



The Global Economy, Rising Risk and Marine Insurance Markets

Risk and Reward in a Troubled World

Houston Marine Insurance Seminar

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- **Modest growth will continue in 2014 (~ 4.0% DPW in US)**
 - ◆ Exposure growth tied primarily to overall GDP growth/key sector drivers
 - ◆ Rates remain marginally in positive territory though more concern for commercial lines in late 2014 and into 2015
 - ◆ Reinsurance pricing under pressure—more so for property risks
- **Underlying loss cost trends remain manageable**
- **Very well capitalized (record)**
- **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, International Regulation; Ex-Im Bank

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



Risk & Insurance

U.S. and Global Perspective

**Marine Insurance Is Very Sensitive to
the Global Economic and Political
Environment**

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

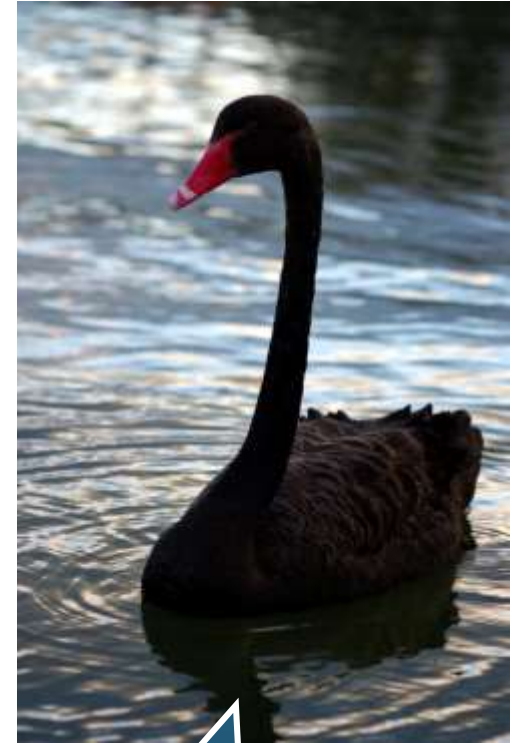


While risks can be broadly categorized, none are mutually exclusive



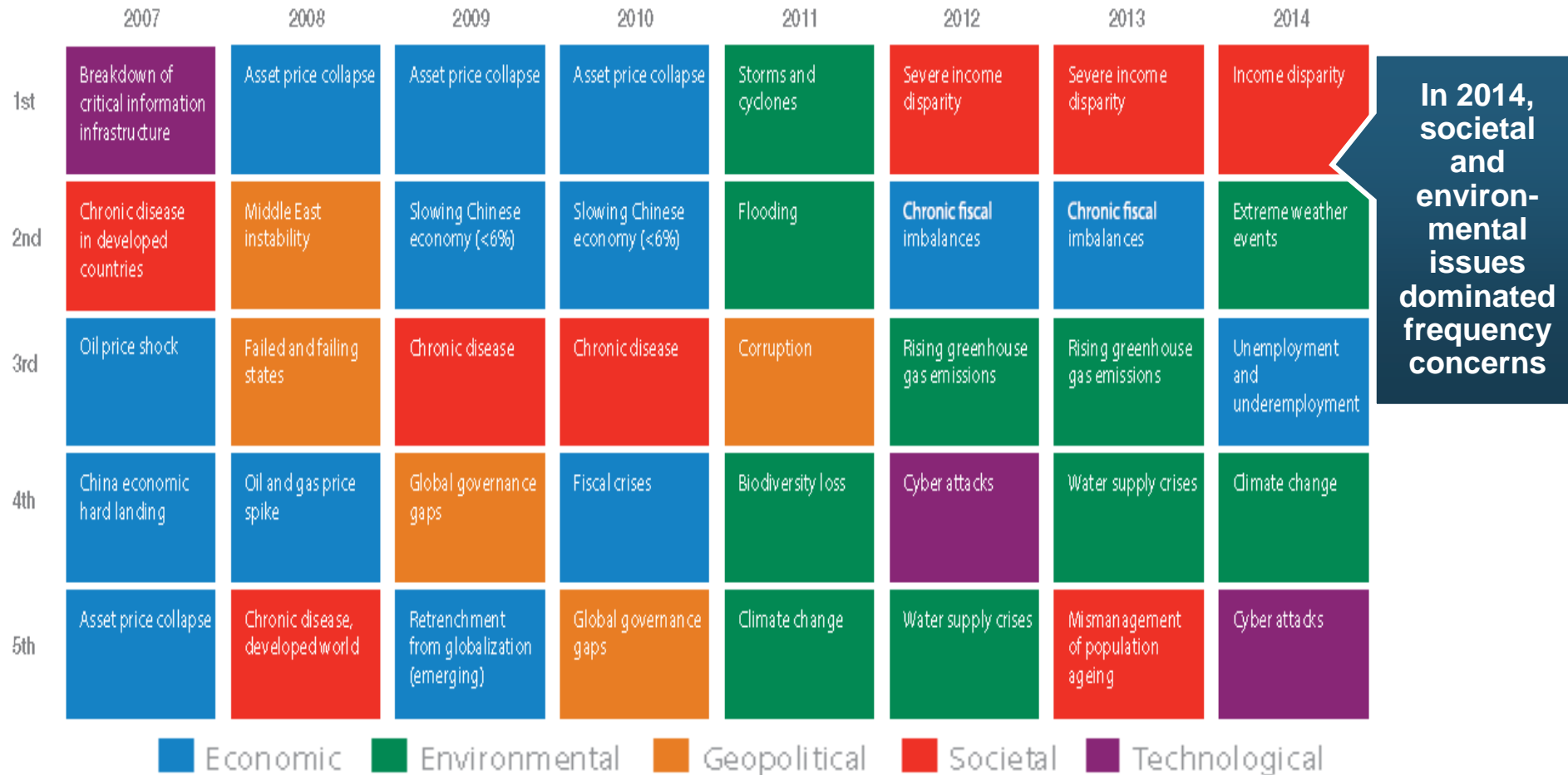
Multitude of Exogenous Factors Influence Growth, Performance & Cyclicity

- Economic Issues in US, Europe
- Weakness in China/Emerging Economies
- Political Upheaval in the Ukraine, Middle East
 - ◆ Argentina, Venezuela, Thailand, Syria, Iraq
 - ◆ → Trade sanctions (e.g., Iran, Russia)
- Political Gridlock in the US, Europe, Japan
- Fiscal/Monetary Imbalances/Low Interest Rates
- Unemployment
- Resurgent Terrorism Risk: ISIS & Other Groups
- Cyber Attacks (theft, espionage, terrorism)
- Ebola Crisis
- Sabre Rattling (e.g., US-China, Russia-Ukraine)
- Separatist Fever (UK/Scotland, Spain)
- Severe Natural Disaster Losses
- Climate Change/Sea Level Rise
- Environmental Degradation
- (Over)Regulation: Systemic Risk?



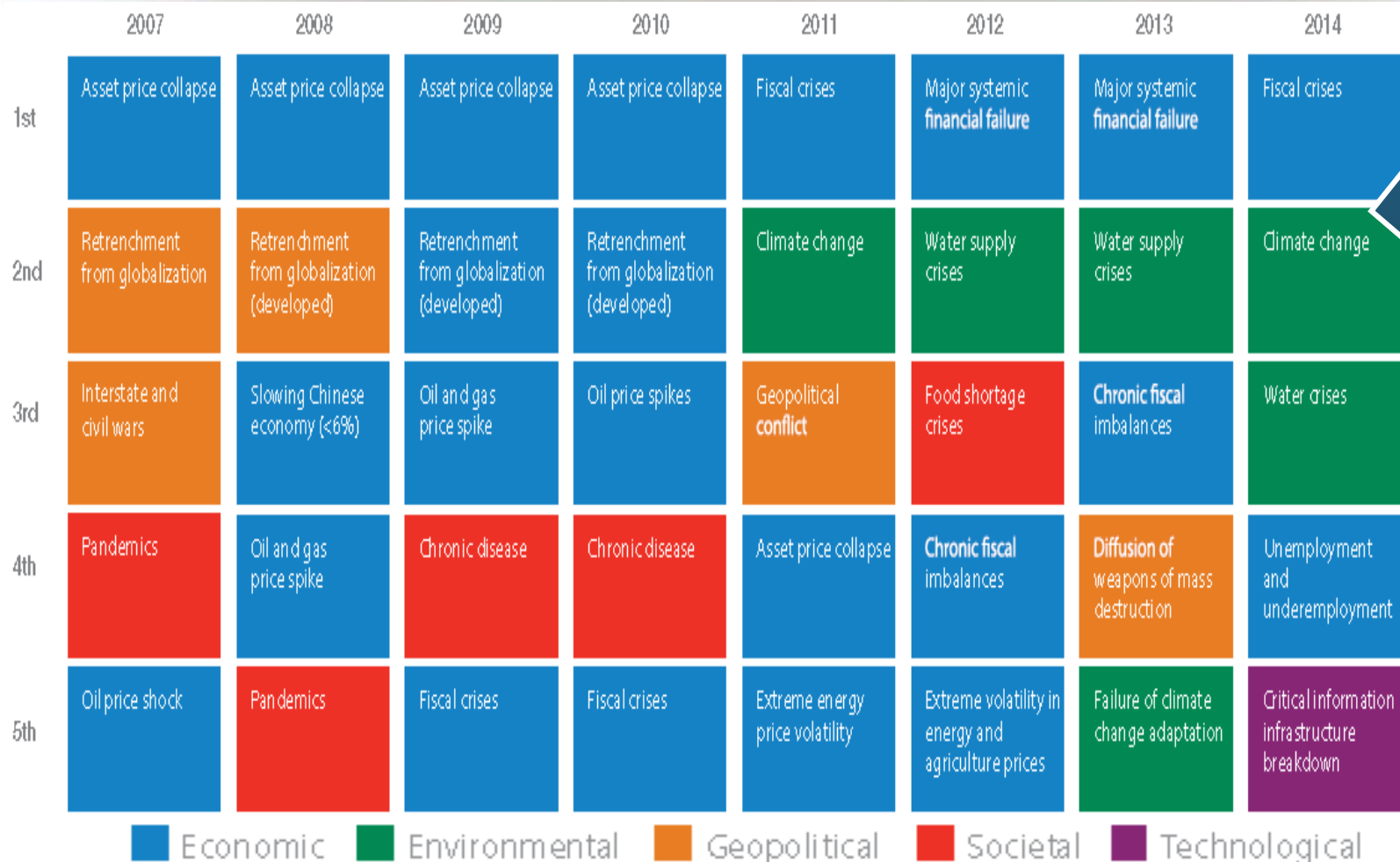
Are “Black Swans”
everywhere or
does it just seem
that way?

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

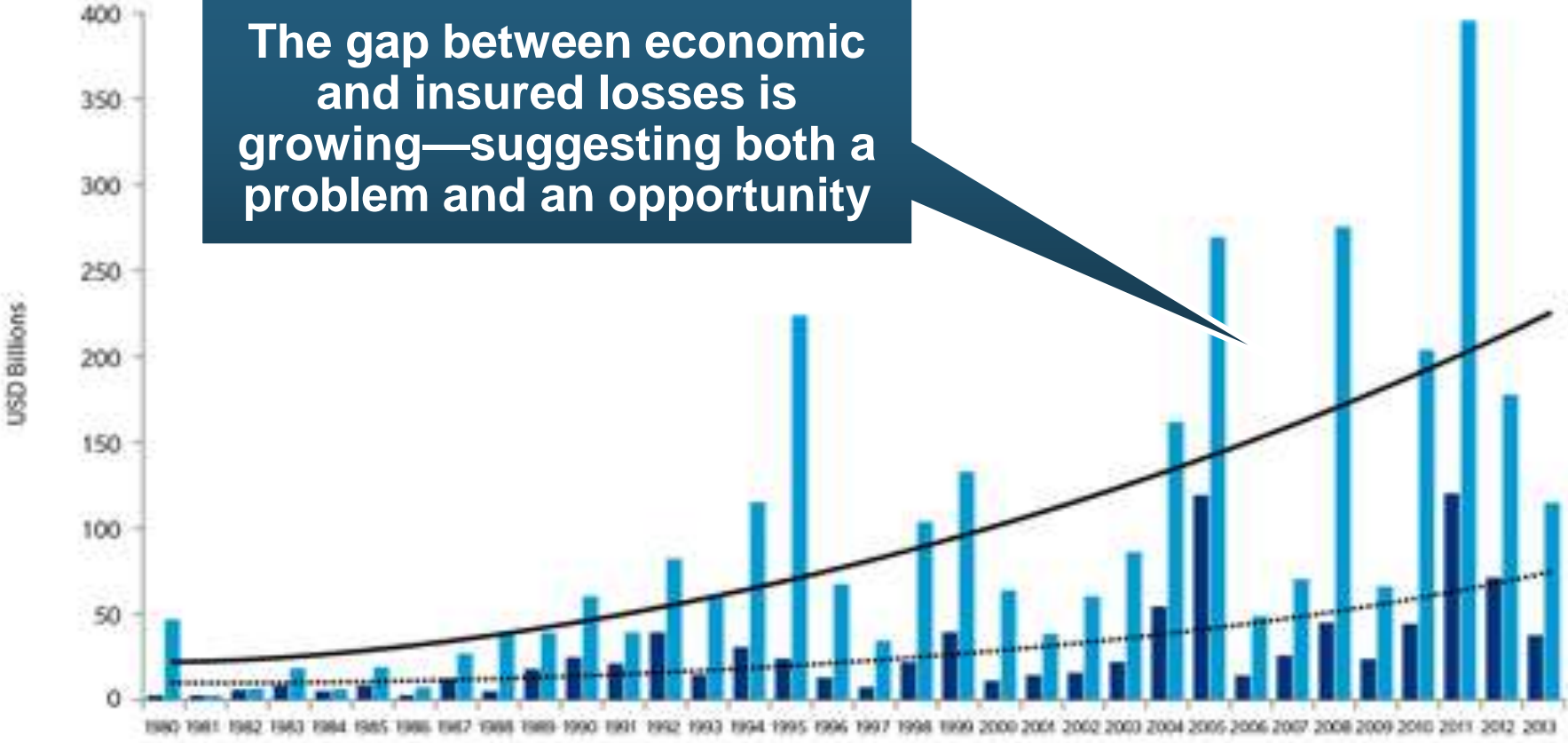


In 2014, economic and environmental issues dominated severity concerns

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

Gap Between Economic and Insured Losses: 1980—2013

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



Source: Guy Carpenter, Swiss Re

- Insured Losses (at 2012 values)
- Economic Losses (at 2012 values)
- - - - - Insured Losses Trend
- Economic Losses Trend

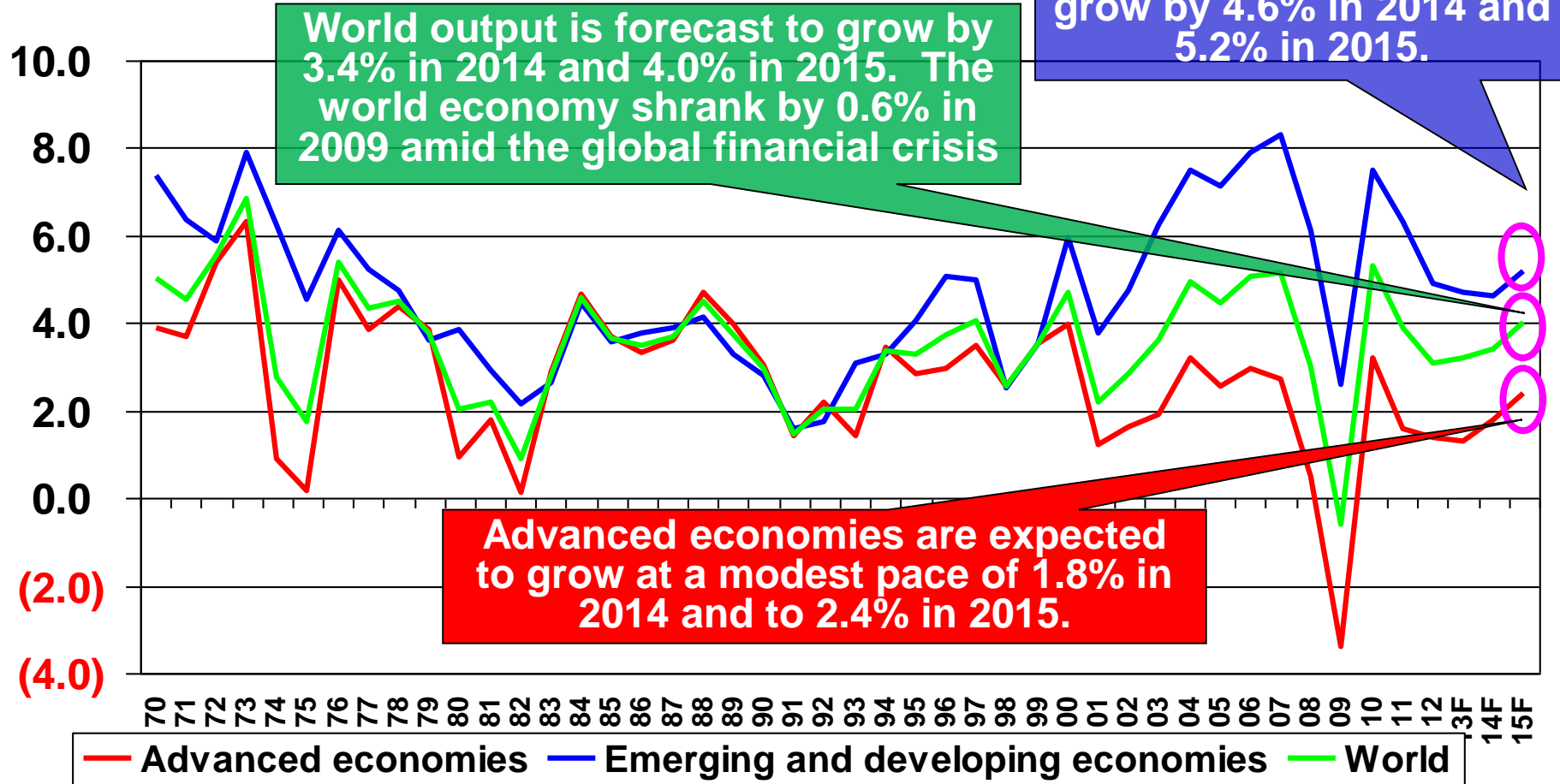
Globalization: The Global Economy Creates and Transmits Cycles & Risks

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

Emerging vs. “Advanced” Economies

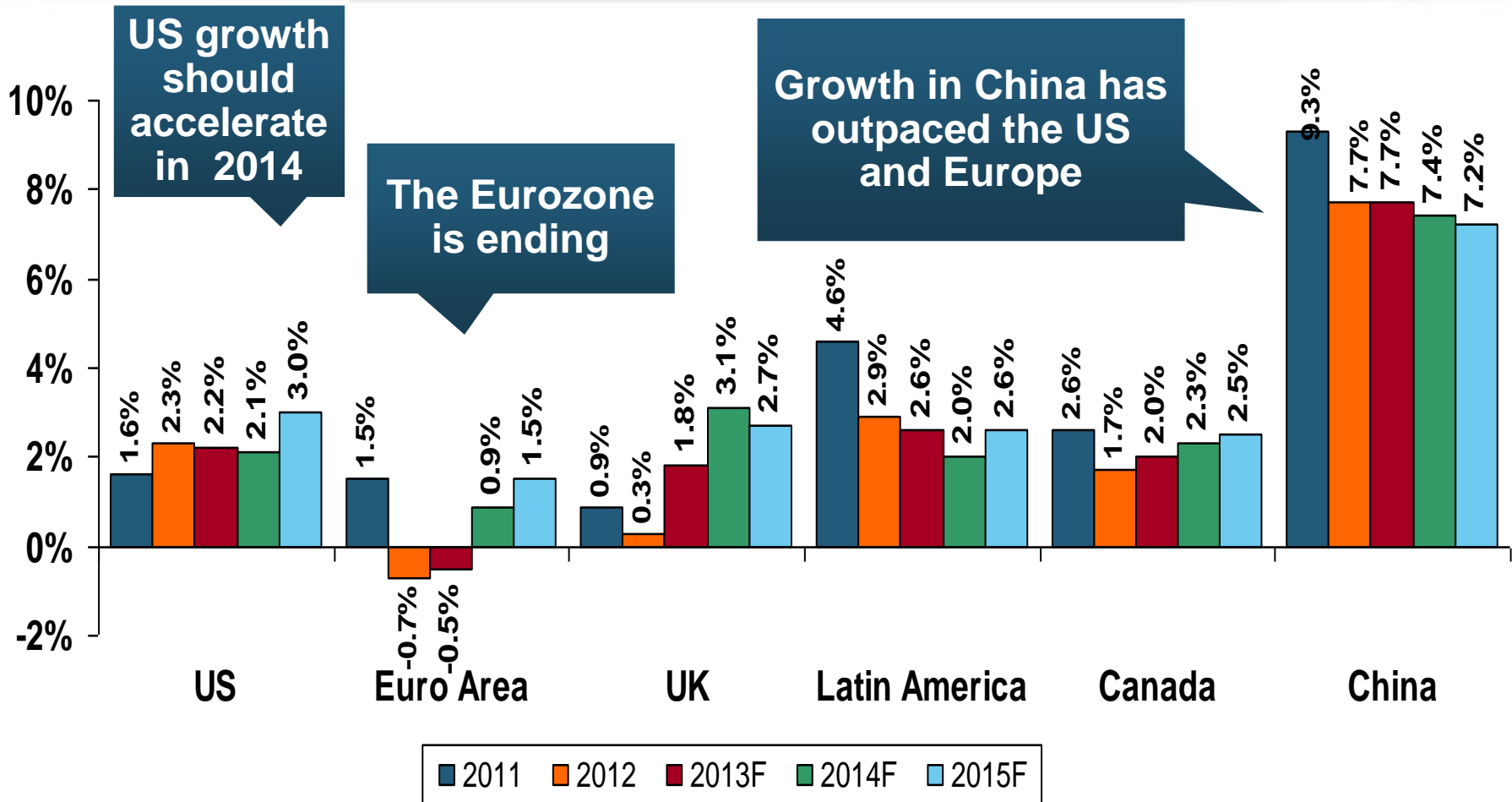
GDP Growth: Advanced & Emerging Economies vs. World, 1970-2015F

GDP Growth (%)



Source: International Monetary Fund, *World Economic Outlook*, July 2014; Insurance Information Institute.

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

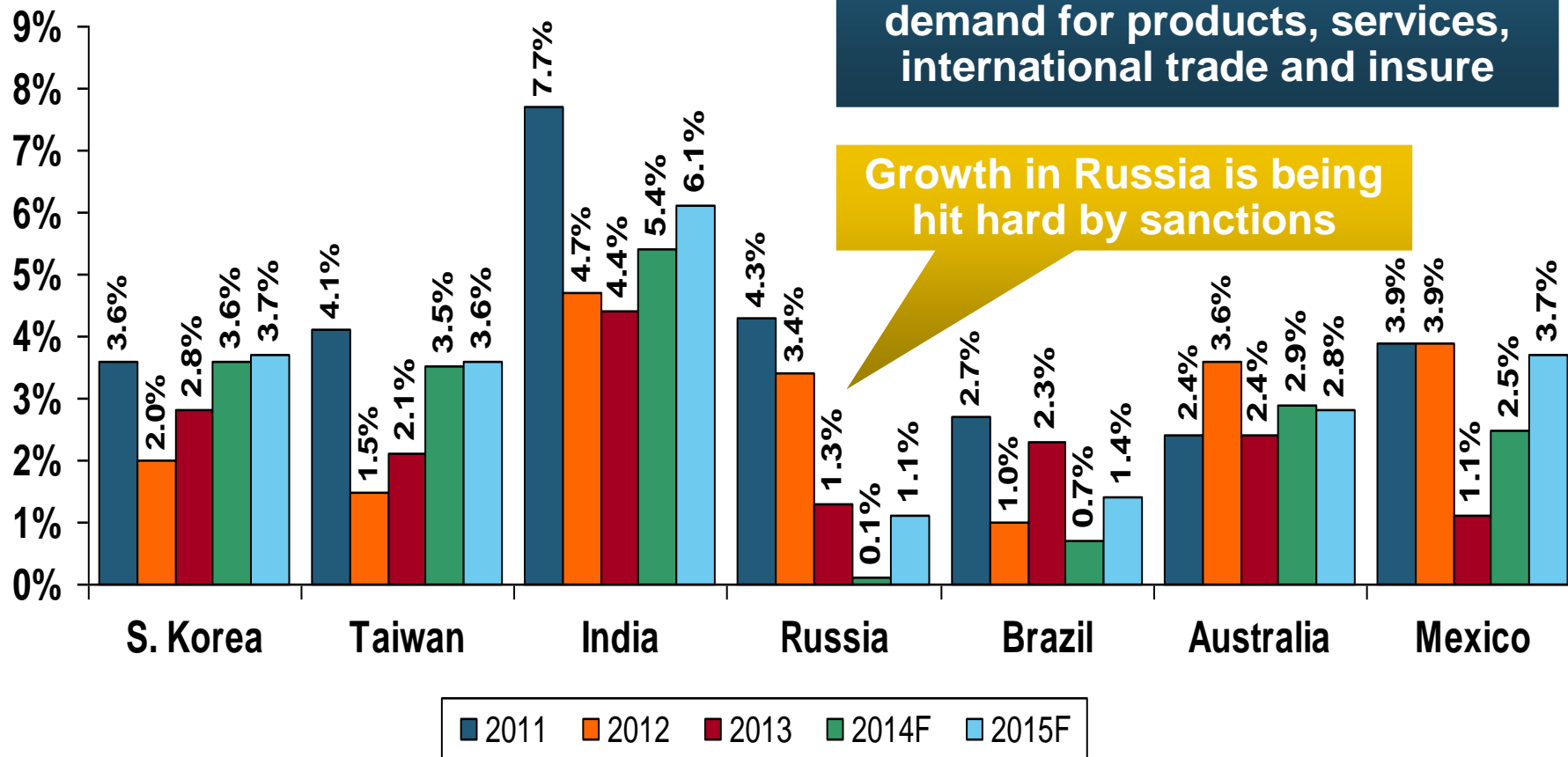


Growth Prospects Vary Widely by Region: Growth Returns to Most Areas Even as China Slows; Some strengthening in Latin America

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

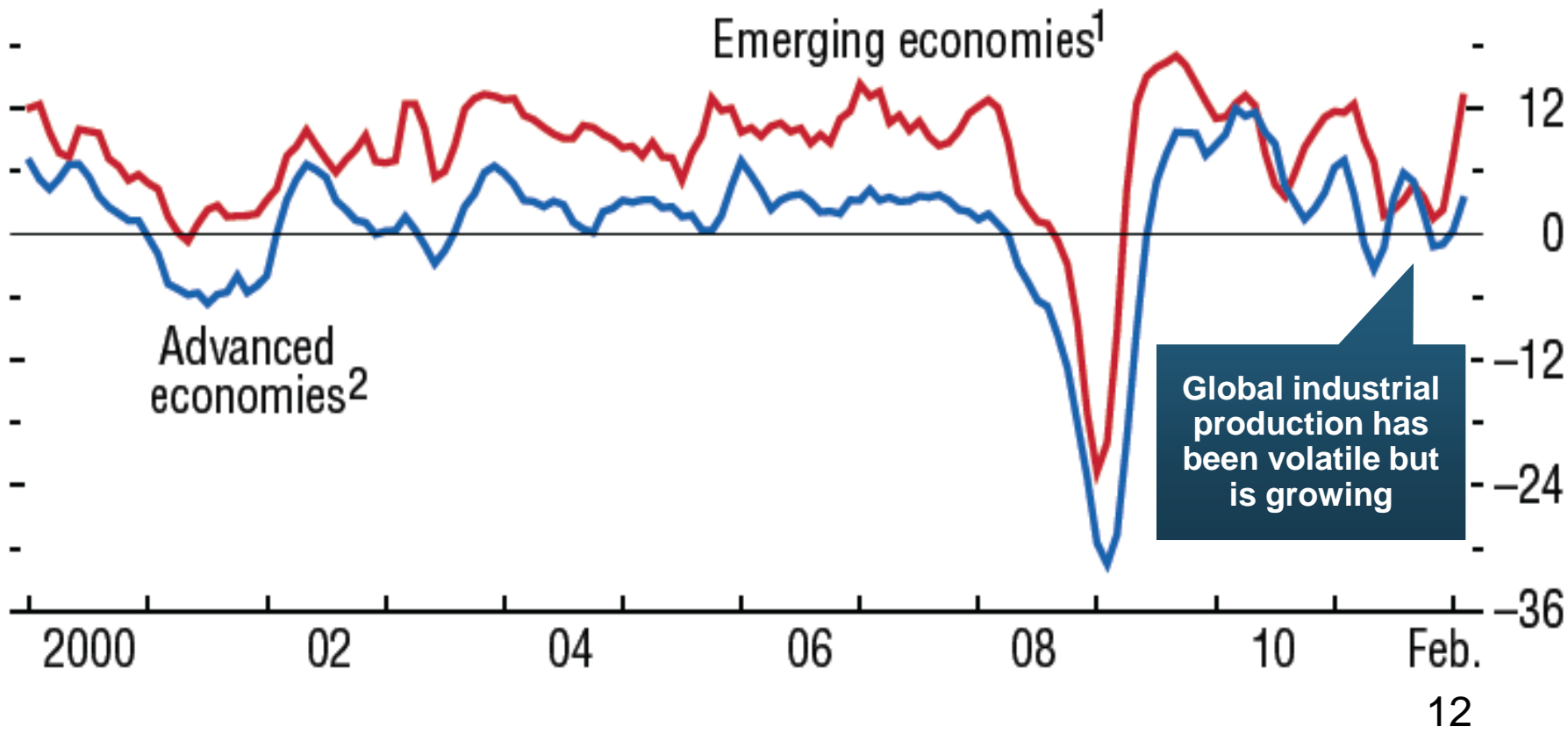
Strong economies in smaller industrialized nations will bolster demand for products, services, international trade and insure

Growth in Russia is being hit hard by sanctions



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

Global Industrial Production (2000-Feb. 2012)



Source: IMF, World Economic Outlook, April 2012; Insurance Information Institute.

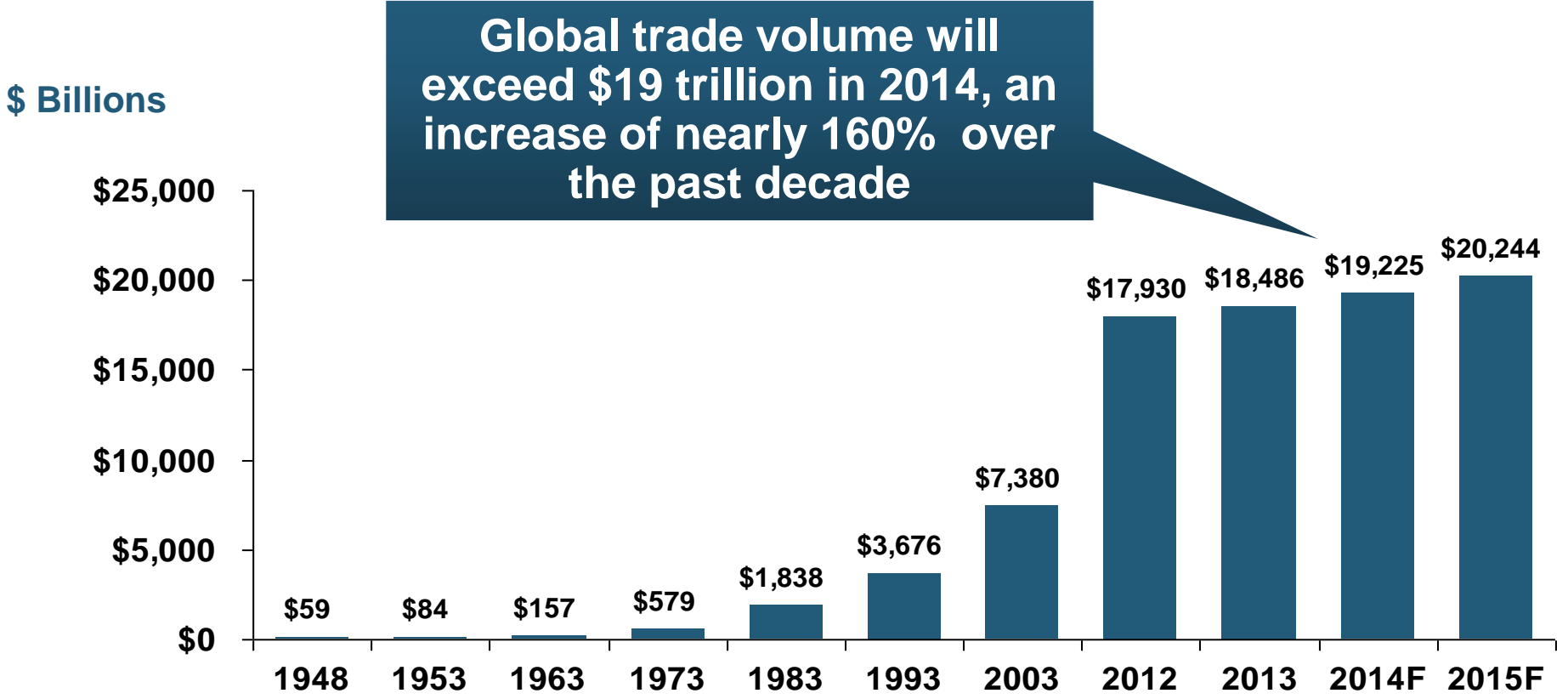
World GDP and Industrial Production (2005-Feb. 2015F)

Global industrial production should continue to rise as should exports and imports of manufactured goods



Source: IMF, World Economic Outlook, April 2014; Insurance Information Institute.

World Trade Volume: 1948—2015F

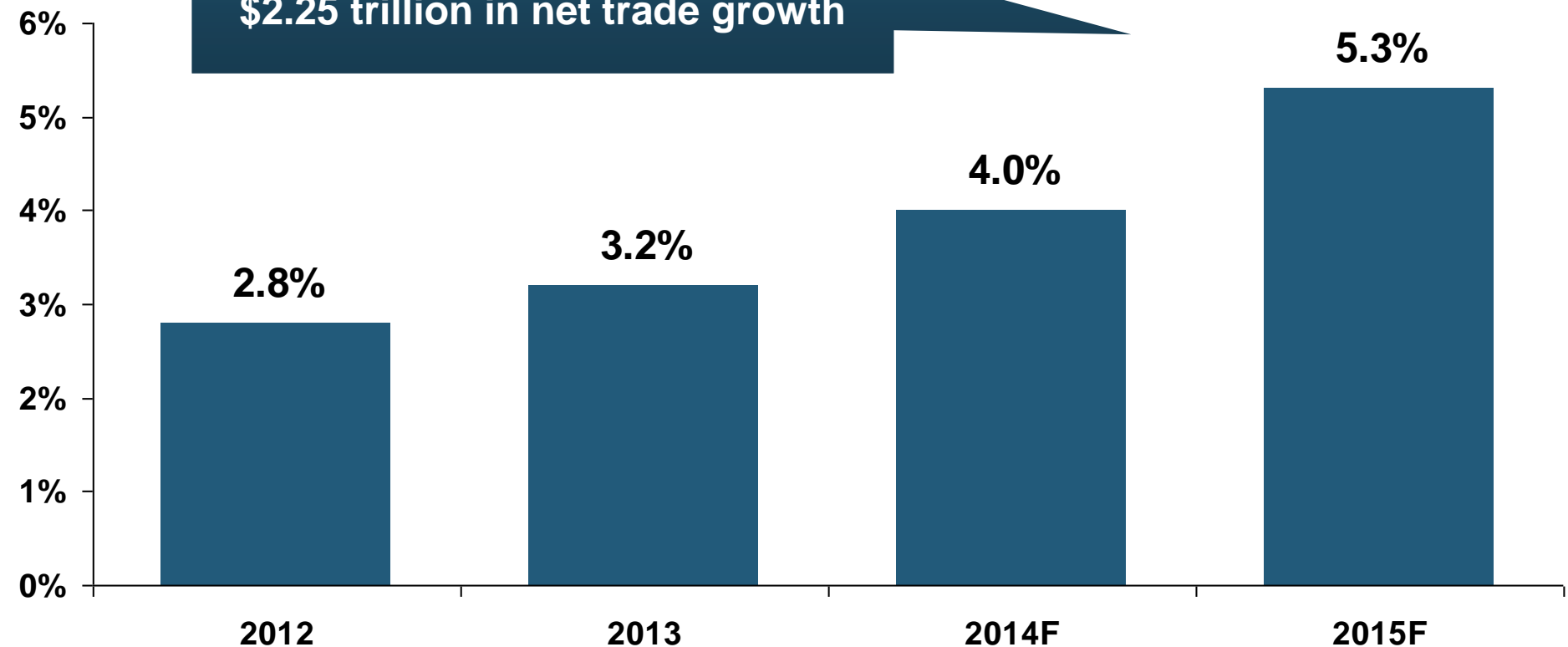


Insurance Regulation Will Necessarily Become More Transnational, Following Patterns of Global Economic Growth, the Creation of New Insurable Exposures and International Capital Flows

Sources: World Trade Organization data through 2012 from *International Trade Statistics 2013*; Insurance Information Institute estimates and forecasts for 2013-2015 based on IMF *World Economic Outlook* forecasts as of July 2014.

World Trade Volume Growth*, 2012 – 2015F

World trade volume growth is expected to accelerate modestly through 2015—translating into \$2.25 trillion in net trade growth



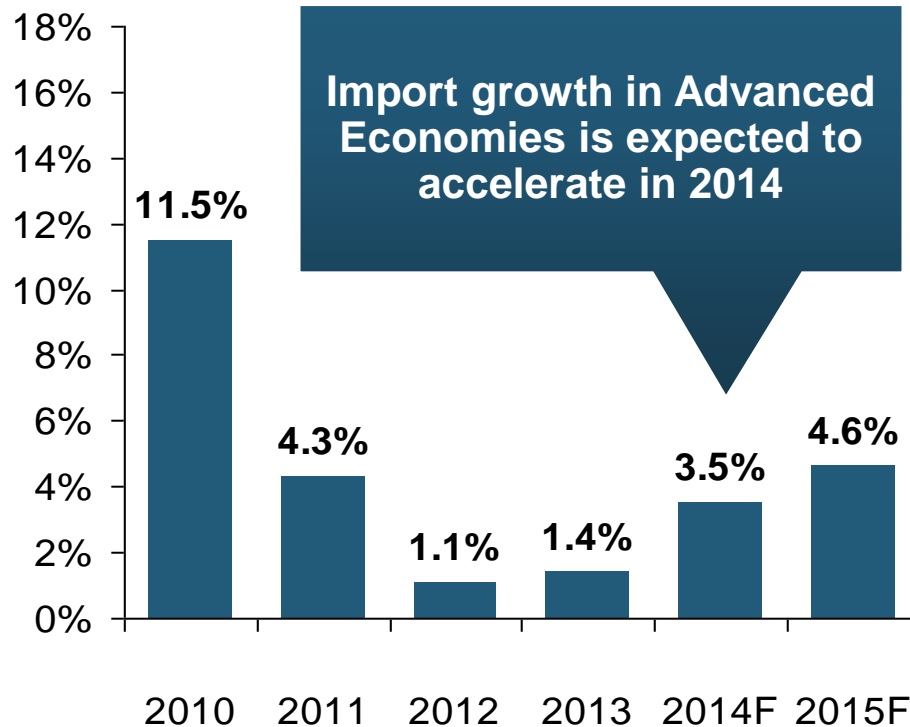
*Goods and services.

Source: International Monetary Fund, *World Economic Outlook*, July 2014; Insurance Information Institute.

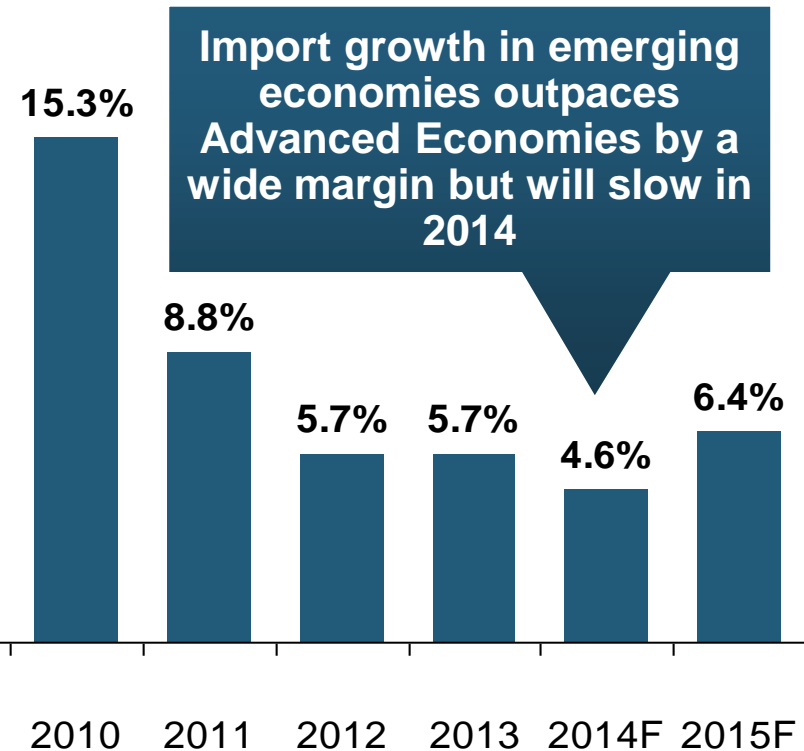
World Trade Volume: IMPORTS 2010 – 2015F

Growth (%)

Advanced Economies



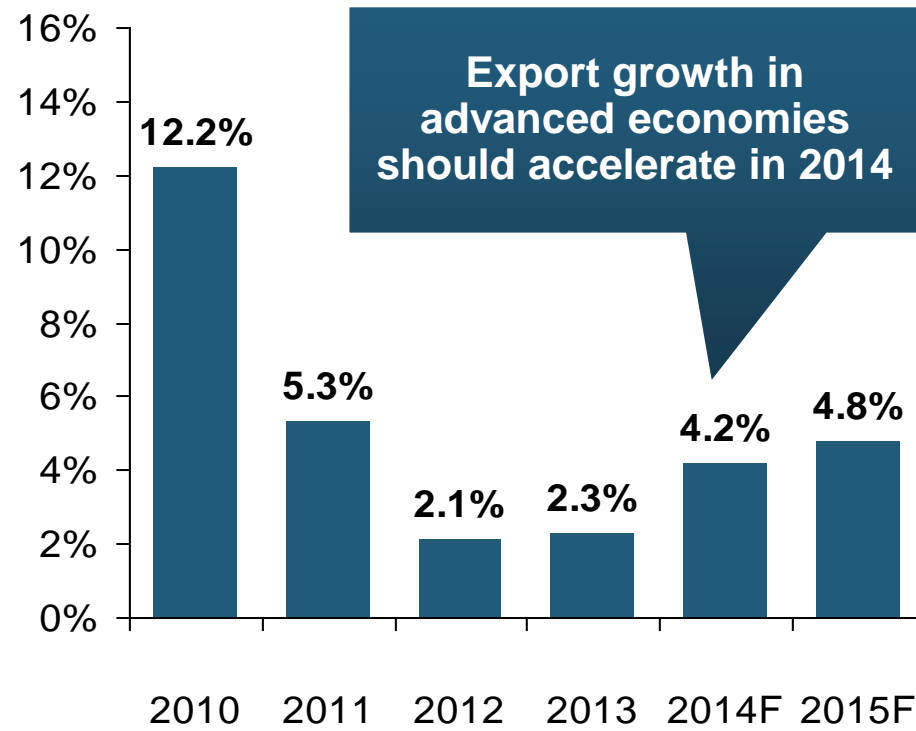
Emerging Economies



World Trade Volume: EXPORTS 2010 – 2015F

Growth (%)

Advanced Economies

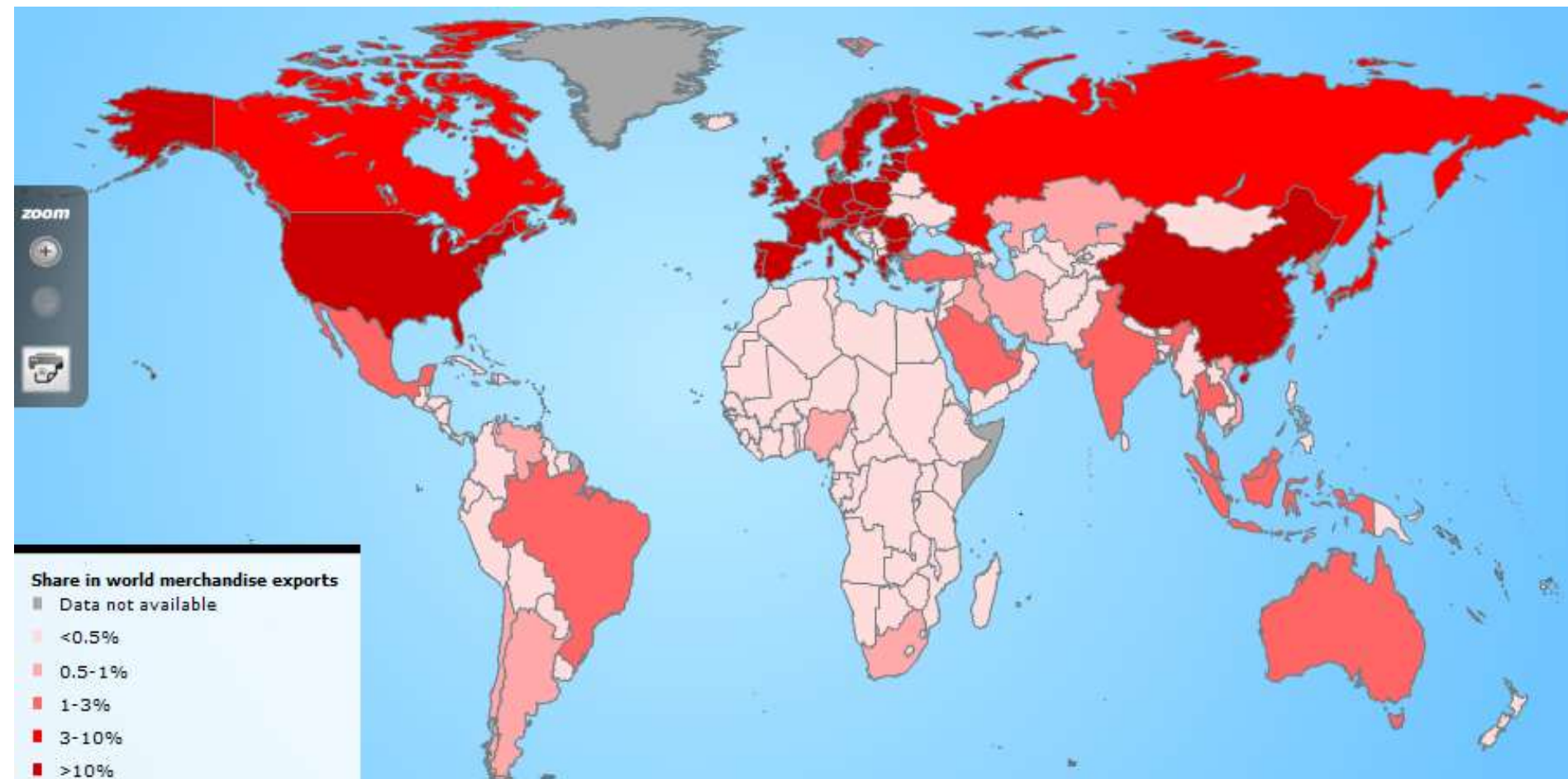


Emerging Economies



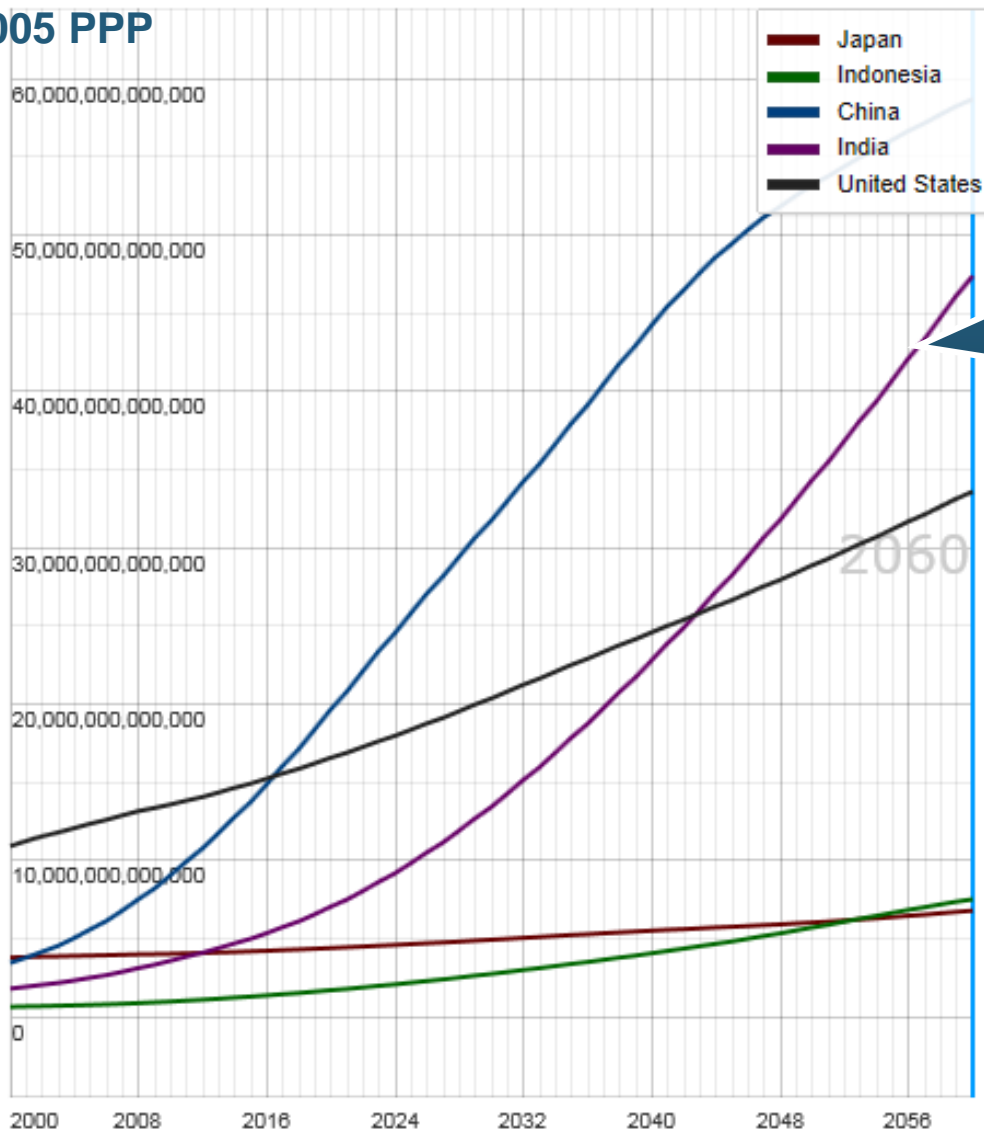
Country Shares of World Merchandise Exports

The US, China, Japan and Western Europe lead the world in merchandise exports



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

\$ 2005 PPP



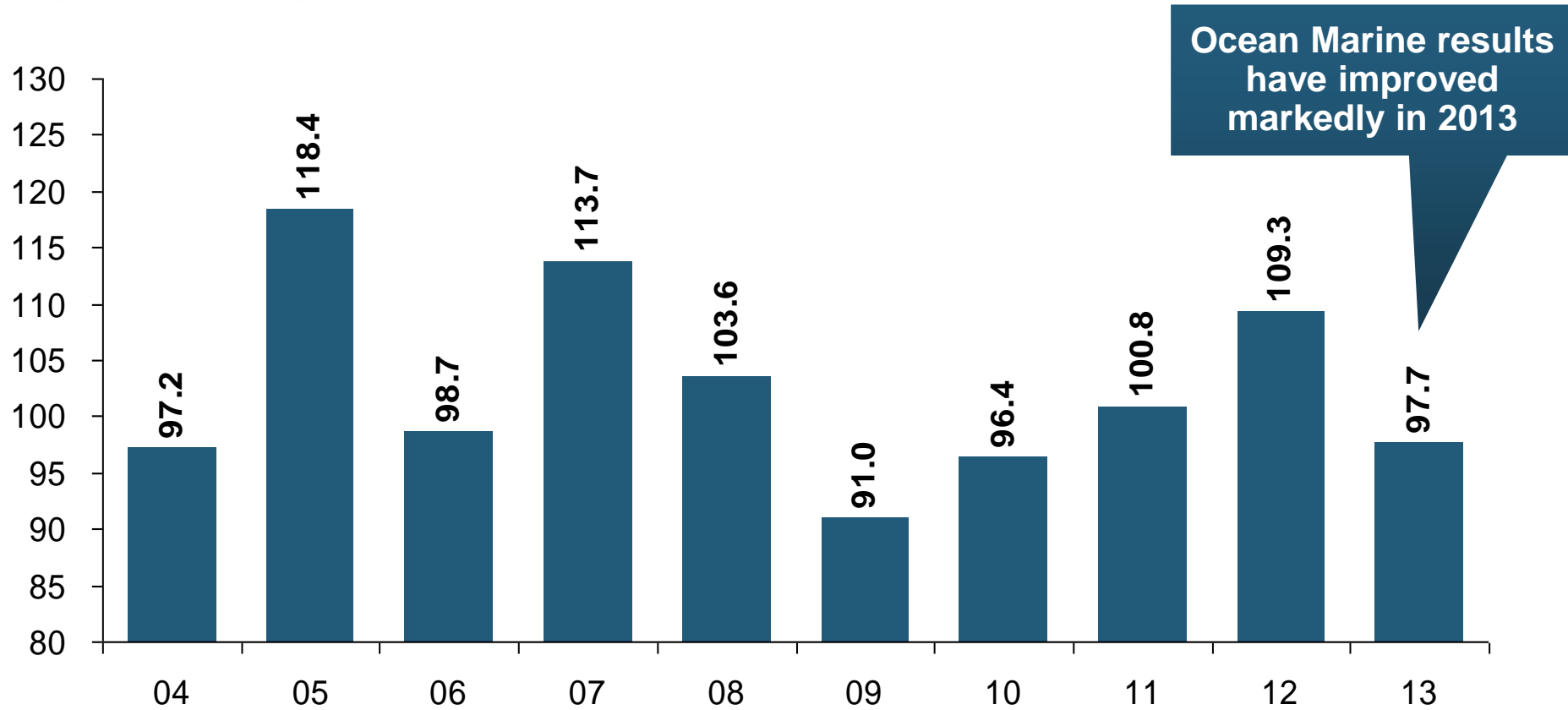
Growth in economic output will be concentrated in certain developing economies such as China and India

