The Historical Arc of Insurance Regulation and Modernization: Convergence or Disharmony?

Past , Present and Future

St. John’s University

School of Risk Management, Insurance & Actuarial Science

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Presentation Outline

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- **A History of Insurance and Insurance Regulation**
- **The Eight Waves of Regulation in US Insurance History**
  - The institutionalization of insurance regulation
  - Industrialization, progressive politics and federal power
  - The genesis of rate regulation
  - Reversing Course: A massive display of federal power
  - A deregulatory pulse
  - Crises and regulatory fury
  - Global Crises, Global Responses
  - Shadow Regulators
- **Future Shock: Waves of Risk Near and Far**
  - Health Insurance and the Affordable Care Act (“ObamaCare”)
  - Emerging Markets, Emerging Risks
- **Thoughts on Significant Near-Term Risks**
- **Summary**
- **Q&A**

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A History of Insurance and the Rise of Regulation

The Roots of Insurance Extend Back Thousands of Years

Formal Regulation Came Much Later

In the Beginning…

Civilizations Long Ago Discovered the Benefits of Risk Pooling and Risk Transfer

Origins of Insurance…and Insurance Regulation

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- **Earliest Forms of Insurance Date to 1800 BC in Babylon**
  - **Code of Hammurabi**
  - **282 clauses on the topic of "bottomery"**
  - ***Bottomery* is a loan taken out by the owner of a ship to finance its voyage (no premium involved)**
  - **If ship was lost, loan didn't have to be repaid**

- **Roman Emperor Claudius (10BC – 54AD)**
  - **Eager to boost grain trade, Claudius became a 1-man, premium free insurance company by personally guaranteeing the storm losses of Roman merchants *(also granted citizenship to sailors and exempted them from laws that penalized adultery and celibacy)***
  - **Reduced taxes on communities impacted by drought or famine (form of ancient disaster aid)**

- **Greek/Roman Occupational Guilds→Early Life Insurance**
  - **Paid into pool that made payment to deceased member's family**

Sources: Elements drawn from *Against the Gods: The Remarkable Story of Risk,* Peter L. Bernstein; Insurance Information Institute.

Origins of Insurance…and Insurance Regulation

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- **The Rise of Long Distance Trade: The Explosion of Risk and Reward**
  - **14th Century: Italian city states of Venice, Florence, Genoa and Pisa became global epicenters for trade and are where the earliest written insurance contract originated**
    - **The word "*policy*" is from the Italian "*polizza*" meaning *promise* or *undertaking***
  - **Bruges, Antwerp followed in the 15th century, Amsterdam by 17th century**
  - **By 1600 England had become a major trading nation**
- **From Expensive Cargo/Ships Arose Disputes and the Need for Certainty and the Foundations for Insurance Regulation Were Laid**
  - ***"For whom they insure, it is sweet to them to take the monies; but when disaster comes, it is otherwise, and each man draws his rump back and strives not to pay."***
    - **Franceso di Marco Datini, Florentine Merchant, 14th Century, complaining about insurers of his era (Datini left 400 marine insurance policies in his estate when he died)**
  - ***"For even though I were to live a thousand years, never again would I underwrite insurance."***
    - **Guiglielmo Barberi, 14th Century, lamenting the loss of a bale of cloth and a barrel of furs he had underwritten on a ship that had been plundered by pirates, but had no ability to pay**

Sources: Elements drawn from *Against the Gods: The Remarkable Story of Risk* by Peter L. Bernstein, J. Wiley & Sons (1996); *Insurance Perspectives*, G. Gibbons, G. Rejda and M. Elliott., American Institutes for CPCU (1992); Insurance Information Institute.

Origins of Insurance…and Insurance Regulation

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- **London and the Dawn of Insurance Regulation**
  - **Italian forms of marine insurance contracts were used in London since at least the 15th century**
  - **London merchants frequently acted as underwriters**
  - **Contracts were negotiated by commodity brokers**
  - **Notaries drafted/delivered policies and kept registers of policies written**
  - **Chamber of Assurances established in 1576 and until 1690 all policies had to be registered in its office in the Royal Exchange**

- **1601: Francis Bacon Introduces Bill to Regulate Insurance Policies**

  - **Bacon recognized the ubiquity and of utility of insurance contracts which were *"tyme out of mynde an usage amonste merchants, both of this realm and of forraine nacyons."***
  - **Led to 1601 Act of Parliament that formally recognized that the benefits of insurance justified legal sanction, with the government willing to enforce insurance contracts and resolve disputes**

Sources: Elements drawn from *Against the Gods: The Remarkable Story of Risk* by Peter L. Bernstein, J. Wiley & Sons (1996); *Insurance Perspectives*, G. Gibbons, G. Rejda and M. Elliott., American Institutes for CPCU (1992); Insurance Information Institute.

