Capital Punishment?

The Challenge of Profitability and Growth in an Industry and World Awash in Capital

Geneva Association

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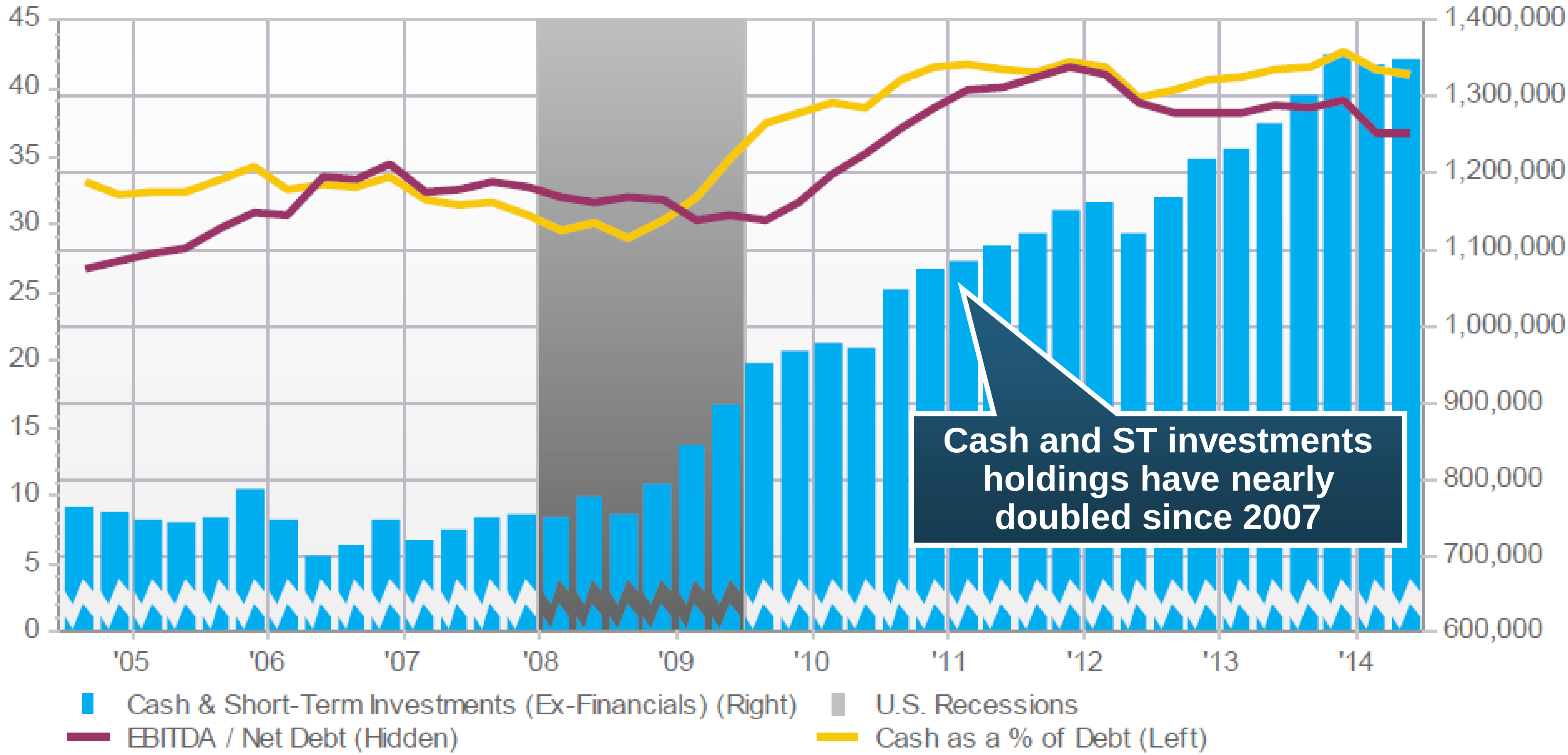
A World Awash in Capital

Too Much of a Good Thing?

The Global Glut of Capital is Not Unique to (Re)Insurance

S&P 500 (Excl. Financials): Cash & Short-Term Investments



Holdings of Cash and Liquid Asset Holdings Have Soared Across Virtually All Industries Since the Financial Crisis

Source: Fact Set Fundamentals.

Hedge Fund Industry: Assets Under Management: 1997–2014:Q2[1]

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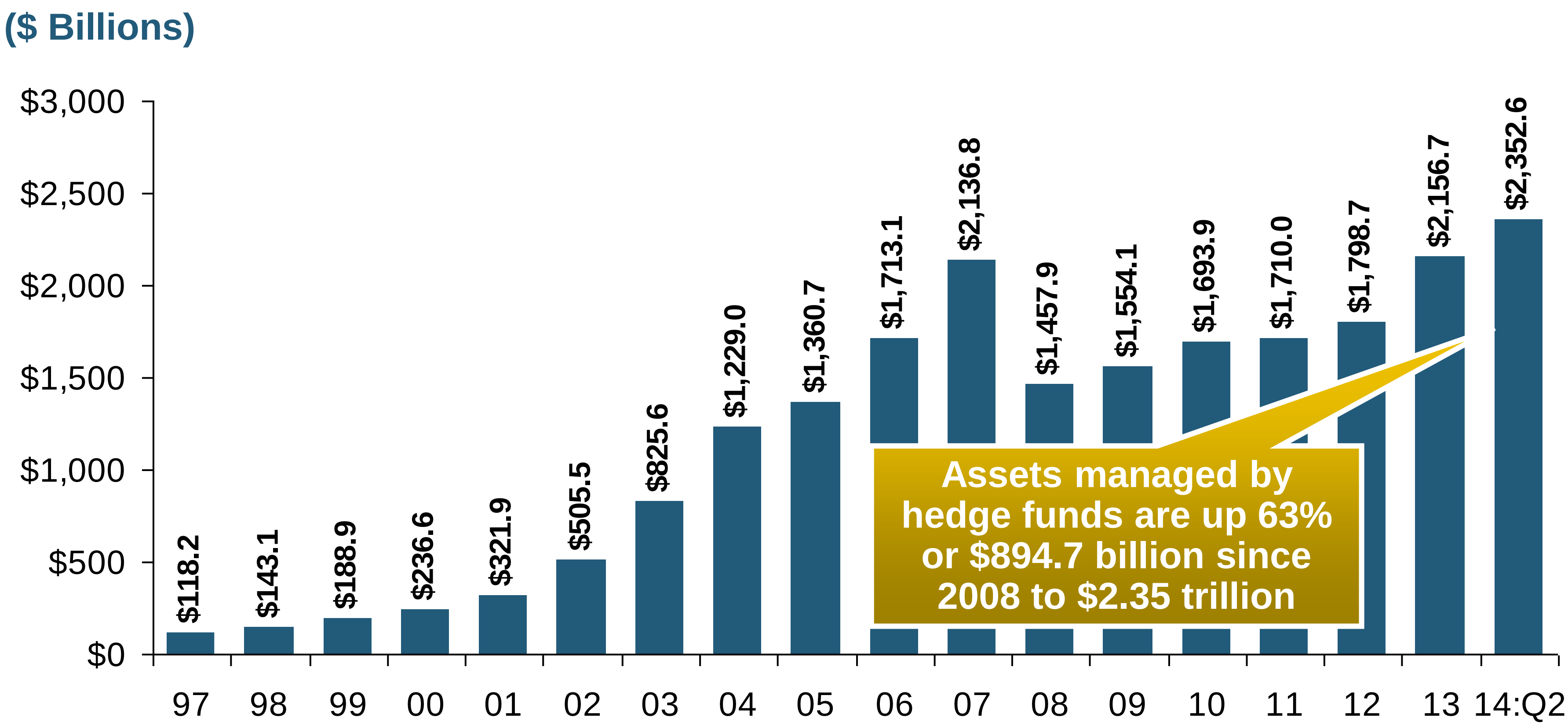
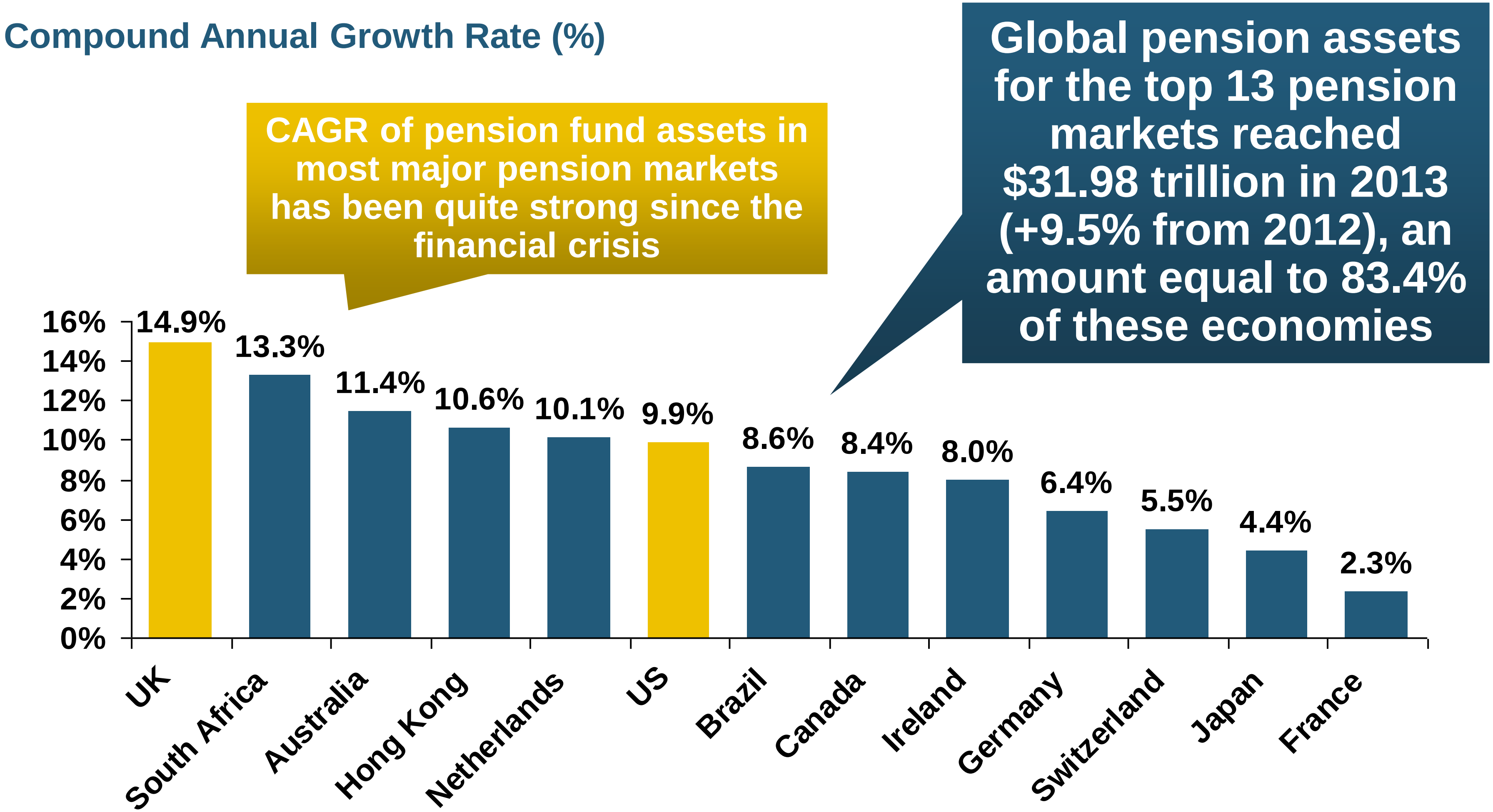


Yield Hungry Pension Funds Have Grown Rapidly Since the Financial Crisis, Deploying Oceans of Capital in Industries Across the Globe—Including the Global Reinsurance Industry

[1] Figures for 2011-2013 are as of Q4 for each year.

Sources: BarclayHedge: http://www.barclayhedge.com/research/indices/ghs/mum/Hedge_Fund.html; Insurance Information Institute.

Global Pension Assets Growth, 2008 – 2013*



*As of year-end.

Source: Towers Watson Global Pensions Asset Study 2014 at: http://www.towerswatson.com/en-US/Insights/IC-Types/Survey-Research-Results/2014/02/Global-Pensions-Asset-Study-2014

Pension Asset Allocation (World's 7 Largest Pension Markets)

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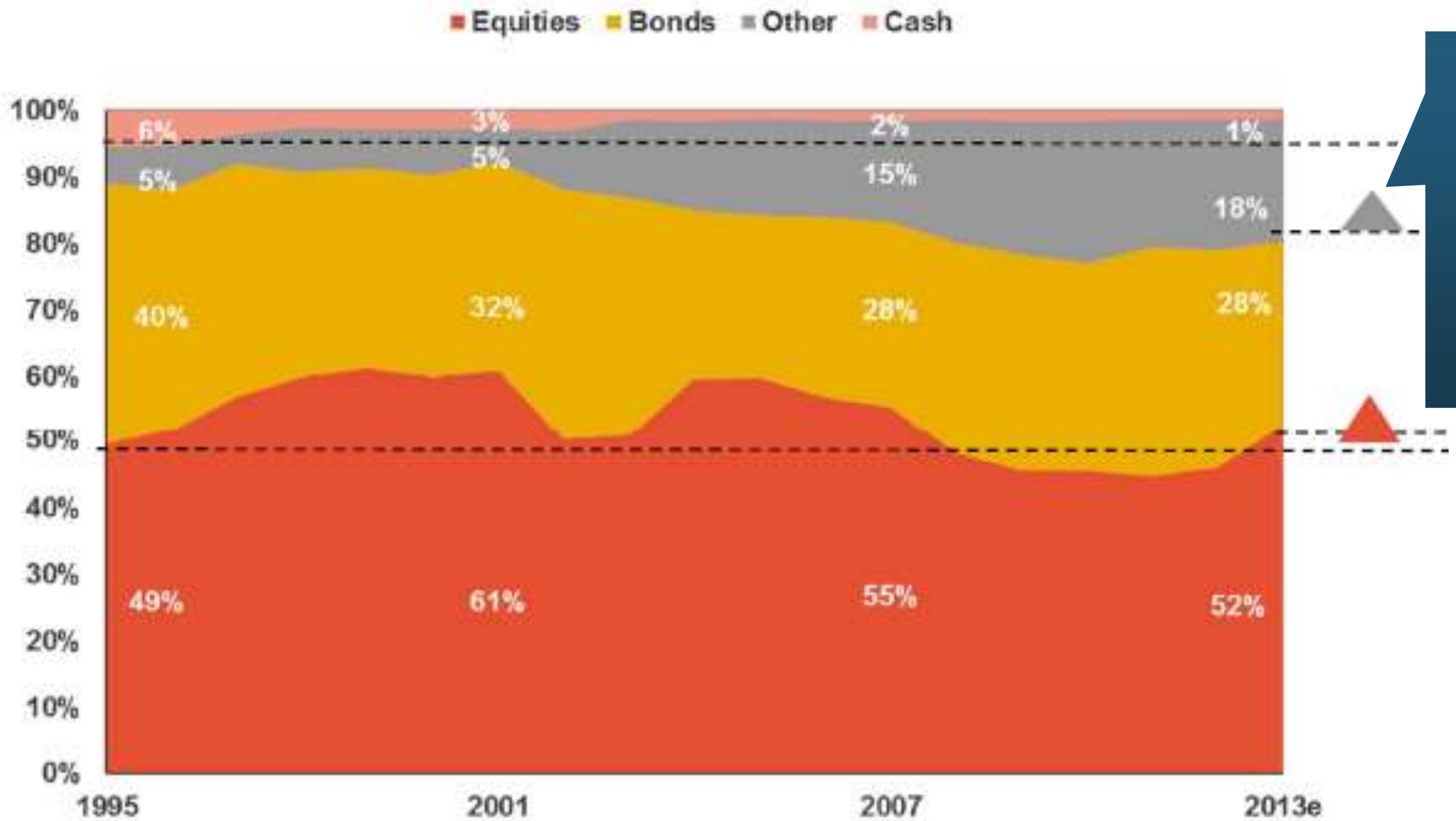