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

Ocean Marine Overview

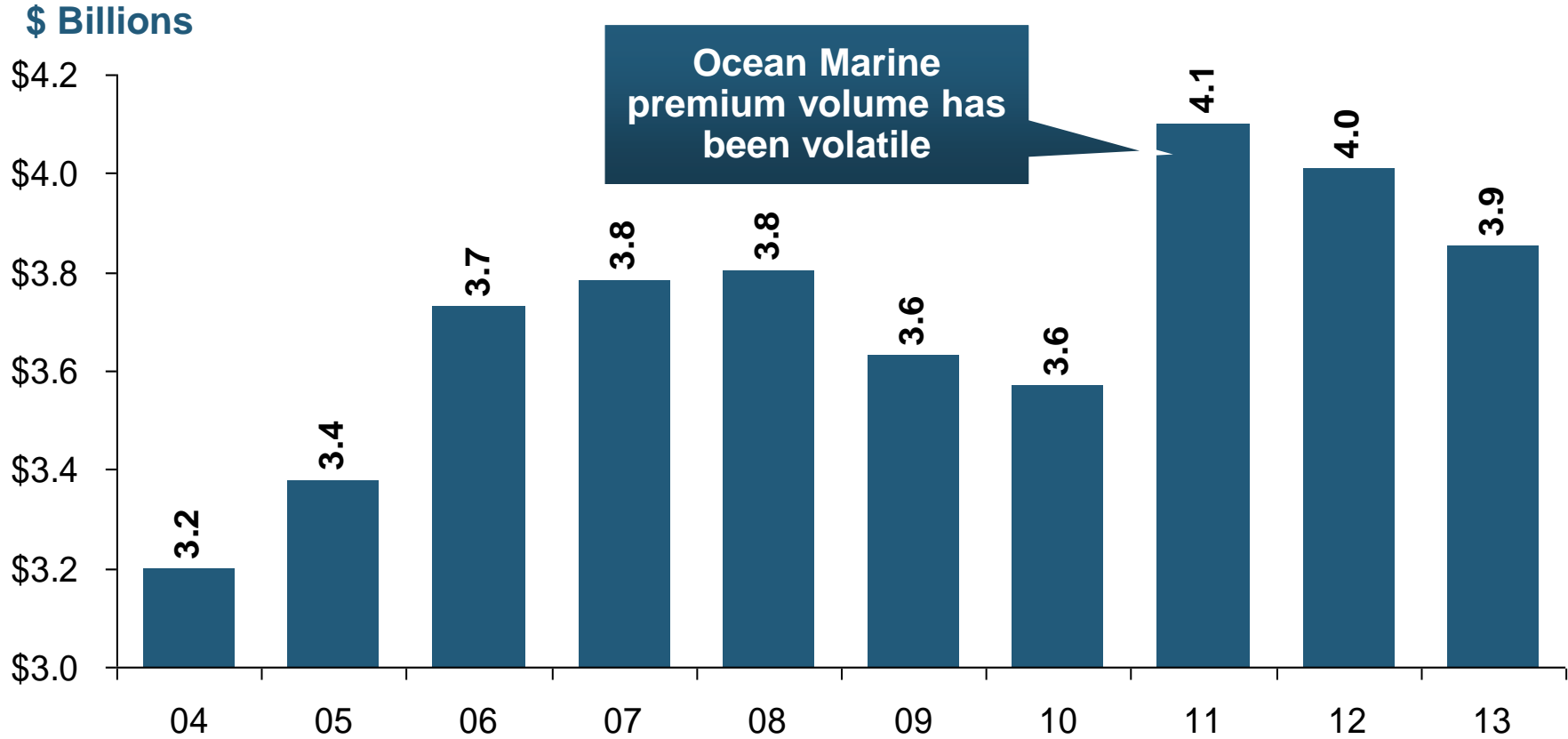
**Vessel Losses Have Dropped though
Underwriting Performance Remains
Volatile**

U.S. Ocean Marine Combined Ratio: 2004–2013



Ocean Marine Results Have Been Quite Volatile Over the Past Decade, with the Combined Ratio Ranging by More than 20 Points

U.S. Ocean Marine Direct Written Premiums: 2004–2013

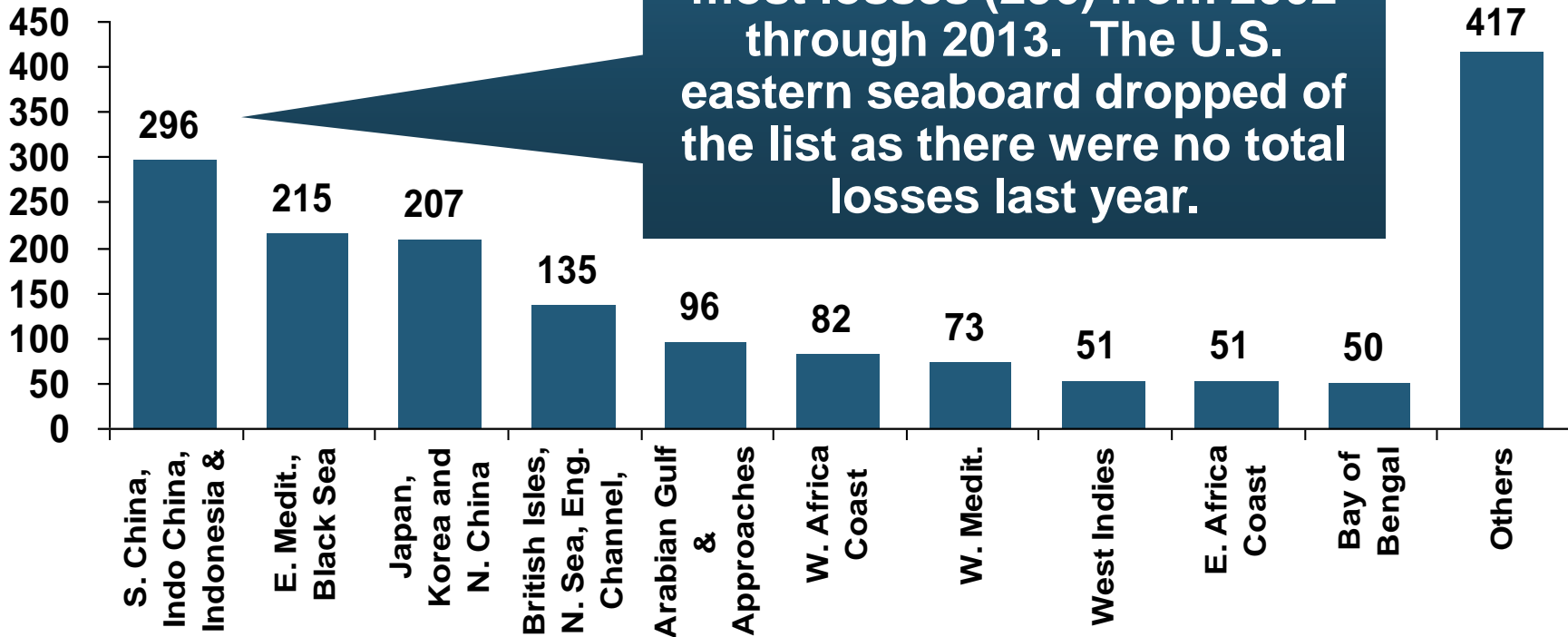


Ocean Marine Premium Volume Fell During the Global Financial Crisis, Increased but Are Now Falling Again

Total Vessel Losses by Top 10 Regions: 2002 – 2013

Total Vessel Losses

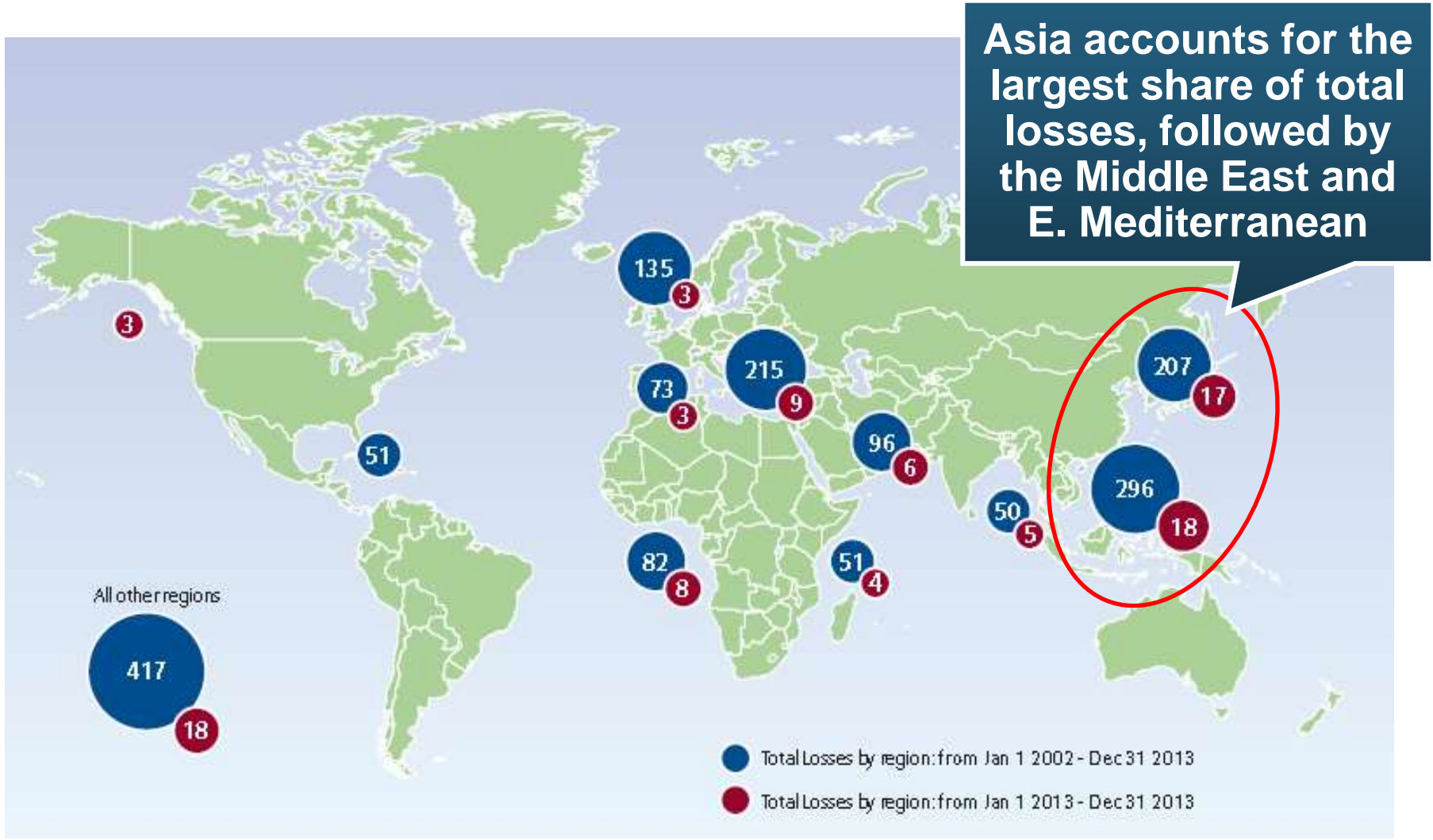
S. China, Indo China, Indonesia and the Philippines was the region that saw the most losses (296) from 2002 through 2013. The U.S. eastern seaboard dropped of the list as there were no total losses last year.



There were 1,673 total vessel losses from 2002 through 2013. The top 10 regions account for about 75% of all total losses

Sources: Lloyd's List Intelligence Casualty Statistics as published in *Safety and Shipping Review 2014*, Allianz Global Corporate and Specialty; Insurance Information Institute.

Vessel Losses by Region, 2002 – 2013



Sources: Lloyd's List Intelligence Casualty Statistics as published in *Safety and Shipping Review 2014*, Allianz Global Corporate and Specialty; Insurance Information Institute.

Ferry Sewol Sinking in South Korea Is One of the Greatest Maritime Tragedies in Recent History

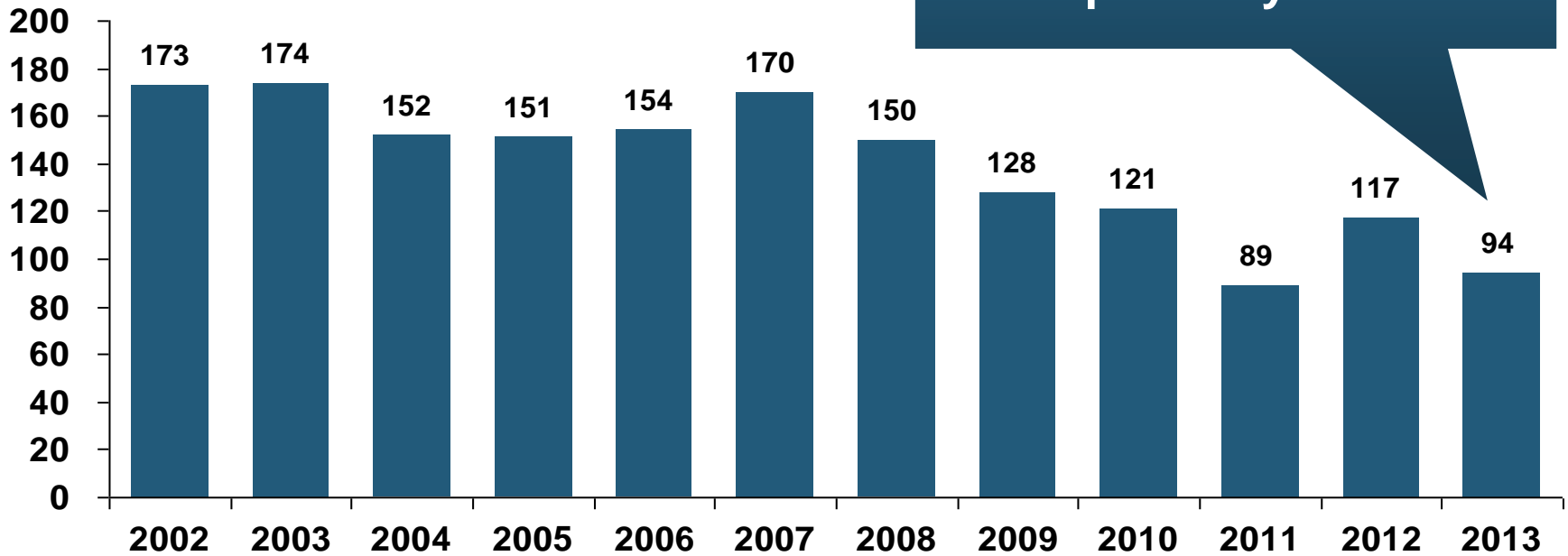


The Sewol and Costa Concordia disasters will impact risk management in the maritime sector



Total Vessel Losses by Year: 2002 – 2013

Total Vessel Losses



While total vessel losses are down sharply over the past decade, the question is whether this trend will continue

Total Vessel Losses by Top 10 Regions: 2013

Total Vessel Losses



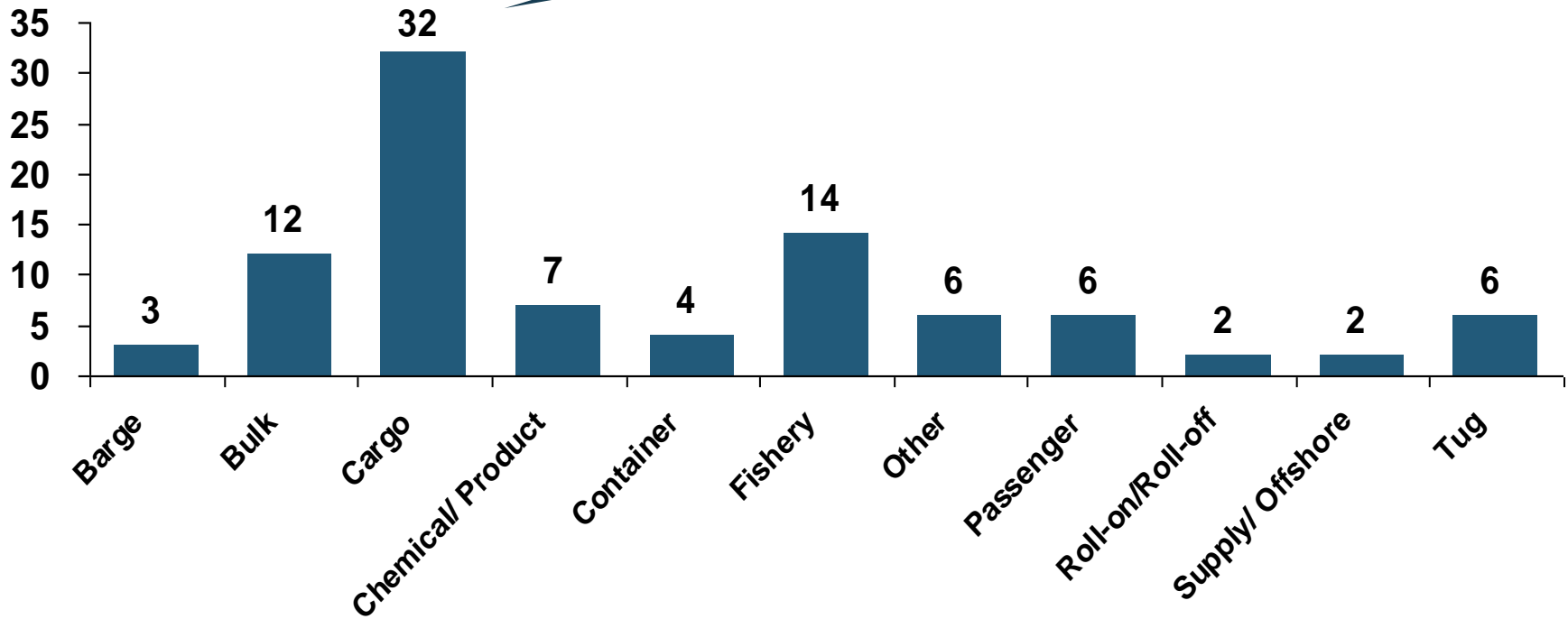
S. China, Indo China, Indonesia and the Philippines was the region that saw the most losses (18) in 2013, but this was down from 29 in 2012

There were 94 total vessel losses in 2013—about 8 per month

Sources: Lloyd's List Intelligence Casualty Statistics as published in *Safety and Shipping Review 2014*, Allianz Global Corporate and Specialty; Insurance Information Institute.

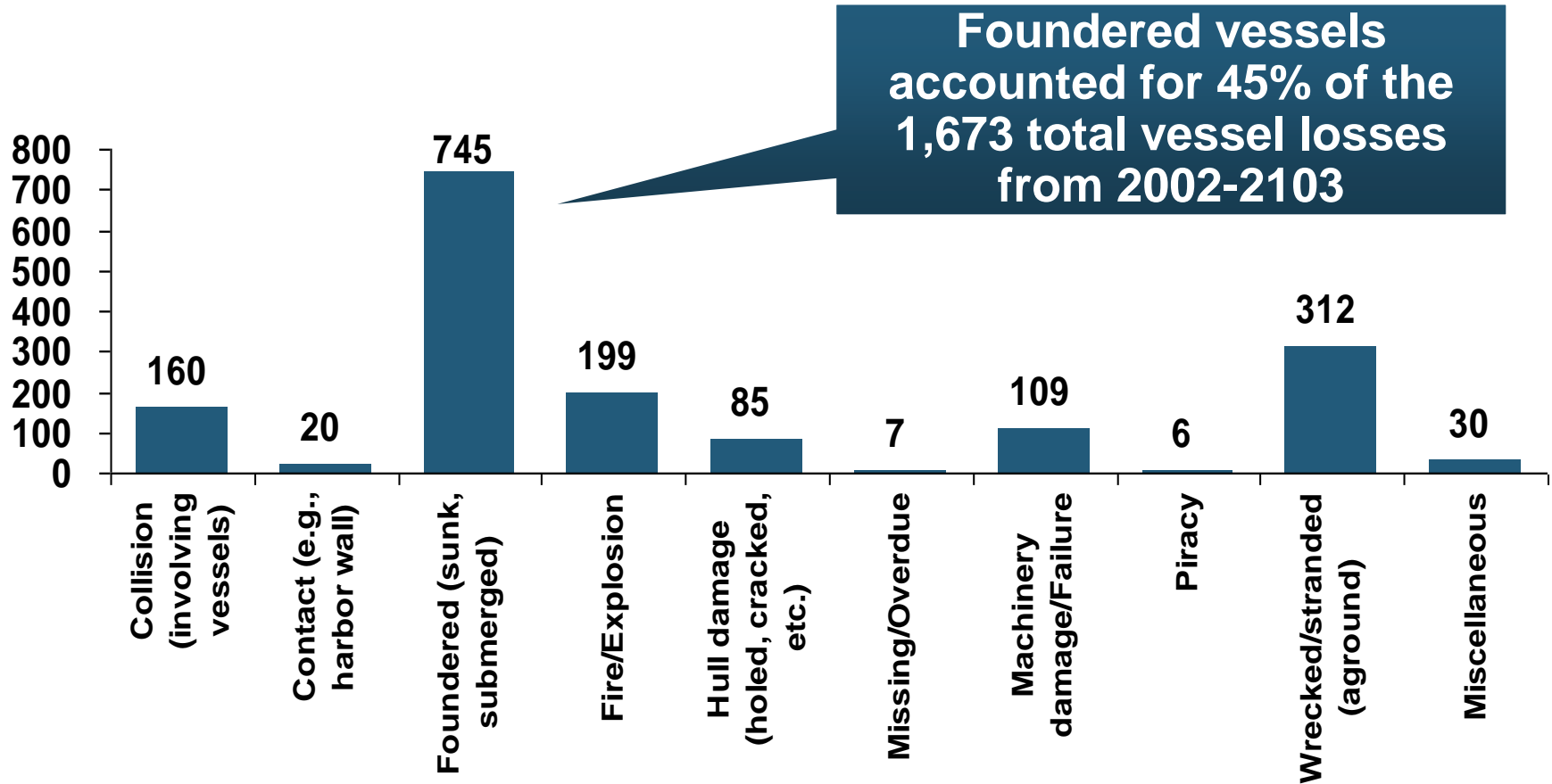
Total Losses by Type of Vessel: 2013

Cargo vessels accounted for more than 1/3 of 94 total vessel losses in 2013



Sources: Lloyd's List Intelligence Casualty Statistics as published in *Safety and Shipping Review 2014*, Allianz Global Corporate and Specialty; Insurance Information Institute.

Causes of Total Losses: 2002 – 2013

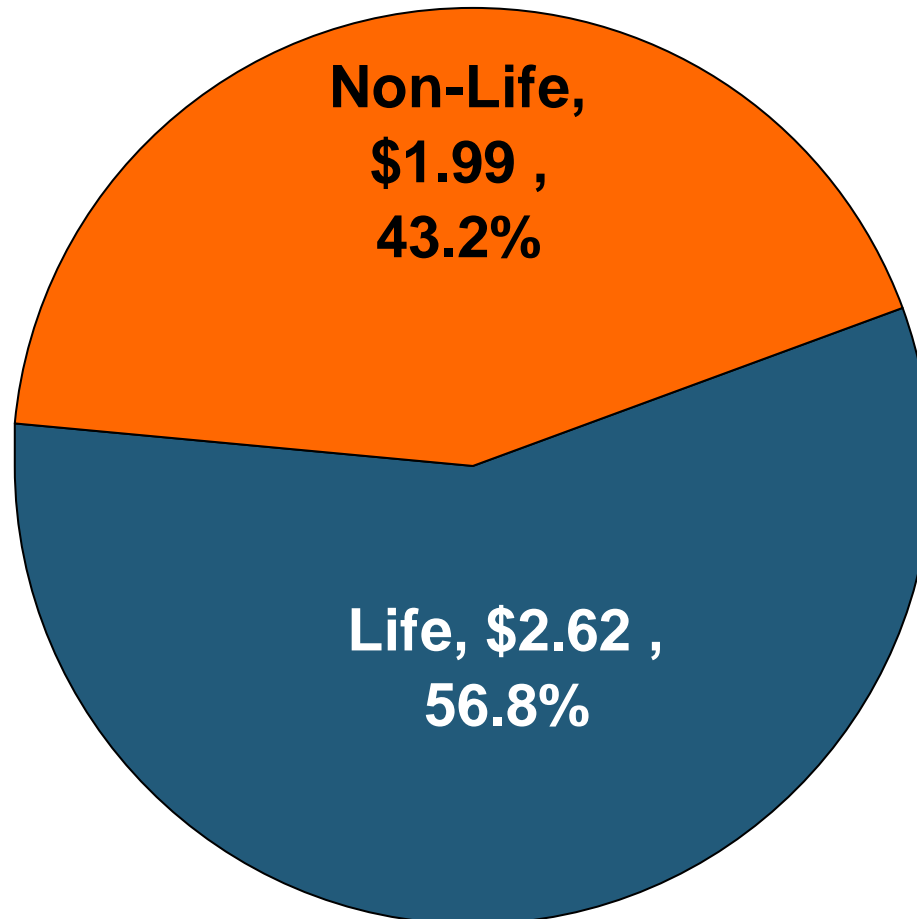


Global Insurance Premium Growth Trends

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

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

Total Premium Volume = \$4.613 Trillion*

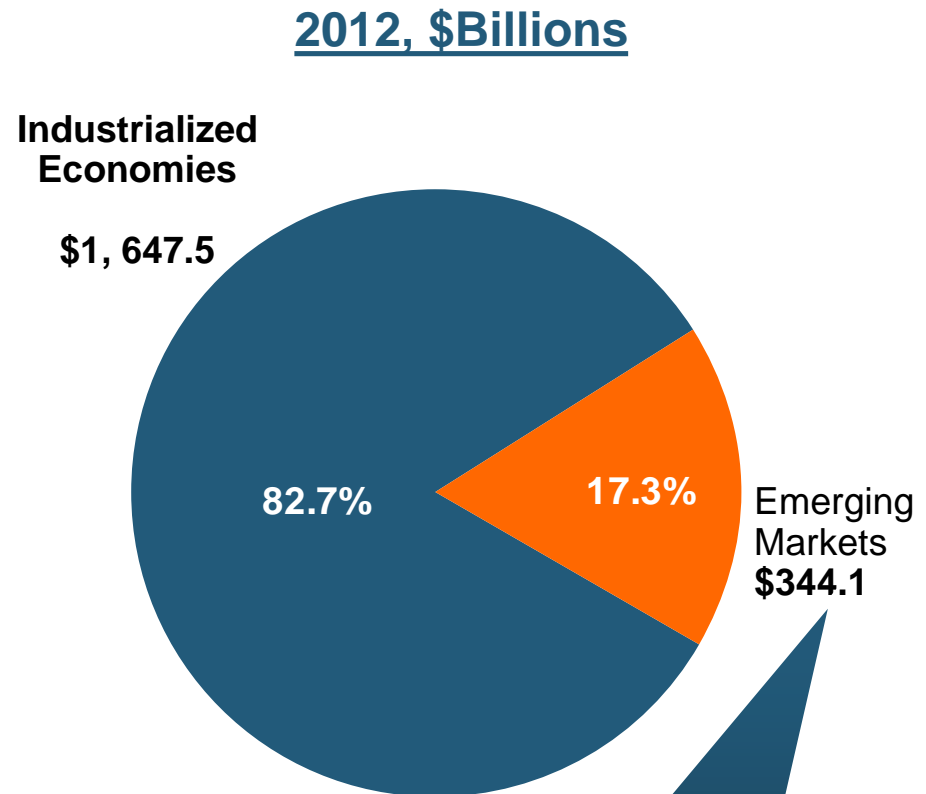


Life insurance accounted for nearly 57% of global premium volume in 2012 vs. 43% for Non-Life

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

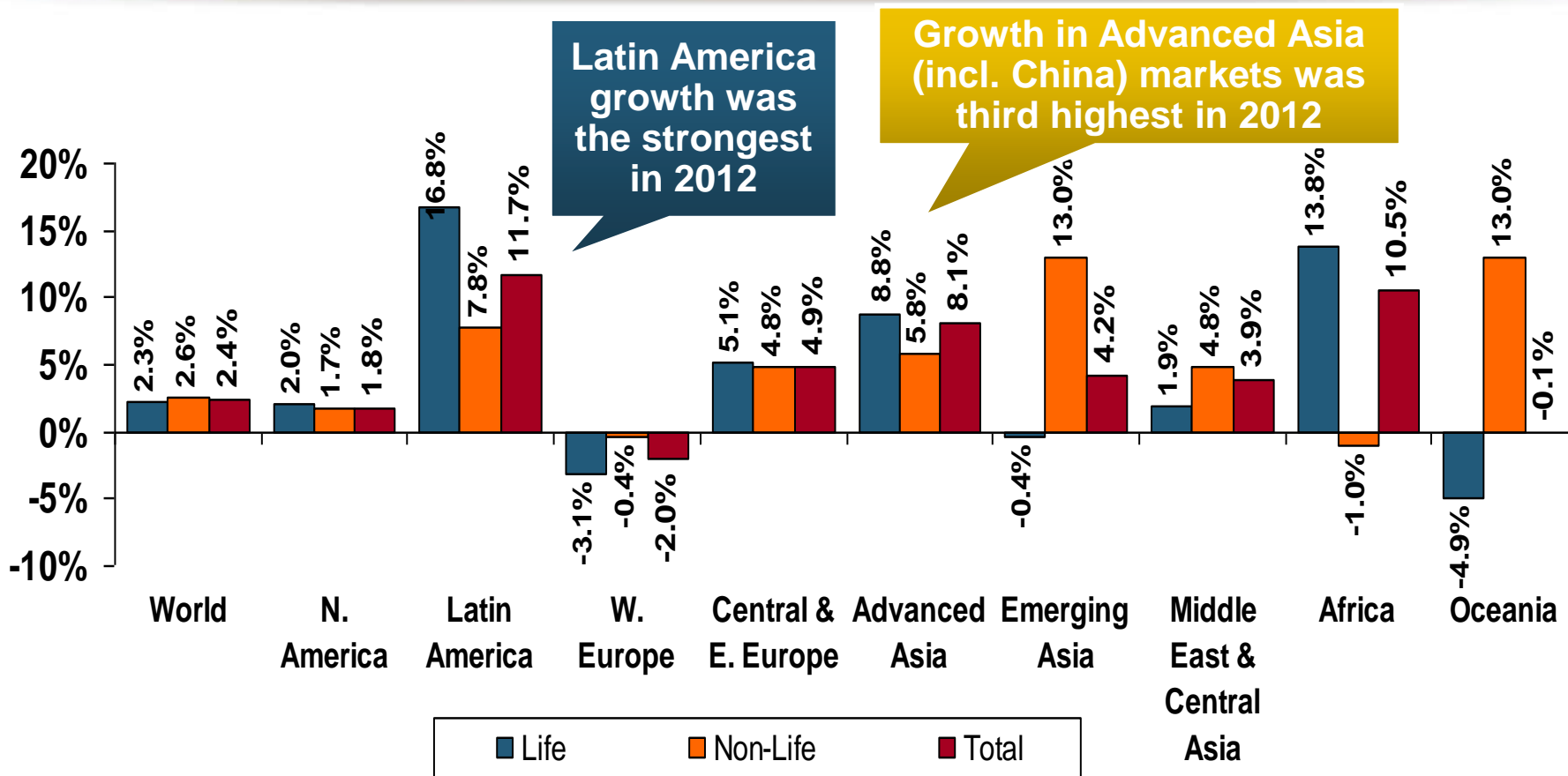
Premium Growth Facts

- 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



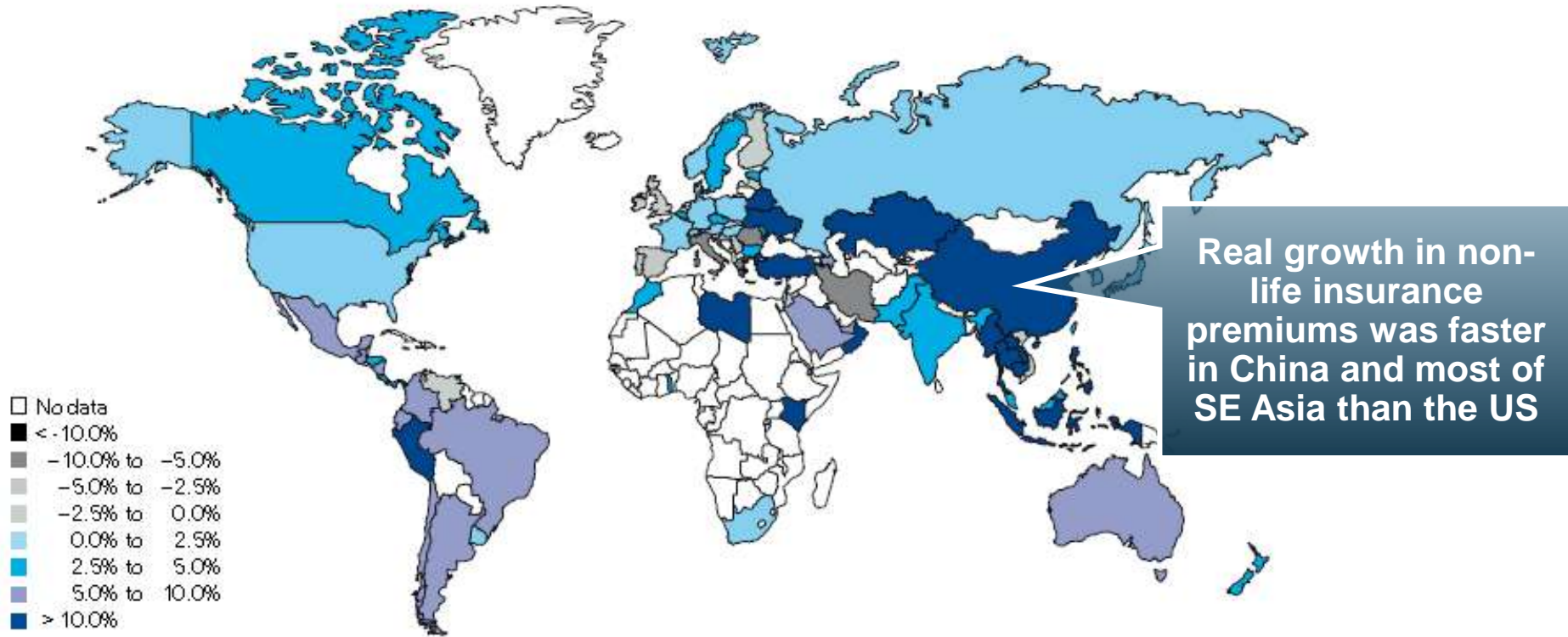
Developing markets now account for about 40% of global GDP but just 17.3% of nonlife premiums

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

Non-Life Insurance: Global Real (Inflation Adjusted) Premium Growth, 2013



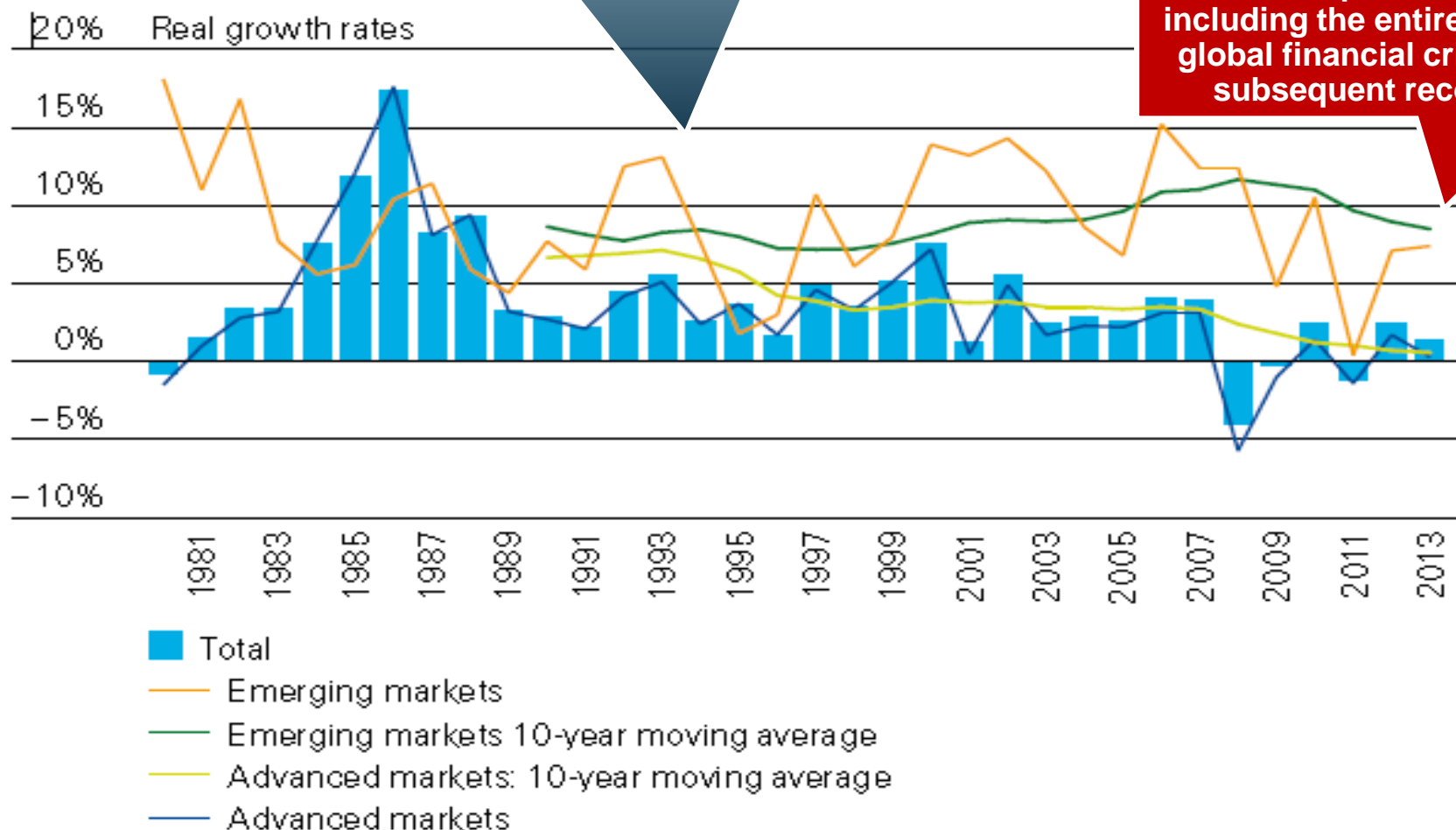
Market	Life	Non-Life	Total
Advanced	-0.2	1.1	0.3
Emerging	6.4	8.3	7.4
World	0.7	2.3	1.4

Source: Swiss Re, *sigma*, No. 3/2014.

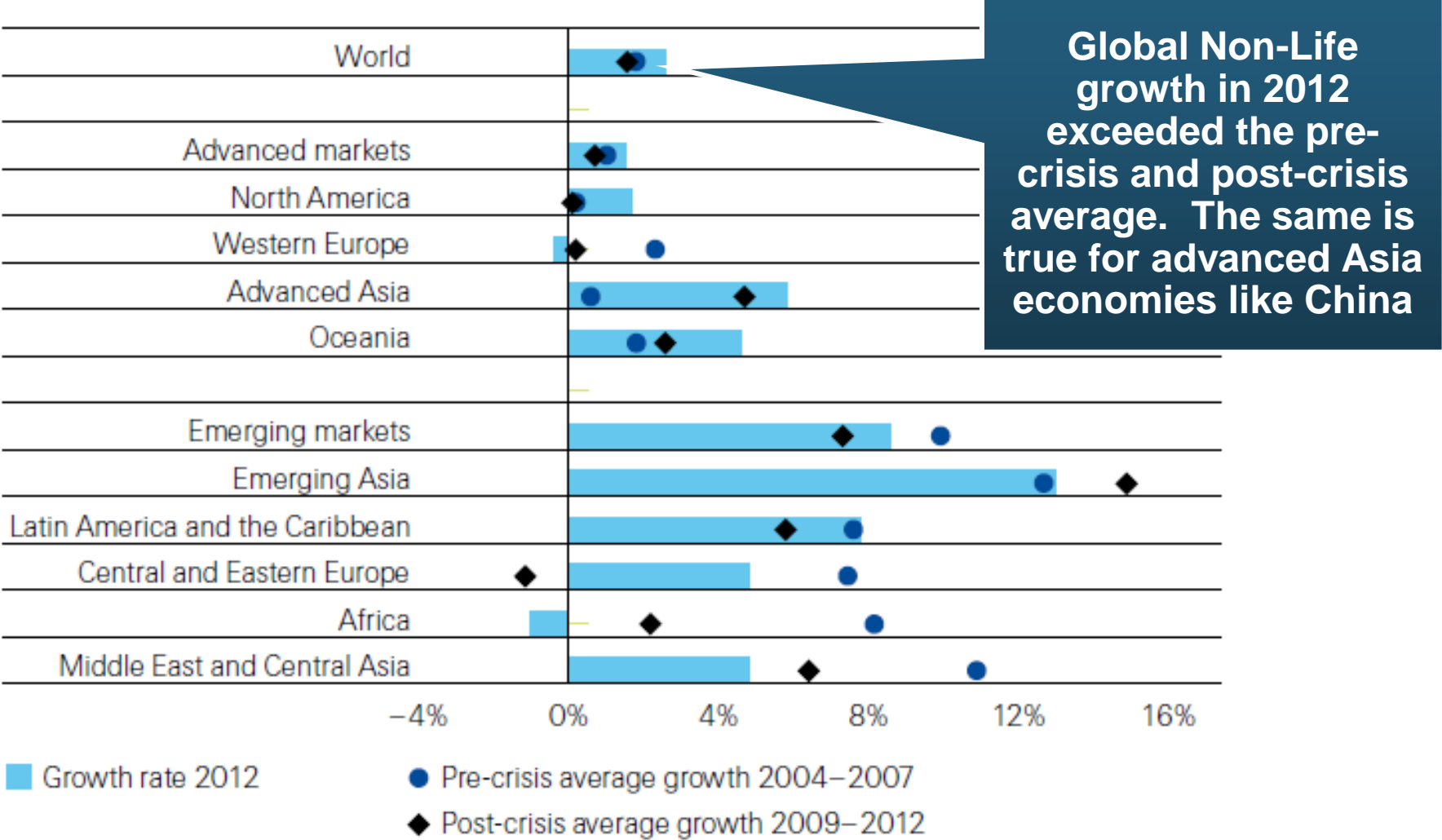
Global Real (Inflation Adjusted) Premium Growth: 1980-2013

Premium growth is very erratic in part to inflation volatility in emerging markets as well as a lack of consistent cyclicity

Emerging market growth has exceeded that of industrialized countries in 30 of the past 34 years, including the entirety of the global financial crisis and subsequent recovery

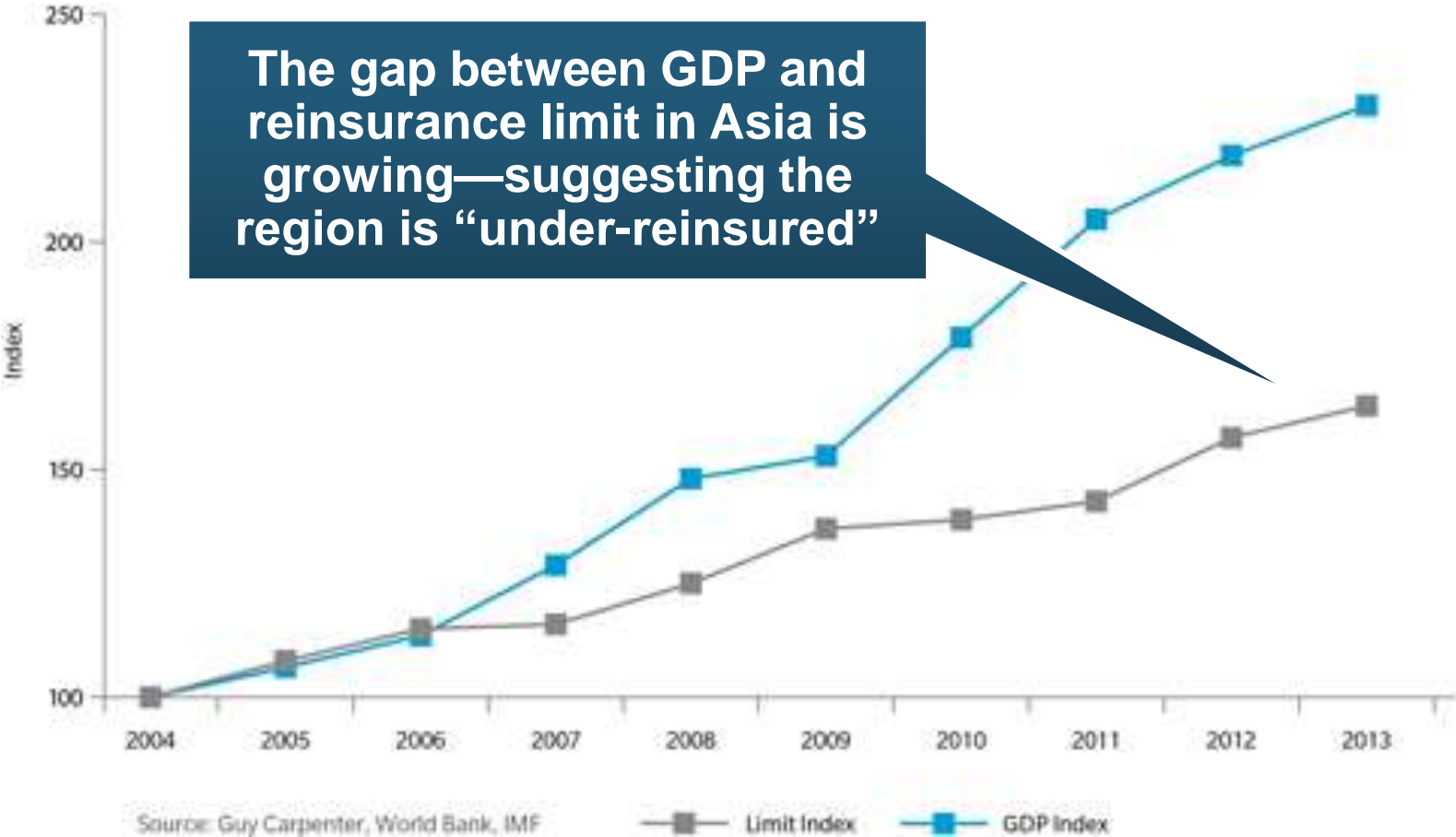


Non-Life Insurance: Global Real (Inflation Adjusted) Premium Growth, 2012



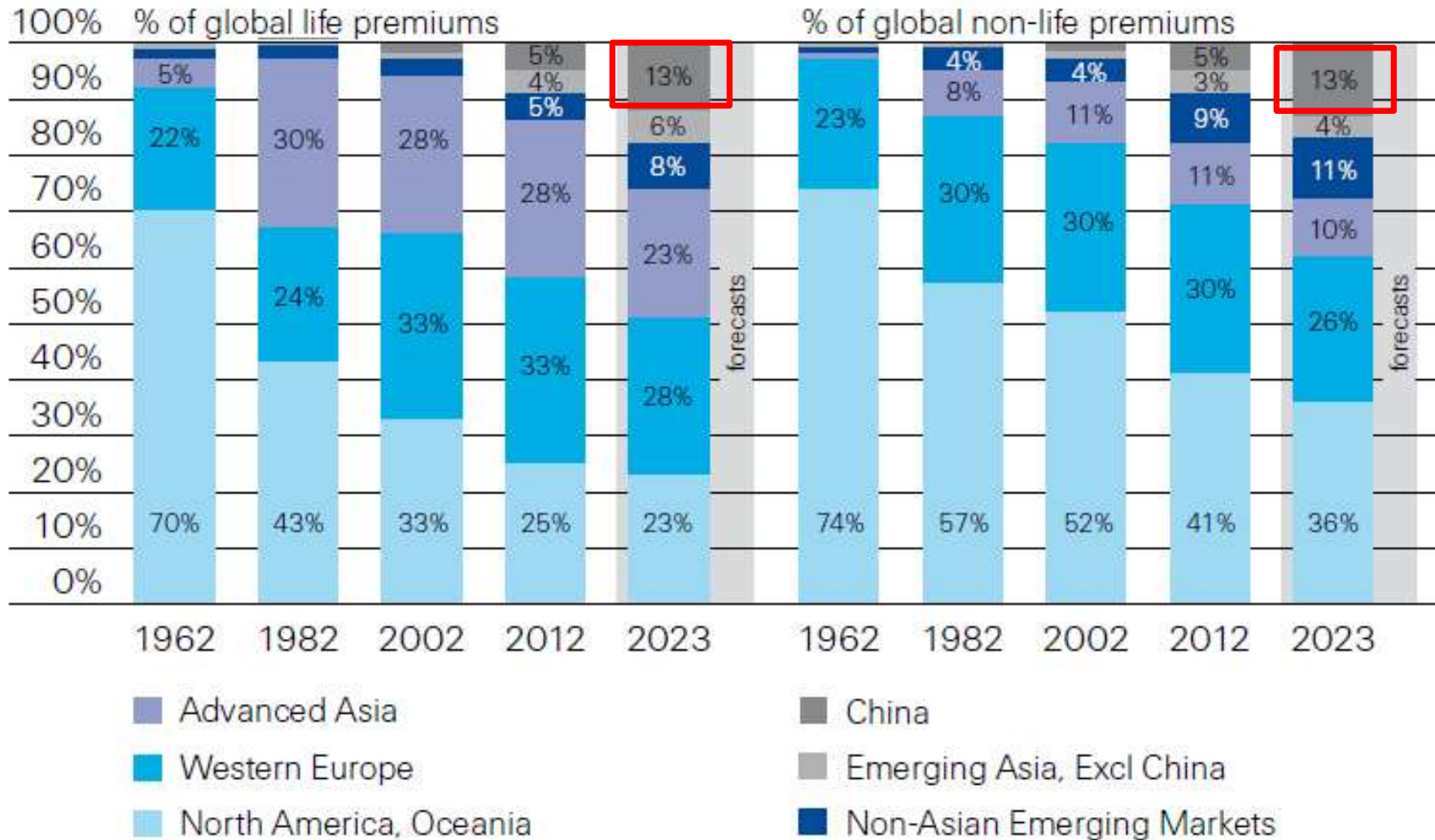
Source: Swiss Re, *sigma*, No. 3/2013.

