



Global Insurance & Reinsurance: *Trends, Challenges & Opportunities*

**Insurance Information Institute
April 25, 2014**

Robert P. Hartwig, Ph.D., CPCU, President & Economist
Insurance Information Institute ♦ 110 William Street ♦ New York, NY 10038
Tel: 212.346.5520 ♦ Cell: 917.453.1885 ♦ bobh@iii.org ♦ www.iii.org

- **Modest growth will continue in 2014 (~ 4.5% DPW)**
 - ◆ Exposure growth tied primarily to overall GDP growth/key sector drivers
 - ◆ Rates remain in positive territory
- **Underlying loss cost trends remain manageable**
- **Very well capitalized**
- **For primary insurers, falling reinsurance pricing and alternative capital are benefits**
- **Traditional reinsurers challenged by continued entry of new capital and accumulation of “organic” capital**
- **Regulatory/Legislative concerns manageable**
 - ◆ TRIA, Systemic risk, FIO & general federal “intrusions”

**A.M.
Best
Outlook**

**Personal Lines: Stable
Commercial Lines: Negative
Reinsurance: Stable**

■ Major concern has been persistently low interest rates

- ◆ Remains a headwind, but currently thinking is that life insurers can manage to achieve reasonable rates of return so long as the 10-year Treasury yield > 2.5% in a steep yield curve environment
- ◆ New Fed Chair Janet Yellen on 4/16 focused on slack in the economy—Dovish outlook suggests short-term rate will remain low
- ◆ On the margin, life insurers have increased investment allocations to less liquid assets such as pvt. placements, comm. mortgages and alternative assets (hedge funds, PE); more “bbb” bonds; longer maturity

■ US market is mature and penetration rates suffering

- ◆ Penetration of younger demographic groups (Gen X) is at 50-yr. low

■ Group sales/benefits benefiting from increased hiring

■ Regulatory risks:

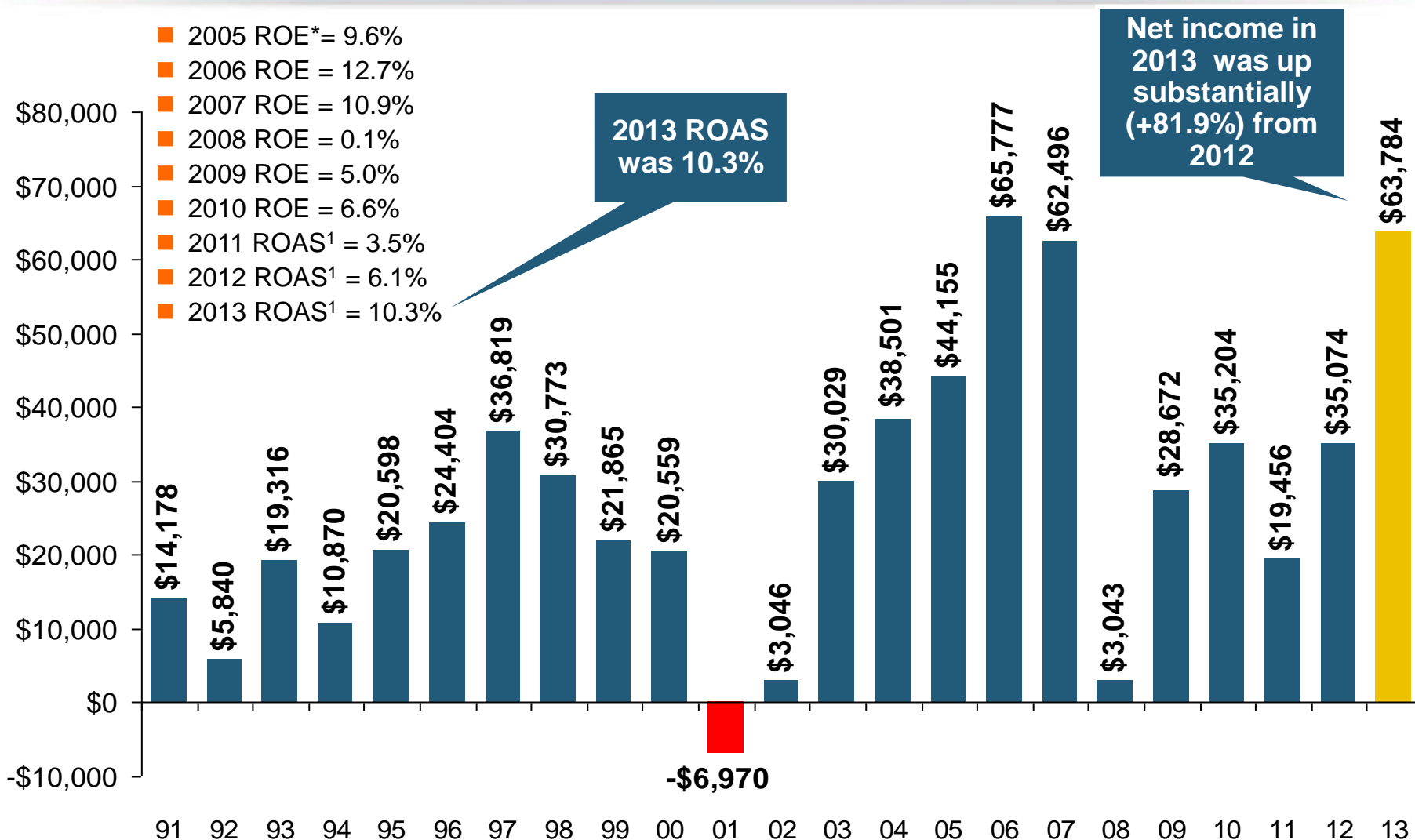
- ◆ SIFI designations (Prudential, AIG, possibly Met)
- ◆ Unclaimed assets
- ◆ Consumer protection violations (e.g., NY)

P/C (Re)Insurance Industry Financial Overview

**2013: Best Year in the
Post-Crisis Era**

**Performance Improved with
Lower CATs, Strong Markets**

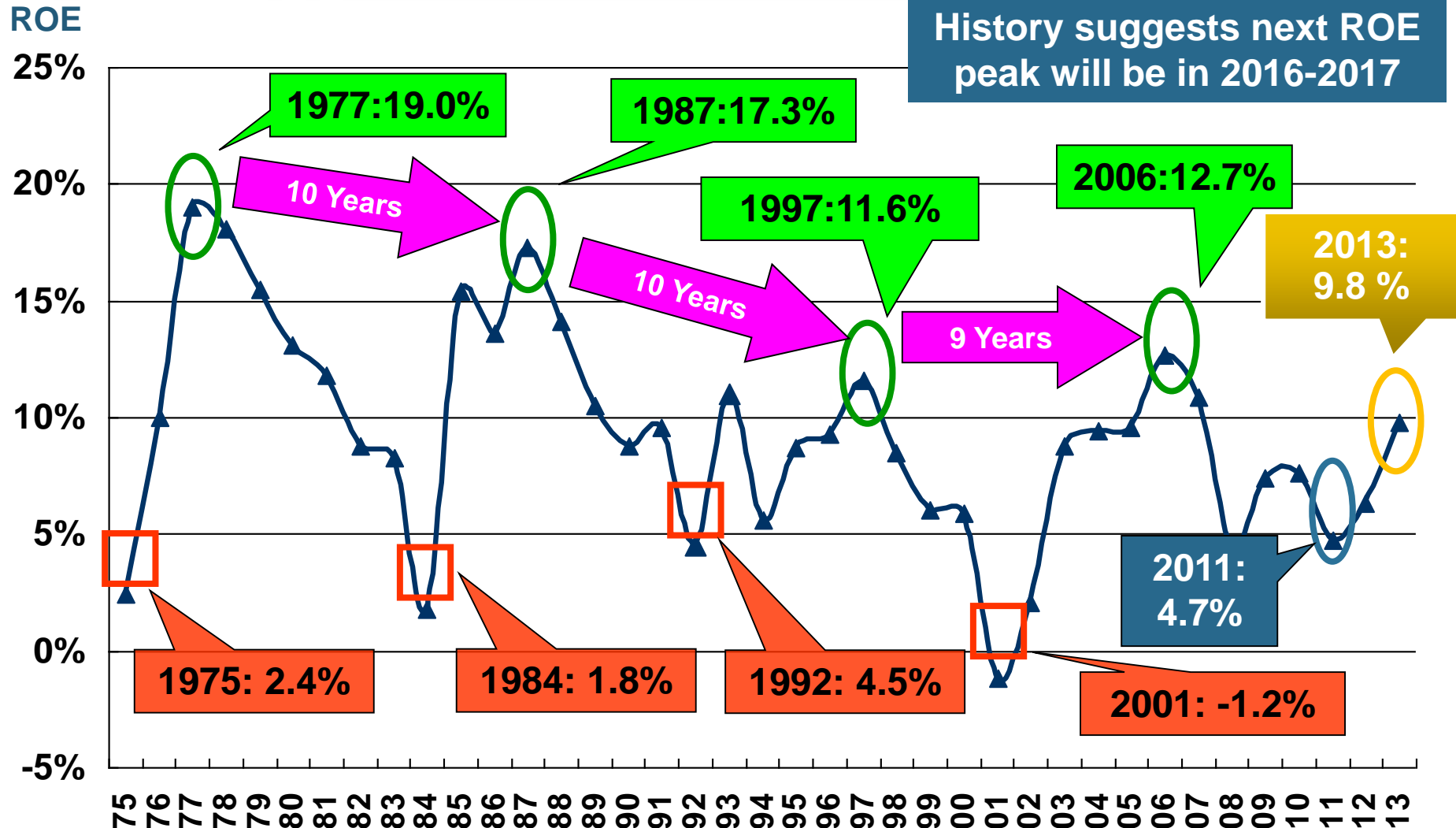
P/C Net Income After Taxes 1991–2013 (\$ Millions)



*ROE figures are GAAP; ¹Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields a 9.8% ROAS in 2013, 6.3% 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*



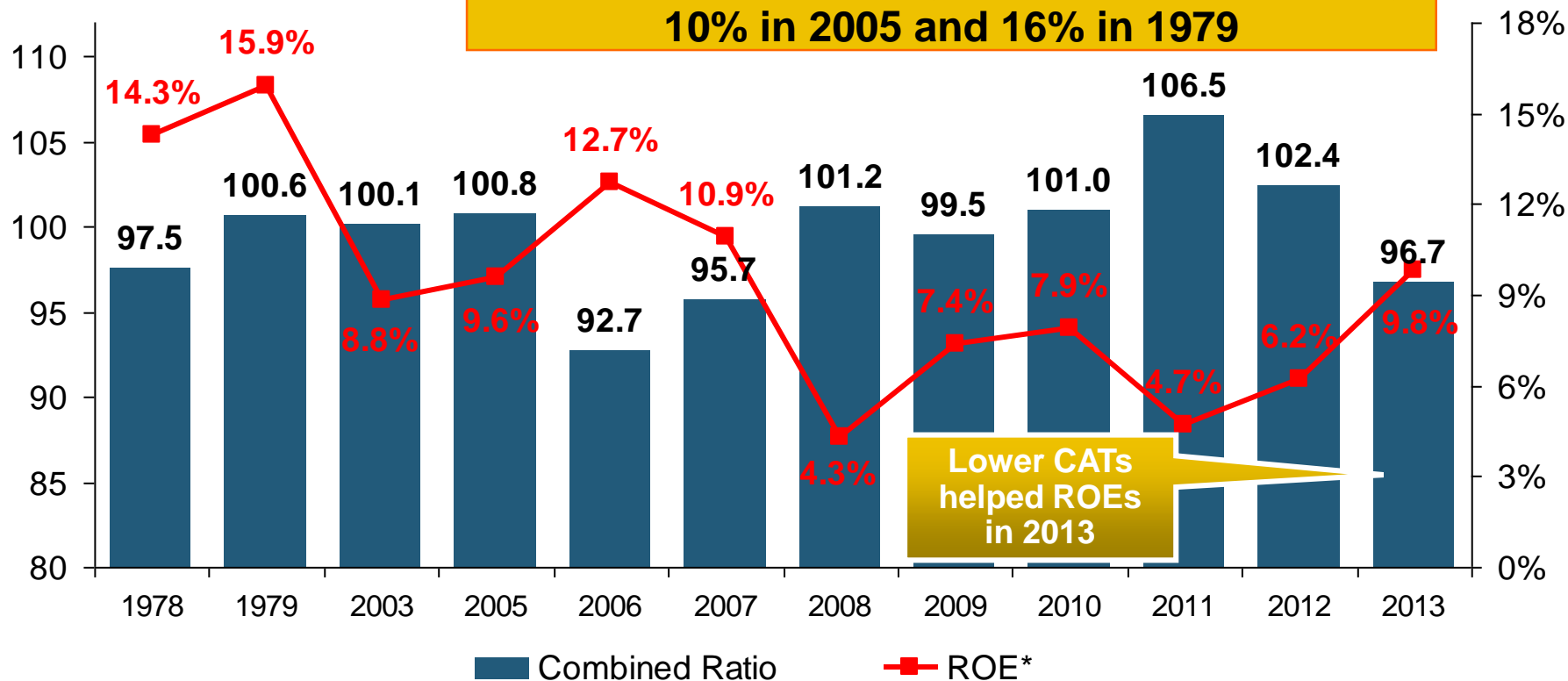
*Profitability = P/C insurer ROEs. 2011-13 figures are estimates based on ROAS data. Note: Data for 2008-2013 exclude mortgage and financial guaranty insurers.

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

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



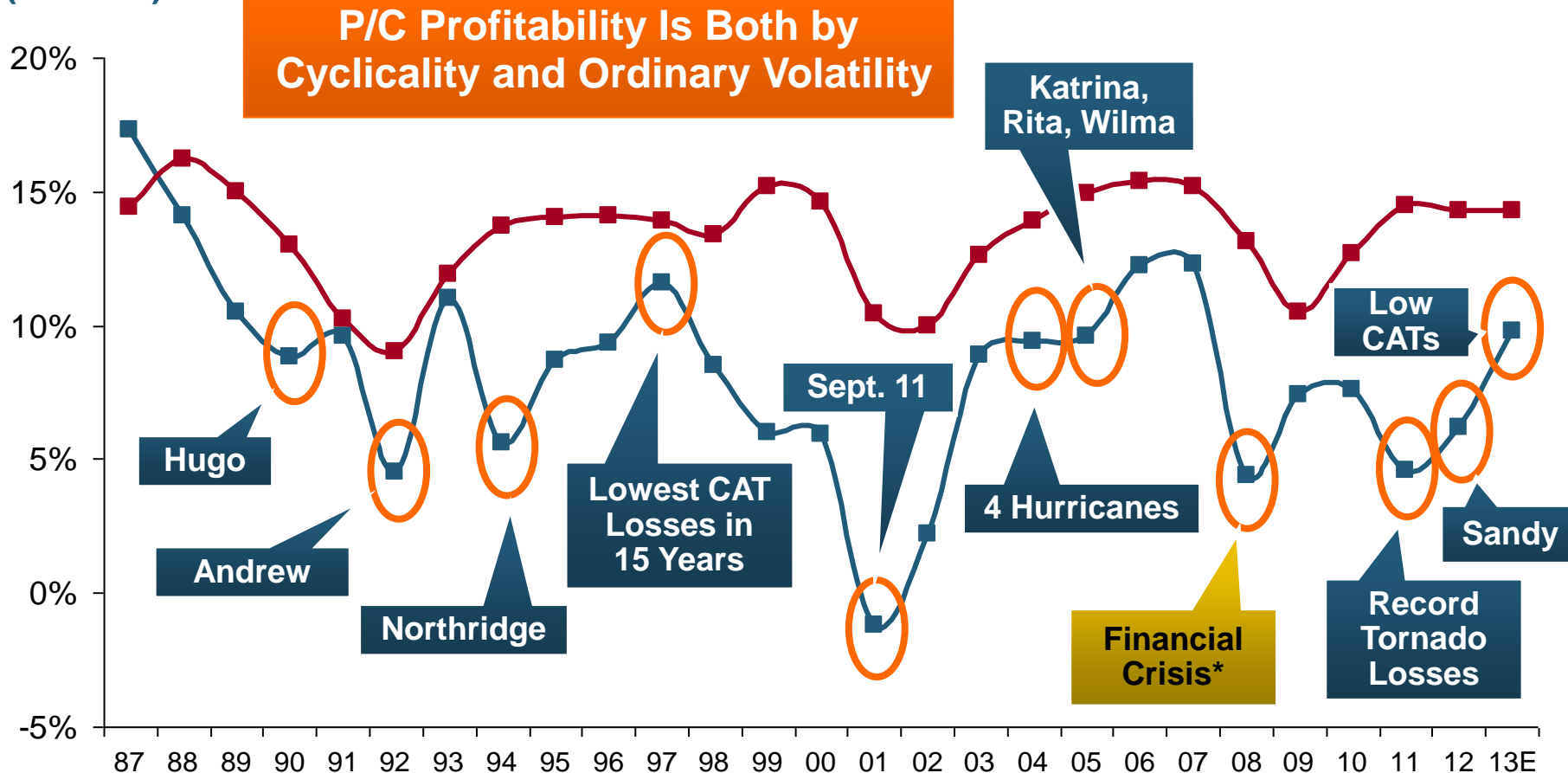
Combined Ratios Must Be Lower in Today's Depressed Investment Environment to Generate Risk Appropriate ROEs

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

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

ROE: Property/Casualty Insurance vs. Fortune 500, 1987–2013E*

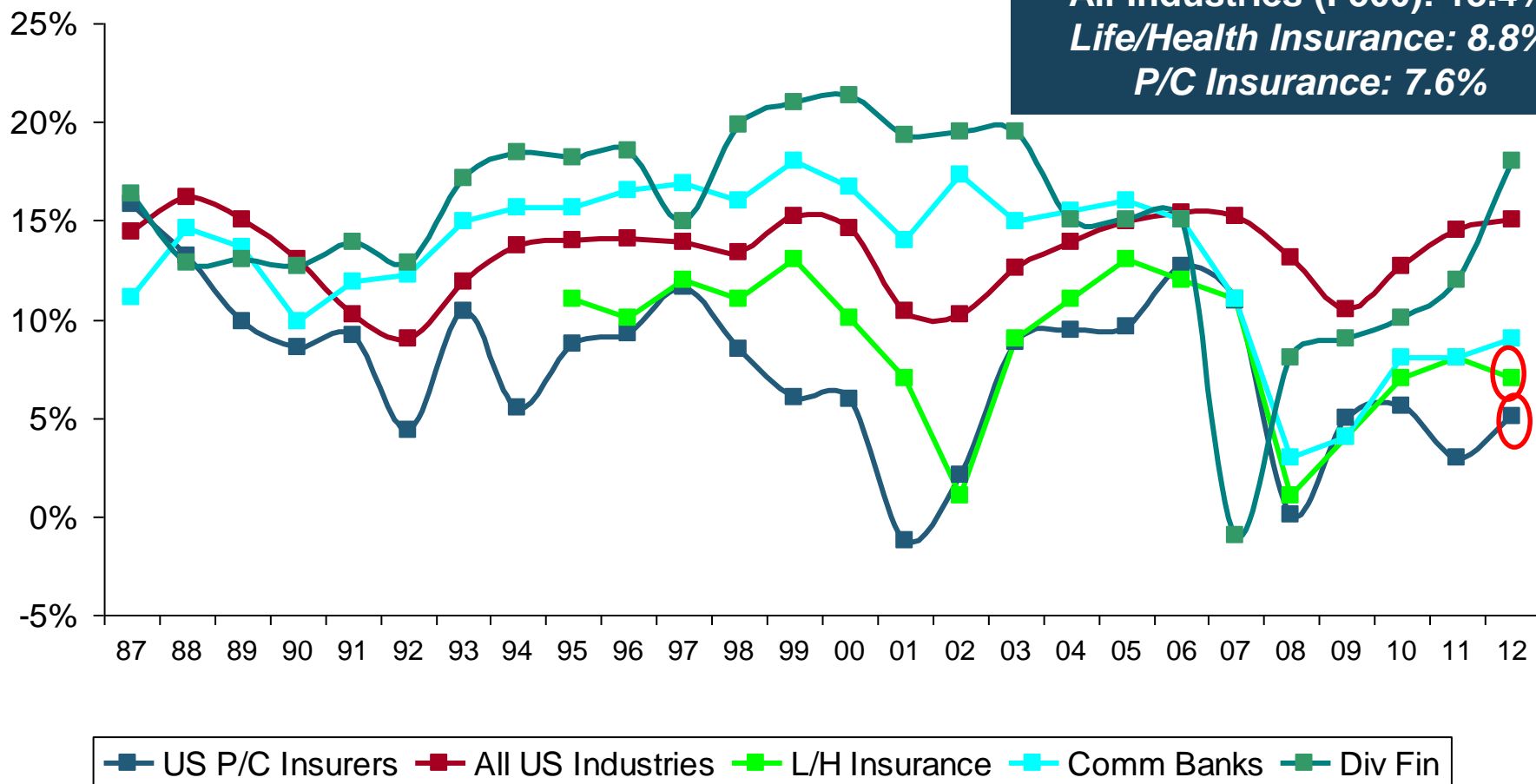
(Percent)



* Excludes Mortgage & Financial Guarantee in 2008 – 2013. 2013 Fortune 500 figure is I.I.I. estimate.
Sources: ISO, *Fortune*; Insurance Information Institute.

ROE: ROEs by Industry vs. Fortune 500, 1987–2012*

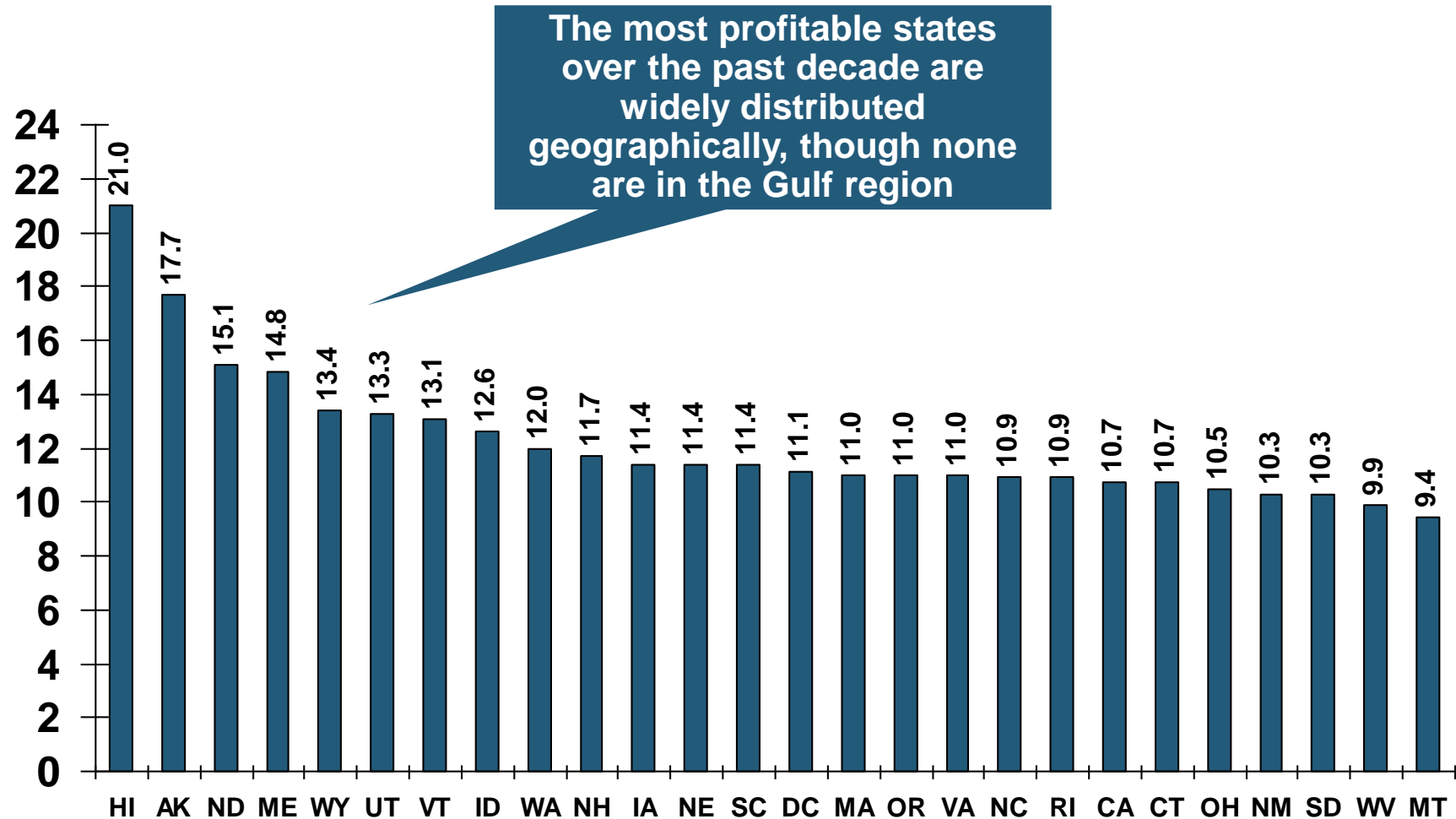
(Percent)



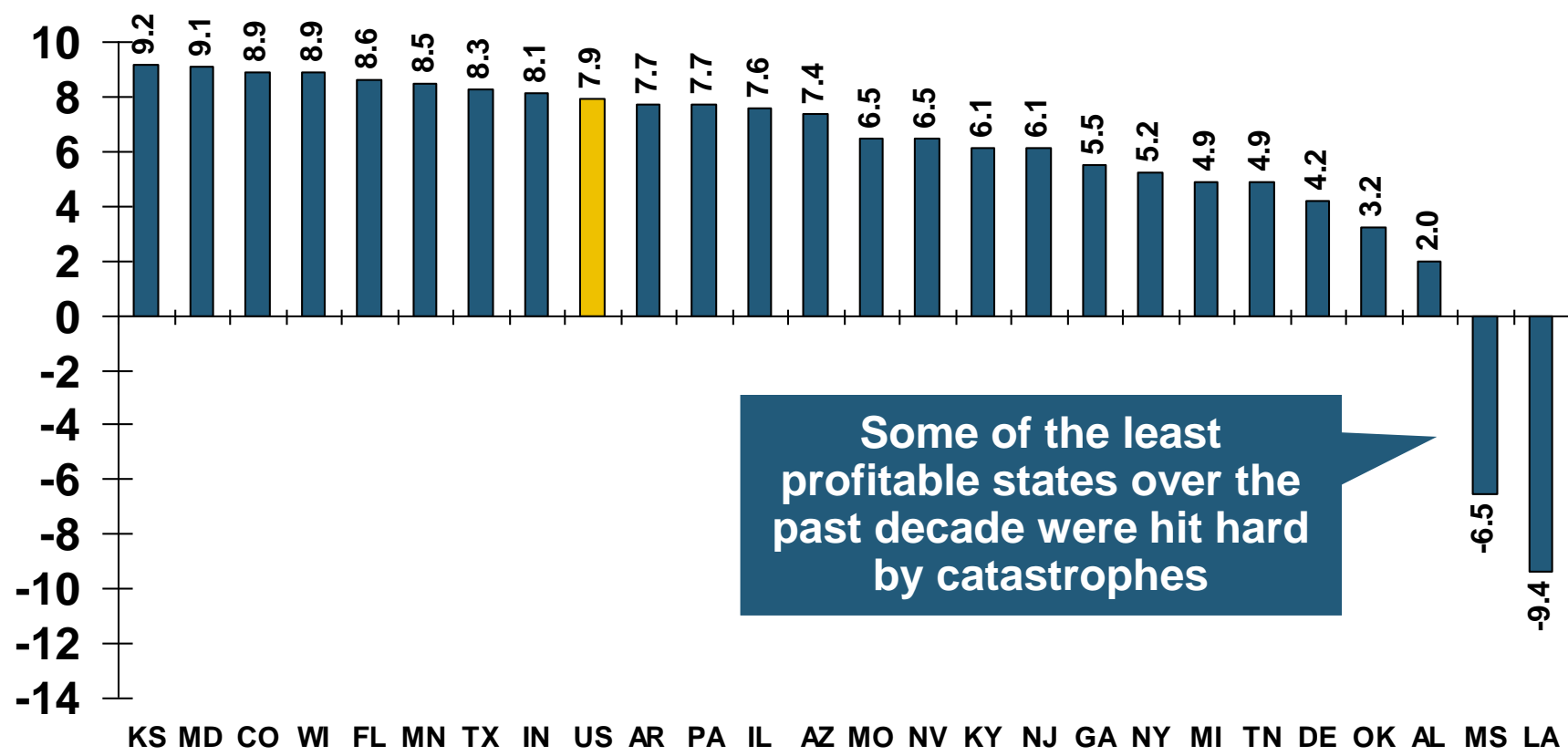
* All figures are GAAP.

Sources: ISO, *Fortune*; Insurance Information Institute.

RNW All Lines by State, 2003-2012 Average: Highest 25 States

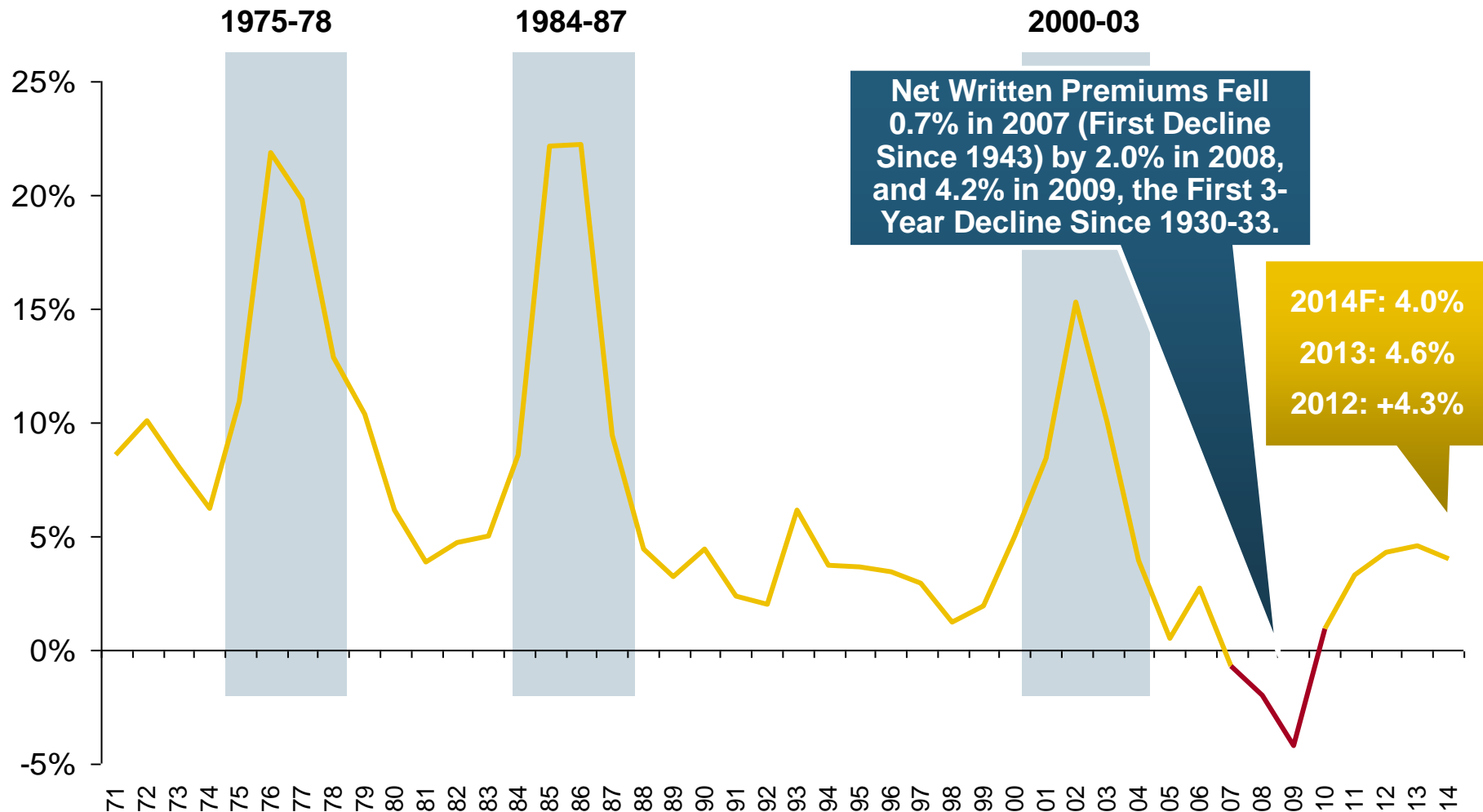


RNW All Lines by State, 2003-2012 Average: Lowest 25 States



Net Premium Growth: Annual Change, 1971—2014F

(Percent)



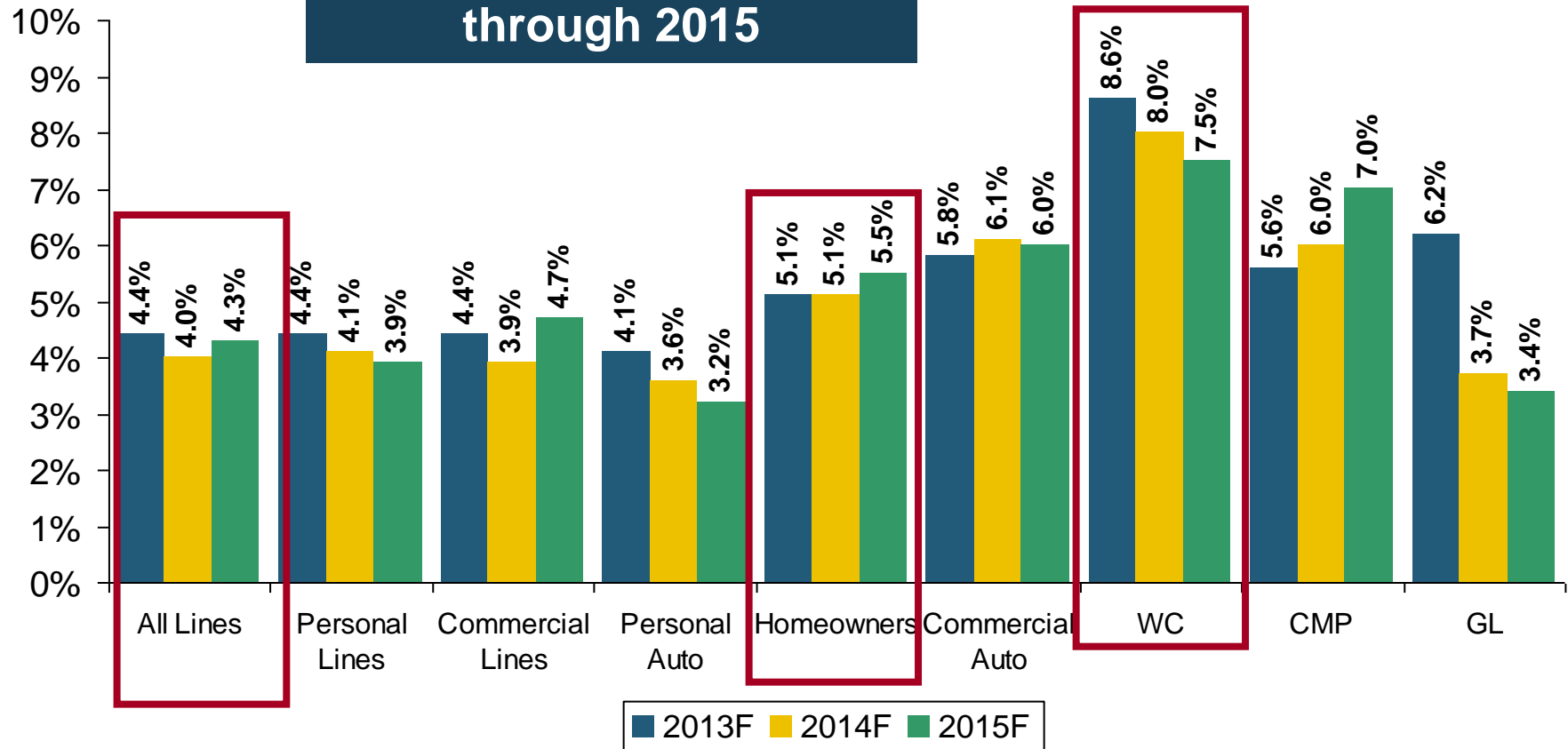
Shaded areas denote "hard market" periods

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

Growth in Direct Written Premium by Line, 2013-2015F*

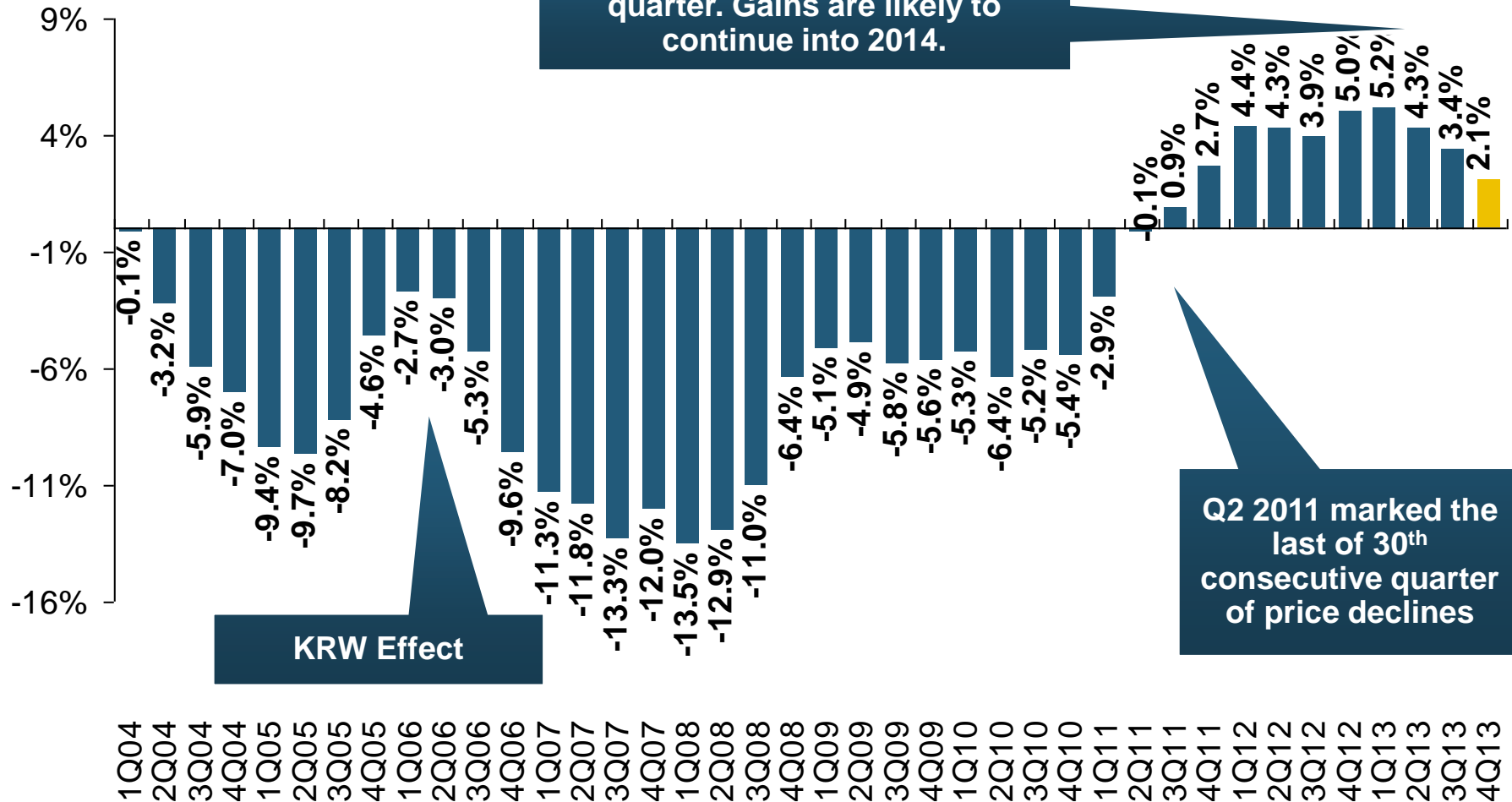
(Percent)

P/C growth is expected
to remain fairly stable
through 2015



Average Commercial Rate Change, All Lines, (1Q:2004–4Q: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

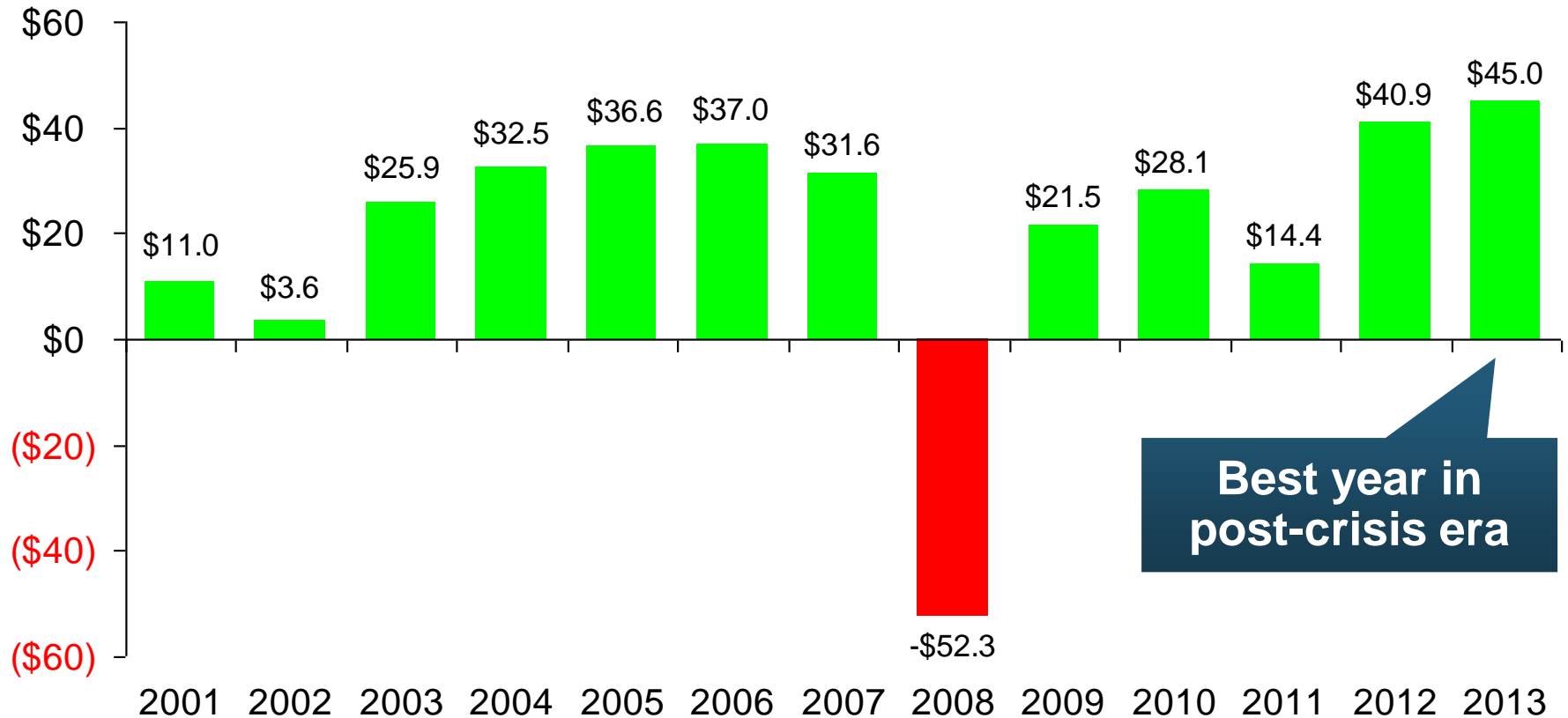
The Life/Annuities/A&H segment

Five Major Segments

- Individual Life Insurance
- Individual Annuities
- Group Life Insurance
- Group Annuities
- A&H Insurance

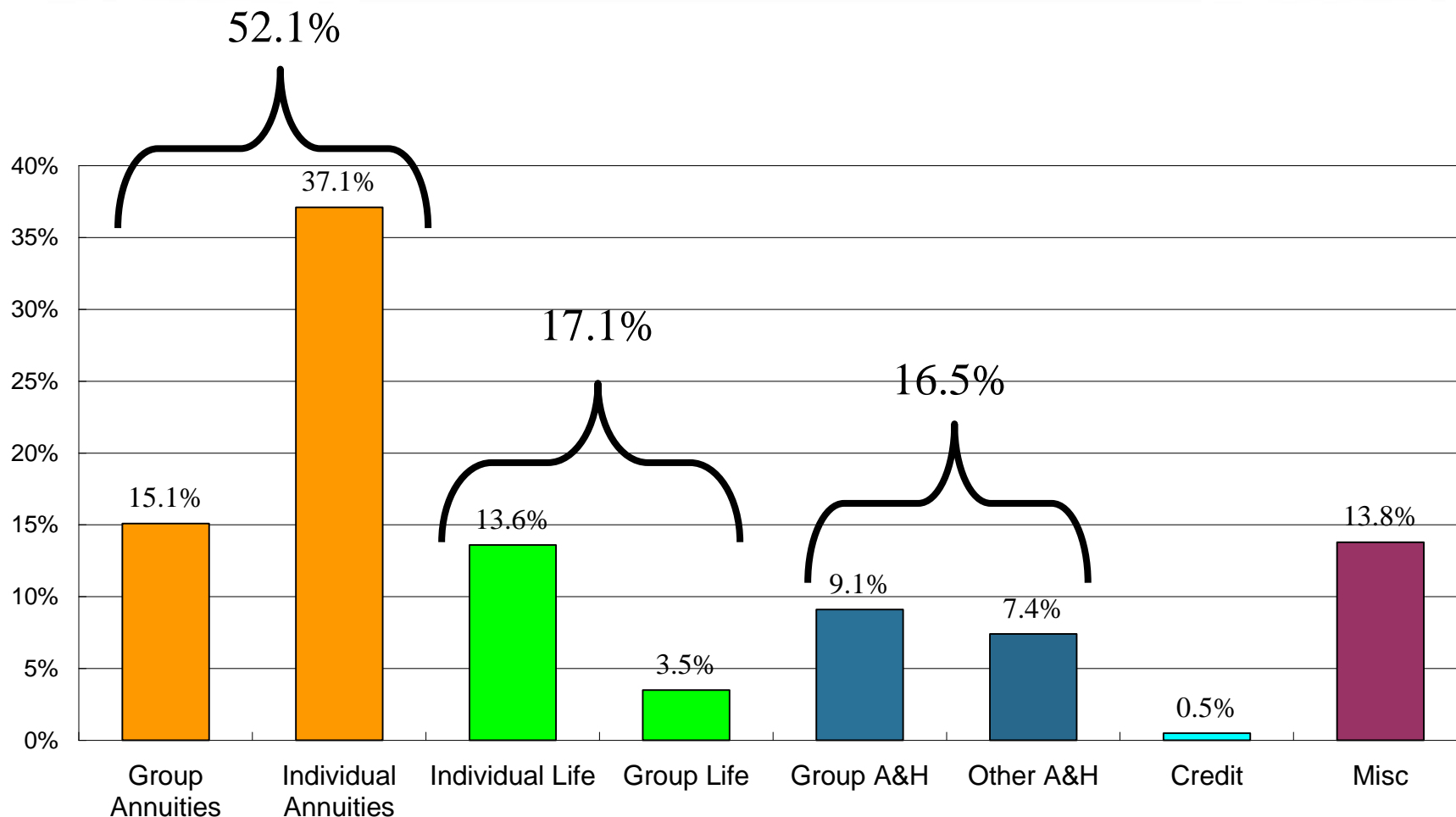
Life/Annuity Industry Profits, 2001-2013E

Billions



The Life/Annuity industry has produced steady (if unspectacular) profits, except for years in which the industry's investment results produced significant realized capital losses.

U.S. Life/Annuity Insurance Industry Profit Sources, by Percent, 2012

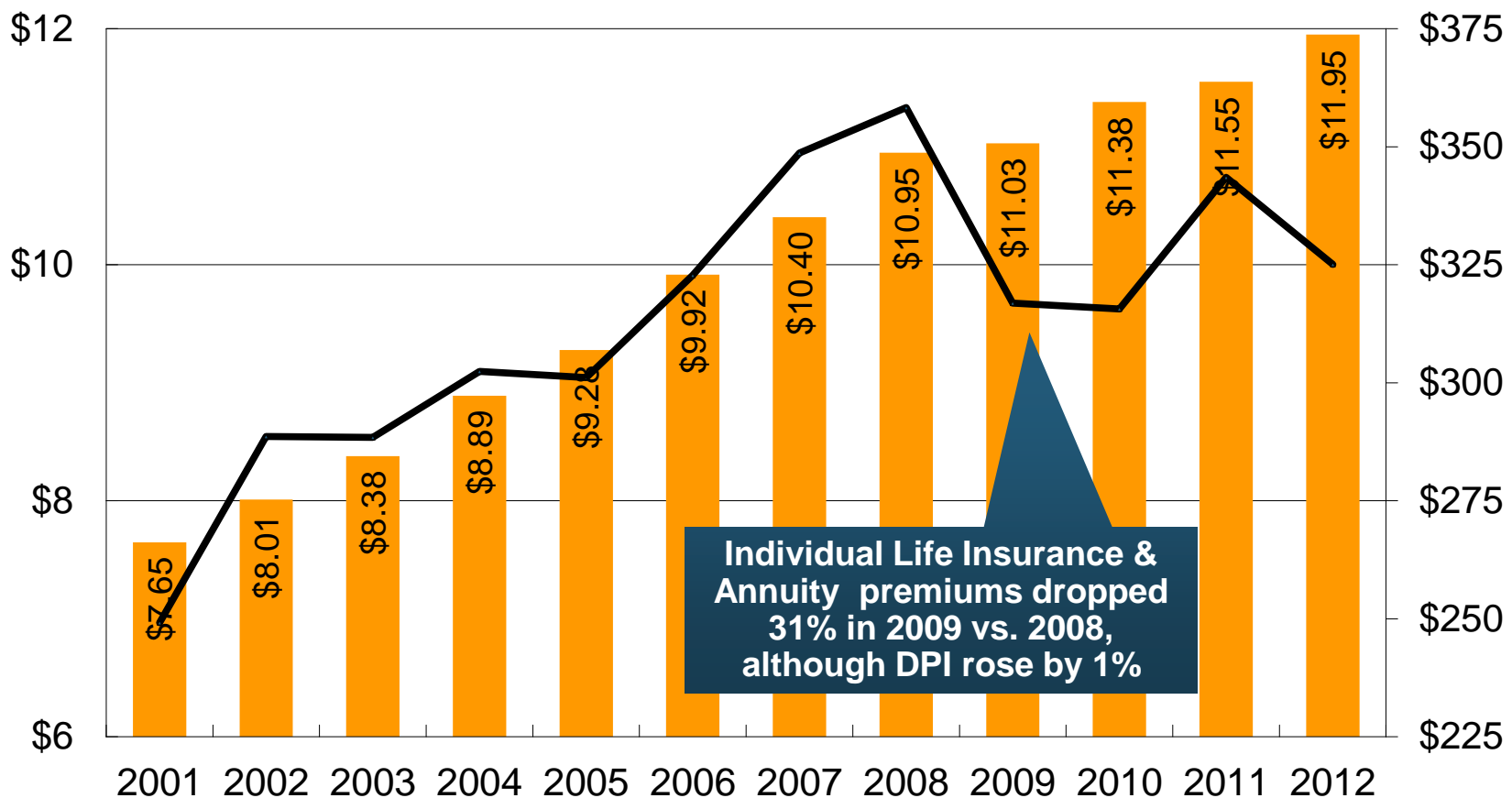


Individual Life Insurance & Annuity Premiums Tracked DPI Until 2009

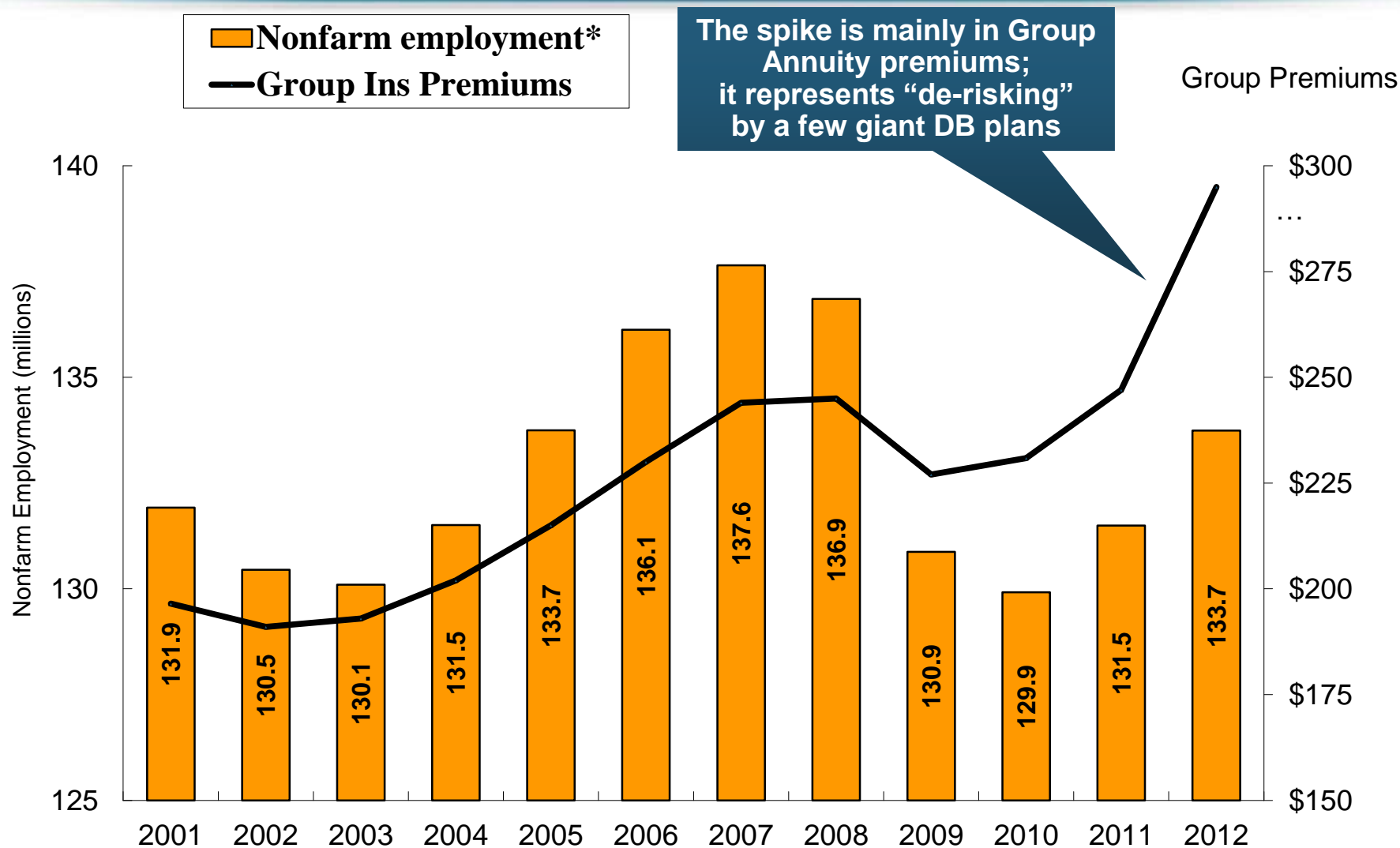
DPI
(\$ Trillion)

■ Disposable Personal Income
— Individual Life Insurance & Annuity Premiums

Individual Life
Insurance & Annuity
Premiums (\$ Billion)

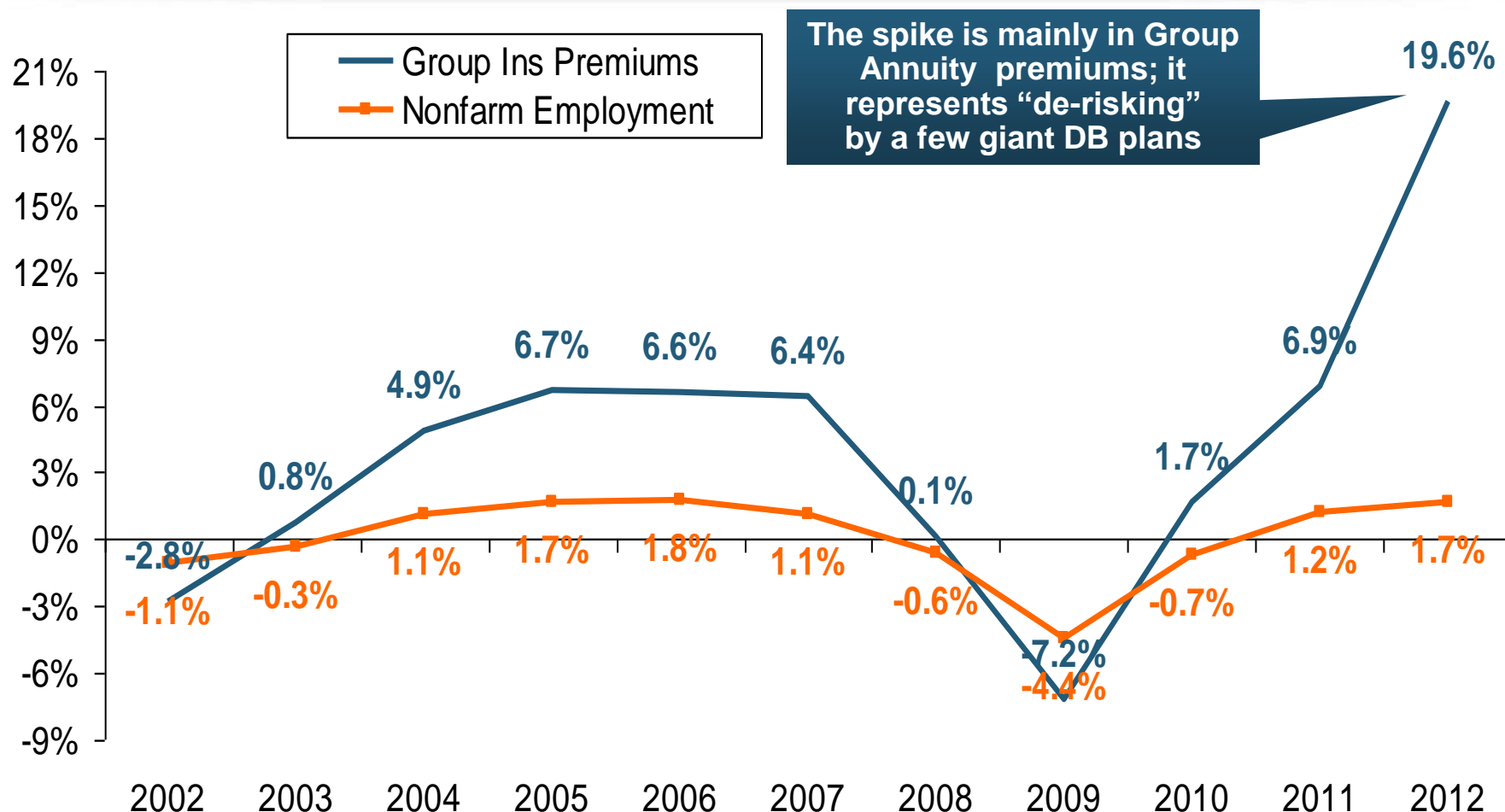


Group Insurance Premiums (line) Track Nonfarm Employment (bars)



*Not seasonally adjusted. Group premiums = group life, group annuities, and group a&h
Sources: NAIC Annual Statements, via SNL Financial; <http://www.bls.gov/ces/>

Pct. Change in Group Insurance Premiums Tracks Nonfarm Employment

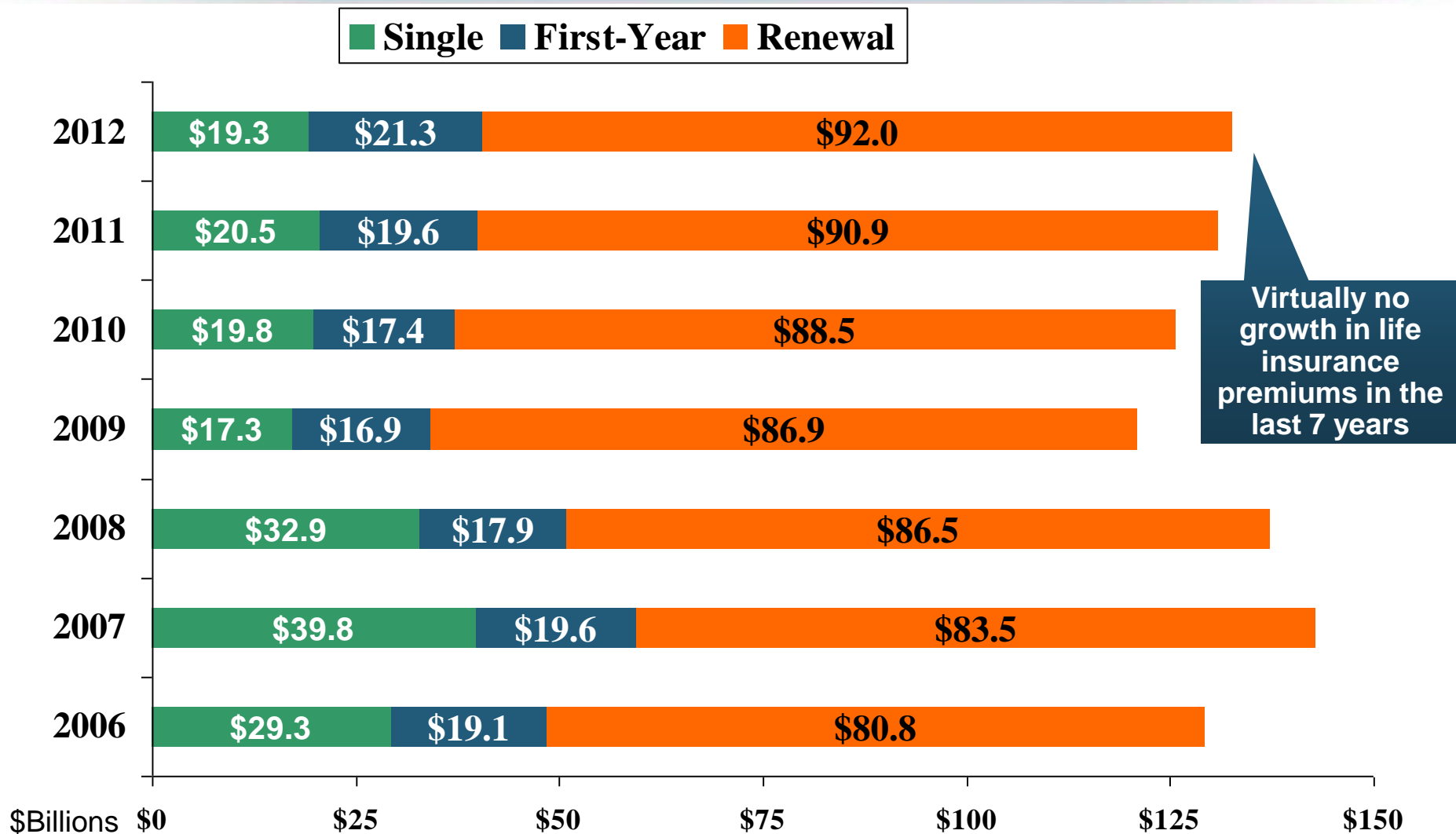


A few employers with large defined-benefit pension plans recently bought group annuities in order to avoid excess longevity risk.

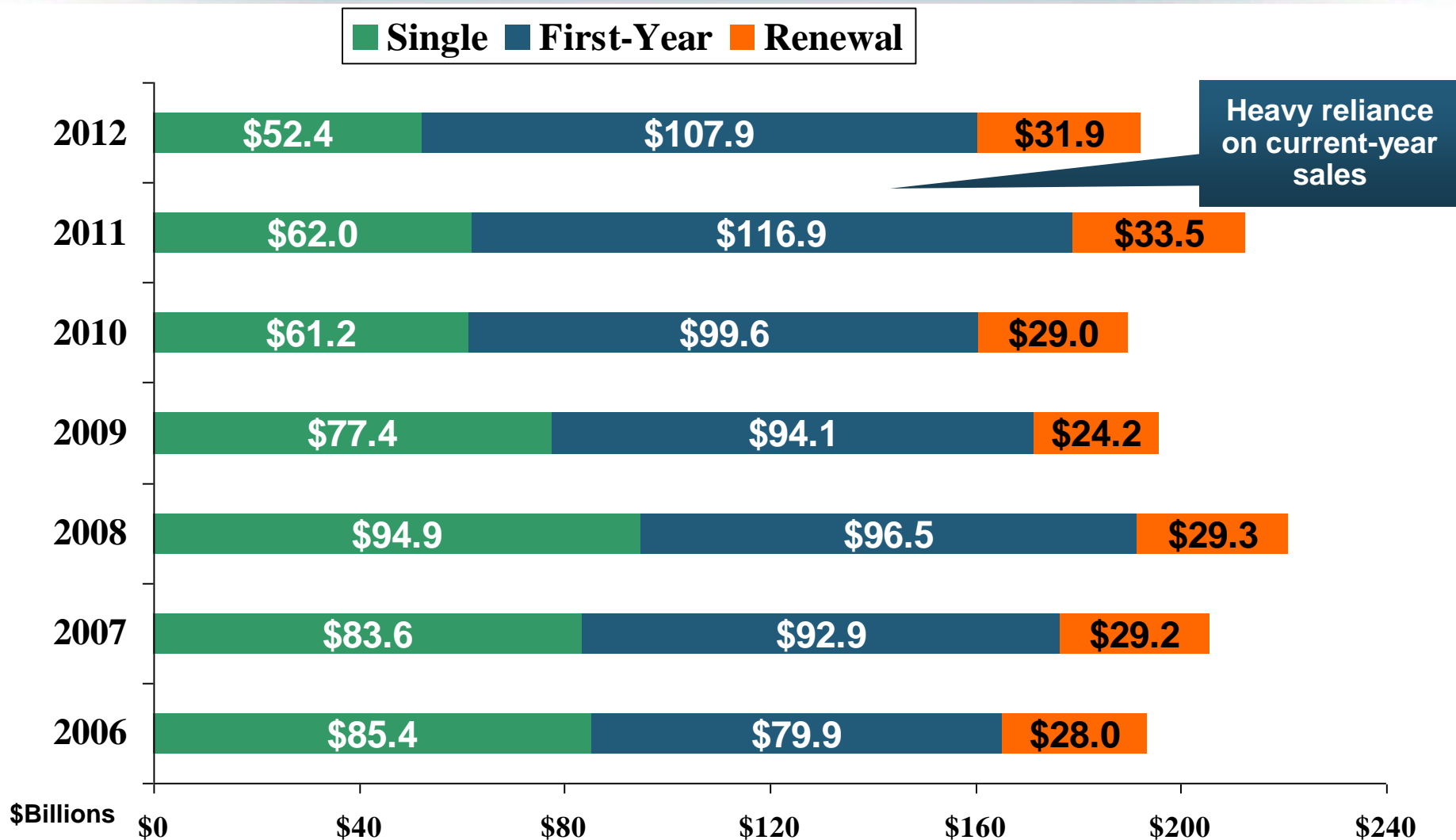
*Not seasonally adjusted. Group premiums = group life, group annuities, and group a&h

Sources: NAIC Annual Statements, via SNL Financial; <http://www.bls.gov/ces/>

Individual Life Insurance: Direct Premiums by Frequency, 2006-2012



Individual Annuities: Direct Premiums by Frequency, 2012

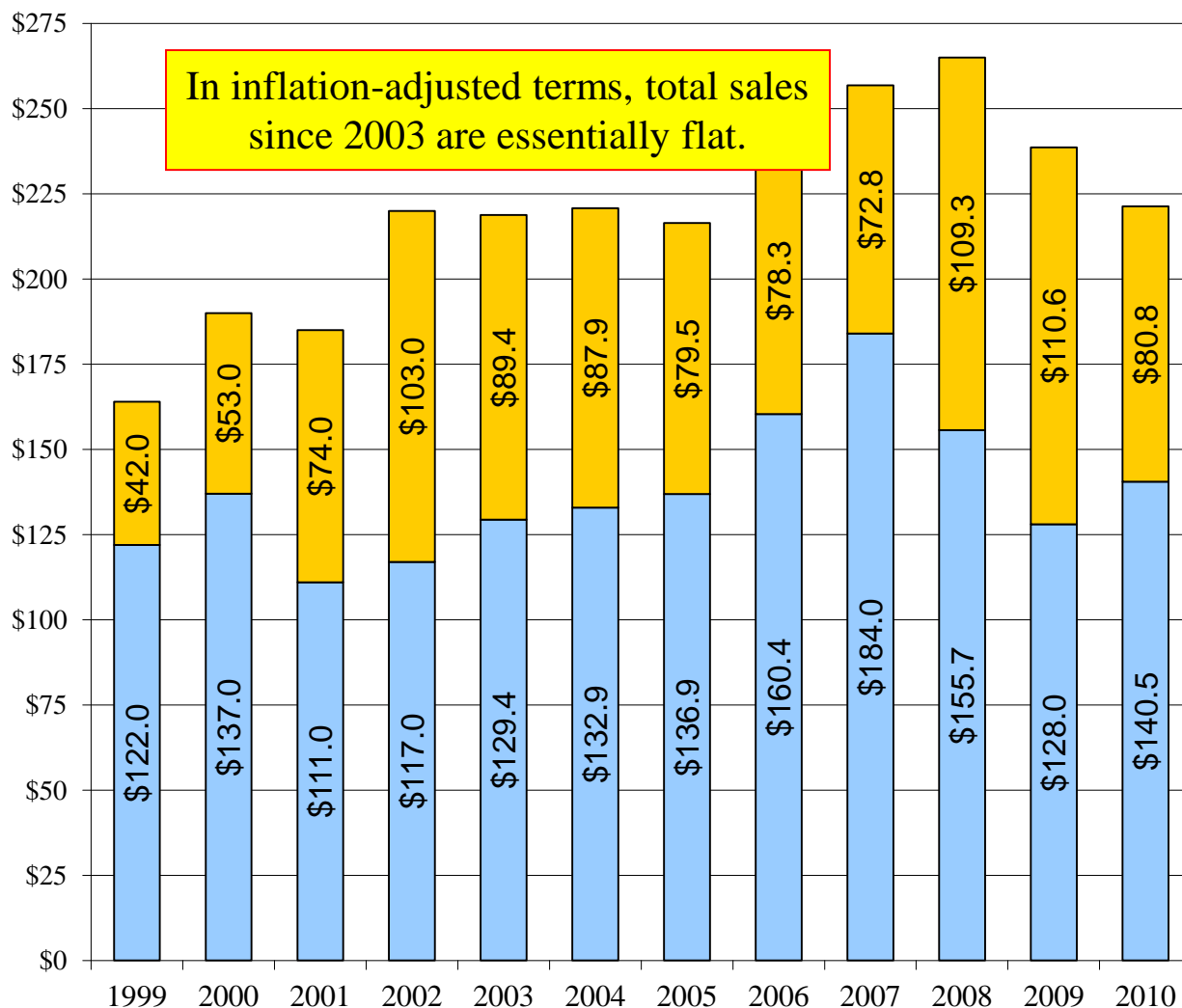


Sources: NAIC Annual Statements, from SNL Financial; I.I.I. calculations.

Deferred + Immediate Individual Annuity Sales, 1999-2010

\$ Billions

Variable Fixed

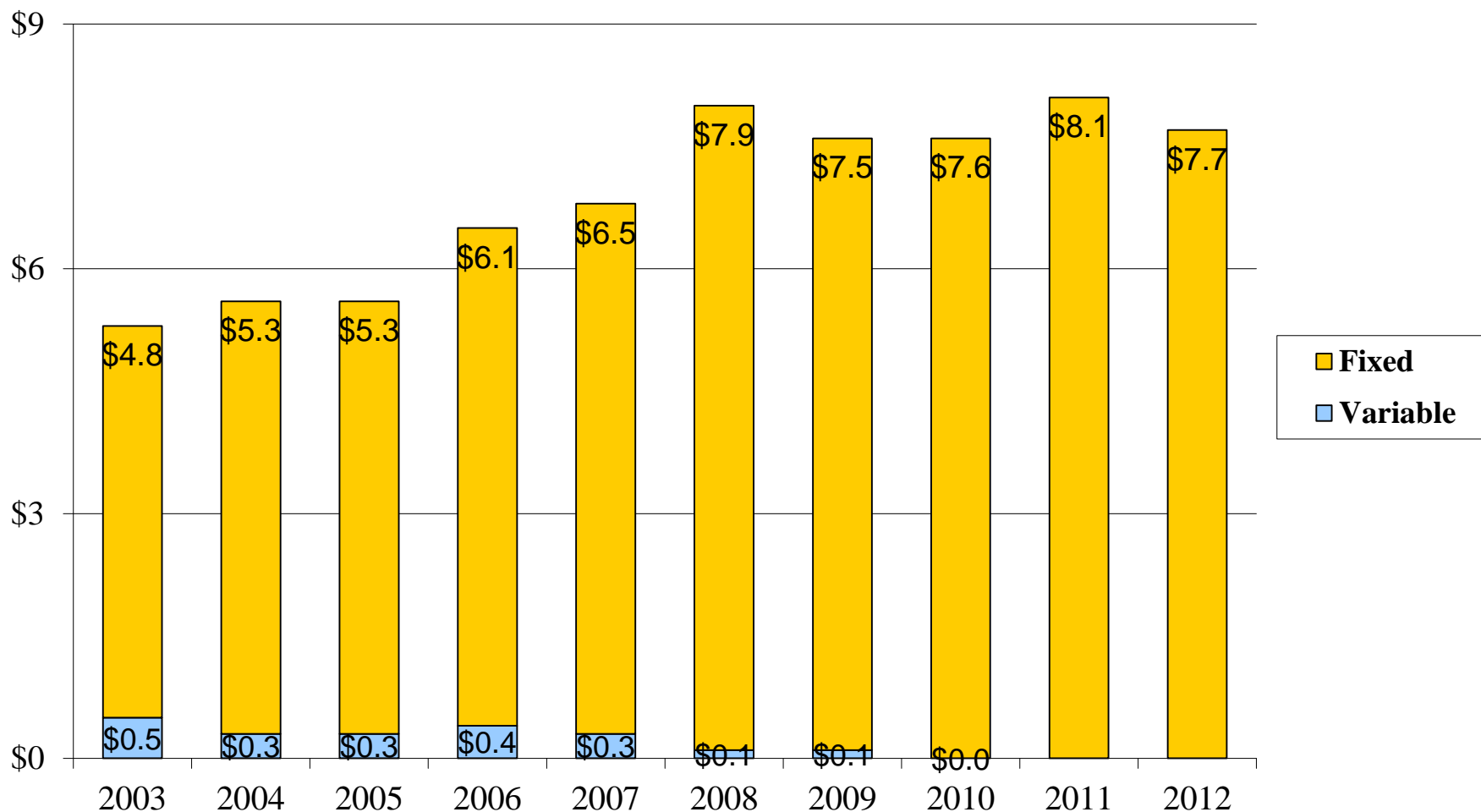


Fixed annuity sales spike when the stock market tumbles

Variable sales dropped after the stock market plunge in 2000 but recovered by 2004. 2007 was a record year. 2009 variable sales vs. 2007 dropped by 30.4%.

