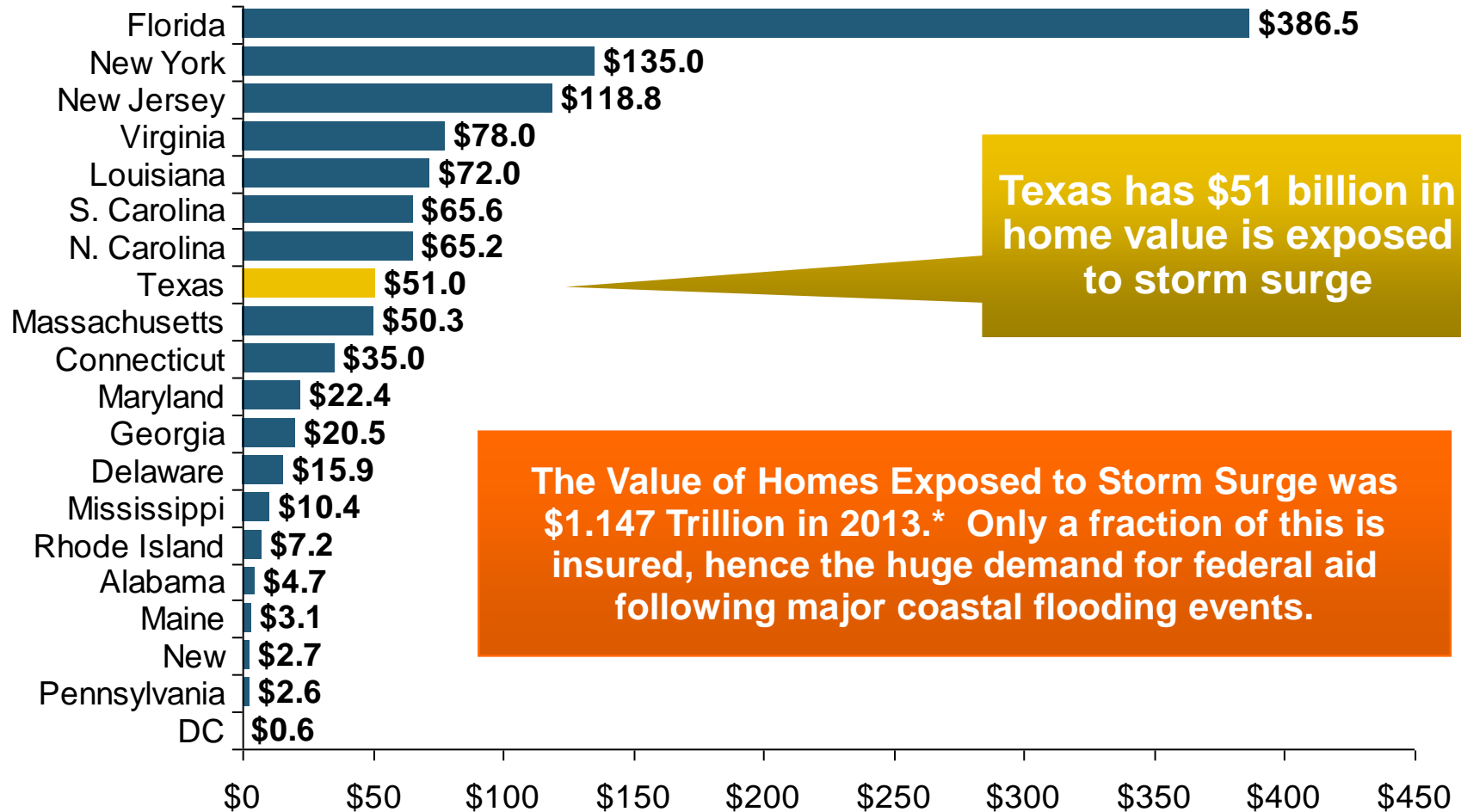
# Total Value of Insured Coastal Exposure in 2007

(2007, \$ Billions)



# Total Potential Home Value Exposure to Storm Surge Risk in 2013\*

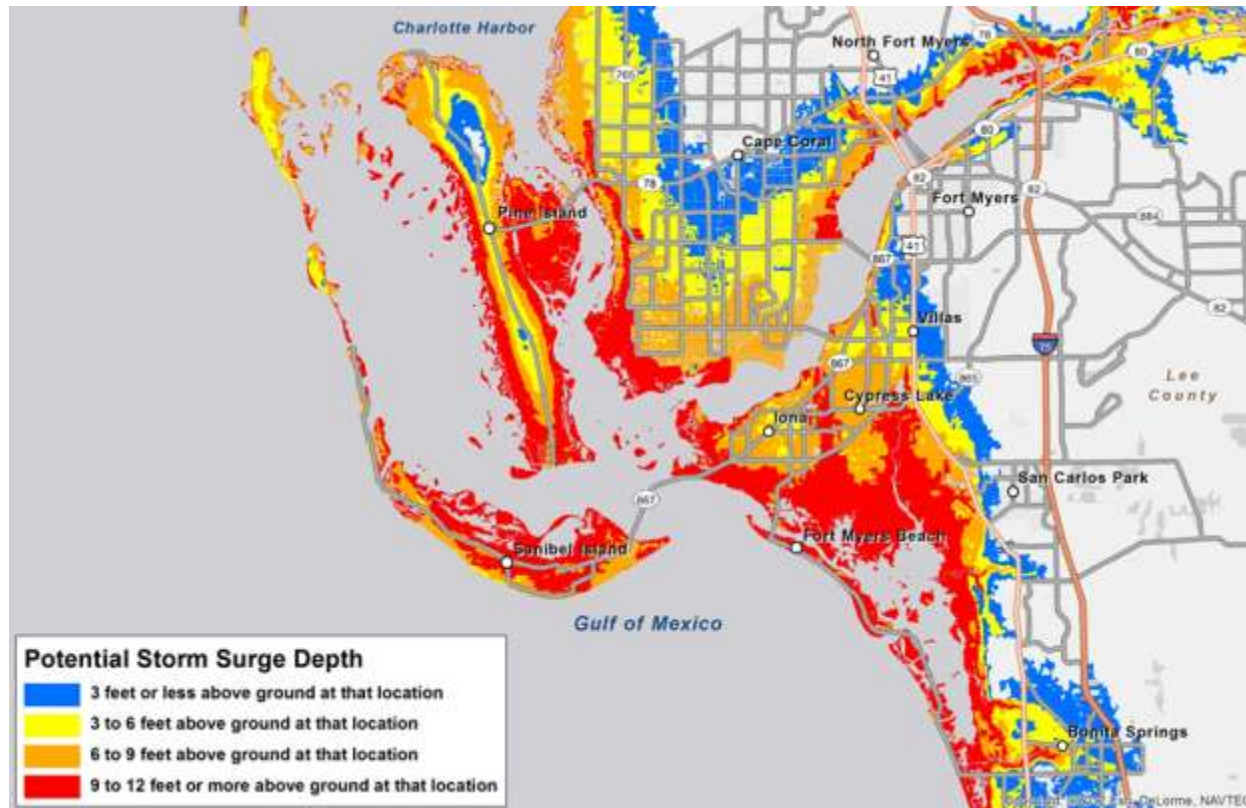
(\$ Billions)



\*Insured and uninsured property. Based on estimated property values as of April 2013.

Source: *Storm Surge Report 2013*, CoreLogic.

# Storm Surge Inundation Graphic

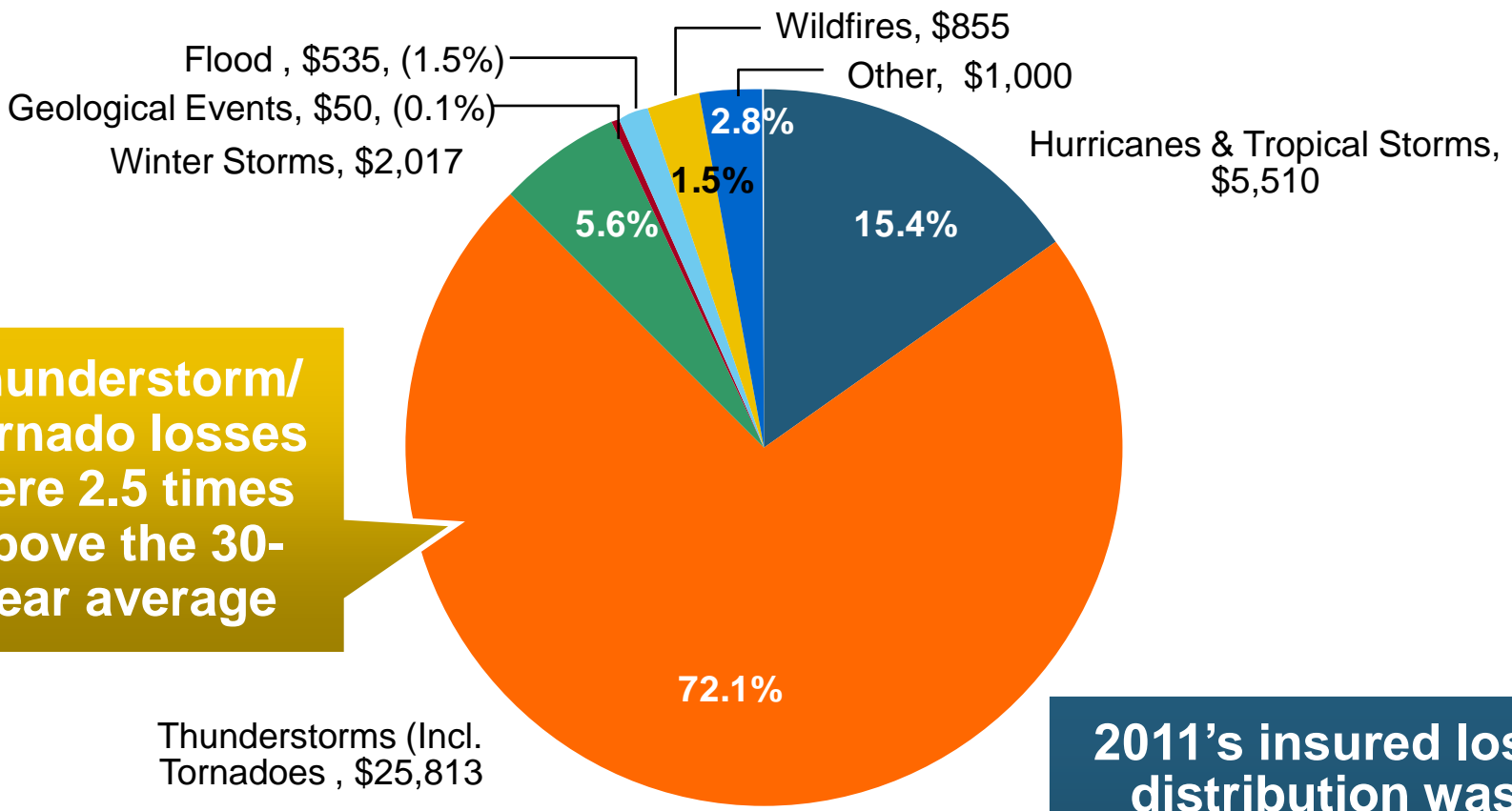


- NHC shooting for mid-season for deployment. First of many ways of distributing storm-surge forecasts.

# Storm Surge Warning

- ❑ Separate from the Hurricane Warning
- ❑ Different timing than Hurricane Warning
- ❑ Development, plan, test in 2013 & 2014
  - ❑ Deploy in 2015

# U.S. Insured Catastrophe Losses by Cause of Loss, 2011 (\$ Millions)

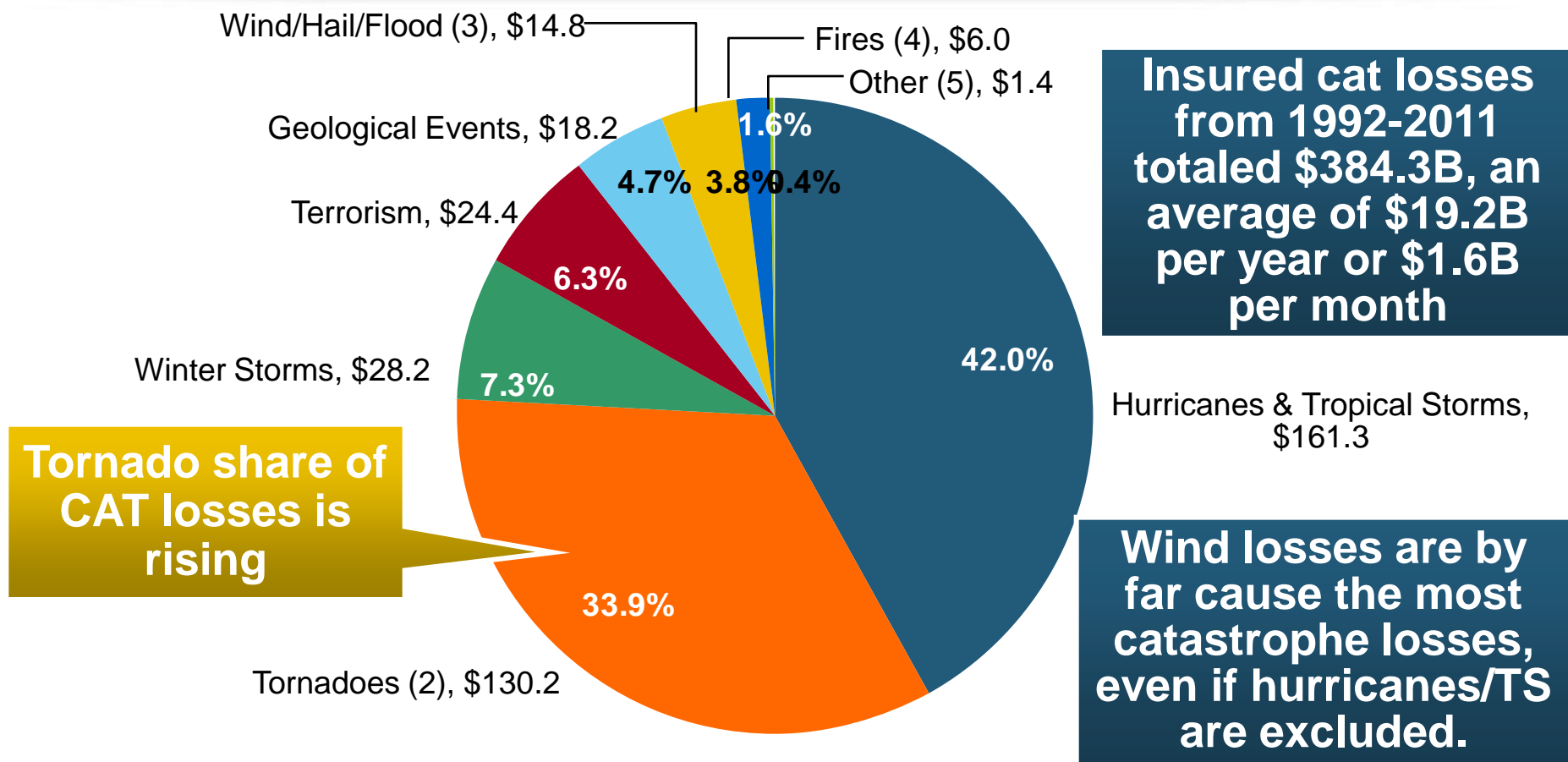


**Thunderstorm/  
Tornado losses  
were 2.5 times  
above the 30-  
year average**

**2011's insured loss  
distribution was  
unusual with tornado  
and thunderstorm  
accounting for the  
vast majority of loss**

Source: ISO's Property Claim Services Unit, Munich Re; Insurance Information Institute.

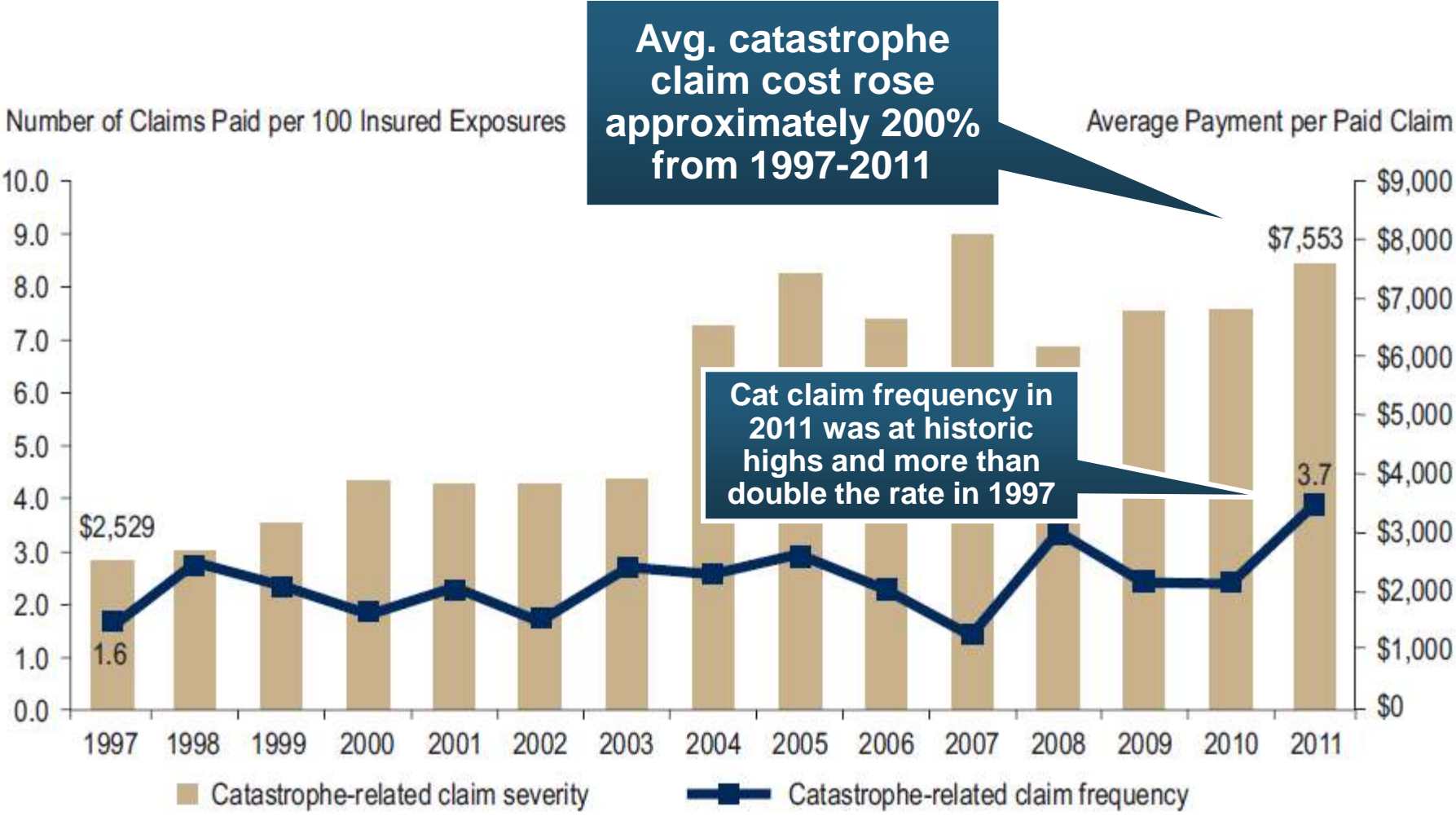
# Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1992–2011<sup>1</sup>



1. Catastrophes are defined as events causing direct insured losses to property of \$25 million or more in 2009 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.

# Homeowners Insurance Catastrophe-Related Claim Frequency and Severity, 1997—2012\*



\*All policy forms combined, countrywide.

Source: Insurance Research Council, *Trends in Homeowners Insurance Claims*, Sept. 2012 from ISO Fast Track data.

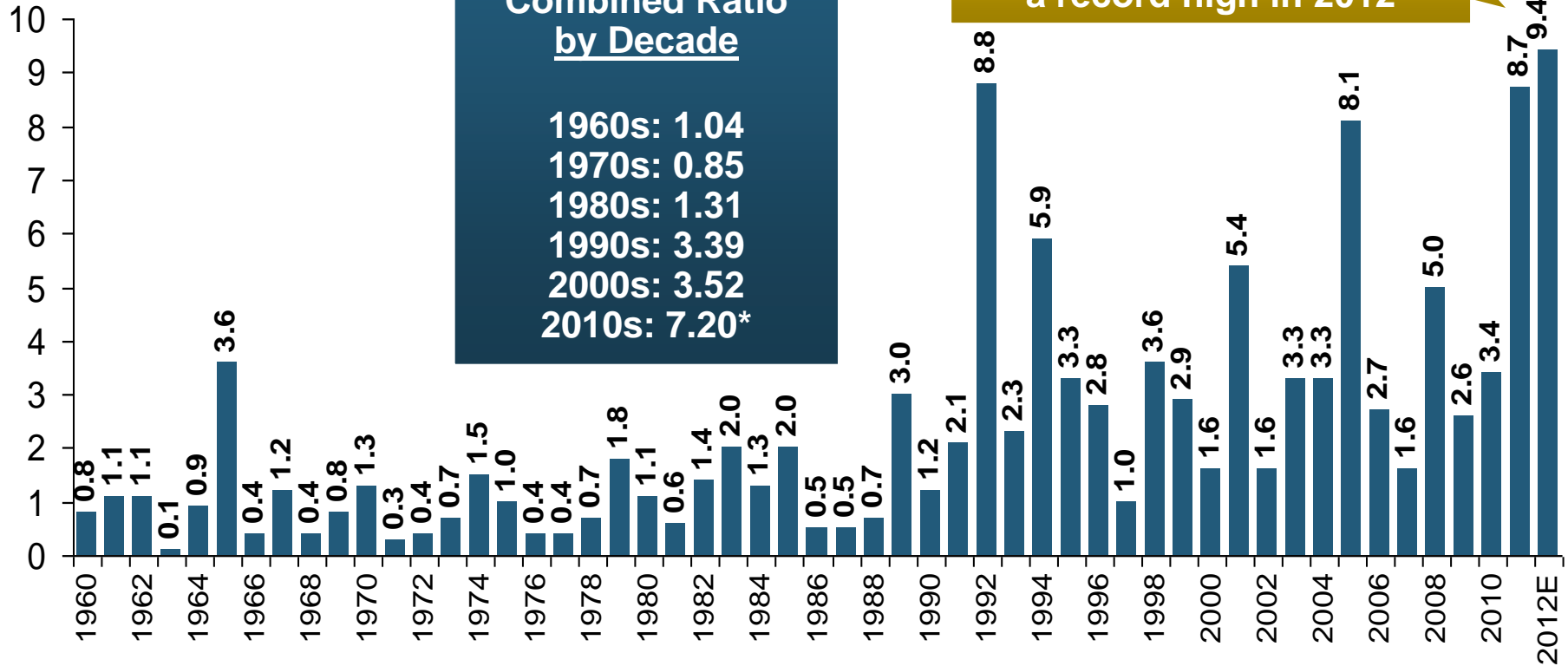
# Combined Ratio Points Associated with Catastrophe Losses: 1960 – 2012\*

## 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: 7.20\*

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



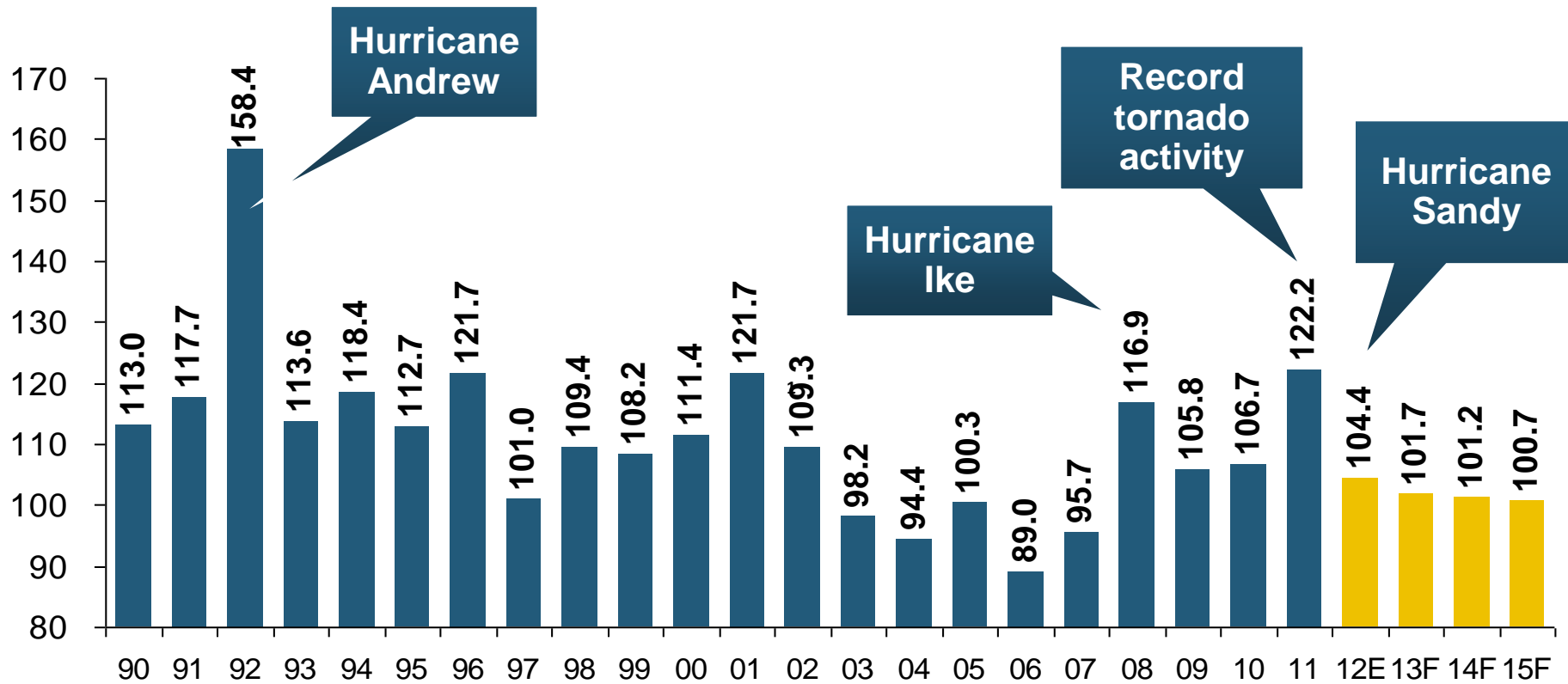
**The Catastrophe Loss Component of Private Insurer Losses Has Increased Sharply in Recent Decades**

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 (2012E) Insurance Information Institute.



# Homeowners Insurance Combined Ratio: 1990–2015F



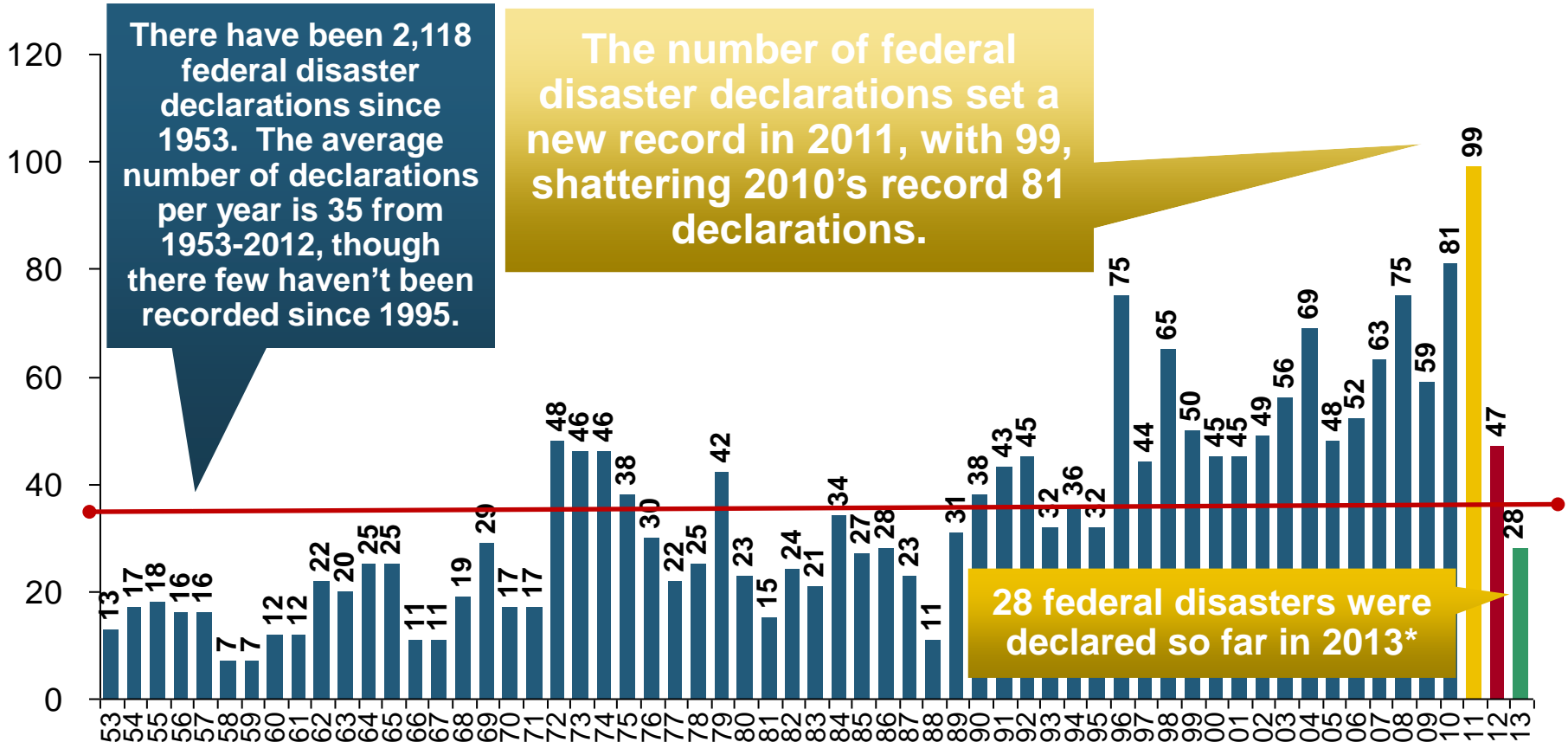
**Homeowners Performance in 2011/12 Impacted by Large Cat Losses. Extreme Regional Variation Can Be Expected Due to Local Catastrophe Loss Activity**



# Federal Disaster Declarations Patterns: 1953-2013

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

# Number of Federal Disaster Declarations, 1953-2013\*

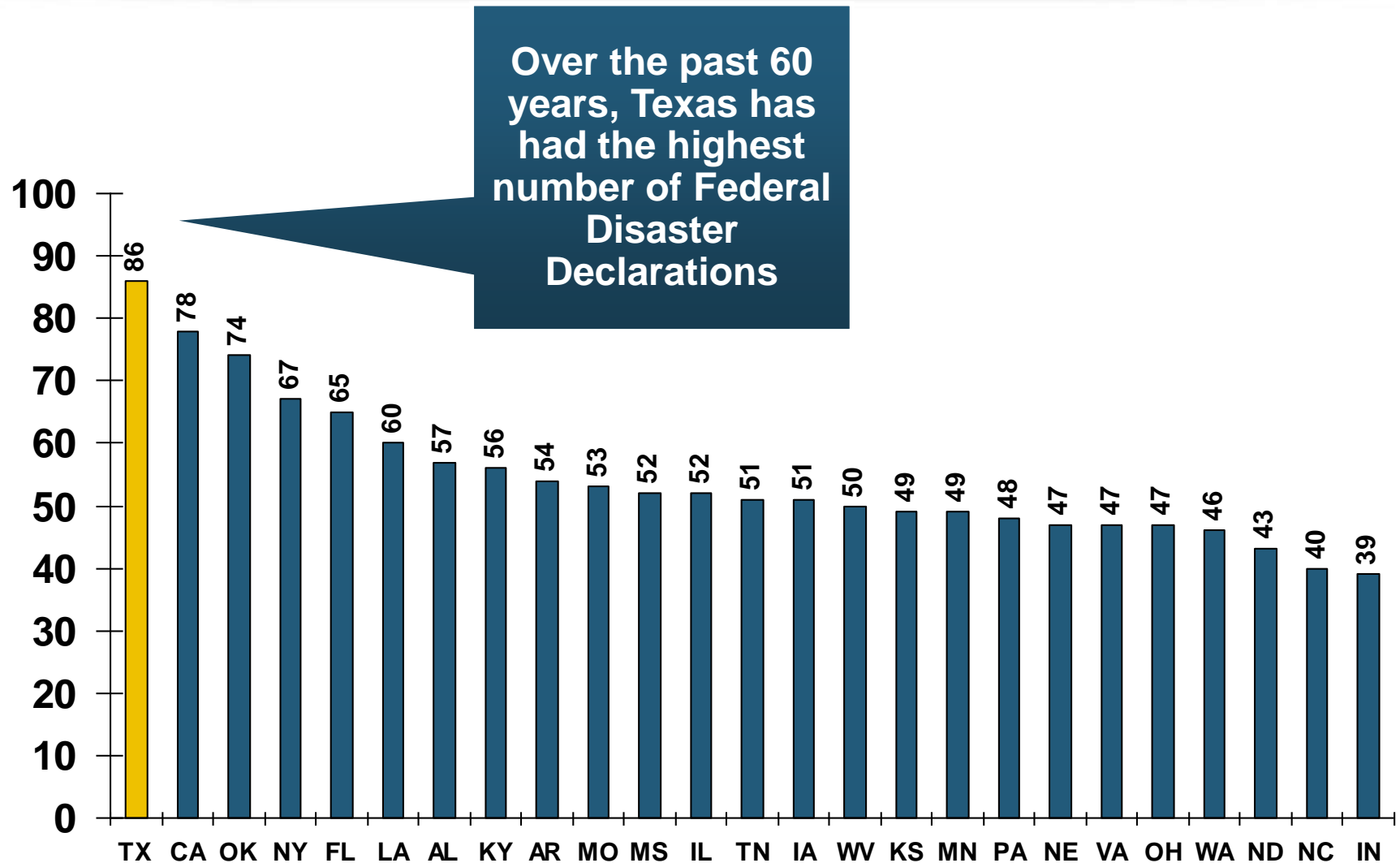


**The Number of Federal Disaster Declarations Is Rising and Set New Records in 2010 and 2011. Hurricane Sandy Produced 13 Declarations in 2012/13.**

\*Through July 10, 2013.

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

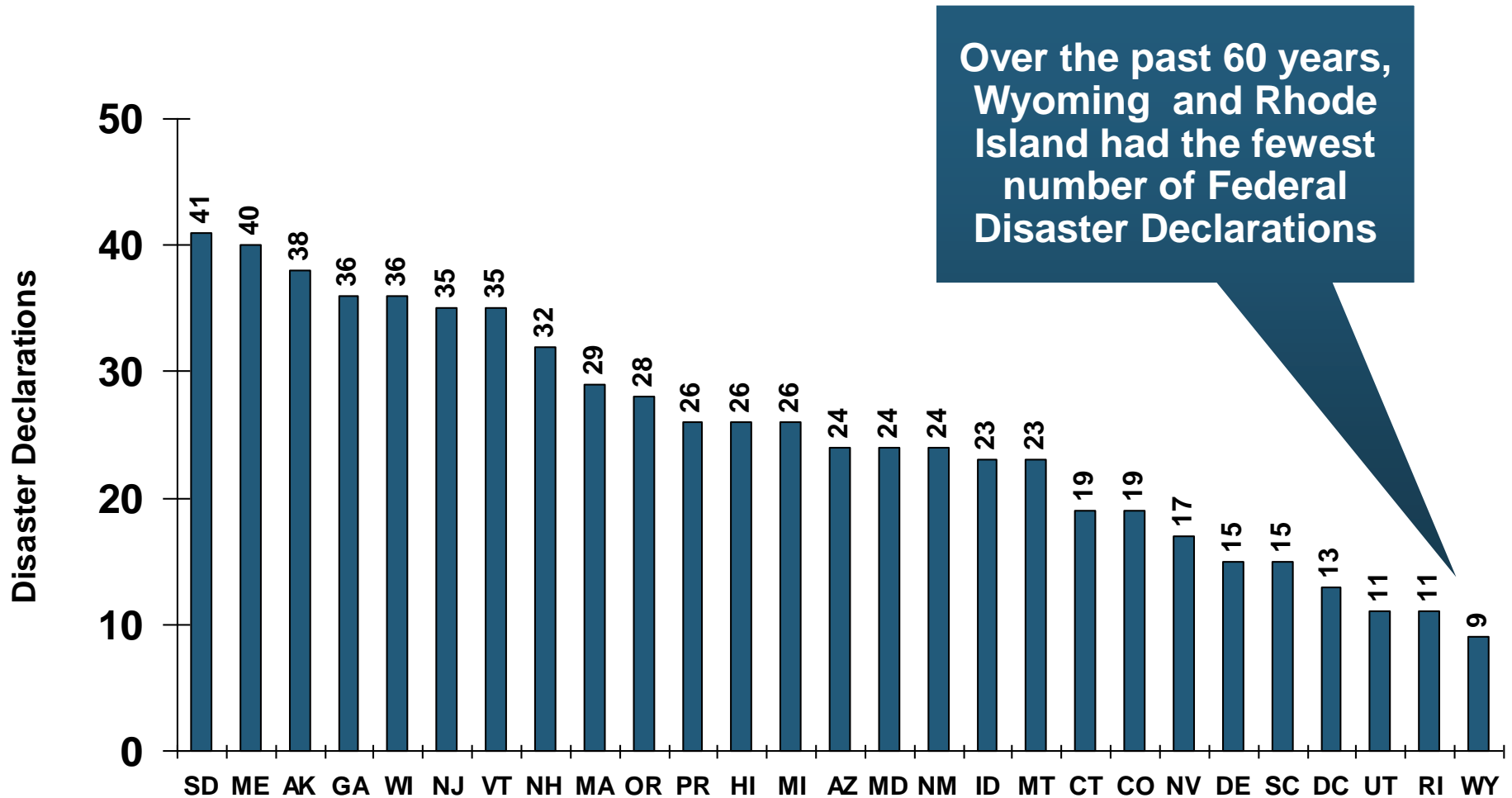
# Federal Disasters Declarations by State, 1953 – 2013: Highest 25 States\*



\*Through July 10, 2013. Includes Puerto Rico and the District of Columbia.

Source: FEMA: [http://www.fema.gov/news/disaster\\_totals\\_annual.fema](http://www.fema.gov/news/disaster_totals_annual.fema); Insurance Information Institute.

# Federal Disasters Declarations by State, 1953 – 2013: Lowest 25 States\*



\*Through July 10, 2013. Includes Puerto Rico and the District of Columbia.

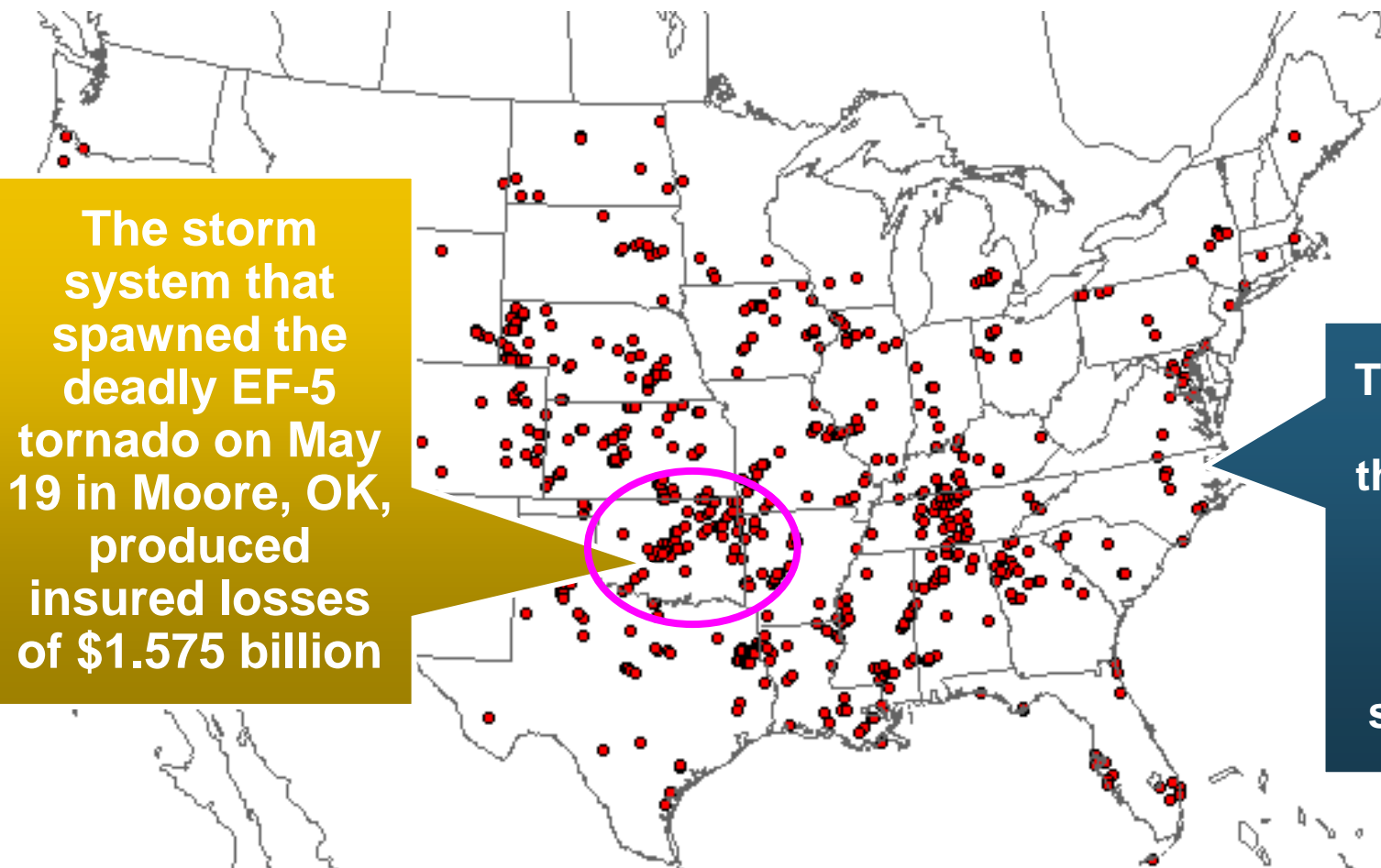
Source: FEMA: [http://www.fema.gov/news/disaster\\_totals\\_annual.fema](http://www.fema.gov/news/disaster_totals_annual.fema); Insurance Information Institute.



## SEVERE WEATHER REPORT UPDATE: 2013

*Damage from Tornadoes, Large Hail  
and High Winds Keep Insurers Busy*

# Location of Tornado Reports: Through July 3, 2013



The storm system that spawned the deadly EF-5 tornado on May 19 in Moore, OK, produced insured losses of \$1.575 billion

There were 630 tornadoes through July 3, causing extensive property damage in several states



PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

Tornado Reports  
January 01, 2013 - July 03, 2013

Updated: Wednesday July 03, 2013 14:53 CT

# U.S. Tornado Count, 2005-2013\*

United States Annual Trend of LSR Tornadoes\*



National Weather Service  
Storm Prediction Center  
Jul. 06, 2013

There were 1,897 tornadoes in the U.S. in 2011 far above average, but well below 2008's record

2013 count is running well below average

Year (count thru Jul. 06)
2013 (633)
2012 (872) YR:1116
2011 (1604) YR:1897
2010 (1016) YR:1525
2009 (985) YR:1304
2008 (1701) YR:2194
2007 (952) YR:1276
2006 (902) YR:1296
2005 (753) YR:1216
05-12 Avg. (1098) YR:1478

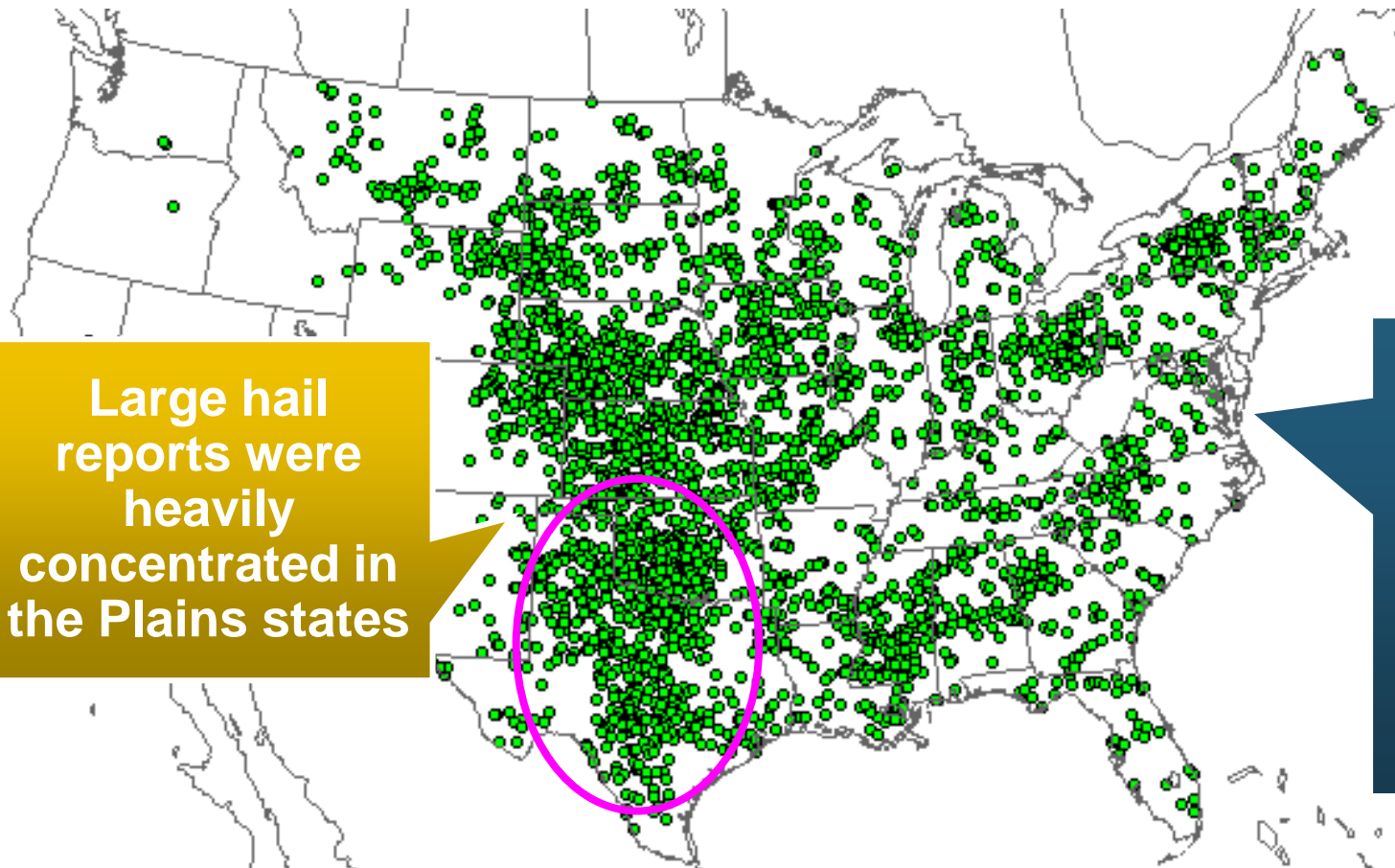
\*Preliminary tornadoes from NWS Local Storm Reports (LSRs)  
Annual average is based on preliminary LSRs, 2005-2012

\*Through July 6, 2013.

Source: <http://www.spc.noaa.gov/wcm/>.



# Location of Large Hail Reports: Through July 3, 2013



Large hail reports were heavily concentrated in the Plains states

There were 3,716 "Large Hail" reports through July 3, causing extensive property and vehicle damage



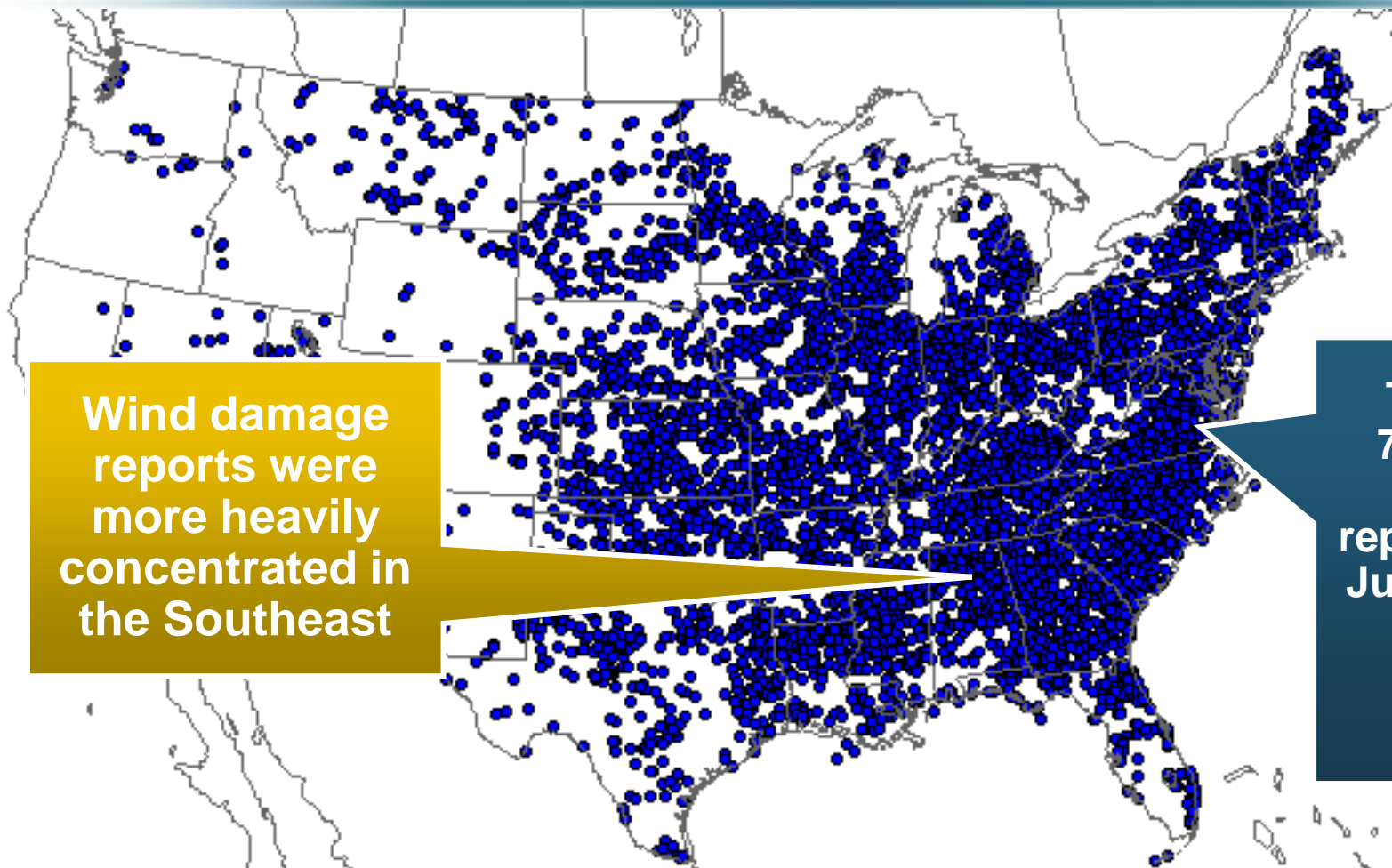
PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

Hail Reports  
January 01, 2013 - July 03, 2013

Updated: Wednesday July 03, 2013 14:53 CT

# Location of High Wind Reports: Through July 3, 2013



Wind damage reports were more heavily concentrated in the Southeast

There were 7,371 “Wind Damage” reports through July 3, causing extensive property damage



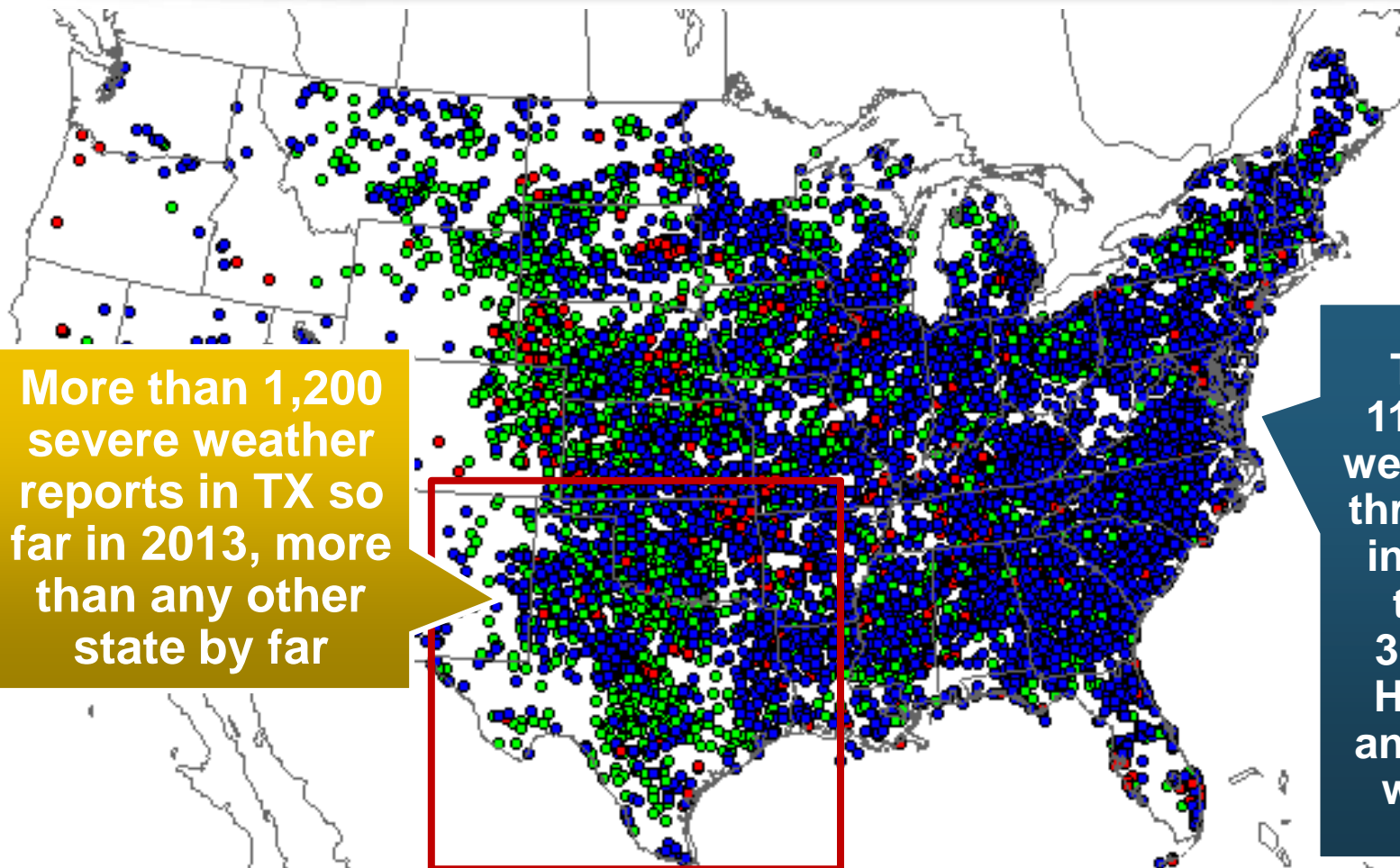
PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

Wind Reports  
January 01, 2013 - July 03, 2013

Updated: Wednesday July 03, 2013 14:53 CT

# Severe Weather Reports: Through July 3, 2013



More than 1,200 severe weather reports in TX so far in 2013, more than any other state by far

There were 11,717 severe weather reports through July 3; including 630 tornadoes; 3,716 "Large Hail" reports and 7,371 high wind events



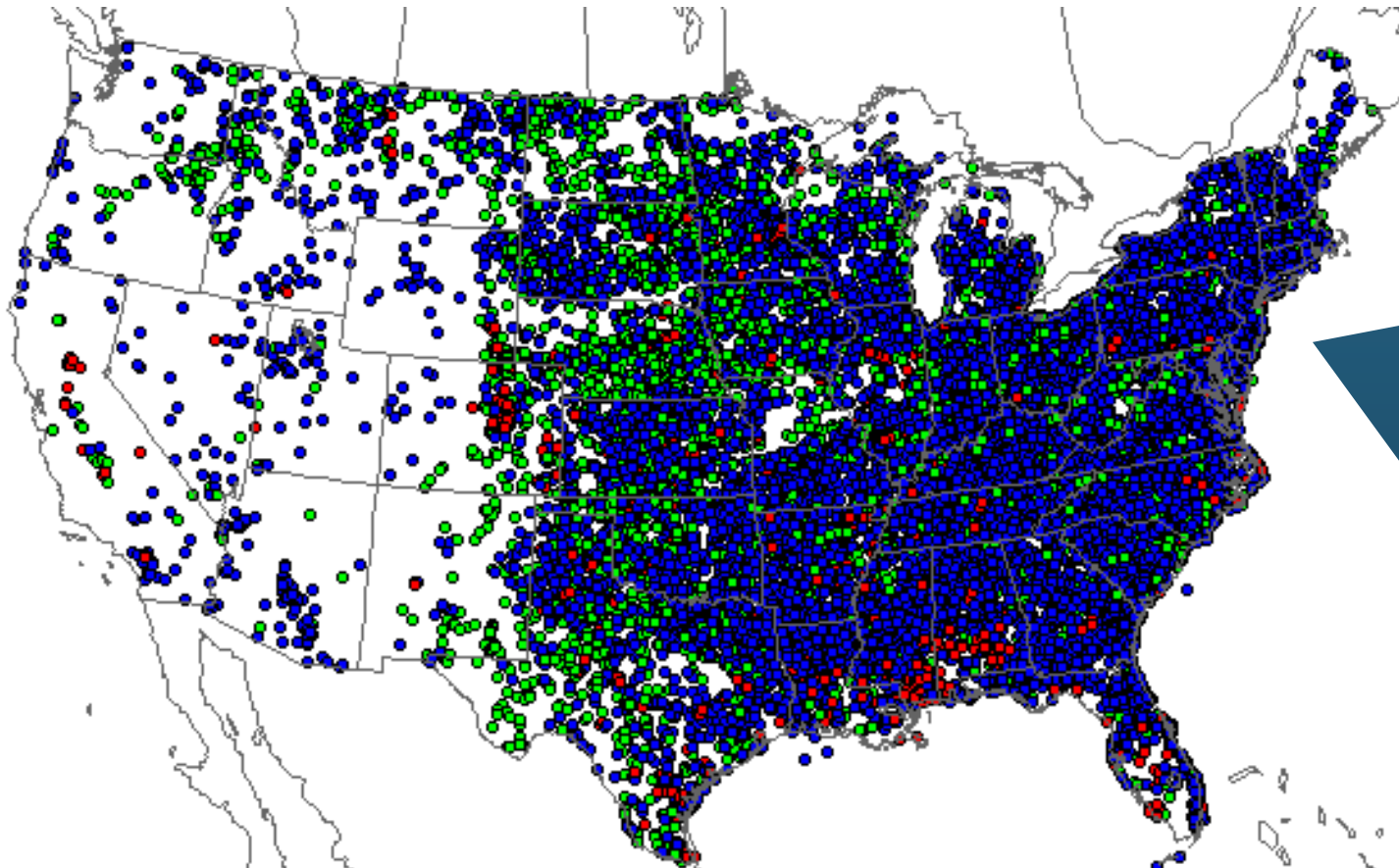
PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

Severe Weather Reports  
January 01, 2013 - July 03, 2013

Updated: Wednesday July 03, 2013 14:53 CT

# Severe Weather Reports, 2012



There were 22,503 severe weather reports in 2011; including 1,119 tornadoes; 7,033 “Large Hail” reports and 14,351 high wind events



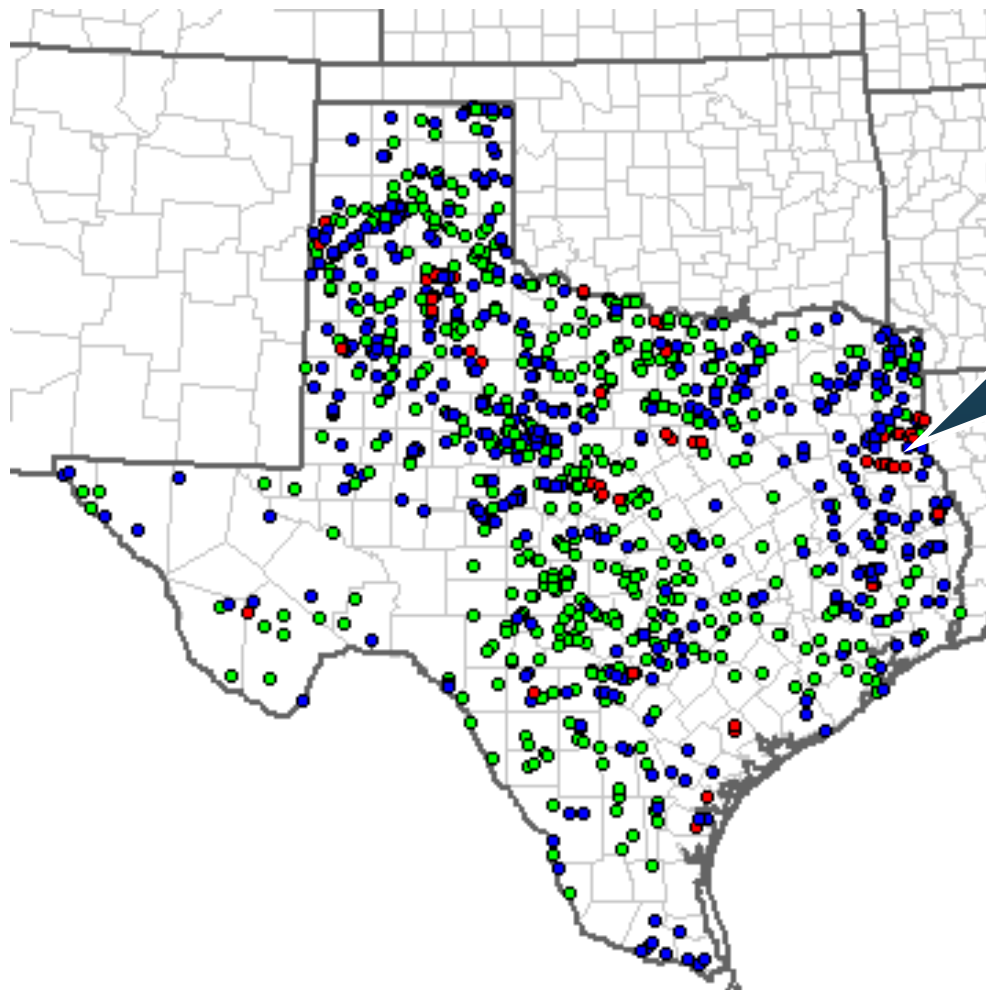
PRELIMINARY SEVERE WEATHER  
REPORT DATABASE (ROUGH LOG)

NOAA/Storm Prediction Center Norman, Oklahoma

Severe Weather Reports  
January 01, 2012 - December 31, 2012

Updated: Sunday January 06, 2013 02:10 CT

# Severe Weather Reports in Texas: January 1—July 10, 2013



There have been a combined 1,212 severe weather reports so far in 2013 in TX, more than any other state by far (OK is #2 with 695 reports)

## Texas

**Total Reports = 1,212**

Tornadoes = 56 (Red)

Hail Reports = 613 (Green)

Wind Reports = 542 (Blue)

# Terrorism Update

## **Boston Marathon Bombings Underscore the Need for Extension of the Terrorism Risk Insurance Program**

***Download III's Terrorism Insurance Report at:  
[http://www.iii.org/white\\_papers/terrorism-  
risk-a-constant-threat-2013.html](http://www.iii.org/white_papers/terrorism-risk-a-constant-threat-2013.html)***

# Terrorism Risk Insurance Program

- Reauthorization Was a Major Industry Initiative for 2013 Even Before Boston
- I.I.I. Testified at First Congressional Hearing on 9/11/12
  - ◆ Provided testimony at NYC hearing on 6/17/13
- I.I.I. Accelerated Planned Study on Terrorism Risk and Insurance in the Wake of Boston and Was Well Received
  - ◆ *Terrorism: A Constant Threat* issued in June 2013



- **Boston Marathon Bombing Has Helped Focus Attention in Congress on TRIPRA and its Looming Expiration**
  - ◆ Act expires 12/31/14
  - ◆ Exclusionary language will likely be inserted for post-1/1/2014 renewals and will likely lead to significant media interest (educational opportunity)
  - ◆ Numerous headwinds; not a priority issue in 2013 in Congress
  - ◆ 3 extension bills introduced in 2013—2 since Boston
  
- **Media Interest Soared**
  - ◆ I.I.I. was conducting its first interviews within minutes after live-tweeting (nearly) from the scene; TV interest was high
  - ◆ Local, national and international media focused on this topic for the first time in any significant way since TRIA's inception in late 2002
  - ◆ Inquiries revealed very little/no understanding (or even awareness) outside insurance industry and business owners
  - ◆ Certification process caused confusion



# Summary of Terrorism Risk Insurance Program Extension Bills Introduced in 2013

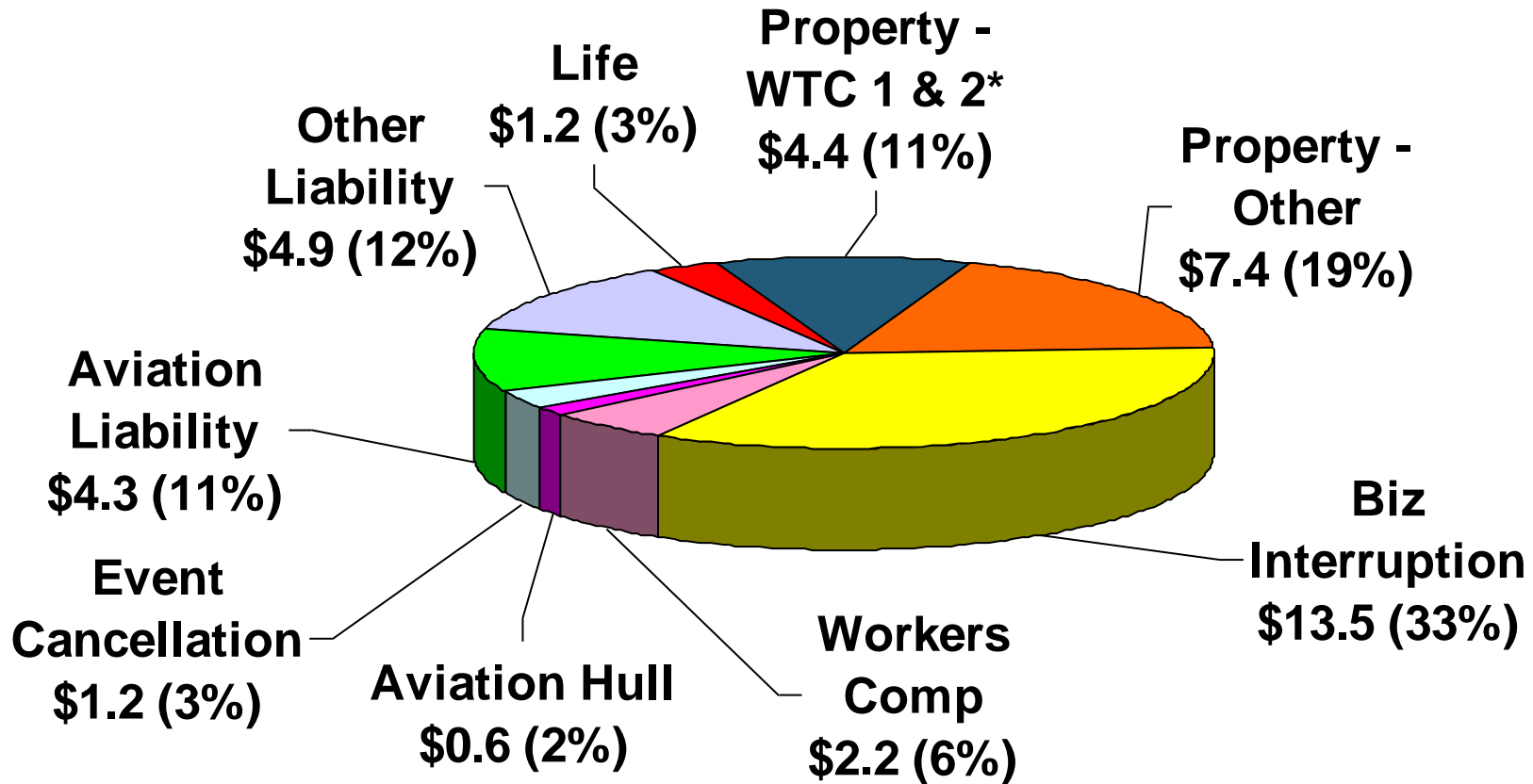
Bill	Summary
<p>•H.R. 508: <i>“Terrorism Risk Insurance Act of 2002 Reauthorization Act of 2013”</i></p> <p>•Introduced Feb. 5 by Rep. Michael Grimm (D-NY)</p>	<ul style="list-style-type: none"> <li>•5-Year Extension (through 2019)</li> <li>•Extend recoupment period for any TRIA assistance from 2017 to 2019</li> </ul>
<p>•H.R. 2146: <i>“Terrorism Risk Insurance Program Reauthorization Act of 2013”</i></p> <p>•Introduced May 23 by Rep. Michael Capuano (D-MA)</p>	<ul style="list-style-type: none"> <li>•10-Year Extension (through 2024)</li> <li>•Extend recoupment period for any TRIA assistance from 2017 to 2024</li> <li>•Requires President’s Working Group on Financial Markets (PWGFM) to issue reports on long-term availability and affordability of terrorism insurance in 2017, 2020 and 2023</li> <li>•Reports to be drafted with consultation from NAIC and representatives of the insurance and securities industries and policyholders</li> </ul>
<p>•H.R. 1945: <i>“Fostering Resilience to Terrorism Act of 2013”</i></p> <p>•Introduced May 9 by Rep. Benny Thompson (D-MS)</p>	<ul style="list-style-type: none"> <li>•10-Year Extension (through 2024)</li> <li>•Recoupment period changed to 2024</li> <li>•Would transfer responsibility for certification of a “act of terrorism” to the Secretary of Homeland Security from Secretary of Treasury.</li> <li>•PWGFM to issue reports in 2017, 2020 and 2023</li> <li>•Requires Sec. of DHS to provide insureds with “timely homeland security information, including terrorism risk information, at the appropriate level of classification and information on best practices to foster resilience to an act of terrorism.”</li> </ul>

# Terrorist Risk Index



# Loss Distribution by Type of Insurance from Sept. 11 Terrorist Attack (\$ 2011)

(\$ Billions)



**Total Insured Losses Estimate: \$40.0B\*\***

\*Loss total does not include March 2010 New York City settlement of up to \$657.5 million to compensate approximately 10,000 Ground Zero workers or any subsequent settlements.