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



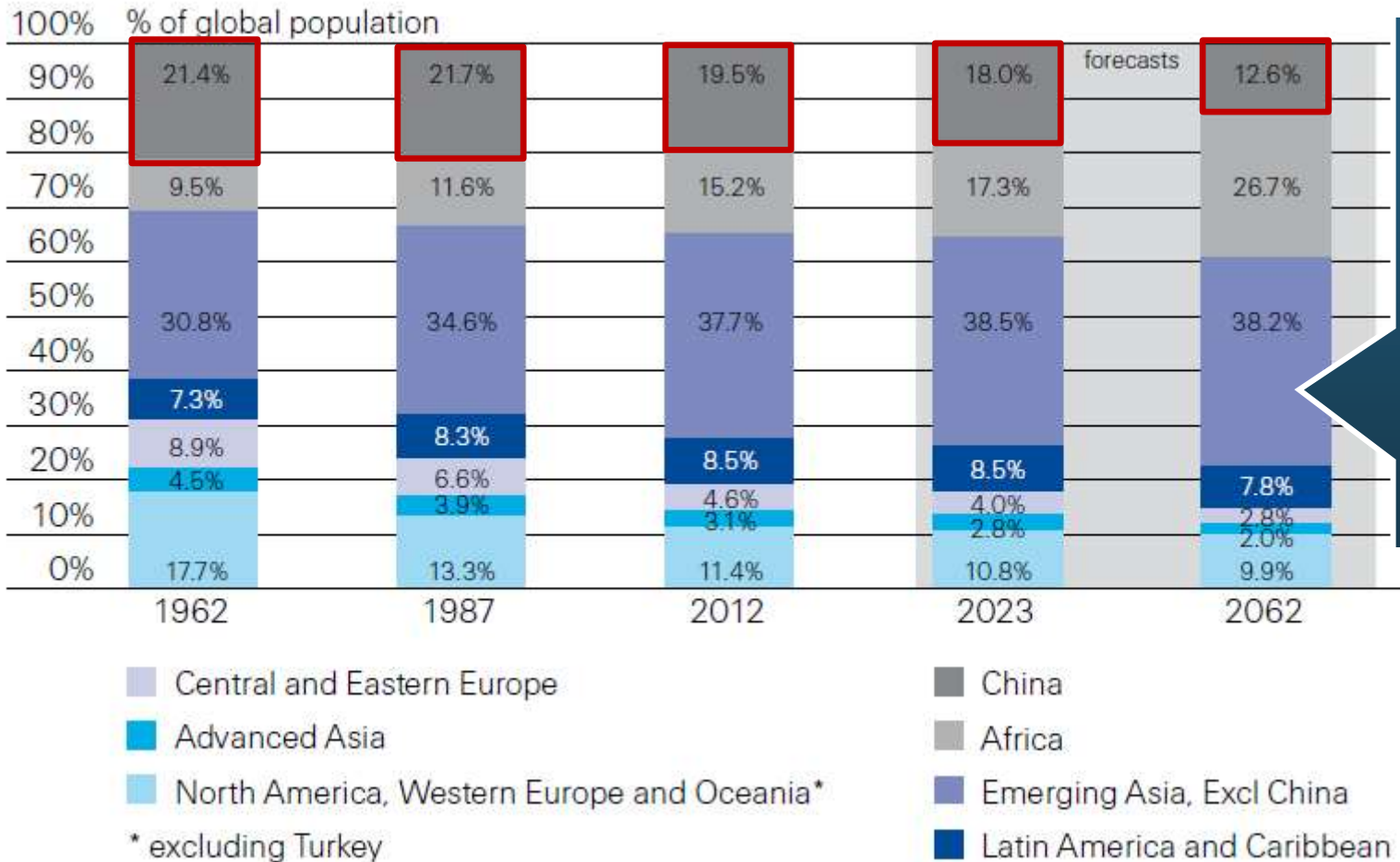
Premiums Written in Life and Non-Life, by Region: 1962-2012

Emerging market shares rose rapidly over the past 50 years



Population Distribution, by Region: 1962-2062F

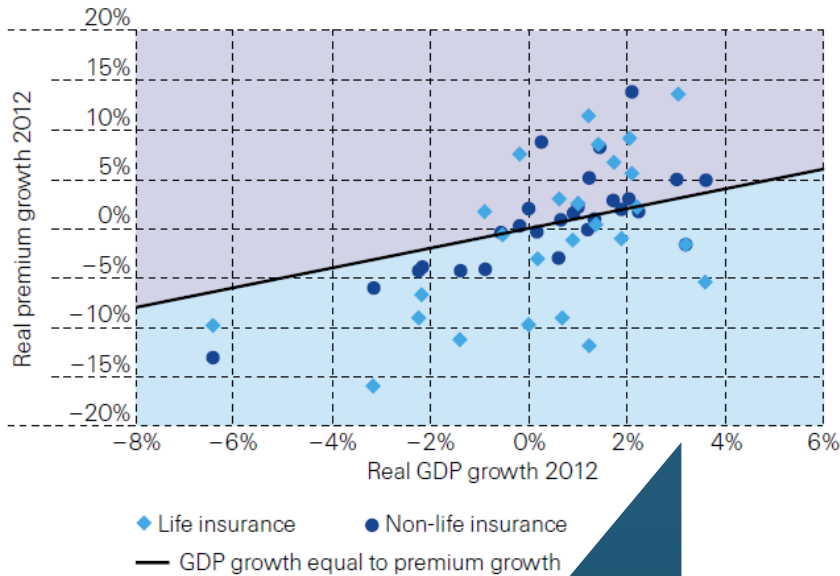
Enormous population shifts will impact insurance demand over the next half century



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

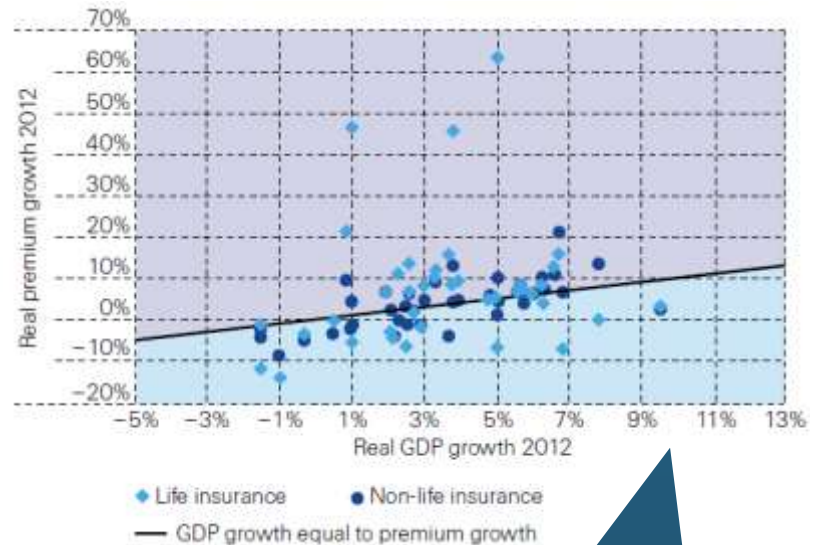
Relationship Between Real GDP and Real Life and Non-Life Premium Growth, 2012

Advanced Markets



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

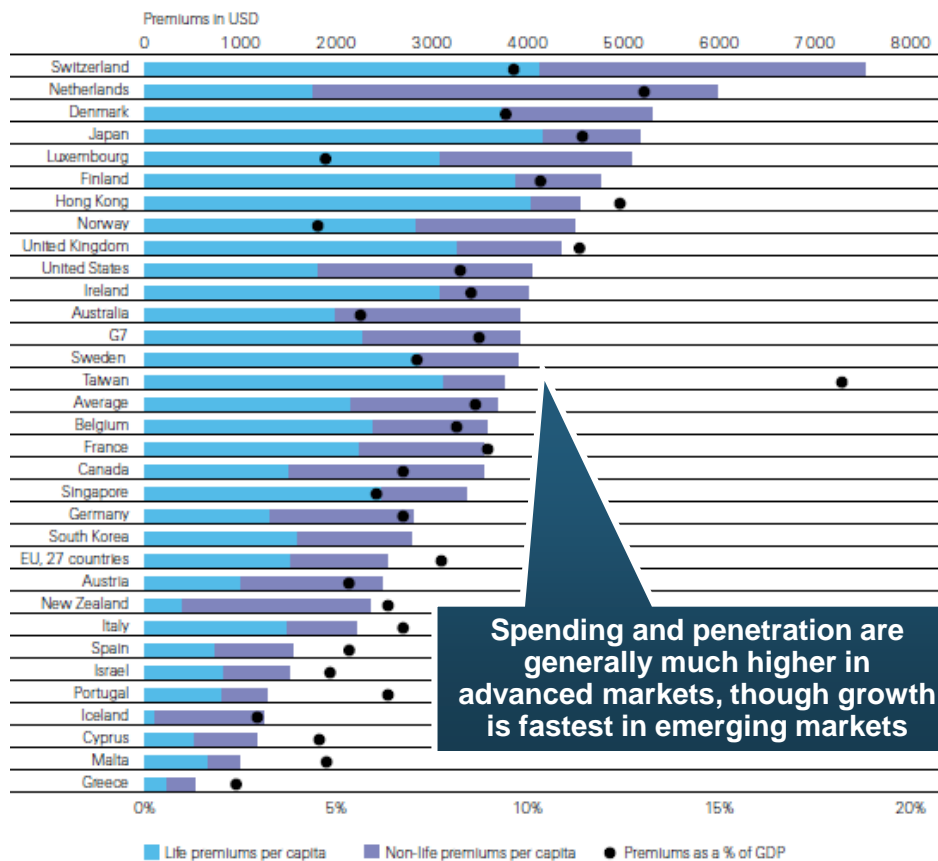
Emerging Markets



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

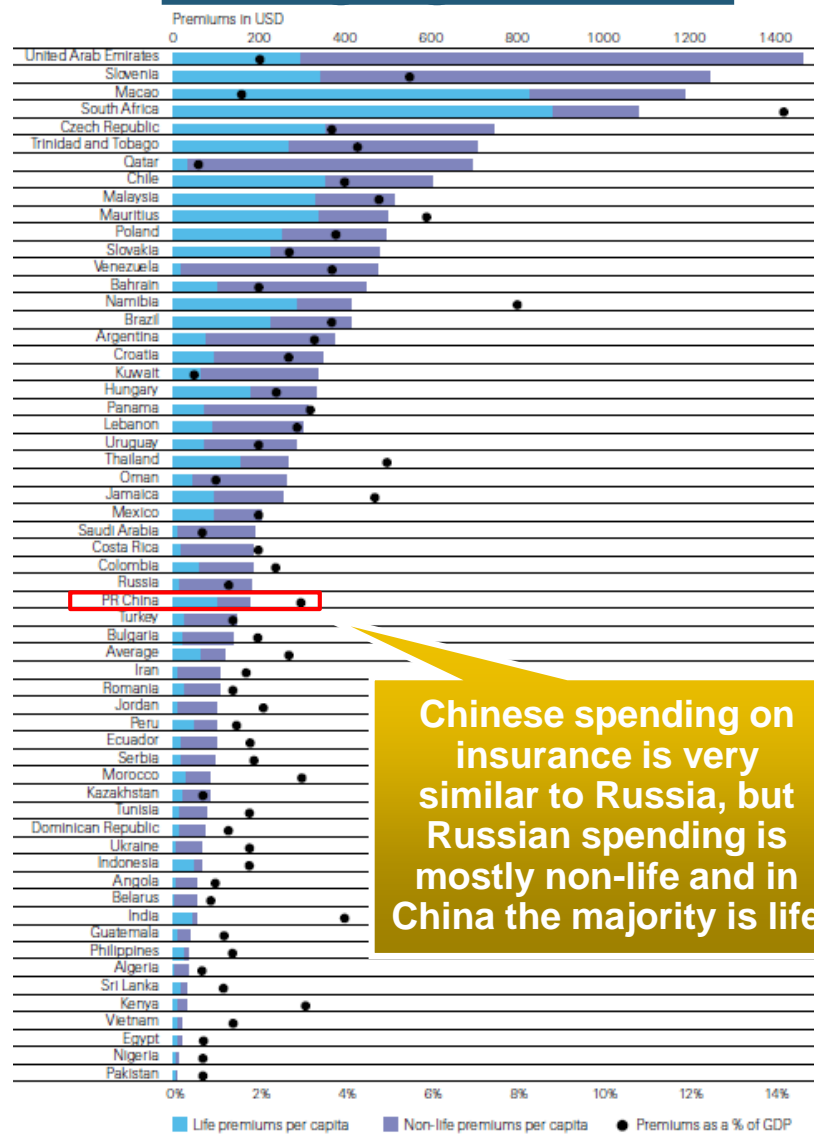
Insurance Density and Penetration for Advanced and Emerging Markets, 2012

Advanced Markets



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

Emerging Markets

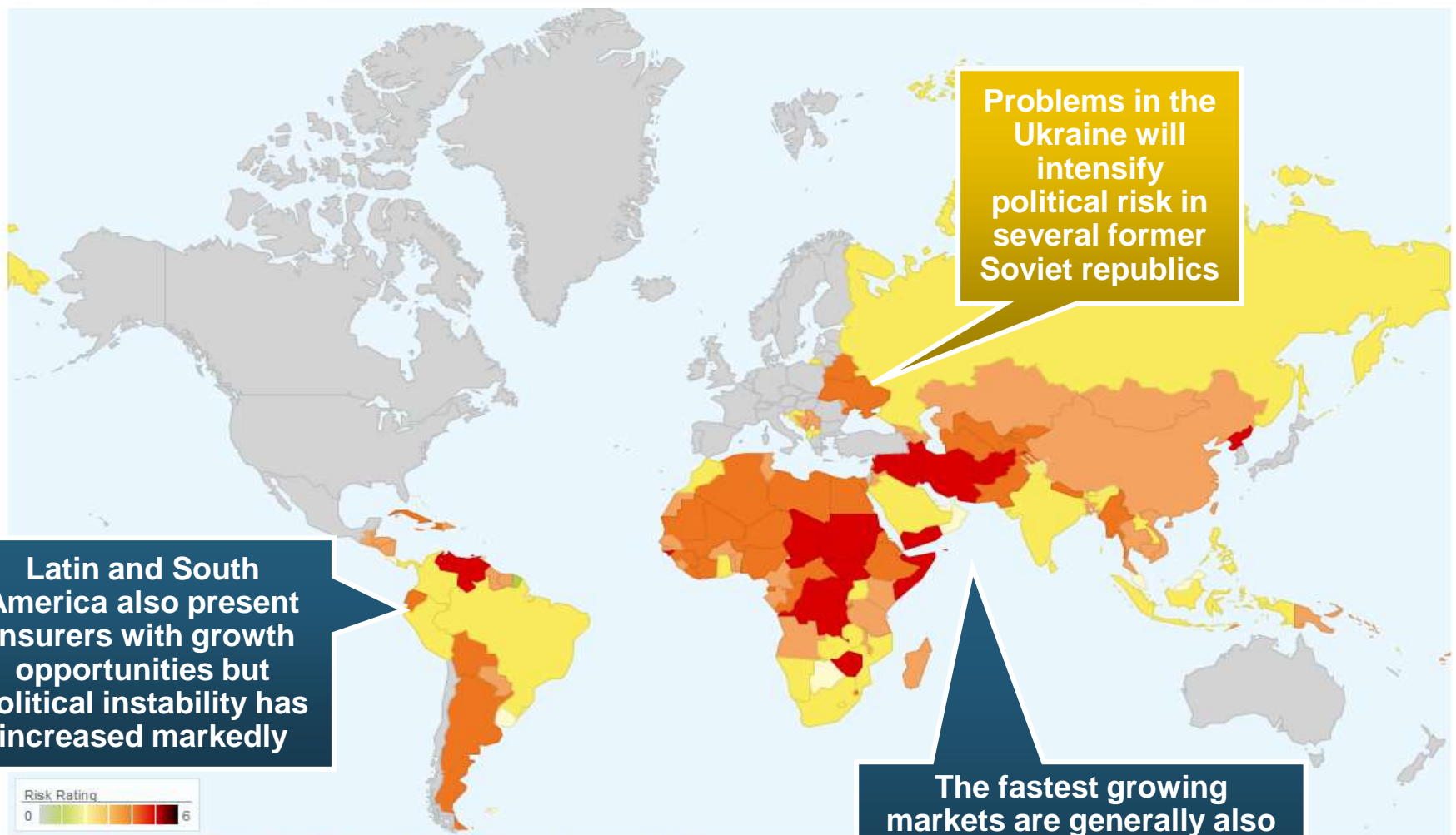


Chinese spending on insurance is very similar to Russia, but Russian spending is mostly non-life and in China the majority is life

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



Problems in the Ukraine will intensify political risk in several former Soviet republics

Latin and South America also present insurers with growth opportunities but political instability has increased markedly

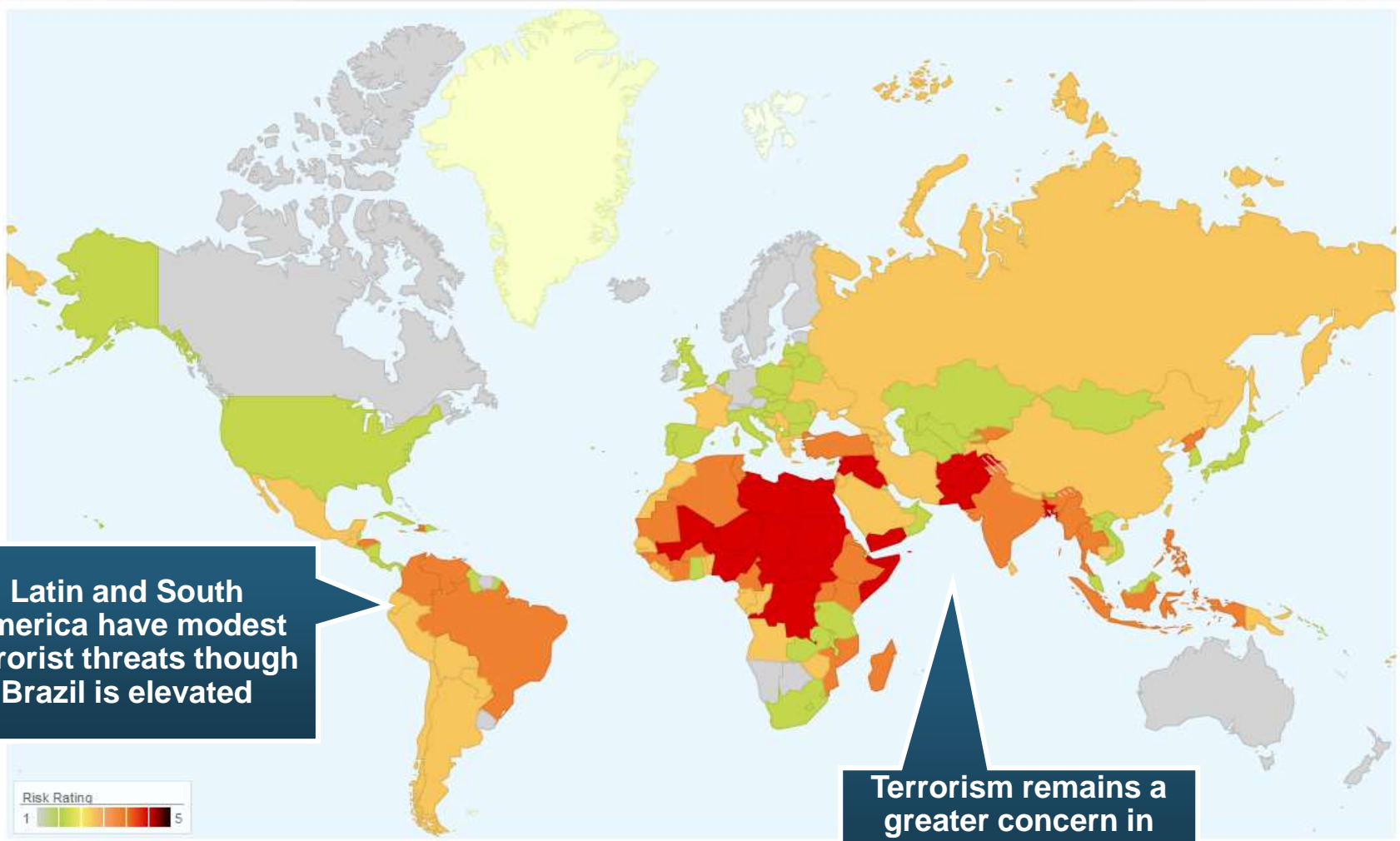
The fastest growing markets are generally also among the politically riskiest, including East and South Asia and Africa



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

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



Latin and South America have modest terrorist threats though Brazil is elevated

Terrorism remains a greater concern in the Middle East, Africa and South Asia

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

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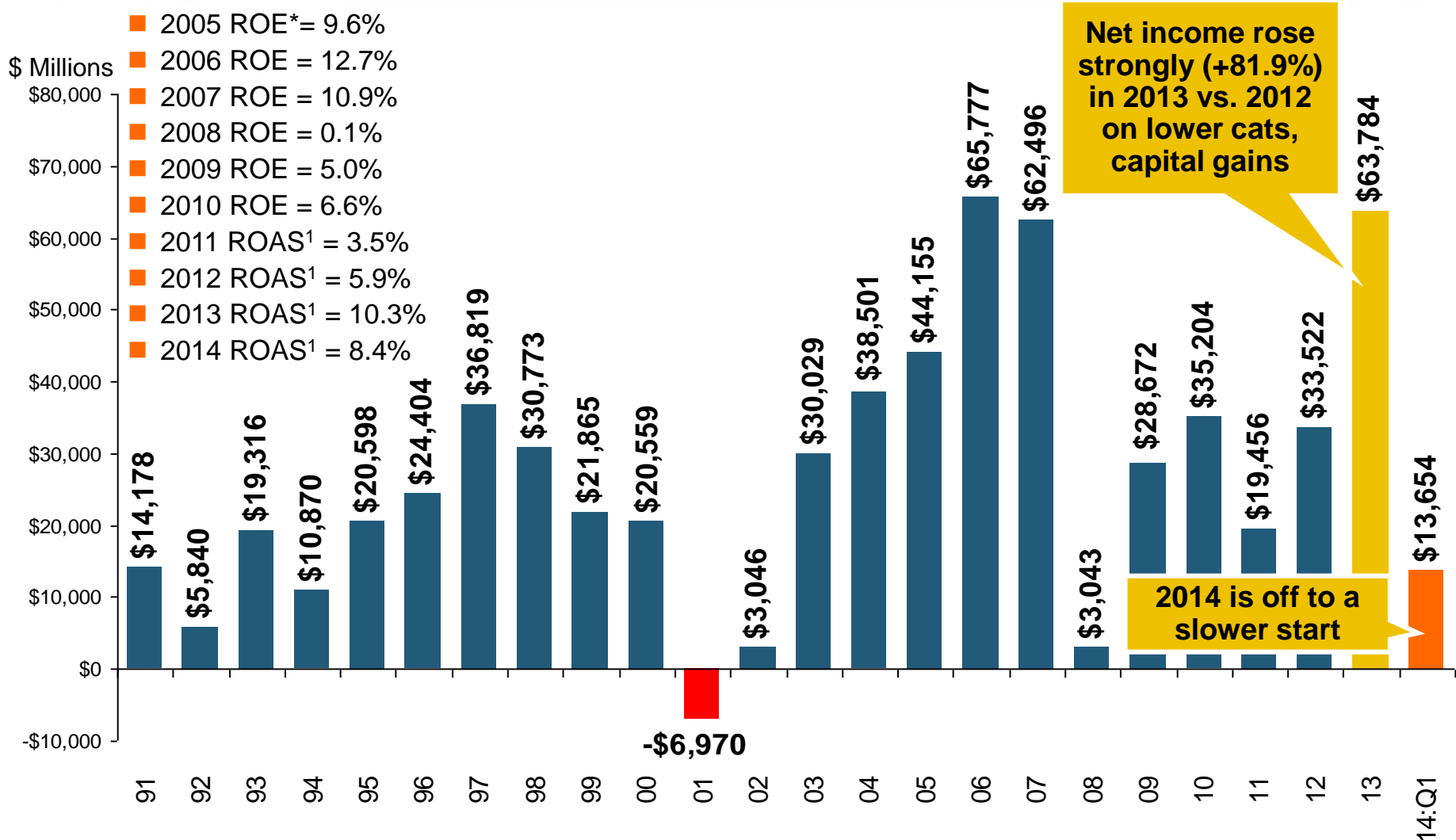
Source: Aon PLC; Insurance Information Institute.

P/C (Re)Insurance Industry Financial Overview

2014: Reasonably Good Year

**2013: Best Year in the Post-
Crisis Era with Lower CATs,
Strong Markets**

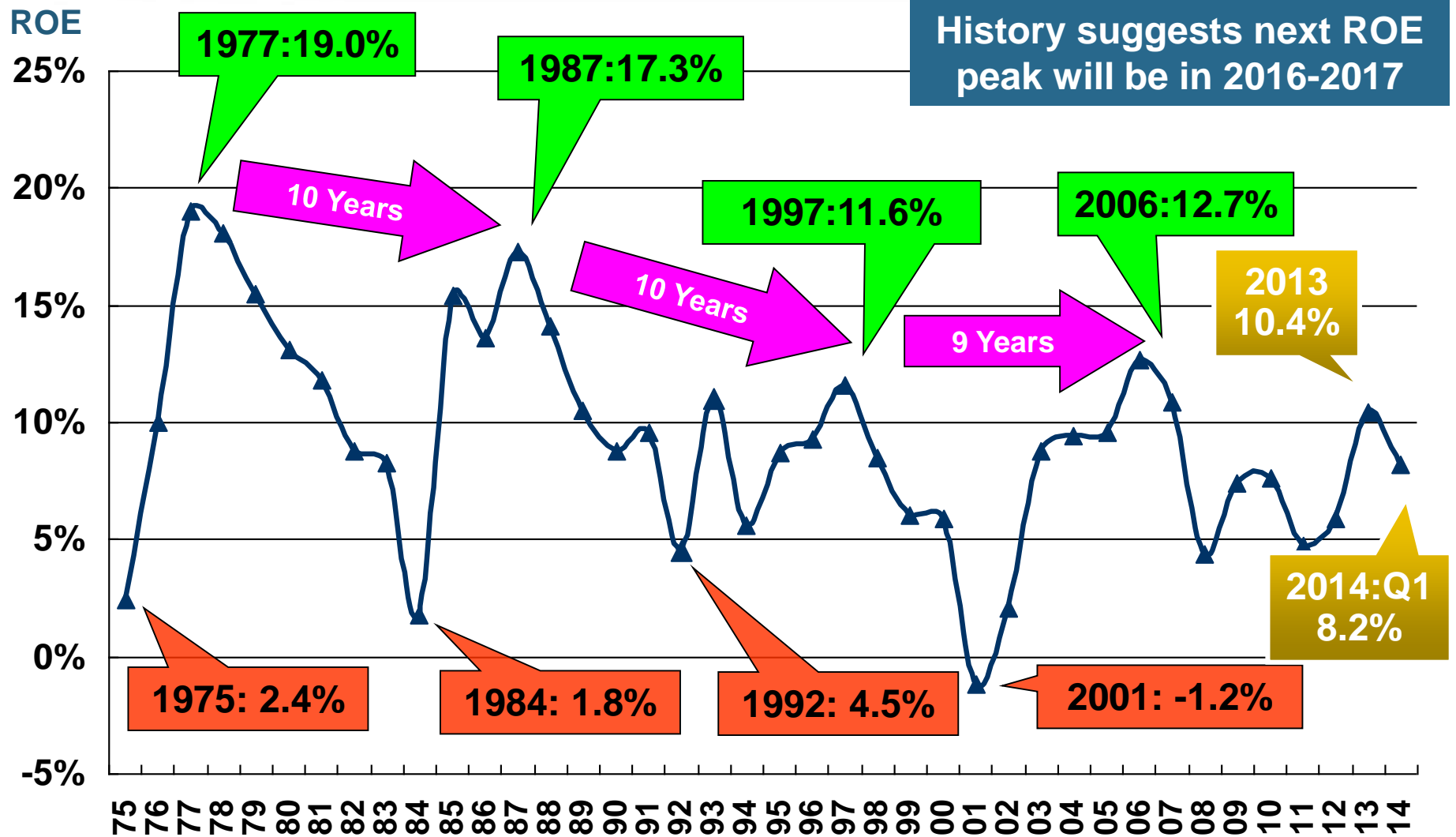
P/C Industry Net Income After Taxes 1991–2014:Q1



• ROE figures are GAAP; ¹Return on avg. surplus. Excluding Mortgage & Financial Guaranty insurers yields an 8.2% ROAS through 2014:Q1, 9.8% ROAS in 2013, 6.2% ROAS in 2012, 4.7% ROAS for 2011, 7.6% for 2010 and 7.4% for 2009.

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

Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2014:Q1*

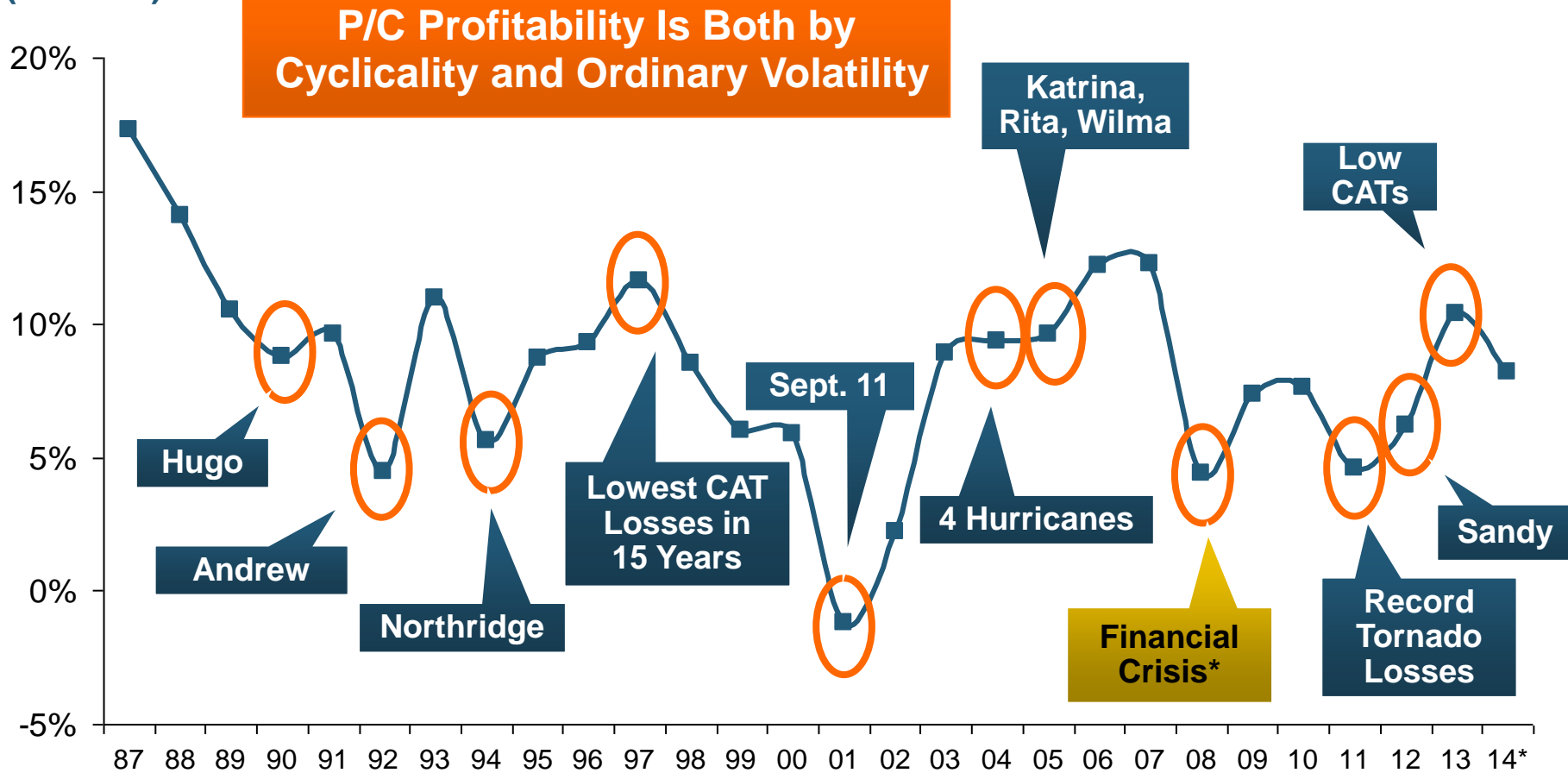


*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.

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

ROE: Property/Casualty Insurance by Major Event, 1987–2014:Q1

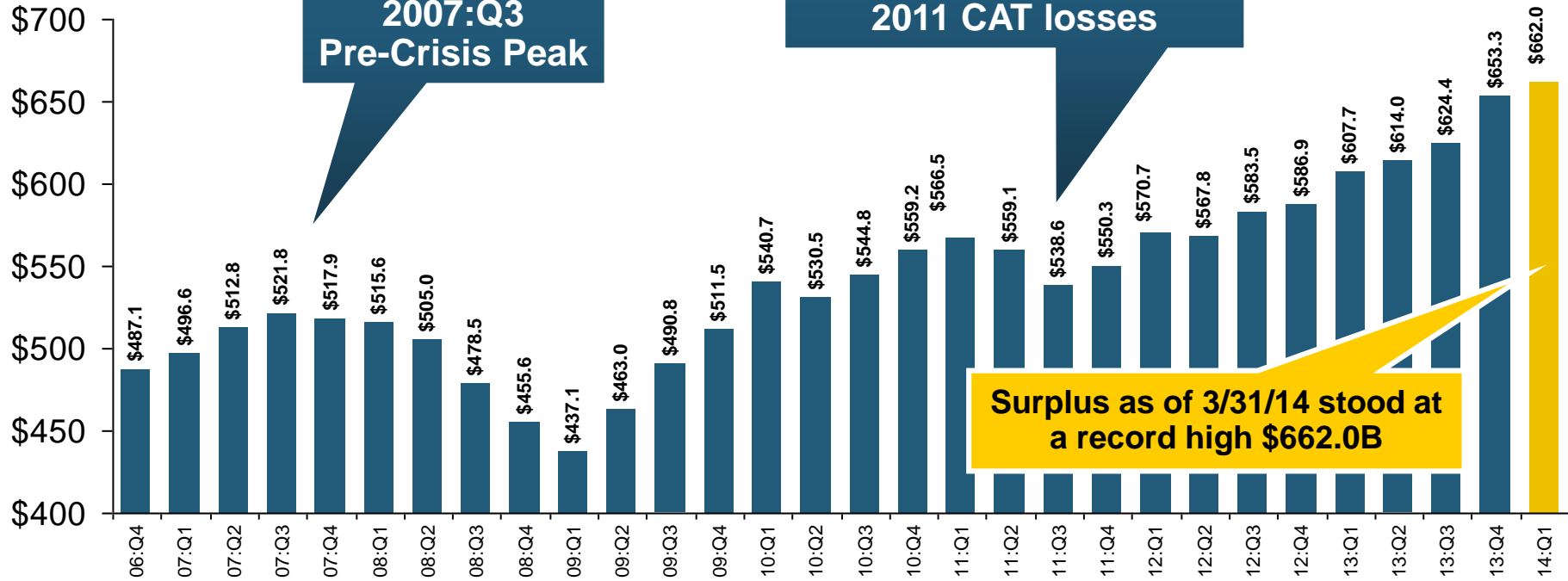
(Percent)



* Excludes Mortgage & Financial Guarantee in 2008 – 2014. 2014 figure is through Q1:2014.
Sources: ISO, *Fortune*; Insurance Information Institute.

Policyholder Surplus, 2006:Q4–2014:Q1

(\$ Billions)



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

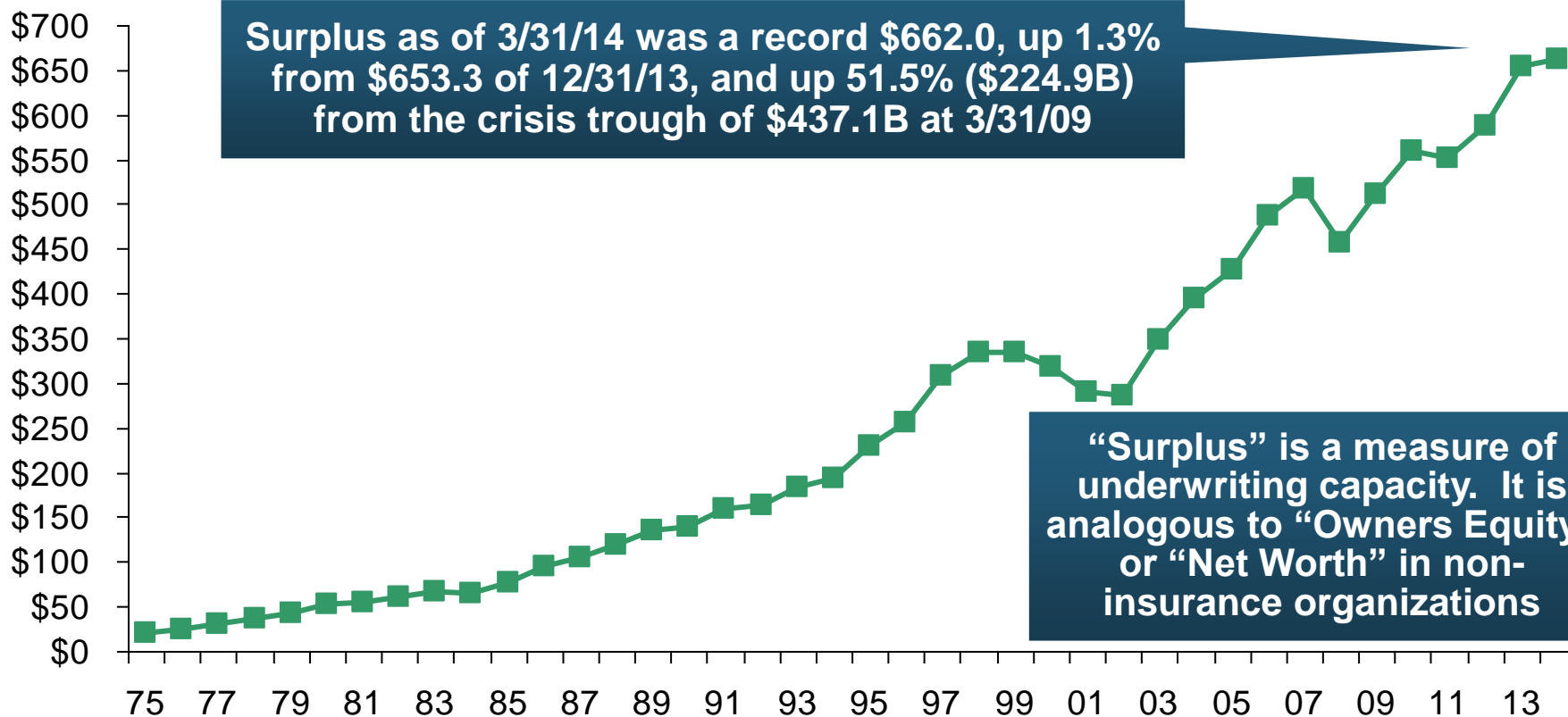
2010:Q1 data includes \$22.5B of paid-in capital from a holding company parent for one insurer’s investment in a non-insurance business .

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

Sources: ISO, A.M .Best.

US Policyholder Surplus: 1975–2014*

(\$ Billions)



The Premium-to-Surplus Ratio Stood at \$0.73:\$1 as of 3/31/14, a Near Record Low (at Least in Recent History)

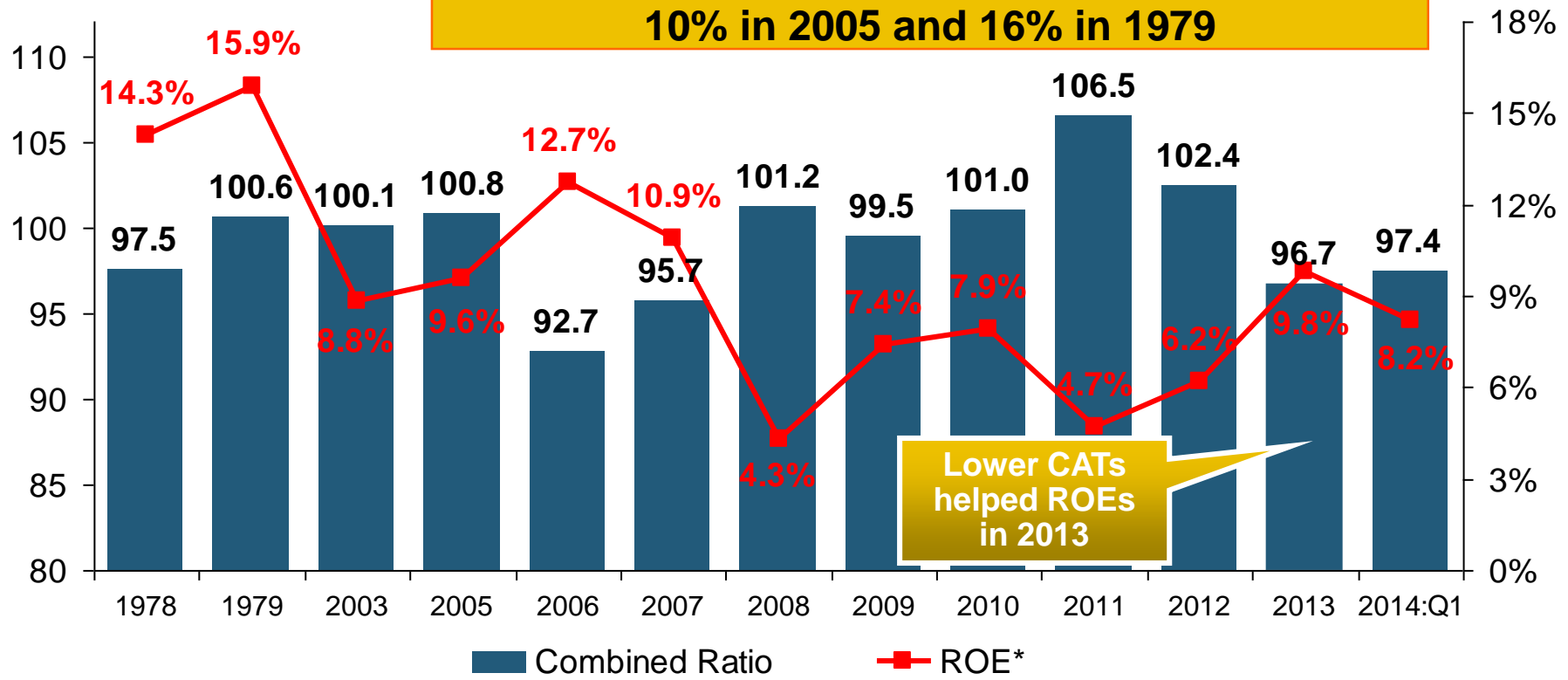
* As of 3/31/14.

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

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

Combined Ratio / ROE

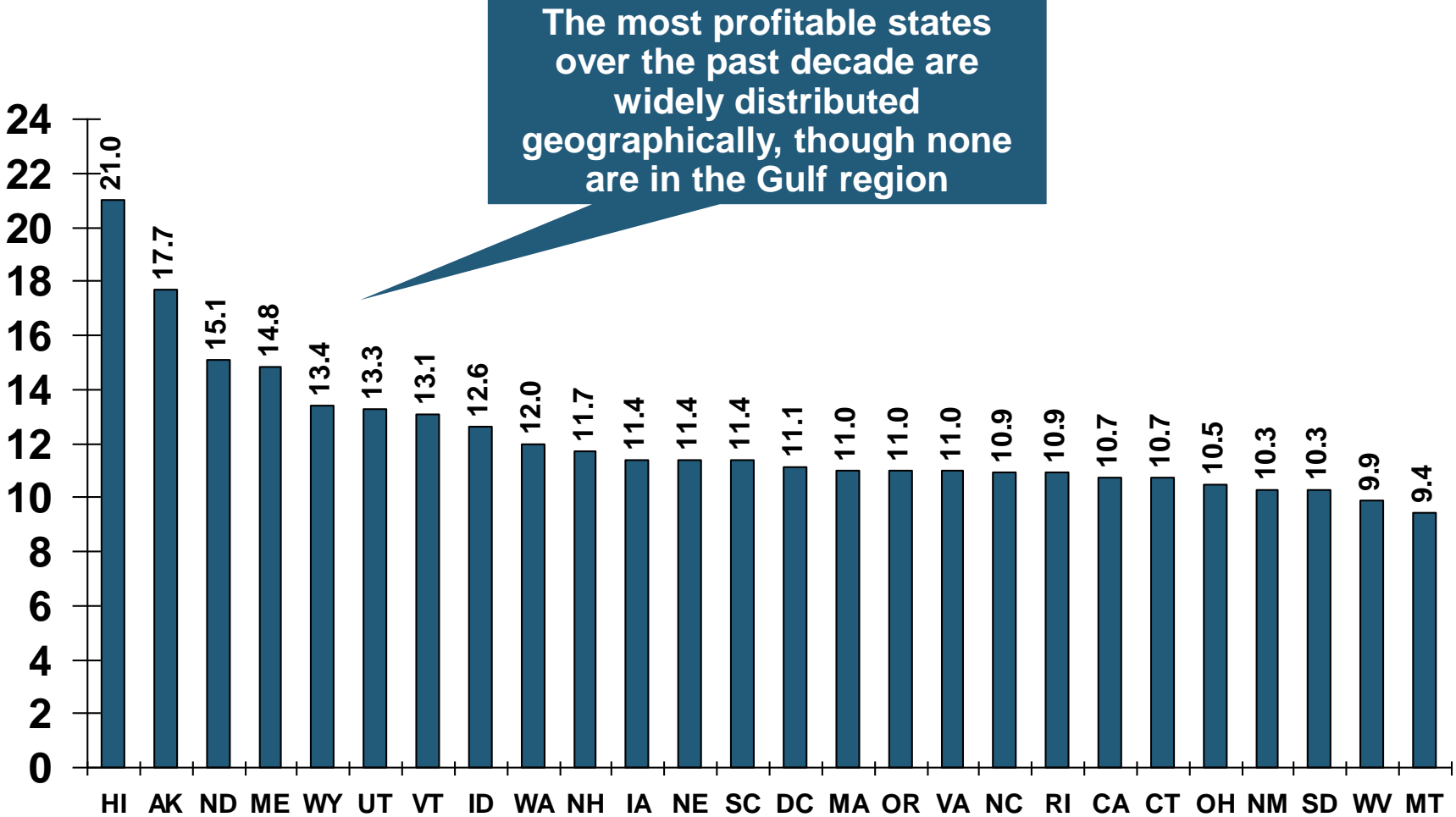
A combined ratio of about 100 generates an ROE of ~7.0% in 2012/13, ~7.5% ROE in 2009/10, 10% in 2005 and 16% in 1979



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

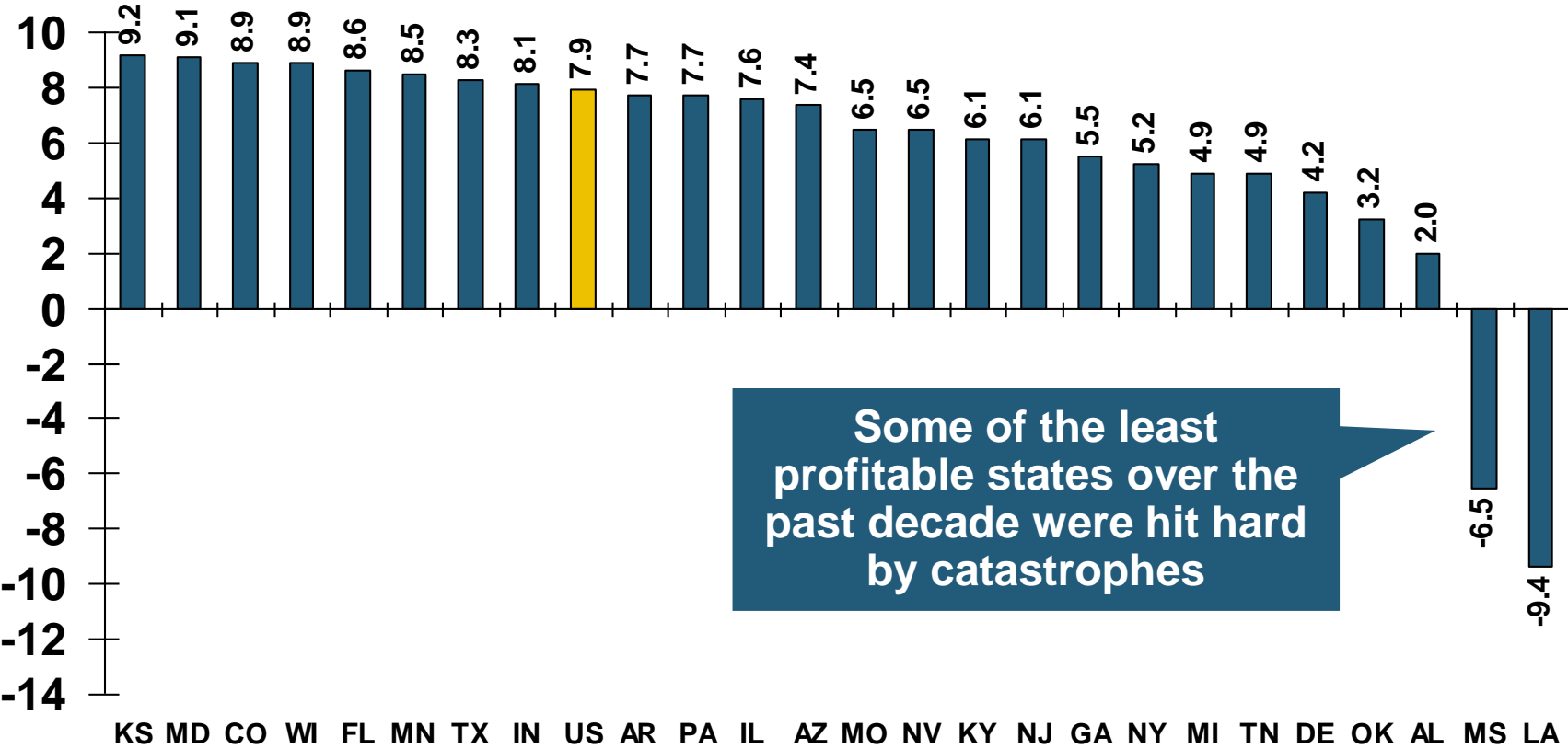
* 2008 -2014 figures are return on average surplus and exclude mortgage and financial guaranty insurers. 2014:Q1 combined ratio including M&FG insurers is 97.3; 2013 = 96.1; 2012 =103.2, 2011 = 108.1, ROAS = 3.5%.
 Source: Insurance Information Institute from A.M. Best and ISO Verisk Analytics data.

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



Source: NAIC.