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The 8 Stages (Waves) of Insurance Regulation in the United States

Regulation in the U.S. Has Been Characterized by Periodic Pulses of Activity

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Regulatory Wave #1

1850- 1900

The Institutionalization of State-Based Insurance Regulatory Schemes

Year of Establishment of Insurance Regulator Supervision

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1850s
- 1850
- 1851
- VT, NH, IN 1852
- 1853
- 1854
- 1855 MA
- RI 1856
- MS 1857
- 1858
- 1859

1860s
- NY, AL 1860
- 1861
- 1862
- 1863
- NV 1864
- WV, CT 1865
- VA 1866
- WI, OH 1867
- CA, IA, ME 1868
- MO, GA, IL 1869

1870s
- KY 1870
- KS, MI 1871
- FL, MD, MN 1872
- AR, NE, PA, TN 1873
- 1874
- NJ 1875
- TX, SC 1876
- WY 1877
- 1878
- DE 1879

1880s
- 1880
- 1881
- NM 1882
- MT, CO 1883
- UT 1884
- 1885
- 1886
- AZ 1887
- 1888
- ND, WA, SD 1889

1890-1902
- OK 1890
- ID 1891
- 1892
- 1893
- 1894
- 1895
- 1896
- 1897
- LA 1898
- 1899
- AK 1900
- 1901
- DC 1902

The half century from 1850-1900 bore witness to a massive wave of institutionalized regulation of the business of insurance

Sources: Insurance Information Institute based on information in Appendix IV of *The History of the National Board of Fire Underwriters: Fifty Years of a Civilizing Force*, Harry Chase Brearly, published by Frederick A. Stokes Co. (1916).

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

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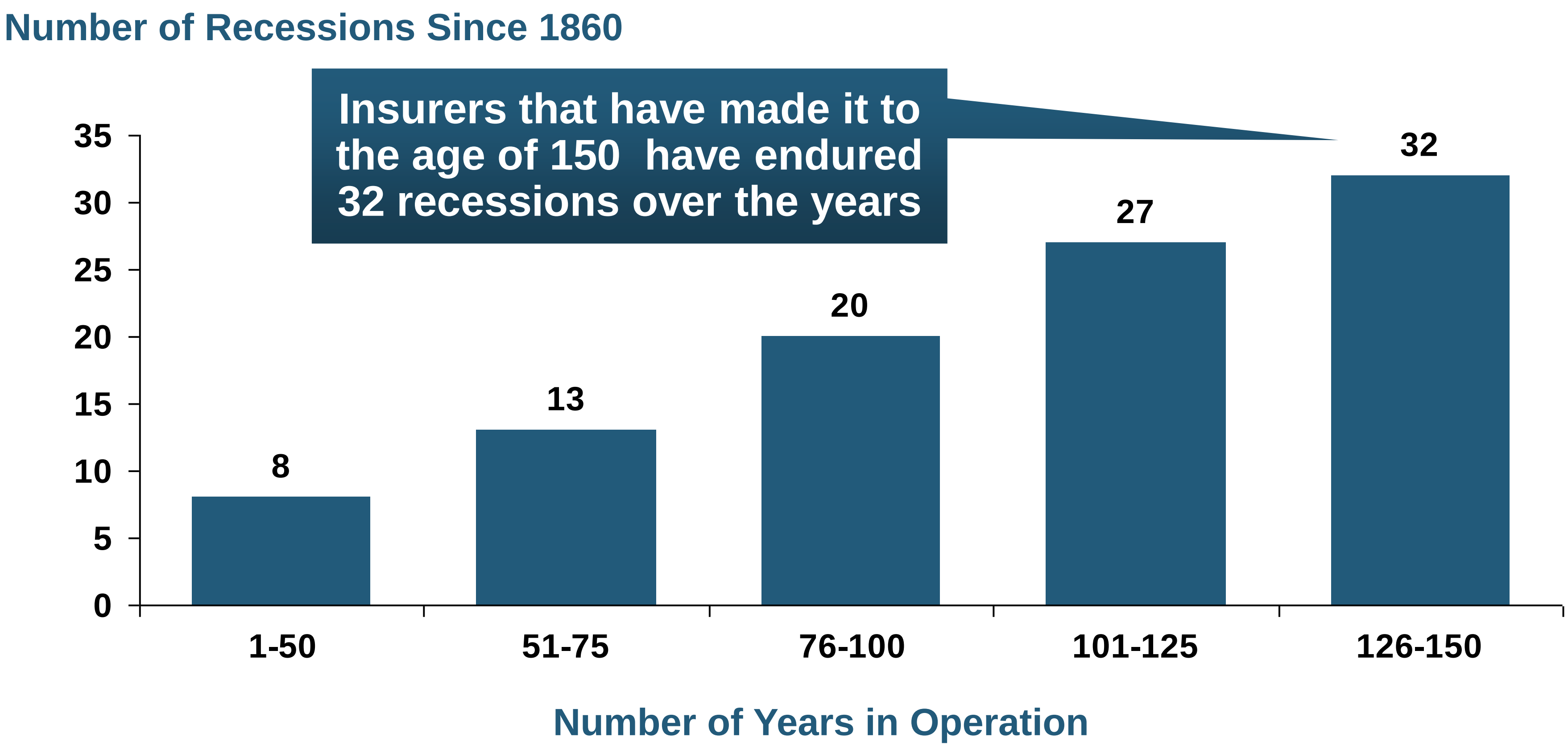

Longevity Requires an Insurer to Overcome Extreme Economic Adversity of Every Sort