\*\*\$32.5 billion in 2001 dollars.

Source: Insurance Information Institute.

# Terrorism Violates Traditional Requirements for Insurability

Requirement	Definition	Violation
<b>Estimable Frequency</b>	<ul style="list-style-type: none"><li>•Insurance requires large number of observations to develop predictive rate-making models (an actuarial concept known as credibility)</li></ul>	<ul style="list-style-type: none"><li>•Very few data points</li><li>•Terror modeling still in infancy, untested.</li><li>•Inconsistent assessment of threat</li></ul>
<b>Estimable Severity</b>	<ul style="list-style-type: none"><li>•Maximum possible/ probable loss must be at least estimable in order to minimize “risk of ruin” (insurer cannot run an unreasonable risk of insolvency though assumption of the risk)</li></ul>	<ul style="list-style-type: none"><li>•Potential loss is virtually unbounded.</li><li>•Losses can easily exceed insurer capital resources for paying claims.</li><li>•Extreme risk in workers compensation and statute forbids exclusions.</li></ul>

# Terrorism Violates Traditional Requirements for Insurability (cont'd)

Requirement	Definition	Violation
<p><b>Diversifiable Risk</b></p>	<ul style="list-style-type: none"> <li>• Must be able to spread/distribute risk across large number of risks</li> <li>• “Law of Large Numbers” helps makes losses manageable and less volatile</li> </ul>	<ul style="list-style-type: none"> <li>• Losses likely highly concentrated geographically or by industry (e.g., WTC, power plants)</li> </ul>
<p><b>Random Loss Distribution/ Fortuity</b></p>	<ul style="list-style-type: none"> <li>• Probability of loss occurring must be purely random and fortuitous</li> <li>• Events are individually unpredictable in terms of time, location and magnitude</li> </ul>	<ul style="list-style-type: none"> <li>• Terrorism attacks are planned, coordinated and deliberate acts of destruction</li> <li>• Dynamic target shifting from “hardened targets” to “soft targets”</li> <li>• Terrorist adjust tactics to circumvent new security measures</li> <li>• Actions of US and foreign govts. may affect likelihood, nature and timing of attack</li> </ul>



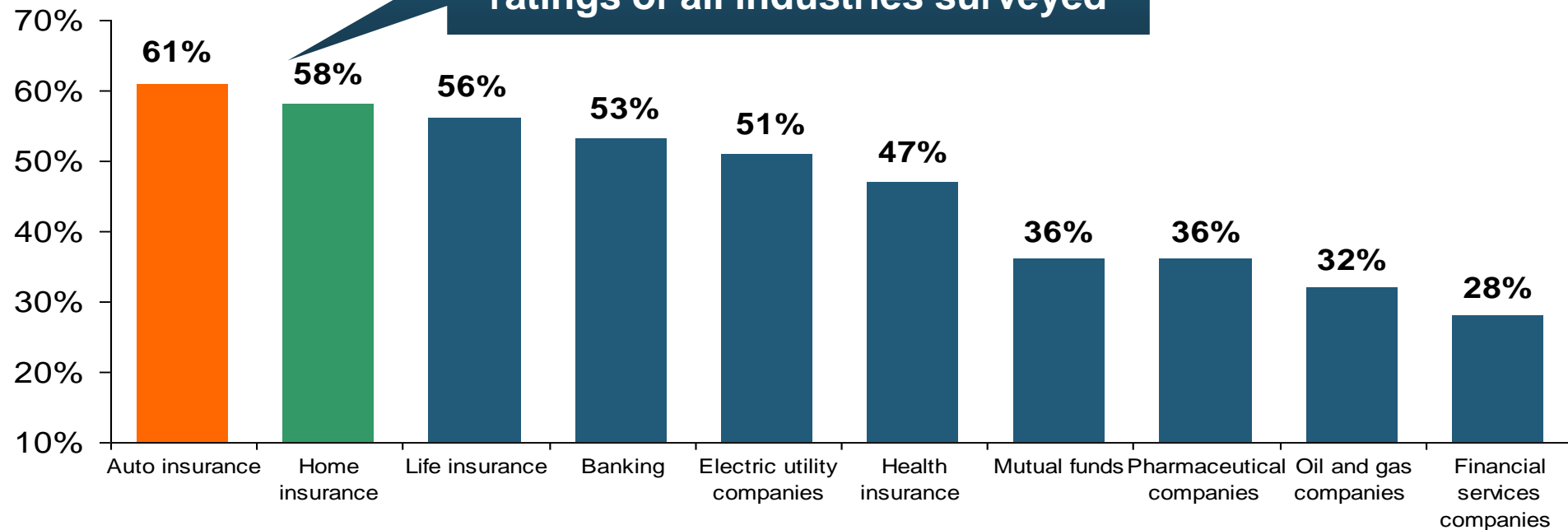
# Public Opinion Survey

## Disaster Preparedness

# I.I.I. Poll: Favorability

## Percent of Public Rating Industry as Very or Mostly Favorable, 2013

Viewed separately, auto and home insurers have highest favorability ratings of all industries surveyed

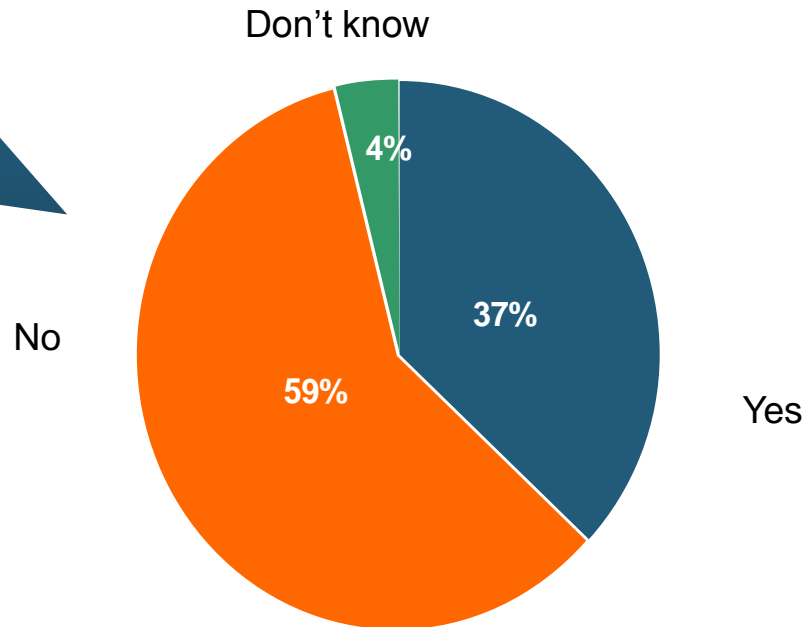


**Auto Insurers and Home Insurers Ranked Highest.**

# I.I.I. Poll: Homeowners Insurance

Q. Do you think that it is fair that people who live in areas affected by record storms in 2011 and 2012 should pay more for their homeowners insurance in the future?

Public believes it is not fair to raise premiums of homeowners due to events they cannot control



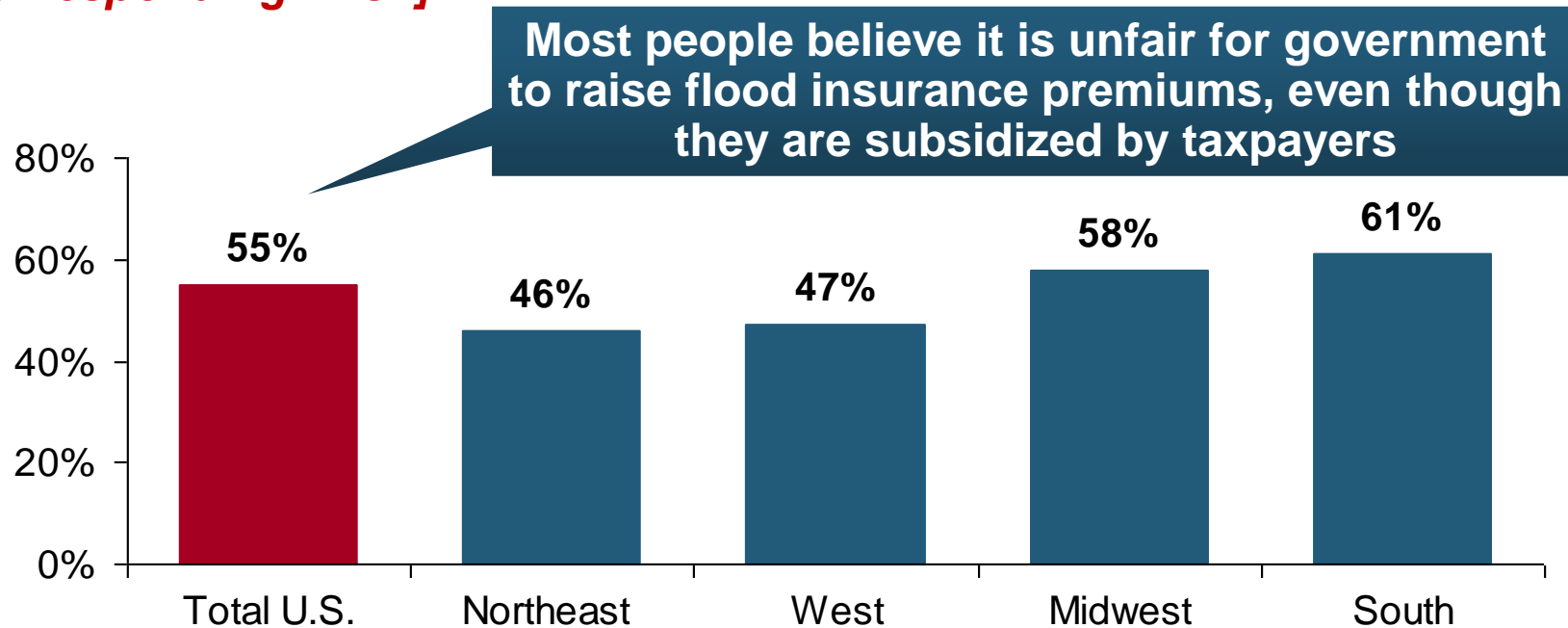
Nearly 60 percent of Americans believe that homeowners insurance premiums should not be raised as a result of recent storms in their areas.



# I.I.I. Poll: Flood Insurance

**Q. The federal government plans to raise the price of flood insurance so it reflects the costs of paying claims. Do you believe this is fair?**

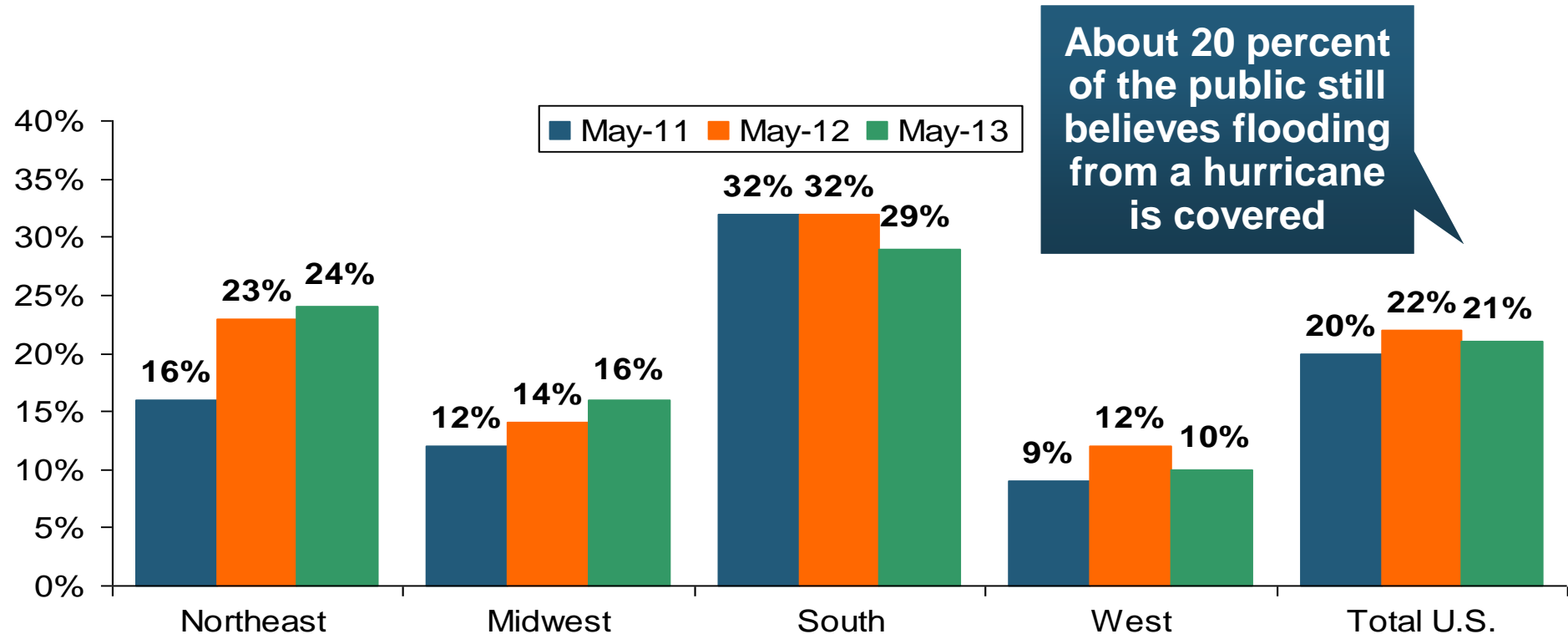
***[% Responding "NO"]***



**More than one-half of Americans do not think it is fair for the federal government to raise its flood insurance premiums to better reflect claims payouts.**

# I.I.I. Poll: Disaster Preparedness

Q. Does your homeowners policy cover damage from flooding during a hurricane?<sup>1</sup>

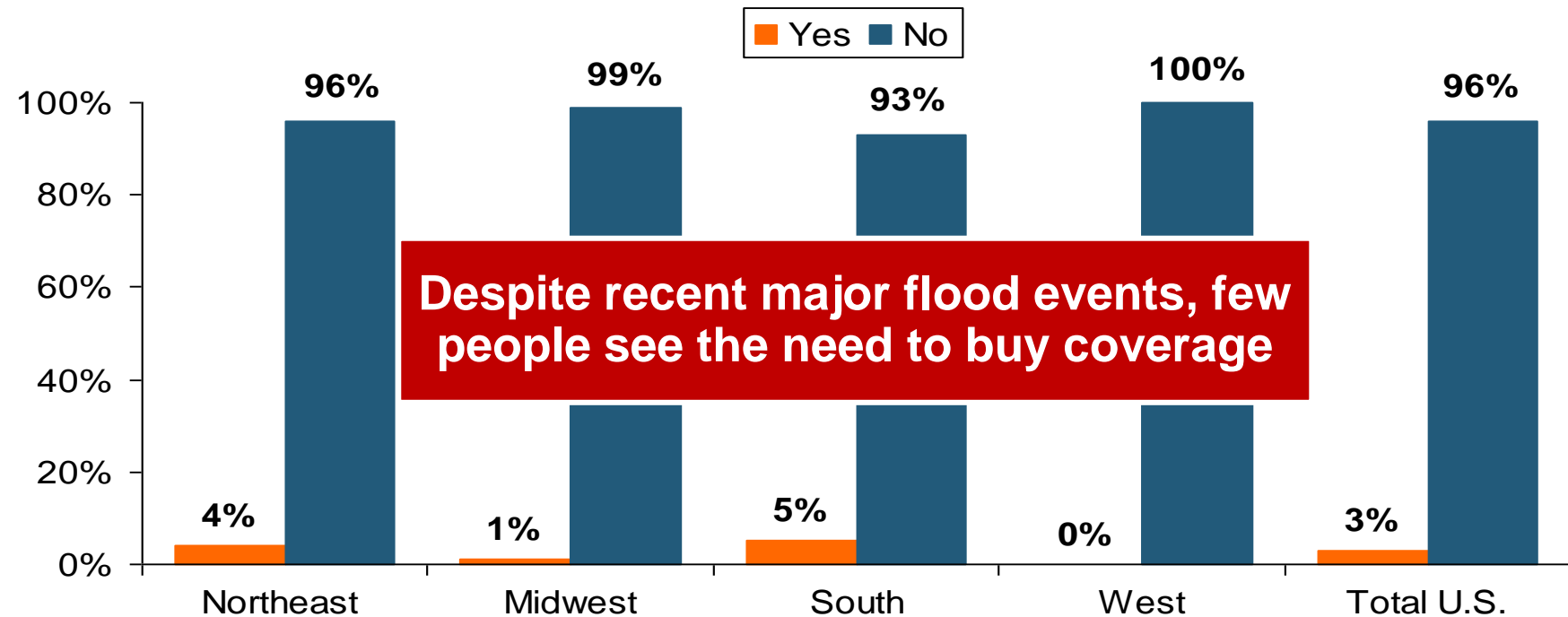


The proportion of homeowners who believe their homeowners policy covers damage from flooding during a hurricane stands at 21 percent. This proportion rises eight percentage points in the South, to 29 percent.

<sup>1</sup>Asked of those who have homeowners insurance and who responded "yes".

# I.I.I. Poll: Disaster Preparedness

Q. Have recent flooding events such as Hurricane Sandy or Hurricane Irene motivated you to buy flood coverage?<sup>1</sup>

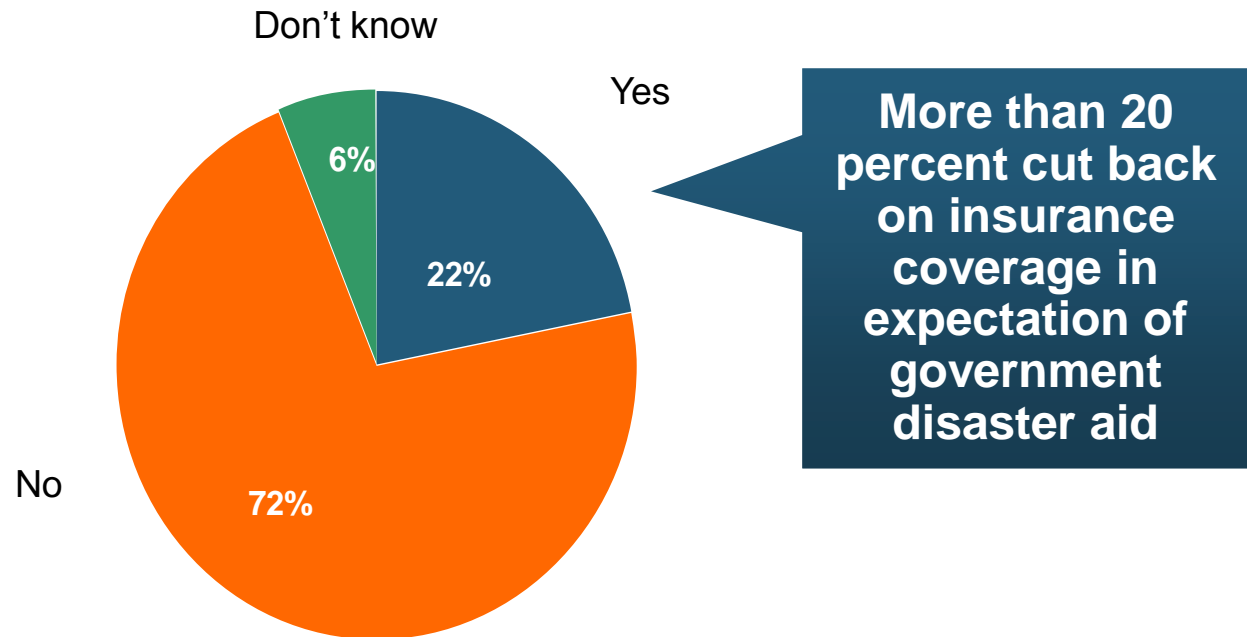


**Recent storms have not motivated people to buy flood insurance coverage**

<sup>1</sup>Asked of those who have homeowners insurance but not flood insurance.

# I.I.I. Poll: Disaster Preparedness

**Q. If you expect some relief from the government, do you purchase less insurance coverage against these natural disasters than you would have otherwise?**



**Seventy-two percent of Americans would not purchase less insurance if they expect some relief from the government—but 22% would.**

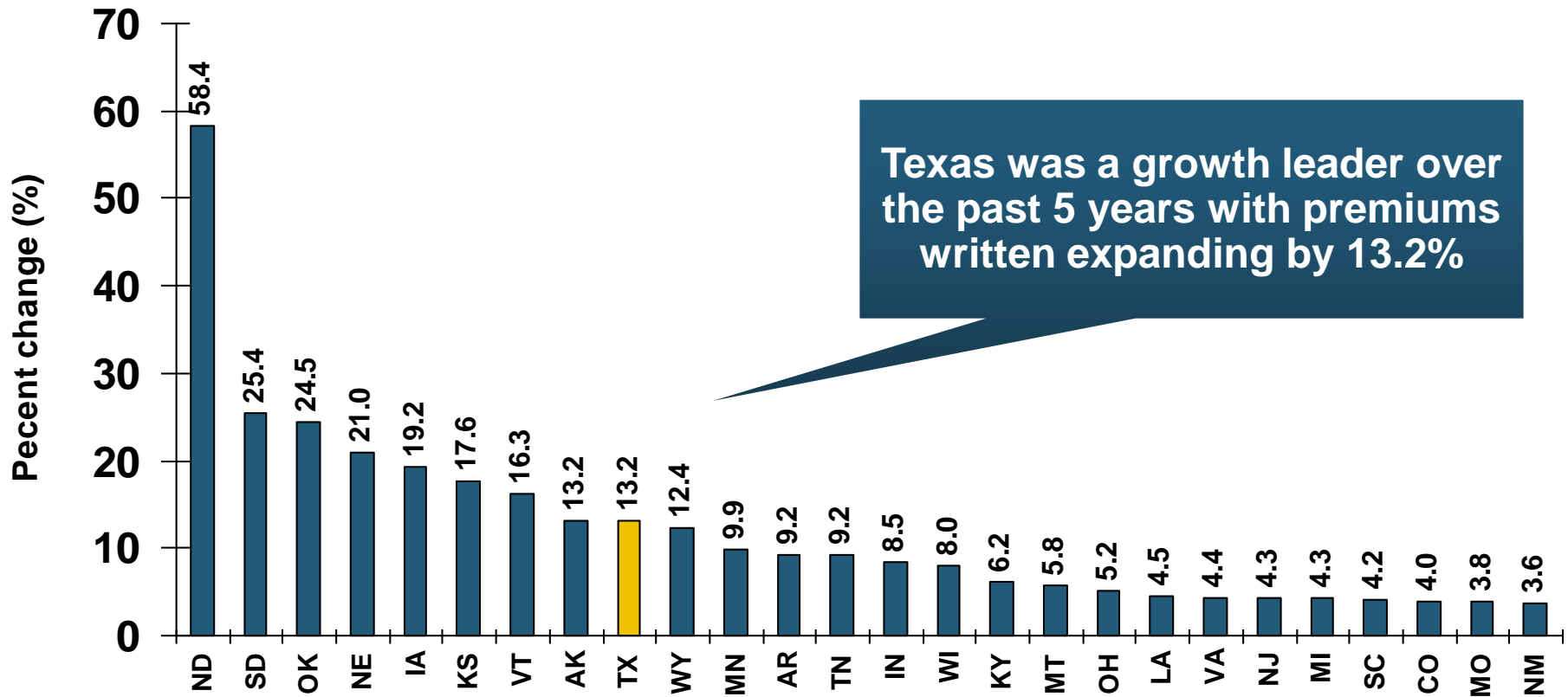


# Growth Analysis by State and Business Segment

**Premium Growth Rates Vary Tremendously by State**

# Direct Premiums Written: Total P/C Percent Change by State, 2007-2012\*

## Top 25 States

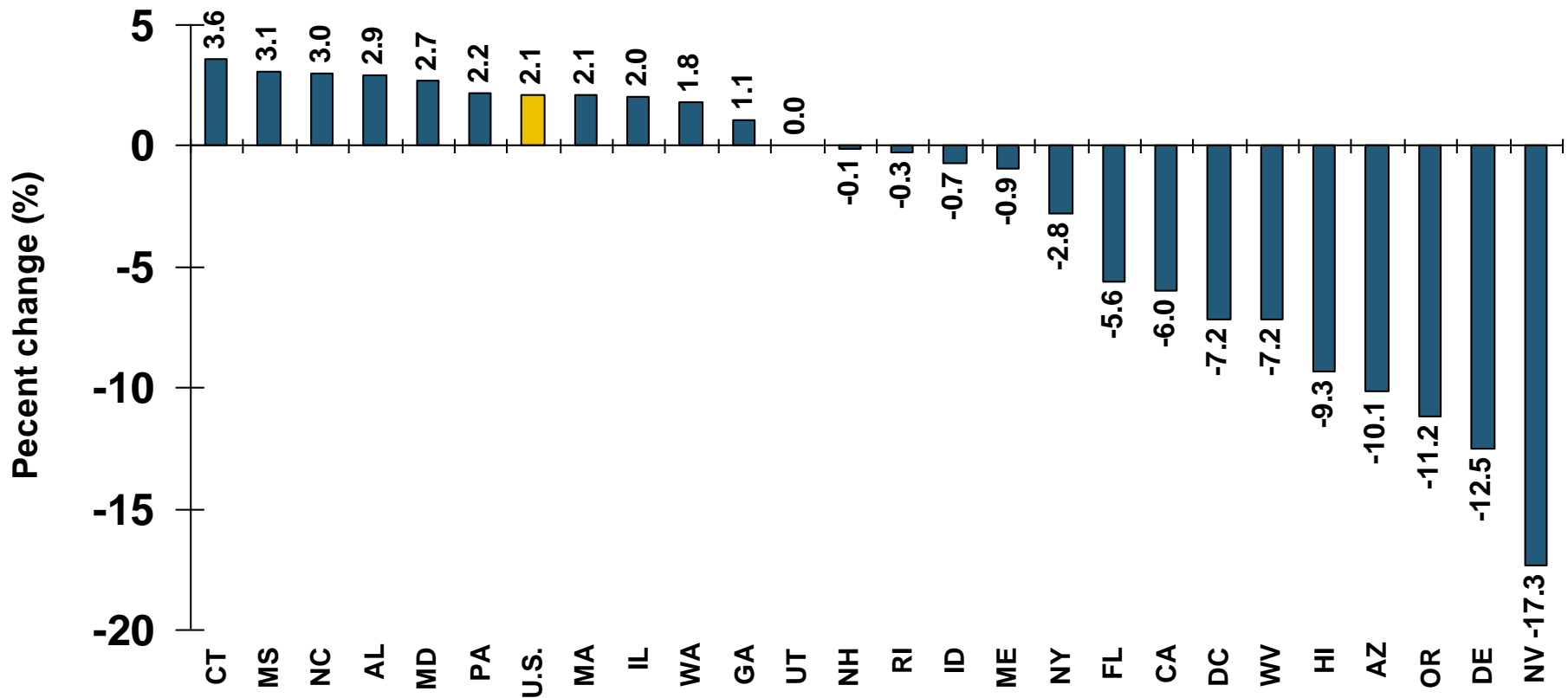


\*Data are preliminary as of 5/1/13 and do not yet fully reflect the impact of state-run pools and plans.

Sources: SNL Financial LC.; Insurance Information Institute.

# Direct Premiums Written: Total P/C Percent Change by State, 2007-2012\*

## Bottom 25 States

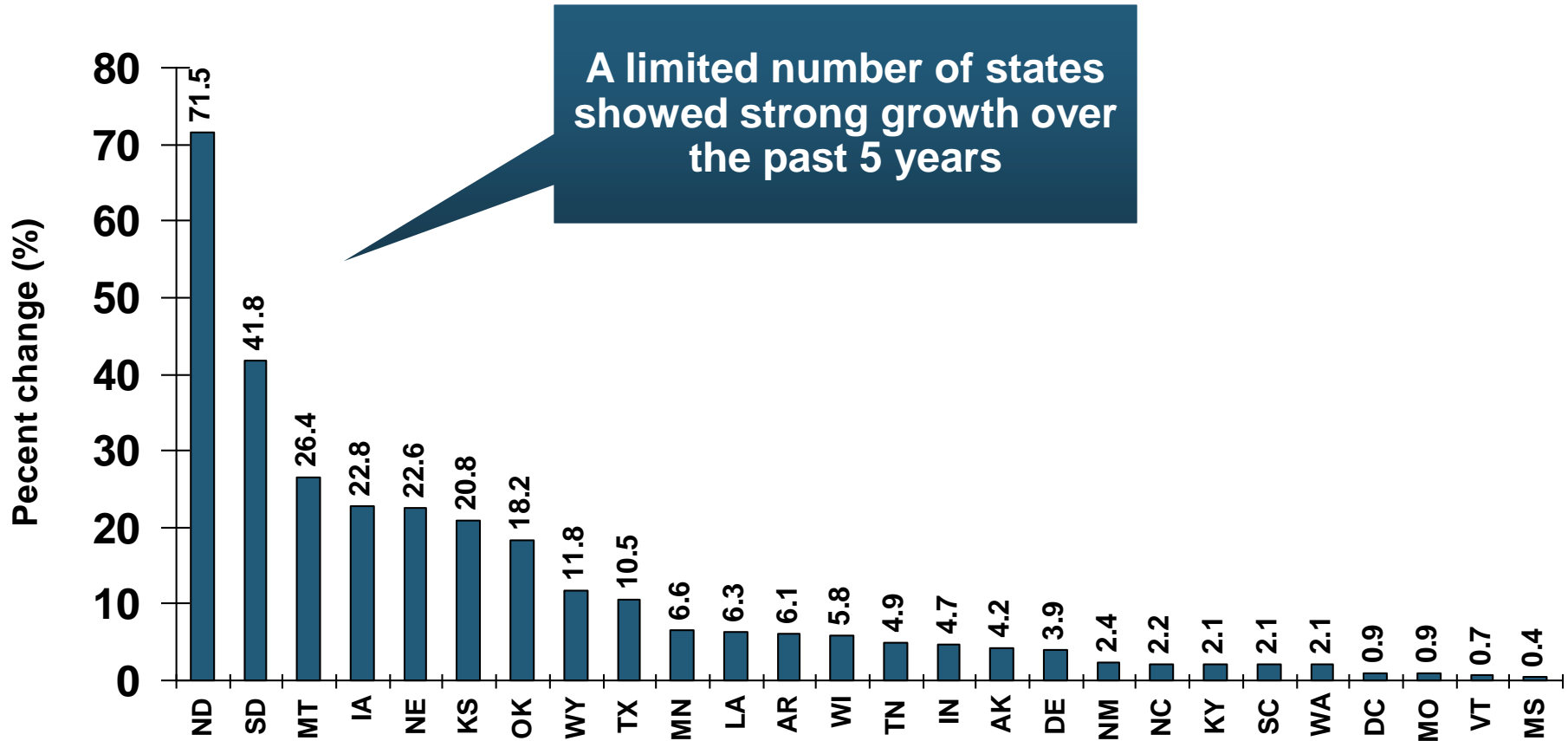


\*Data are preliminary as of 5/1/13 and do not yet fully reflect the impact of state-run pools and plans.

Sources: SNL Financial LC.; Insurance Information Institute.

# Direct Premiums Written: Total P/C Percent Change by State, 2006-2011\*

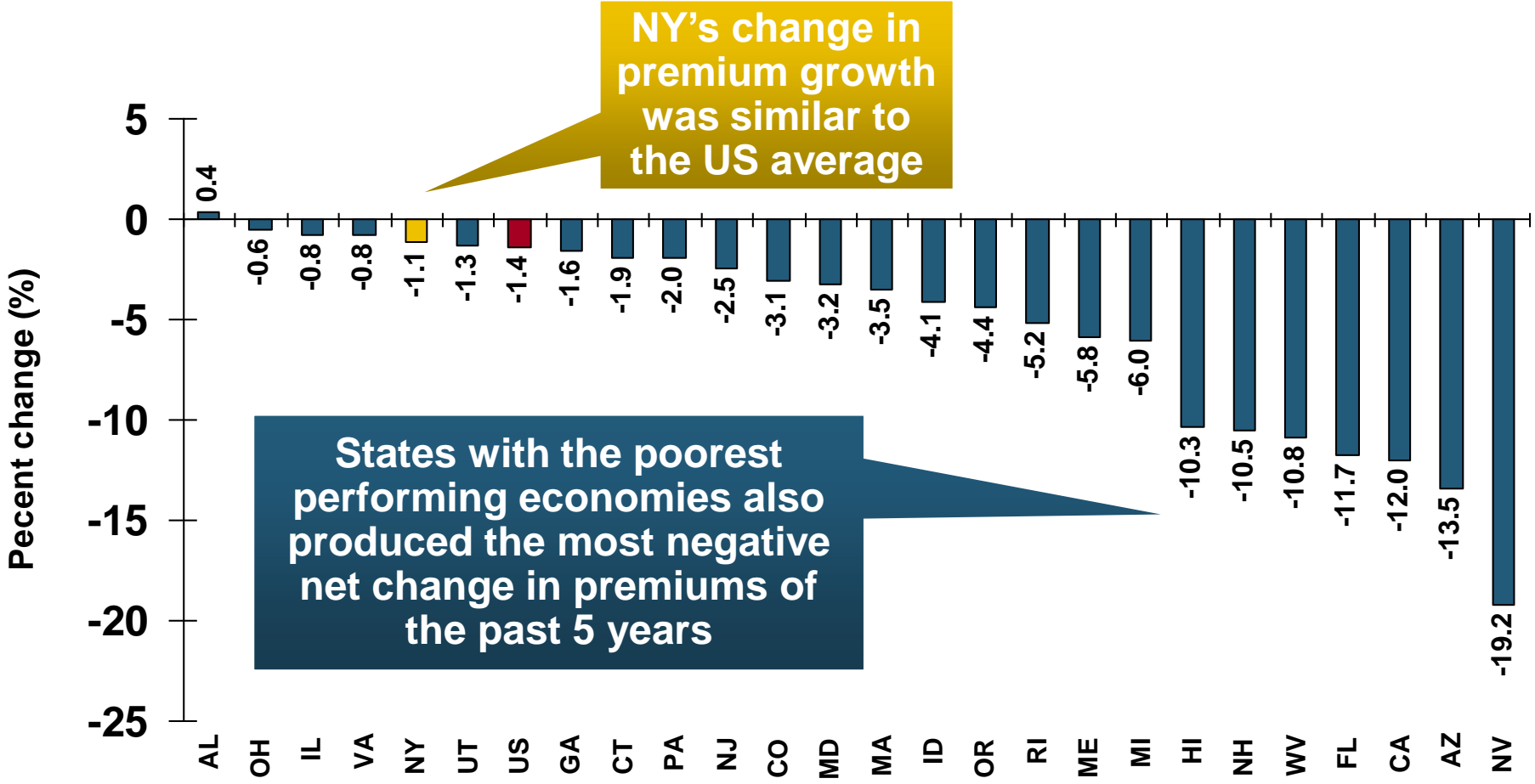
## Top 25 States





# Direct Premiums Written: Total P/C Percent Change by State, 2006-2011\*

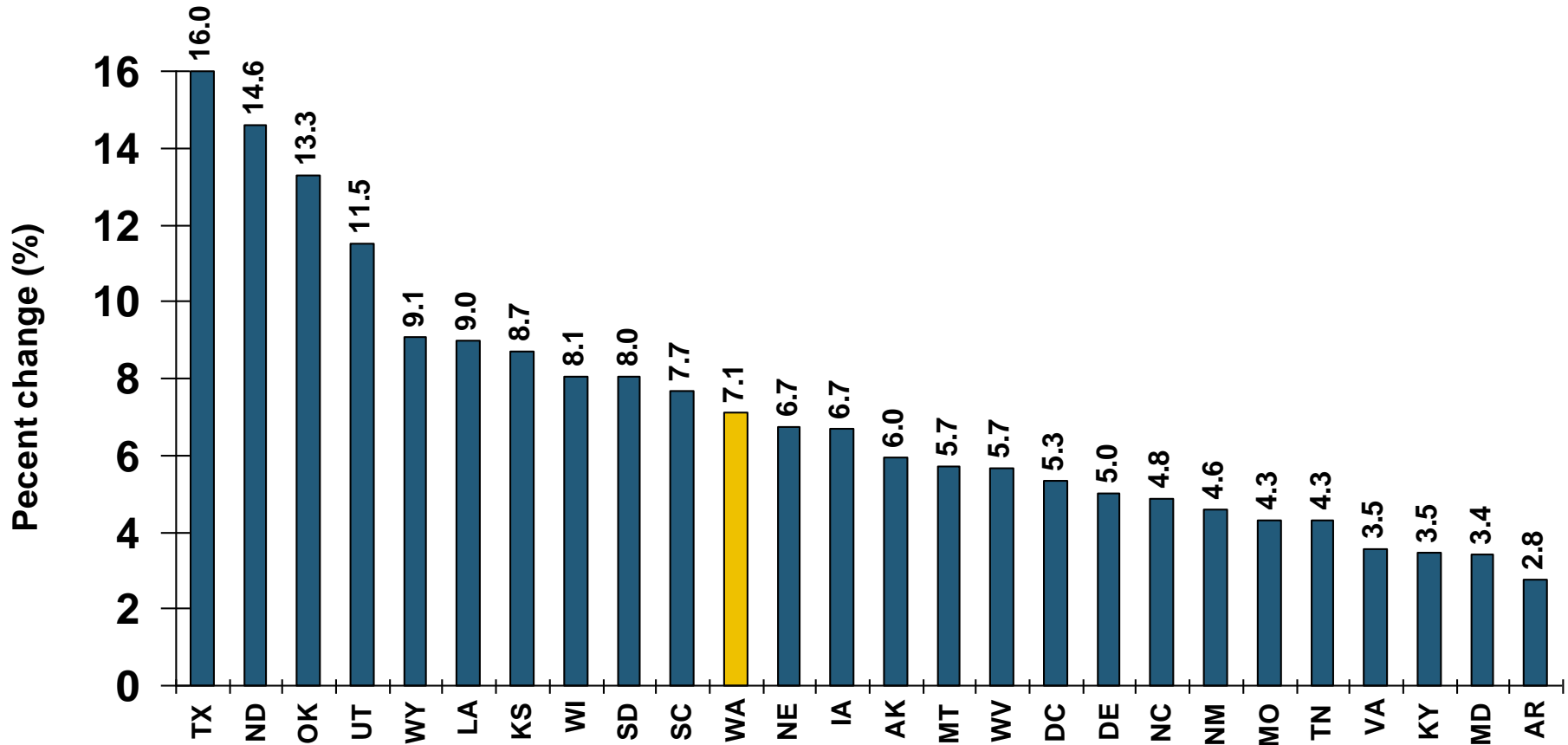
## Bottom 25 States



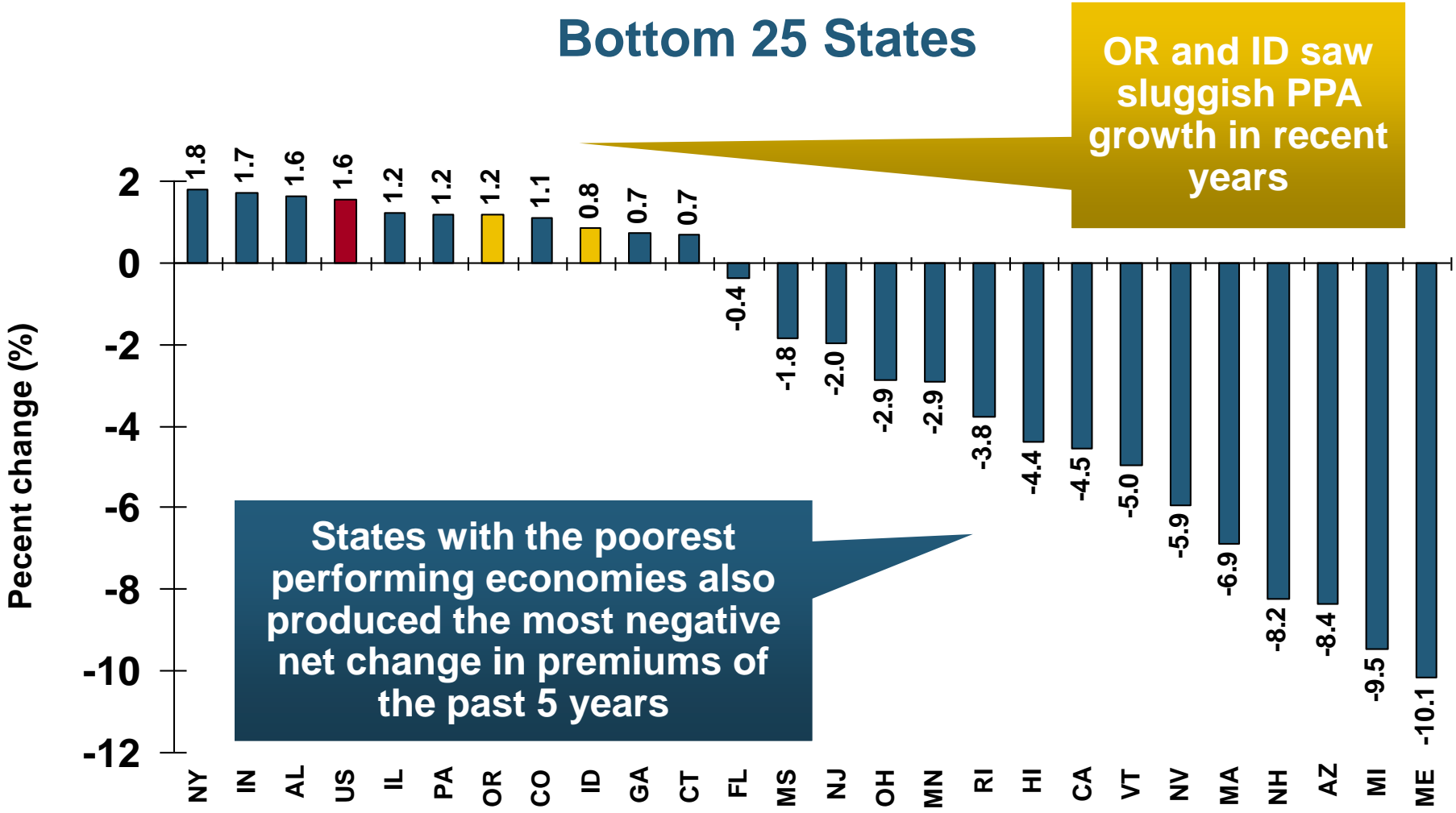
Sources: SNL Financial LC.; Insurance Information Institute.

# Direct Premiums Written: PP Auto Percent Change by State, 2006-2011\*

## Top 25 States



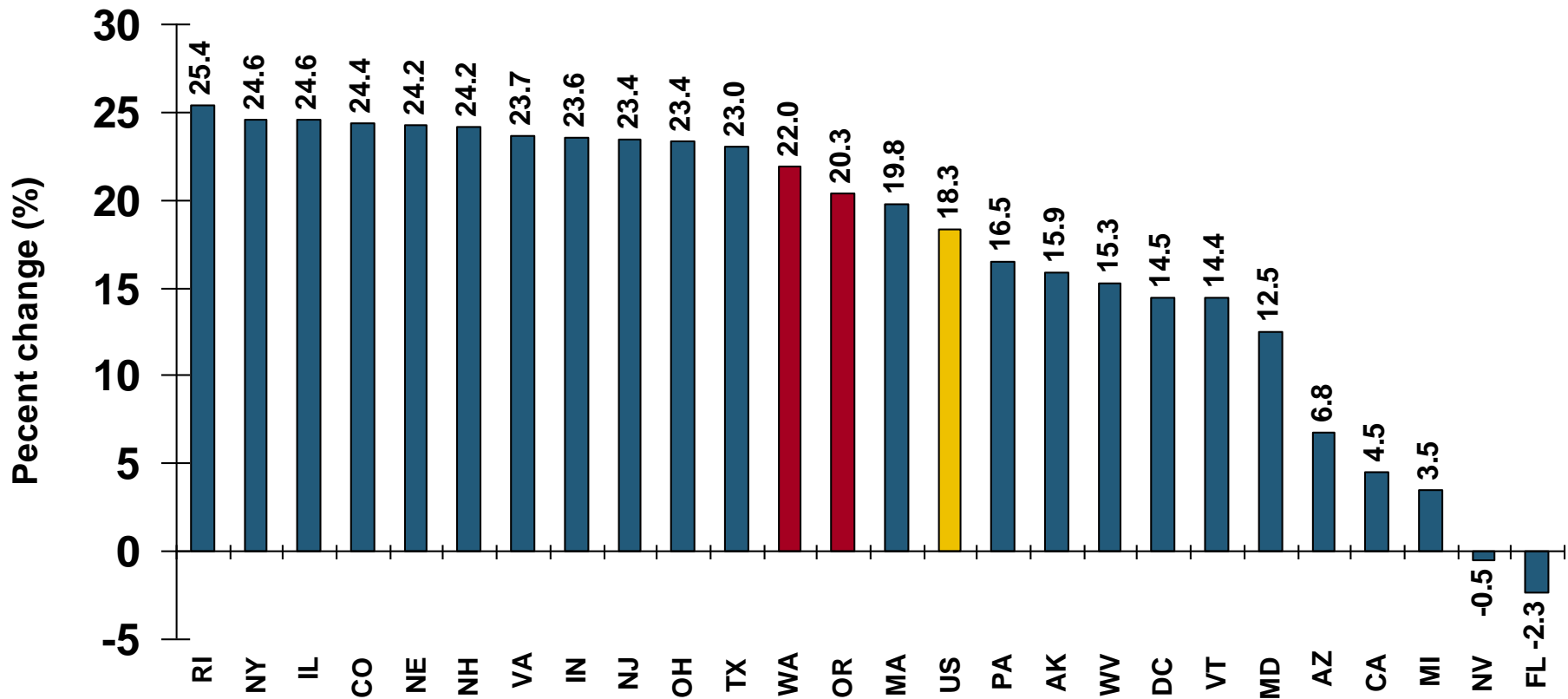
# Direct Premiums Written: PP Auto Percent Change by State, 2006-2011\*



Sources: SNL Financial LC.; Insurance Information Institute.

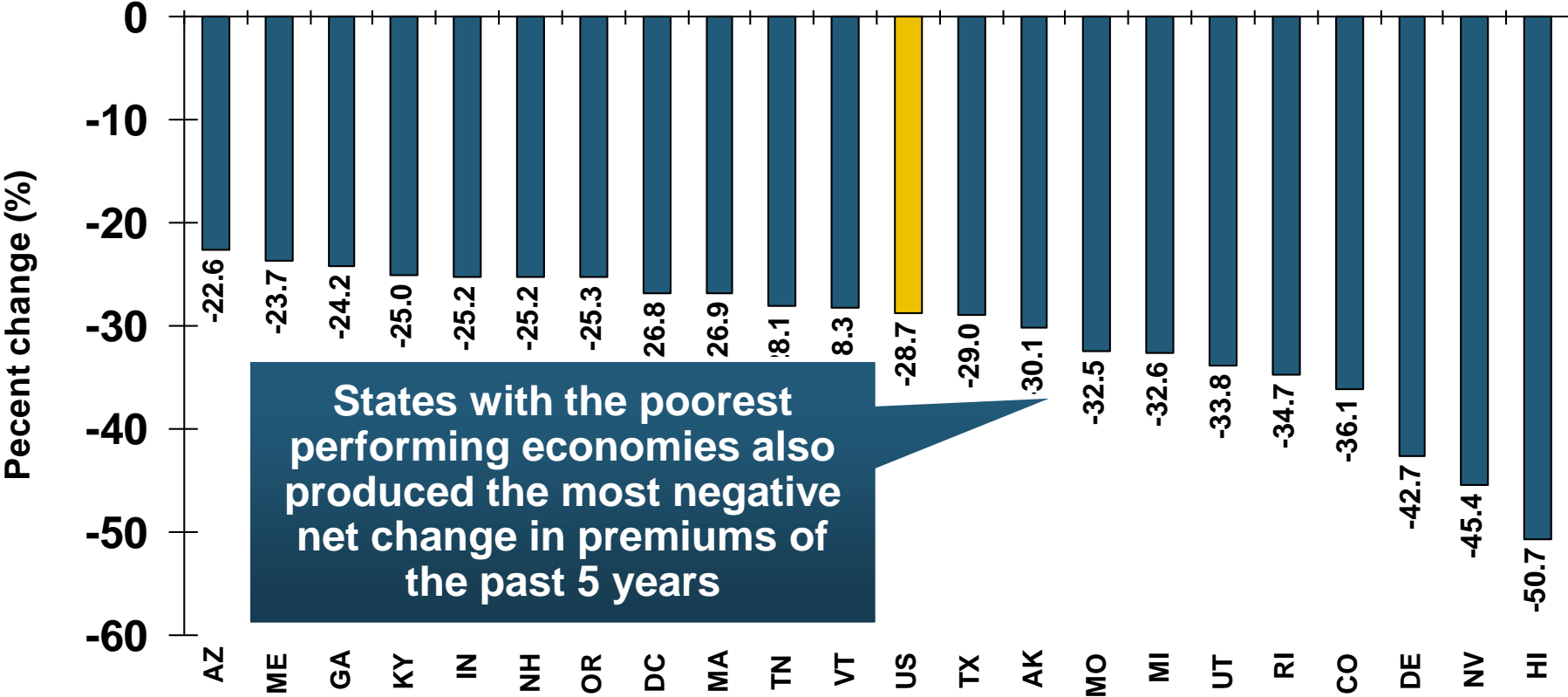
# Direct Premiums Written: Homeowners Percent Change by State, 2006-2011\*

## Top 25 States



# Direct Premiums Written: Homeowners Percent Change by State, 2006-2011\*

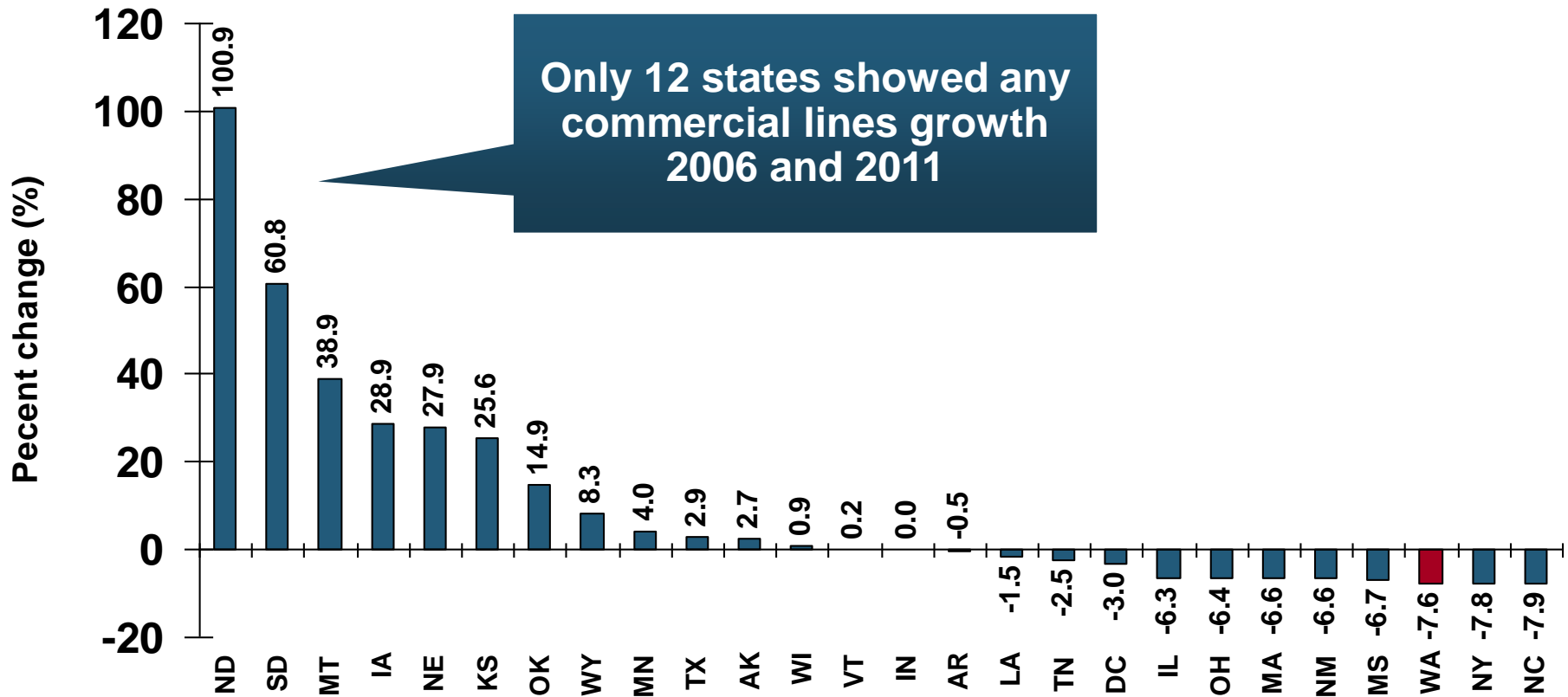
## Bottom 25 States



Sources: SNL Financial LC.; Insurance Information Institute.

# Direct Premiums Written: Comm. Lines Percent Change by State, 2006-2011\*

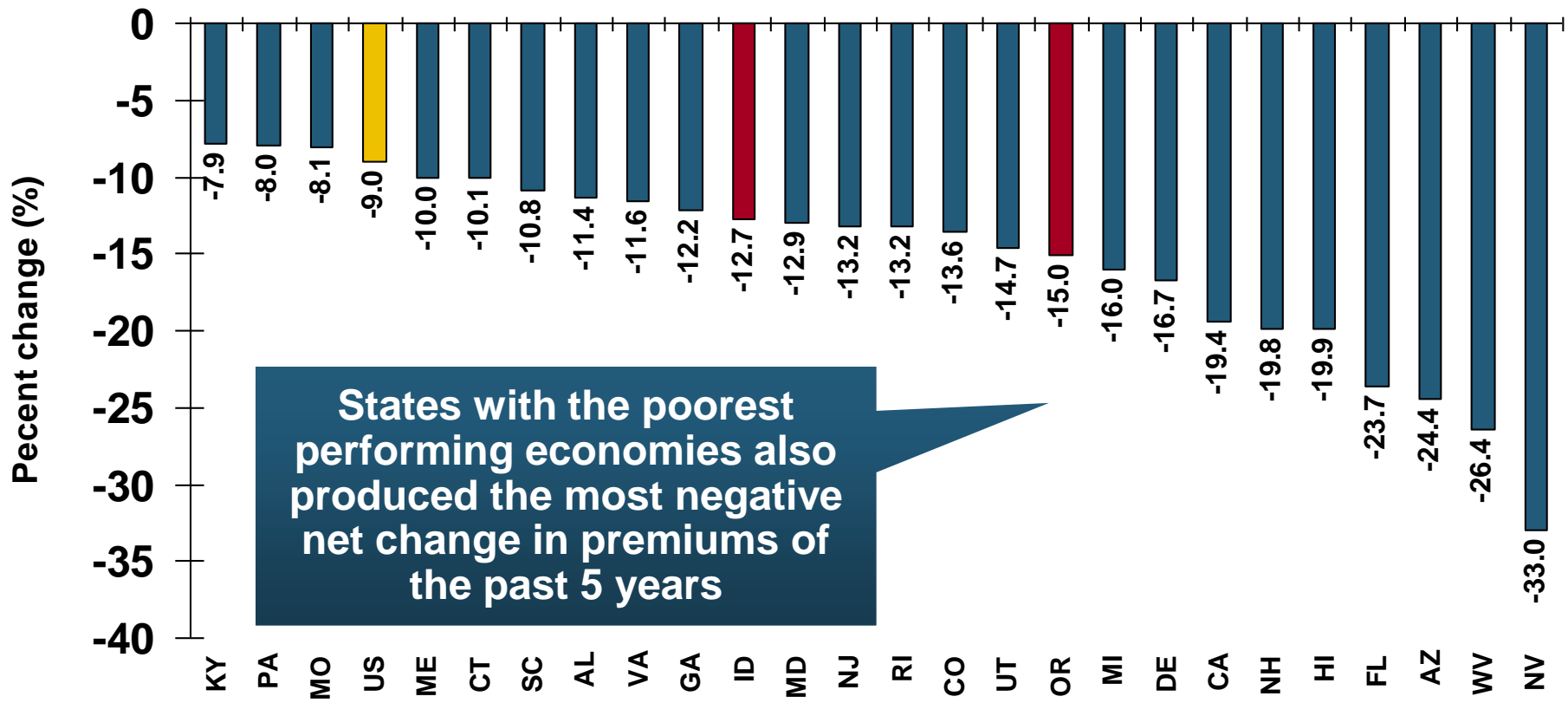
## Top 25 States



Sources: SNL Financial LC.; Insurance Information Institute.