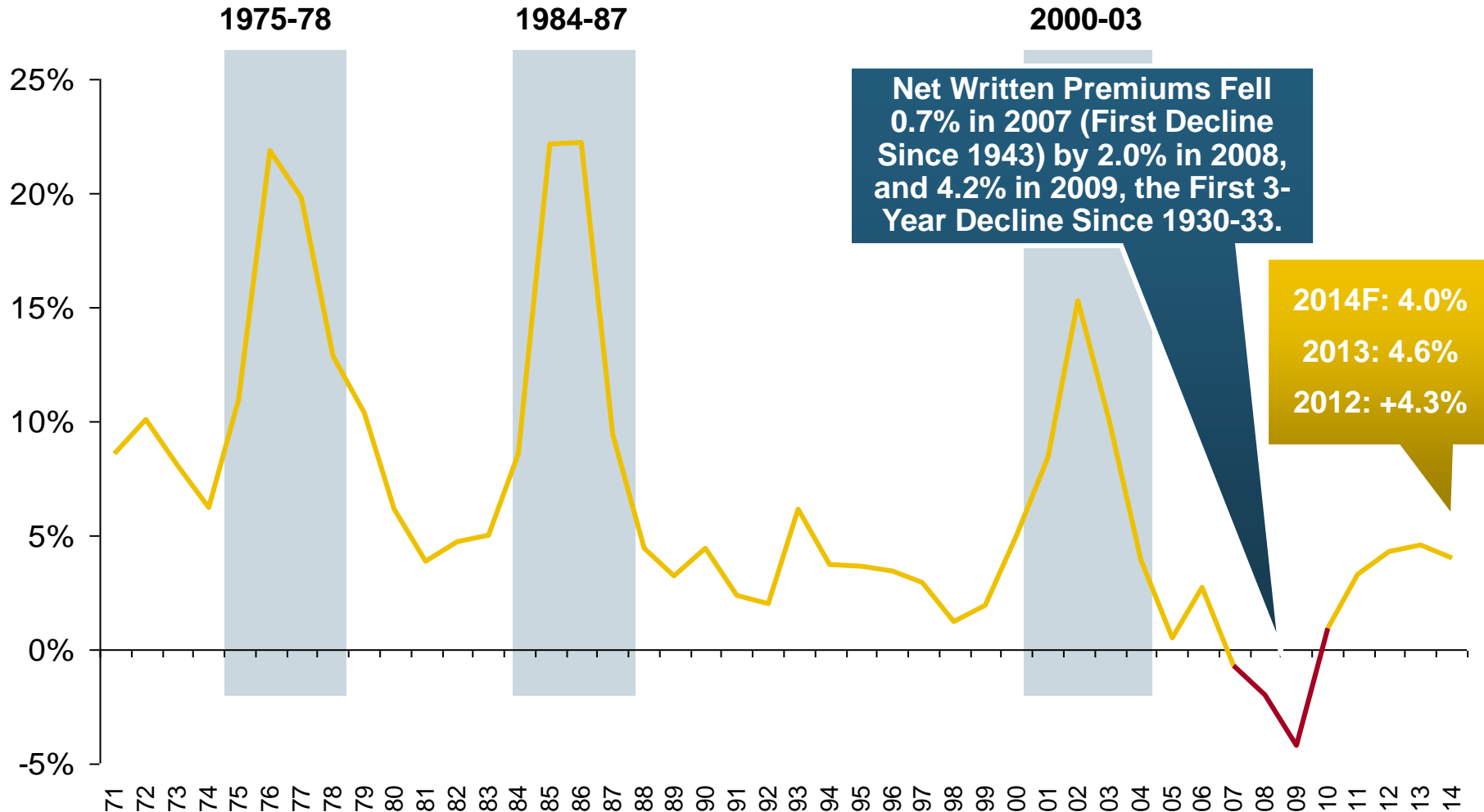
RNW All Lines by State, 2003-2012 Average: Lowest 25 States



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

Net Premium Growth: Annual Change, 1971—2014F

(Percent)



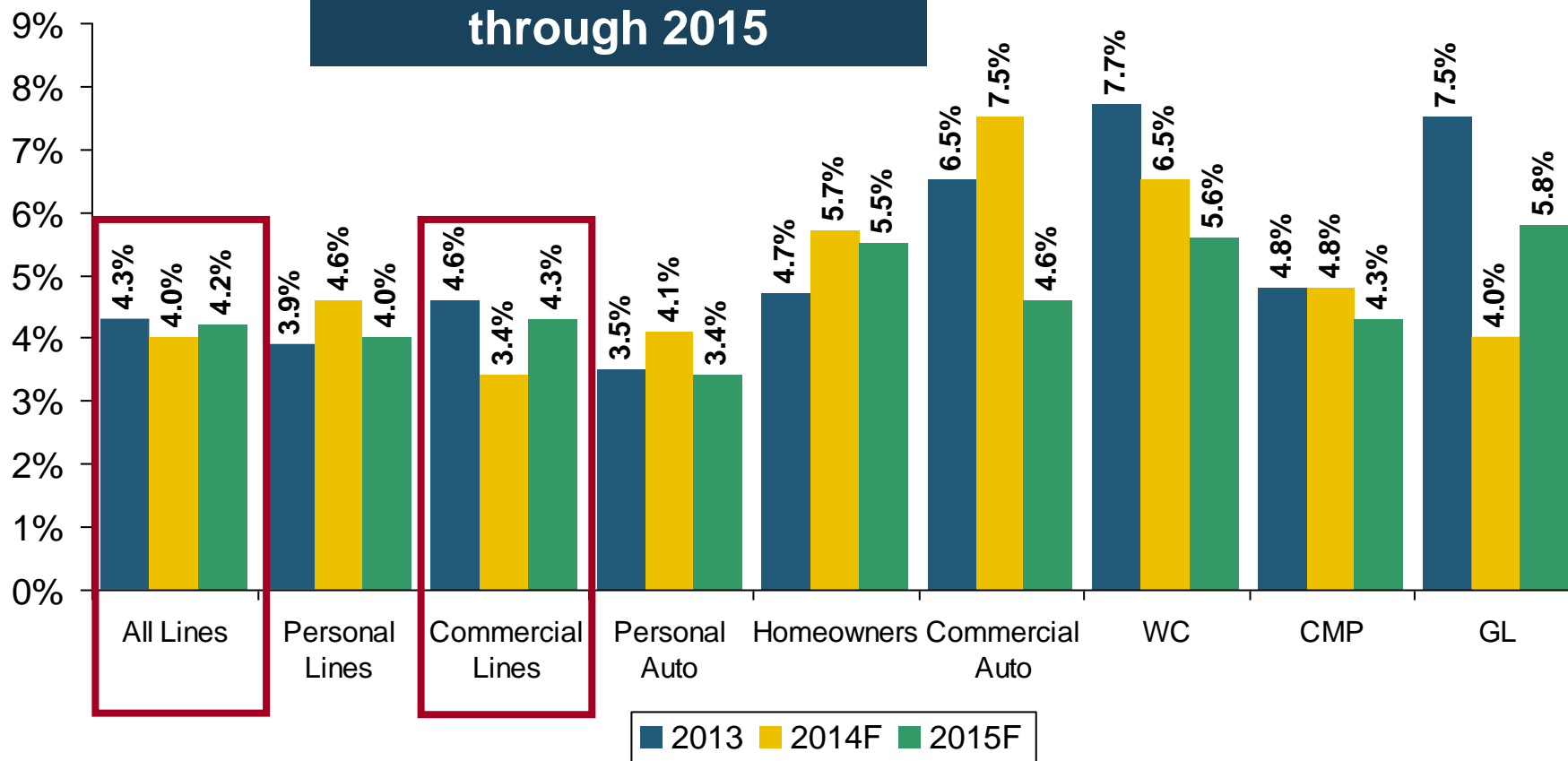
Shaded areas denote "hard market" periods

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

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

(Percent)

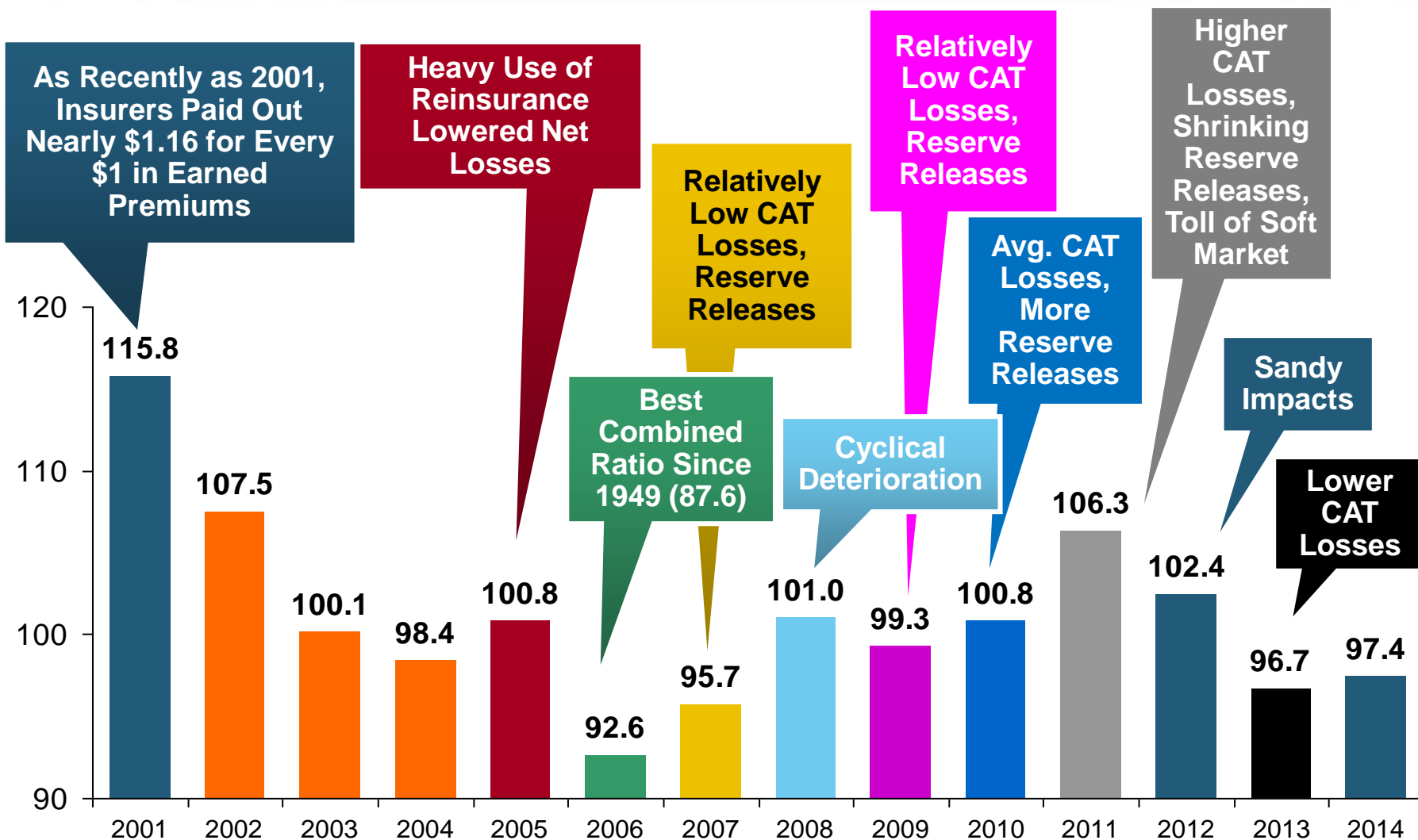
P/C growth is expected to remain fairly stable through 2015



P/C UNDERWRITING

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

P/C Insurance Industry Combined Ratio, 2001–2014:Q1*



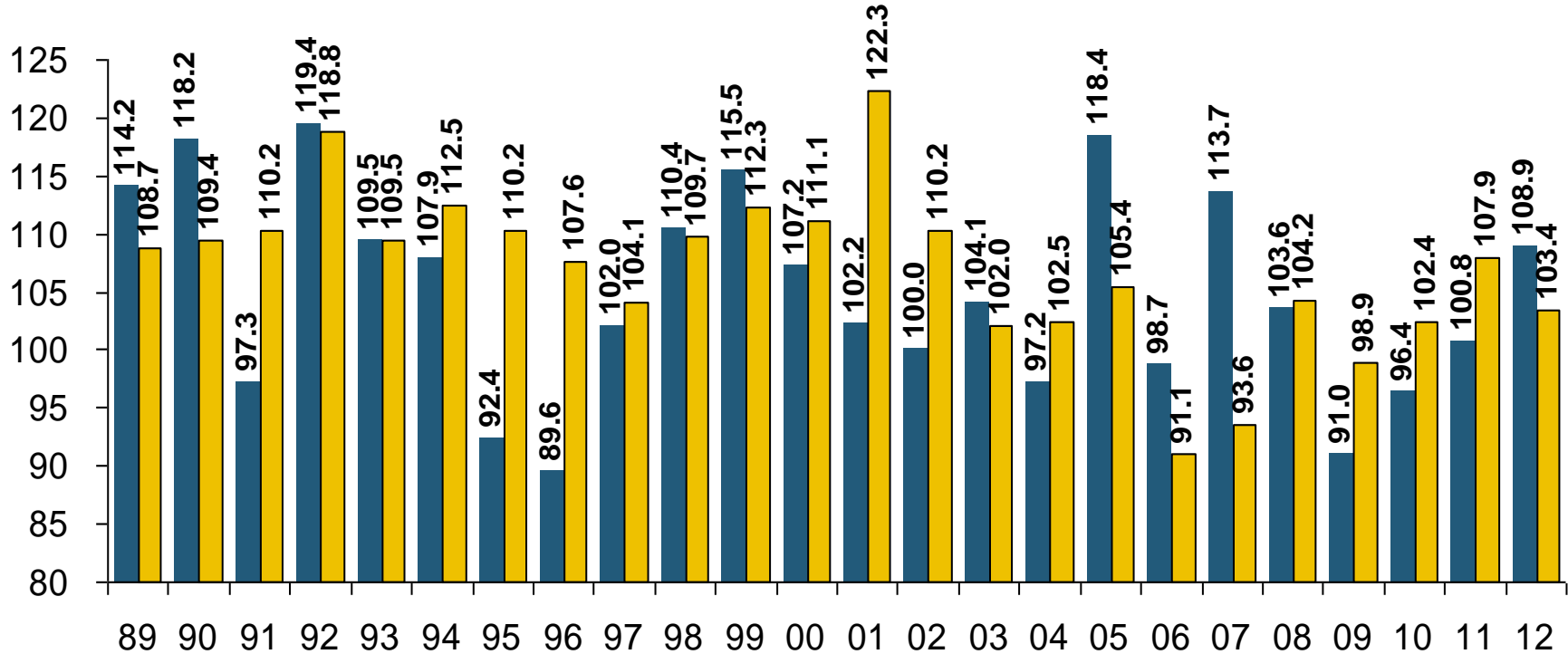
* Excludes Mortgage & Financial Guaranty insurers 2008--2012. Including M&FG, 2008=105.1, 2009=100.7, 2010=102.4, 2011=108.1; 2012:=103.2; 2013: = 96.1; 2014:Q1 = 97.3.

Sources: A.M. Best, ISO.

Ocean Marine vs. Commercial Lines Combined Ratio: 1989–2012

■ Ocean Marine ■ All Commercial Lines

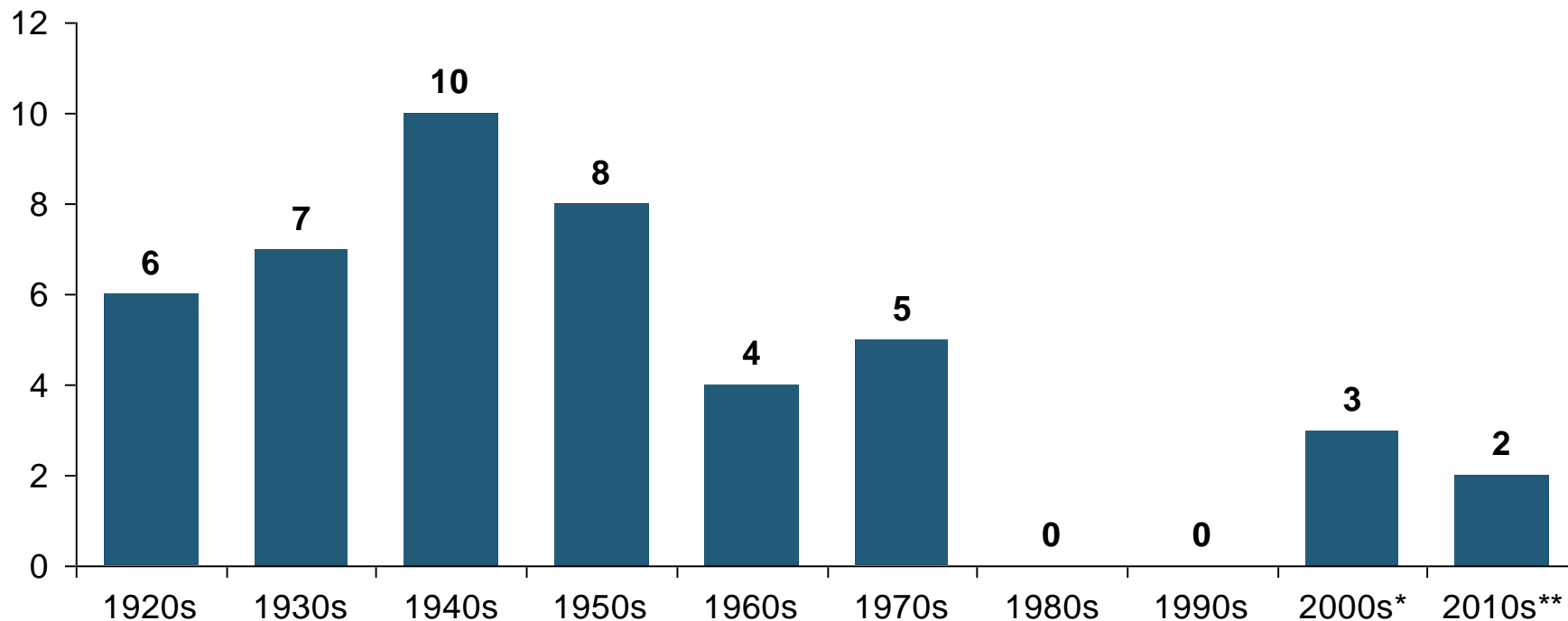
Average: 1989-2012
Ocean Marine: 104.9
All Commercial Lines: 107.0



Ocean Marine has marginally outperformed Commercial Lines overall over the period from 1989 – 2012

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.

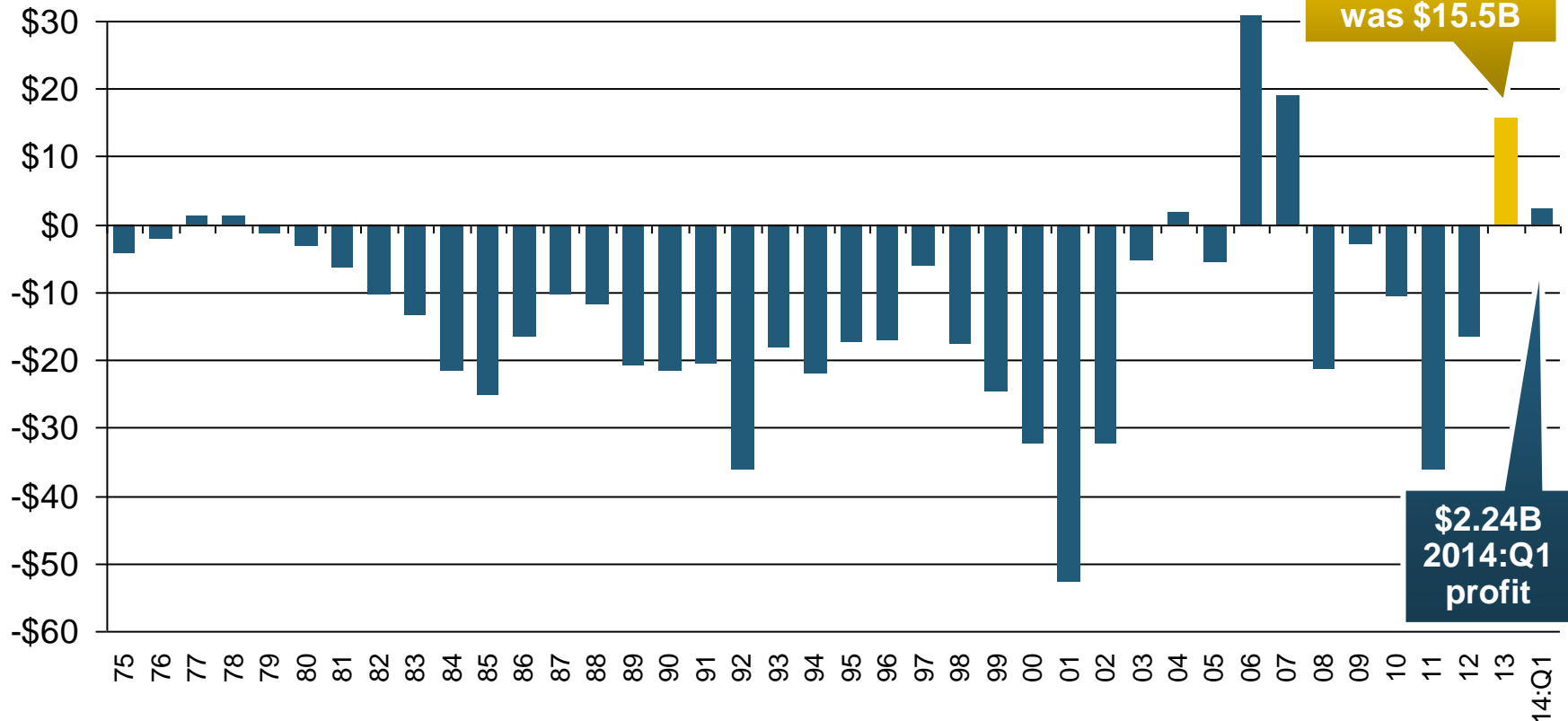
**Data for the 2010s is for the period 2010 through 2013.

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

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

Underwriting Gain (Loss) All Lines Combined, 1975–2014*

(\$ Billions)



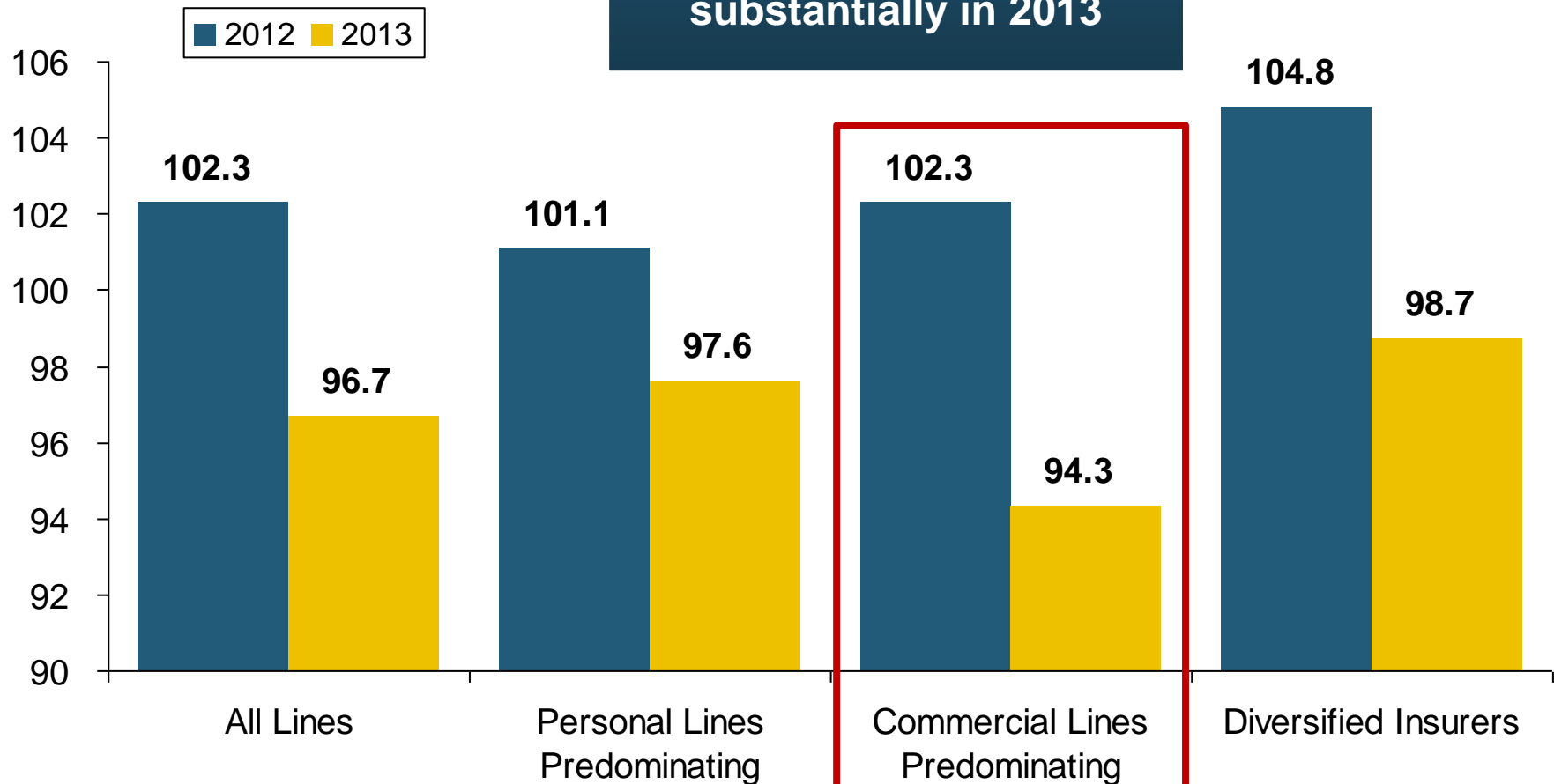
High CAT losses in 2011 led to the highest underwriting loss since 2001. Lower CAT losses in 2013 led to the highest underwriting profit since 2007.

* 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*

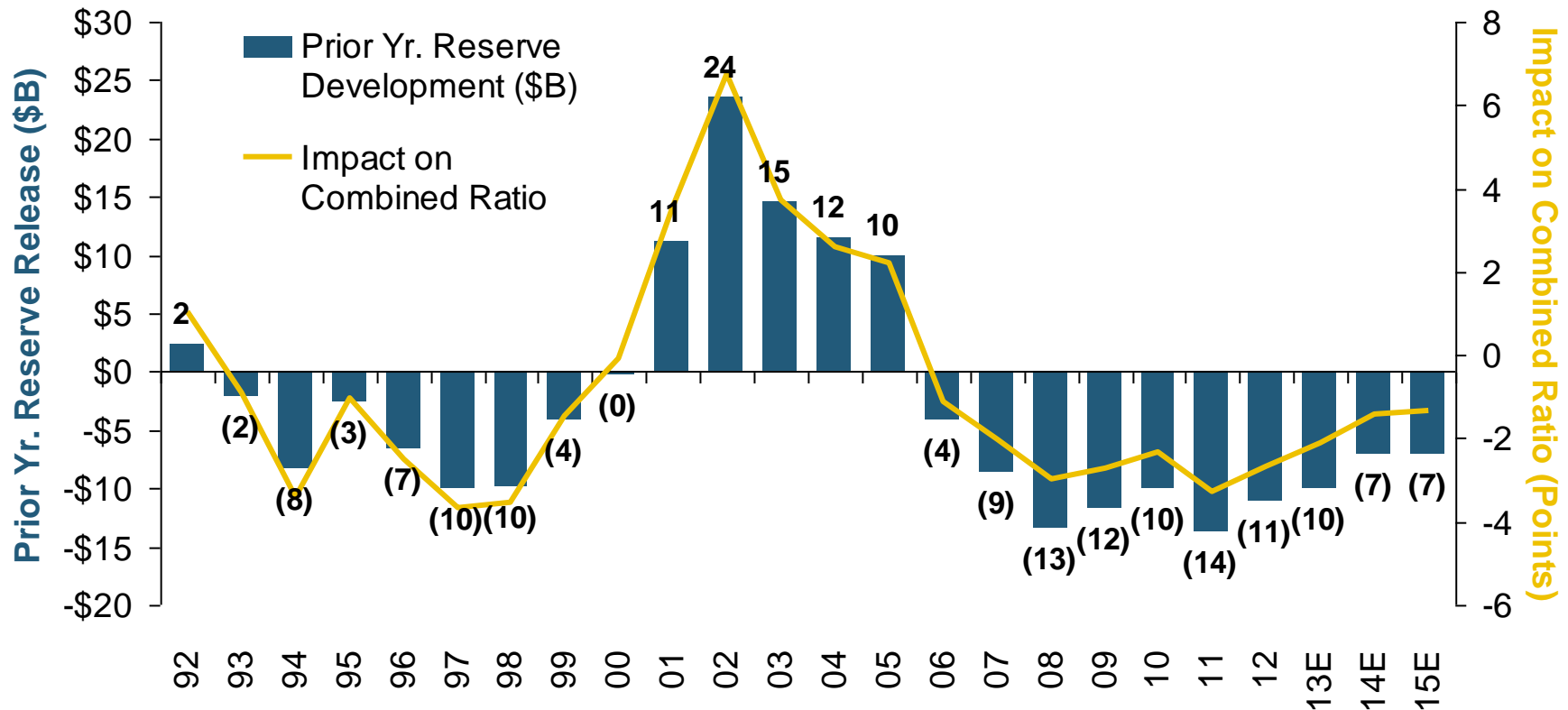
(Percent)



*Excludes mortgage and financial guaranty insurers.

Source: ISO/PCI; Insurance Information Institute

P/C Reserve Development, 1992–2015E



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

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



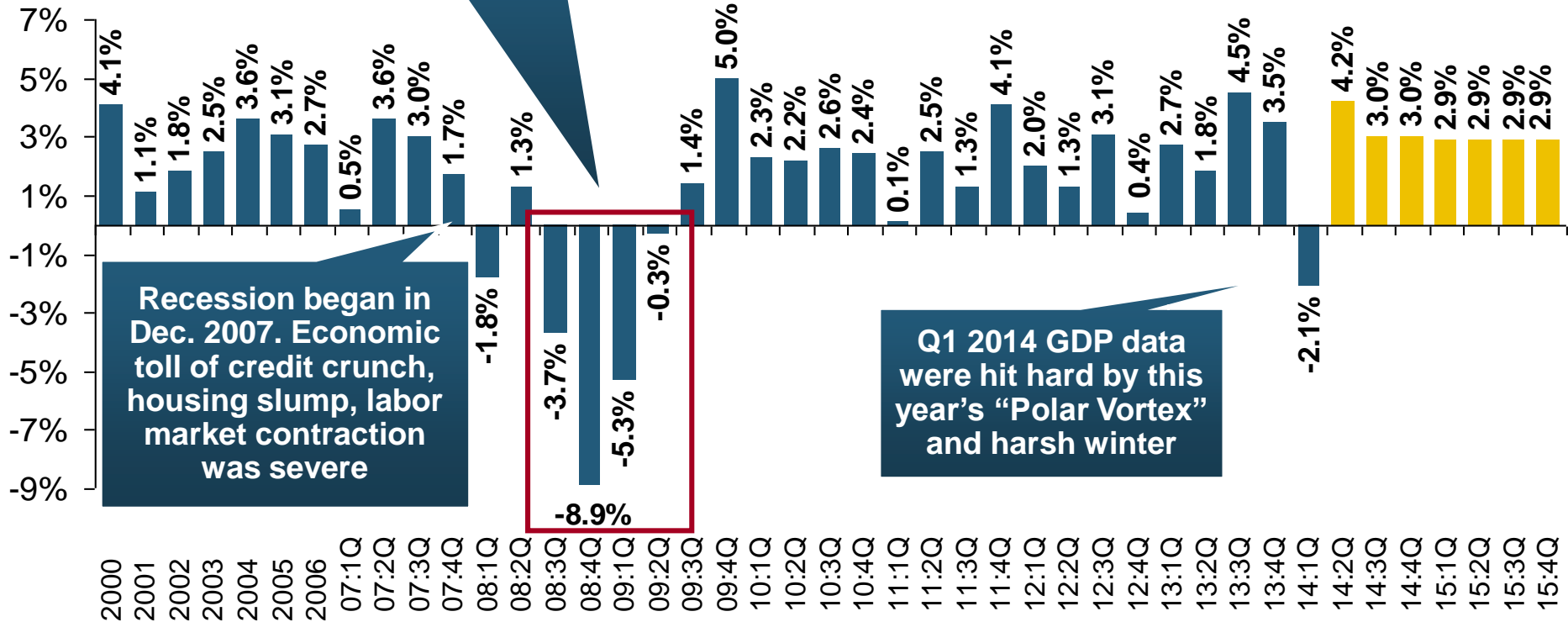
Some Key Drivers in the US Economy

**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%



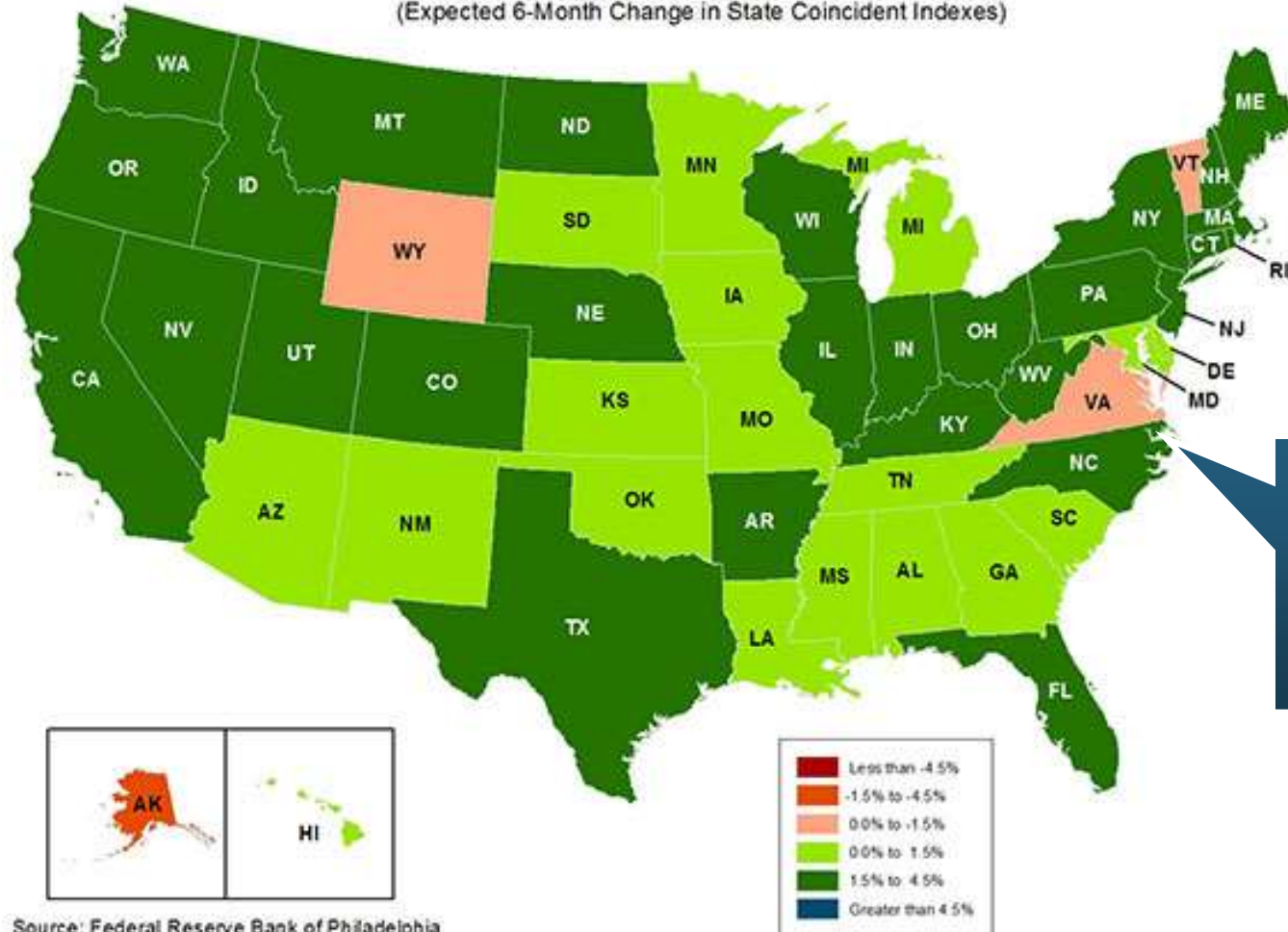
Demand for Insurance Should Increase in 2014/15 as GDP Growth Accelerates Modestly and Gradually Benefits the Economy Broadly

* Estimates/Forecasts from Blue Chip Economic Indicators.

Source: US Department of Commerce, Blue Economic Indicators 9/14; Insurance Information Institute.

State-by-State Leading Indicators through 2014:Q4

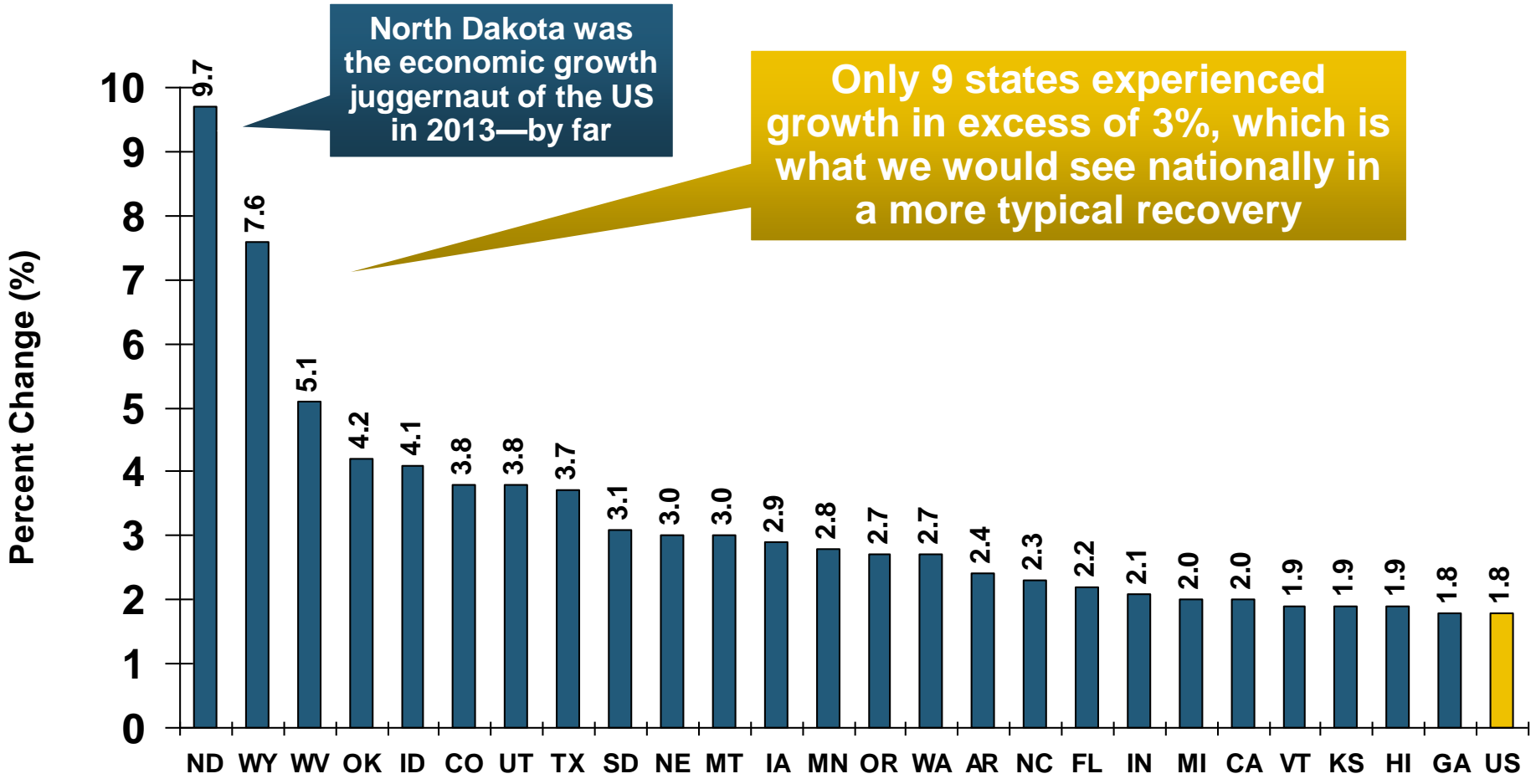
June 2014 State Leading Indexes
(Expected 6-Month Change in State Coincident Indexes)



The economic outlook for most of the US is generally positive, though flat-to-negative for 4 states

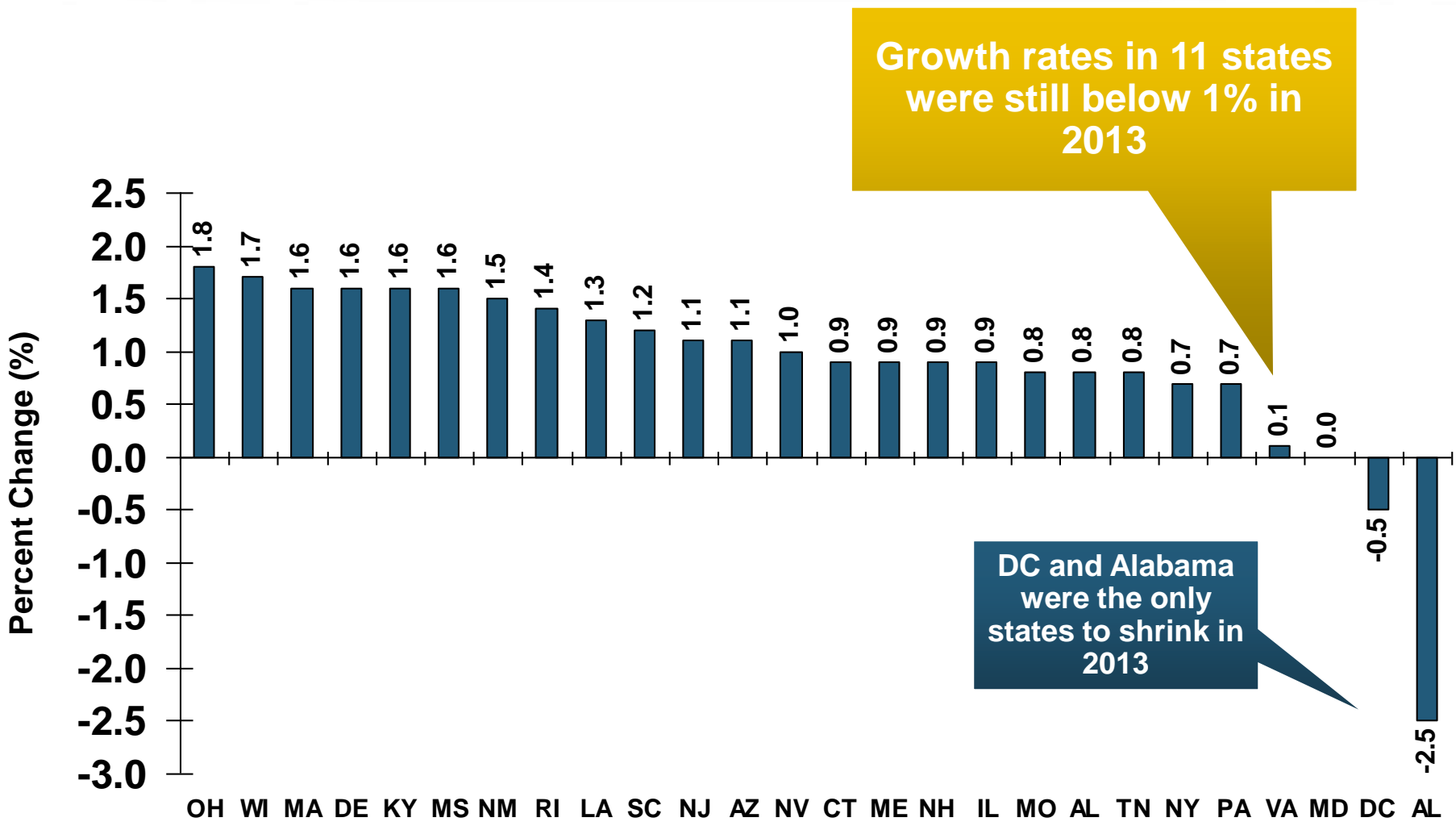
Source: Federal Reserve Bank of Philadelphia

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



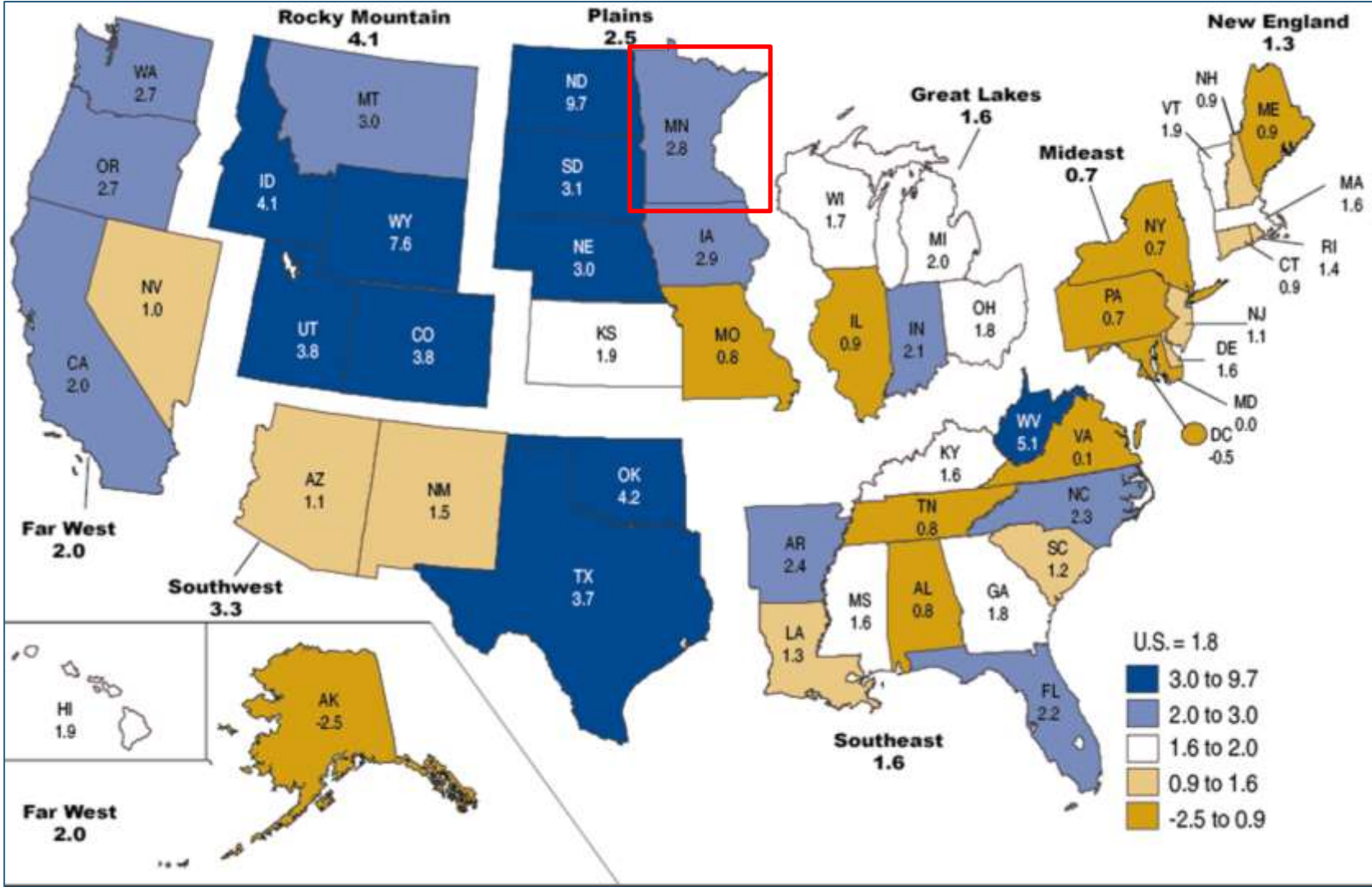
Sources: [U.S. Bureau of Economic Analysis](#); Insurance Information Institute.

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



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

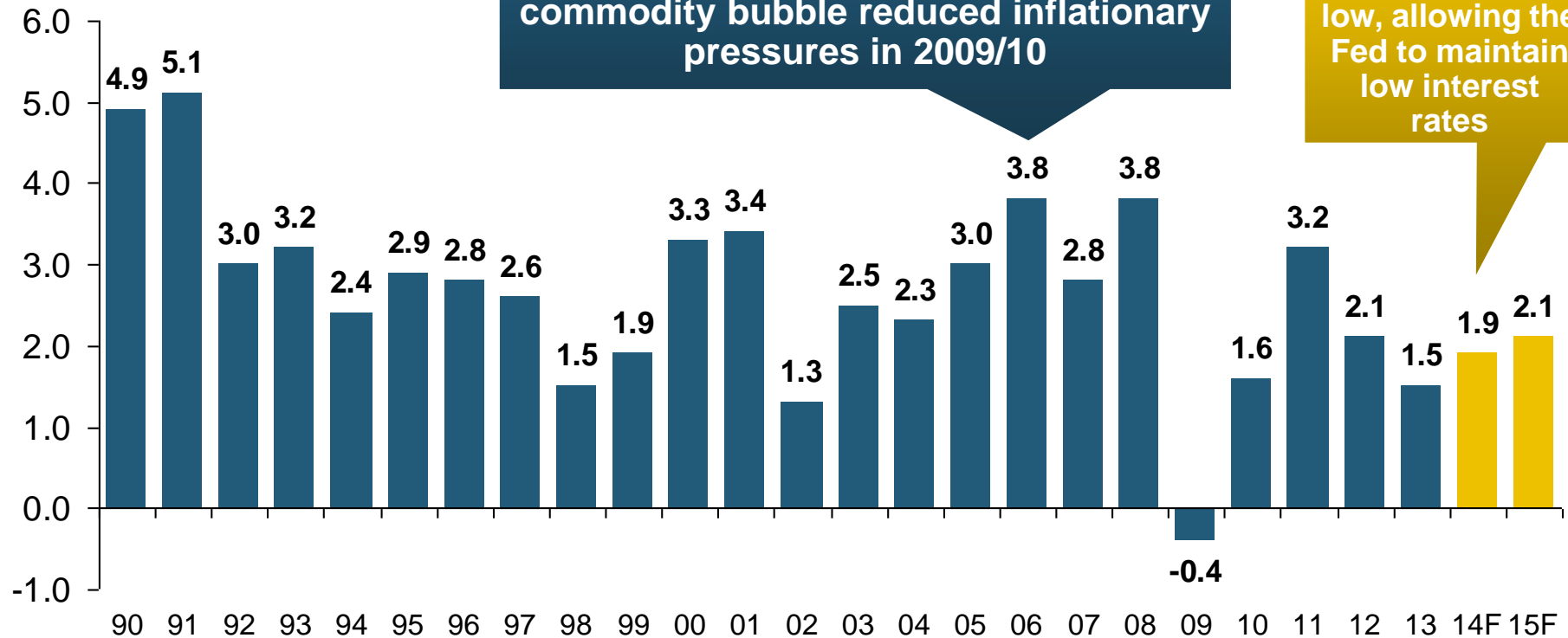
Percent Change in Real GDP by State, 2013



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

Annual Inflation Rates, (CPI-U, %), 1990–2015F

Annual Inflation Rates (%)



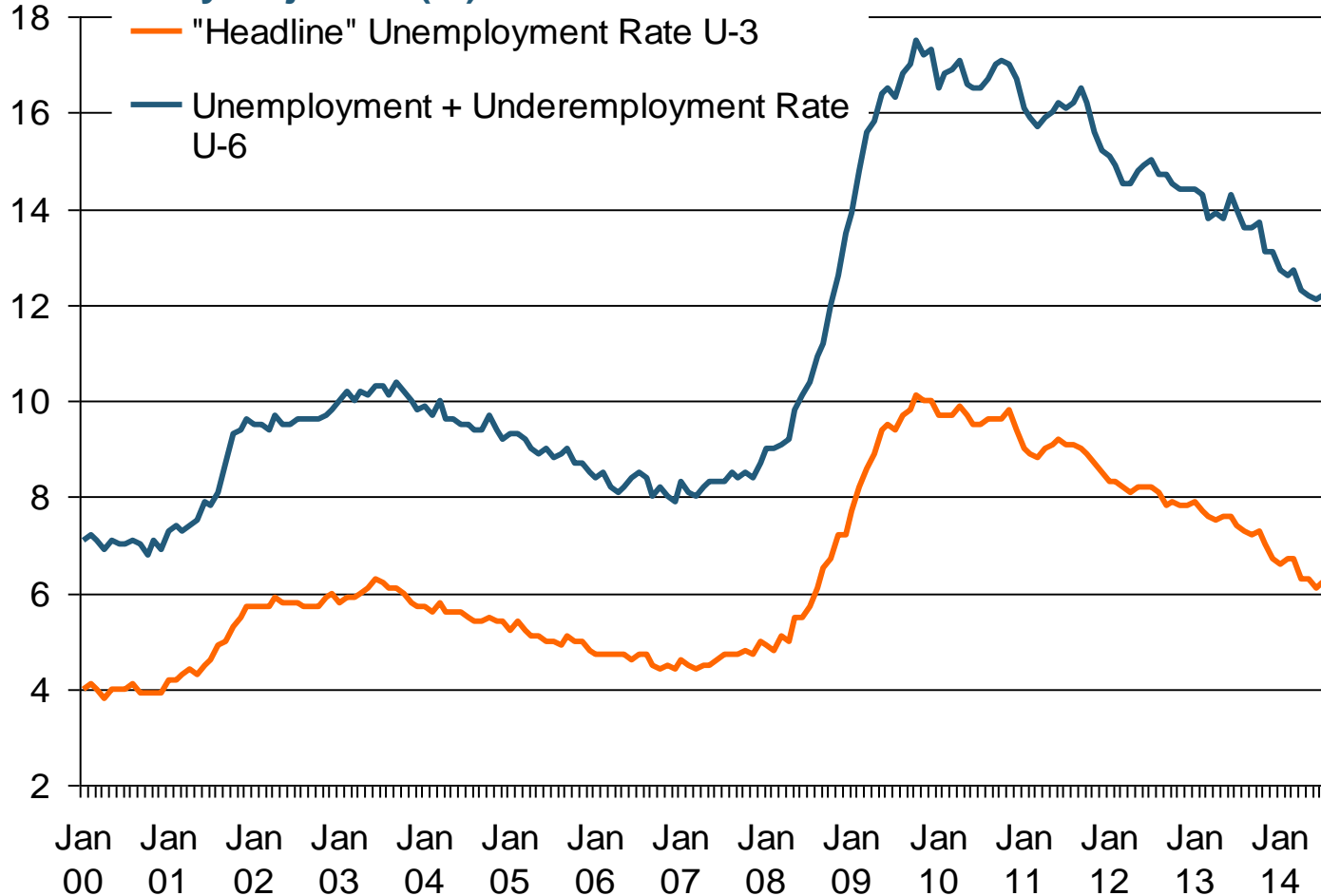
Inflation peaked at 5.6% in August 2008 on high energy and commodity crisis. The recession and the collapse of the commodity bubble reduced inflationary pressures in 2009/10

Inflationary expectations have edged up but remain quite low, allowing the Fed to maintain low interest rates

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

Unemployment and Underemployment Rates: Still Too High, But Falling

January 2000 through Aug. 2014,
Seasonally Adjusted (%)



U-6 went from 8.0% in March 2007 to 17.5% in October 2009; Stood at 12.0% in Aug. 2014. 8% to 10% is “normal.”

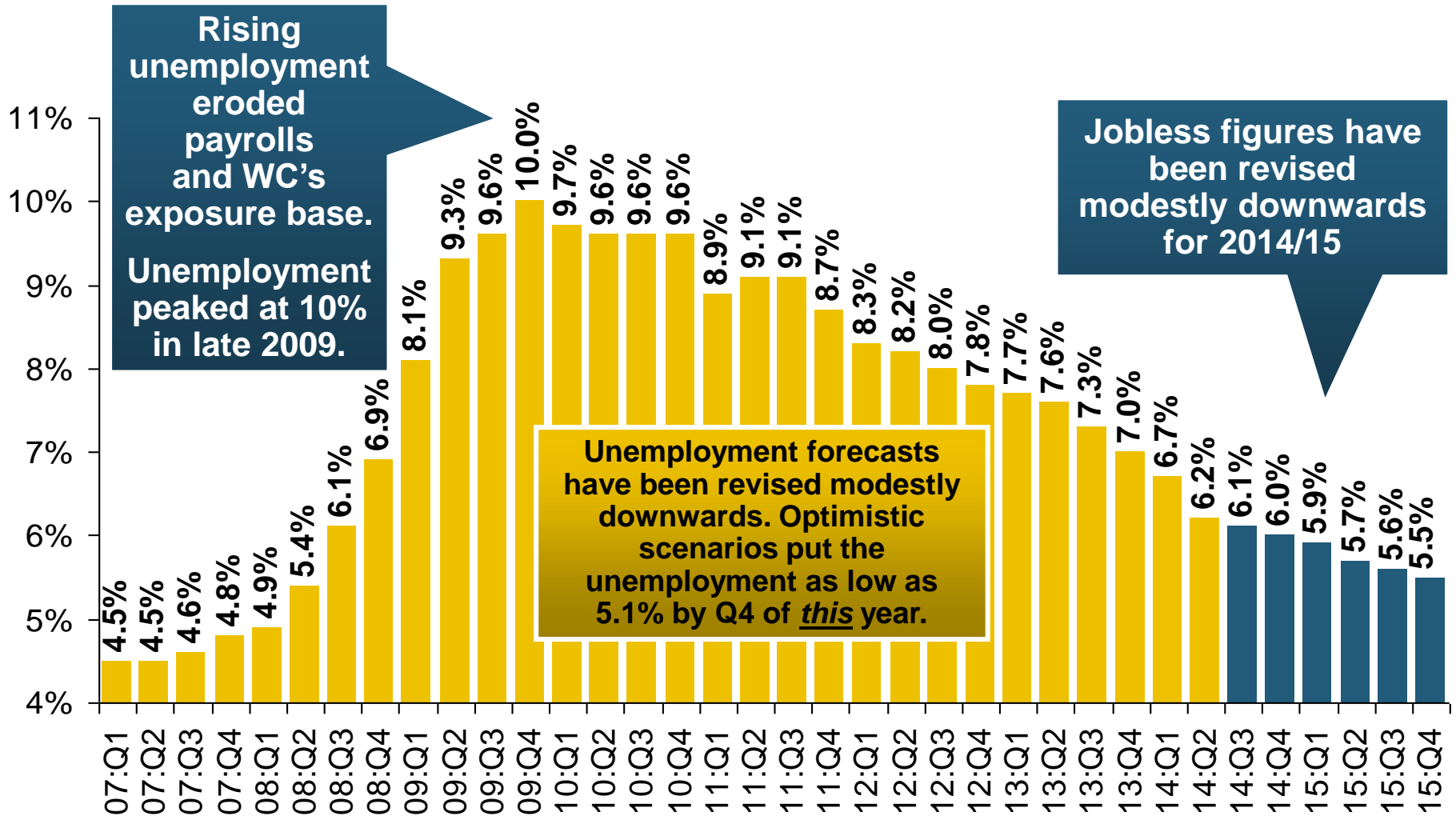
“Headline” unemployment was 6.1% in Aug. 2014. 4.5% to 6% is “normal.”