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

The Supreme Court Reinforces (Establishes) the Primacy of State Regulation of Insurance

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Paul vs. Virginia (1869)

- **Since its mid-18th century origins in the US, insurance had been regulated under the general laws governing commerce in the states in which the insurer had been granted a charter/license to operate**
- **As the US economy expanded and insurers (based mostly in the Northeast) sought to expand along with the country, they wanted to avoid the cost and complexity of complying with the many and varied requirements promulgated by the states**
- **Virginia in 1866 enacted legislation requiring a $30,000+ bond be deposited with the state treasurer as a condition of licensure for out-of-state insurers (the agents representing them needed a license as well)**
- **Test Case: Insurers determined to challenge the law asserting that VA's law interfered with the federal government's constitutional power to regulate interstate commerce [Modern Historical Parallel: Pre-crisis push for OFC]**
  - **States opposed since they generated significant revenues from the taxation of premiums**
- **Several NY companies appointed as their agent in VA Samuel D. Paul, a Petersburg, VA, attorney.**

Sources: *Insurance Perspectives*, G. Gibbons, G. Rejda and M. Elliott., American Institutes for CPCU (1992); Introduction to Risk Management and Insurance, Mark S. Dorfman, Pearson/Prentice Hall (2007); Insurance Information Institute.

The Supreme Court Reinforces (Establishes) the Primacy of State Regulation of Insurance

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Paul vs. Virginia (1869)

- **Paul applied for a license which was denied because the bond had not been deposited but continued to sell insurance**
- **Paul was indicted, convicted and fined ($50)**
- **Case was eventually appealed to the US Supreme Court which ruled *unanimously* in VA's favor**
- **Chief Justice Stephen J. Field delivered the court's opinion that:**
  - ***"Issuing a policy of insurance is not a transaction of commerce. The policies are simple contracts of indemnity against loss by fire…They are not commodities to be shipped from one state to another, and put up for sale. They are like personal contracts between parties which are completed by their signature and transfer of consideration…The policies do not take effect—are not executed contracts—until delivered by the agent in Virginia, They are, then, local transactions, governed by local law."***
- **This settled the law on the matter of state vs. federal regulation for the next *75* years**

Sources: *Insurance Perspectives*, G. Gibbons, G. Rejda and M. Elliott., American Institutes for CPCU (1992); Introduction to Risk Management and Insurance, Mark S. Dorfman, Pearson/Prentice Hall (2007); Insurance Information Institute.

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Regulatory Wave #2

1880- 1920

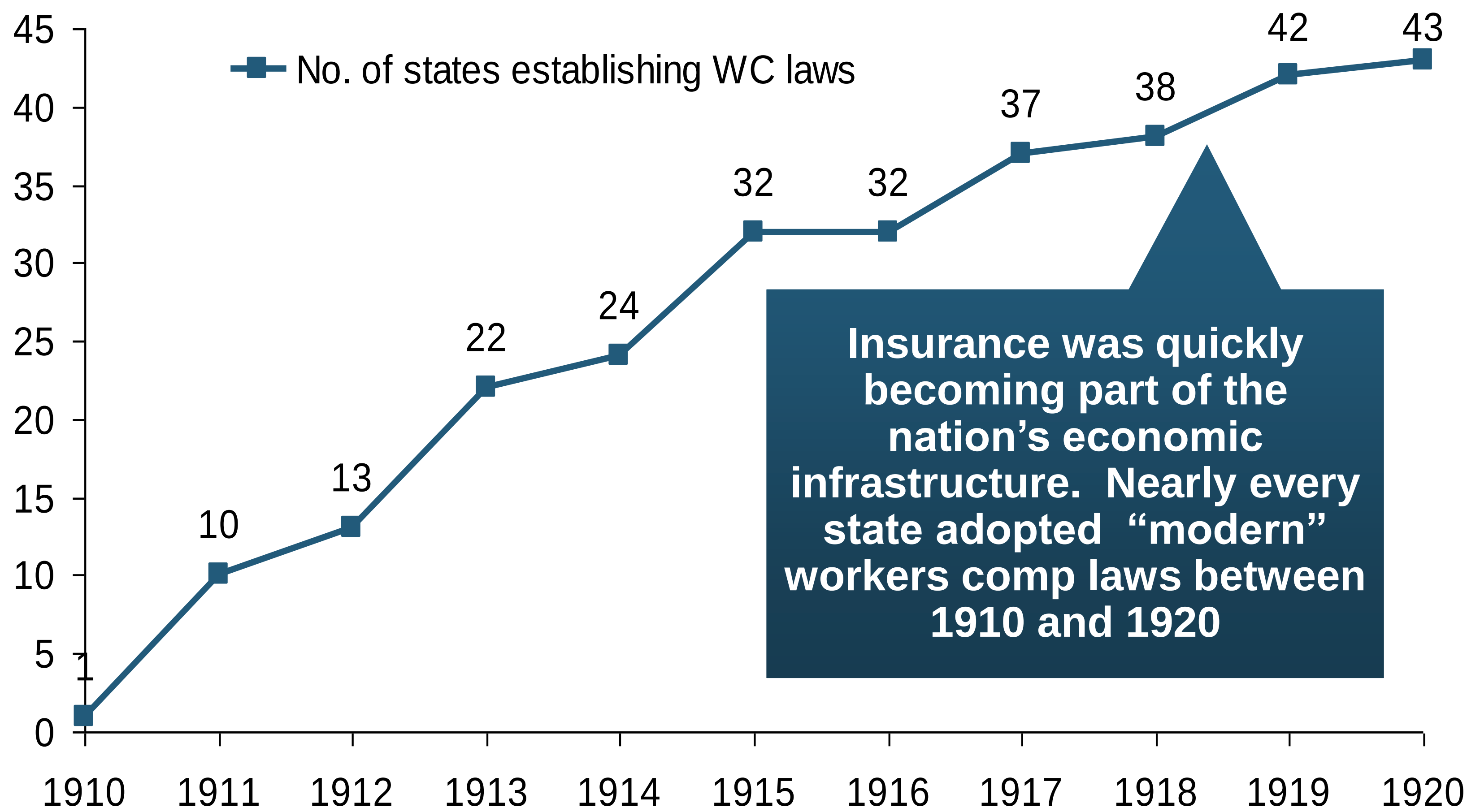
Industrialization, Progressive Politics and the Assertion of Federal Regulatory Might