Alternative investment's share of assets is up +15 points since 2001 from 5% to 18%

Holdings of Cash and Liquid Asset Holdings Have Soared Across Virtually All Industries Since the Financial Crisis

*Australia, Canada, Japan, Netherlands, Switzerland, UK, US.
Source: Towers Watson Global Pensions Asset Study 2014 at: http://www.towerswatson.com/en-US/Insights/IC-Types/Survey-Research-Results/2014/02/Global-Pensions-Asset-Study-2014

U.S. Policyholder Surplus, 2006:Q4–2014:H1

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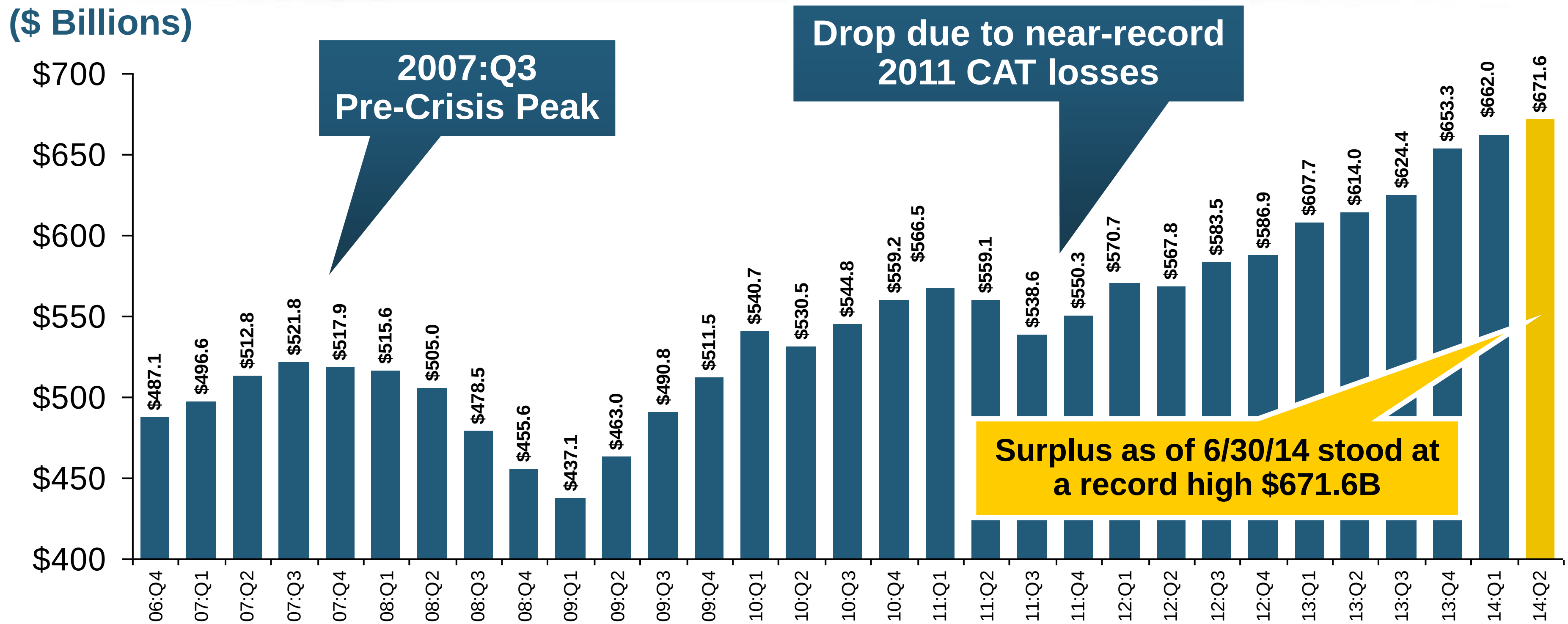

The industry now has $1 of surplus for every $0.73 of NPW, close to the strongest claims-paying status in its history.

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.

U.S. Policyholder Surplus: 1975–2014*

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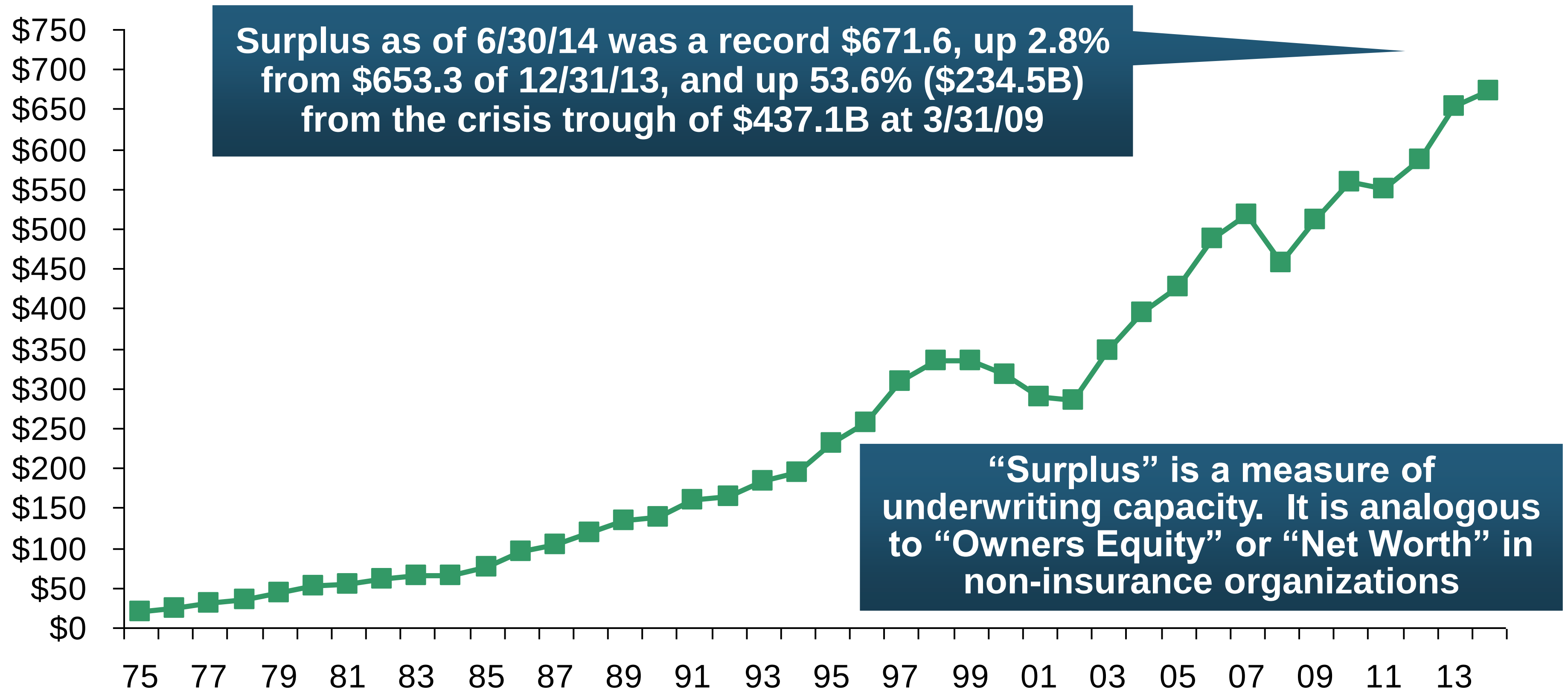
($ Billions)

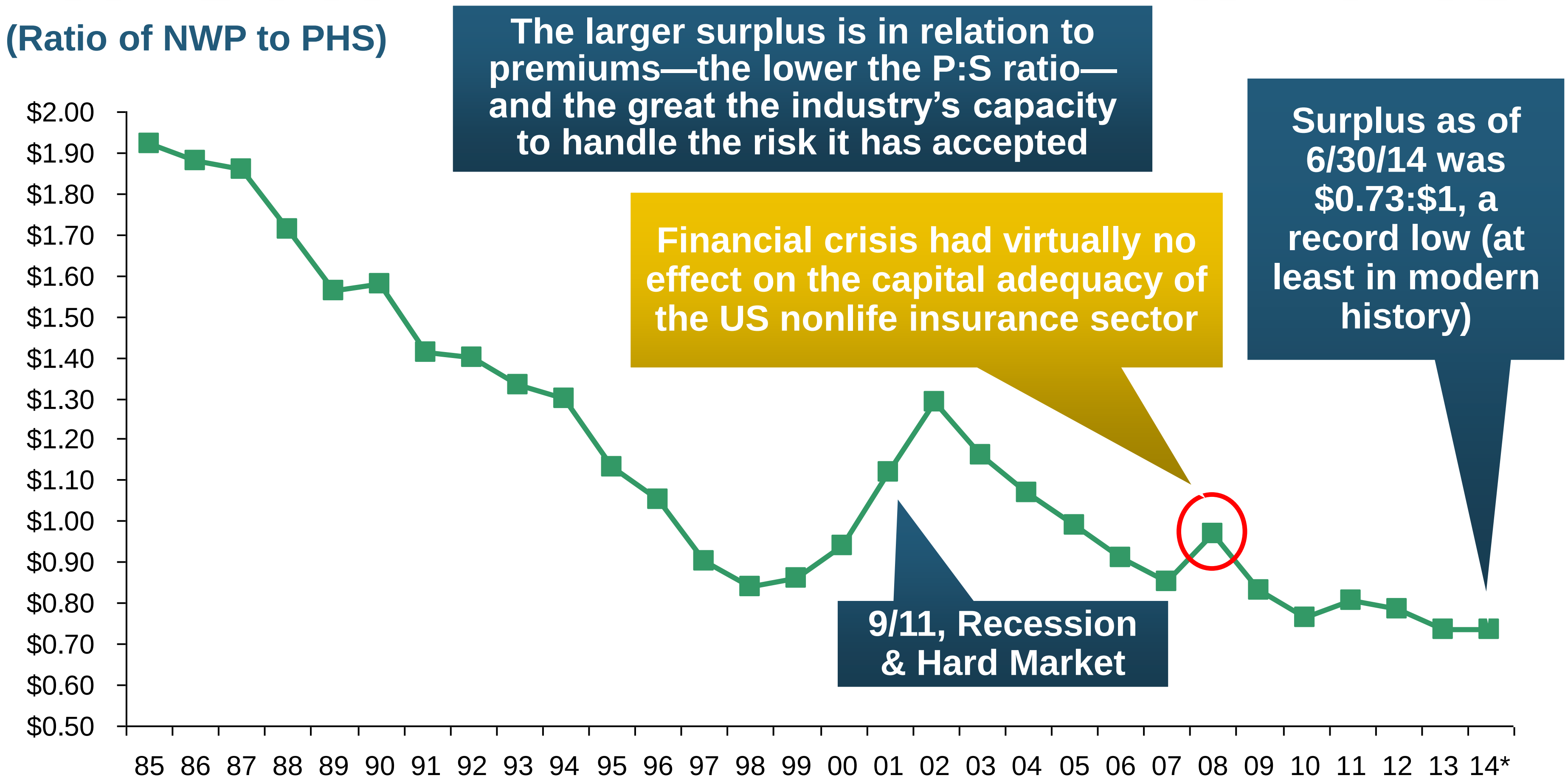


The Premium-to-Surplus Ratio Stood at $0.73:$1 as of 6/30/14, a Near Record Low (at Least in Recent History)

* As of 6/30/14.

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

Premium-to-Surplus Ratio: 1985–2014*



The Premium-to-Surplus Ratio Stood at $0.73:$1 as of 6/30/14, a Record Low (at Least in Recent History)

* As of 6/30/14.