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

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

US Unemployment Rate Forecast

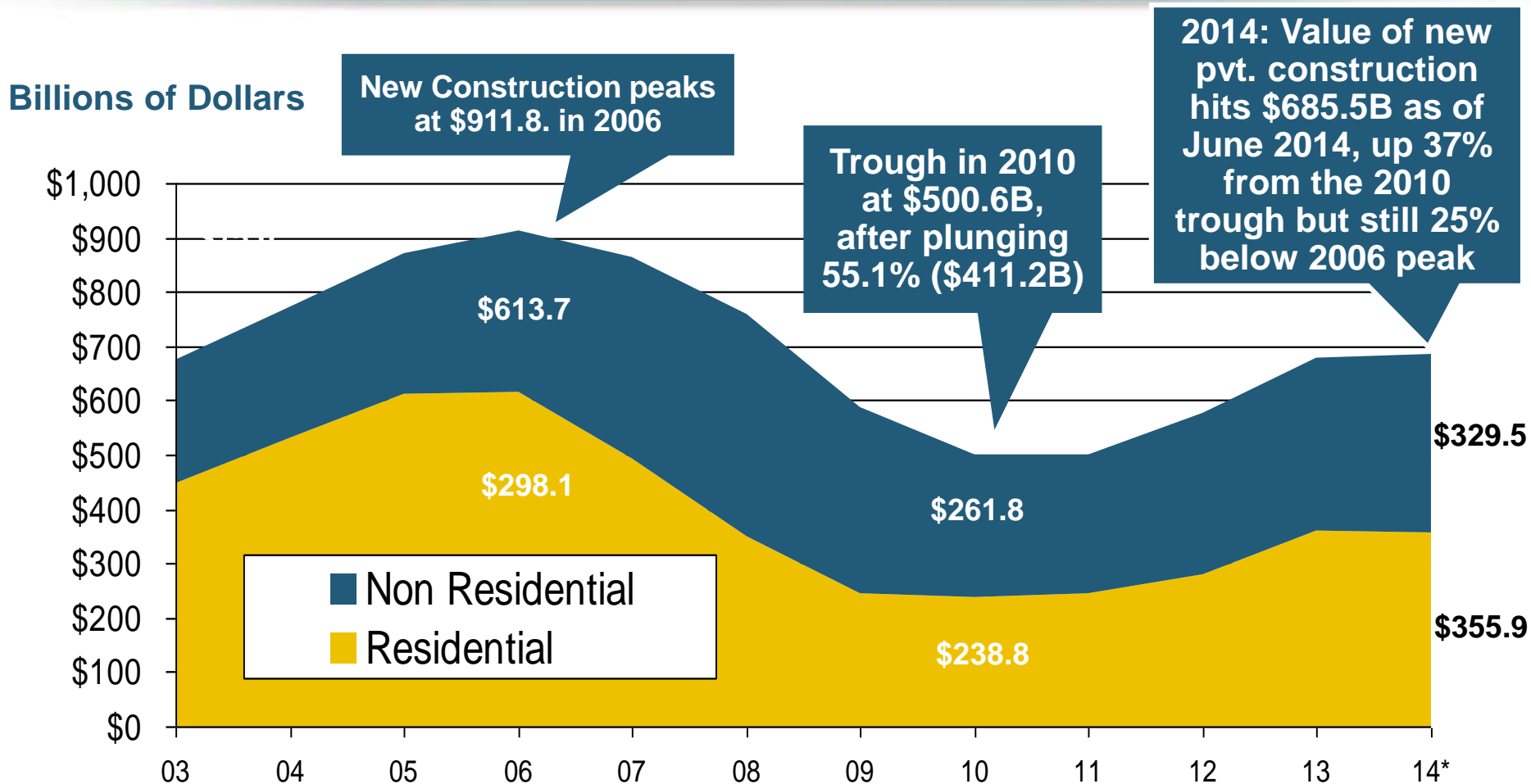
2007:Q1 to 2015:Q4F*



*  = actual;  = forecasts

Sources: US Bureau of Labor Statistics; Blue Chip Economic Indicators (9/14 edition); Insurance Information Institute.

Value of New Private Construction: Residential & Nonresidential, 2003-2014*



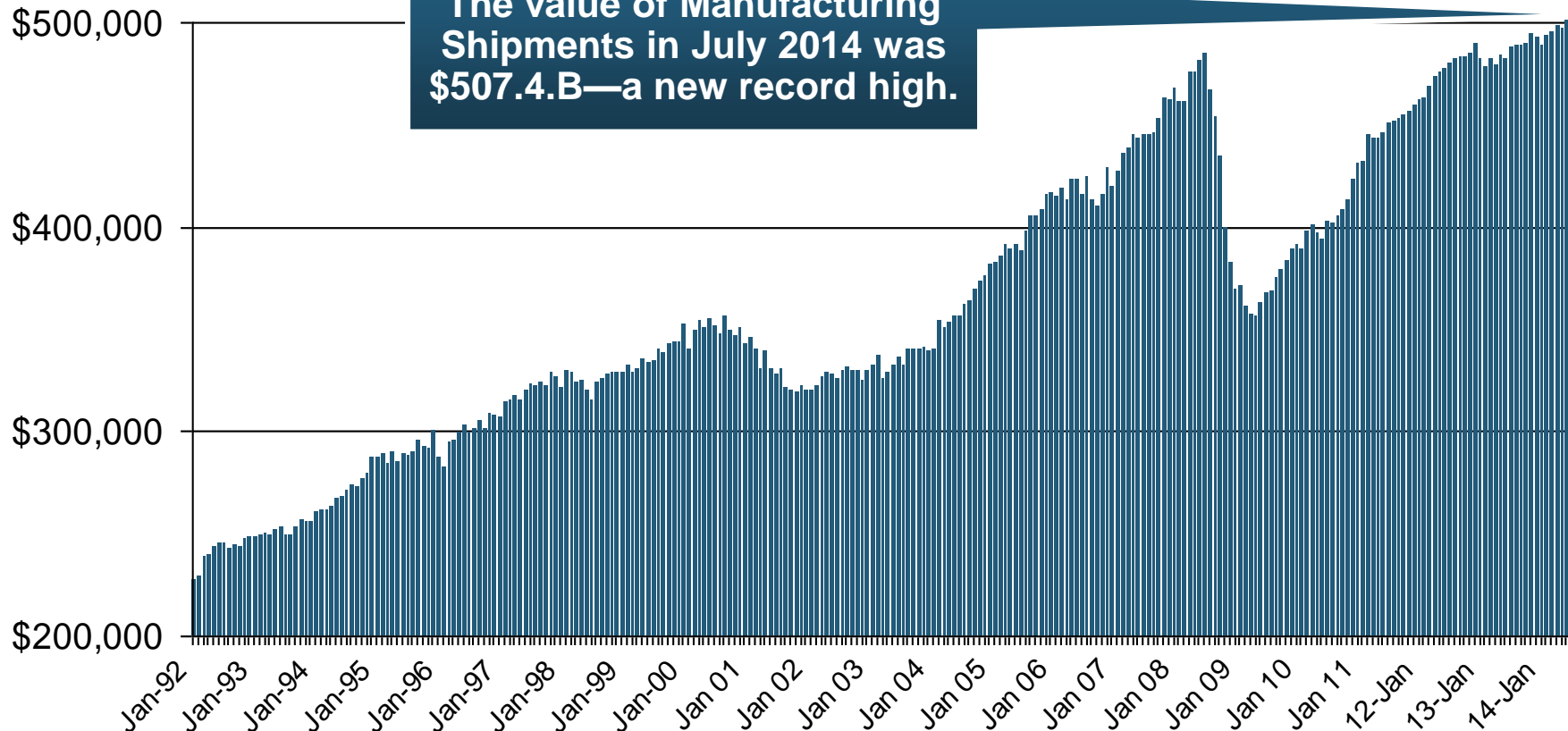
Private Construction Activity Is Moving in a Positive Direction though Remains Well Below Pre-Crisis Peak; Residential Dominates

*2014 figure is a seasonally adjusted annual rate as of June.

Sources: US Department of Commerce; Insurance Information Institute.

Dollar Value* of Manufacturers' Shipments Monthly, Jan. 1992—July 2014

\$ Millions



Monthly shipments in July 2014 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; Data published Sept. 4, 2014.

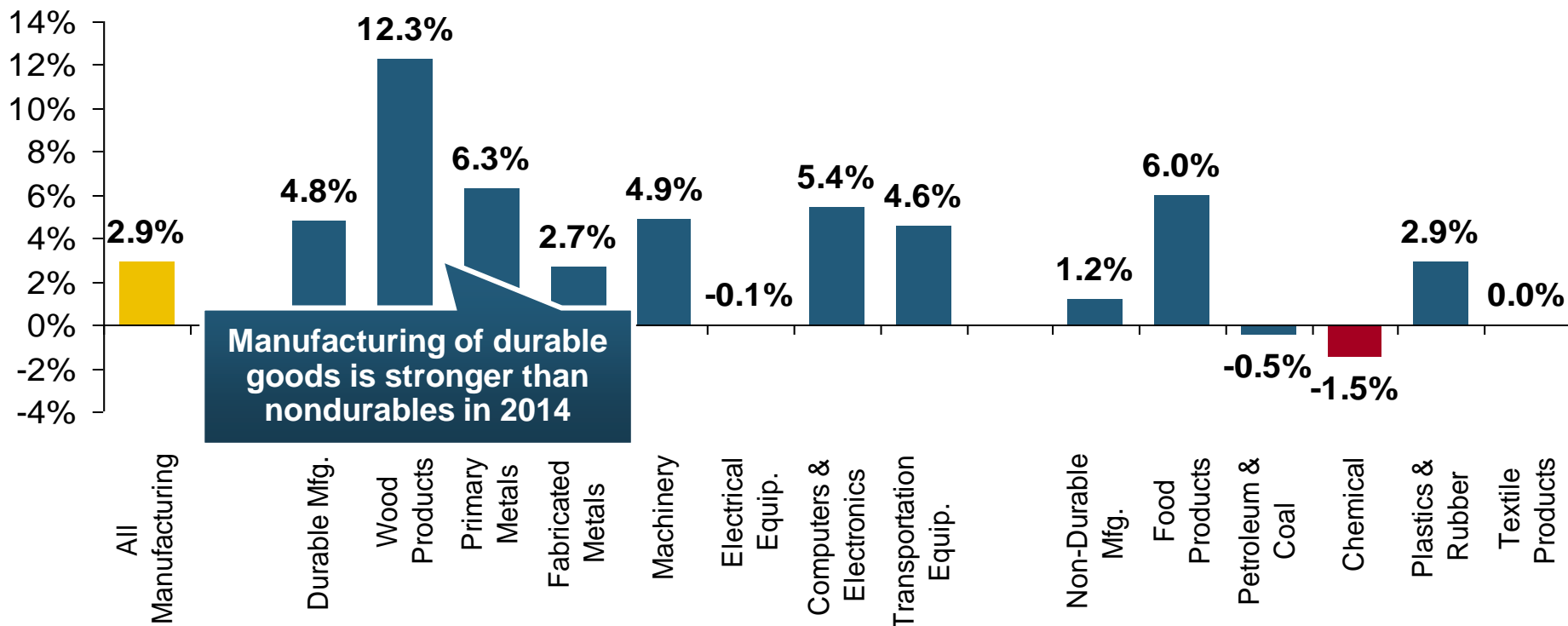
Source: U.S. Census Bureau, *Full Report on Manufacturers' Shipments, Inventories, and Orders*, <http://www.census.gov/manufacturing/m3/>

Manufacturing Growth for Selected Sectors, 2014 vs. 2013*

Growth (%)

Durables: +4.8%

Non-Durables: +0.9%



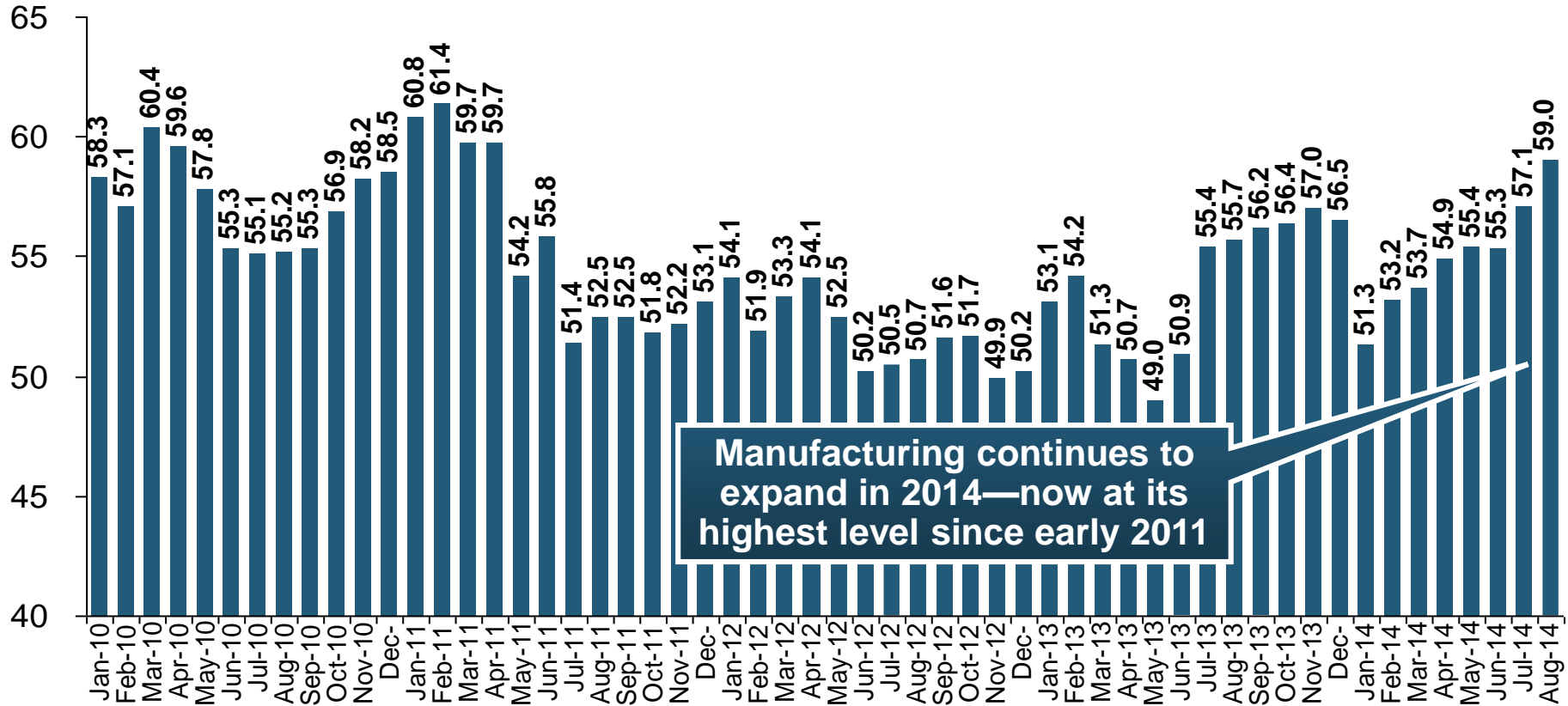
Manufacturing Is Expanding—Albeit Slowly—Across a Number of Sectors that Will Contribute to Growth in Insurable Exposures Including: WC, Commercial Property, Commercial Auto and Many Liability Coverages

*Seasonally adjusted; Date are YTD comparing data through July 2014 to the same period in 2013.

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

ISM Manufacturing Index (Values > 50 Indicate Expansion)

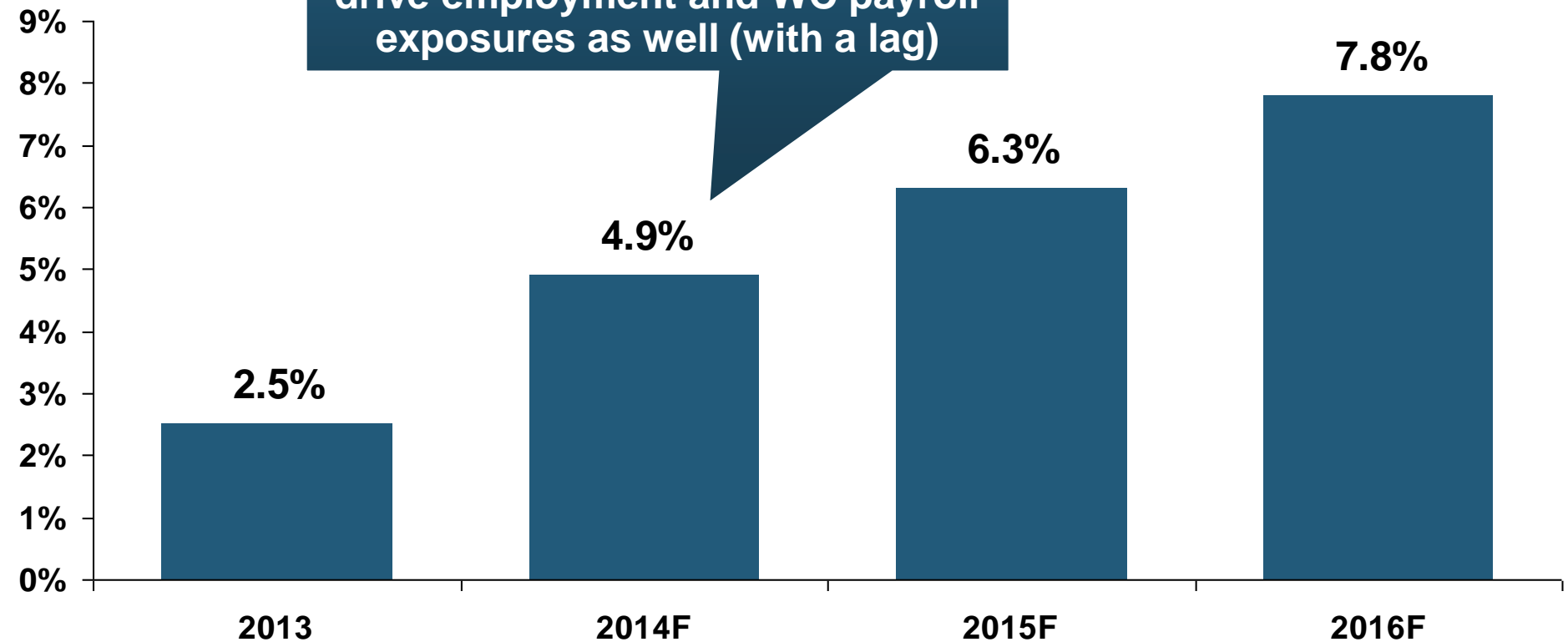
January 2010 through August 2014



The manufacturing sector expanded for 54 of the 56 months from Jan. 2010 through Aug. 2014. Pace of recovery has been uneven due to economic turbulence in the U.S., Europe and China.

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)



12 Industries for the Next 10 Years: Insurance Solutions Needed

Health Care

Health Sciences

Energy (Traditional)

Alternative Energy

Petrochemical

Agriculture

Natural Resources

Technology (incl. Biotechnology)

Light Manufacturing

Inourced Manufacturing

Export-Oriented Industries

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



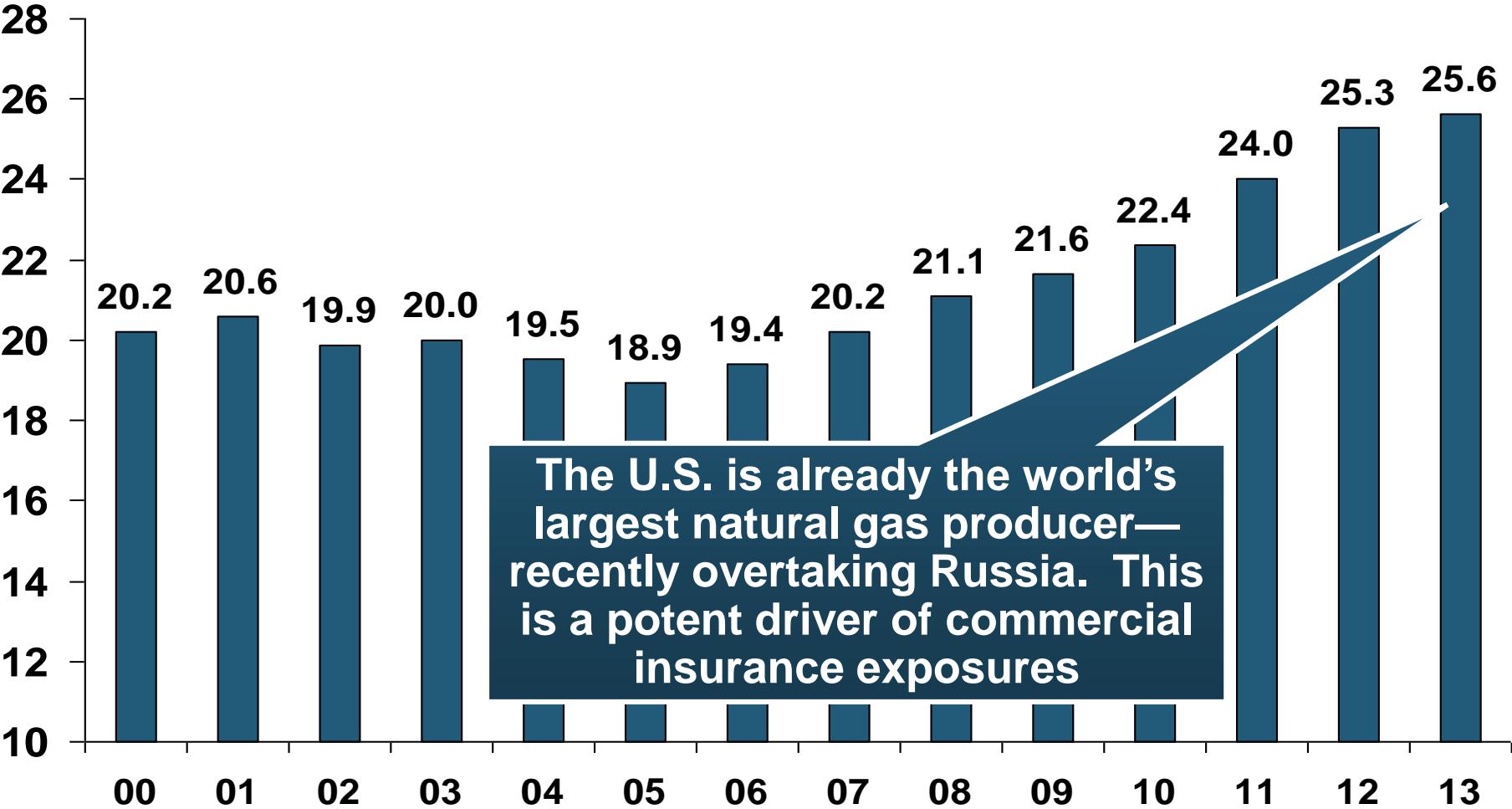
Many industries are poised for growth, though insurers' ability to capitalize on these industries varies widely

ENERGY SECTOR: OIL, GAS & EXPORTS ARE BRIGHT

**US Is Becoming an Energy
Powerhouse; Exports Are Key**
Need Infrastructure Investment

U.S. Natural Gas Production, 2000-2013

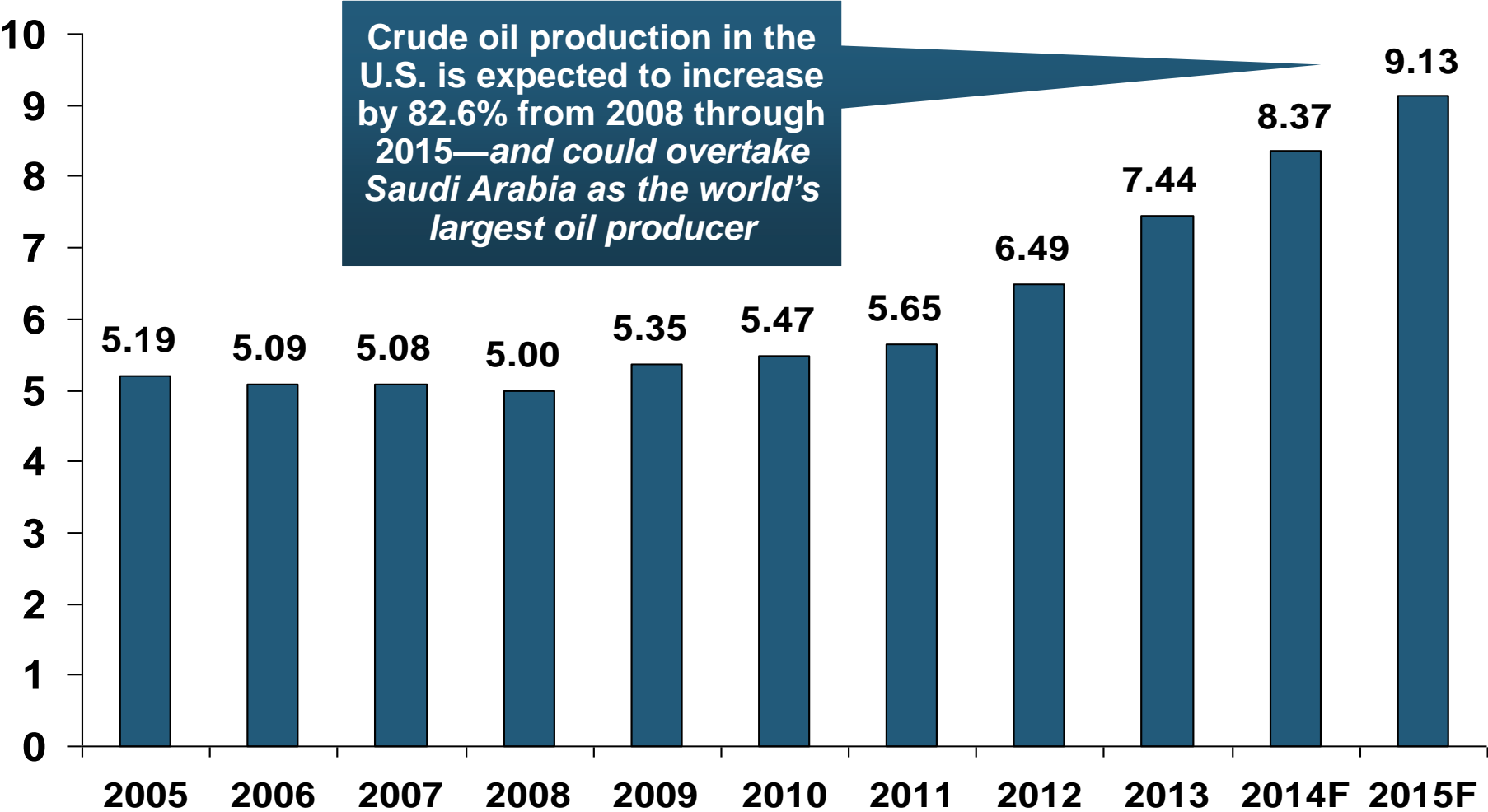
Trillions of Cubic Ft. per Year



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

U.S. Crude Oil Production, 2005-2015P

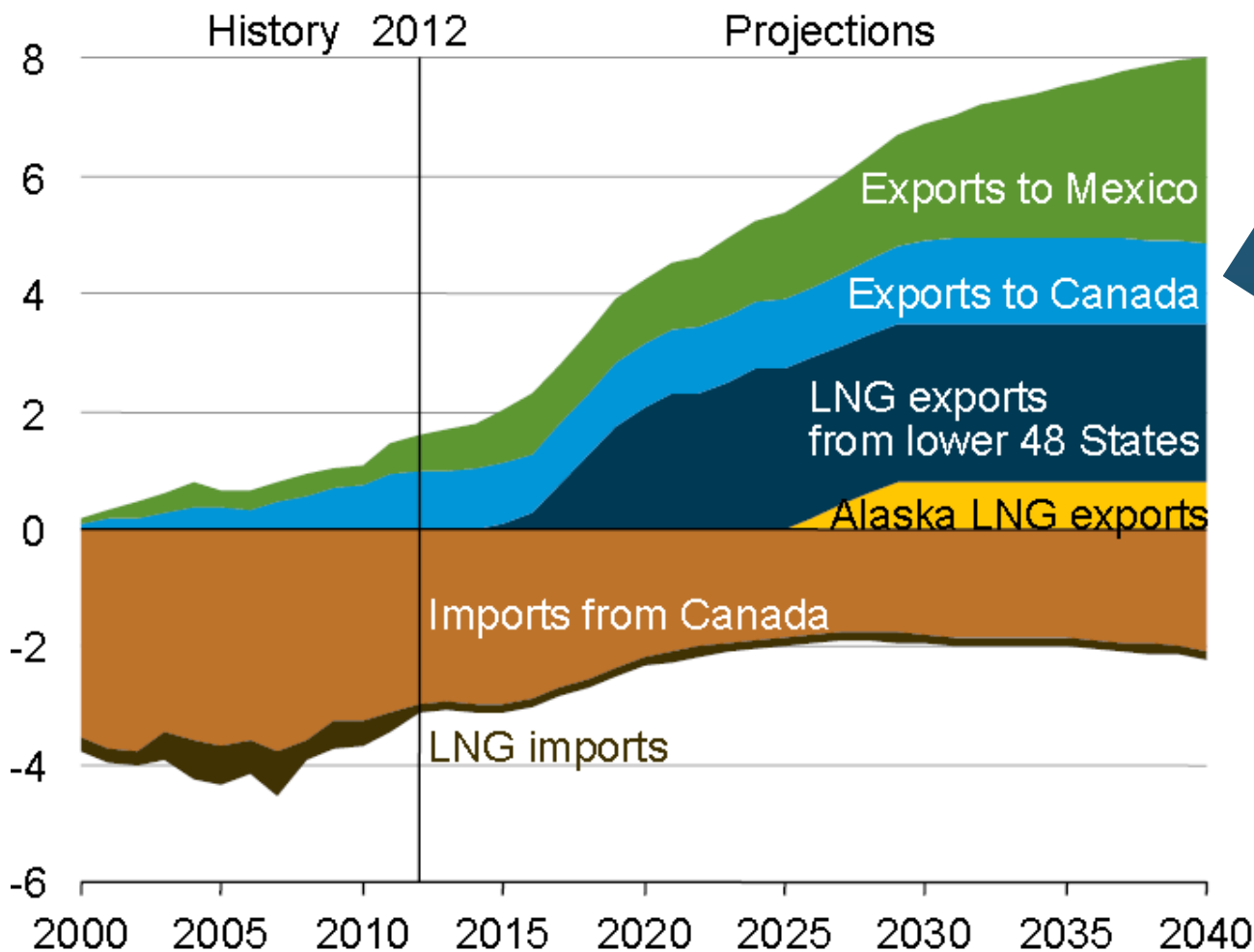
Millions of Barrels per Day



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

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

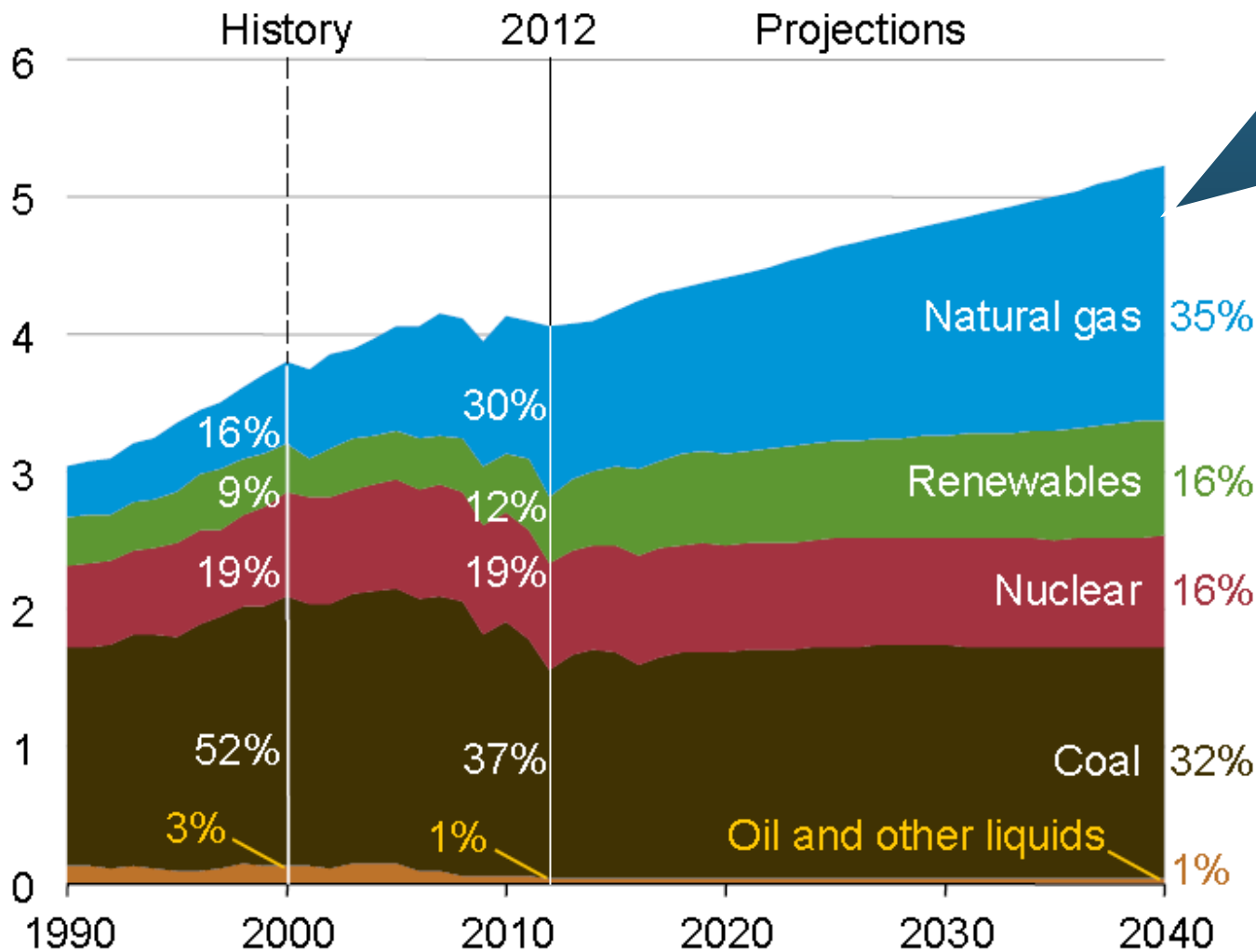
Trillions of Cubic Feet



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

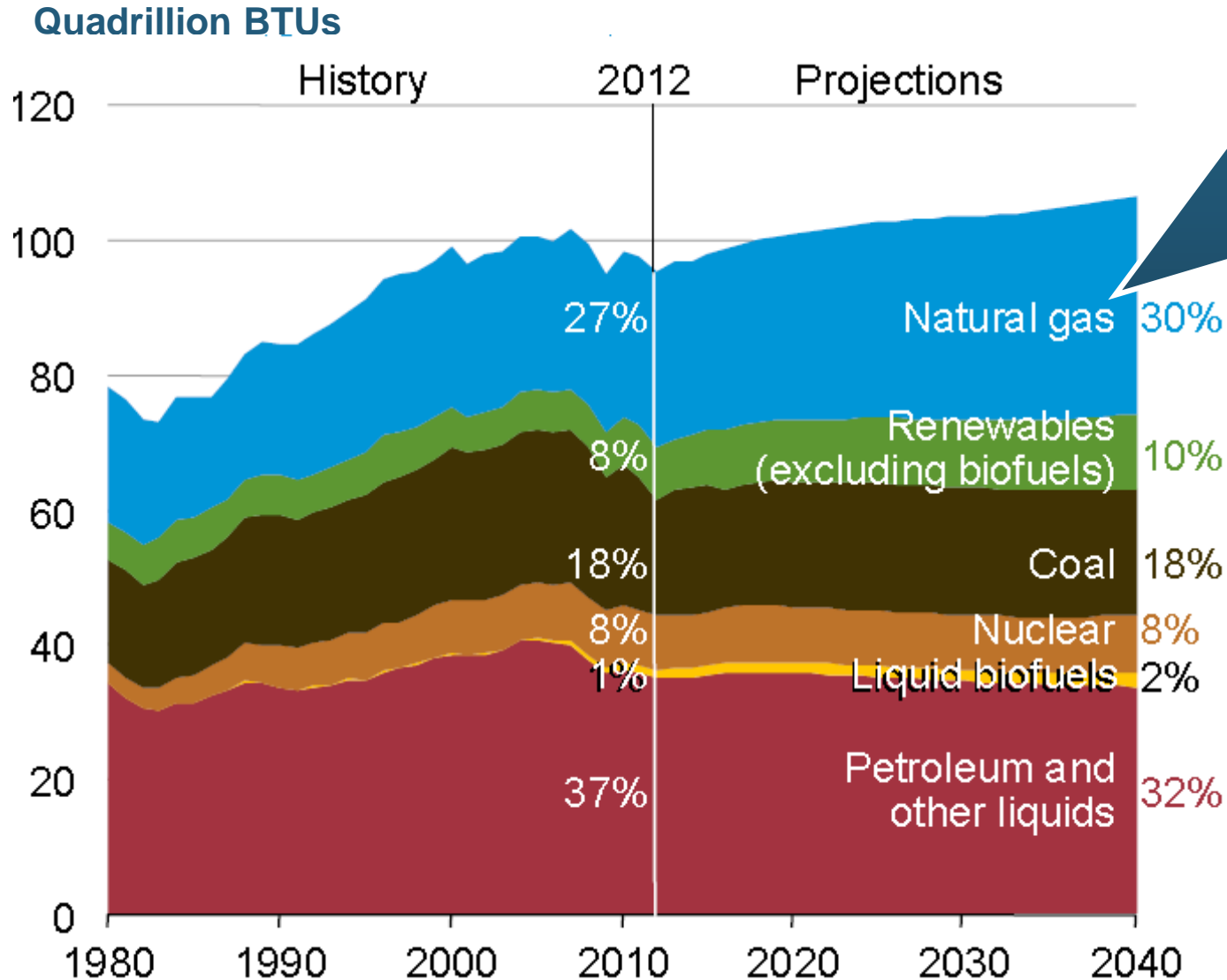
U.S. Electricity Generation by Fuel, 1990 - 2040

Trillions of kilowatt Hours



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

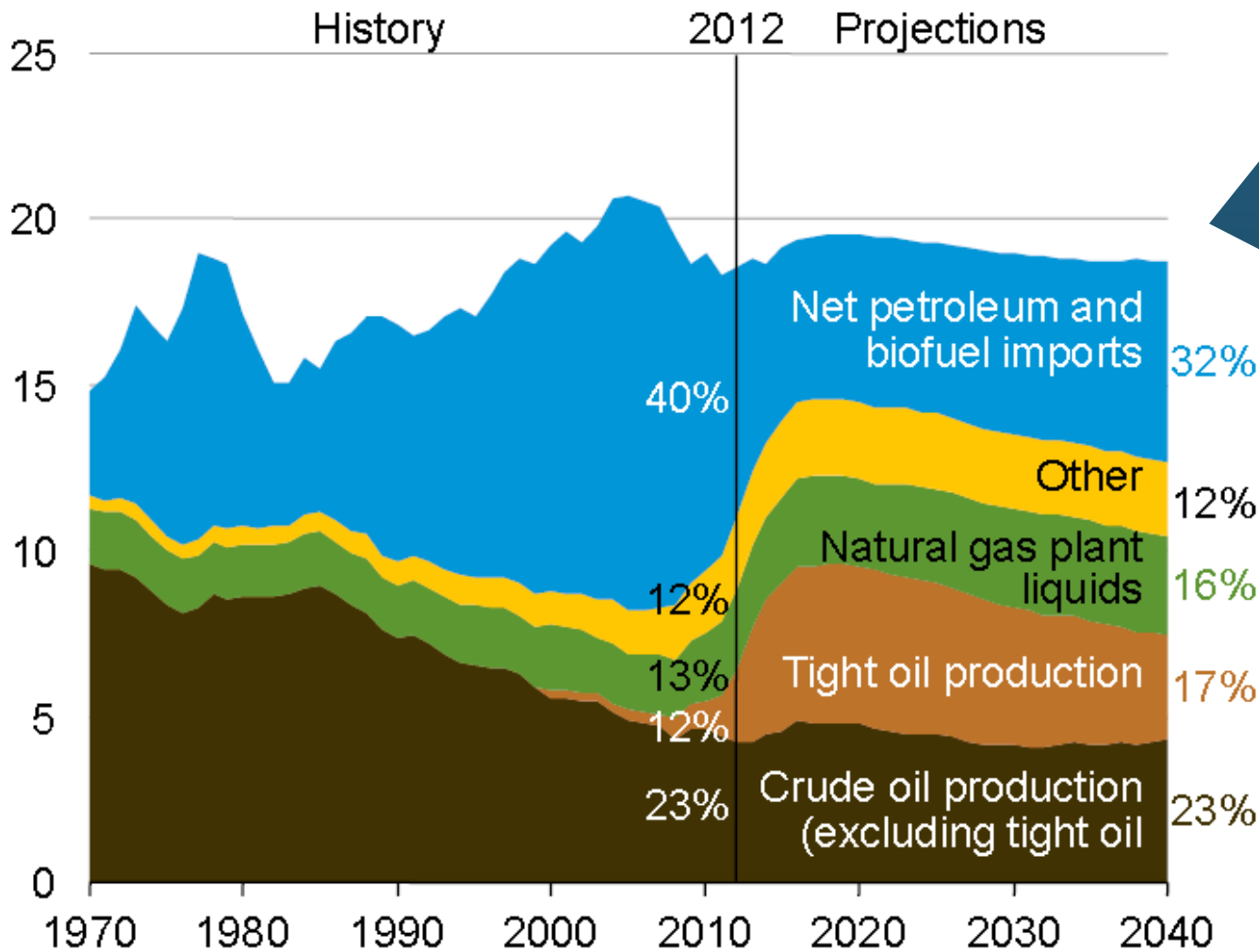
U.S. Primary Energy Consumption by Fuel, 1990 - 2040



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

CYBER RISK

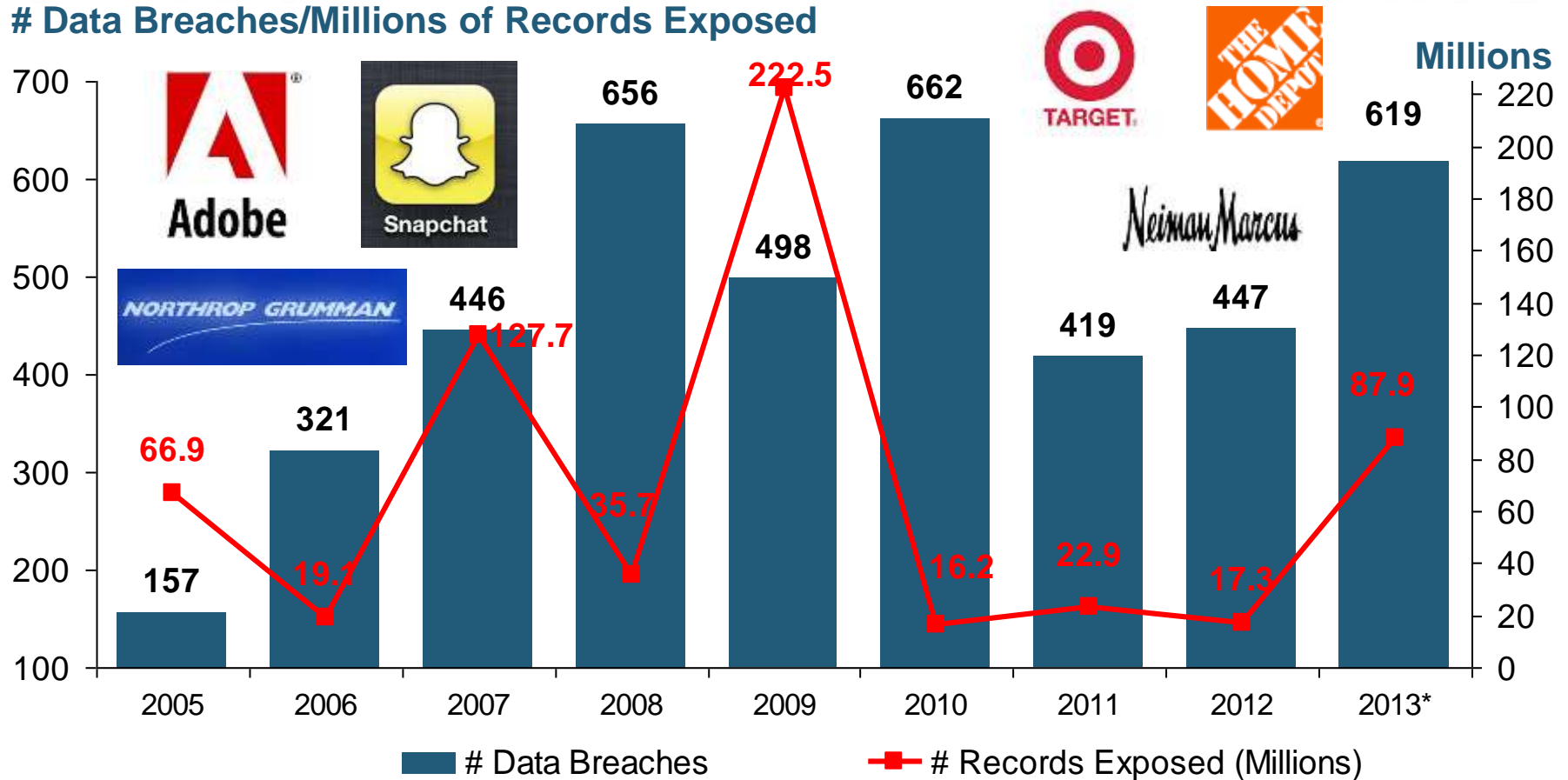
**Cyber Risk is a Rapidly Emerging
Exposure for Businesses Large
and Small in Every Industry**

NEW III White Paper:

http://www.iii.org/assets/docs/pdf/paper_CyberRisk_2014.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.

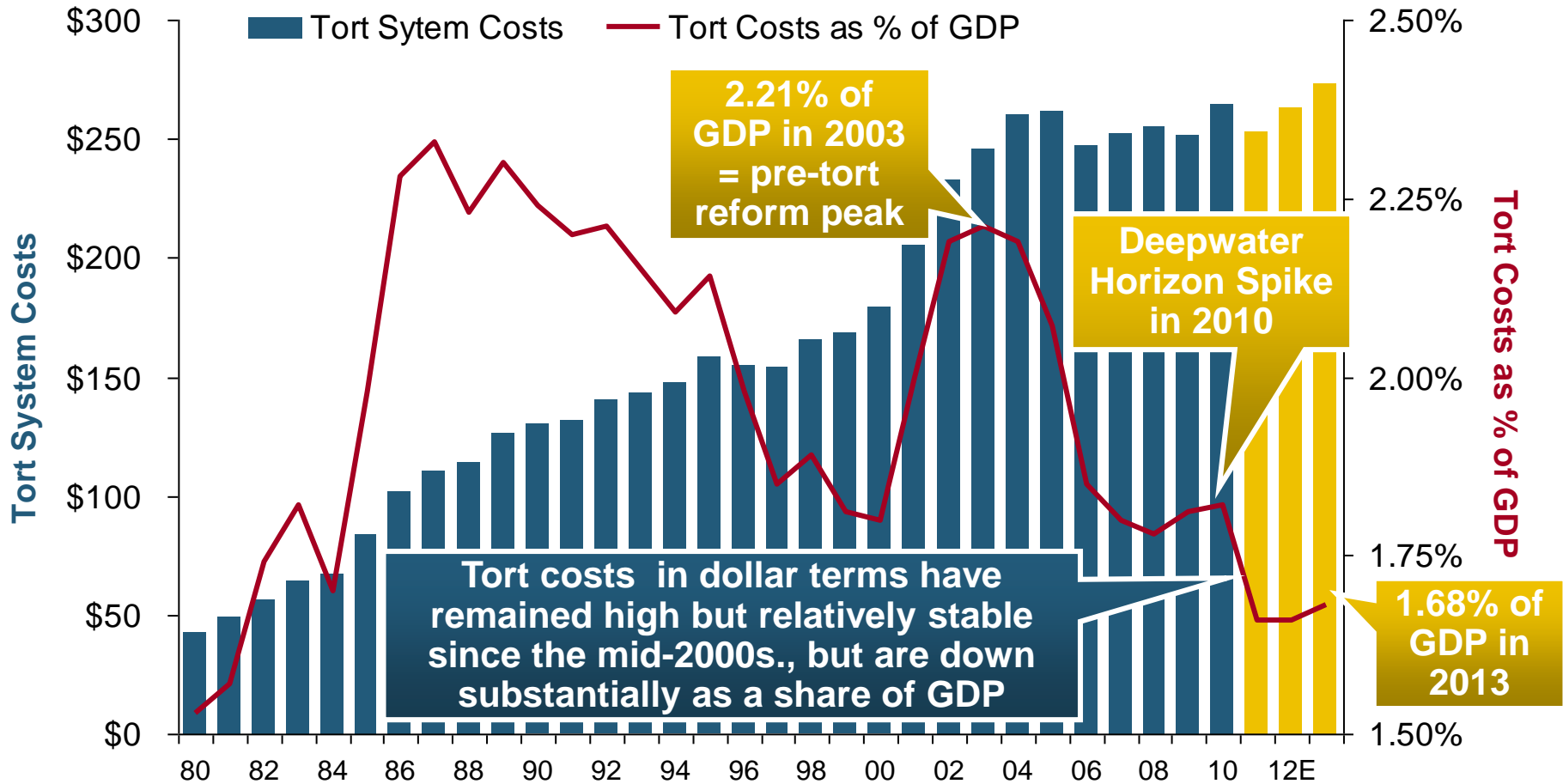


Shifting Legal Liability & Tort Environment

Is the Tort Pendulum Swinging Against Insurers?