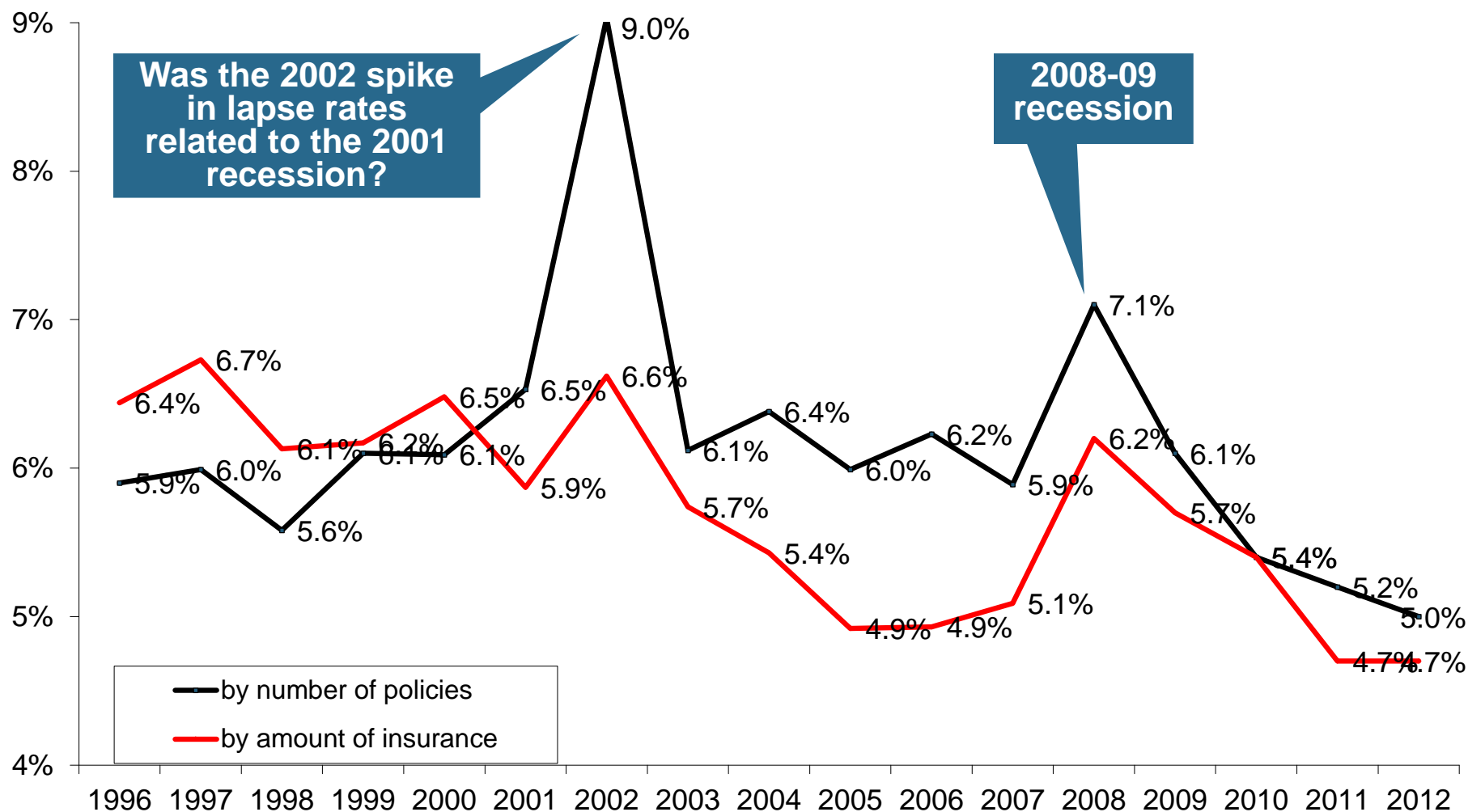
Individual Immediate Annuity Sales, 2003-2012

\$ Billions



Almost no one buys variable immediate annuities or indexed immediate annuities

Ordinary Life Insurance Lapse Rates, 1996-2012

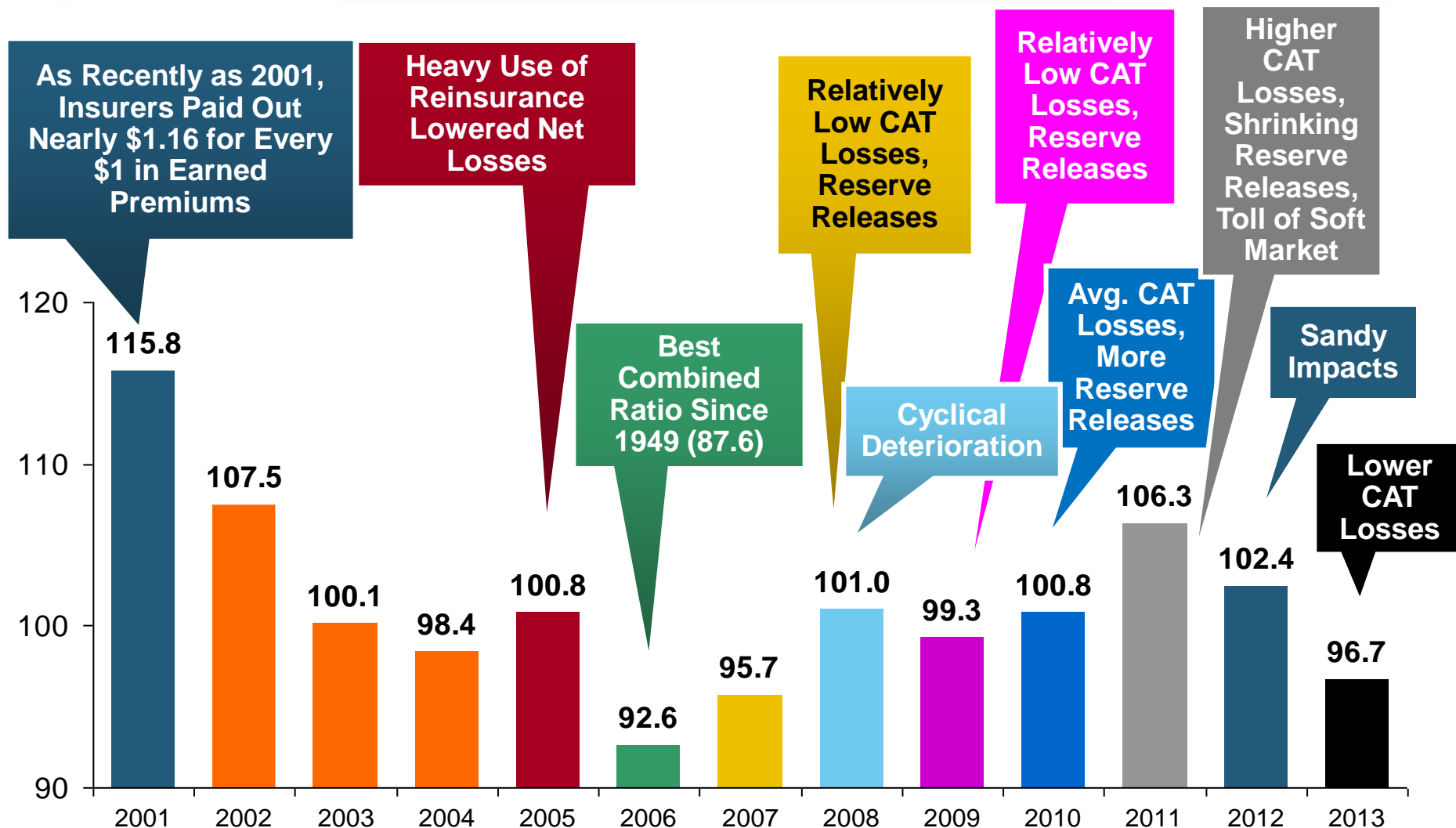


Sources: NAIC Annual Statements, p. 25 line 15 (lapses) and average of lines 1 and 21, from SNL Financial; I.I.I. calculations

P/C UNDERWRITING

**Underwriting Losses in 2013
Much Improved After High
Catastrophe Losses in 2011/12**

P/C Insurance Industry Combined Ratio, 2001–2013*

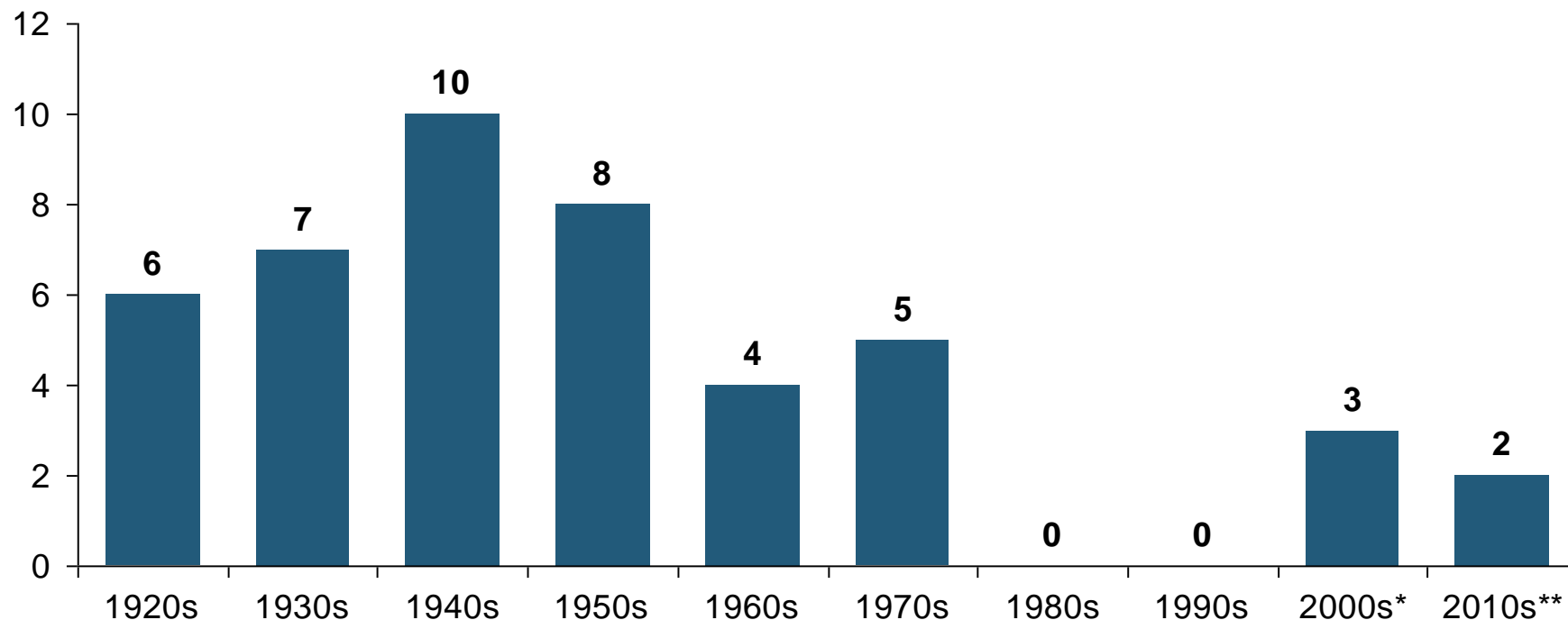


* Excludes Mortgage & Financial Guaranty insurers 2008--2012. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013:= 96.1.

Sources: A.M. Best, ISO.

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

Number of Years with Underwriting Profits



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

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

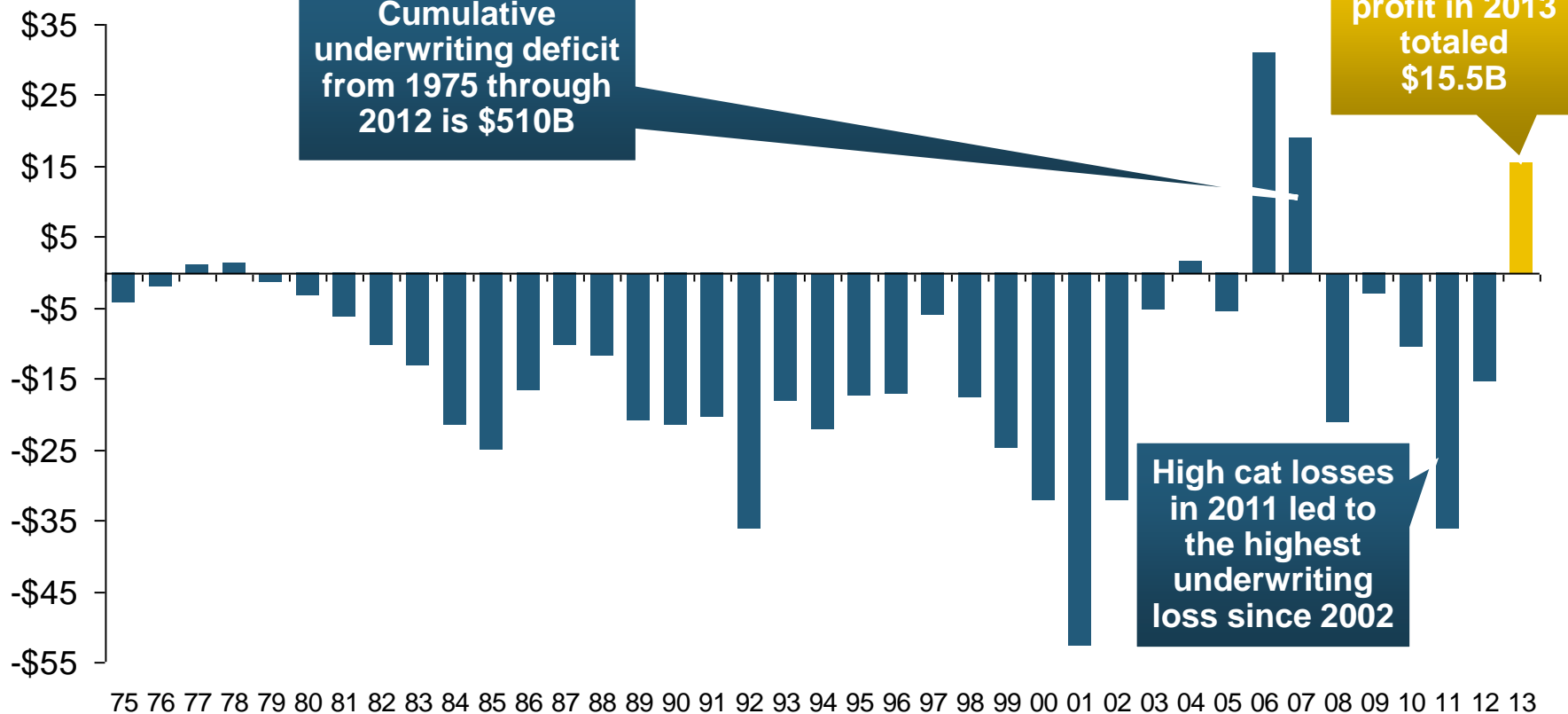
**Data for the 2010s is for the period 2010 through 2013.

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

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

Underwriting Gain (Loss) 1975–2013*

(\$ Billions)

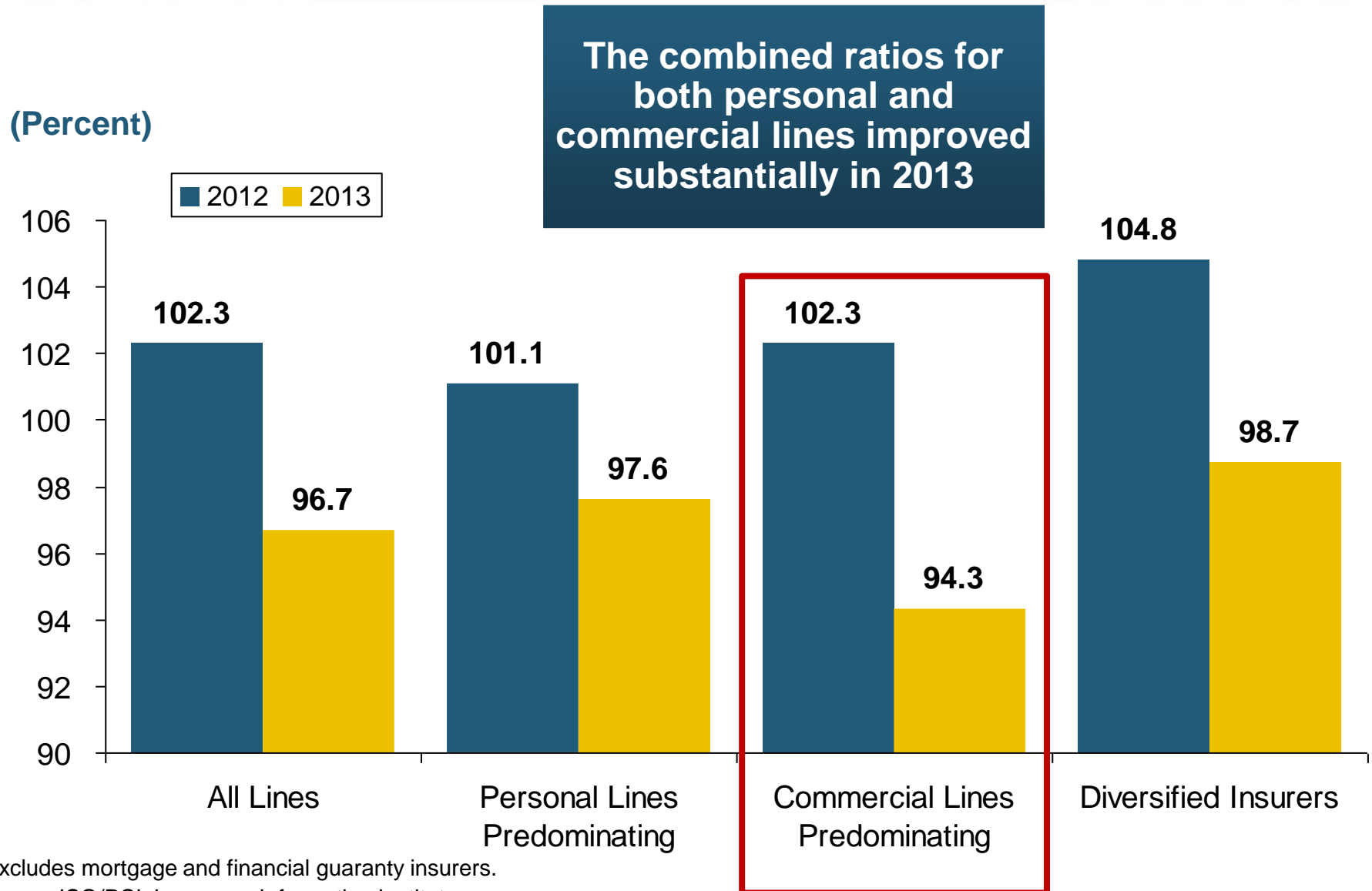


**Large Underwriting Losses Are *NOT* Sustainable
in Current Investment Environment**

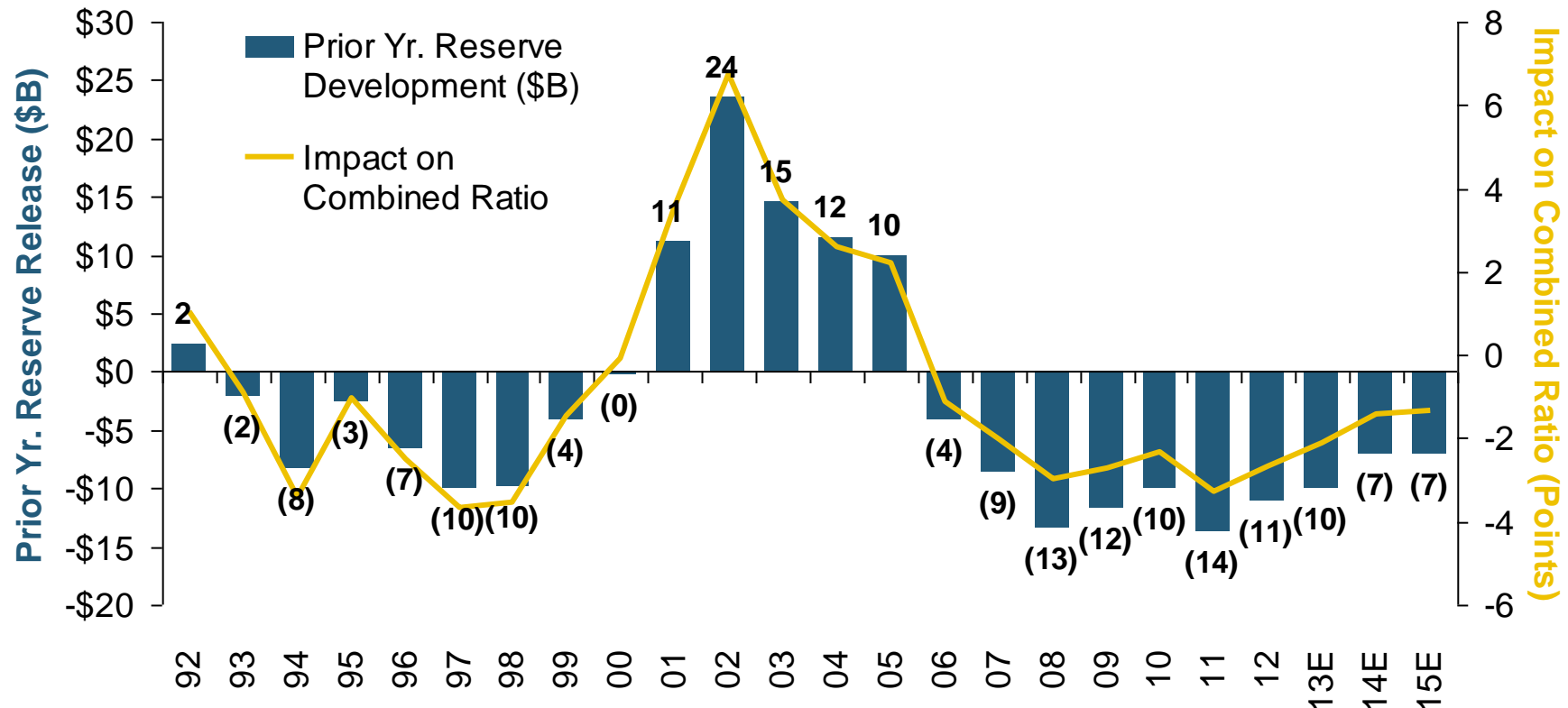
* Includes mortgage and financial guaranty insurers in all years.

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

Combined Ratios by Predominant Business Segment, 2013 vs. 2012*



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 for 2013-2015).

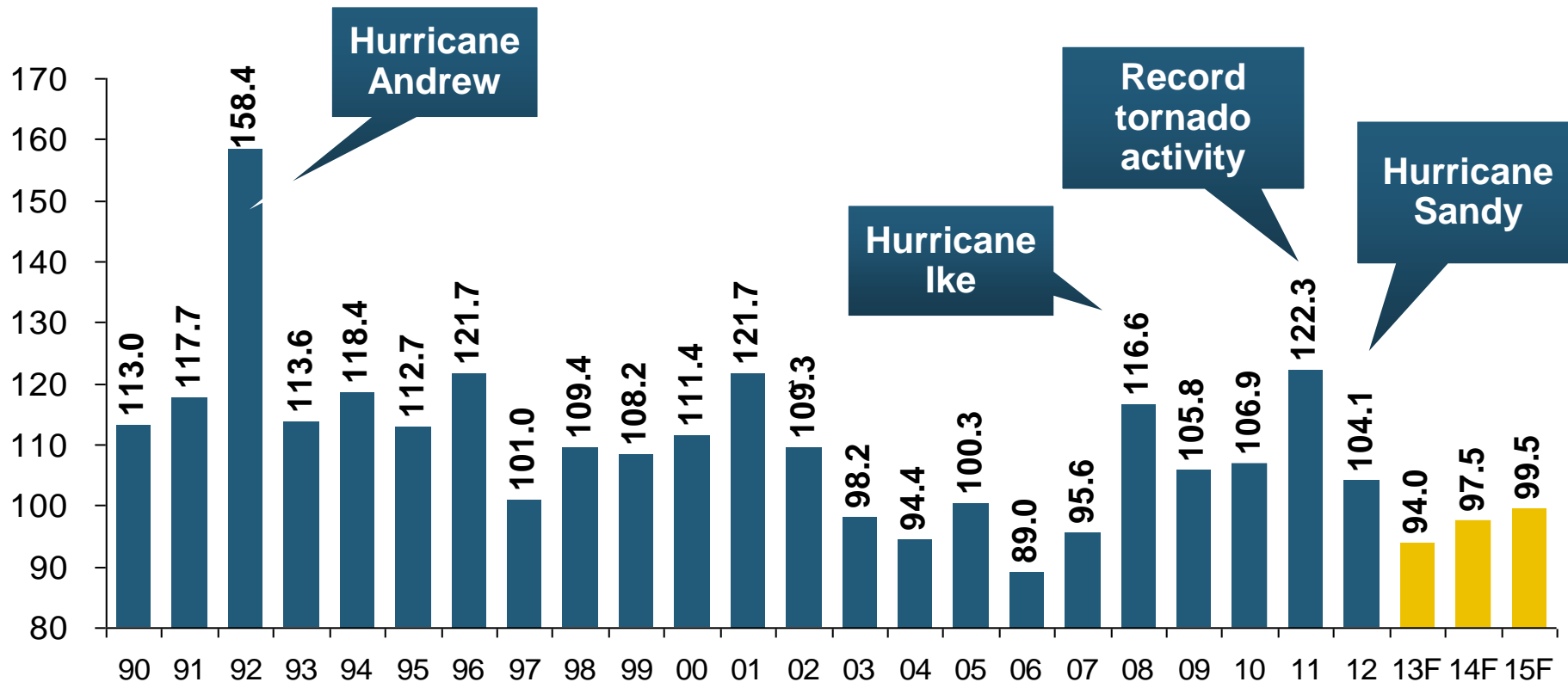
P/C Estimated Loss Reserve Deficiency/ (Redundancy), Excl. Statutory Discount

Line of Business	2013
Personal Auto Liability	-\$3.9B
Homeowners	-\$0.4
Other Liab (incl. Prod Liab)	\$7.5
Workers Compensation	\$11.1
Commercial Multi Peril	\$1.9
Commercial Auto Liability	\$0.7
Medical Professional Liab.	-\$3.5
Reinsurance—Nonprop Assumed	\$1.0
All Other Lines*	-\$4.6
Total Core Reserves	\$9.8
Asbestos & Environmental	\$11.2
Total P/C Industry	\$21.0B

Performance by Key Segment

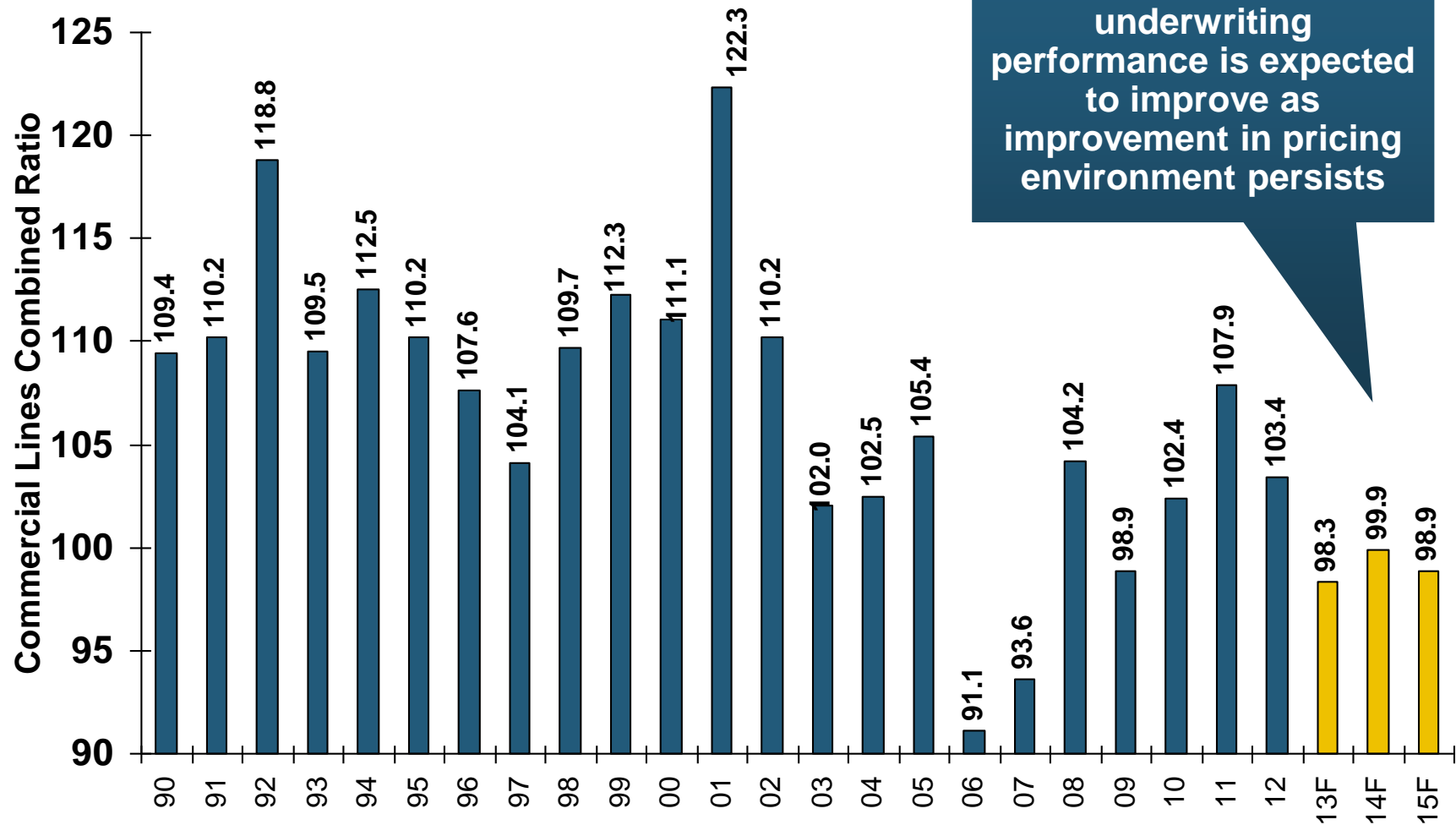
**Large Differences Exist in the
Performance and Cyclical
Behavior of Key Lines**

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

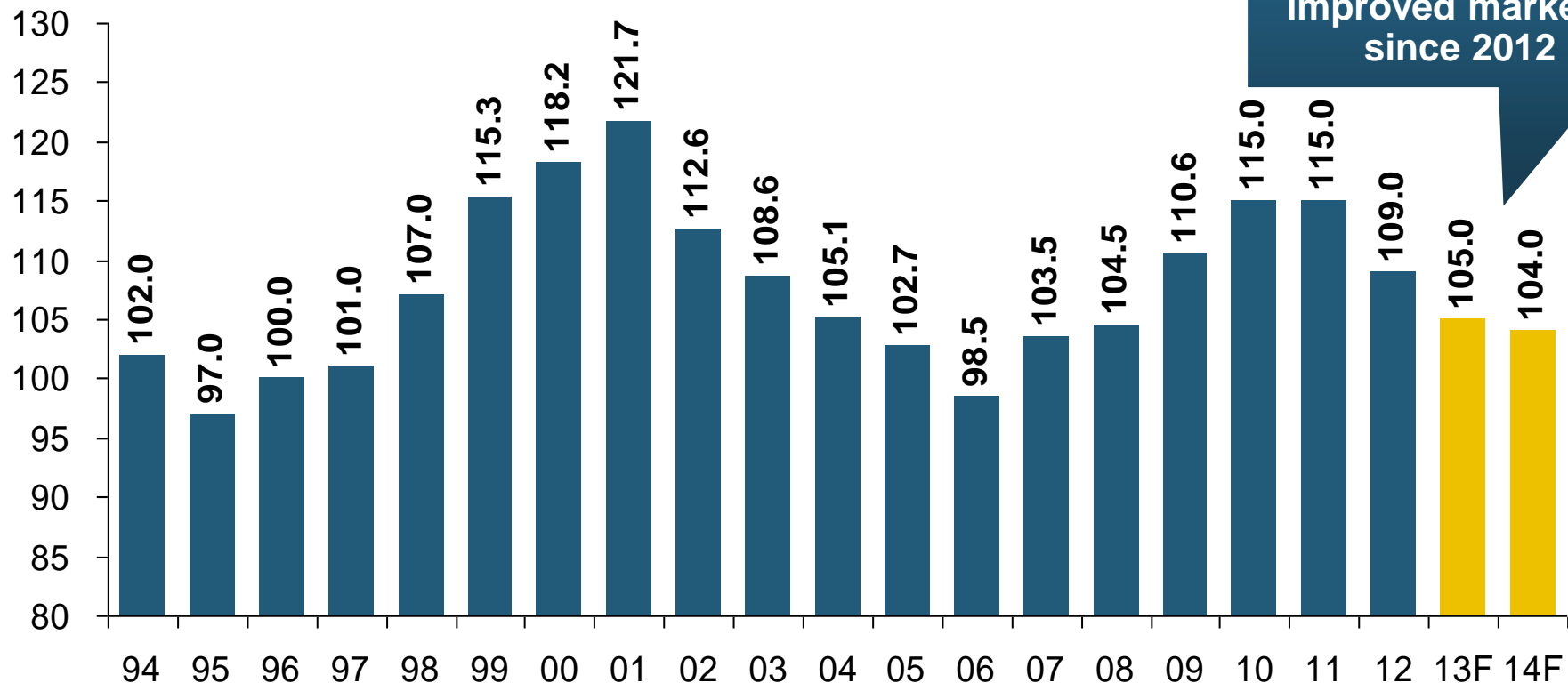
Commercial Lines Combined Ratio, 1990-2015F*



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

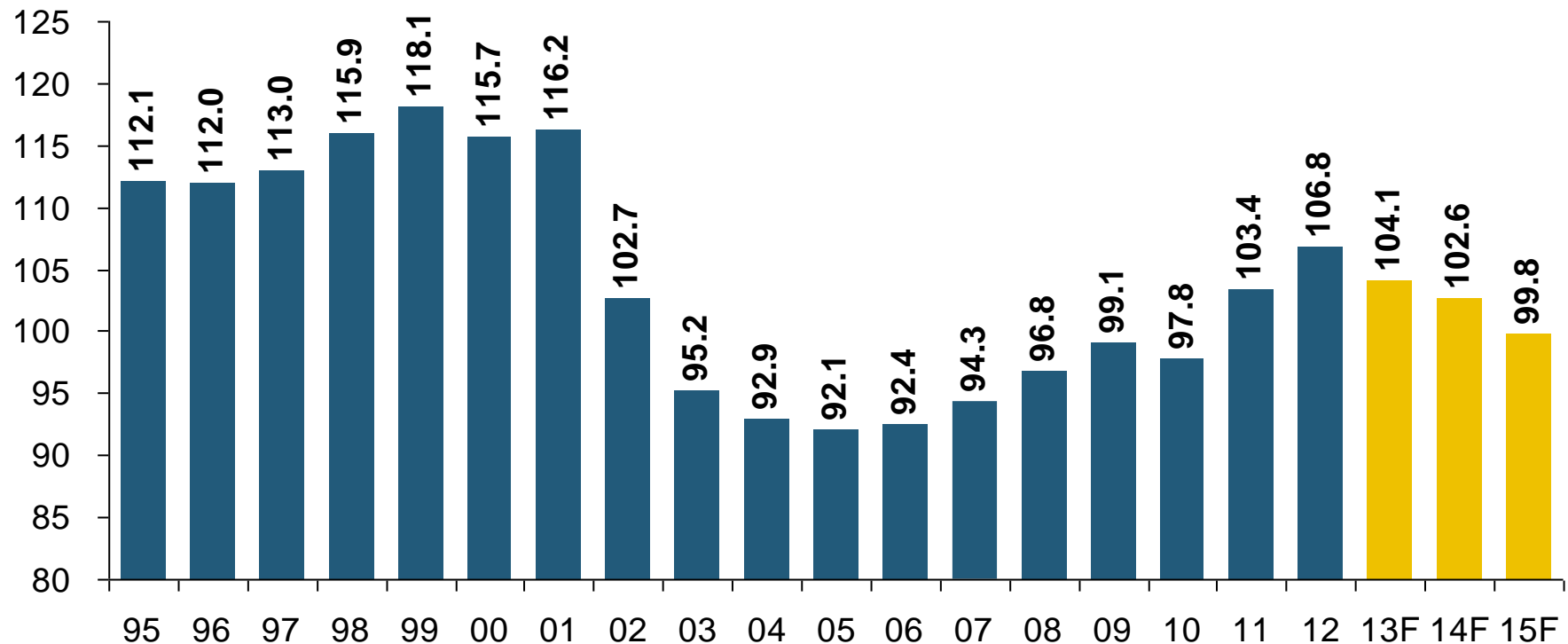
Source: A.M. Best (1990-2014F); Conning (2015F) Insurance Information Institute.

Workers Compensation Combined Ratio: 1994–2014F



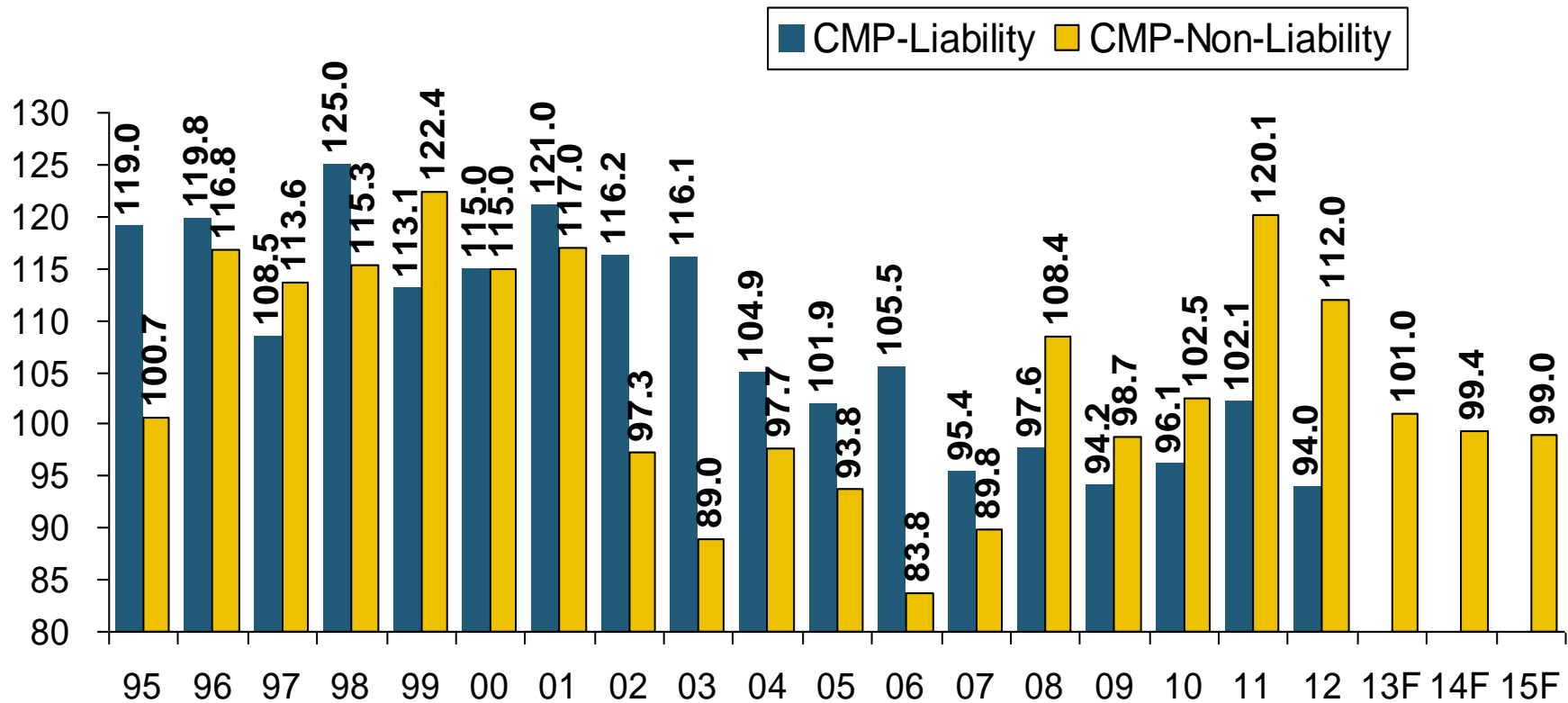
**Workers Comp Results Began to Improve in 2012.
Underwriting Results Deteriorated Markedly from 2007-
2010/11 and Were the Worst They Had Been in a Decade.**

Commercial Auto Combined Ratio: 1993–2015F



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

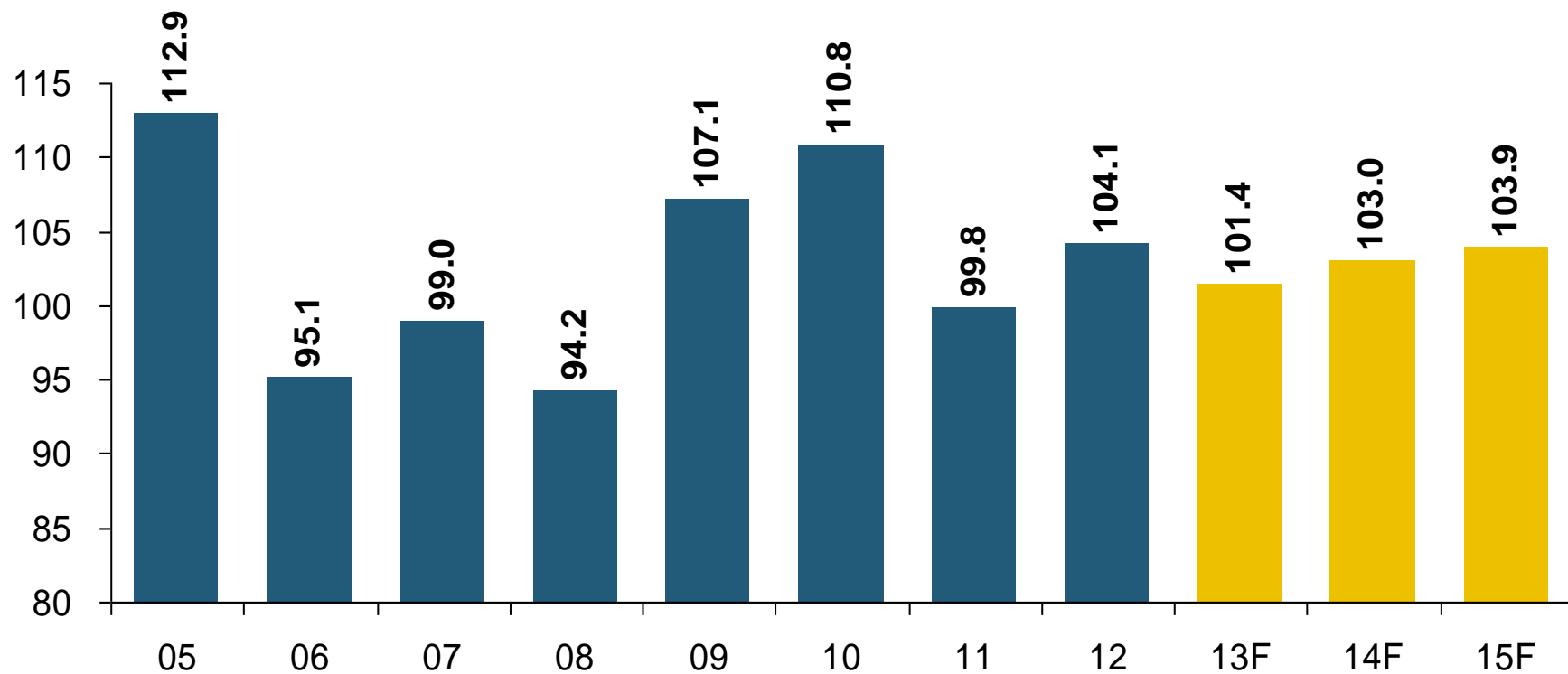
Commercial Multi-Peril Combined Ratio: 1995–2015F



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

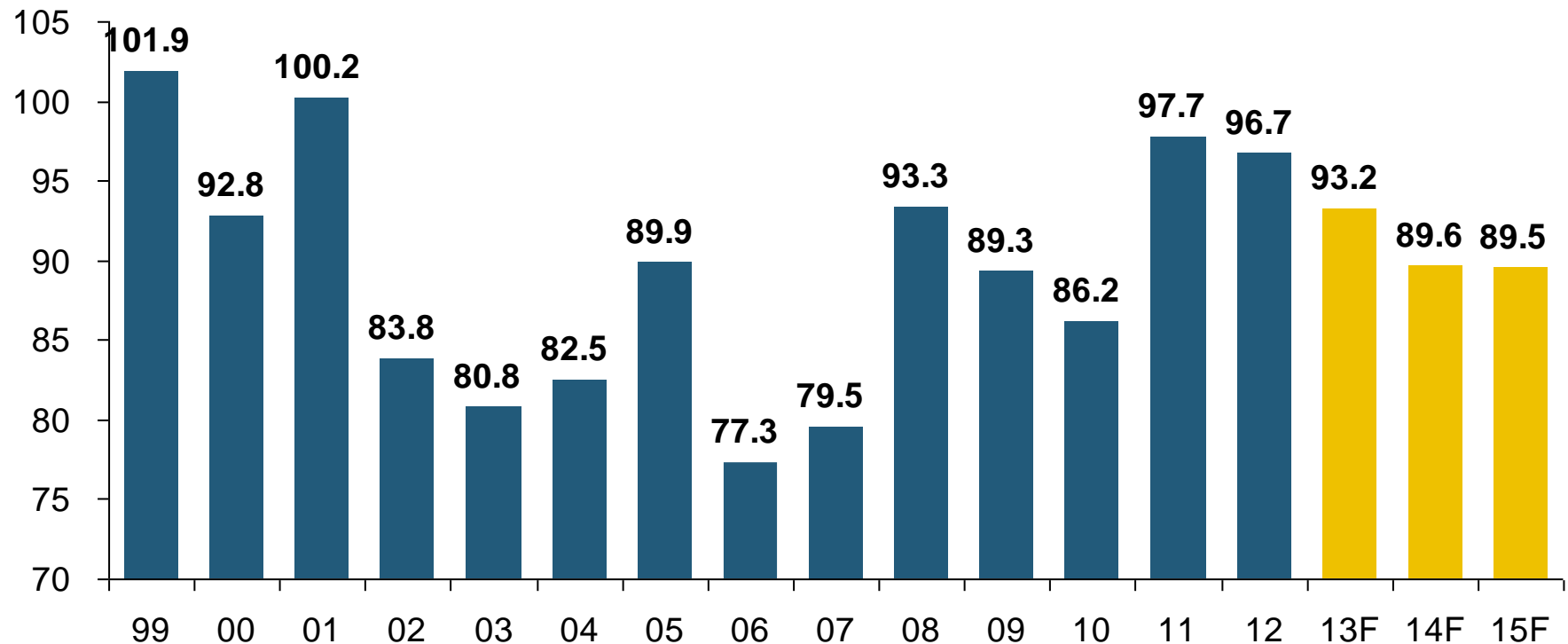
*2013F-2012F figures are Conning figures for the combined liability and non-liability components..
Sources: A.M. Best; Conning; Insurance Information Institute.

General Liability Combined Ratio: 2005–2015F



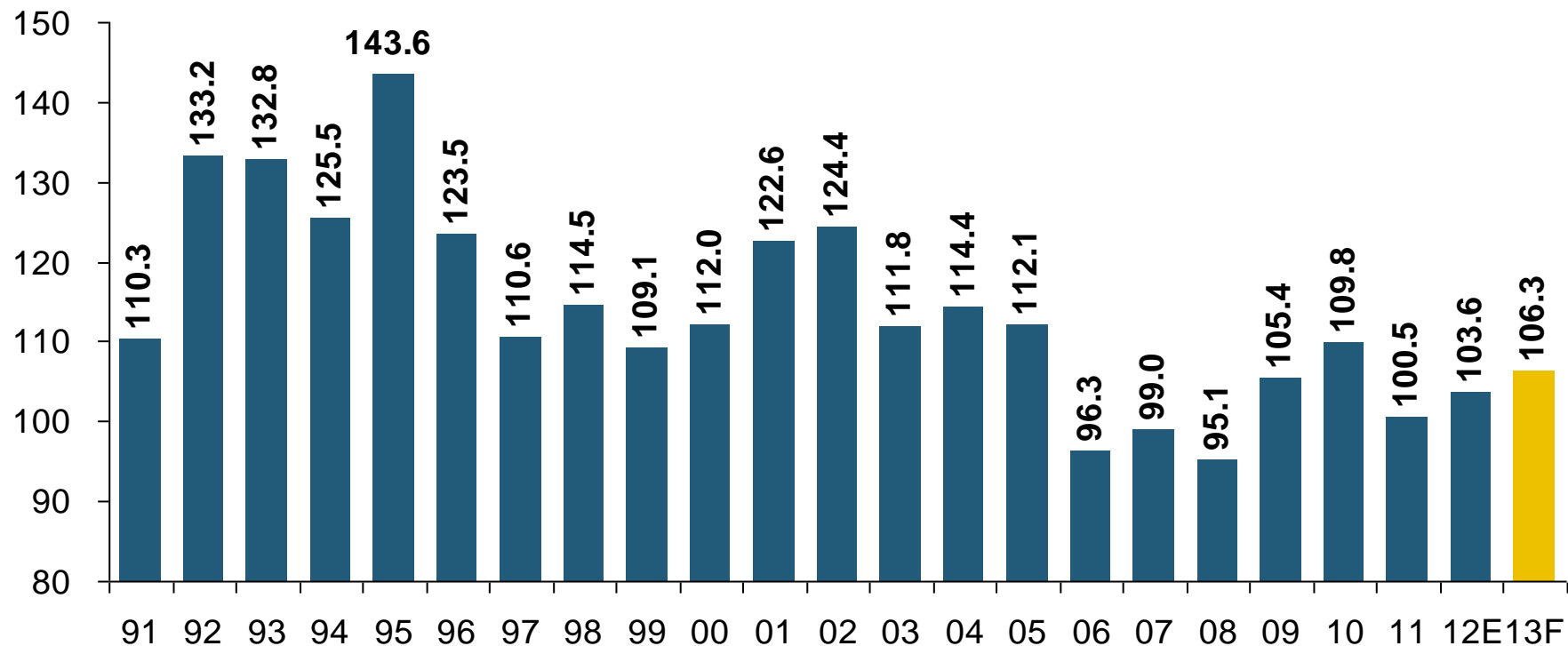
**Commercial General Liability Underwriting
Performance Has Been Volatile in Recent Years**

Inland Marine Combined Ratio: 1999–2015F



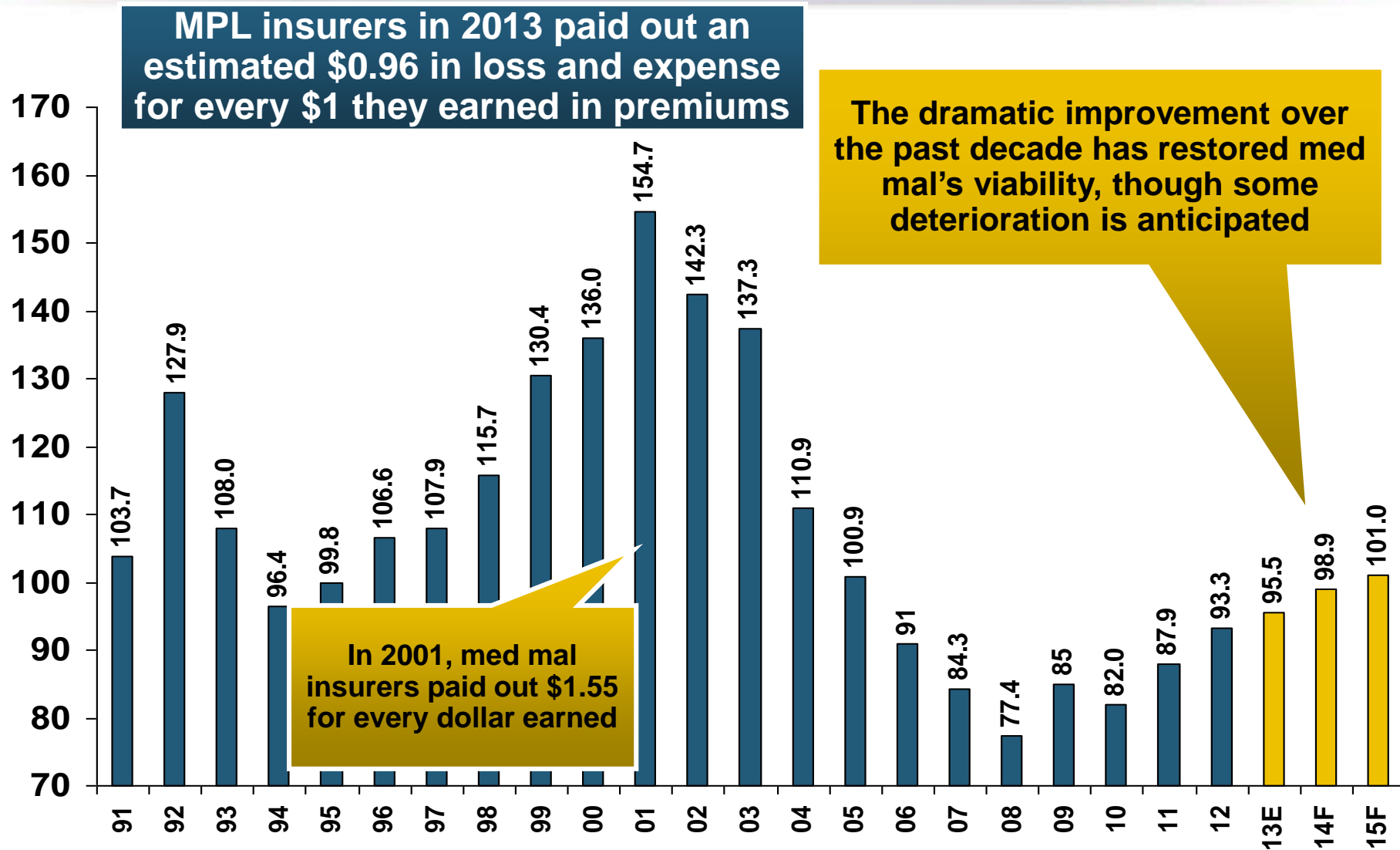
Inland Marine is Expected to Remain Among the Most Profitable of All Lines

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



Risk & Insurance

U.S. and Global Perspective

The External Environment:

***Is the World Becoming a
Riskier & More Uncertain Place?***

5 Major Categories for External Global Risks, Uncertainties and Fears: Insurance Solutions

1. Economic Risks
2. Geopolitical Risks
3. Environmental Risks
4. Technological Risks
5. Societal Risks



While risks can be broadly categorized, none are mutually exclusive



Multitude of Exogenous Factors Influence Growth, Performance & Cyclicality

- Economic Issues in US, Europe
- Weakness in China/Emerging Economies
- Political Gridlock in the US, Europe, Japan
- Fiscal Imbalances
- Monetary Policy/Tapering/Low Interest Rates
- Unemployment
- Political Upheaval in the Ukraine, Middle East
 - ◆ Argentina, Venezuela, Thailand
- Resurgent Terrorism Risk
- Diffusion of Weapons of Mass Destruction
- Cyber Attacks
- Record Natural Disaster Losses
- Climate Change
- Environmental Degradation
- Income Inequality
- (Over)Regulation: Systemic Risk?



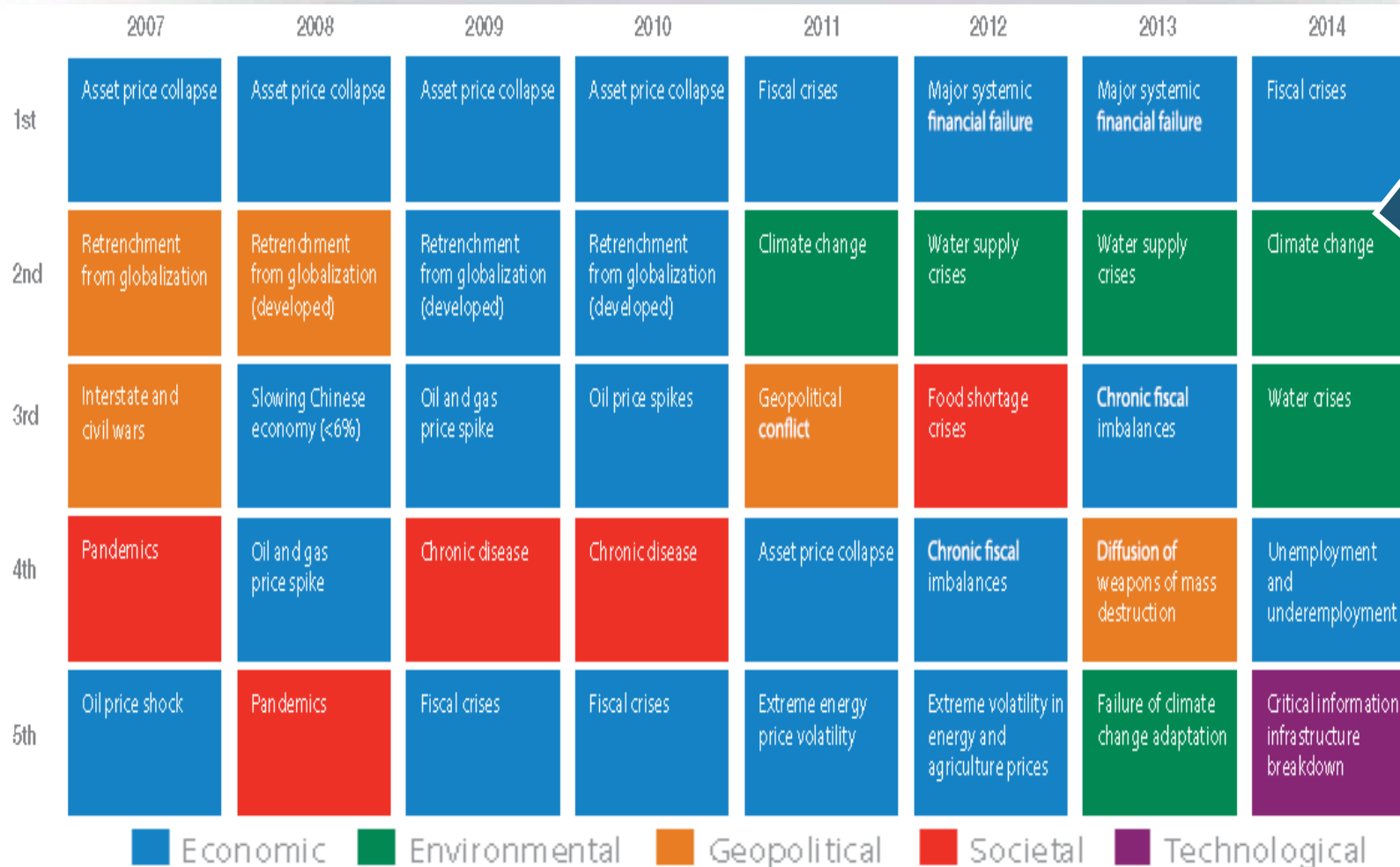
Are “Black Swans”
everywhere or
does it just seem
that way?

Top 5 Global Risks in Terms of *Likelihood*, 2007—2014: Insurance Can Help With Most



Concerns Shift Considerably Over Short Spans of Time. 2014 Includes a Mix of Environmental Economic, Social and Environmental Risks

Top 5 Global Risks in Terms of *Impact*, 2007—2014: Insurance Can Help With Most



In 2014, economic and environmental issues dominated severity concerns

Concerns Over the Impacts of Economics Risks Remained High in 2014, but Societal, Environment and Technological Risks Also Loom Large

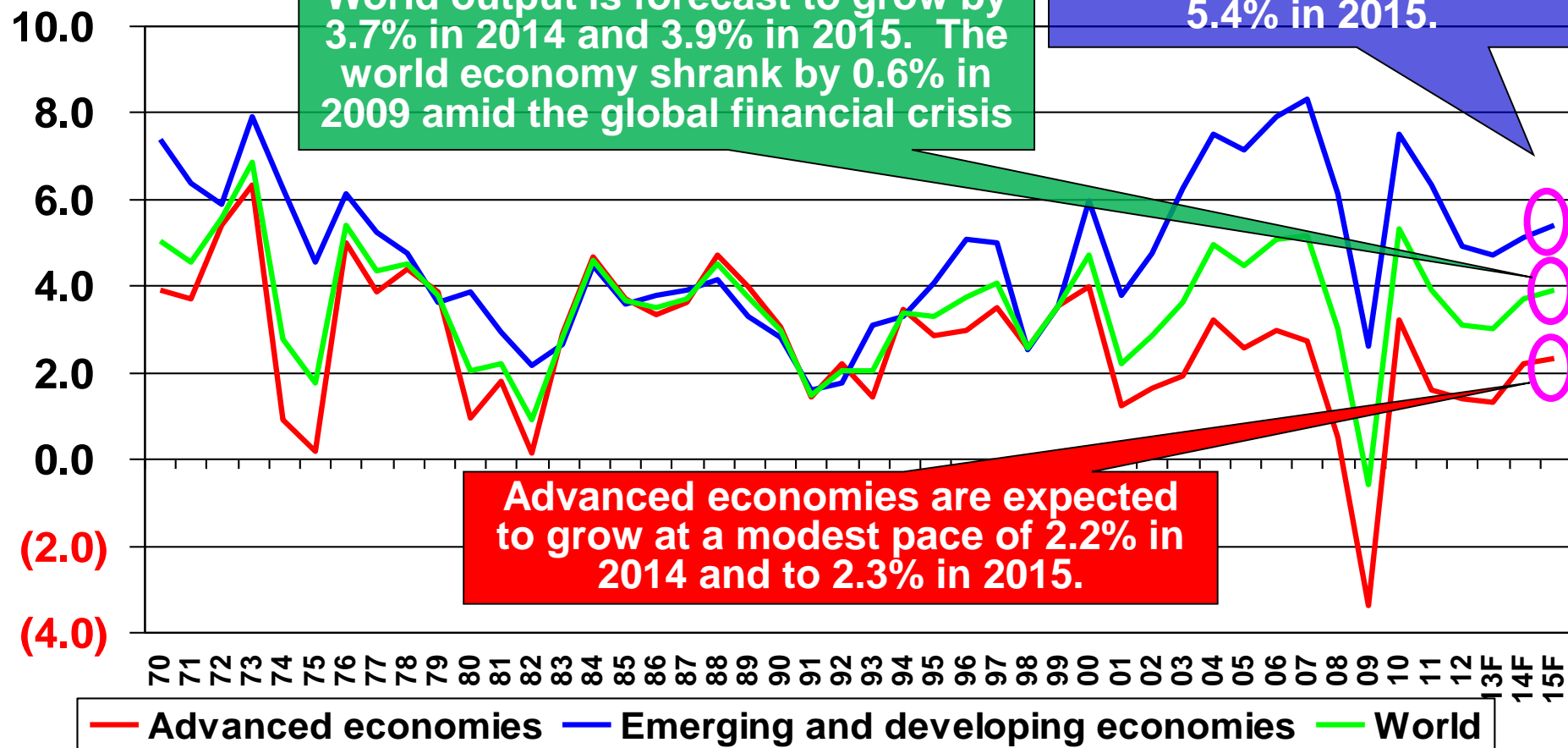
Globalization: The Global Economy Creates and Transmits Cycles & Risks

**Globalization Is a Double Edged Sword—
Creating Opportunity and Wealth But
Potentially Creating and Amplifying Risk**

Emerging vs. “Advanced” Economies

GDP Growth: Advanced & Emerging Economies vs. World, 1970-2015F

GDP Growth (%)



World Trade Volume: 1948—2013F

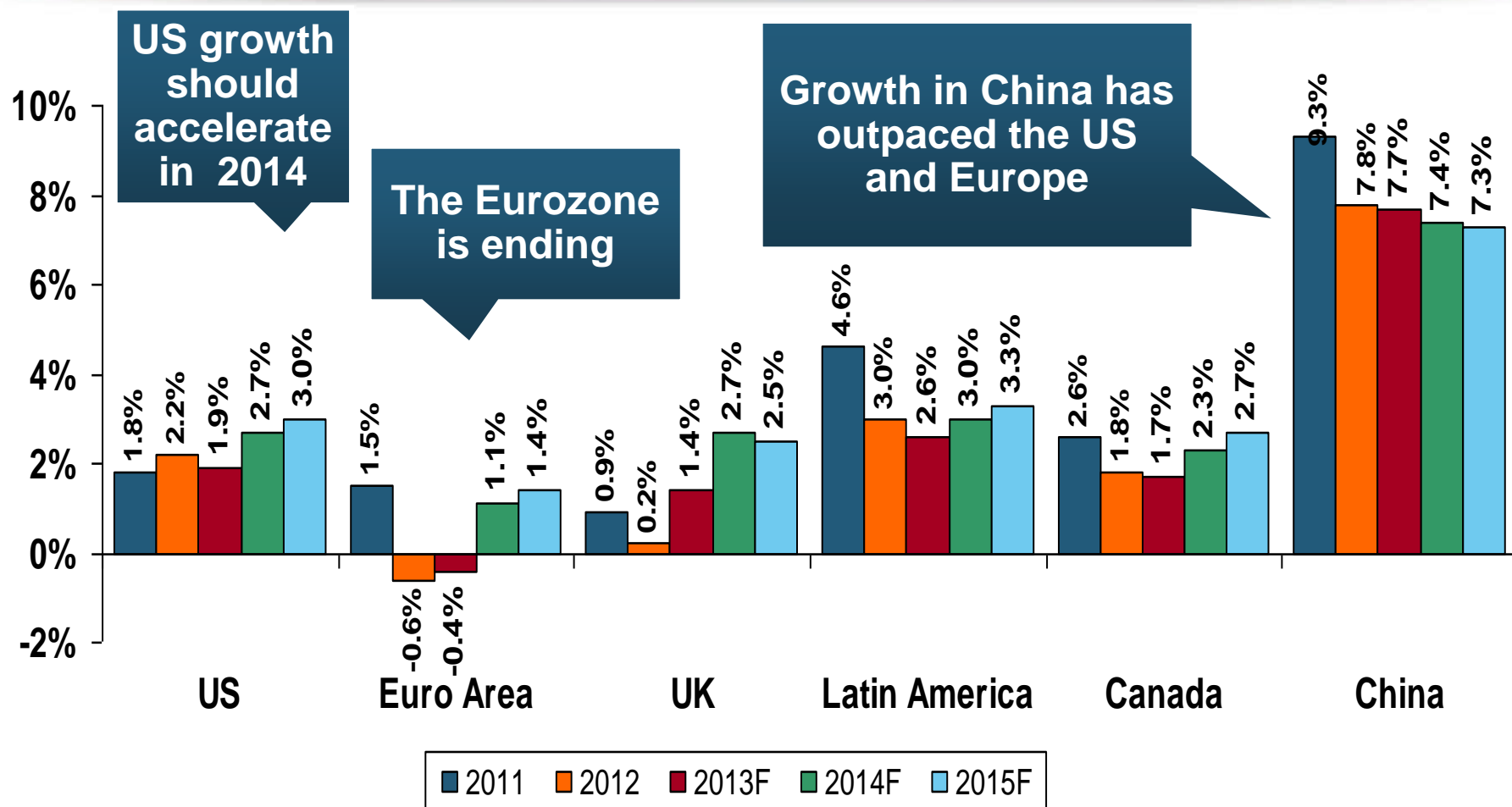
\$ Billions



Insurance Regulation Will Necessarily Become More Transnational, Following Patterns of Global Economic Growth, the Creation of New Insurable Exposures and International Capital Flows

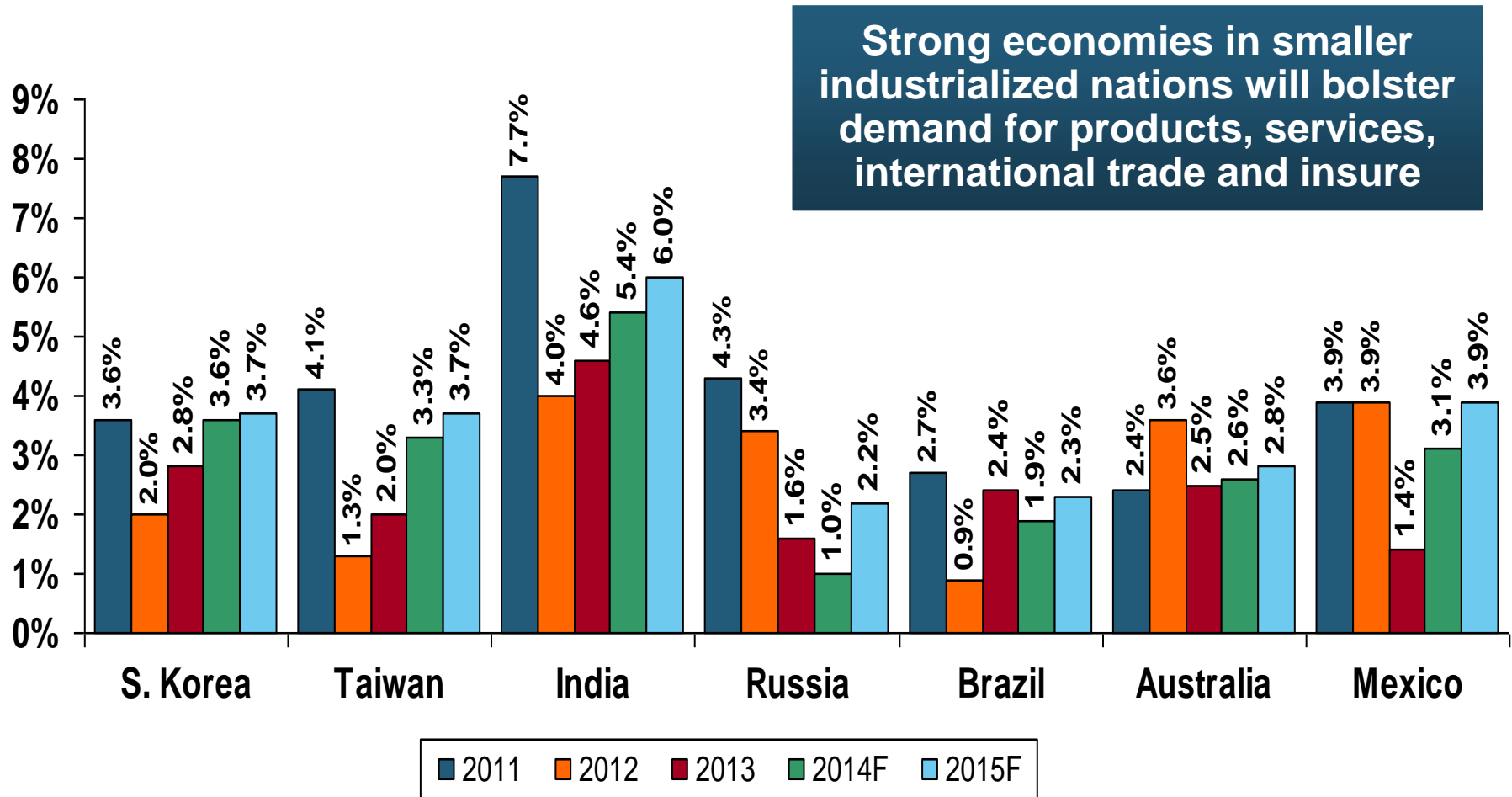
Sources: World Trade Organization data through 2011; Insurance Information Institute estimate for 2013 based on IMF forecasts as of July 2013.

Real GDP Growth Forecasts: Major Economies: 2011 – 2015F



Growth Prospects Vary Widely by Region: Growth Returns to Most Areas Even as China Slows; Some strengthening in Latin America

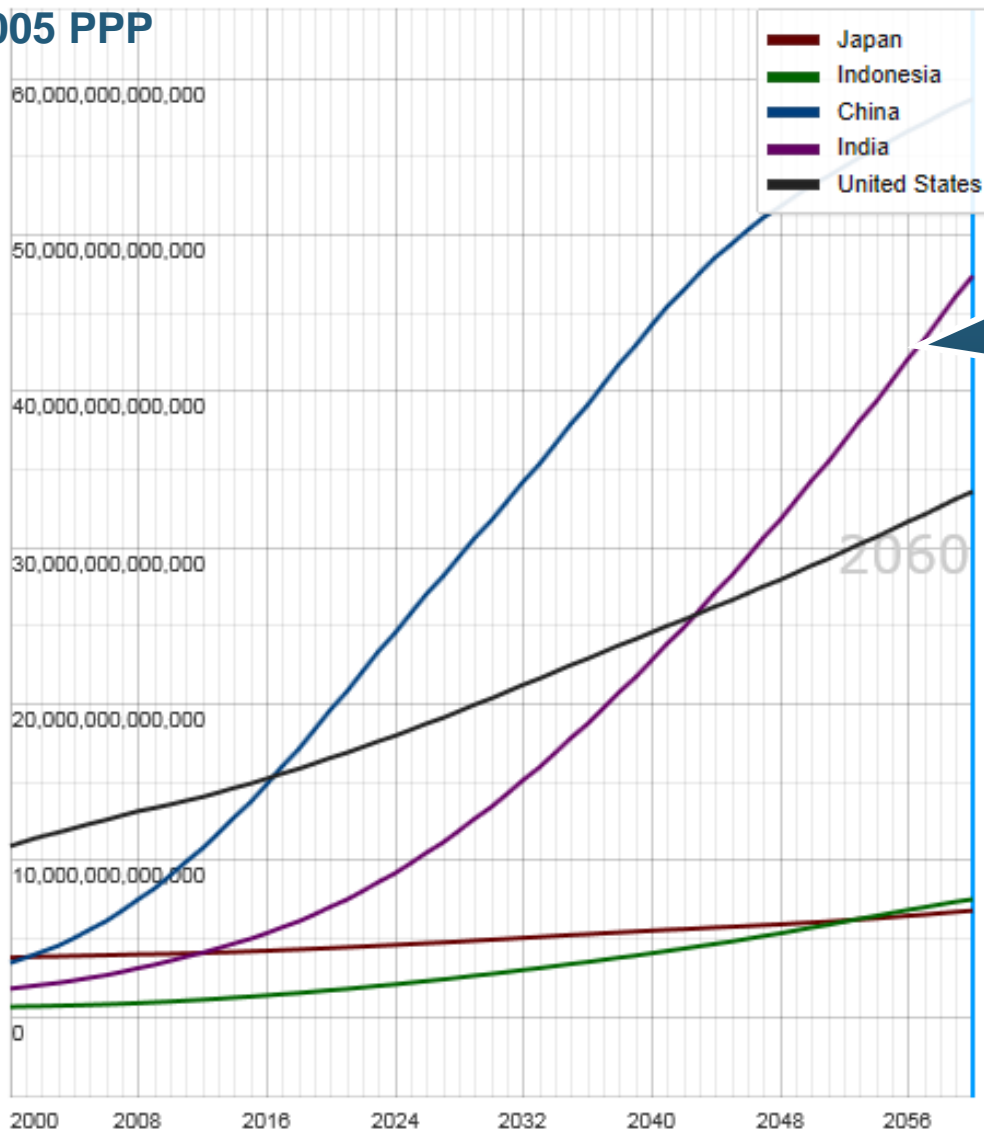
Real GDP Growth Forecasts: Selected Economies: 2011 – 2015F



Growth Is Expected Accelerate in Most of the World in 2014 and 2015

Potential Output of Total Economy: US, China, India, Indonesia and Japan, 2000-2060F

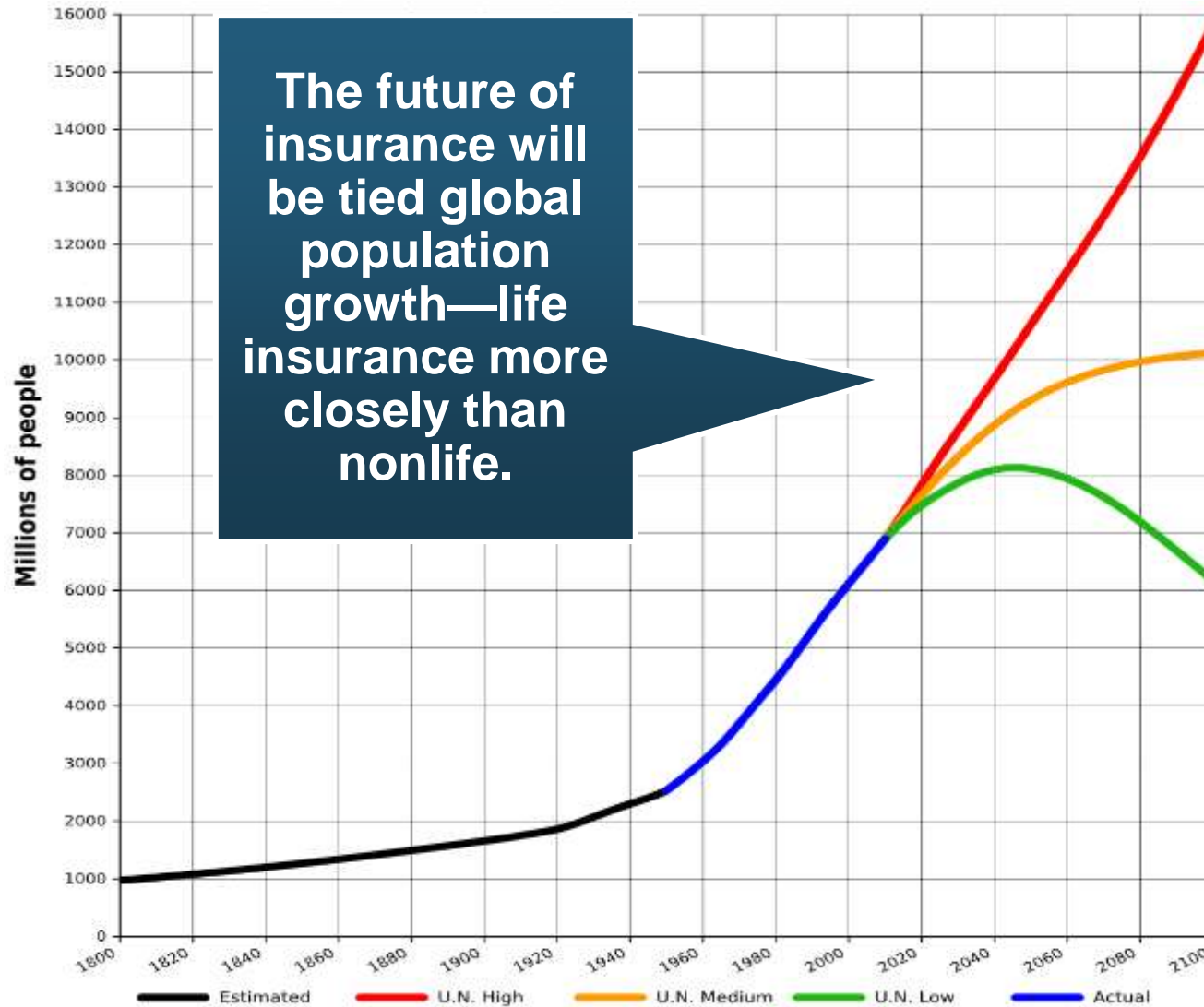
\$ 2005 PPP



Growth in economic output will be concentrated in certain developing economies such as China and India

China will likely become the world's largest economy between 2025 and 2030

World Population Growth: 2010—2100F

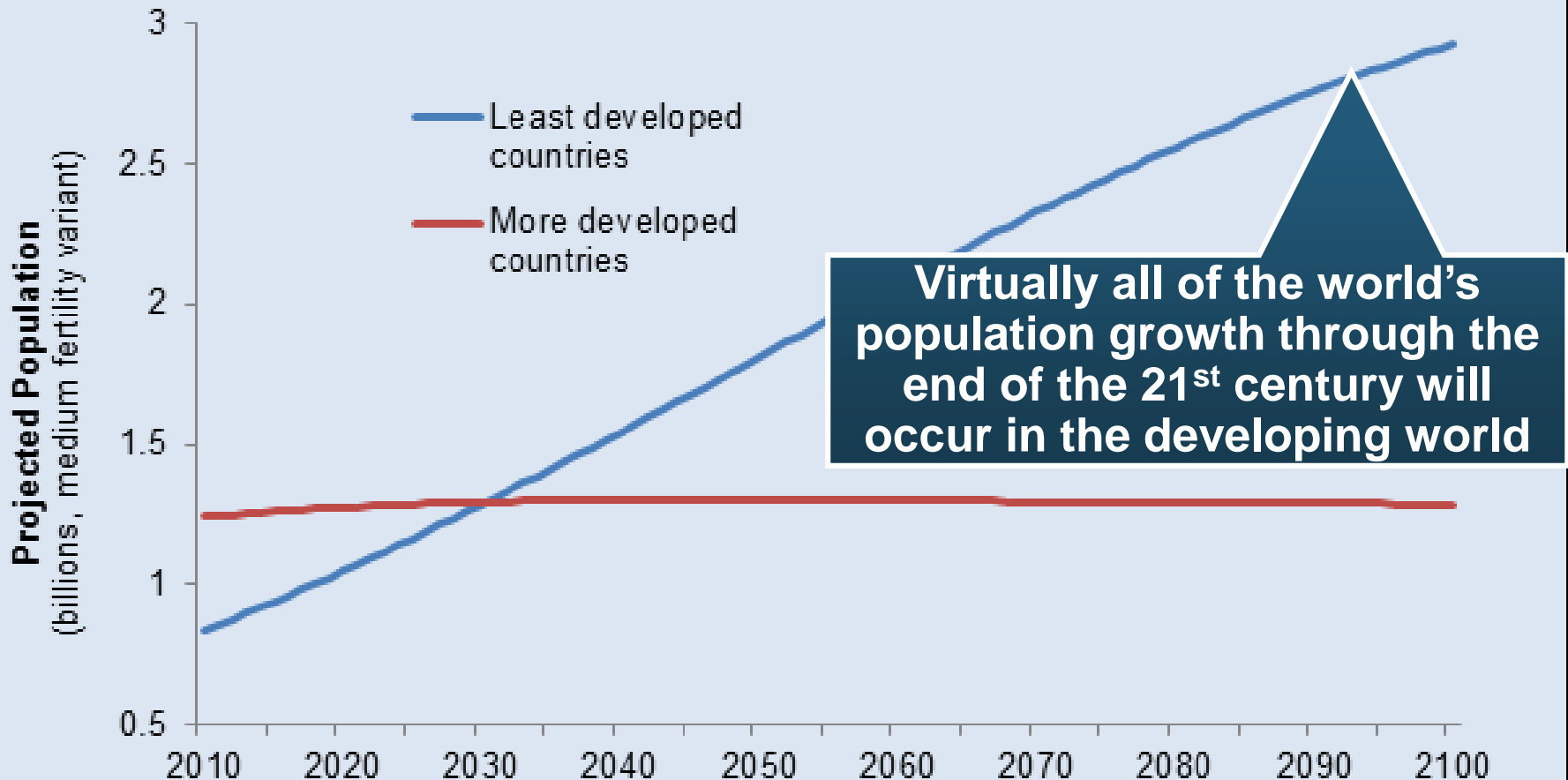


The future of insurance will be tied global population growth—life insurance more closely than nonlife.