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

A World of Low Yields

Capital Will Seek Its Highest (Risk-Adjusted) Return

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

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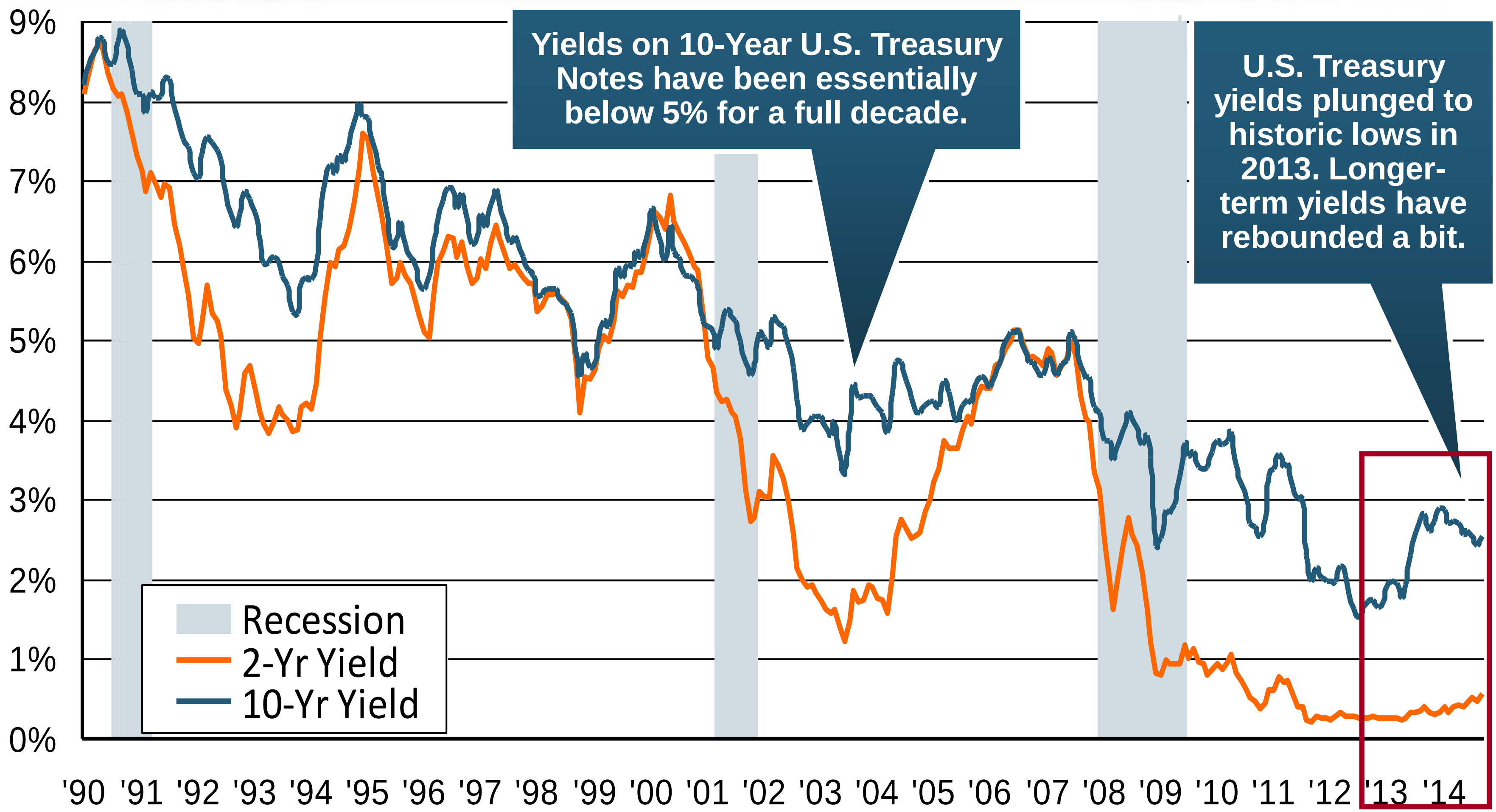
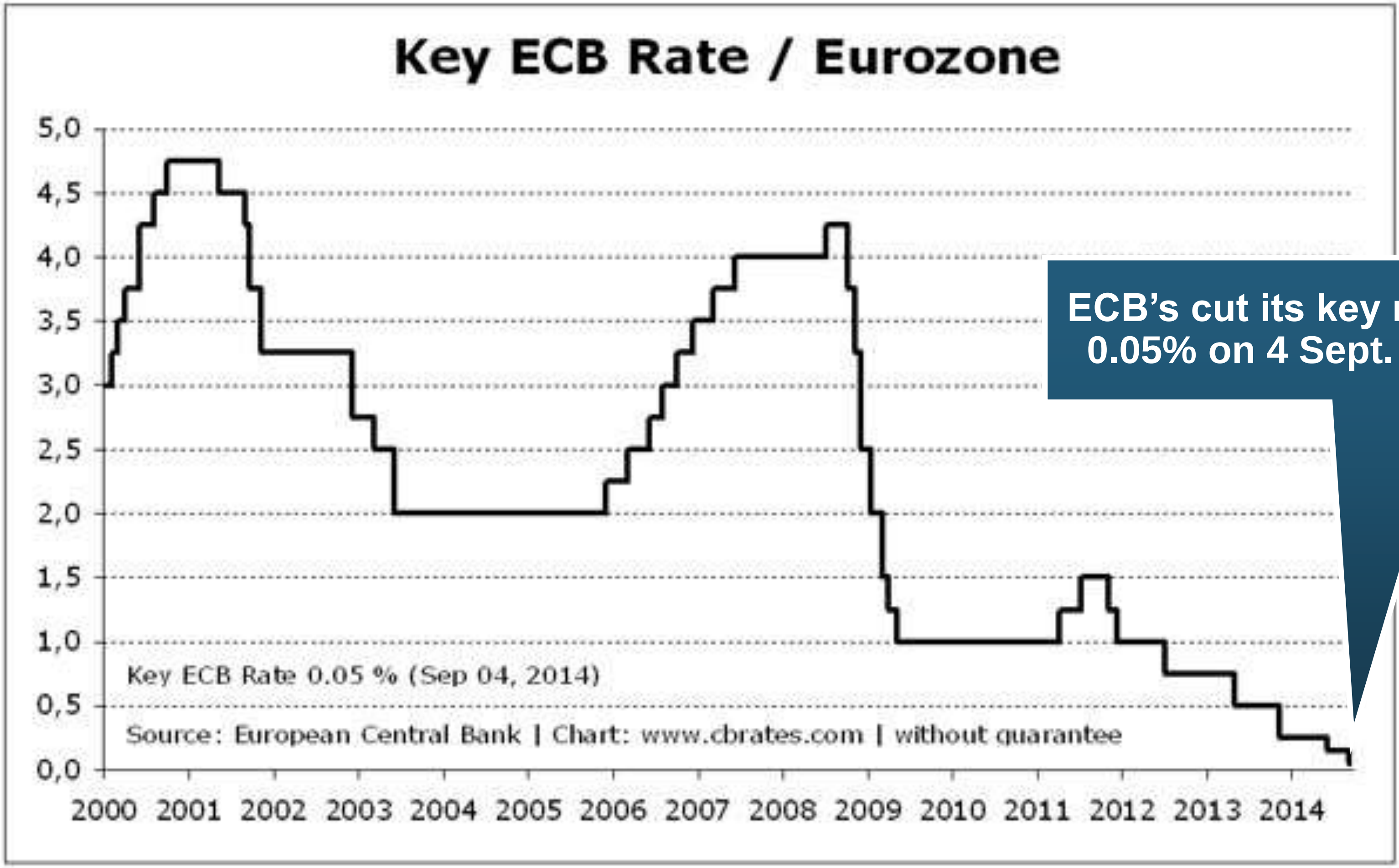


Since roughly 80% of P/C bond/cash investments are in 10-year or shorter durations, most P/C insurer portfolios will have low-yielding bonds for years to come.

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

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

Key European Central Bank Interest Rates, 2000 - 2014



ECB's cut its key rate to 0.05% on 4 Sept. 2014

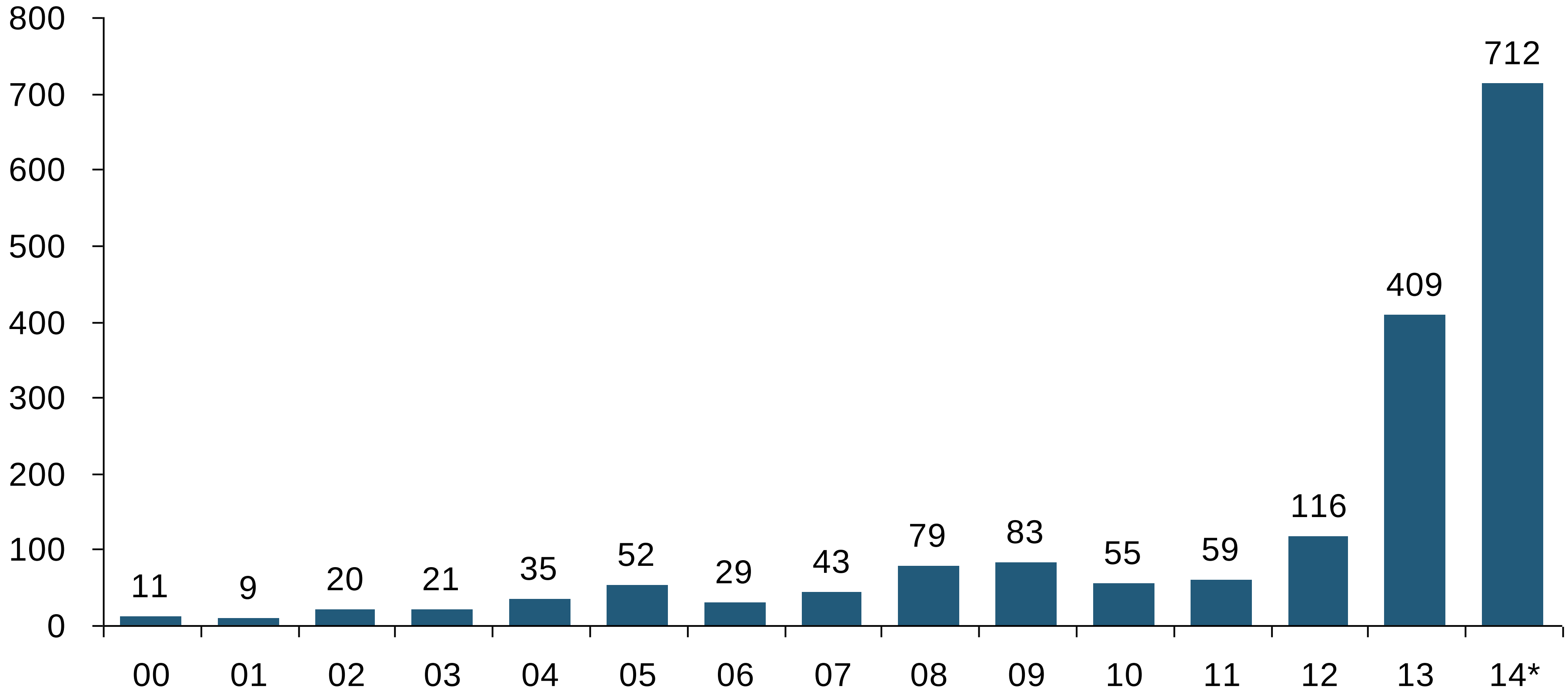
Interest Rates Have Been Slashed by Most Major Central Banks, Igniting a Global Quest for Yield. Reinsurance Is Just One of Many New Areas "Discovered" by Large Institutional Investors

Source: European Central Bank from www.cbrates.com; Insurance Information Institute.

Alternative Capital in Global Reinsurance Markets

The Global Hunt for Yield Pushed Institutional Investors Into Countless New Areas—(Re)Insurance Being One of Them

Mentions of the Term “*Alternative Capital*” with “Insurance” or “Reinsurance”



Should the Increased Use of Terms Such as “Alternative Capital,” “Hedge Fund” and “Pension Fund” in Conjunction with a (Re)Insurance Be a Concern

* Estimate is annualized figure based on actual data through September 30, 2014.
Source: Insurance Information Institute search of Factiva database.

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

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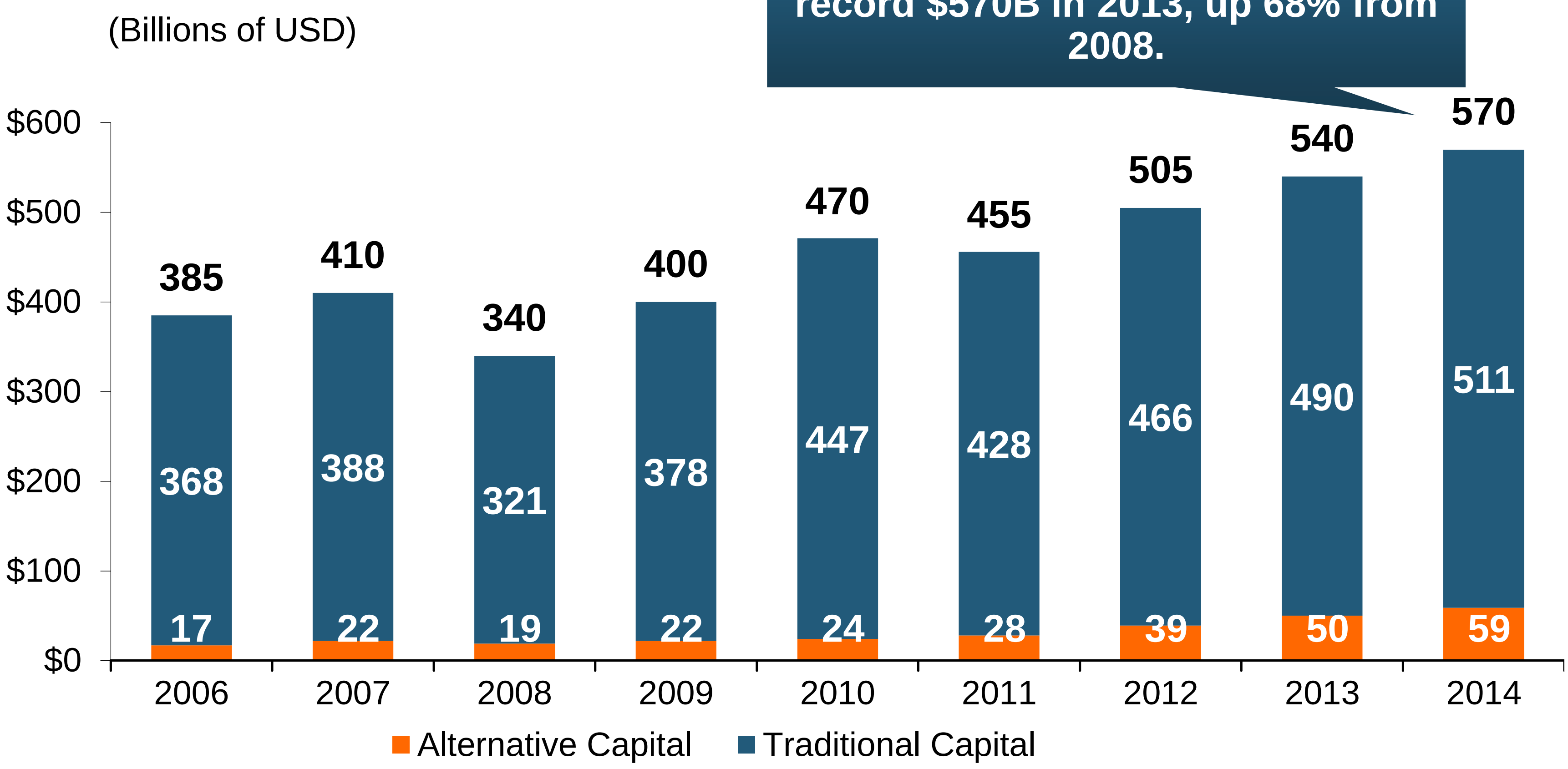
Total reinsurance capital reached a record $570B in 2013, up 68% from 2008.

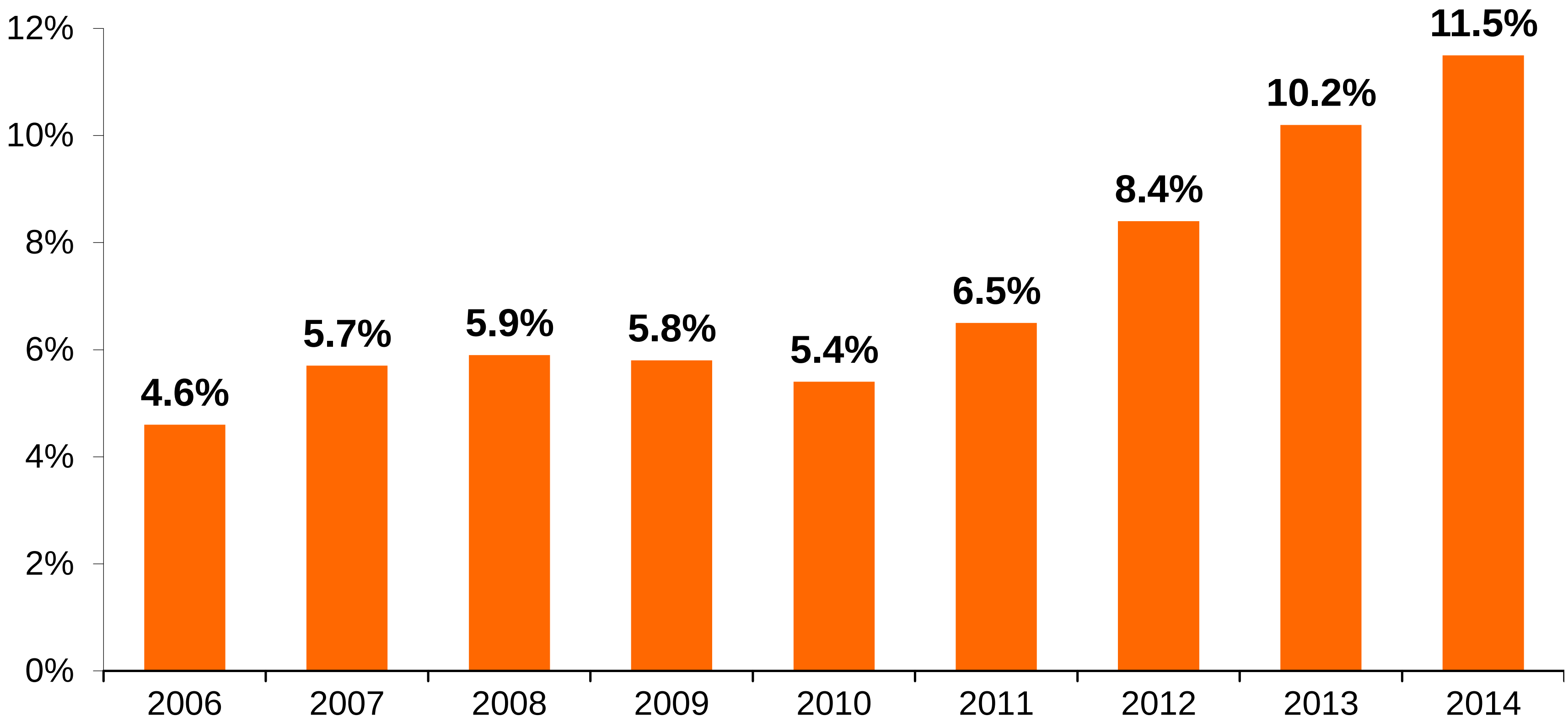


But alternative capacity has grown 210% since 2008, to $50B. It has more than doubled in the past three years.