Societal Changes Drive a Re-Evaluation of Insurance: Tidal Wave of Regulation

- **Historically, the determination of pricing (in any industry) was not viewed as a function of government, but the outcome of negotiation between parties**
- **Societal views on this began to change in the period from 1887-1916 (roughly) with American industrialization and the rise of finance**
  - **Munn v. Illinois (1877) [Supreme Ct. affirmed authority of states to regulate prices in businesses affected with the public interest]**
  - **Interstate Commerce Act (1887)**
  - **Sherman Antitrust Act (1890)**
  - **Clayton Act (1914) [amended the Sherman Act]**
  - **Federal Reserve Act (1913) *[100 years later, the Fed has discovered insurance!]***
  - **16th Amendment (1913) [permitted the establishment of a federal income tax]**
- **Kansas Rate Law (1909, Upheld by US Supreme Court in 1914): Court said that insurance was "a business affected with the public interest" and that insurance rate regulation was an appropriate function of government**
- **New York Rate Law of 1922: Required fire insurers to join approved rating bureau through which the NYID attempted to determine that rates were reasonable (neither inadequate nor excessive)**

Sources: *Insurance Perspectives*, G. Gibbons, G. Rejda and M. Elliott., American Institutes for CPCU (1992); Insurance Information Institute.

Cumulative Number of WC Laws Passed, 1910-1920



Source: http://eh.net/encyclopedia/article/fishback.workers.compensation; Insurance Information Institute.

Regulatory Wave #3

1910- 1943
The Genesis of Rate Regulation

Regulation Oversight Tightens, Especially Over Rates

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- **Armstrong Committee (1905) and Merritt Committee: NY investigations into alleged inappropriate practices of life and fire insurers, respectively**
- **Investigations led to calls for federal regulation of the insurance industry coming both from the critics and from some in the industry itself.**
  - **NJ Senator John Dryden (also President of Prudential Life) advocated for federal regulation in 1905 considering it *"infinitely preferable to the intolerable regulation [of the states]."* President Theodore Roosevelt that year even proposed that insurance be regulated and supervised by the Bureau of Corporation, but Congress did not act.**
- **Southeastern Underwriters Case: After ~20 years of experience with rating bureaus some states—led by Missouri—came to view insurers' actions through these bureaus as collusive.**
  - **A federal investigation was launched and in 1942 the US Justice Department charged the Southeastern Underwriters Association and 9 of its member insurers with violations of the Sherman Antitrust Act. [The SEUA was owned by 200 private stock fire insurers that controlled 90%+ of the business in 6 southeastern states.]**
- **Case was ultimately appealed to the Supreme Court which in 1944 stunned the industry by finding that the SEUA had violated antitrust law**

Sources: *Insurance Perspectives*, G. Gibbons, G. Rejda and M. Elliott., American Institutes for CPCU (1992); Insurance Information Institute.

Regulatory Wave #4

1944- Present

Reversing Course: A Massive Display of Federal Power in Insurance Regulation

Out With the Old…In With Dual Regulation

- 1944 SEUA Supreme Court decision effectively overturned the 1869 Paul v. Virginia decision—after 75 years
- State and Federal regulation of insurance were both constitutional
  - This created an obvious dilemma with no obvious solution
  - Congress stepped into the void
- McCarran-Ferguson Act of 1945
  - Crafted a partial exemption of the business of insurance from the Sherman, Clayton and FTC Acts to the extent it is regulated by the states
  - Maintained that federal antitrust laws do apply in cases of boycott, coercion or intimidation
  - Widely misunderstood by industry critics (including occasionally some members of Congress) as a blanket exemption from antitrust statutes
- NAIC's 1946 All Industry Bill became the model law establishing a framework for regulation in the wake of McCarran-Ferguson
- Stringent rate regulation became the norm and by 1948 all states had enacted rate regulatory laws, usually in line with the All Industry Bill

Sources: *Insurance Perspectives*, G. Gibbons, G. Rejda and M. Elliott., American Institutes for CPCU (1992); Insurance Information Institute.