# Direct Premiums Written: Comm. Lines Percent Change by State, 2006-2011\*

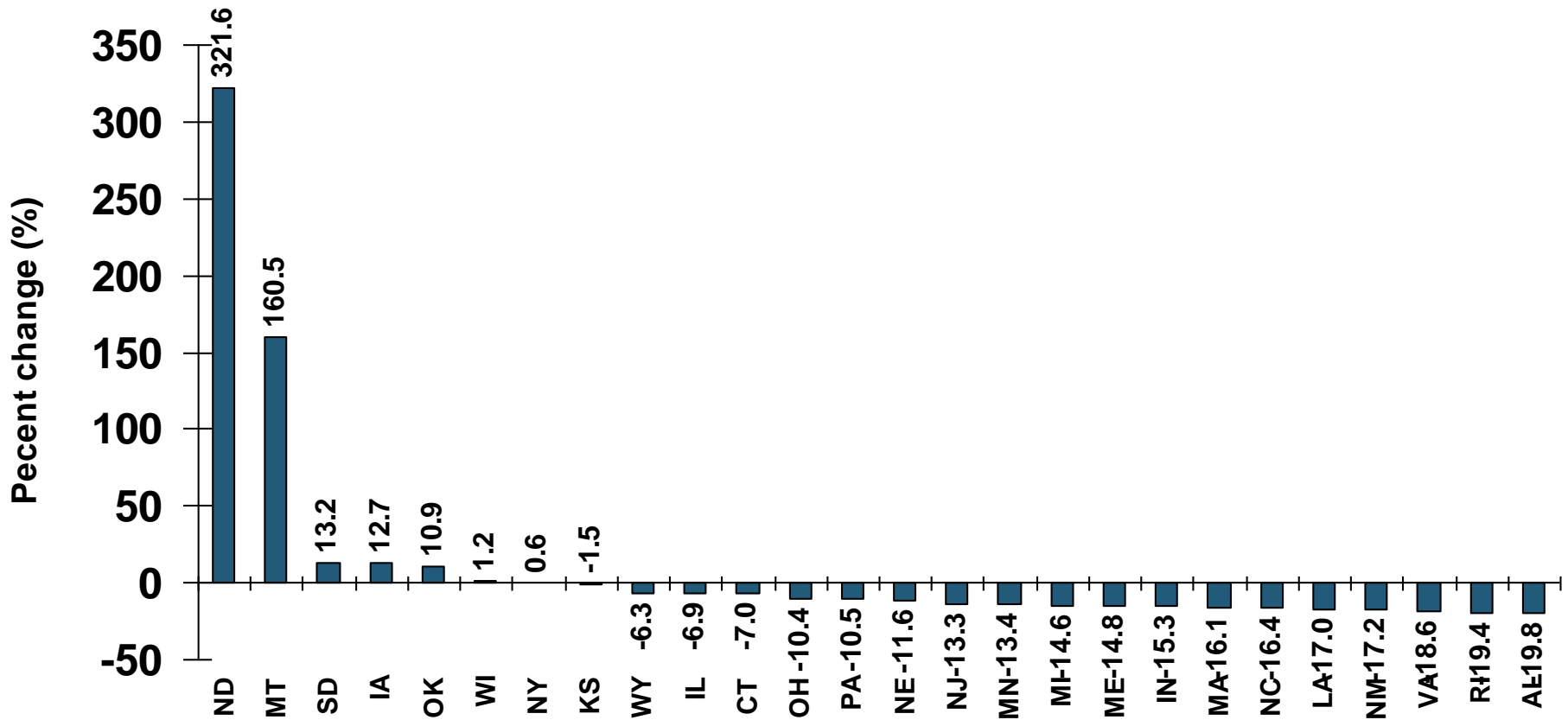
## Bottom 25 States



Sources: SNL Financial LC.; Insurance Information Institute.

# Direct Premiums Written: Workers' Comp Percent Change by State, 2006-2011\*

## Top 25 States



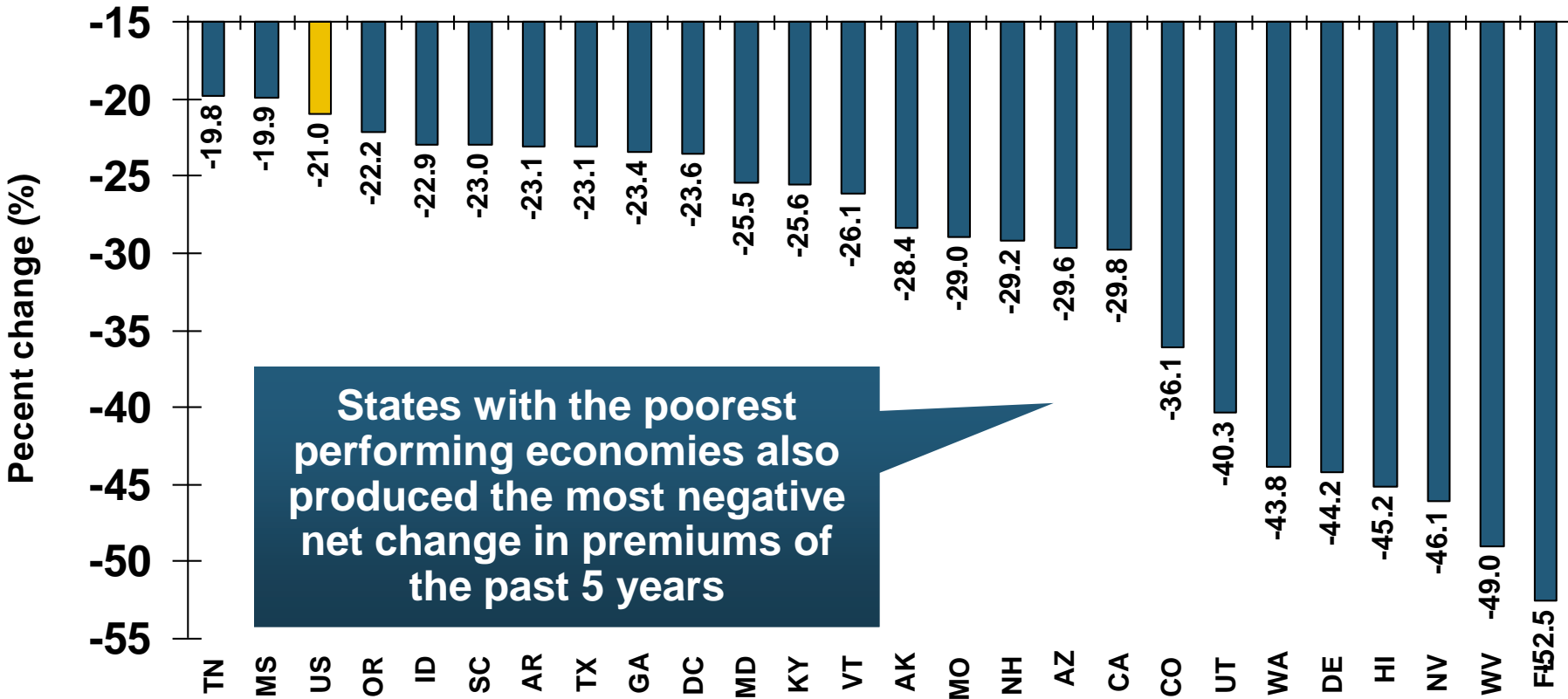
\*Excludes monopolistic fund states: ND, OH, WA, WY as well as WV, which transitioned to a competitive structure during this period.

Sources: SNL Financial LC.; Insurance Information Institute.



# Direct Premiums Written: Worker's Comp Percent Change by State, 2006-2011\*

## Bottom 25 States



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

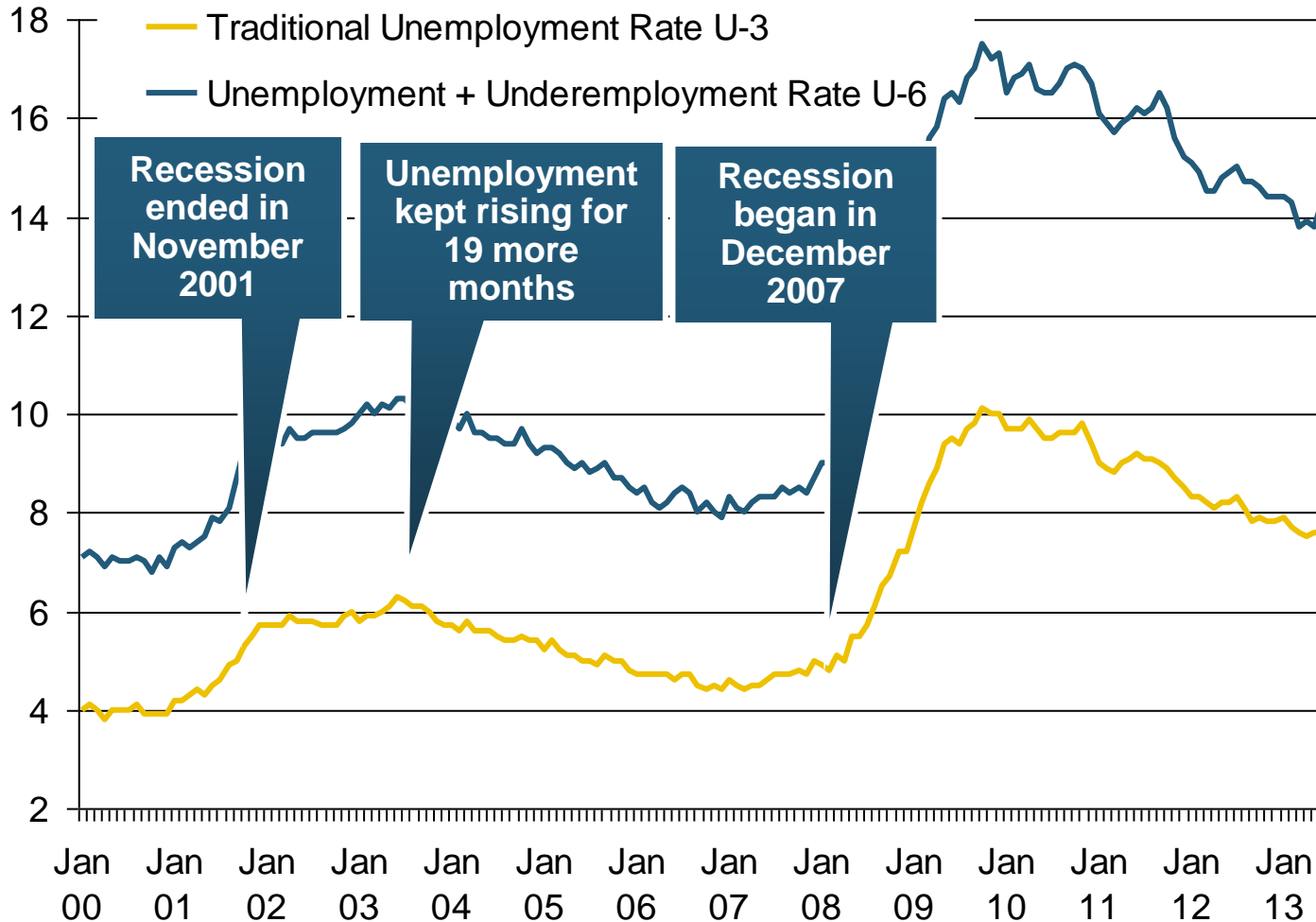
Sources: SNL Financial LC.; Insurance Information Institute.

# Labor Market Trends

**Massive Job Losses Sapped the Economy and Commercial/Personal Lines Exposure, But Trend is Improving**

# Unemployment and Underemployment Rates: Stubbornly High in 2012, But Falling

January 2000 through June 2013, Seasonally Adjusted (%)



U-6 went from 8.0% in March 2007 to 17.5% in October 2009; Stood at 14.3% in June 2013

Unemployment stood at 7.6% in June 2013—nearly its lowest level in 4 years.

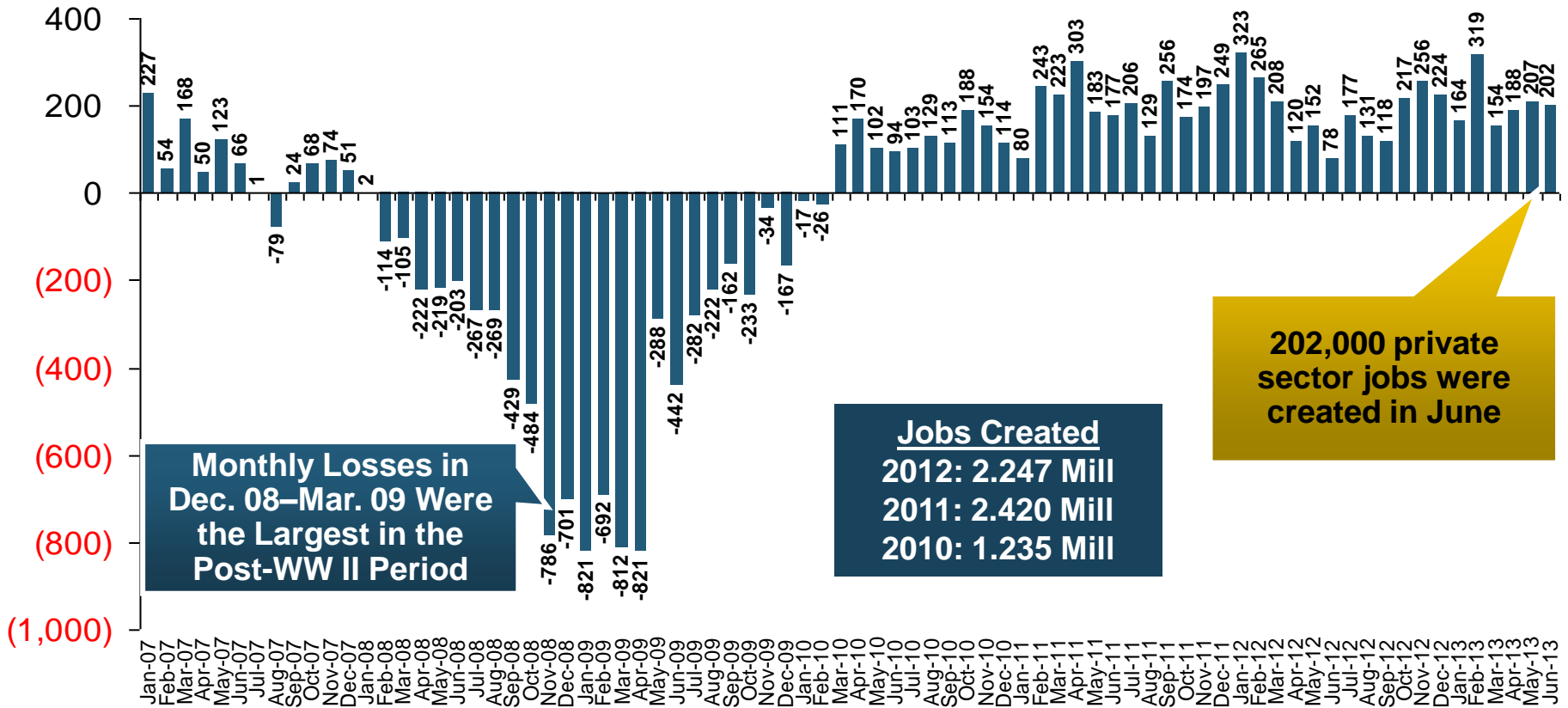
Unemployment peaked at 10.1% in October 2009, highest monthly rate since 1983.

Peak rate in the last 30 years: 10.8% in November - December 1982

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

# Monthly Change in Private Employment

January 2007 through June 2013 (Thousands)



Monthly Losses in Dec. 08–Mar. 09 Were the Largest in the Post-WW II Period

**Jobs Created**  
 2012: 2.247 Mill  
 2011: 2.420 Mill  
 2010: 1.235 Mill

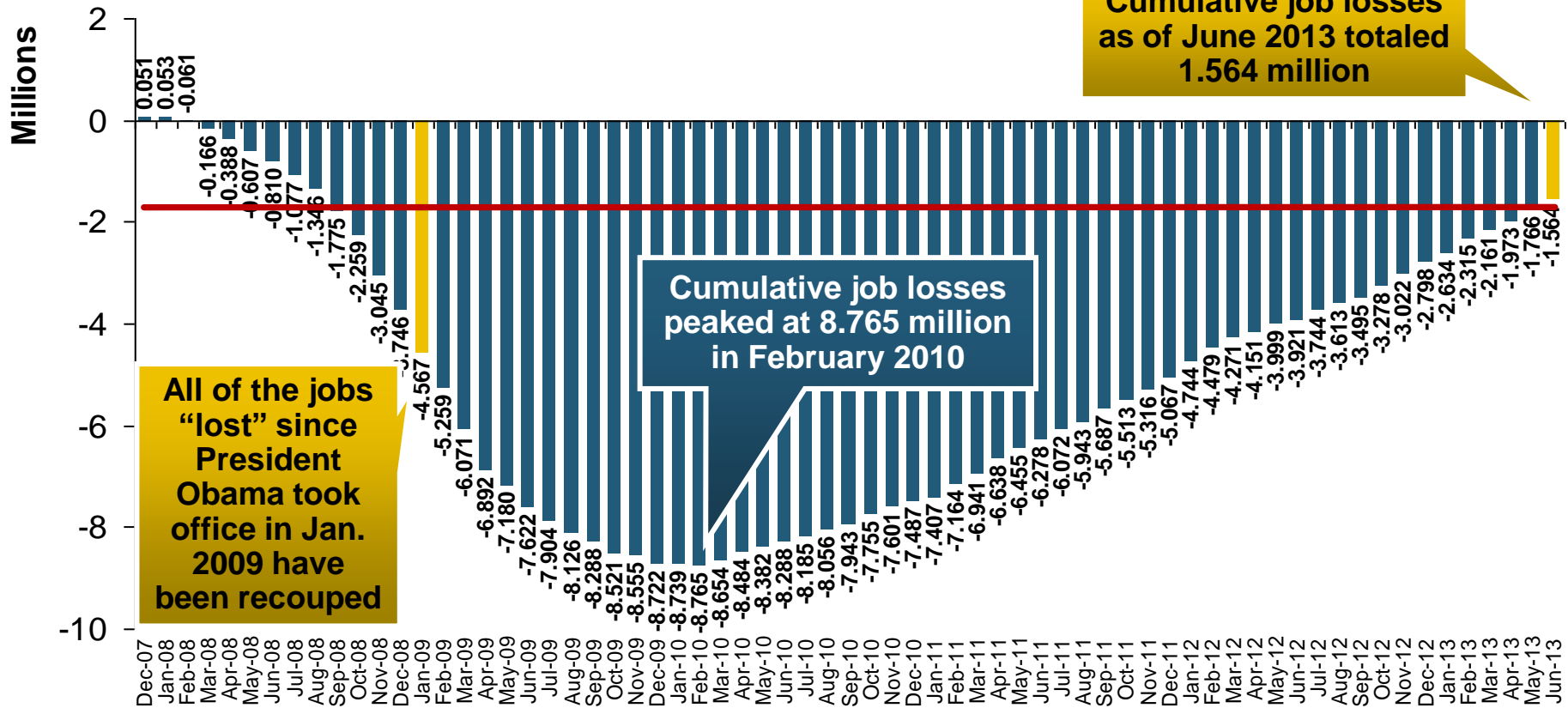
202,000 private sector jobs were created in June

Private Employers Added 7.16 million Jobs Since Jan. 2010 After Having Shed 4.98 Million Jobs in 2009 and 3.80 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)

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

# Cumulative Change in Private Employment: Dec. 2007—May 2013

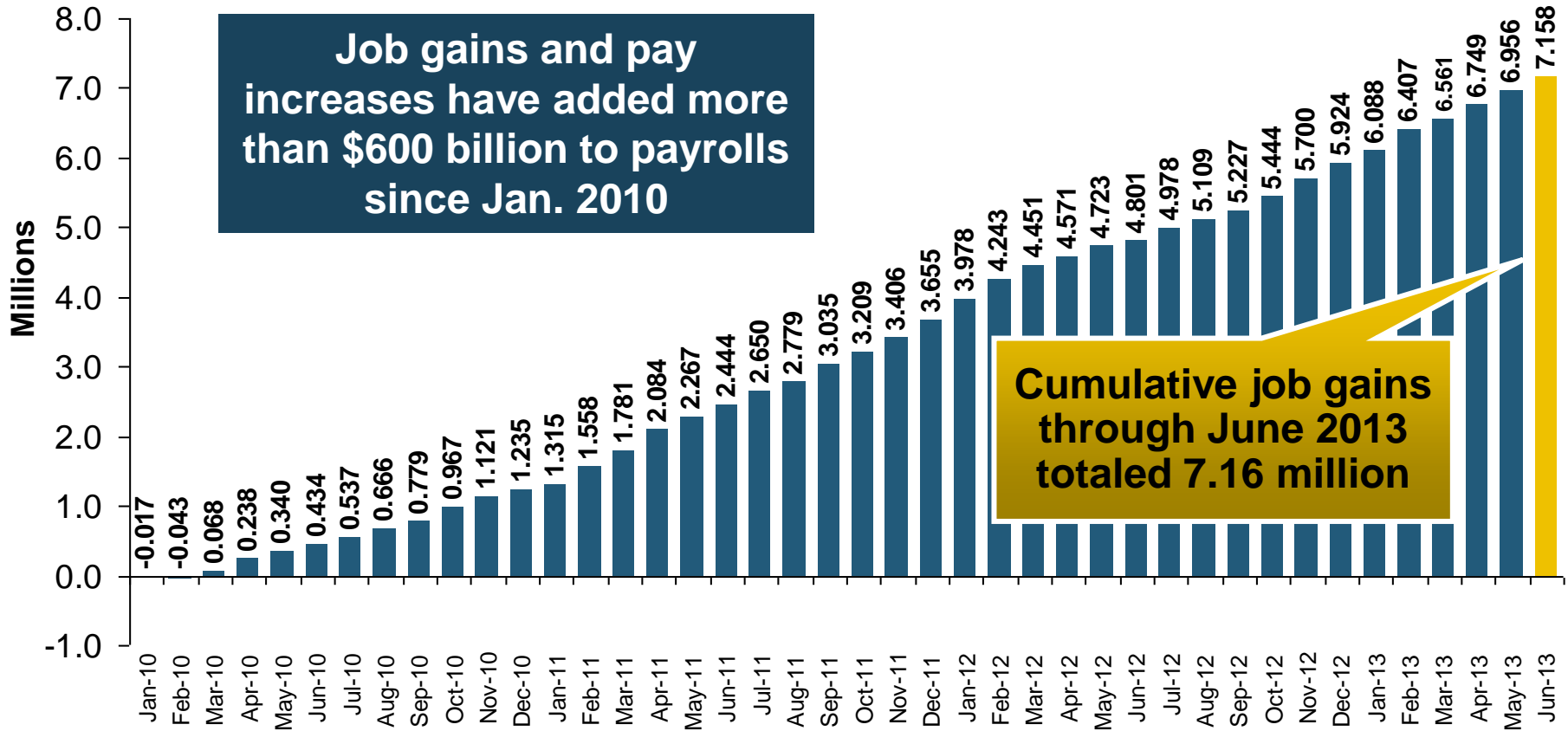
December 2007 through May 2013 (Millions)



**Private Employers Added 7.16 million Jobs Since Jan. 2010 After Having Shed 4.98 Million Jobs in 2009 and 3.80 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)**

# Cumulative Change in Private Sector Employment: Jan. 2010—June 2013

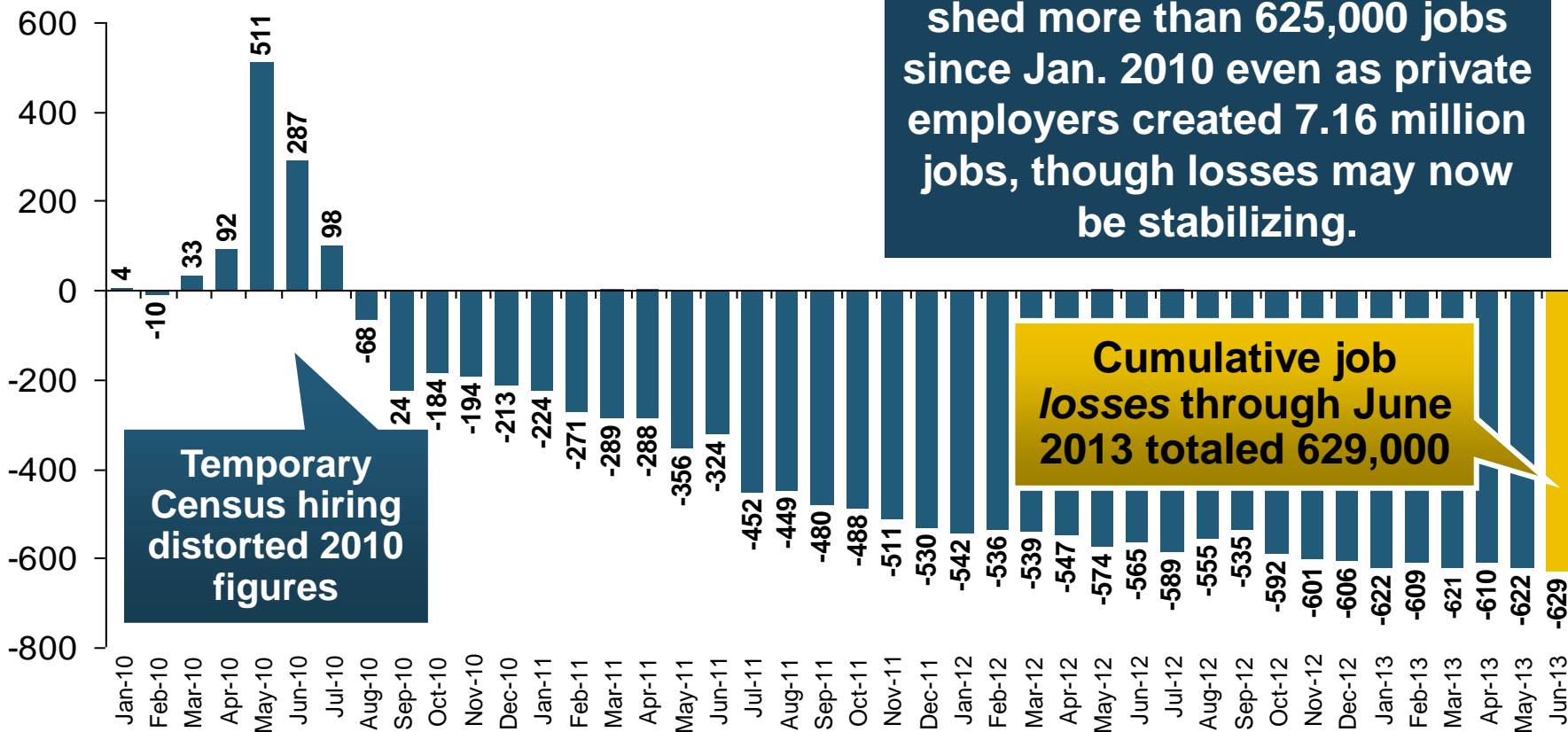
January 2010 through June 2013\* (Millions)



**Private Employers Added 7.16 million Jobs Since Jan. 2010 After Having Shed 4.98 Million Jobs in 2009 and 3.80 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)**

# Cumulative Change in Government Employment: Jan. 2010—June 2013

January 2010 through June 2013\* (Millions)



Government at all levels has shed more than 625,000 jobs since Jan. 2010 even as private employers created 7.16 million jobs, though losses may now be stabilizing.

Temporary Census hiring distorted 2010 figures

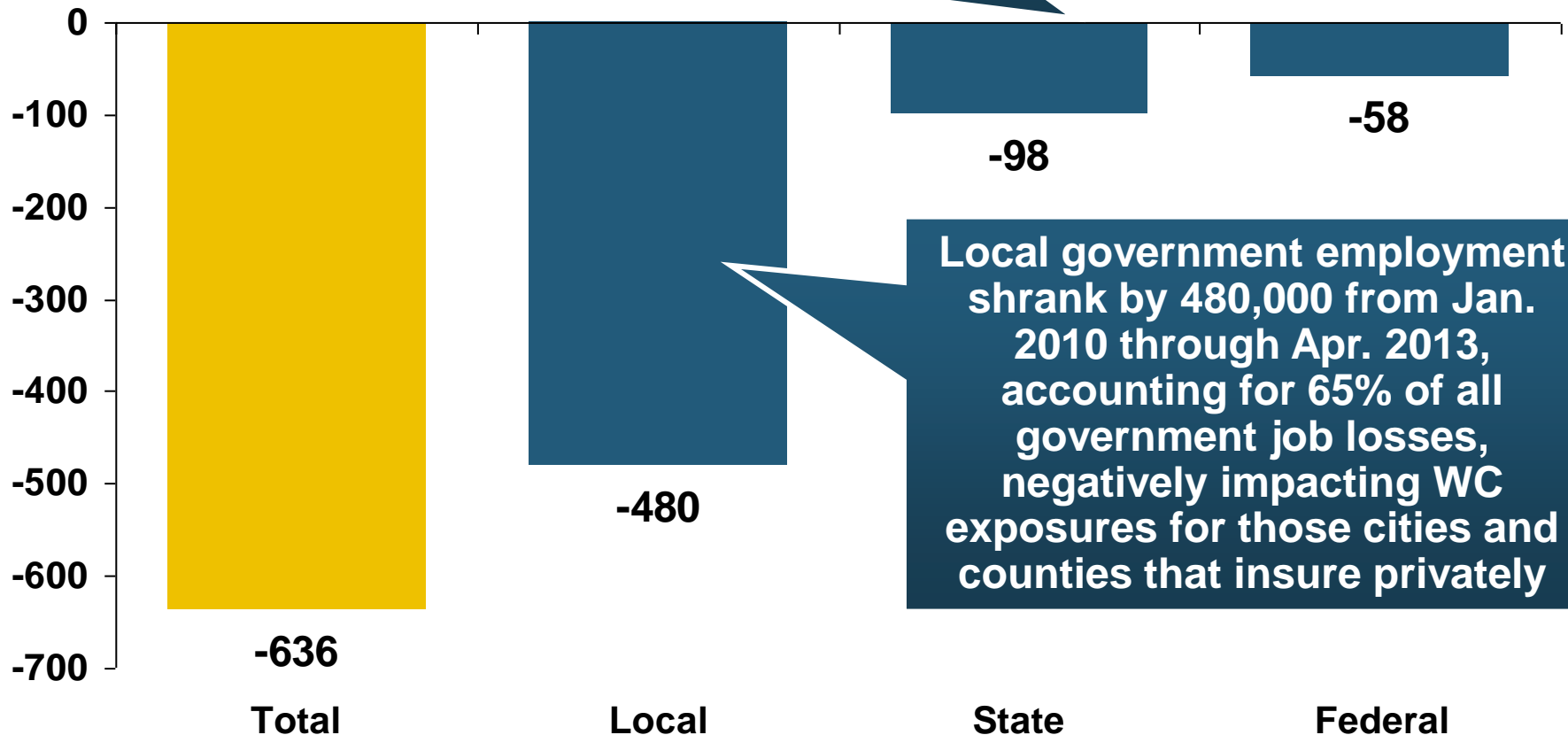
Cumulative job losses through June 2013 totaled 629,000

**Governments at All Levels are Under Severe Fiscal Strain As Tax Receipts Plunged and Pension Obligations Soared During the Financial Crisis: Sequestration Will Add to this Toll**

# Net Change in Government Employment: Jan. 2010—Apr. 2013\*

(Thousands)

State government employment fell by 1.9% since the end of 2009 while Federal employment is down by 2.1%

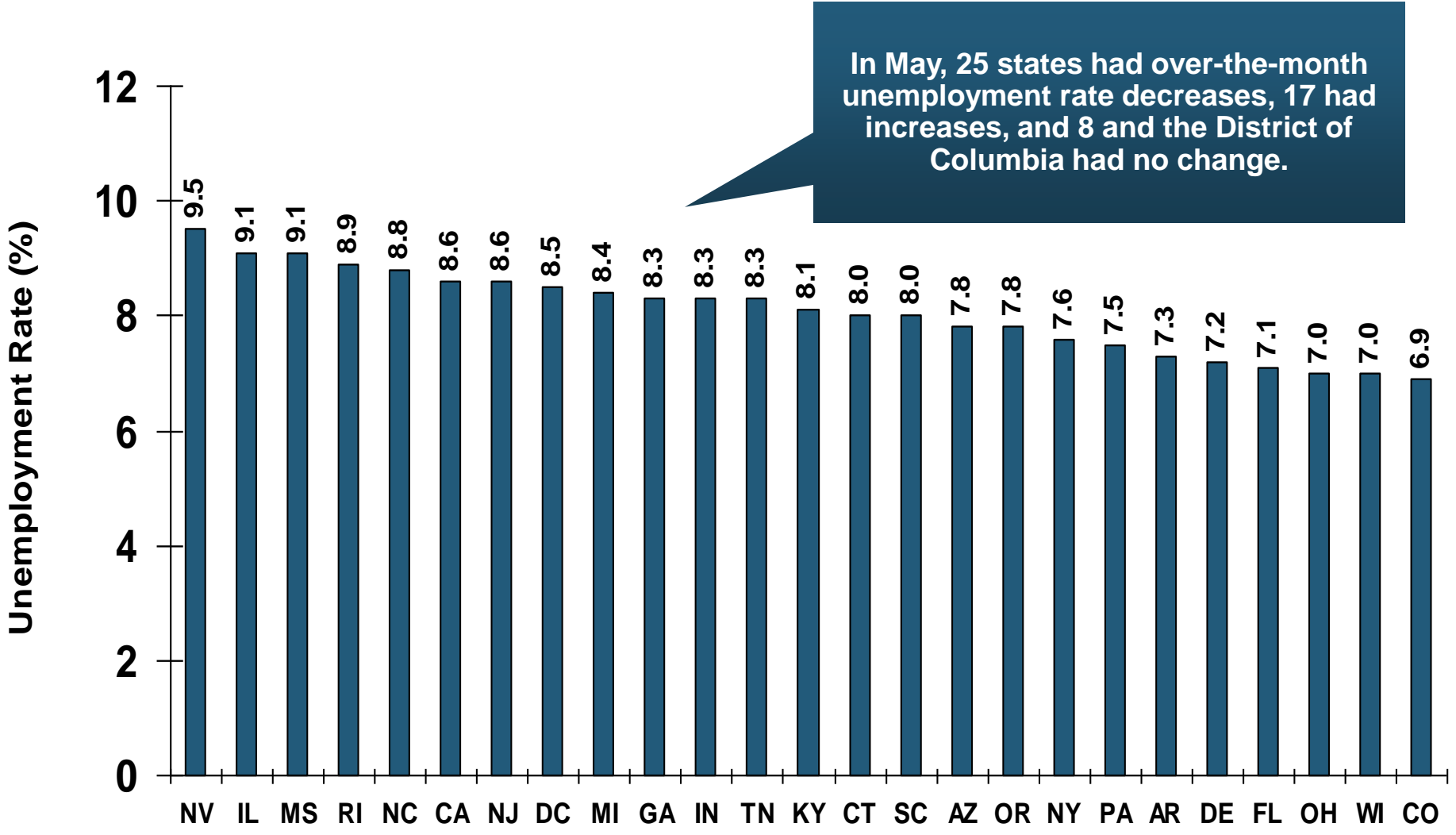


\*Cumulative change from prior month; Base employment date is Dec. 2009.

Source: US Bureau of Labor Statistics <http://www.bls.gov/data/#employment>; Insurance Information Institute



# Unemployment Rates by State, May 2013: Highest 25 States\*

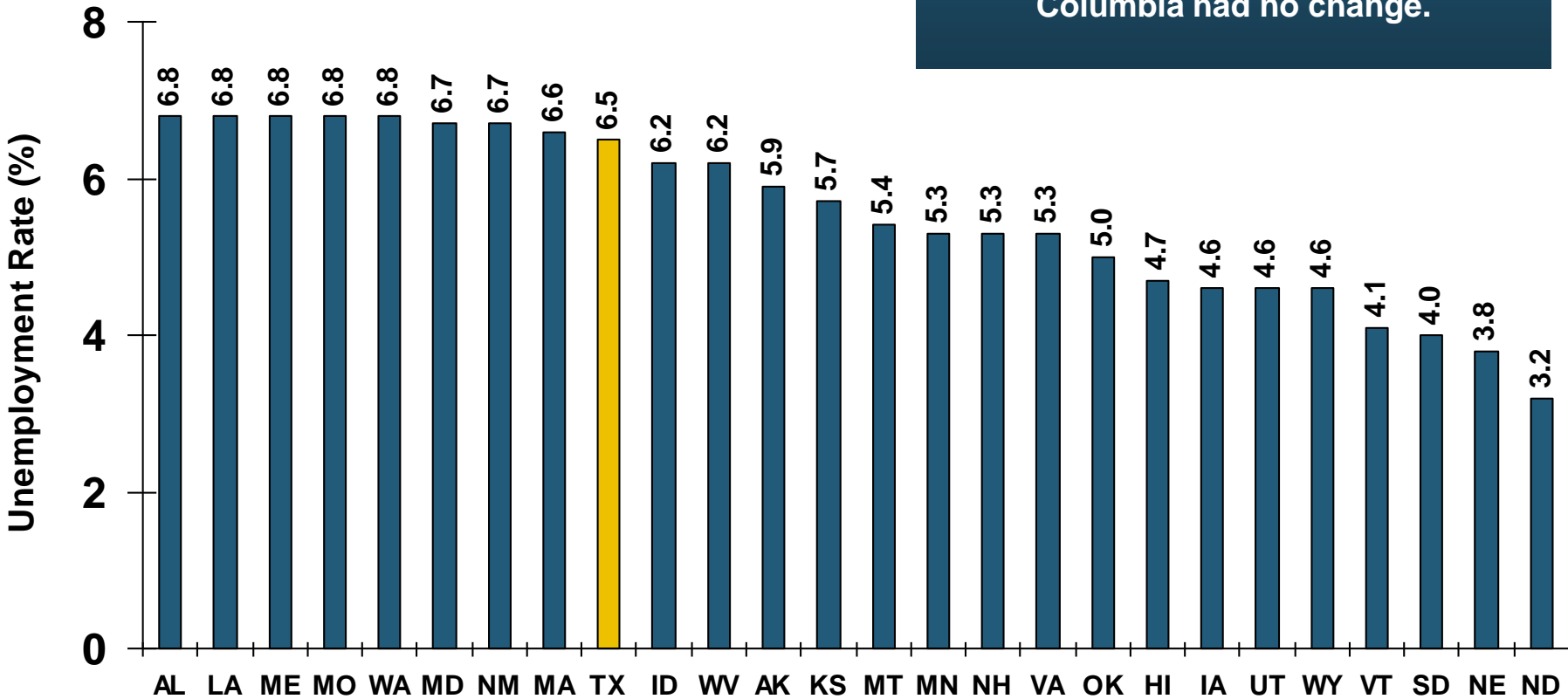


\*Provisional figures for May 2013, seasonally adjusted.

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

# Unemployment Rates by State, May 2013: Lowest 25 States\*

In May, 25 states had over-the-month unemployment rate decreases, 17 had increases, and 8 and the District of Columbia had no change.

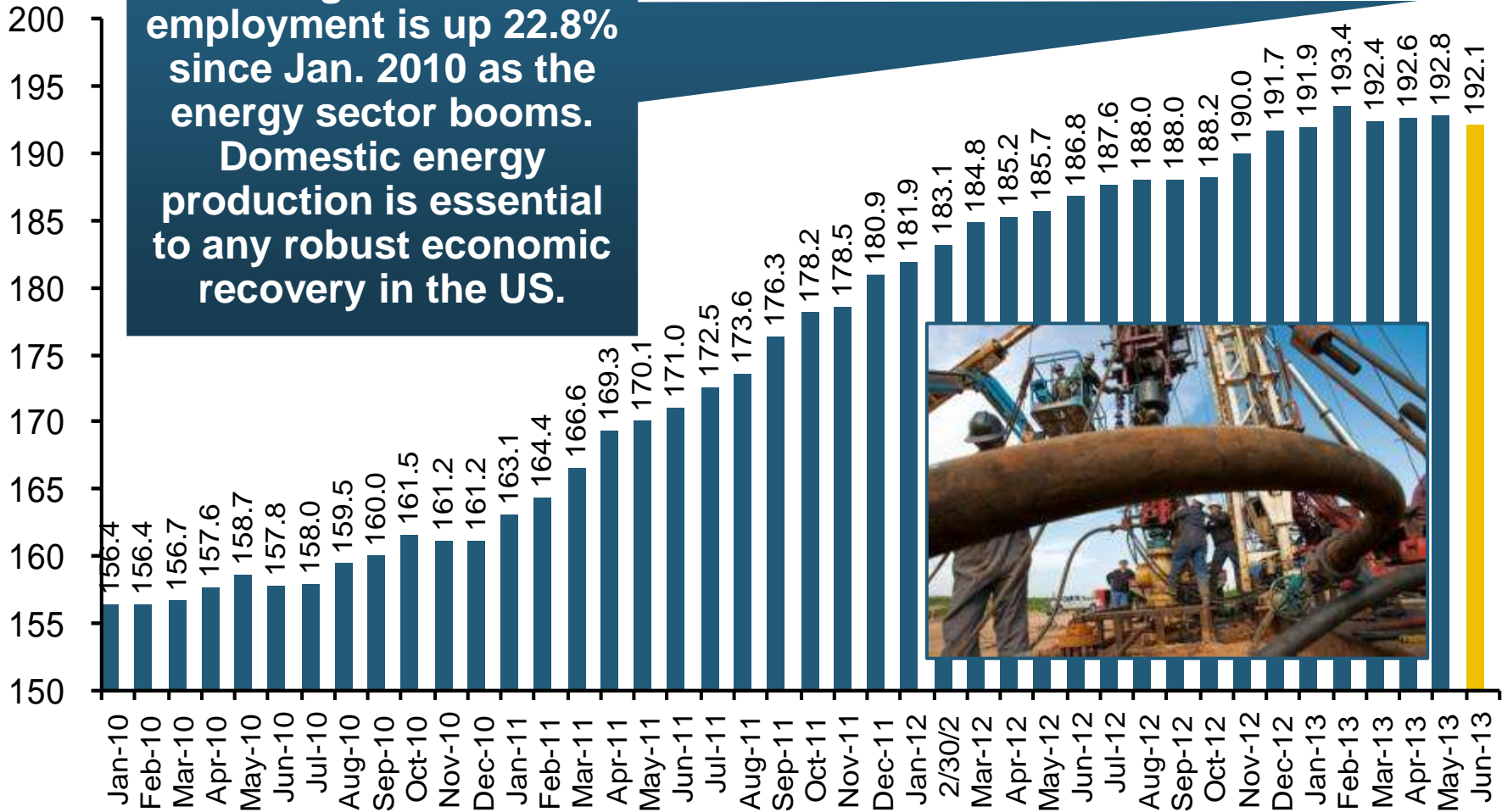


\*Provisional figures for May 2013, seasonally adjusted.  
Sources: US Bureau of Labor Statistics; Insurance Information Institute.

# Oil & Gas Extraction Employment, Jan. 2010—June 2013\*

(Thousands)

Oil and gas extraction employment is up 22.8% since Jan. 2010 as the energy sector booms. Domestic energy production is essential to any robust economic recovery in the US.

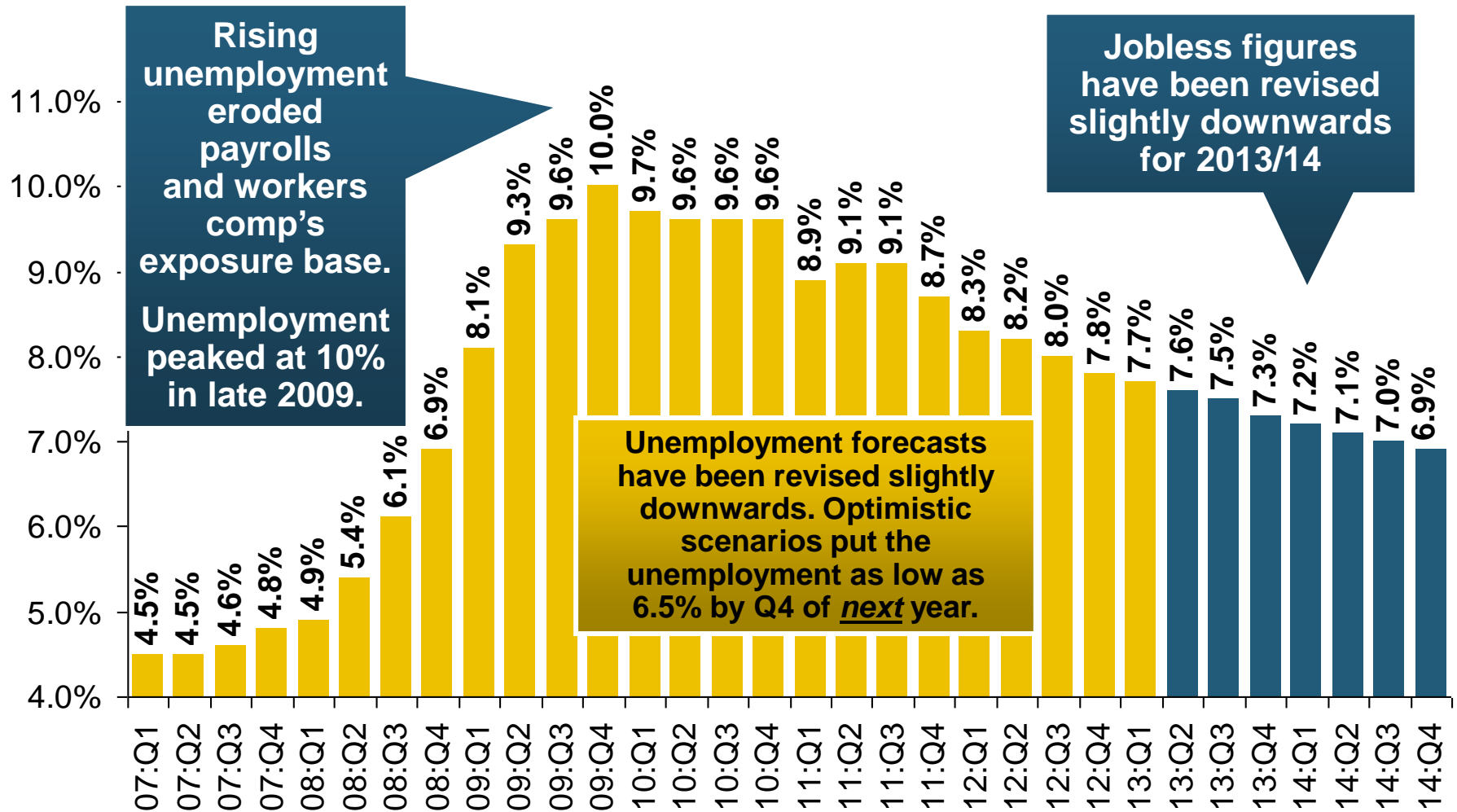


\*Seasonally adjusted

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

# US Unemployment Rate Forecast

2007:Q1 to 2014:Q4F\*

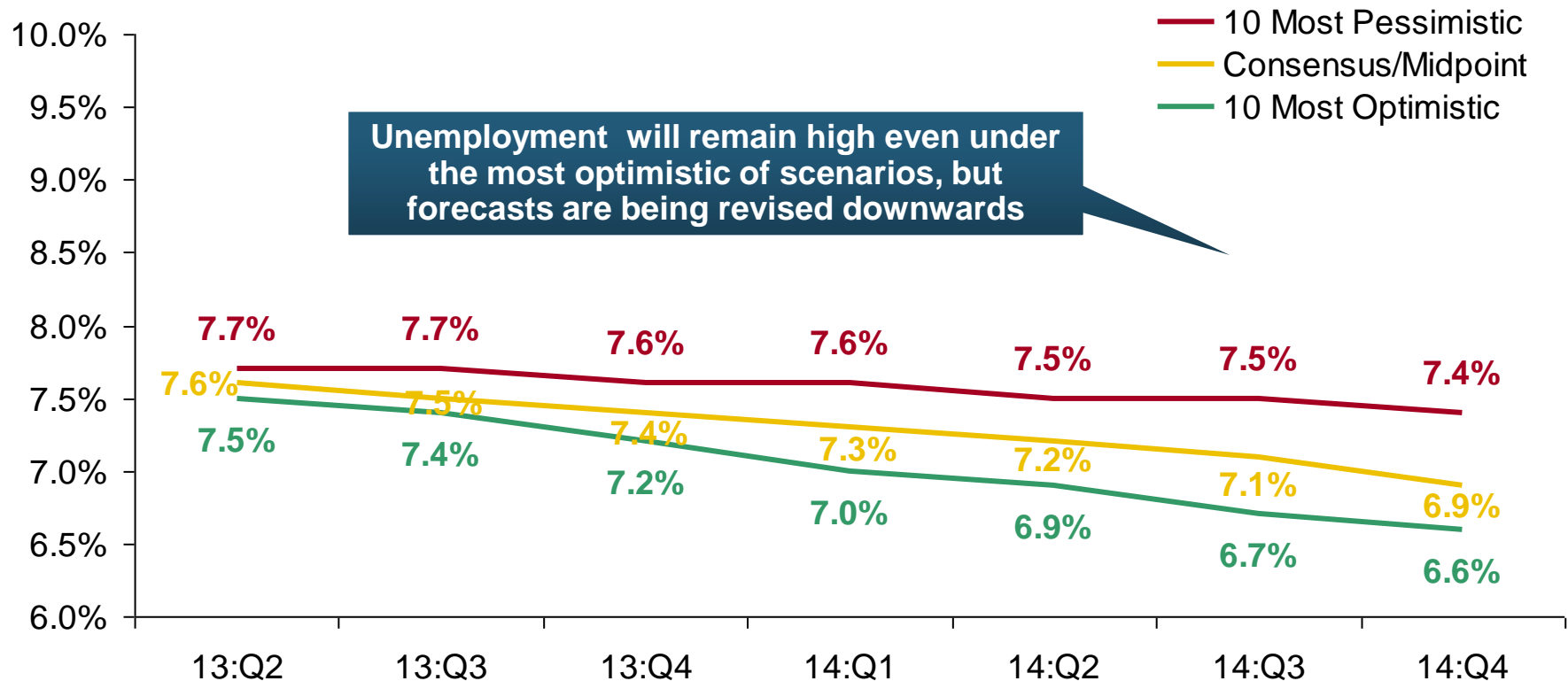


\* ■ = actual; ■ = forecasts

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (7/13 edition); Insurance Information Institute.

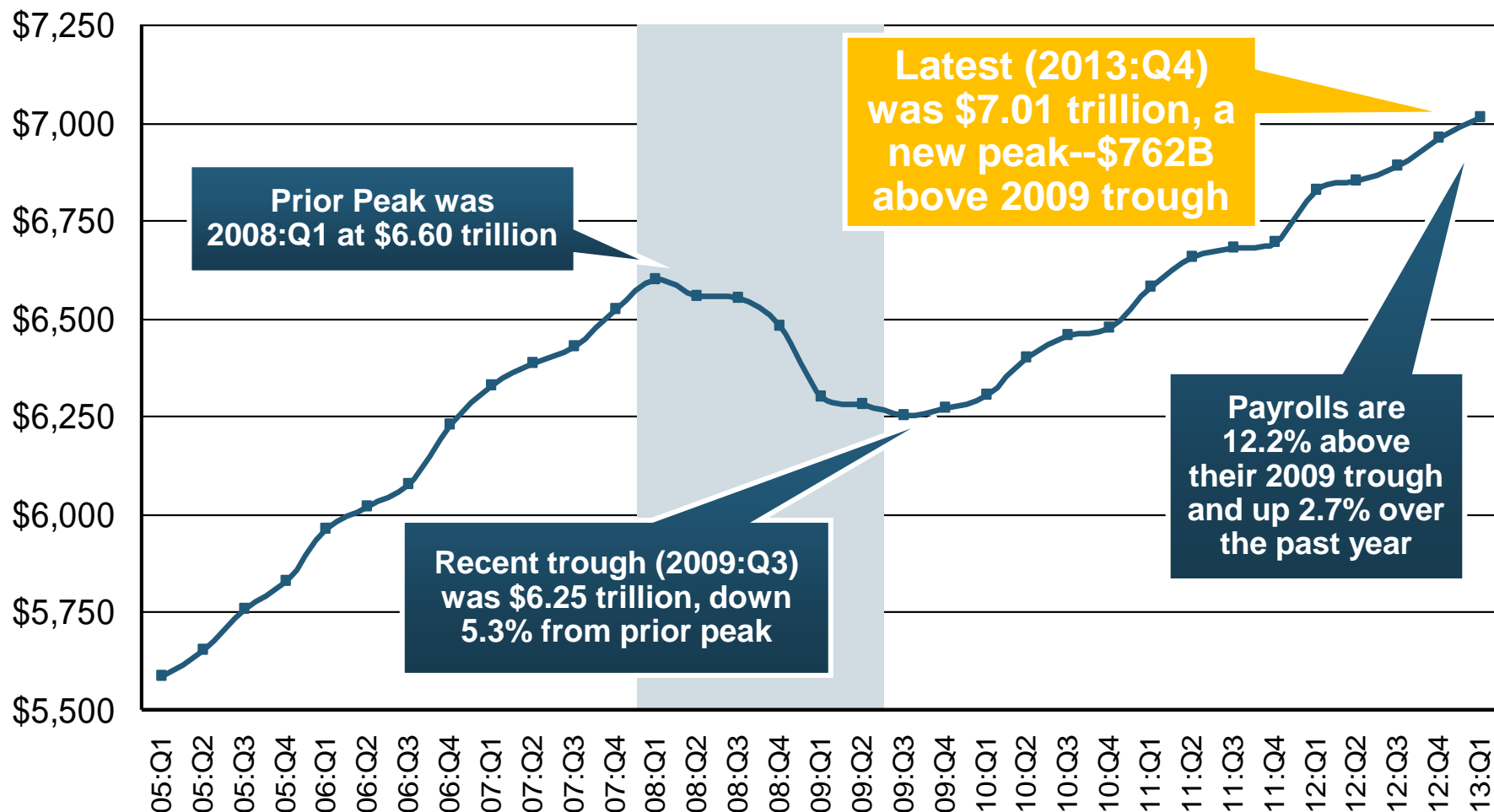
# US Unemployment Rate Forecasts

Quarterly, 2013:Q1 to 2014:Q4



# Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2013:Q1

Billions



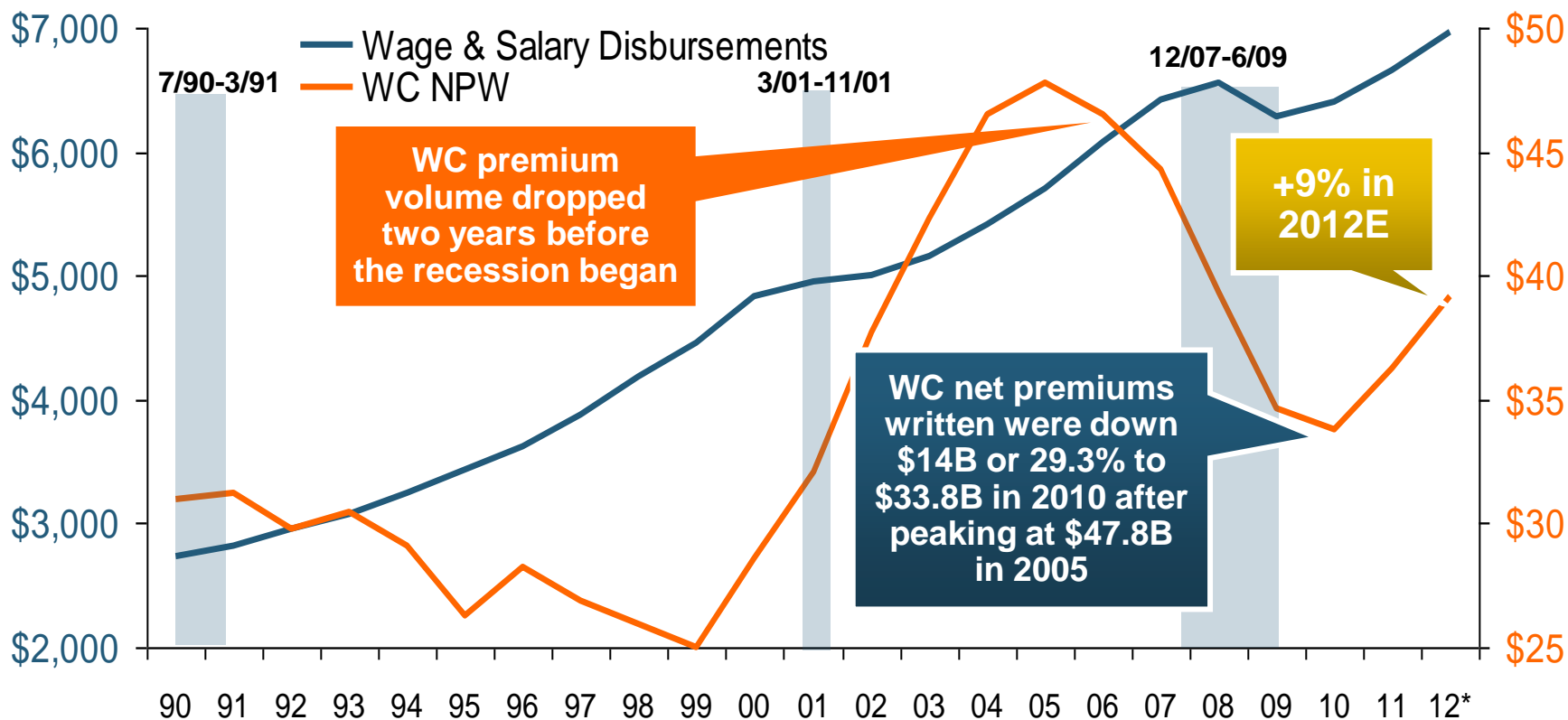
Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

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

# Payroll vs. Workers Comp Net Written Premiums, 1990-2012E

Payroll Base\*  
\$Billions

WC NWP  
\$Billions



**Continued Payroll Growth and Rate Increases Suggest WC NWP Will Grow Again in 2012; +7.9% Growth in 2011 Was the First Gain Since 2005**

\*Private employment; Shaded areas indicate recessions. WC premiums for 2012 are I.I.I. estimate based YTD 2012 actuals. Sources: NBER (recessions); Federal Reserve Bank of St. Louis at <http://research.stlouisfed.org/fred2/series/WASCUR> ; NCCI; I.I.I.

# The BIG Question: Where Is the Market Heading?

**Catastrophes and Other Factors Are  
Pressuring Insurance Markets**

***New Factor: Record Low Interest  
Rates Are Contributing to  
Underwriting and Pricing Pressures***



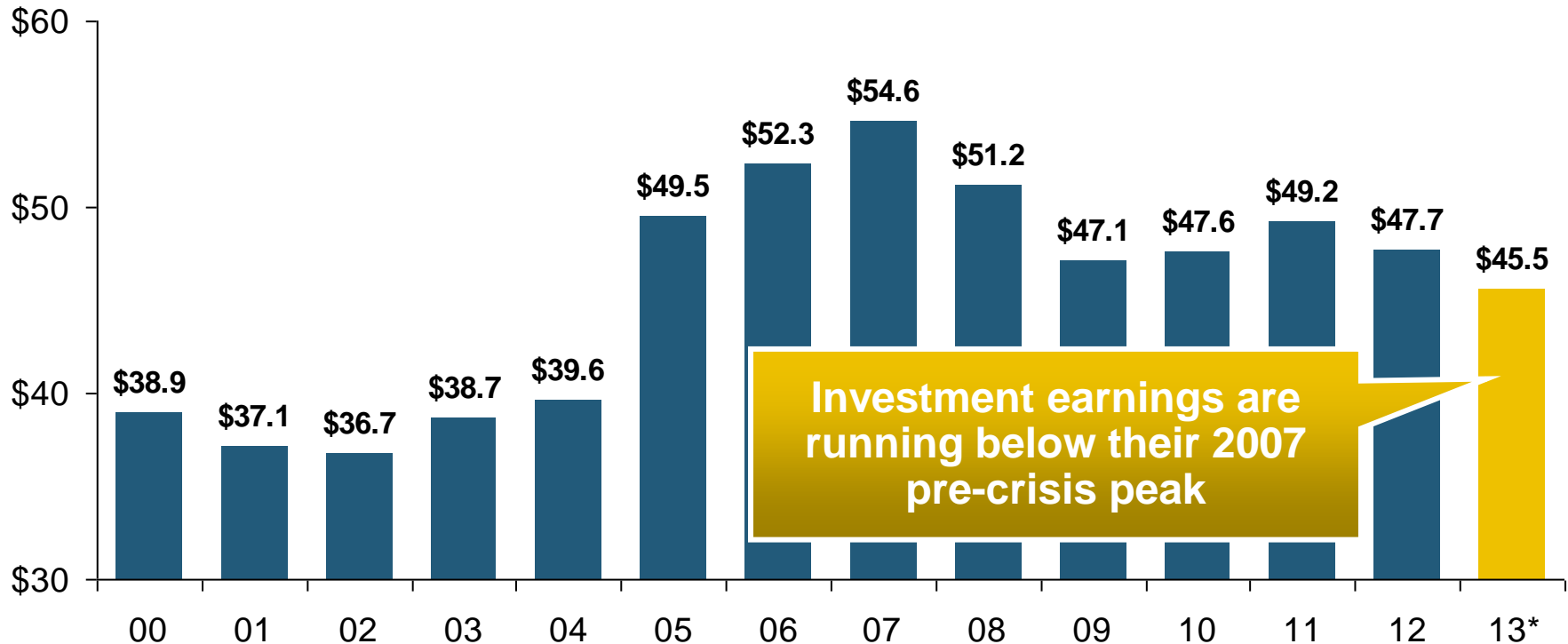
# **INVESTMENTS: THE NEW REALITY**

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

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

# Property/Casualty Insurance Industry Investment Income: 2000–2013\*1

(\$ Billions)



**Investment Income Fell in 2012 and is Falling in 2013 Due to Persistently Low Interest Rates, Putting Additional Pressure on (Re) Insurance Pricing**

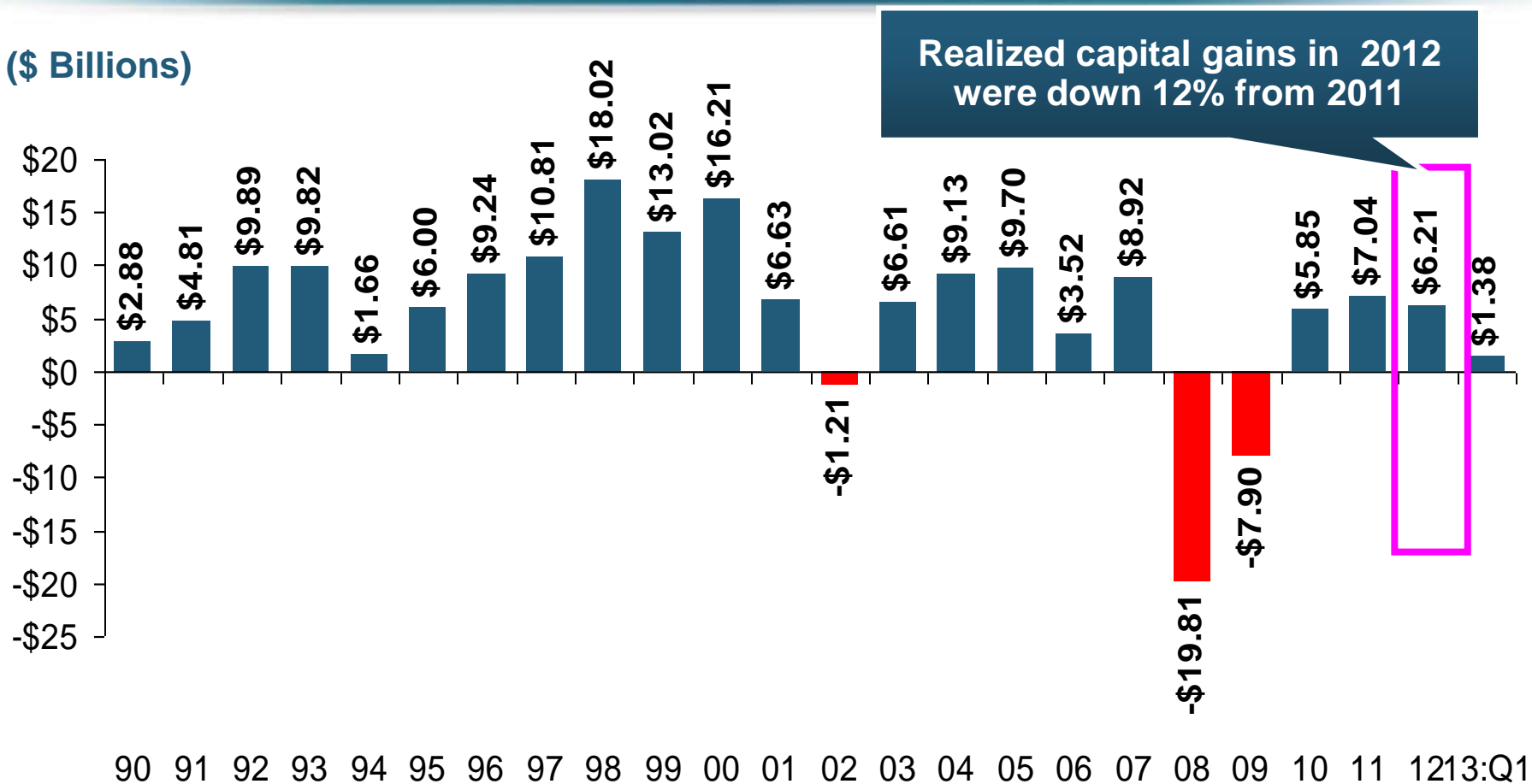
<sup>1</sup> Investment gains consist primarily of interest and stock dividends..