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.

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

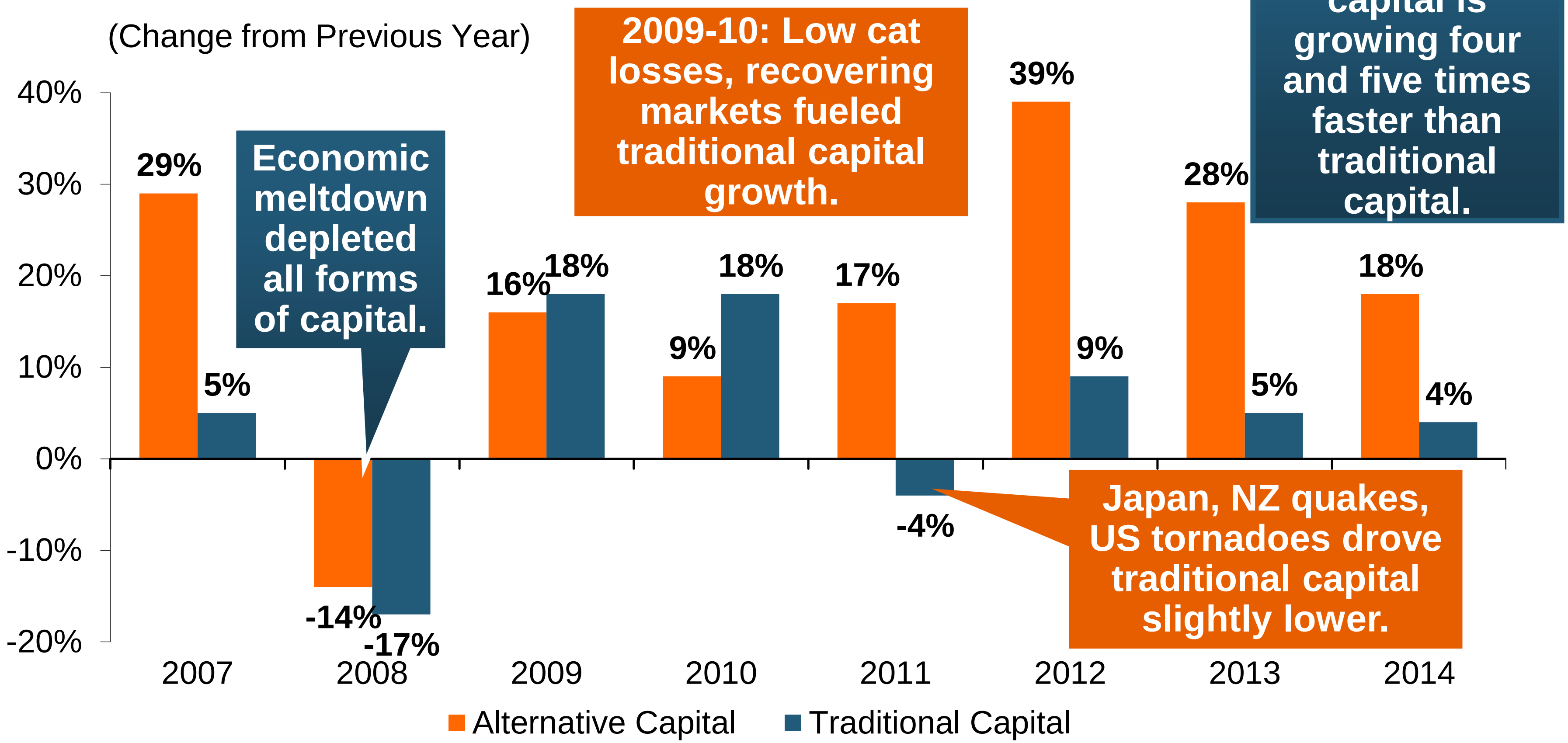


Alternative Capital's Share of Global Reinsurance Capital Has More Than Doubled Since 2010.

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.

Growth in Traditional and Alternative Capital, 2007-2014

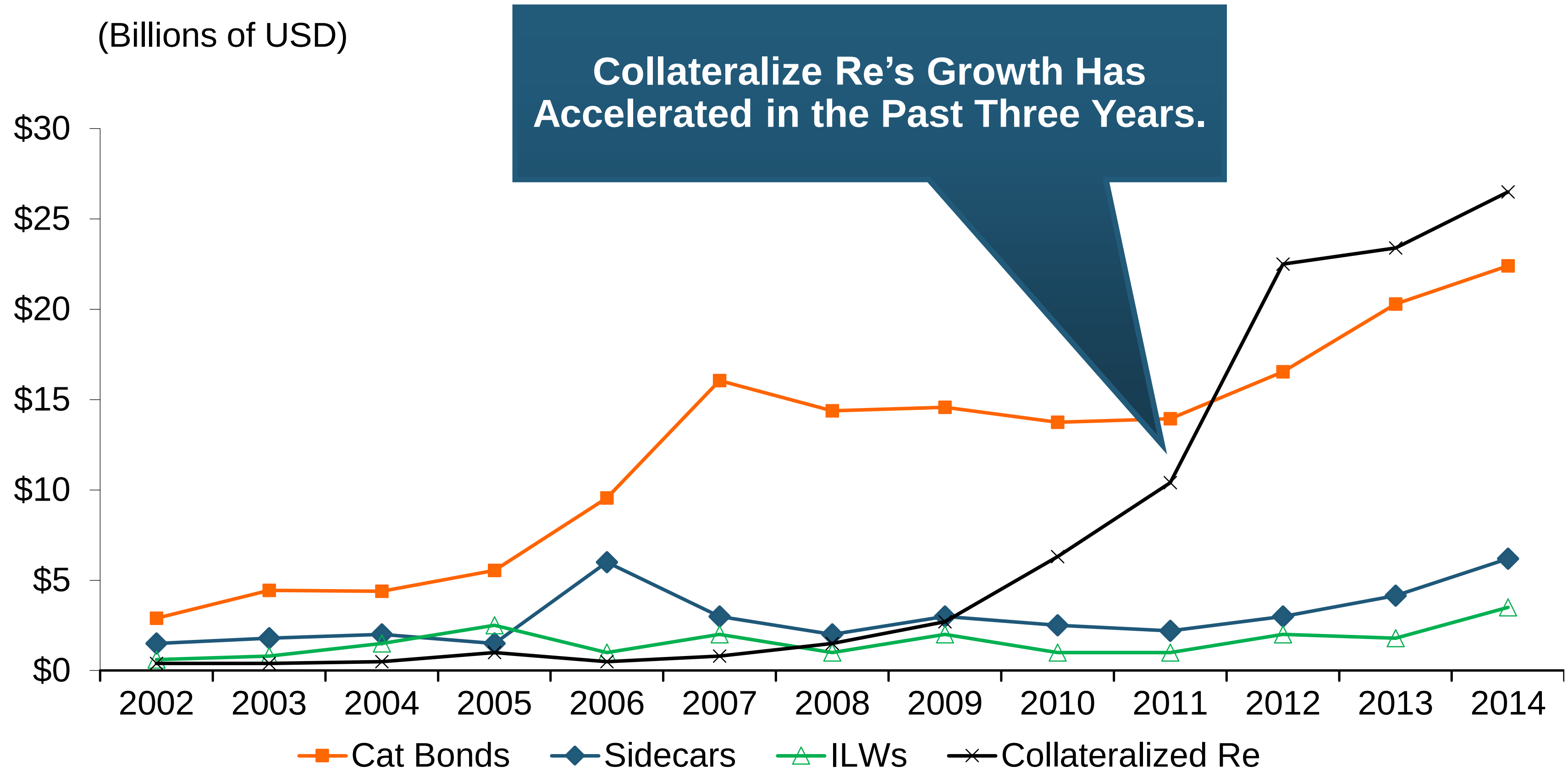


Alternative capital has grown 247% since 2006, vs. 39% growth in traditional capital.

2014 reflects growth through June 30 from prior year end.

Source: Aon Benfield Analytics; Insurance Information Institute.

Growth of Alternative Capital Structures, 2002 - 2014



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

2014 data is as of June 30, 2014.

Source: Aon Benfield Analytics; Insurance Information Institute.

ILS: Issuance and Outstanding, 1997- 2014:Q2

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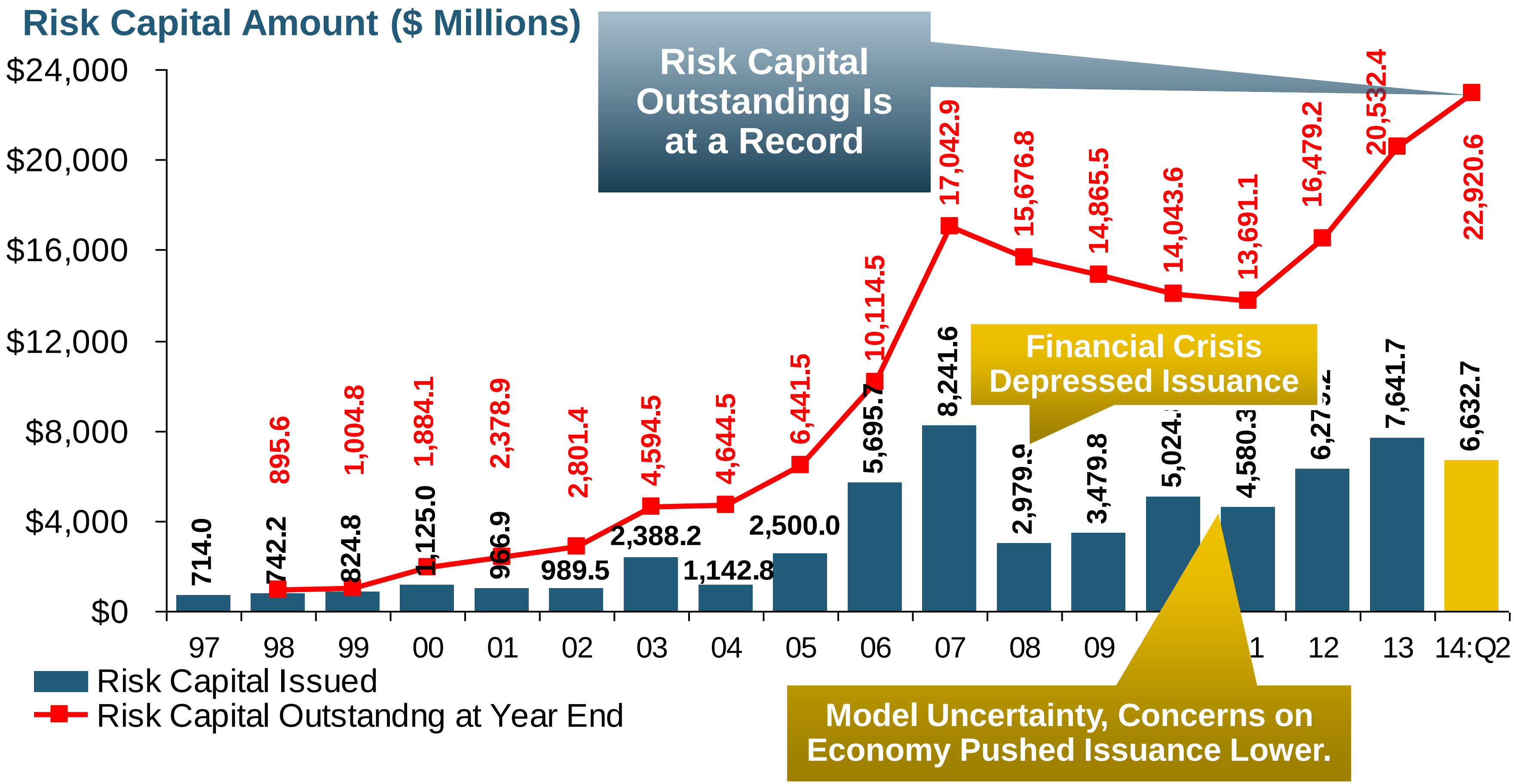
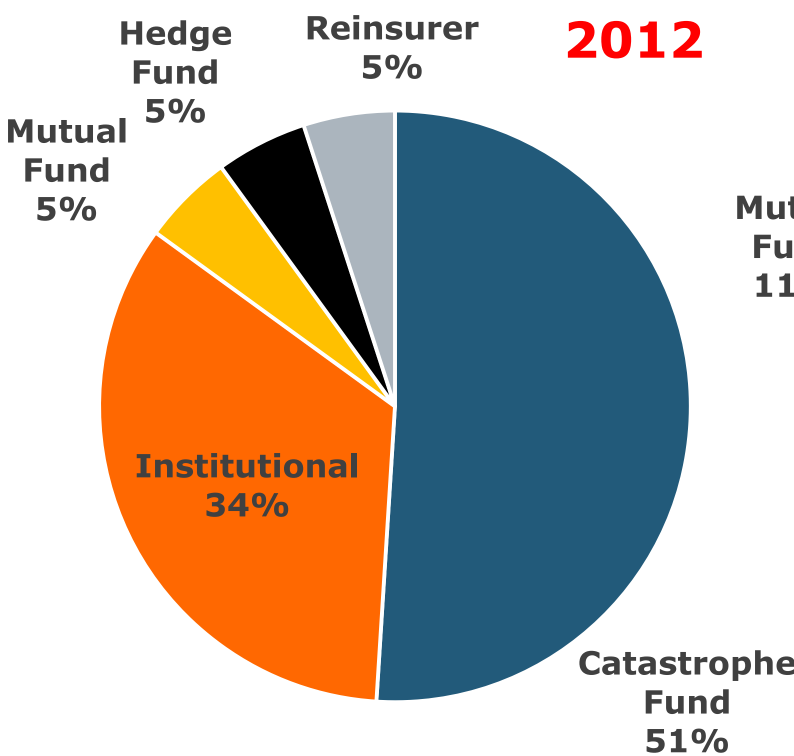
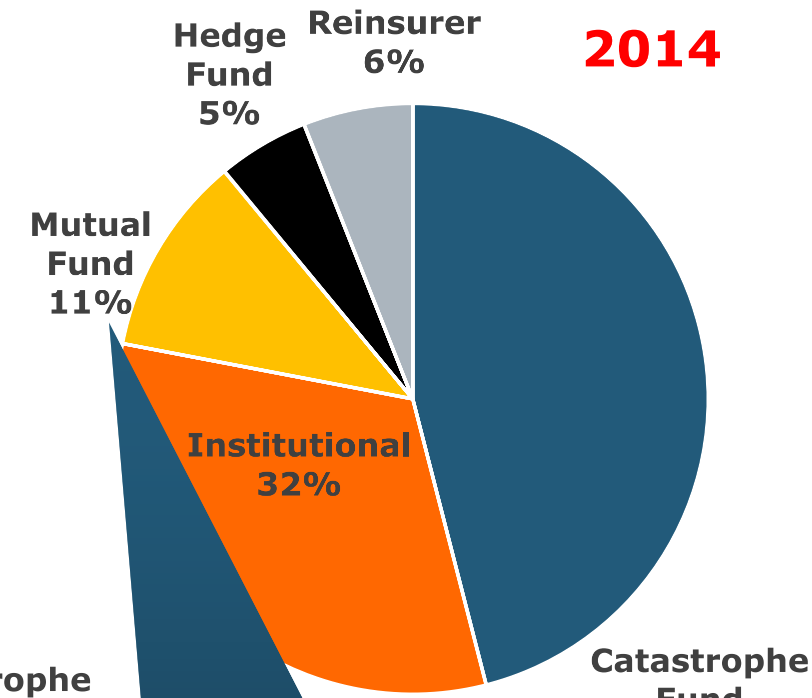


2014 Has Seen the Largest Cat Bond Ever - $1.5 Billion (Florida Citizens). Bond Issuance Will Set a Record.

Sources: Artemis.bm, Insurance Information Institute.