Mid-range scenarios suggest a massive slowdown in the number of available lives to insure. Growth will be increasing dependent on product penetration rates in emerging economies

Population Growth: Developed vs. Less Developed Countries 2010—2100F

Growth by Current Socioeconomic Level

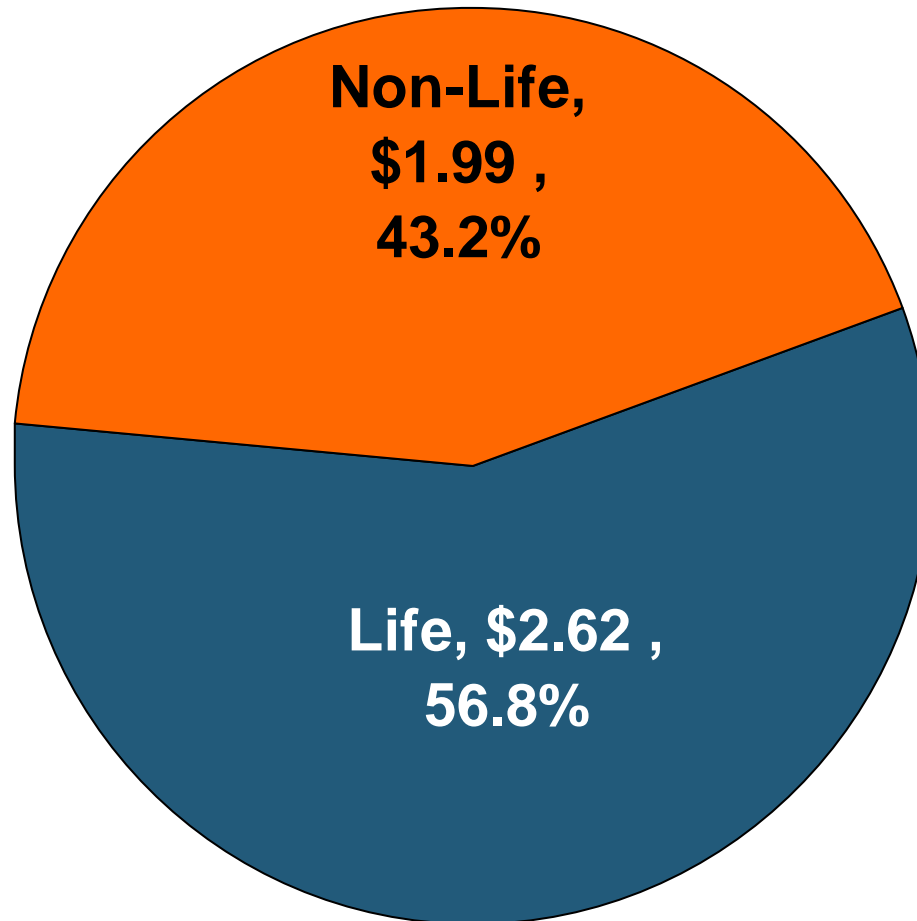


Global Insurance Premium Growth Trends: Non-Life (P/C) and Life

**Growth Is Uneven Across Regions
and Market Segments**

Distribution of Global Insurance Premiums, 2012 (\$ Trillions)

Total Premium Volume = \$4.613 Trillion*

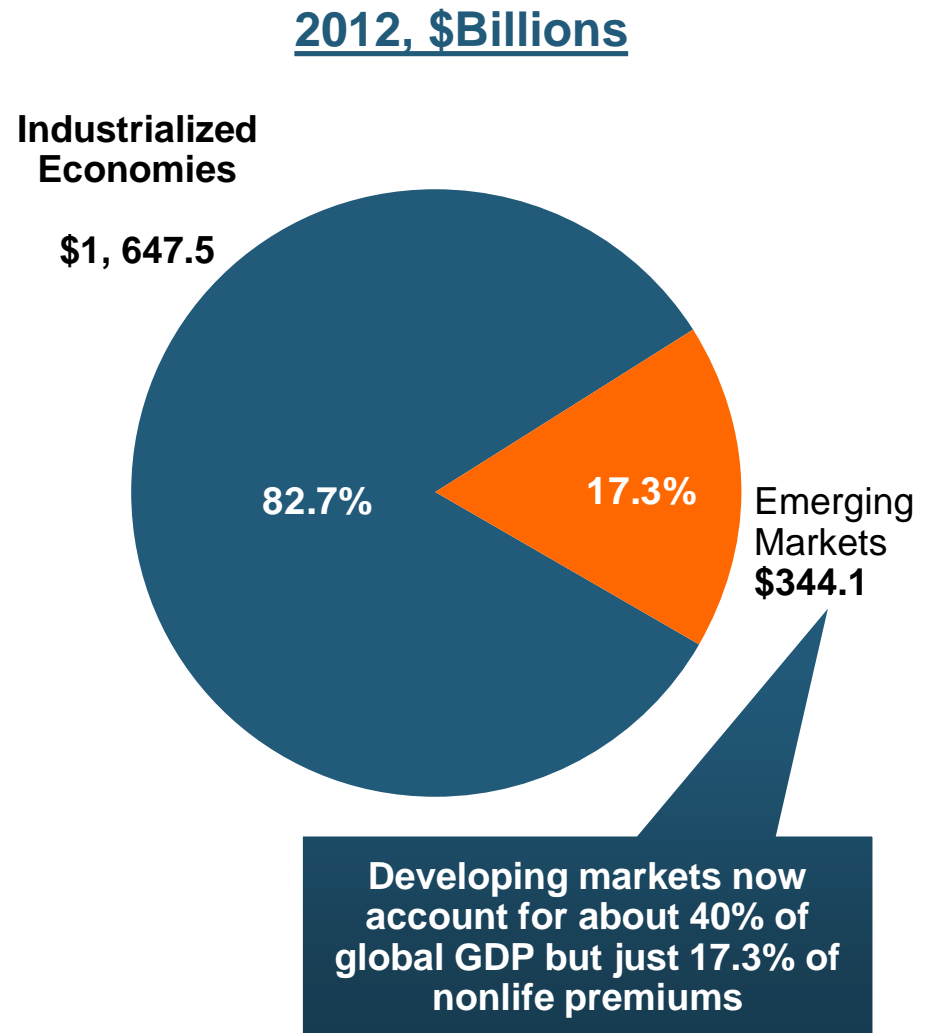


Life insurance accounted for nearly 57% of global premium volume in 2012 vs. 43% for Non-Life

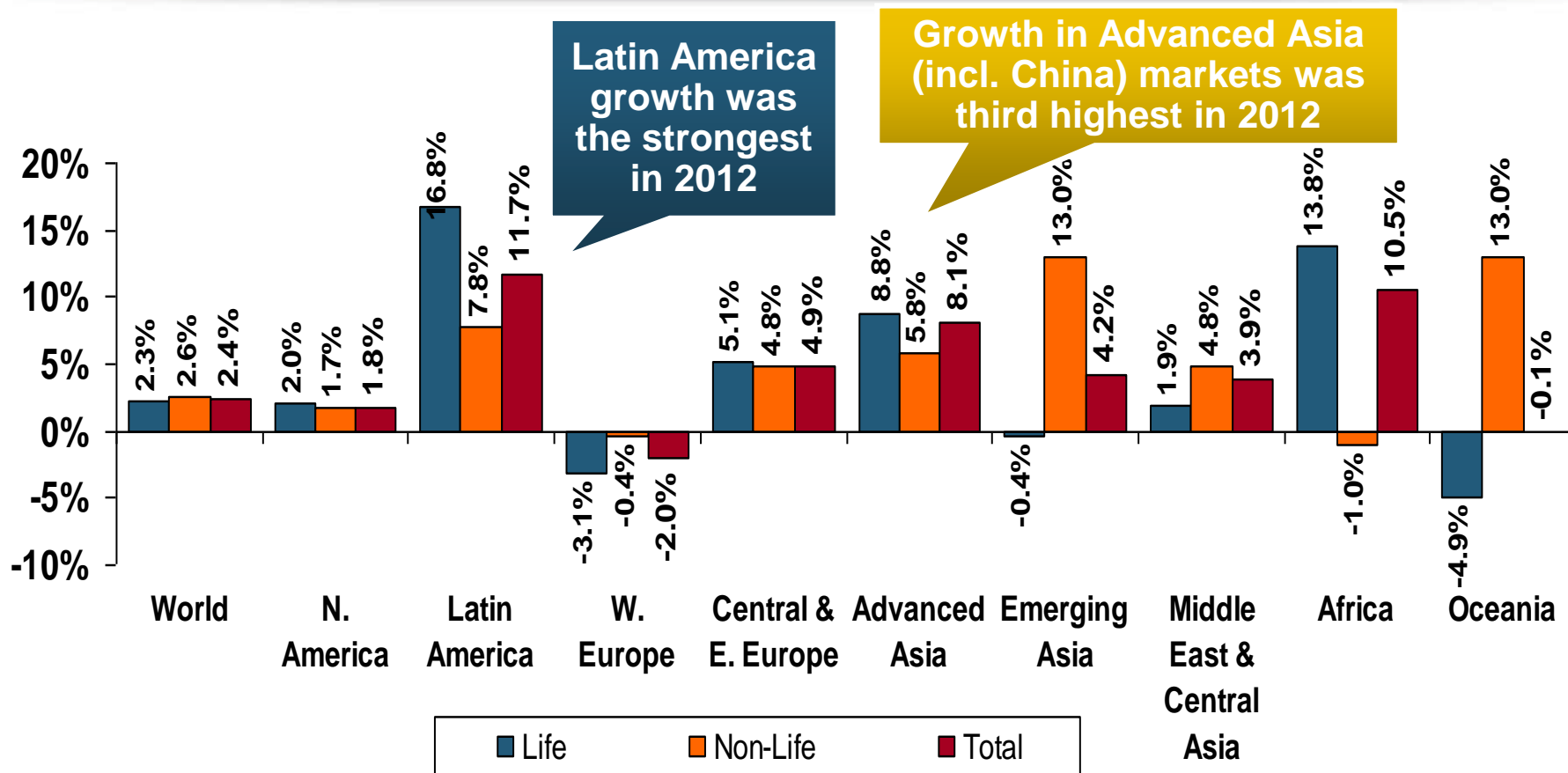
Distribution of Nonlife Premium: Industrialized vs. Emerging Markets, 2012

Premium Growth Facts

- Emerging market's share of nonlife premiums increased to 17.3% in 2012 from 14.3% in 2009. The share of premiums written in the \$2 trillion global nonlife market remains much larger (82.7%) but continues to shrink.
- The financial crisis and sluggish recovery in the major insurance markets will accelerate the expansion of the emerging market sector

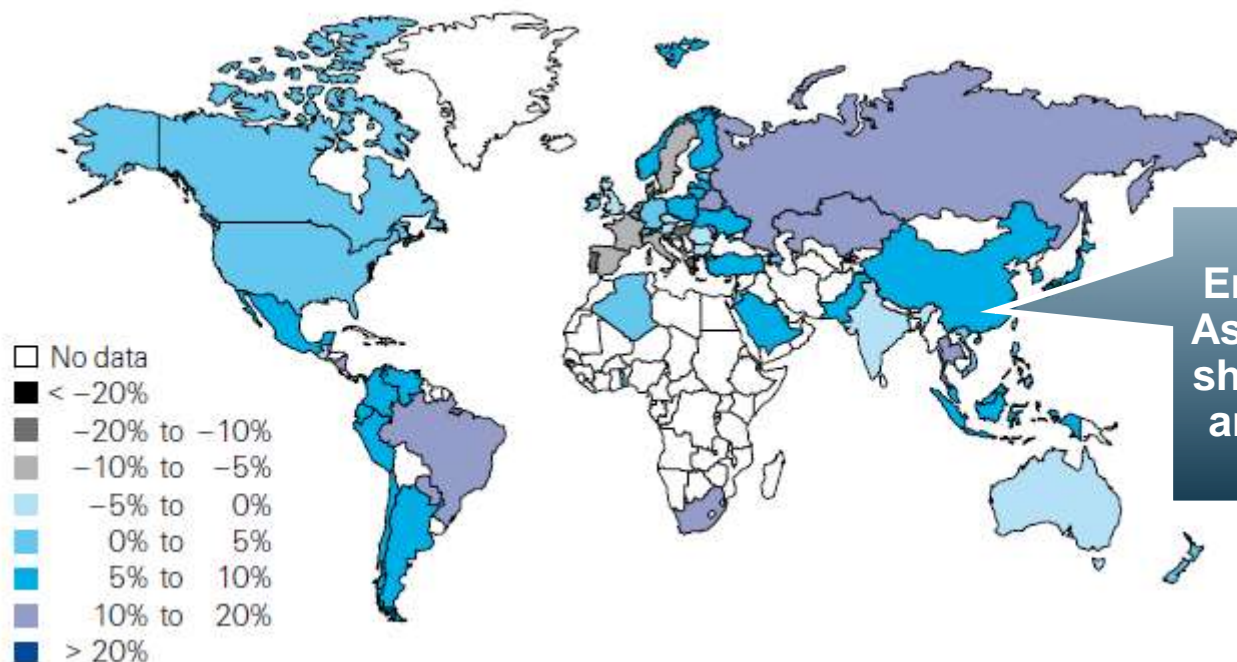


Premium Growth by Region, 2012



Global Premium Volume Totaled \$4.613 Trillion in 2012, up 2.4% from \$4.566 Trillion in 2011. Global Growth Was Weighed Down by Slow Growth in N. America and W. Europe and Partially Offset by Emerging Markets

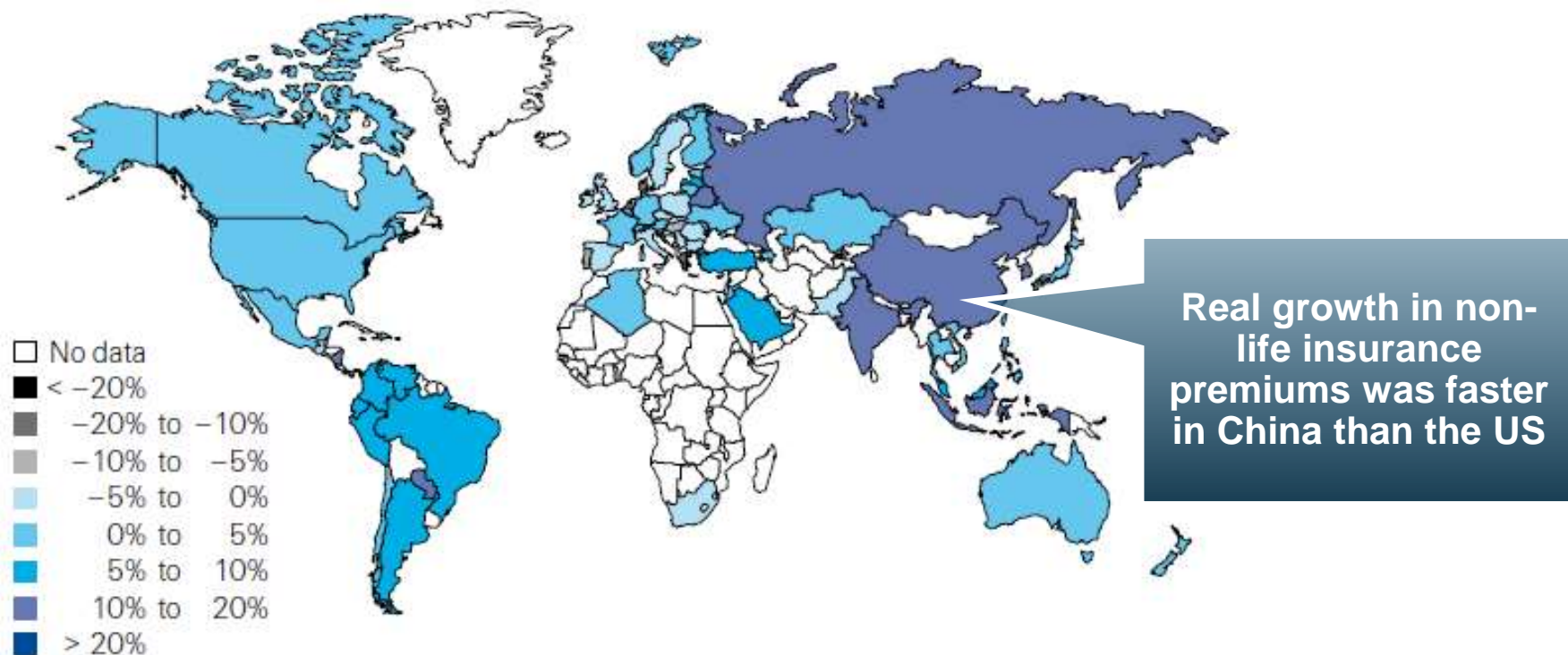
Global Real (Inflation Adjusted) Premium Growth (Life and Non-Life): 2012



Market	Life	Non-Life	Total
Advanced	1.8	1.5	1.7
Emerging	4.9	8.6	6.8
World	2.3	2.6	2.4

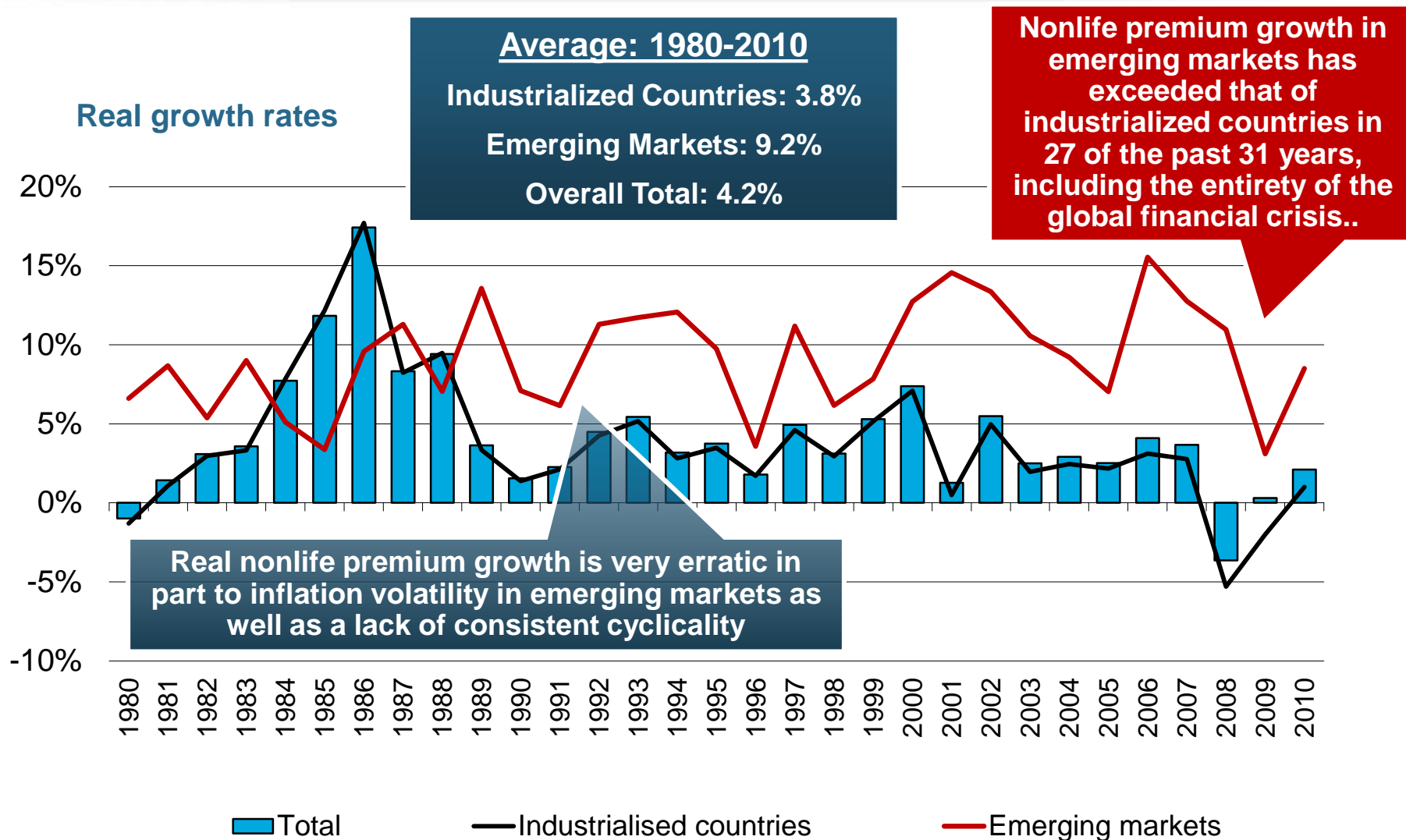
Premium growth in emerging markets was 4 times that of advanced economies in 2012

Non-Life Insurance: Global Real (Inflation Adjusted) Premium Growth, 2012

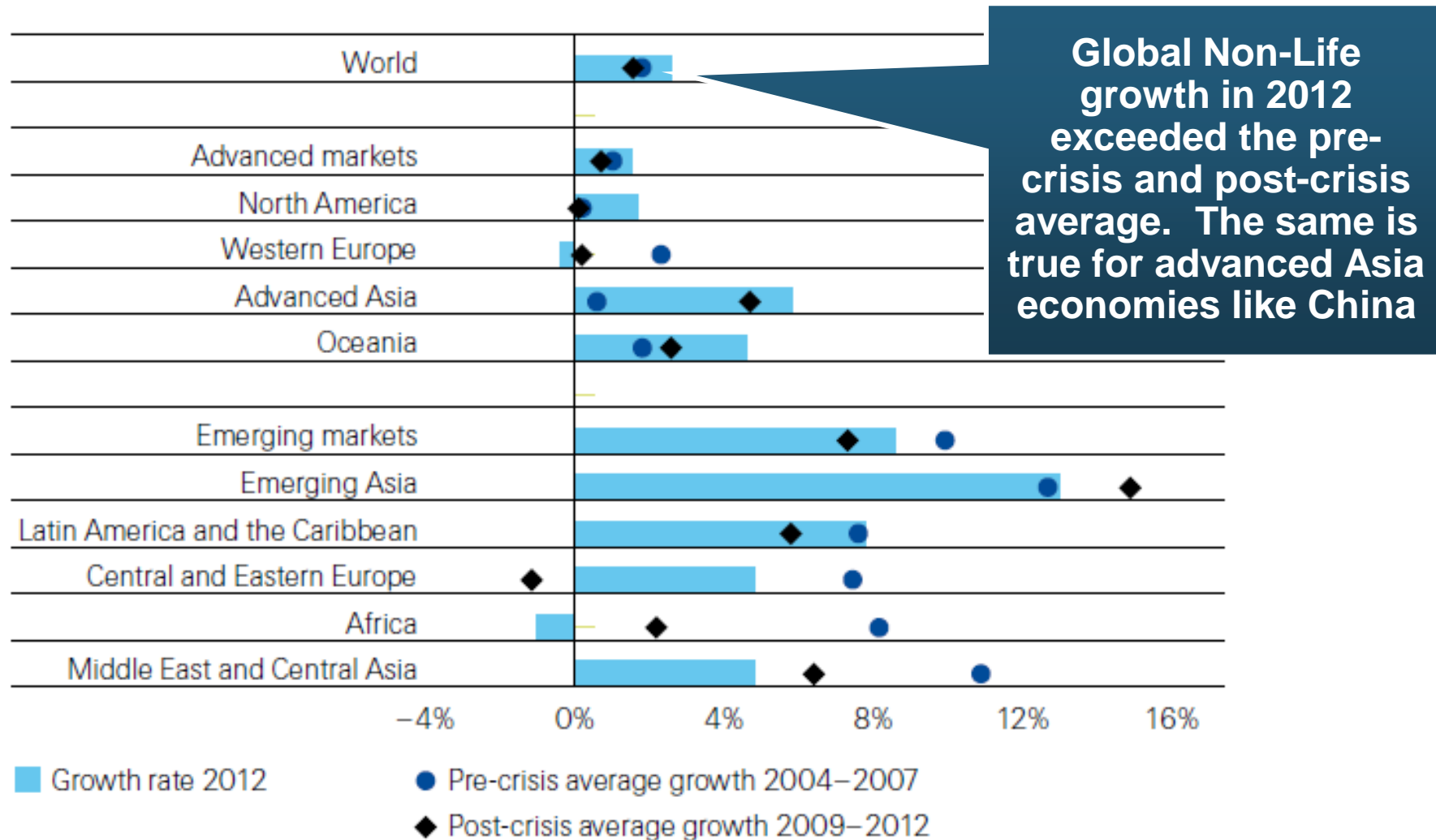


Market	Life	Non-Life	Total
Advanced	1.8	1.5	1.7
Emerging	4.9	8.6	6.8
World	2.3	2.6	2.4

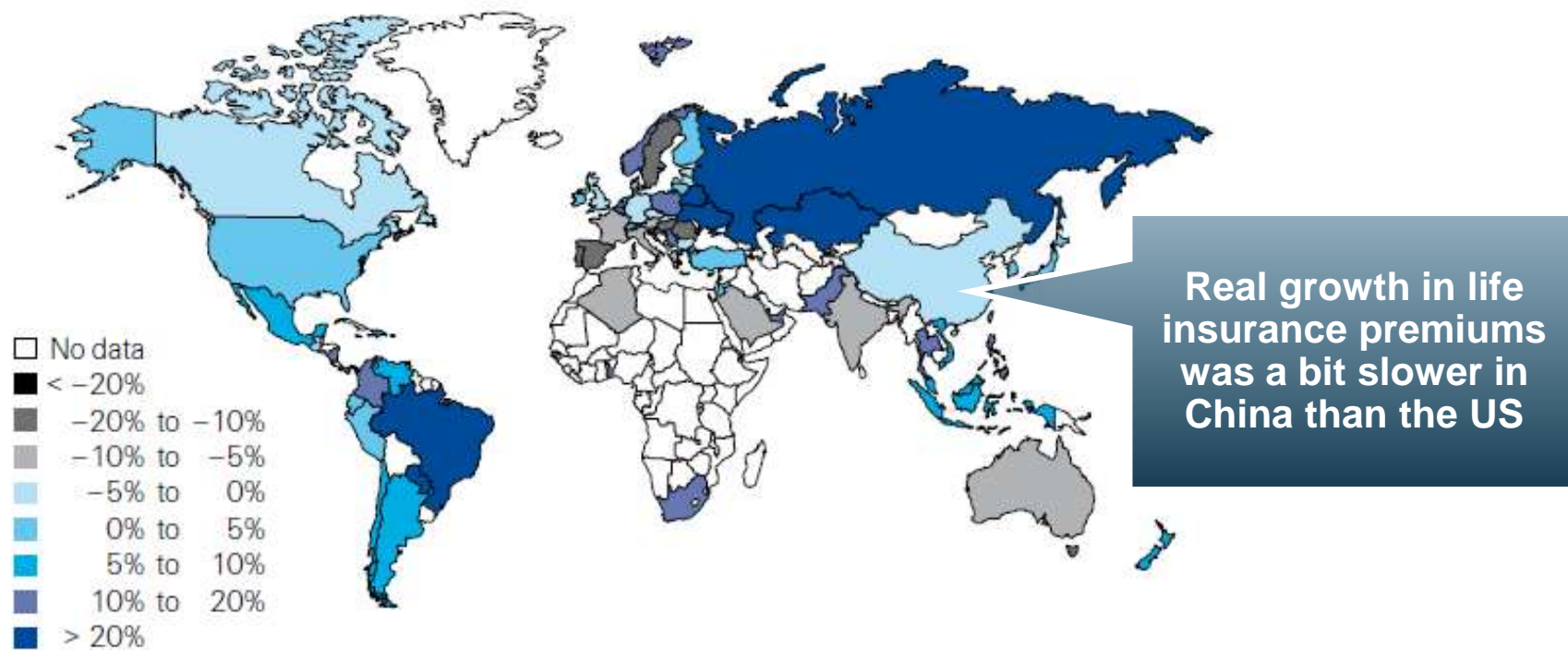
Global Real (Inflation Adjusted) Nonlife Premium Growth: 1980-2010



Non-Life Insurance: Global Real (Inflation Adjusted) Premium Growth, 2012

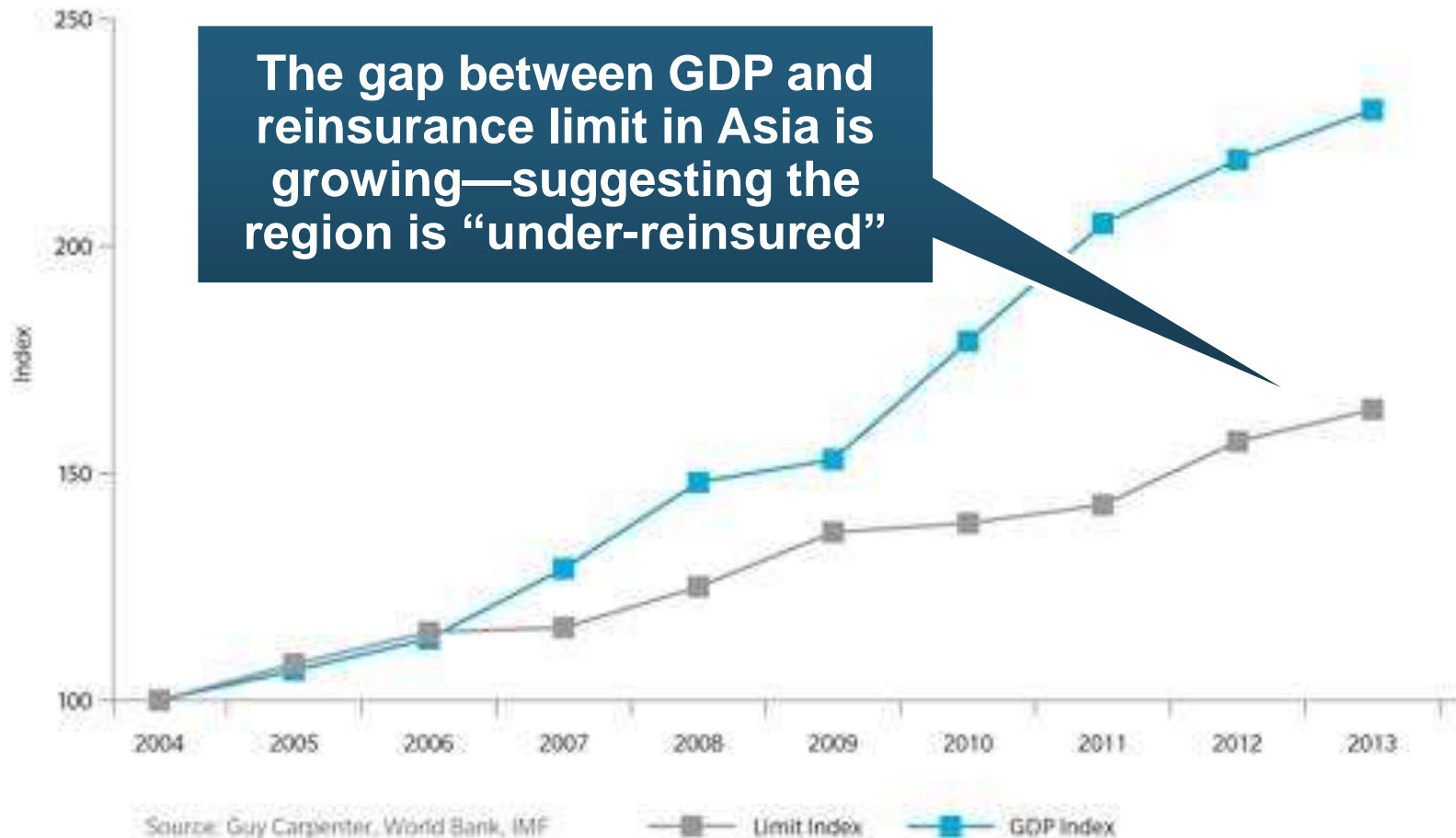


Life Insurance: Global Real (Inflation Adjusted) Premium Growth, 2012

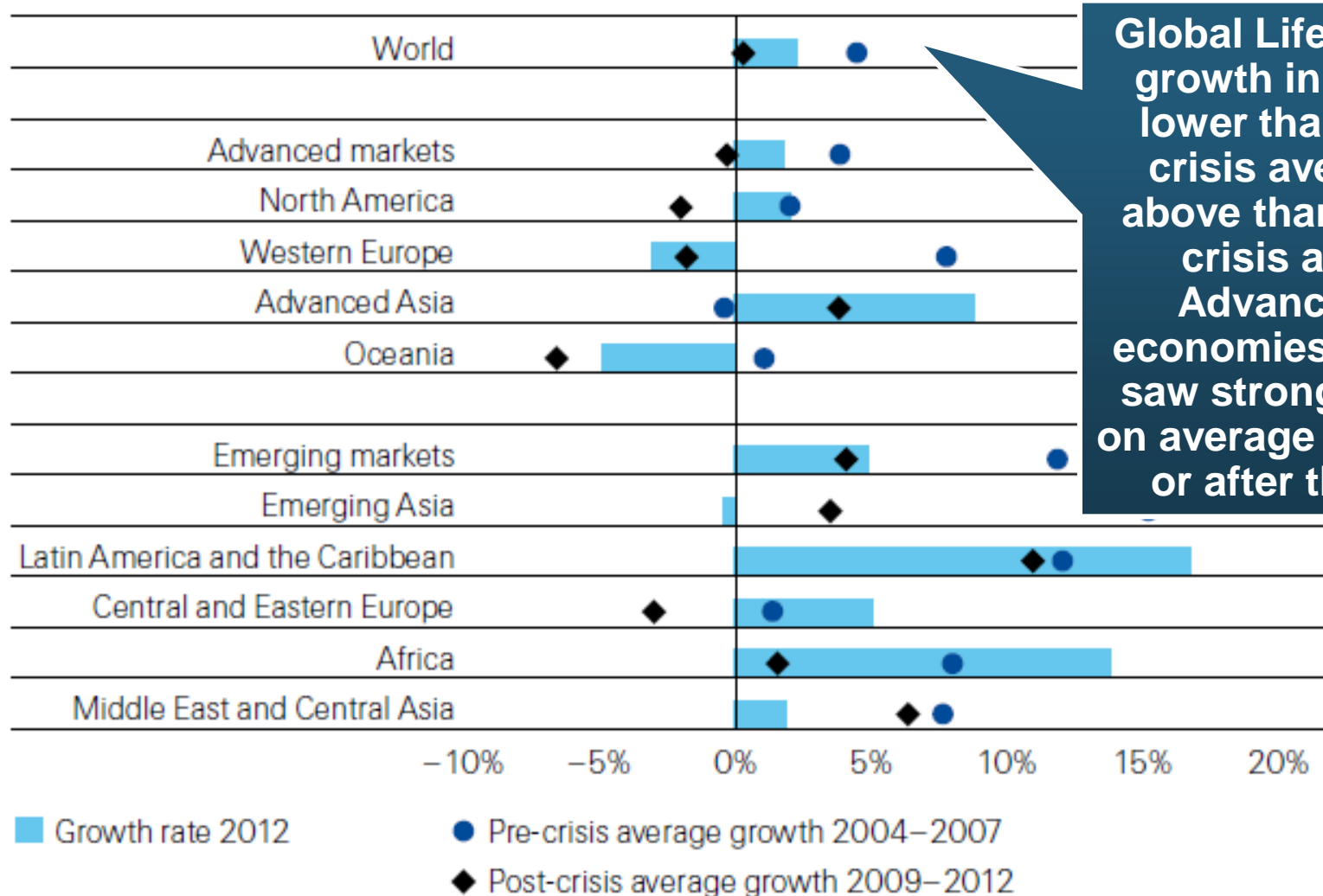


Market	Life	Non-Life	Total
Advanced	1.8	1.5	1.7
Emerging	4.9	8.6	6.8
World	2.3	2.6	2.4

Gap Between GDP Growth and Reinsurance Limit in Asia-Pacific Region: 2004—2013

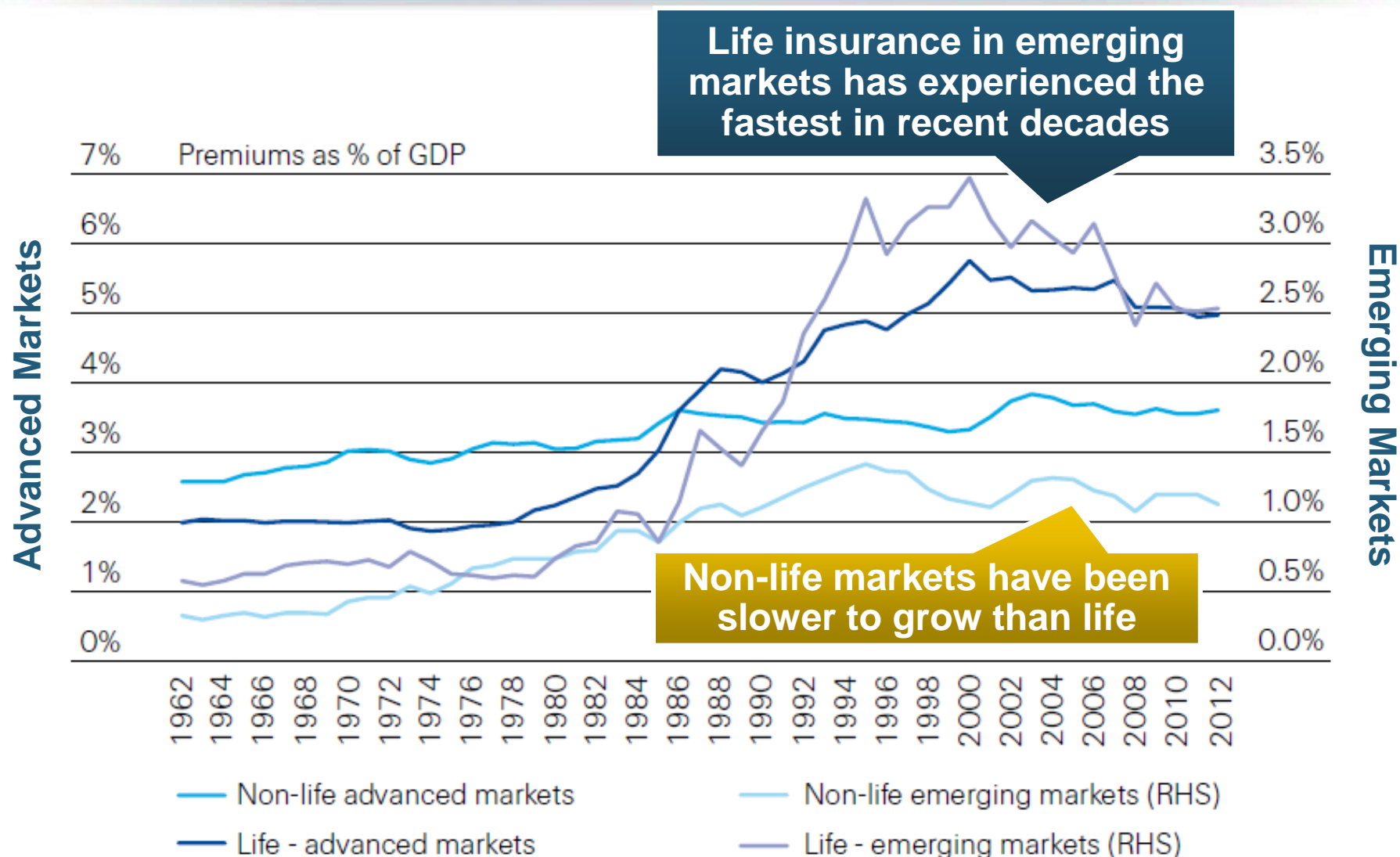


Life Insurance: Global Real (Inflation Adjusted) Premium Growth, 2012



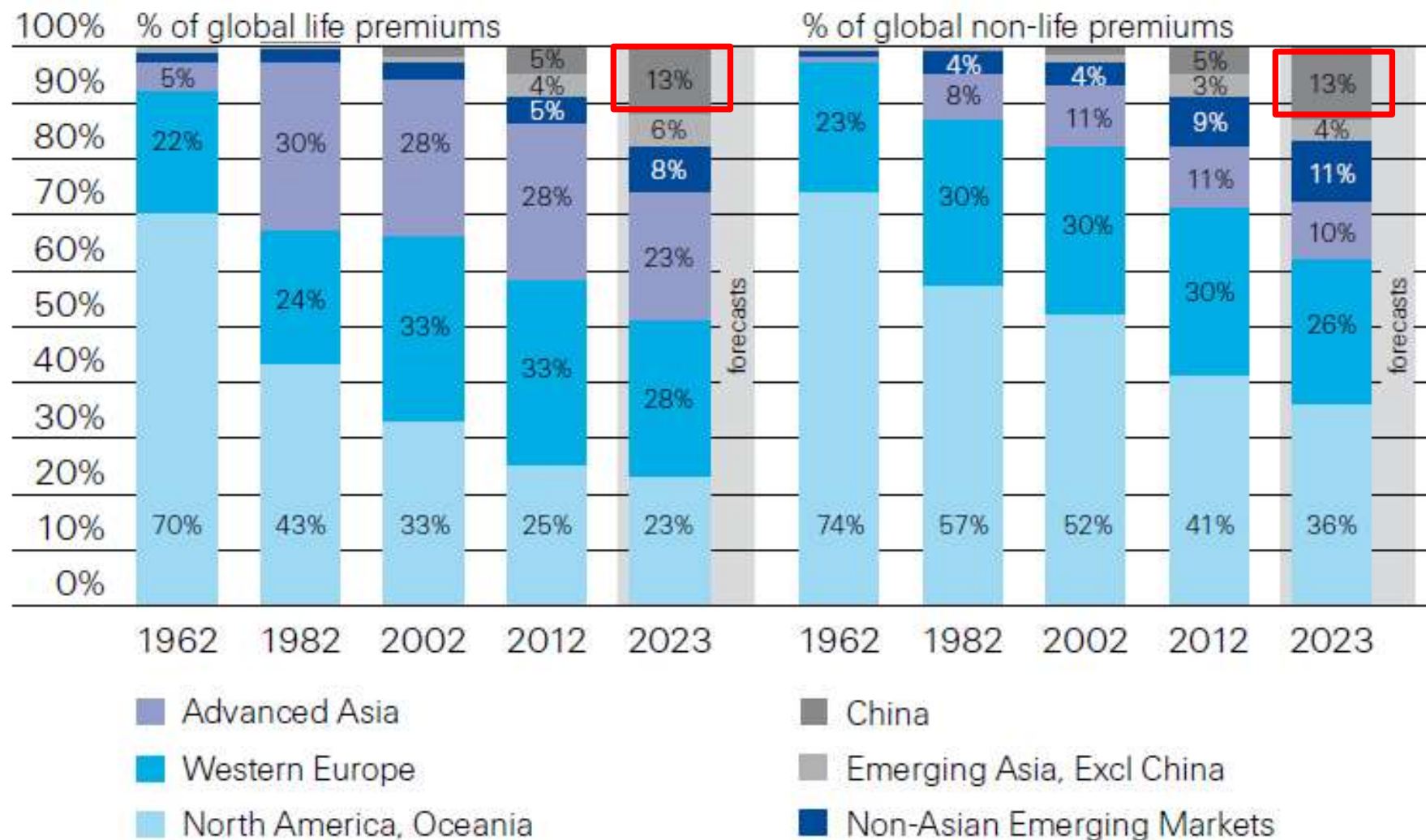
Global Life Insurance growth in 2012 was lower than the pre-crisis average but above than the post-crisis average. Advanced Asia economies like China saw stronger growth on average than before or after the crisis.

Life and Non-Life Insurance Penetration as a % of GDP: 1962-2012



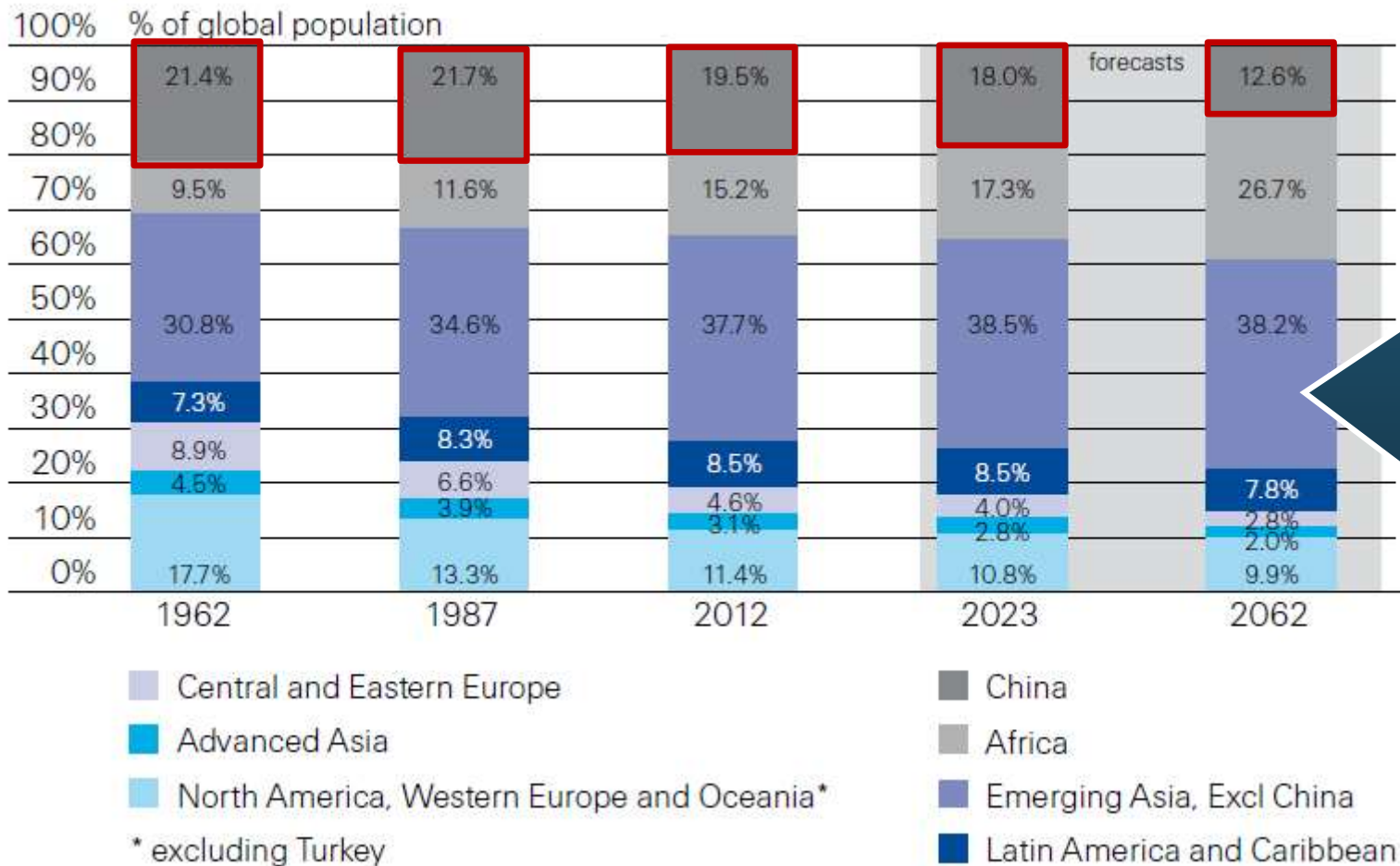
Premiums Written in Life and Non-Life, by Region: 1962-2012

Emerging market shares rose rapidly over the past 50 years



Population Distribution, by Region: 1962-2062F

Enormous population shifts will impact insurance demand over the next half century



Africa is expected to be the fastest population growth over the next 50 years, but no expectation now of Asia-like growth in economies or insurance demand

Relationship Between Real GDP and Real Life and Non-Life Premium Growth, 2012

Advanced Markets



The was a clear but highly relationship between real GDP growth and real premium growth in advance markets in 2012

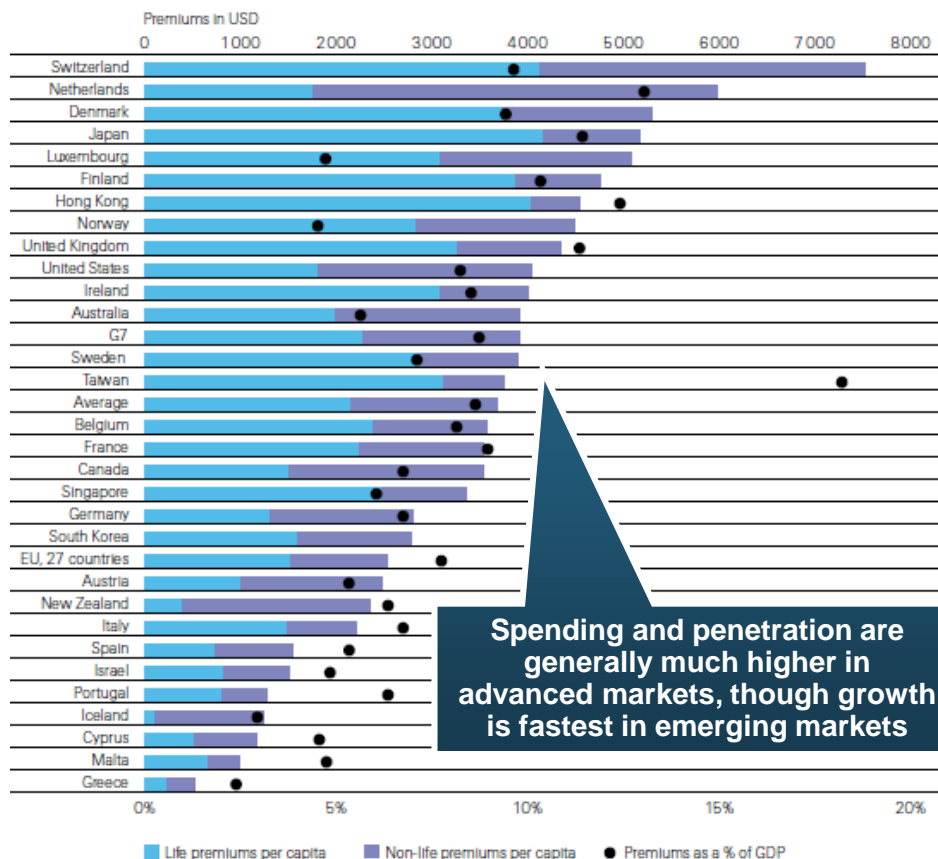
Emerging Markets



The correlation between real GDP growth and real premium growth in emerging markets was much stronger than in advanced markets in 2012

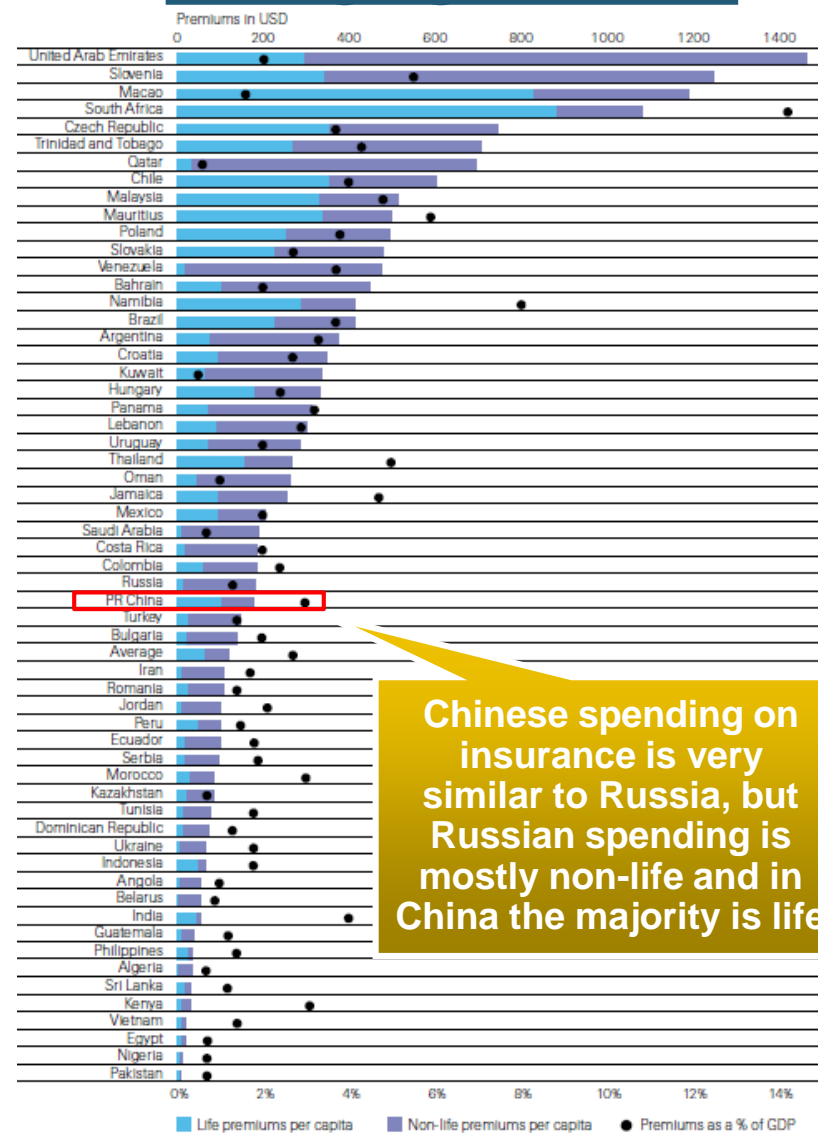
Insurance Density and Penetration for Advanced and Emerging Markets, 2012

Advanced Markets



Spending and penetration are generally much higher in advanced markets, though growth is fastest in emerging markets

Emerging Markets

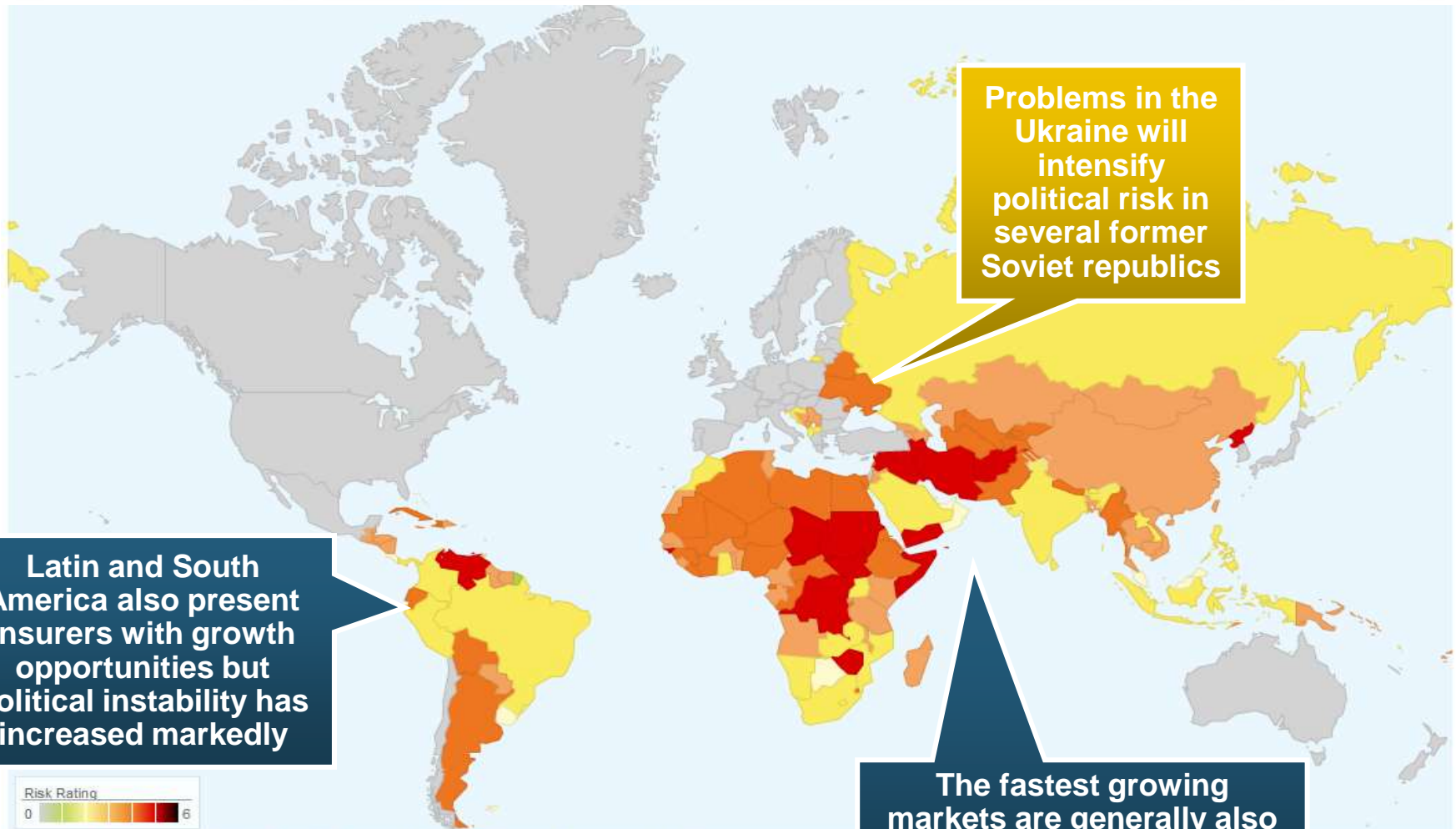


Chinese spending on insurance is very similar to Russia, but Russian spending is mostly non-life and in China the majority is life

The Unfortunate Nexus: Opportunity, Risk & Instability

**Most of the Global Economy's Future
Gains Will be Fraught with Much
Greater Risk and Uncertainty than in
the Past**

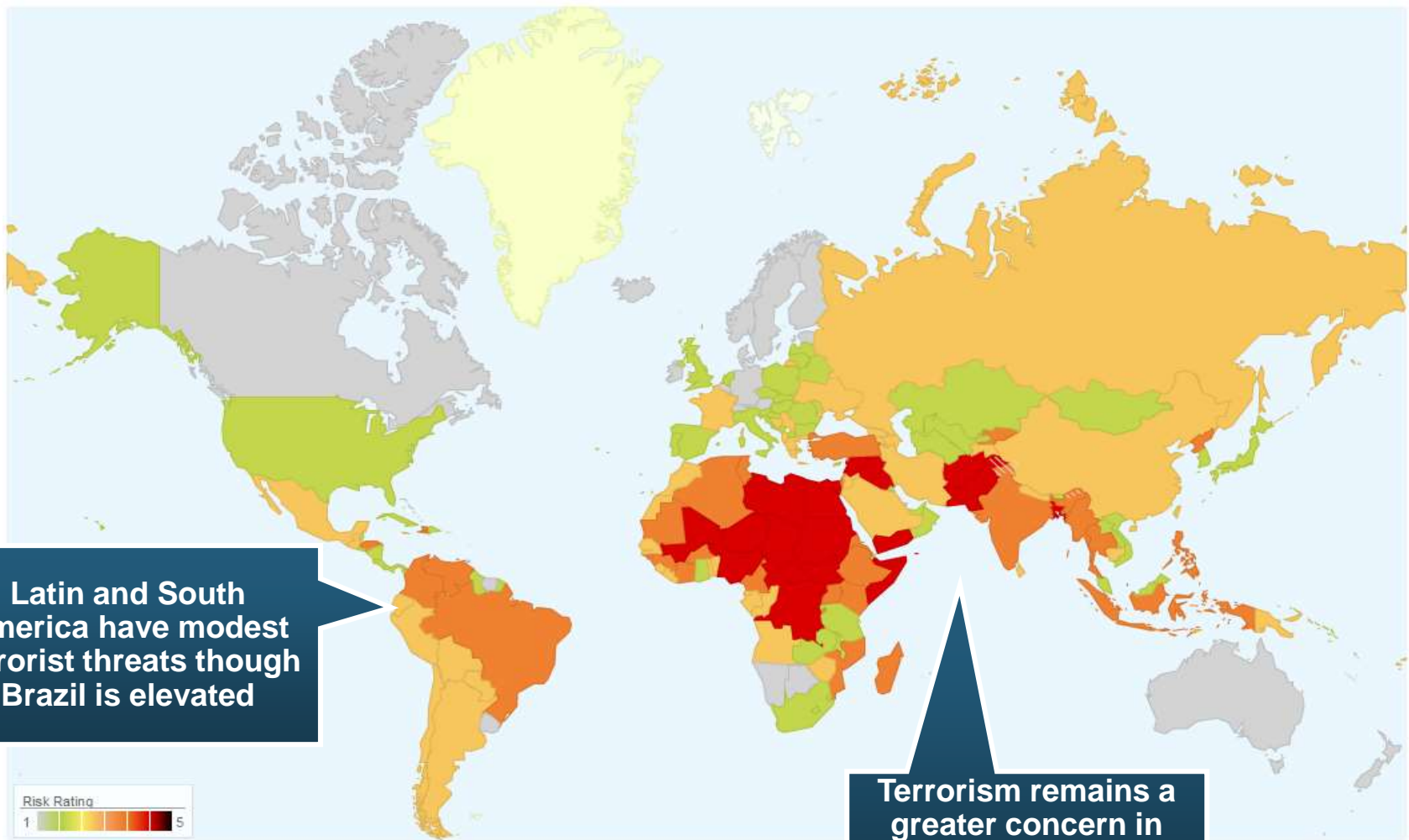
Political Risk in 2013: Greatest Business Opportunities Are Often in Risky Nations



*** Please Select Country from the dropdown or Click on Map to get Country Snapshot ***

© 2013 Aon plc

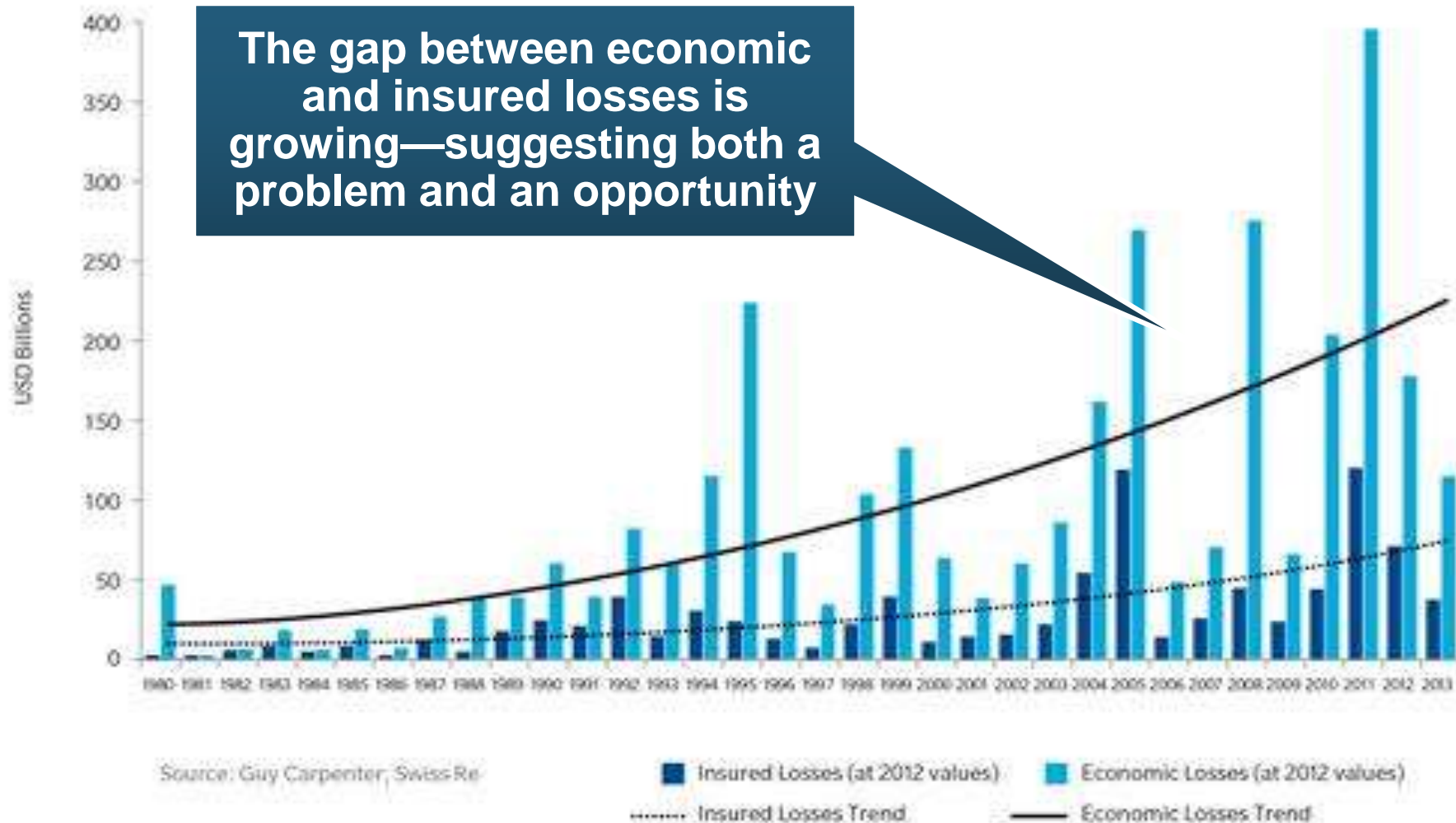
Terrorism Risk in 2013: Greatest Business Opportunities Are Often in Risky Nations



*** Please Select Country from the dropdown or Click on Map to get Country Snapshot ***

Gap Between Economic and Insured Losses: 1980—2013

The gap between economic and insured losses is growing—suggesting both a problem and an opportunity



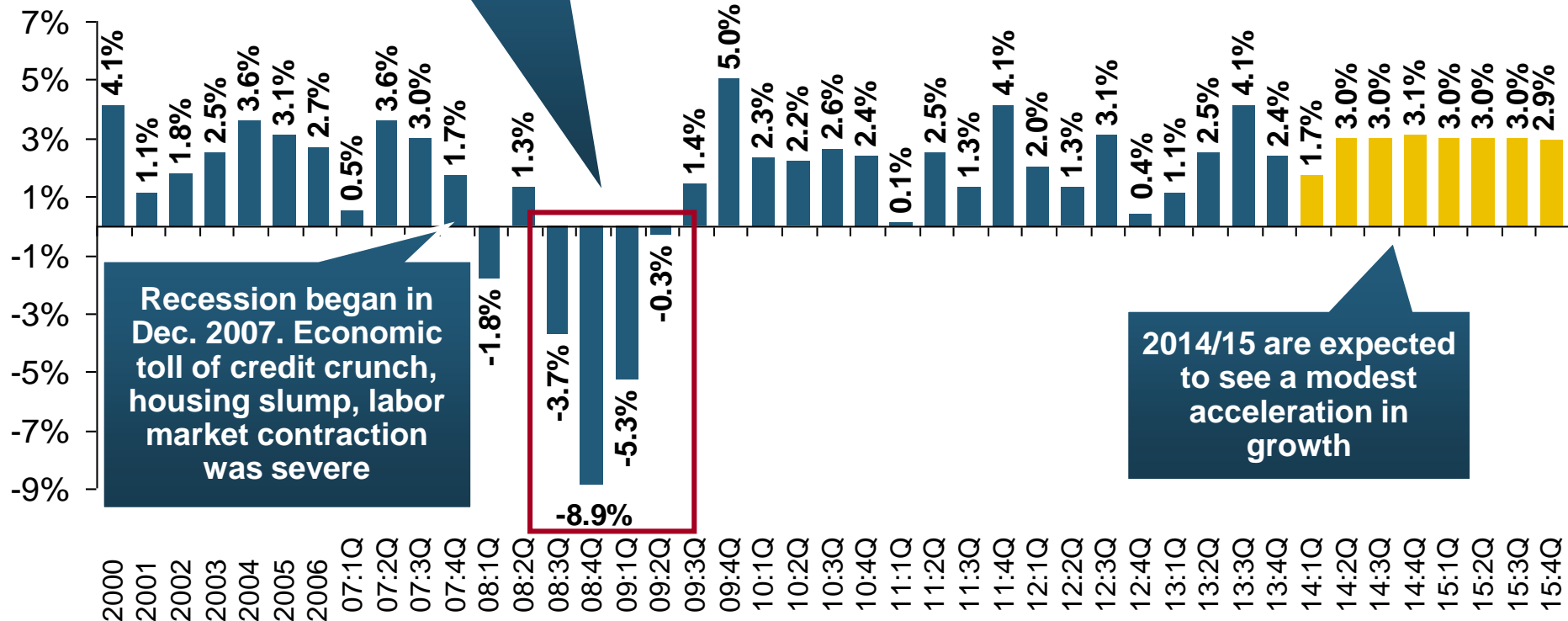
Some Key Drivers in the US Economy

**Economic Factors Driving
Exposure Growth and
Insurer Performance**

US Real GDP Growth*

Real GDP Growth (%)

The Q4:2008 decline was the steepest since the Q1:1982 drop of 6.8%



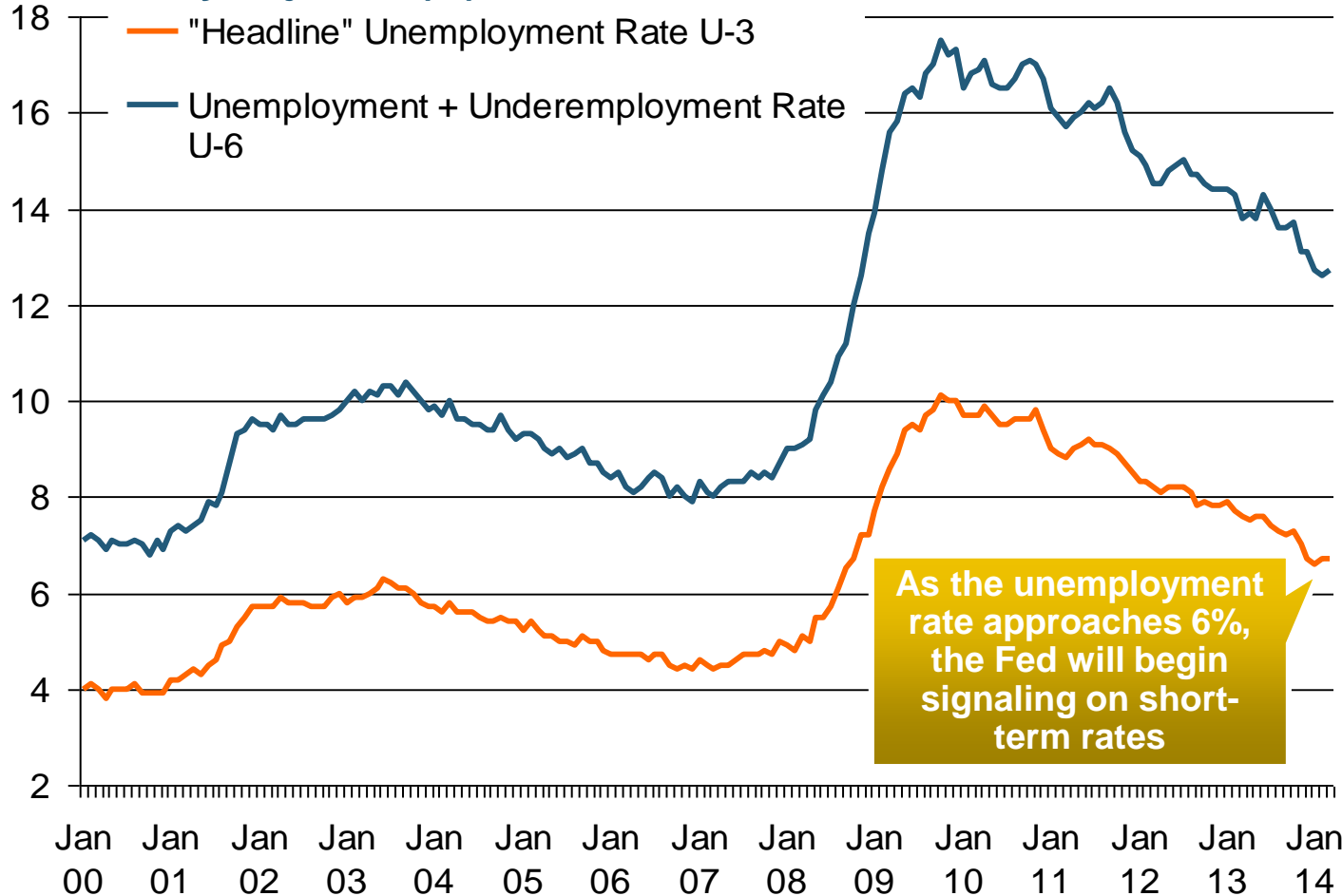
Demand for Insurance Should Increase in 2014/15 as GDP Growth Accelerates Modestly and Gradually Benefits the Economy Broadly

* Estimates/Forecasts from Blue Chip Economic Indicators.

Source: US Department of Commerce, Blue Economic Indicators 4/14; Insurance Information Institute.

Unemployment and Underemployment Rates: Still Too High, But Falling

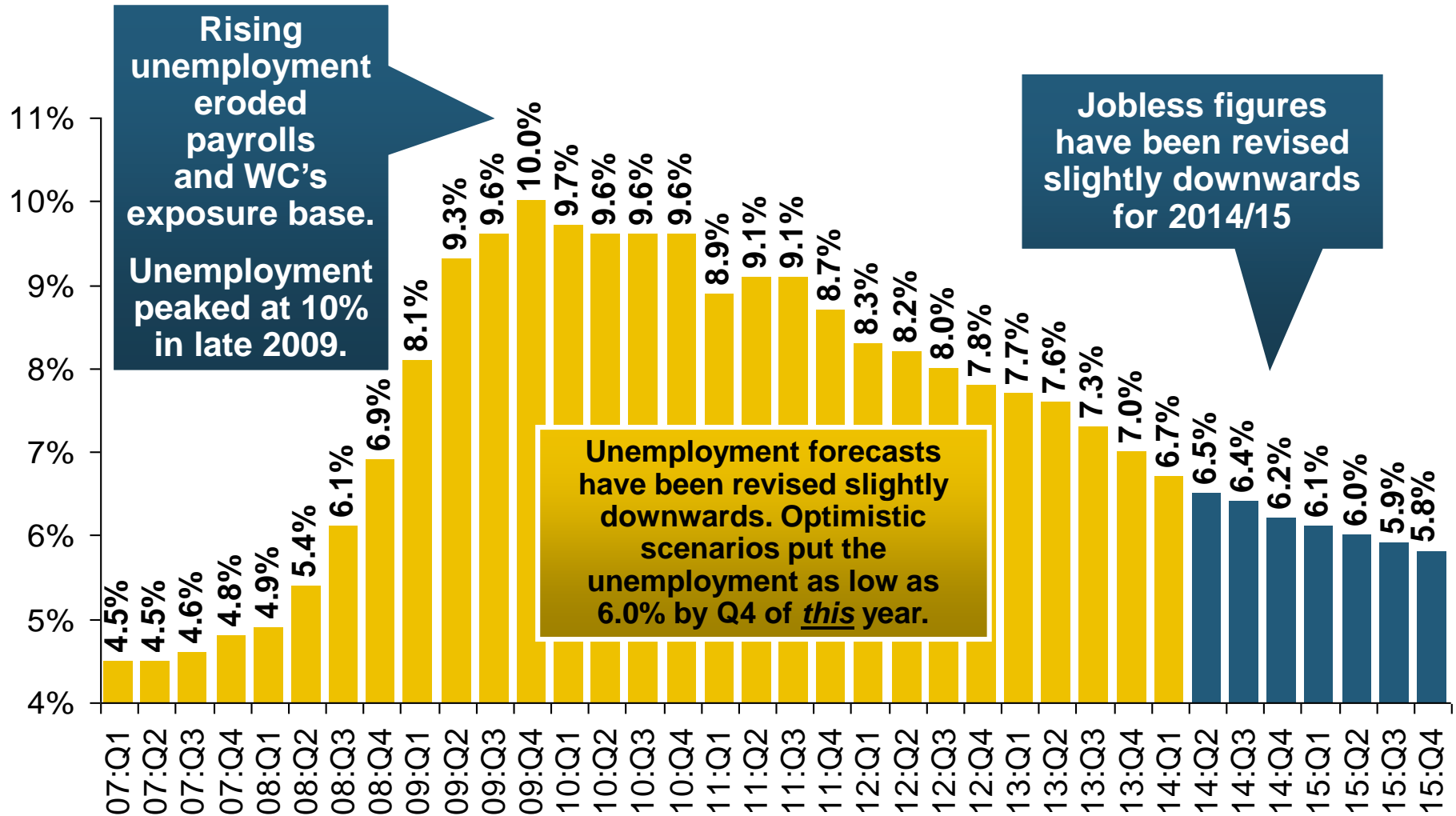
January 2000 through March 2014,
Seasonally Adjusted (%)



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

US Unemployment Rate Forecast

2007:Q1 to 2015:Q4F*

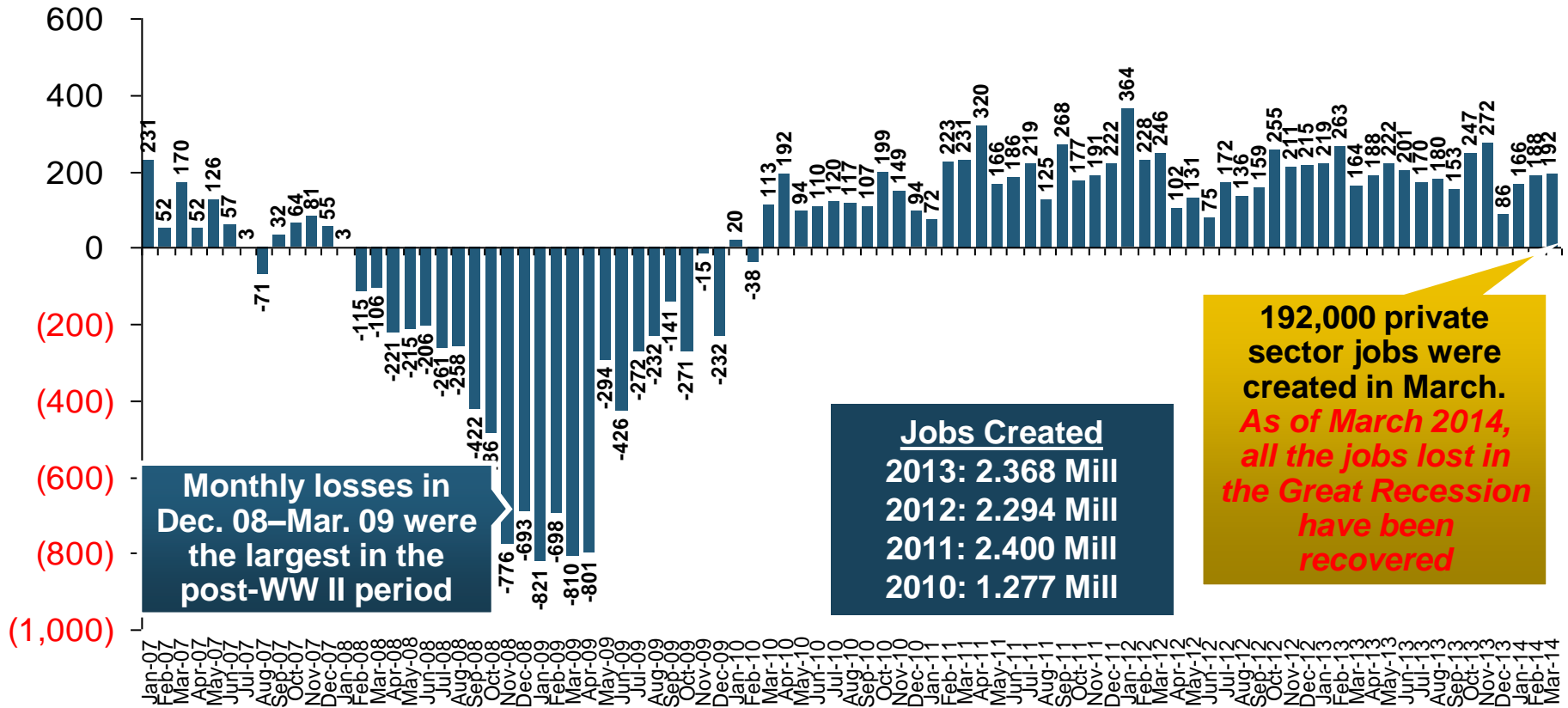


* ■ = actual; ■ = forecasts

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (4/14 edition); Insurance Information Institute.