Regulatory Wave #5

1999- 2009

A Pulse of Deregulation

The Pendulum Swings: Financial Services Deregulation and Gramm-Leach-Bliley

- By the late 1990s, years of bull markets and merger mania led to the view that Depression Era legislation such as Glass-Steagal (1933) prohibiting affiliations between commercial banks and securities firms were anachronistic
- Gramm-Leach-Bliley Act of 1999
  - Repealed Glass-Steagal
  - Allowed the formation of Financial Service Holding Companies that permitted combinations of banks, securities firms and insurers
- Preserved state-based regulation of insurance entities
- Had little impact on insurance industry in the US
- Only one major transaction involving an insurer took place—merger between Citi and Travelers in 1998
  - Travelers was spun off in 2002
- The idea of banks in insurance ("bancassurance") never caught on in the US but was somewhat popular in Europe until the financial crisis

Sources: *I*nsurance Information Institute research.

Regulatory Wave #6

2008 - Present

Crisis and Regulatory Fury

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

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- **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**

Regulatory Wave #7

2010 - Present

Global Crises, Global Response

Global Financial Crises & Global Systemic Risk

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- **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 staring in 2019
January 2019	G-SIIs to apply HLA requirements

Sources: Financial Stability Board, *"Globally Systemically Important Insurers (G-SIIs) and the Policy Measures that Will Apply to Them,"* July 18, 2013.

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

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- **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)***

Regulatory Wave #8

<u>Time Immemorial → End of Time</u>

Shadow Regulators

Shadow Regulators—A New and Unpredictable Regulatory Concern?

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- How Many Insurance Regulators Are There?
- 50 State Departments of Insurance
- 50 State Attorneys General, 50 Governors
- Thousands of State Legislators, Hundreds in Congress
- New Federal Entities (FIO, FSOC) and Fed
- Global Entities (IAIS, FSB)?
- Eliot Spitzer and contingent commission issue
    - Little substance to his accusations

- MS AG Jim Hood—post-Katrina in wind vs. water dispute
- Former Florida Governor Charlie Christ on rates, deductibles
- Governors on hurricane deductibles post-Sandy
- Shadow Regulators: A Source of Moral Hazard

Sources: Insuce Information Institute.

Insurance Regulation and the Great Arc of the History

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That Was Then…	This is Now…
"…misguided zealots, honest in intention but without knowledge of the special problems of underwriting present the greatest danger. They usually are the authors of the most revolutionary plans and their pride of authorship makes them the most impatient of correction."	***"Overzealous regulators are endangering the vigour, competitiveness and diversity of insurers in the US."***
"Public enjoyment of fair rates, sound protection, prompt adjustments, and freedom from discrimination is not due…to unwilling virtue under compulsion, but to the underwriters' knowledge that any other course would be unprofitable—bad business."	***"If a policy is priced in a certain way on a certain basis, we cannot allow the terms and conditions simply to be overturned by political considerations."***

1916

2013 (Oct. 21)

Shadow Regulators—A New and Unpredictable Regulatory Concern?

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- **Is the Phenomenon of Shadow Regulators Really a New One?**
  - ***"…one turns with a feeling of surprise, of bewilderment, to the intense activity of…state legislators fairly seething with legislation on fire insurance. Why should there be 2,500 bills in a single year unless the subject be one of immediate and overwhelming emergency…Many of the bills introduced are conceived in a spirit of indiscriminate hostility…from the time immemorial, politicians of a certain type have sought to pose as defenders of the people from the aggressions of capital…The politician has learned that popularity and applause may be most quickly attained by attacking largeness…'Big-game' hunting…brings its political rewards. Fire insurance companies seem to be the most accessible of the larger fauna."***
    - ***Harry Chase Stokes, The History of the National Board of Fire Underwriters: Fifty Years of a Civilizing Force*, 1916.**