Cat Bond: Investor by Category





Mutual Funds Share of Cat Bond Purchases is Growing; Most Hedge Funds Participate Via Collateralized Reinsurance.

Years ended June 30.

Source: Aon Benfield Securities; Insurance Information Institute

Catastrophe Bonds Outstanding, Q2 2014

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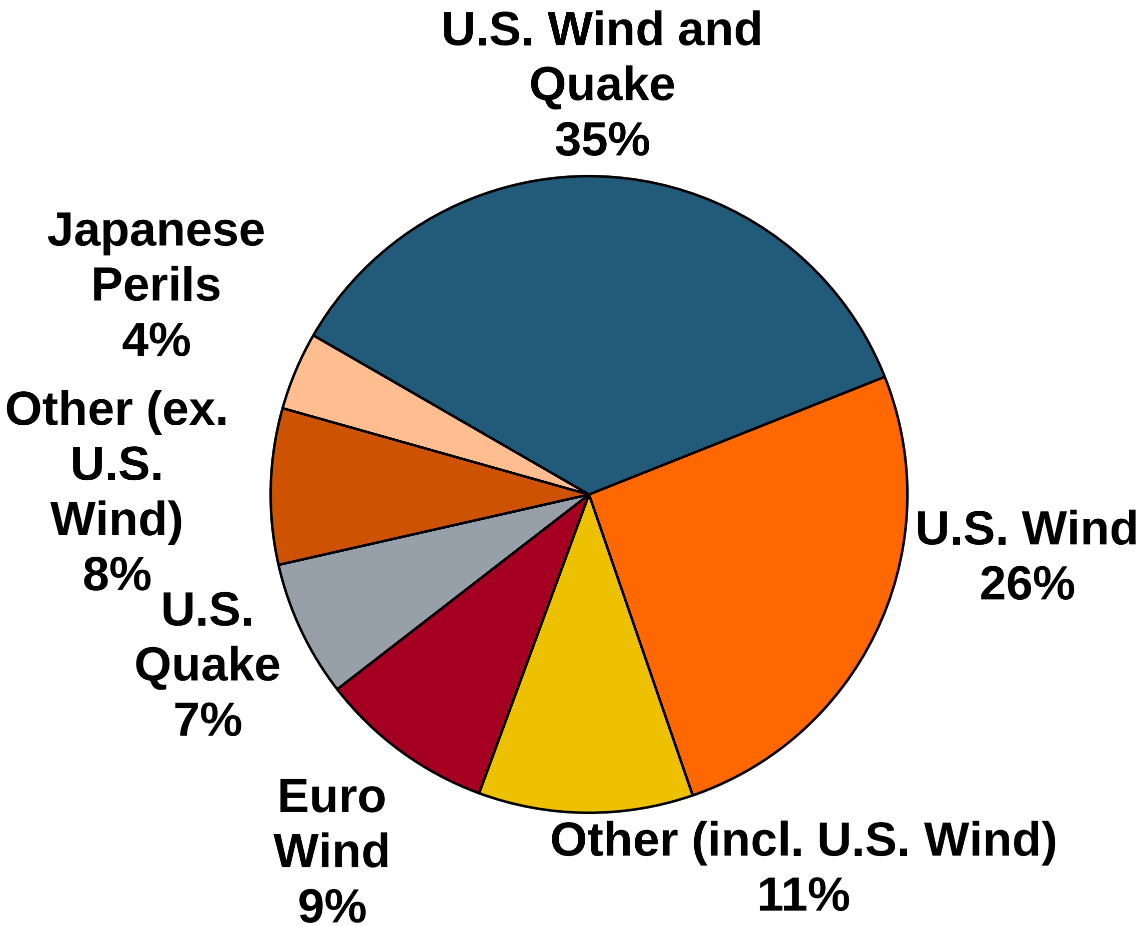
Catastrophe Bonds Are Heavily Concentrated in U.S. Hurricane Exposures. More Than 70 Percent of Catastrophe Risks Outstanding Cover U.S. Wind Risks.

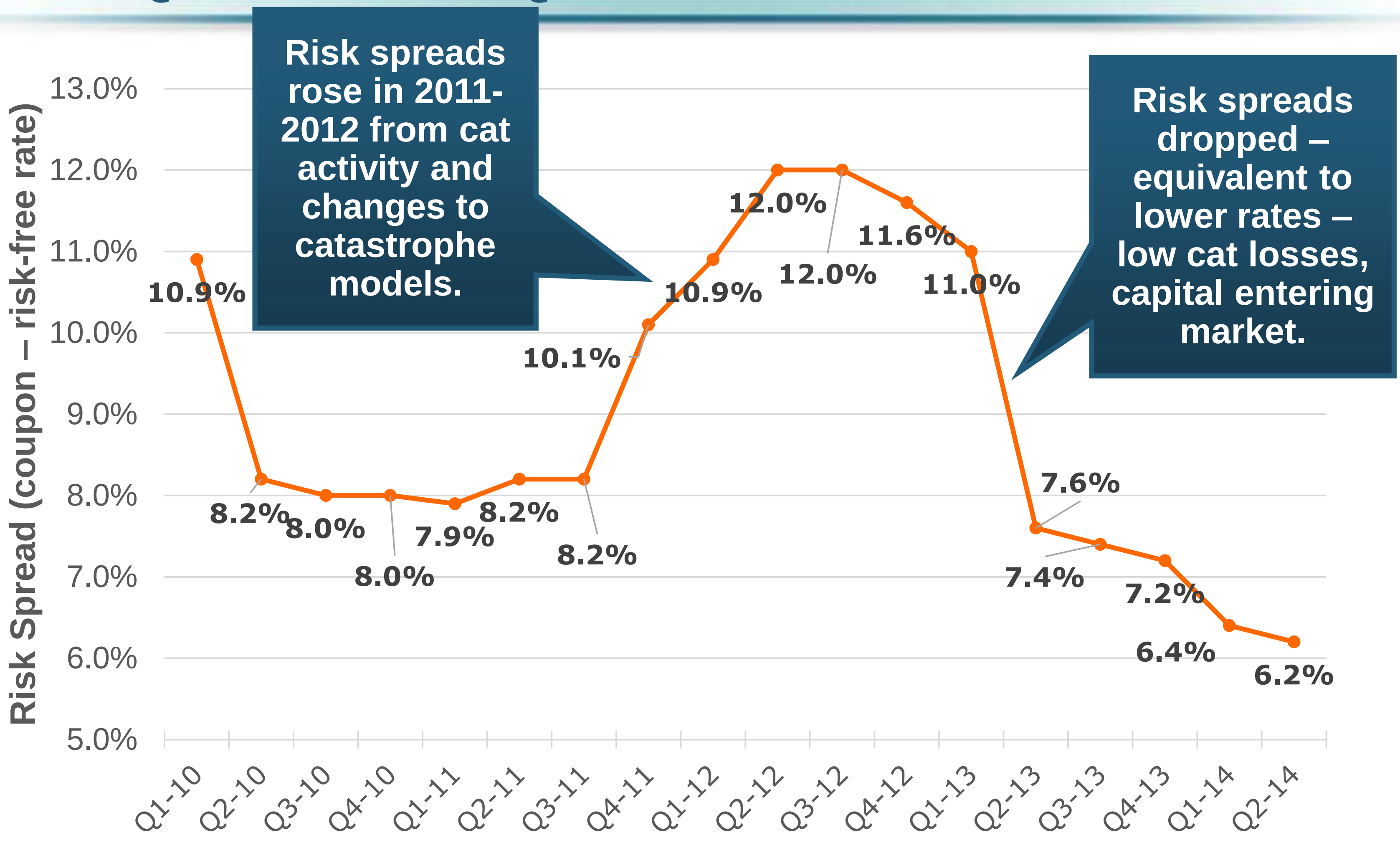


Source: Willis Capital Markets, Insurance Information Institute.

Alternative Capital Is Impacting the Reinsurance Pricing Environment

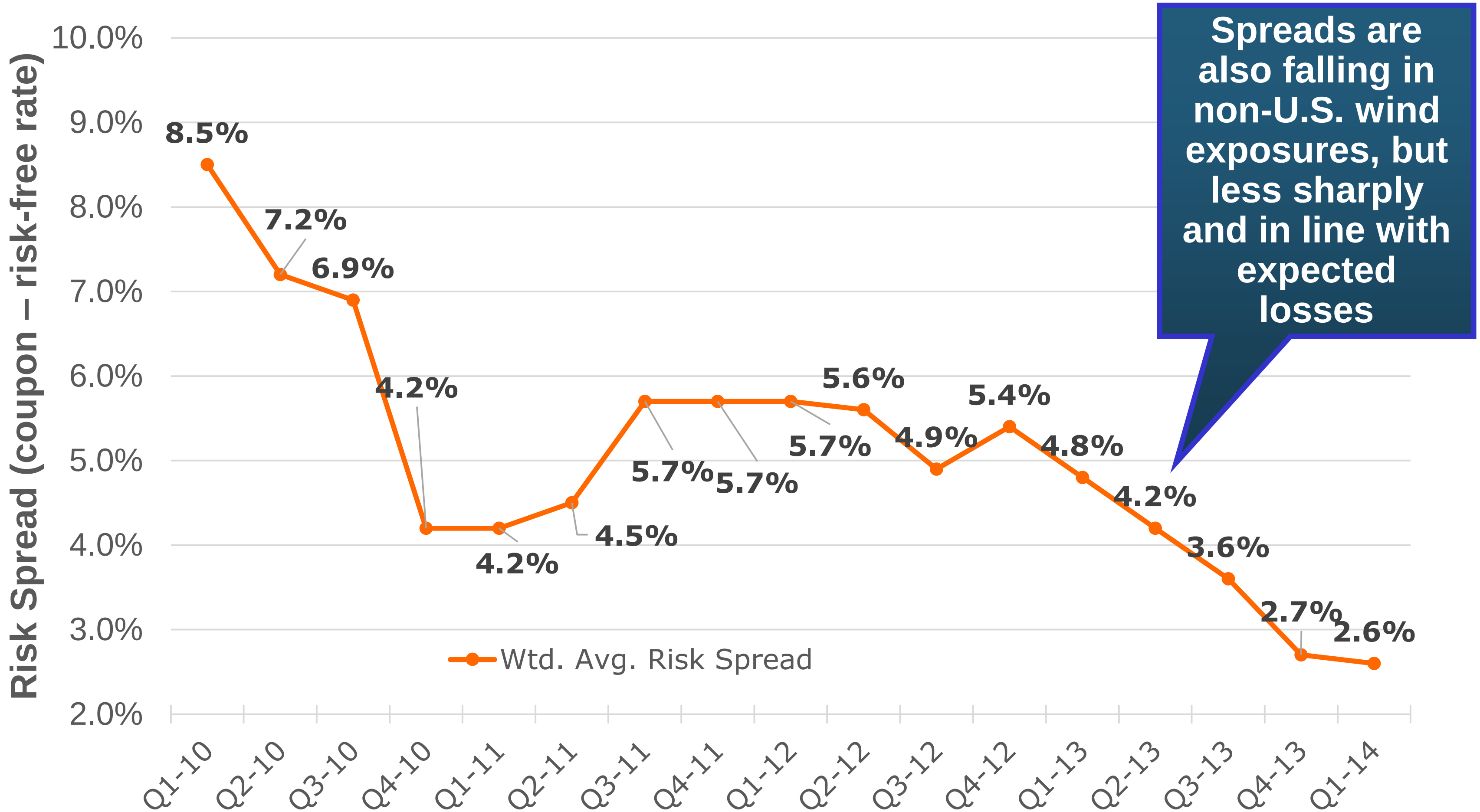
Traditional and Alternative Returns Are Under Pressure

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.

Insurance-Linked Securities: Average Multiple Since 1997

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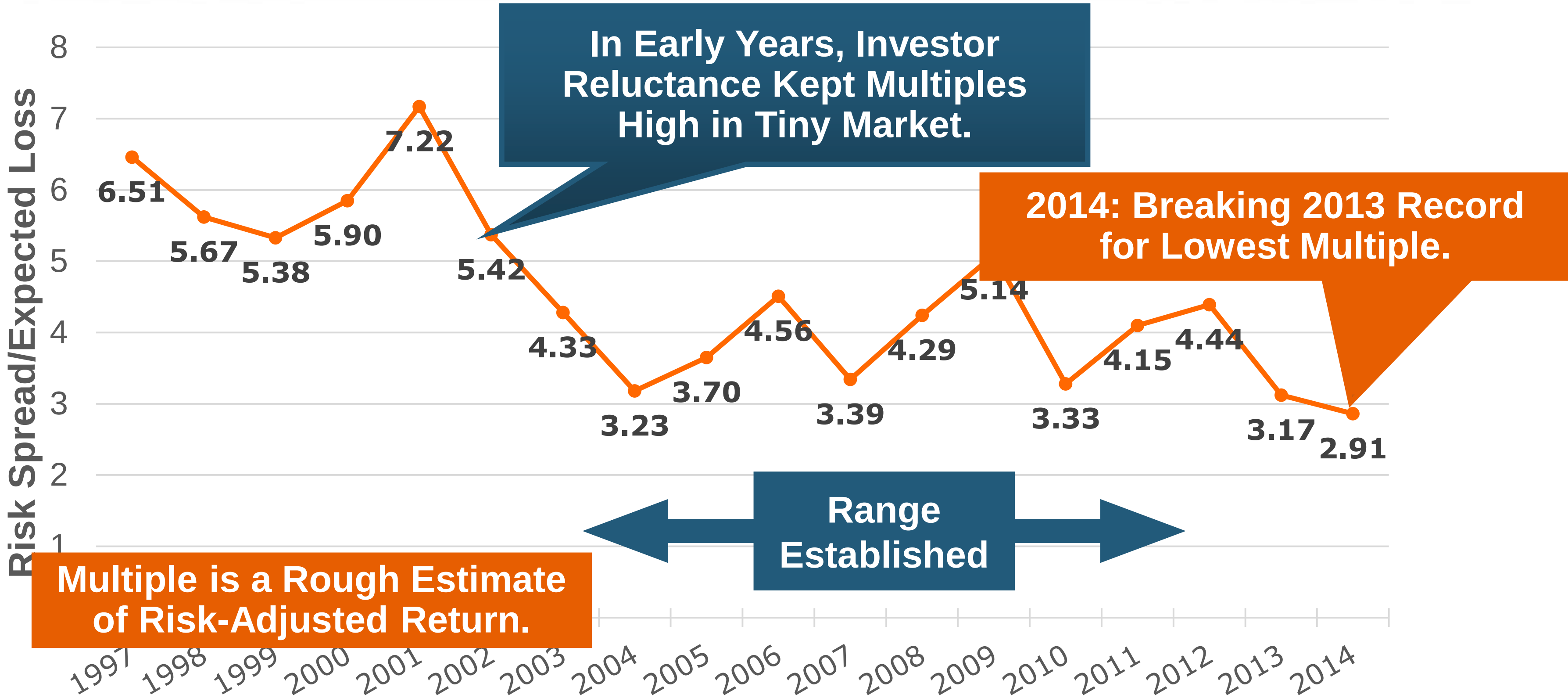

Cat Bond Terms Have Also Softened, With Indemnity Triggers (Favored by Insurers) Growing More Common.