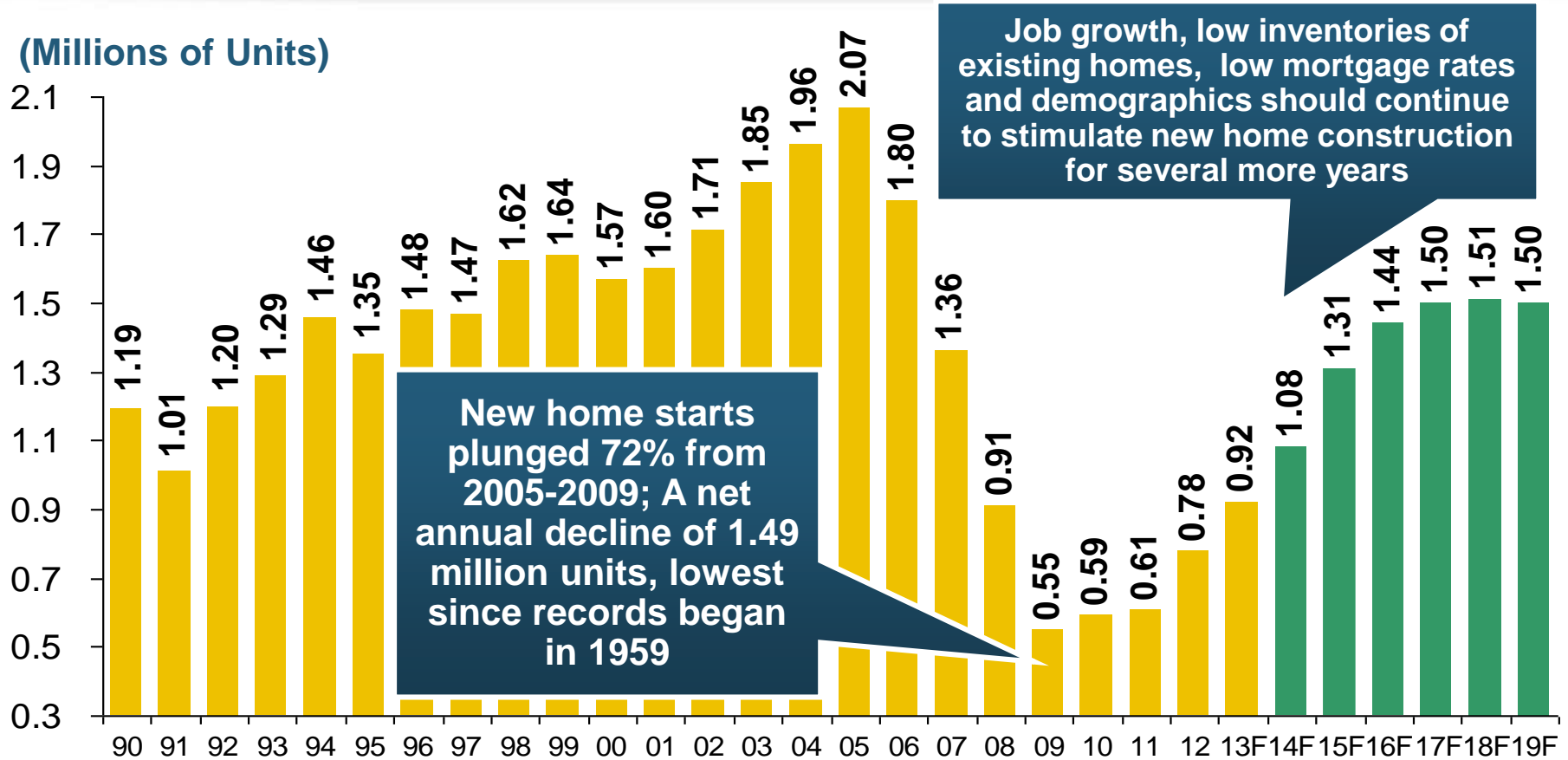
Monthly Change in Private Employment

January 2007 through March 2014 (Thousands, Seasonally Adjusted)



Private Employers Added 8.88 million Jobs Since Jan. 2010 After Having Shed 5.01 Million Jobs in 2009 and 3.76 Million in 2008 (State and Local Governments Have Shed Hundreds of Thousands of Jobs)

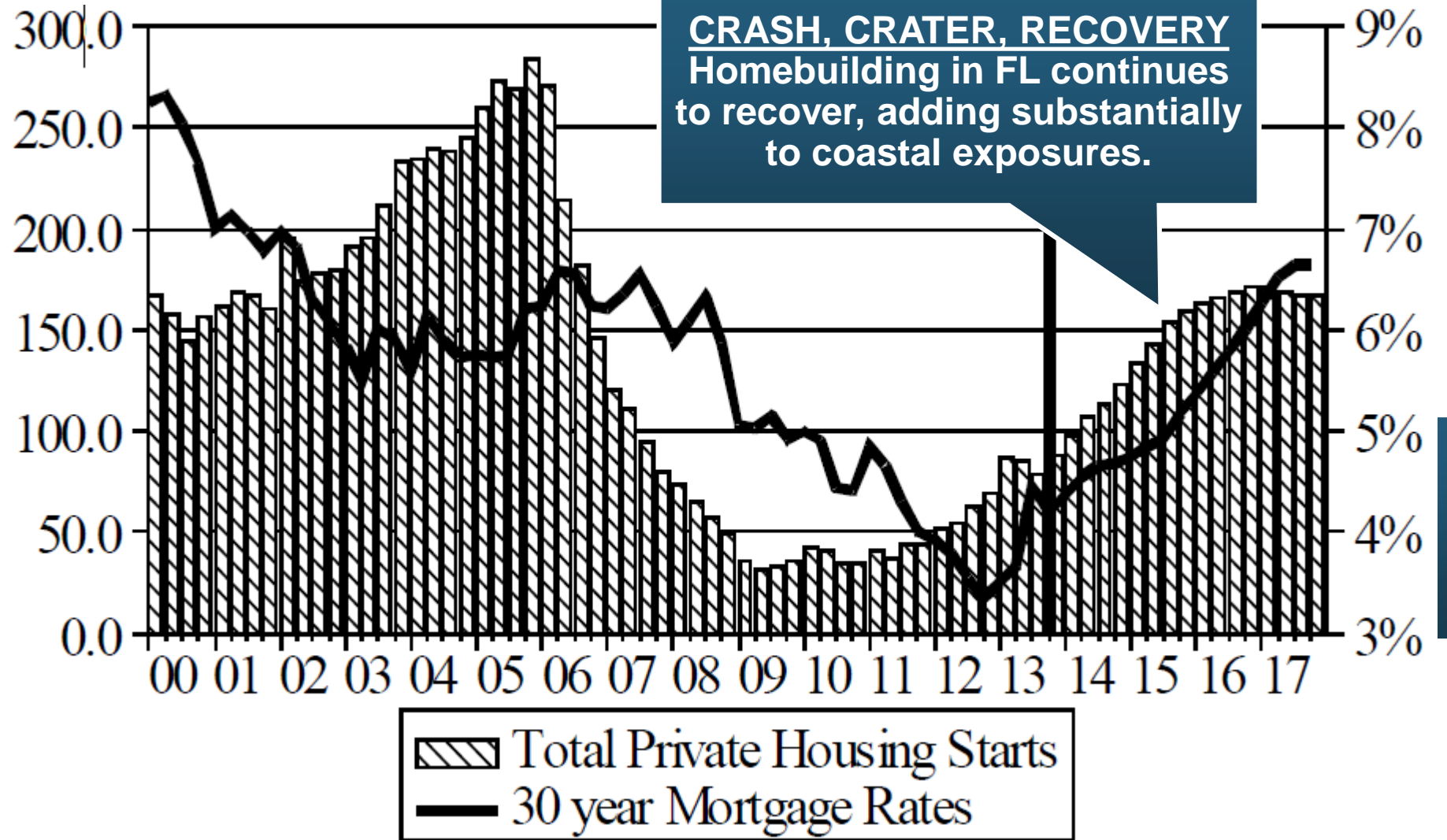
New Private Housing Starts, 1990-2019F



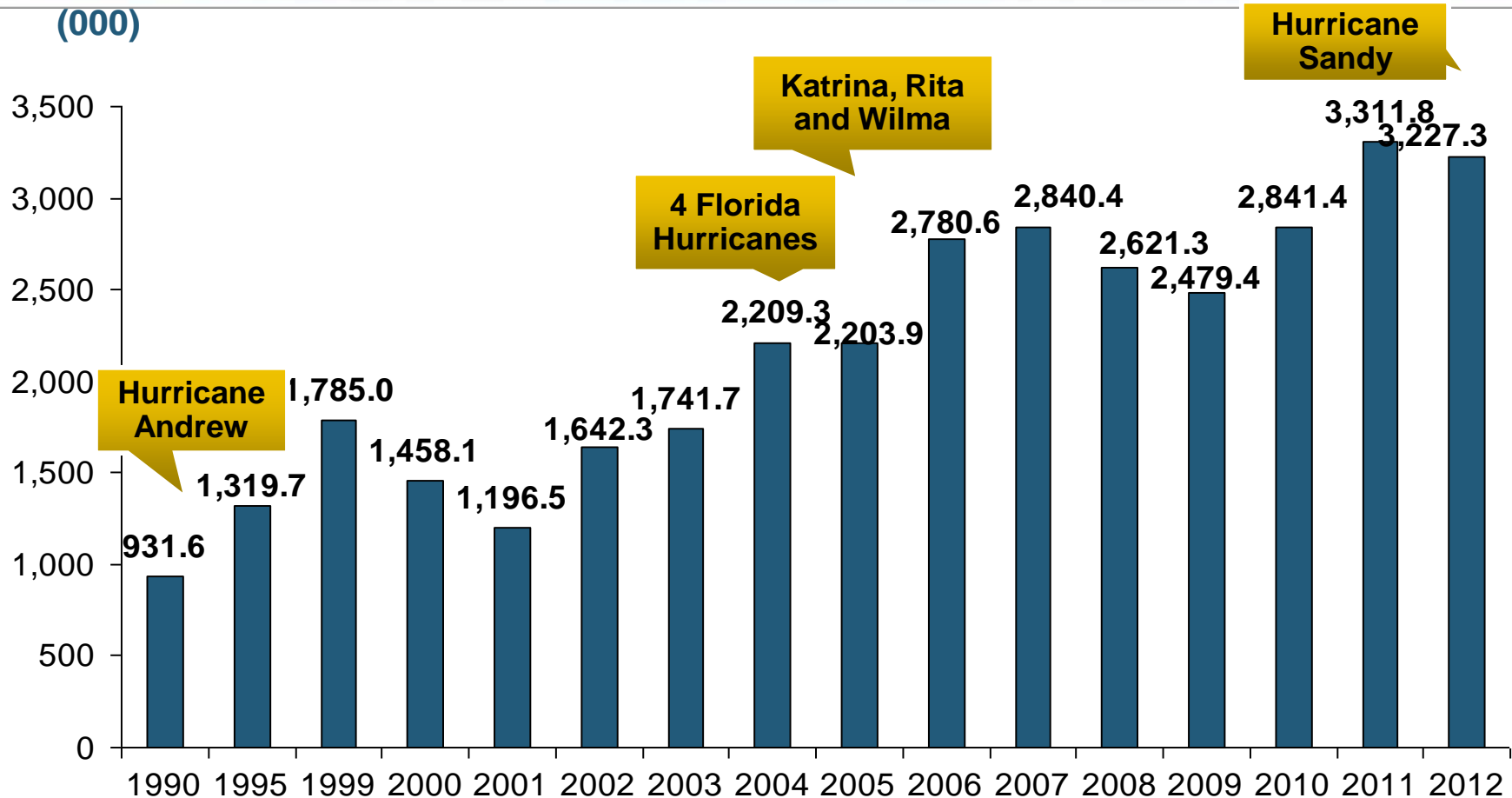
Insurers Are Continue to See Meaningful Exposure Growth in the Wake of the “Great Recession” Associated with Home Construction: Construction Risk Exposure, Surety, Commercial Auto; Potent Driver of Workers Comp Exposure

Florida Total Private Housing Starts, 2000 – 2017F

(Thousands of Units)

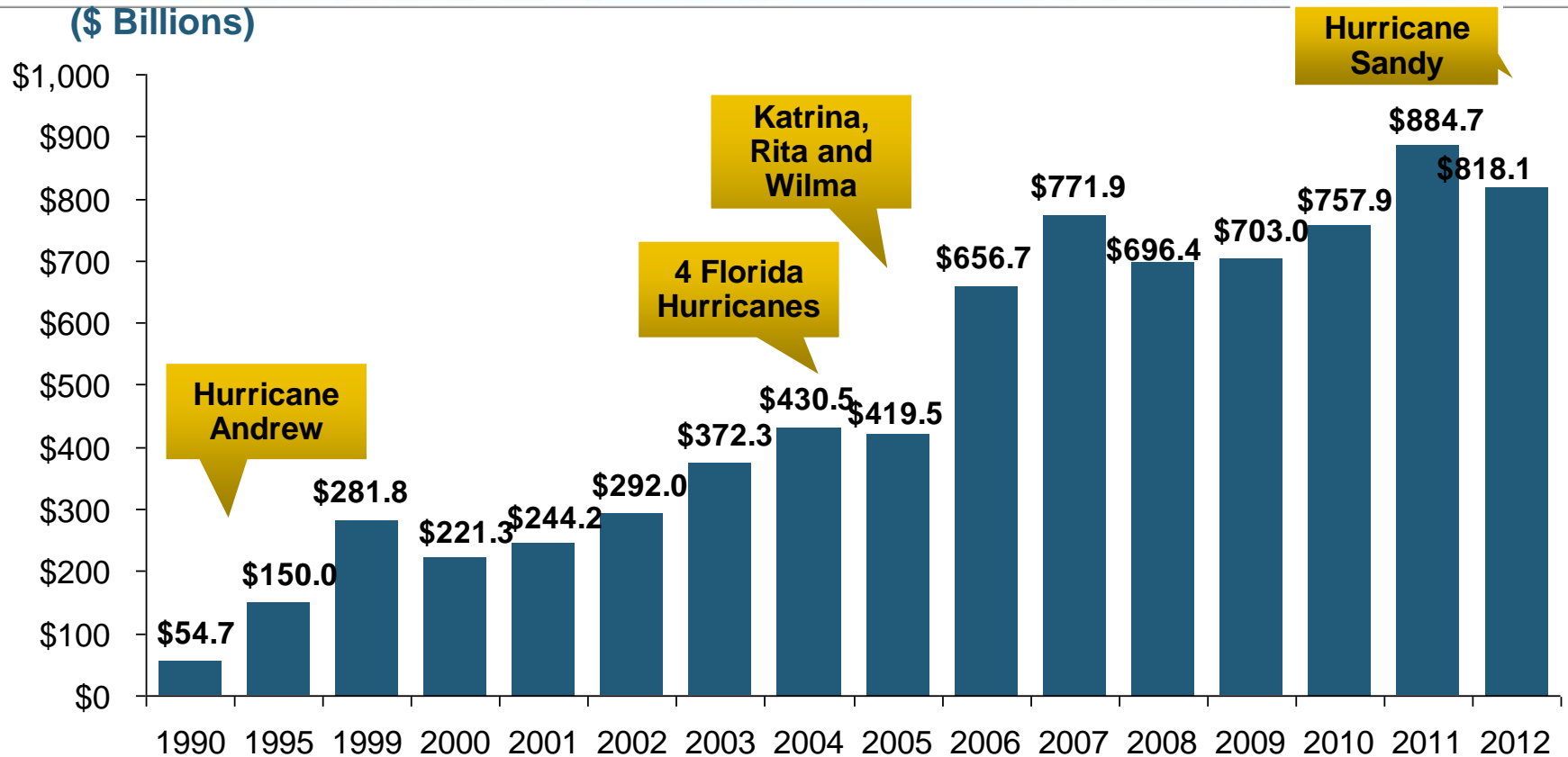


U.S. Residual Market: Total Policies In-Force (1990-2012) (000)



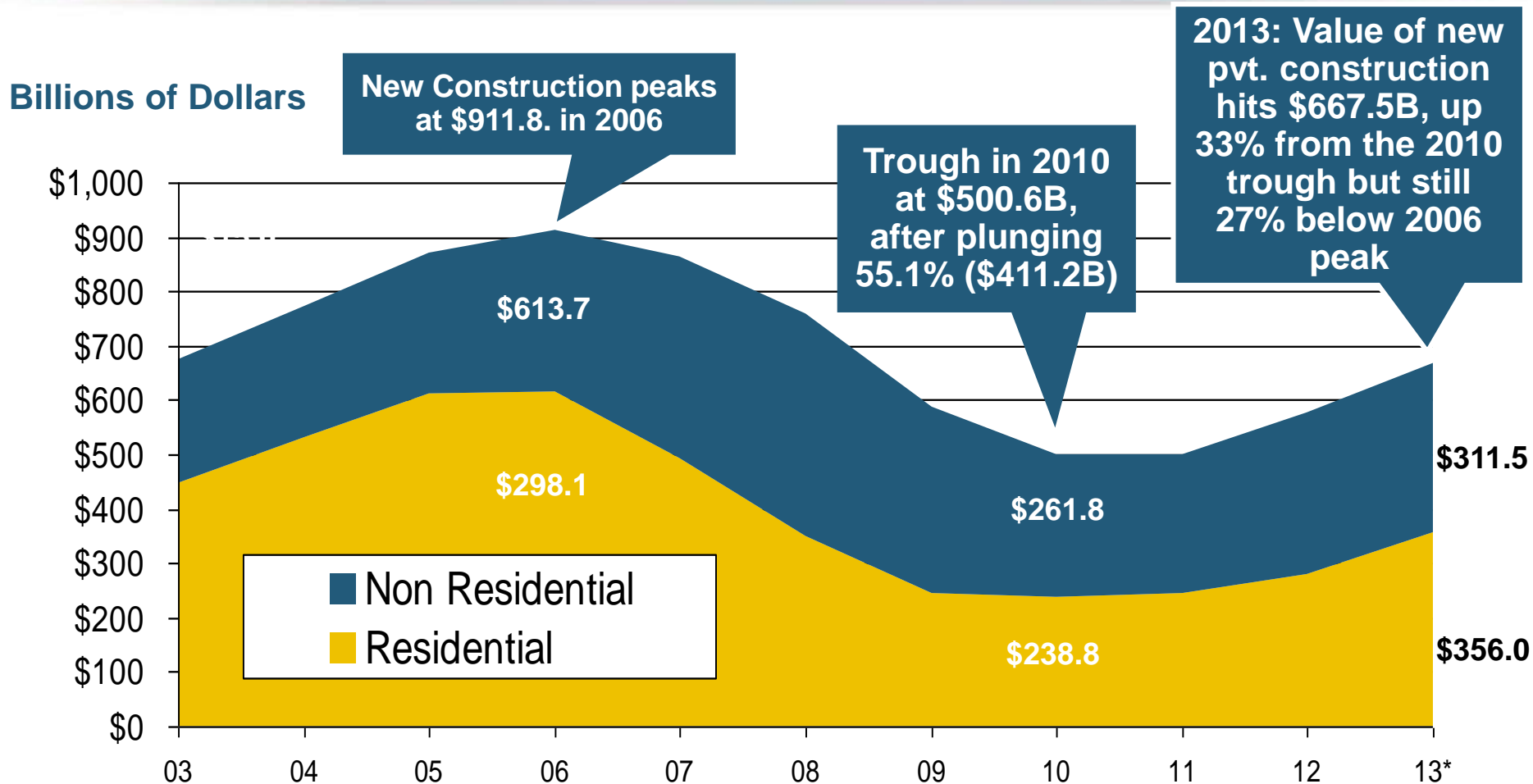
In the 23-year period between 1990 and 2012, the total number of policies in-force in the residual market (FAIR & Beach/Windstorm) Plans has more than tripled.

U.S. Residual Market Exposure to Loss (1990-2012) (\$ Billions)



In the 23-year period between 1990 and 2012, total exposure to loss in the residual market (FAIR & Beach/Windstorm) Plans has surged from \$54.7 billion in 1990 to \$818.1 billion in 2012.

Value of New Private Construction: Residential & Nonresidential, 2003-2013*



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

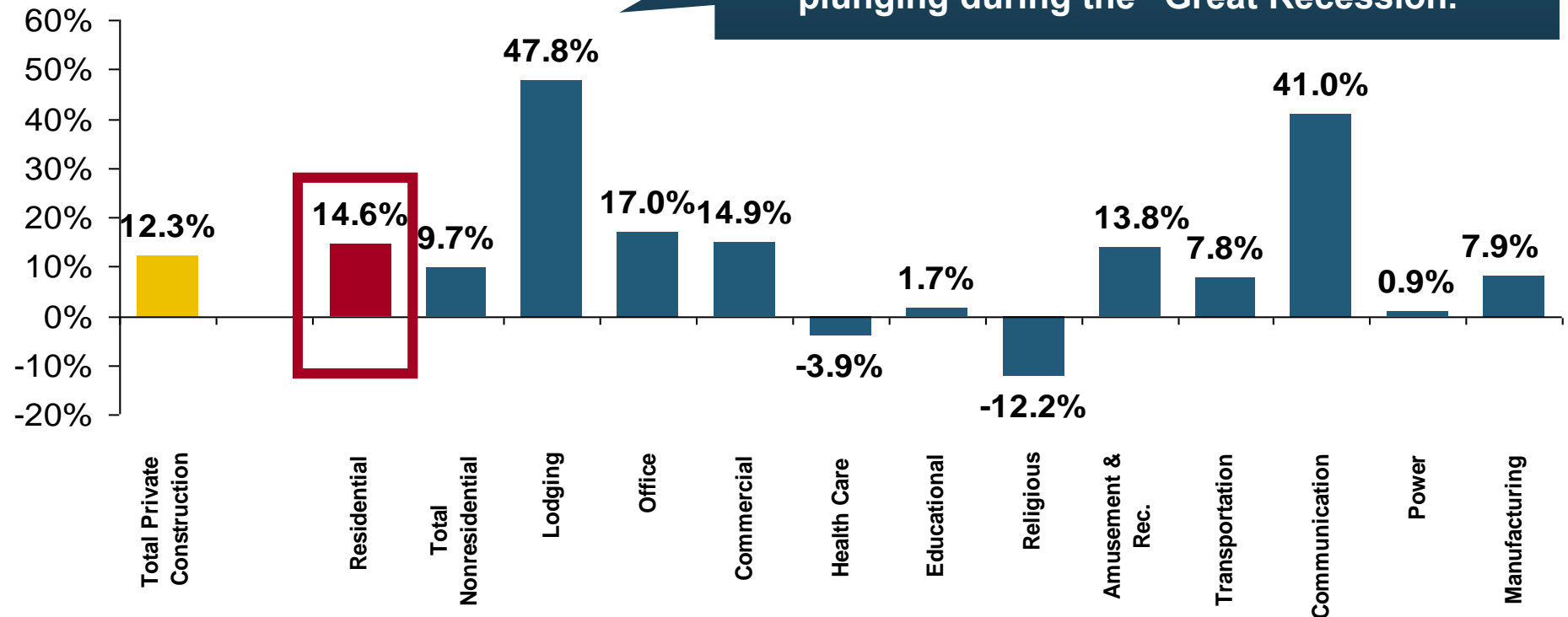
*2013 figure is a seasonally adjusted annual rate as of December.

Sources: US Department of Commerce; Insurance Information Institute.

Value of Private Construction Put in Place, by Segment, Jan. 2014 vs. Jan. 2013*

Growth (%)

Led by the Residential Construction, Lodging, Communication and Office segments, Private sector construction activity is rising after plunging during the "Great Recession."



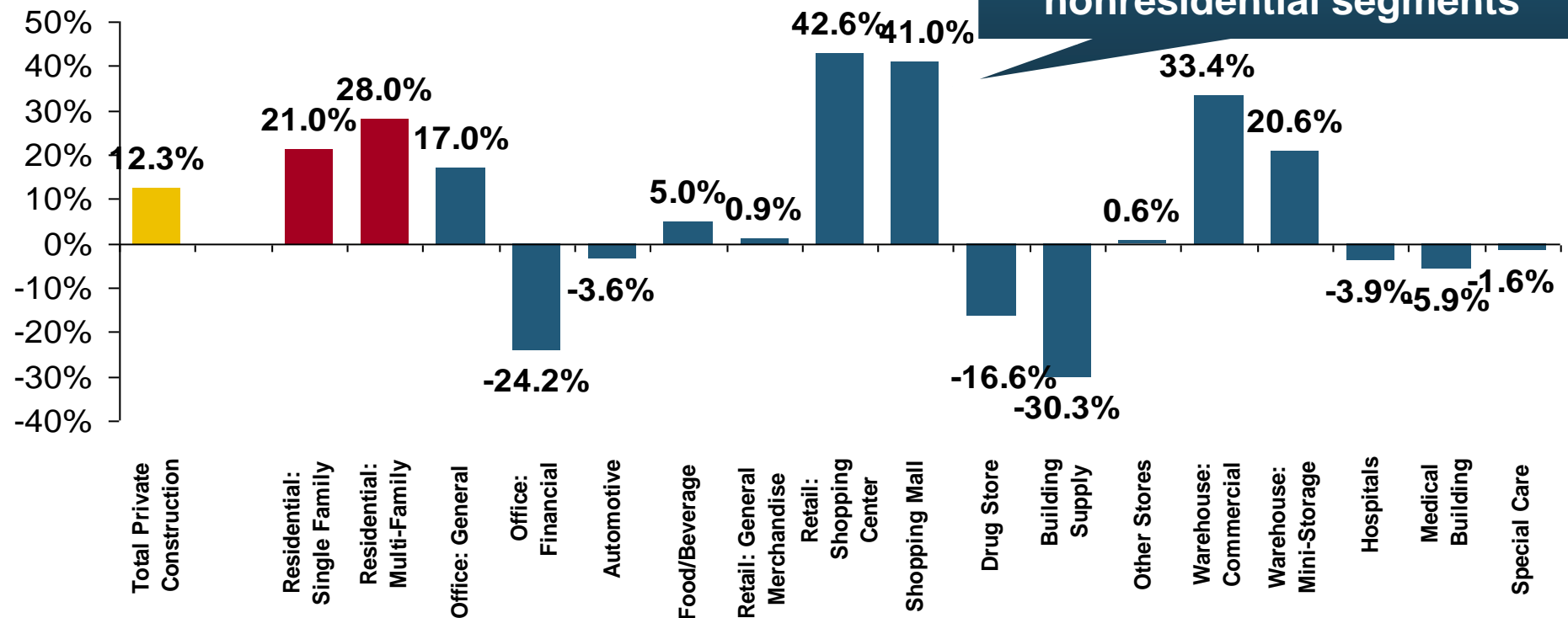
Private Construction Activity is Up in Most Segments, Including the Key Residential Construction Sector; Bodes Well for Early 2014

*seasonally adjusted

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

Private Construction by Segment/Project Type, Jan. 2014 vs. Jan. 2013*

Growth (%)

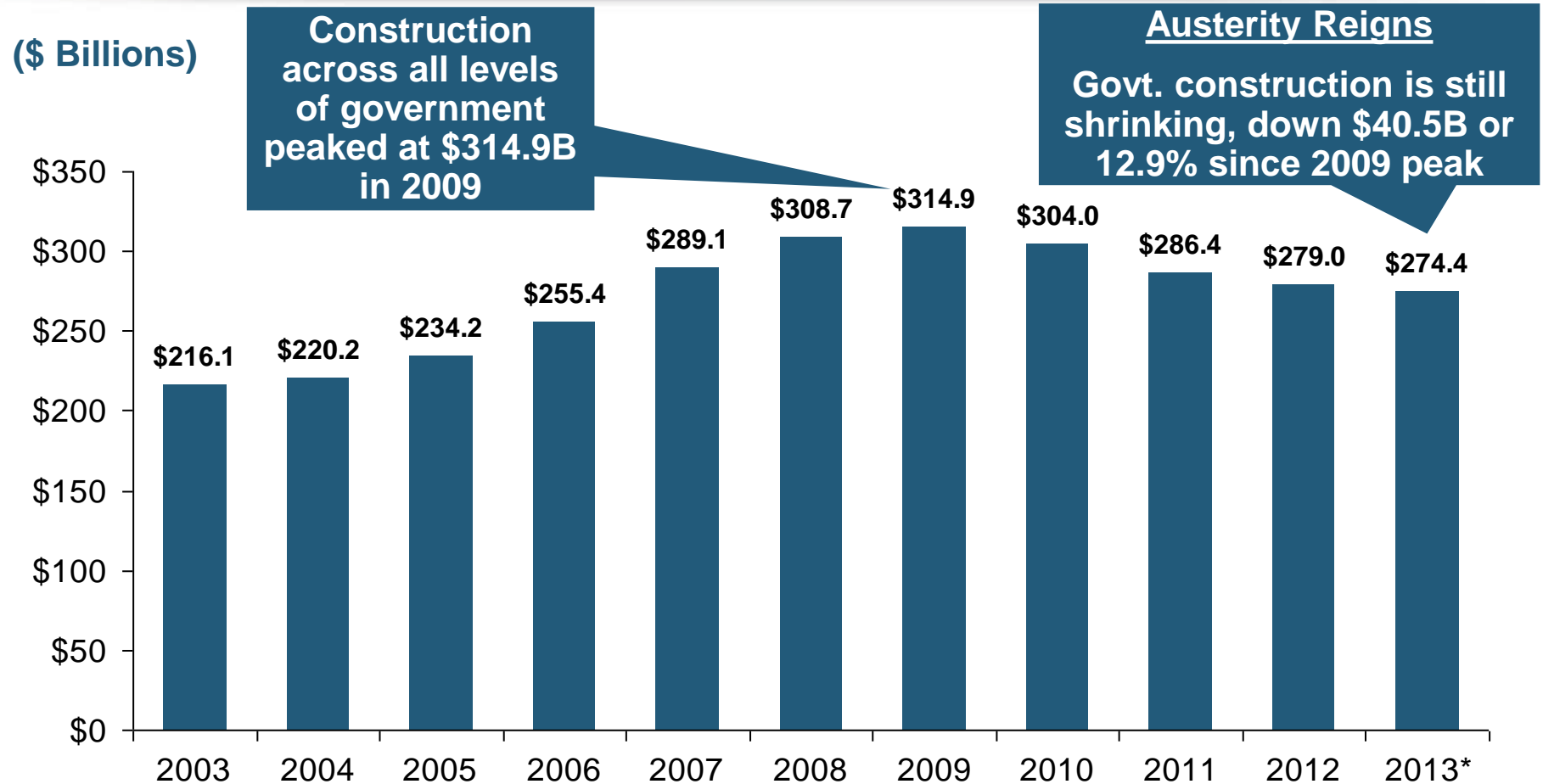


Private Construction Activity is Up in Many Segments, Including the Key Residential Construction Sector, But Down in a Few

*seasonally adjusted

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

Value of New Federal, State and Local Government Construction: 2003-2013*



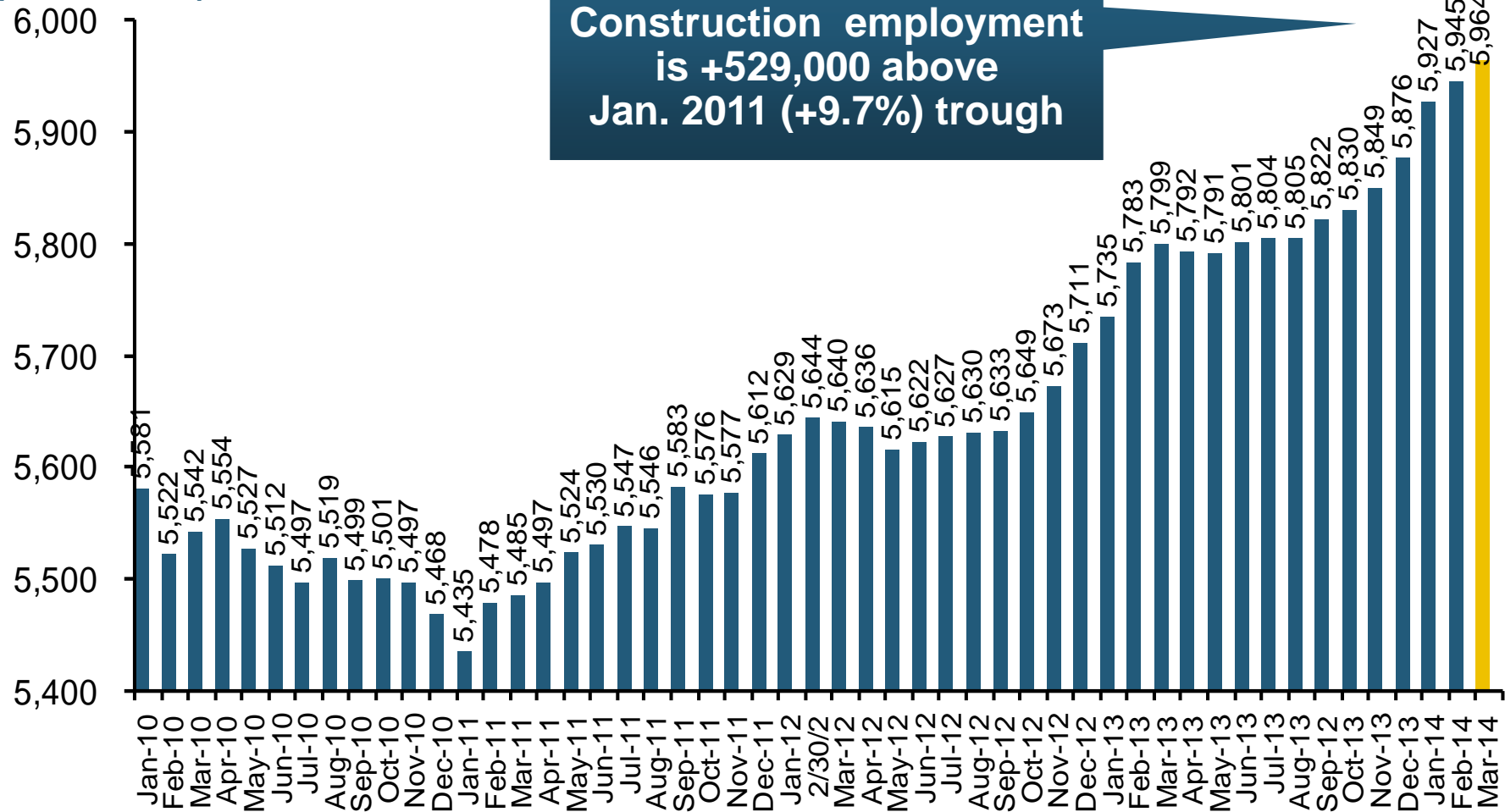
Government Construction Spending Peaked in 2009, Helped by Stimulus Spending, but Continues to Contract As State/Local Governments Grapple with Deficits and Federal Sequestration Takes Hold

*2013 figure is a seasonally adjusted annual rate as of December.

Sources: US Department of Commerce; Insurance Information Institute.

Construction Employment, Jan. 2010—March 2014*

(Thousands)



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

*Seasonally adjusted.

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

Dollar Value* of Manufacturers' Shipments Monthly, Jan. 1992—Dec. 2013

\$ Millions

\$500,000

\$400,000

\$300,000

\$200,000

The value of Manufacturing Shipments in Dec. 2013 was \$492.7B—a near record high.

Jan-92 Jan-93 Jan-94 Jan-95 Jan-96 Jan-97 Jan-98 Jan-99 Jan-00 Jan-01 Jan-02 Jan-03 Jan-04 Jan-05 Jan-06 Jan-07 Jan-08 Jan-09 Jan-10 Jan-11 12-Jan 13-Jan

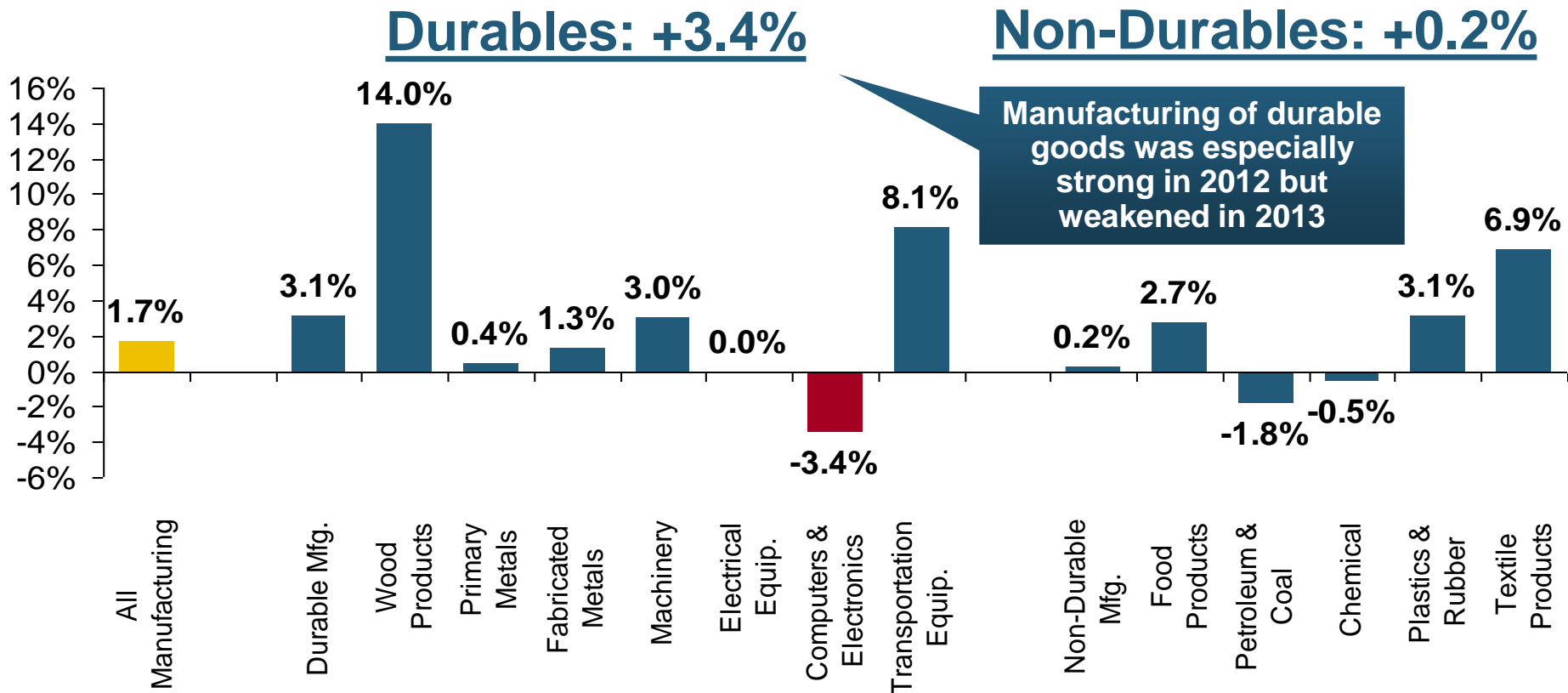
Monthly shipments in Dec. 2013 exceeded the pre-crisis (July 2008) peak. Manufacturing is energy-intensive and growth leads to gains in many commercial exposures: WC, Commercial Auto, Marine, Property, and various Liability Coverages.

*seasonally adjusted; Dec. 2013 is preliminary; data published February 4, 2014.

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. 2012*

Growth (%)



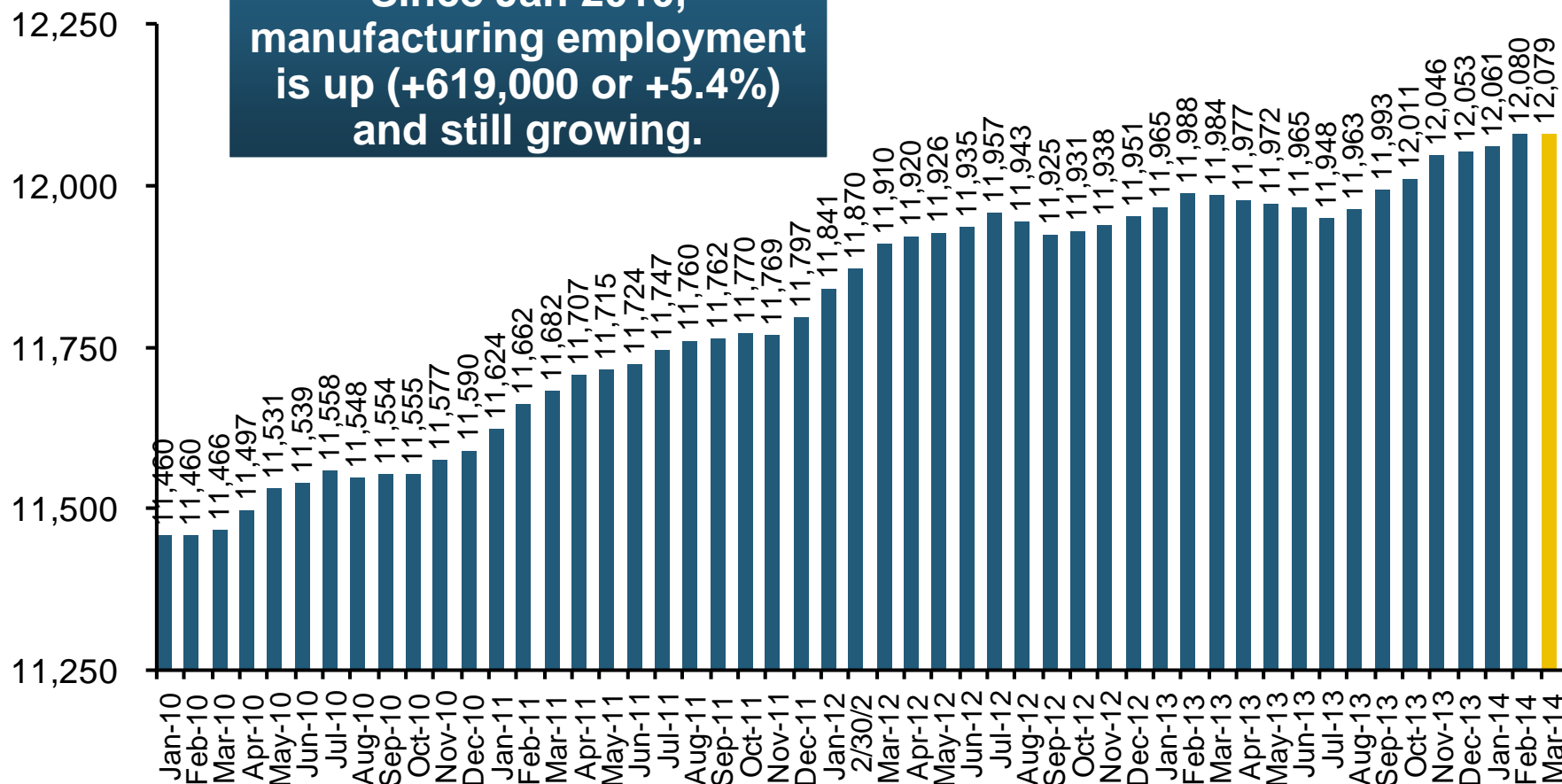
Manufacturing Is Expanding—Albeit Slowly—Across a Number of Sectors that Will Contribute to Growth in Insurable Exposures Including: WC, Commercial Property, Commercial Auto and Many Liability Coverages

*Seasonally adjusted; Date are YTD comparing data through November 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/>

Manufacturing Employment, Jan. 2010—March 2014*

(Thousands)



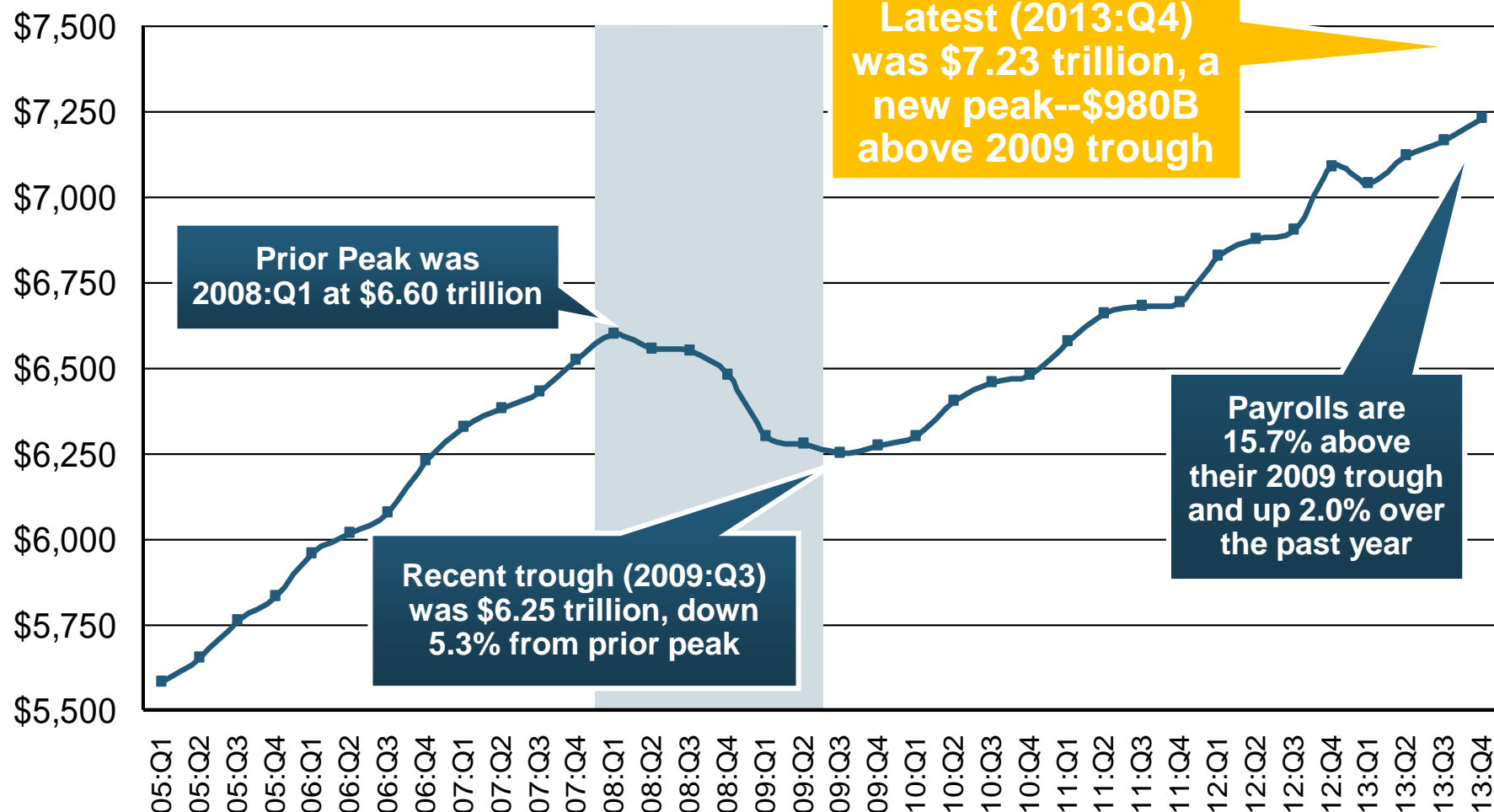
Manufacturing employment is a surprising source of strength in the economy. Employment in the sector is at a multi-year high.

*Seasonally adjusted; Feb. and Mar. 2014 are preliminary

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

Nonfarm Payroll (Wages and Salaries): Quarterly, 2005–2013:Q4

Billions

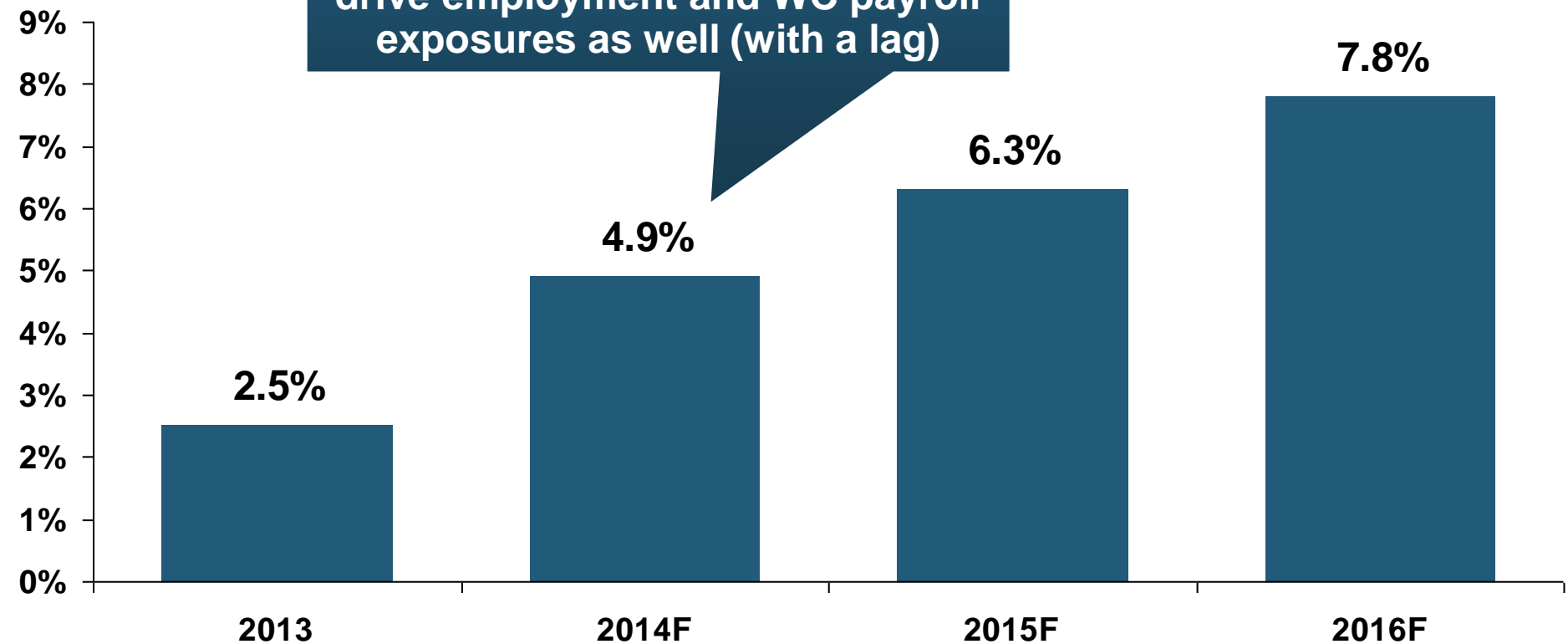


Note: Recession indicated by gray shaded column. Data are seasonally adjusted annual rates.

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

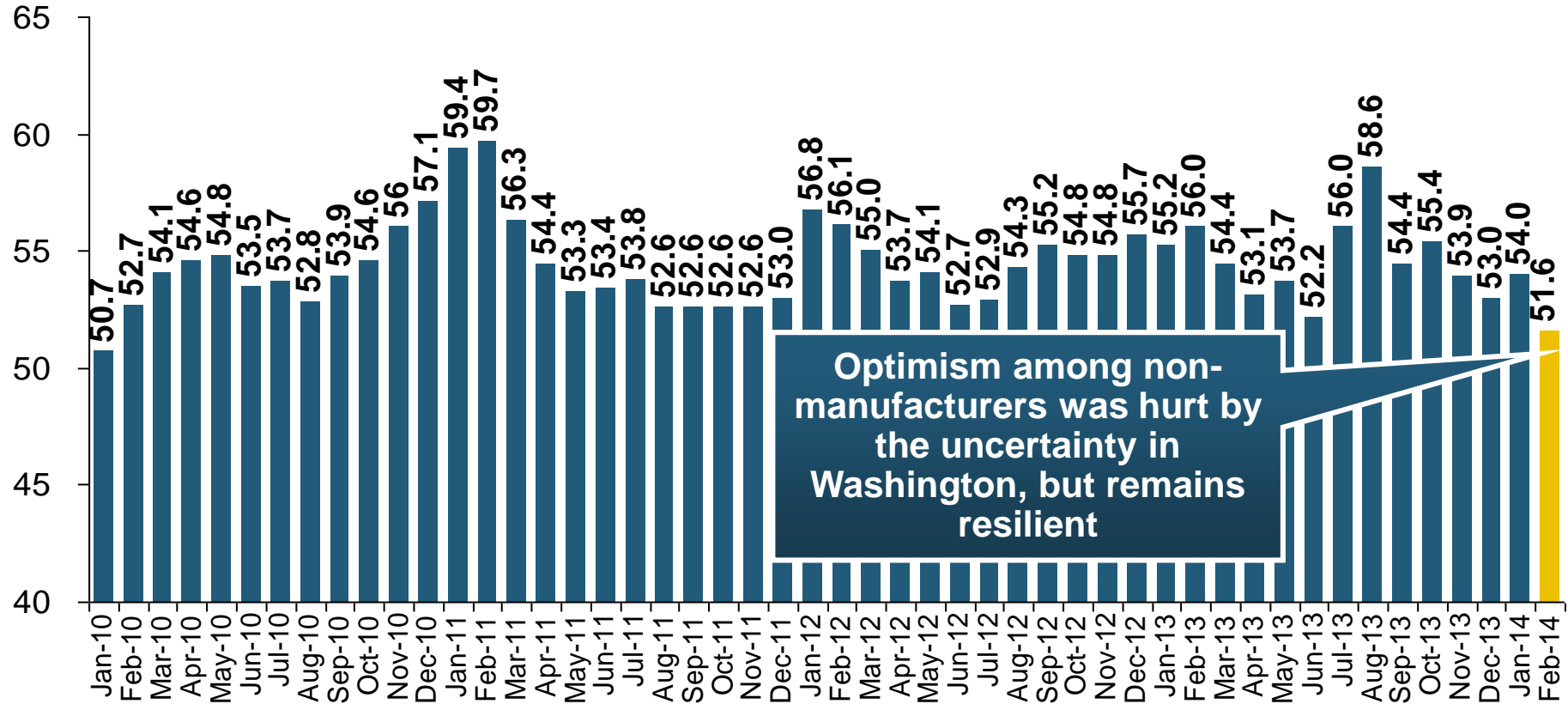
Business Investment: Expected to Accelerate, Fueling Commercial Exposure Growth

Accelerating business investment will be a potent driver of commercial property and liability insurance exposures and should drive employment and WC payroll exposures as well (with a lag)



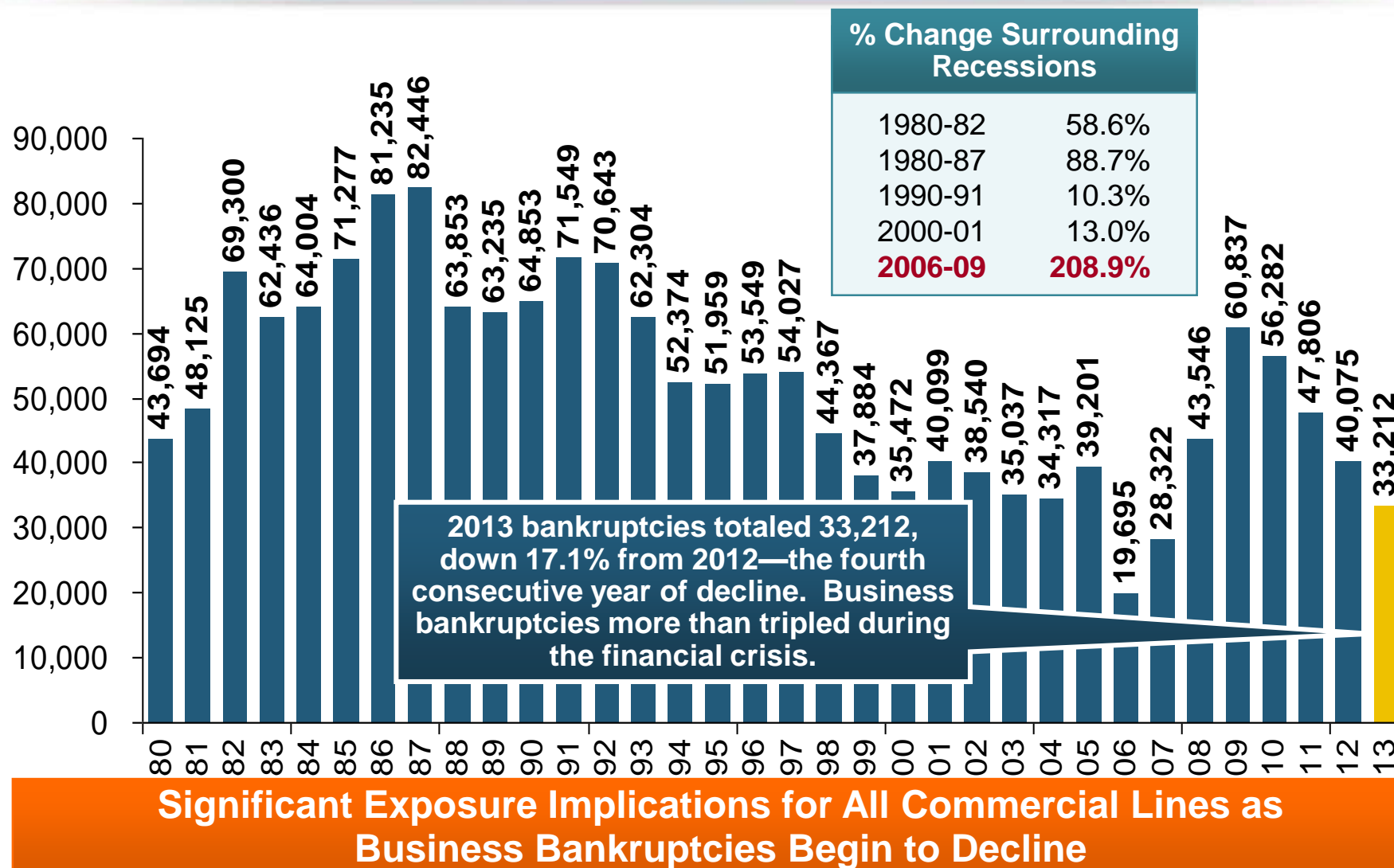
ISM Non-Manufacturing Index (Values > 50 Indicate Expansion)

January 2010 through February 2014



Non-manufacturing industries have been expanding and adding jobs. This trend is likely to continue through 2014.

Business Bankruptcy Filings, 1980-2013



Sources: American Bankruptcy Institute (1980-2012) at

<http://www.abiworld.org/AM/AMTemplate.cfm?Section=Home&TEMPLATE=/CM/ContentDisplay.cfm&CONTENTID=61633>; 2013

data from United States Courts at <http://news.uscourts.gov>; Insurance Information Institute.

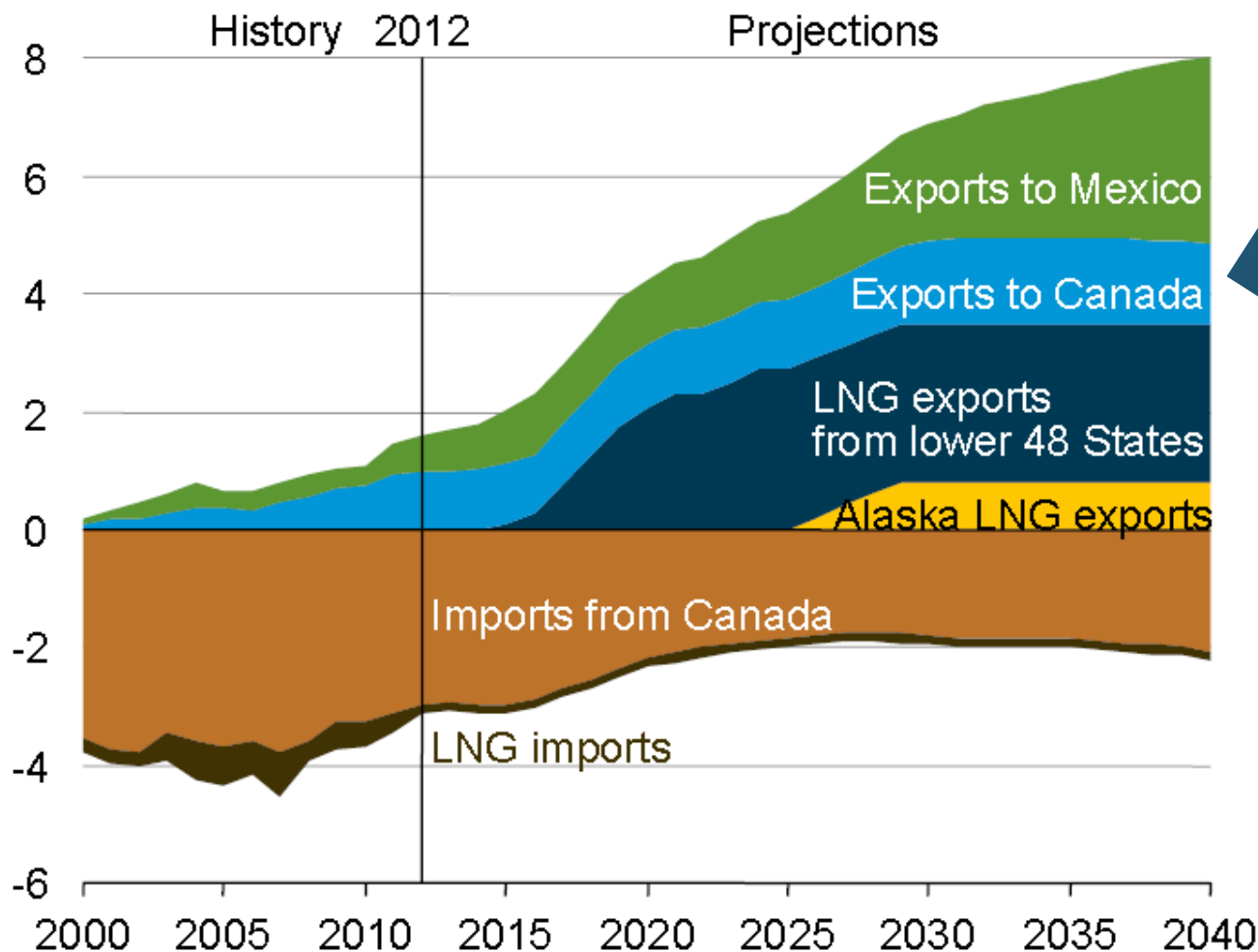
12 Industries for the Next 10 Years: Insurance Solutions Needed

Health Care
Health Sciences
Energy (Traditional)
Alternative Energy
Petrochemical
Agriculture
Natural Resources
Technology (incl. Biotechnology)
Light Manufacturing
Insourced Manufacturing
Export-Oriented Industries
Shipping (<i>Rail, Marine, Trucking, Pipelines</i>)

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

U.S. Natural Gas Imports and Exports, 1990 - 2040

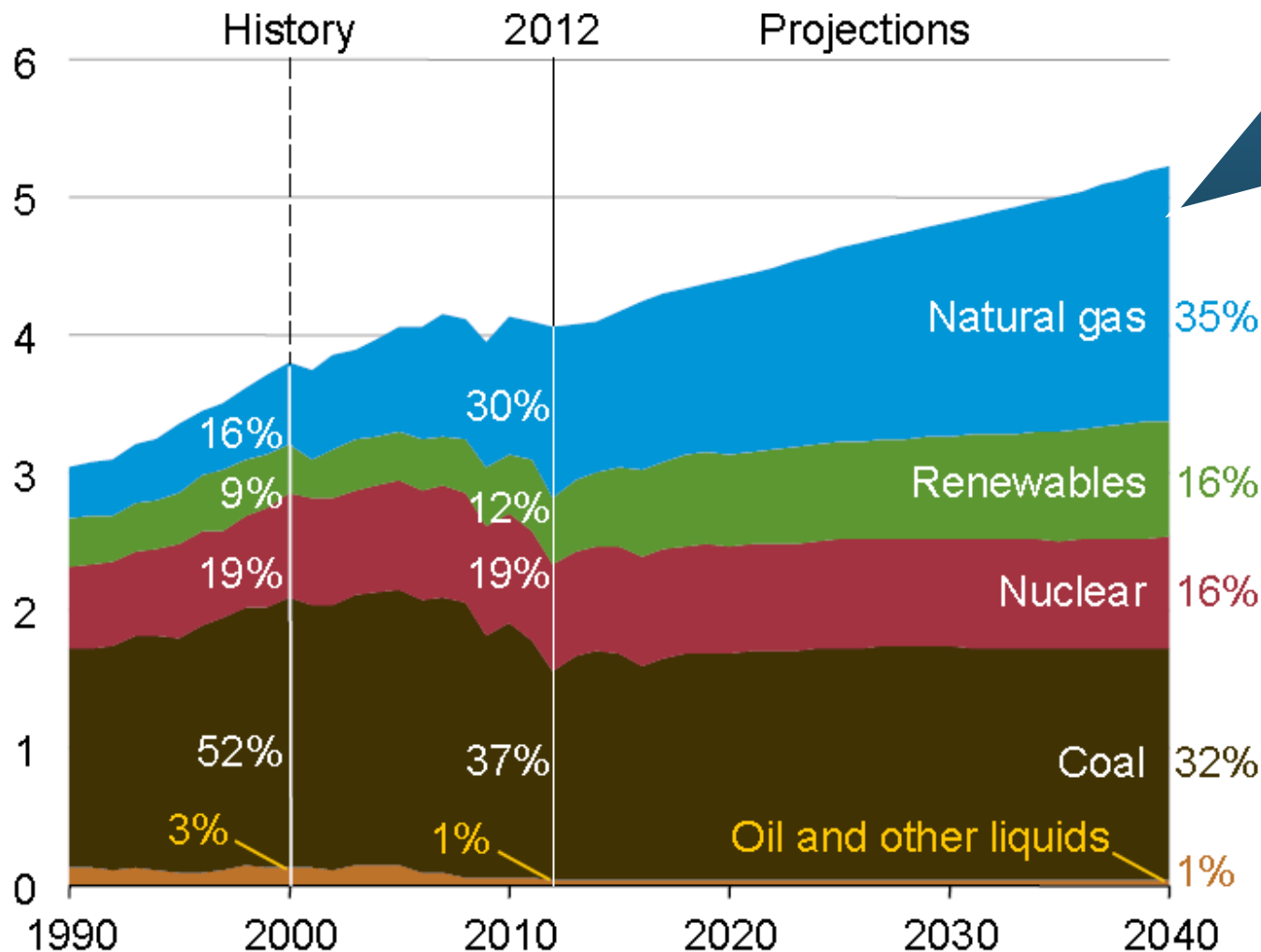
Trillions of Cubic Feet



The US is now the largest gas producer in the world, though Russia is the largest exporter. The US needs to invest in its pipeline and LNG infrastructure and expedite regulatory approval to realize its full export potential

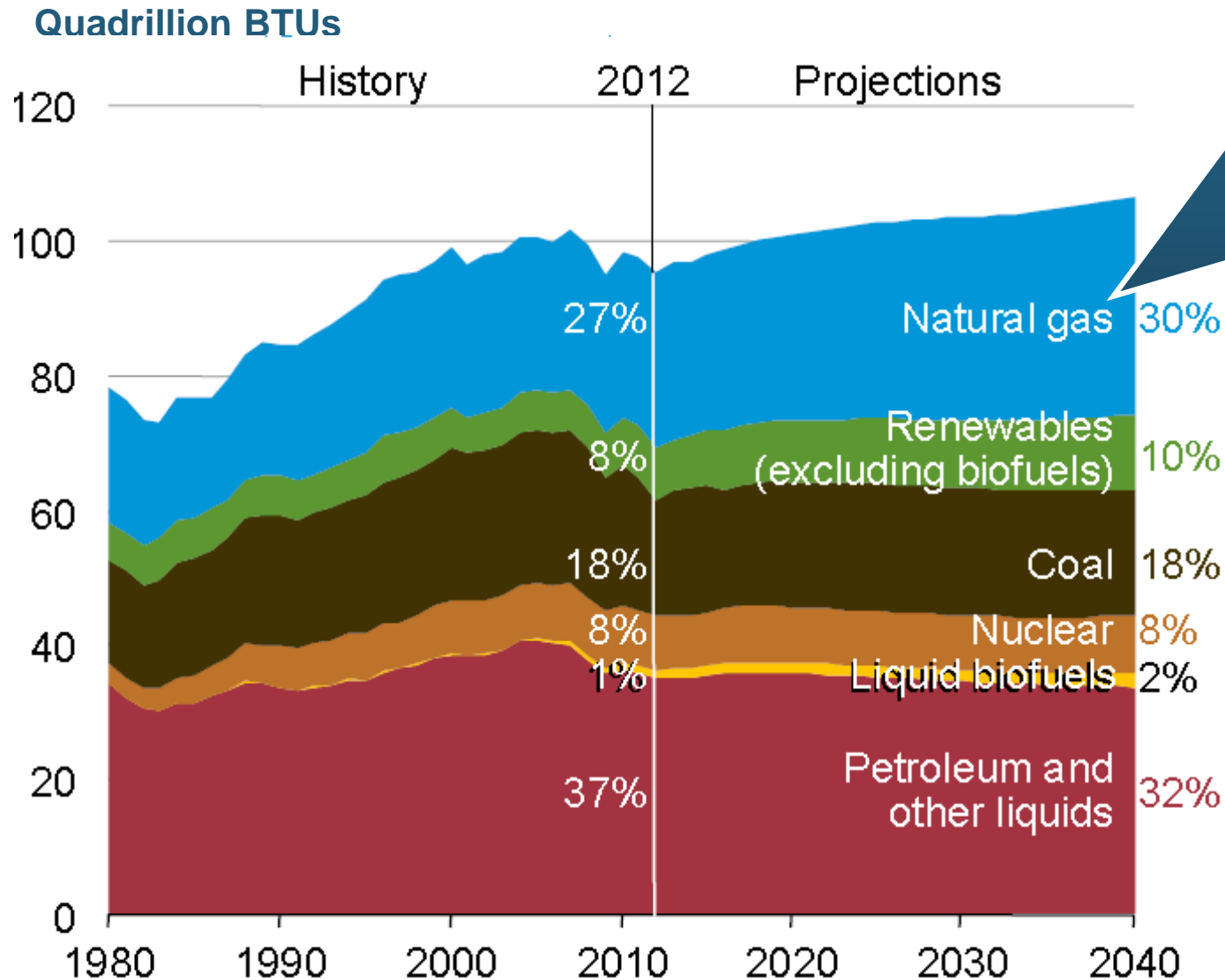
U.S. Electricity Generation by Fuel, 1990 - 2040

Trillions of kilowatt Hours



Electricity consumption in the US will rise steadily along with the fuel shares of natural gas and renewables

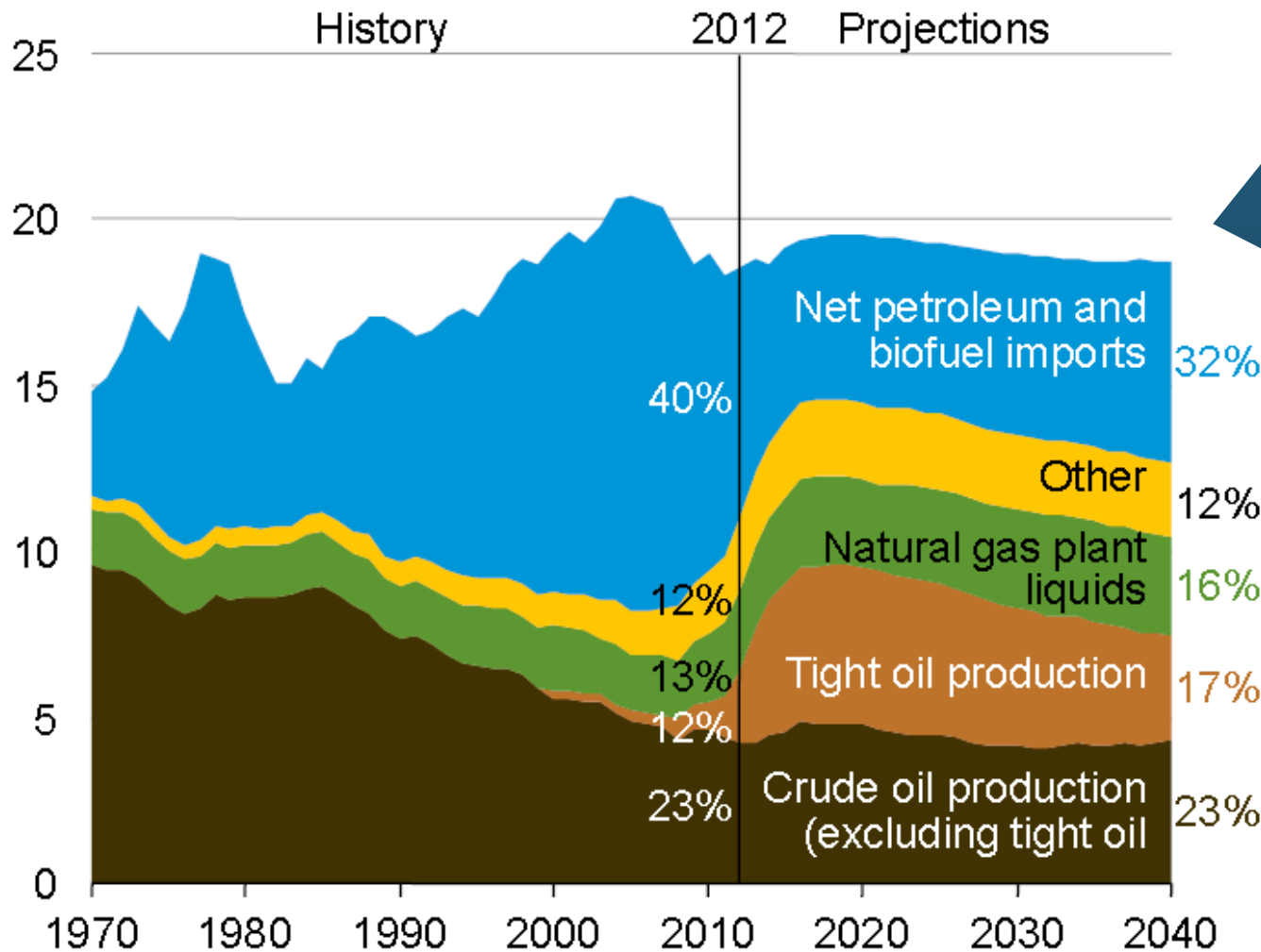
U.S. Primary Energy Consumption by Fuel, 1990 - 2040



Energy consumption in the US will rise steadily with natural gas fueling most of the additional consumption

U.S. Petroleum and Other Liquid Fuel Supplies by Source, 1990 - 2040

Millions of Barrels per Day



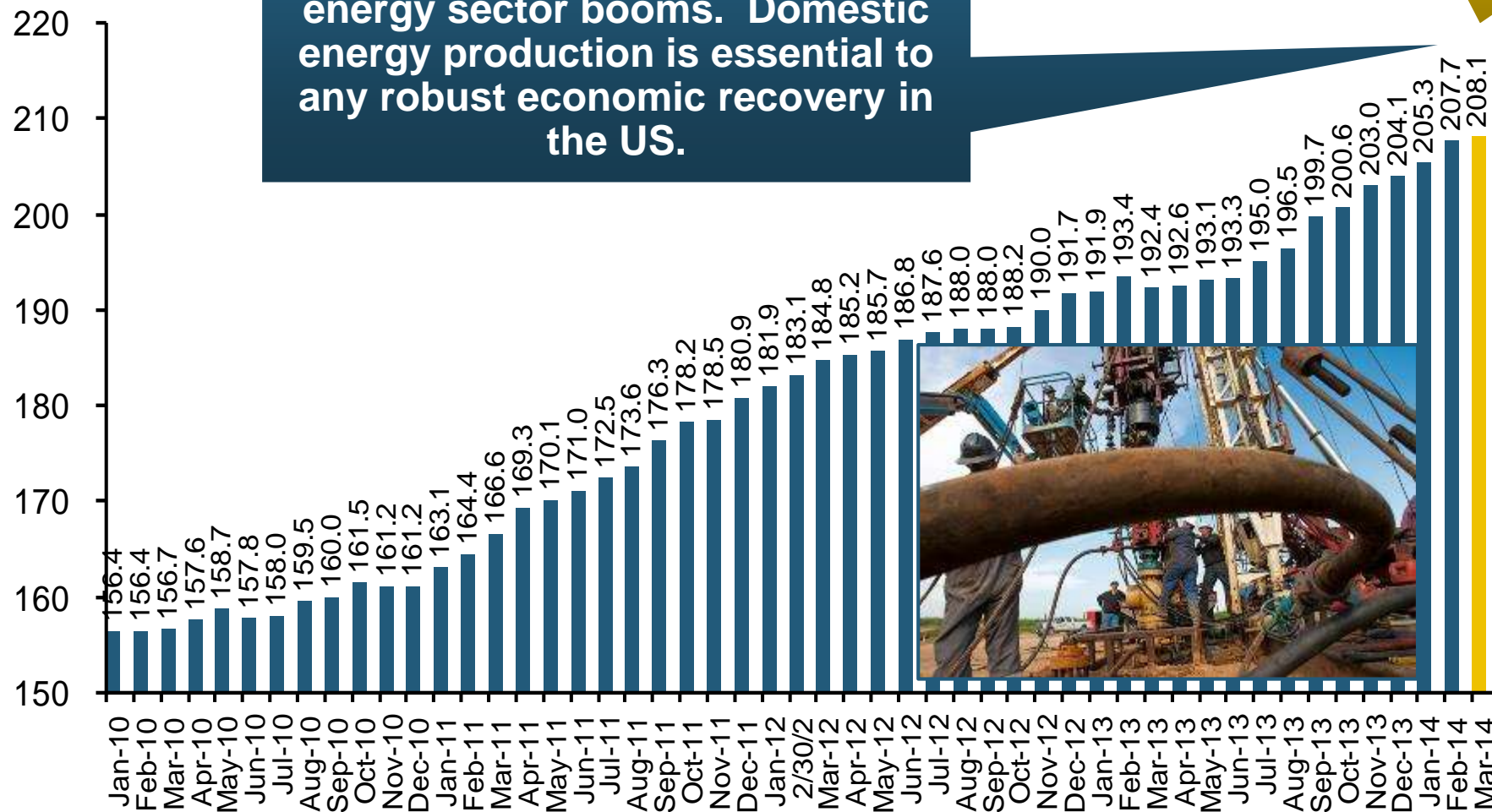
Liquid fuel consumption is expected to change little through 2040, though “tight” oil will account for a much larger share thereby reducing imports of petroleum products

Oil & Gas Extraction Employment, Jan. 2010—March 2014*

(Thousands)

Oil and gas extraction employment is up 33.1% since Jan. 2010 as the energy sector booms. Domestic energy production is essential to any robust economic recovery in the US.

Highest since Aug. 1986



*Seasonally adjusted

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



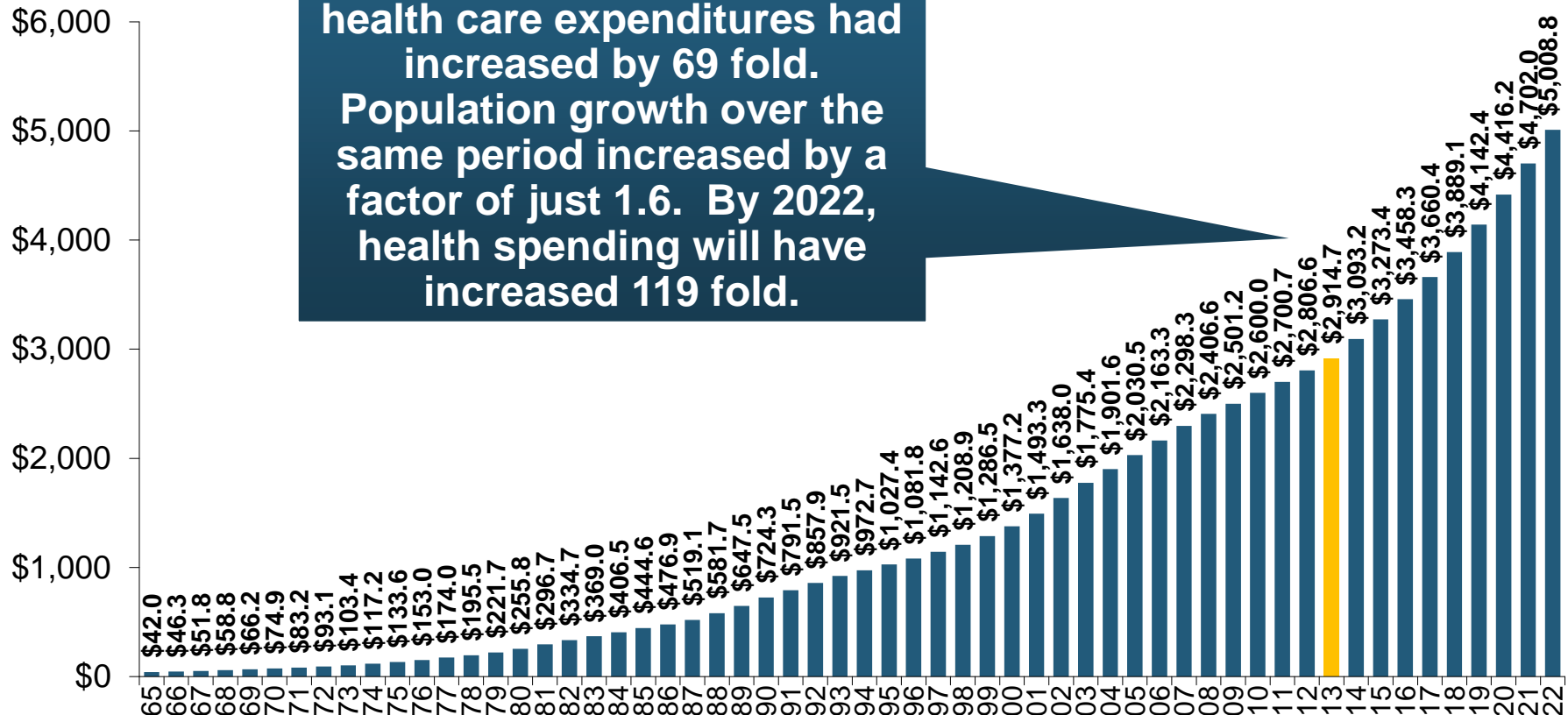
The Future of Healthcare in America

**Insurers Are Increasingly
Along for the Ride in the
American Health Care Saga**

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

\$ Billions

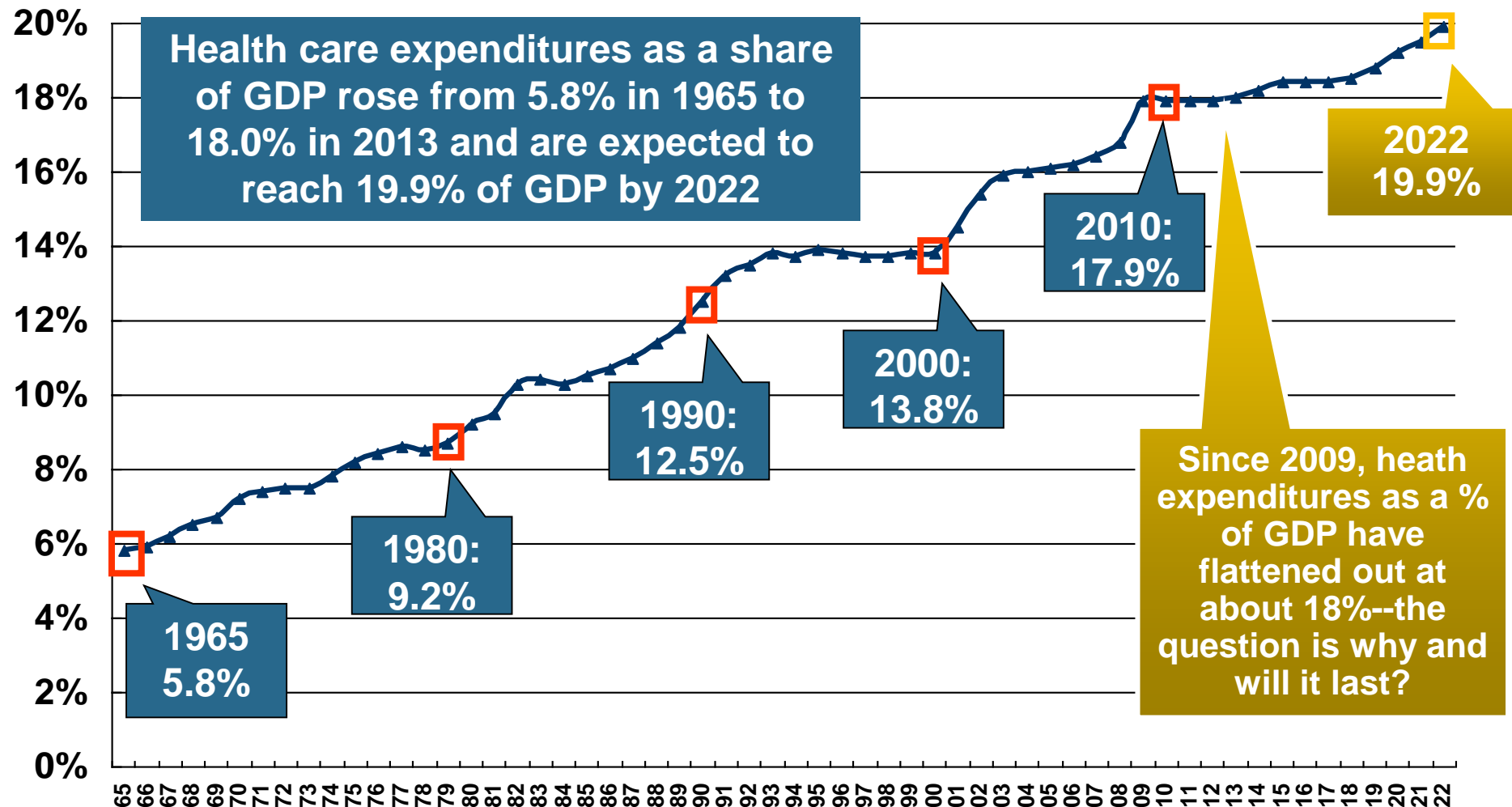
From 1965 through 2013, US health care expenditures had increased by 69 fold. Population growth over the same period increased by a factor of just 1.6. By 2022, health spending will have increased 119 fold.