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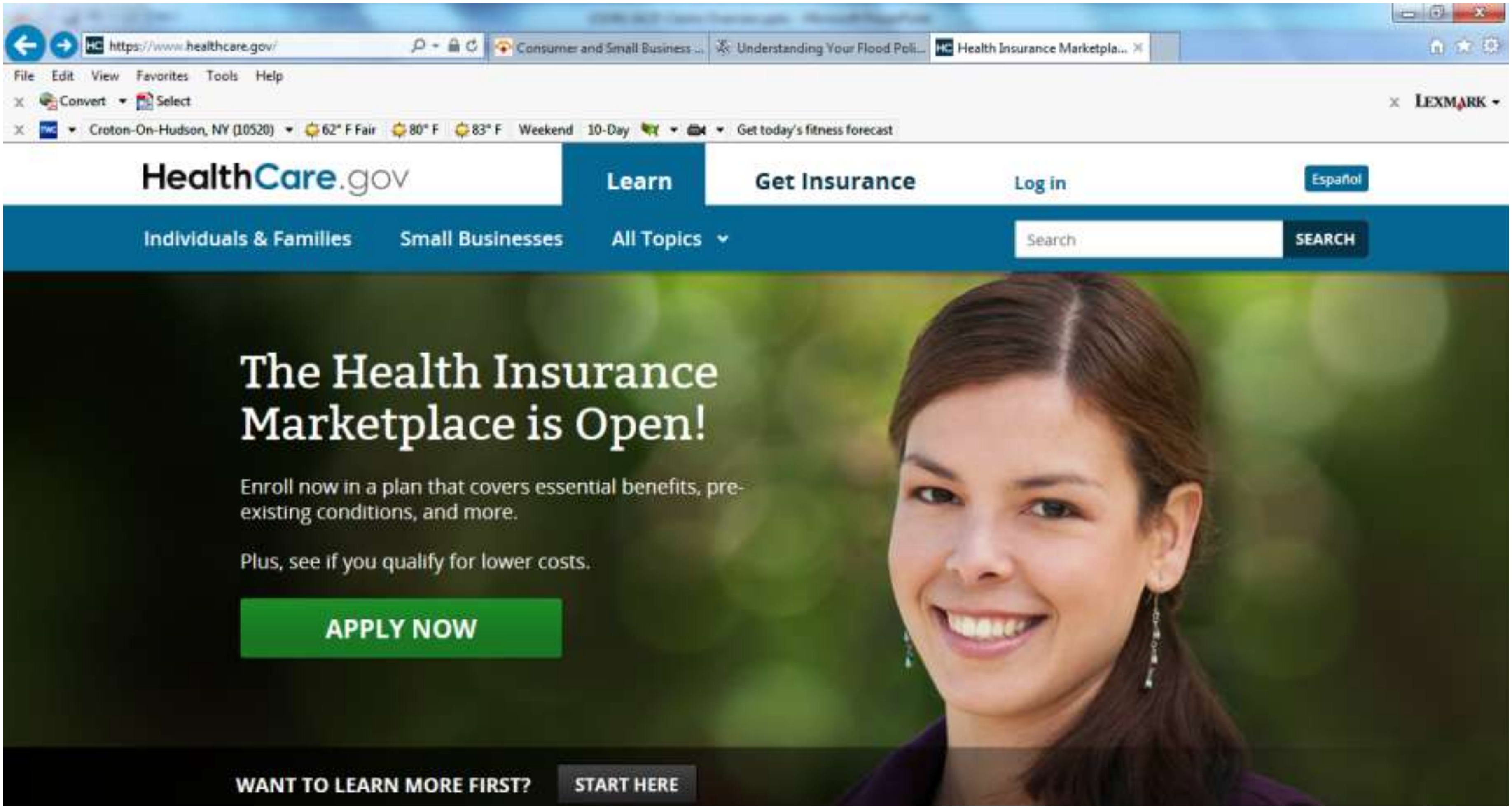
Future Shock

Waves of Risk for the Immediate Future

Affordable Care Act ("ObamaCare"): Grand Opening October 1

Health Insurance Marketplaces Are Open But Remain a Logistical and Political Nightmare



Sources: Screen capture on Oct. 1, 2013 from www.HealthCare.gov; Insurance Information Institute.

States of Play | Management of Health-Insurance Exchanges

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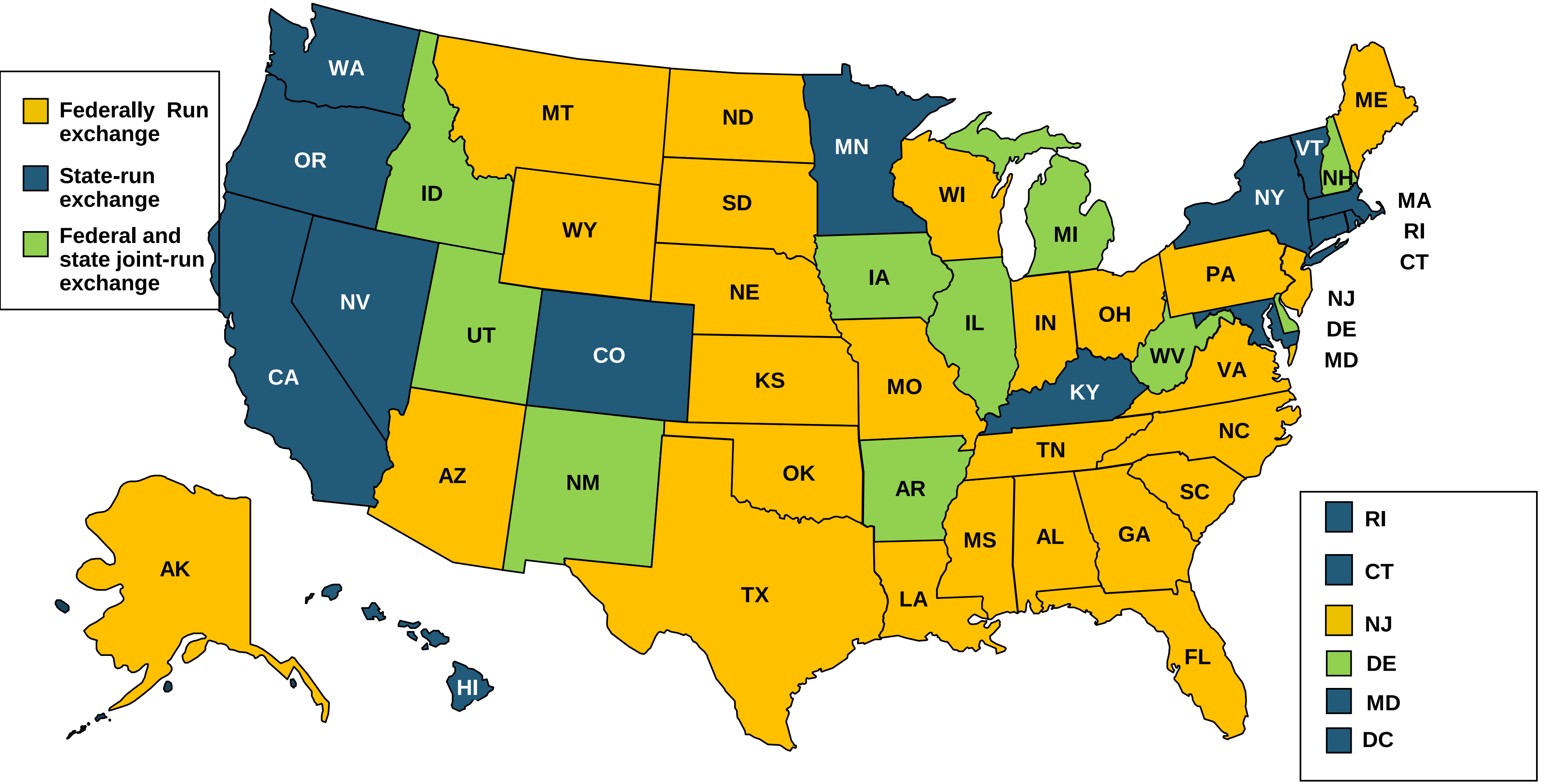
Some states are running new health-insurance exchanges on their own. Other are leaving some or all of the task to the federal government.