SOURCE: www.Artemis.bm Deal Directory, Insurance Information Institute.

Reinsurance Pricing: Change in Rate on Line for U.S. CAT Business

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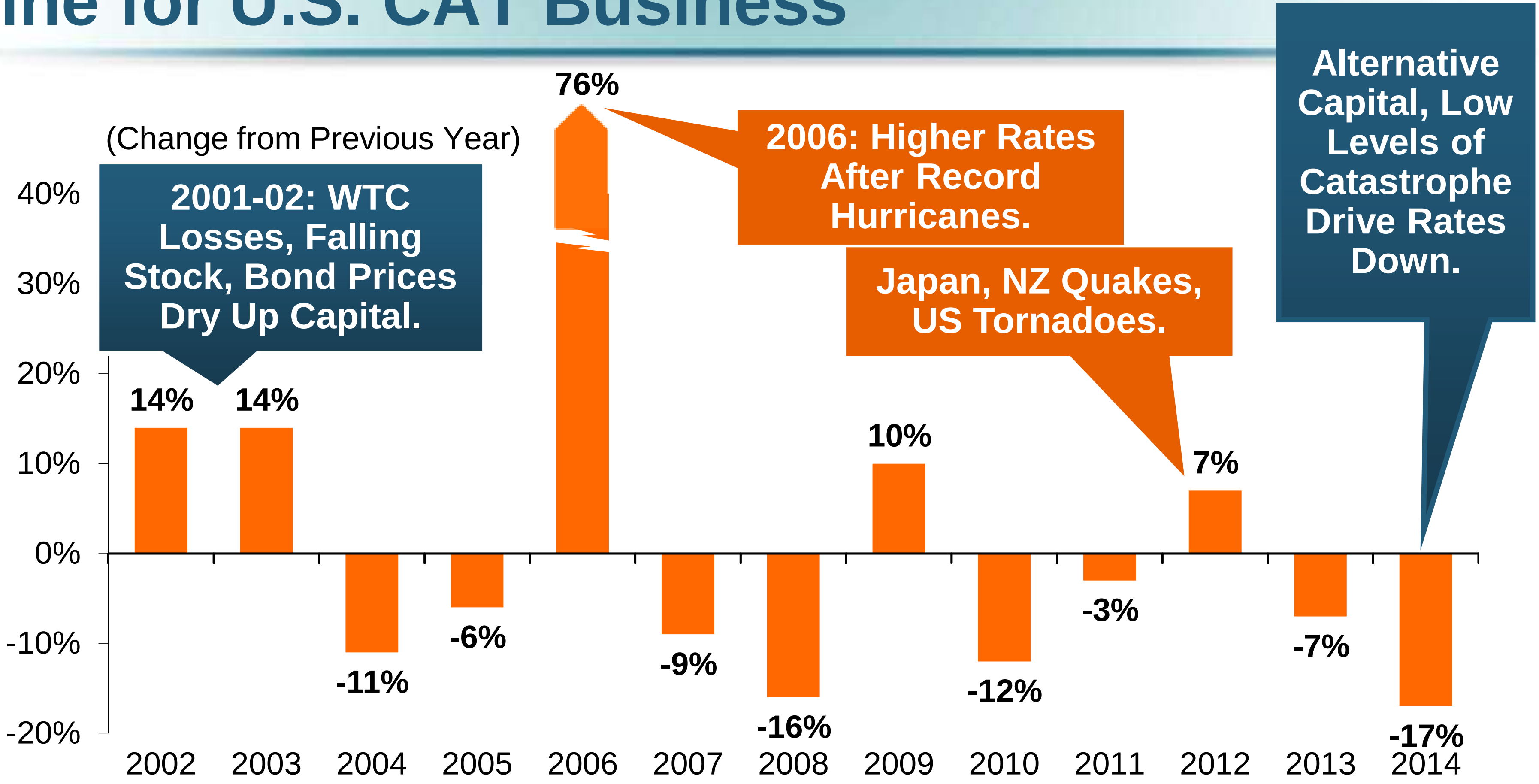

Some Observers Predict Catastrophe Prices Will Fall Another 10 Percent in 2015, Driven by Emergence of New Capital.

2014 reflects growth through June 30 from prior year end.

Source: Guy Carpenter; Insurance Information Institute.

What Is Happening to Insurer Profitability?

Has Capital Accumulation Impacted Profitability?

Déjà Vu: Does History Suggest Cycles or Super-Cycles in Insurance?

ROE: Property/Casualty Insurance by Major Event, 1987–2014:H1

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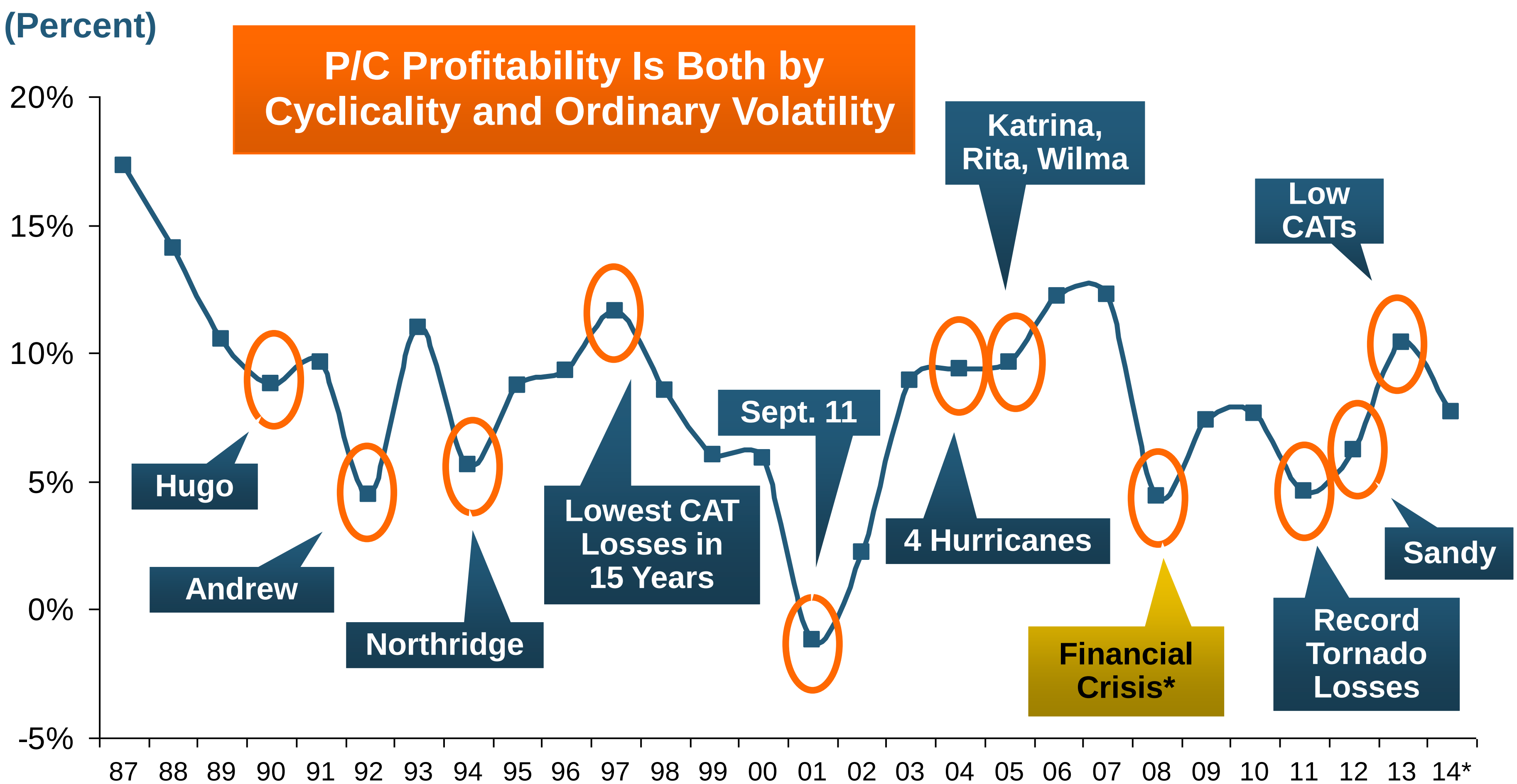

* Excludes Mortgage & Financial Guarantee in 2008 – 2014. 2014 figure is through H1:2014.
Sources: ISO, *Fortune*; Insurance Information Institute.

Profitability Peaks & Troughs in the P/C Insurance Industry, 1975 – 2014:H1*

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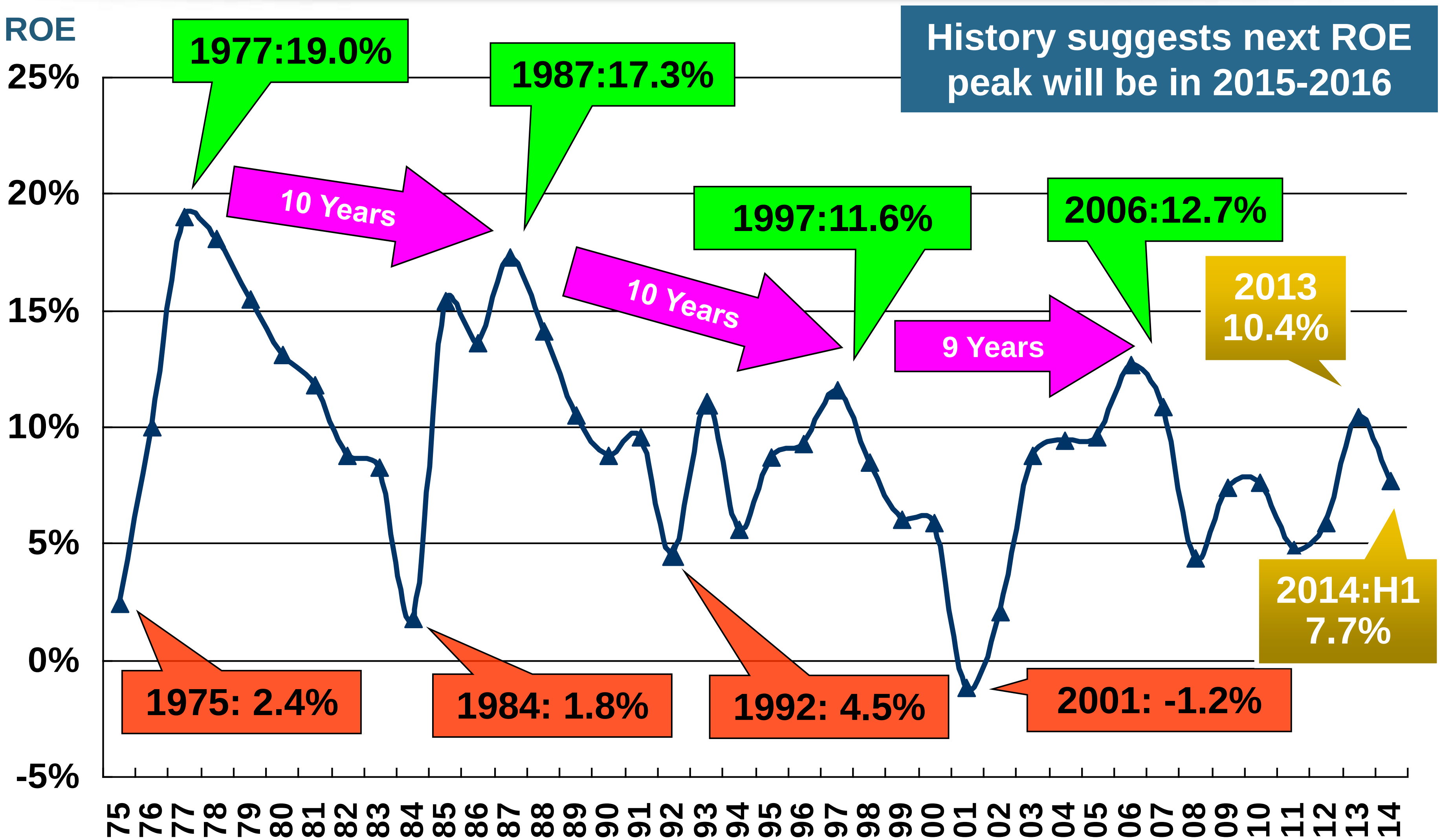

*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers.

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

P/C Insurance ROE as 5-Year Moving Average

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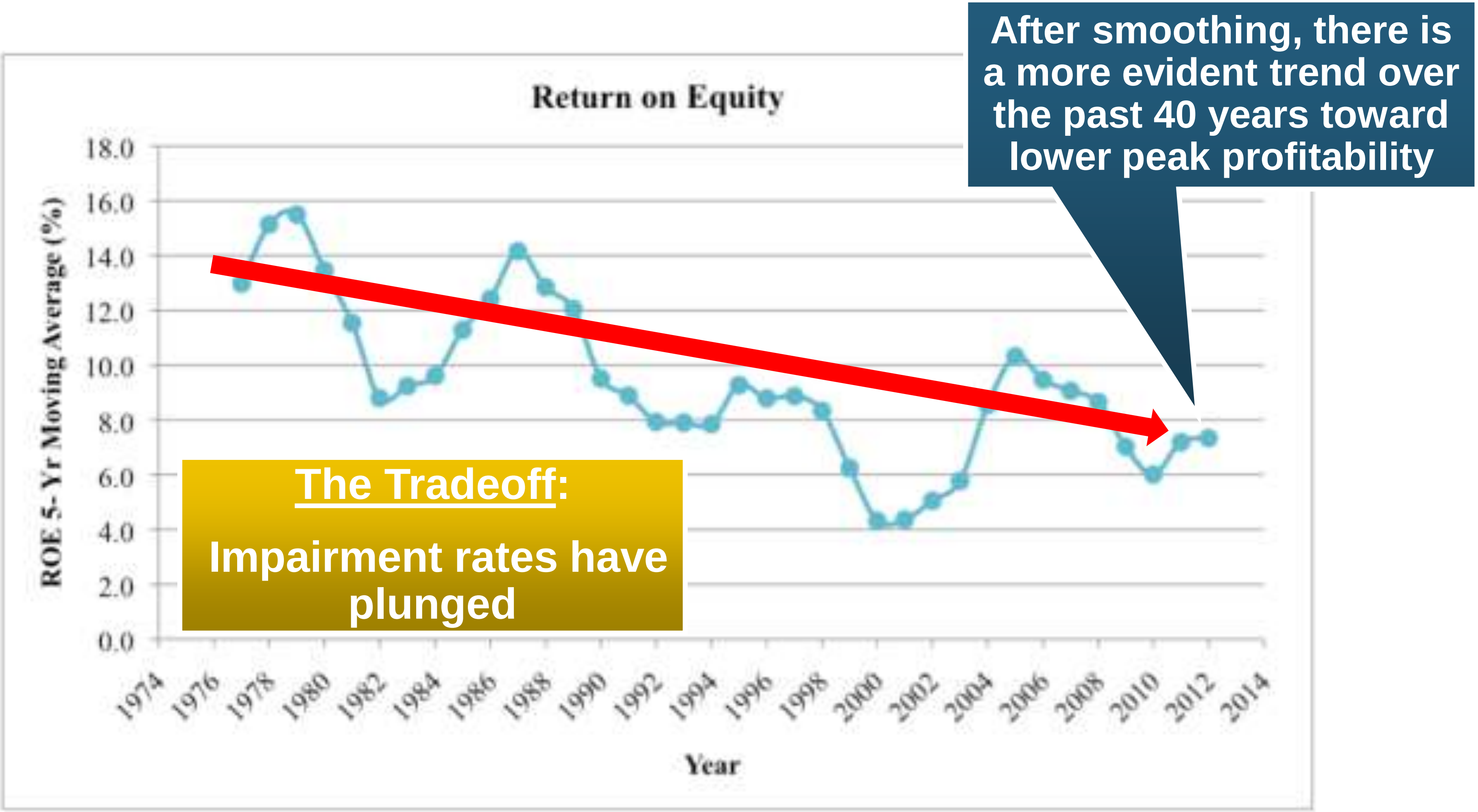

Source: Jessica Weinkle, *Insurance Journal*, “An Average Perspective Based Insurance Profitability Cycles,” October 6, 2014, based om I.I.I. data, http://www.insurancejournal.com/magazines/closingquote/2014/10/06/342096.htm.