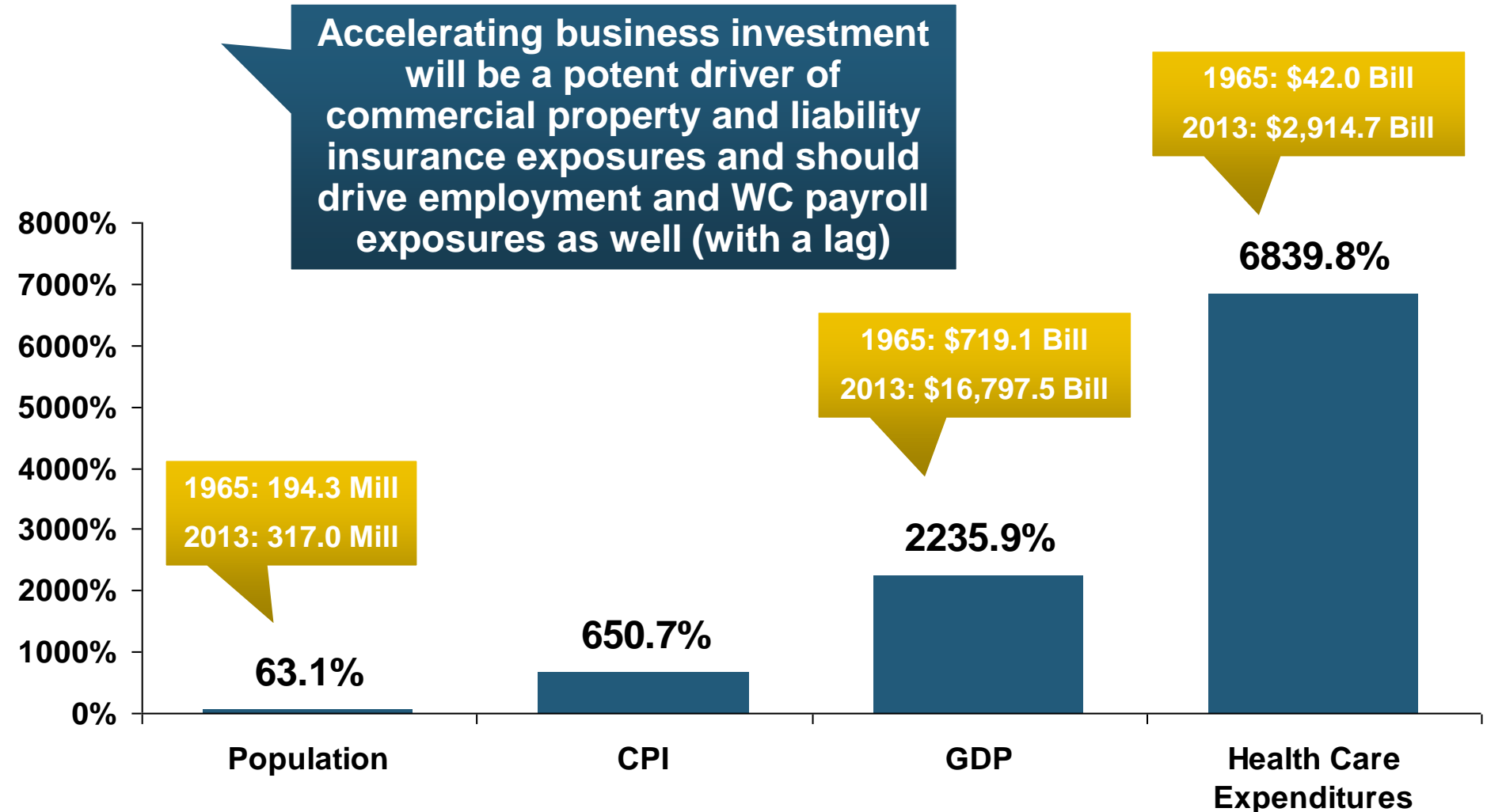
U.S. health care expenditures have been on a relentless climb for most of the past half century, far outstripping population growth, inflation of GDP growth

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

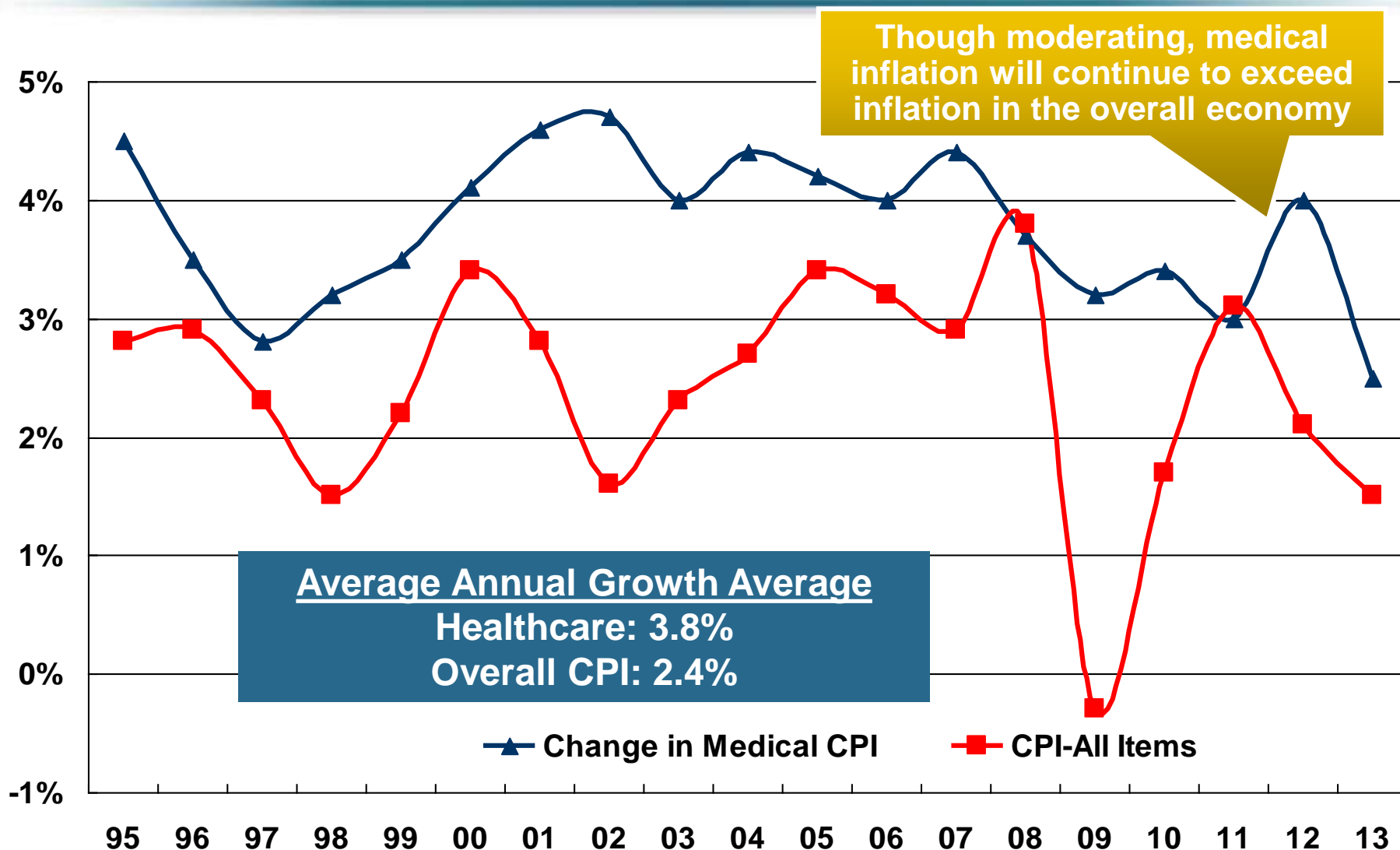
% of GDP



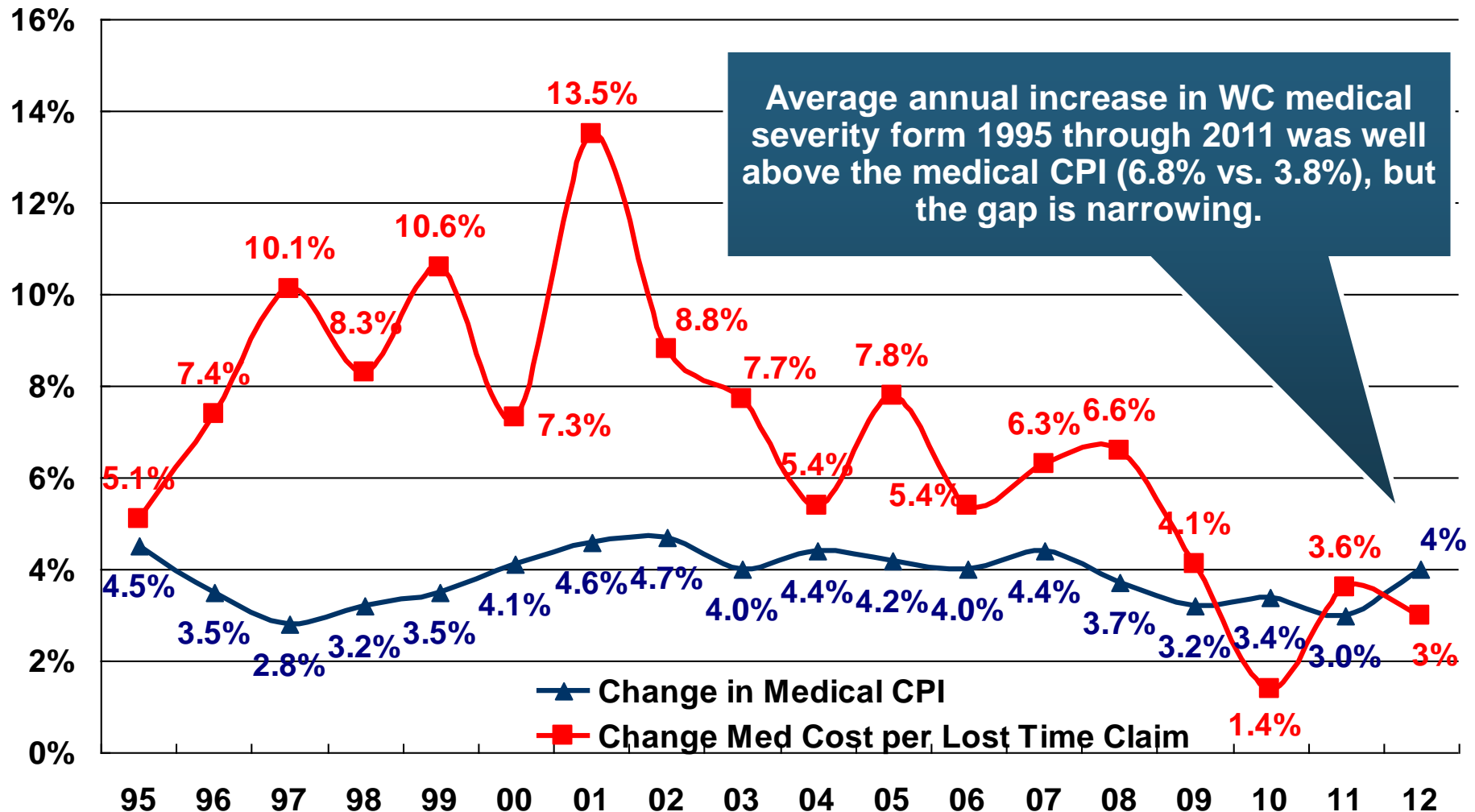
Rate of Health Care Expenditure Increase Compared to Population, CPI and GDP



Medical Cost Inflation vs. Overall CPI, 1995 - 2013



WC Medical Severity Generally Outpaces the Medical CPI Rate



CYBER RISK

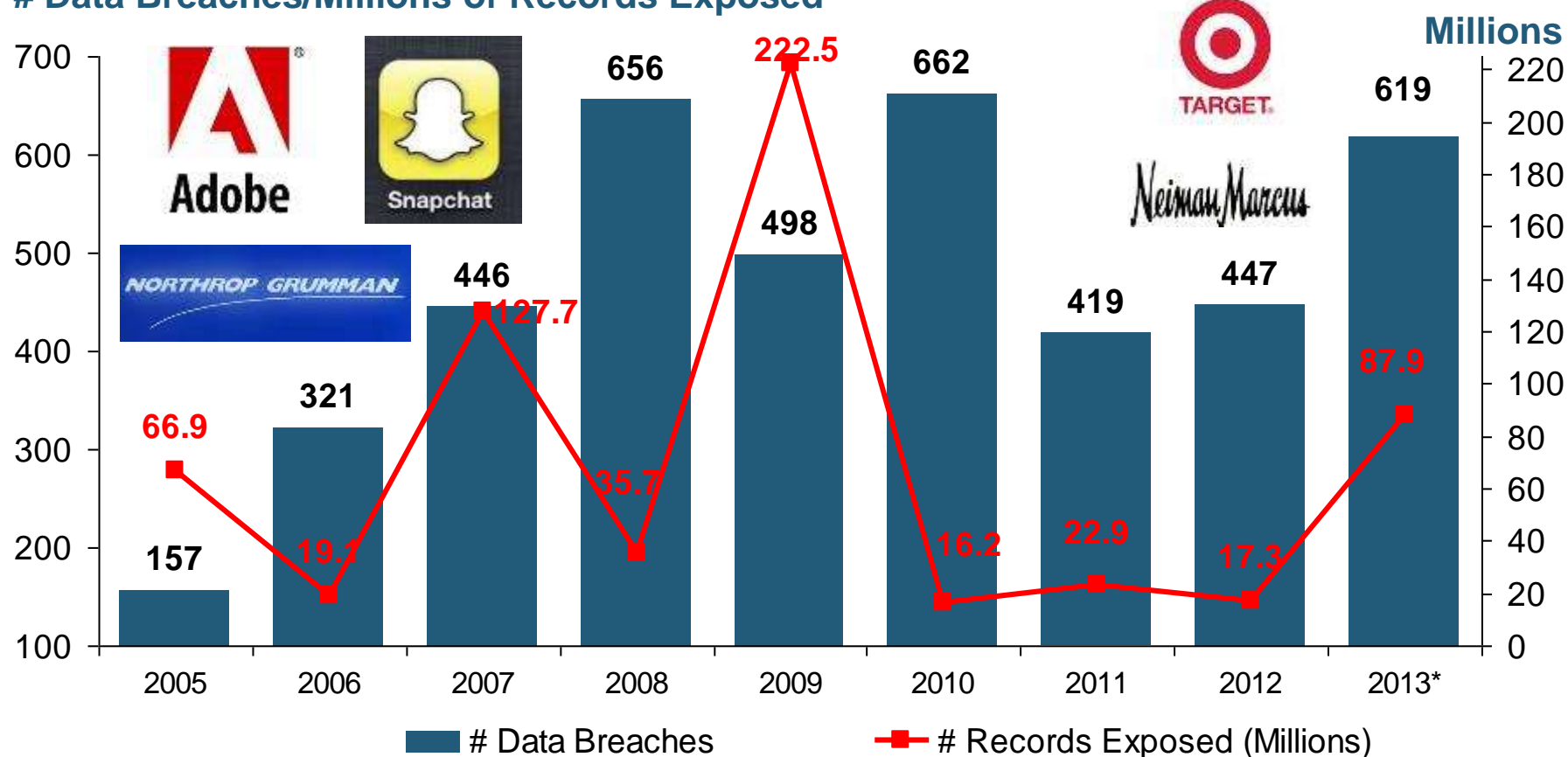
**Cyber Risk is a Rapidly Emerging
Exposure for Businesses Large
and Small in Every Industry**

NEW III White Paper:

http://www.iii.org/assets/docs/pdf/paper_CyberRisk_2013.pdf

Data Breaches 2005-2013, by Number of Breaches and Records Exposed

Data Breaches/Millions of Records Exposed



The Total Number of Data Breaches (+38%) and Number of Records Exposed (+408%) in 2013 Soared

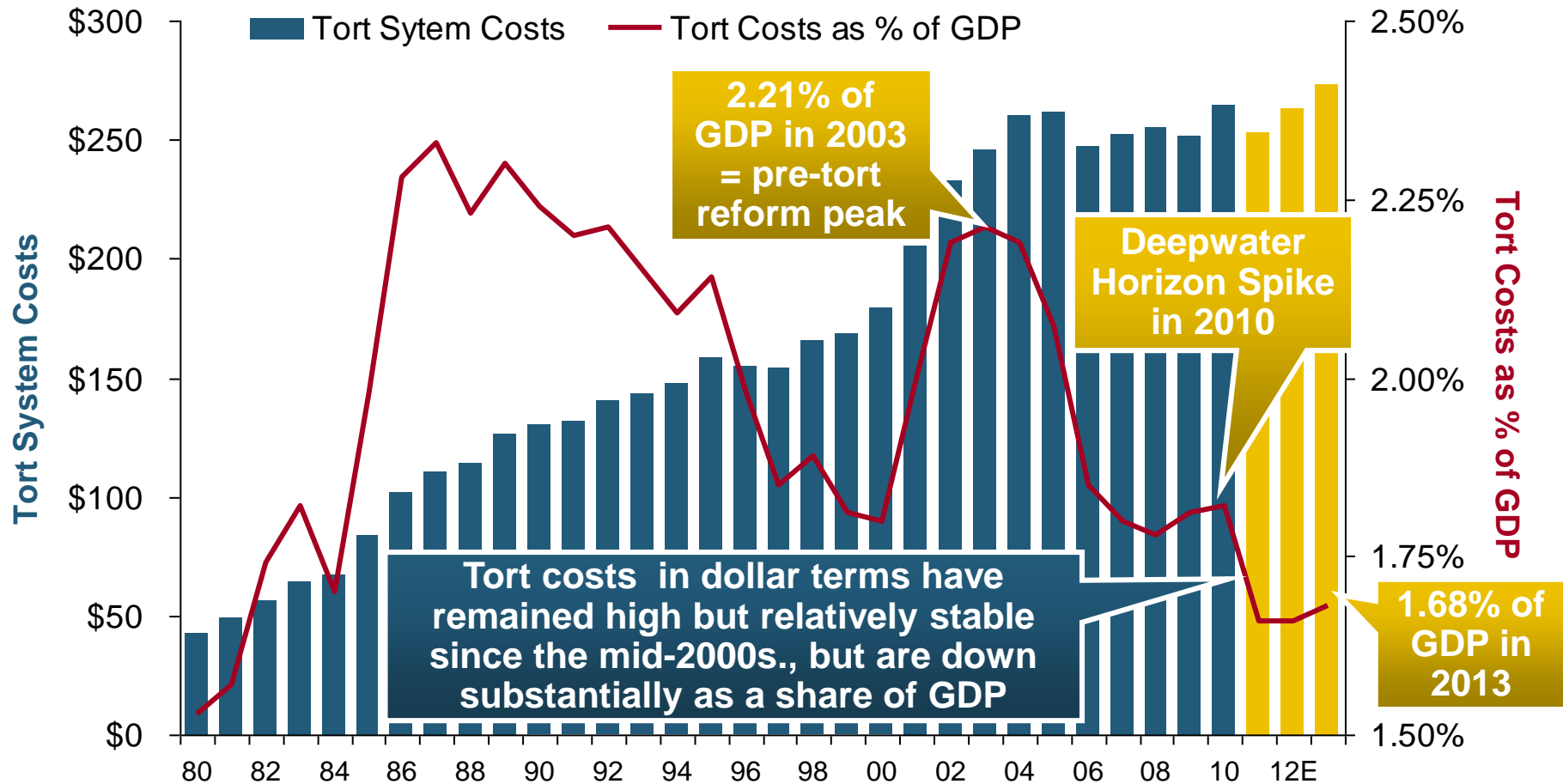
* 2013 figures as of Jan. 1, 2014 from the ITRC updated to an additional 30 million records breached (Target) as disclosed in Jan. 2014.
Source: Identity Theft Resource Center.

Shifting Legal Liability & Tort Environment

Is the Tort Pendulum Swinging Against Insurers?

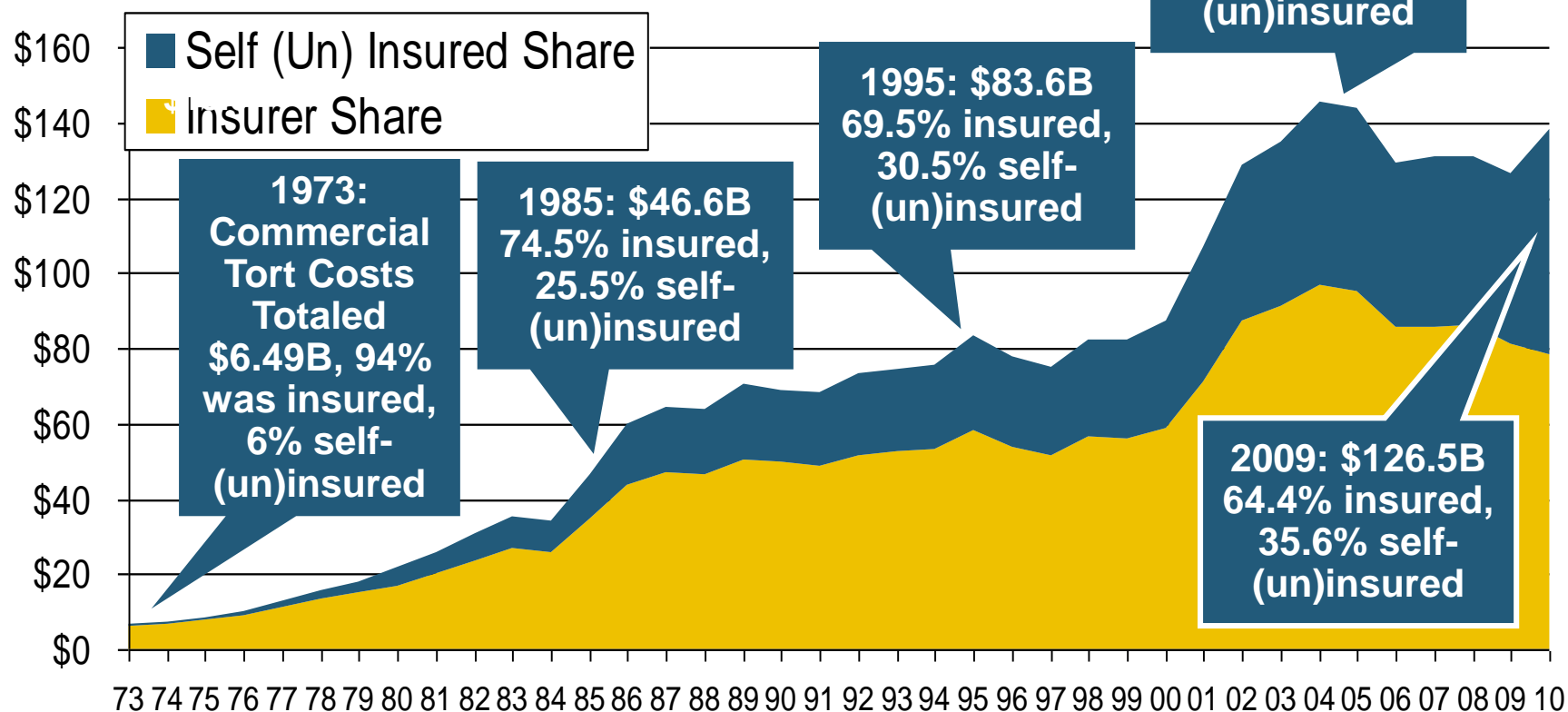
Over the Last Three Decades, Total Tort Costs as a % of GDP Appear Somewhat Cyclical, 1980-2013E

(\$ Billions)



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

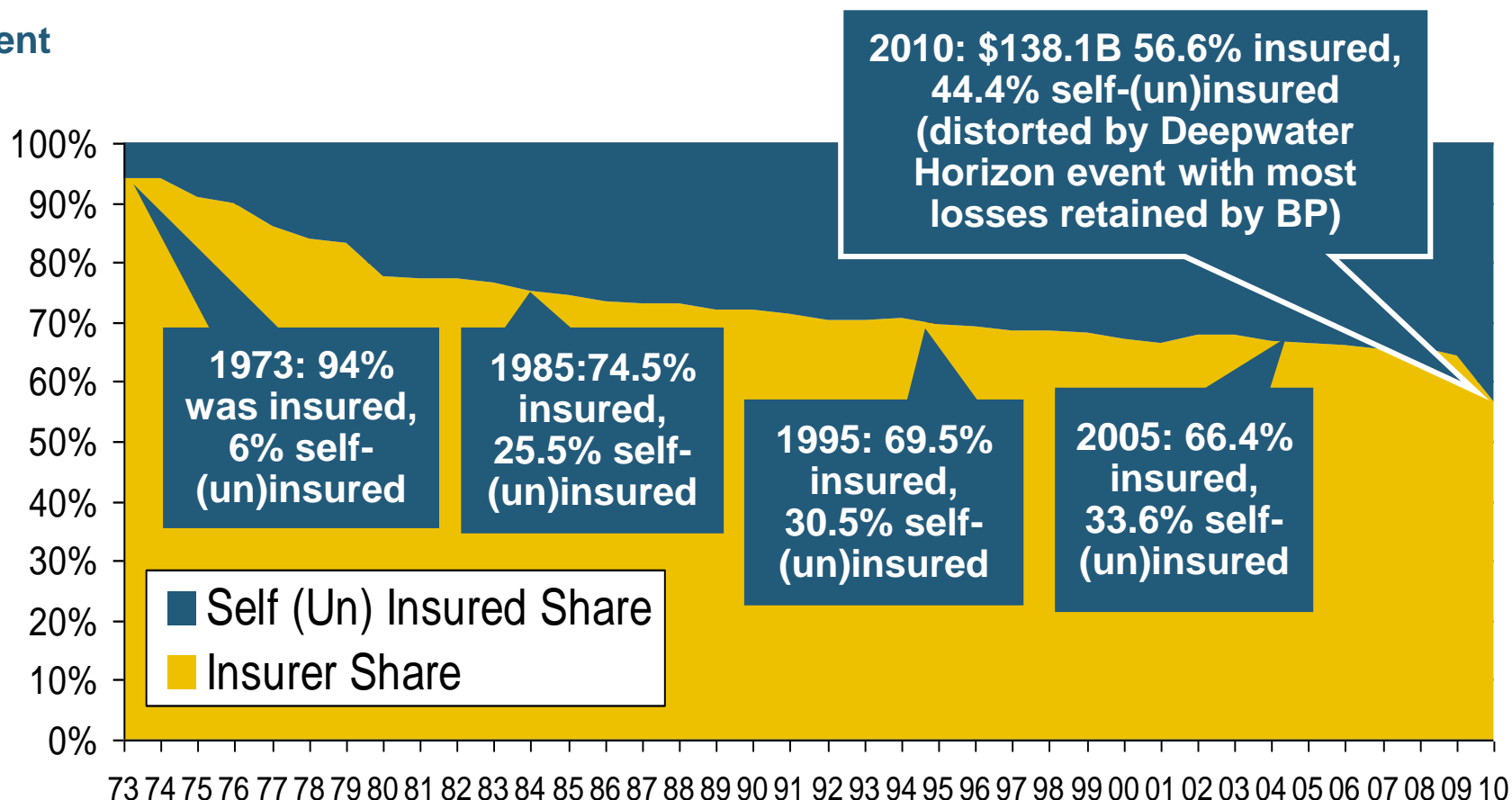
Billions of Dollars



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

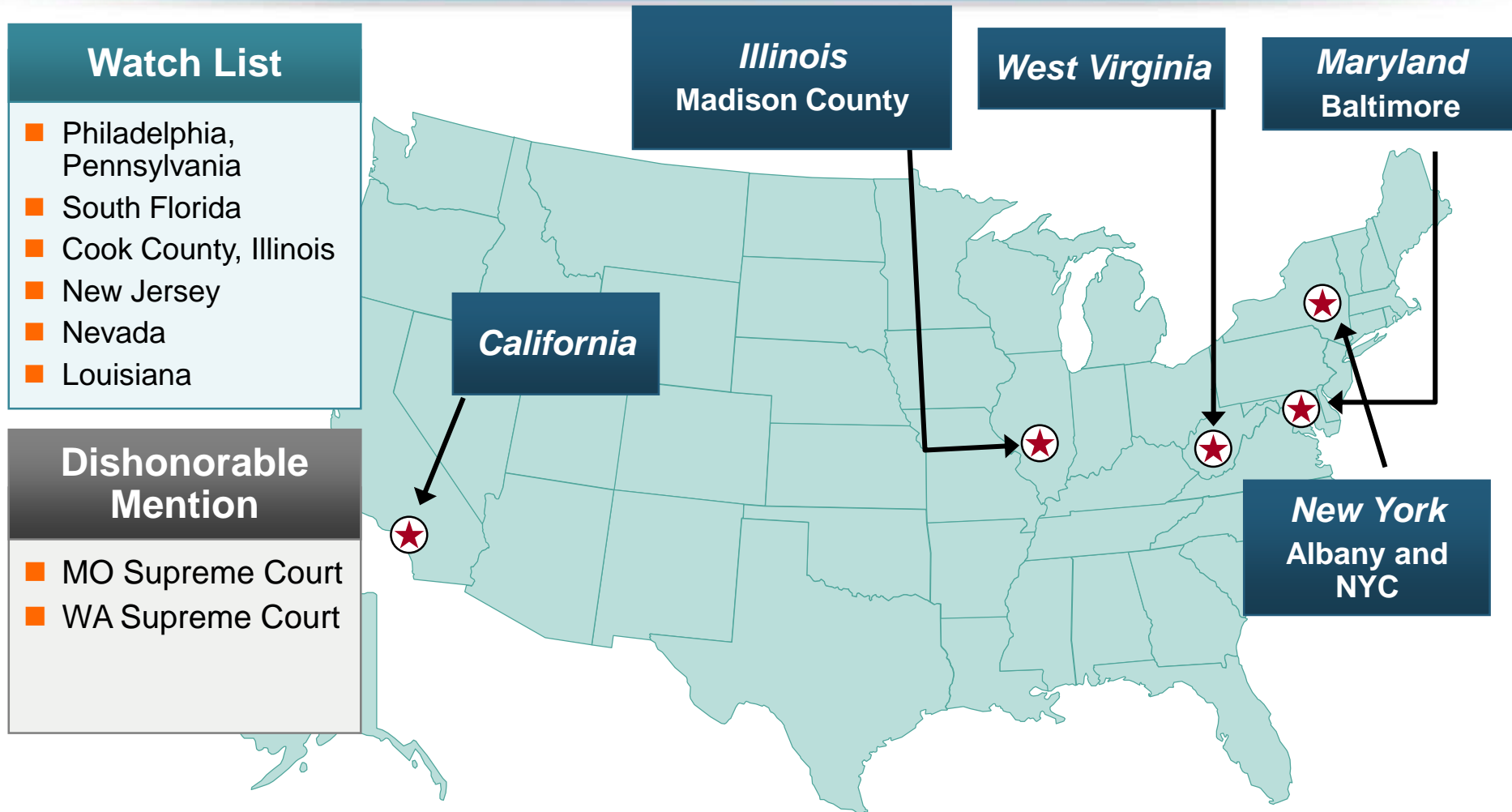
Newly Notorious

- Oklahoma

Rising Above

- Arkansas

The Nation's Judicial Hellholes: 2012/2013

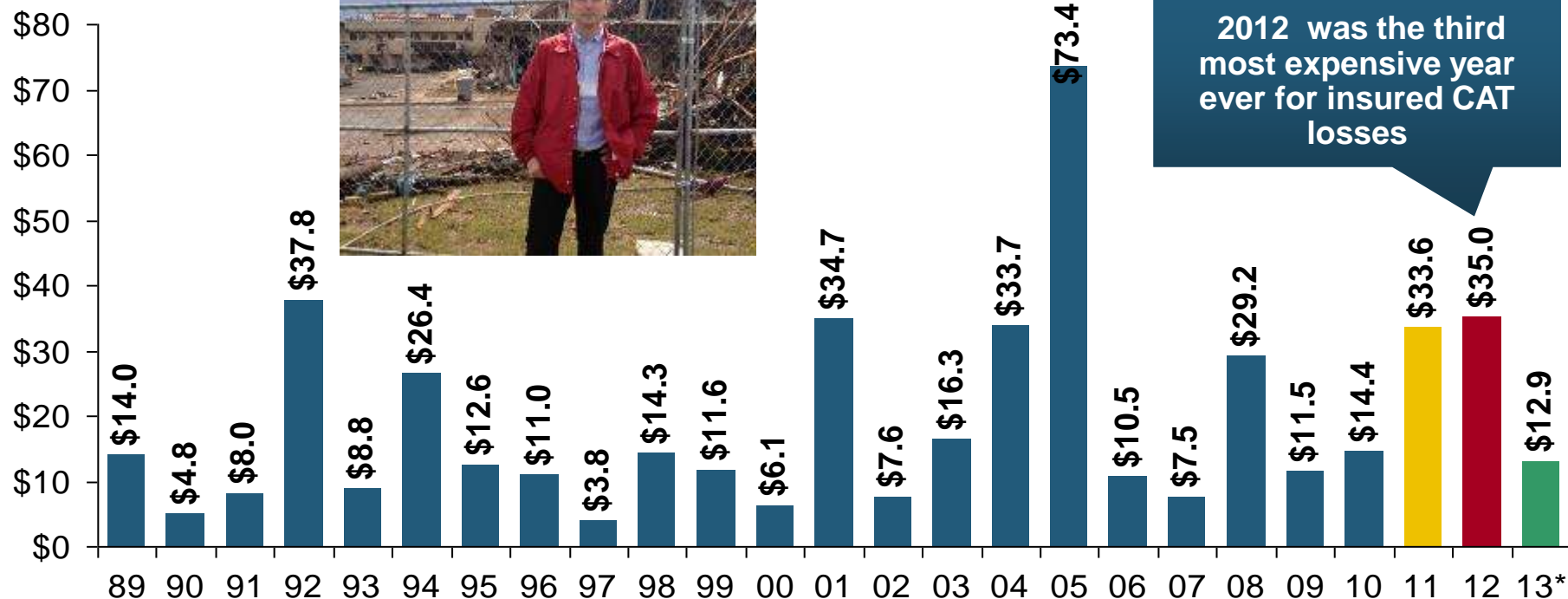


U.S. Insured Catastrophe Loss Update

**2013 Was a Welcome Respite from the
High Catastrophe Losses in Recent Years**

U.S. Insured Catastrophe Losses

(\$ Billions, \$ 2012)



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

2012 Was the 3rd Highest Year on Record for Insured Losses in U.S. History on an Inflation-Adj. Basis. 2011 Losses Were the 6th Highest. YTD 2013 Running Well Below 2011 and 2012 YTD Totals.

Record tornado losses caused 2011 CAT losses to surge

*Through 12/31/13.

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.

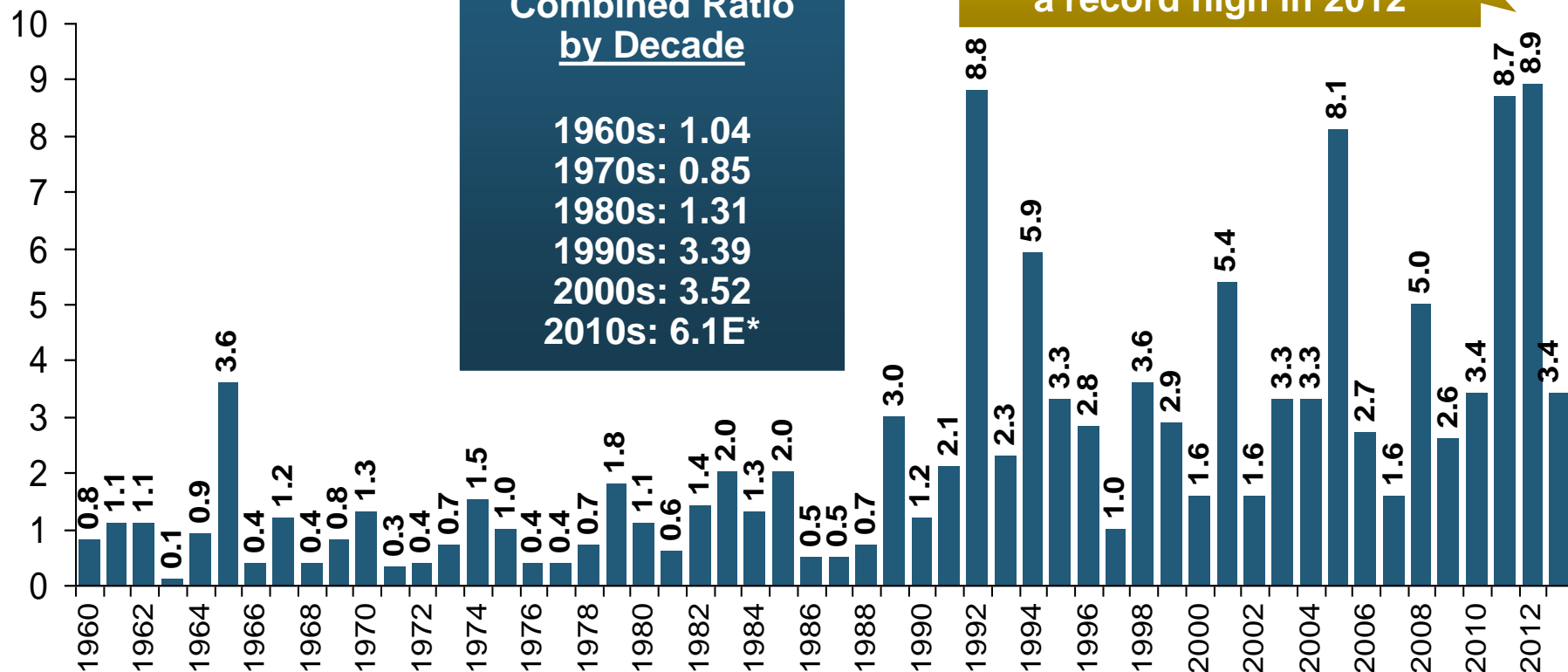
Combined Ratio Points Associated with Catastrophe Losses: 1960 – 2013*

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: 6.1E*

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



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

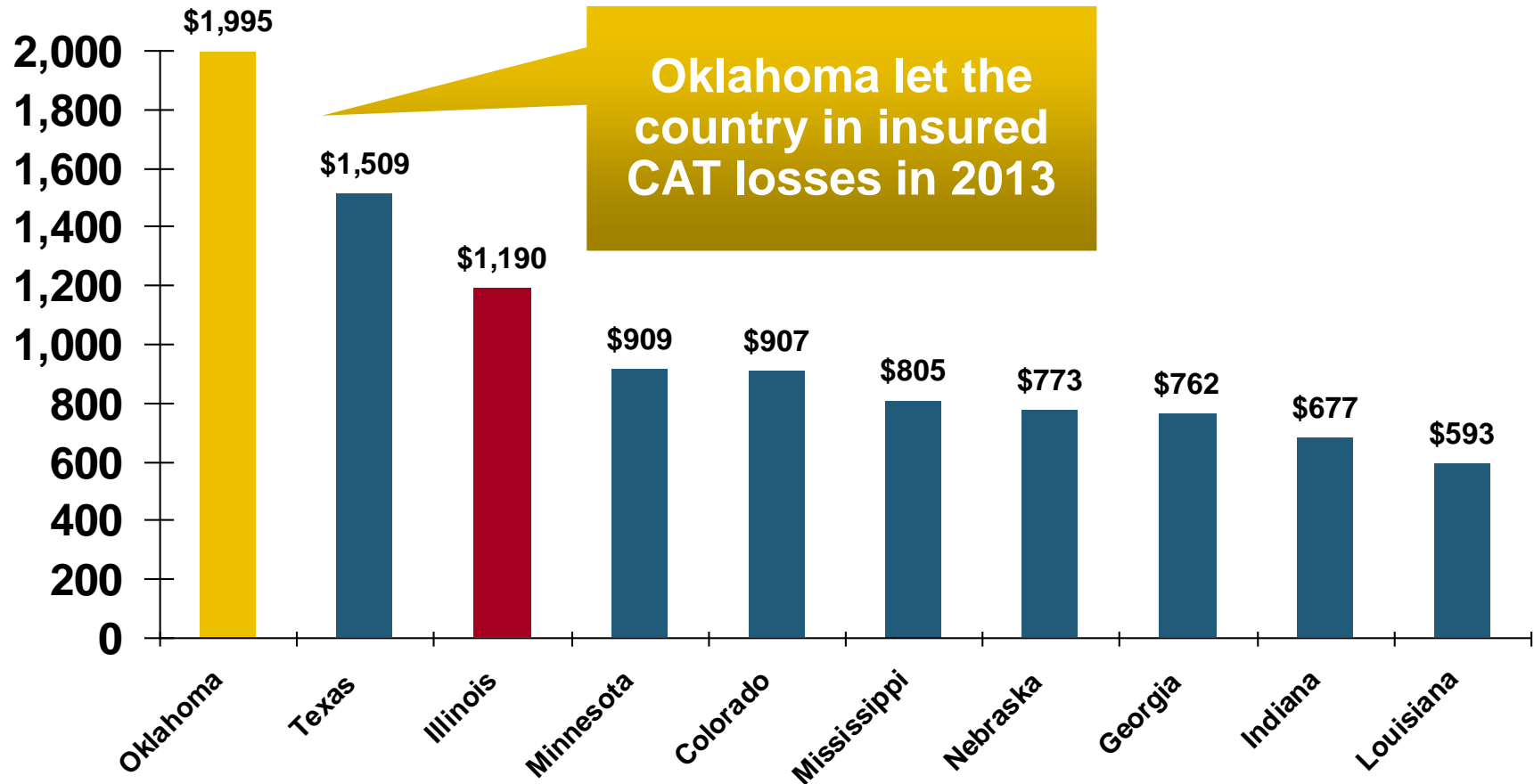
*2010s represent 2010-2013.

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.

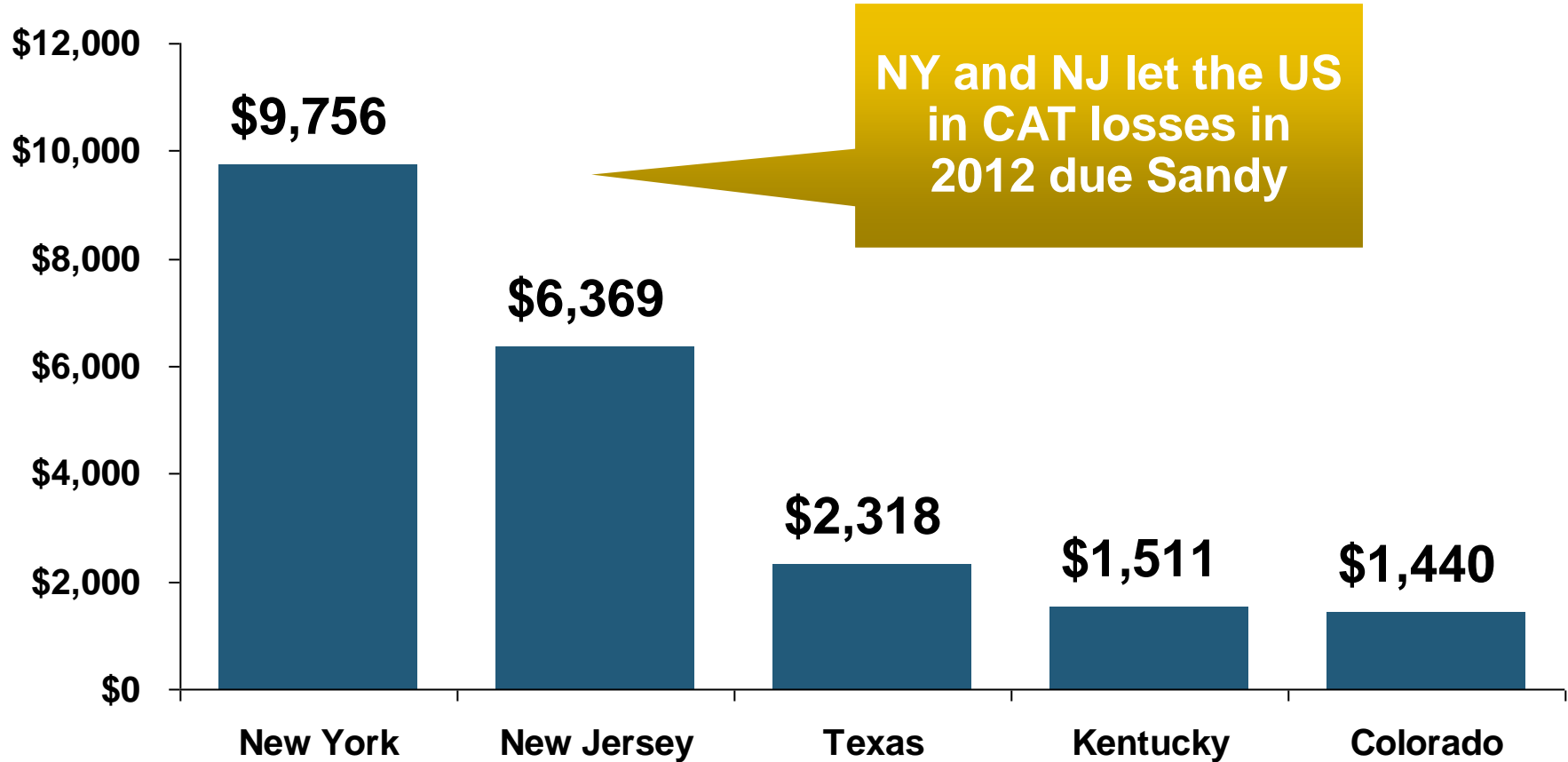
Top 10 States for Insured Catastrophe Losses, 2013

\$ Millions



Top 5 States by Insured Catastrophe Losses in 2012*

(2012, \$ Billions)



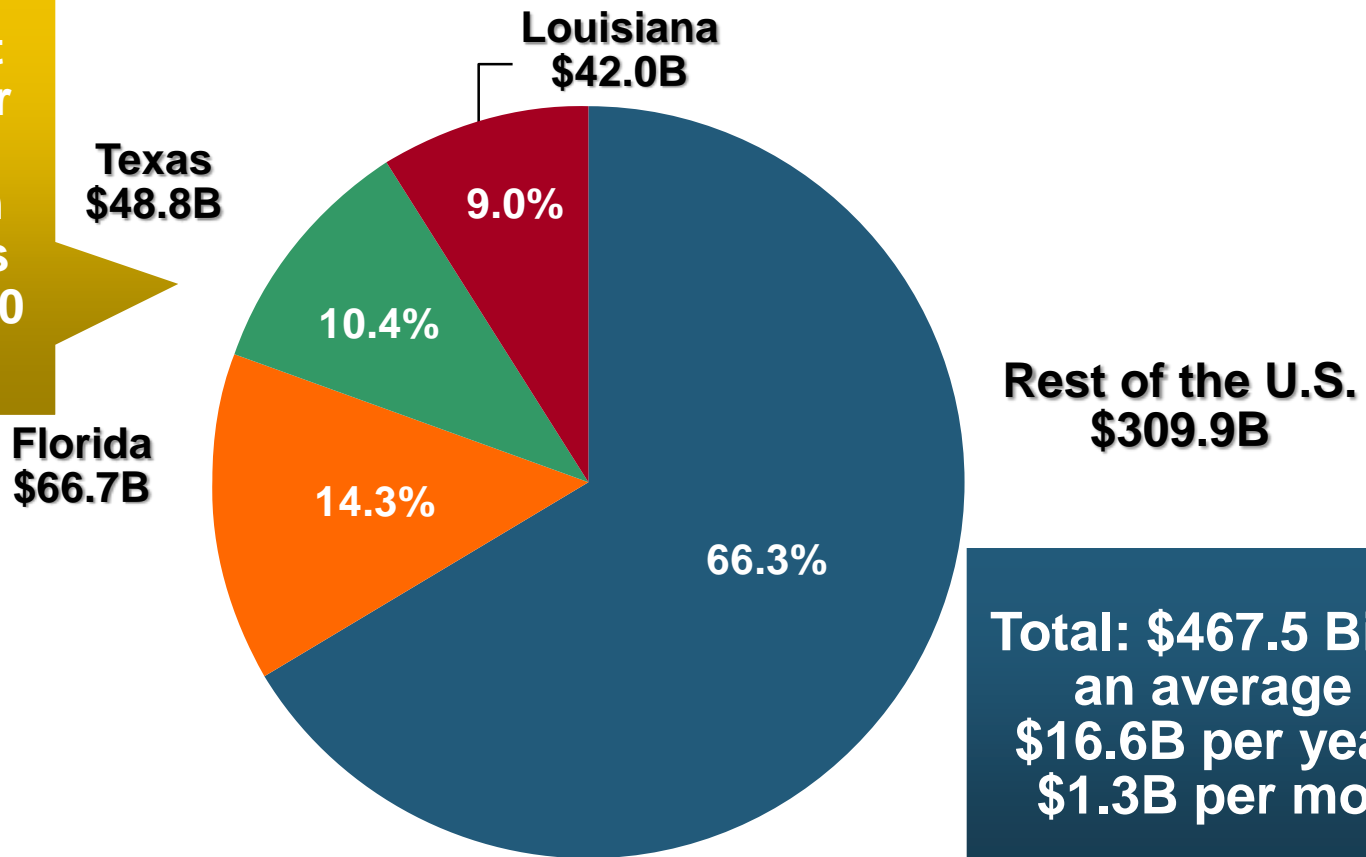
*Includes catastrophe losses of at least \$25 million.

Sources: PCS unit of ISO; Insurance Information Institute.

Top States by Inflation-Adjusted Insured Catastrophe Losses, 1983–2012

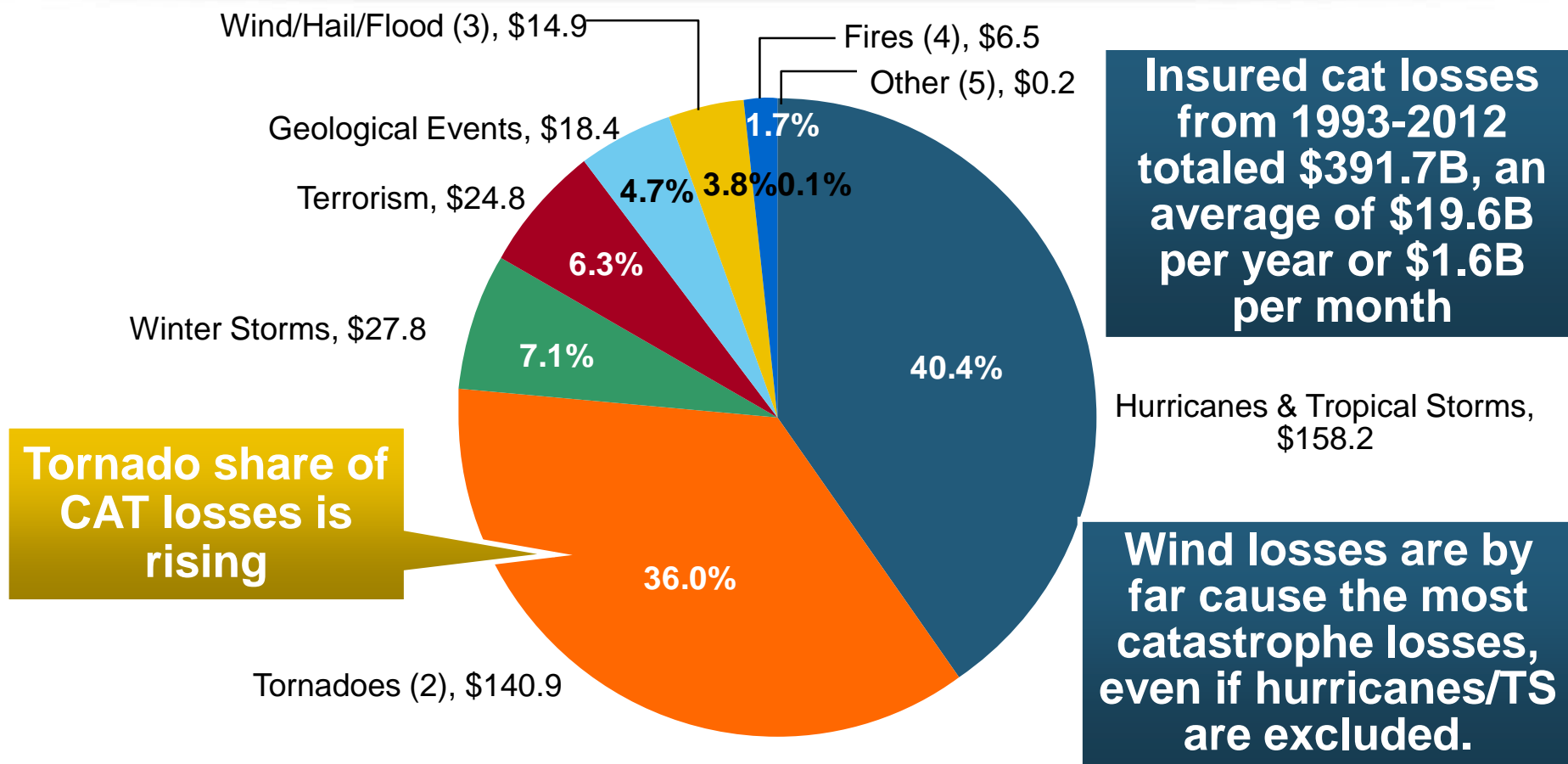
Over the Past 30 Years Florida Has Accounted for the Largest Share of Catastrophe Losses in the U.S., Followed by Texas and Louisiana

FL is the most costly state for CATs, with nearly \$67B in insured losses over the past 30 years



Total: \$467.5 Billion,
an average of
\$16.6B per year or
\$1.3B per month

Inflation Adjusted U.S. Catastrophe Losses by Cause of Loss, 1993–2012¹

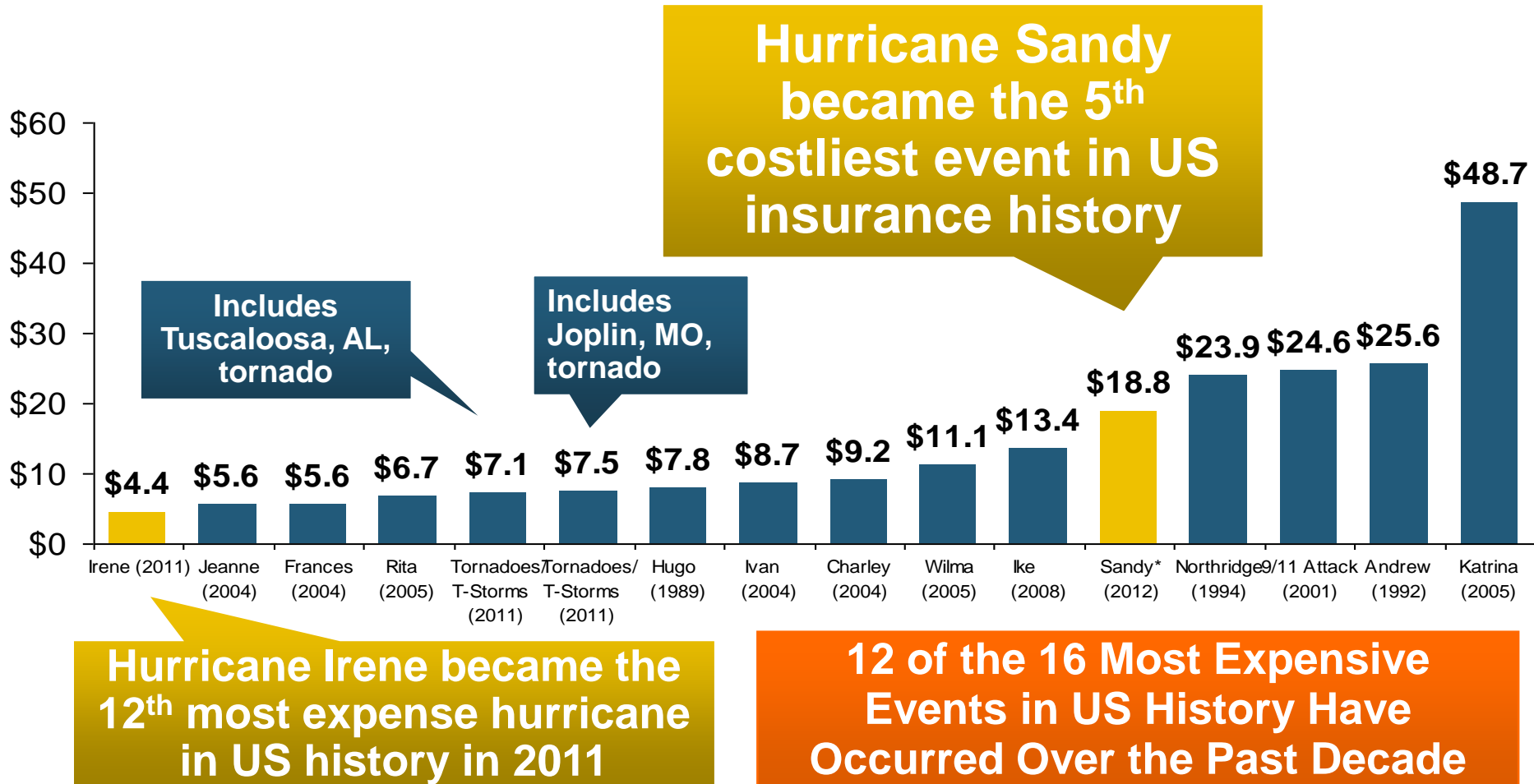


1. Catastrophes are defined as events causing direct insured losses to property of \$25 million or more in 2012 dollars.
2. Excludes snow.
3. Does not include NFIP flood losses
4. Includes wildland fires
5. Includes civil disorders, water damage, utility disruptions and non-property losses such as those covered by workers compensation.

Source: ISO's Property Claim Services Unit.

Top 16 Most Costly Disasters in U.S. History

(Insured Losses, 2012 Dollars, \$ Billions)



*PCS estimate as of 4/12/13.

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

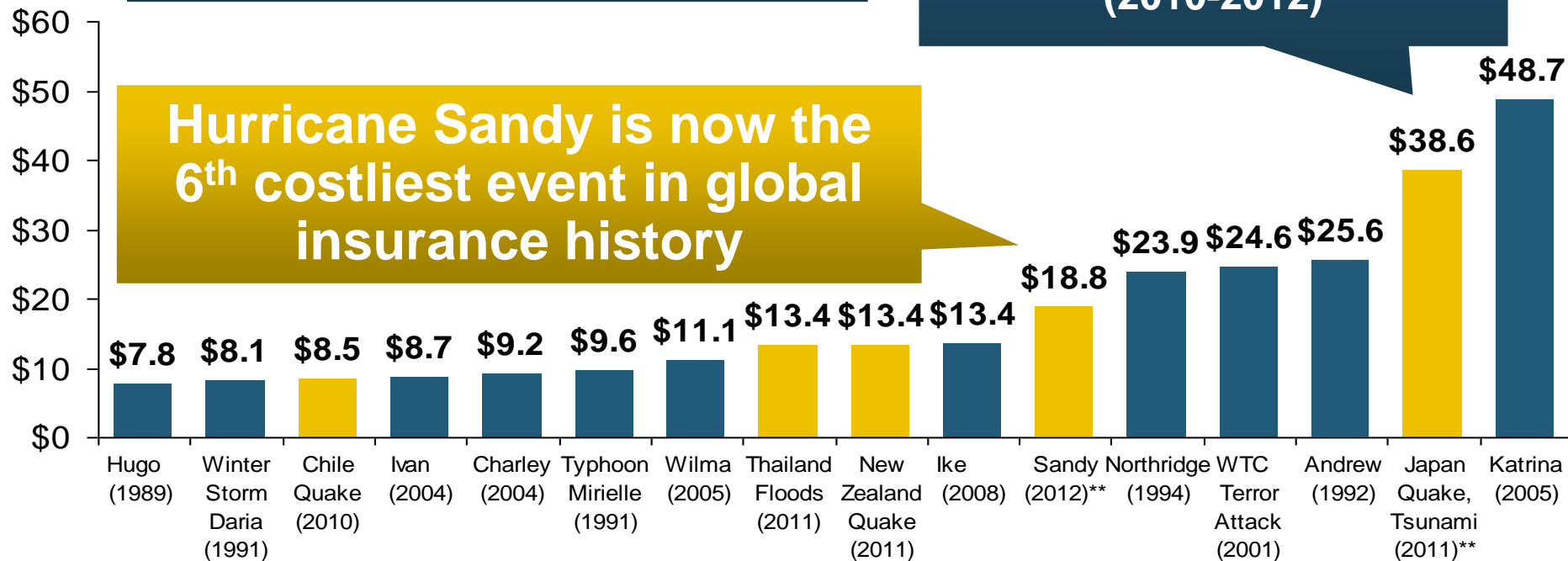
Top 16 Most Costly World Insurance Losses, 1970-2013*

(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 6th costliest event in global insurance history



*Figures do not include federally insured flood losses.

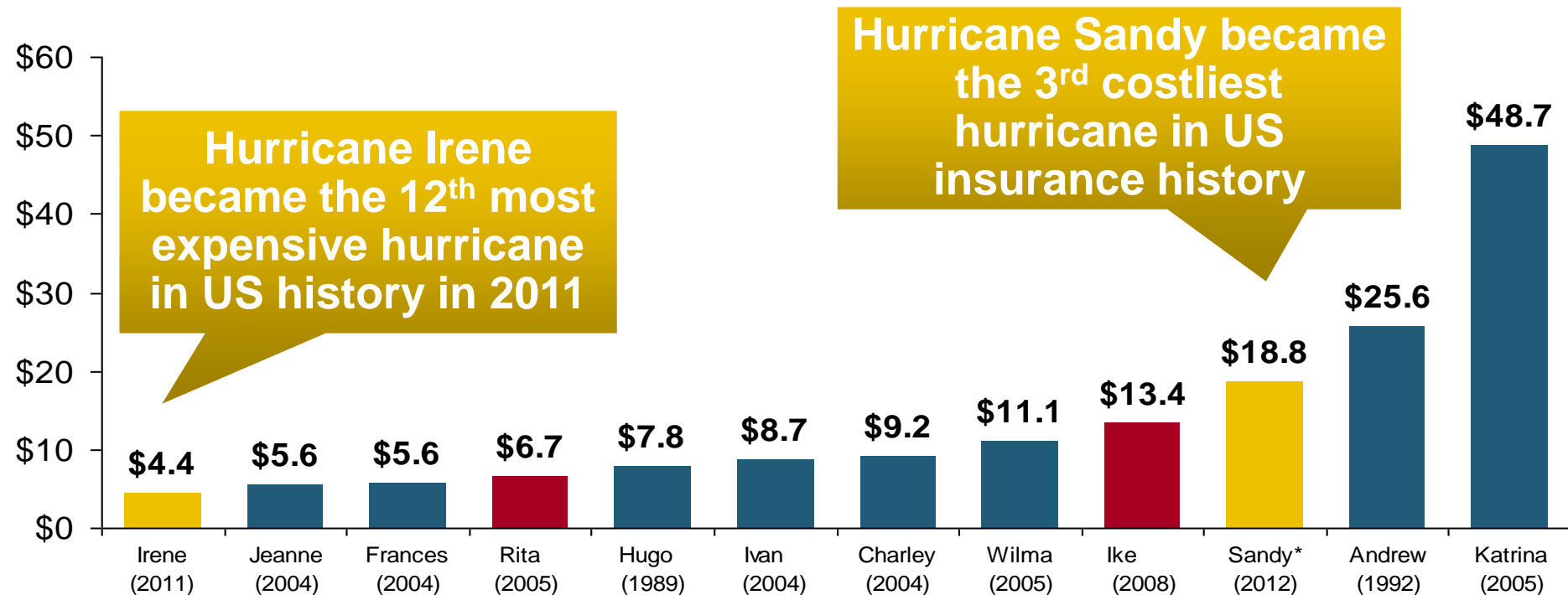
**Estimate based on PCS value of \$18.75B as of 4/12/13.

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

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)

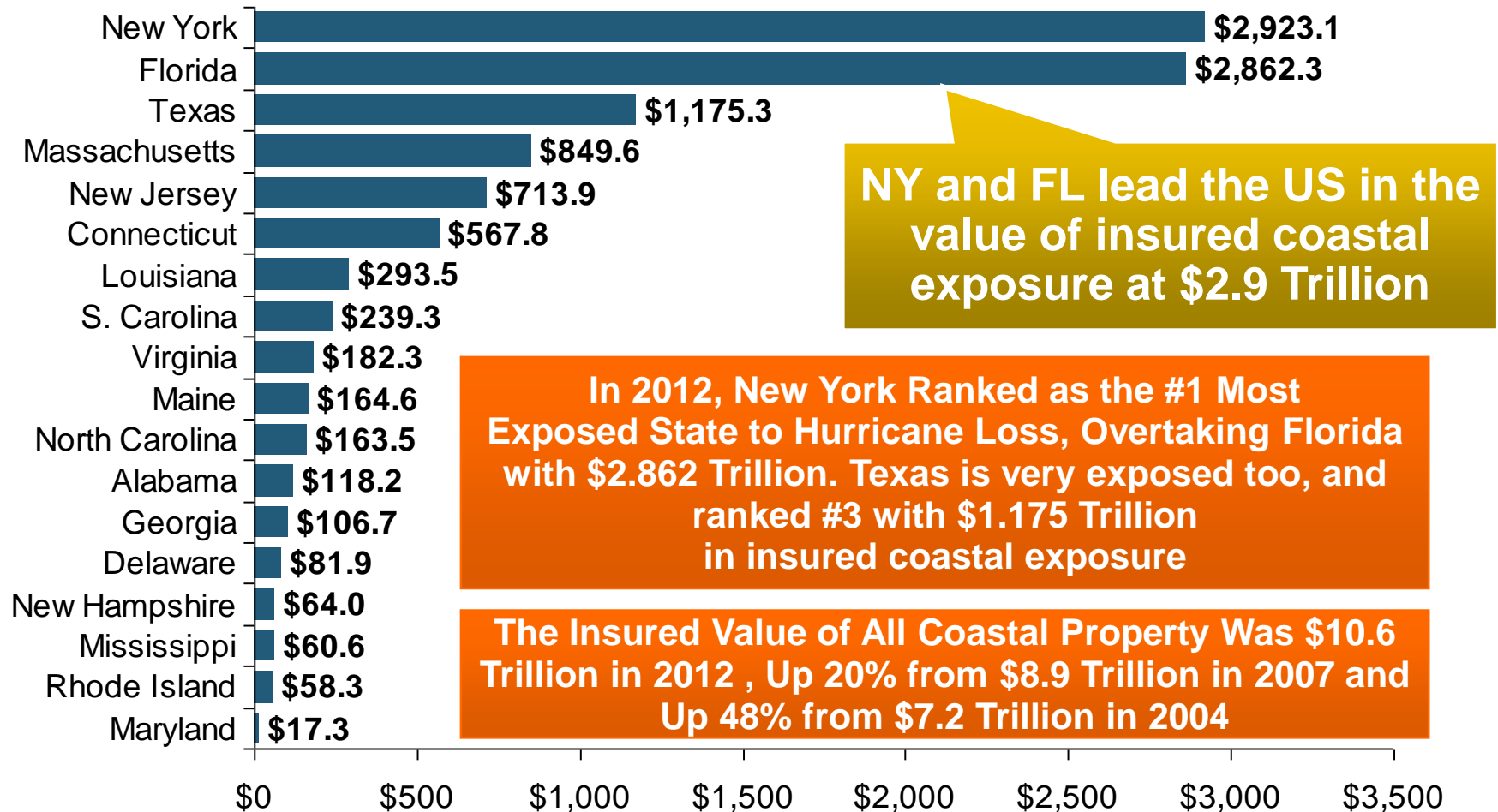


*PCS estimate as of 4/12/13.

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

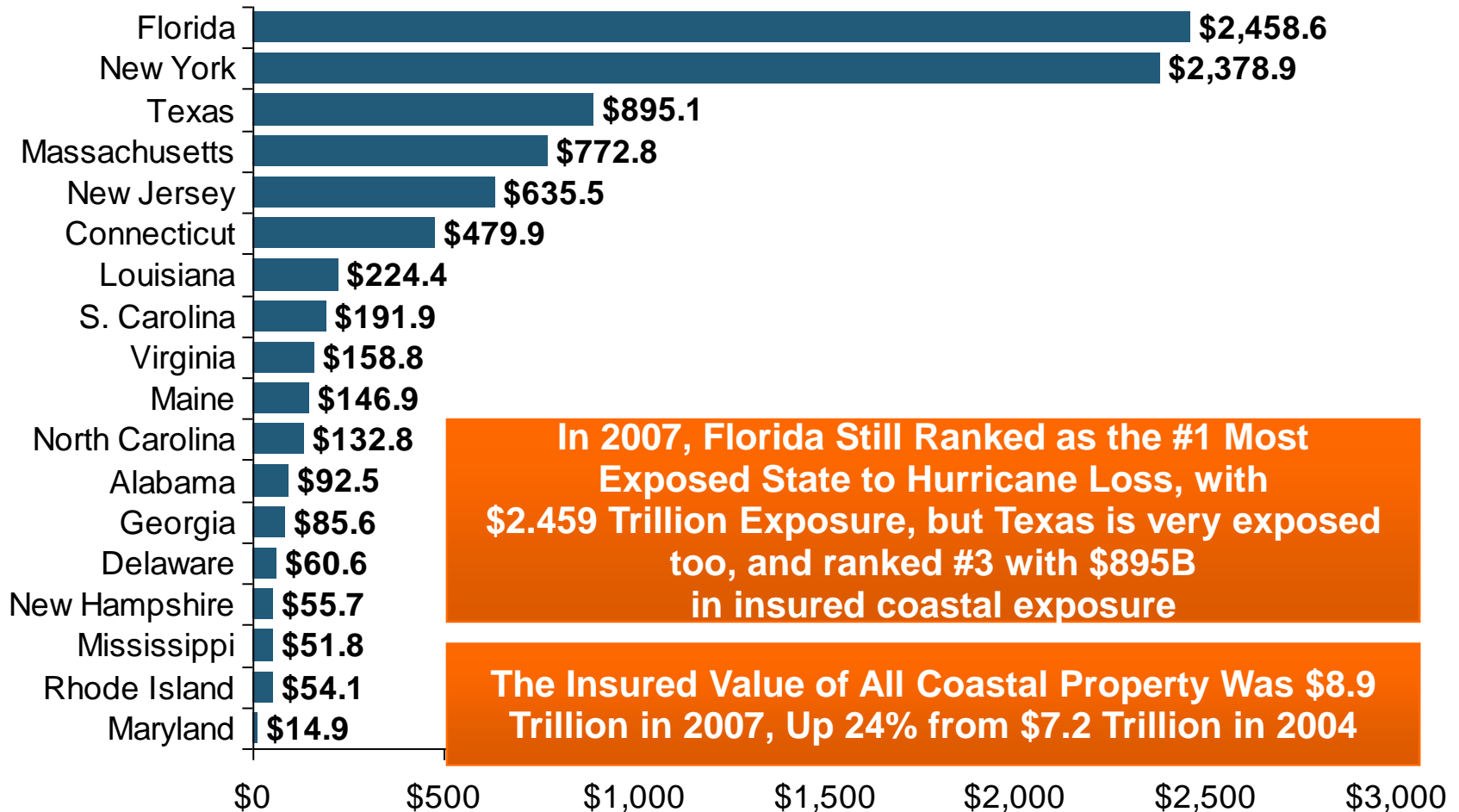
Total Value of Insured Coastal Exposure in 2012

(2012, \$ Billions)

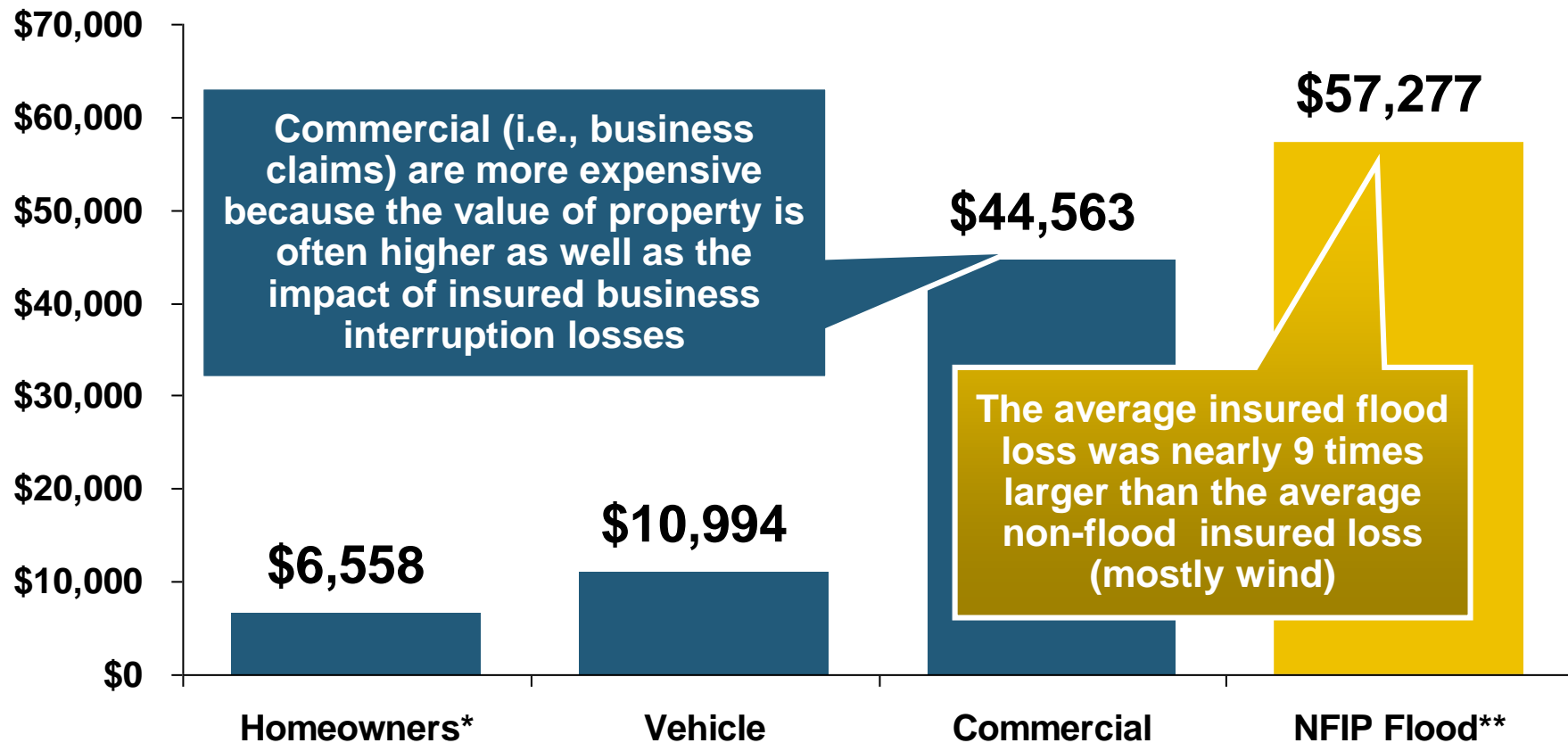


Total Value of Insured Coastal Exposure in 2007

(2007, \$ Billions)



Hurricane Sandy: Average Claim Payment by Type of Claim



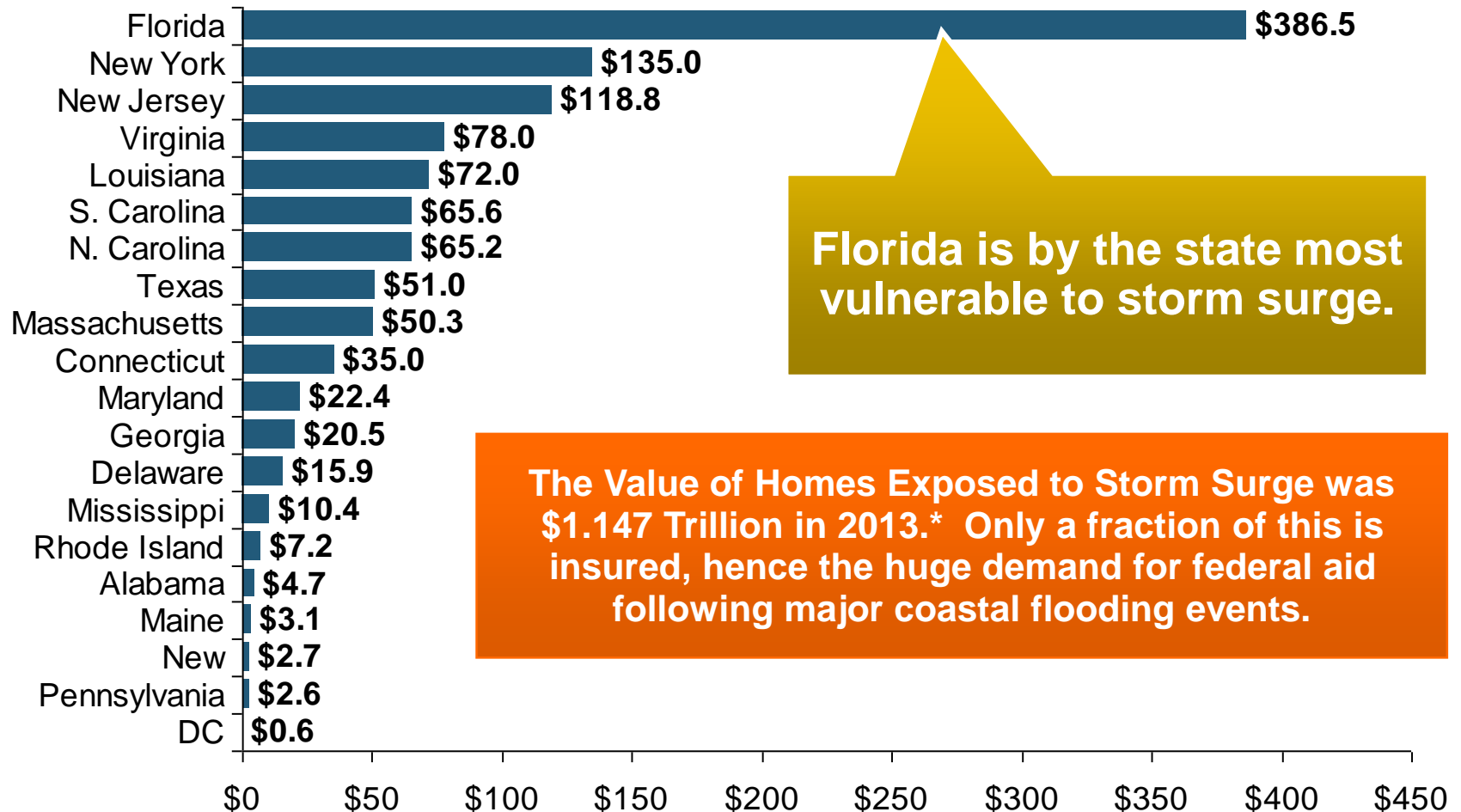
Post-Sandy, the I.I.I. worked very hard to make help media, consumers and regulators understand the distinction between a flood claim and a standard homeowners claim. *NFIP is \$24B in debt.*

*Includes rental and condo policies (excludes NFIP flood). **As of Oct. 31, 2013.