\*Estimate based on annualized actual Q1:2013 investment income of \$11.385B.

Sources: ISO; Insurance Information Institute.

# P/C Insurer Net Realized Capital Gains/Losses, 1990-2013:Q1

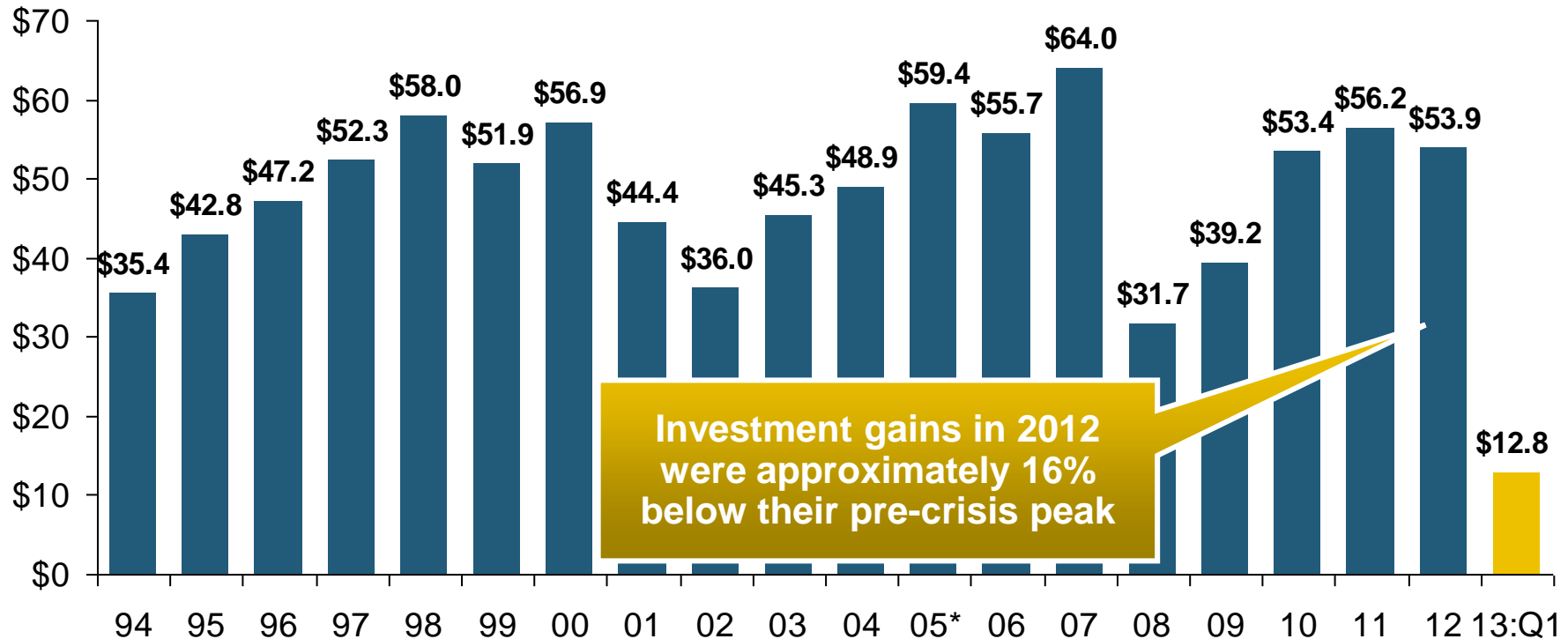
(\$ Billions)



**Insurers Posted Net Realized Capital Gains in 2010, 2011 and 2012 Following Two Years of Realized Losses During the Financial Crisis. Realized Capital Losses Were the Primary Cause of 2008/2009's Large Drop in Profits and ROE**

# Property/Casualty Insurance Industry Investment Gain: 1994–2013:Q1<sup>1</sup>

(\$ Billions)



**Investment Gains Are Slipping in 2012 as Low Interest Rates Reduce Investment Income and Lower Realized Investment Gains; The Financial Crisis Caused Investment Gains to Fall by 50% in 2008**

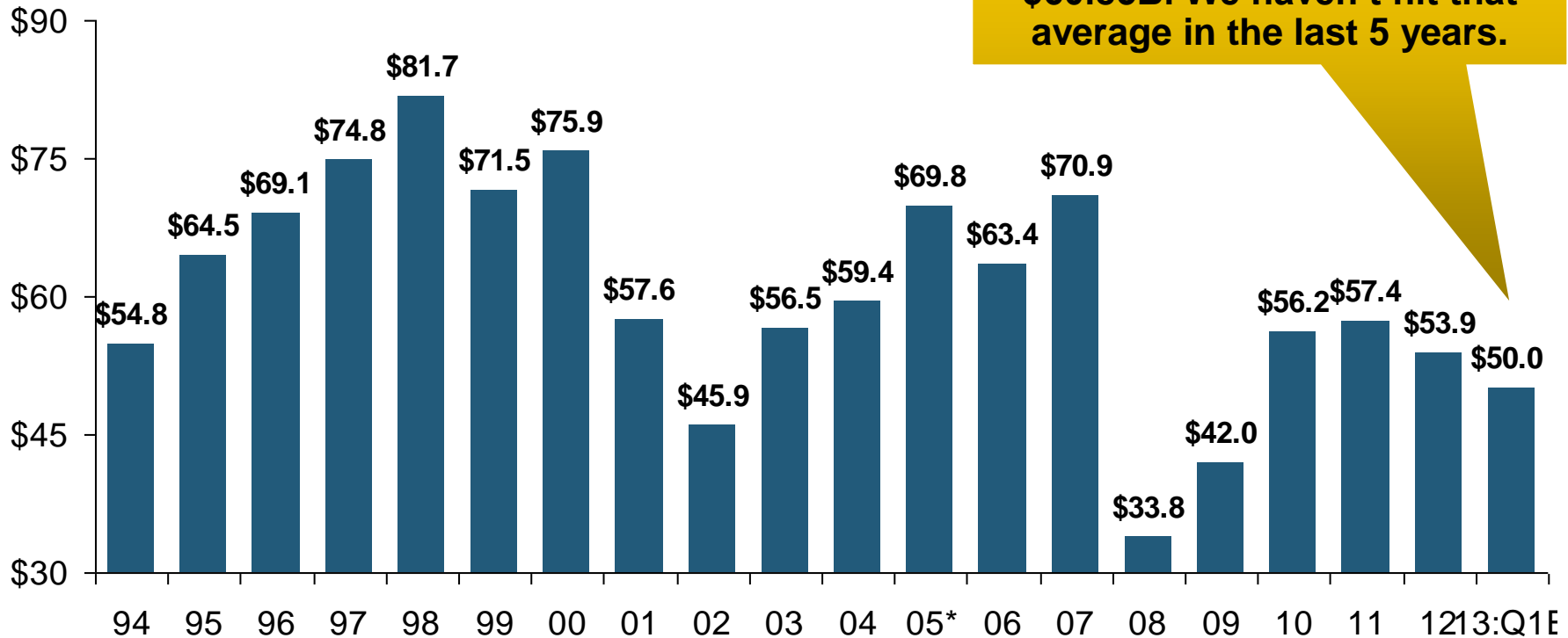
<sup>1</sup> Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.

\* 2005 figure includes special one-time dividend of \$3.2B;

Sources: ISO; Insurance Information Institute.

# P/C Industry Investment Gains, Inflation-Adjusted: 1994–2012<sup>1</sup>

(\$ Billions, 2012 dollars)



**1994-2012 average yearly gain: \$60.85B. We haven't hit that average in the last 5 years.**

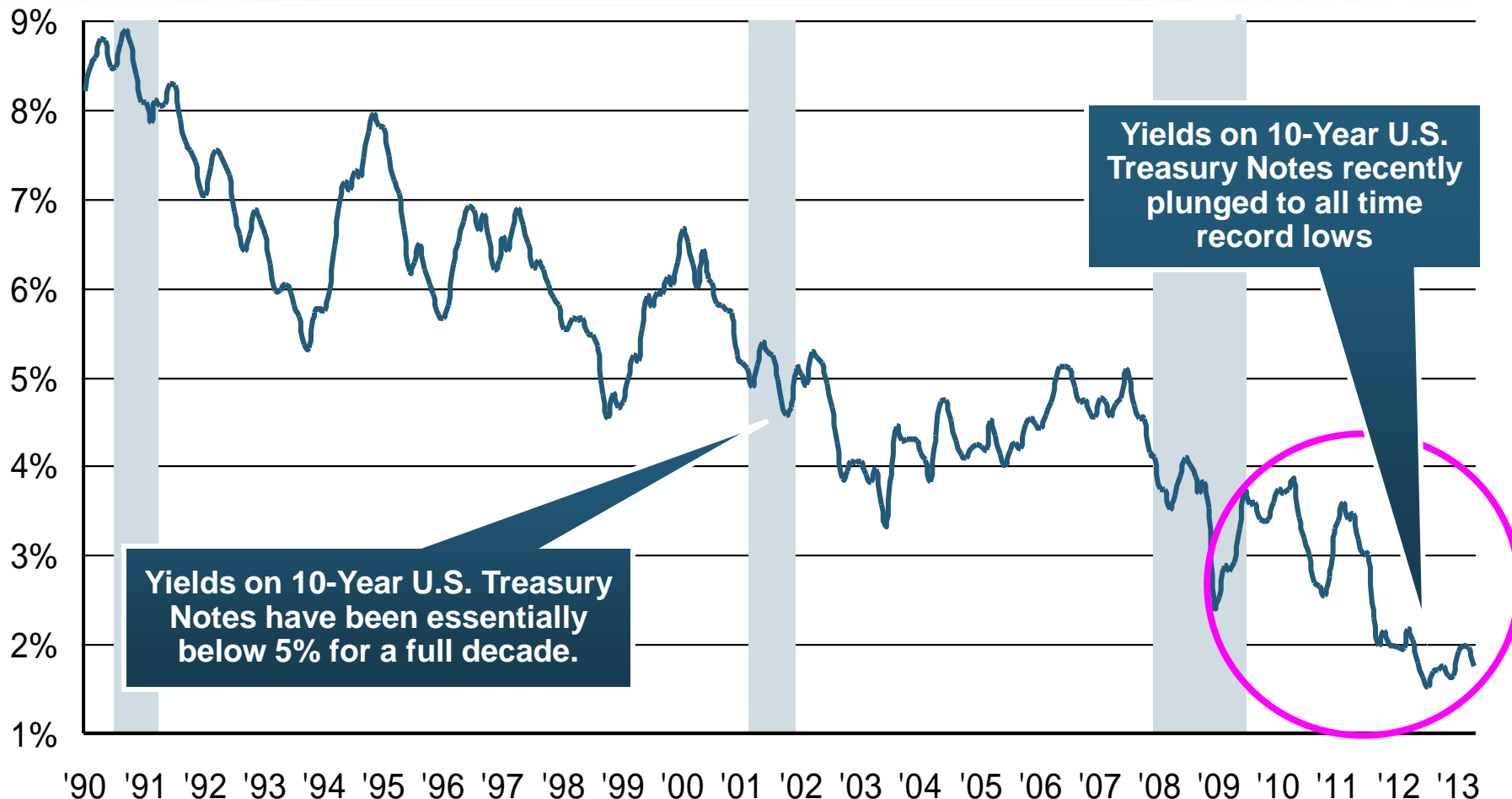
**Because the Federal Reserve Board aims to keep interest rates exceptionally low until the unemployment rate hits 6.5%—likely at least another year off—maturing bonds will be re-invested at even lower rates.**

<sup>1</sup>Investment gains consist primarily of interest, stock dividends and realized capital gains and losses.

\*2005 figure includes special one-time dividend of \$3.2B; 2013F figure is I.I.I. estimate for 2013:Q1, annualized.

Sources: ISO; Insurance Information Institute.

# U.S. 10-Year Treasury Note Yields: A Long Downward Trend, 1990–2013\*



**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.**

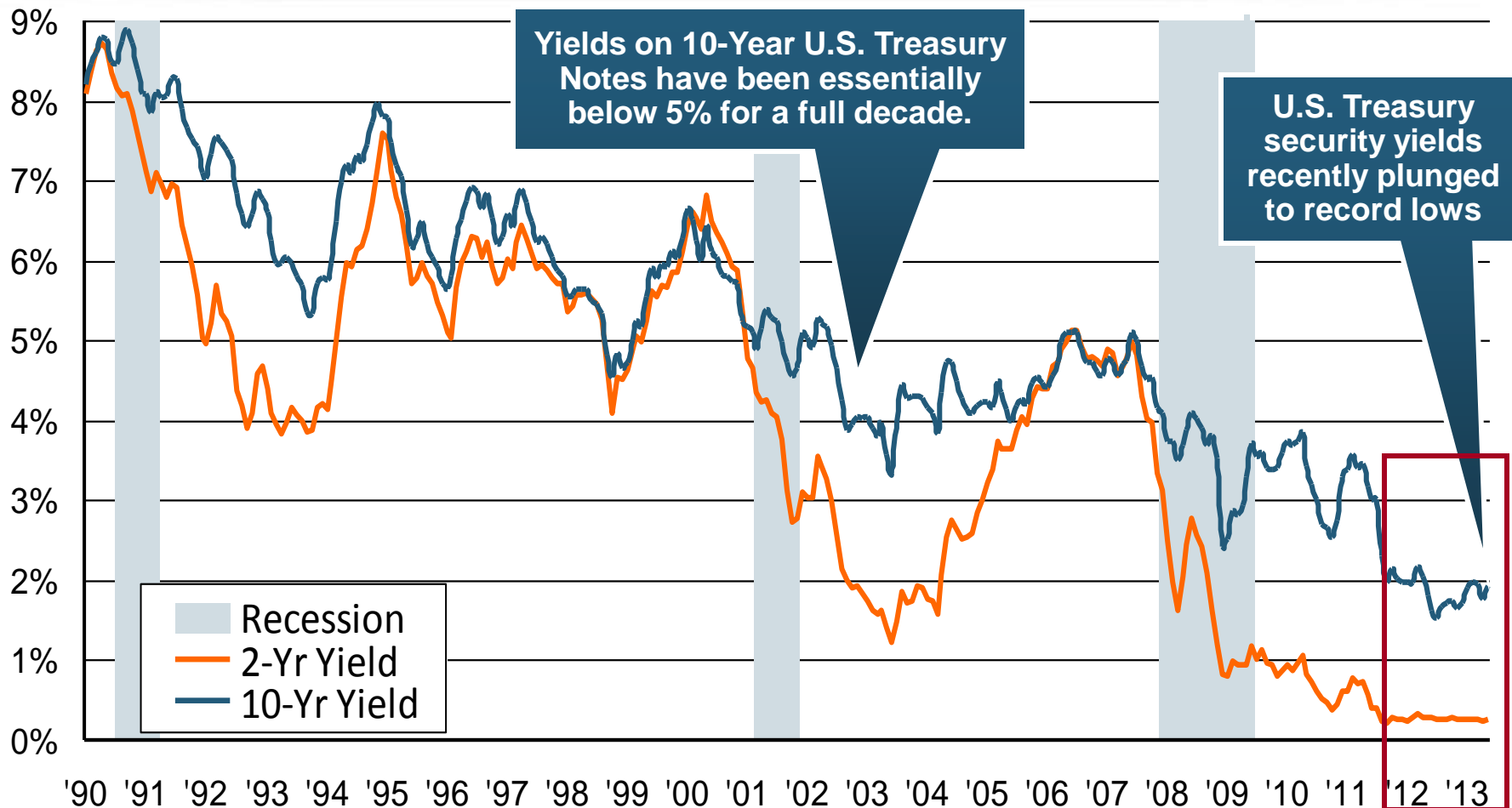
\*Monthly, through Apr. 2013.

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.

# U.S. Treasury Security Yields\*: A Long Downward Trend, 1990–2013

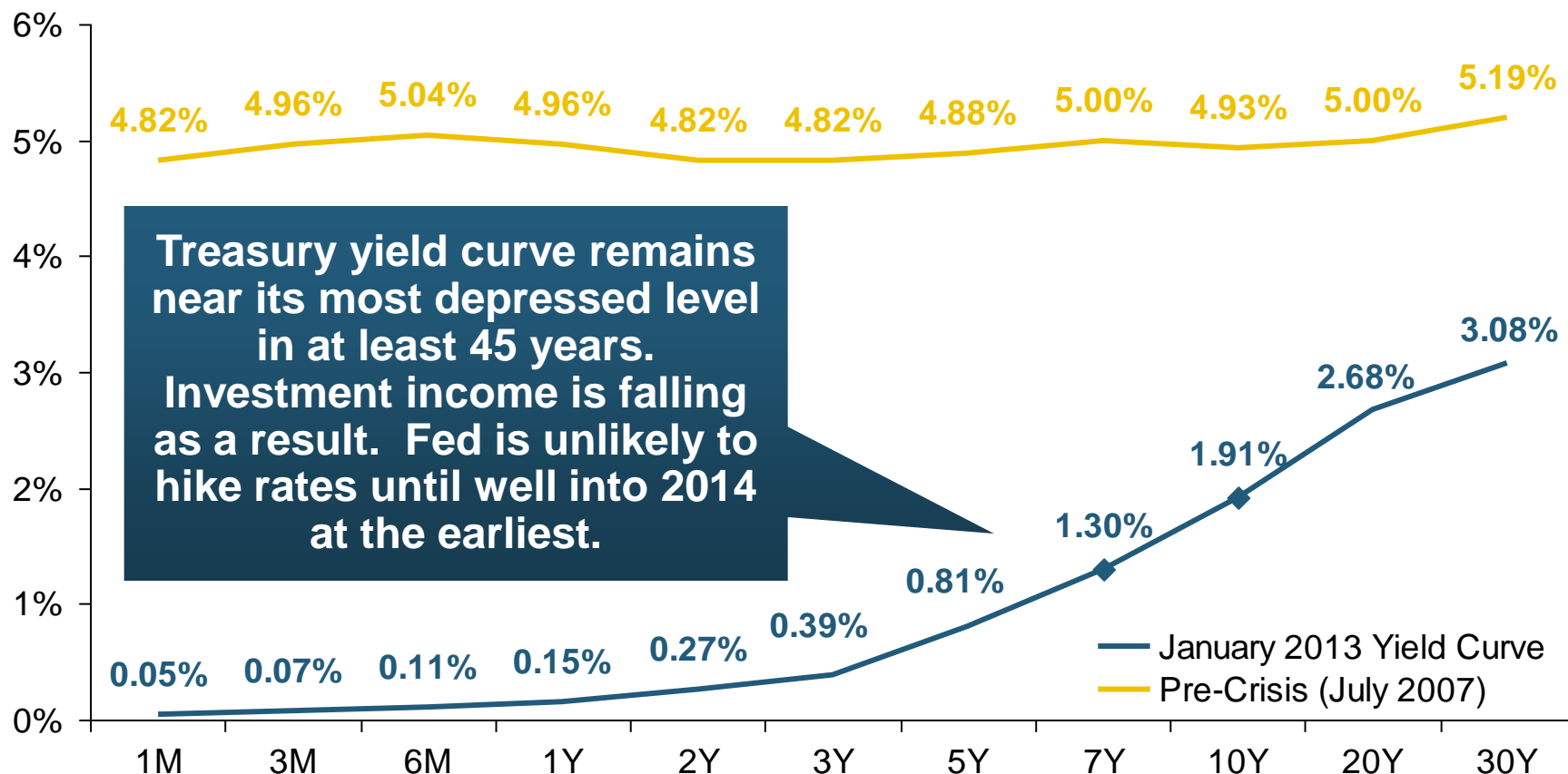


**Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.**

\*Monthly, constant maturity, nominal rates, through May 2013.

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

# Treasury Yield Curves: Pre-Crisis (July 2007) vs. Jan. 2013



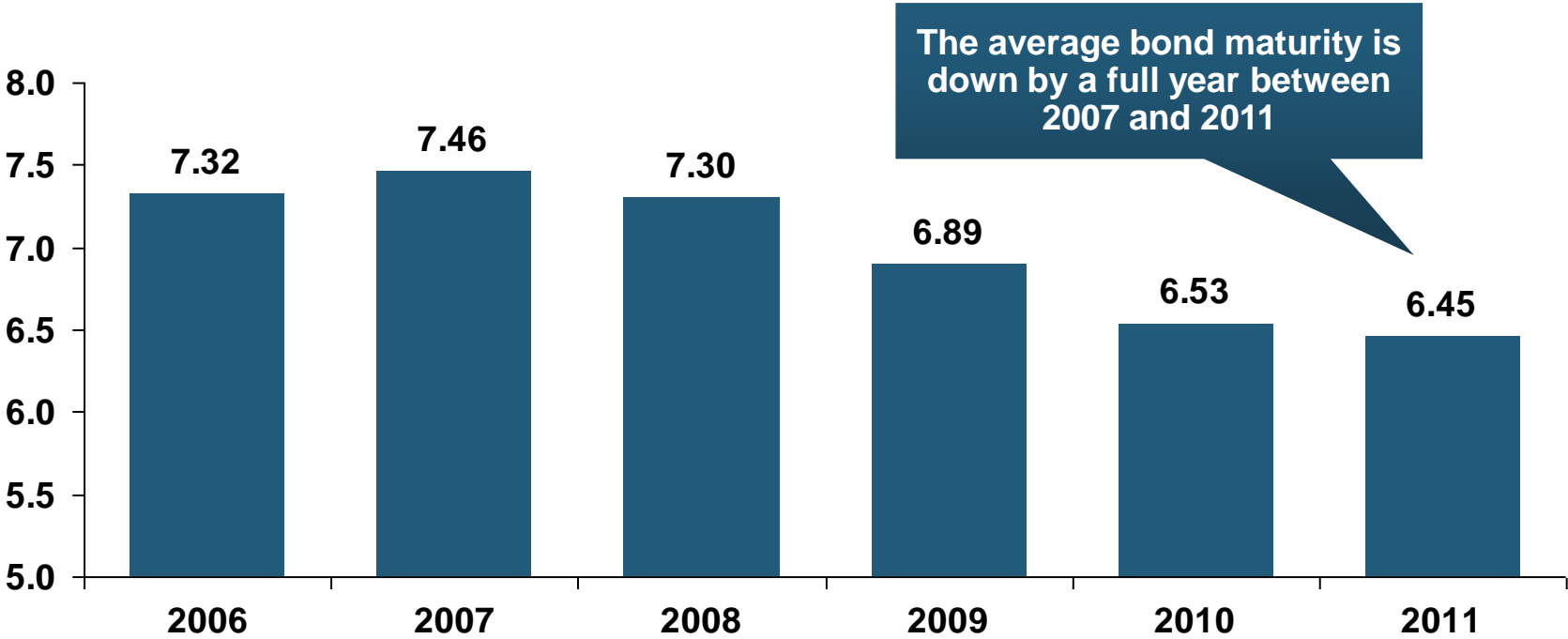
Treasury yield curve remains near its most depressed level in at least 45 years. Investment income is falling as a result. Fed is unlikely to hike rates until well into 2014 at the earliest.

The Fed Is Actively Signaling that it Is Determined to Keep Rates Low Until Unemployment Drops Below 6.5% or Until Inflation Expectations Exceed 2.5%; Low Rates Add to Pricing Pressure for Insurers.



# Average Maturity of Bonds Held by US P/C Insurers, 2006—2011\*

Average Maturity (Years)

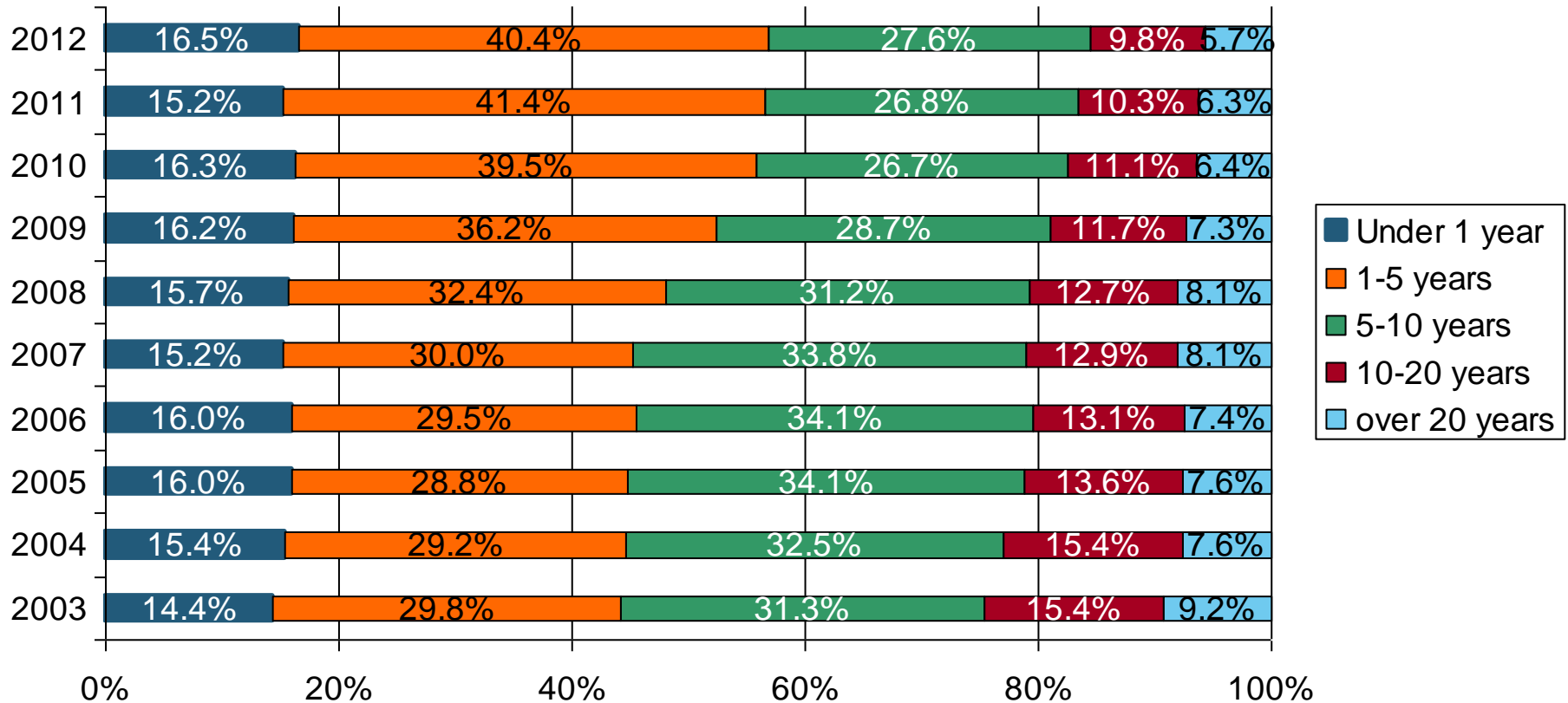


**Falling Average Maturity (and Duration) of the P/C Industry's Bond Portfolio is Contributing to the Drop in Investment Income Along With Lower Yields**

\*Year-end figures. Latest available.

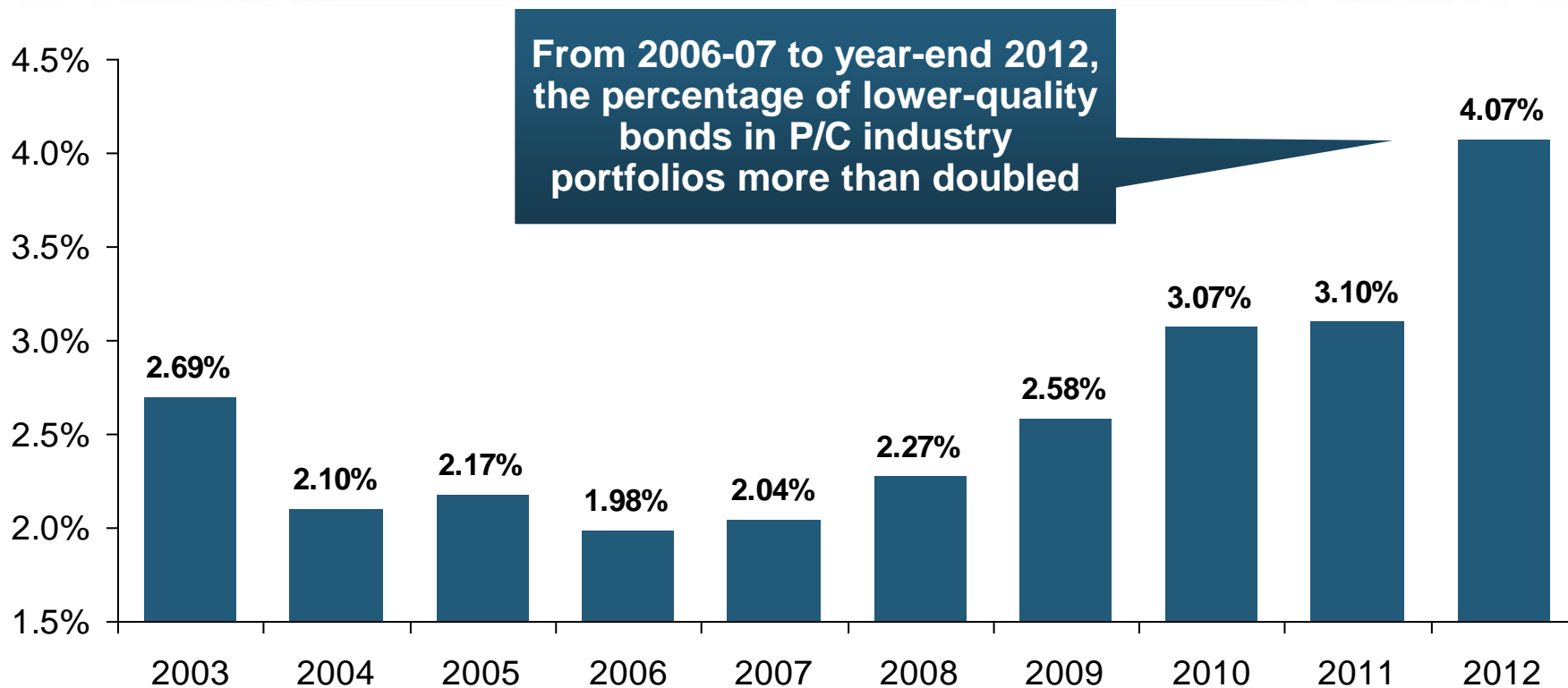
Sources: Insurance Information Institute calculations based on A.M. Best data.

# Distribution of Bond Maturities, P/C Insurance Industry, 2003-2012



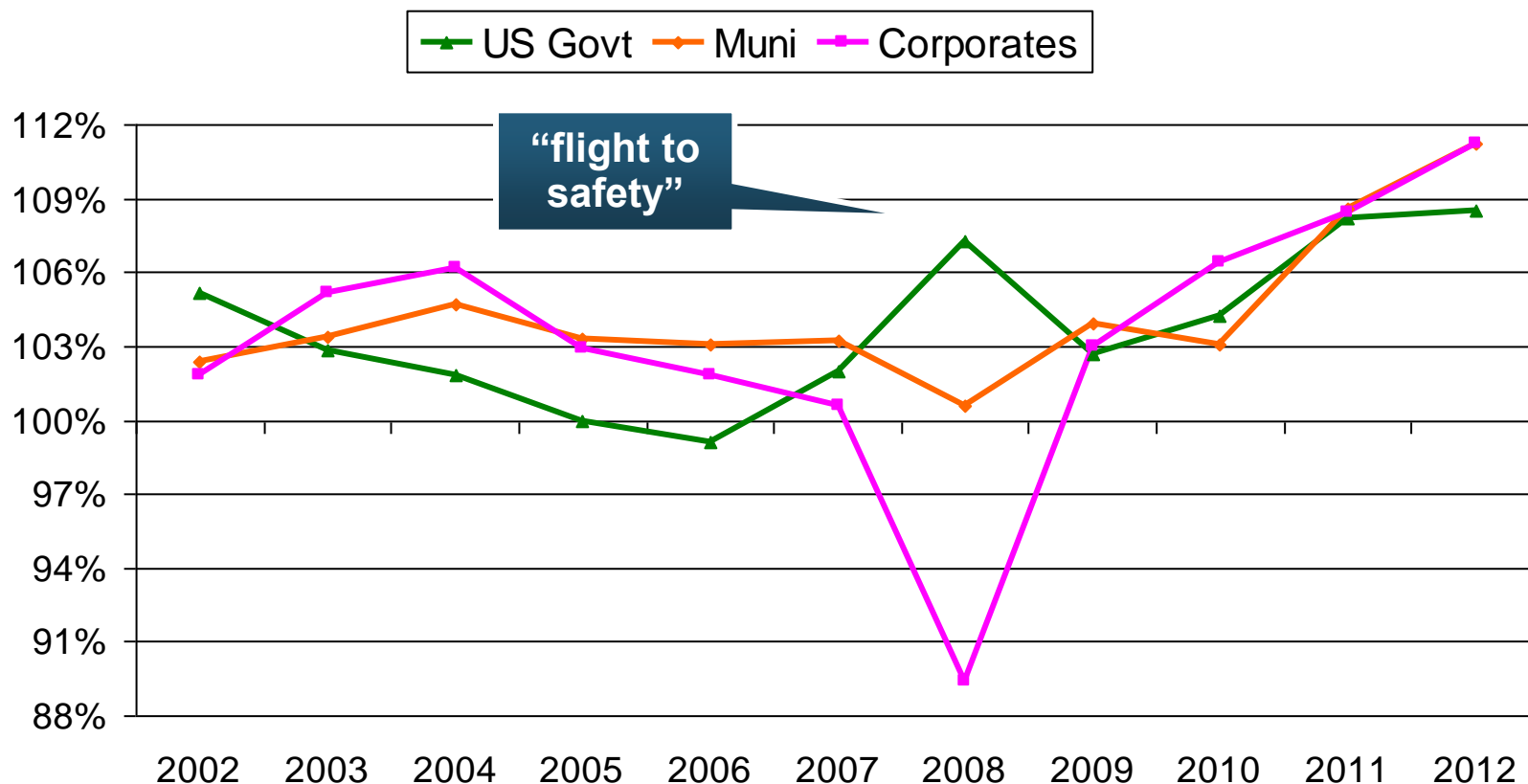
The main shift over these years has been from bonds with longer maturities to bonds with shorter maturities. The industry first trimmed its holdings of over-10-year bonds (from 24.6% in 2003 to 15.5% in 2012) and then trimmed bonds in the 5-10-year category (from 31.3% in 2003 to 27.6% in 2012). Falling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

# Bonds Rated NAIC Quality Category 3-6 as a Percent of Total Bonds, 2003–2012



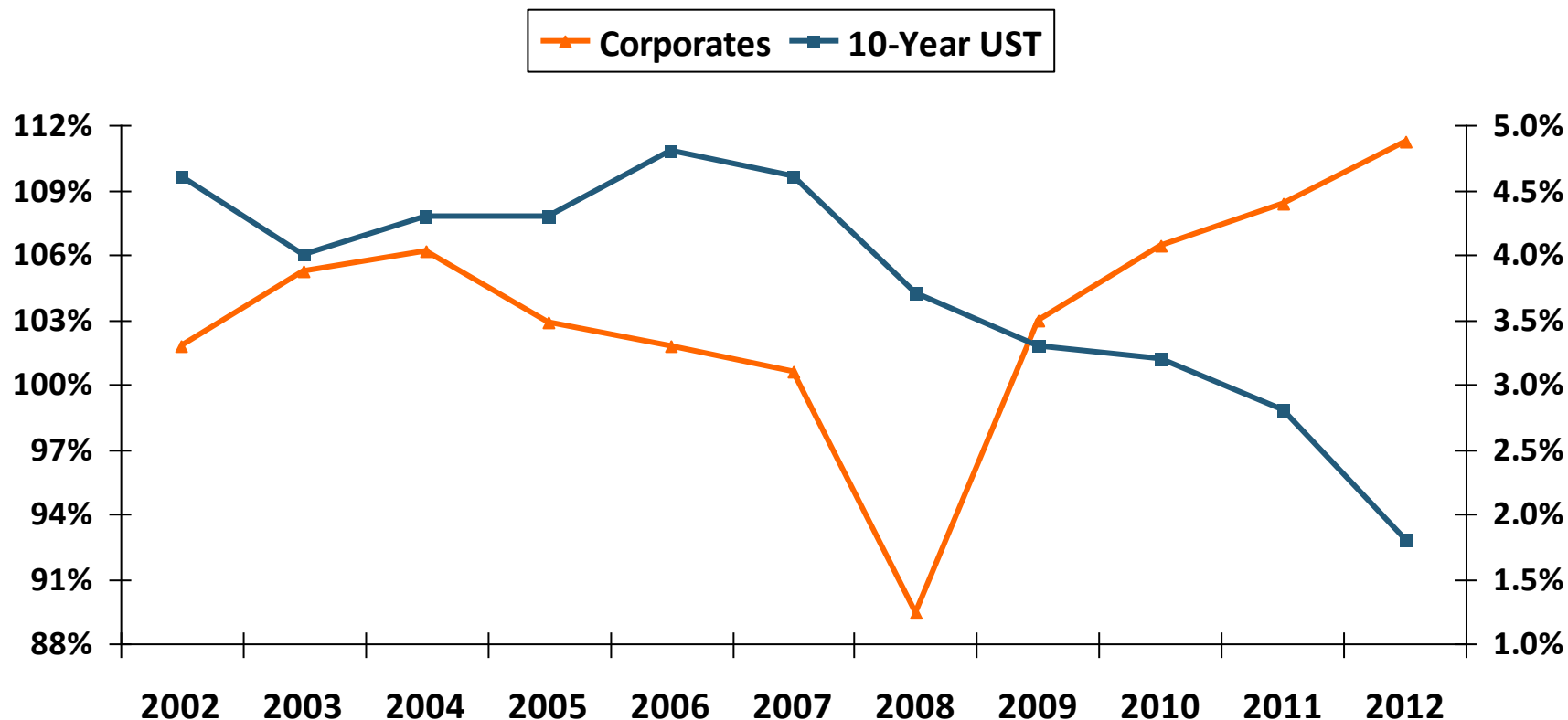
There are many ways to capture higher yields on bond portfolios. One is to accept greater risk, as measured by NAIC bond ratings. The ratings range from 1 to 6, with the highest quality rated 1. Even in 2012, over 95% of the industry's bonds were rated 1 or 2.

# Insurance Industry Fair Value as a Percent of Par History, by Bond Type, 2002–2012



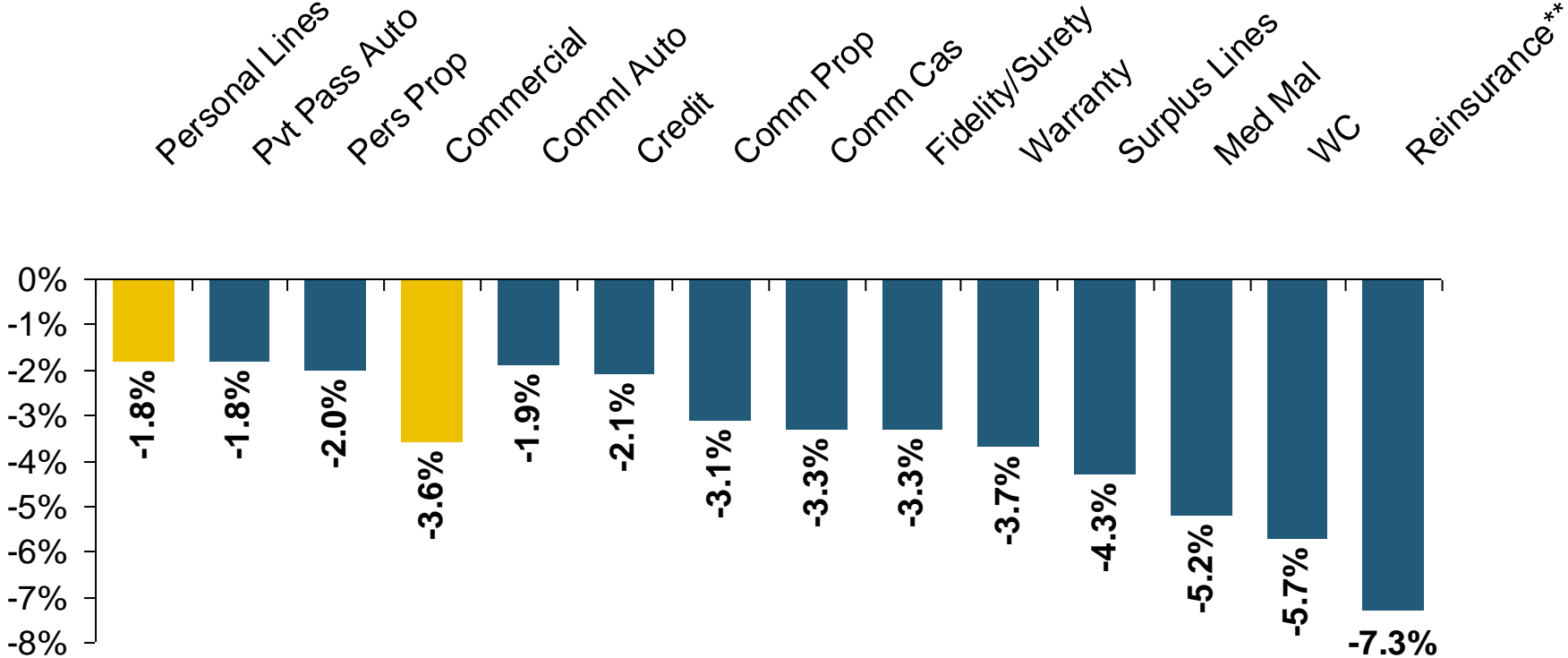
**Because the Federal Reserve Board aims to keep interest rates exceptionally low until the “headline” unemployment rate hits 6.5%, maturing bonds will be re-invested at even lower rates.**

# As Yields (Blue) Sank, Fair Value as a Percent of Par (Orange) Rose, 2002–2012



**When interest rates rise again, the Fair Value of Insurance Industry bonds will fall. How far and how fast the fall occurs depends on many factors, but the direction of change is clear.**

# 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**

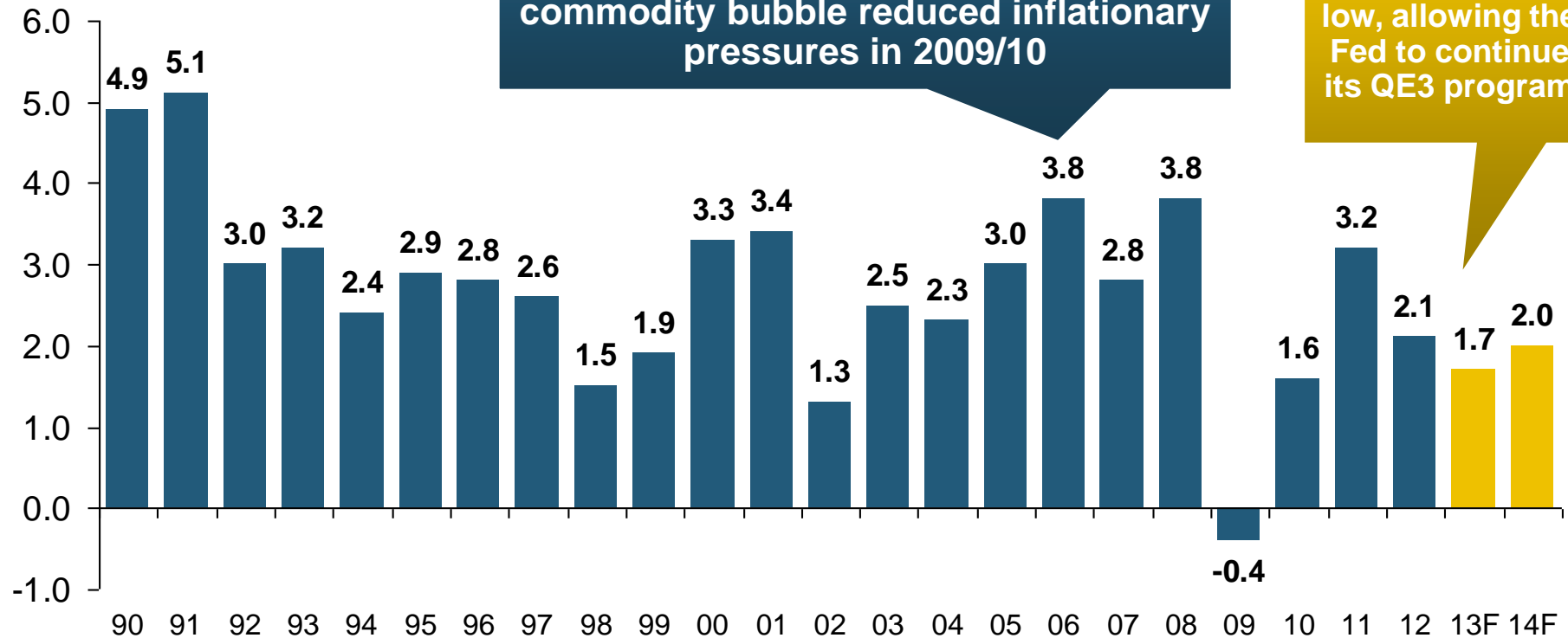
\*Based on 2008 Invested Assets and Earned Premiums

\*\*US domestic reinsurance only

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

# Annual Inflation Rates, (CPI-U, %), 1990–2014F

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 remain quite low, allowing the Fed to continue its QE3 program

The slack in the U.S. economy suggests that inflationary pressures should remain subdued for an extended period of times. Energy, health care and commodity prices, plus U.S. debt burden, remain longer-run concerns

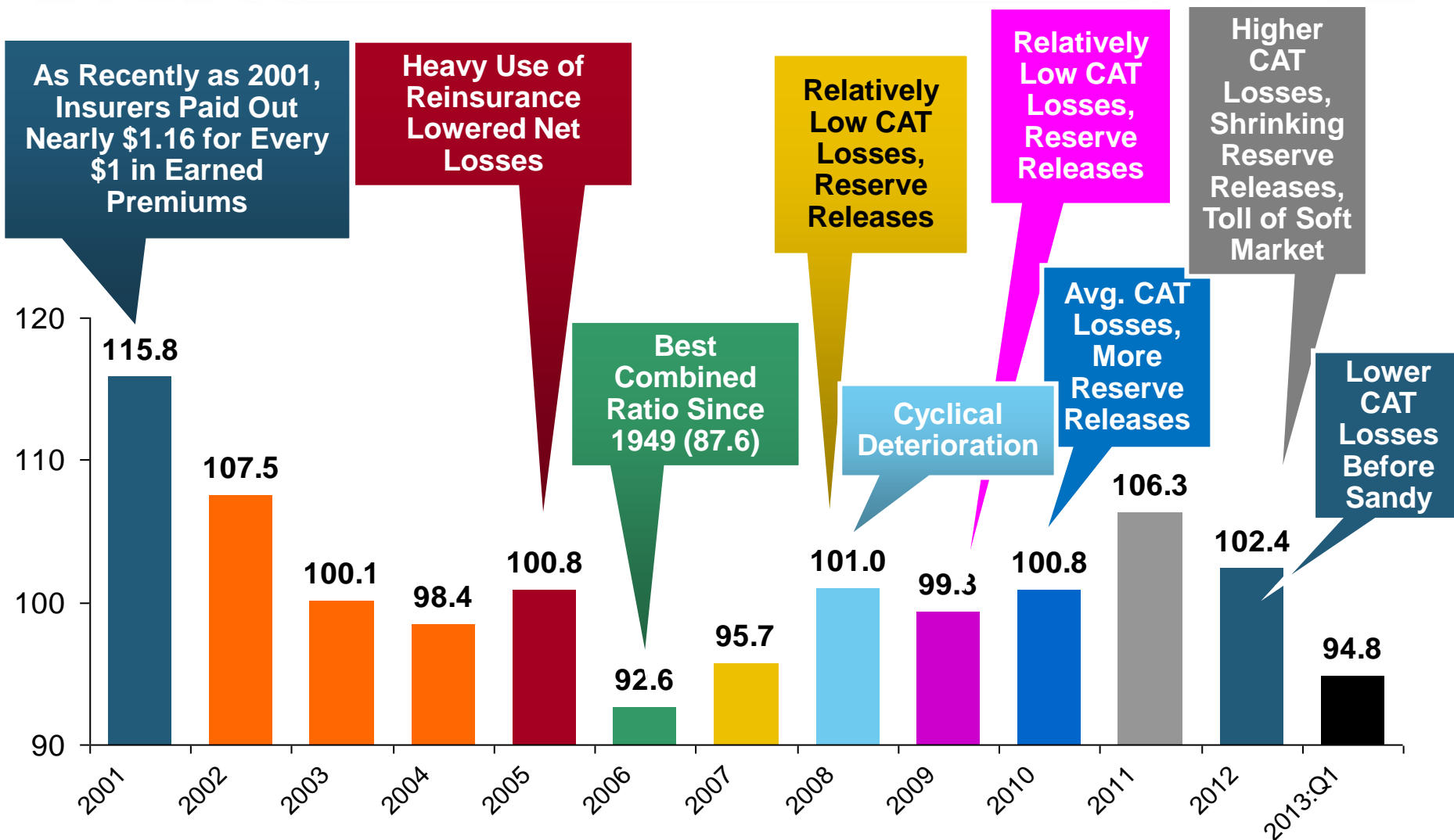
Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators, 5/13 (forecasts).

# 1. UNDERWRITING

**Underwriting Losses in 2011  
and 2012 Are Elevated by High  
Catastrophe Losses**



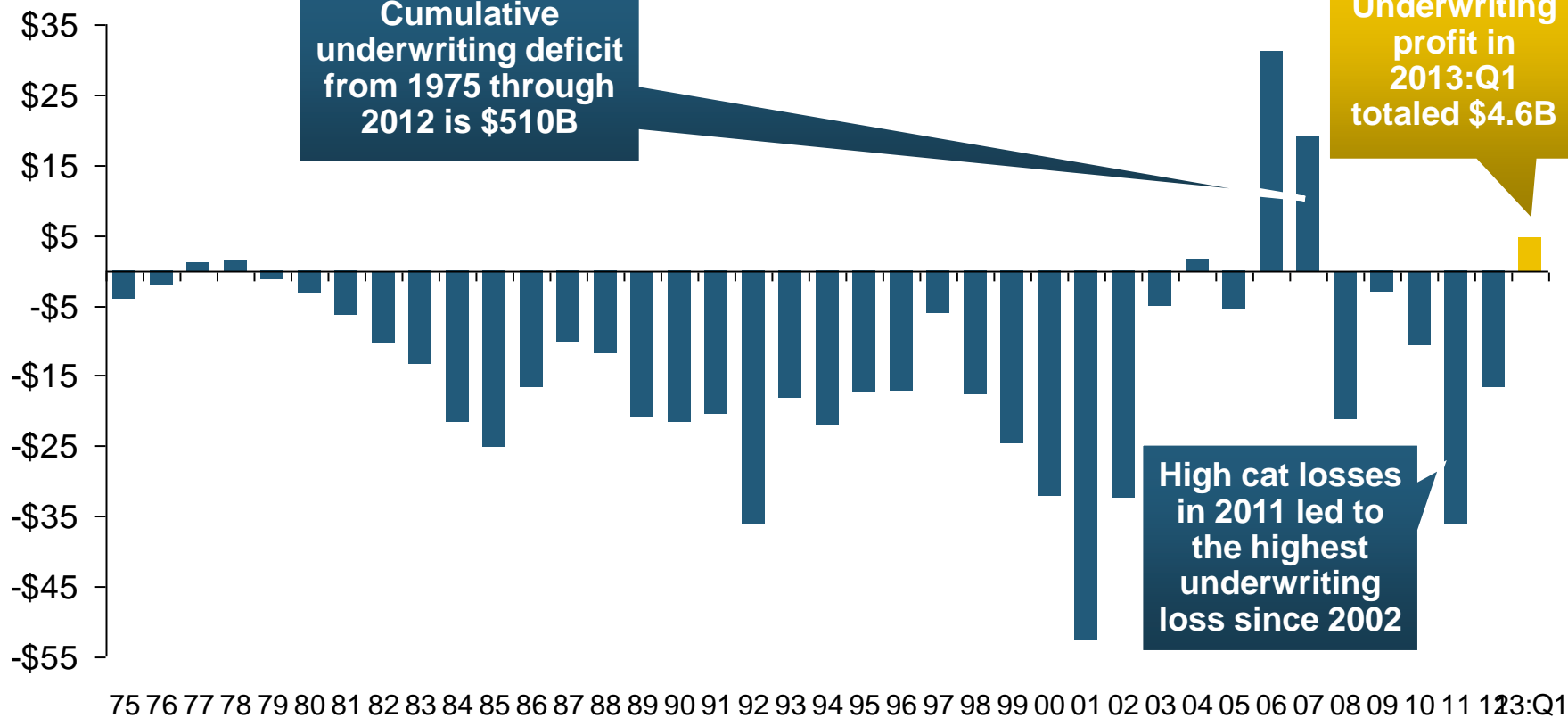
# P/C Insurance Industry Combined Ratio, 2001–2013:Q1\*



\* Excludes Mortgage & Financial Guaranty insurers 2008--2012. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2.  
Sources: A.M. Best, ISO.

# Underwriting Gain (Loss) 1975–2013:Q1\*

(\$ Billions)

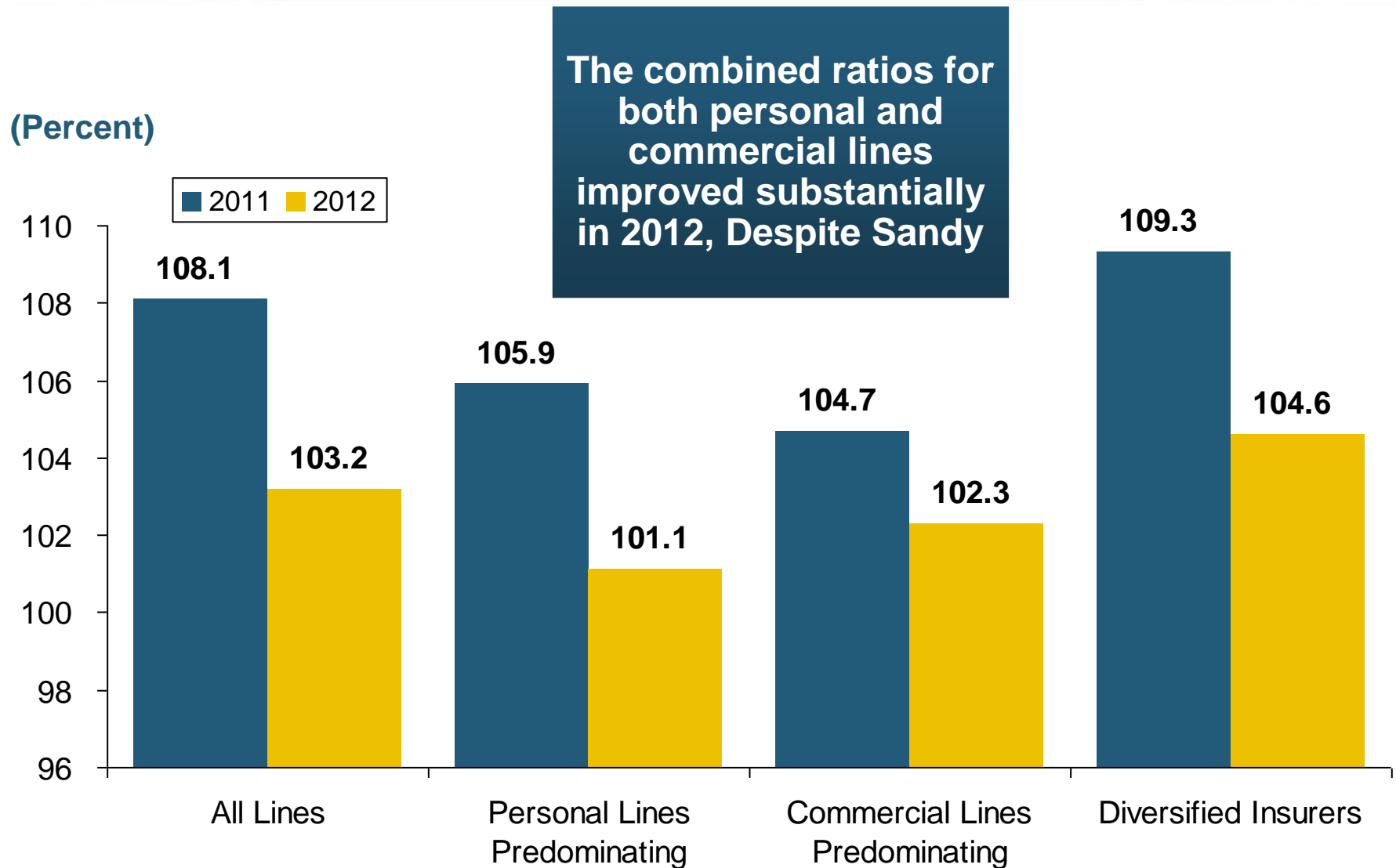


**Large Underwriting Losses Are *NOT* Sustainable  
in Current Investment Environment**

\* Includes mortgage and financial guaranty insurers in all years.

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

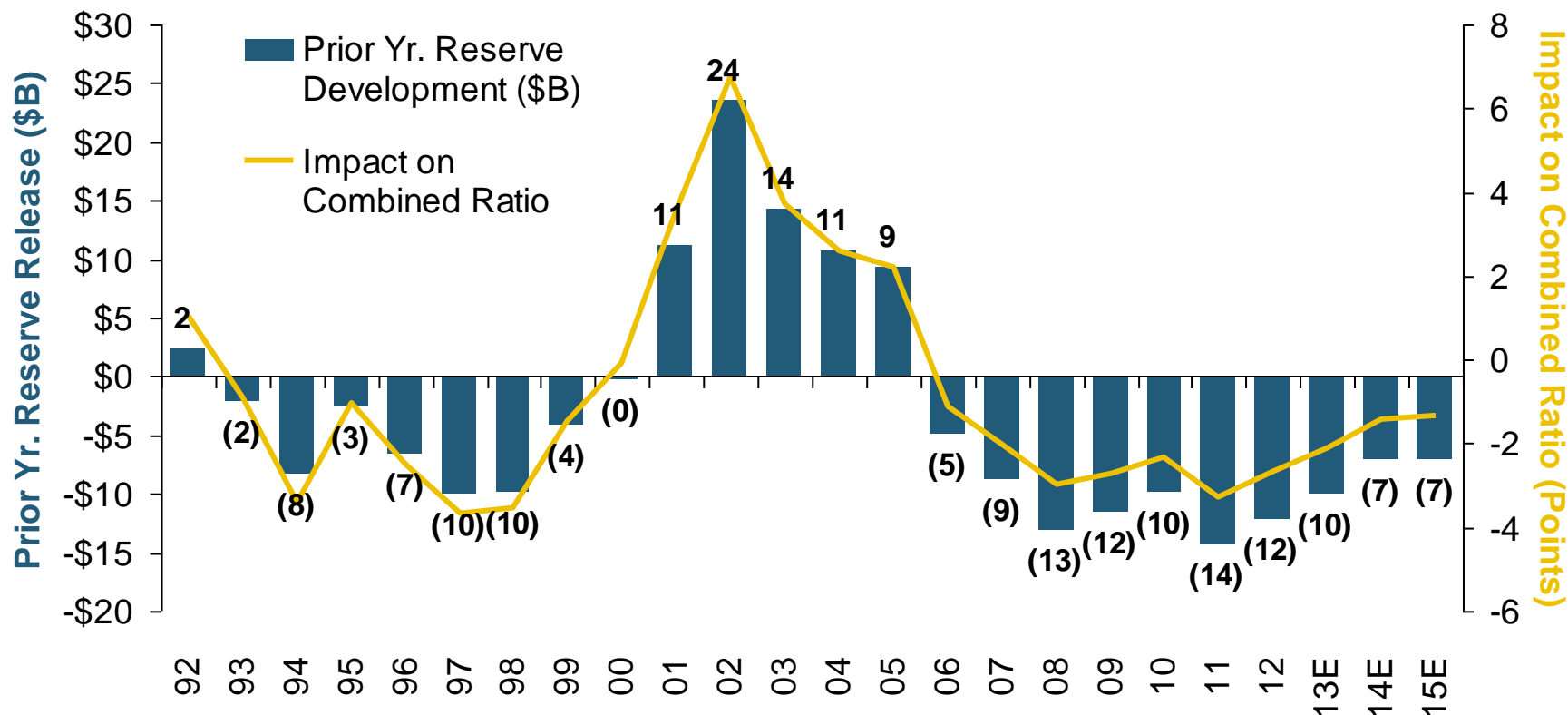
# Combined Ratios by Predominant Business Segment, 2012 vs. 2011\*



\*Excludes mortgage and financial guaranty insurers.

Source: ISO/PCI; Insurance Information Institute

# P/C Reserve Development, 1992–2015E

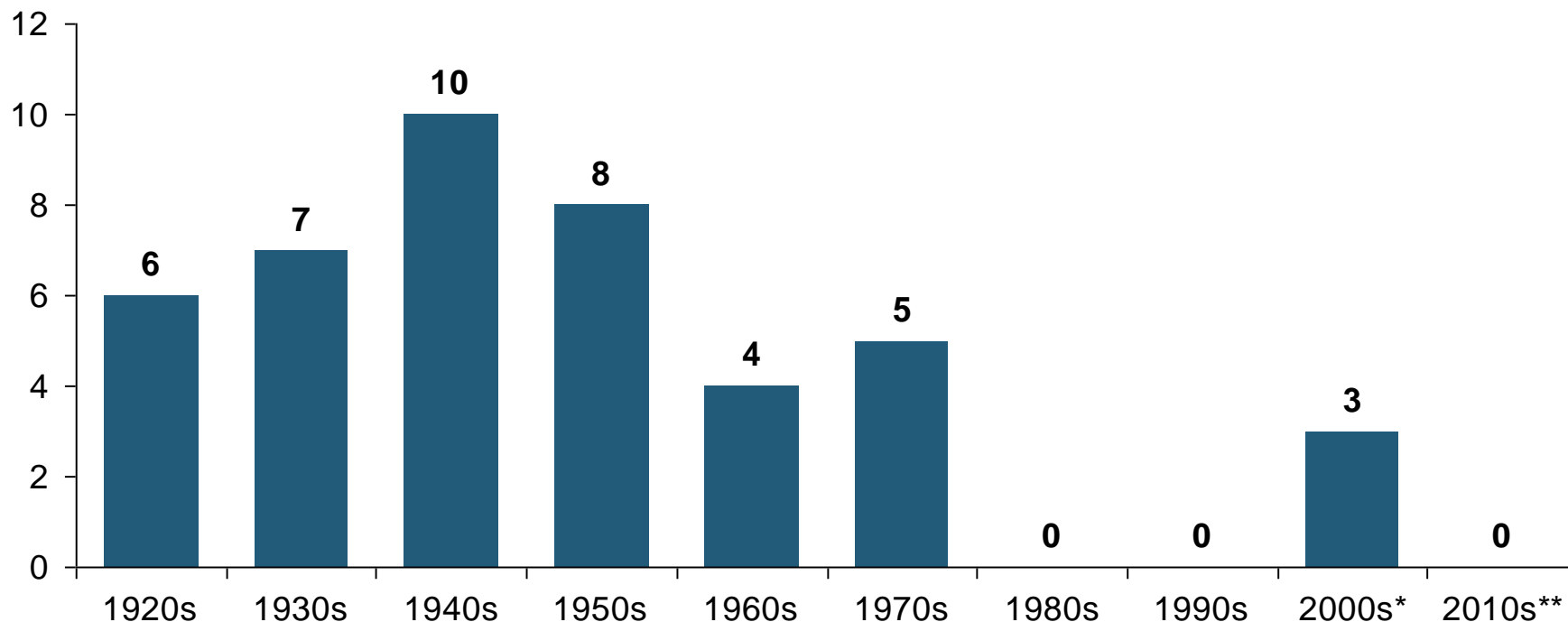


Note: 2005 reserve development excludes a \$6 billion loss portfolio transfer between American Re and Munich Re. Including this transaction, total prior year adverse development in 2005 was \$7 billion. The data from 2000 and subsequent years excludes development from financial guaranty and mortgage insurance.