Source: Wall Street Journal, September 20, 2013.

Affordable Care Act ("ObamaCare"): Grand Opening October 1

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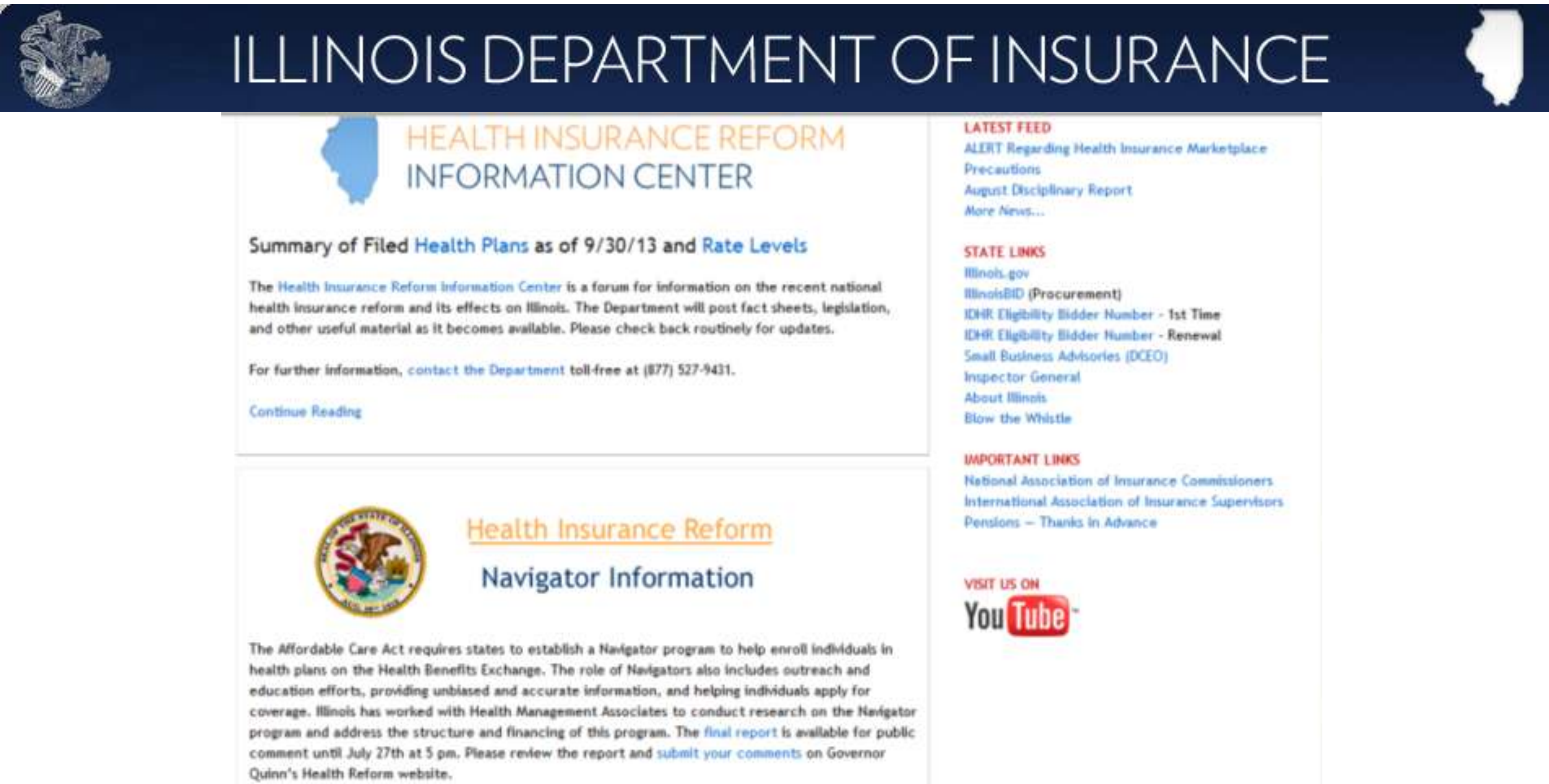
Health Insurance Marketplaces But Info About Health Insurance Is Much More Available on Some State's Websites Than Others