Sources: Catastrophe loss data is for Catastrophe Serial No. 90 (Oct. 28 – 31, 2012) from PCS as of March 2013; Insurance Information Institute.

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.

Top 10 Winter Storm and Winter Damage Events in the US and Canada, 1980-2013*



Ranked by Insured Loss, in Millions of \$ 2013*

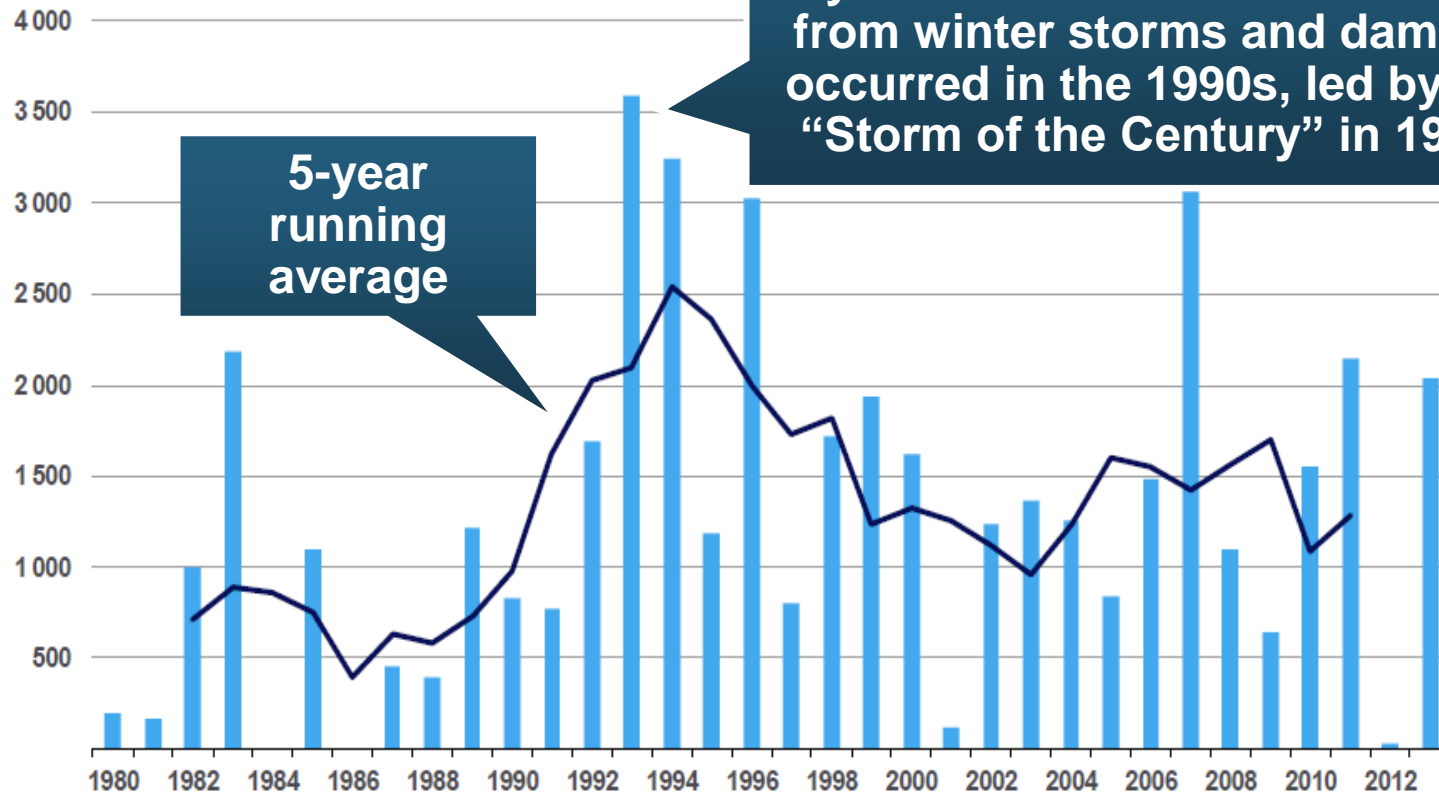
Period	Area	Economic Loss (in inflation-adjusted 2013 \$US mill)	Insured Loss (in inflation-adjusted 2013 \$US mill)	Fatalities
Mar. 11-14, 1993	CAN, USA	8,061	3,224	270
Dec. 17-30, 1983	USA	2,339	2,058	500
Apr. 13-17, 2007	CAN, USA	2,247	1,775	23
Dec. 10-13, 1992	USA	4,981	1,660	19
Jan. 5-12, 1998	CAN, USA	4,145	1,644	45
Feb. 10-12, 1994	USA	4,716	1,258	9
Jan. 17-20, 1994	USA	1,572	1,258	70
Apr. 7-11, 2013	USA	1,600	1,200	N/A
Jan. 1-4, 1999	CAN, USA	1,398	1,084	25
Jan. 31-Feb. 2, 2011	USA	1,346	1,010	36

*Top 10 events in original insured loss dollars were adjusted to and ranked by the Insurance Information Institute to 2013 inflation-adjusted values.

Sources: Munich Re NatCatSERVICE; Insurance Information Institute.

Winter Storm and Winter Damage Events in the US and Canada, 1980-2013 (2013 US\$)

Insured Losses (Millions, \$ 2013)



Insured losses from severe winter events totaled \$2 billion in 2013.

Insured winter storm and damage losses in Jan. 2014 already totaled \$1.5 billion. Continued severe weather since then makes it likely that 2014 will become one of the top 5 costliest winters since 1980.

Natural Disaster Losses in the United States, by Type, 2013

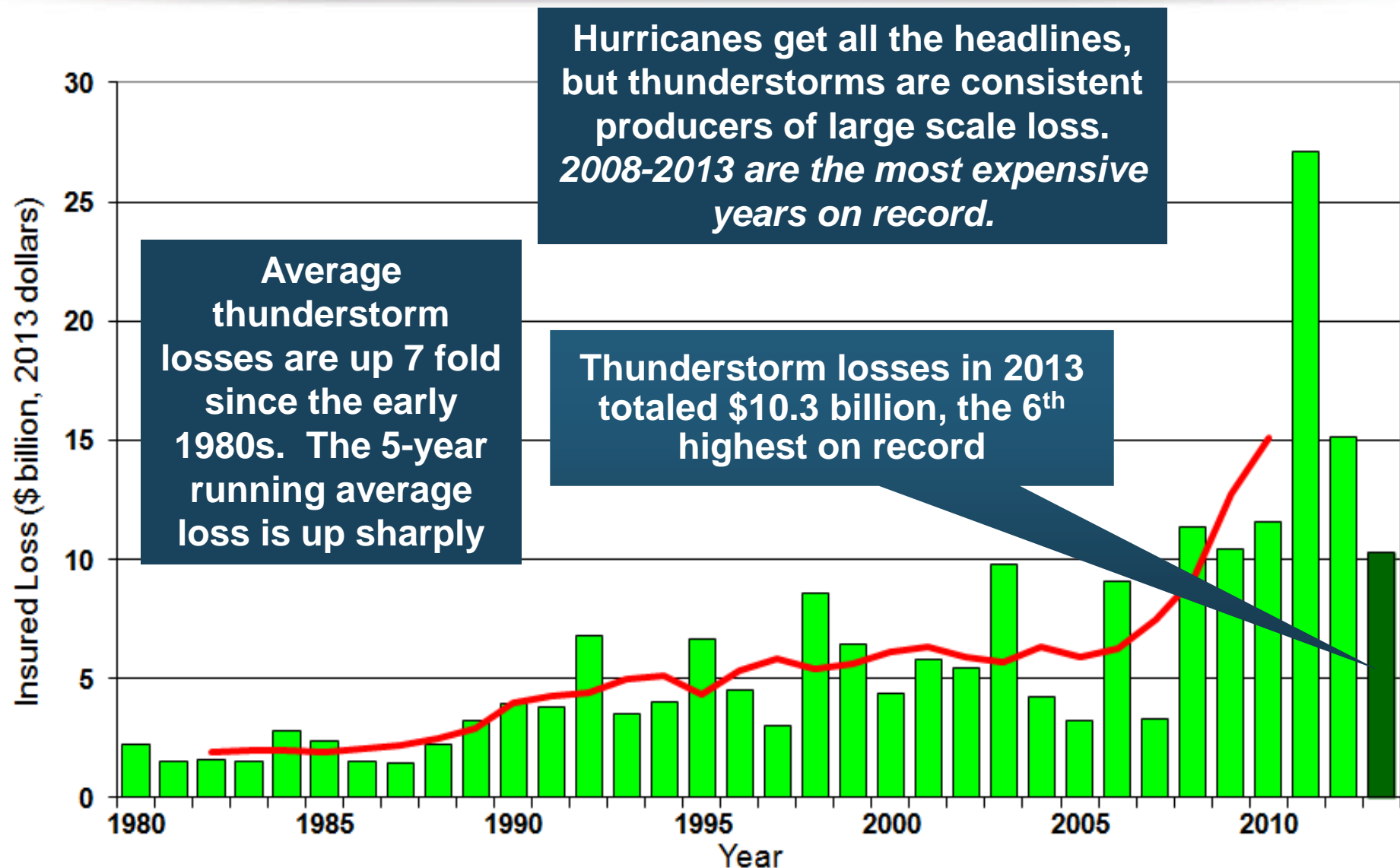
As of December 31, 2013	Number of Events	Fatalities	Estimated Overall Losses (US \$m)	Estimated Insured Losses (US \$m)
Severe Thunderstorm	69	110	16,341	10,274
Winter Storm	11	43	2,935	1,895
Flood	19	23	1,929	240
Earthquake & Geophysical	6	1	Minor	Minor
Tropical Cyclone	1	1	Minor	Minor
Wildfire, Heat, & Drought	22	29	620	385
Totals	128	207	21,825	12,794

Significant Natural Catastrophes, 2013

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

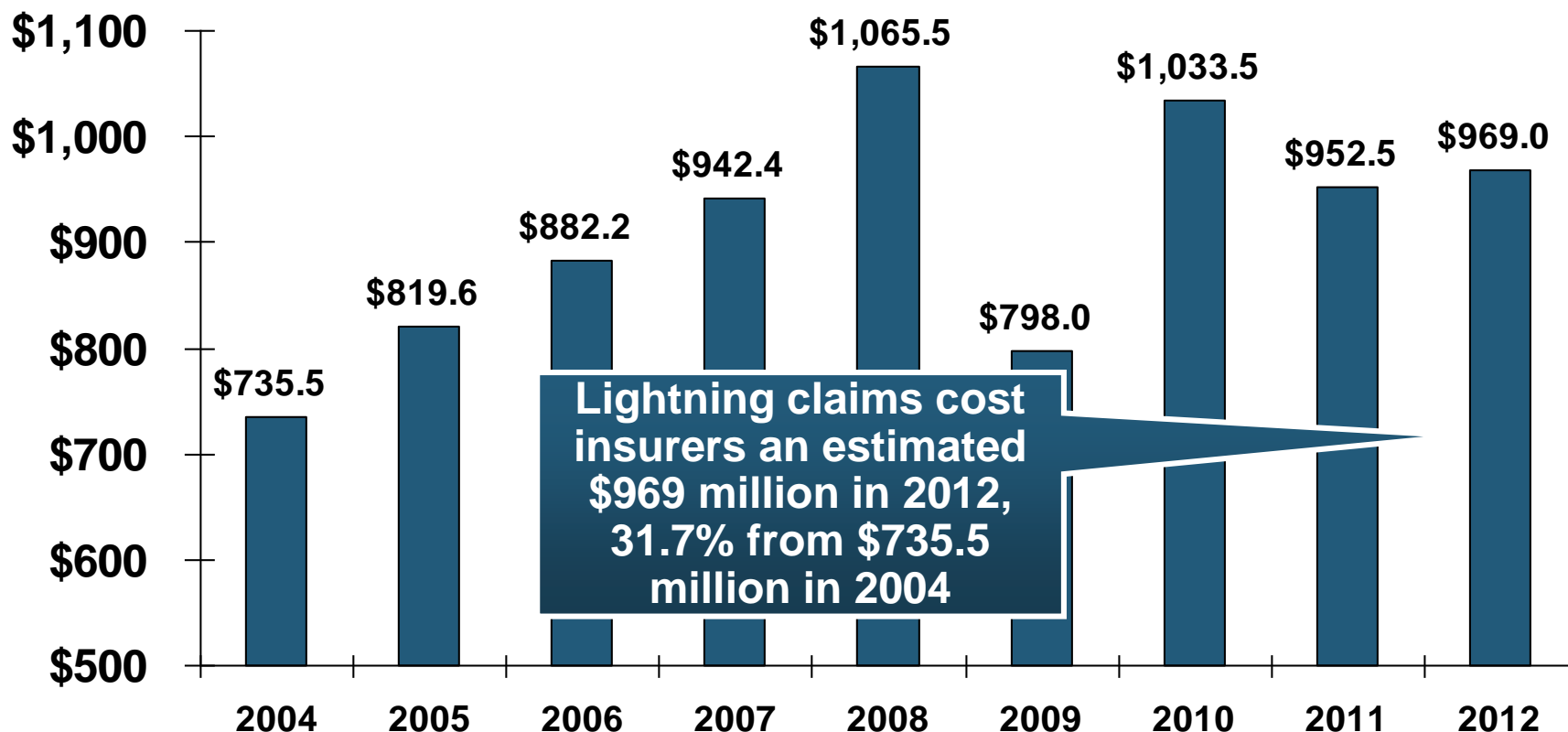
Date	Event	Estimated Economic Losses (US \$m)	Estimated Insured Losses (US \$m)
February 24 – 25	Winter Storm	1,300	690
March 18 – 19	Thunderstorms	2,200	1,600
April 7 – 11	Winter Storm	1,600	1,200
April 16 – 18	Thunderstorms	1,100	560
May 18 – 20	Thunderstorms	3,100	1,800
May 28 – 31	Thunderstorms	2,800	1,400
August 6 – 7	Thunderstorms	1,300	740
September 9 – 16	Flooding	1,500	160
November 17 - 18	Thunderstorms	1,300	931

U.S. Thunderstorm Insured Loss Trends, 1980 – 2013



Insured Homeowners Losses Due to Lightning, 2004-2012

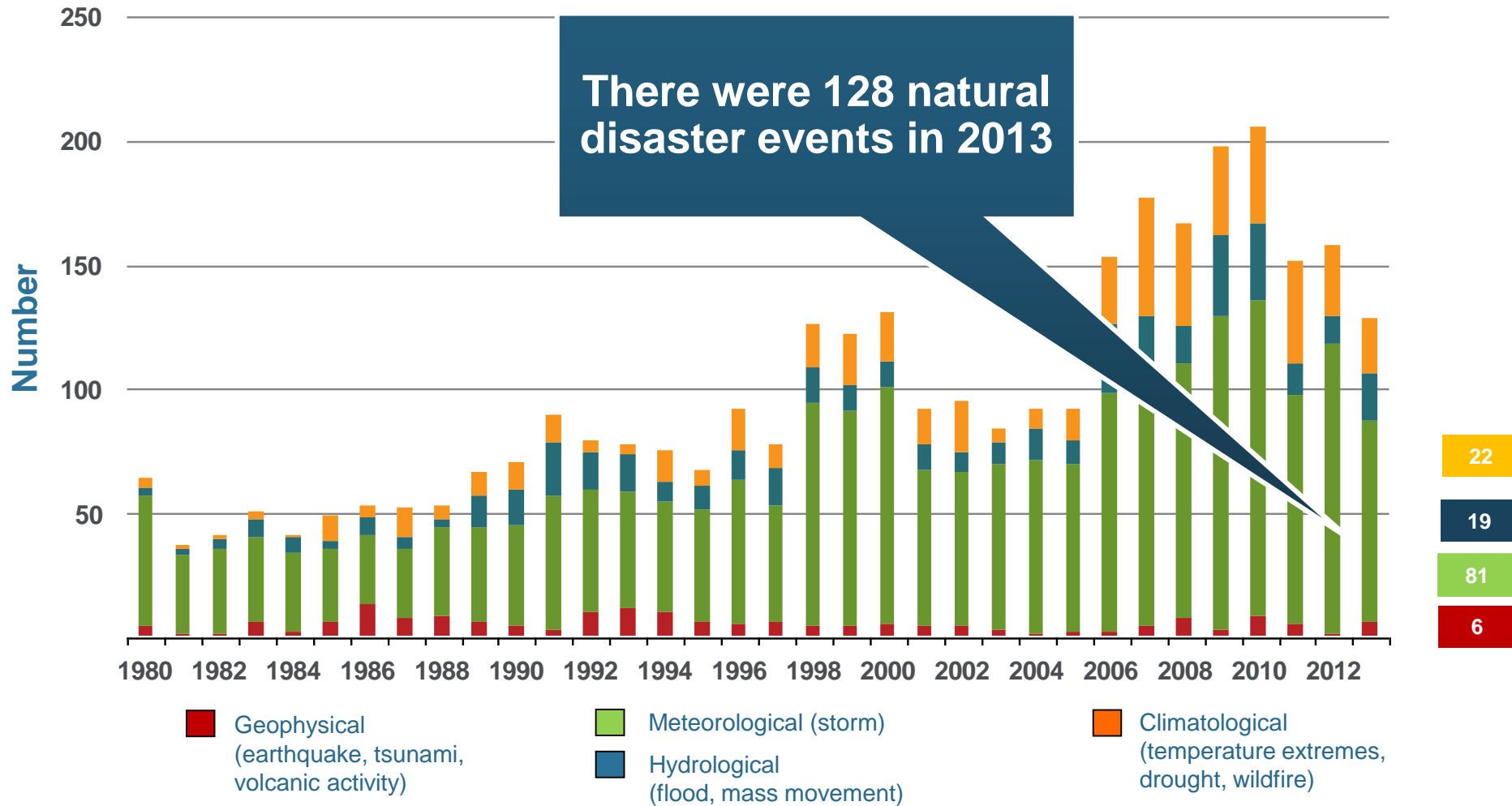
\$ Millions



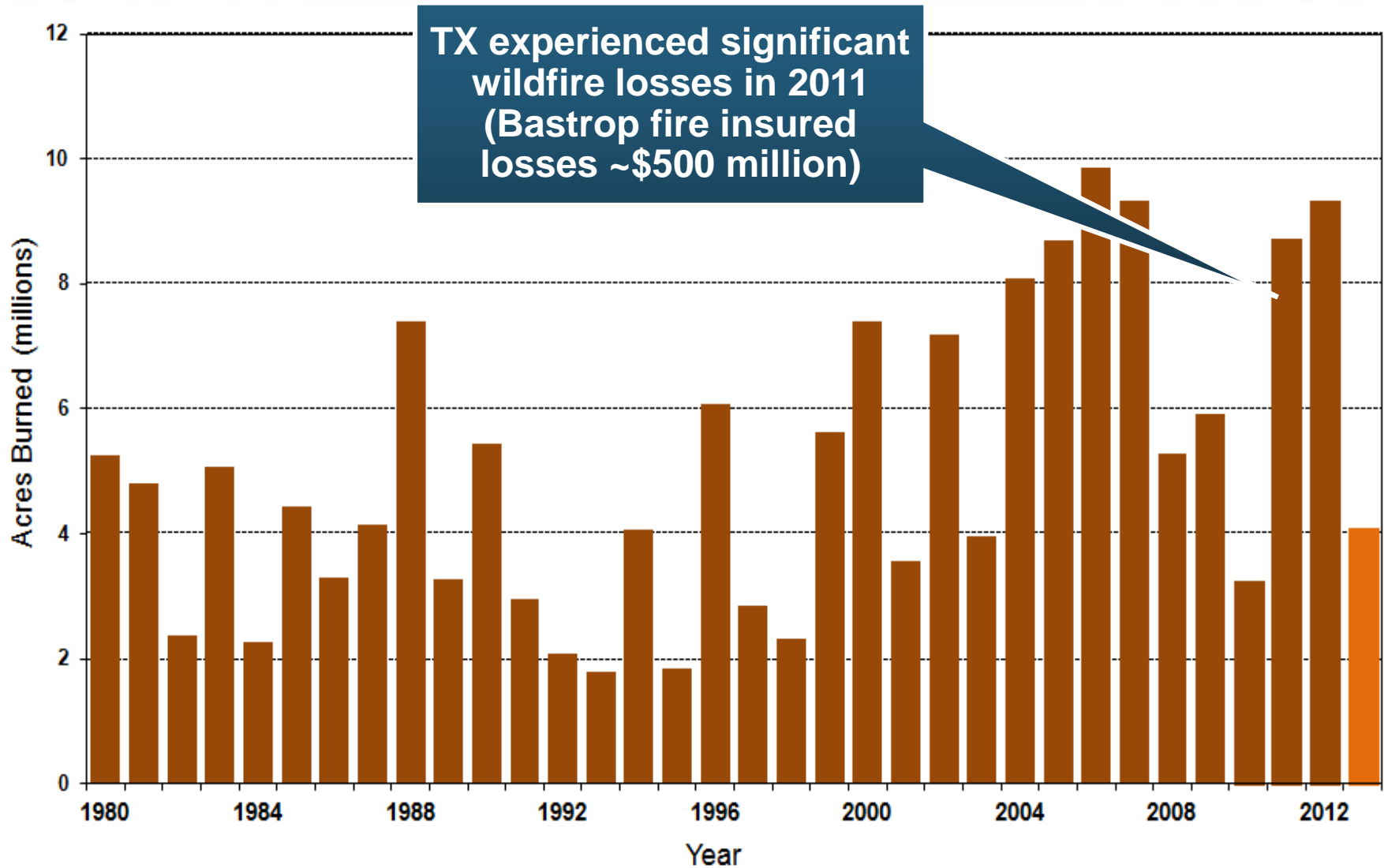
The Increased Number and Value of Expensive Electronic Devices in Homes is Pushing the Total Lightning Claim Costs Up Even as the Number of Lightning Claims Falls

Natural Disasters in the United States, 1980 – 2013

Number of Events (Annual Totals 1980 – 2013)

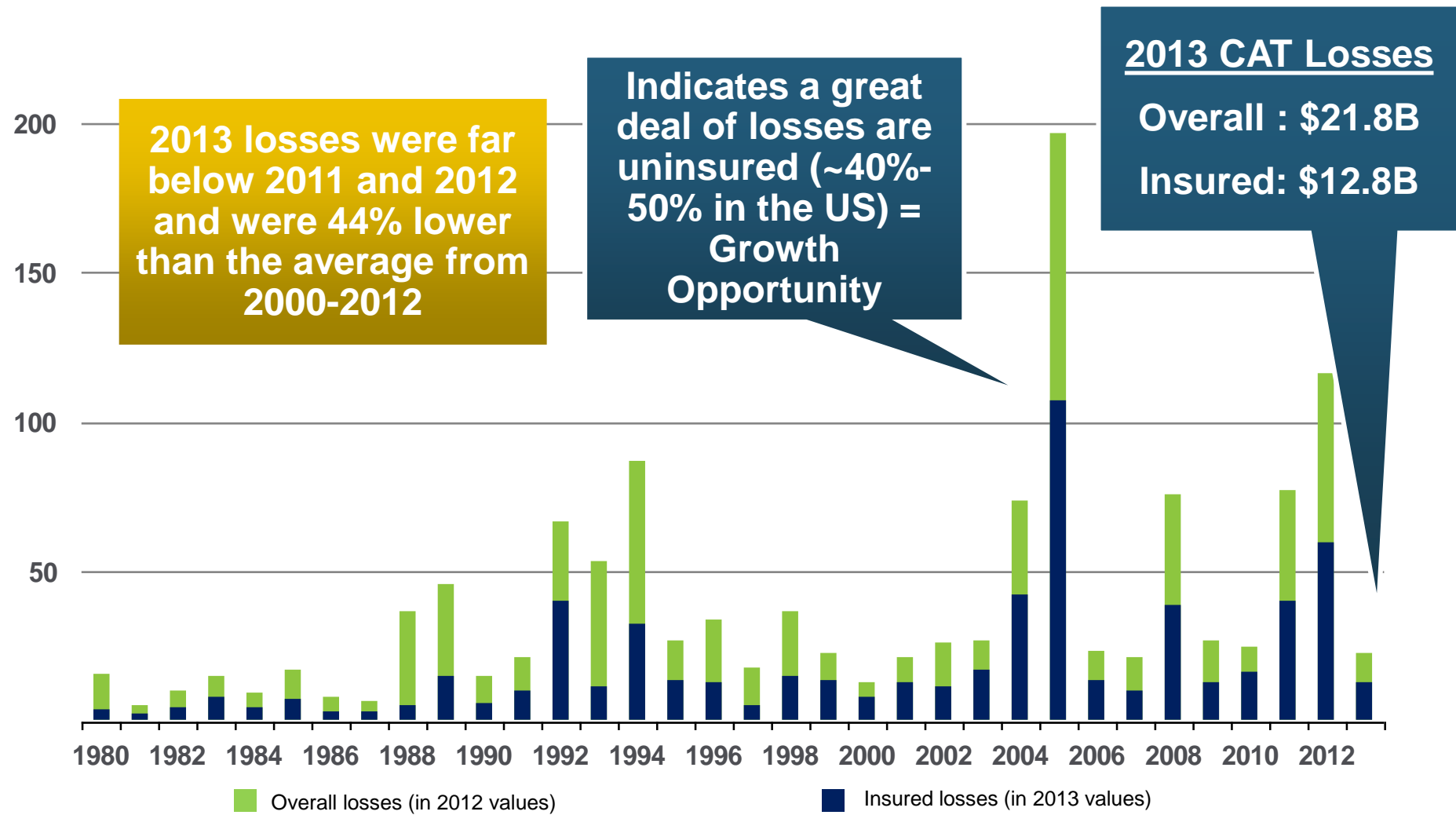


Number of Acres Burned in Wildfires, 1980 – 2013



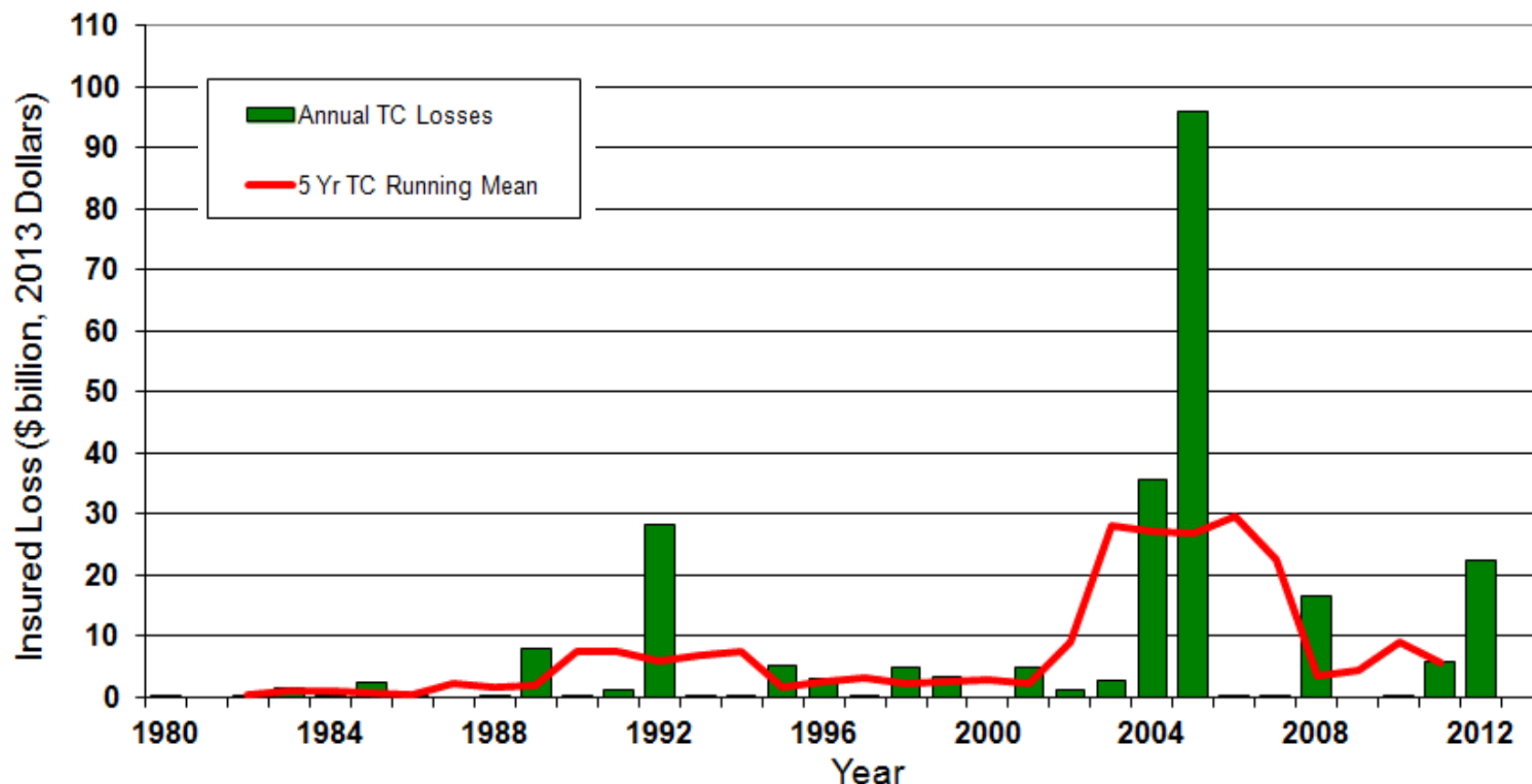
Losses Due to Natural Disasters in the US, 1980–2013

(2013 Dollars, \$ Billions) (Overall and Insured Losses)

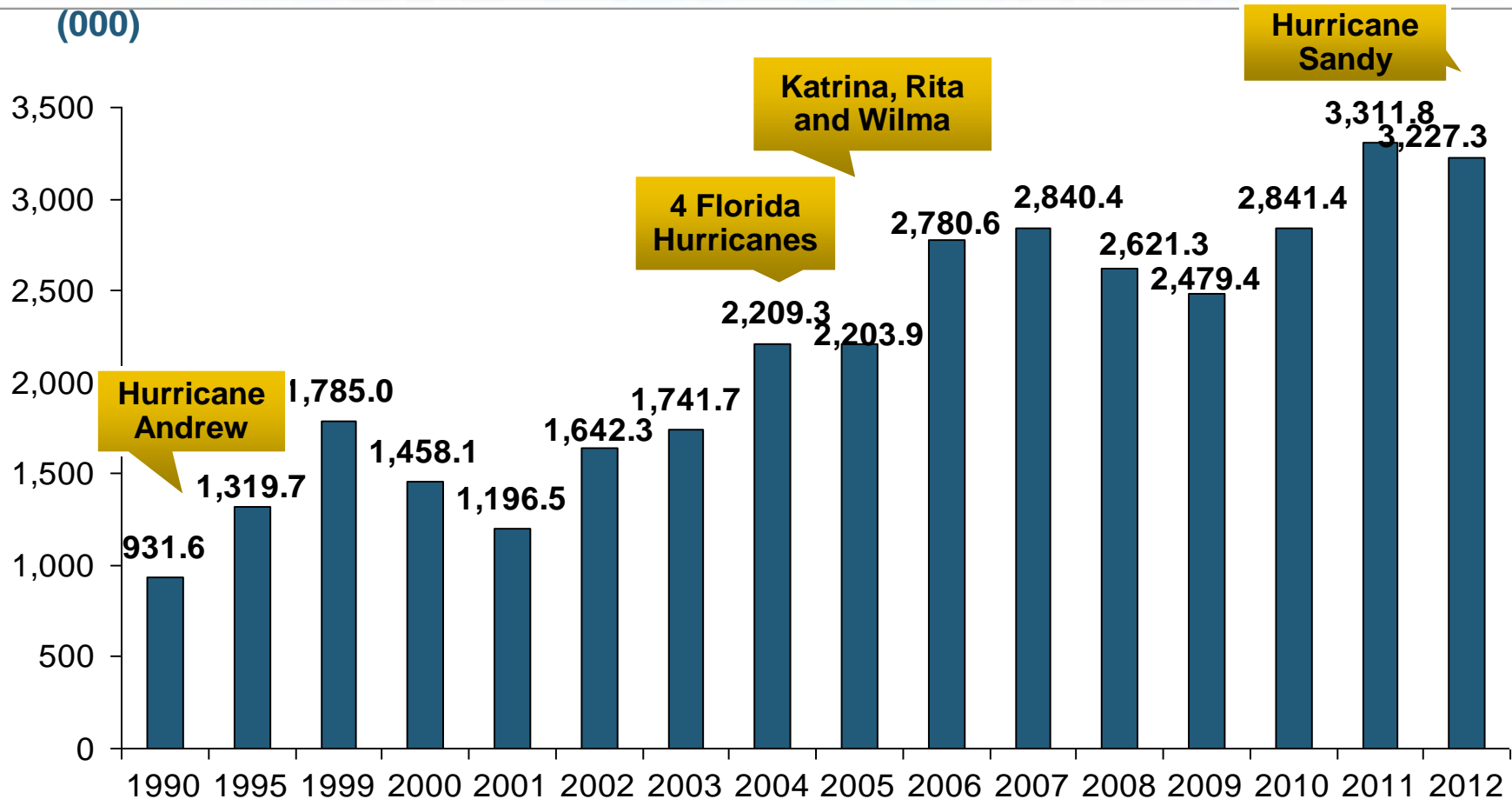


Insured US Tropical Cyclone Losses, 1980 - 2013

The current 5-year average (2008 - 2013) insured tropical cyclone loss is \$5.6 billion per year.

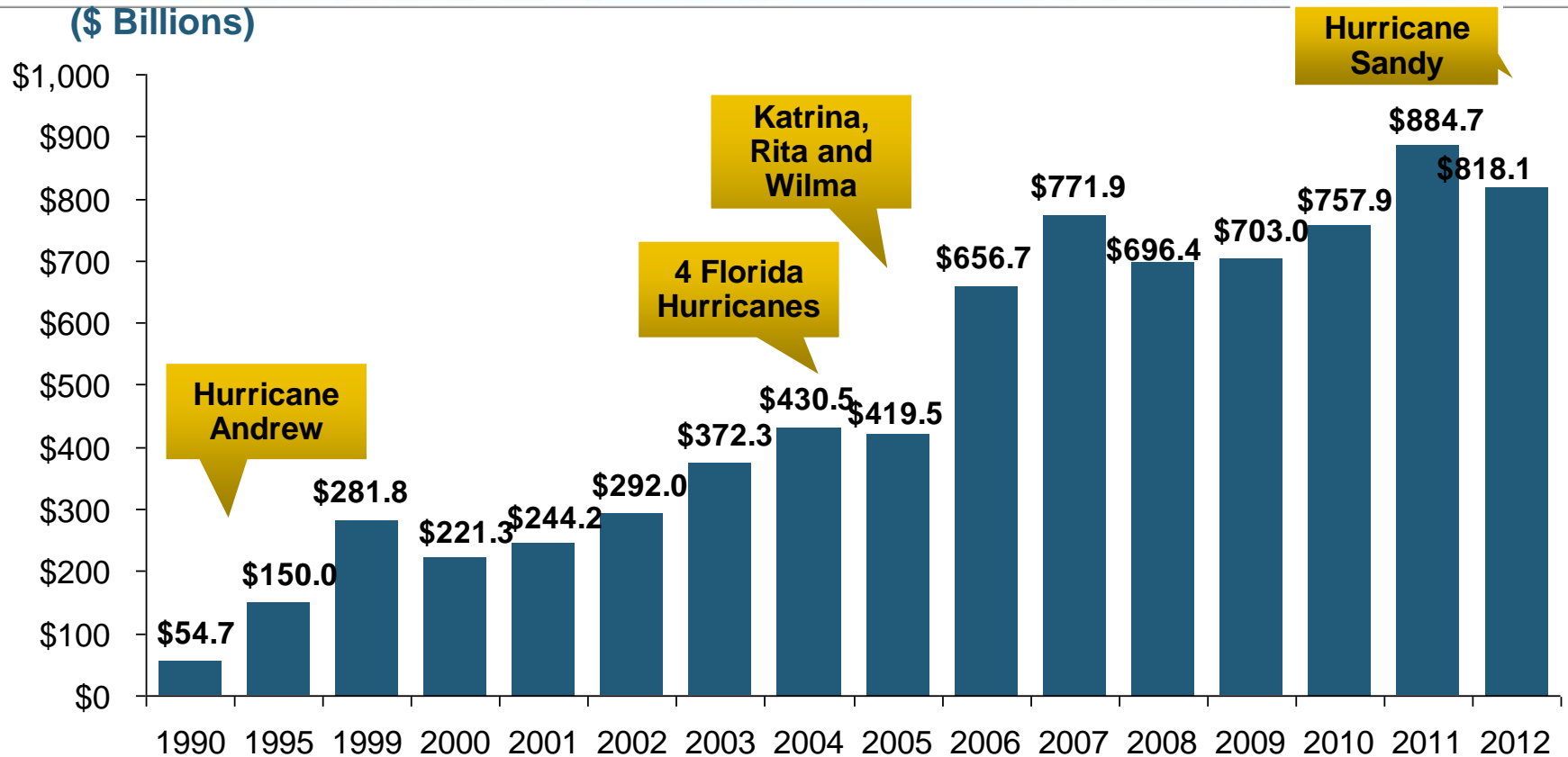


U.S. Residual Market: Total Policies In-Force (1990-2012) (000)



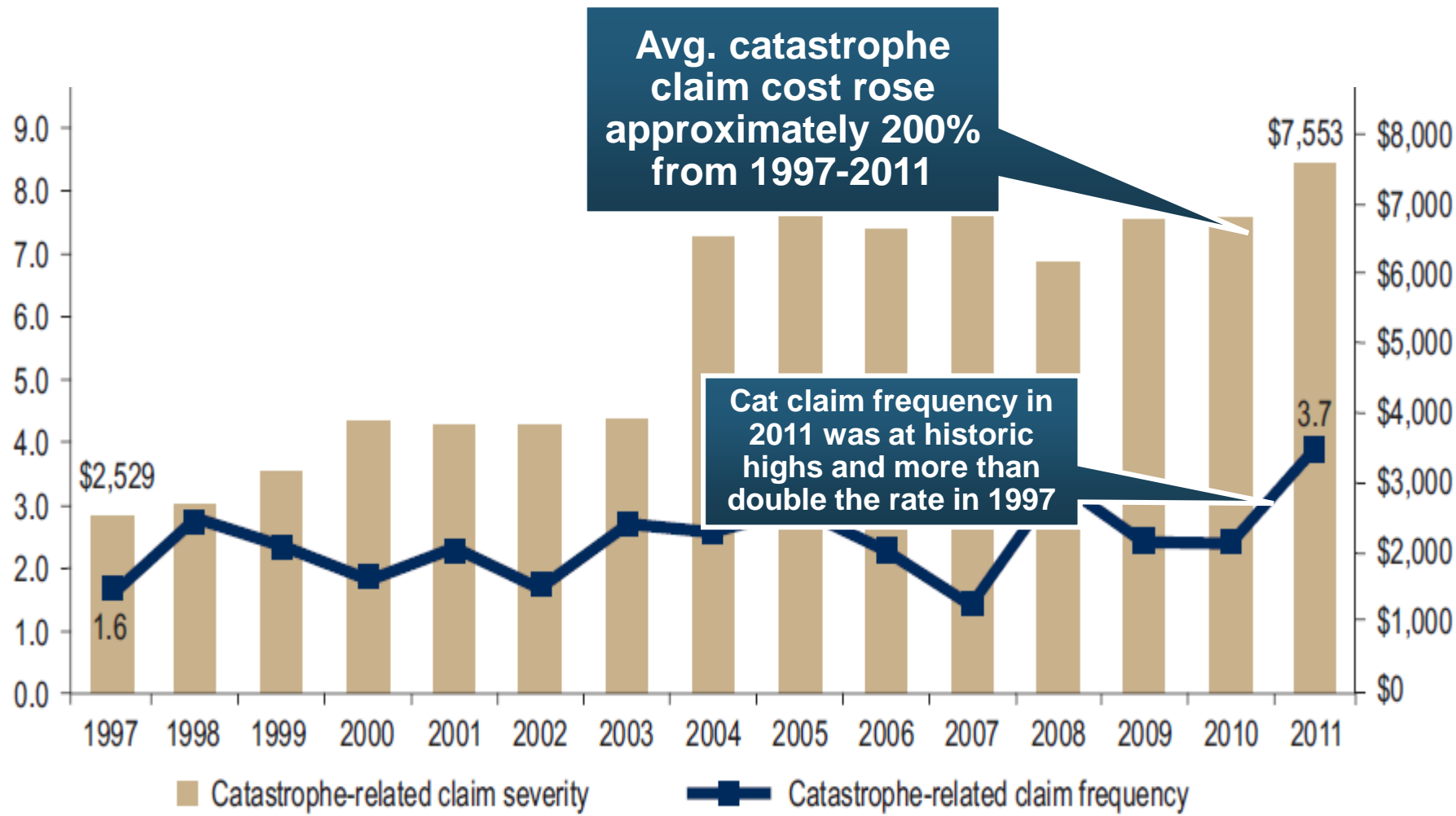
In the 23-year period between 1990 and 2012, the total number of policies in-force in the residual market (FAIR & Beach/Windstorm) Plans has more than tripled.

U.S. Residual Market Exposure to Loss (1990-2012) (\$ Billions)



In the 23-year period between 1990 and 2012, total exposure to loss in the residual market (FAIR & Beach/Windstorm) Plans has surged from \$54.7 billion in 1990 to \$818.1 billion in 2012.

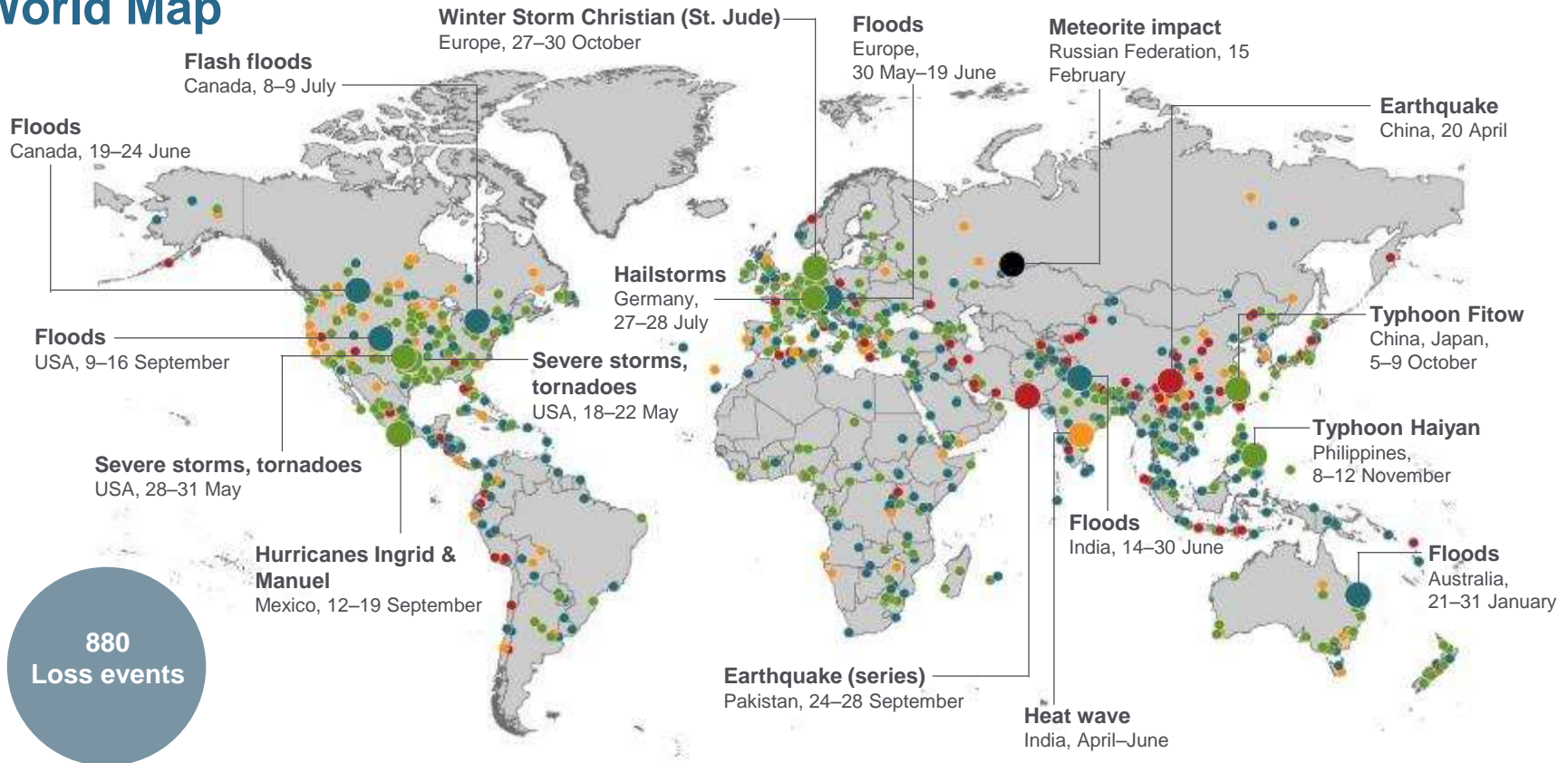
Homeowners Insurance Catastrophe-Related Claim Frequency and Severity, 1997—2012*



*All policy forms combined, countrywide.
Source: Insurance Research Council, *Trends in Homeowners Insurance Claims*, Sept. 2012 from ISO Fast Track data.

Natural Loss Events: Full Year 2013

World Map



○ **Natural catastrophes**

○ **Selection of significant
Natural catastrophes**

● **Geophysical events**
(earthquake, tsunami, volcanic activity)

● **Meteorological events**
(storm)

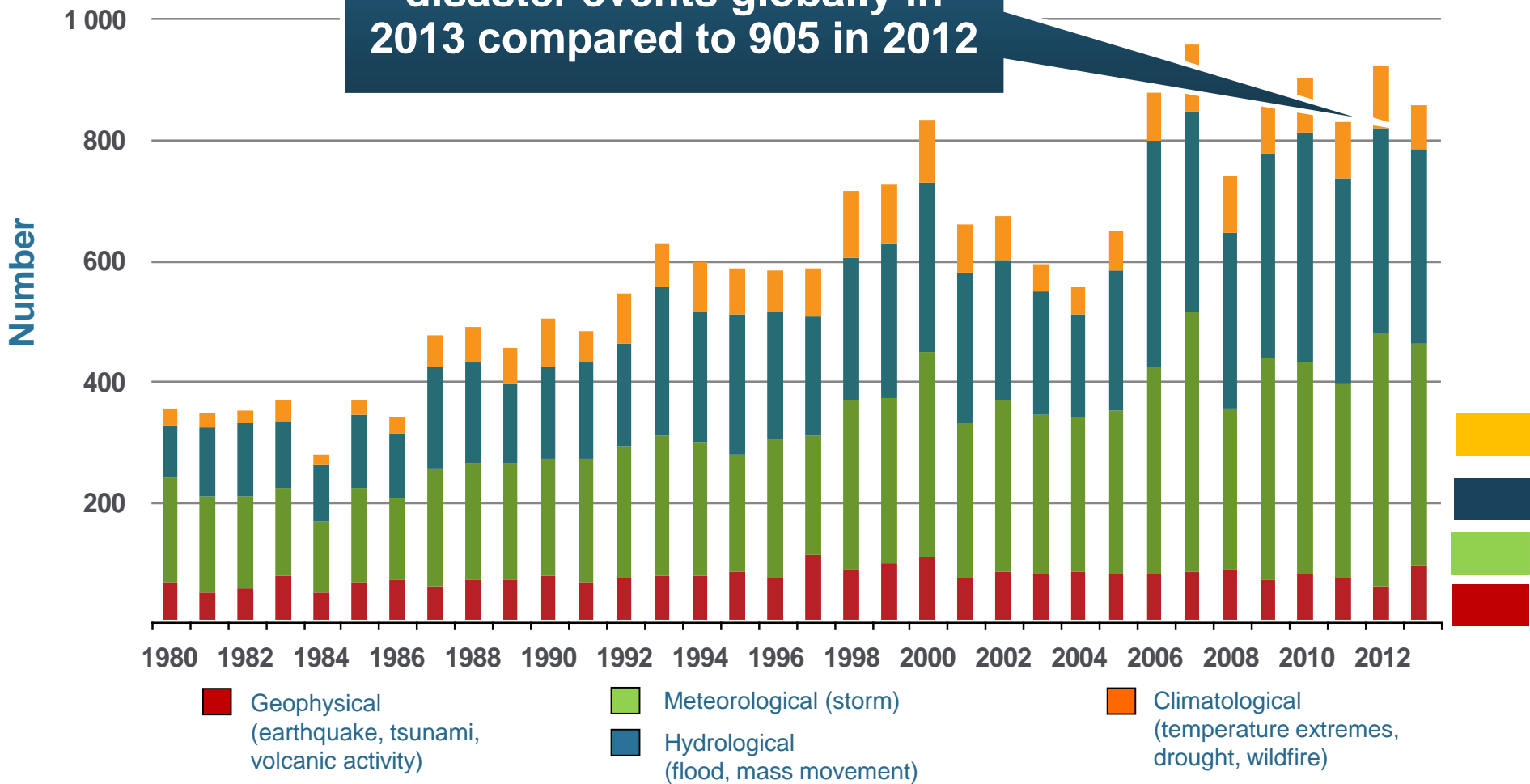
● **Hydrological events**
(flood, mass movement)

● **Climatological events**
(extreme temperature, drought, wildfire)

● **Extraterrestrial events**
(Meteorite impact)

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

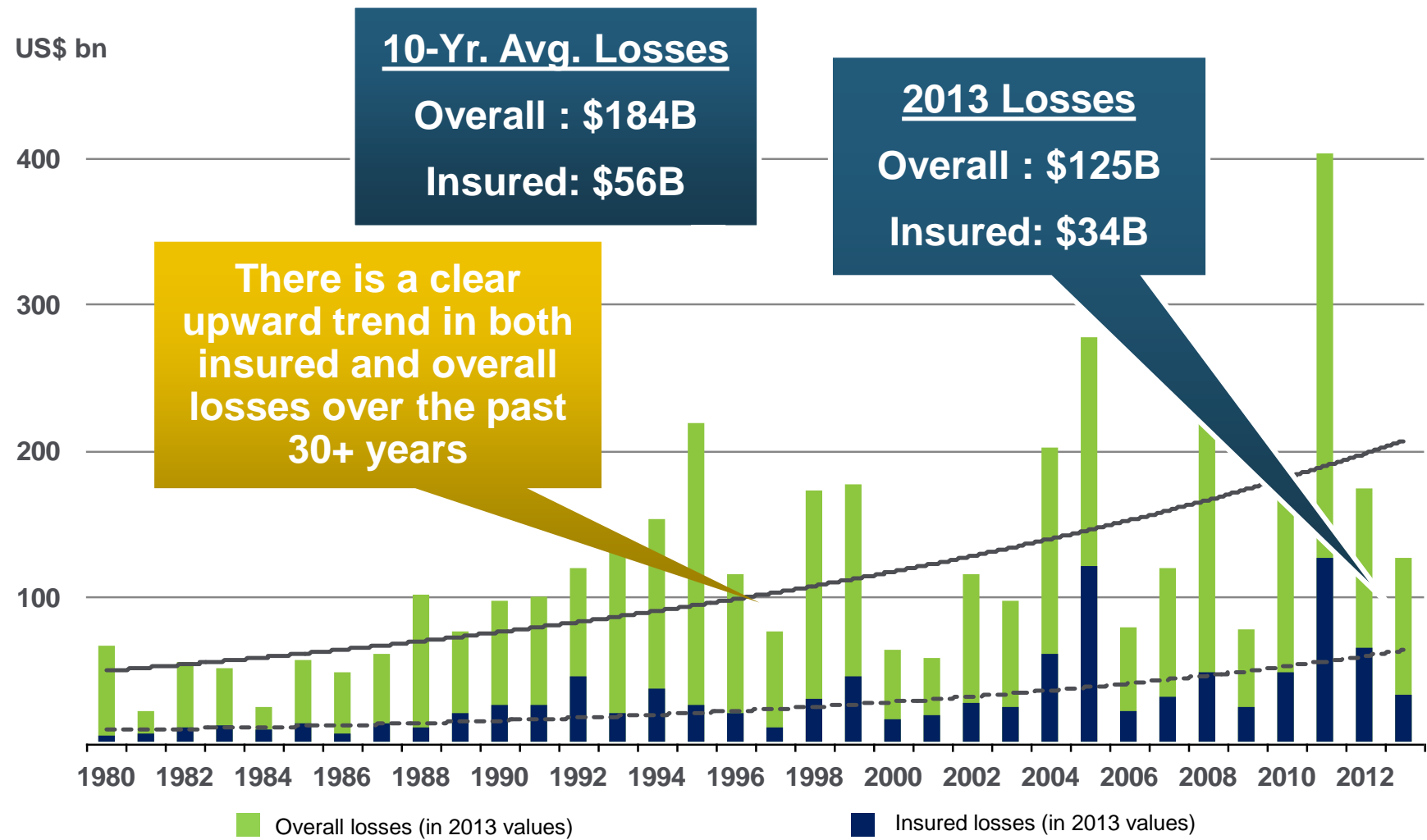
There were 880 natural
disaster events globally in
2013 compared to 905 in 2012



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

(Overall and Insured Losses)

(2013 Dollars, \$ Billions)

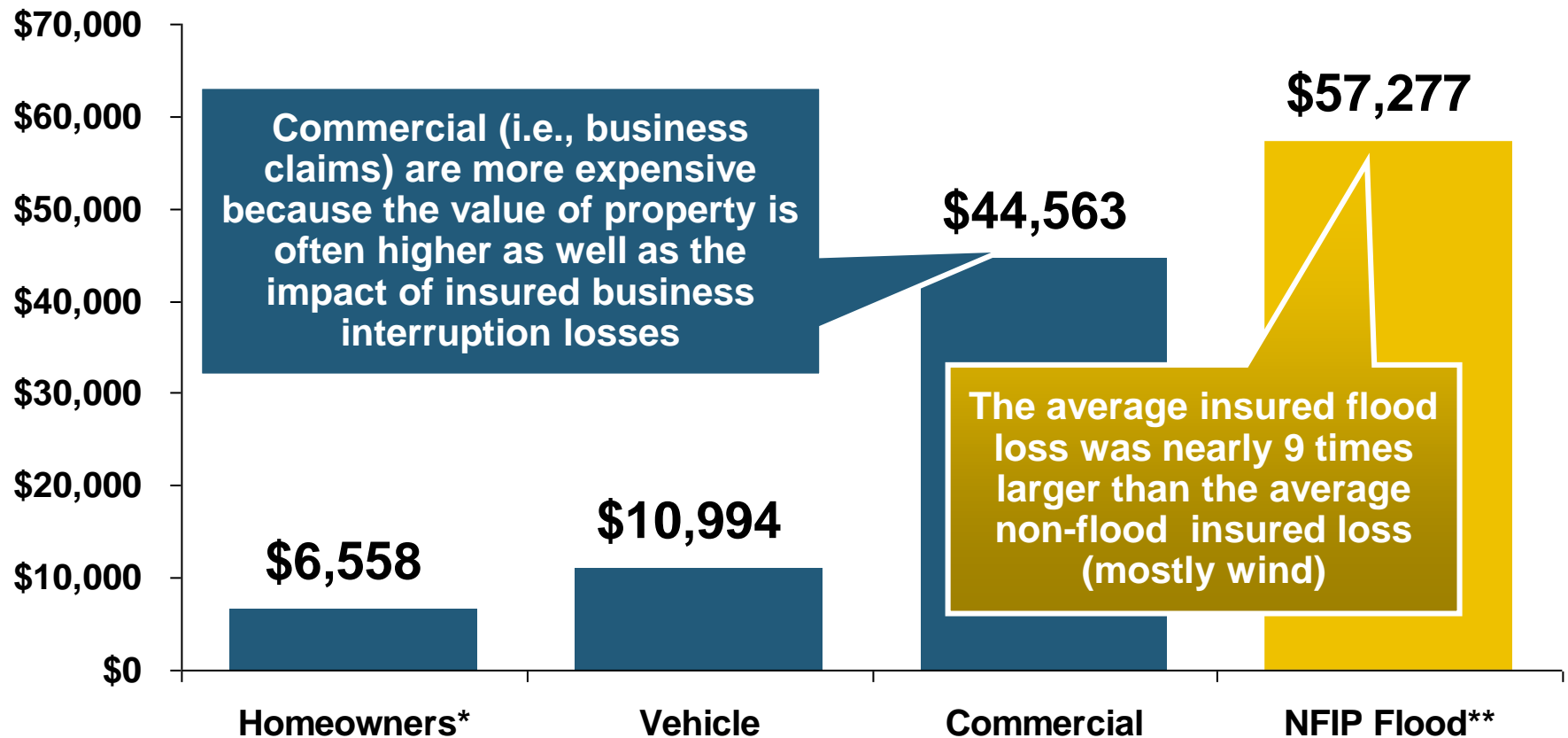


Flood Insurance

**Biggert-Waters 2012 Created
Opportunity for Private Insurers**

***2014 Backtracking on Those Reforms
Reduces Opportunities***

Hurricane Sandy: Average Claim Payment by Type of Claim



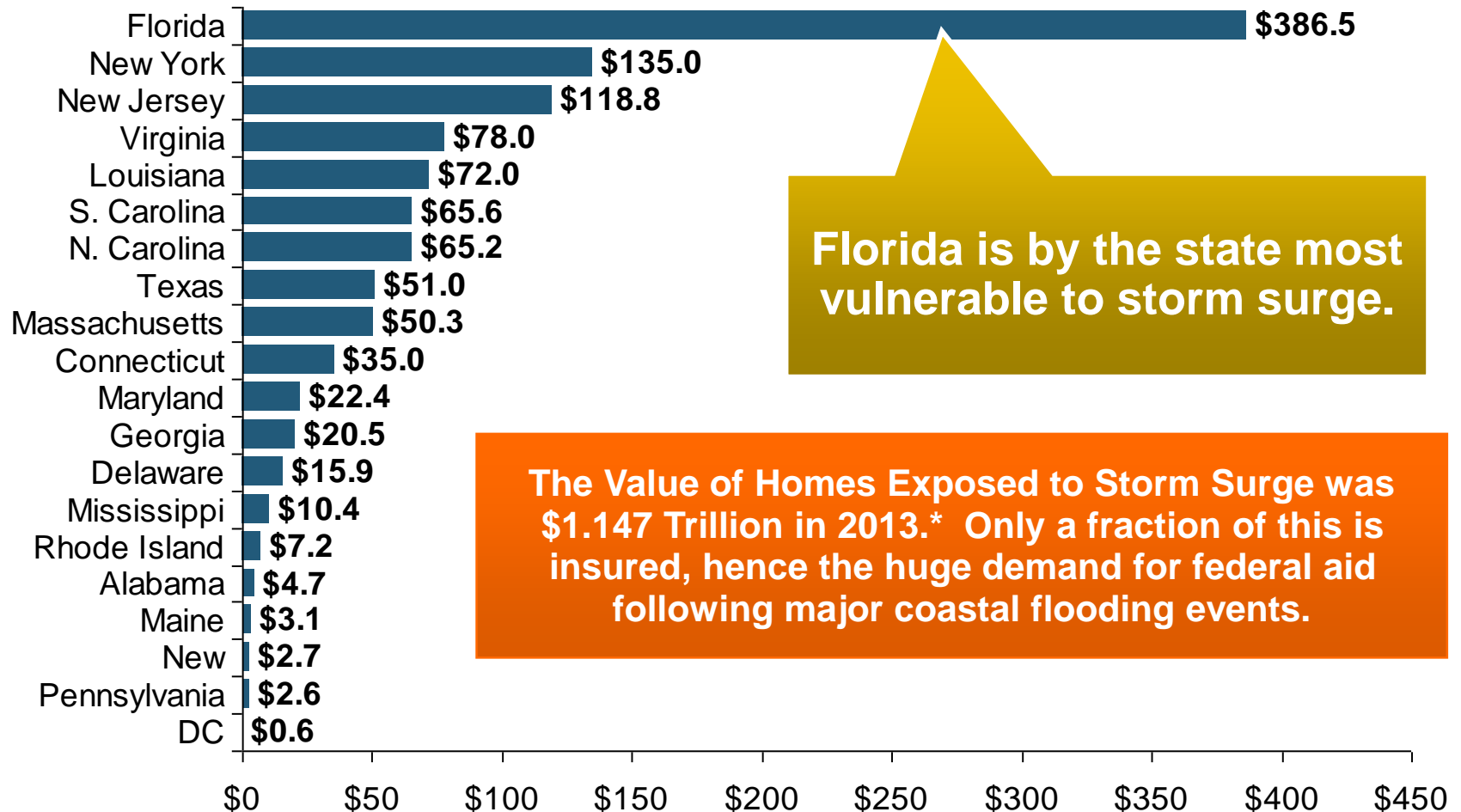
Post-Sandy, the I.I.I. worked very hard to make help media, consumers and regulators understand the distinction between a flood claim and a standard homeowners claim. *NFIP is \$24B in debt.*

*Includes rental and condo policies (excludes NFIP flood). **As of Oct. 31, 2013.

Sources: Catastrophe loss data is for Catastrophe Serial No. 90 (Oct. 28 – 31, 2012) from PCS as of March 2013; Insurance Information Institute.

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

(\$ Billions)

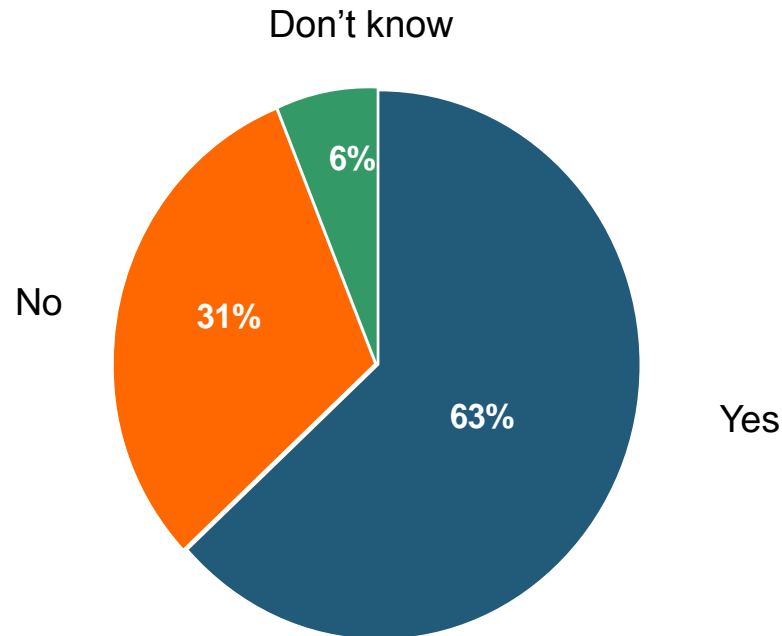


*Insured and uninsured property. Based on estimated property values as of April 2013.

Source: *Storm Surge Report 2013*, CoreLogic.

I.I.I. Poll: Flood Insurance

Q. Do you think it is fair that flood insurance premium increases are higher if people who live in high flood risk areas and rebuild their homes do not elevate them?



Almost two-thirds of Americans think that it is fair that flood insurance premiums be raised for people who live in high flood risk areas and rebuild their homes after a flood but do not elevate them.

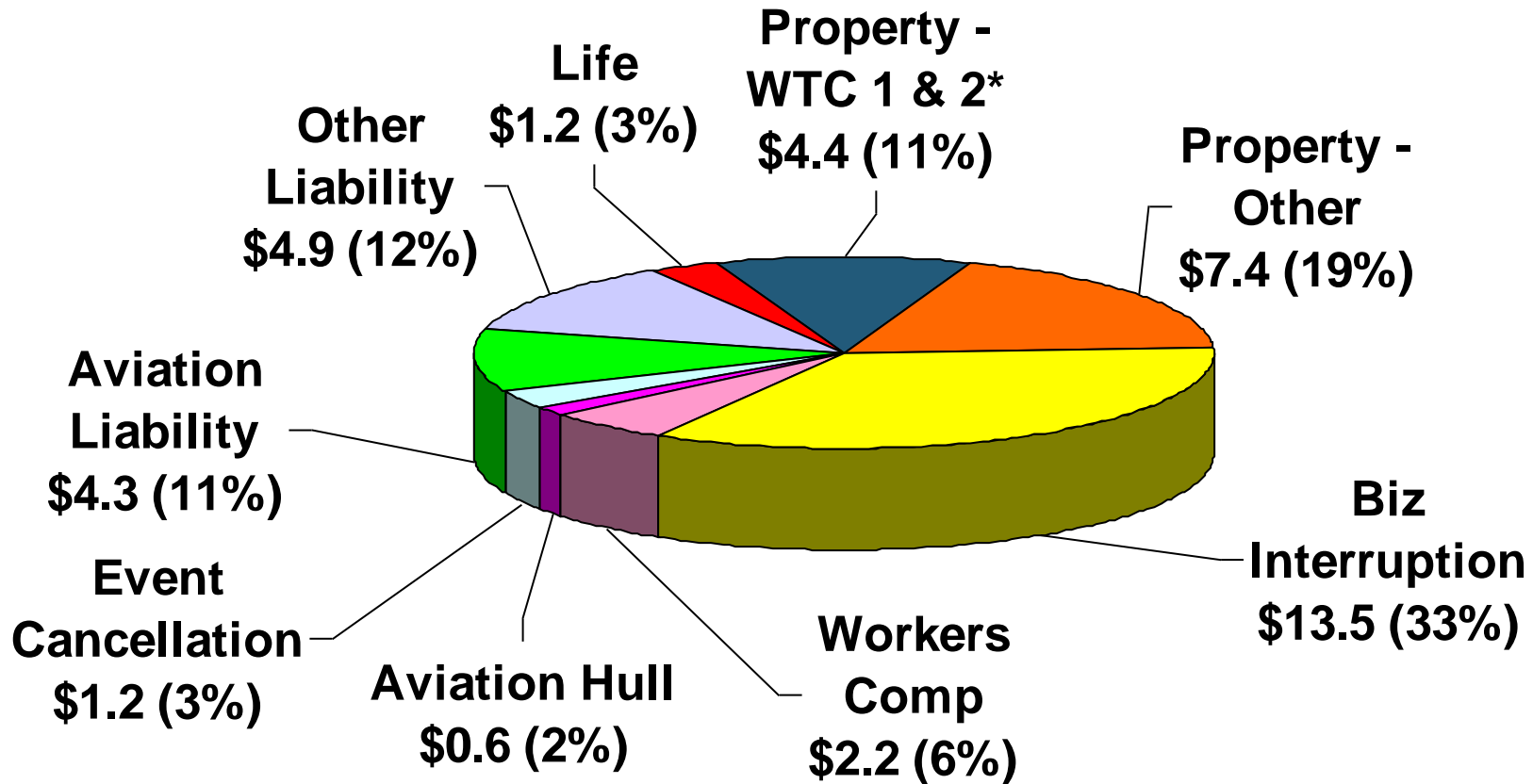
Terrorism Update

Down to the Wire? Boston 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***

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

(\$ Billions)



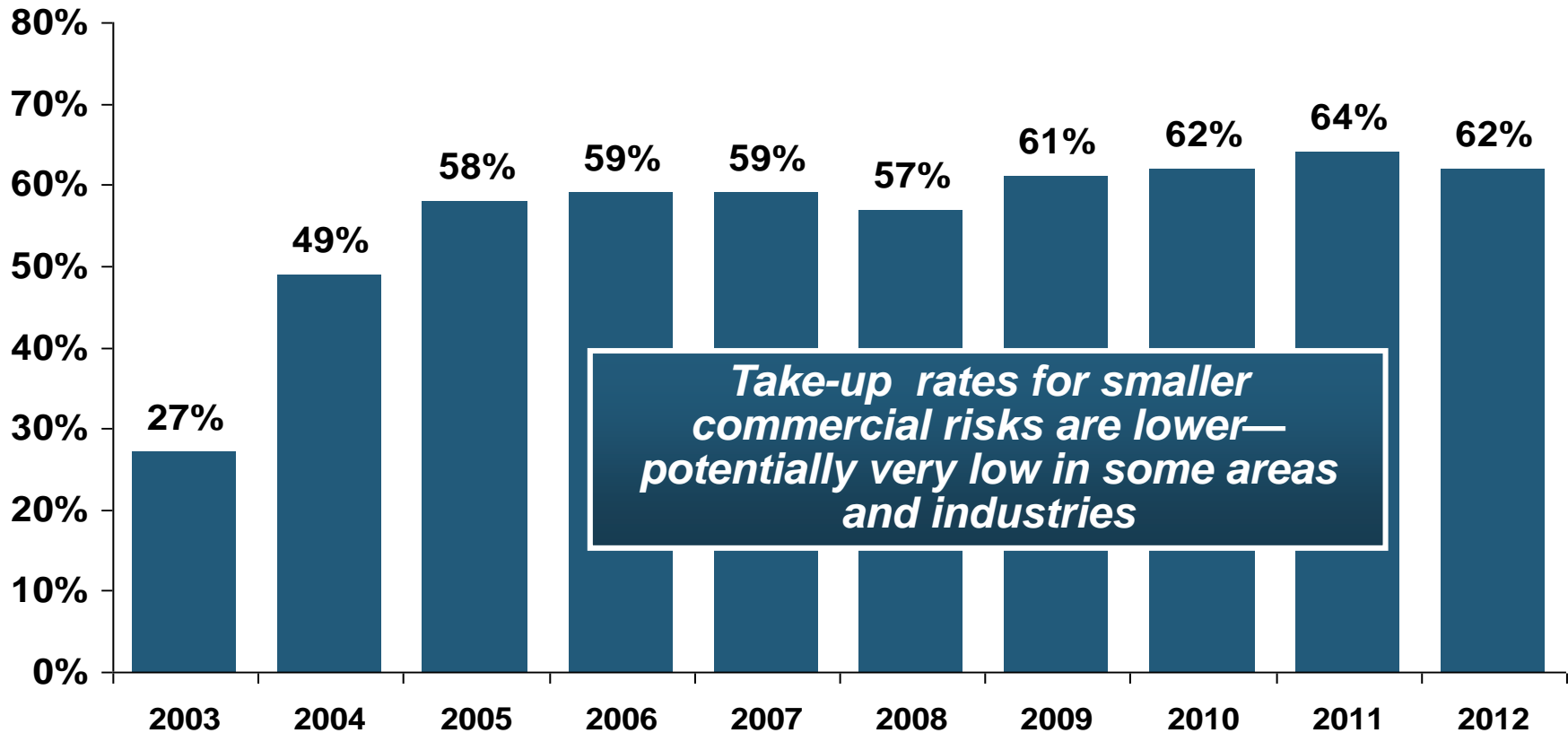
Total Insured Losses Estimate: \$40.0B**

*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 Insurance Take-up Rates, By Year, 2003-2012



In 2003, the first year TRIA was in effect, the terrorism take-up rate was 27 percent. Since then, it has increased steadily, remaining in the low 60 percent range since 2009.

Terrorism Risk Insurance Program

- Testified before Senate Banking Cmte. in Sept. 2013
- Testified before House Financial Services Nov. 2013
- Provided testimony at NYC hearing on June 2013
- I.I.I. Accelerated Planned Study on Terrorism Risk and Insurance in the Wake of Boston and Hearings; Was Well Received and Widely Circulated
- Working with Trades, Congressional Staff, GAO & Others



Senate Banking Committee, 9/25/13



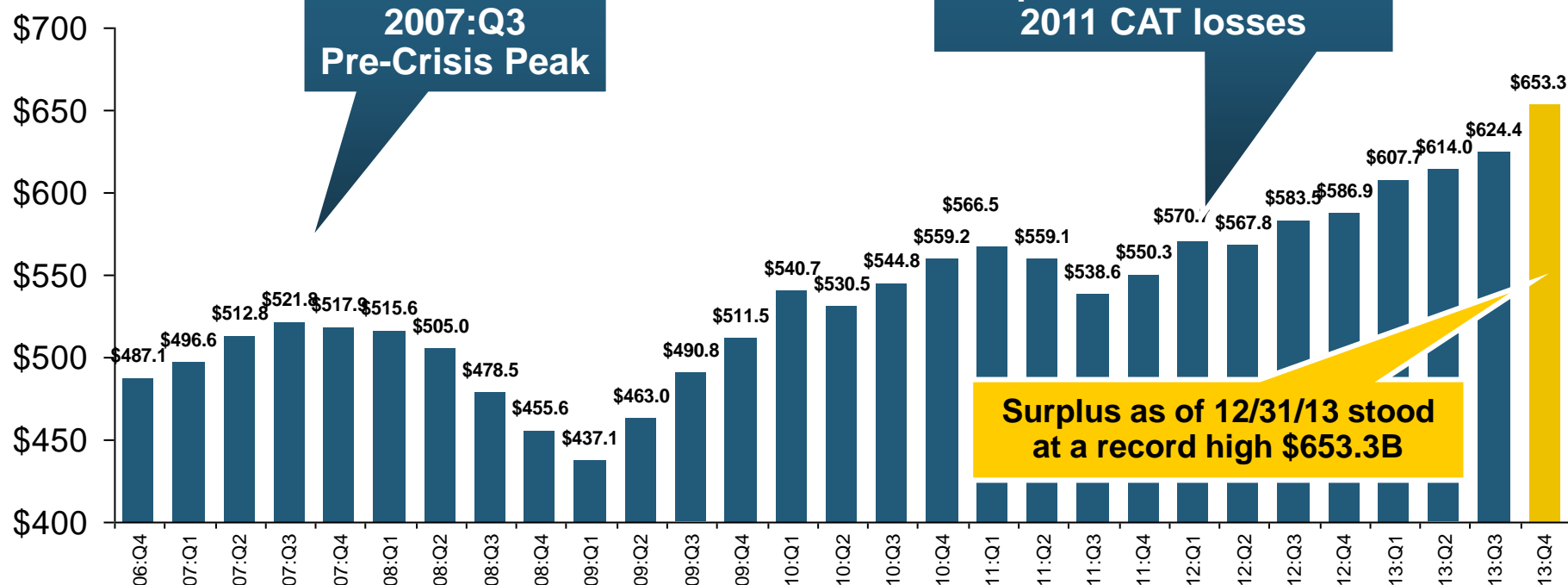
House Financial Services
Subcommittee, 11/13/13

SURPLUS/CAPITAL/CAPACITY

**2013 Recorded Yet Another
Record High in the Primary
and Reinsurance Sectors**

Policyholder Surplus, 2006:Q4–2013:Q4

(\$ Billions)



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

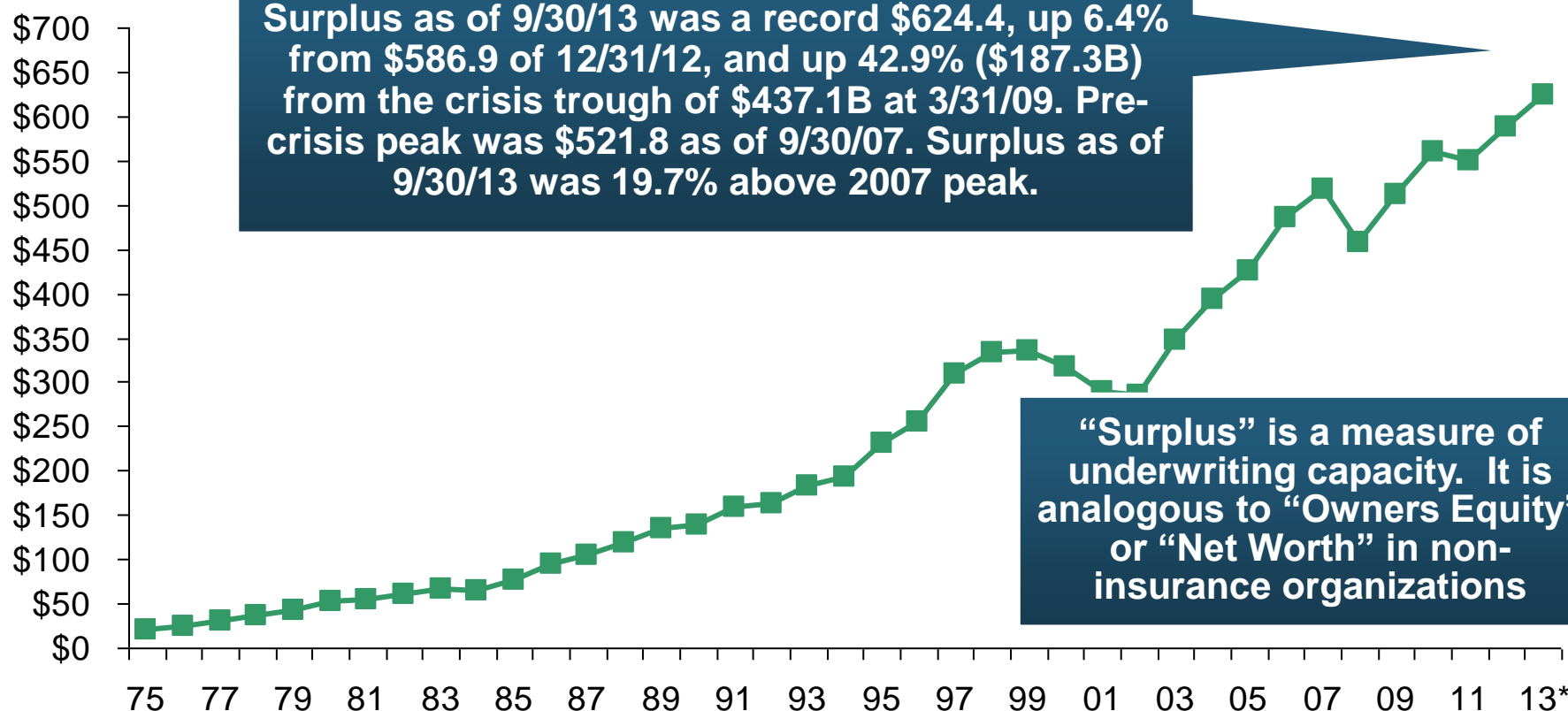
2010:Q1 data includes \$22.5B of paid-in capital from a holding company parent for one insurer's investment in a non-insurance business.

Sources: ISO, A.M. Best.

The P/C insurance industry entered 2014 in very strong financial condition.