Sources: A.M. Best, ISO, Barclays Research (estimates).

# Number of Years with Underwriting Profits by Decade, 1920s–2010s

## Number of Years with Underwriting Profits



**Underwriting Profits Were Common Before the 1980s (40 of the 60 Years Before 1980 Had Combined Ratios Below 100) – But Then They Vanished. Not a Single Underwriting Profit Was Recorded in the 25 Years from 1979 Through 2003**

\* 2009 combined ratio excl. mort. and finl. guaranty insurers was 99.3, which would bring the 2000s total to 4 years with an u/w profit.

\*\*Data for the 2010s includes 2010 and 2011.

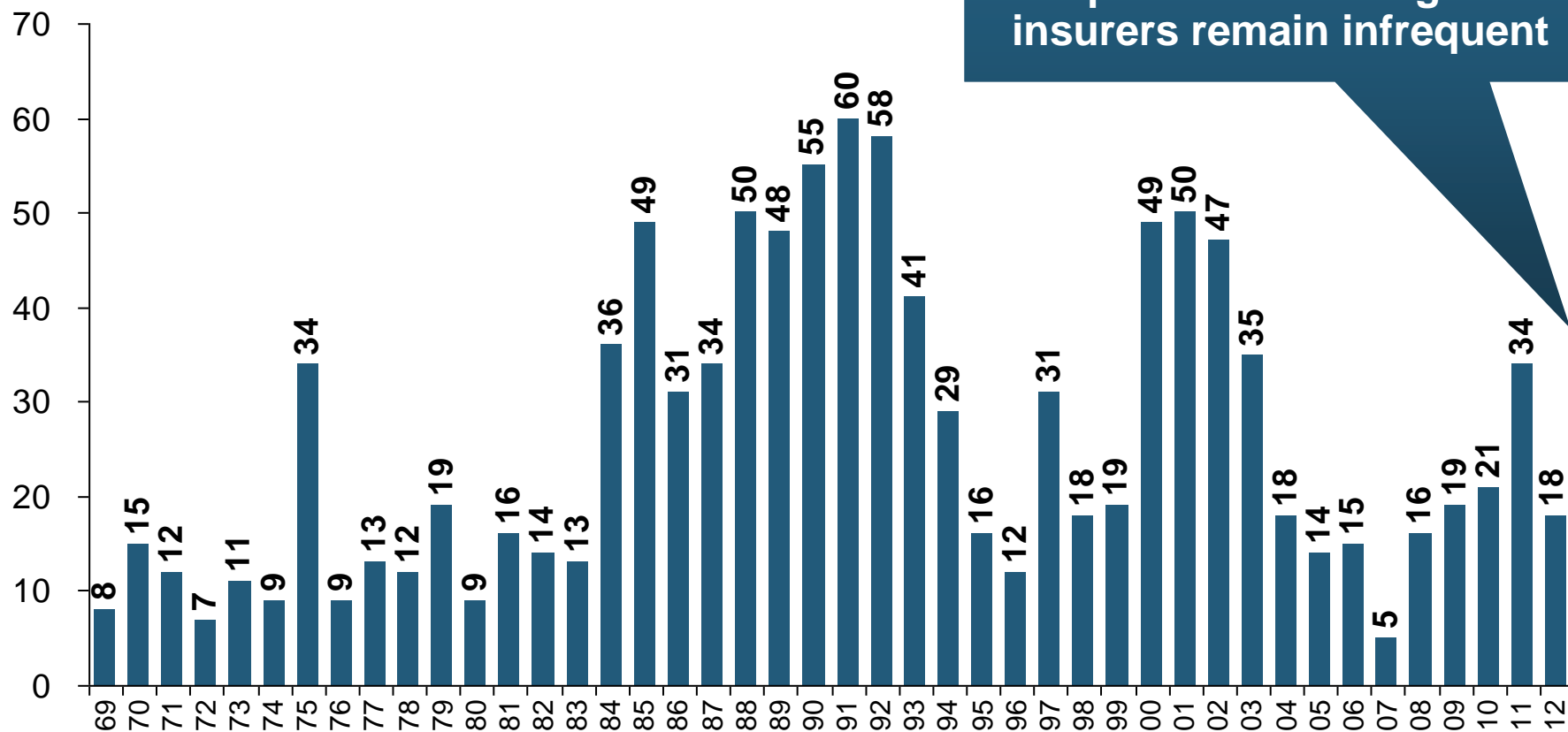
Note: Data for 1920–1934 based on stock companies only.

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

# **Financial Strength & Underwriting**

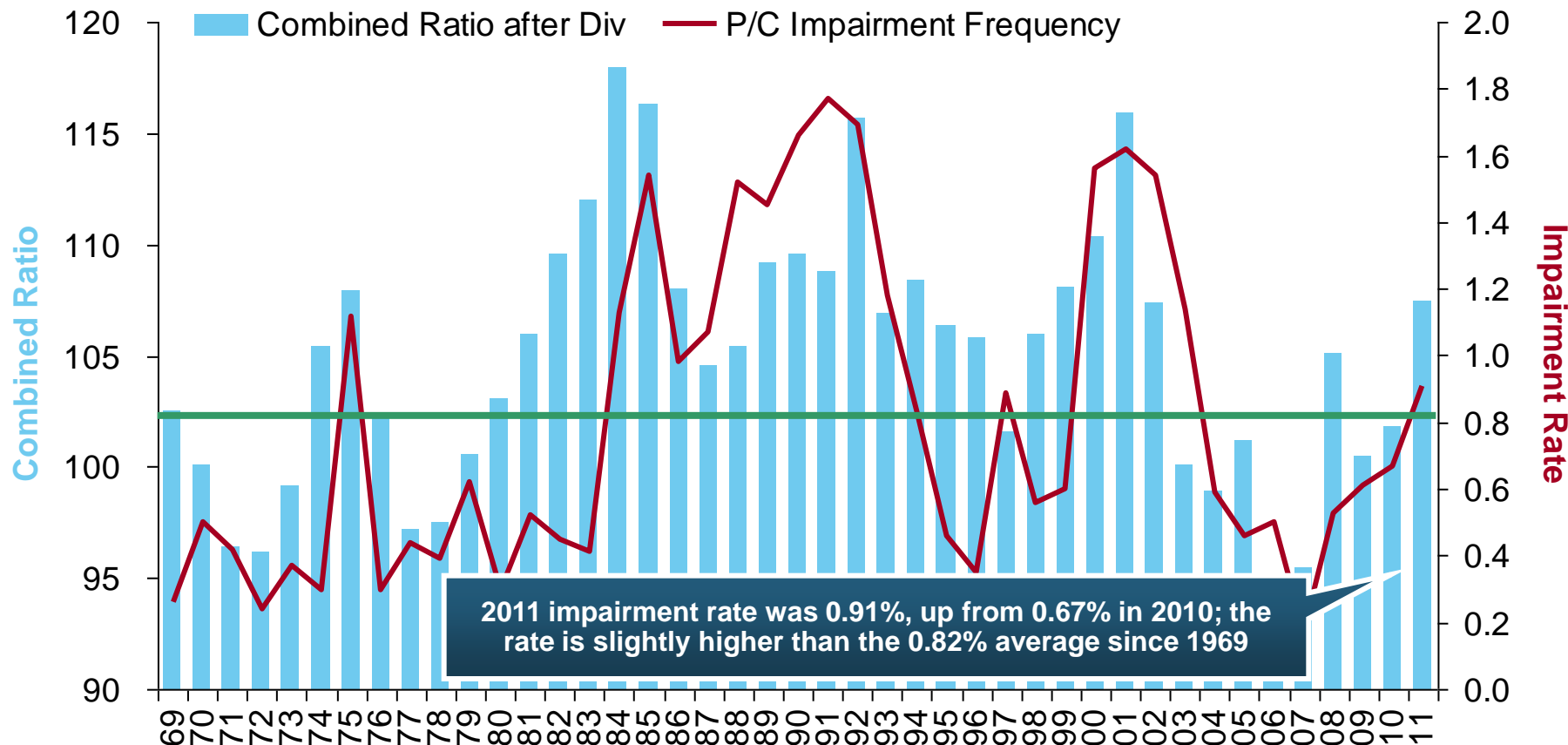
**Cyclical Pattern is P-C Impairment  
History is Directly Tied to  
Underwriting, Reserving & Pricing**

# P/C Insurer Impairments, 1969–2012



**The Number of Impairments Varies Significantly Over the P/C Insurance Cycle, With Peaks Occurring Well into Hard Markets**

# P/C Insurer Impairment Frequency vs. Combined Ratio, 1969-2011



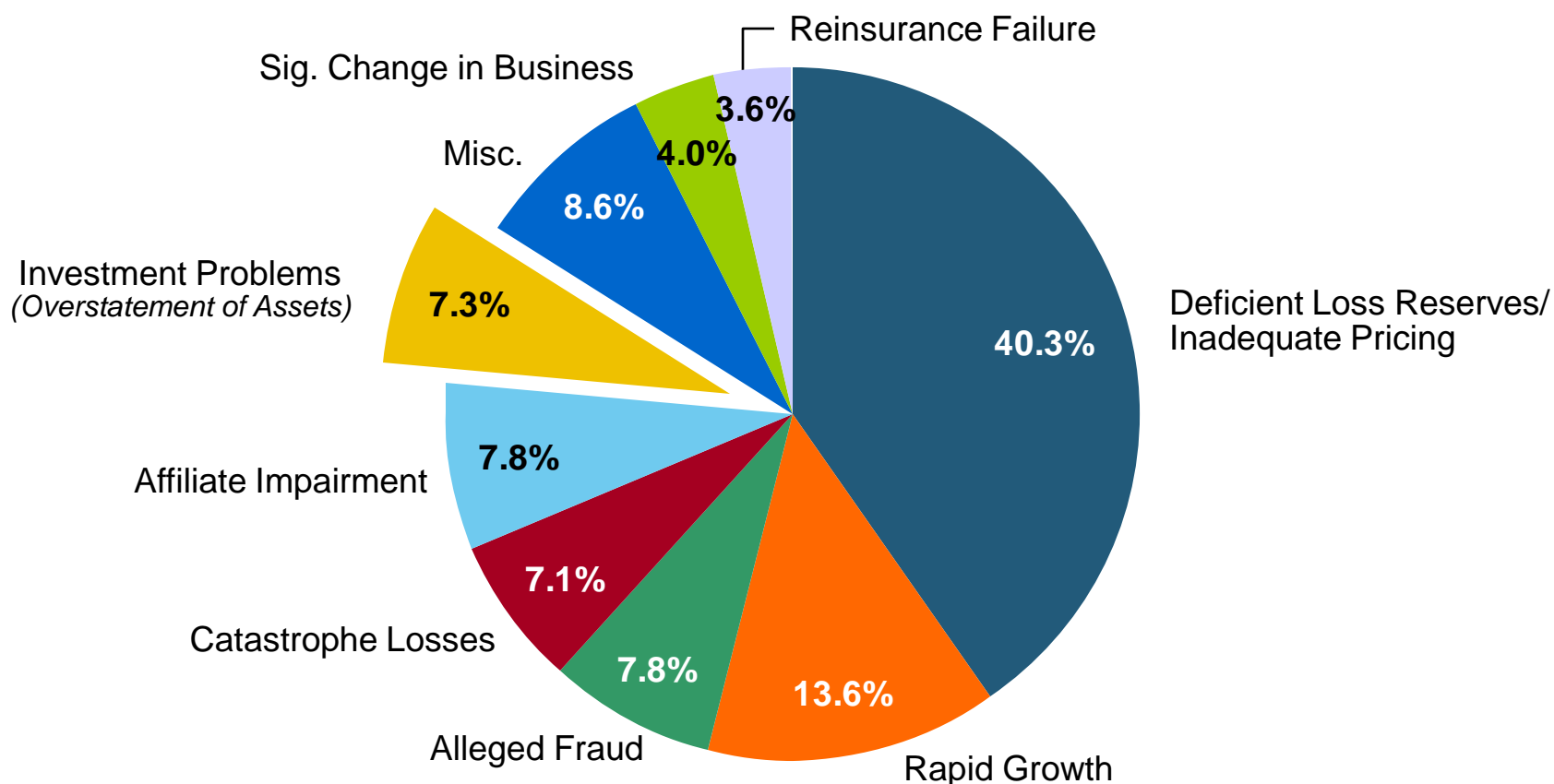
2011 impairment rate was 0.91%, up from 0.67% in 2010; the rate is slightly higher than the 0.82% average since 1969

**Impairment Rates Are Highly Correlated With Underwriting Performance and Reached Record Lows in 2007; Recent Increase Was Associated Primarily With Mortgage and Financial Guaranty Insurers and Not Representative of the Industry Overall**



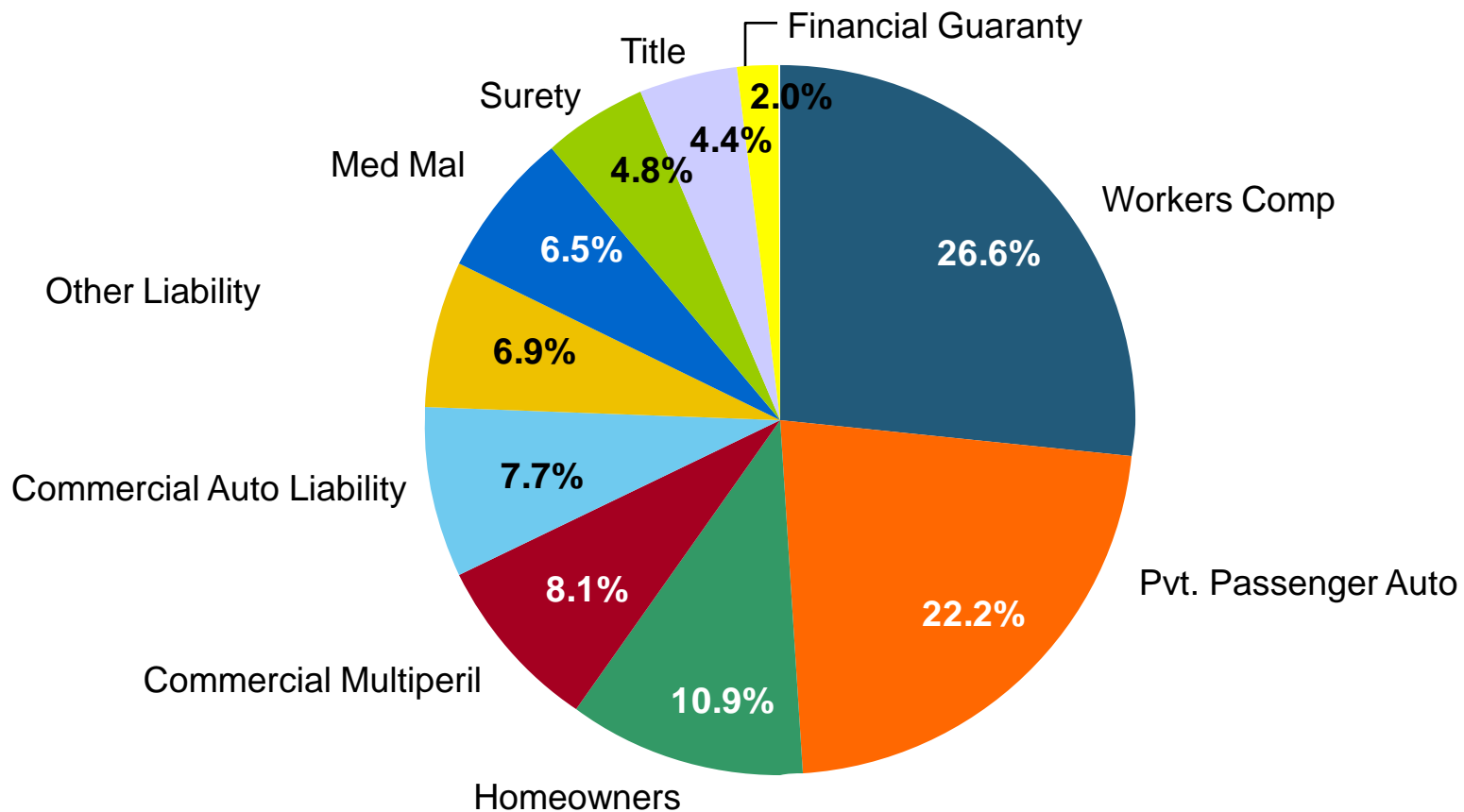
# Reasons for US P/C Insurer Impairments, 1969–2010

Historically, Deficient Loss Reserves and Inadequate Pricing Are By Far the Leading Cause of P-C Insurer Impairments. Investment and Catastrophe Losses Play a Much Smaller Role



# Top 10 Lines of Business for US P/C Impaired Insurers, 2000–2010

Workers Comp and Pvt. Passenger Auto Account for Nearly Half of the Premium Volume of Impaired Insurers Over the Past Decade



# Number of Recessions Endured by P/C Insurers, by Number of Years in Operation

Number of Recessions Since 1860



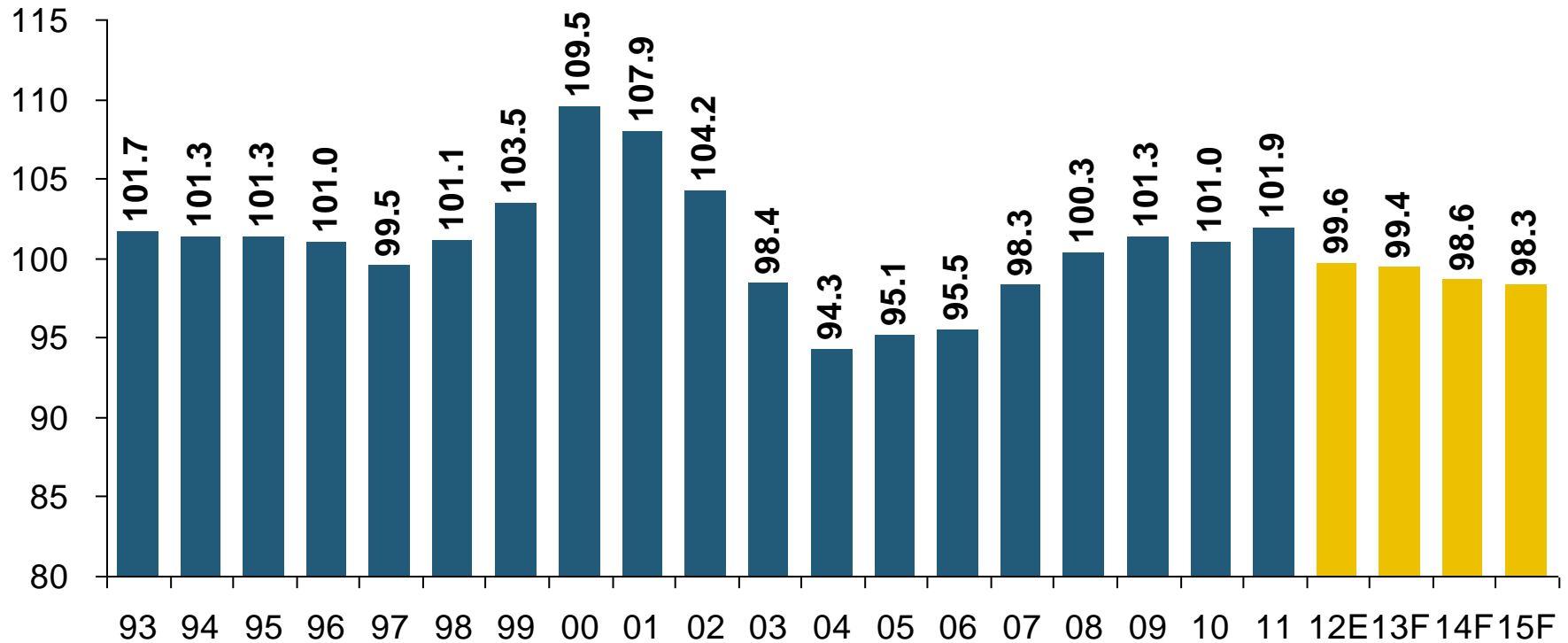
Insurers are true survivors—not just of natural catastrophes but also economic ones

Many US Insurers Are Close to a Century Old or Older

Sources: Insurance Information Institute research from National Bureau of Economic Research data.

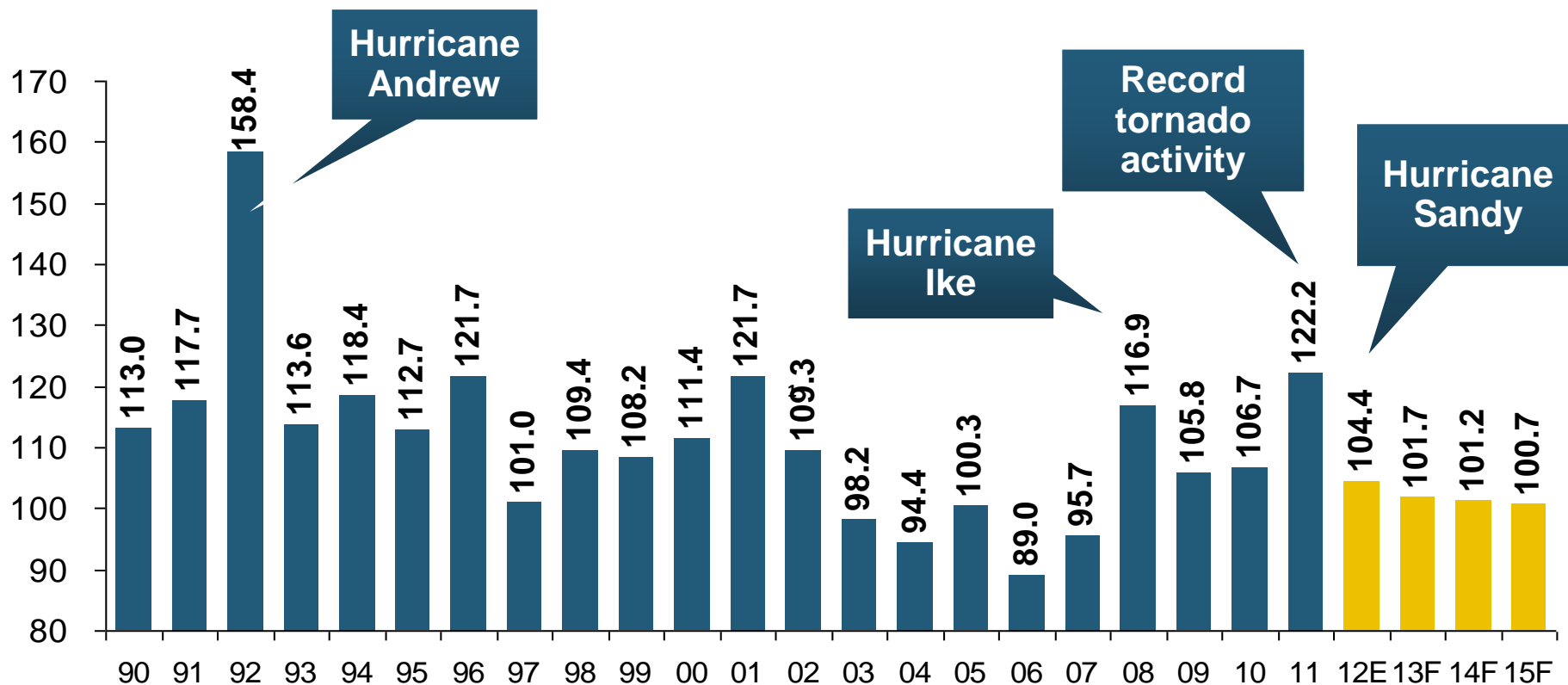
# Performance by Segment

# Private Passenger Auto Combined Ratio: 1993–2015F



**Private Passenger Auto Accounts for 34% of Industry Premiums and Remains the Profit Juggernaut of the P/C Insurance Industry**

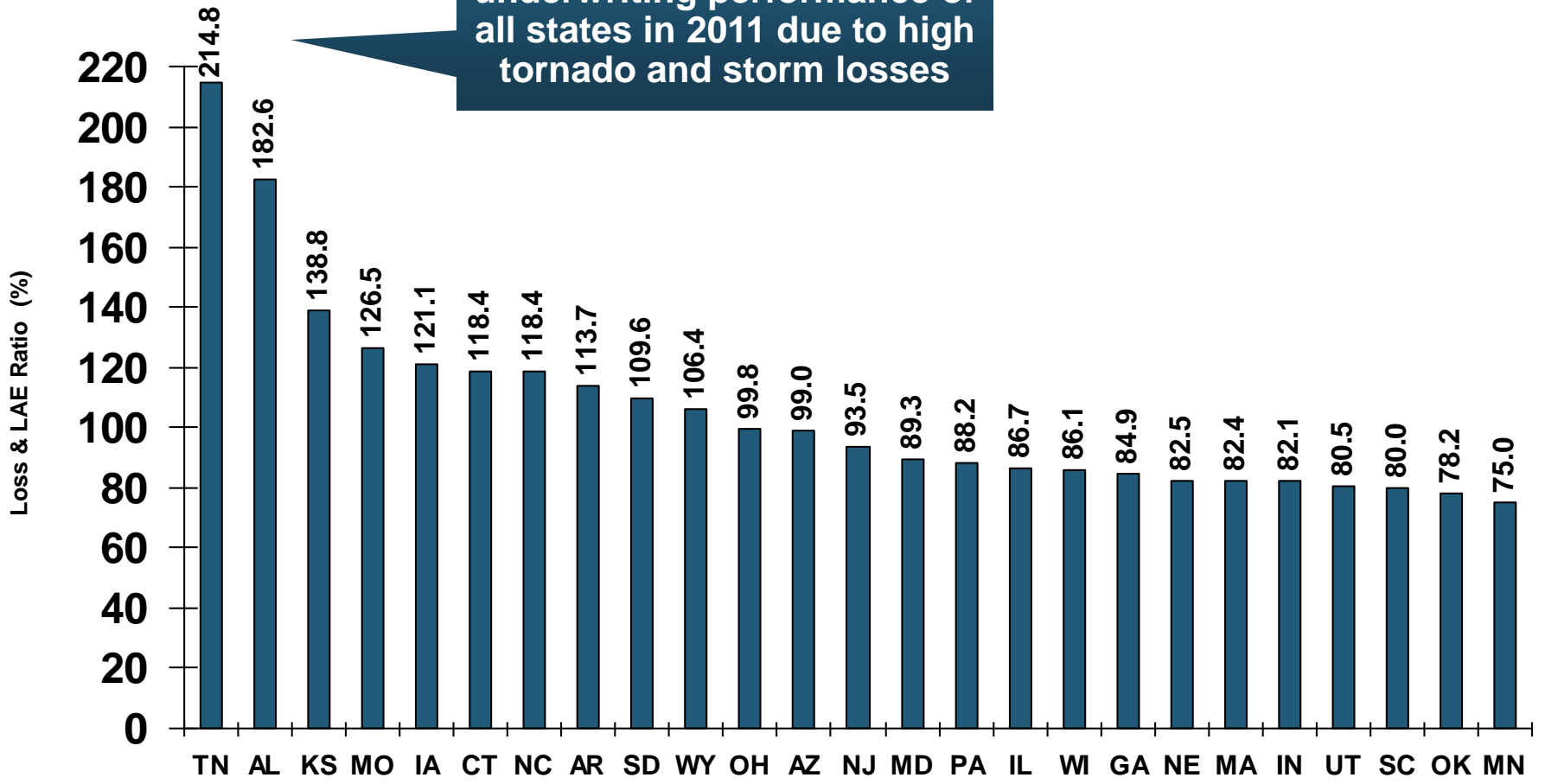
# Homeowners Insurance Combined Ratio: 1990–2015F



**Homeowners Performance in 2011/12 Impacted by Large Cat Losses. Extreme Regional Variation Can Be Expected Due to Local Catastrophe Loss Activity**

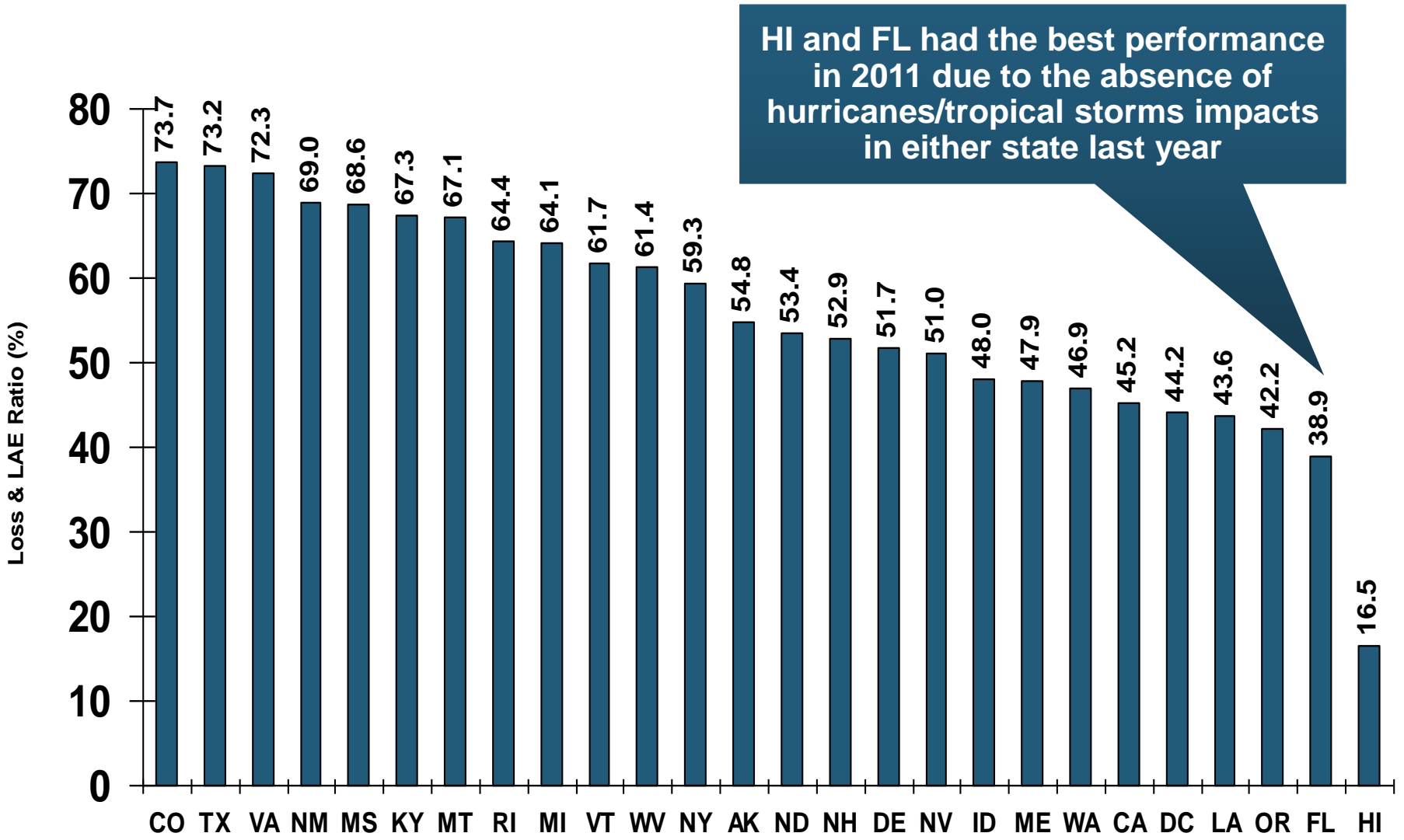
# Homeowners Multi-Peril Loss & LAE Ratio, 2011: Highest 25 States

TN and AL had the worst underwriting performance of all states in 2011 due to high tornado and storm losses



Sources: SNL Financial; Insurance Information Institute.

# Homeowners Multi-Peril Loss & LAE Ratio, 2011: Lowest 25 States

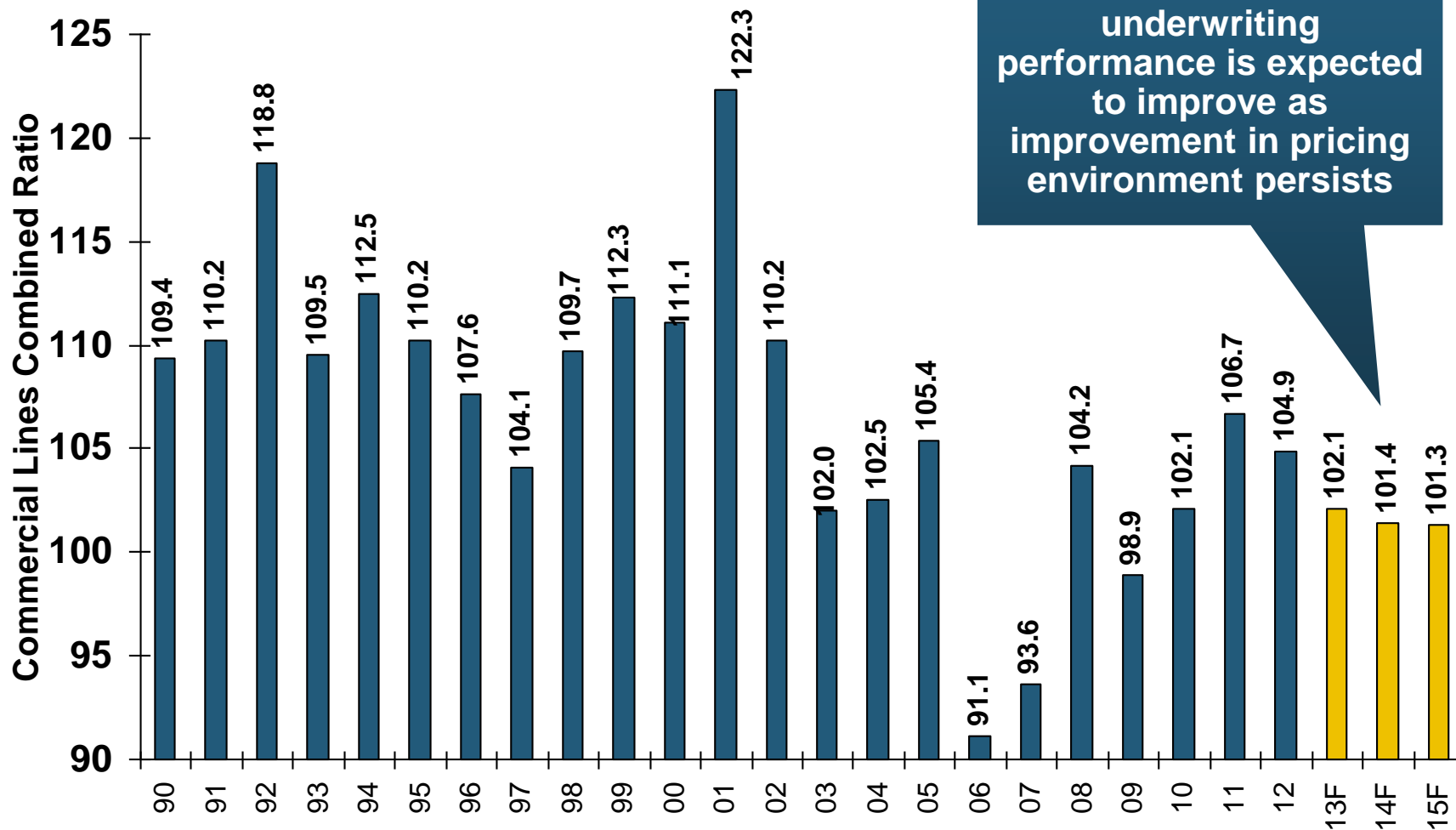


HI and FL had the best performance in 2011 due to the absence of hurricanes/tropical storms impacts in either state last year

Sources: SNL Financial; Insurance Information Institute.



# Commercial Lines Combined Ratio, 1990-2015F\*

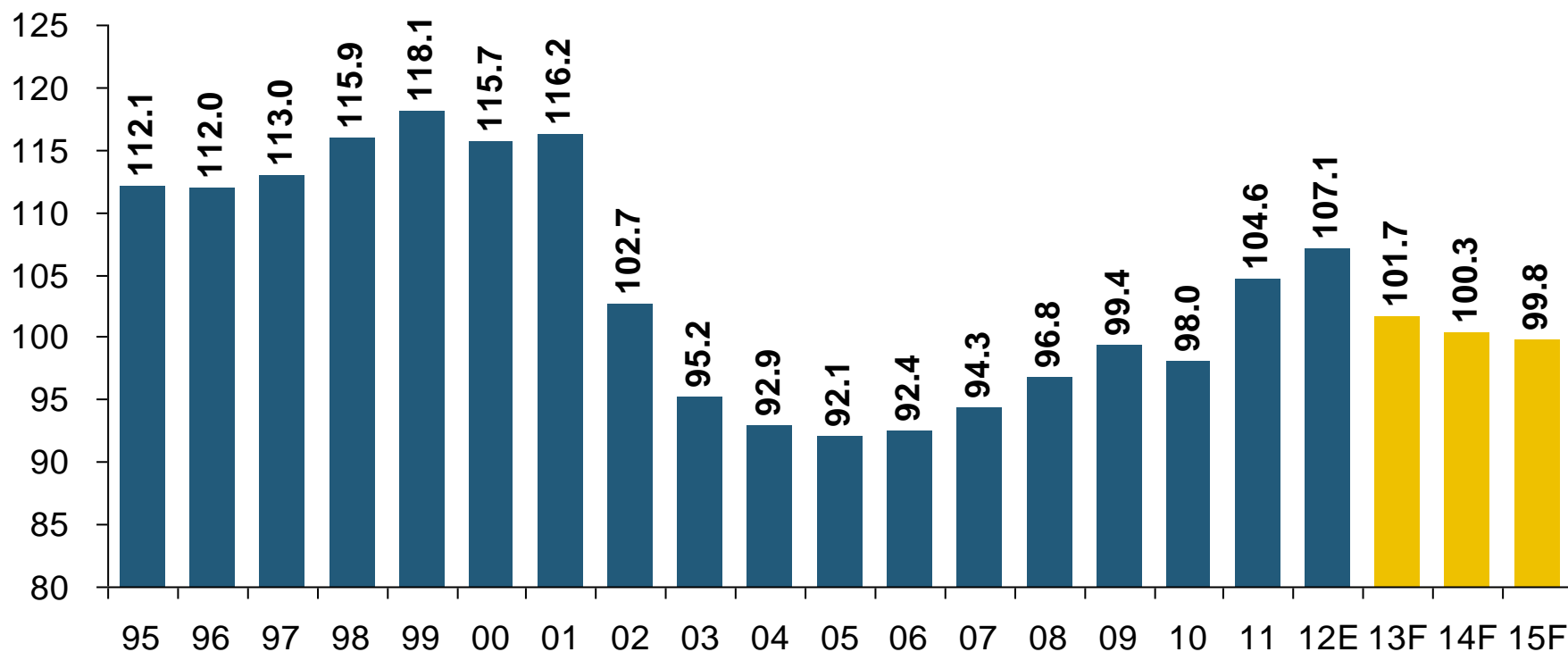


Commercial lines underwriting performance is expected to improve as improvement in pricing environment persists

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

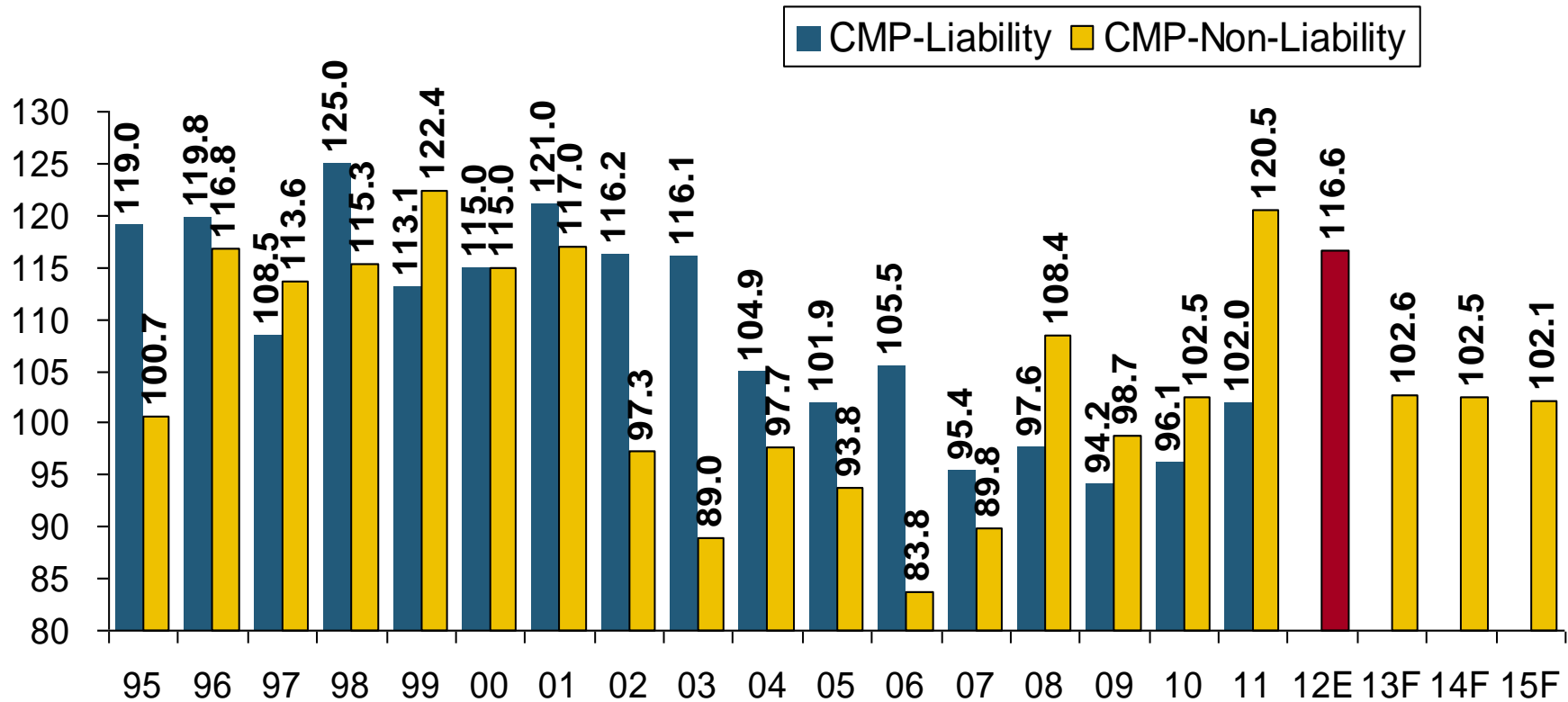
Source: A.M. Best (1990-2011); Conning (2012-2015F) Insurance Information Institute

# Commercial Auto Combined Ratio: 1993–2015F



**Commercial Auto is Expected to Improve as Rate Gains Outpace Any Adverse Frequency and Severity Trends**

# Commercial Multi-Peril Combined Ratio: 1995–2015F

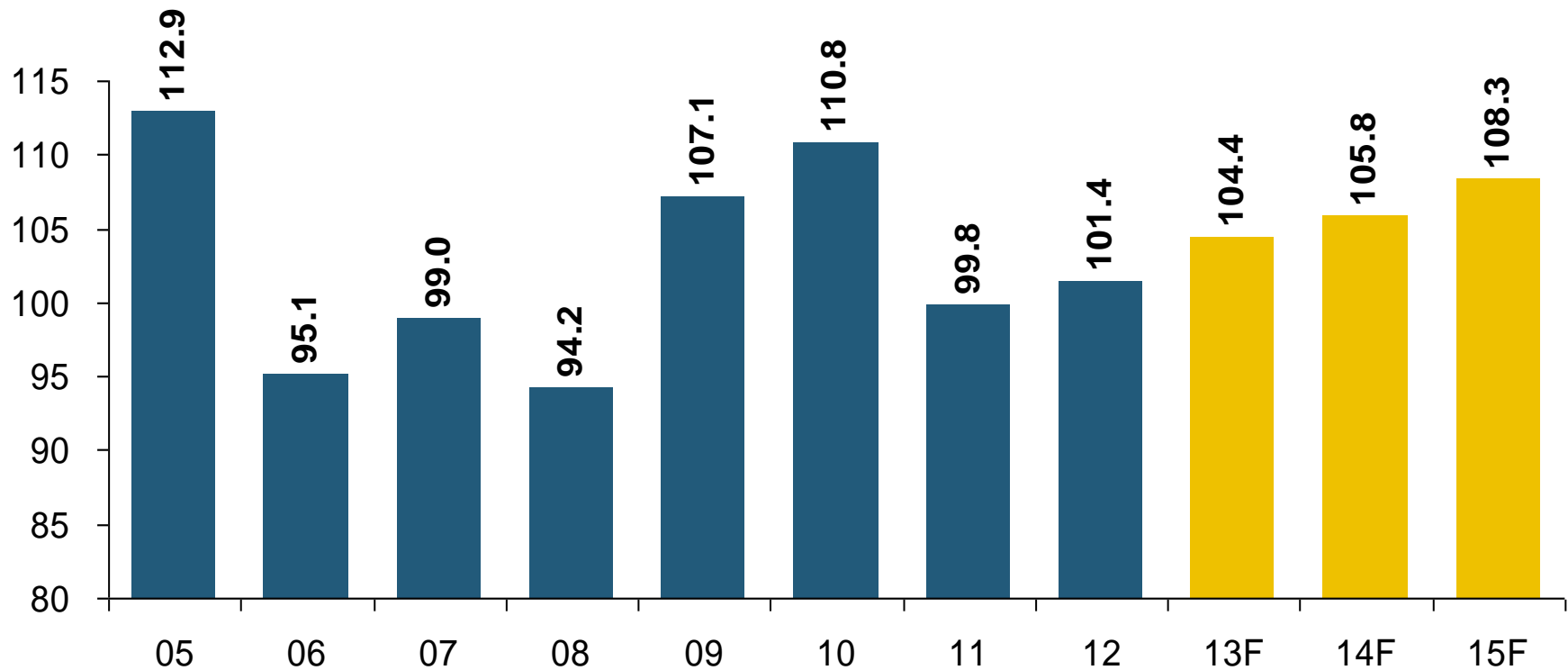


**Commercial Multi-Peril Underwriting Performance is Expected to Improve in 2013 Assuming Normal Catastrophe Loss Activity**

\*2012-2013 figures are A.M. Best estimate/forecast for the combined liability and non-liability components. Same for Conning 2014-2015F figures.

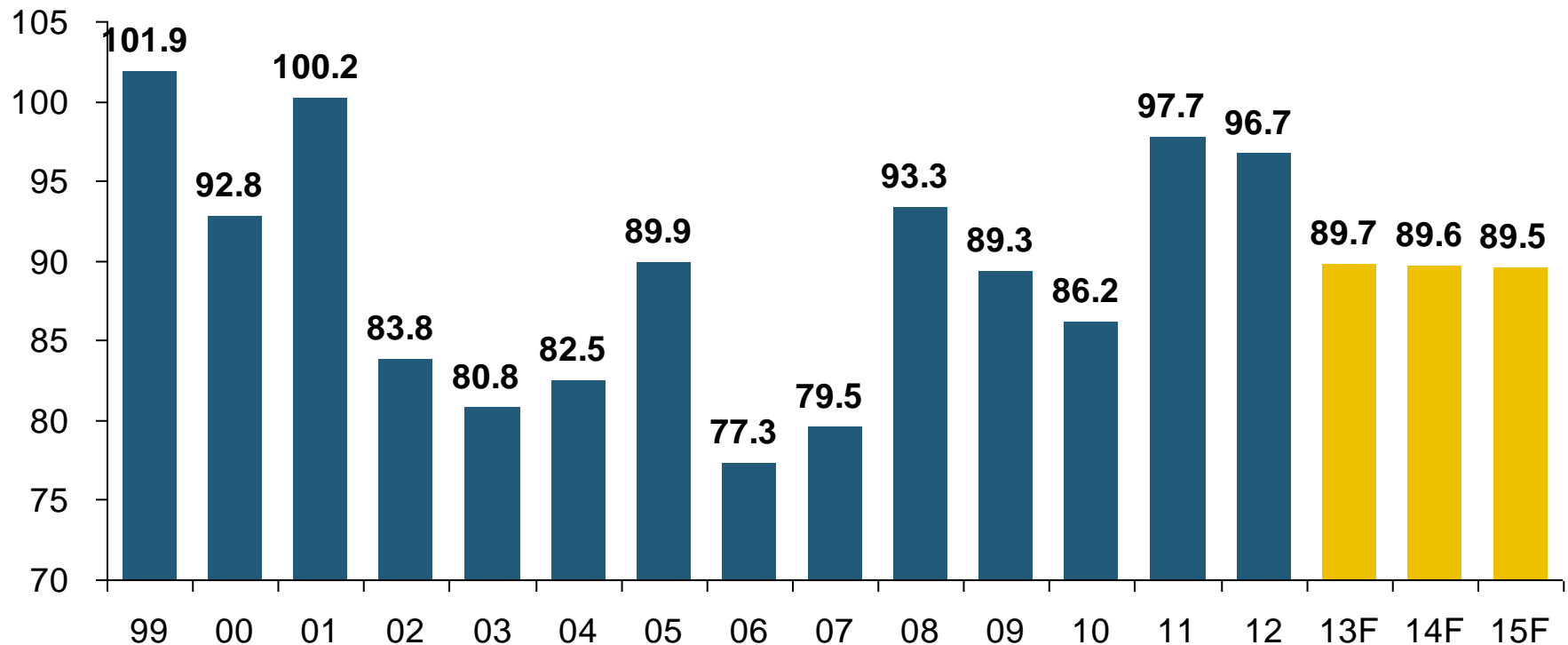
Sources: A.M. Best; Conning; Insurance Information Institute.

# General Liability Combined Ratio: 2005–2015F



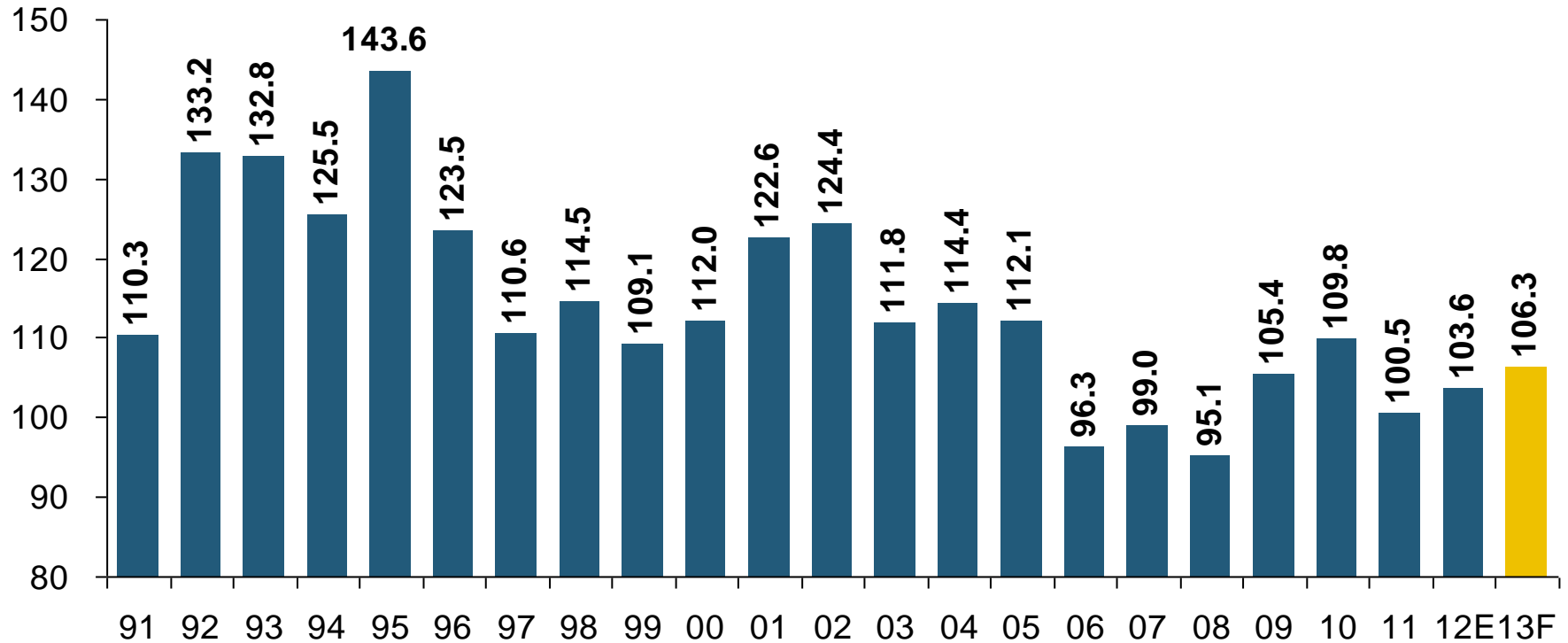
**Commercial General Liability Underwriting  
Performance Has Been Volatile in Recent Years**

# Inland Marine Combined Ratio: 1999–2015F



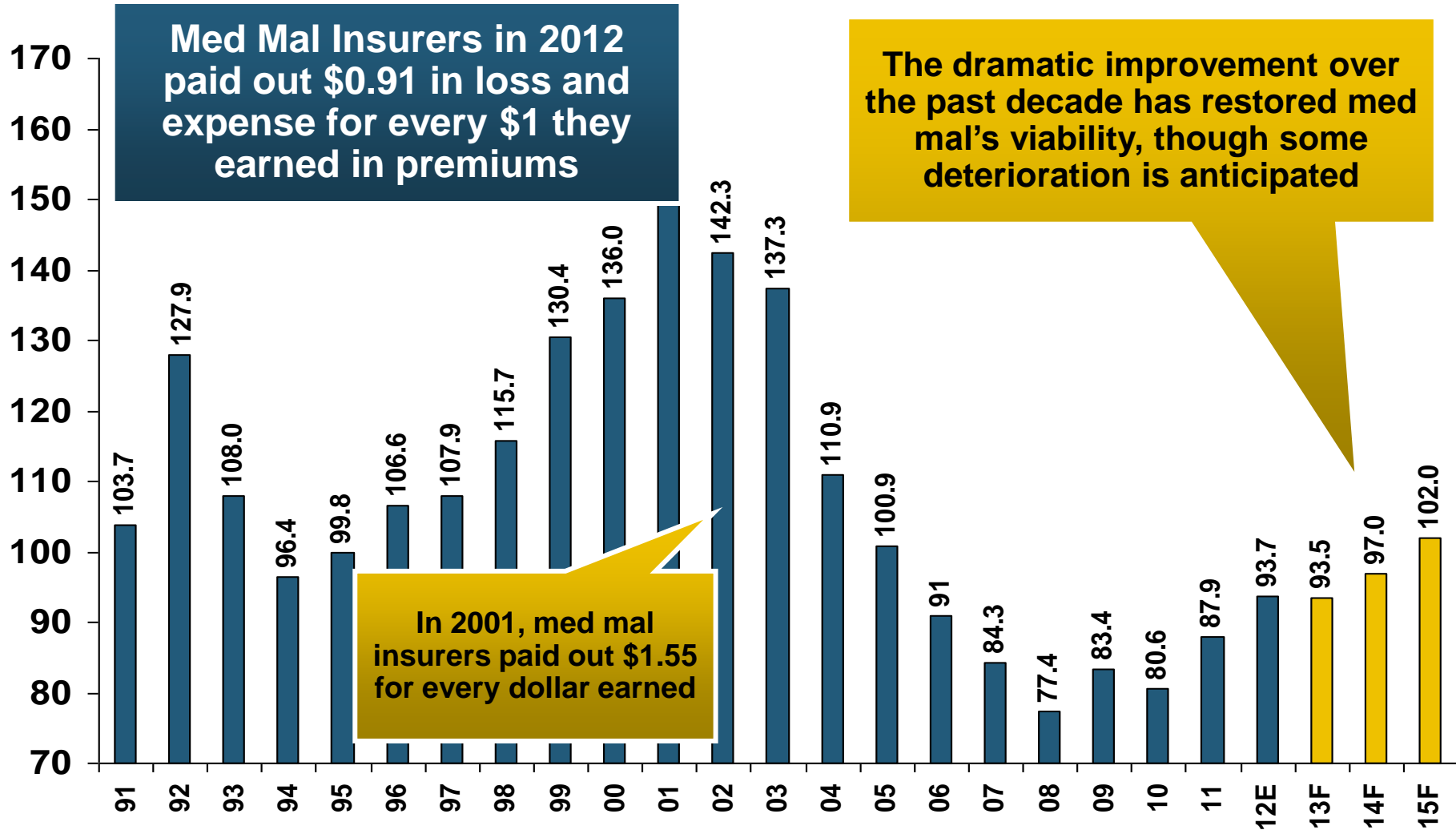
**Inland Marine is Expected to Remain Among the Most Profitable of All Lines**

# Other & Products Liability Combined Ratio: 1991–2013F



**Liability Lines Have Performed Better in the Post-Tort Reform Era (~2005), but There Has Been Some Deterioration in Recent Years**

# Medical Malpractice Combined Ratio vs. All Lines Combined Ratio, 1991-2015F



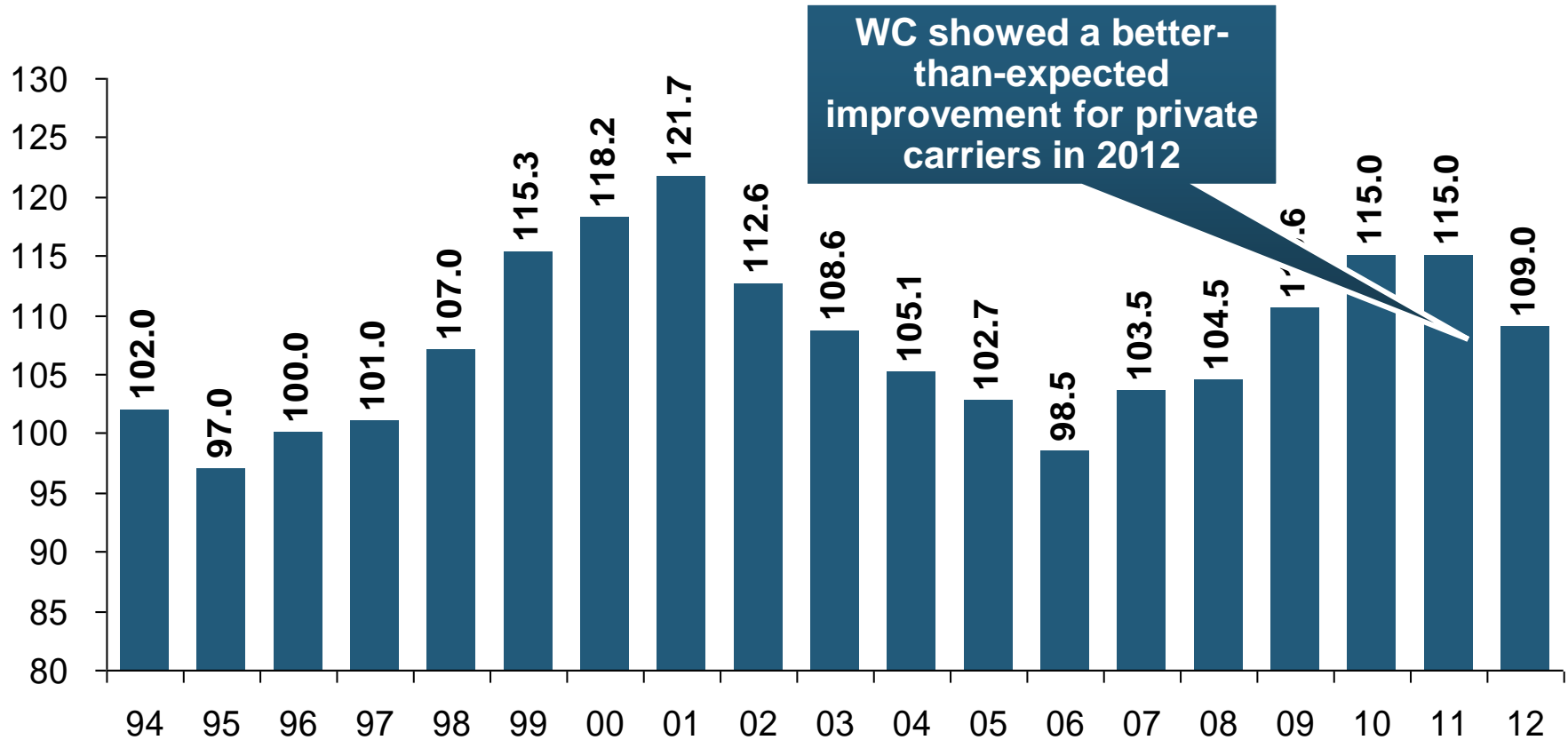


# Workers Compensation Operating Environment

**The Weak Economy and Soft Market Have  
Made the Workers Comp Operating  
Increasingly Challenging**



# Workers Compensation Combined Ratio: 1994–2012P



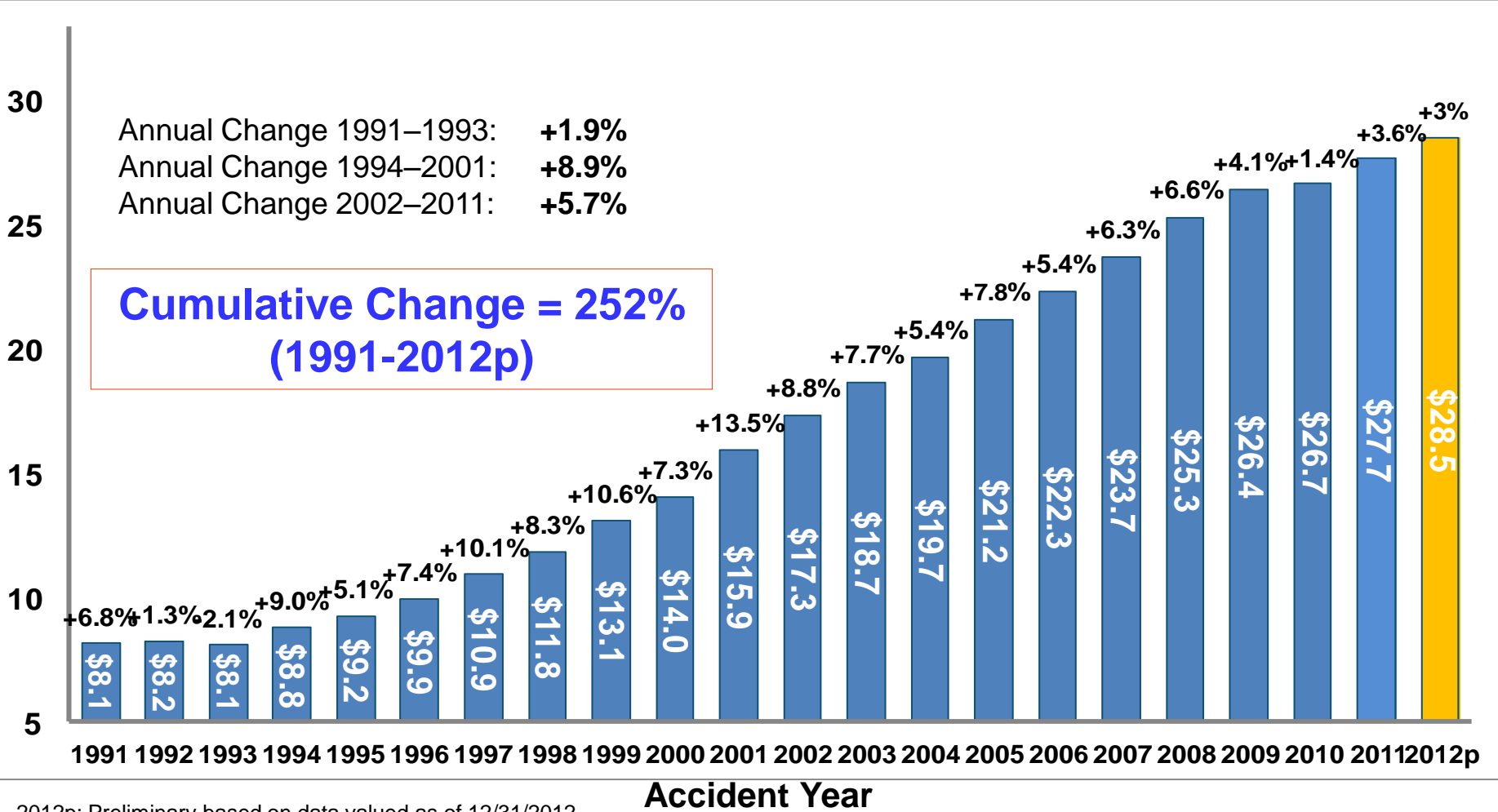
**Workers Comp Results Began to Improve in 2012. Underwriting Results Deteriorated Markedly from 2007-2010/11 and Were the Worst They Had Been in a Decade.**

# Workers Compensation Medical Severity Moderate Increase in 2012



Medical Claim Cost (\$000s)

## Average Medical Cost per Lost-Time Claim

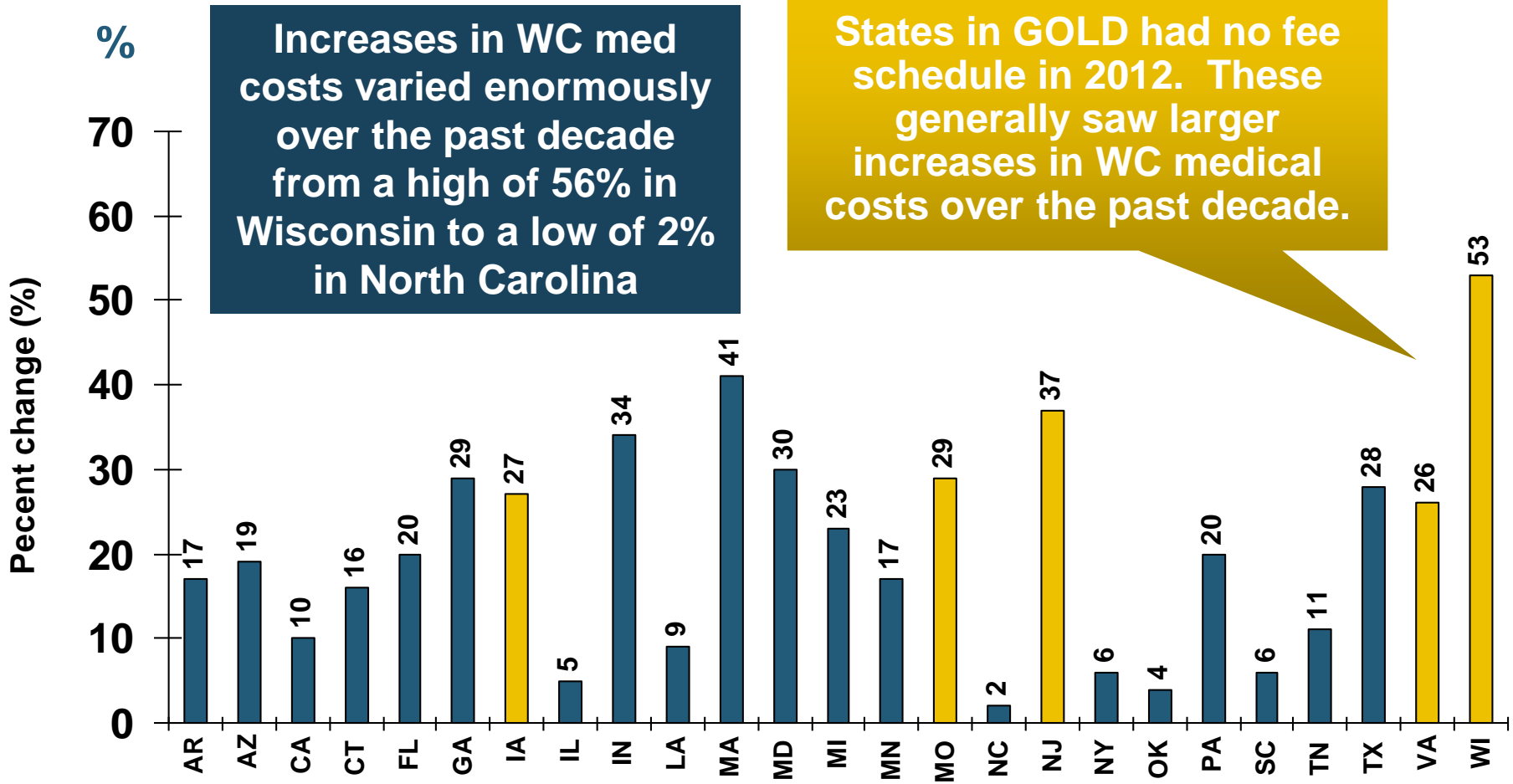


2012p: Preliminary based on data valued as of 12/31/2012.