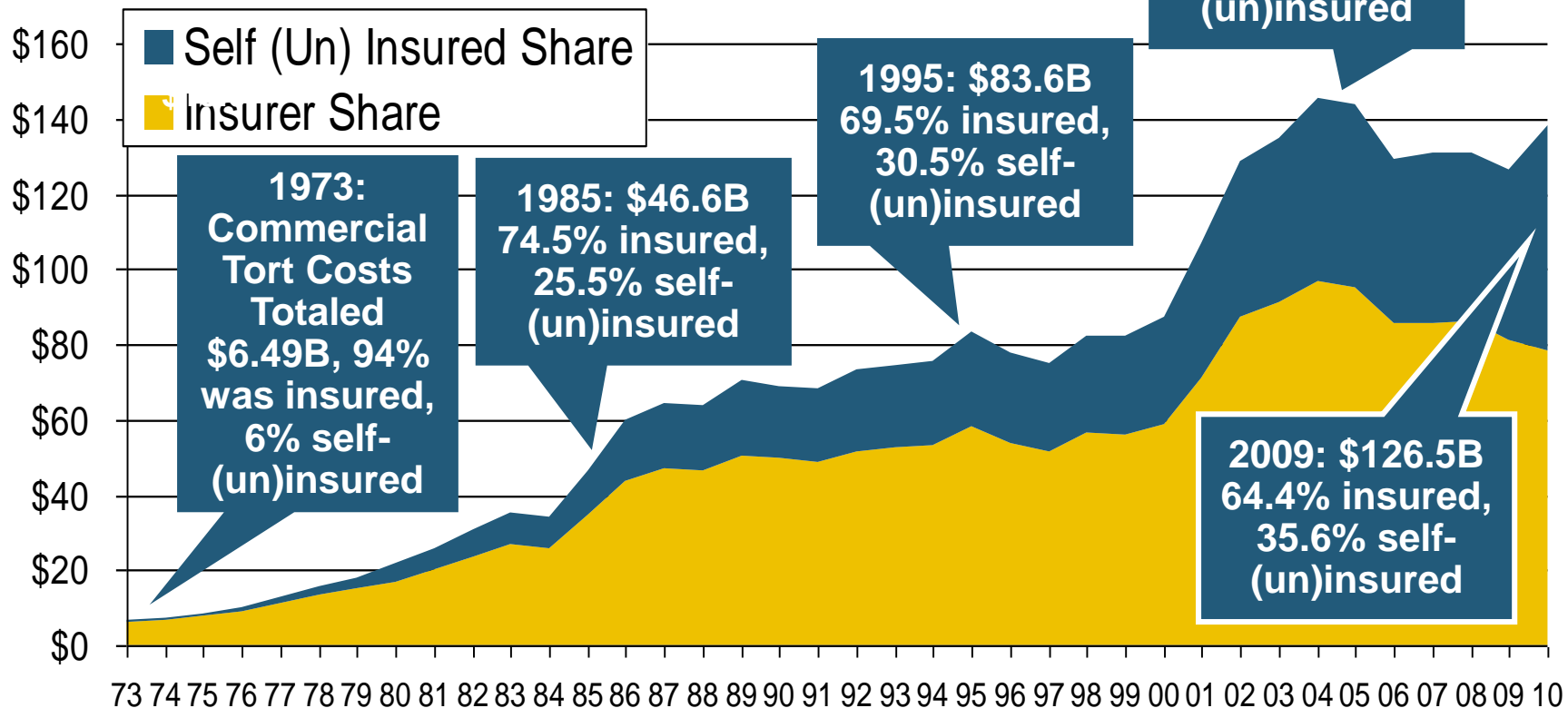
Over the Last Three Decades, Total Tort Costs as a % of GDP Appear Somewhat Cyclical, 1980-2013E

(\$ Billions)



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

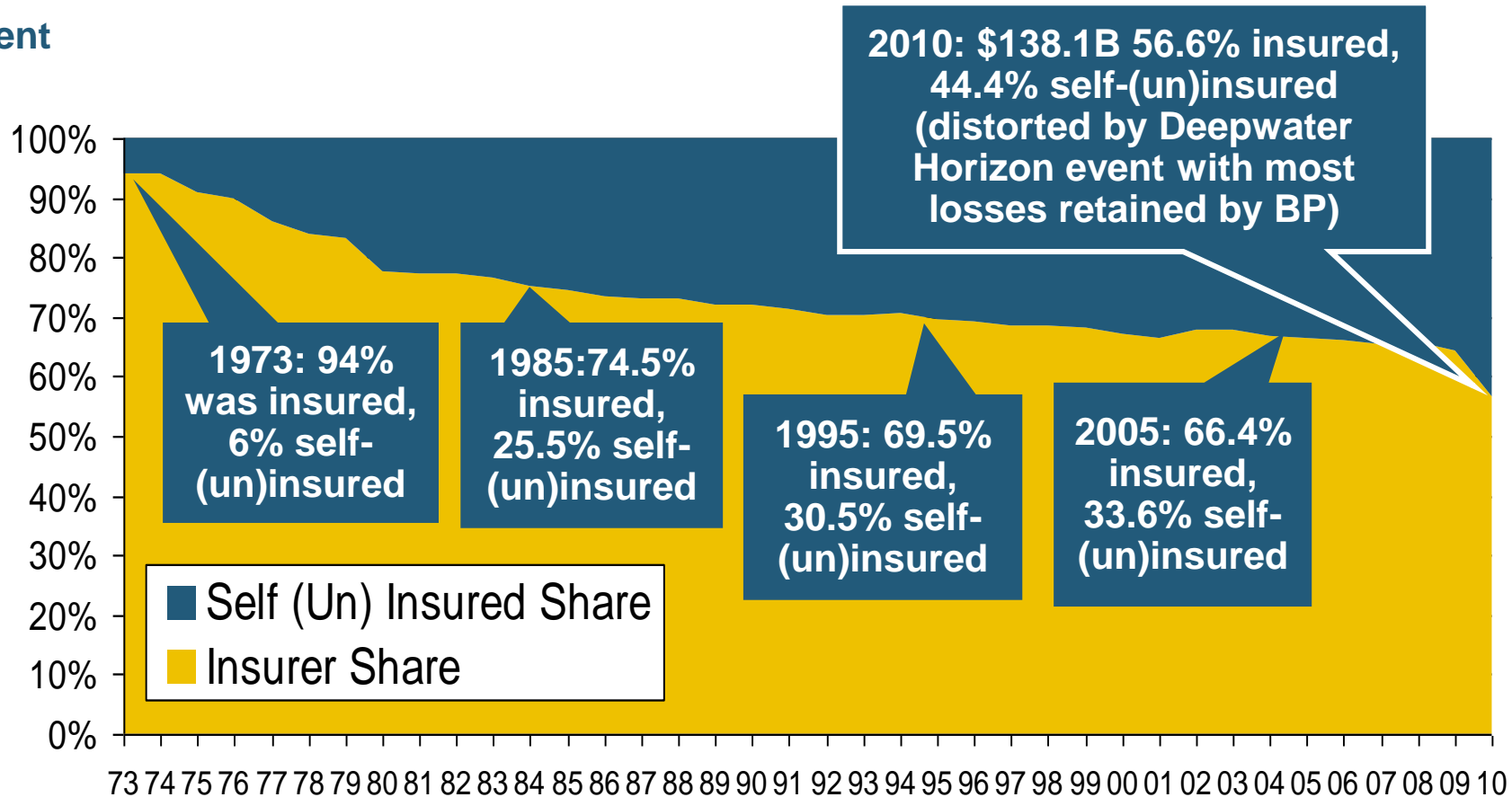
Billions of Dollars



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

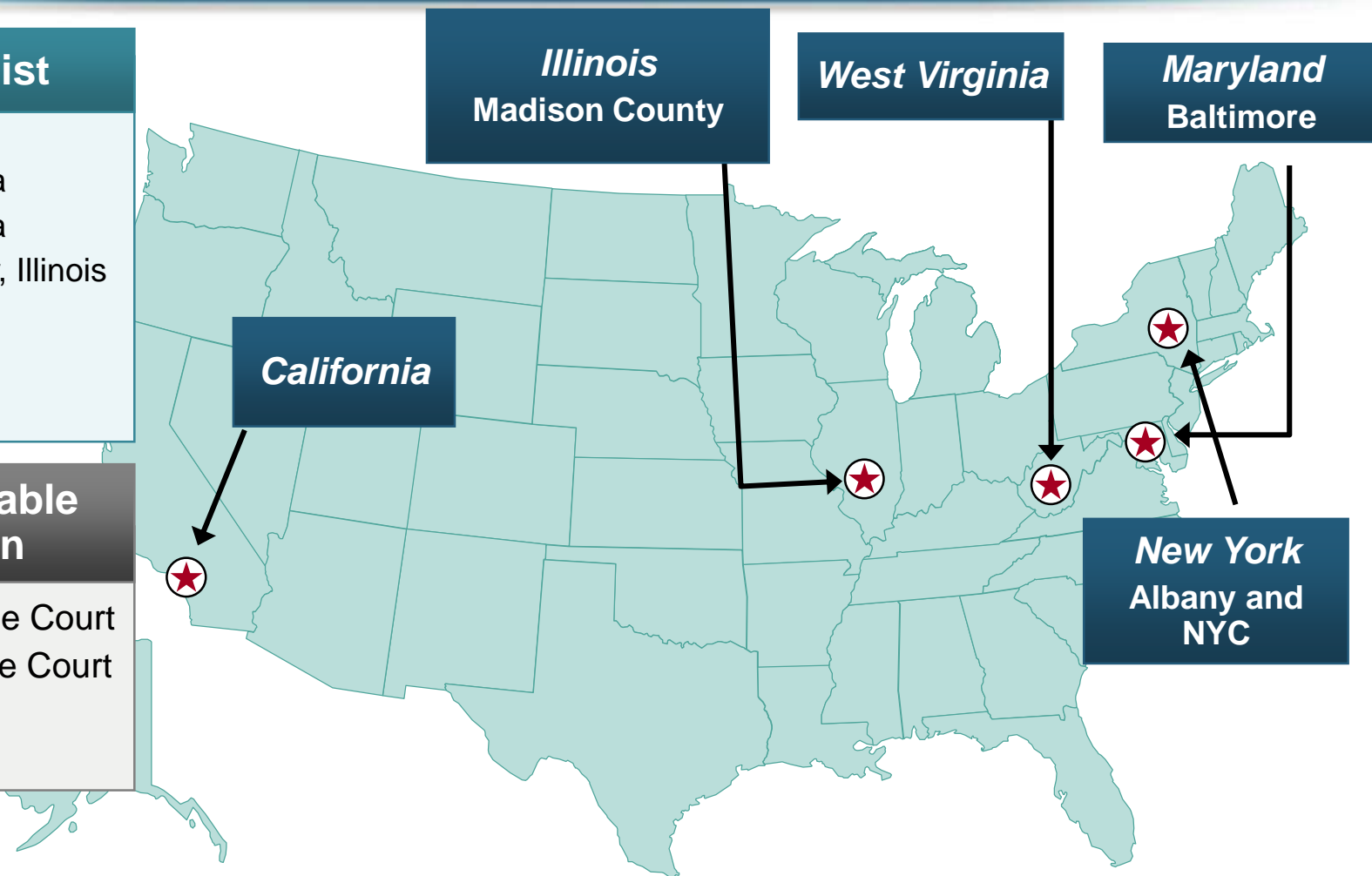
The Nation's Judicial Hellholes: 2012/2013

Watch List

- Philadelphia, Pennsylvania
- South Florida
- Cook County, Illinois
- New Jersey
- Nevada
- Louisiana

Dishonorable Mention

- MO Supreme Court
- WA Supreme Court



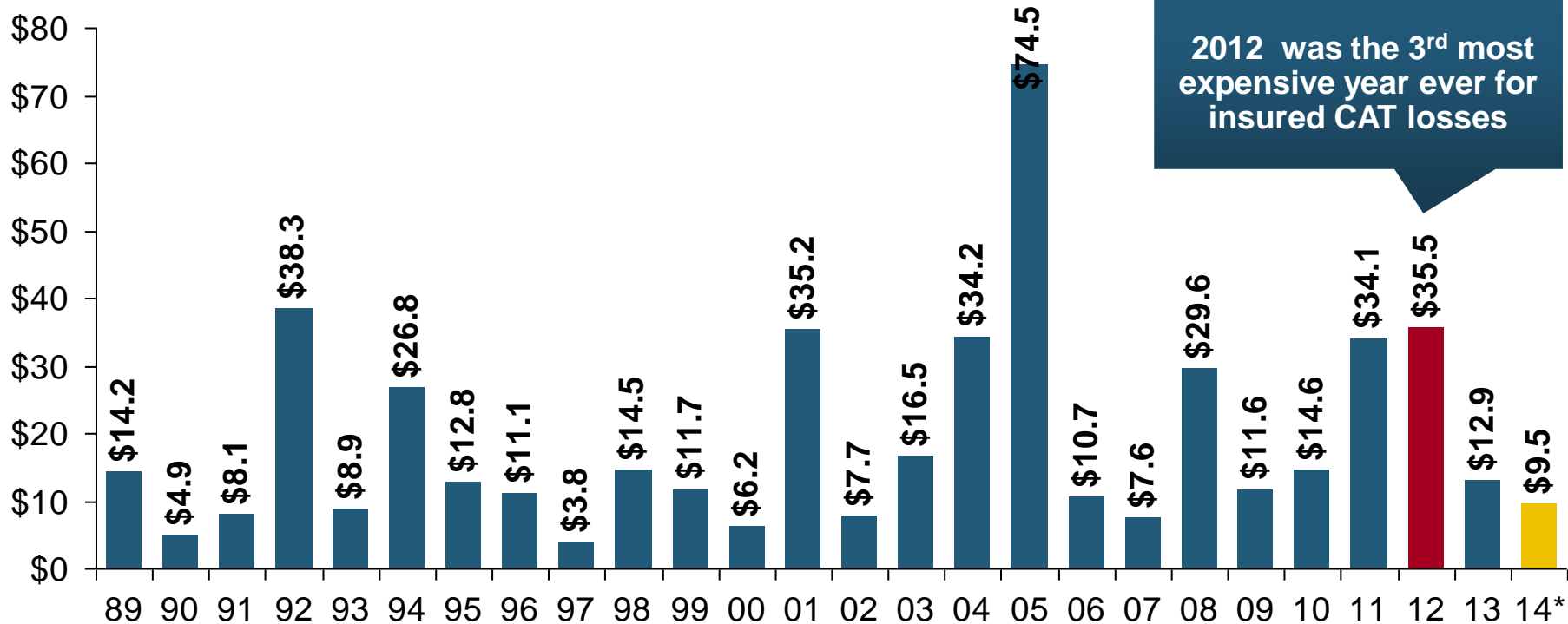


U.S. Insured Catastrophe Loss Update

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

U.S. Insured Catastrophe Losses

(\$ Billions, \$ 2013)



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

2013 Was a Welcome Respite from 2012, the 3rd Costliest Year for Insured Disaster Losses in US History. Longer-term Trend is for more—not fewer—Costly Events

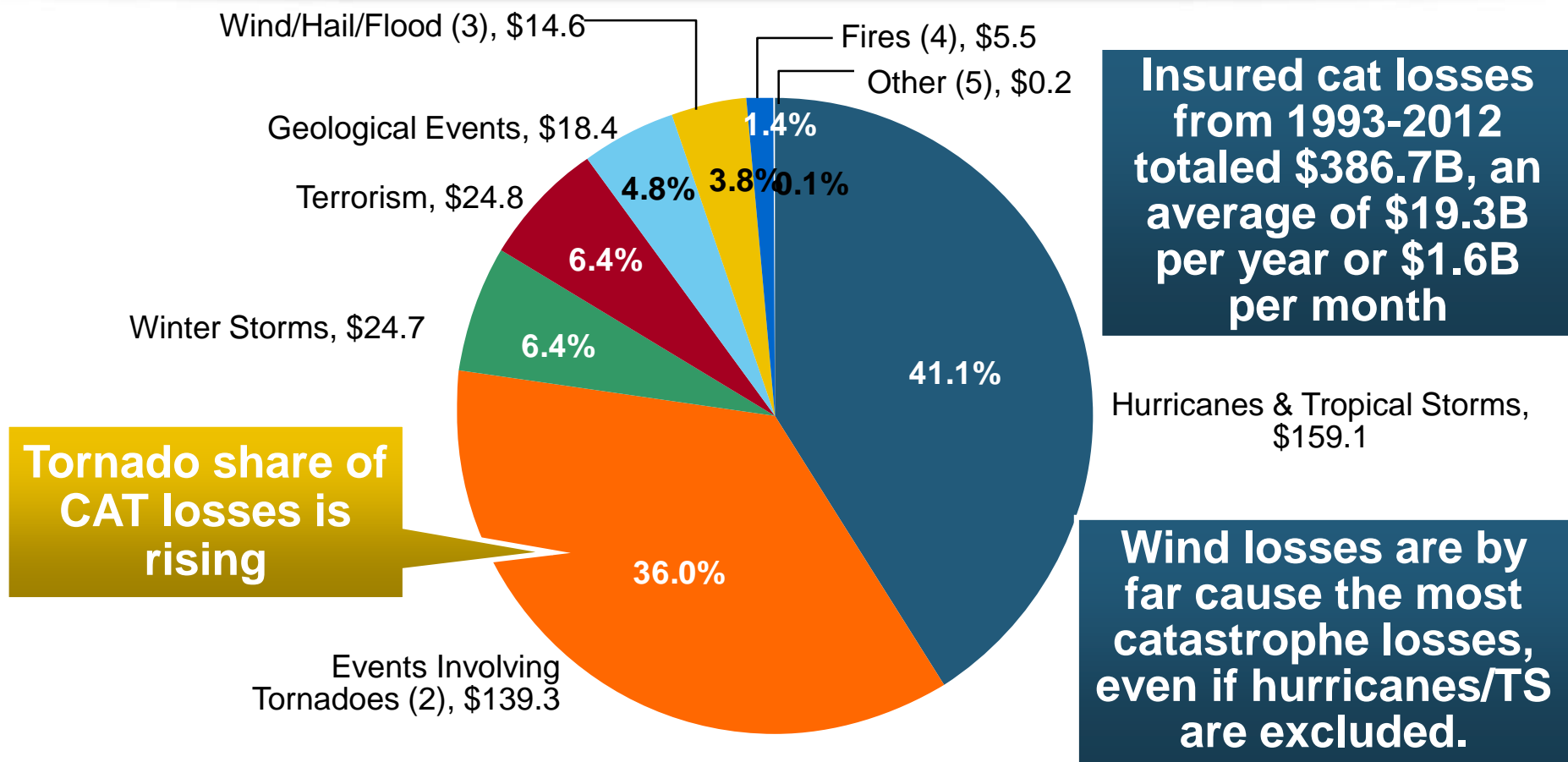
\$9.5 billion in insured CAT losses through June 30

*Through 6/30/14.

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

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

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



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

Tornado share of CAT losses is rising

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

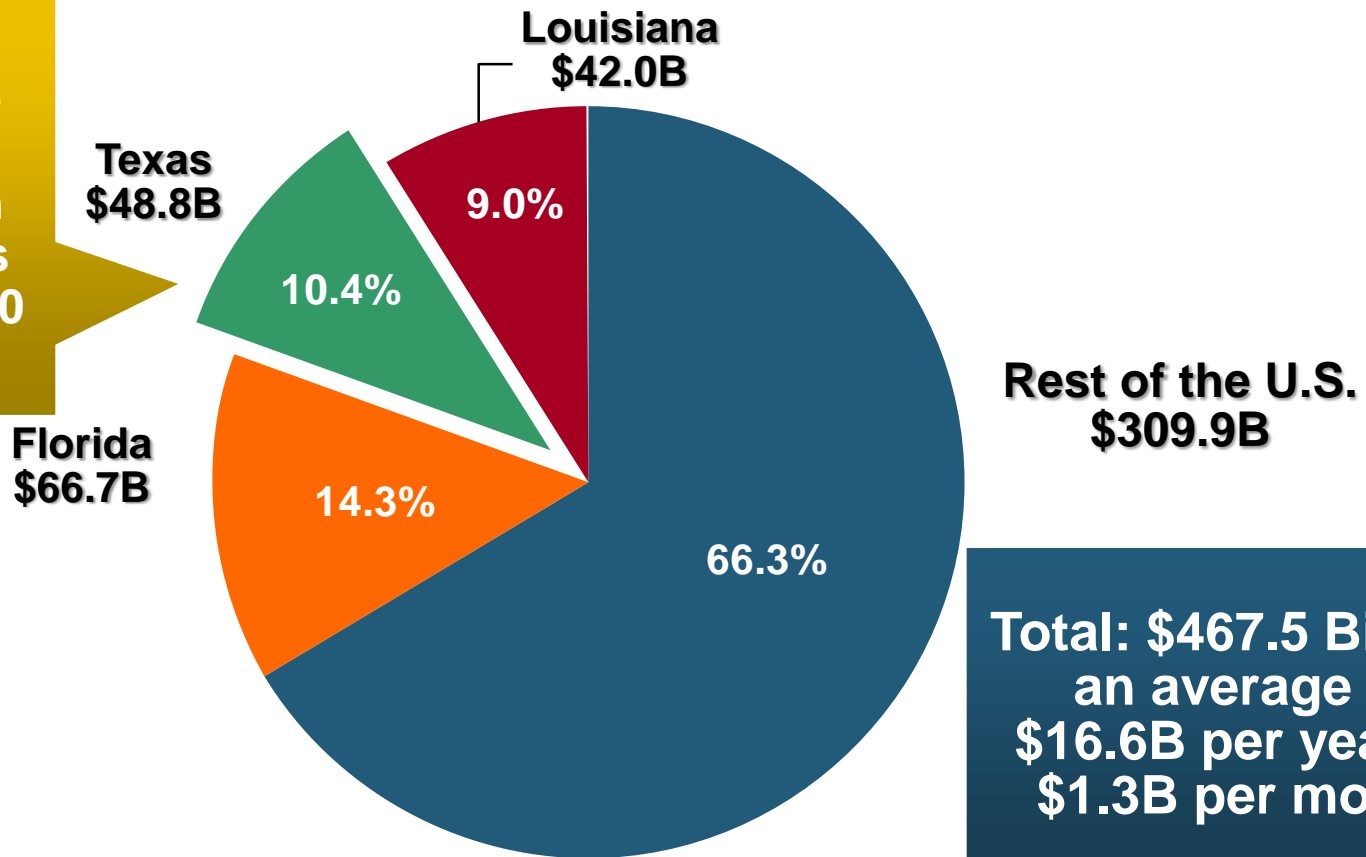
1. Catastrophes are defined as events causing direct insured losses to property of \$25 million or more in 2013 dollars.
2. Excludes snow.
3. Does not include NFIP flood losses
4. Includes wildland fires
5. Includes civil disorders, water damage, utility disruptions and non-property losses such as those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

Source: ISO's Property Claim Services Unit.

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

TX is the 2nd costliest state for CATs, with nearly \$50B in insured losses over the past 30 years



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

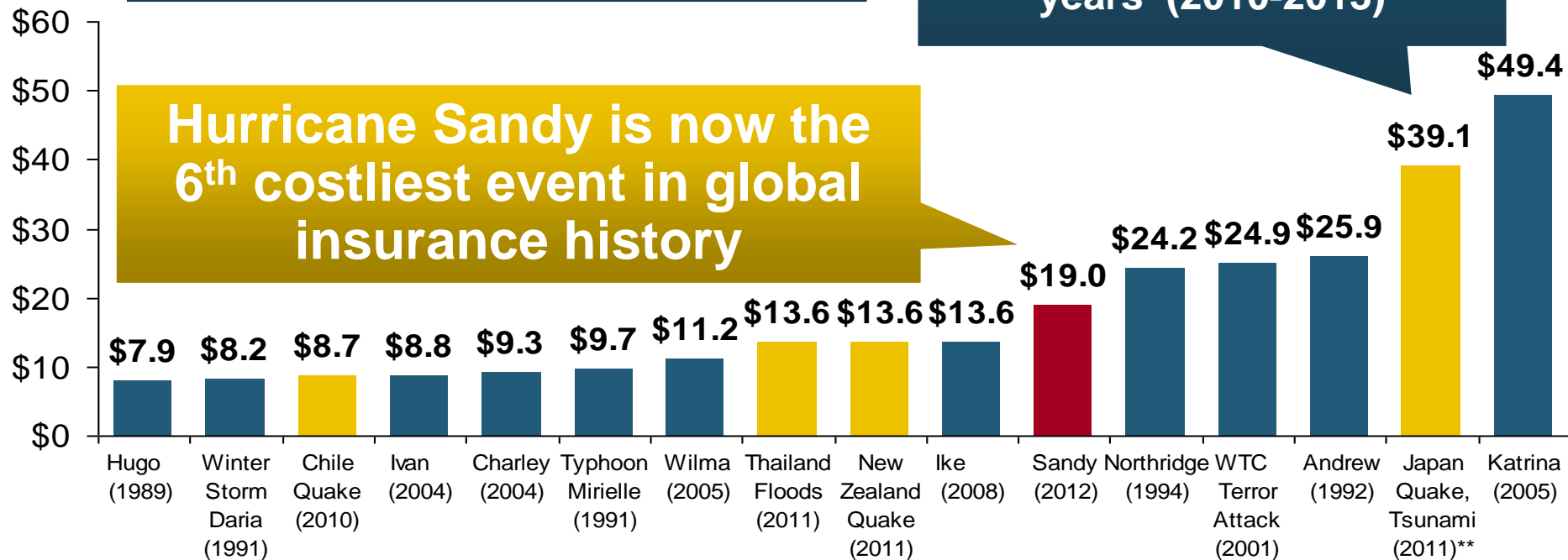
Top 16 Most Costly World Insurance Losses, 1970-2013*

(Insured Losses, 2013 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 most recent 4 years (2010-2013)

Hurricane Sandy is now the 6th costliest event in global insurance history

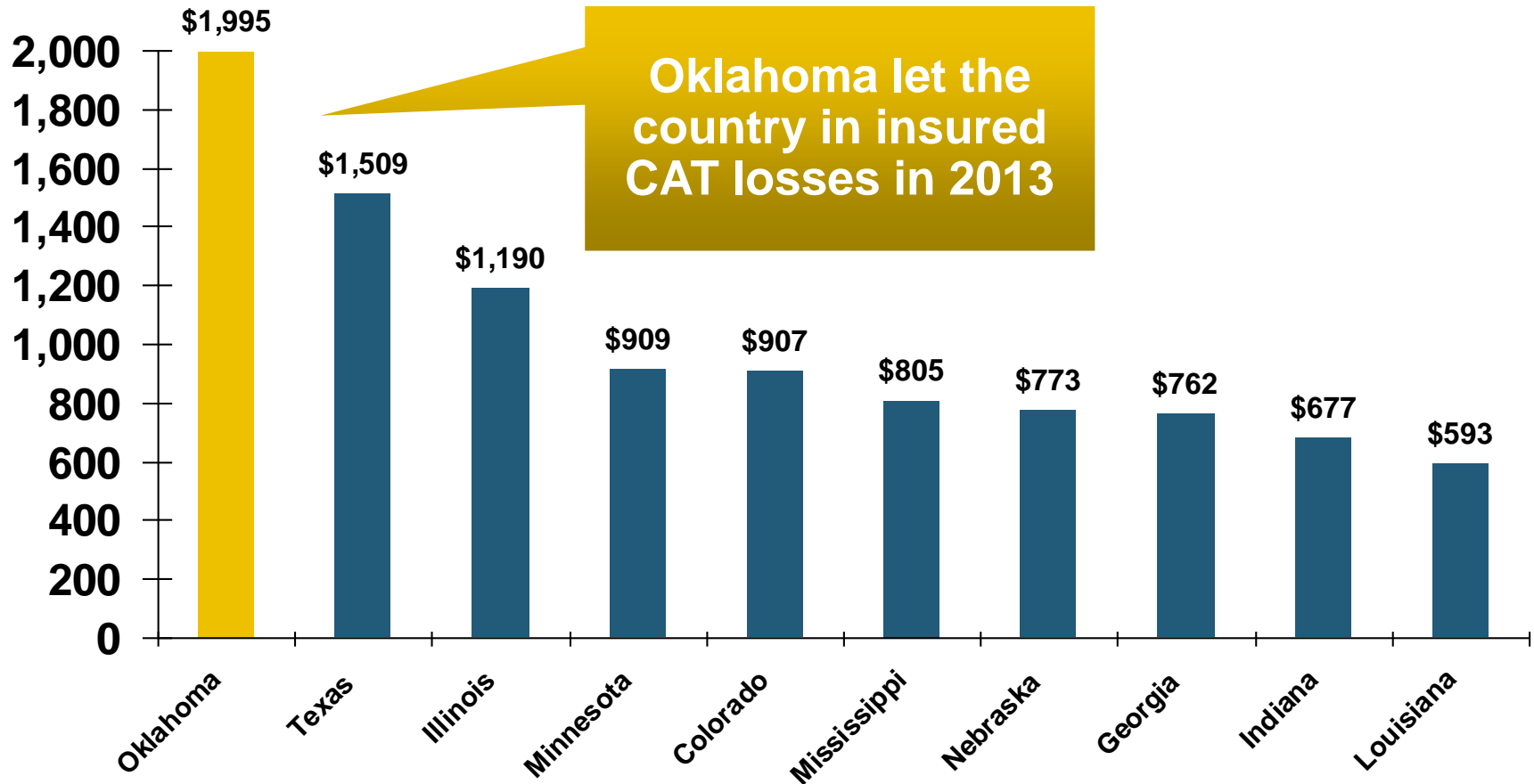


*Figures do not include federally insured flood losses.

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

Top 10 States for Insured Catastrophe Losses, 2013

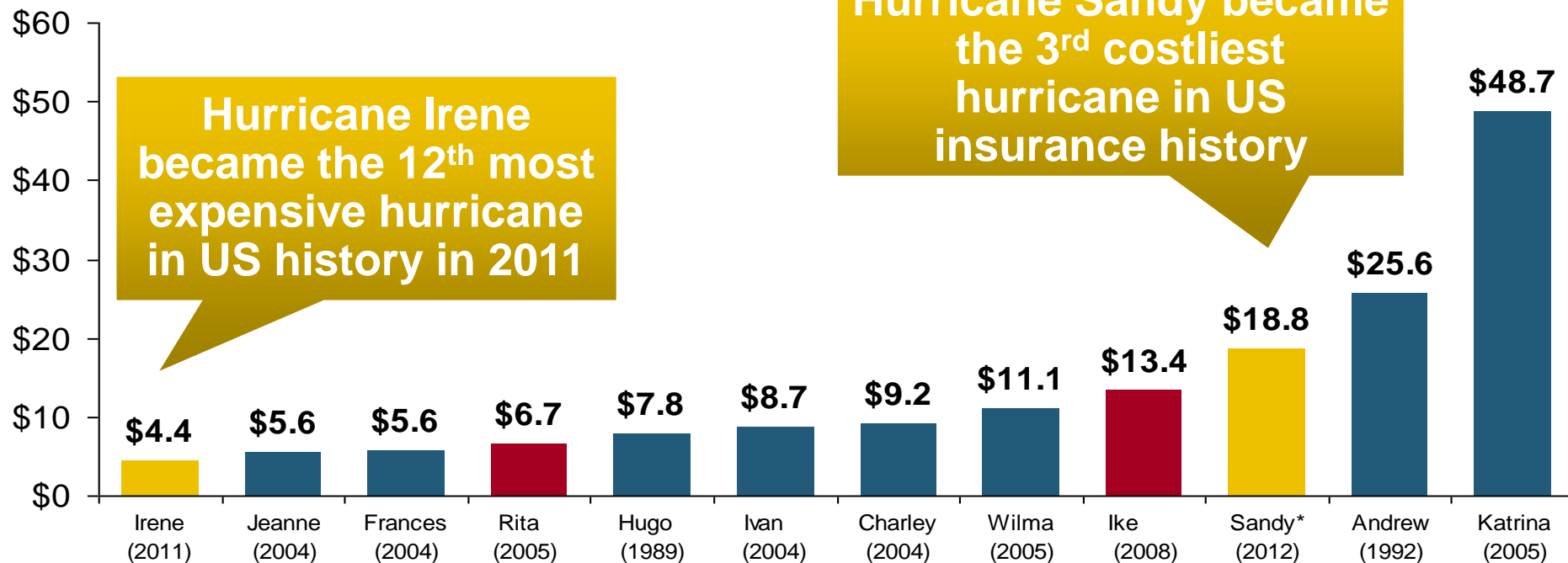
\$ Millions



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)

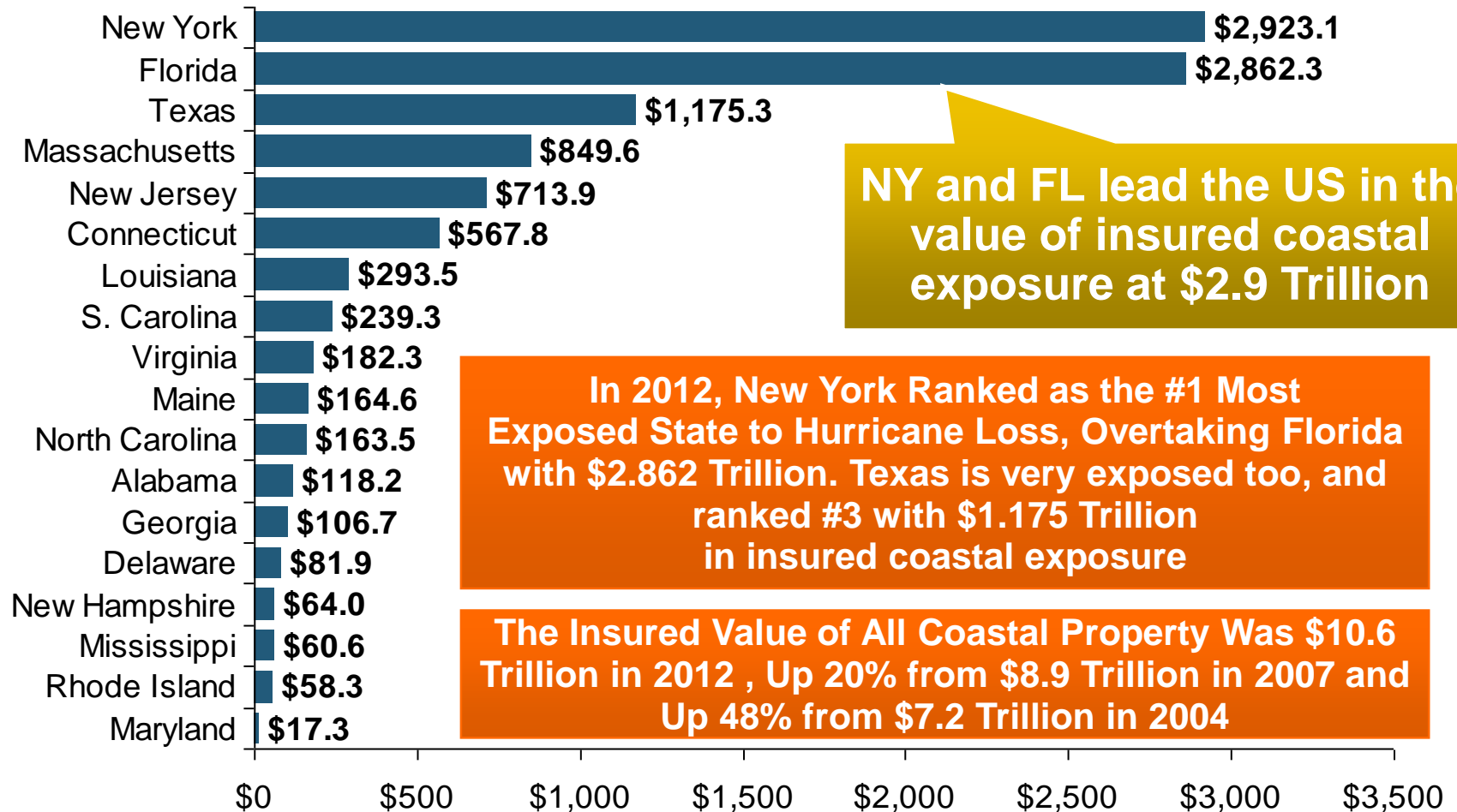


*PCS estimate as of 4/12/13.

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

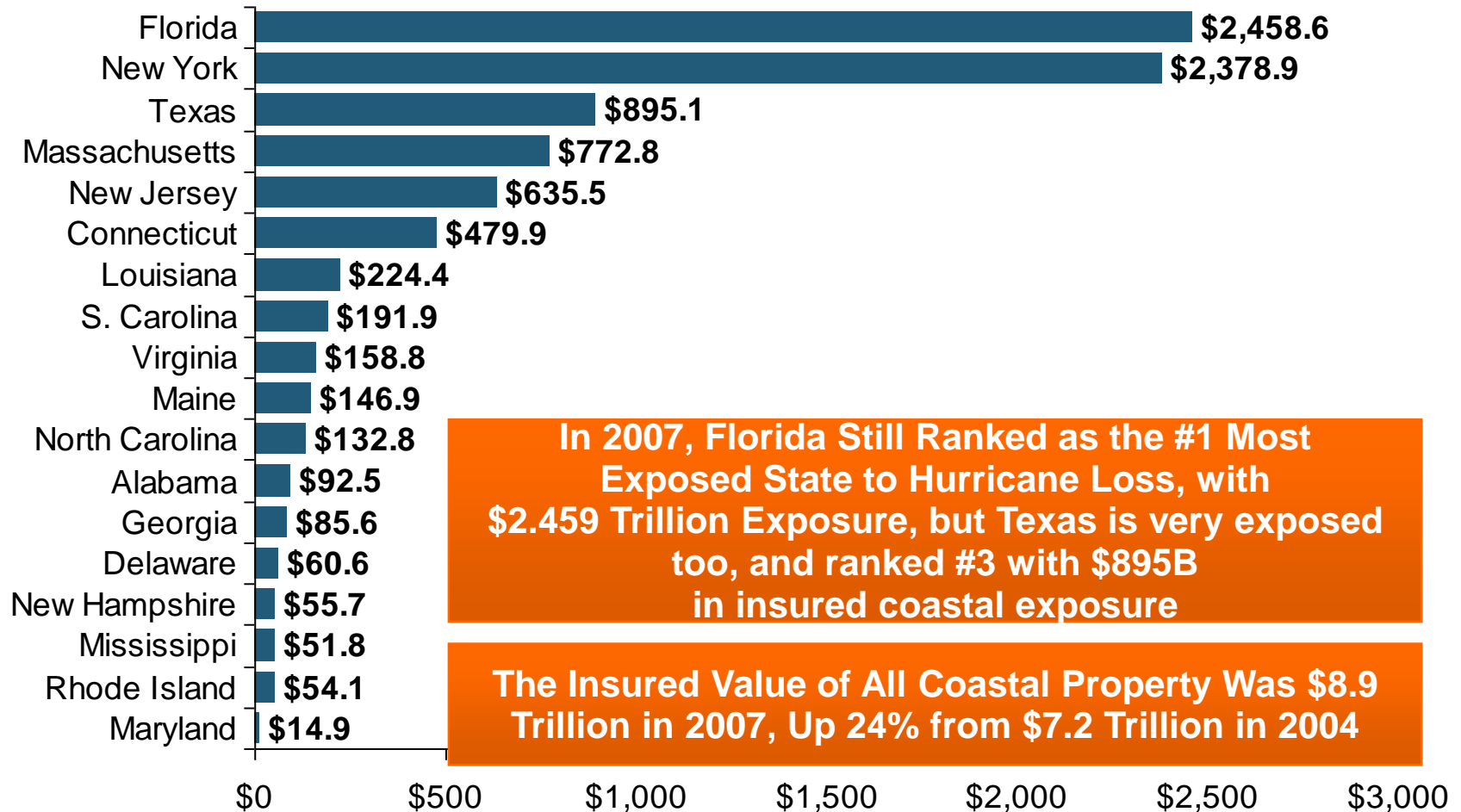
Total Value of Insured Coastal Exposure in 2012

(2012, \$ Billions)

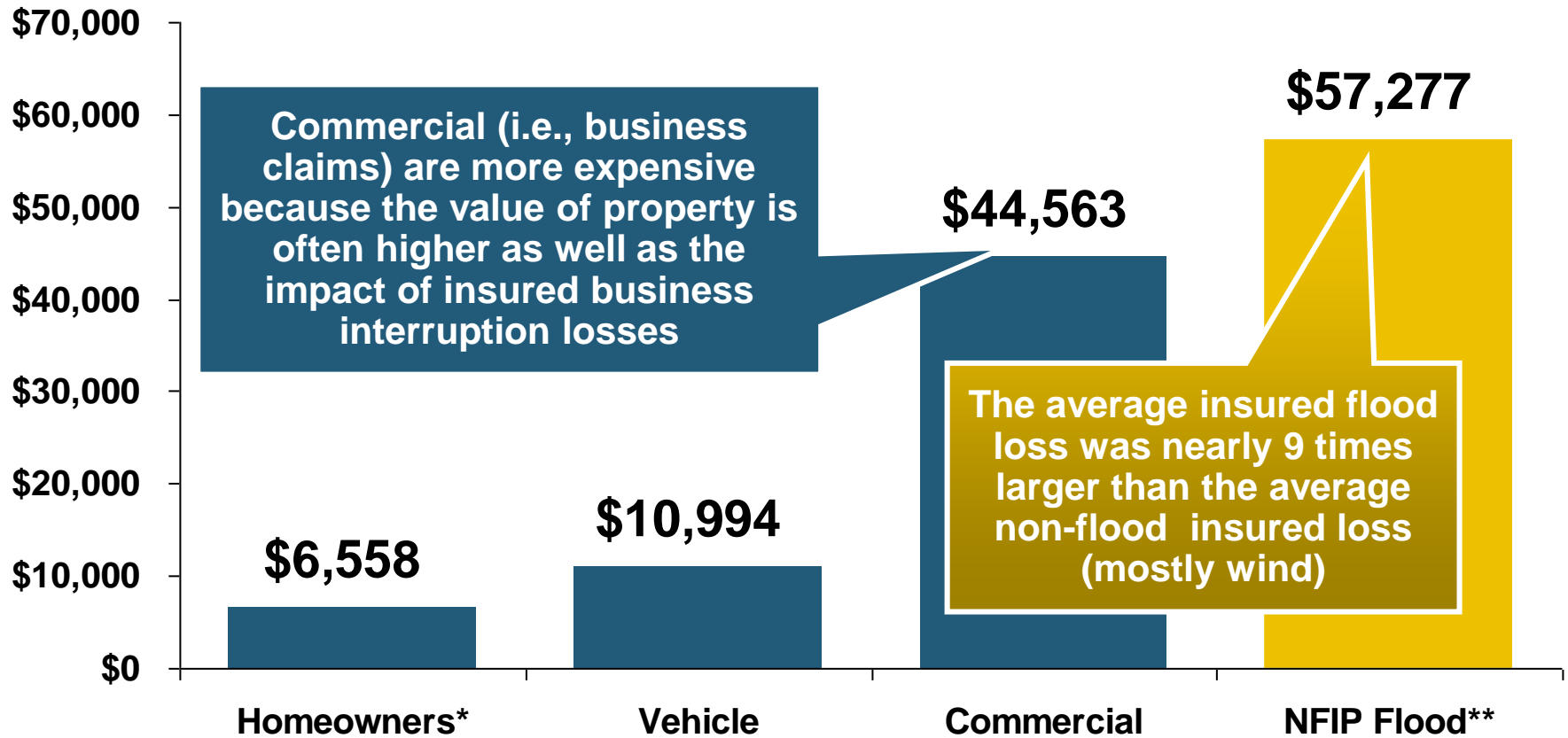


Total Value of Insured Coastal Exposure in 2007

(2007, \$ Billions)



Hurricane Sandy: Average Claim Payment by Type of Claim



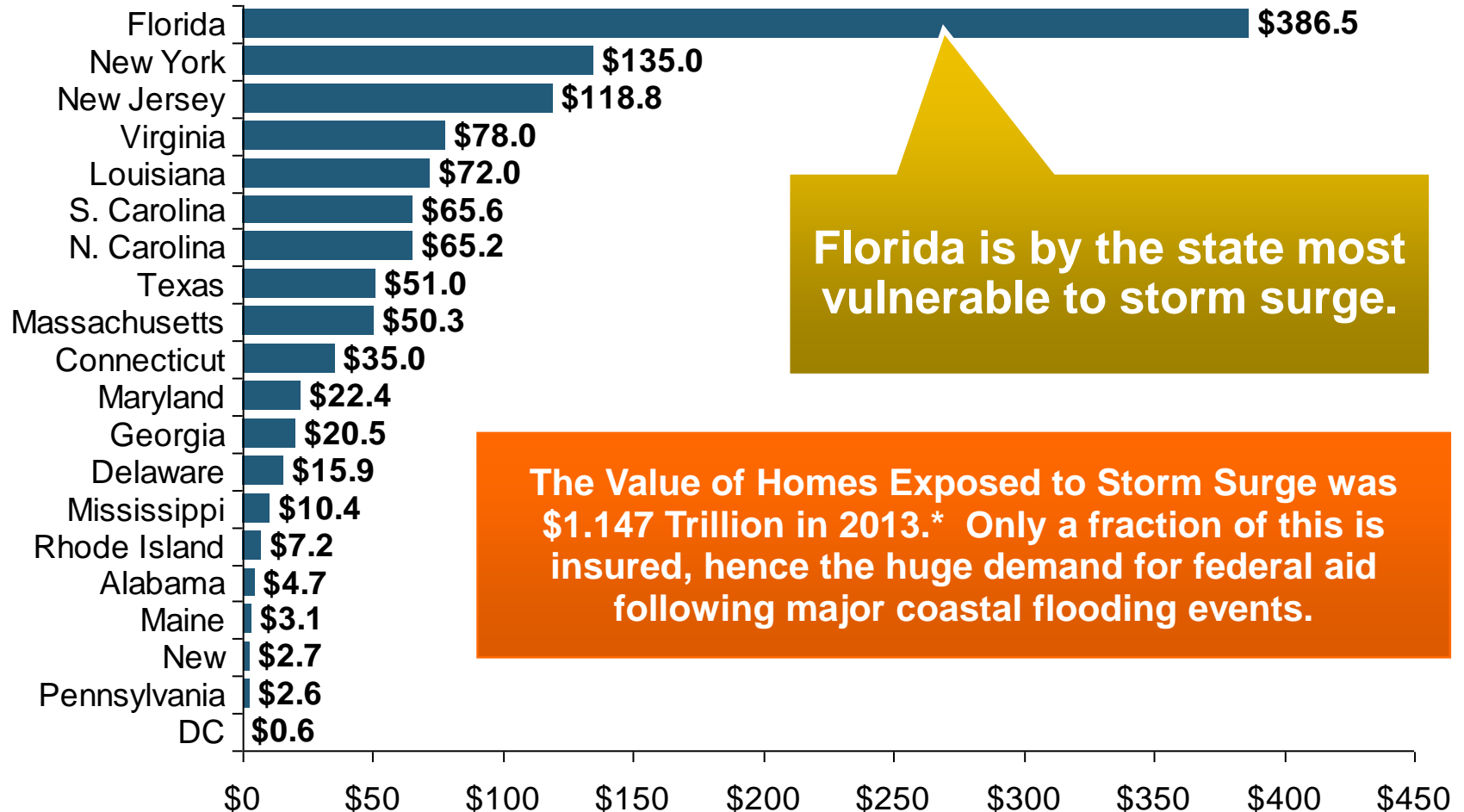
Post-Sandy, the I.I.I. worked very hard to make help media, consumers and regulators understand the distinction between a flood claim and a standard homeowners claim. *NFIP is \$24B in debt.*

*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)

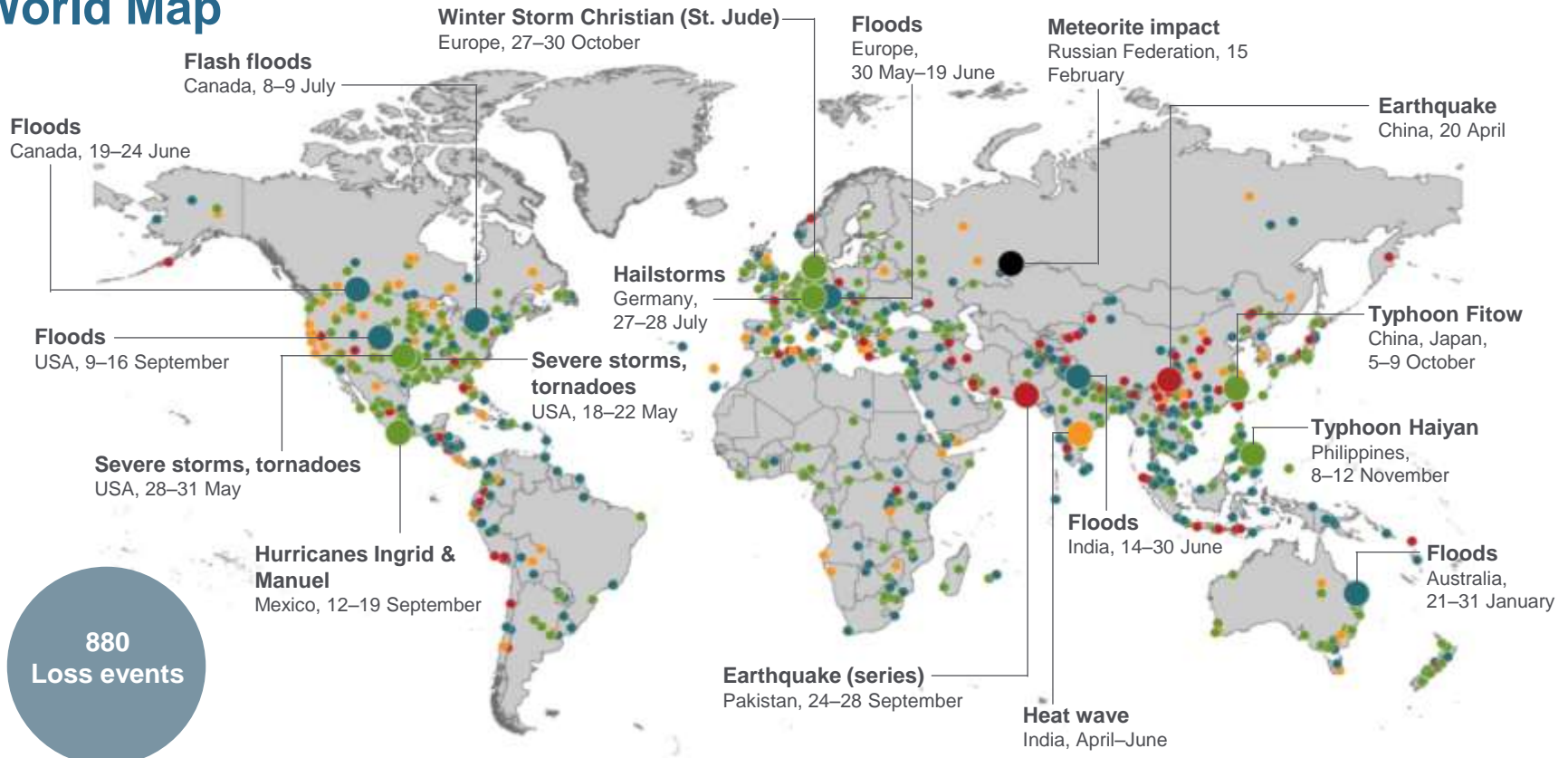


*Insured and uninsured property. Based on estimated property values as of April 2013.

Source: *Storm Surge Report 2013*, CoreLogic.