US Policyholder Surplus: 1975–2013*

(\$ Billions)



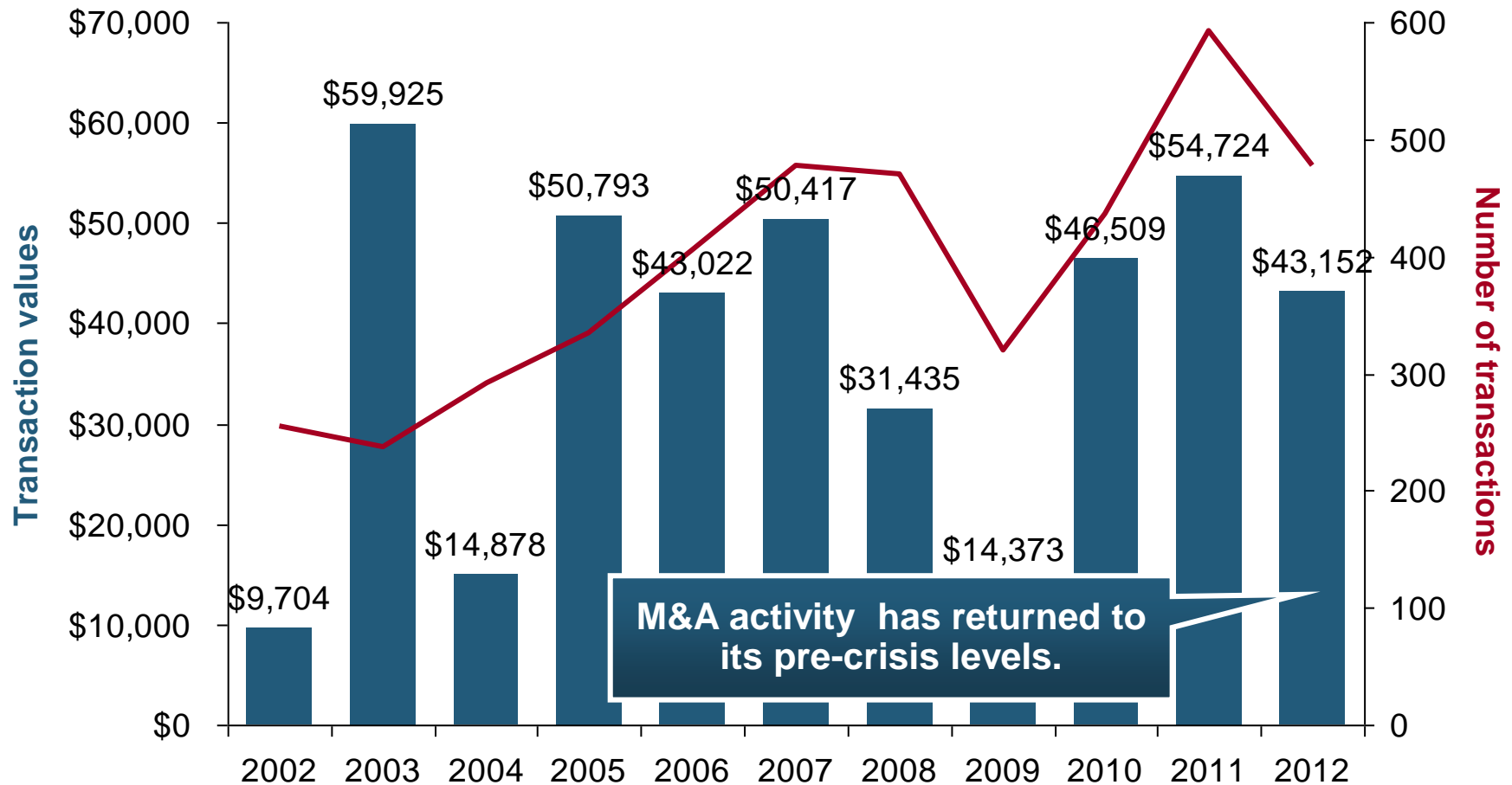
The Premium-to-Surplus Ratio Stood at \$0.78:\$1 as of 9/30/13, a Near Record Low (at Least in Recent History)*

* As of 9/30/13.

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

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

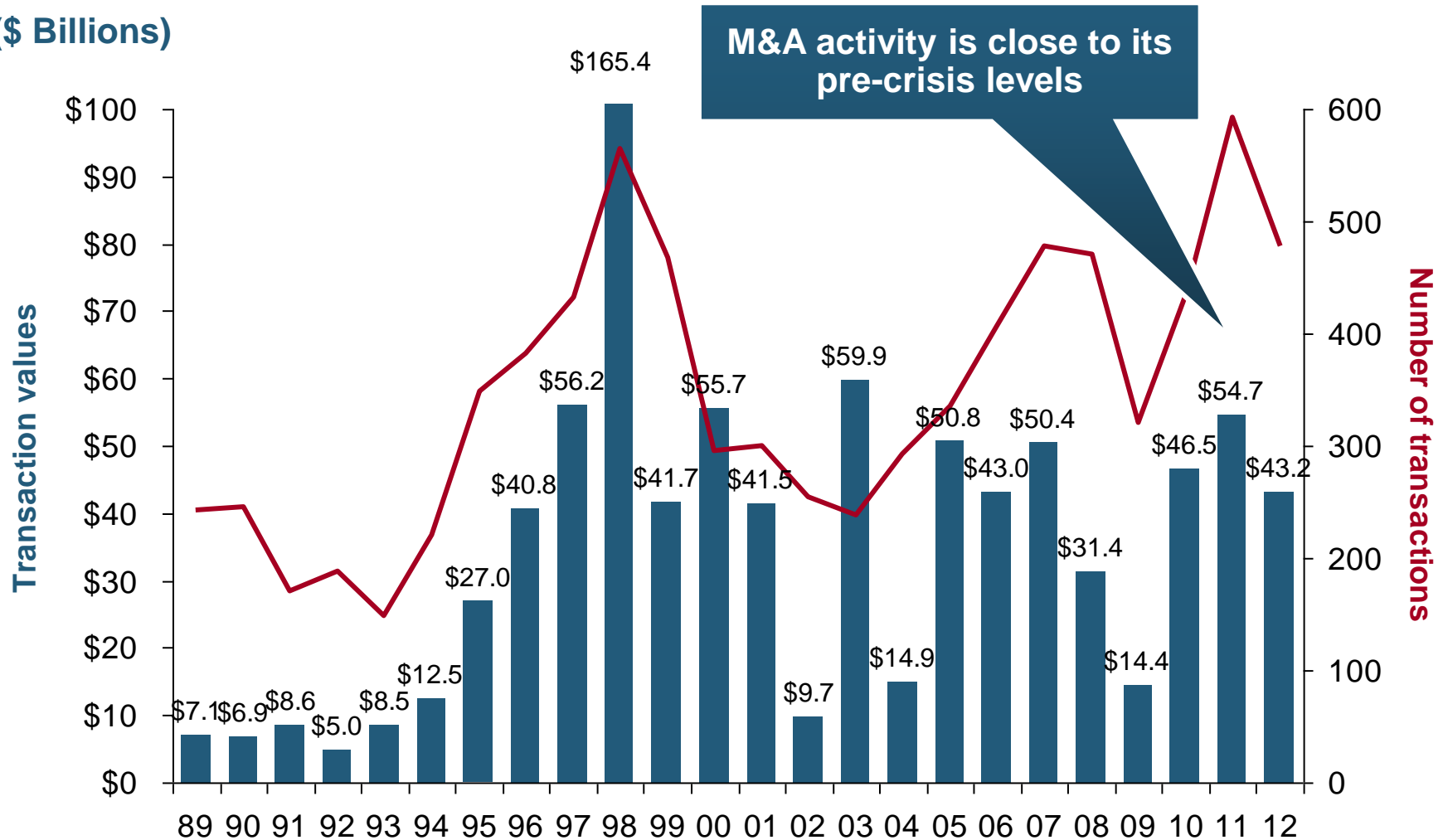
(\$ Millions)



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

U.S. INSURANCE MERGERS AND ACQUISITIONS, All Sectors, 1989-2012 (1)

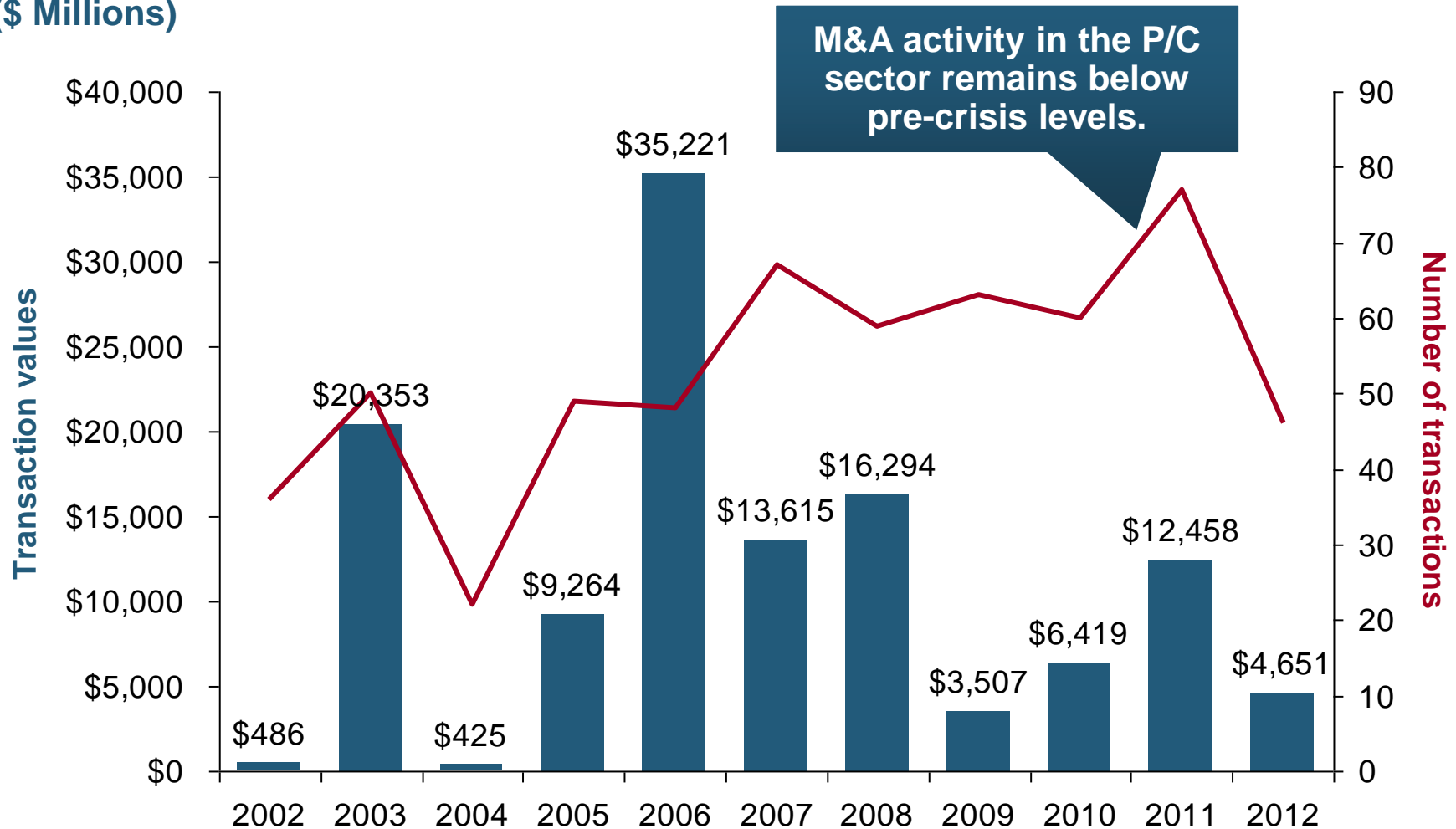
(\$ Billions)



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

U.S. INSURANCE MERGERS AND ACQUISITIONS, P/C SECTOR, 2002-2012 (1)

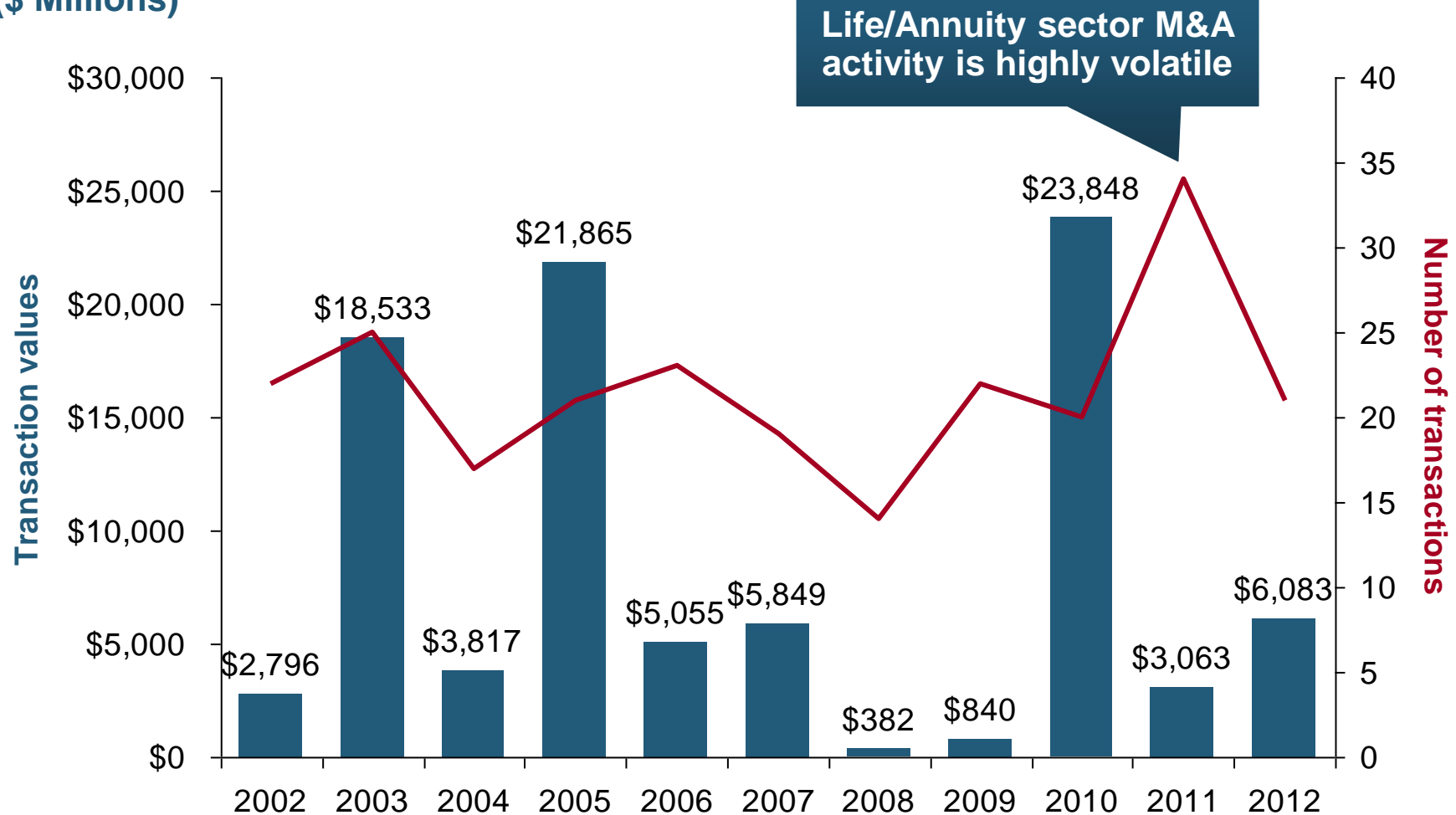
(\$ Millions)



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

U.S. INSURANCE MERGERS AND ACQUISITIONS, LIFE/ANNUITY SECTOR, 2002-2012 (1)

(\$ Millions)

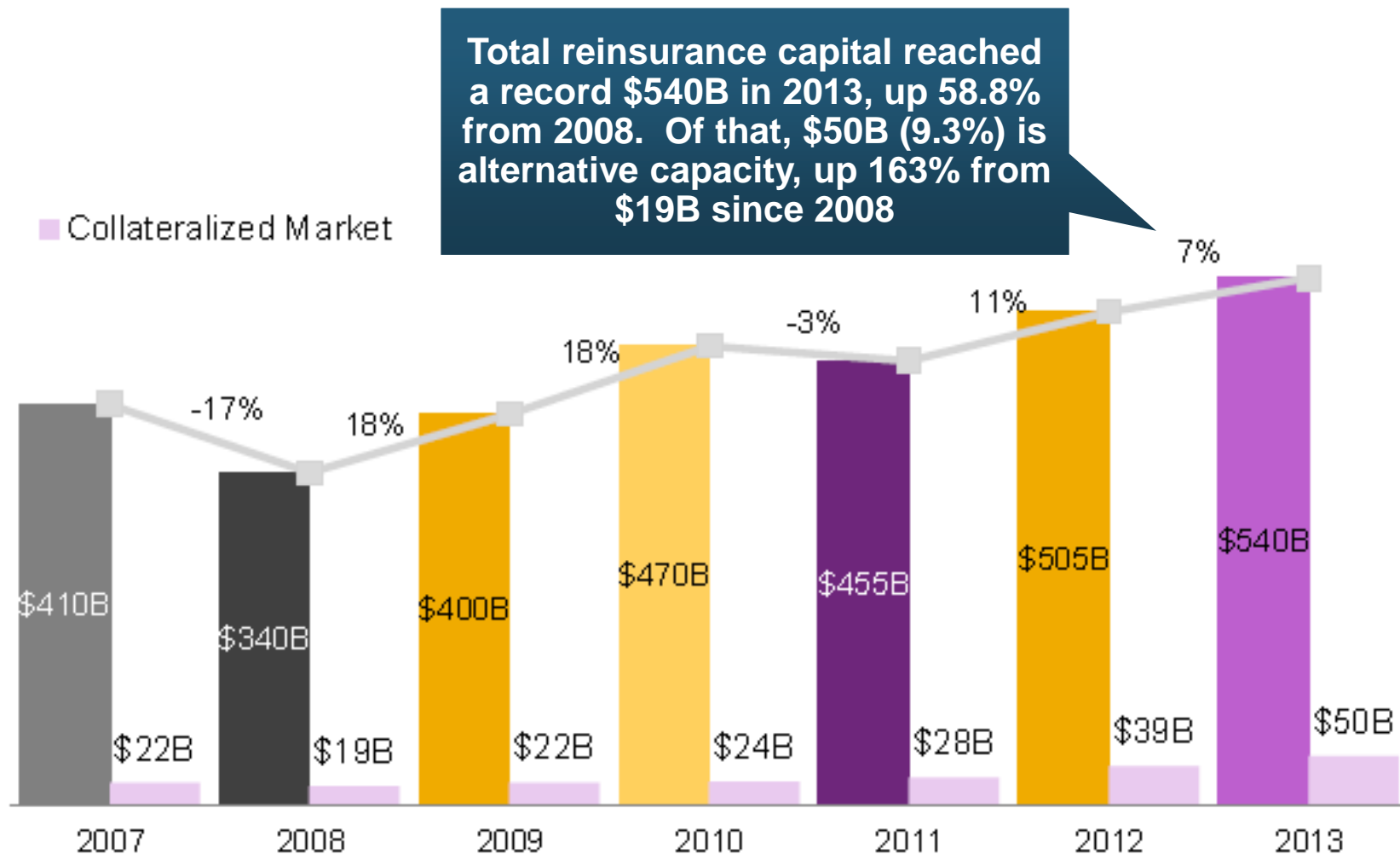


(1) Includes transactions where a U.S. company was the acquirer and/or the target.

REINSURANCE MARKET CONDITIONS

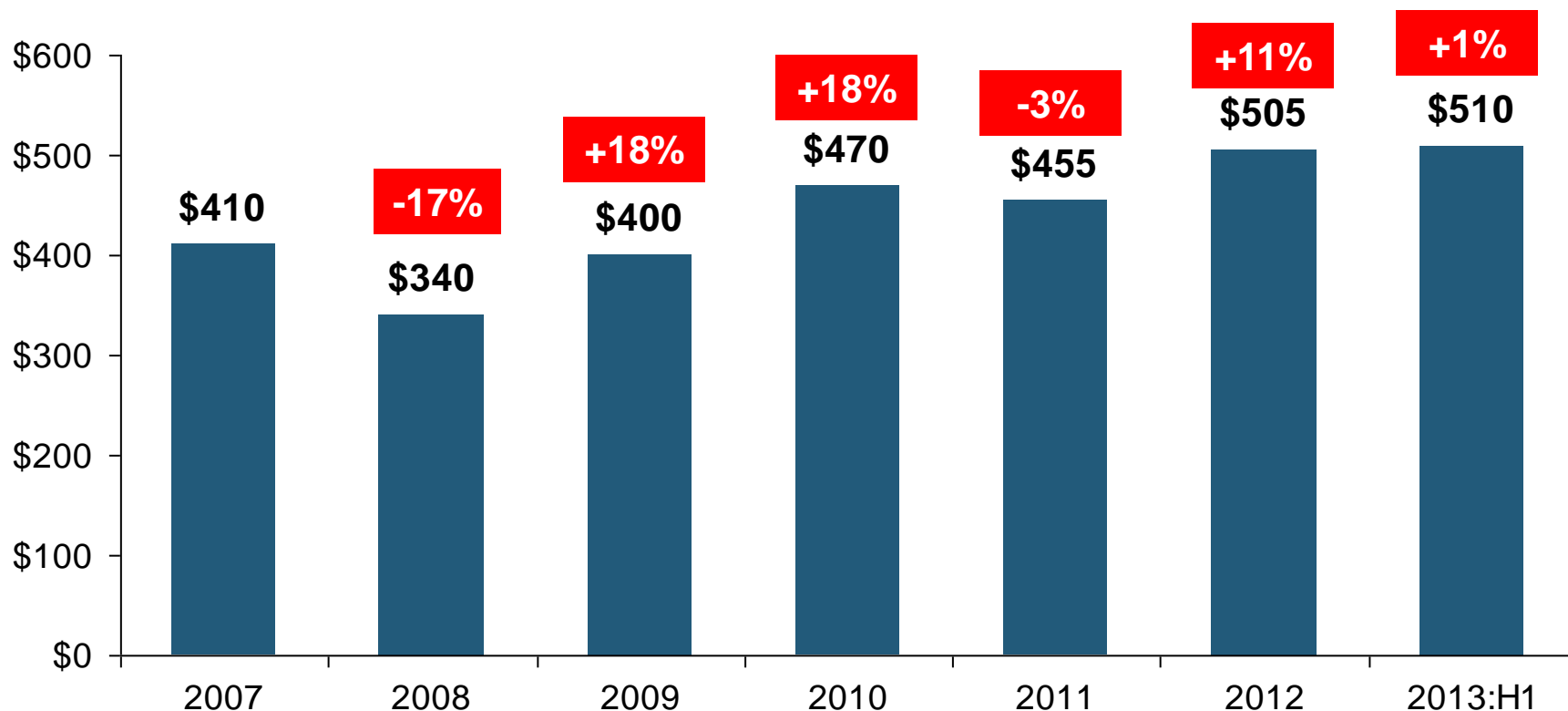
**Ample Capacity as
Alternative Capital is
Transforming the
Market—And Pushing
Down Prices**

Global Reinsurance Capital (Traditional and Alternative), 2007 - 2013



Global Reinsurer Capital, 2007-2013:H1*

(\$ Billions)

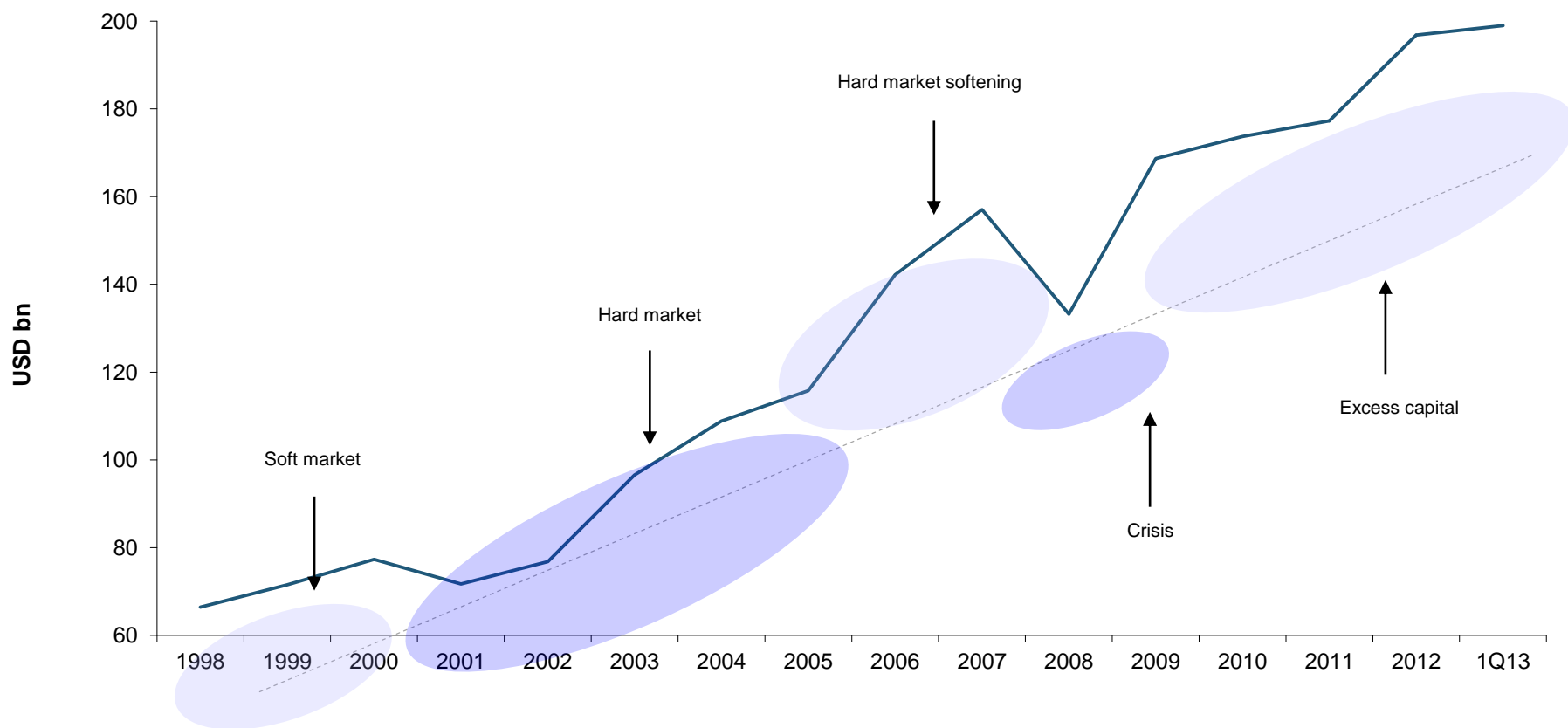


Global Reinsurance Capital Has Been Trending Generally Upward Since the Global Financial Crisis, a Trend that Seems Likely to Continue

*Includes both traditional and non-traditional forms of reinsurance capital.

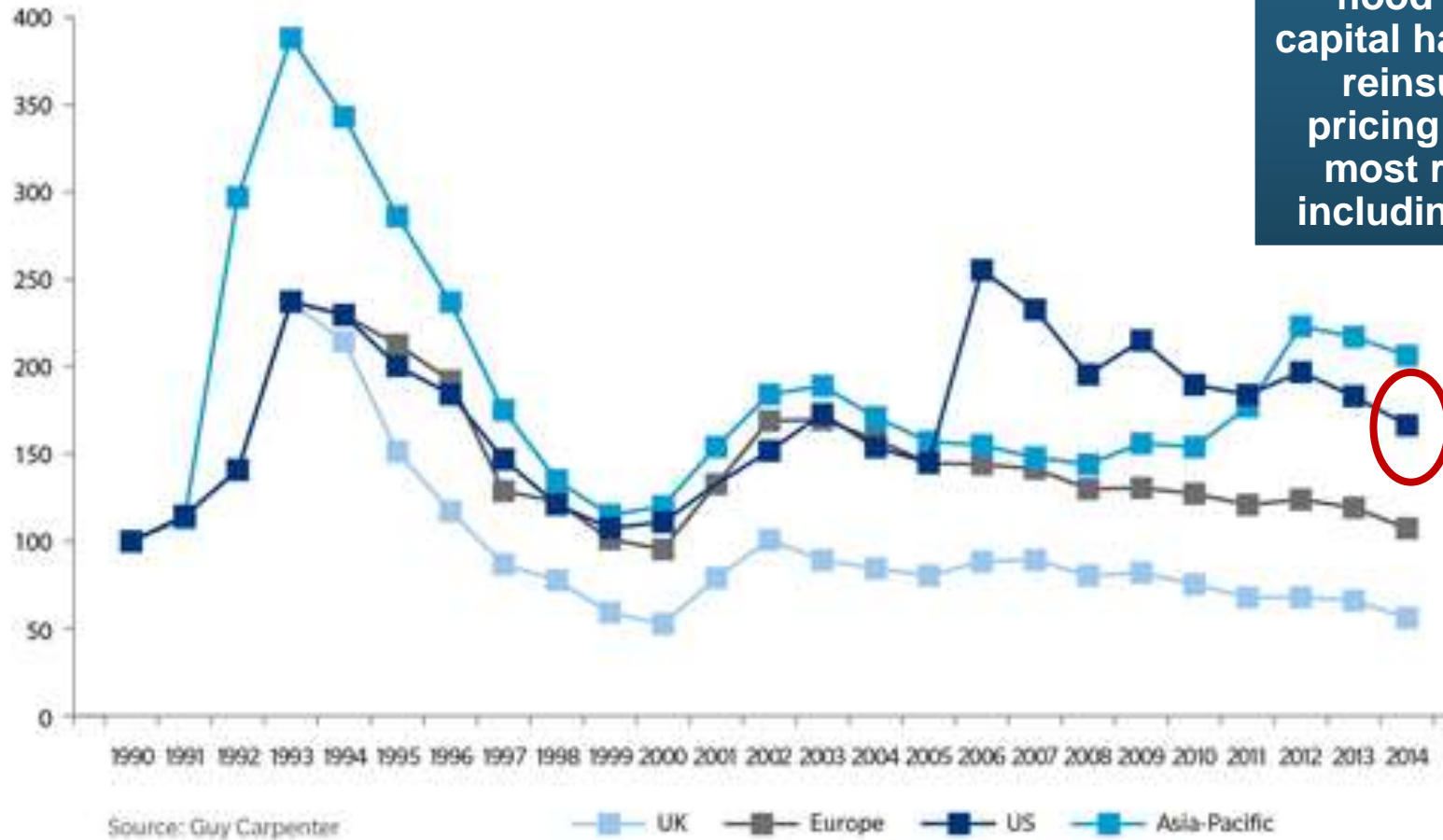
Source: Aon Benfield Aggregate study for the 6 months ending June 2013; Insurance Information Institute.

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



Reinsurance Pricing: Rate-on-Line Index by Region, 1990 – 2014*

F-10 | REGIONAL PROPERTY CATASTROPHE ROL INDEX – 1990 TO 2014



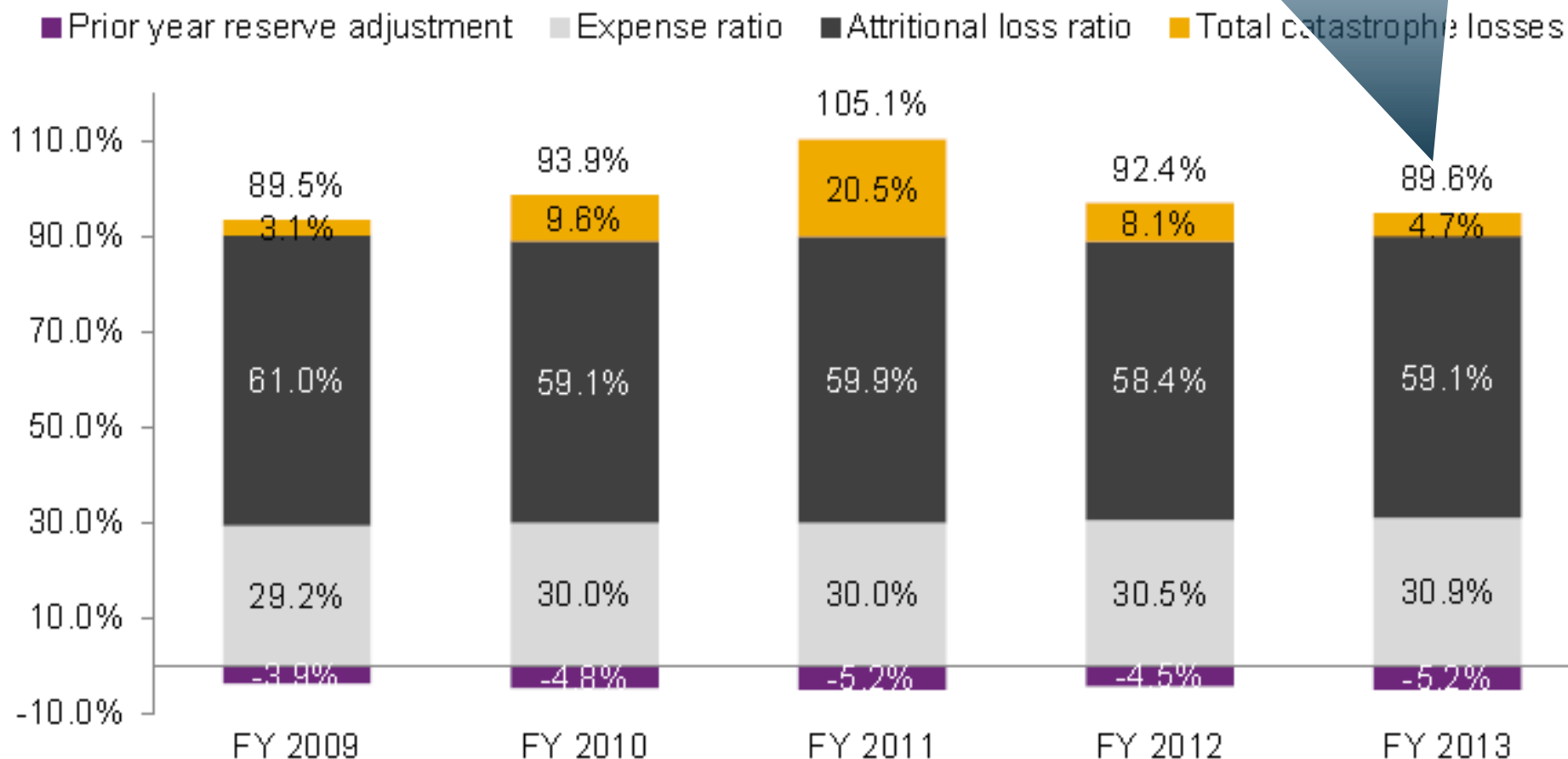
Lower CATs and a flood of new capital has pushed reinsurance pricing down in most regions, including the US

*As of Jan. 1.

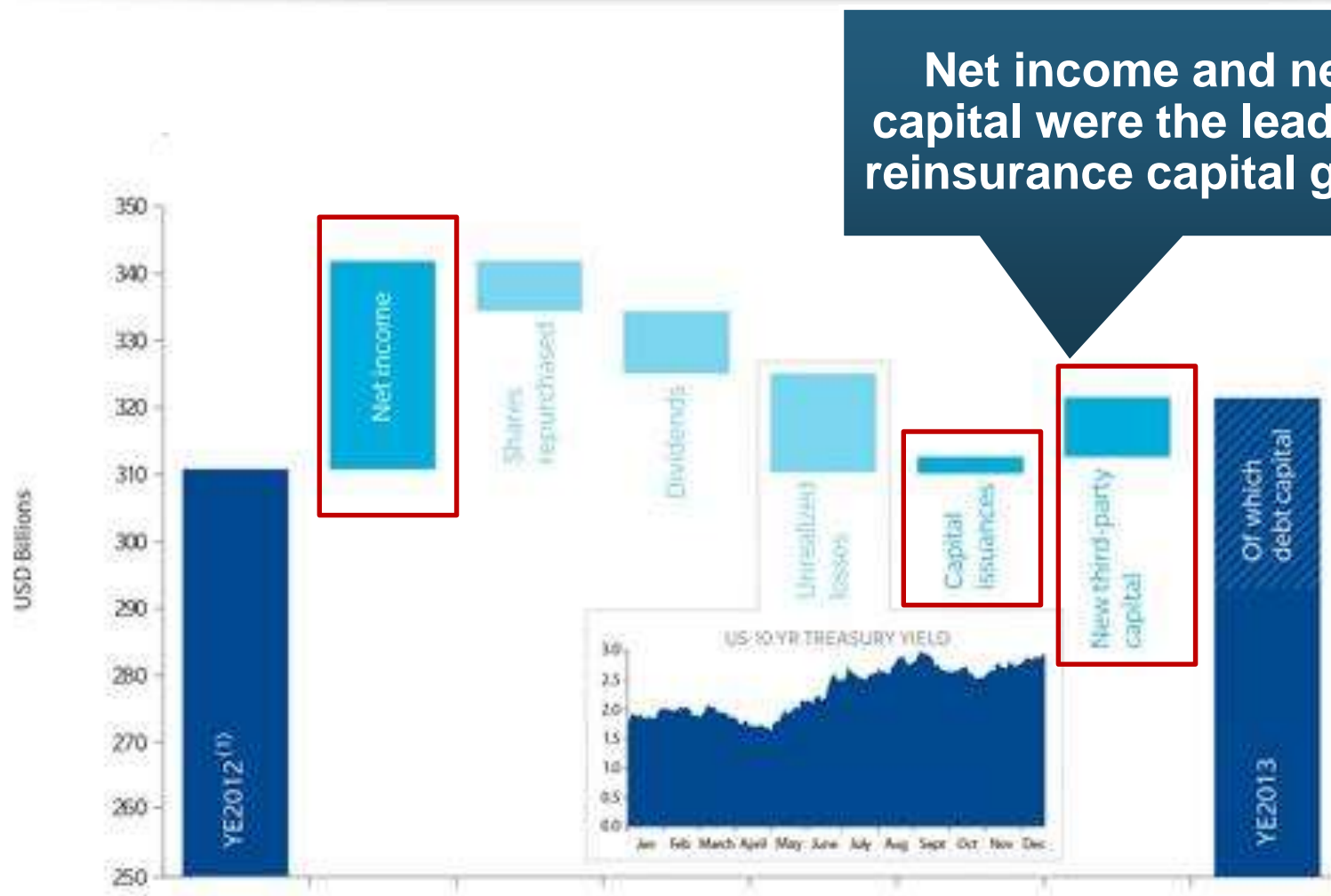
Source: Guy Carpenter

Reinsurer Combined Ratios (Aon Benfield Aggregate), 2007 - 2013

Reinsurers posted a combined under 90 in 2013, the best result since 2009

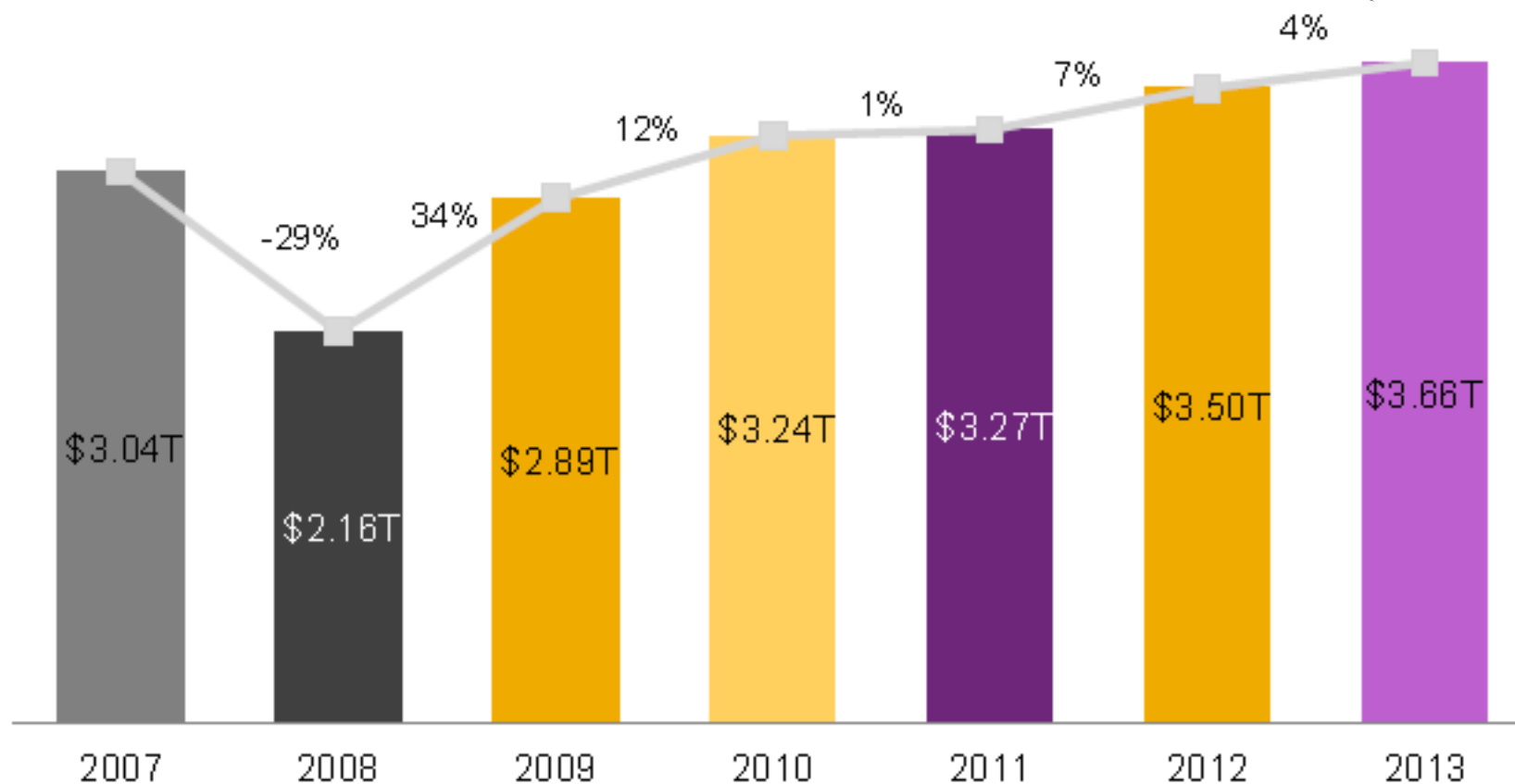


Sources of Reinsurance Capital Change: YE 2012 to YE 2013



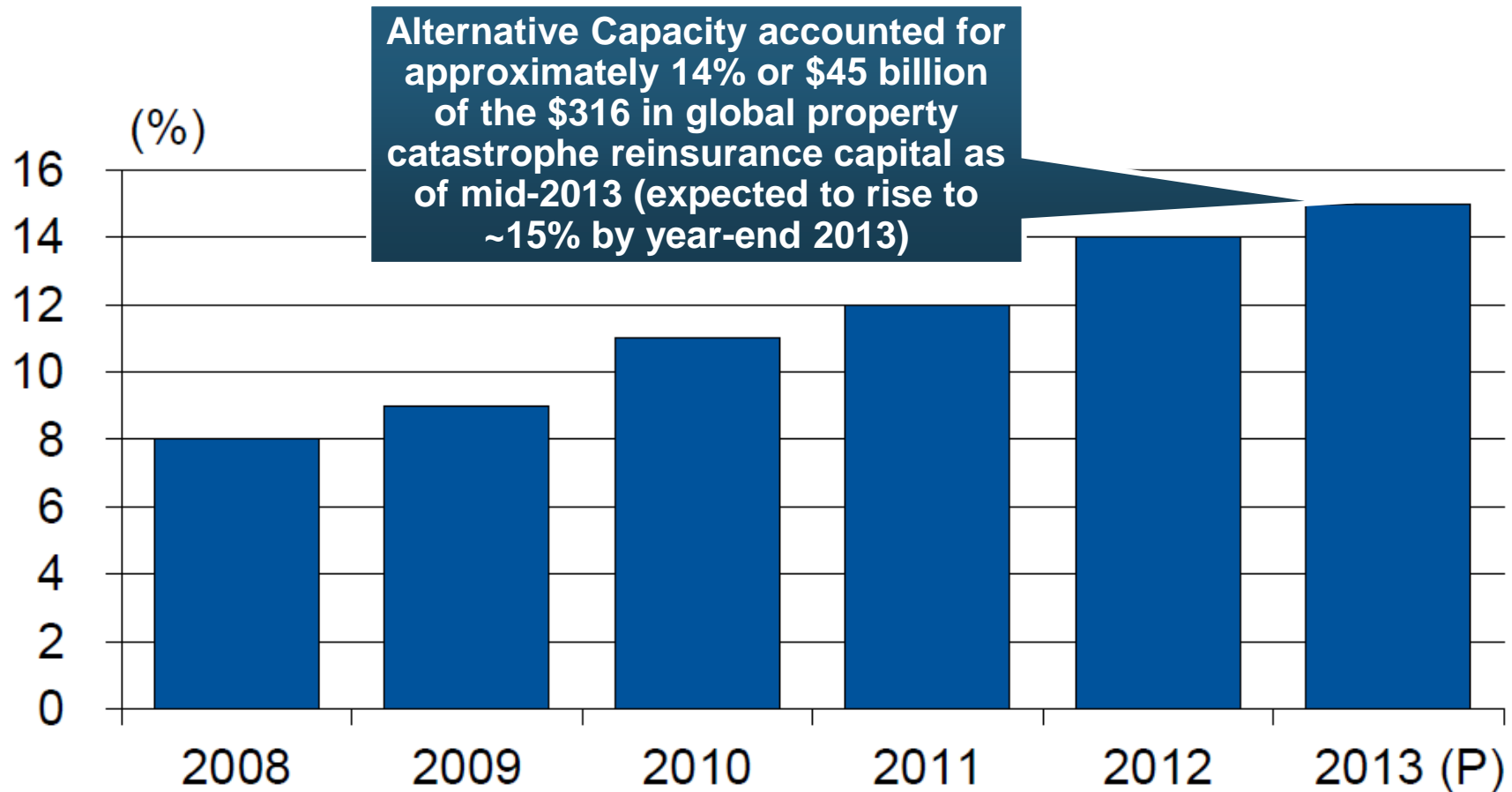
Global Insurance Capital, 2007 - 2013

Insurance capital increased by 69.4% (\$1.5 trillion) since the depths of the global financial crisis in 2008



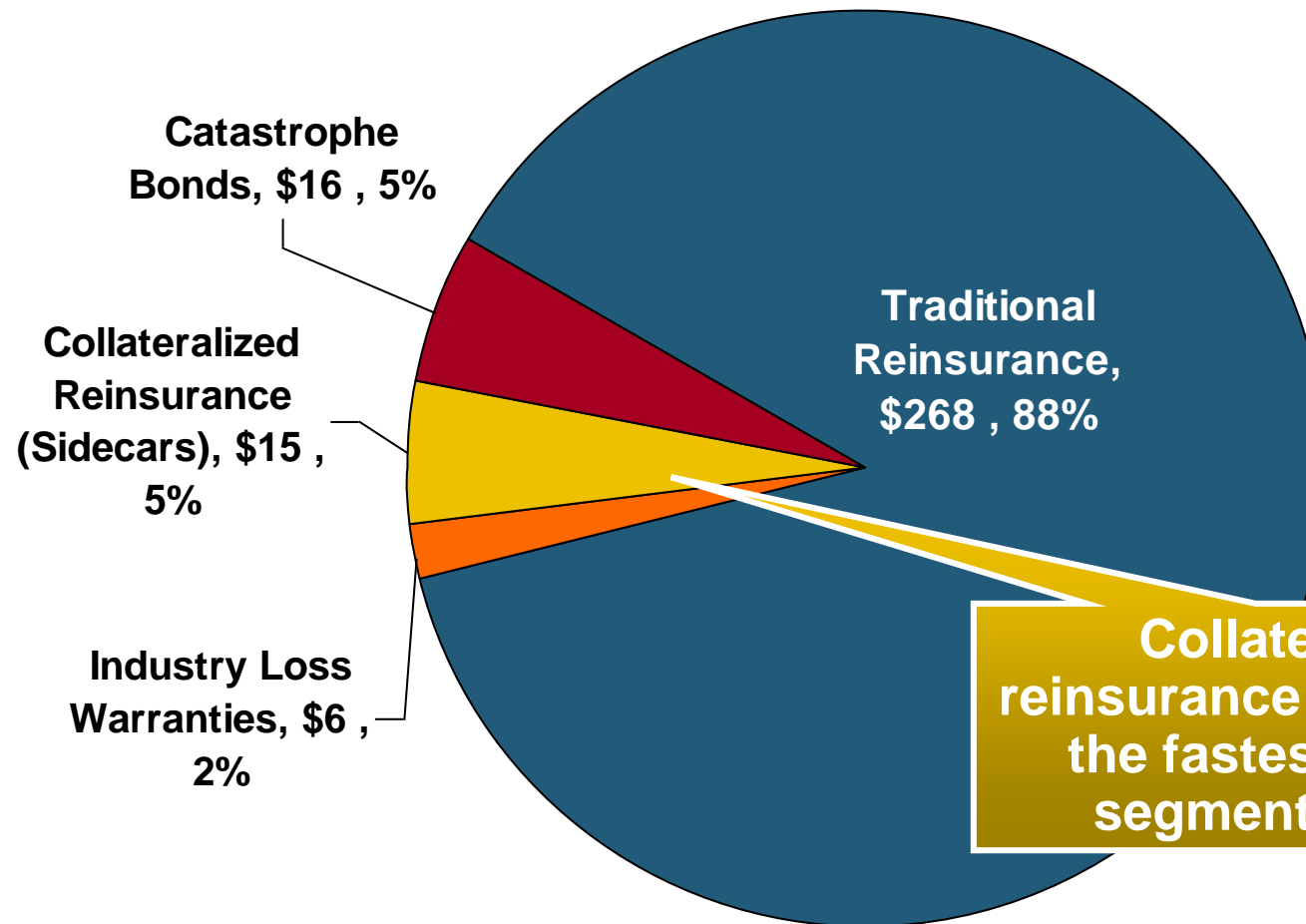
Alternative Capacity as a Percentage of Global Property Catastrophe Reinsurance Limit

(As of Year End)



Property Catastrophe Reinsurance Capacity by Source as of Mid-2013 (\$ Bill)

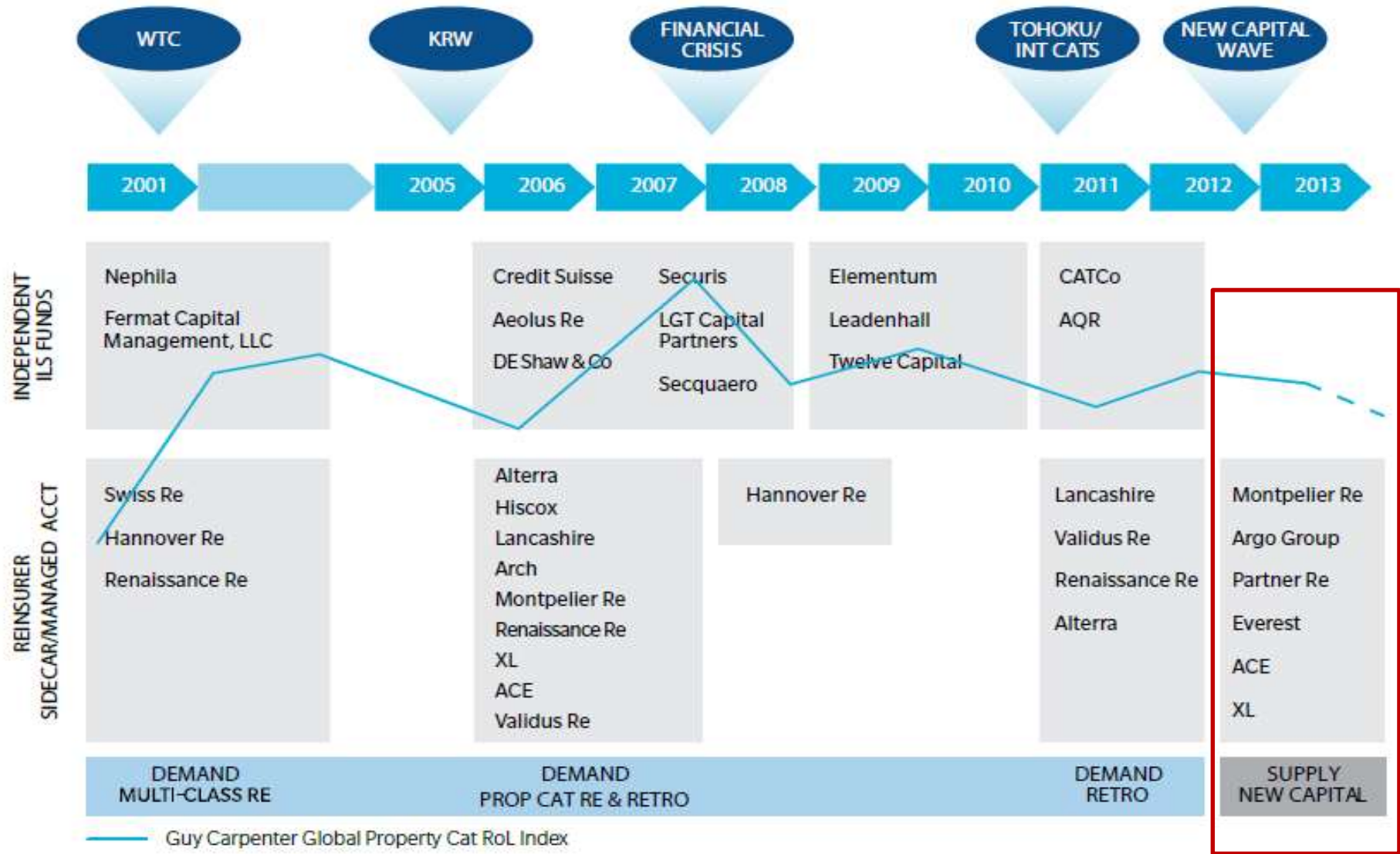
Total = \$316 Billion*



“Convergence Capital” accounted for an estimated \$45B or 14% or total property catastrophe reinsurance capacity as of mid-2013, up \$10B over the past 18 months (since 1/1/12). Penetration of this type of capacity is growing

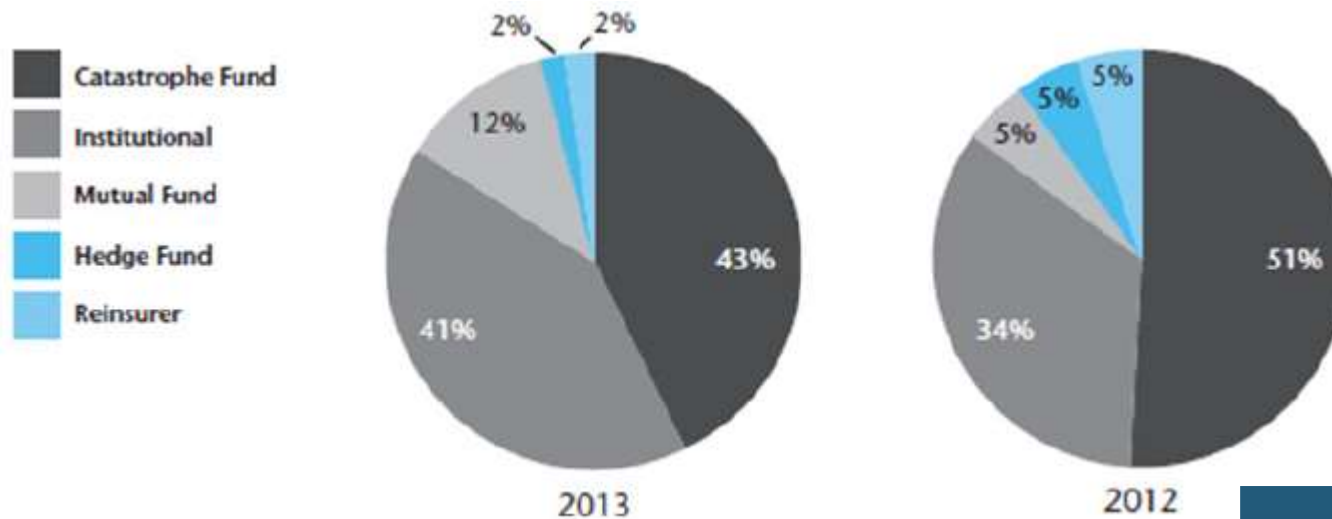
Collateralized reinsurance (sidecars) is the fastest growing segment recently

Alternative Capacity Development, 2001—2013:H1



Source: Guy Carpenter; *Mid-Year Market Report*, September 2013; Insurance Information Institute.

Investor by Category, 2013 vs. 2012*



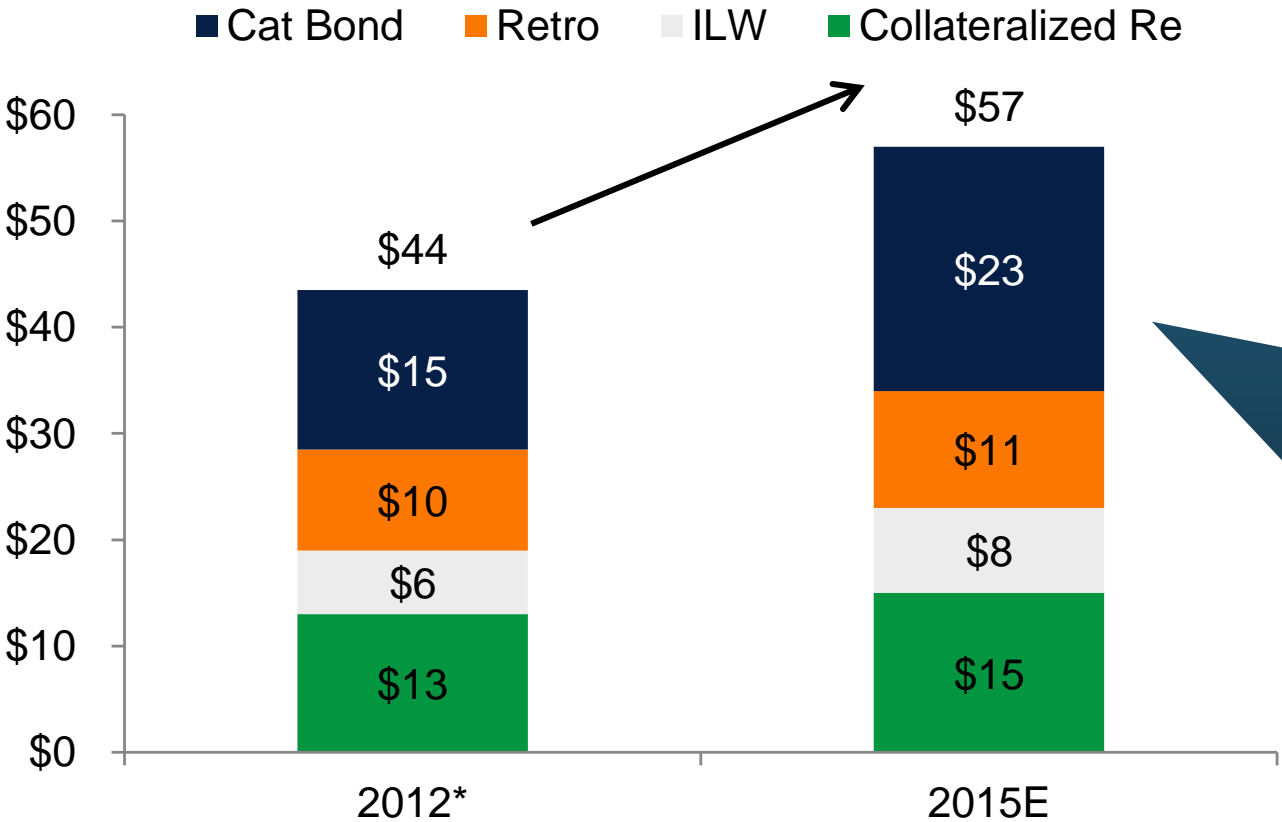
Institutional Investors are accounting for a larger share of alternative reinsurance investors

*As of June 30 each year.

Source: Aon Benfield Securities; Insurance Information Institute.

Non-Traditional Property Catastrophe Limits by Type, YE 2012 vs. YE 2015E

NON-TRADITIONAL P/CAT LIMITS BY TYPE

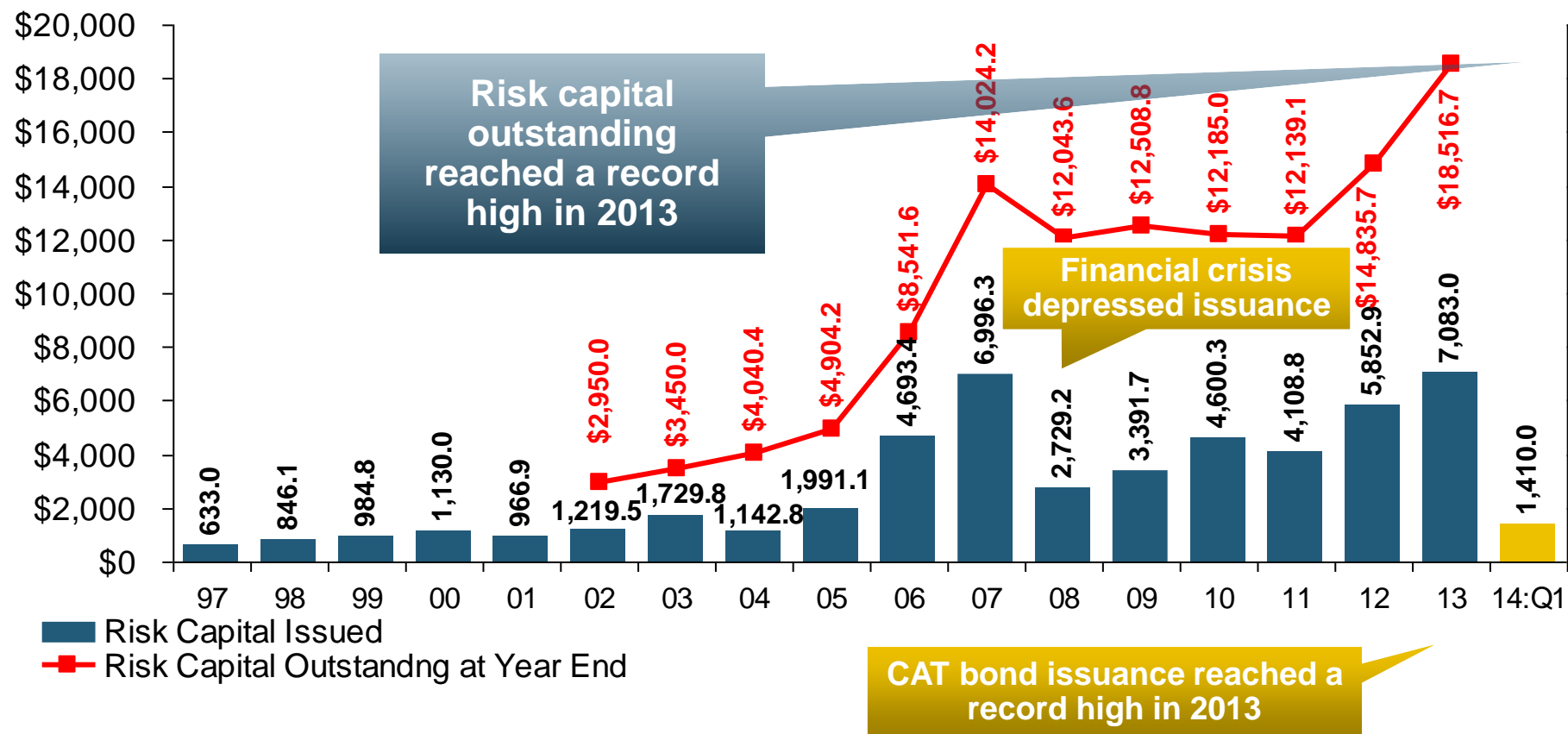


Alternative capital is expected to rise by 30% by YE 2015 and will ultimately account for 20-30% of total reinsurance spend, according to Guy Carpenter

Source: Guy Carpenter; *As Of Mar-2013

Catastrophe Bonds: Issuance and Outstanding, 1997- 2014:Q1*

Risk Capital Amount (\$ Millions)



Catastrophe Bond Issuance Is Approaching Pre-Crisis Levels While Risk Capital Outstanding Stands at an All-Time Record

*Through Jan. 31, 2014.

Source: Guy Carpenter; Insurance Information Institute.

Questions Arising from Influence of Alternative Capital

- **Could Pension Fund Money Swamp Traditional Capacity?**
 - ◆ US private pension funds hold ~\$7 trillion in assets
 - ◆ 2% allocation = \$140 billion
 - ◆ Global property cat capital = ~\$316 bill as of mid-2013
- **Do New Investors Have a Lower Cost of Capital?**
 - ◆ New capacity expects 6-8% rate of return compared to 8-10% for traditional reinsurance, according to Dowling & Partners
- **Will Reinsurance Pricing Become More Closely Linked to Interest Rates?**
 - ◆ What happens when interest rates rise?
- **Terms and Conditions Could Weaken**
 - ◆ Multi-year deals

Questions Arising from Influence of Alternative Capital

- **What Will Happen When Investors Face Large-Scale Losses?**
- **Does ILS Have a Higher Propensity to Litigate?**
 - ◆ Short-term focus could contribute to disputes
 - ◆ Large share of triggered transactions ended up in dispute
- **How Low Will ROLs Be Pushed?**
- **Does the New Interconnectedness with Capital Markets Lend Credence to the Suggestion that Reinsurance Is a Systemic Risky Business?**
- **Will Alternative Capital Drive Consolidation Among Traditional Reinsurers?**
 - ◆ Has the mating dance begun? → *Endurance/Aspen*

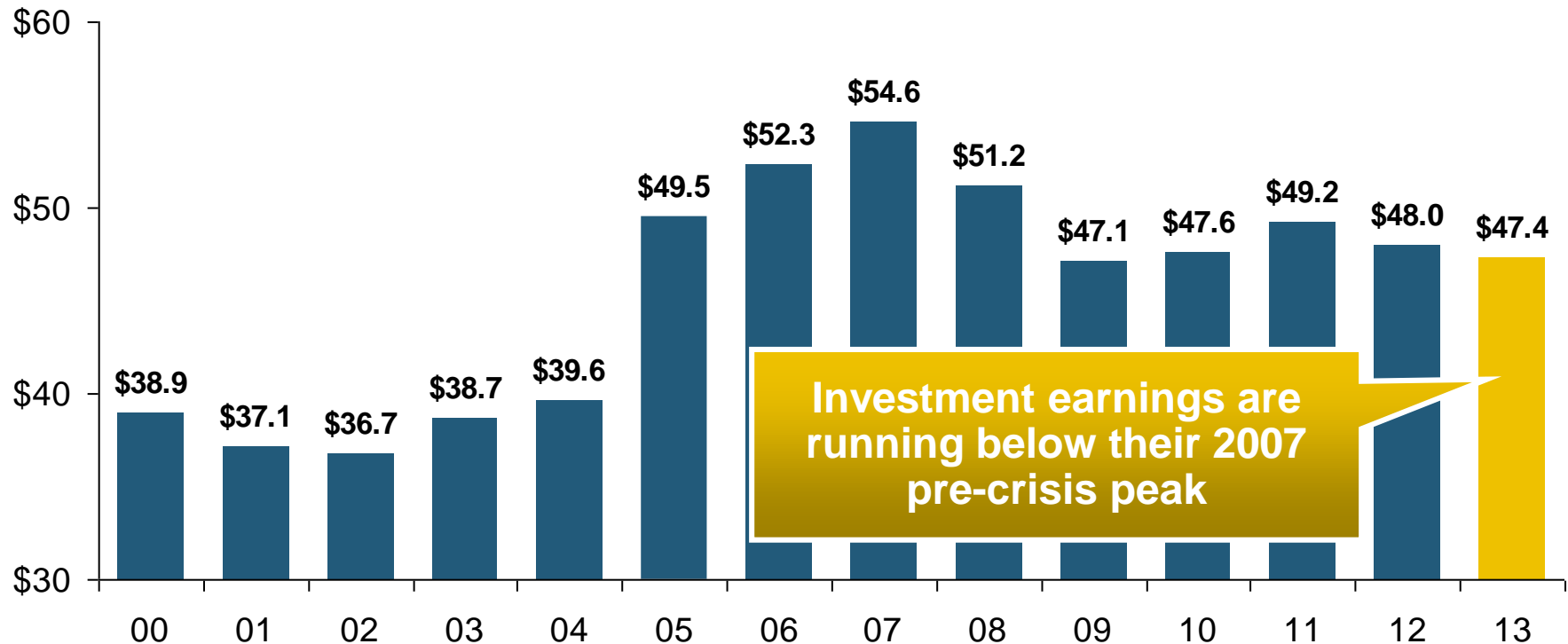
INVESTMENTS: THE NEW REALITY

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

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

Property/Casualty Insurance Industry Investment Income: 2000–2013¹

(\$ Billions)

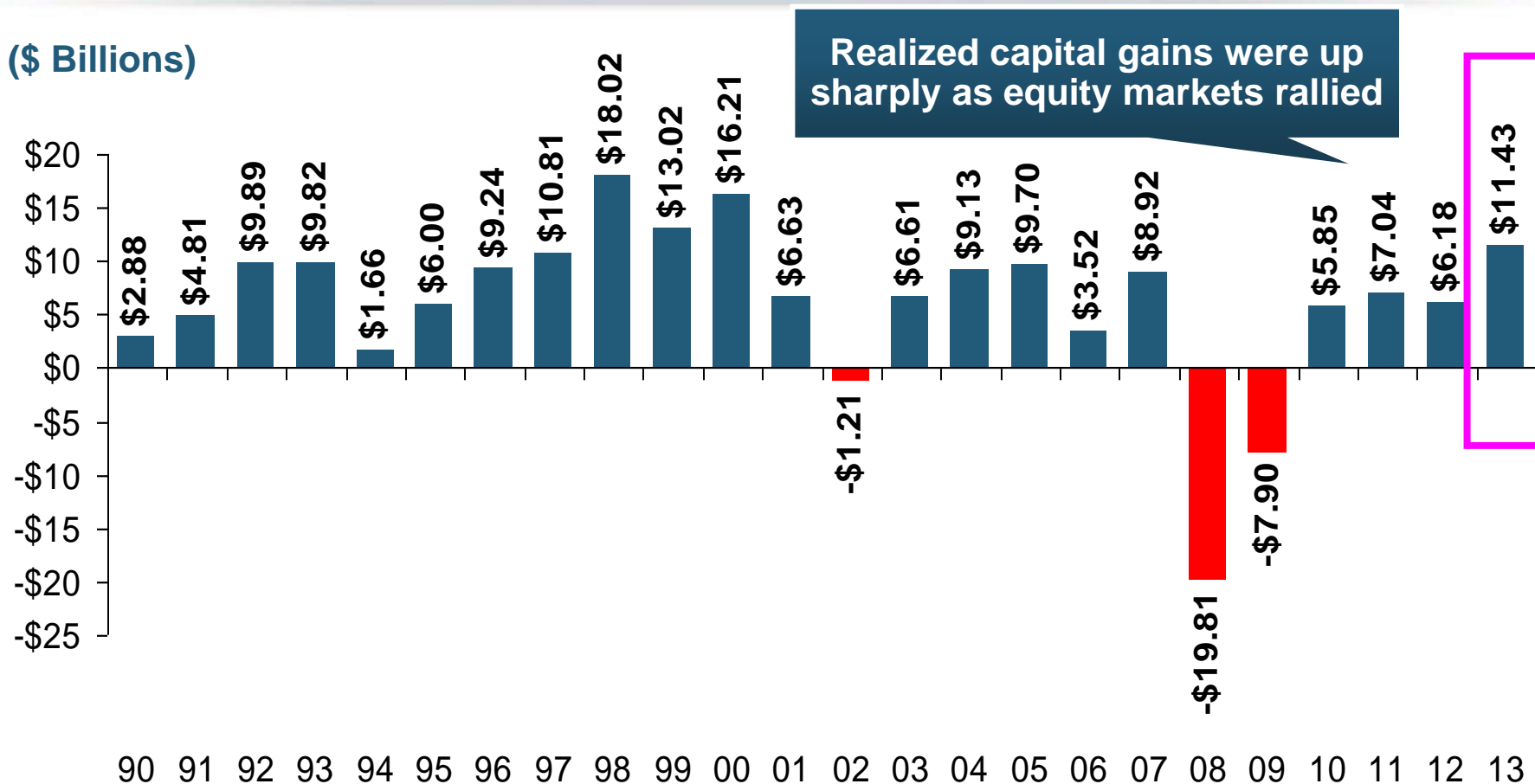


Investment Income Fell in 2012 and 2013 Due to Persistently Low Interest Rates, Putting Additional Pressure on (Re) Insurance Pricing

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

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

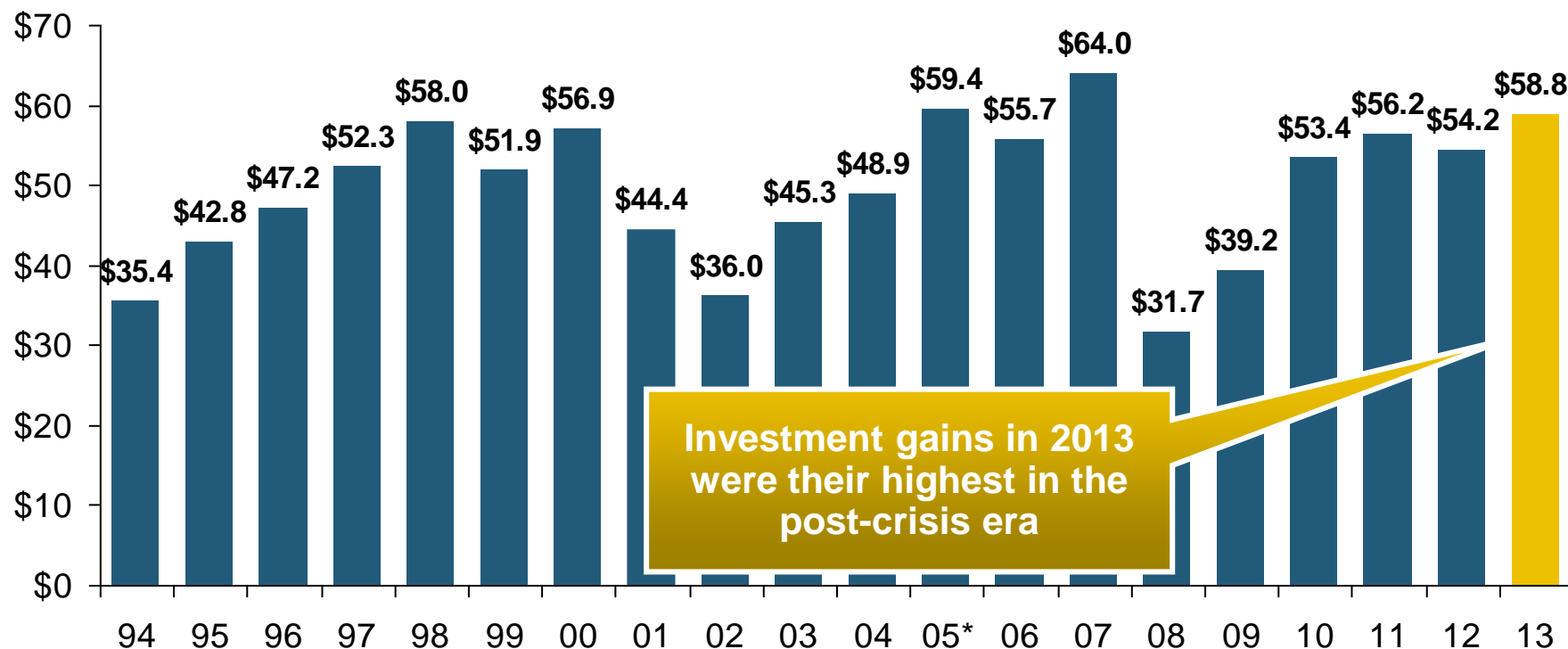
(\$ Billions)



Insurers Posted Net Realized Capital Gains in 2010 - 2013 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: 1994–2013¹

(\$ Billions)



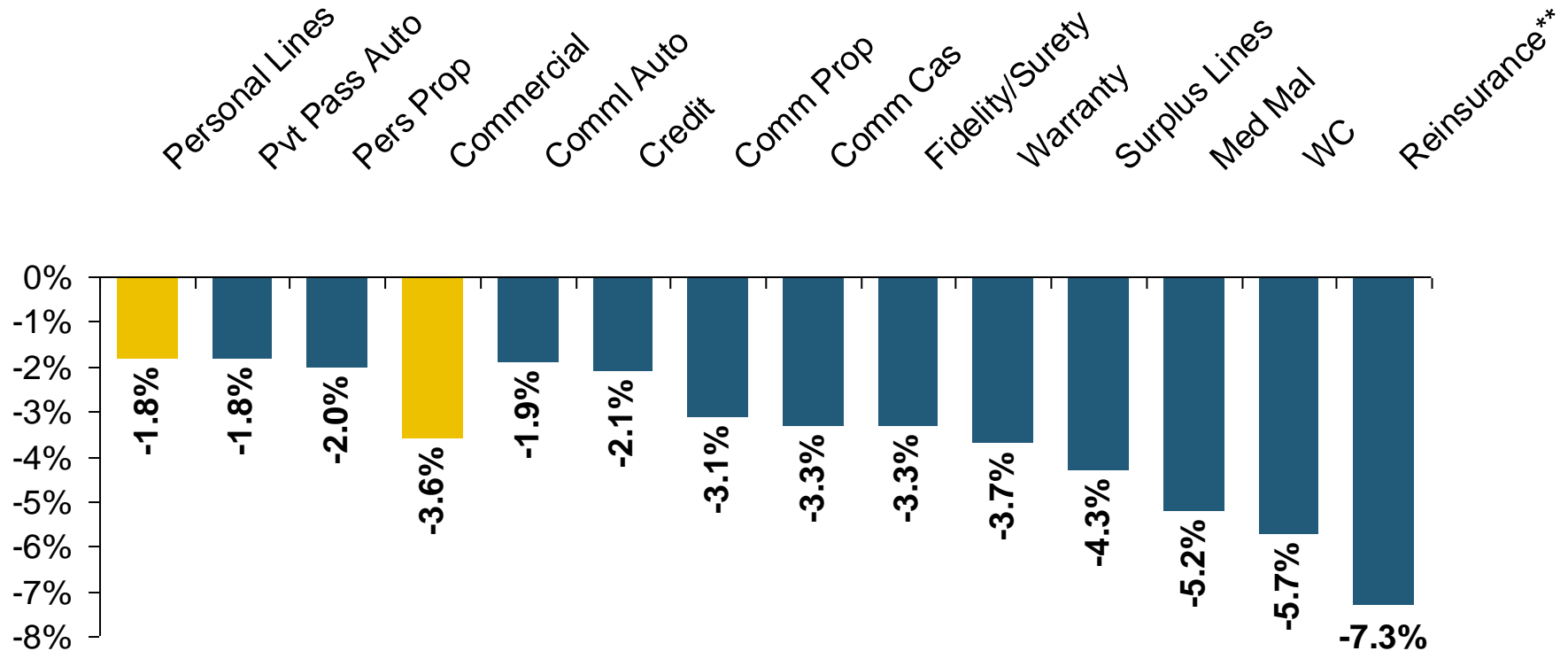
Investment Income Continued to Fall in 2013 Due to Low Interest Rates but Realized Investment Gains Were Up Sharply; The Financial Crisis Caused Investment Gains to Fall by 50% in 2008

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

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

Sources: ISO; Insurance Information Institute.