P/C Insurance ROE Index (1974-2014:Q1 = 100)

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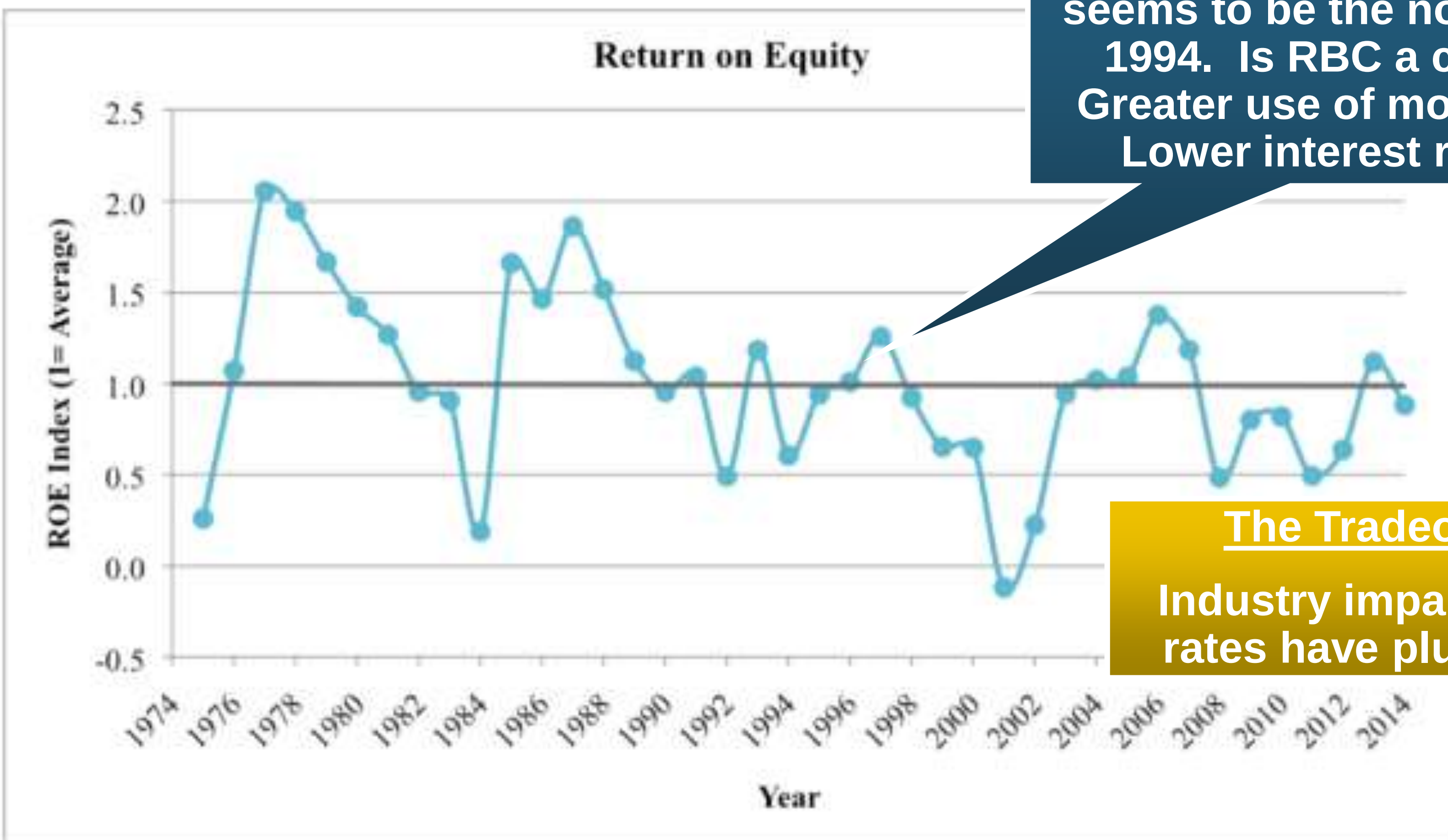

Lower peak profitability seems to be the norm after 1994. Is RBC a cause? Greater use of modeling? Lower interest rates?

The Tradeoff:

Industry impairment rates have plunged

Source: Jessica Weinkle, *Insurance Journal*, "An Average Perspective Based Insurance Profitability Cycles," October 6, 2014, based om I.I.I. data, http://www.insurancejournal.com/magazines/closingquote/2014/10/06/342096.htm.

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

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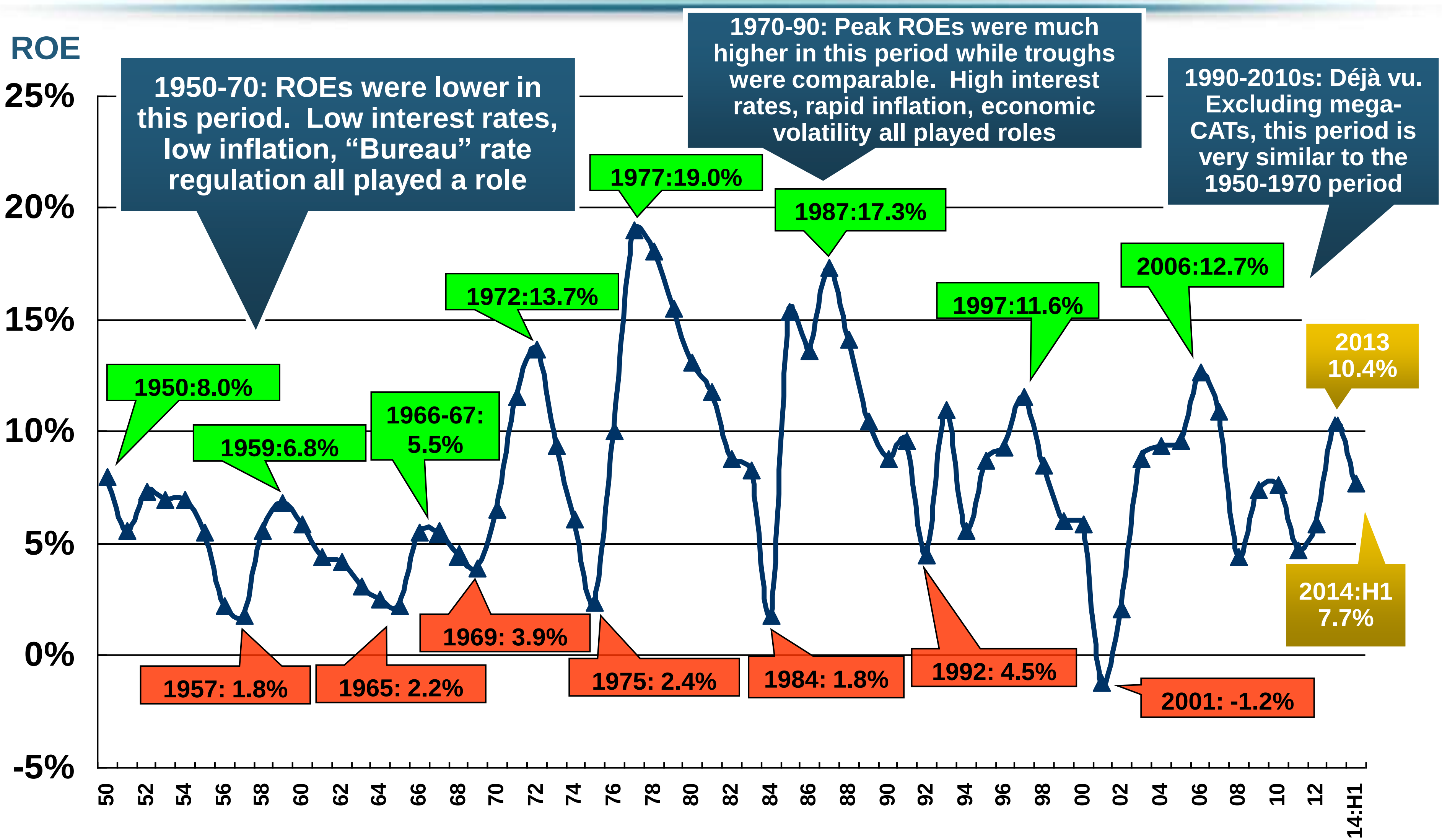

*Profitability = P/C insurer ROEs. 2011-14 figures are estimates based on ROAS data. Note: Data for 2008-2014 exclude mortgage and financial guaranty insurers. 2014 figure is through Q2.

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

Average ROE for the P/C Insurance Industry by Decade, 1950s – 2010s

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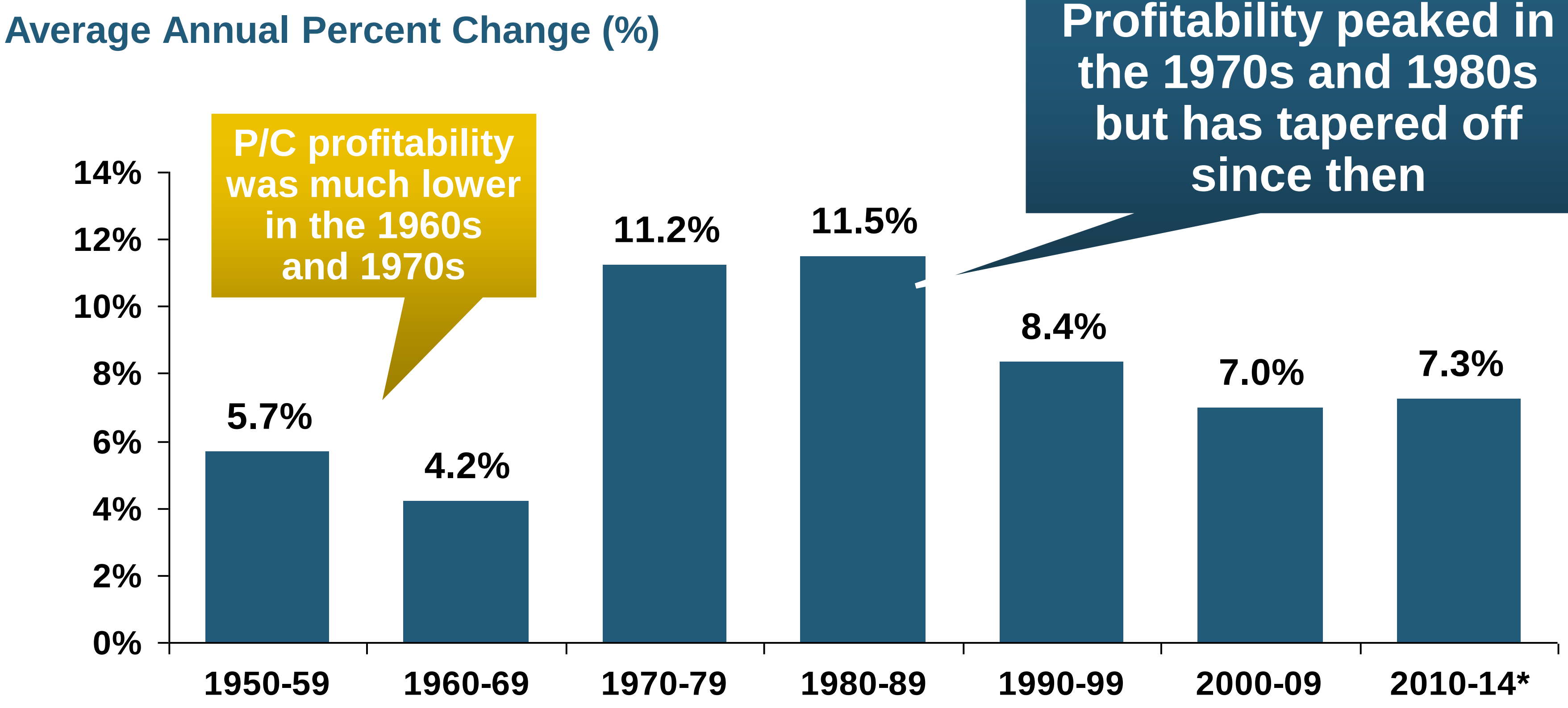
Profitability peaked in the 1970s and 1980s but has tapered off since then

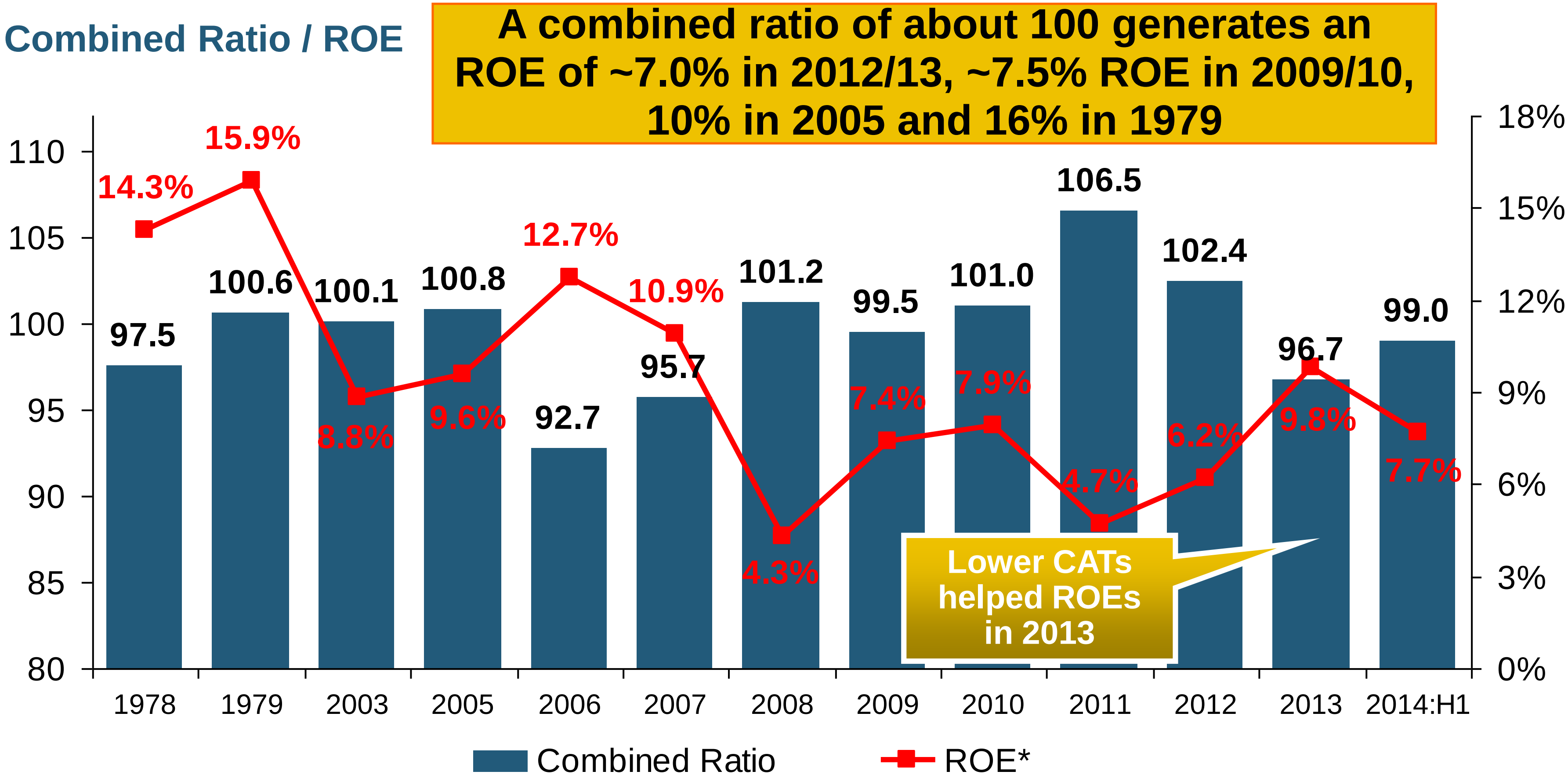
P/C profitability was much lower in the 1960s and 1970s



Profitability in the current low yield, low Inflation environment has declined since the highs of the 1970s and 1980s, but is above that of the 1950s and 1960s and the industry's impairment rates have dropped since the 1980s

Sources: Insurance Information Institute research.