Natural Loss Events: Full Year 2013

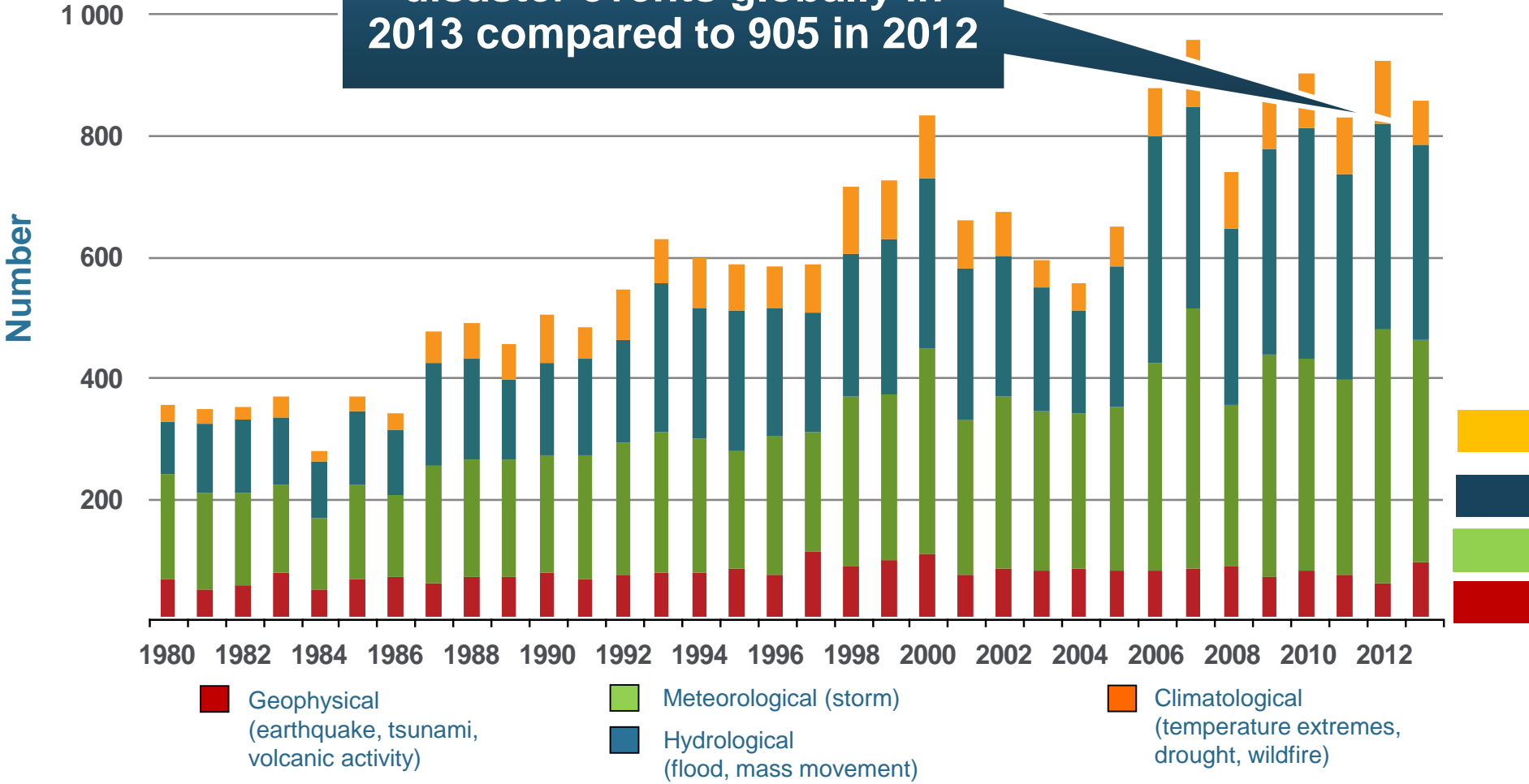
World Map



- 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

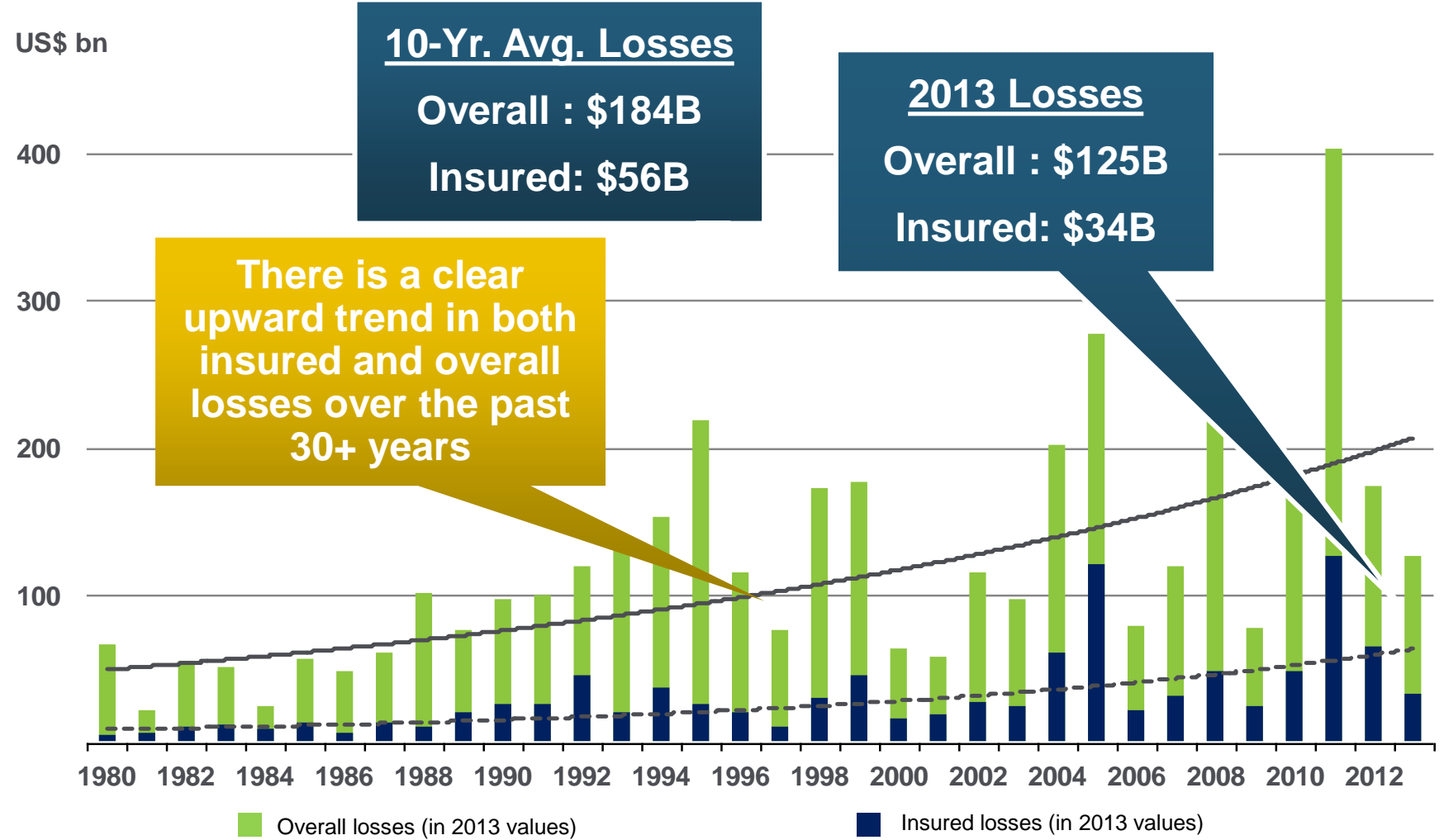


Source: MR NatCatSERVICE

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

(Overall and Insured Losses)

(2013 Dollars, \$ Billions)



Terrorism Update

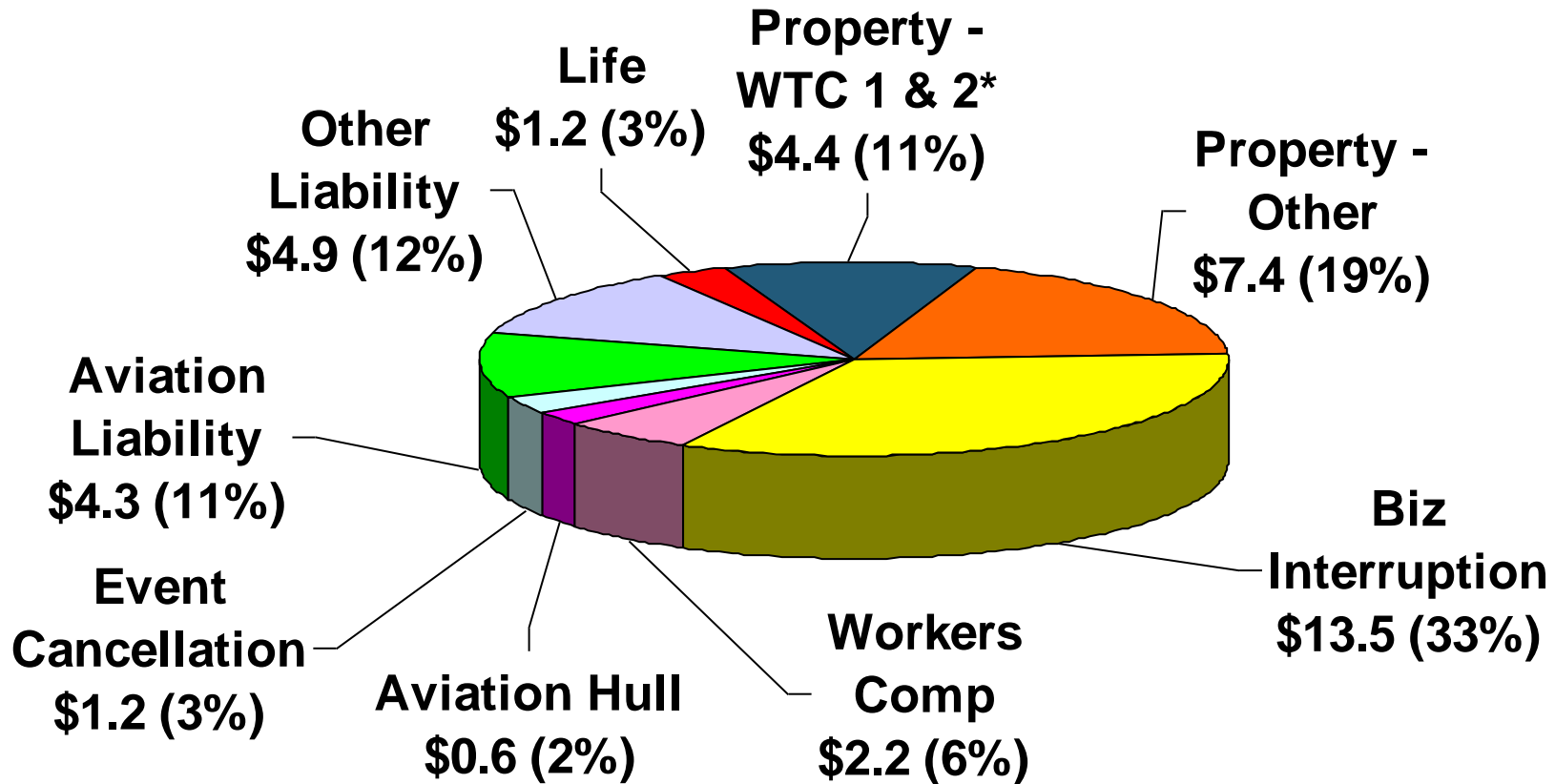
TRIA's Success

Consequences of Expiration

Download III's Terrorism Insurance Report at:
http://www.iii.org/white_papers/terrorism-risk-a-constant-threat-2014.html

Loss Distribution by Type of Insurance from Sept. 11 Terrorist Attack (\$ 2013)

(\$ Billions)



Total Insured Losses Estimate: \$42.9B**

*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 Risk Insurance Program

- Testified before House Financial Services Nov. 2013
- Testified before Senate Banking Cmte. in Sept. 2013
- Provided testimony at NYC hearing in June 2013
- Provided Capitol Hill Joint House/Senate Staff Briefing in April 2014
- I.I.I. Published Several Updates to its Study on Terrorism Risk and Insurance



Senate Banking Committee, 9/25/13



House Financial Services
Subcommittee, 11/13/13

I.I.I. White Paper (March 2014): *Terrorism Risk: A Constant Threat*



TERRORISM RISK: A CONSTANT THREAT

Impacts for Property/Casualty Insurers

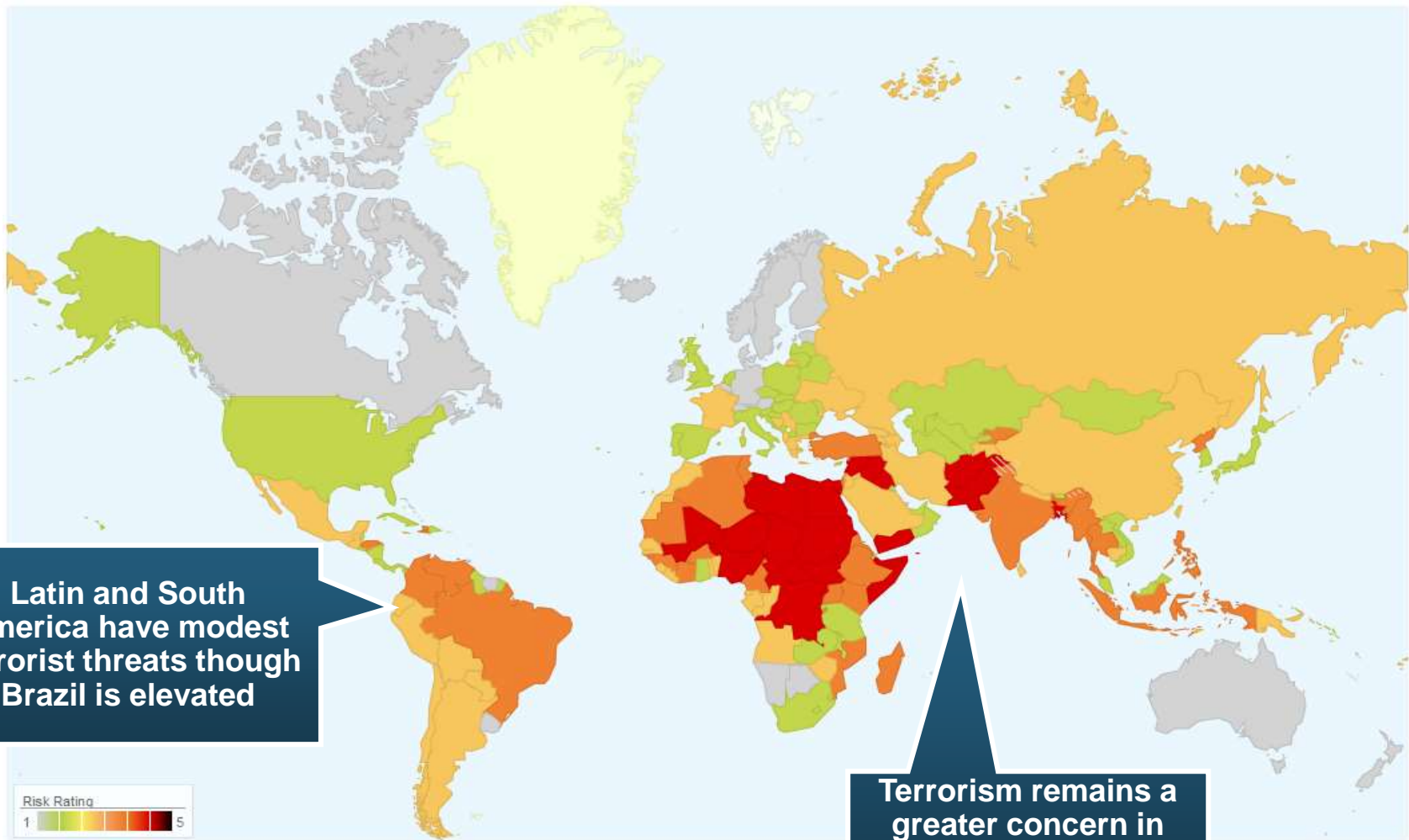
MARCH 2014

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- Detailed history of TRIA
- How TRIA works
- Assessing the threat of terrorism
- Terrorism market conditions
- Global perspective
- Download at http://www.iii.org/white_papers/terrorism-risk-a-constant-threat-2014.html

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

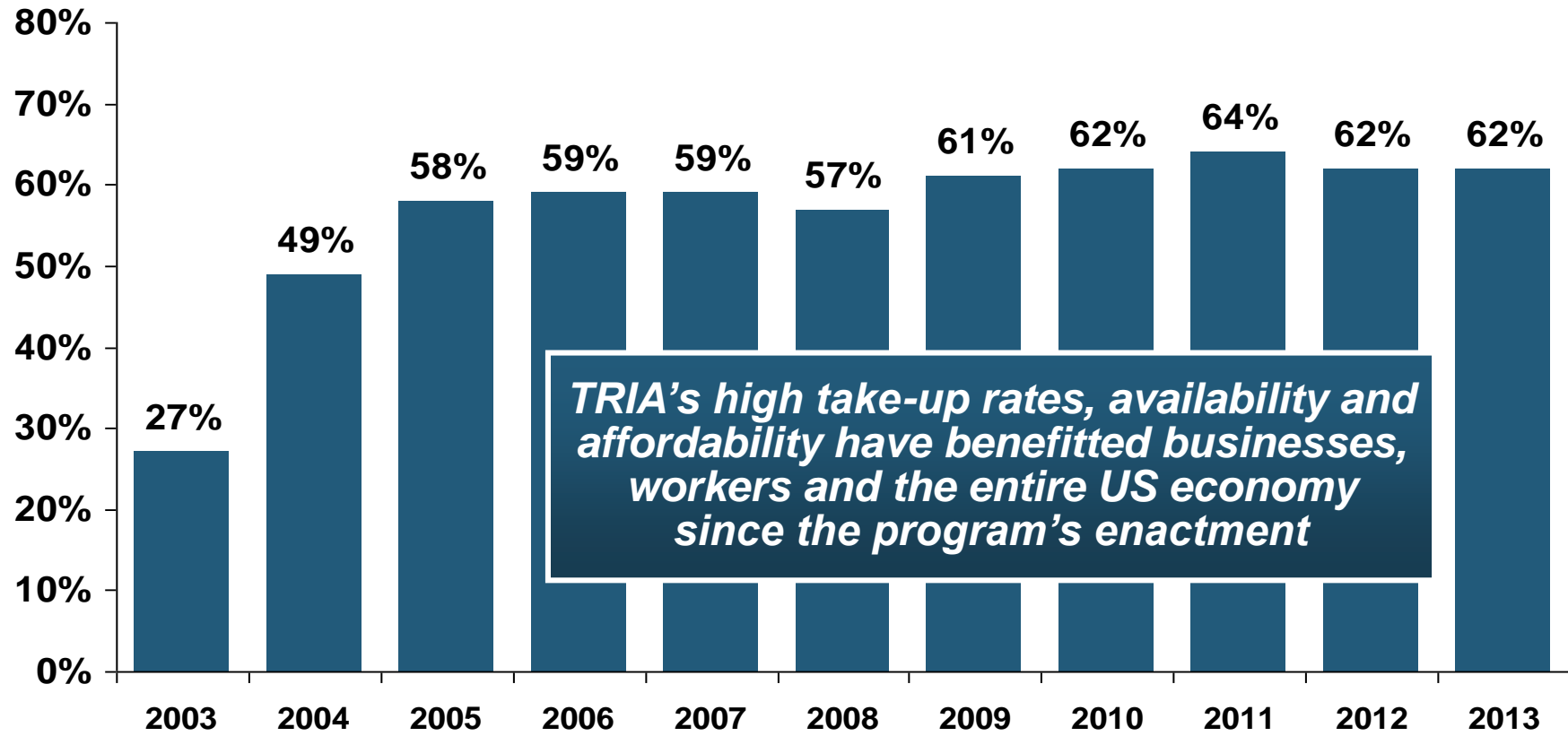


Latin and South America have modest terrorist threats though Brazil is elevated

Terrorism remains a greater concern in the Middle East, Africa and South Asia

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

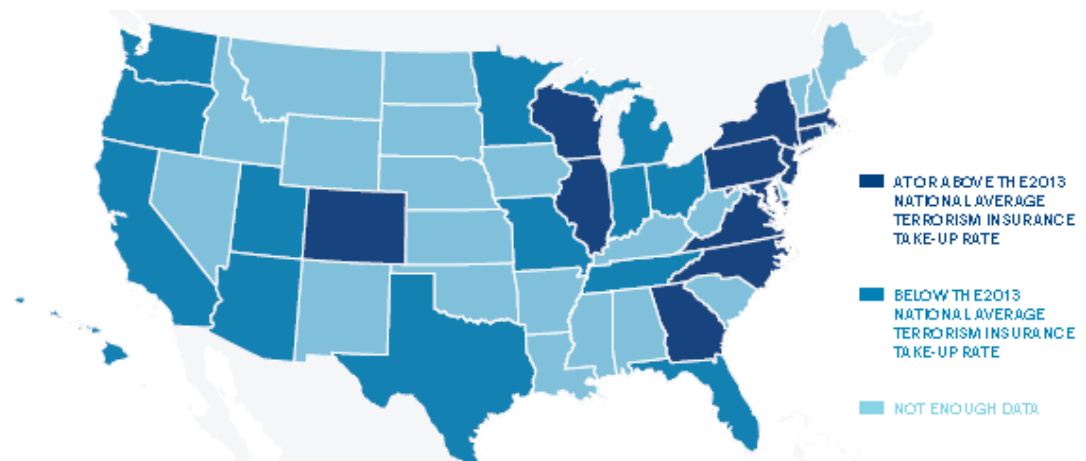
Terrorism Insurance Take-up Rates, By Year, 2003-2013



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.

Source: Marsh Global Analytics, 2014 Terrorism Risk Insurance Report, April 2014 and earlier editions.

Terrorism Insurance Take-Up Rates by State for 2013*



The overall US take-up rate for terrorism coverage was 62% in 2013 and ranged from a lows of 41% in Michigan to a high of 84% in Massachusetts (where demand likely increased due to the April 2013 Boston Marathon bombing)

ARIZONA	CALIFORNIA	COLORADO	CONNECTICUT	DISTRICT OF COLUMBIA	FLORIDA
53%	56%	62%	71%	79%	47%
GEORGIA	HAWAII	ILLINOIS	INDIANA	MARYLAND	MASSACHUSETTS
73%	36%	73%	42%	81%	84%
MICHIGAN	MINNESOTA	MISSOURI	NEW JERSEY	NEW YORK	NORTH CAROLINA
41%	57%	50%	79%	80%	62%
OHIO	OREGON	PENNSYLVANIA	TENNESSEE	TEXAS	UTAH
44%	45%	74%	61%	54%	47%
VIRGINIA	WASHINGTON	WISCONSIN			
77%	60%	80%			

The 27 states listed met the minimum threshold of available 2013 peer data.

*Data for 27 states with sufficient data.

Source: Marsh 2014 Terrorism Risk Insurance Report; Insurance Information Institute.

Framing the Issue and Educating Policymakers: A Timeline

- Education Efforts Pay Off
 - ◆ Senate Banking Committee unanimously reports out TRIA bill 22-0
 - ◆ House Financial Services Committee passes bill
 - ◆ Senate passes bill with strong support; Votes 93-4 to reauthorize on 7/17
- Key addition to bills: clarification on certification process, cyber terrorism
- Where do we go from here? Are difference between the bills bridgeable?
 - ◆ Reauthorization terms differ (Senate: 7yrs; House: 5yrs)
 - ◆ Bifurcation of NBCR and conventional
 - ◆ Trigger points (\$100M vs. \$500M)
- Clock is running: After July 31, the House is in session for only 12 days before the election
 - ◆ Lame duck for enactment? Even that's in jeopardy!

Summary of President's Working Group Report on TRIA (April 2014)

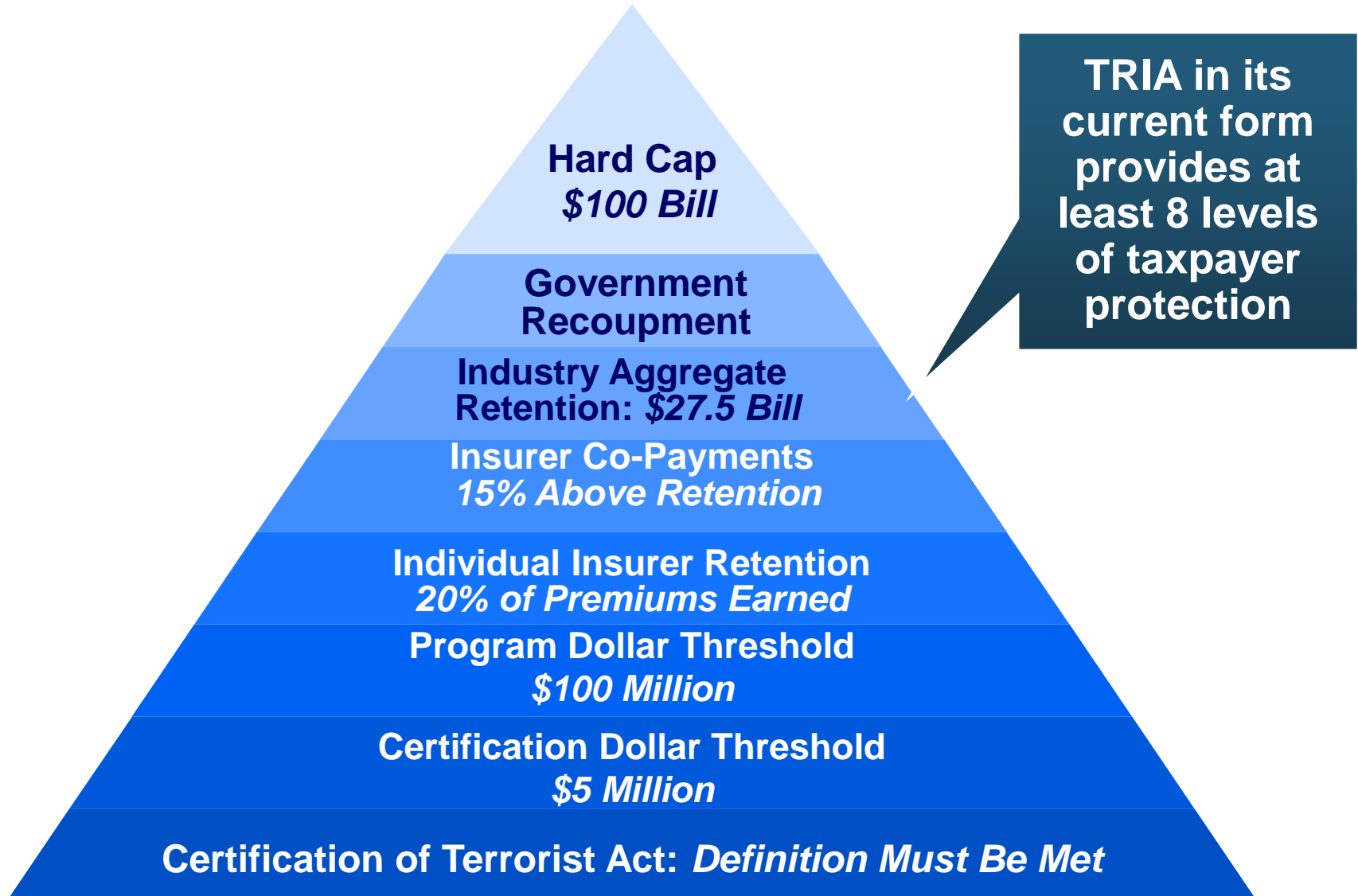
- Insurance for terrorism risk is available and affordable
 - ◆ Availability/affordability have not changed appreciably since 2010
- Prices for terrorism risk insurance vary considerably depending on the policyholder's industry and location of risk
- Prices have declined since TRIA was enacted
 - ◆ Currently ~3% to 5% of commercial property insurance premiums
- Take-up rates have improved since adoption of TRIA
 - ◆ Overall take-up rate is steady at ~60% (62% in 2013 per Marsh)
- *Market capacity is currently tightening given uncertainty over TRIA reauthorization*
- *The private market does not have the capacity to provide reinsurance for terror risk to the extent currently provided by TRIA*
- *In the absence of TRIA, terrorism risk insurance would likely be less available. Coverage that would be available likely would be more costly and/or limited in scope*

Top 3 Key Facts About TRIA

- 1. TRIA costs taxpayers virtually nothing**
- 2. TRIA as currently structured continues to provide tangible benefits to the U.S. economy in the form of:**
 - ◆ Terrorism insurance market stability, affordability and availability
 - ◆ Smooth functioning of commercial lending activity
 - ◆ Employment stimulus
- 3. TRIA is now clearly a critical part of the U.S. national economic security infrastructure**
 - ◆ A primary goal of terrorism is to destabilize the U.S. economy
 - ◆ Terrorism risk insurance is critical to ensure a swift recovery in the event of future attacks

■ ***Bottom Line: TRIA is an unambiguous, unmitigated success***

Pyramid of Taxpayer Protection: Strong, Stable, Sound and Secure



Consequences of Substantially Restructuring TRIA

- **Increases in required insurer retentions/deductibles do not “create” new capacity**
- **New capacity has entered primarily because:**
 - ◆ **TRIA remains in place**
 - ◆ **No major successful attack has occurred since 9/11**
 - ◆ **Modest improvement in modeling/understanding terror risk**
- **Many smaller/medium-sized insurers are likely already at or near their exposure limits, so increasing required retentions will not incentivize them to write more coverage**
 - ◆ **A.M. Best: 19% of insurers with < \$500 million in surplus failed stress tests; 11% of those with \$500 to \$1 billion failed**
 - ◆ **Insurance Information Institute: Insurers with <\$500 million in surplus wrote 16.8% of TRIA-back lines in 2012; those with less than \$1 billion in surplus wrote 23.6% of TRIA-backed coverages**

Consequences of a Failure to Reauthorize TRIA *Followed by a Major Terrorist Attack*

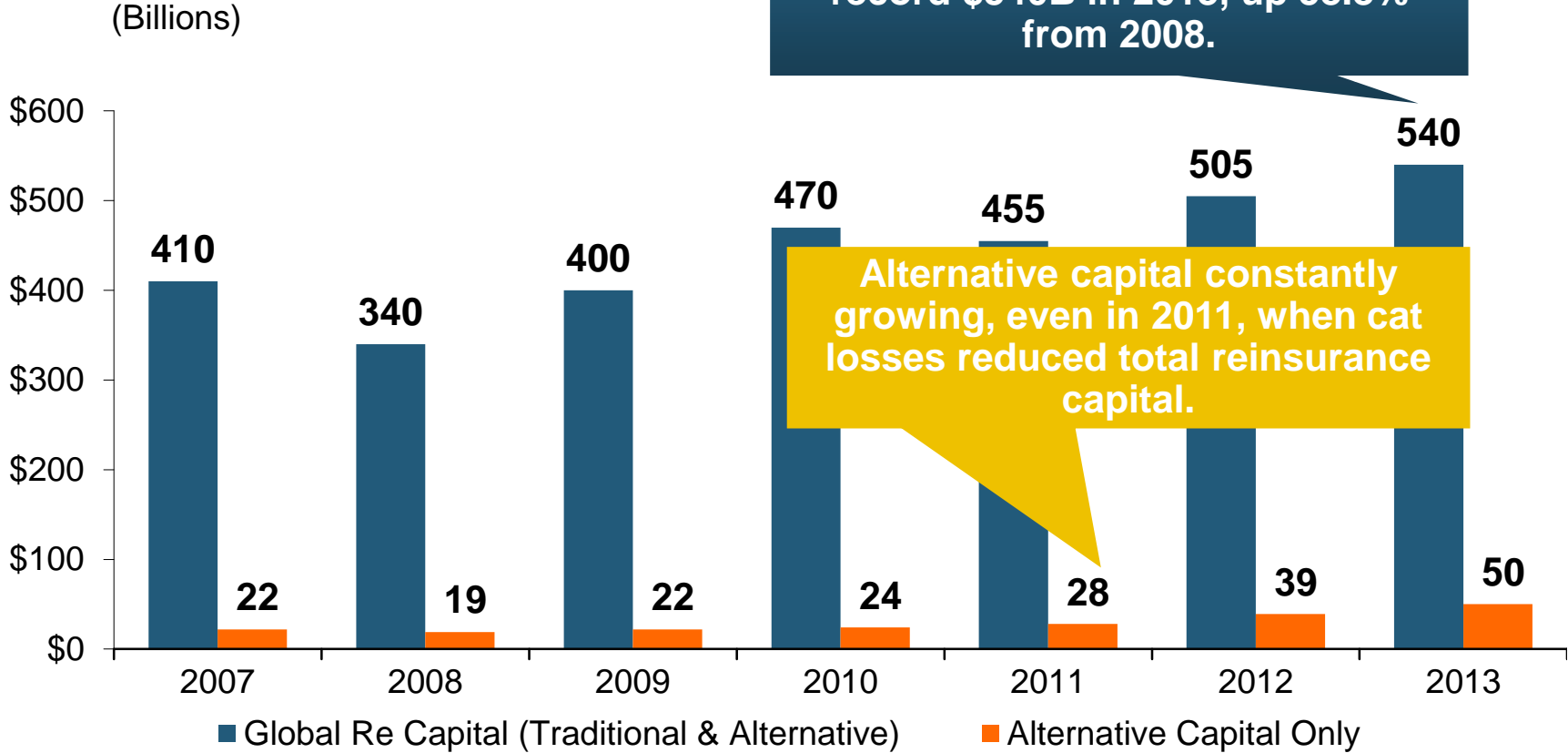
- **If TRIA is not reauthorized, only limited private insurance would be available to cover losses arising from future attacks**
 - ◆ **Potentially large gap between insured and economic losses**
- **The federal government would be called upon to provide very large amounts of aid (tens of billions of dollars +)**
 - ◆ **Federal govt. has no delivery mechanism for post-attack aid**
 - ◆ **Under TRIA, federal response largely piggybacks on an efficient pvt. Insurer claims adjusting and payment system**
- **The existing standalone market would likely seize and contract**
 - ◆ **Depletion of capital → Availability crunch, Prices soar**
 - ◆ **Uncertainty over likelihood of future attacks**
 - ◆ **Terrorism exclusions would become ubiquitous**
- **Congress would likely be compelled to legislate TRIA anew**

ALTERNATIVE CAPITAL & REINSURANCE MARKETS

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

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

Total reinsurance capital reached a record \$540B in 2013, up 58.8% from 2008.

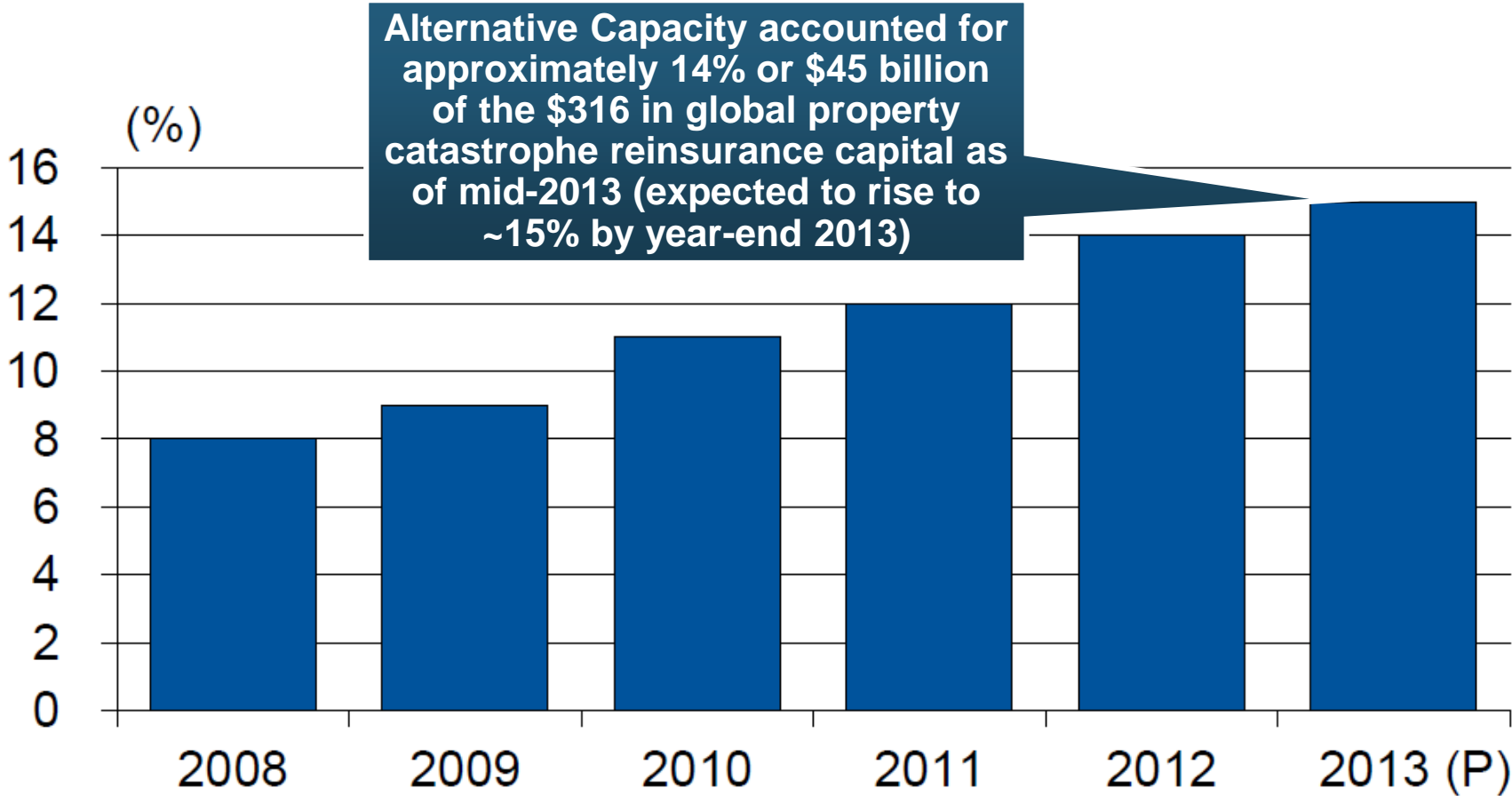


But alternative capacity has grown 163% since 2008, to \$50B. It has grown 79% in the past two years.

Source: Aon Benfield *Reinsurance Market Outlook*, April 1, 2014; Insurance Information Institute.

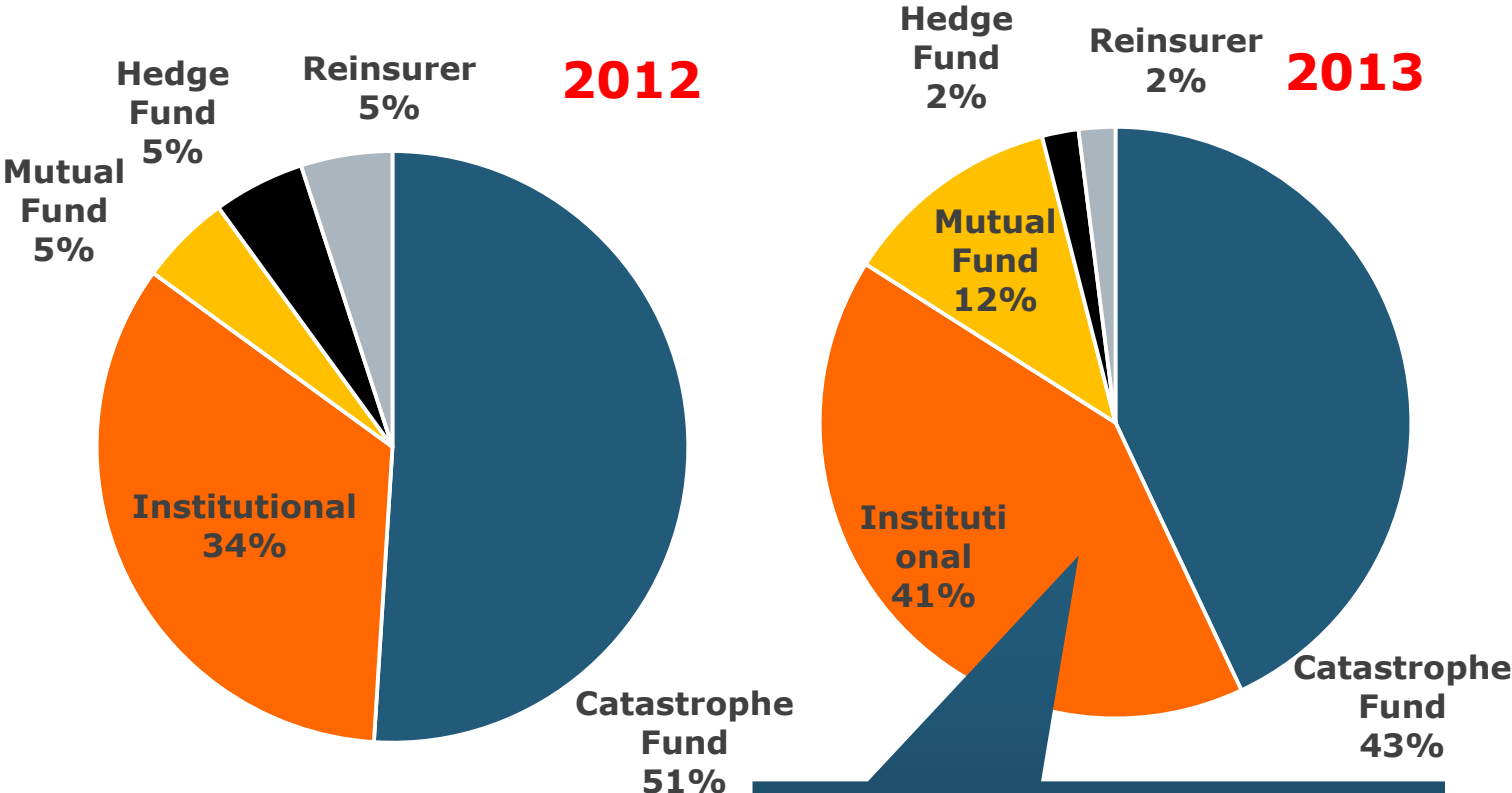
Alternative Capacity as a Percentage of Global Property Catastrophe Reinsurance Limit

(As of Year End)



Source: Guy Carpenter

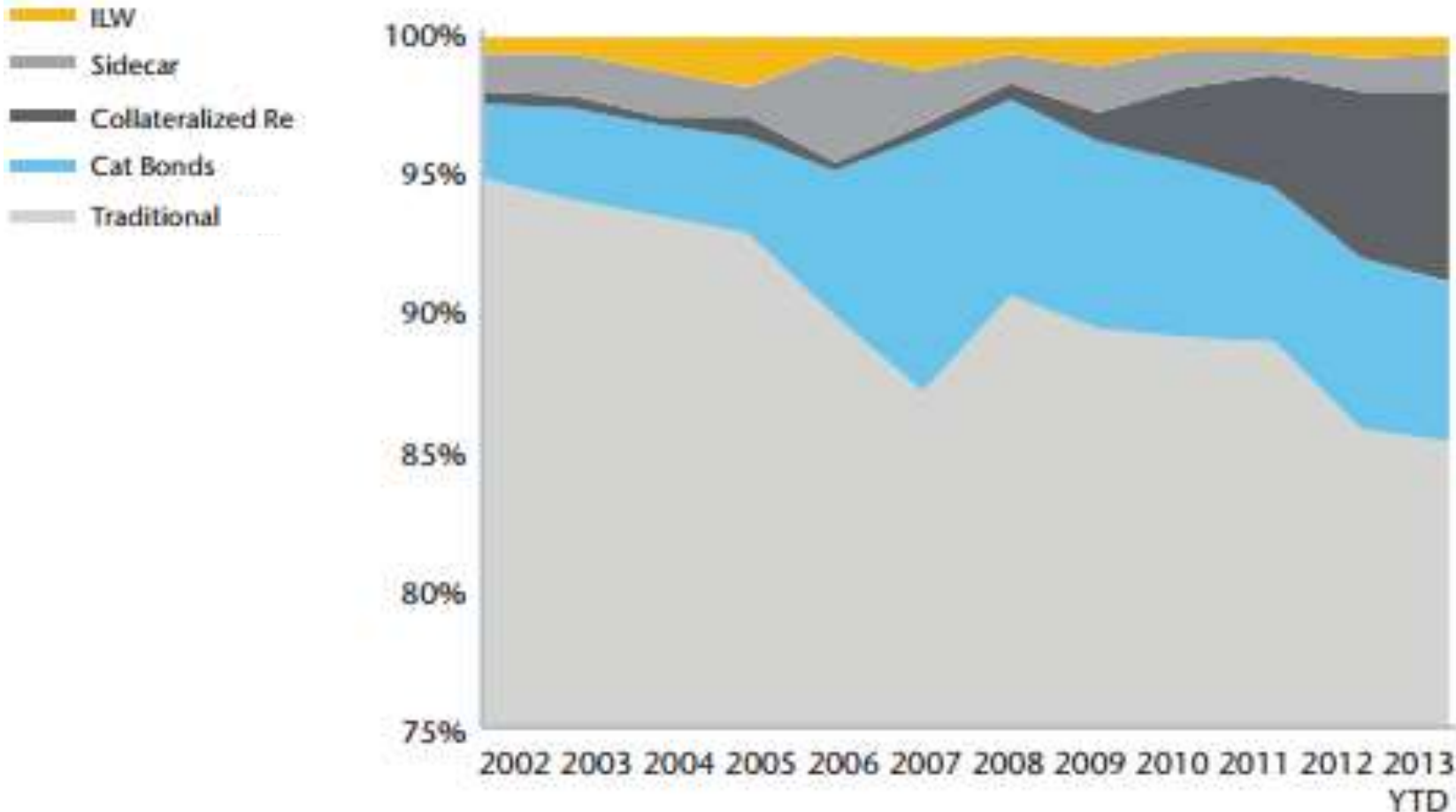
Investor by Category



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

Years ended June 30.
Source: Aon Benfield Securities; Insurance Information Institute.

Alternative Risk Transfer: Market Growth

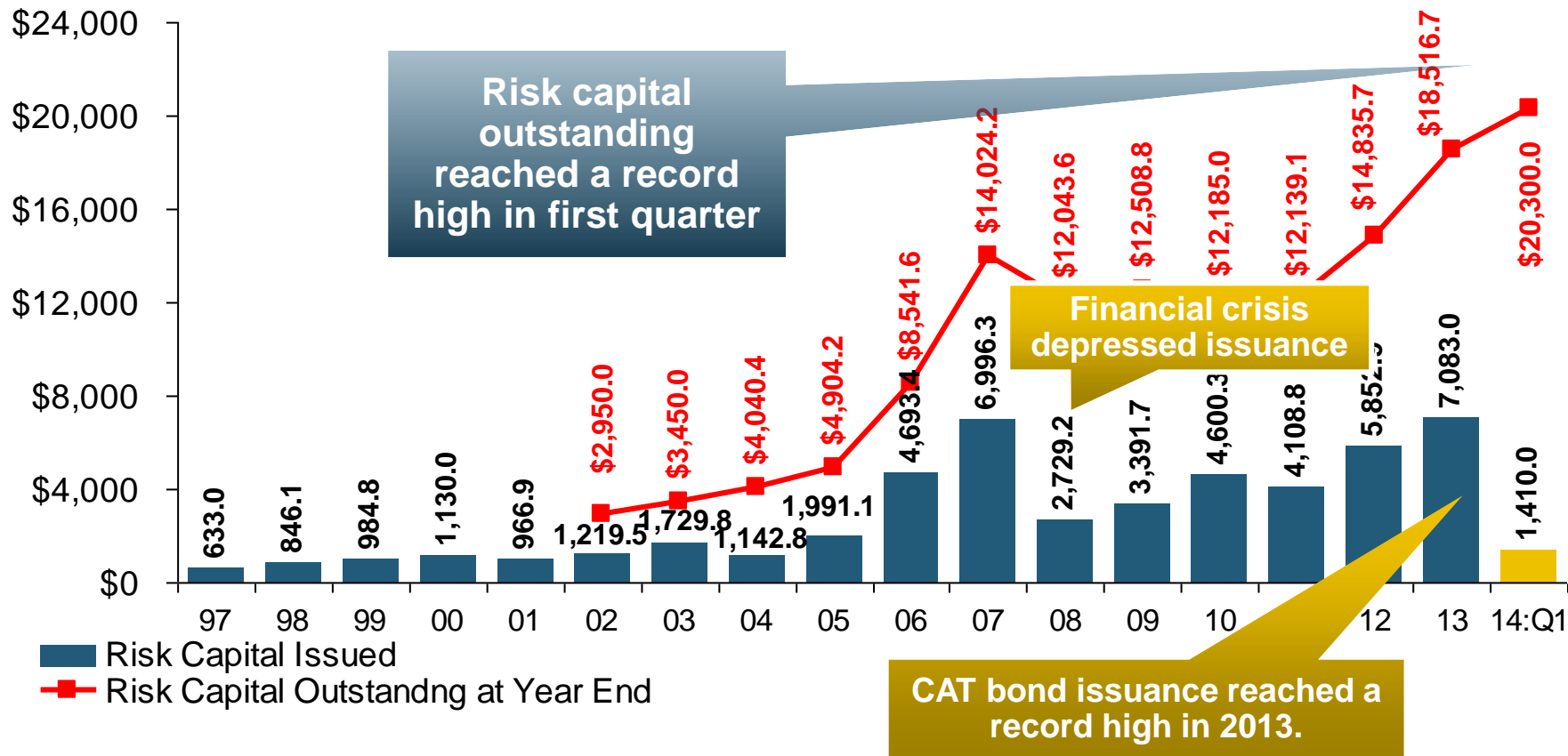


Since 2009, market share of collateralized reinsurance has grown faster than cat bonds or other forms of risk transfer

Source: Aon Benfield *Insurance-Linked Securities: Capital Revolution*, August 30, 2013; Insurance Information Institute.

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

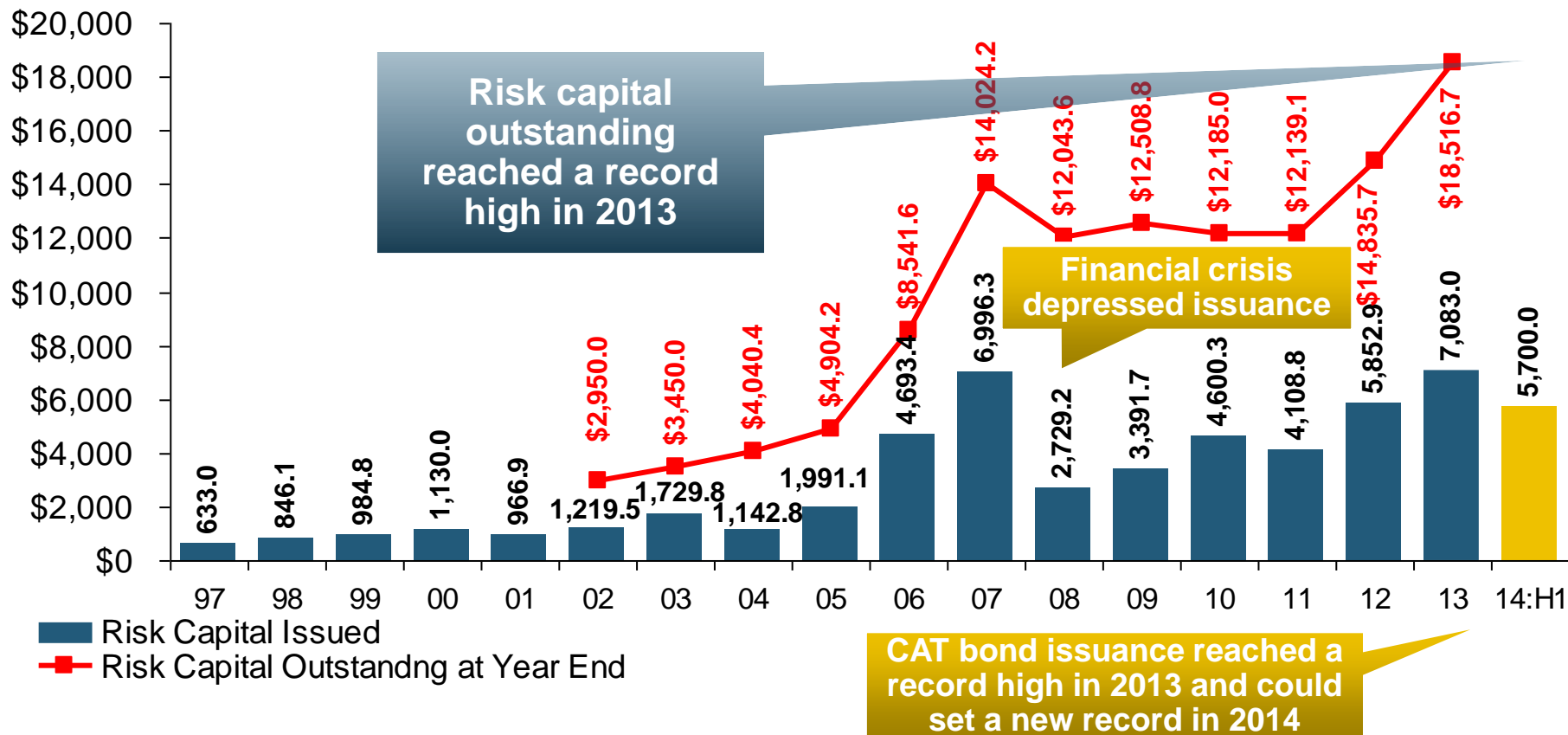
Risk Capital Amount (\$ Millions)



Second Quarter 2014 Will Set a Record – Nearly \$4.6 Billion Issued

Catastrophe Bonds: Issuance and Outstanding, 1997- 2014:Q2*

Risk Capital Amount (\$ Millions)



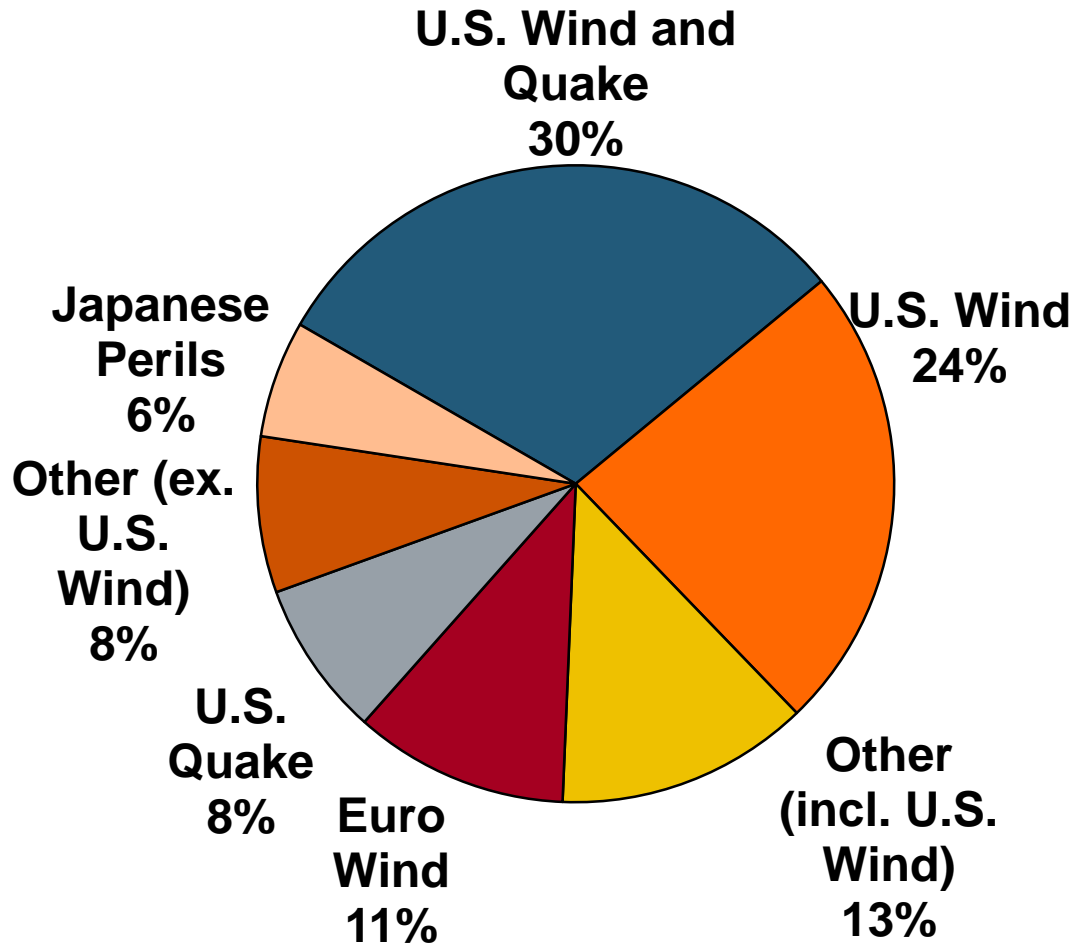
Catastrophe Bond Issuance Is Approaching Pre-Crisis Levels While Risk Capital Outstanding Stands at an All-Time Record

*Through June 30, 2014.

Source: Guy Carpenter; Insurance Information Institute.