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



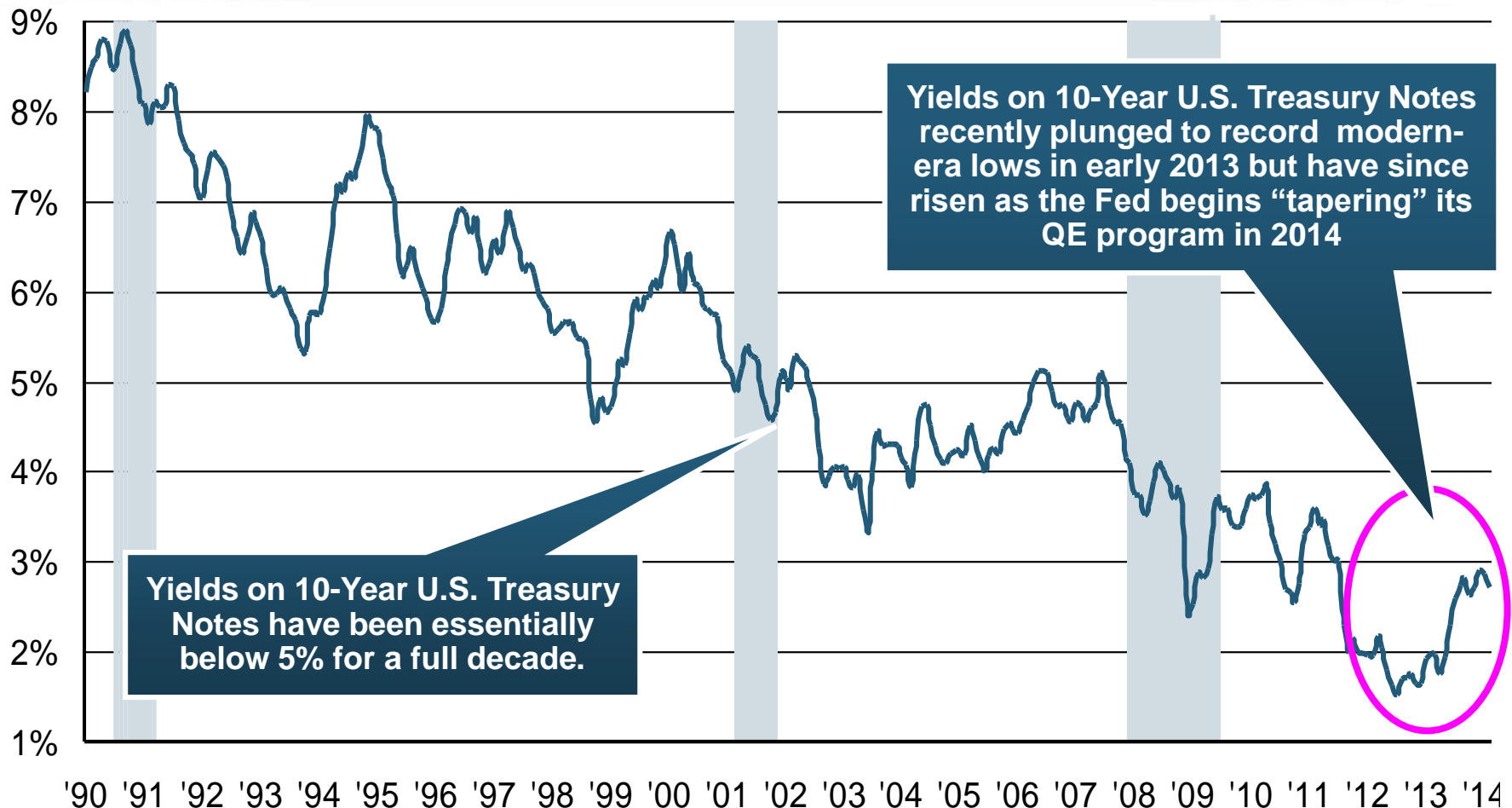
Lower Investment Earnings Place a Greater Burden on Underwriting and Pricing Discipline

*Based on 2008 Invested Assets and Earned Premiums

**US domestic reinsurance only

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

U.S. 10-Year Treasury Note Yields: A Long Downward Trend, 1990–2014*



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.

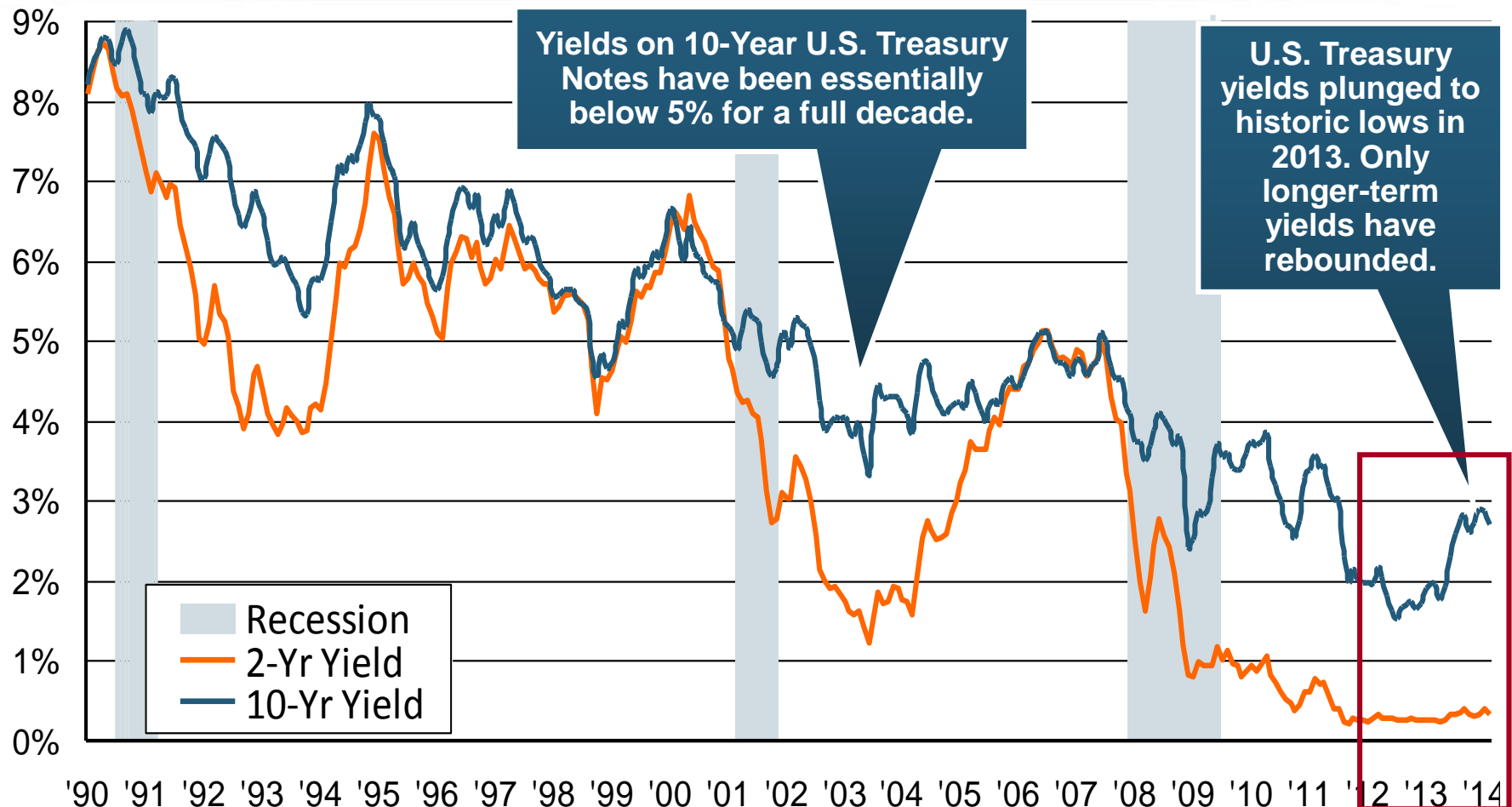
*Monthly, through February 2014.

Note: Recessions indicated by gray shaded columns.

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

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

U.S. Treasury Security Yields: A Long Downward Trend, 1990–2014*

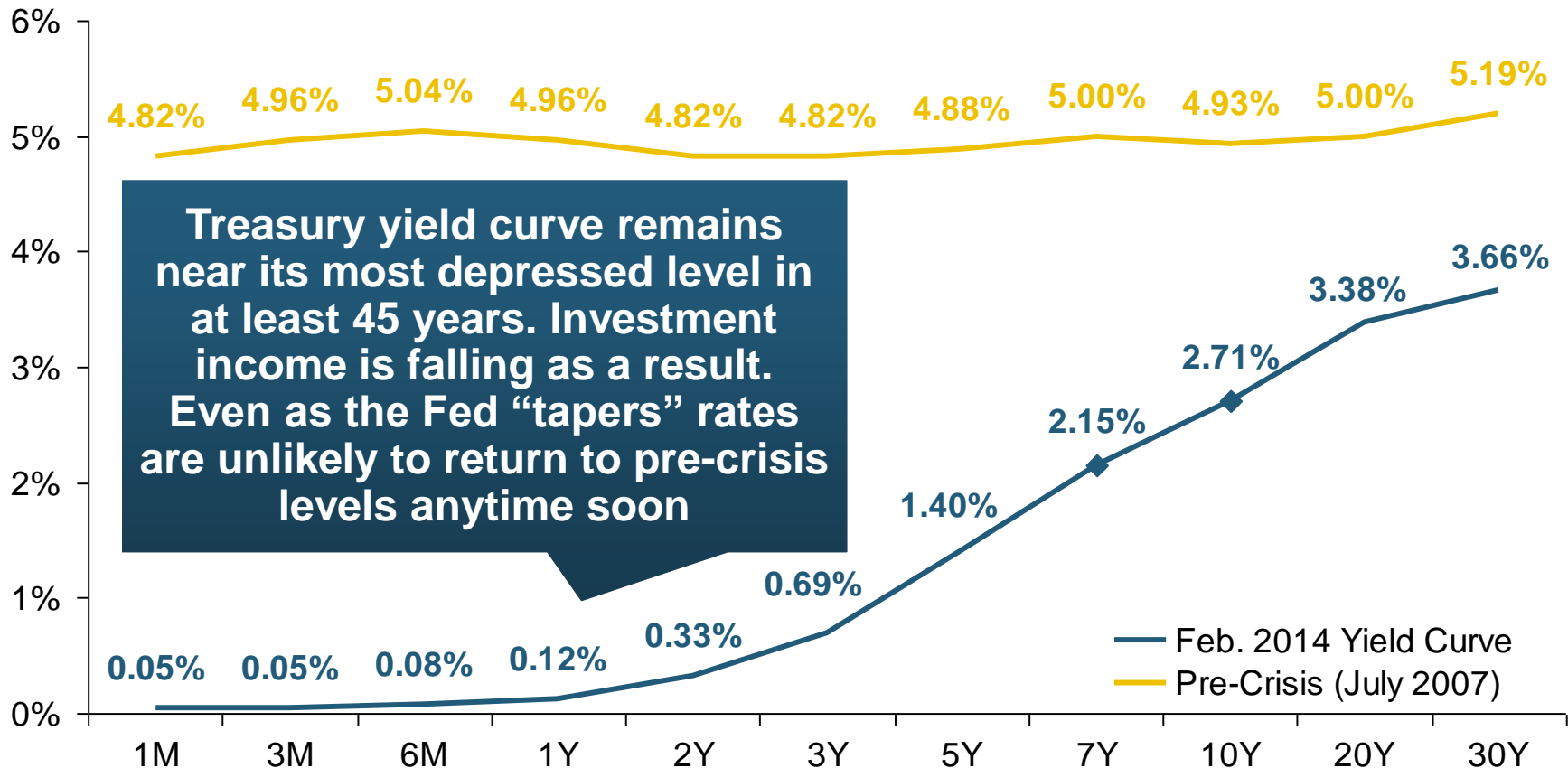


Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

*Monthly, constant maturity, nominal rates, through February 2014.

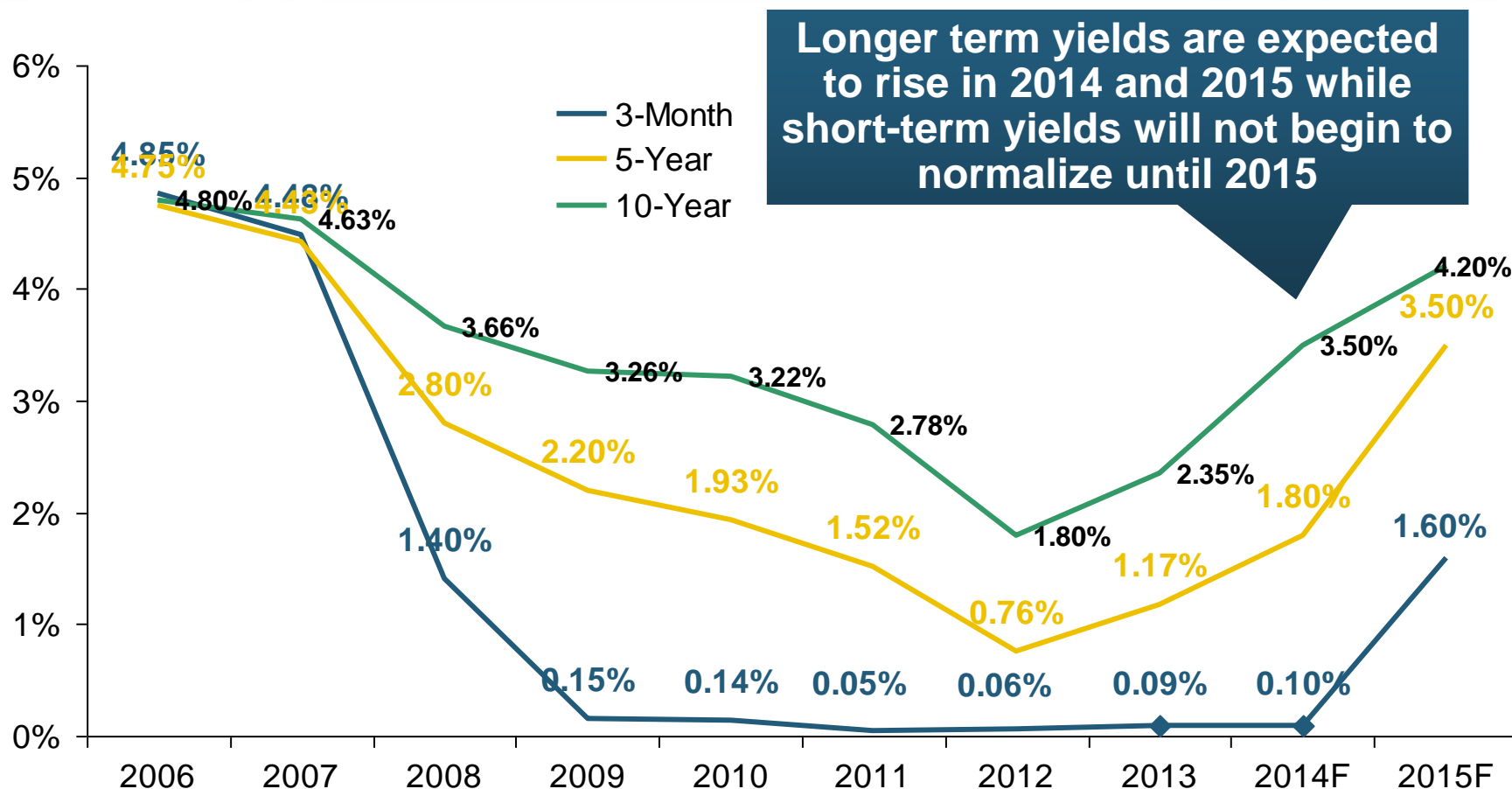
Sources: Federal Reserve Bank at <http://www.federalreserve.gov/releases/h15/data.htm>.
National Bureau of Economic Research (recession dates); Insurance Information Institute.

Treasury Yield Curves: Pre-Crisis (July 2007) vs. Feb. 2014



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.

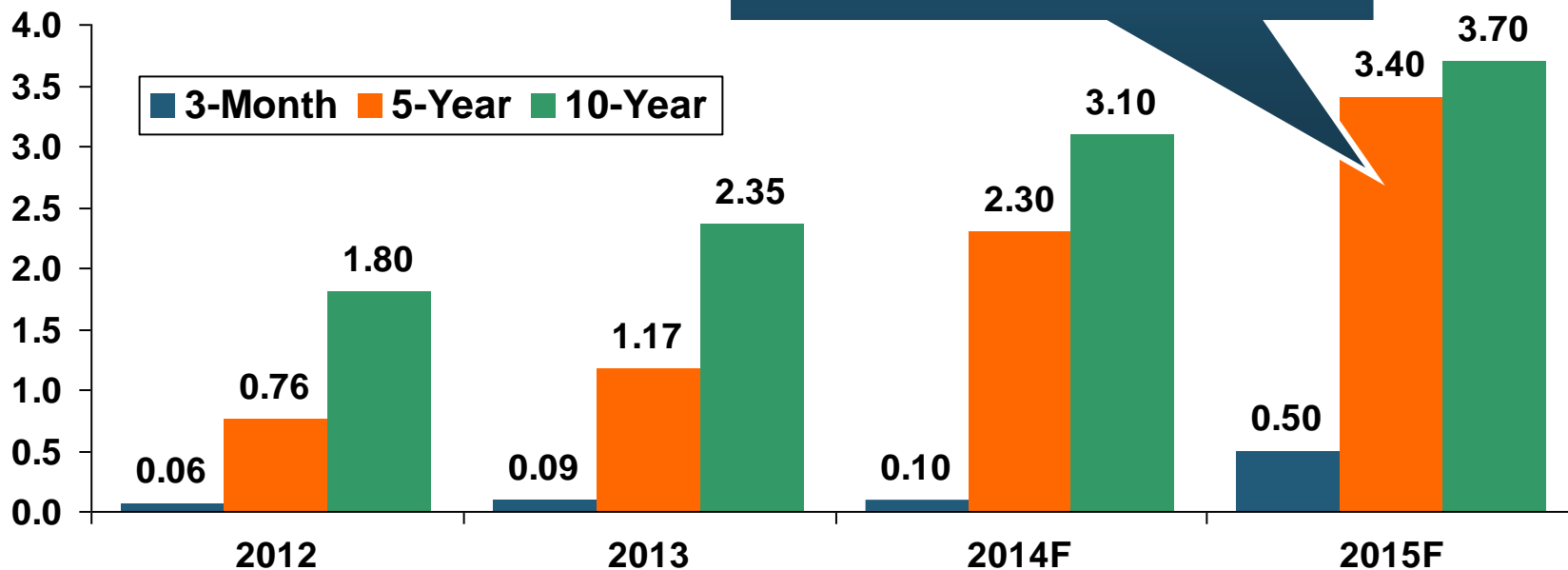
Treasury Yield Curves: Pre-Crisis (July 2007) vs. Feb. 2014



Higher longer-term yields will help insurers but short term yields are expected to lag behind

Outlook for U.S. Treasury Bond Yields Through 2015

% Yield

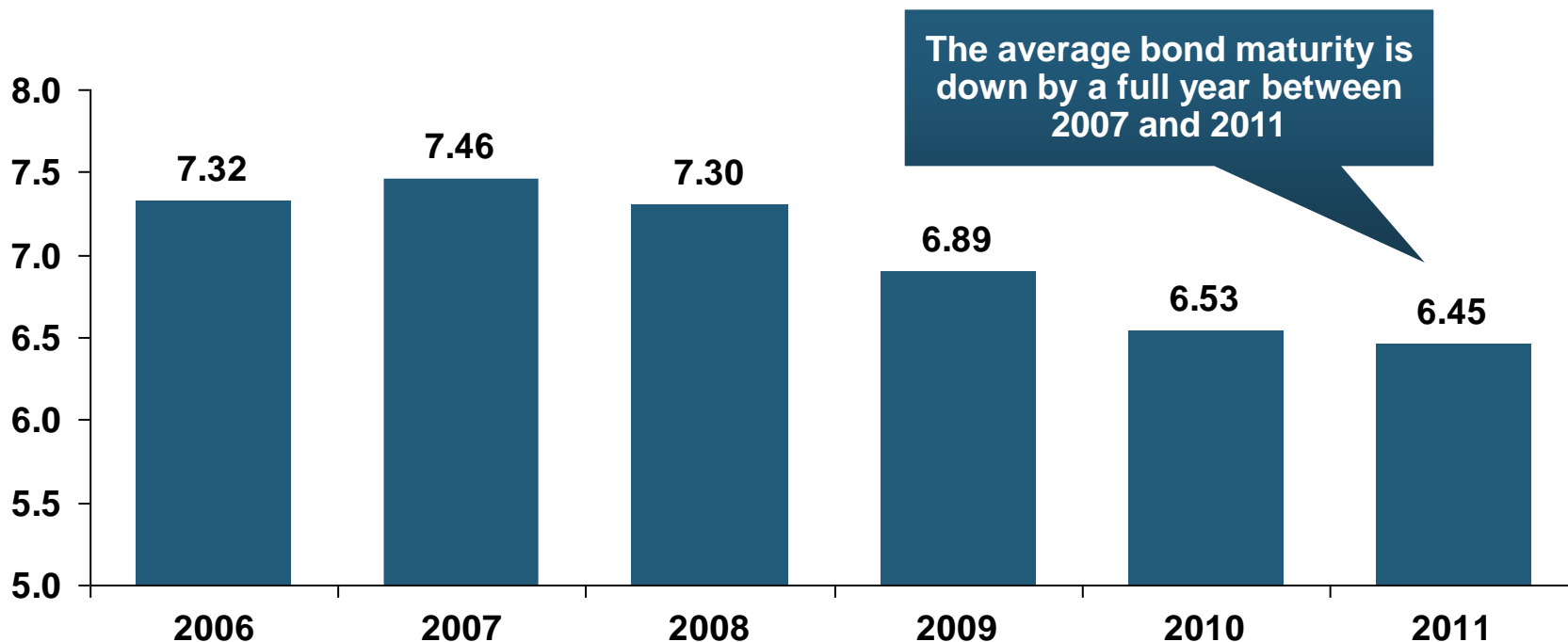


Longer-tail lines like MPL and workers comp will benefit the most from the normalization of yields

Source: Federal Reserve Board of Governors (2012-2013), Blue Economic Forecasts (2014-2015 3-month and 10-yr; 4/14) Swiss Re (2014-2015, 5-yr yield; 4/14); Insurance Information Institute.

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

Average Maturity (Years)

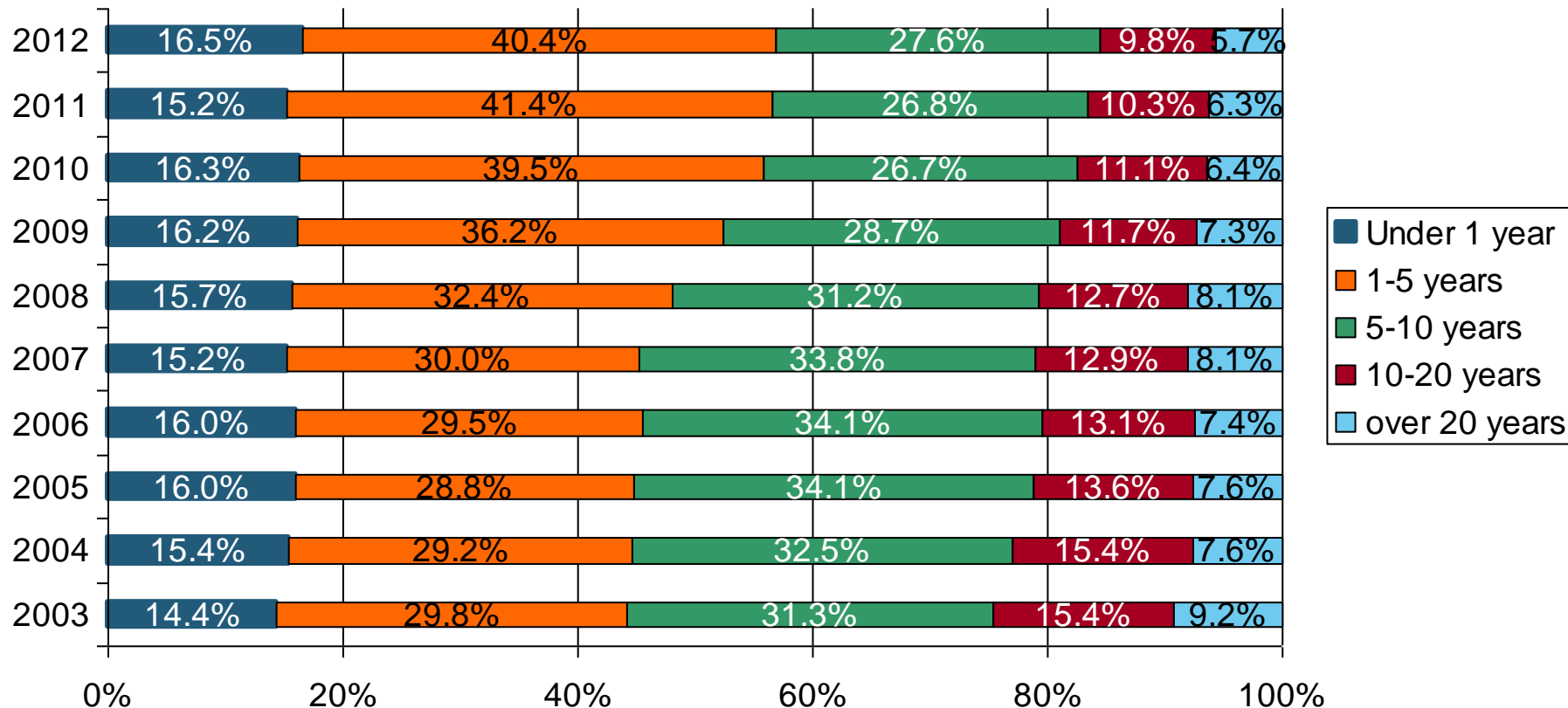


Falling Average Maturity (and Duration) of the P/C Industry's Bond Portfolio is Contributing to the Drop in Investment Income Along With Lower Yields

*Year-end figures. Latest available.

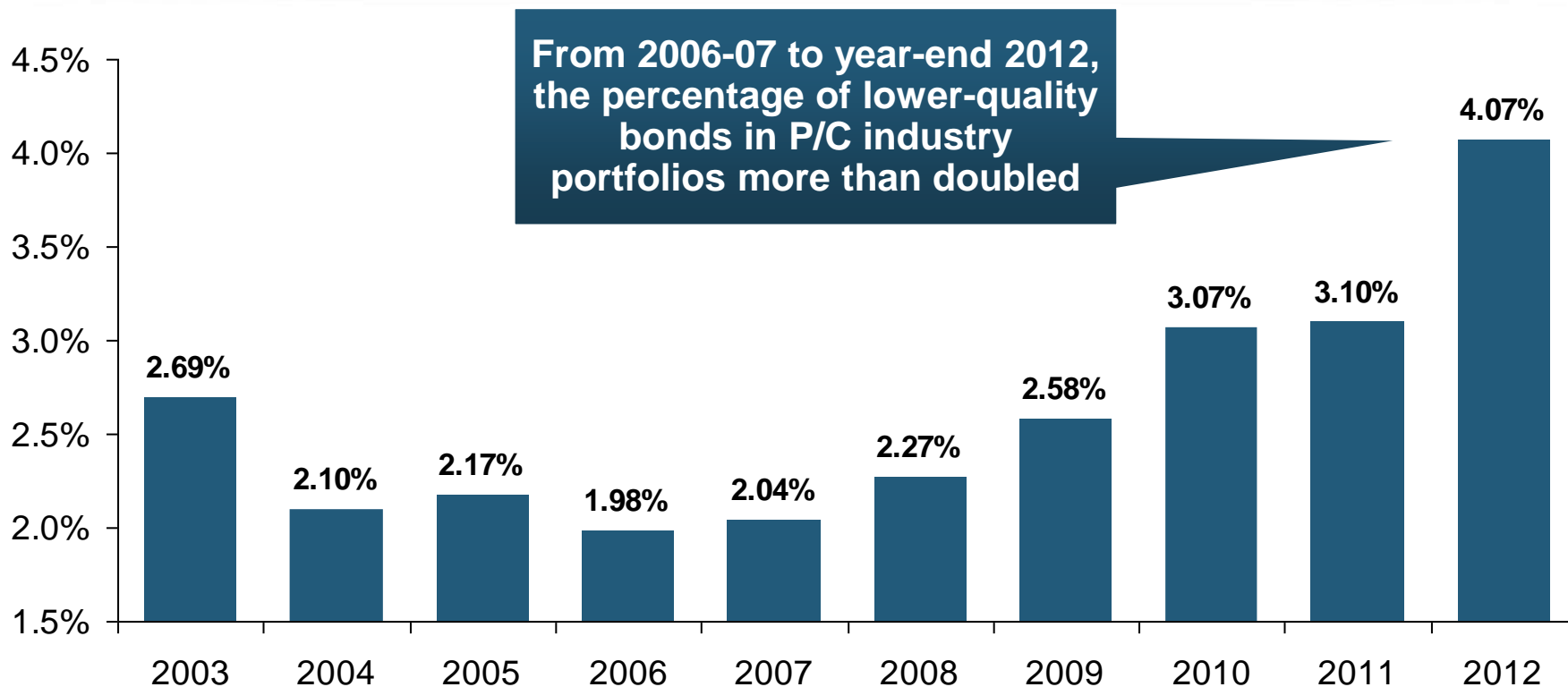
Sources: Insurance Information Institute calculations based on A.M. Best data.

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



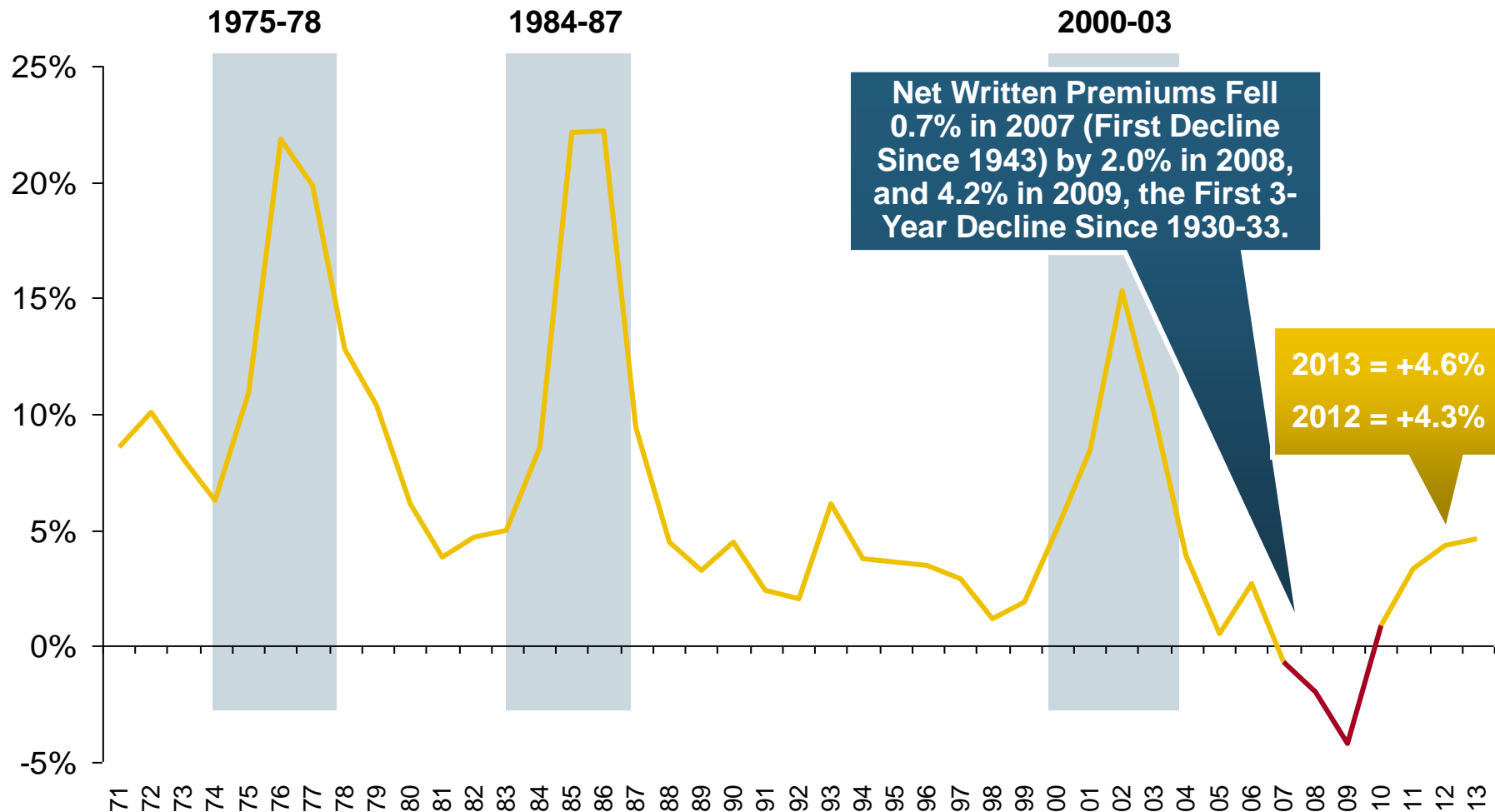
There are many ways to capture higher yields on bond portfolios. One is to accept greater risk, as measured by NAIC bond ratings. The ratings range from 1 to 6, with the highest quality rated 1. Even in 2012, over 95% of the industry's bonds were rated 1 or 2.

PRICING TRENDS

Modest Growth Continues

Net Premium Growth: Annual Change, 1971—2013

(Percent)



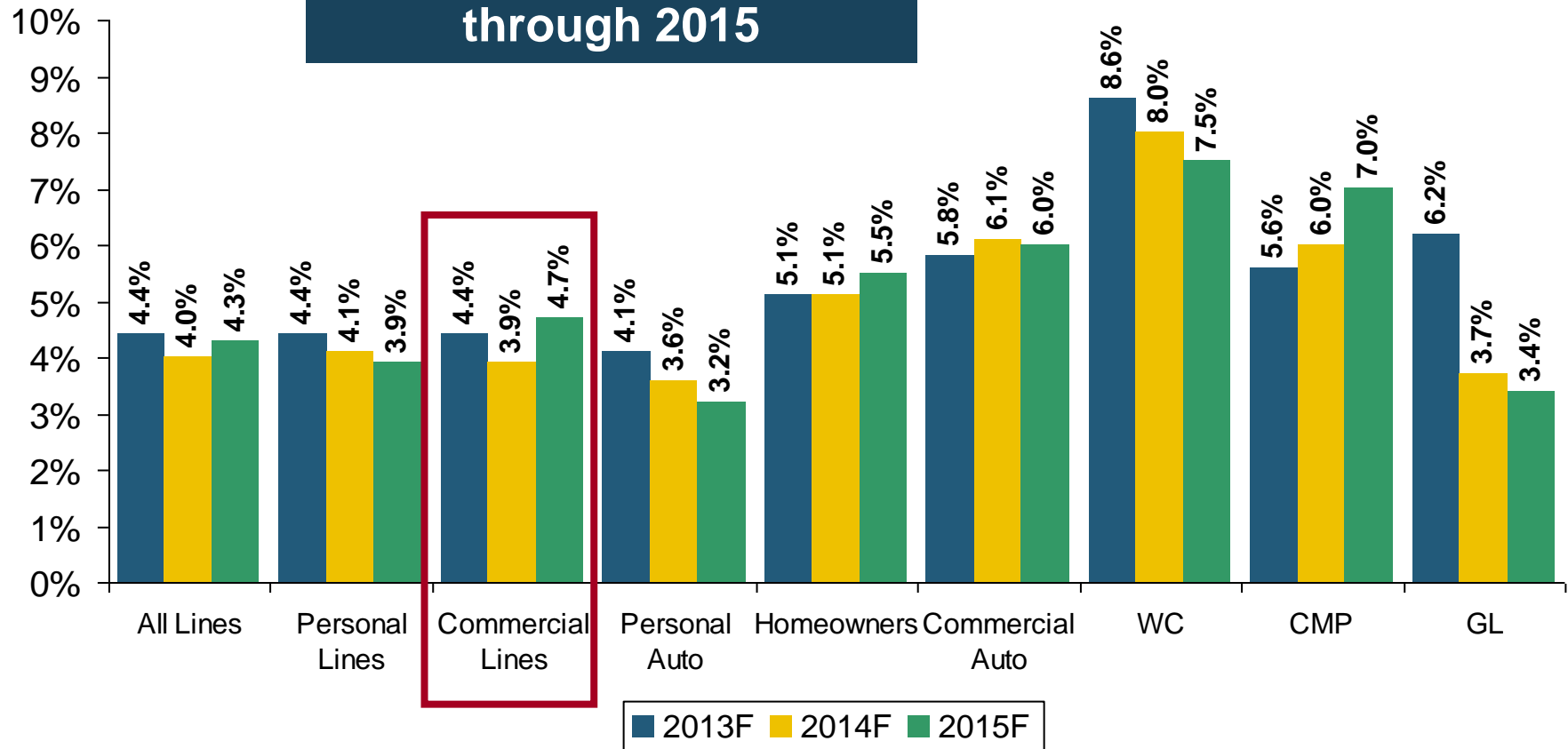
Shaded areas denote "hard market" periods

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

Growth in Direct Written Premium by Line, 2013-2015F*

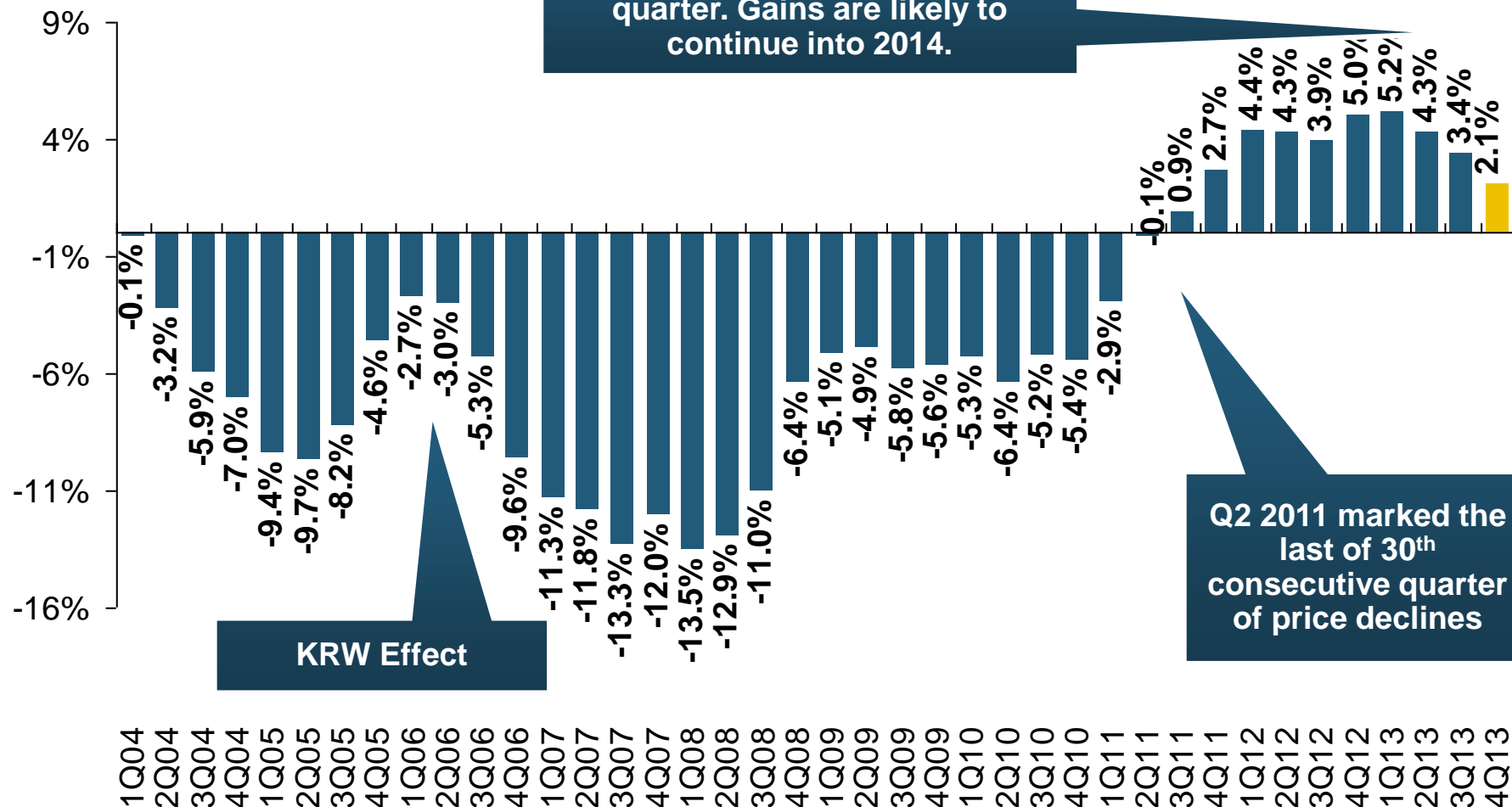
(Percent)

P/C growth is expected
to remain fairly stable
through 2015



Average Commercial Rate Change, All Lines, (1Q:2004–4Q: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:Q3

Percentage Change (%)

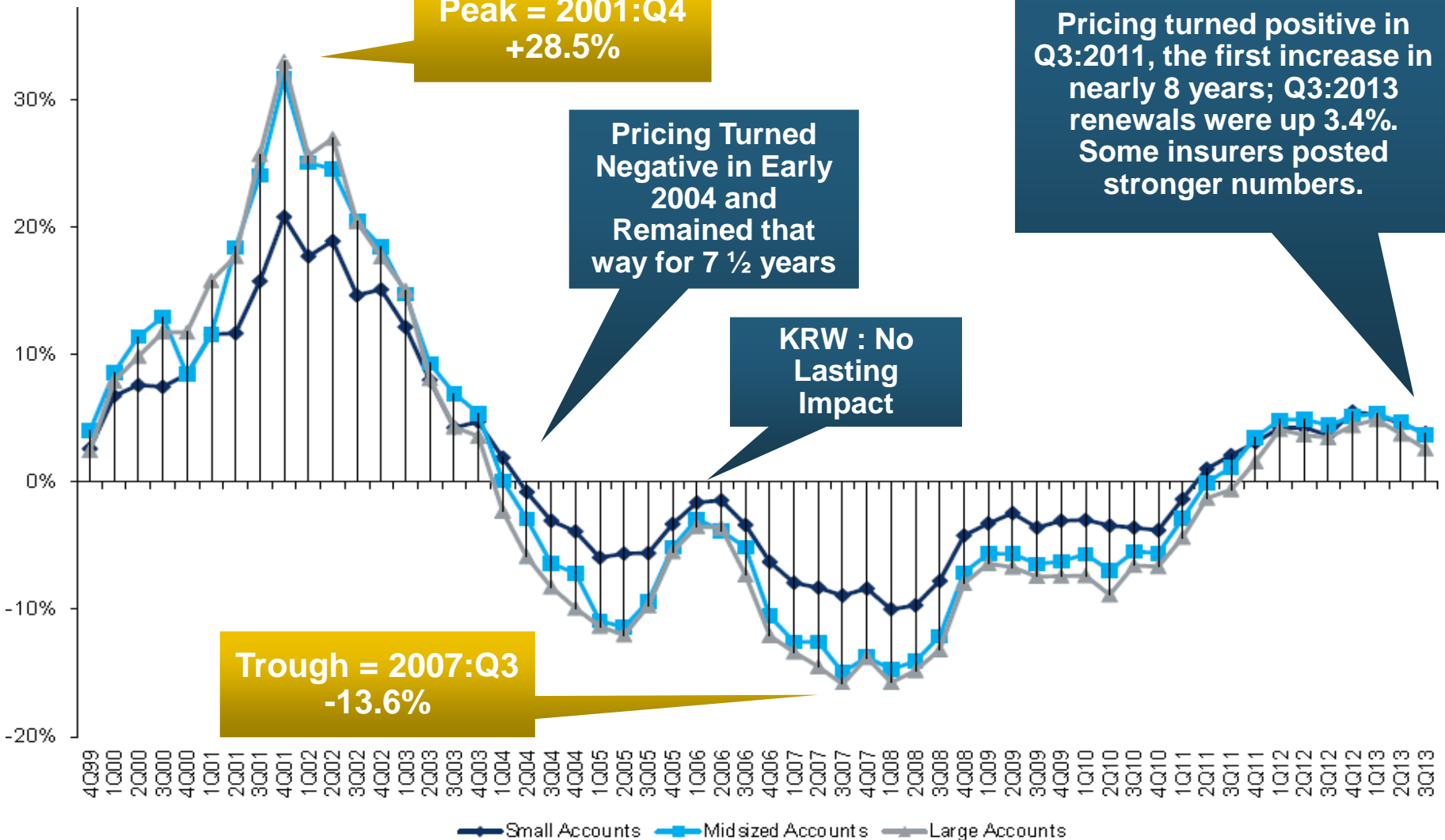
**Peak = 2001:Q4
+28.5%**

**Pricing Turned
Negative in Early
2004 and
Remained that
way for 7 ½ years**

**KRW : No
Lasting
Impact**

**Pricing turned positive in
Q3:2011, the first increase in
nearly 8 years; Q3:2013
renewals were up 3.4%.
Some insurers posted
stronger numbers.**

**Trough = 2007:Q3
-13.6%**

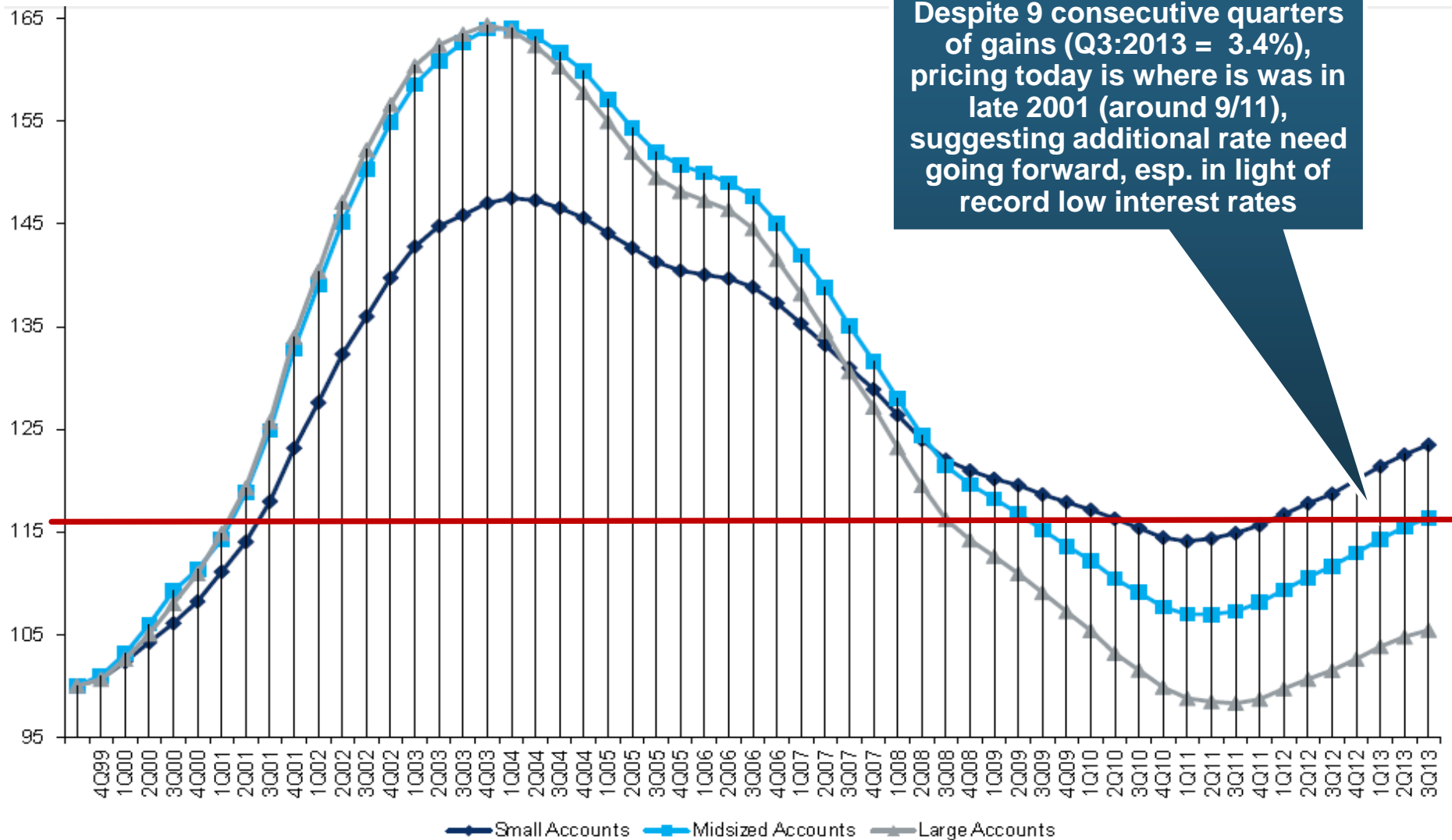


Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.

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:Q3

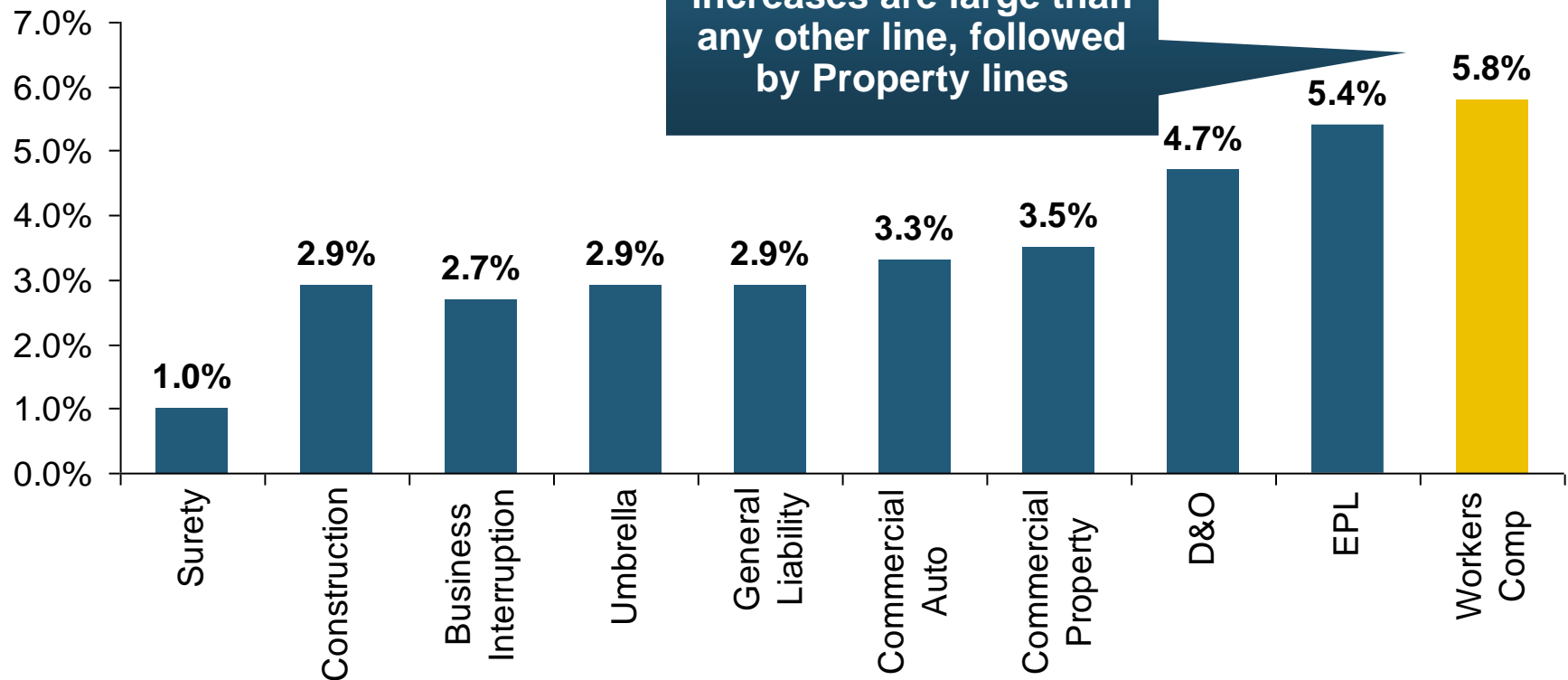
1999:Q4 = 100



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:Q3

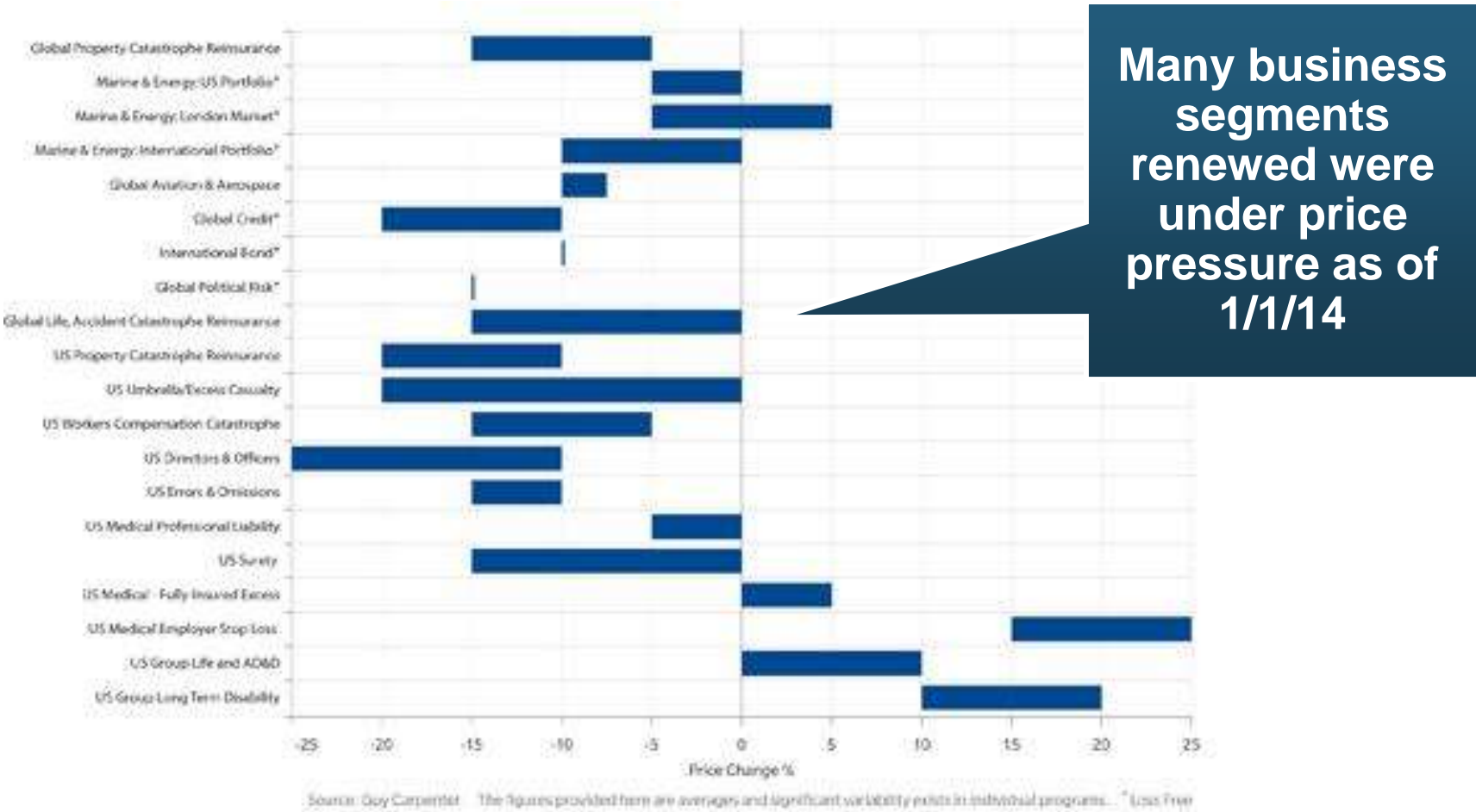
Percentage Change (%)



Major Commercial Lines Renewed Uniformly Upward in Q3:2013 for the 9th Consecutive Quarter; Property Lines & Workers Comp Leading the Way; Cat Losses and Low Interest Rates Provide Momentum Going Forward

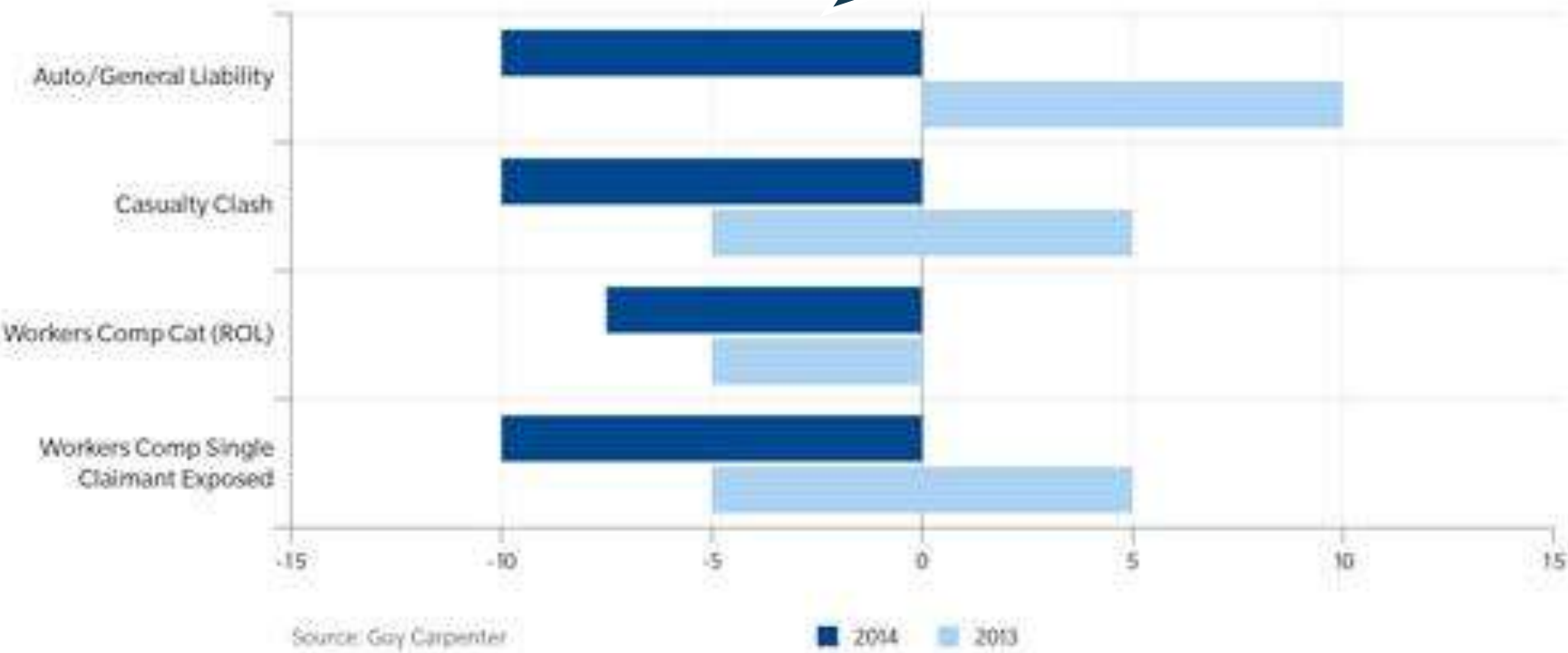
Note: CIAB data cited here are based on a survey. Rate changes earned by individual insurers can and do vary, potentially substantially.
Source: Council of Insurance Agents and Brokers; Insurance Information Institute.

Rate Movements by Business Segment as of January 1, 2014



Casualty: Typical Excess of Loss Rate Changes as of Jan. 1, 2014

Casualty excess of loss renewals
turned generally negative as of 1/1/14



Regulation: The Ultimate External Factor

**Regulation Has Shaped and Reshaped
Insurance for Hundreds of Years—
*The Future Will Be No Different***

New Waves of Regulations

2008 - Present

Global Crisis and Regulatory Response

The Global Financial Crisis: The Pendulum Swings Again: Dodd-Frank & Systemic Risk

- **Dodd-Frank Act of 2010: The implosion of the housing bubble and virtual collapse of the US banking system, the seizure of credit markets and massive government bailouts of US financial institutions led to calls for sweeping regulatory reforms of the financial industry**
- **Limiting Systemic Risk is at the Core of Dodd-Frank**
- **Designation as a Systemically Important Financial Institutional (SIFI) Will Result in Greater Regulatory Scrutiny and Heightened Capital Requirements**
- **Dodd-Frank Established Several Entities Impacting Insurers**
 - ◆ **Federal Insurance Office**
 - ◆ **Financial Stability Oversight Council**
 - ◆ **Office of Financial Research**
 - ◆ **Consumer Financial Protection Bureau**

The Global Financial Crisis: The Pendulum Swings Again: Dodd-Frank & Systemic Risk

- **Insurers—as Non-Bank Financial Institutions—Have Escaped Some, though Not All of the Most Draconian Provision of Dodd-Frank**
 - ◆ In particular, small number of large insurers will (are) receiving a designations as Systemically Important Financial Institutions (SIFIs)
- **Insurers Generally Reject the Notion that Insurance Is Systemically Risky (or that any Individual Insurer is Systemically Important)**
- **Such a Designation Makes the Fed the Penultimate Regulator**
- **To Date: AIG, Prudential Have Been Designated as non-bank SIFIs by the FSOC**
 - ◆ MetLife is still under evaluation
- **Fed Reserve Seems Open to Developing a Tailored Capital Requirement Approach for Insurers**
 - ◆ Conflicting language in the DFA make this somewhat difficult
 - ◆ SIFIs may need Fed approval to repurchase shares on increase dividend

Global Financial Crises & Global Systemic Risk

- **The Global Financial Crisis Prompted the G-20 Leaders to Request that the Financial Stability Board (FSB) Assess the Systemic Risks Associated with SIFIs, Global-SIFIs in Particular**
- **In July 2013, the FSB Endorsed the International Association of Insurance Supervisors Methodology for Identifying Globally Systemically Important Insurers (G-SIIs)**
- **For Each G-SII, the Following Will Be Required:**
 - (i) Recovery and resolution plans
 - (ii) Enhanced group-wide supervision
 - (iii) Higher loss absorbency (HLA) requirements
- **G-SIIs as Designated by the FSB as of July 2013:**

◆ Allianz SE	AIG	Assicurazioni Generali
◆ Aviva	Axa	MetLife
◆ Ping An	Prudential Financial	Prudential plc

Global Financial Crises & Global Systemic Risk: Key Dates

Implementation Date	Action
July 2013	Designation of G-SIIs (annual updates thereafter beginning Nov. 2014)
July 2014	FSB to make a decision on the G-SII status of, and appropriate risk mitigating measures for major reinsurers
By G-20 Summit 2014	IAIS to develop backstop capital requirements to apply to all group activities, incl. non-ins. subs.
End 2015	IAIS to develop HLA requirements that will apply to G-SIIs starting in 2019
January 2019	G-SIIs to apply HLA requirements

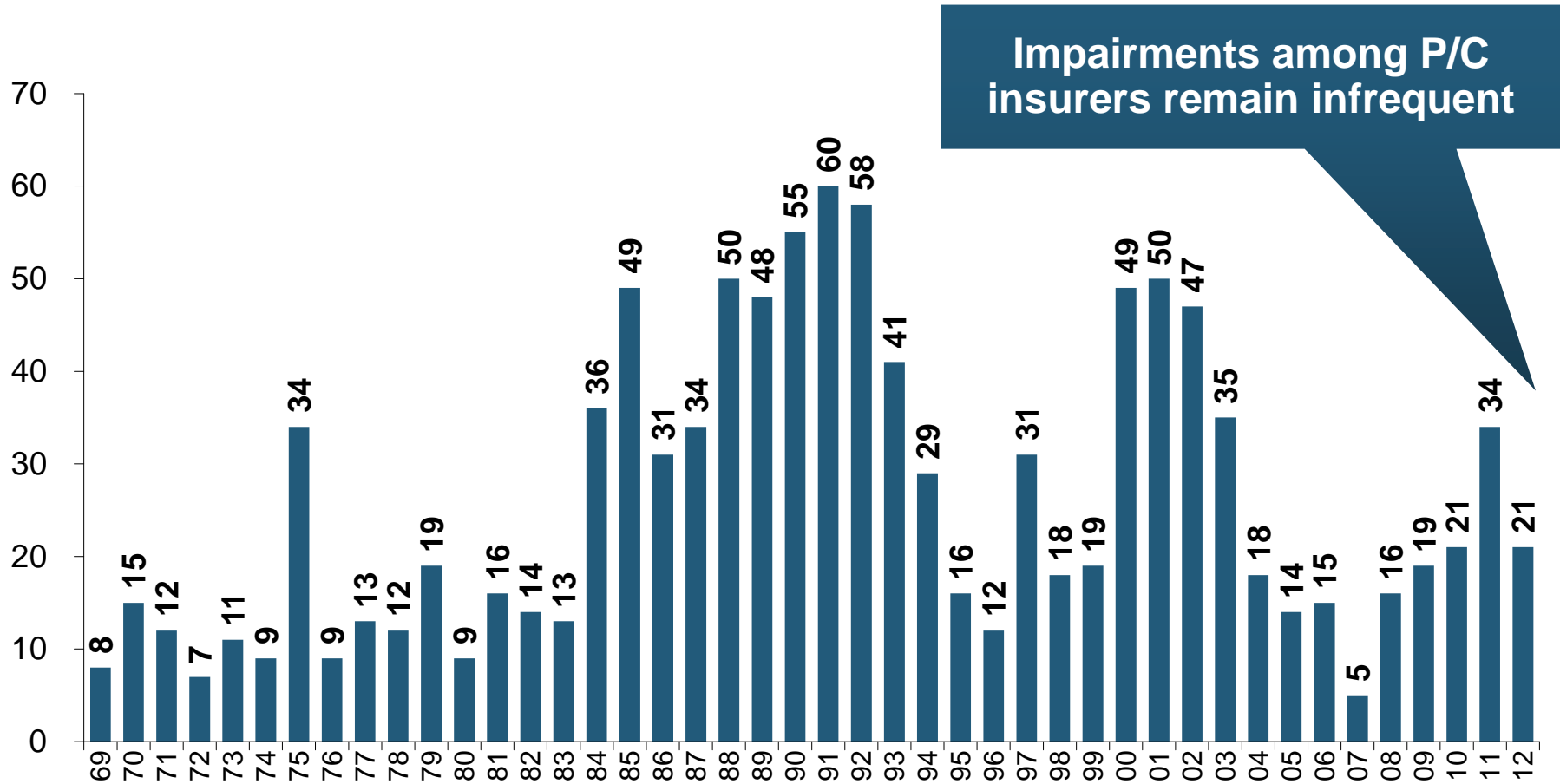
Global Financial Crises & Global Systemic Risk...There's More...

- **IAIS Also Plans to Develop the First-Ever Risk-Based Global Insurance Capital Standards by 2016**
- **Would be Tested in 2017-2018; Implemented in 2019**
- **Would Be Included as Part of ComFrame and Apply to Internationally Active Insurance Groups (IAIGs): ~50 IAIGs Designations Likely**
- **While Flexibility May Exist within the Standards, Doubts in the US Are Likely to Be Strong**
 - ◆ **Concern that the standards may be bank-centric**
 - ◆ **Questions as to whether such standards are even needed:**
 - ◆ ***“Although US state insurance regulators continue to have doubts about the timing, necessity and complexity of developing a global capital standard given regulatory differences around the globe, we intend to remain fully engaged in the process to ensure that any development augments the strong legal entity capital requirements in the US that have provided proven and tested security for US policyholders and stable insurance markets for consumers and industry.” --NAIC President Ben Nelson (P/C 360, Oct. 16, 2013)***

Financial Strength & Underwriting

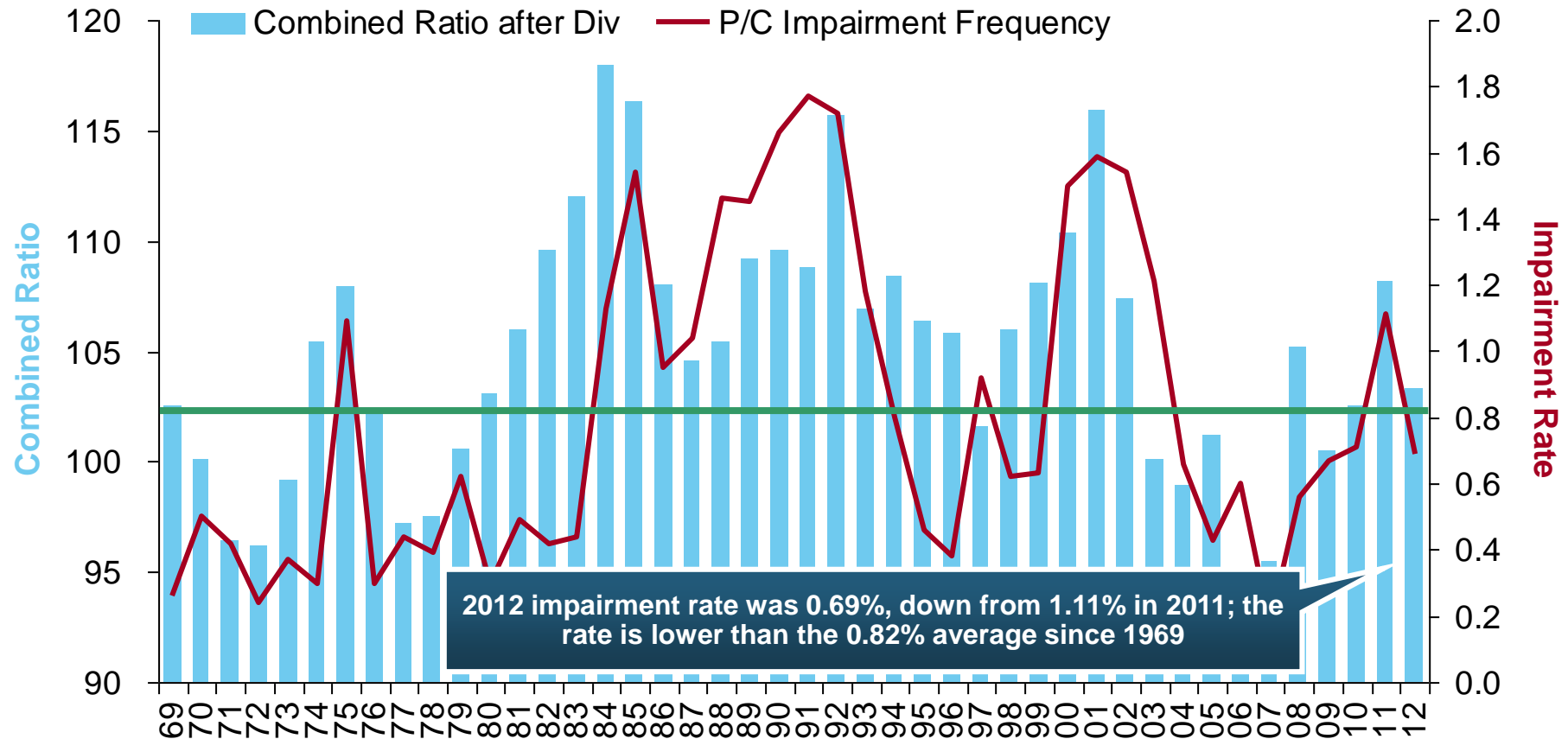
**Cyclical Pattern is P-C Impairment
History is Directly Tied to
Underwriting, Reserving & Pricing**

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

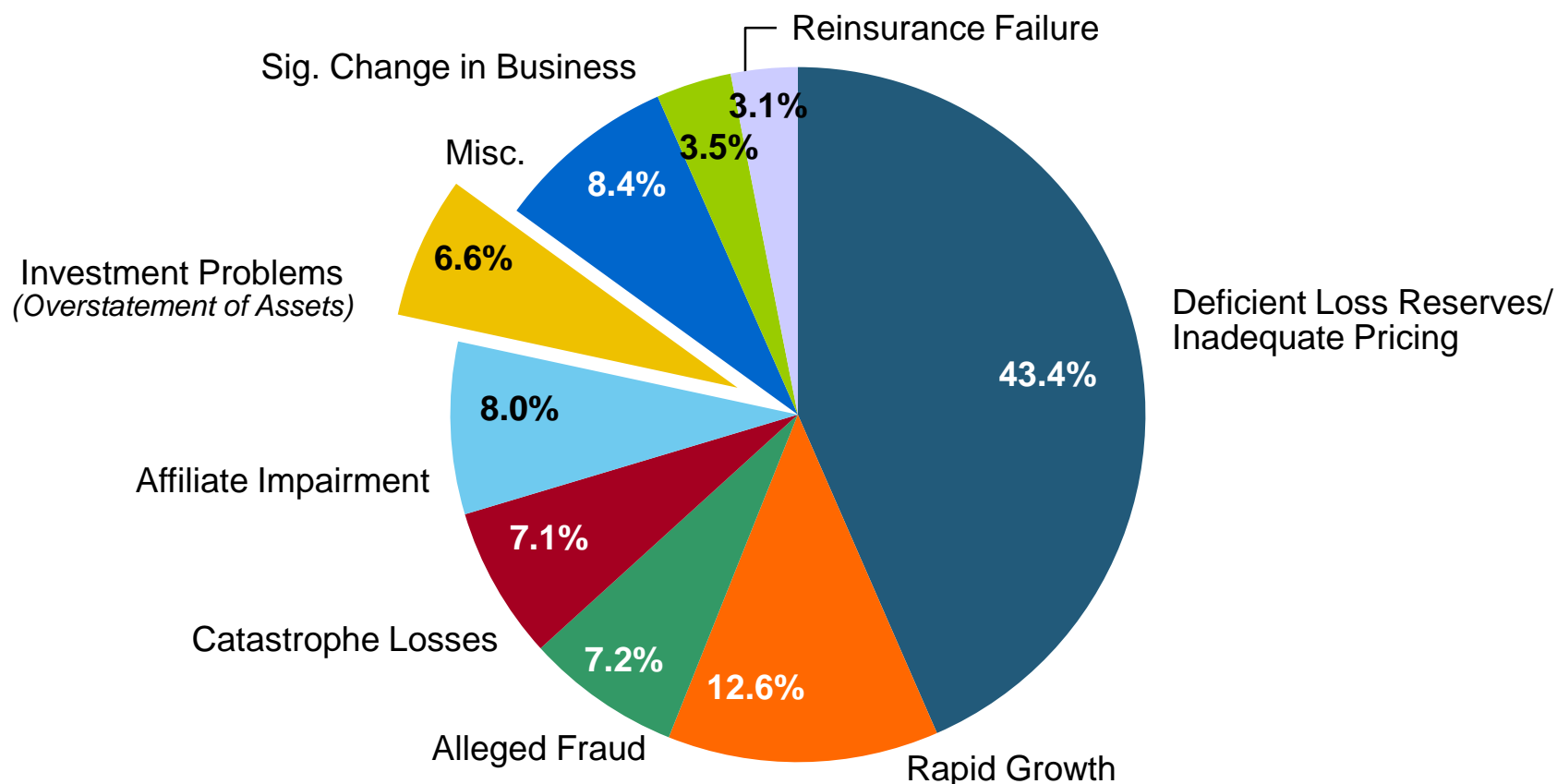
P/C Insurer Impairment Frequency vs. Combined Ratio, 1969-2012



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, 1969–2012

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



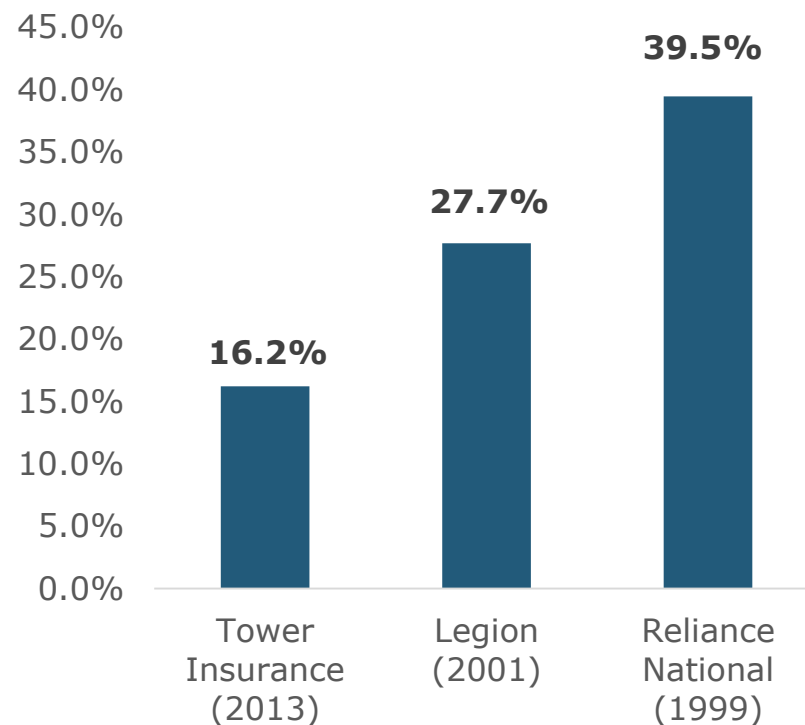
Source: A.M. Best Special Report "Pace of P/C Impairments Slowed in 2012; Auto Writers, RRGs Continued to Struggle," June 2013; Insurance Information Institute.

Rapid Growth 'A Leading Cause' of Impairment

“The leading causes of impairment are deficient loss reserves (inadequate pricing) and **rapid growth**, together comprising more than 50 percent of annual impairments.”

- A.M. Best, 2013

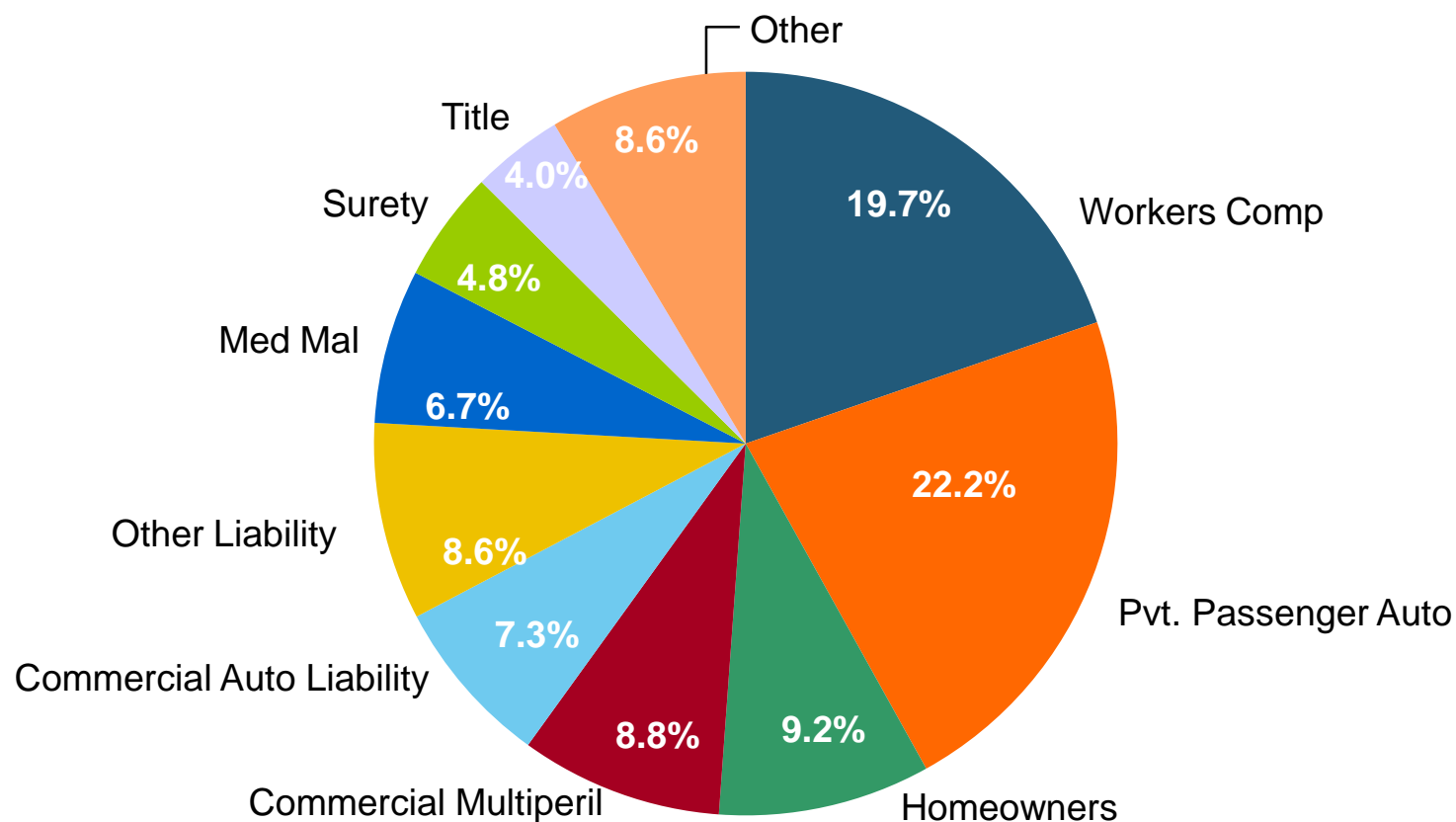
Annualized Growth in
Final Years



Source: SNL Financial, Insurance Information Institute.

Top 10 Lines of Business for US P/C Impaired Insurers, 2000–2012

Workers Comp and Pvt. Passenger Auto Account for More Than 40 Percent of the Impaired Insurers Since 2000



Source: A.M. Best Special Report "Pace of P/C Impairments Slowed in 2012; Auto Writers, RRGs Continued to Struggle," June 2013; Insurance Information Institute.

Insurance Information Institute Online:

www.iii.org

*Thank you for your time
and your attention!*

Twitter: twitter.com/bob_hartwig