1991-2011: Based on data through 12/31/2011, developed to ultimate

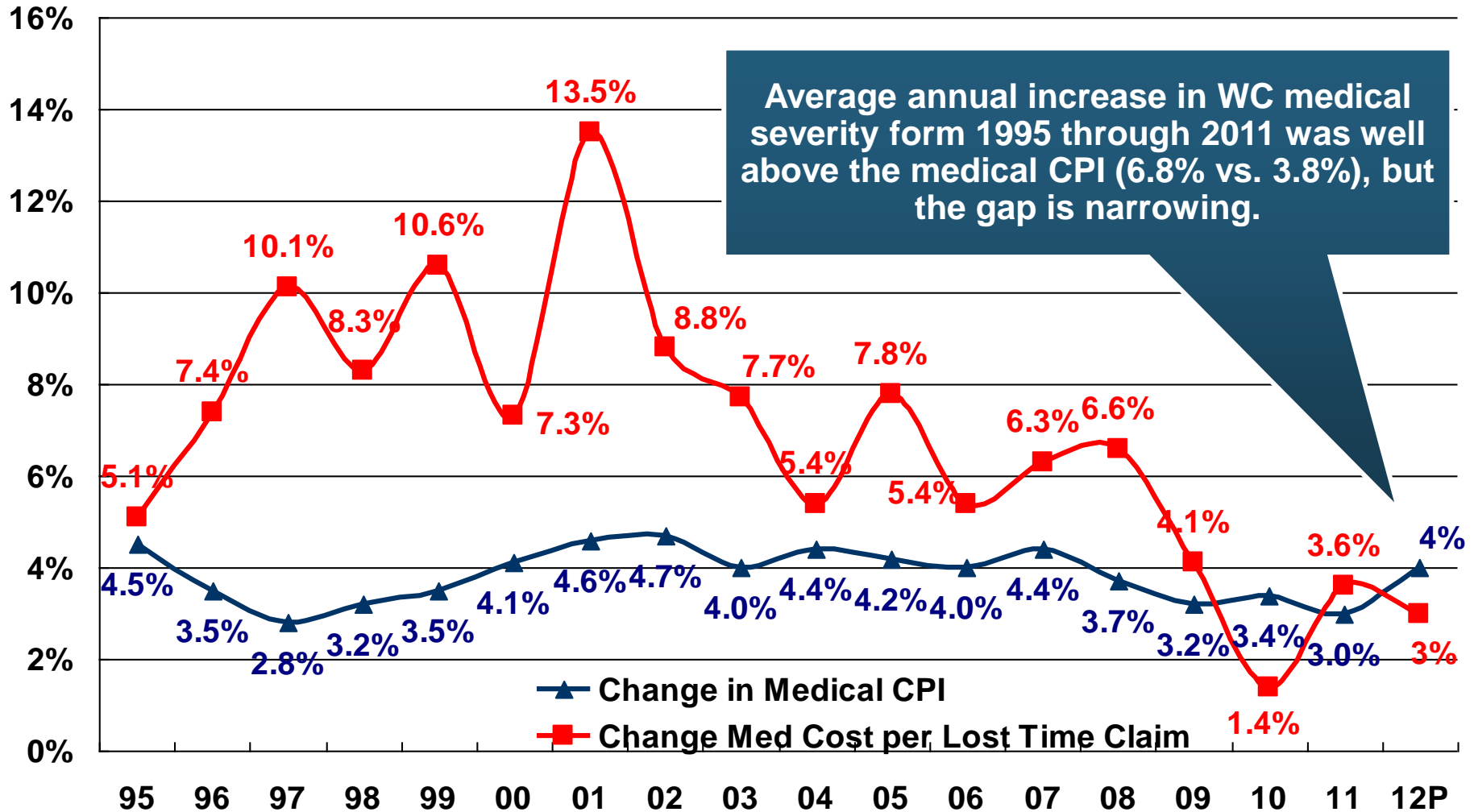
Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.

# Change in Price Paid for Medical Professional Services in WC, 2002-2012\*



\*Data are preliminary as of 6/30/12.

# WC Medical Severity Generally Outpaces the Medical CPI Rate

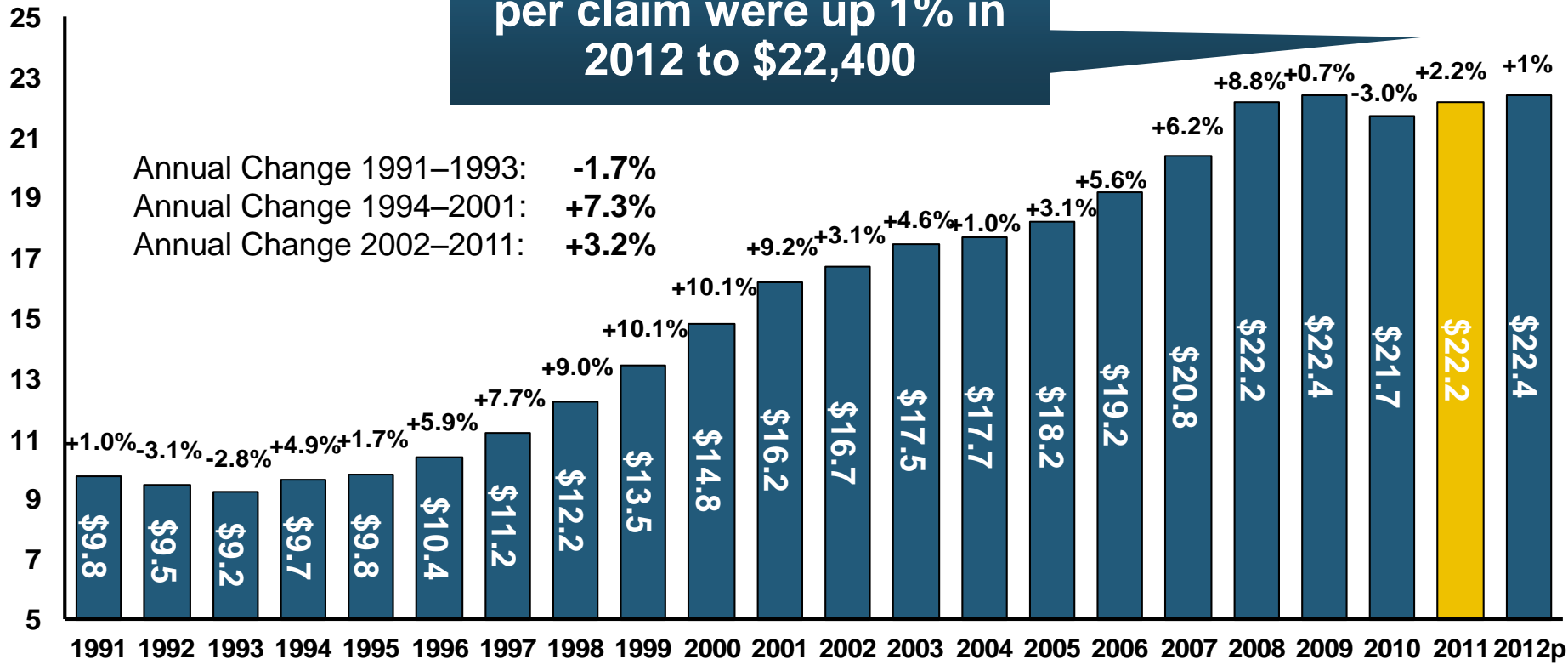


# Workers Comp Indemnity Claim Costs: Small Increase in 2012

## Average Indemnity Cost per Lost-Time Claim

**Average indemnity costs per claim were up 1% in 2012 to \$22,400**

Indemnity Claim Cost (\$ 000s)



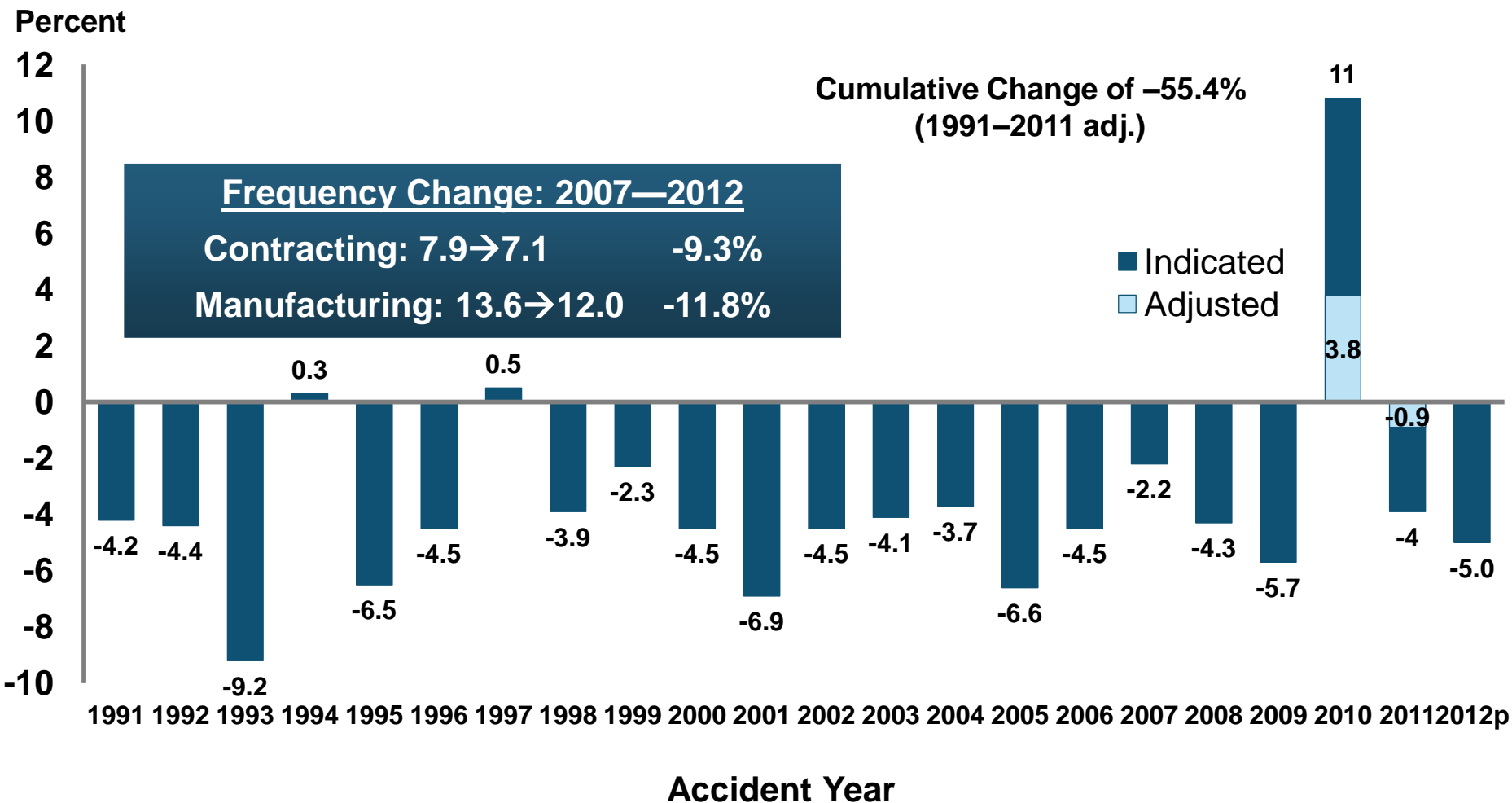
Annual Change 1991–1993: -1.7%  
 Annual Change 1994–2001: +7.3%  
 Annual Change 2002–2011: +3.2%

### Accident Year

2012p: Preliminary based on data valued as of 12/31/2012.  
 1991-2011: Based on data through 12/31/2011, developed to ultimate  
 Based on the states where NCCI provides ratemaking services including state funds, excluding WV; Excludes high deductible policies.

# Workers Compensation Lost-Time Claim Frequency Declined in 2012

## Lost-Time Claims



\*Adjustments primarily due to significant audit activity.

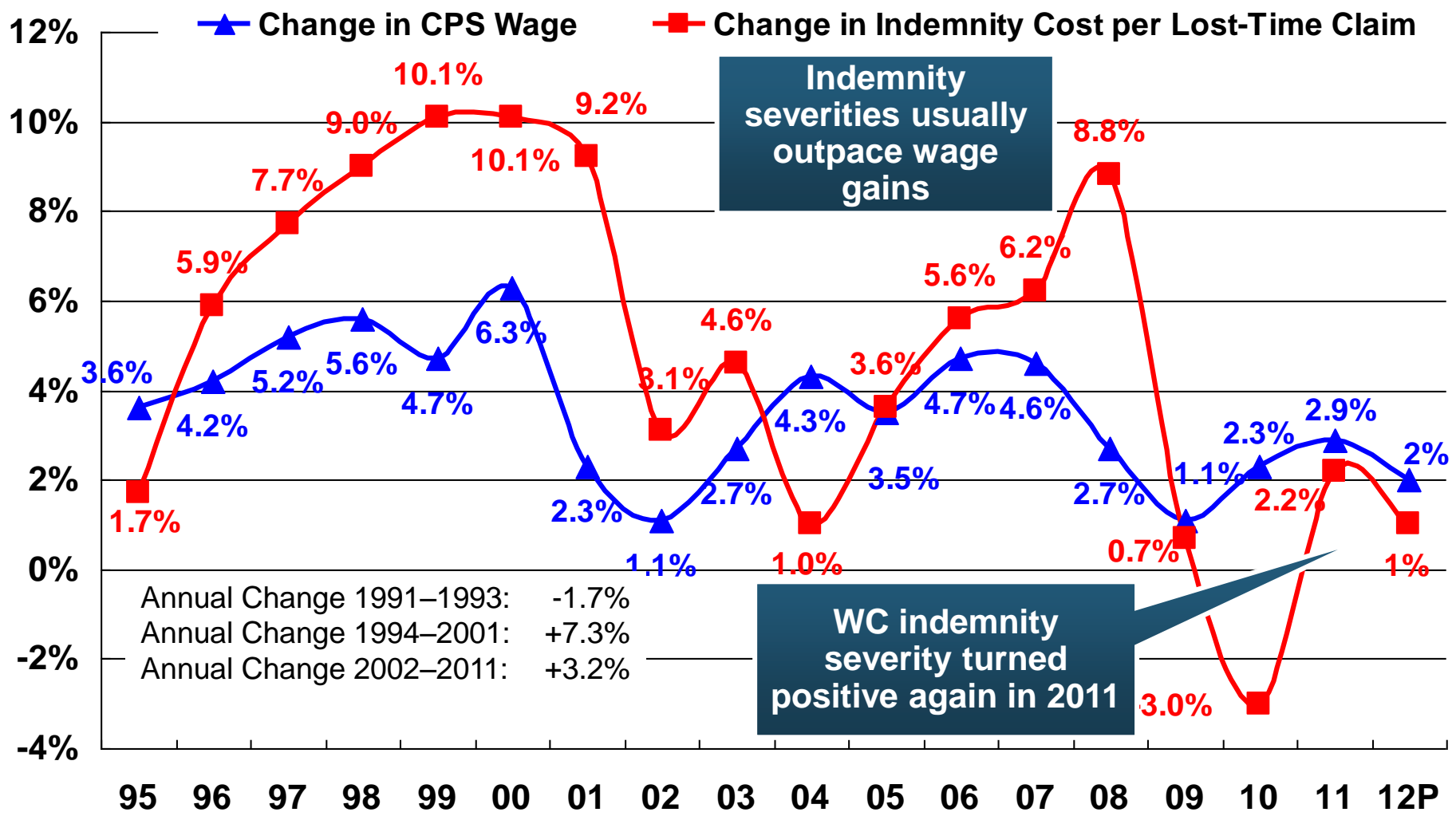
2012p: Preliminary based on data valued as of 12/31/2012

1991–2011: Based on data through 12/31/2011, 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

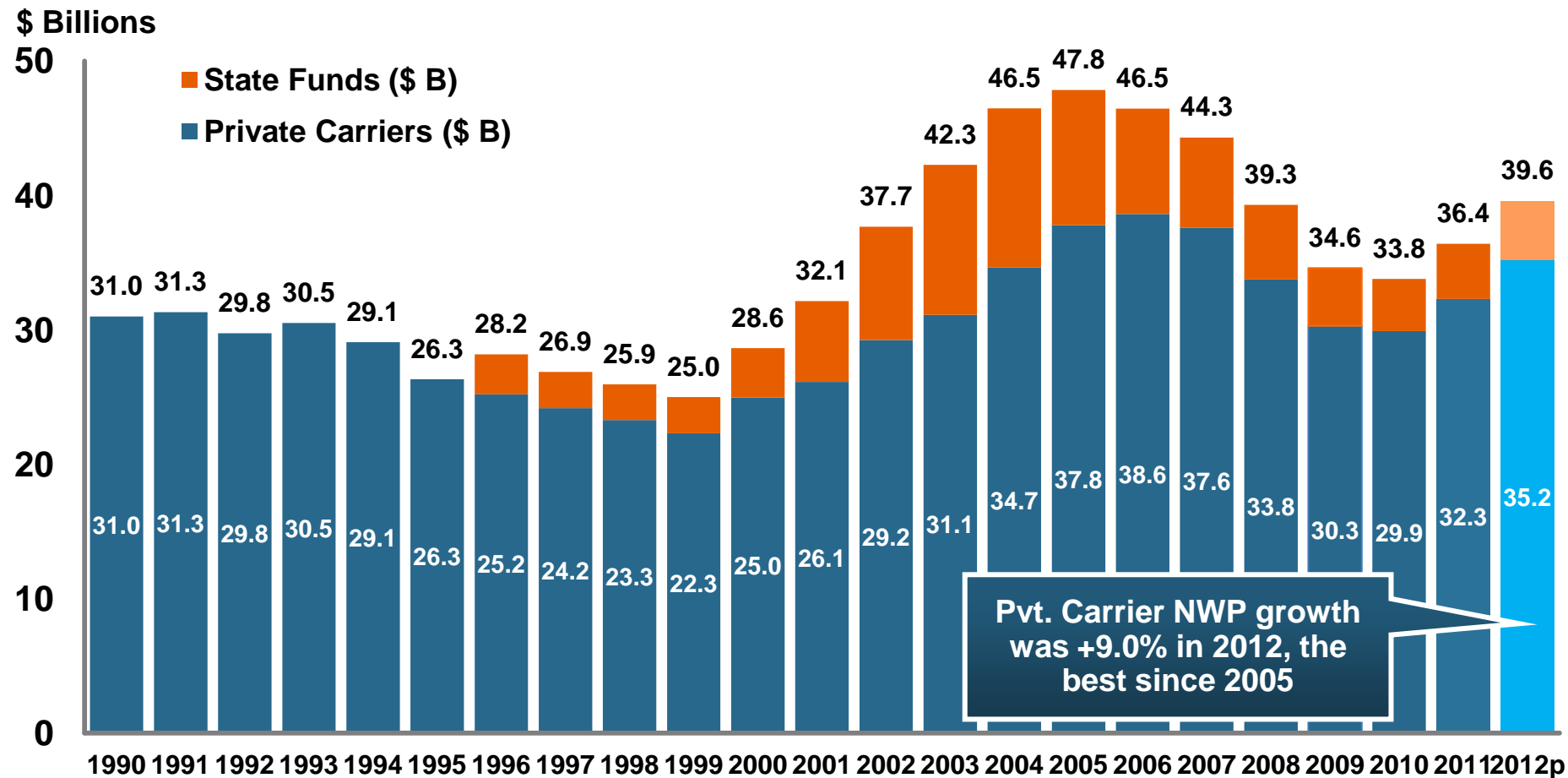
# WC Indemnity Severity vs. Wage Inflation, 1995 -2012p



2011p: Preliminary based on data valued as of 12/31/2011; 1991-2010: Based on data through 12/31/2010, developed to ultimate. Based on the states where NCCI provides ratemaking services. Excludes the effects of deductible policies. CPS = Current Population Survey. Source: NCCI

# Workers Compensation Premium: Second Consecutive Year of Increase

## Net Written Premium



p Preliminary

Source: 1990–20102p Private Carriers, Annual Statement Data, NCCI.

1996–2012p State Funds: AZ, CA, CO, HI, ID, KY, LA, MD, MO, MT, NM, OK, OR, RI, TX, UT Annual Statements

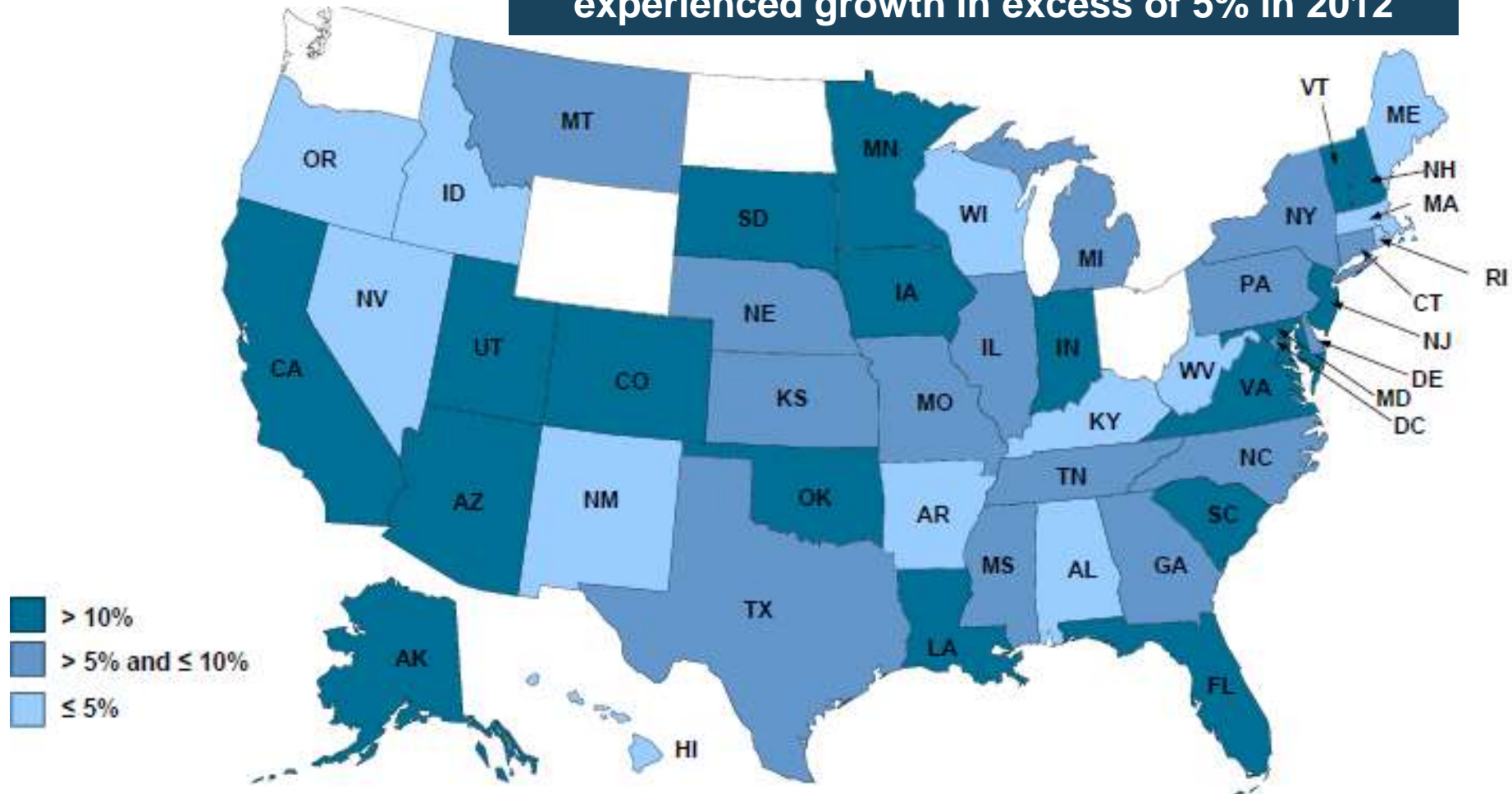
State Funds available for 1996 and subsequent



# 2012 Workers Compensation Direct Written Premium Growth, by State\*

PRIVATE CARRIERS: Overall 2012 Growth = +9%

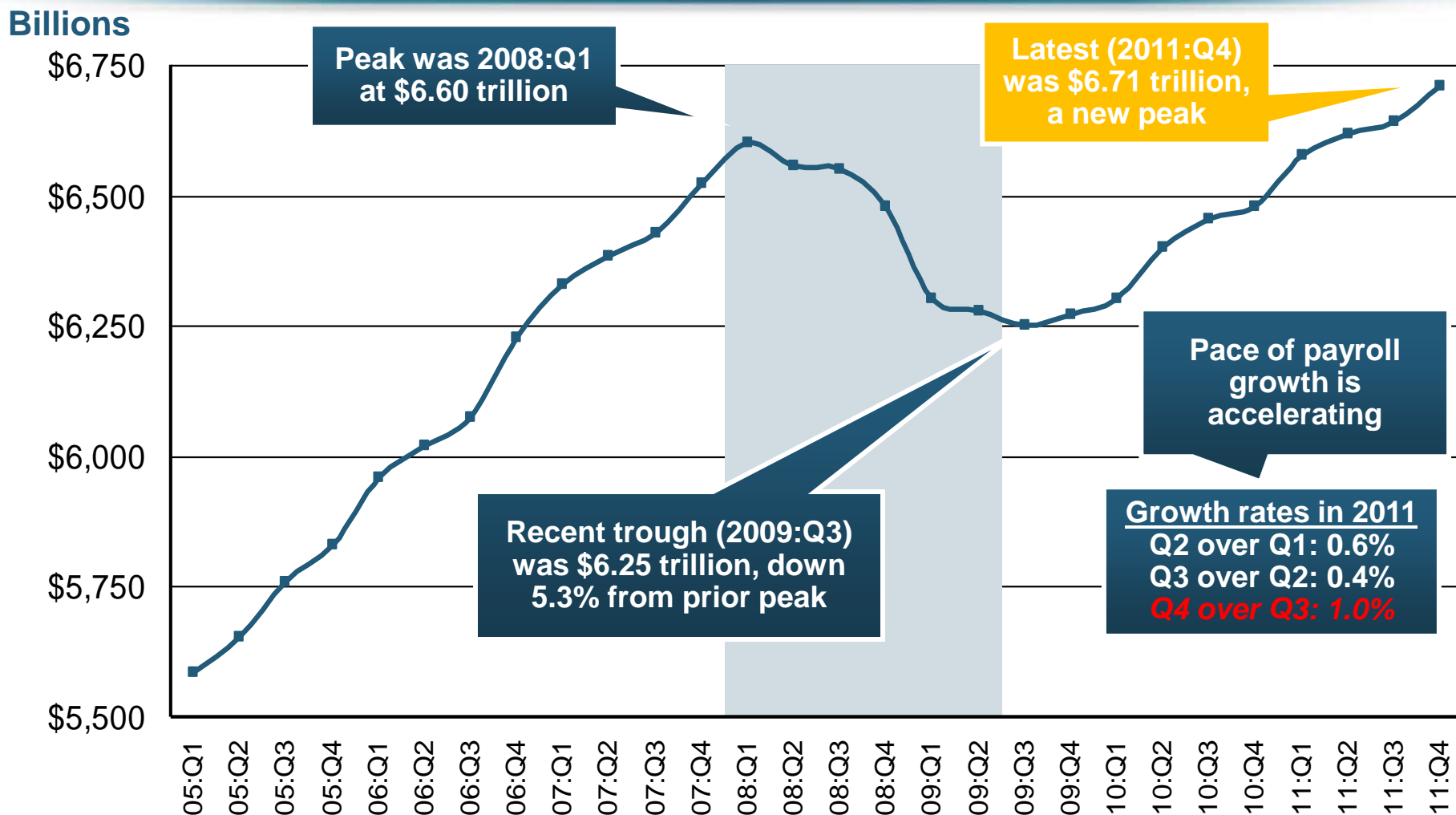
While growth rates varied widely, all states experienced growth in excess of 5% in 2012



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

Source: NCCI.

# Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2011:Q4



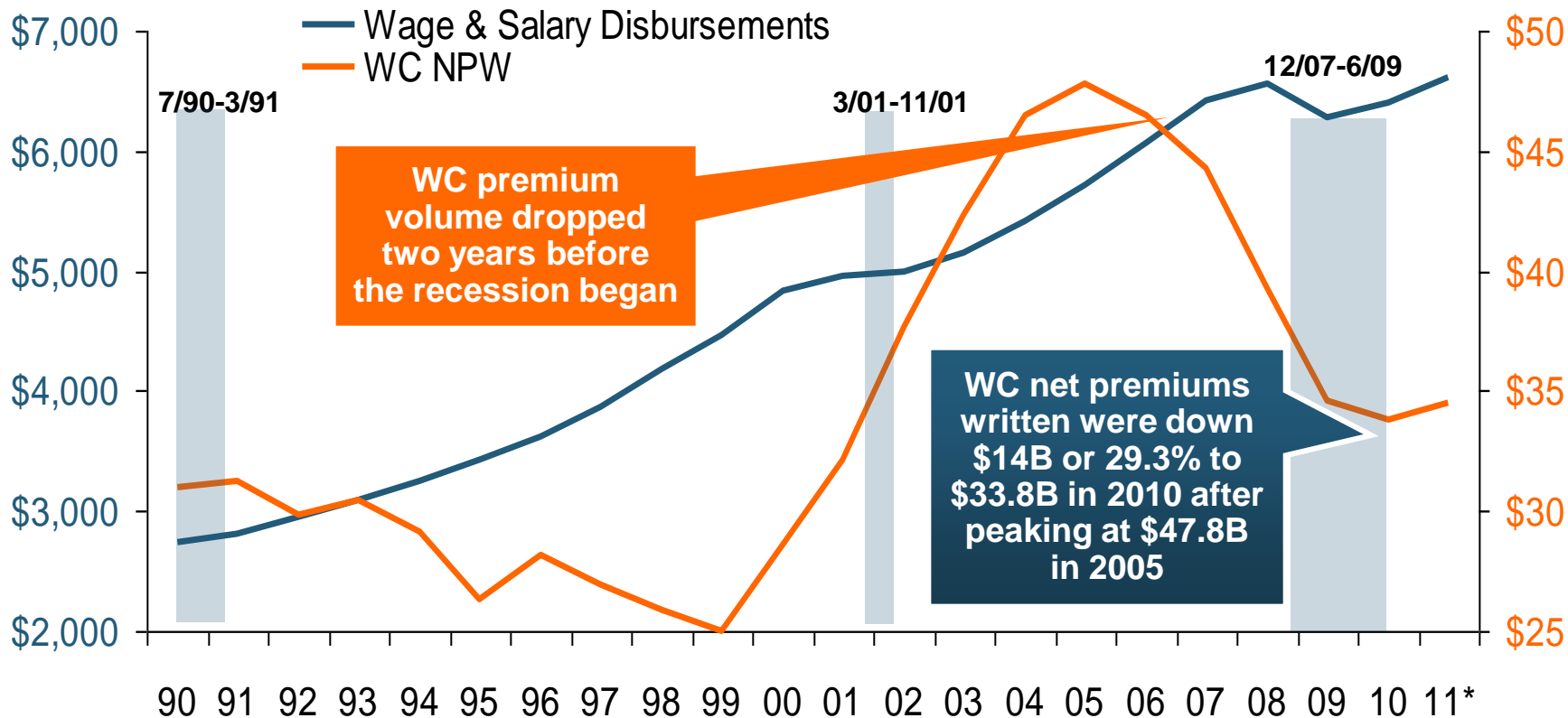
Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

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, 1990-2011

Payroll Base\*  
\$Billions

WC NWP  
\$Billions



**Resumption of payroll growth and rate increases suggests WC NWP will grow again in 2012**

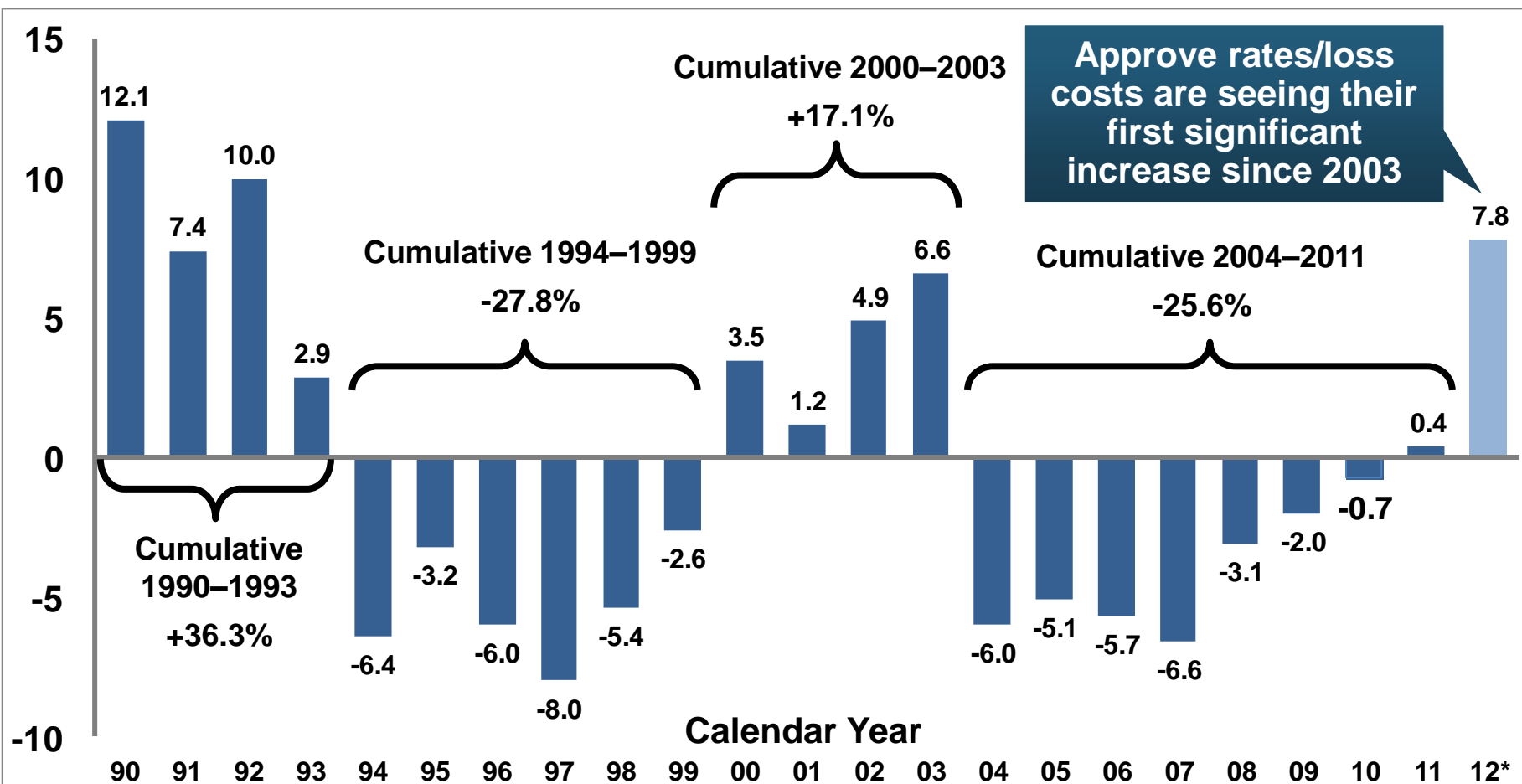
\*Private employment; Shaded areas indicate recessions. Payroll and WC premiums for 2011 is I.I.I. estimate

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

# Average Approved Bureau Rates/Loss Costs

## History of Average WC Bureau Rate/Loss Cost Level Changes

Percent



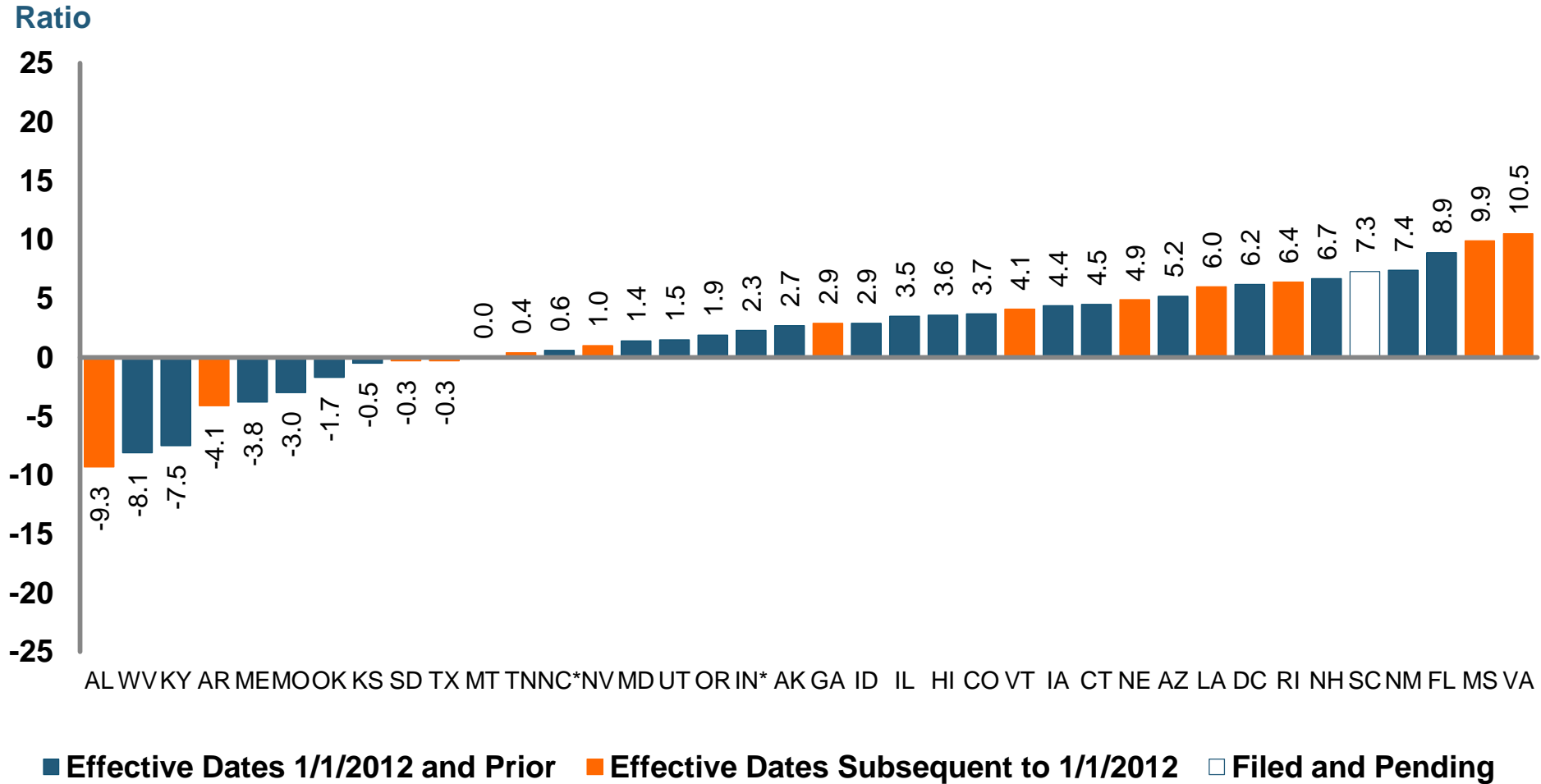
\*States approved through 7/31/12.

Note: Countrywide approved changes in advisory rates, loss costs and assigned risk rates as filed by applicable rating organization.

Source: NCCI.

# Current NCCI Voluntary Market Filed Rate/Loss Cost Changes

(Excludes Law-Only Filings)

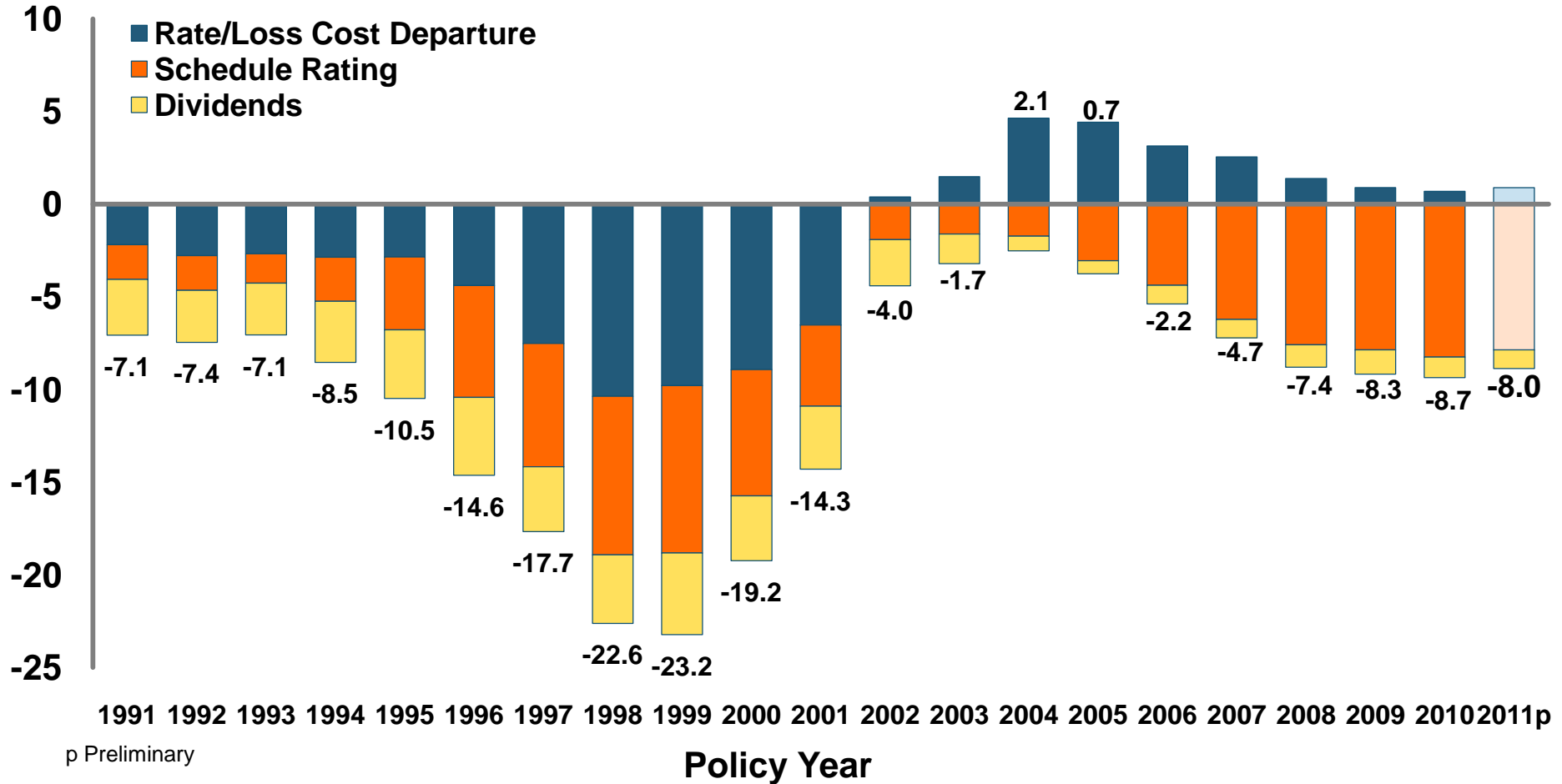


\*IN and NC filed in cooperation with state rating bureau  
Source: NCCI

# Impact of Discounting on Workers Compensation Premium

## NCCI States—Private Carriers

Percent



p Preliminary

Dividend ratios are based on calendar year statistics

NCCI benchmark level does not include an underwriting contingency provision

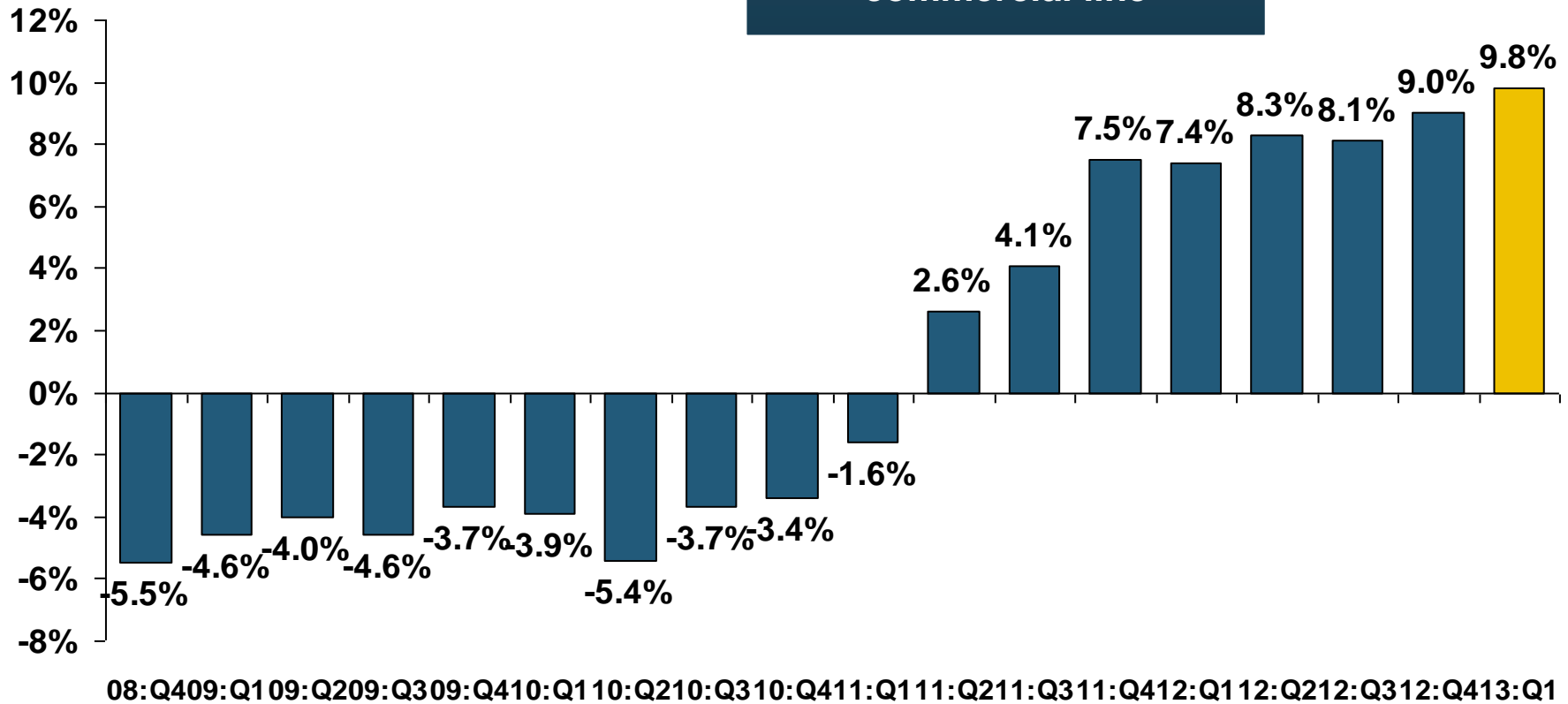
Based on data through 12/31/2011 for the states where NCCI provides ratemaking services

Source: NCCI.

# Workers Comp Rate Changes, 2008:Q4 – 2013:Q1

(Percent Change)

WC rate changes have been positive for 8 consecutive quarters, longer than any other commercial line



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; Information Institute.

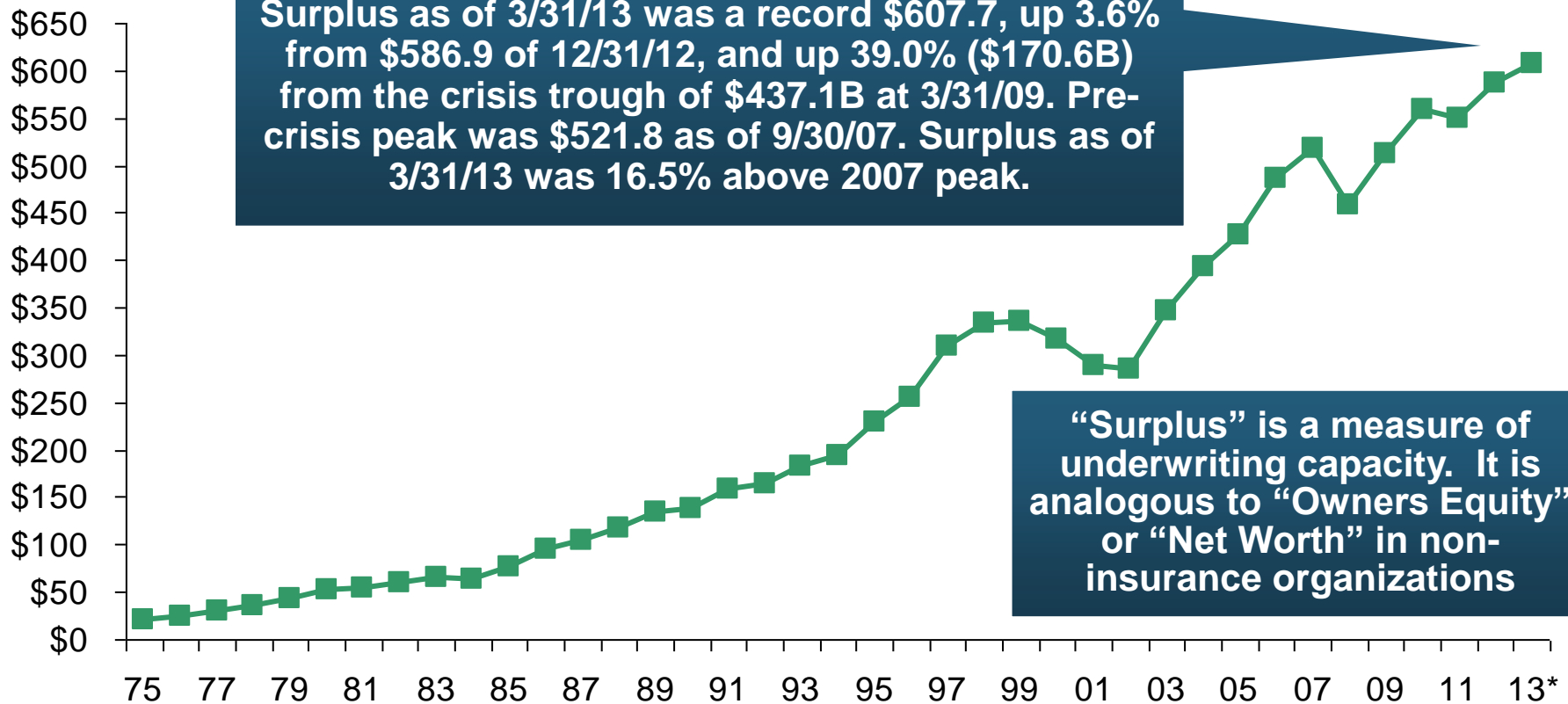
## **2. SURPLUS/CAPITAL/CAPACITY**

**How Will Large Catastrophe Losses  
Impact Capacity?**



# US Policyholder Surplus: 1975–2013\*

(\$ Billions)



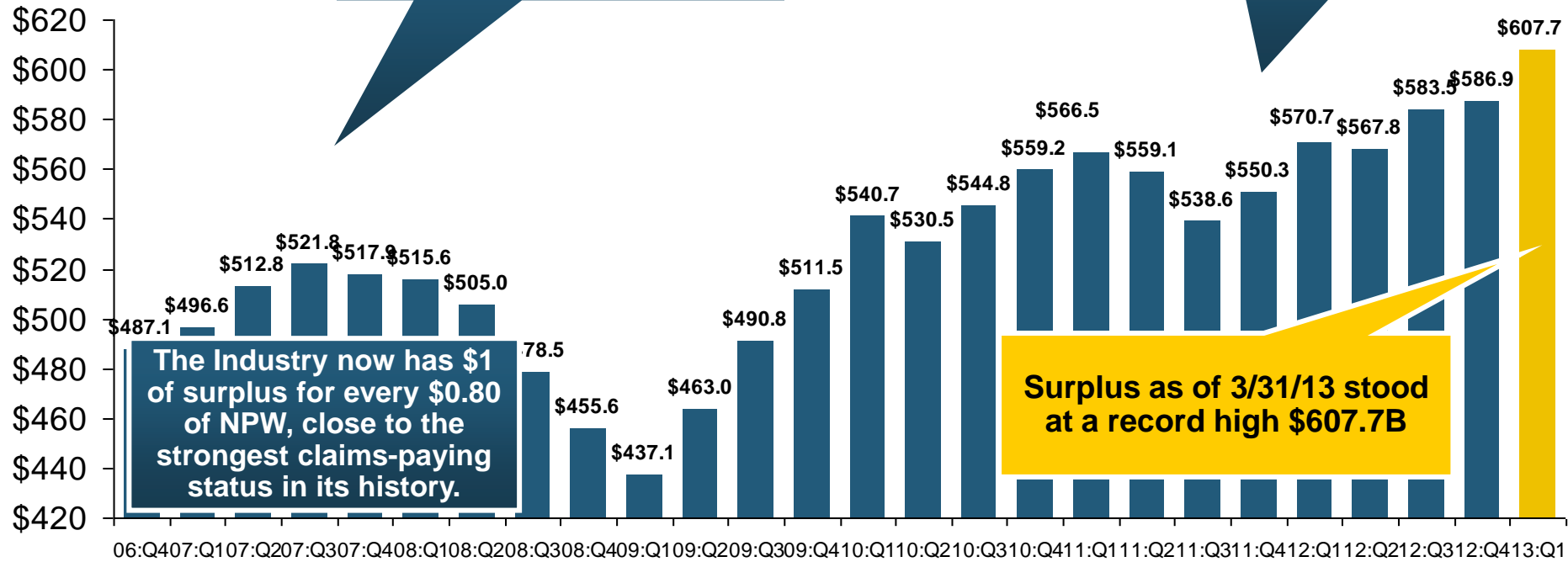
**The Premium-to-Surplus Ratio Stood at \$0.77:\$1 as of 3/31/13, A Near Record Low (at Least in Recent History)\***

\* As of 3/31/13.

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

# Policyholder Surplus, 2006:Q4–2013:Q1

(\$ Billions)



The industry now has \$1 of surplus for every \$0.80 of NPW, close to the strongest claims-paying status in its history.

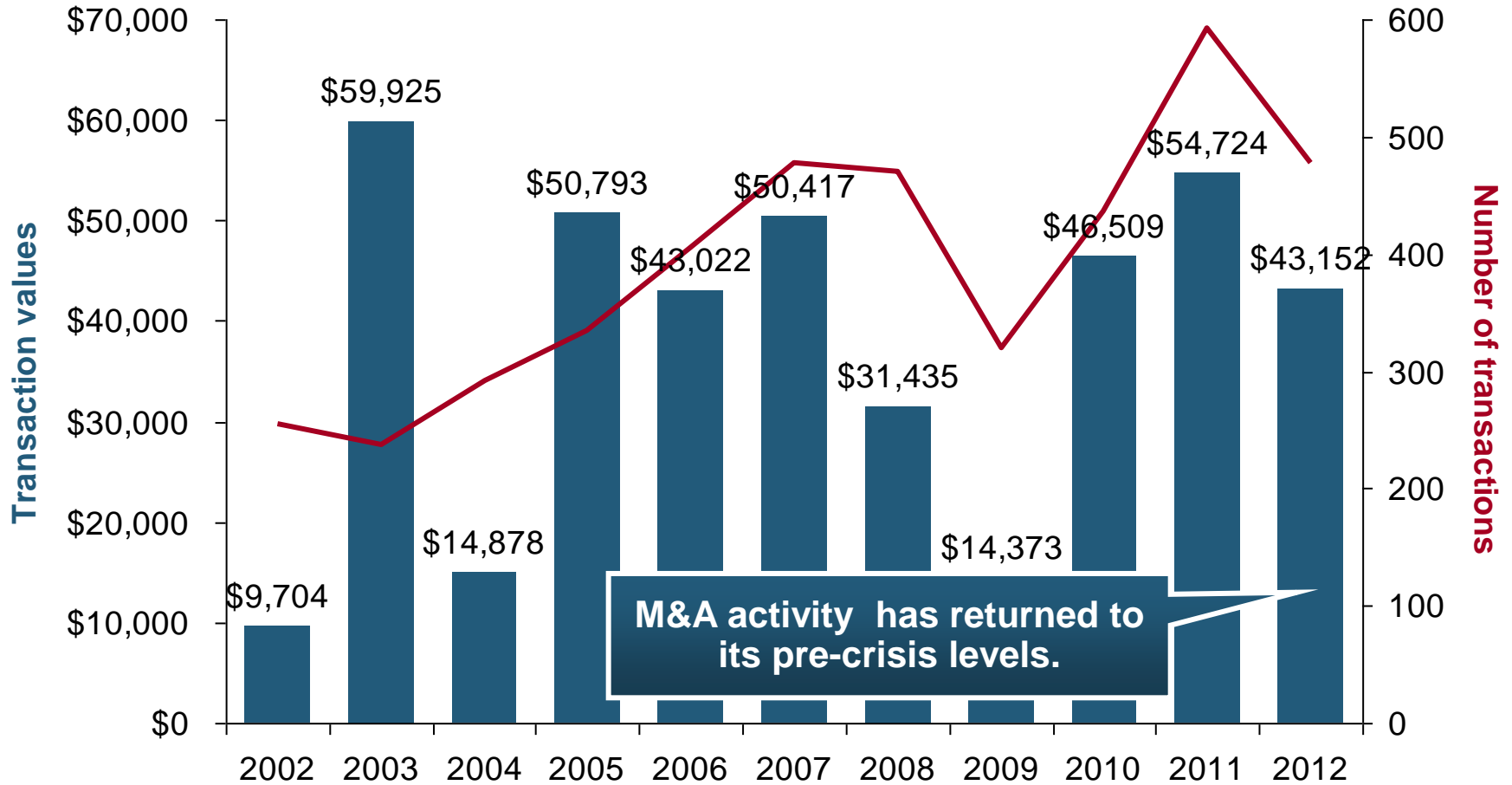
Surplus as of 3/31/13 stood at a record high \$607.7B

\*Includes \$22.5B of paid-in capital from a holding company parent for one insurer's investment in a non-insurance business in early 2010.