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



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:H1 combined ratio including M&FG insurers is 98.9; 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.

BANK LESSON: Profitability, Capital and Systemically Important Banks

Global Systemically Important bank Tier-1 capital ratios are up since the global financial crisis, but ROEs are lower

The Message from Bank Regulators:

Get used to it!

Source: *The Economist*, "No Respite," September 27, 2014.

P/C Insurer Impairments, 1969–2013

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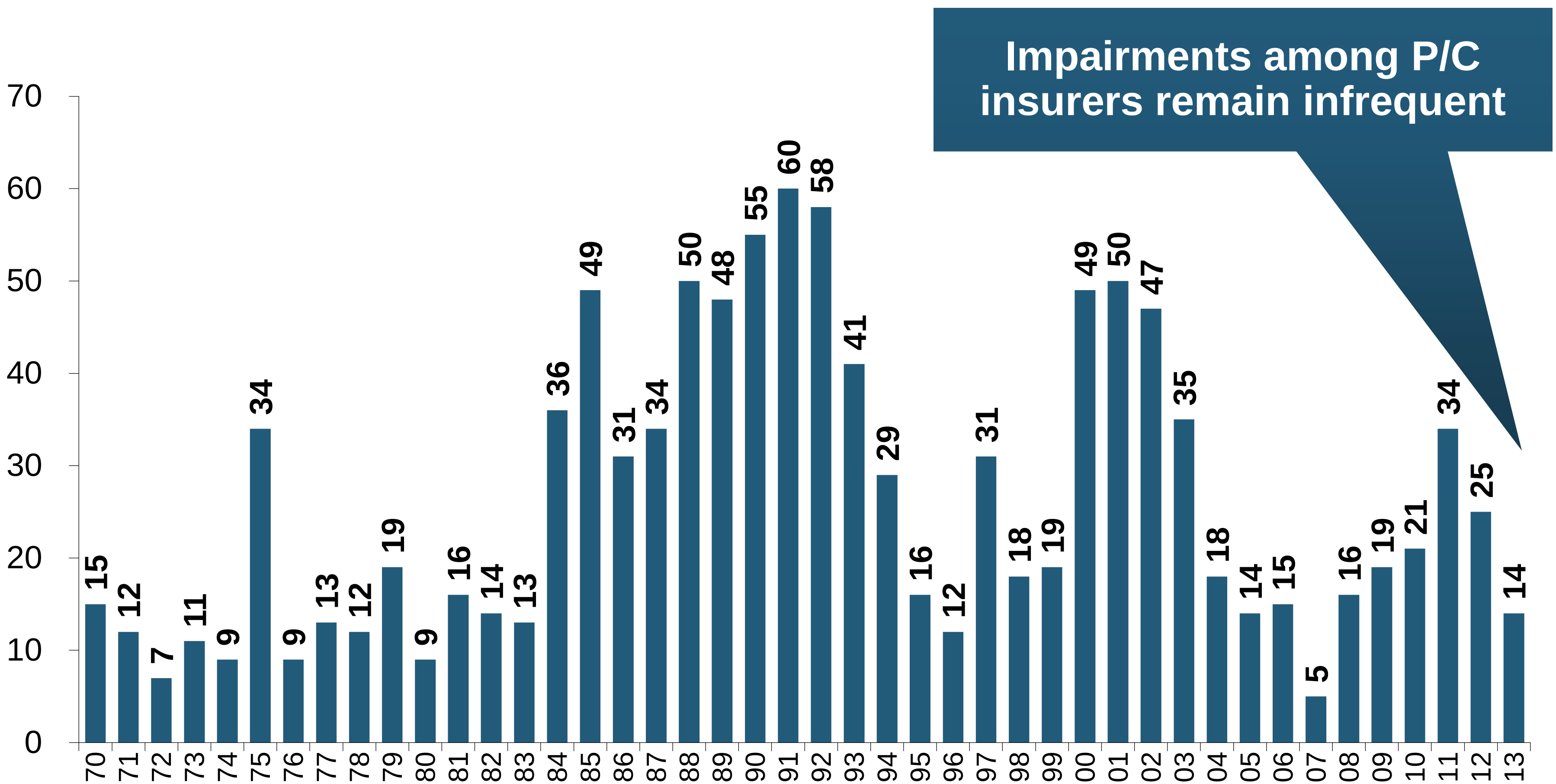
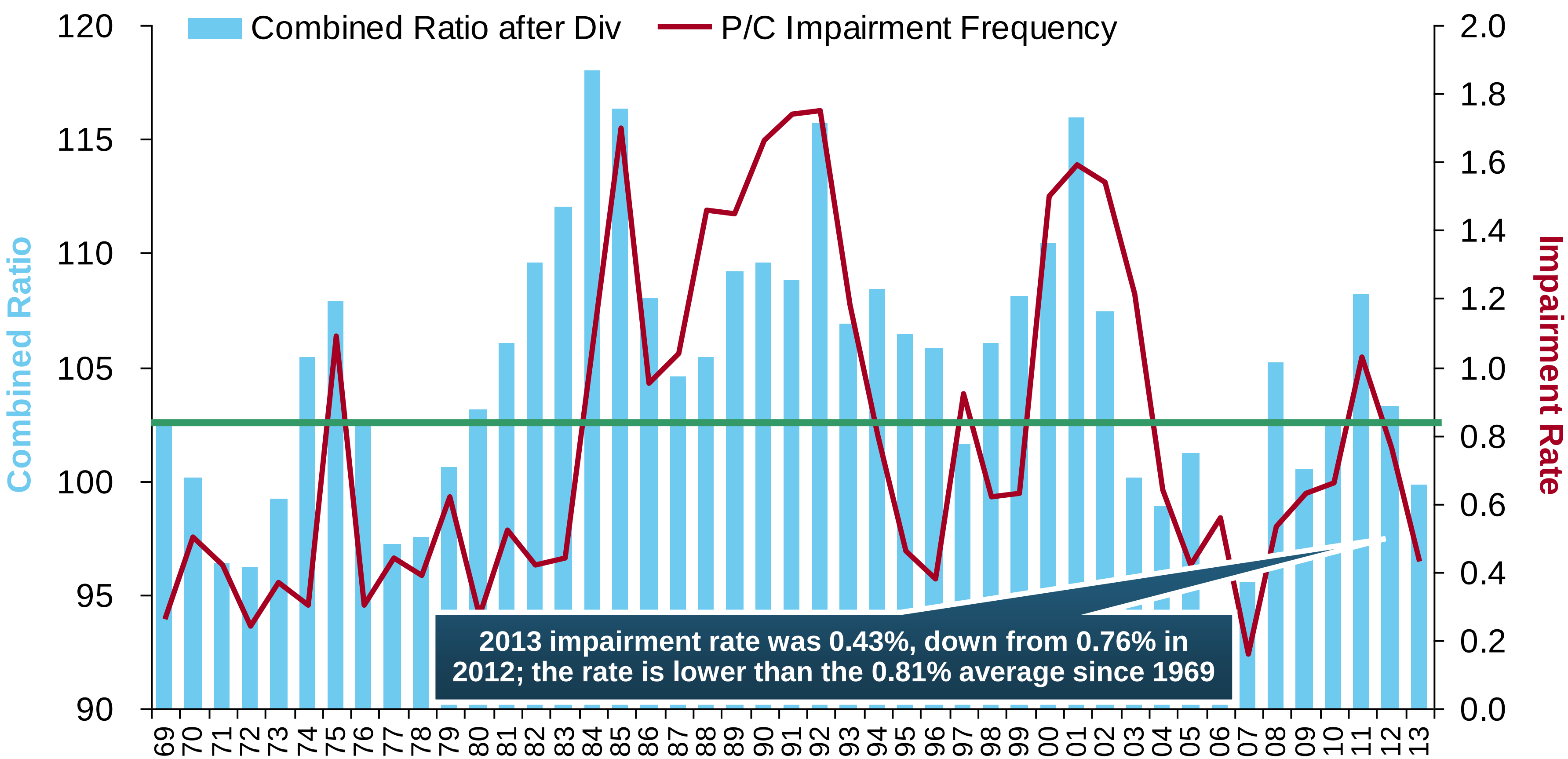


The Number of Impairments Varies Significantly Over the P/C Insurance Cycle, With Peaks Occurring Well into Hard Markets

Source: A.M. Best Special Report "U.S. P/C Impairments Down Sharply in 2013; Alternative Risk Players Faltered," June 23, 2014; Insurance Information Institute.

P/C Insurer Impairment Frequency vs. Combined Ratio, 1969-2013

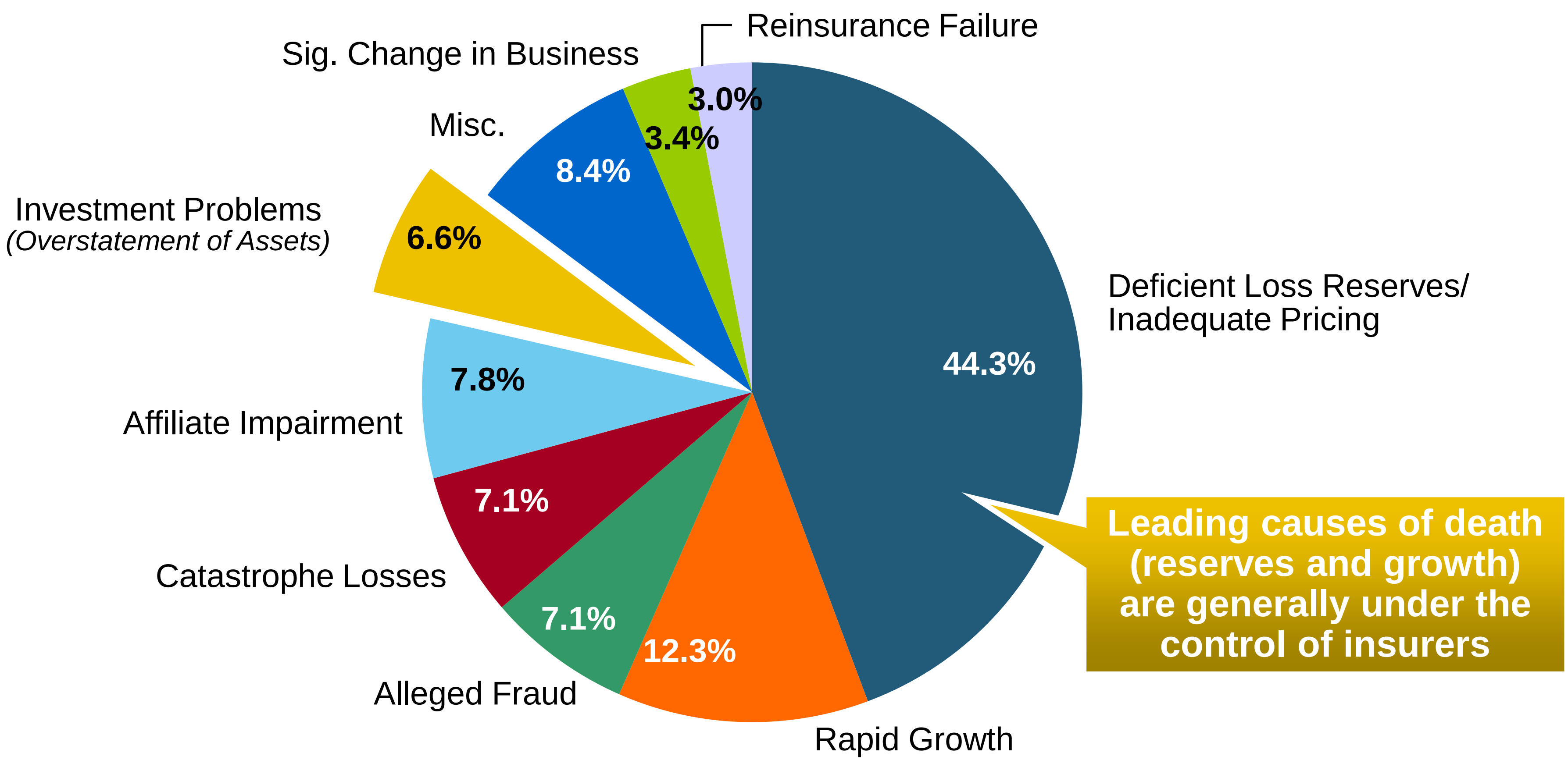


Impairment Rates Are Highly Correlated With Underwriting Performance and Reached Record Lows in 2007; Recent Increase Was Associated Primarily With Mortgage and Financial Guaranty Insurers and Not Representative of the Industry Overall

Source: A.M. Best; Insurance Information Institute

Reasons for US P/C Insurer Impairments, 1969–2013

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 "U.S. P/C Impairments Down Sharply in 2013; Alternative Risk Players Faltered," June 23, 2014; Insurance Information Institute.

Summary

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- **Capital Accumulation is Not Unique to (Re)Insurance**
  - Large corporations, institutional investors (e.g., pension funds), hedge funds, sovereign wealth funds have experienced rapid cash (or equivalent) accumulation
- **All Are Chasing Yield—Globally**
- **Capital Has Generally Been Accumulating on the Balance Sheets of Nonlife (Re)Insurers for Years**
  - Era of rapid accumulation pre-dates financial crisis
  - Pace has accelerated post-financial crisis
  - Profits, capital gains and “alternative capital” all contribute

Summary (Continued)

- **Nonlife ROEs Have Trended Downward**
  - Downward trend pre-dates financial crisis
  - Capital accumulation, RBC requirements are factors; Low yields
  - Tradeoff: Impairment rates have trended downward
- **Quantum Shift or Evidence of a Super-Cycle?**
  - Profitability patterns today are more reminiscent of the pre-1970 era (and in the US back to WW II and even pre-war)
- **Capital Allocation Challenges:**
  - Excess capital seemingly “stuck” in the industry
  - Sluggish economy diminishes rate of exposure growth
  - Insurance penetration lags economic growth in emerging markets
  - Changes in the nature of insurable exposures (e.g., cyber, IP, etc.)
  - Share repurchases preferred over long-term investments or acquisitions (situation is not unique to insurance)
  - Tax and regulatory obstacles

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