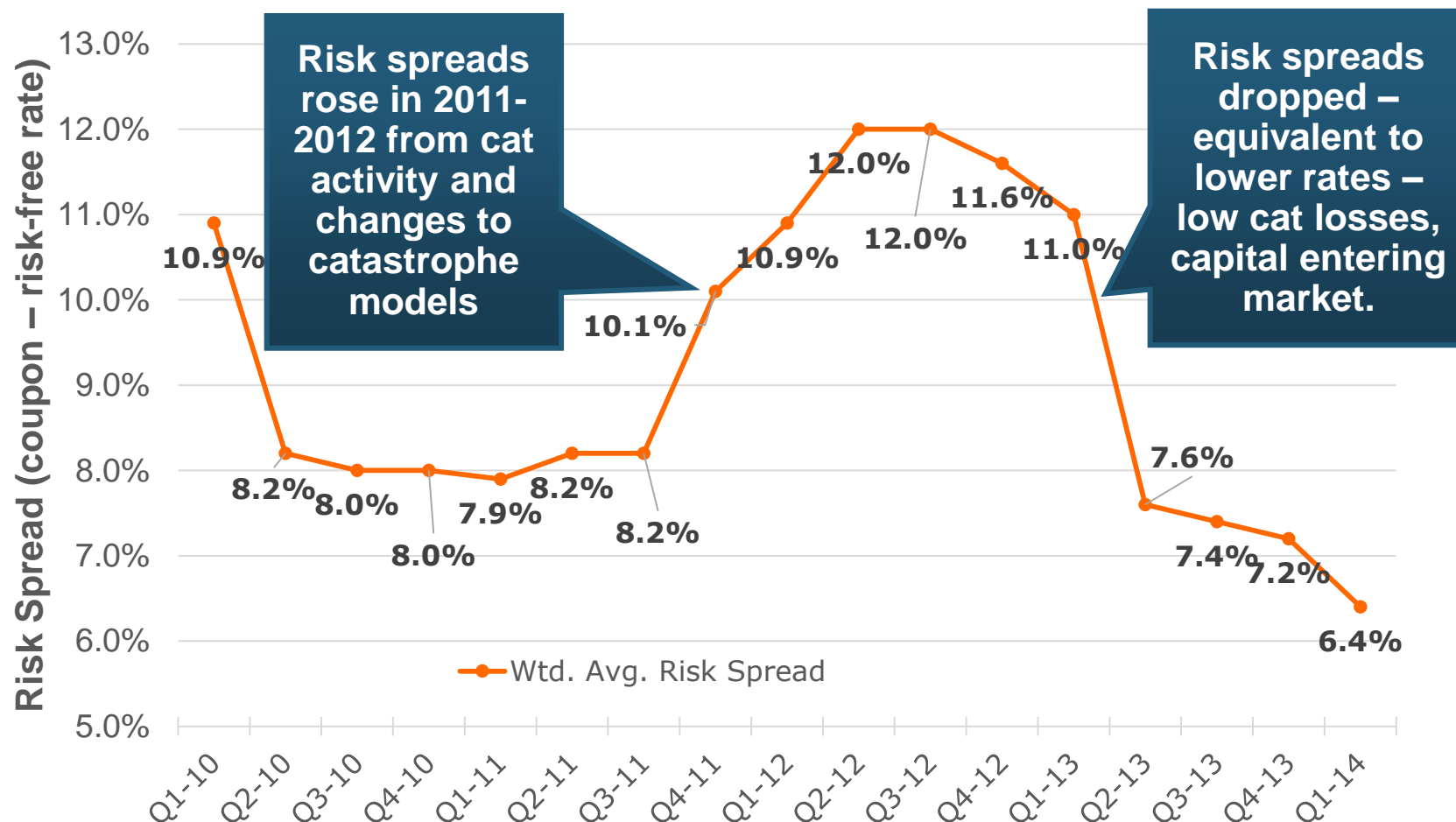
Catastrophe Bonds Outstanding, Q1 2014

Catastrophe bonds are heavily concentrated in U.S. hurricane exposures. Two-thirds of catastrophe risks outstanding cover U.S. wind risks.



Source: Willis Capital Markets.

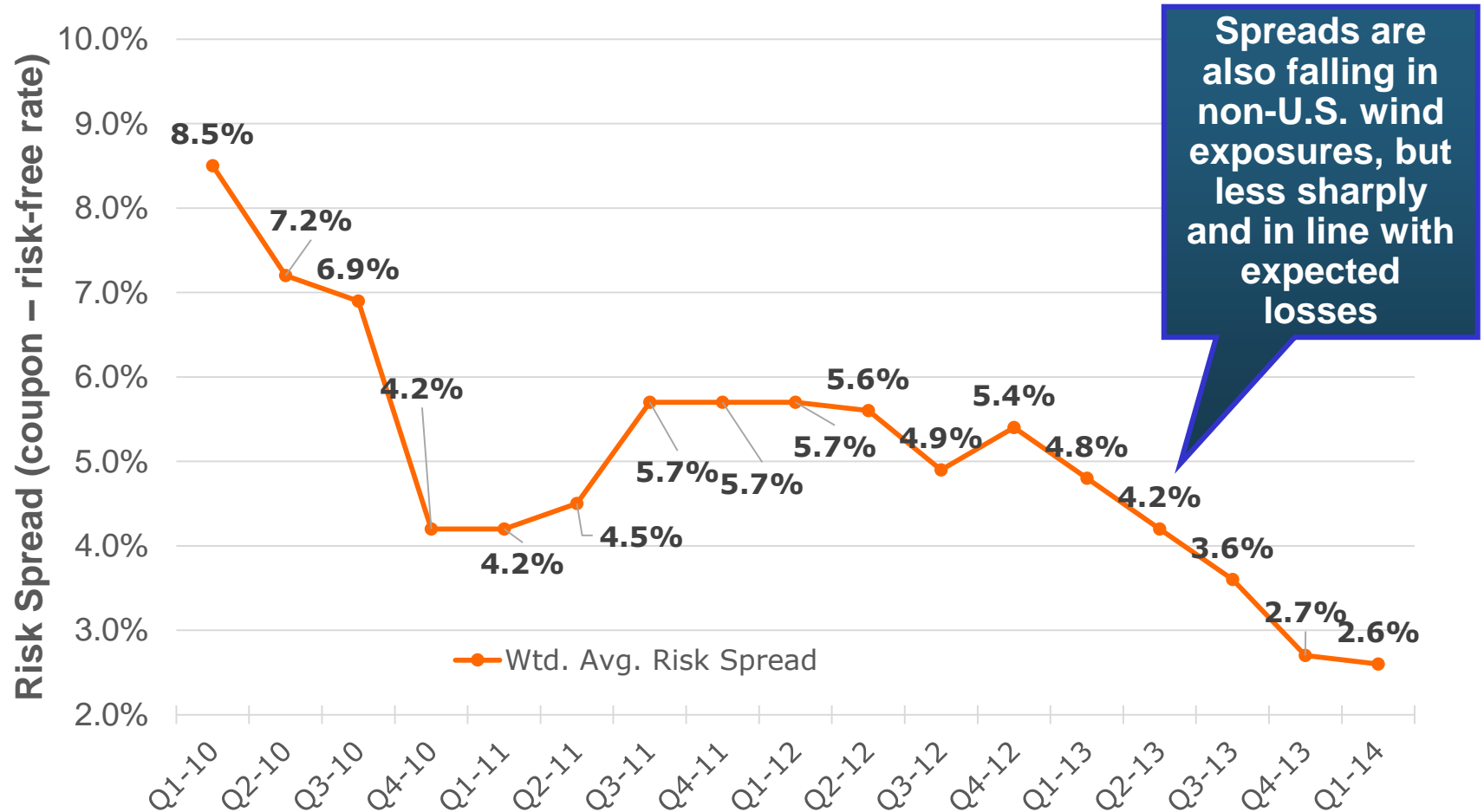
U.S. Wind-Exposed Risk Premium* 2010:Q1 to 2014: Q1



* Trailing 12-month average

SOURCE: Willis Capital Markets, Insurance Information Institute.

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

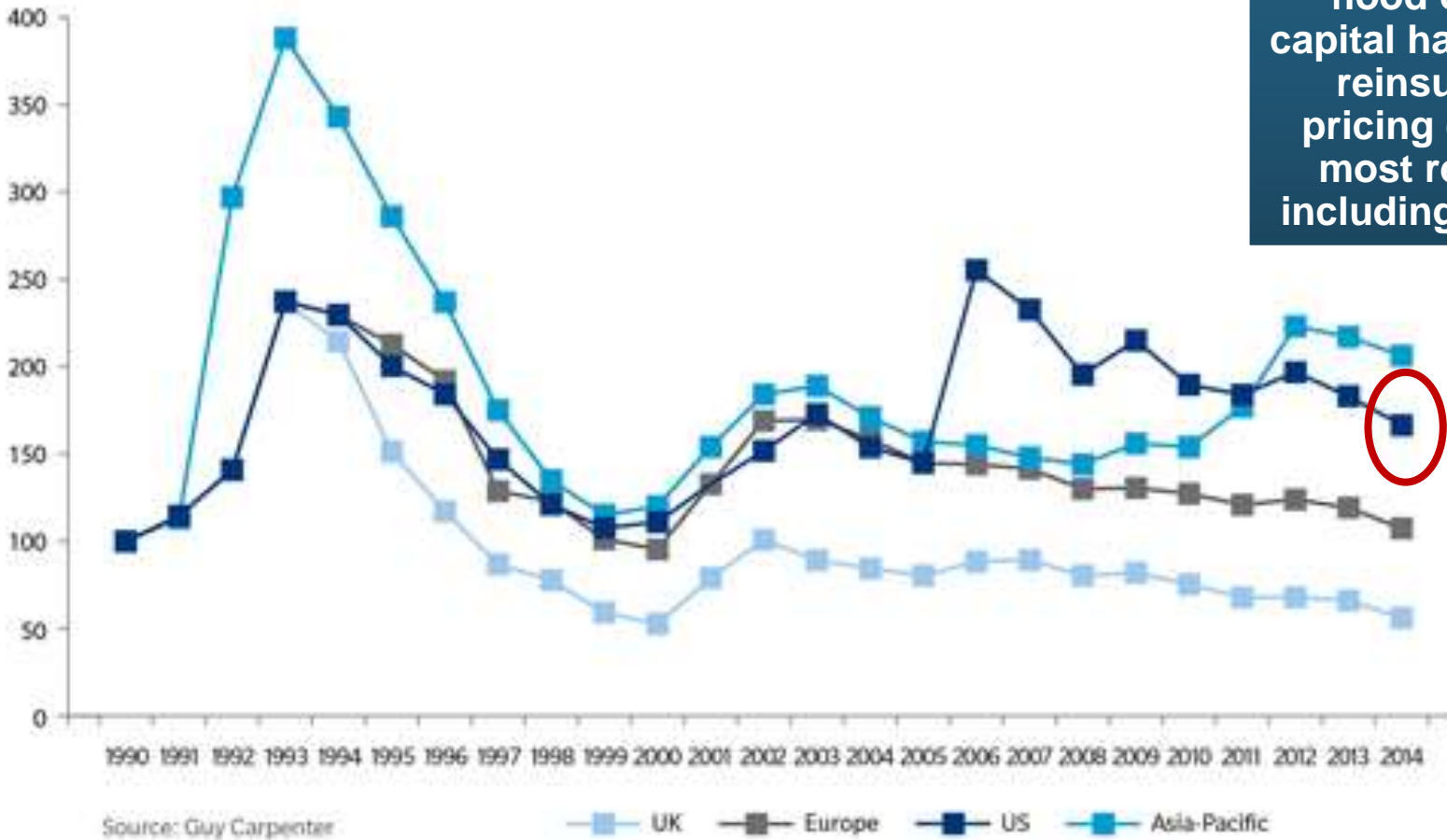


* Trailing 12-month average.

SOURCE: Willis Capital Markets, Insurance Information Institute.

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 U.S.

Source: Guy Carpenter

*As of Jan. 1.

Source: Guy Carpenter

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*

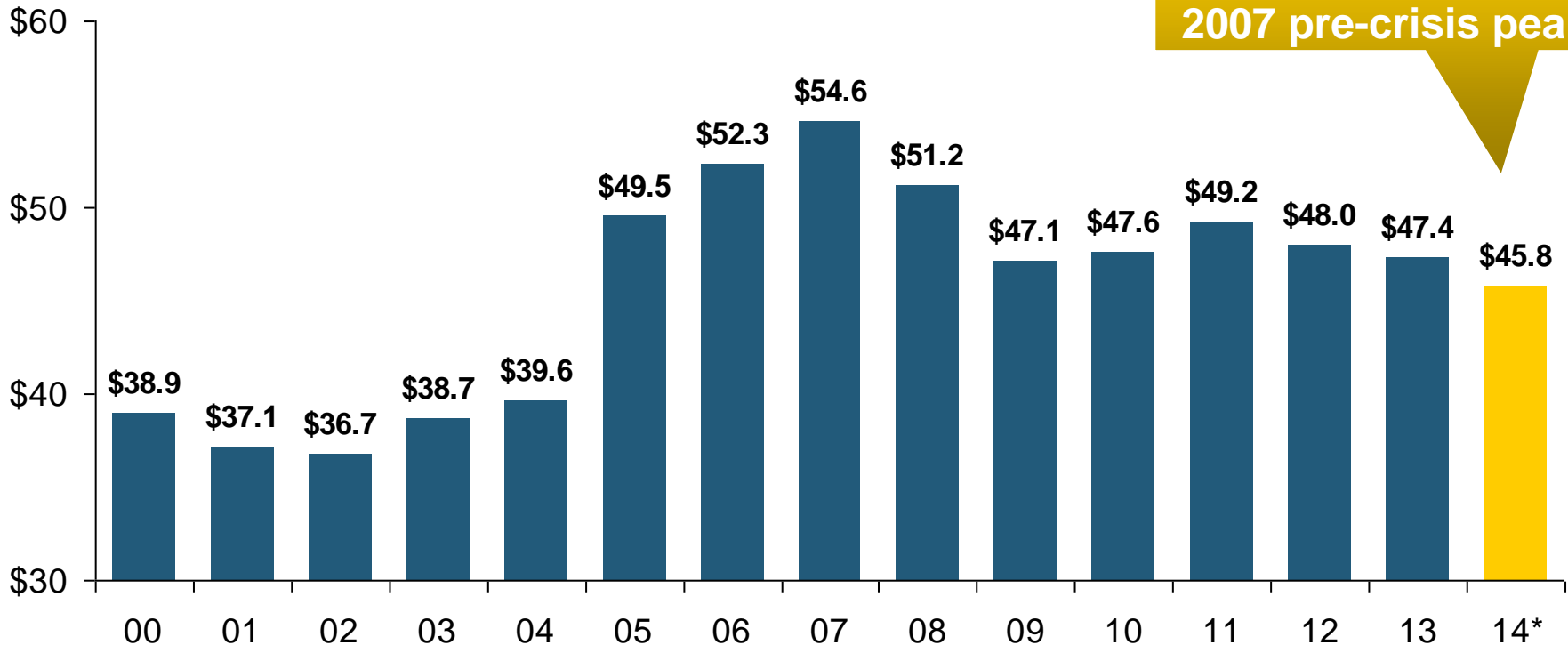
INVESTMENTS: THE NEW REALITY

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

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

Property/Casualty Insurance Industry Investment Income: 2000–2014¹

(\$ Billions)



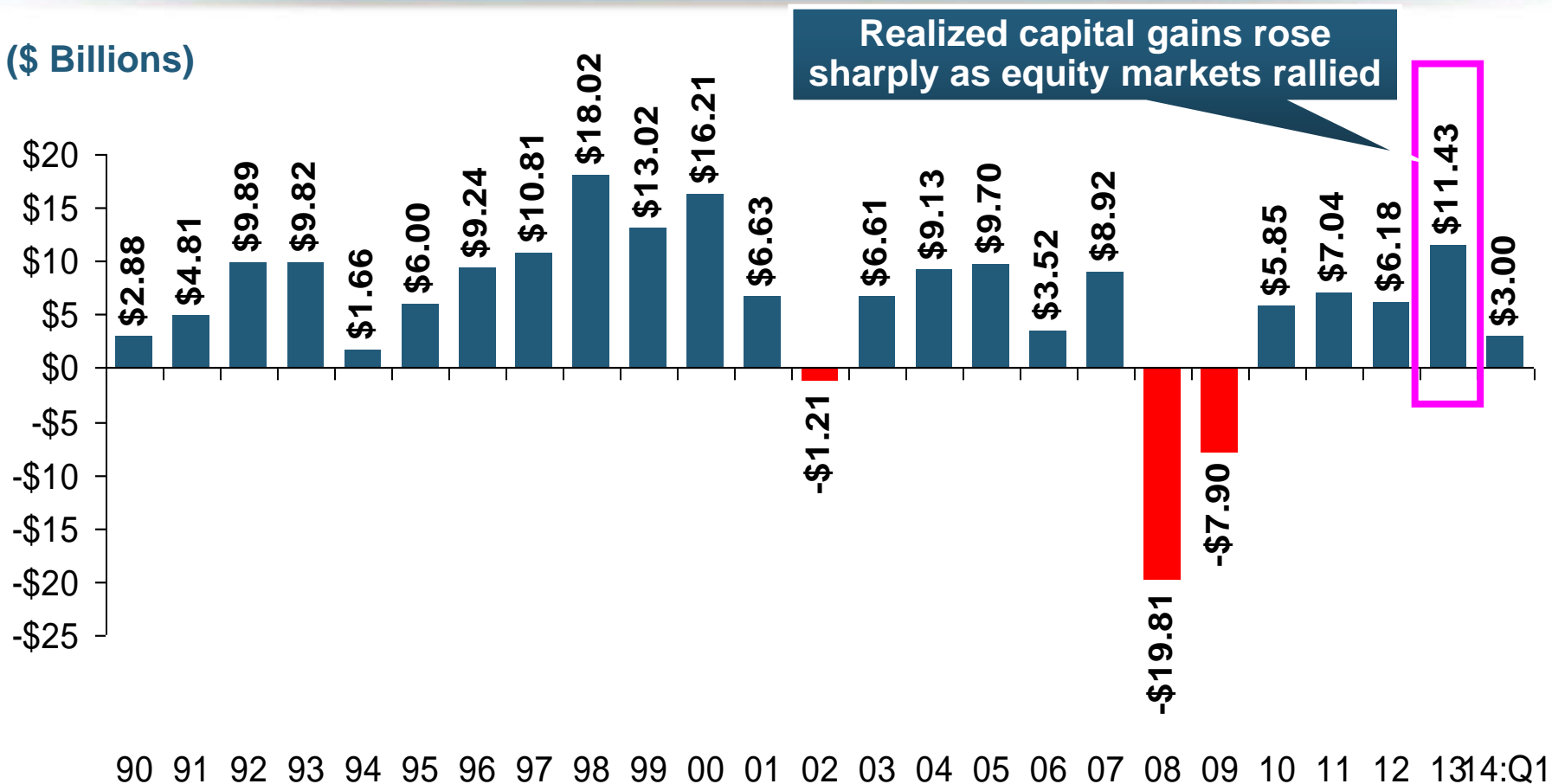
**Due to persistently low interest rates,
investment income fell in 2012 and in 2013
and is falling again in 2014.**

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

*2014 investment income is estimated Q1, annualized.

P/C Insurer Net Realized Capital Gains/Losses, 1990-2014:Q1

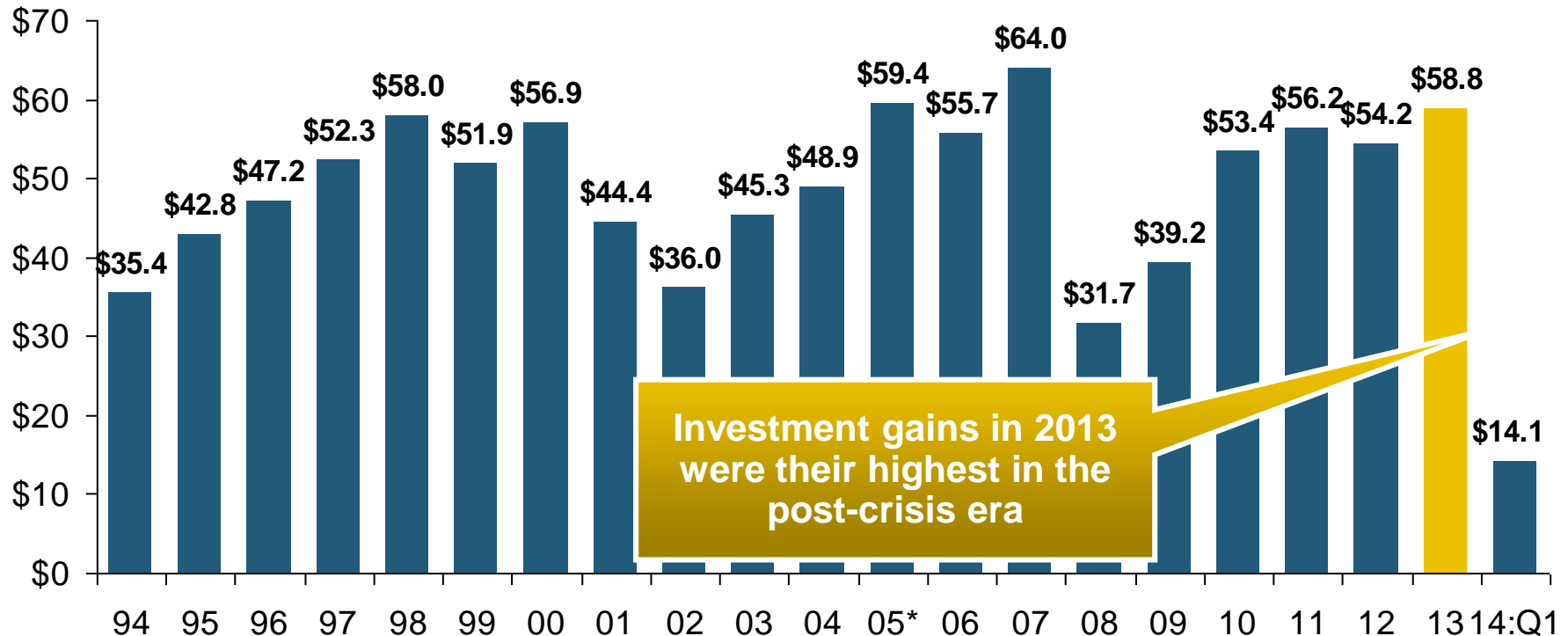
(\$ Billions)



Insurers Posted Net Realized Capital Gains in 2010 - 2013 Following Two Years of Realized Losses During the Financial Crisis. Realized Capital Losses Were a Primary Cause of 2008/2009's Large Drop in Profits and ROE

Property/Casualty Insurance Industry Investment Gain: 1994–2014:Q1¹

(\$ Billions)



Investment gains in 2013 were their highest in the post-crisis era

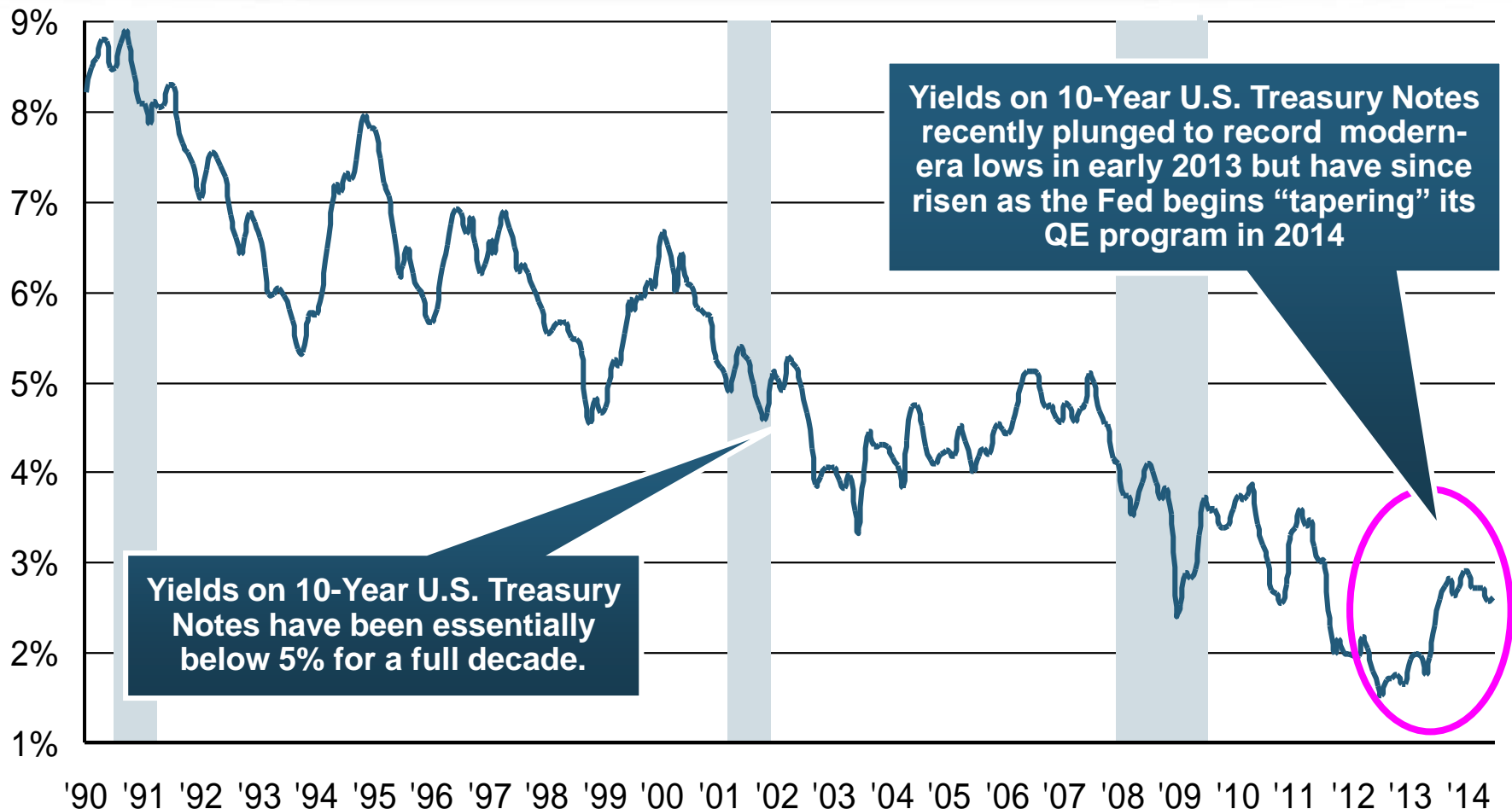
Investment Income Continued to Fall in 2013 Due to Low Interest Rates but Realized Investment Gains Were Up Sharply; The Financial Crisis Caused Investment Gains to Fall by 50% in 2008

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.

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.

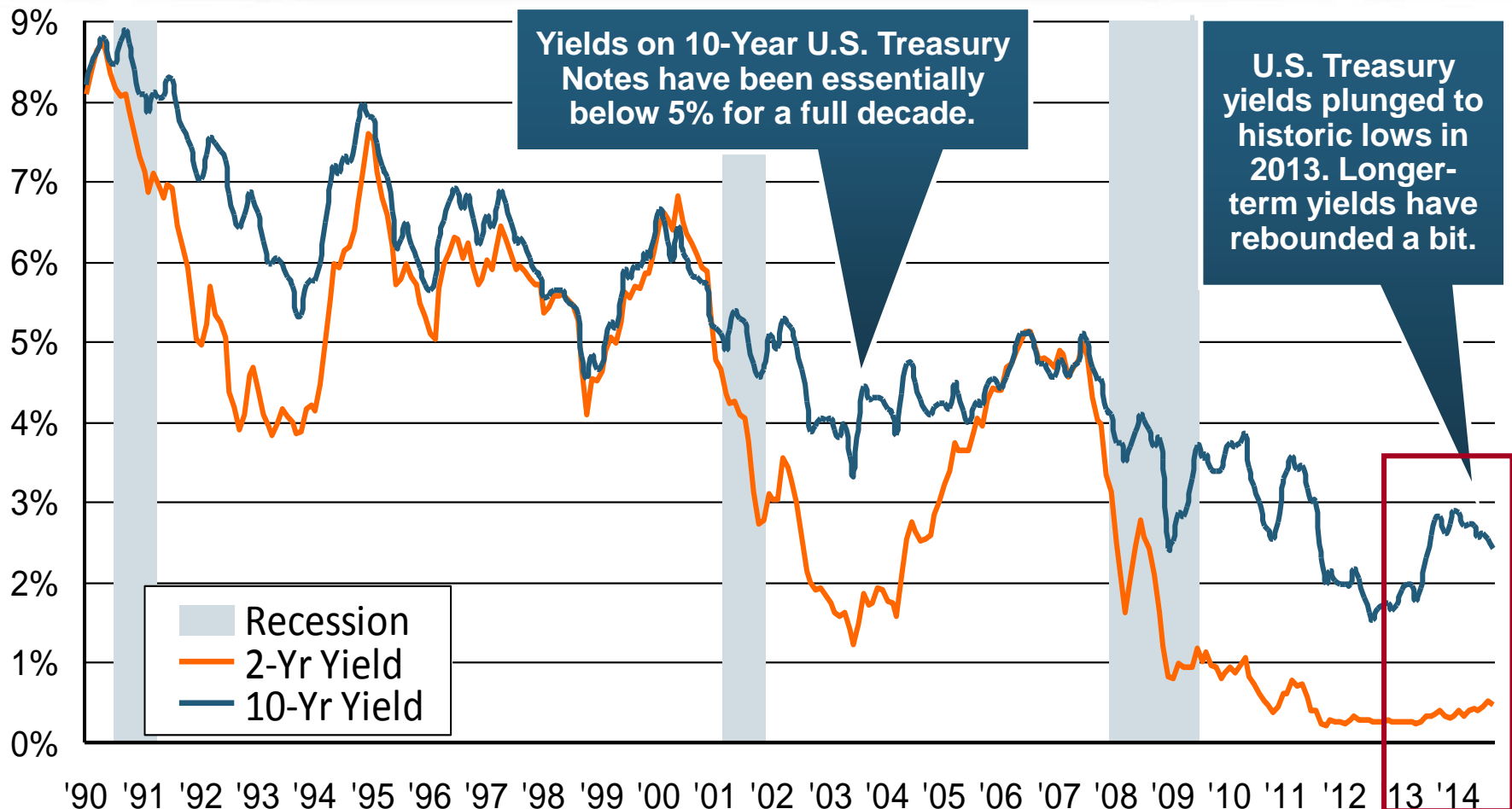
*Monthly, through June 2014.

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*

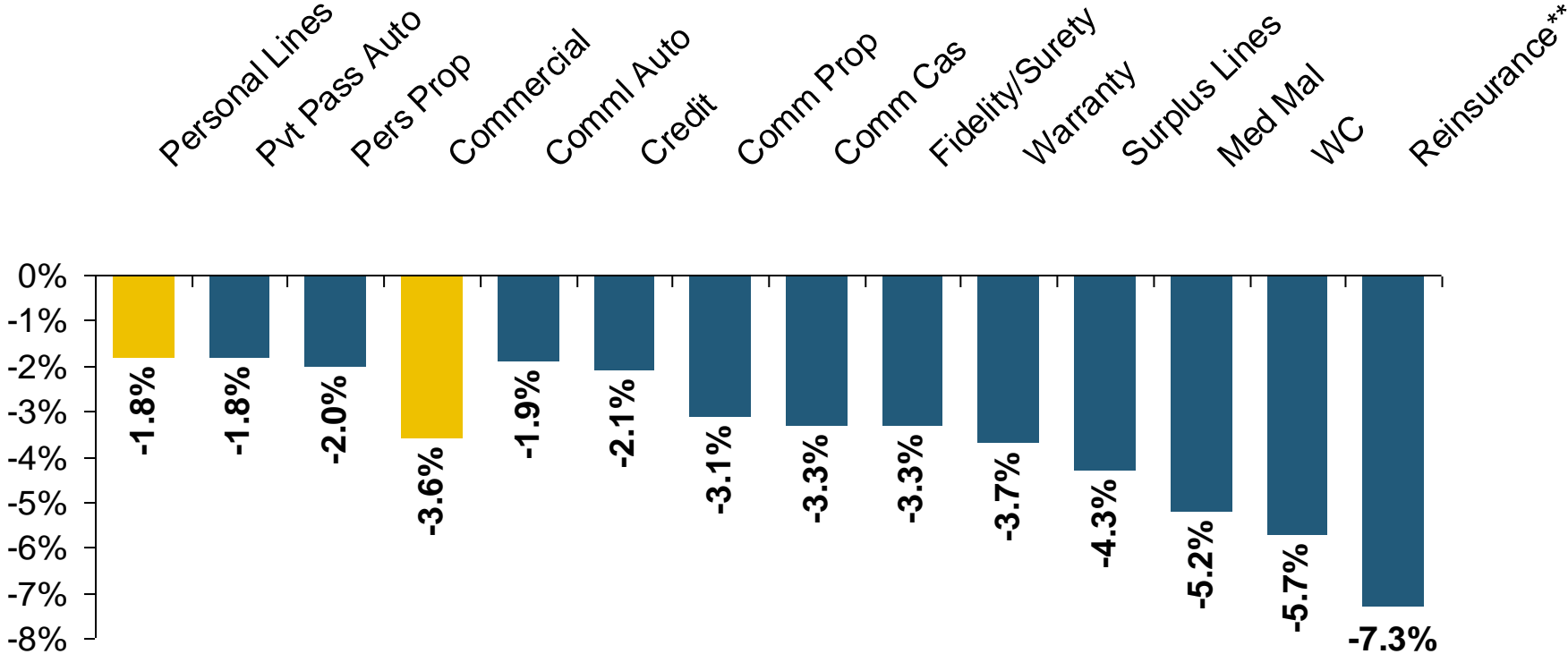


Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

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

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

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



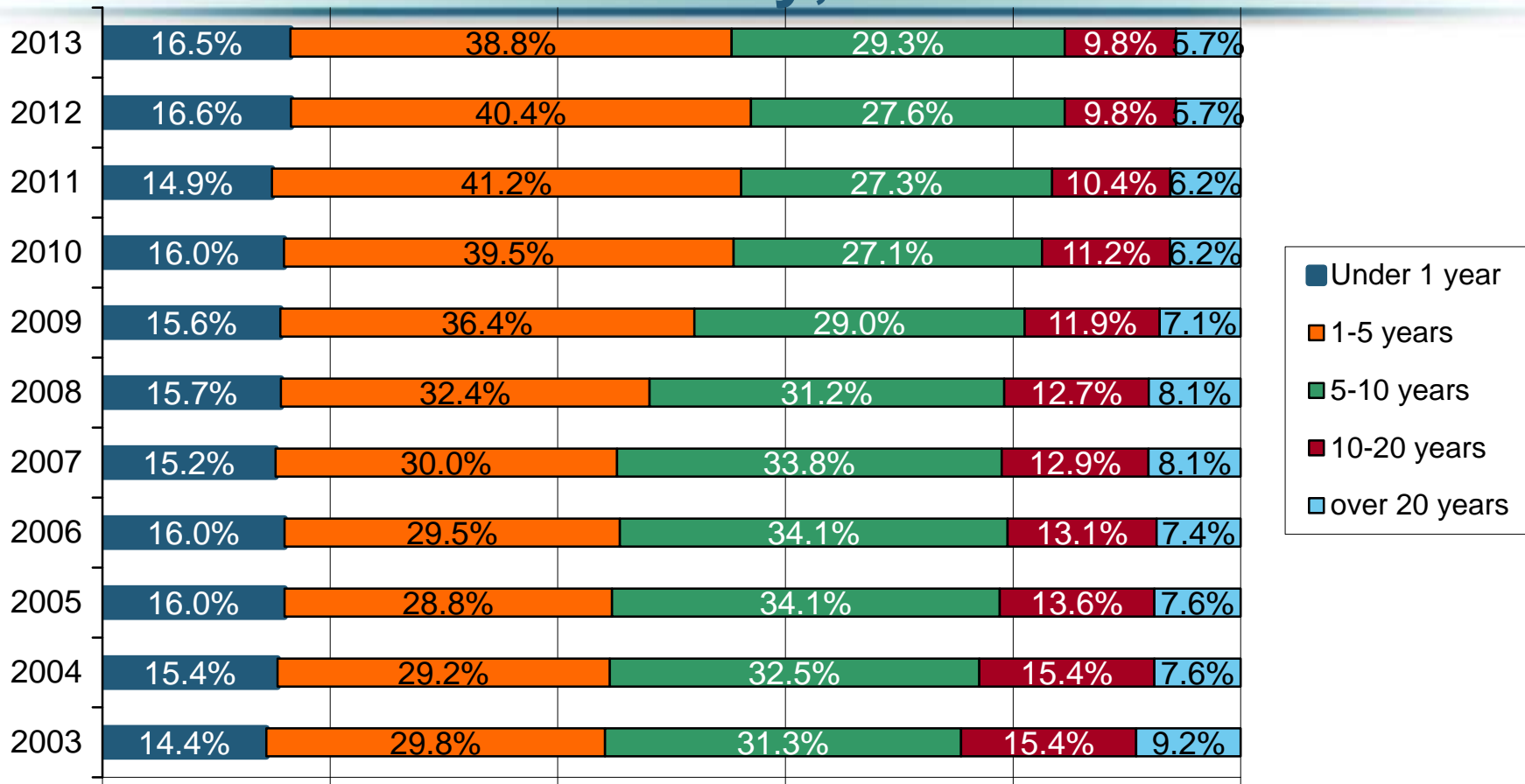
Lower Investment Earnings Place a Greater Burden on Underwriting and Pricing Discipline

*Based on 2008 Invested Assets and Earned Premiums

**US domestic reinsurance only

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

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



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

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

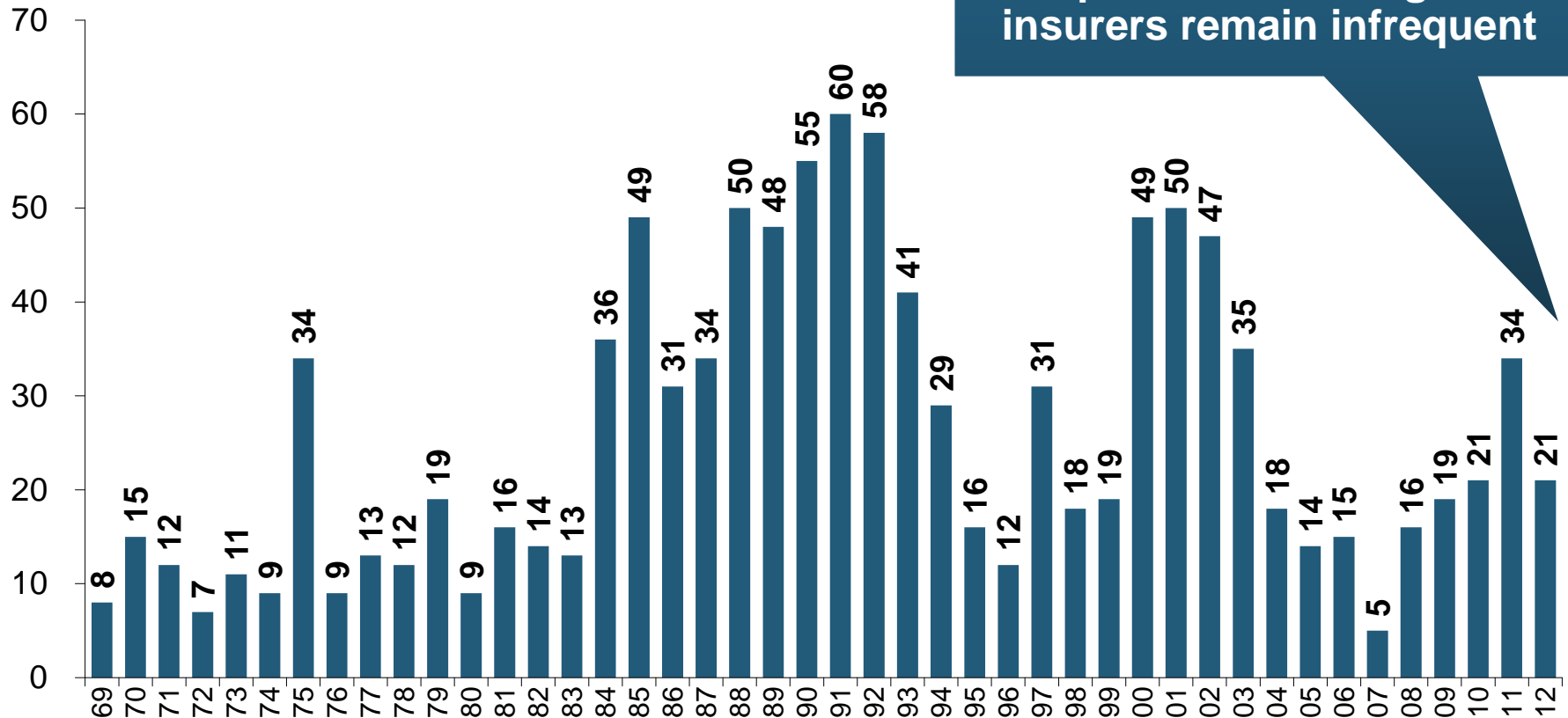
Global Financial Crises & Global Systemic Risk...There's More...

- **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

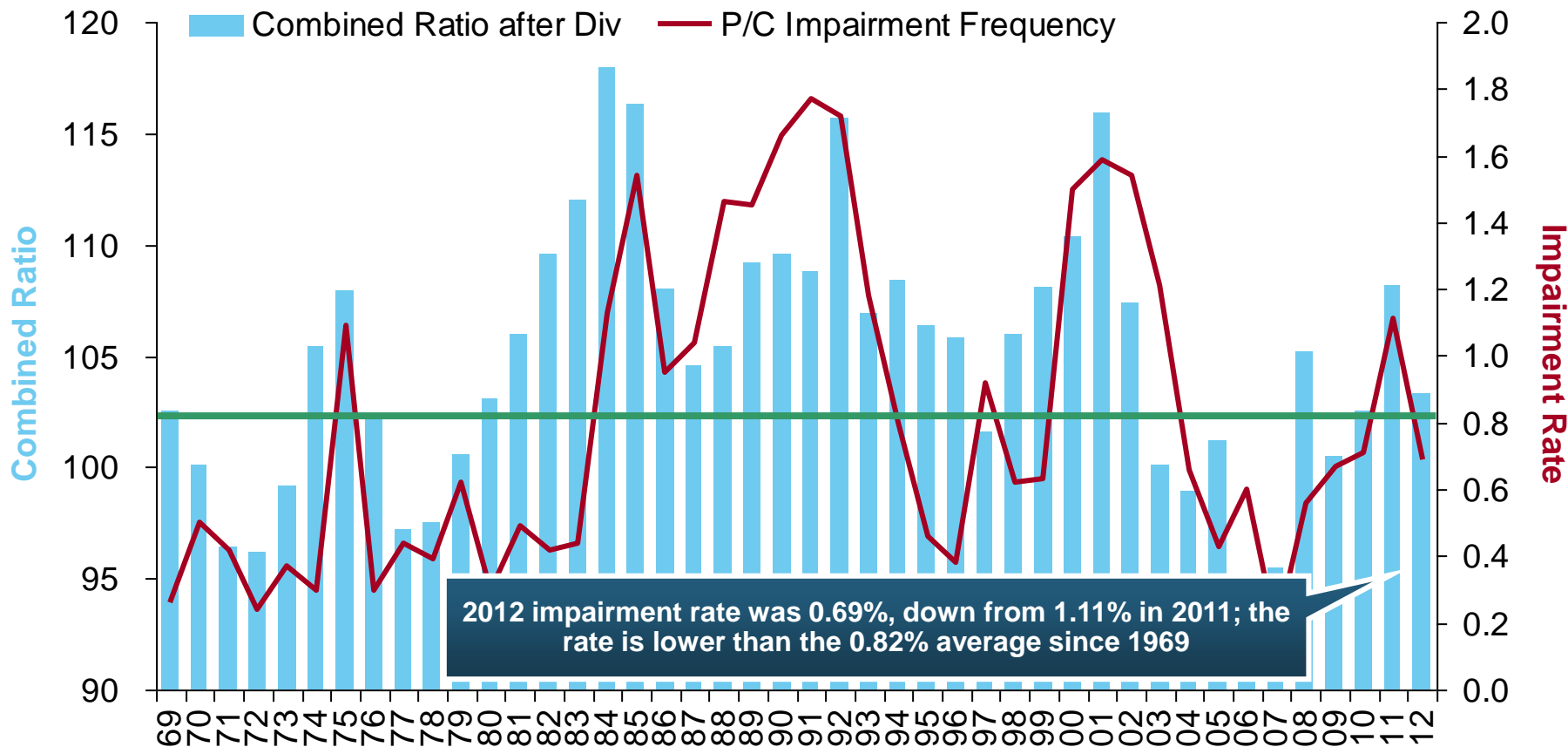
**Cyclical Pattern is P-C Impairment
History is Directly Tied to
Underwriting, Reserving & Pricing**

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

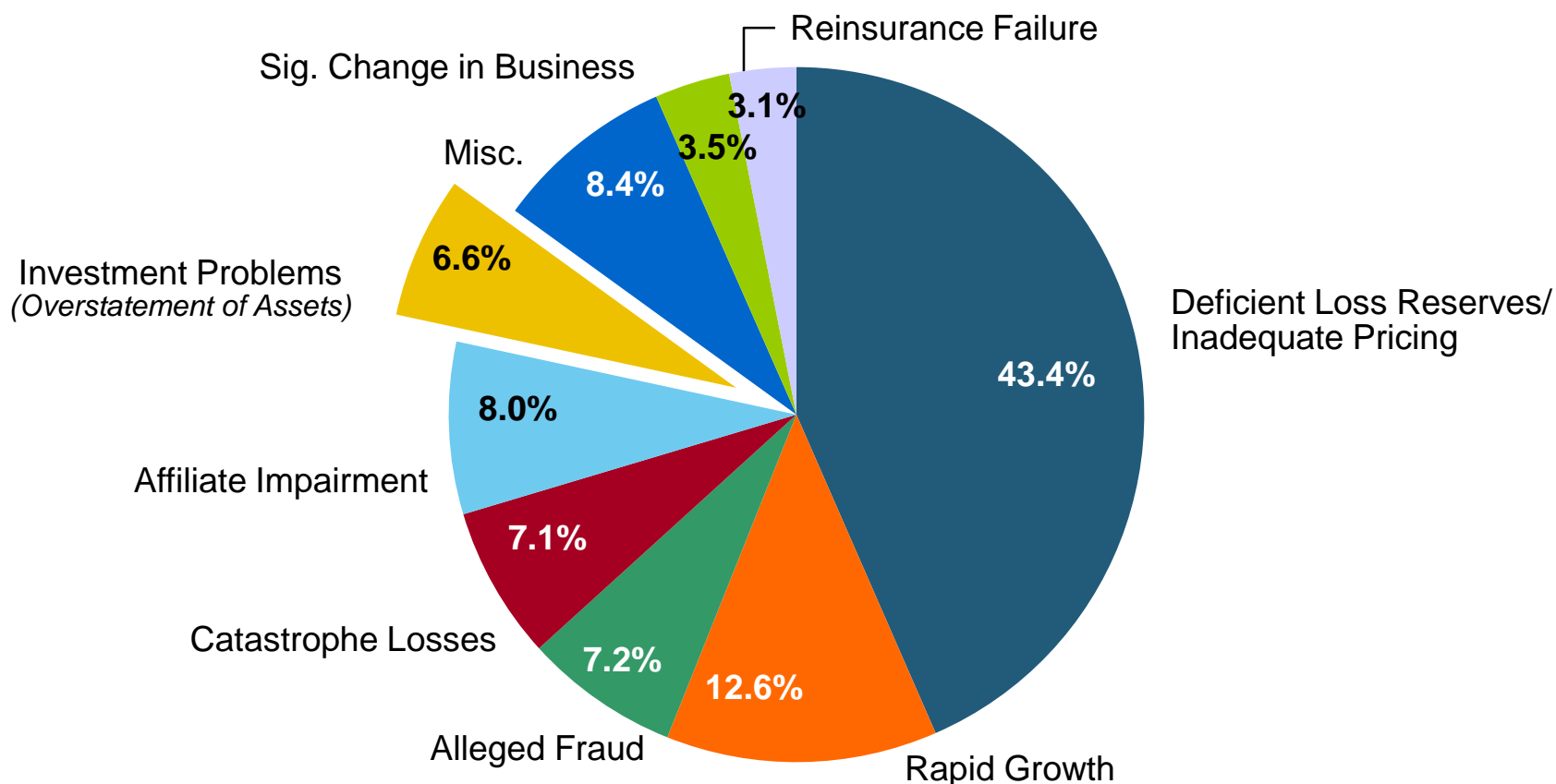
P/C Insurer Impairment Frequency vs. Combined Ratio, 1969-2012



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

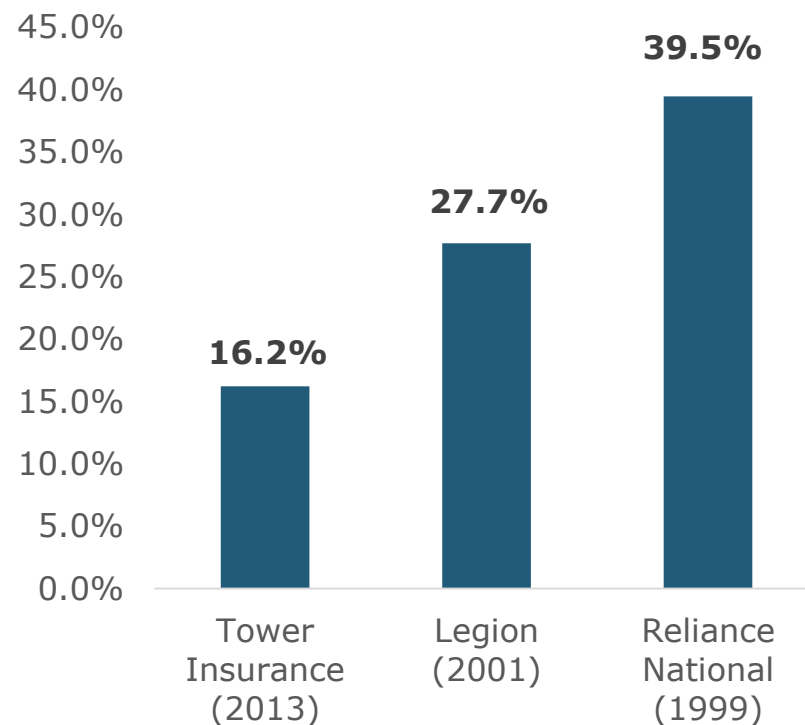


Rapid Growth 'A Leading Cause' of Impairment

“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

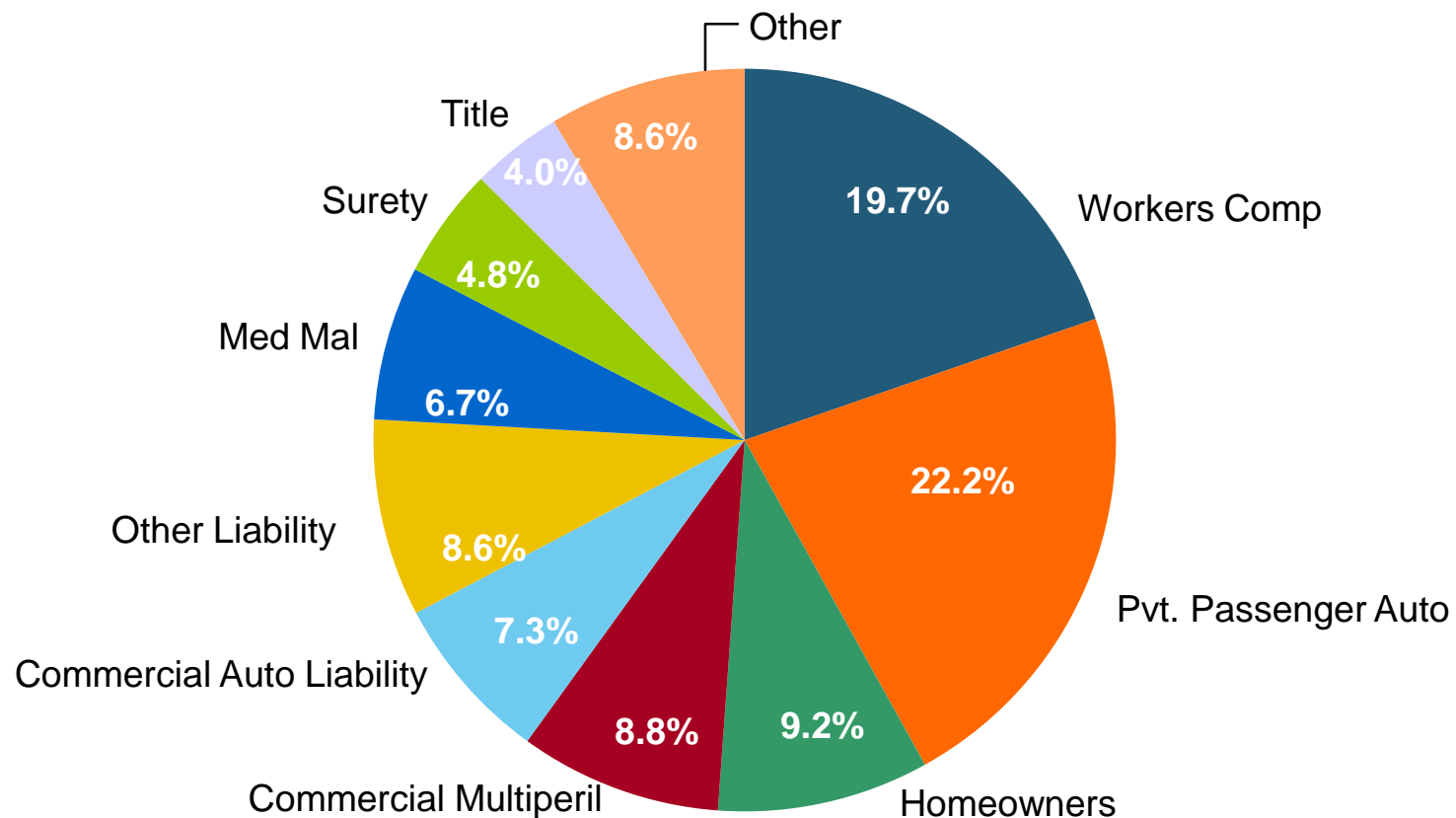
Annualized Growth in Final Years



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