**The P/C Insurance Industry Both Entered and Emerged from the 2012 Hurricane Season Very Strong Financially.**

# U.S. INSURANCE MERGERS AND ACQUISITIONS, 2002-2012 (1)

(\$ Millions)

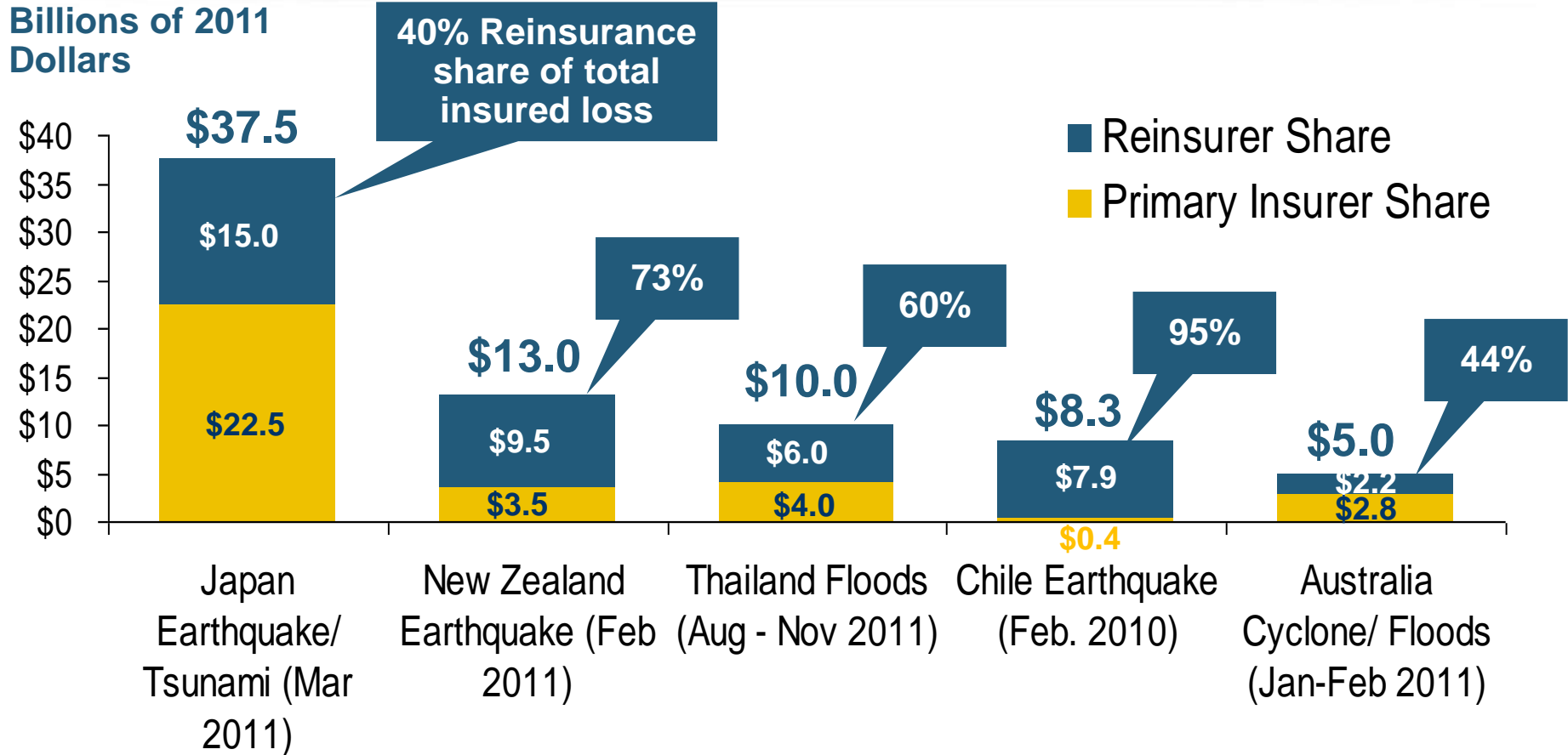


(1) Includes transactions where a U.S. company was the acquirer and/or the target.

## **3. REINSURANCE MARKET CONDITIONS**

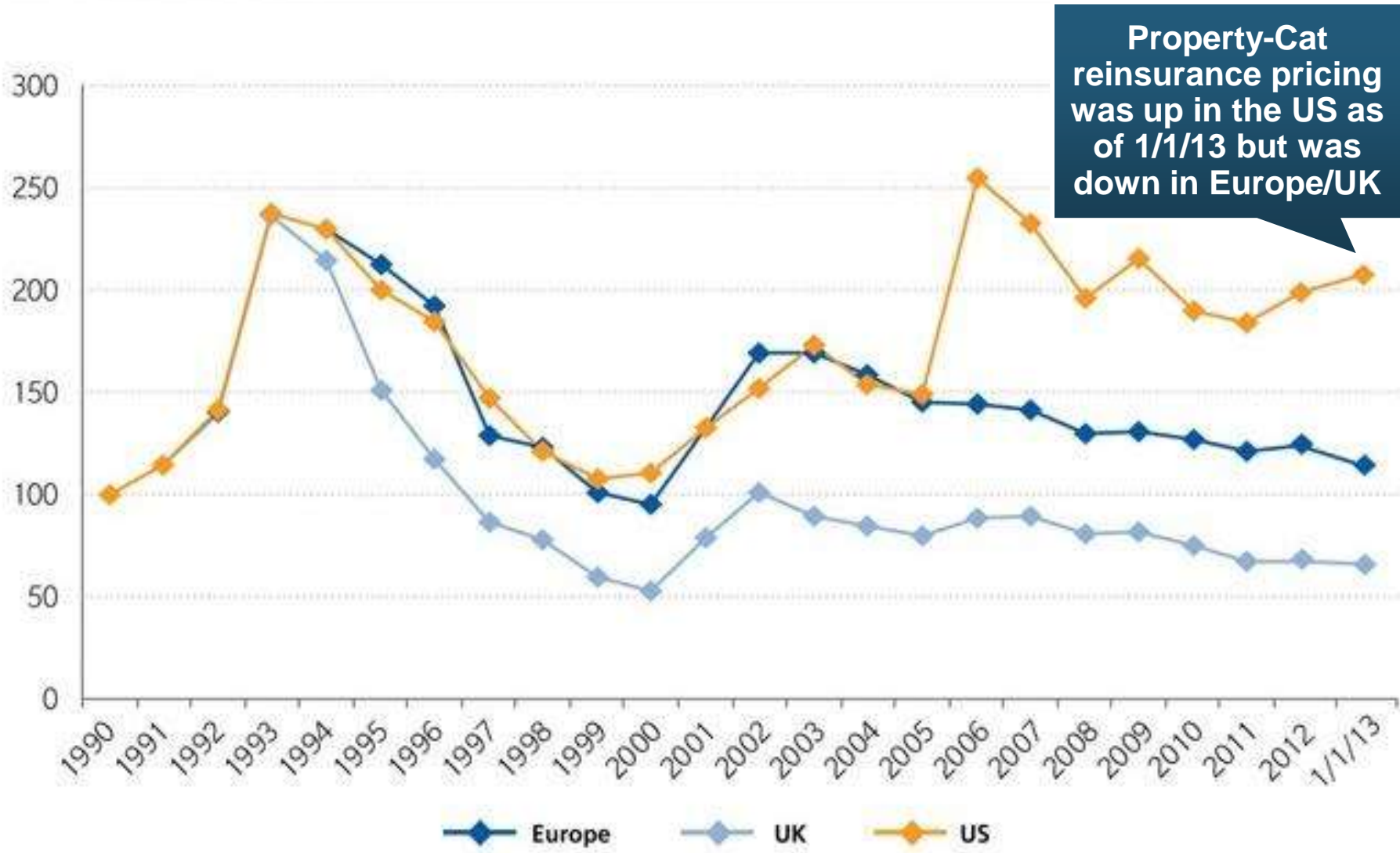
**Record Global  
Catastrophes Activity is  
Pressuring Pricing**

# Reinsurer Share of Recent Significant Market Losses



**Reinsurers Paid a High Proportion of Insured Losses Arising from Major Catastrophic Events Around the World in Recent Years**

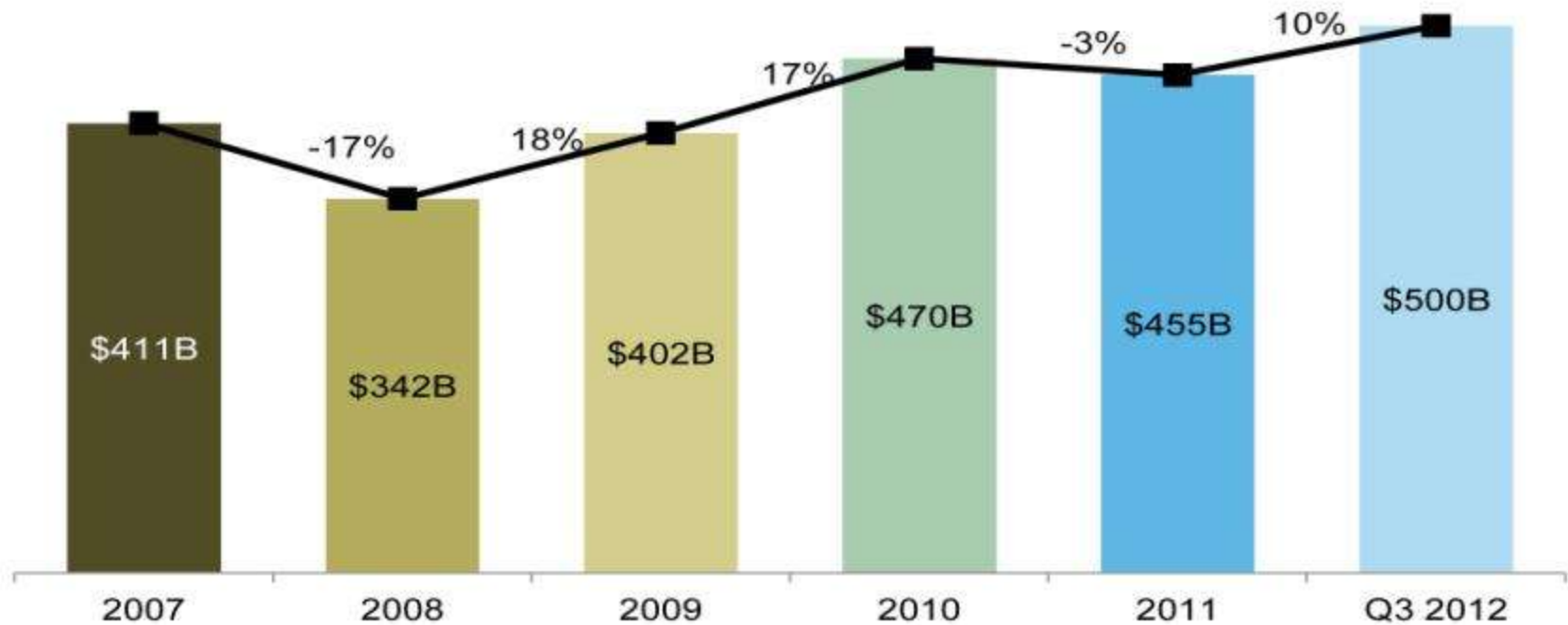
# Regional Property Catastrophe Rate on Line Index, 1990—2013 (as of January 1)



Sources: Guy Carpenter; Insurance Information Institute.

# Reinsurance Capital Is at a Record High

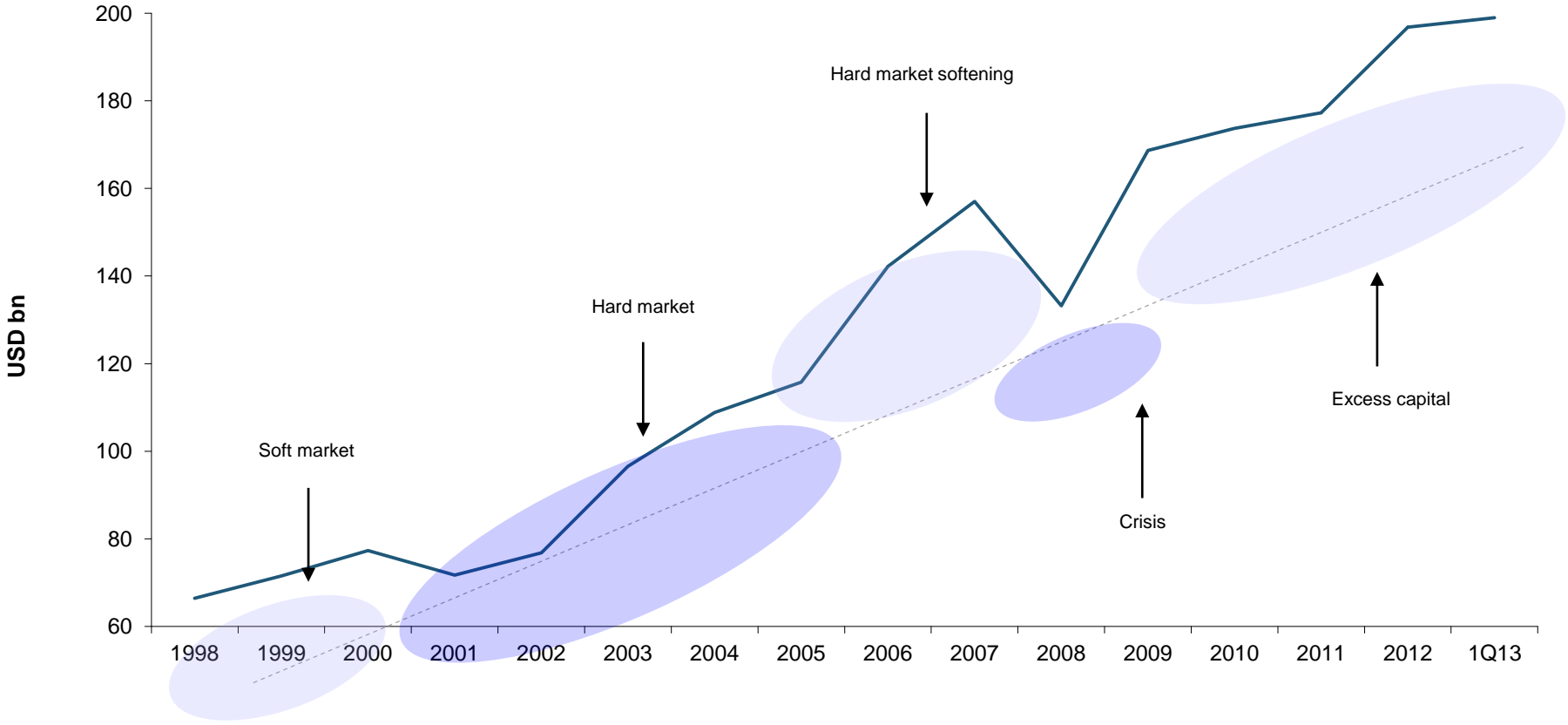
## Change in Global Reinsurer Capital



Source: Individual company reports, Aon Benfield Analytics

Source: Reinsurance Association of America from company reports and Aon Benfield Analytics.

# Long-Term Evolution of Shareholders' Funds for the Guy Carpenter Global Reinsurance Composite

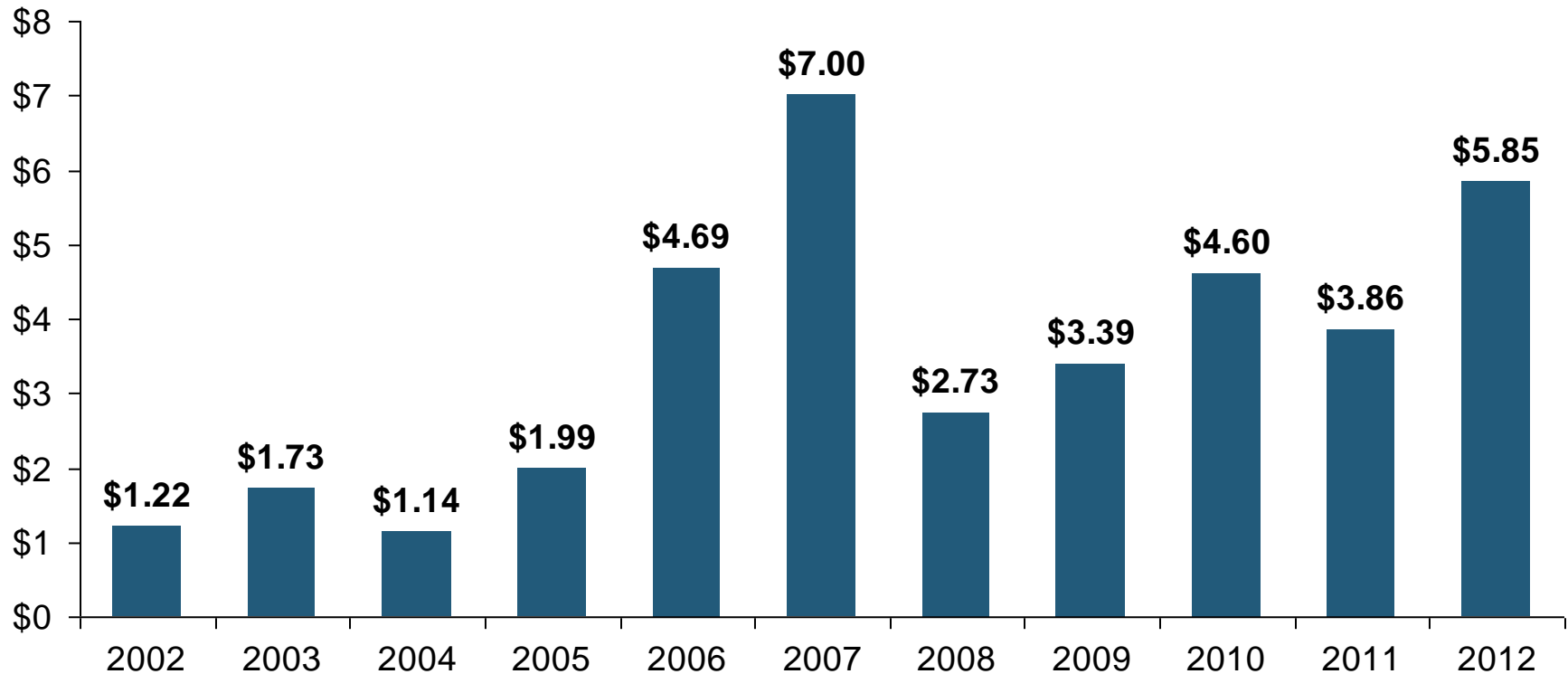


Source: Guy Carpenter



# CATASTROPHE BONDS, ANNUAL RISK CAPITAL ISSUED, 2002-2012

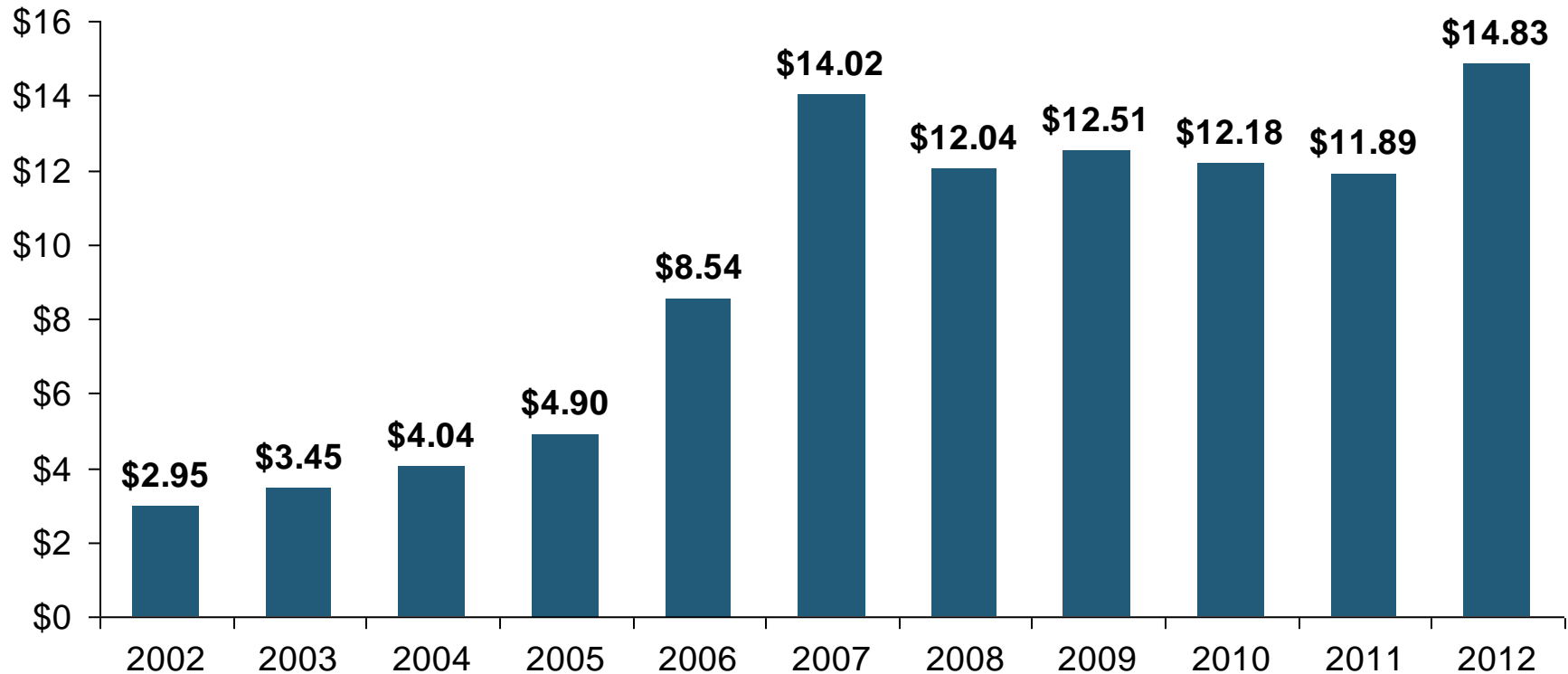
(\$ Billions)



Note

# CATASTROPHE BONDS, RISK CAPITAL OUTSTANDING, 2002-2012

(\$ Billions)



Note

## **4. RENEWED PRICING DISCIPLINE**

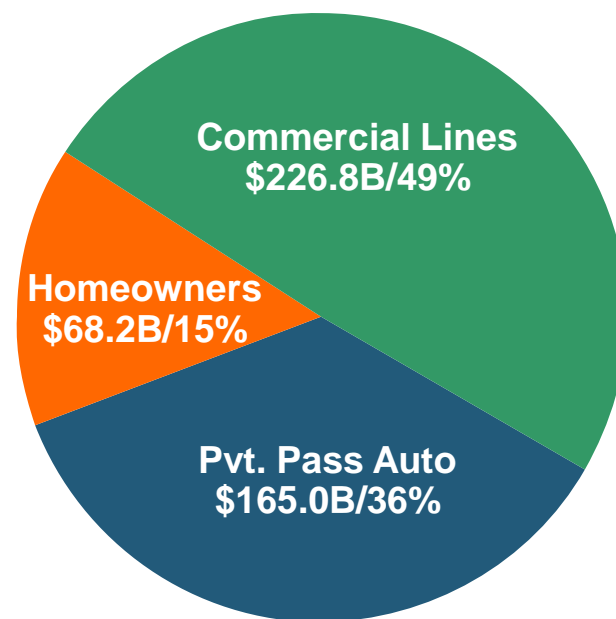
**Evidence of a Broad and  
Sustained Shift in Pricing**

# Distribution of Direct Premiums Written by Segment/Line, 2010

## Distribution Facts

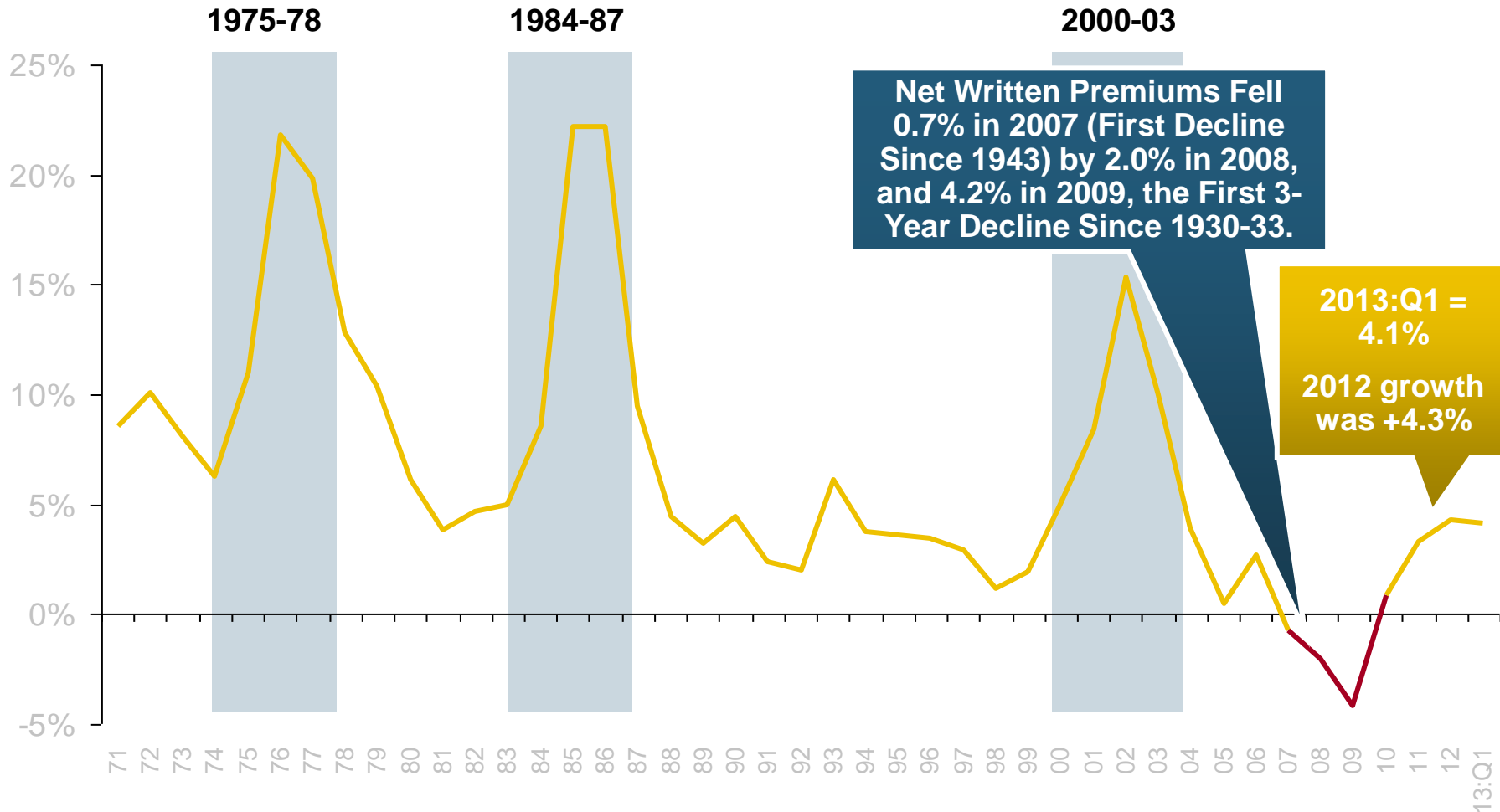
- Personal/Commercial lines split has been about 50/50 for many years; Personal Lines overtook Commercial Lines in 2010
- Pvt. Passenger Auto is by far the largest line of insurance and is currently the most important source of industry profits
- Billions of additional dollars in homeowners insurance premiums are written by state-run residual market plans

2010



# Net Premium Growth: Annual Change, 1971—2013:Q1

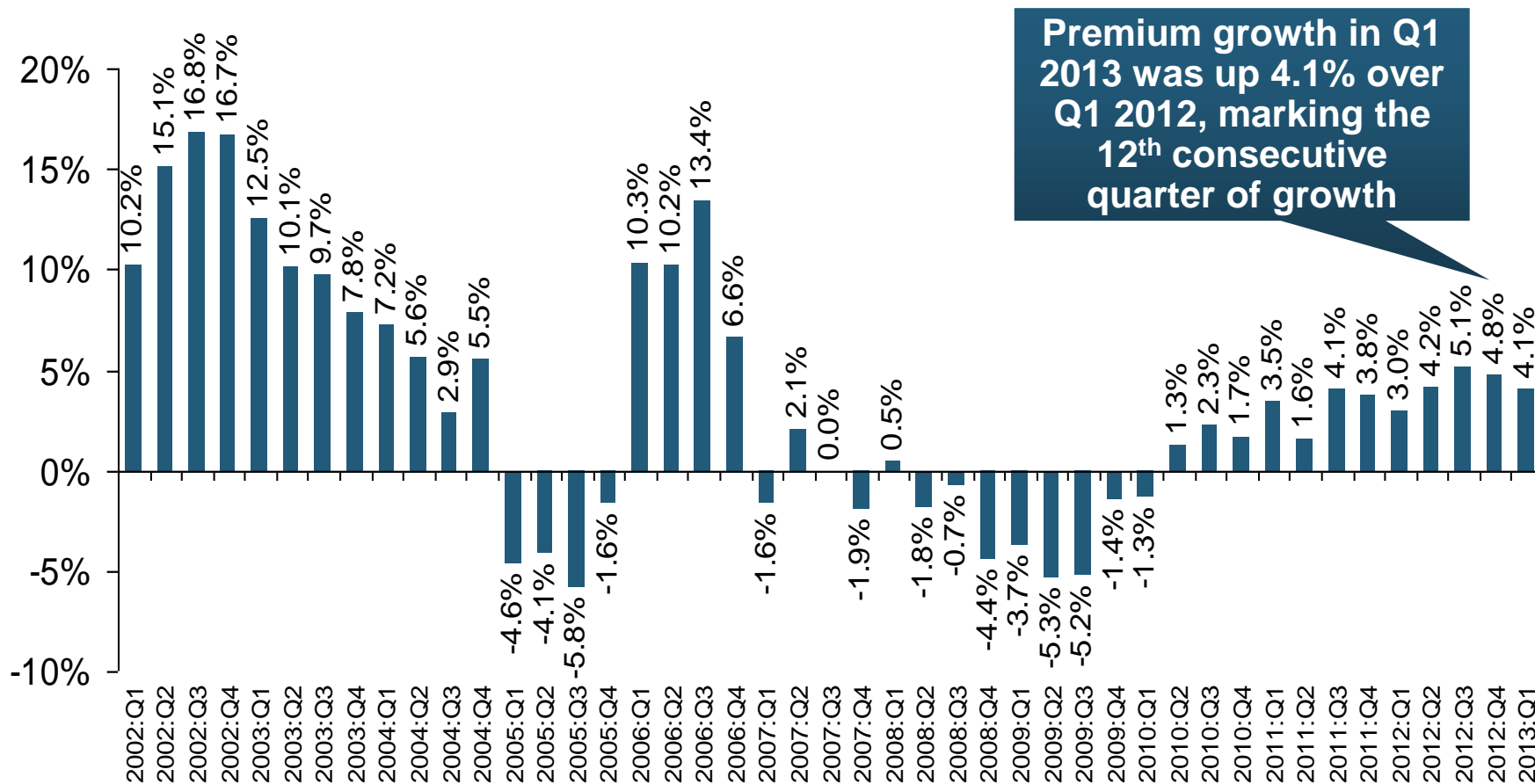
(Percent)



Shaded areas denote “hard market” periods

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

# P/C Net Premiums Written: % Change, Quarter vs. Year-Prior Quarter

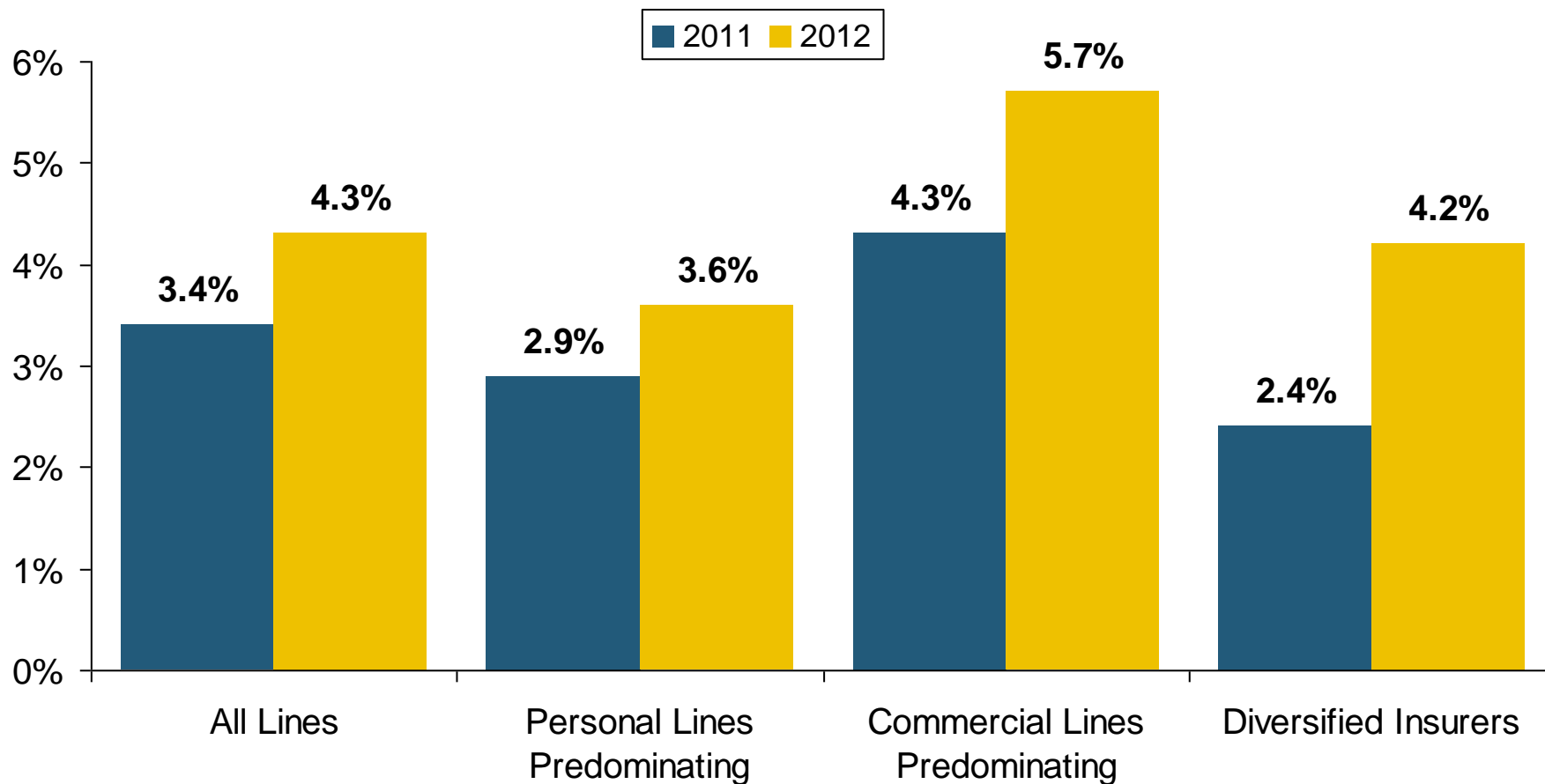


Premium growth in Q1 2013 was up 4.1% over Q1 2012, marking the 12<sup>th</sup> consecutive quarter of growth

**Sustained Growth in Written Premiums (vs. the same quarter, prior year) Will Continue through 2013**

# Growth in Net Written Premium by Segment, 2012 vs. 2011\*

(Percent)

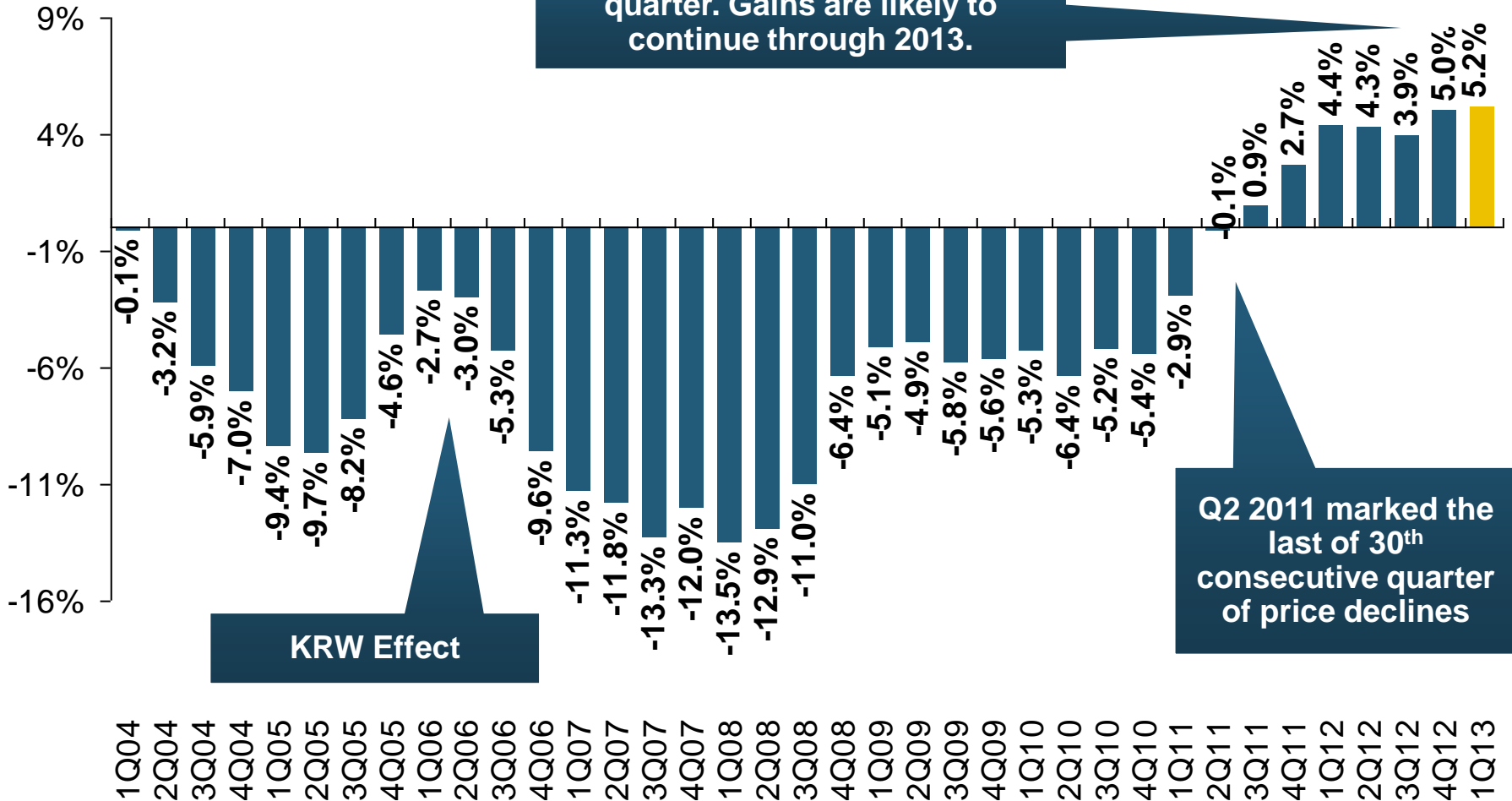


\*Excludes mortgage and financial guaranty insurers.

Source: ISO/PCI; Insurance Information Institute

# Average Commercial Rate Change, All Lines, (1Q:2004–1Q:2013)

(Percent)

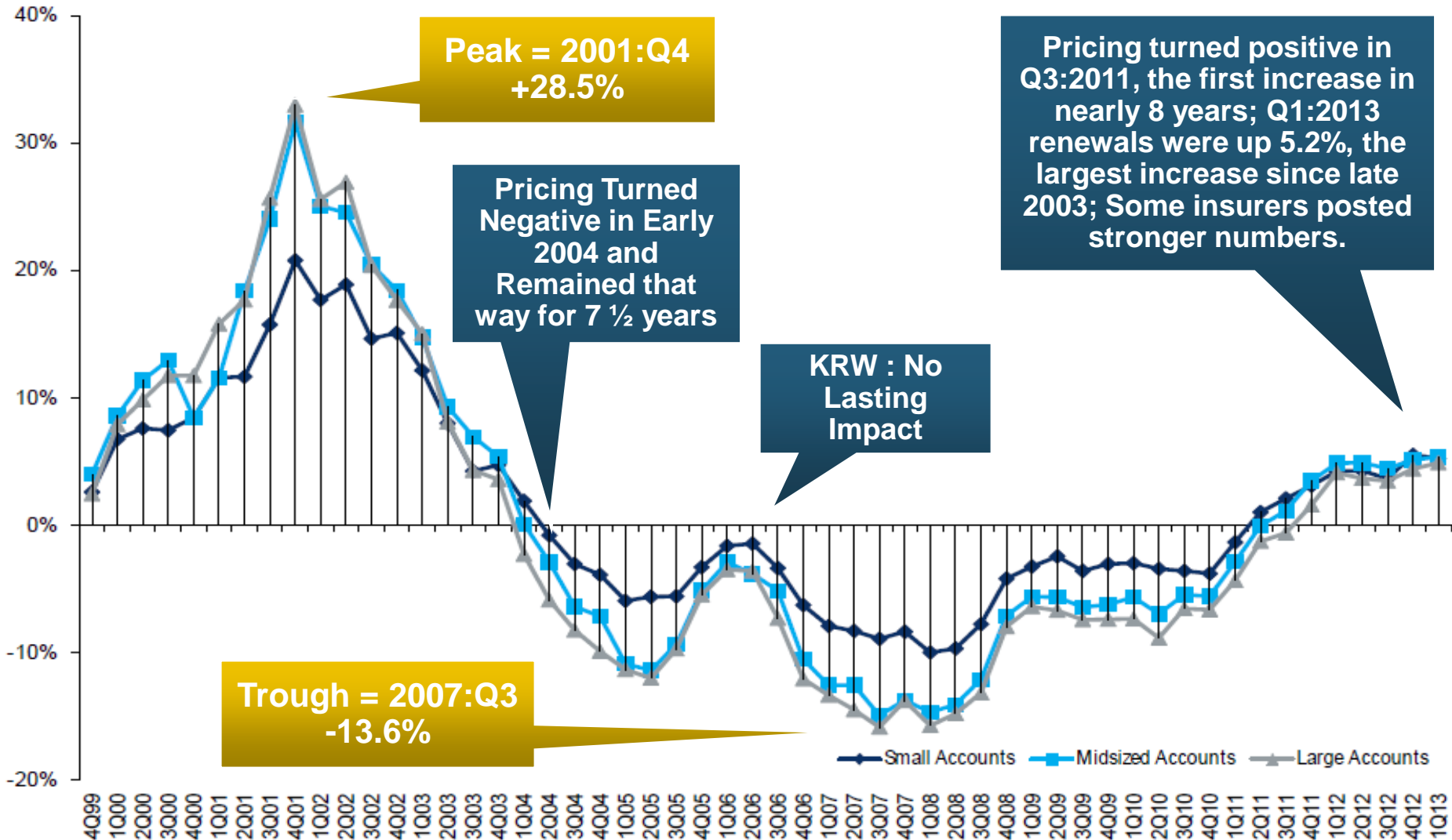


Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.  
 Source: Council of Insurance Agents & Brokers; Insurance Information Institute



# Change in Commercial Rate Renewals, by Account Size: 1999:Q4 to 2013:Q1

Percentage Change (%)

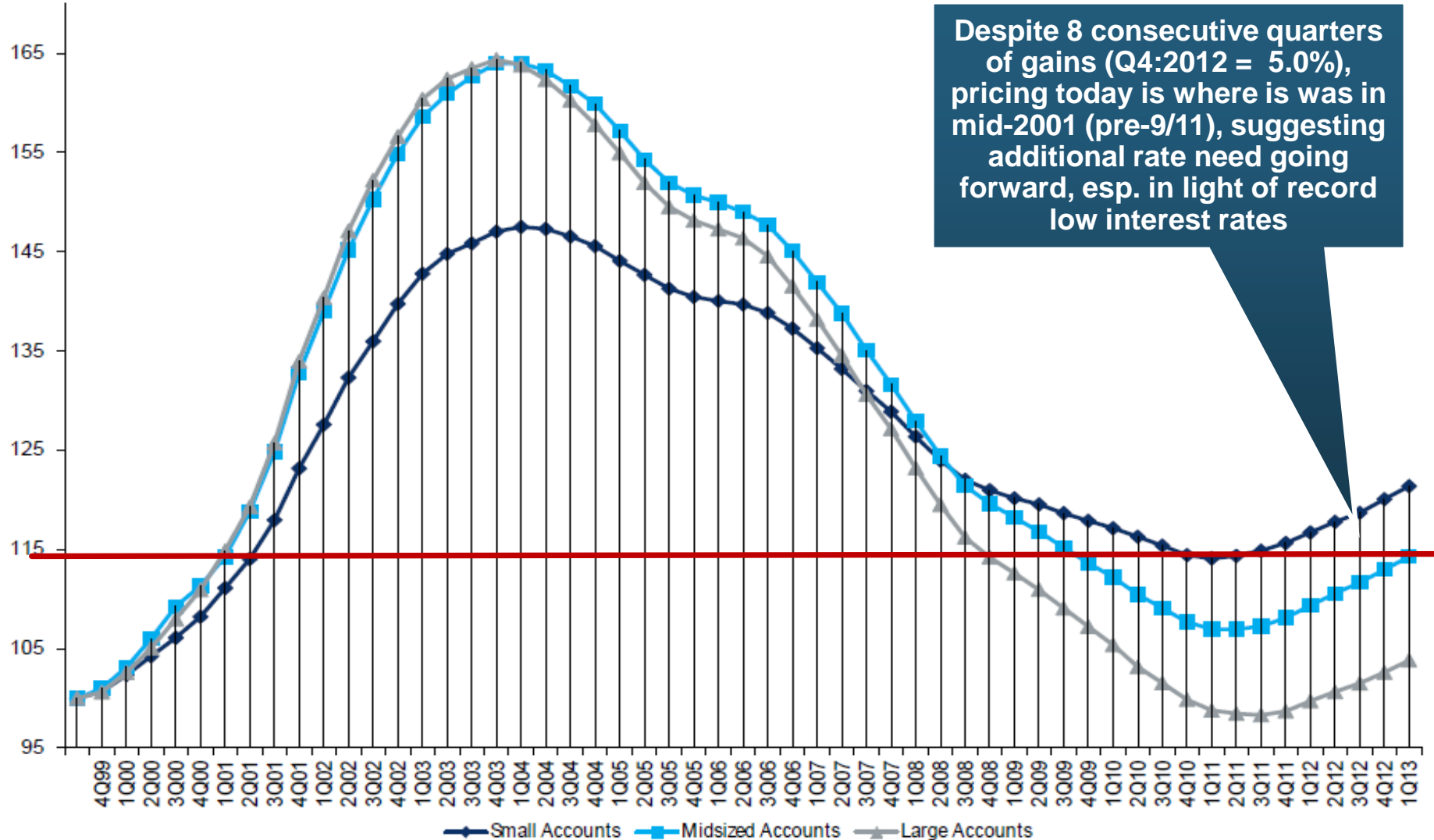


Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.

Source: Council of Insurance Agents and Brokers; Barclay's Capital; Insurance Information Institute.

# Cumulative Qtrly. Commercial Rate Changes, by Account Size: 1999:Q4 to 2013:Q1

1999:Q4 = 100

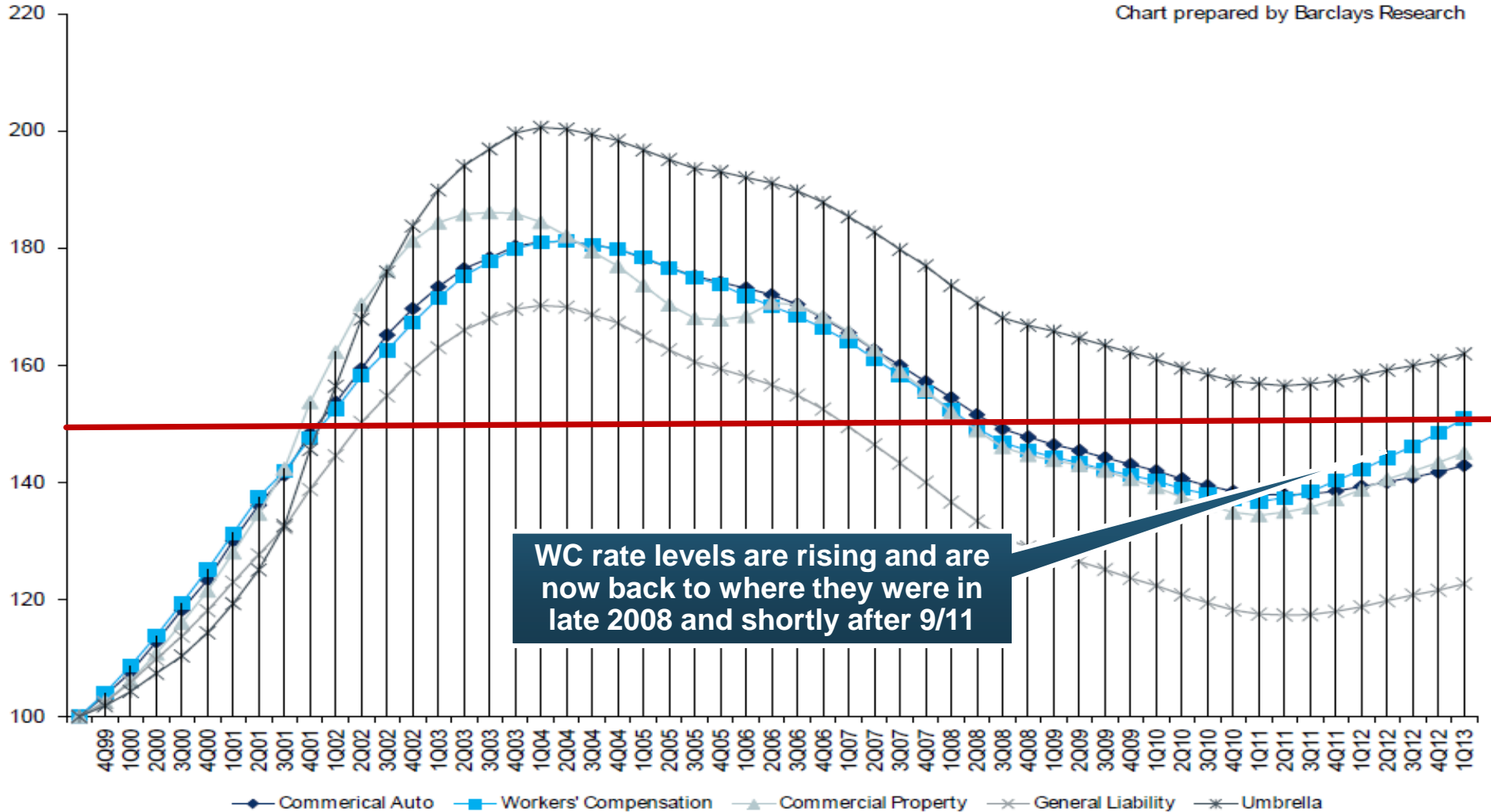


Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially. Source: Council of Insurance Agents and Brokers; Barclay's Capital; Insurance Information Institute.

# Cumulative Qtrly. Commercial Rate Changes, by Line: 1999:Q4 to 2013:Q1

1999:Q4 = 100

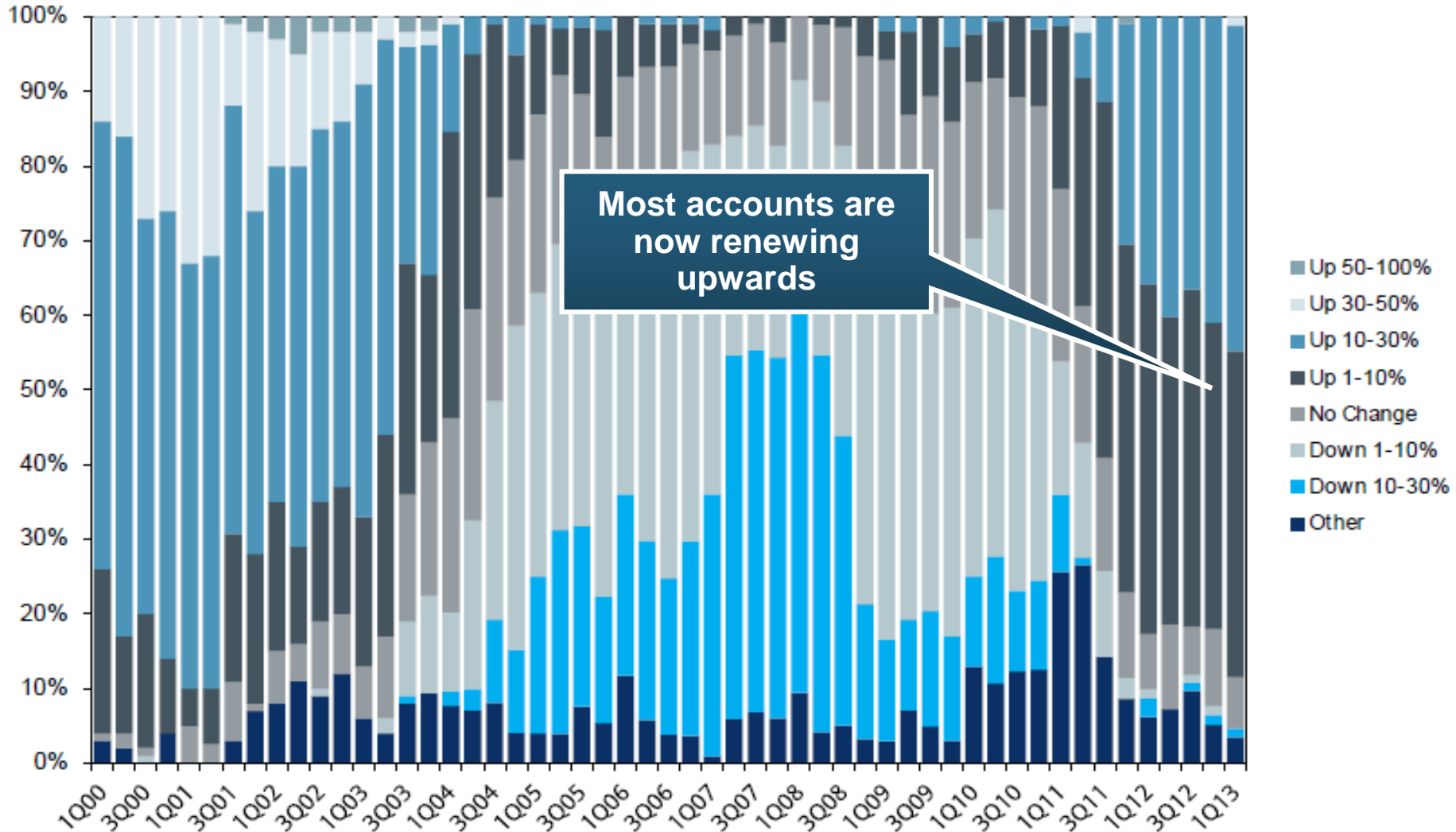
Chart prepared by Barclays Research



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.

# Workers Comp. Quarterly Rate Changes, by Line: 2000:Q1 to 2013:Q1

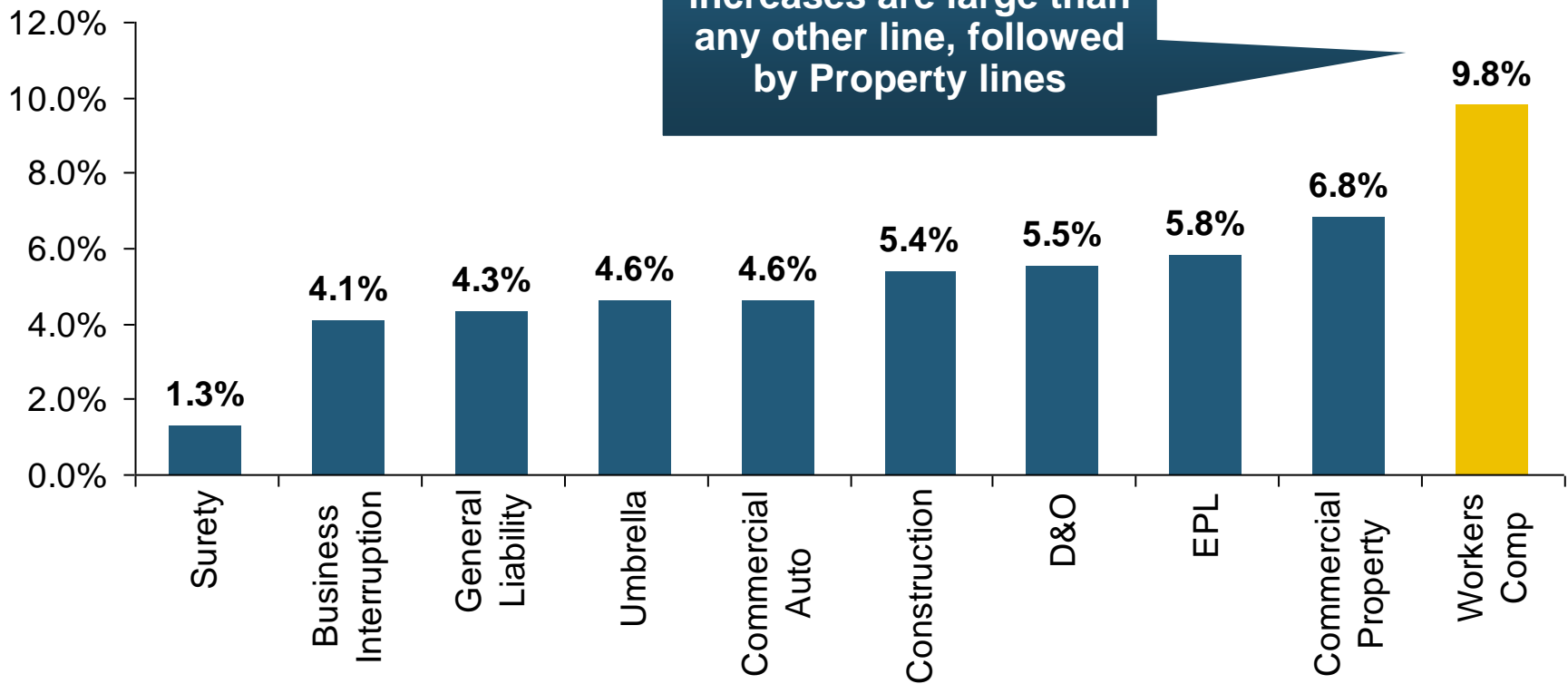
1999:Q4 = 100



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

# Change in Commercial Rate Renewals, by Line: 2013:Q1

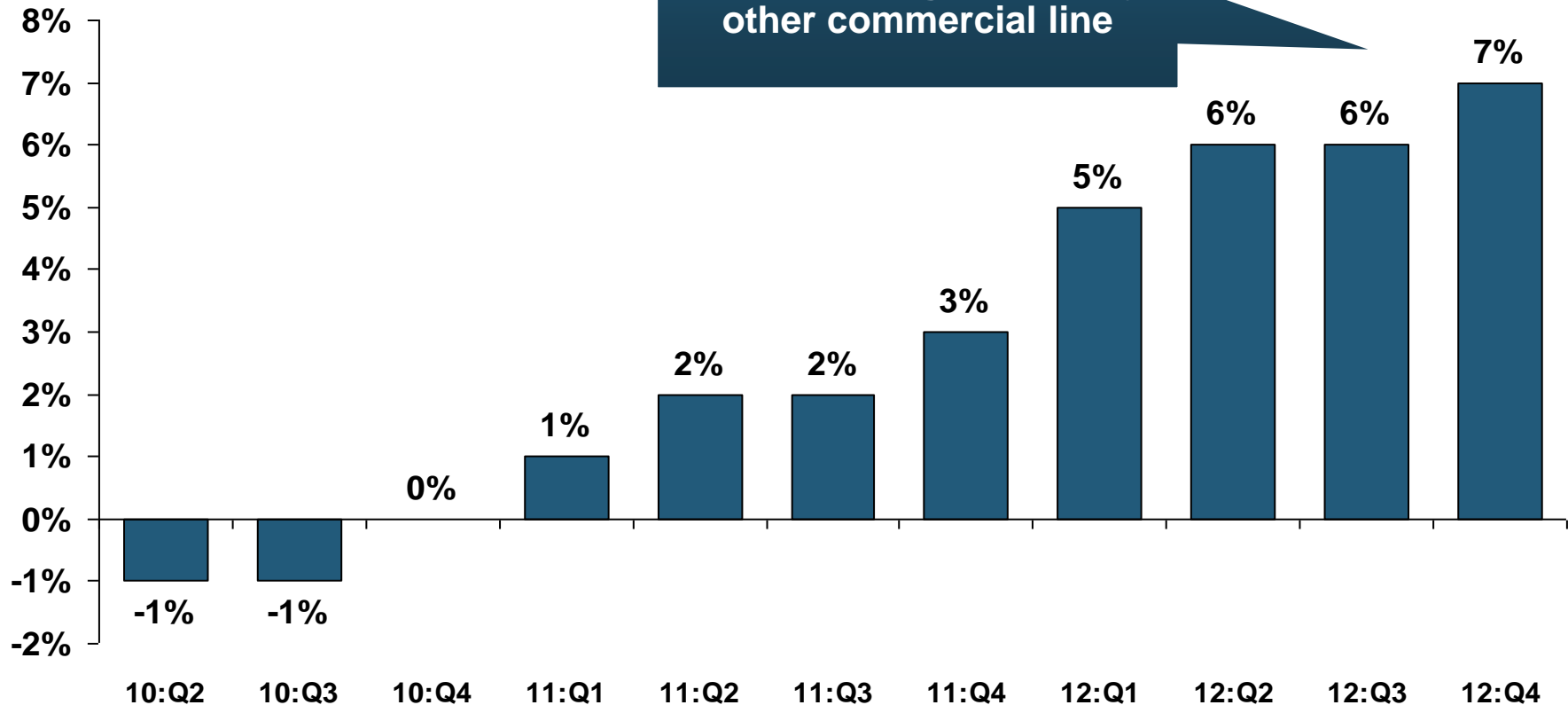
## Percentage Change (%)



**Major Commercial Lines Renewed Uniformly Upward in Q1:2013 for the 8th Consecutive Quarter; Property Lines & Workers Comp Leading the Way; Cat Losses and Low Interest Rates Provide Momentum Going Forward**

# CLIPS: Change in Written Price Level: All Lines, 2010:Q2 – 2012:Q4

(Percent  
Change)

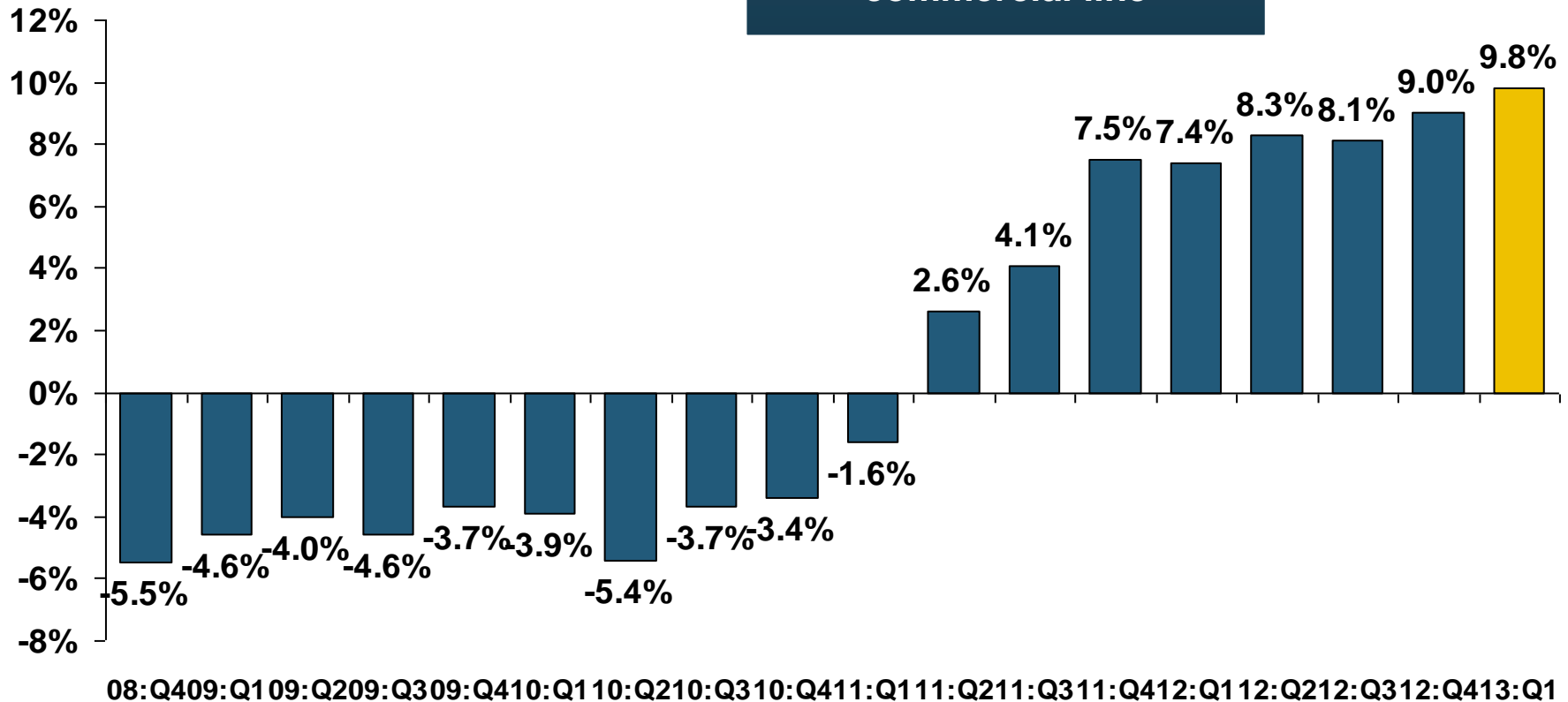


Note: Towers Watson data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.

# Workers Comp Rate Changes, 2008:Q4 – 2013:Q1

(Percent Change)

WC rate changes have been positive for 7 consecutive quarters, longer than any other commercial line



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; Information Institute.

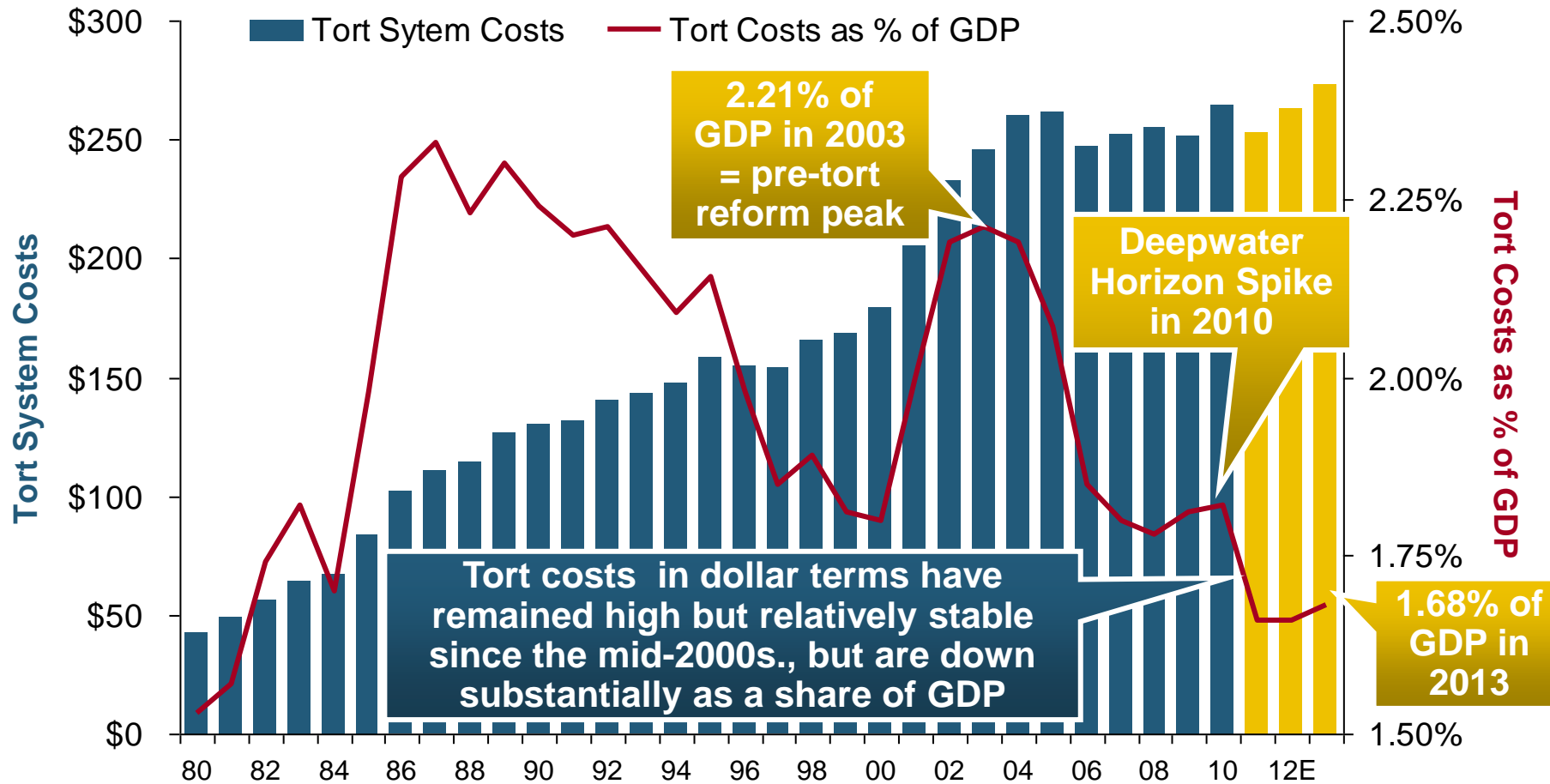
# Shifting Legal Liability & Tort Environment

## Is the Tort Pendulum Swinging Against Insurers?



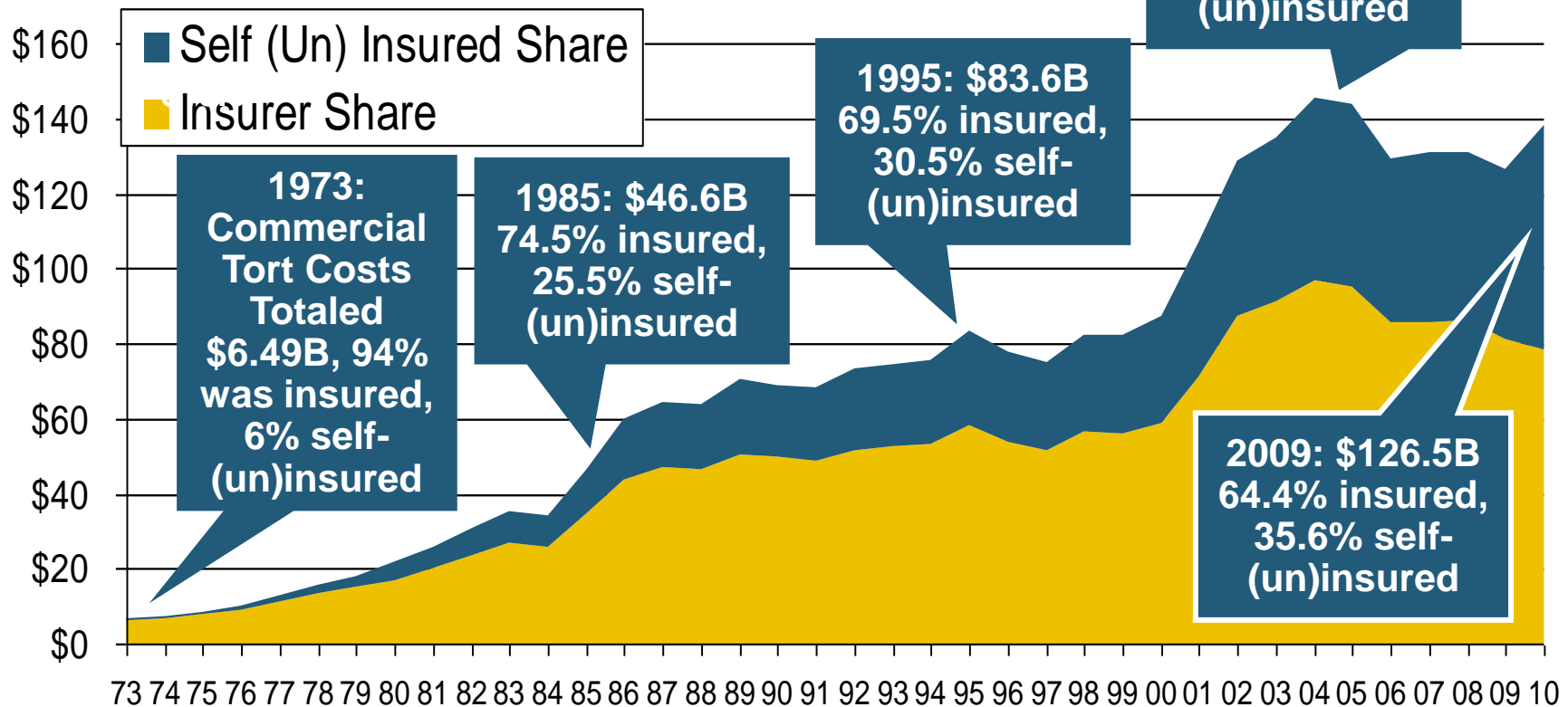
# Over the Last Three Decades, Total Tort Costs as a % of GDP Appear Somewhat Cyclical, 1980-2013E

(\$ Billions)



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

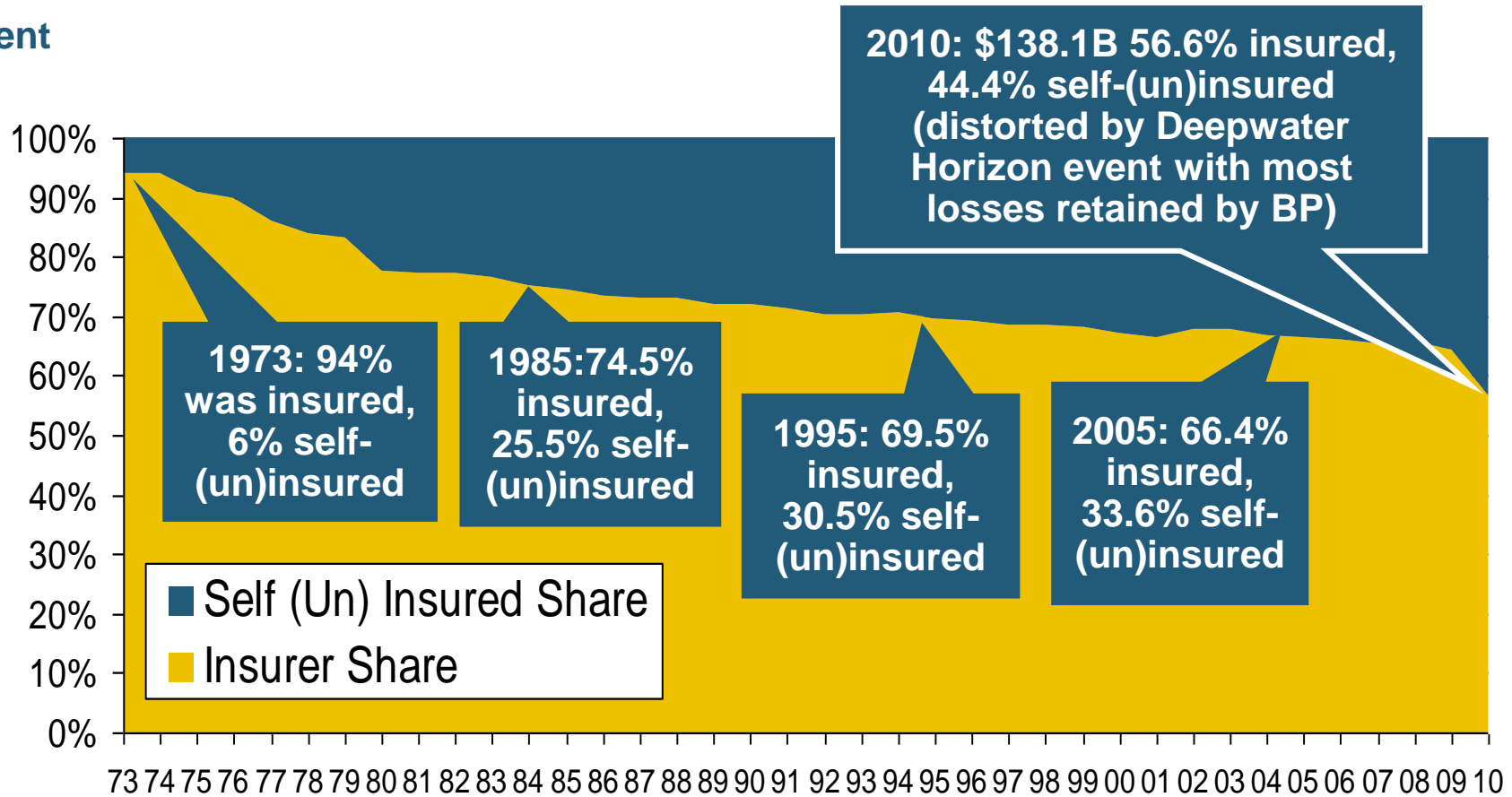
Billions of Dollars



**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

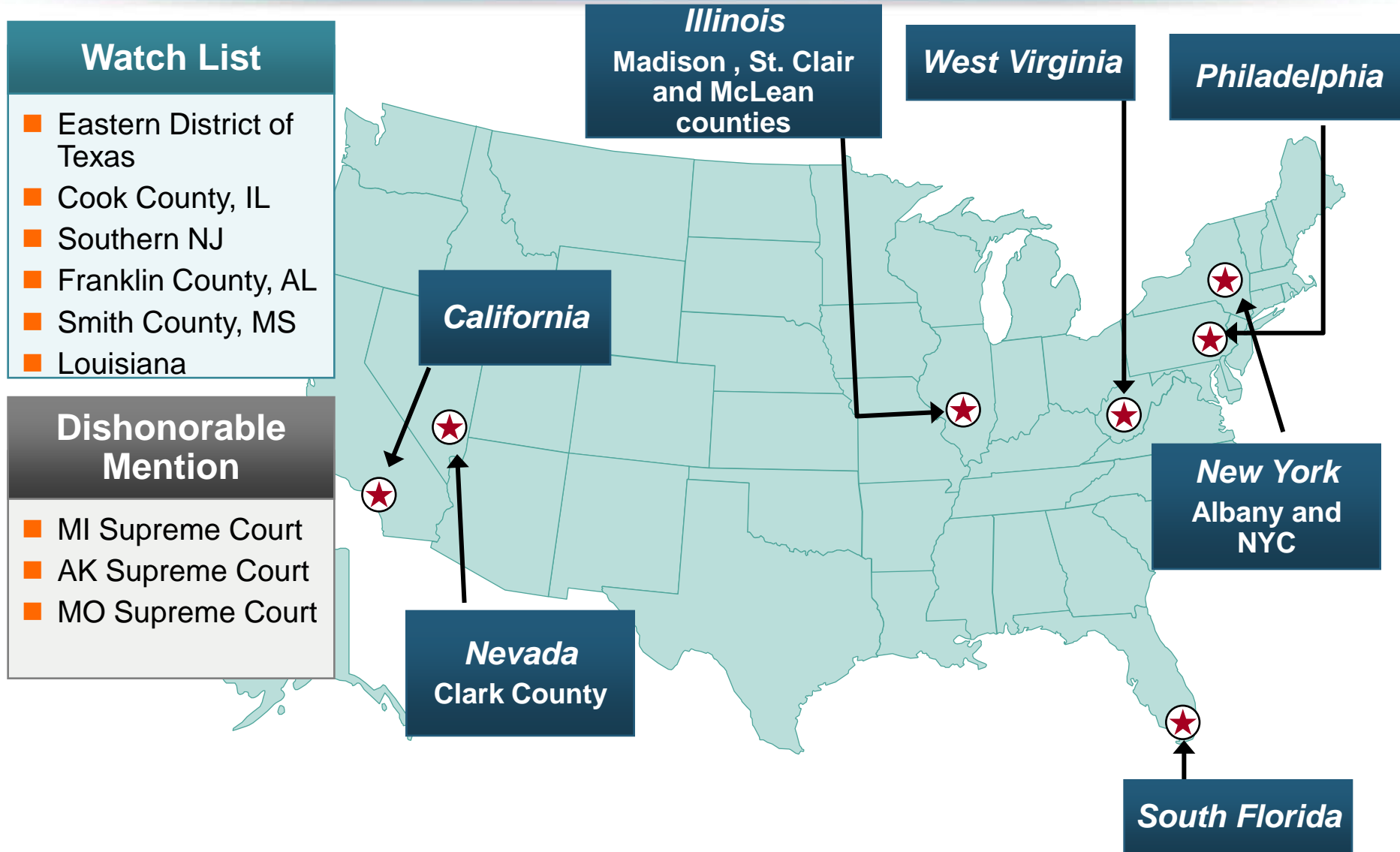
### Newly Notorious

- Oklahoma

### Rising Above

- Arkansas

# The Nation's Judicial Hellholes: 2011



# CYBER RISK

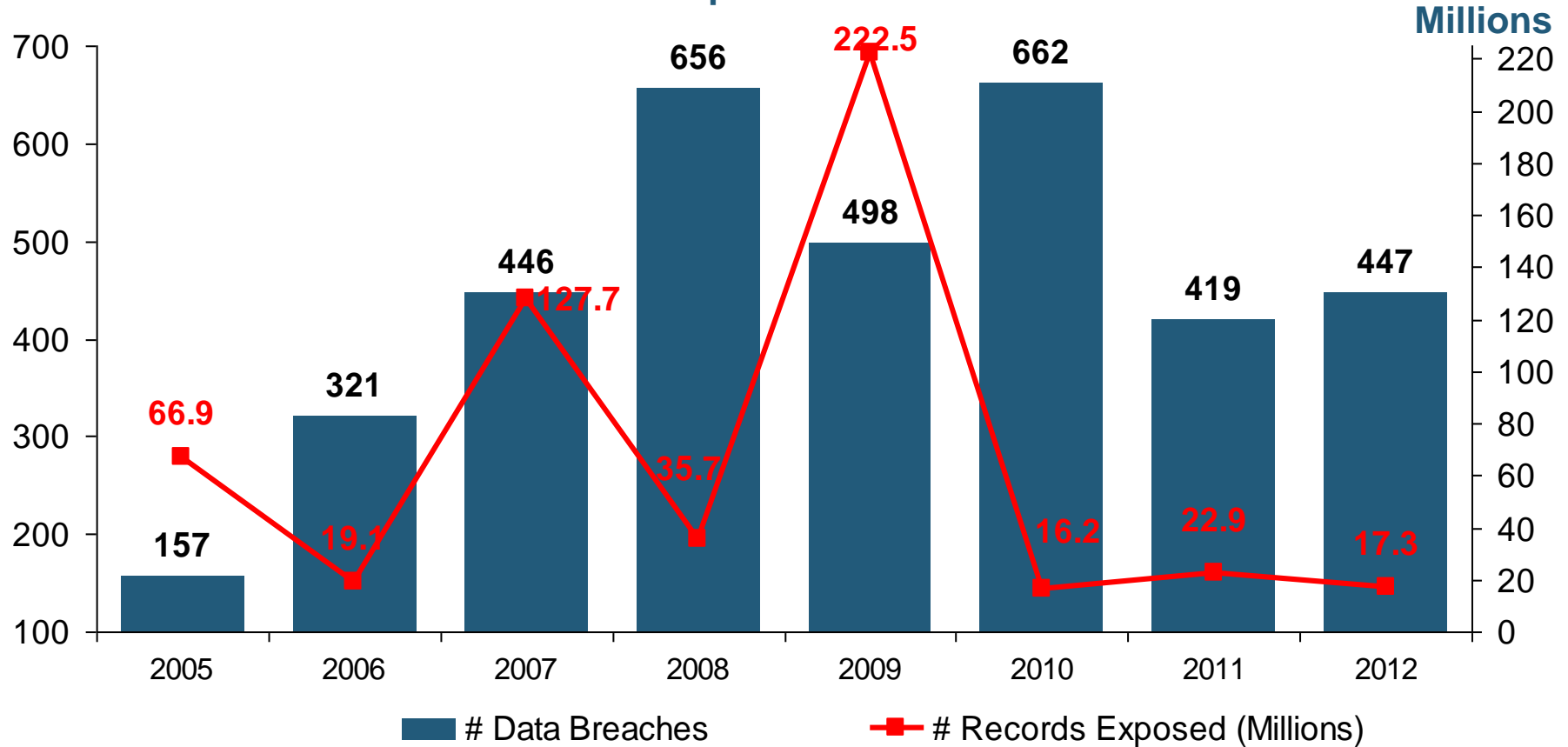
**Cyber Risk is a Rapidly Emerging  
Exposure for Businesses Large  
and Small in Every Industry**

**NEW III White Paper:**

[http://www.iii.org/assets/docs/pdf/paper\\_CyberRisk\\_2013.pdf](http://www.iii.org/assets/docs/pdf/paper_CyberRisk_2013.pdf)

# Data Breaches 2005-2013, By Number of Breaches and Records Exposed

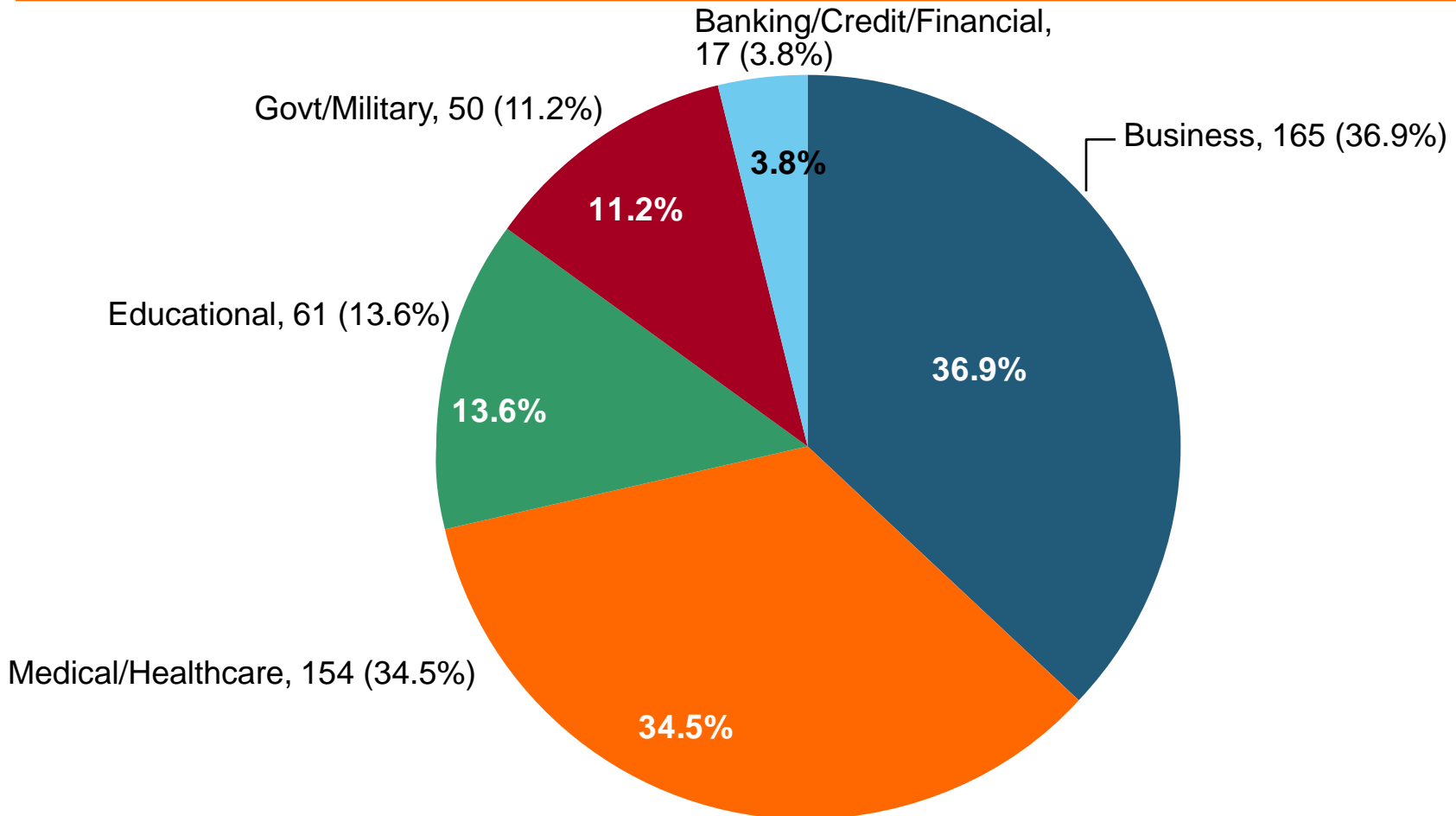
# Data Breaches/Millions of Records Exposed



The total number of data breaches and number of records exposed fluctuates from year to year and over time.

# 2012 Data Breaches By Business Category, By Number of Breaches

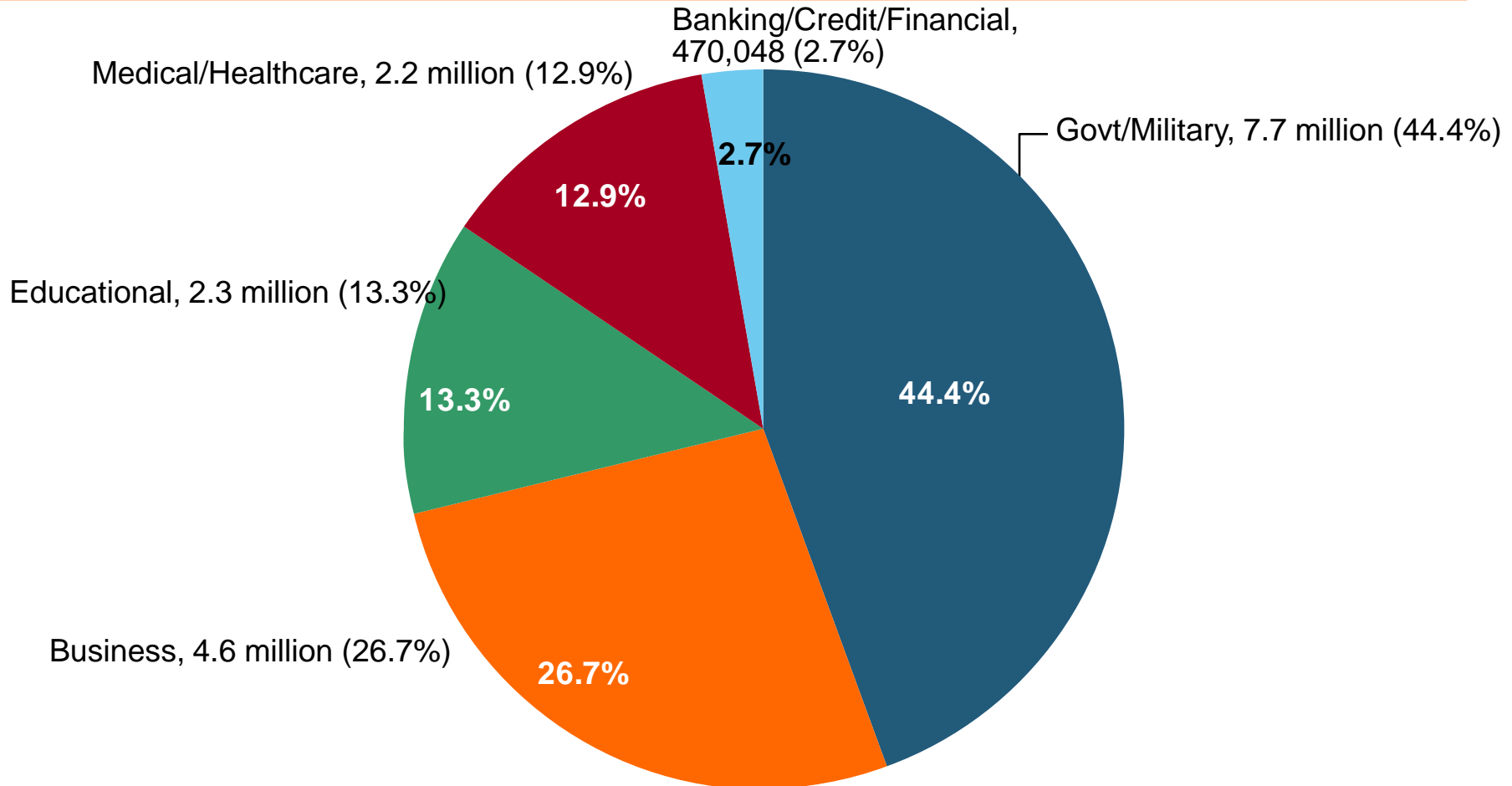
The majority of the 447 data breaches in 2012 affected business and medical/healthcare organizations, according to the Identity Theft Resource Center.





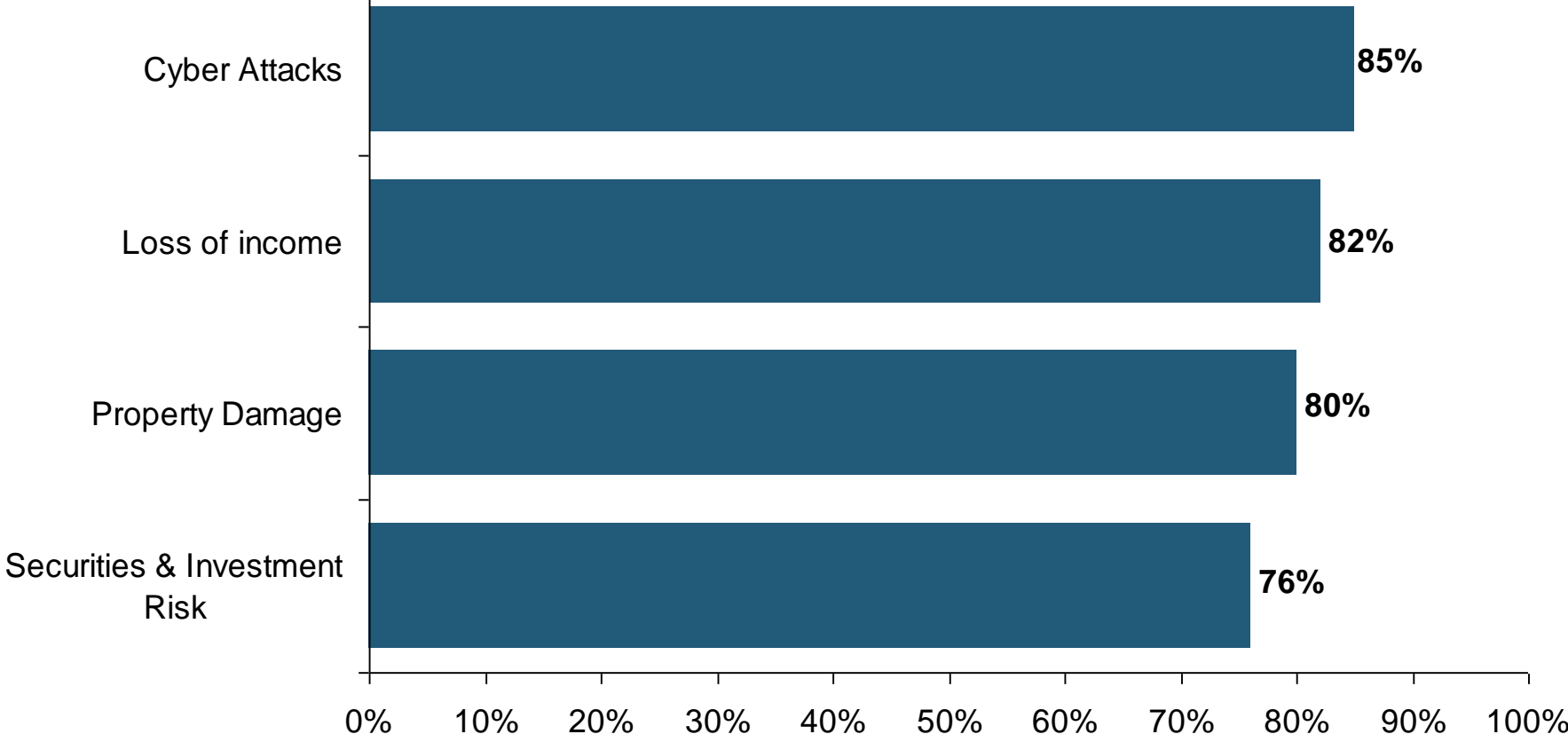
# 2012 Data Breaches By Category, By Number of Records Exposed

Government/Military and Business organizations accounted for the majority of records exposed by data breaches during 2012.



# AIG Survey: Cyber Attacks Top Concern Among Execs

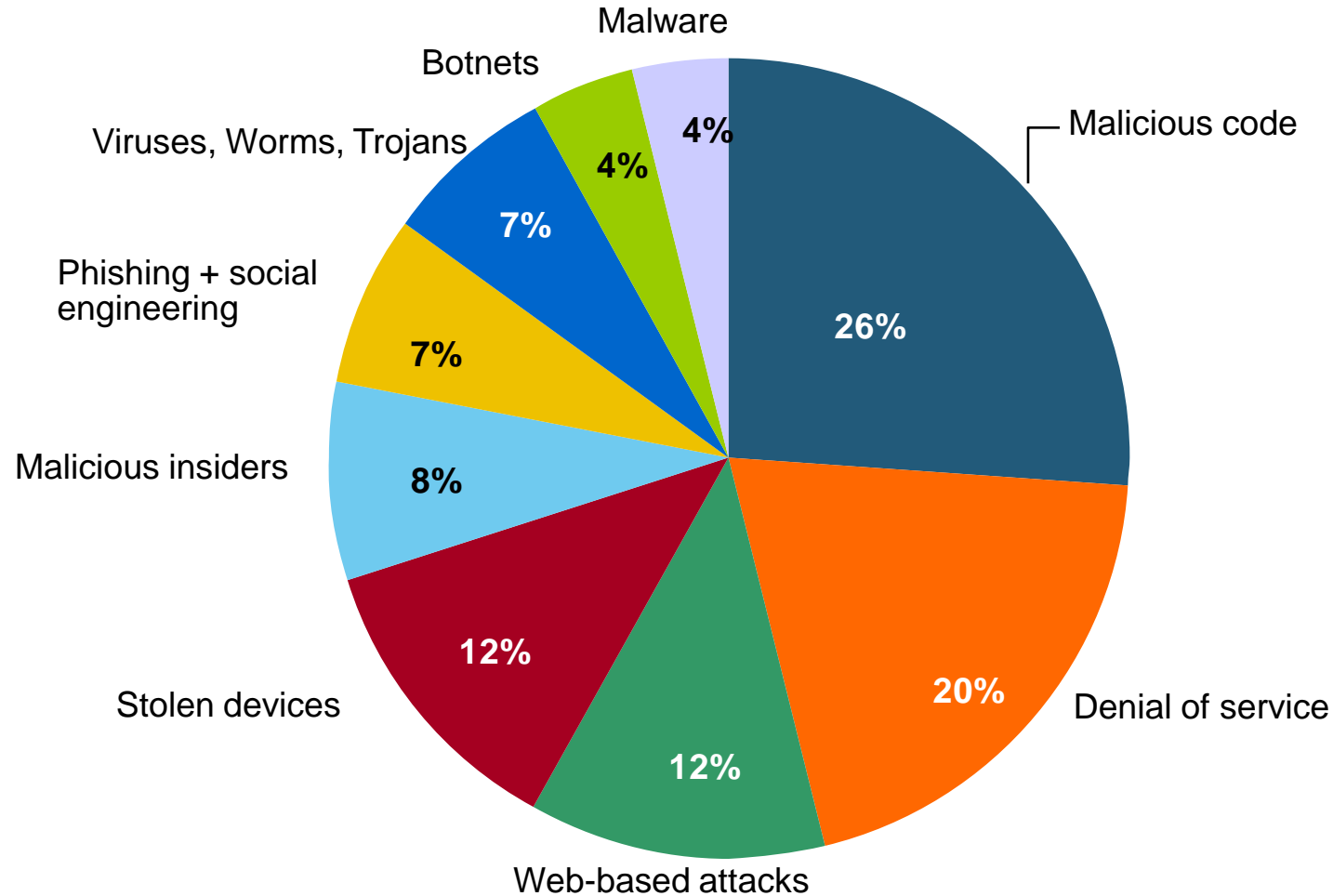
**While companies are focused on managing a variety of business risks, cyber attacks are a top concern. Some 85% of 258 executives surveyed said they were very or somewhat concerned about cyber attacks on their businesses.**



Source: Penn Schoen Berland on behalf of American International Group.

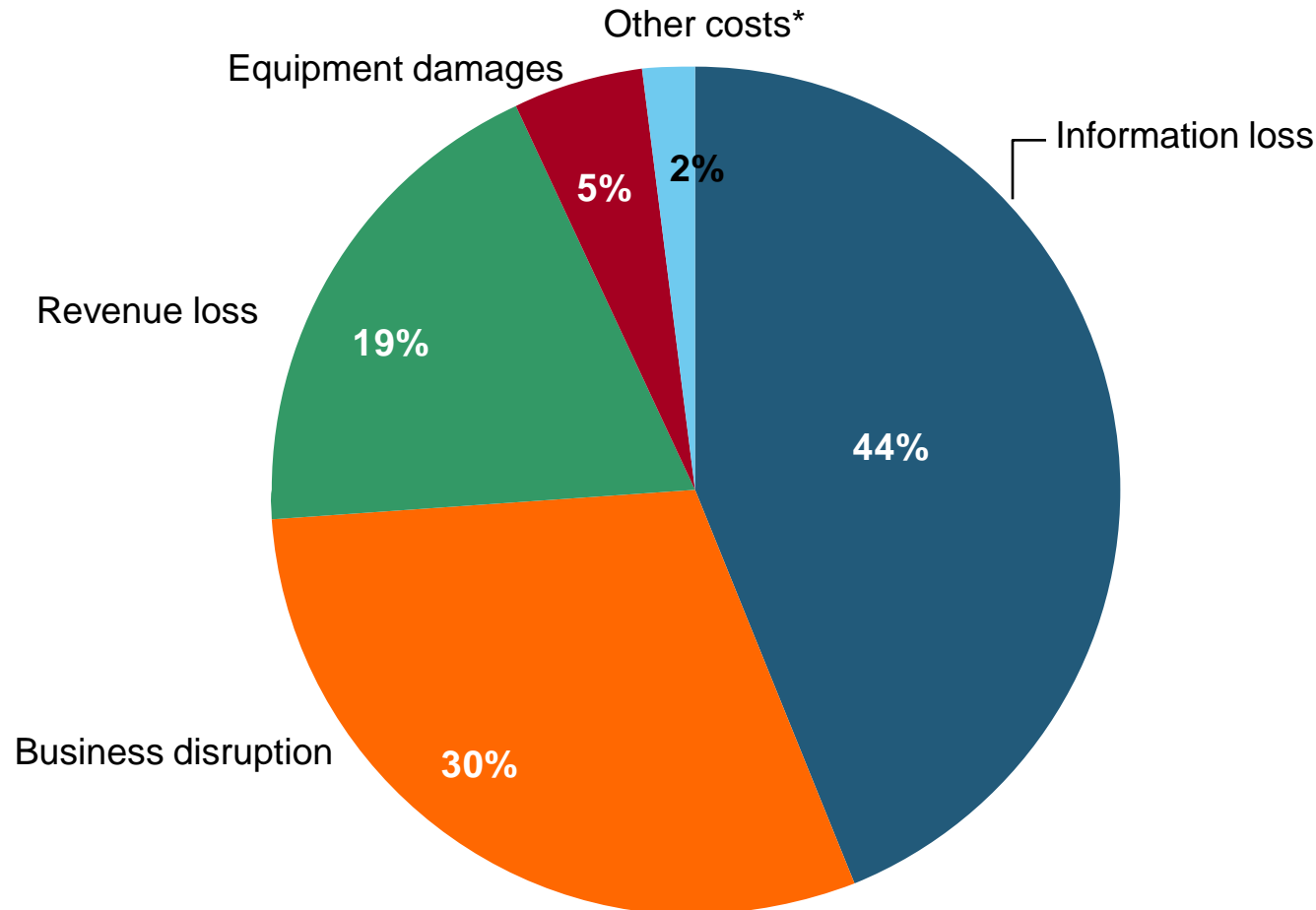
# The Most Costly Cyber Crimes, Fiscal Year 2012

Malicious code, denial of service and web-based attacks account for more than 58 percent of the total annualized cost of cyber crime experienced by 56 companies.



# External Cyber Crime Costs: Fiscal Year 2012

Information loss (44%) and business disruption or lost productivity (30%) account for the majority of external costs due to cyber crime.



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

Source: 2012 Cost of Cyber Crime: United States, Ponemon Institute.

# High Profile Data Breaches, 2012-2013

Date	Company	Description of Breach
Mar 2013*	South Korean banks, media cos	Cyber attack causes computers to crash at South Korean banks and media companies, paralyzing bank machines across the country. No immediate reports of records compromised.
July 2012	Yahoo	Security breach at Yahoo in which some 450,000 passwords lifted and posted to the Internet.
July 2012	eHarmony	Online dating site eHarmony confirms security breach in which some 1.5 million user names and passwords compromised.
July 2012	LinkedIn	Social networking site LinkedIn reportedly targeted in hacker attack that saw 6.5 million hashed passwords posted to the Internet.
April 2012	Utah Dept of Technology Services	Utah Department of Technology notifies of a March 30 breach of a server containing personal data including social security numbers for about 780,000 Medicaid patient claims. Breach traced to Eastern Europe hackers.
Mar 2012	Global Payments	Credit card processor Global Payments confirms hacker attack has compromised the payment card numbers of around 1.5 million cardholders.
Mar 2012	CA Dept of Child Support Services	Officials announce that four computer storage devices containing personal information for about 800,000 adults and children in California's child support system were lost by IBM and Iron Mountain Inc.
Jan 2012	Zappos	Online shoe retailer Zappos announces that information, such as names, addresses and passwords on as many as 24 million customers illegally accessed.
Jan 2012	NY State Electric + Gas Co	Security breach at NYSEG that allowed unauthorized access to NYSEG customer data, containing social security numbers, dates of birth and bank account numbers, exposing 1.8 million records.

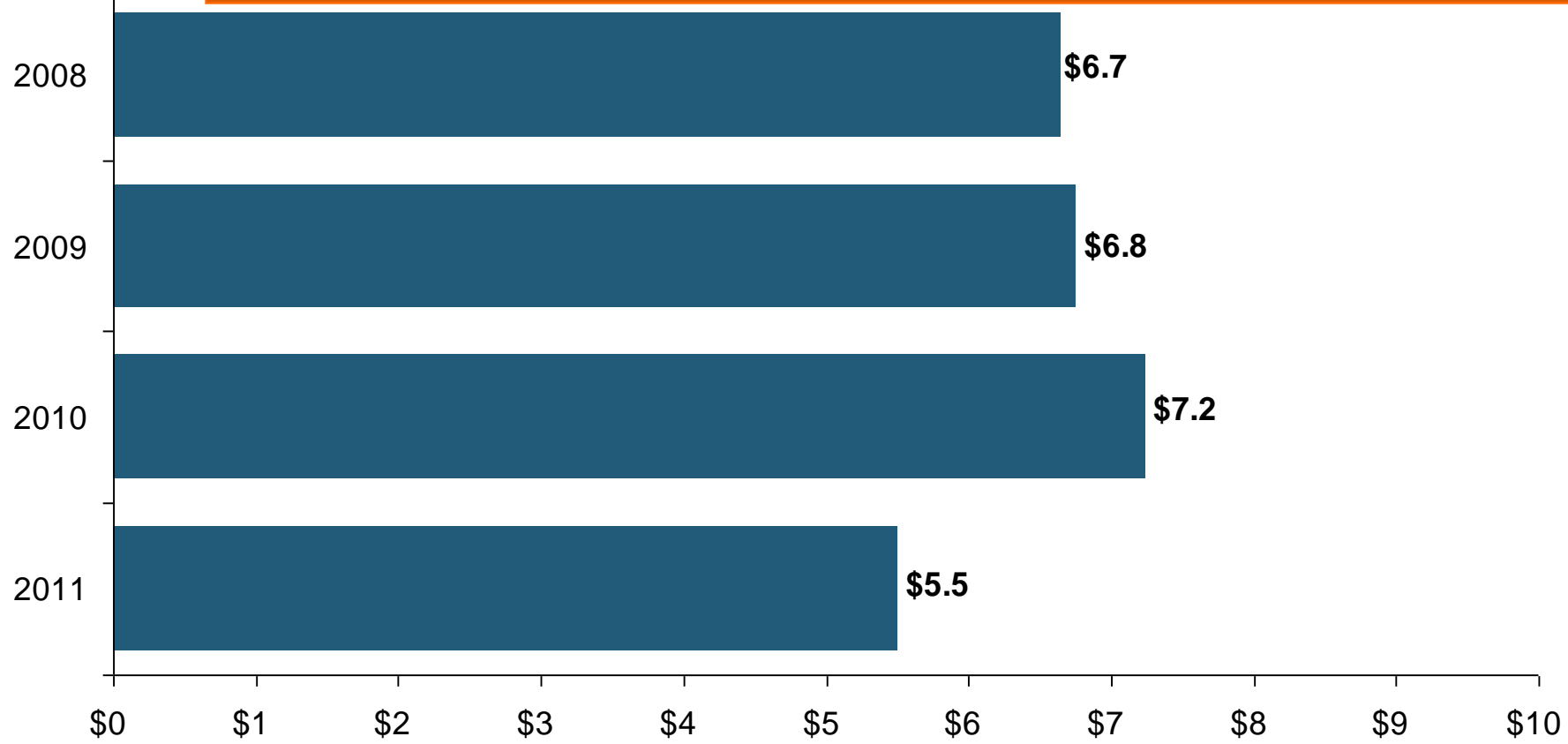
\*March 2013 attack is not part of ITRC research.

# Average Organizational Cost of a Data Breach, 2008-2011\* (\$ Millions)



The average organizational cost of a data breach in 2011 was \$5.5 million, down 24% from \$7.2 million in 2010. Companies have improved steps taken in both preparing for and responding to a data breach.

(\$ Millions)

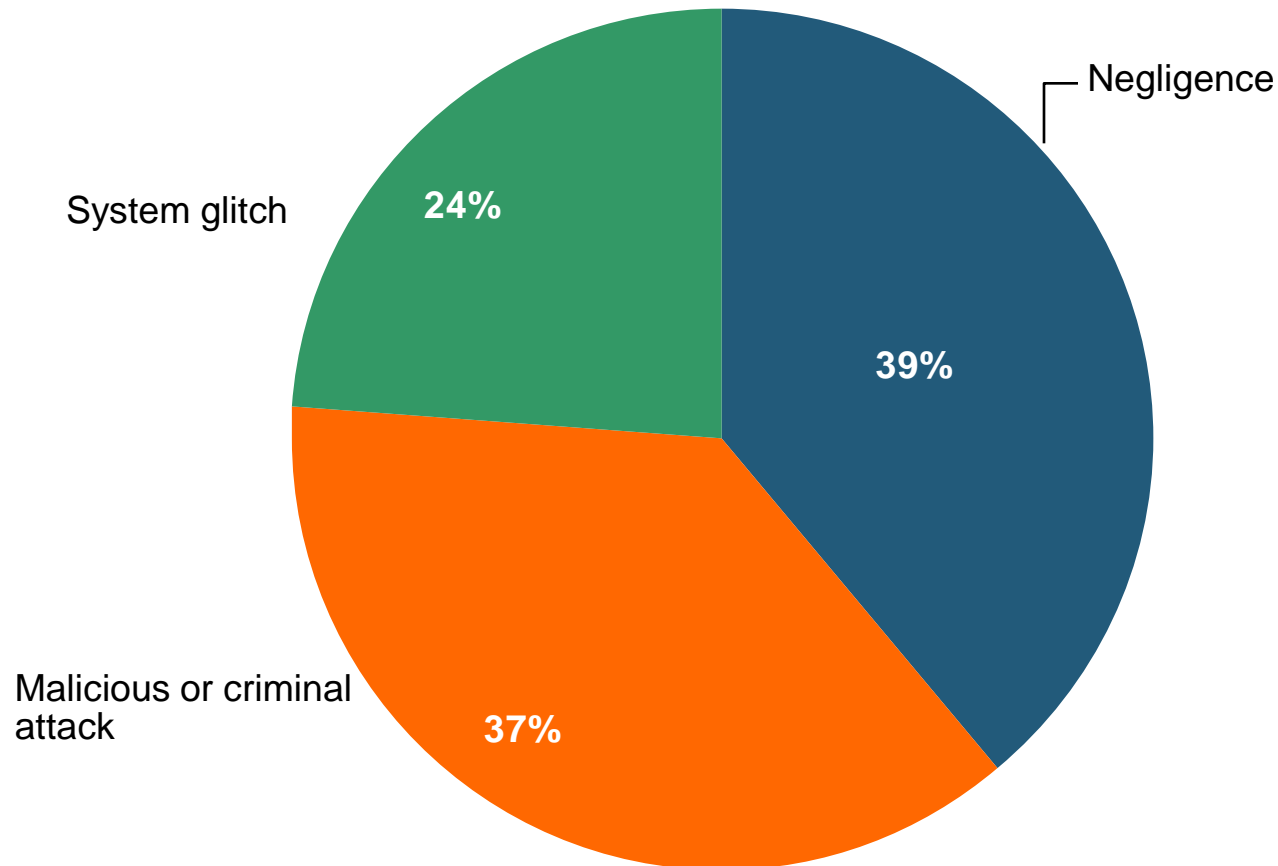


\*Findings of this benchmark study pertain to the actual data breach experiences of 49 U.S. companies from 14 different industry sectors, all of which participated in the 2011 study. Total breach costs include: lost business resulting from diminished trust or confidence of customers ;costs related to detection, escalation, and notification of the breach; and ex-post response activities, such as credit report monitoring.

Source: 2011 Annual Study: U.S. Cost of a Data Breach, the Ponemon Institute.

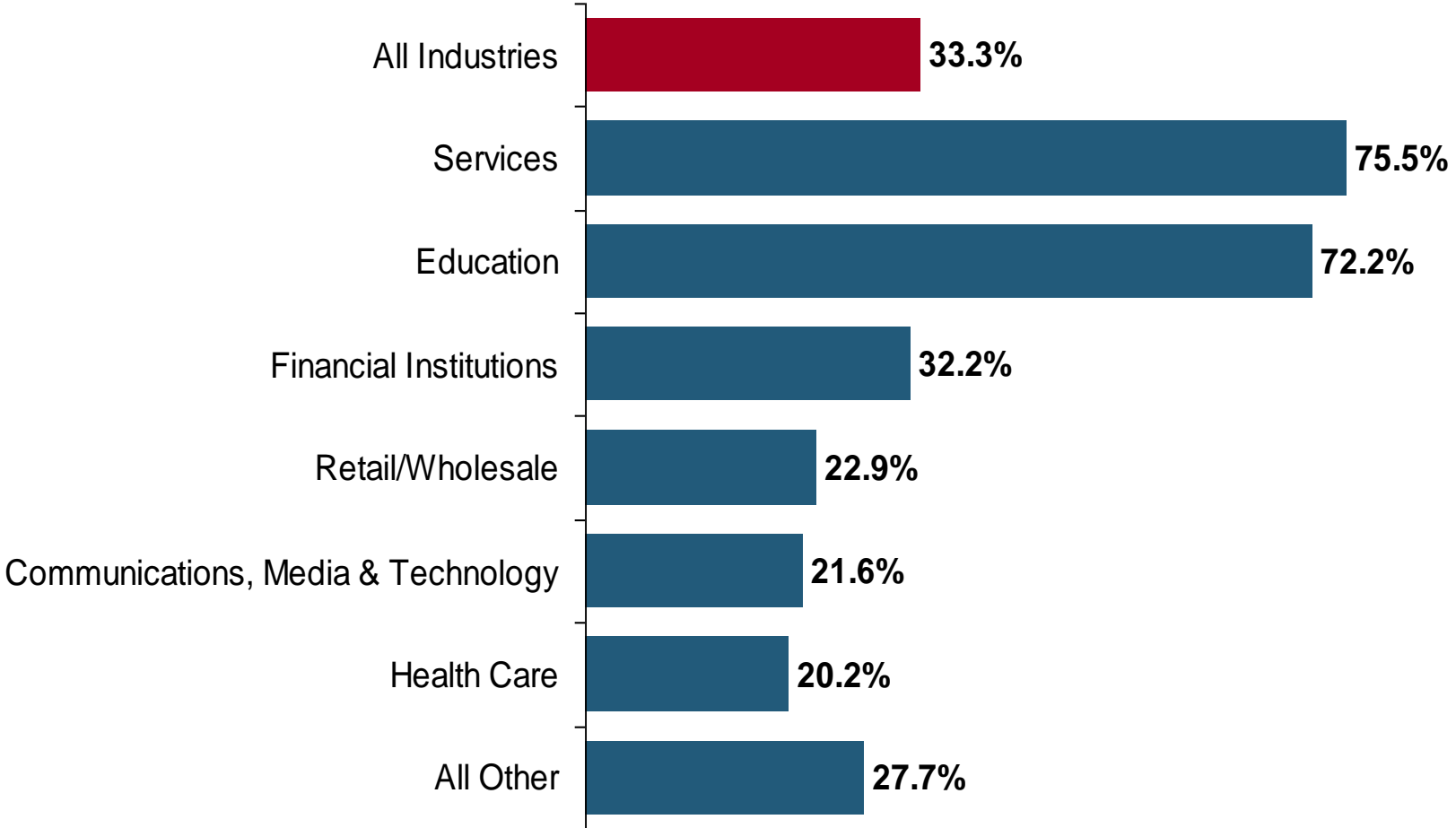
# Main Causes of Data Breach

Negligent employees and malicious attacks are most often the cause of the data breach. Some 39 percent of incidents involve a negligent employee or contractor, while 37 percent concern a malicious or criminal attack.



# Marsh: Increase in Purchase of Cyber Insurance Among U.S. Companies, 2012

Interest in cyber insurance continues to climb. The number of companies purchasing cyber insurance increased 33 percent from 2011 to 2012.



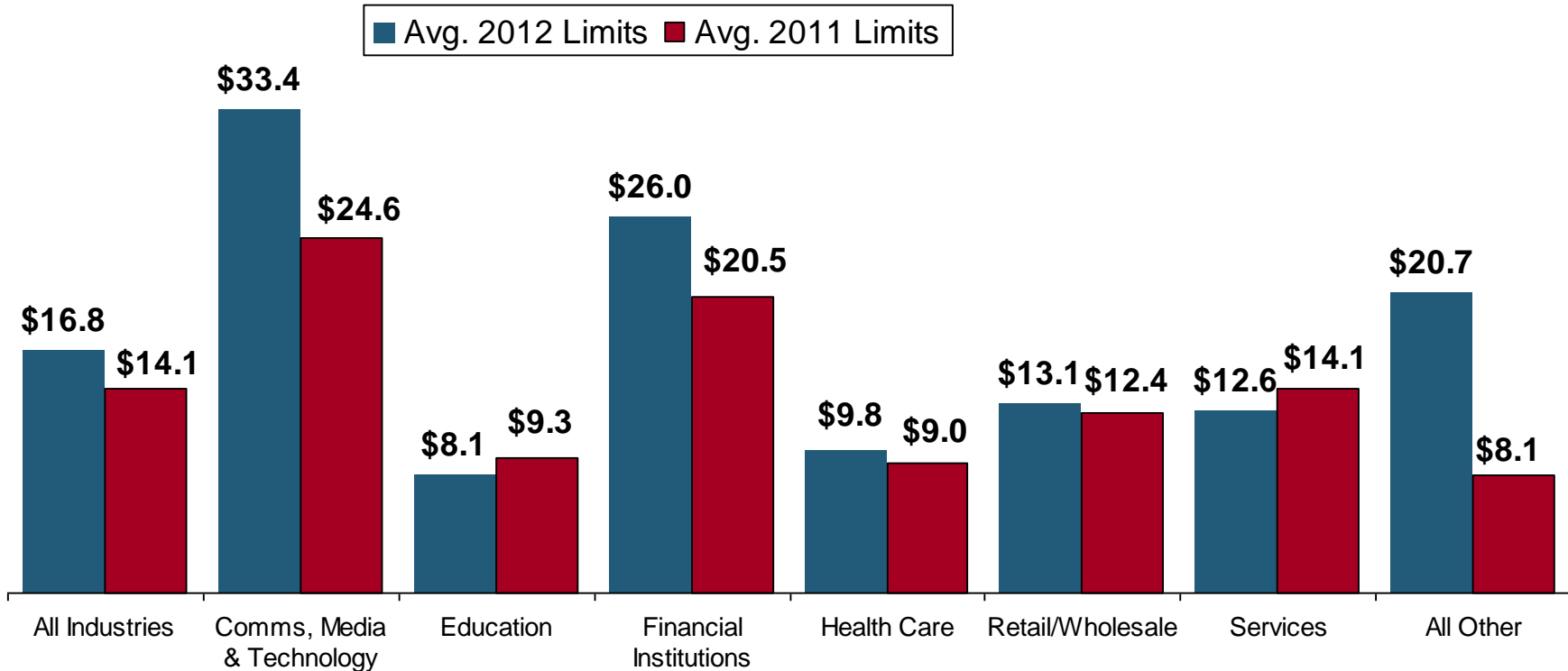
Source: Marsh Global Analytics, Marsh Risk Management Research Briefing, March 2013



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

Cyber insurance limits purchased in 2012 averaged \$16.8 million across all industries, an increase of nearly 20% over 2011.

(\$ Millions)

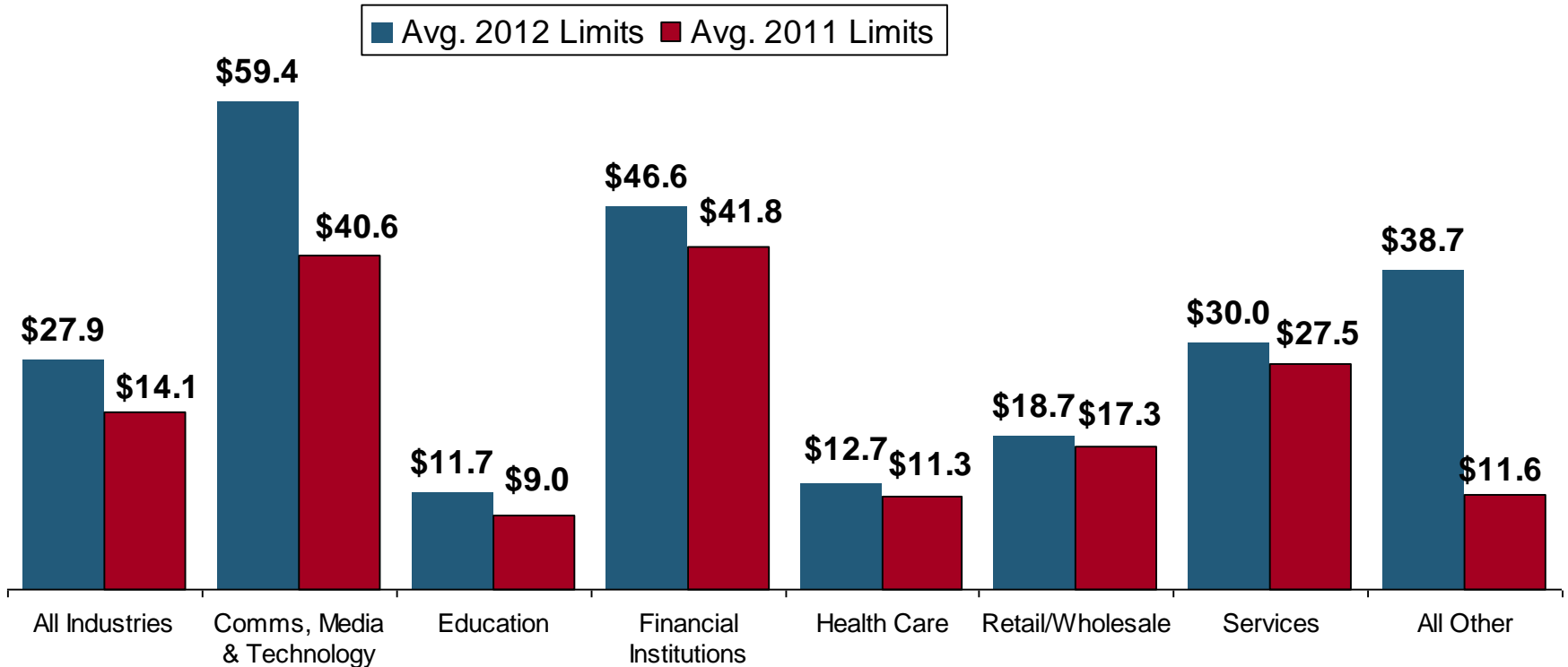


Source: Marsh Global Analytics, Marsh Risk Management Research Briefing, March 2013

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

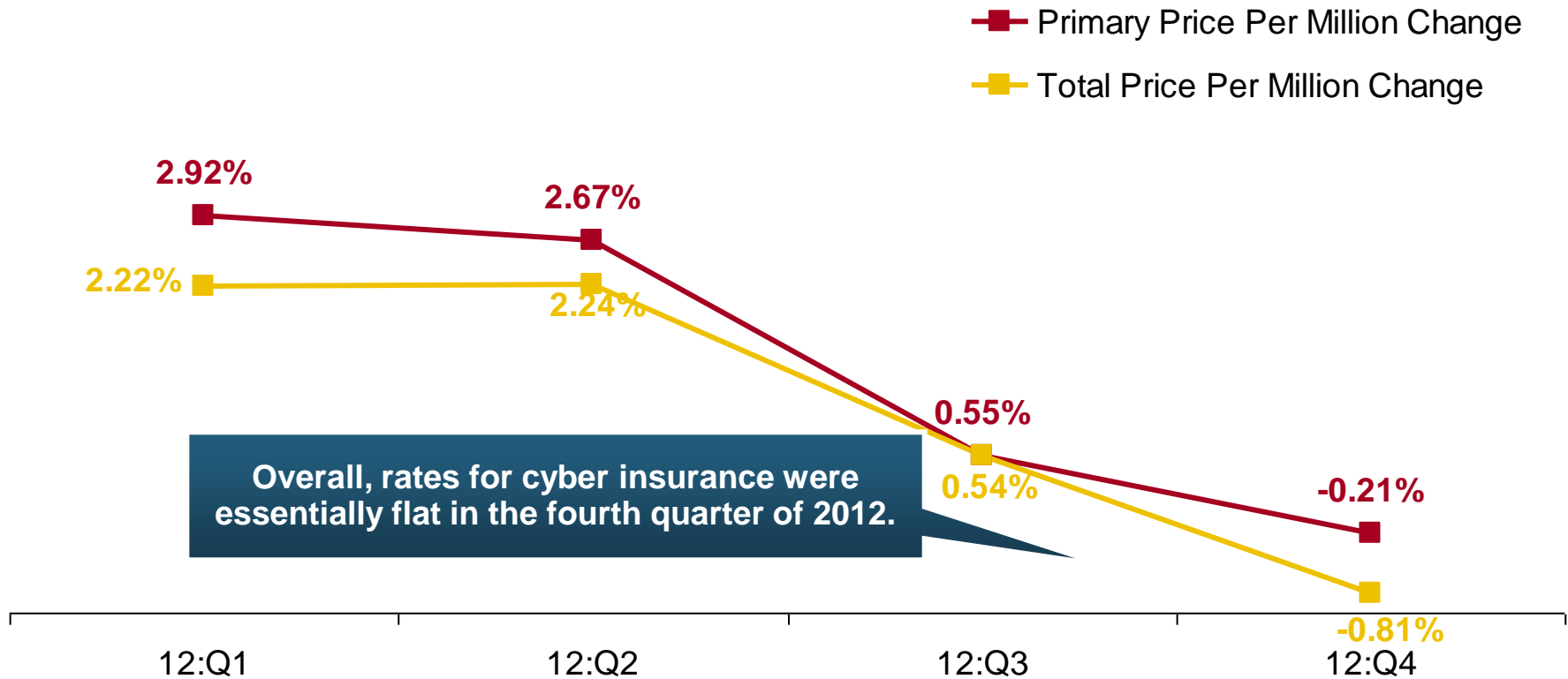
Among larger companies, average cyber insurance limits purchased in 2012 increased nearly 30% over 2011.

(\$ Millions)



Source: Marsh Global Analytics, Marsh Risk Management Research Briefing, March 2013

# Cyber Liability: Historical Rate (price per million) Changes



Insurance Information Institute Online:

[www.iii.org](http://www.iii.org)

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