Sources: Screen capture on Oct. 24, 2013 from Insurance.Illinois.gov; Insurance Information Institute.

Affordable Care Act ("ObamaCare"): Grand Opening October 1

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Health Insurance Marketplaces But Info About Health Insurance Is Much More Available on Some State's Websites Than Others

Sources: Screen capture on Oct. 24, 2013 from TDI.Texas.gov ; Insurance Information Institute.

Risk, Insurance and Regulation

U.S. and Global Perspective

Is the World Becoming a Riskier, More Uncertain Place?

Is Insurance and Its Regulatory Framework Up to the Task?

Uncertainty, Risk and Fear Abound: Insurance Can Help Mitigate Risk

- US Debt and Budget Crisis
- European Sovereign Debt & Eurozone Crises
- Political Gridlock in the US, Europe, Japan
- “Hard Landing” in China/Emerging Economies
- Fiscal Imbalances
- Monetary Policy/Tapering/Low Interest Rates
- Unemployment
- Political Upheaval in the Middle East
- Resurgent Terrorism Risk
- Diffusion of Weapons of Mass Destruction
- Cyber Attacks
- Record Natural Disaster Losses
- Climate Change
- Environmental Degradation
- Income Inequality
- (Over)Regulation

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

5 Major Categories for 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

Source: Adapted from World Economic Forum, *Global Risks 2013*; Insurance Information Institute.

Top 5 Global Risks in Terms of *Likelihood*, 2007—2013: Insurance Can Help With Most

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	2007	2008	2009	2010	2011	2012*	2013*
1st	Breakdown of critical information infrastructure	Asset price collapse	Asset price collapse	Asset price collapse	Meteorological catastrophes	Severe income disparity	Severe income disparity
2nd	Chronic disease in developed countries	Middle East instability	Slowing Chinese economy (<6%)	Slowing Chinese economy (<6%)	Hydrological catastrophes	Chronic fiscal imbalances	Chronic fiscal imbalances
3rd	Oil price shock	Failed and failing states	Chronic disease	Chronic disease	Corruption	Rising greenhouse gas emissions	Rising greenhouse gas emissions
4th	China economic hard landing	Oil and gas price spike	Global governance gaps	Fiscal crises	Biodiversity loss	Cyber attacks	Water supply crises
5th	Asset price collapse	Chronic disease, developed world	Retrenchment from globalization (emerging)	Global governance gaps	Climatological catastrophes	Water supply crises	Mismanagement of population ageing

In 2013, economic and climate change concerns dominated frequency concerns

Concerns Shift Considerably Over Short Spans of Time. Shift in 2012 to Economic Risks and Away from Environmental Risks

Source: World Economic Forum, *Global Risks 2013*; Insurance Information Institute.

Top 5 Global Risks in Terms of *Impact*, 2007—2013: Insurance Can Help With Most

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	2007	2008	2009	2010	2011	2012*	2013*
1st	Asset price collapse	Asset price collapse	Asset price collapse	Asset price collapse	Fiscal crises	Major systemic financial failure	Major systemic financial failure
2nd	Retrenchment from globalization	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)	Retrenchment from globalization (developed)	Climatological catastrophes	Water supply crises	Water supply crises
3rd	Interstate and civil wars	Slowing Chinese economy (<6%)	Oil and gas price spike	Oil price spikes	Geopolitical conflict	Food shortage crises	Chronic fiscal imbalances
4th	Pandemics	Oil and gas price spike	Chronic disease	Chronic disease	Asset price collapse	Chronic fiscal imbalances	Diffusion of weapons of mass destruction
5th	Oil price shock	Pandemics	Fiscal crises	Fiscal crises	Extreme energy price volatility	Extreme volatility in energy and agriculture prices	Failure of climate change adaptation

Impacts from economic, societal, geopolitical and environmental risks were all of great concern in 2013

Concerns Over the Impacts of Economics Risks Remained High in 2013, but Societal, Environment and Societal Risks Also Loom Large

Source: World Economic Forum, *Global Risks 2013*; Insurance Information Institute.

Insurance Regulation Has Always Followed Economic Growth and New Risks

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

Emerging vs. "Advanced" Economies

US Real GDP Growth*

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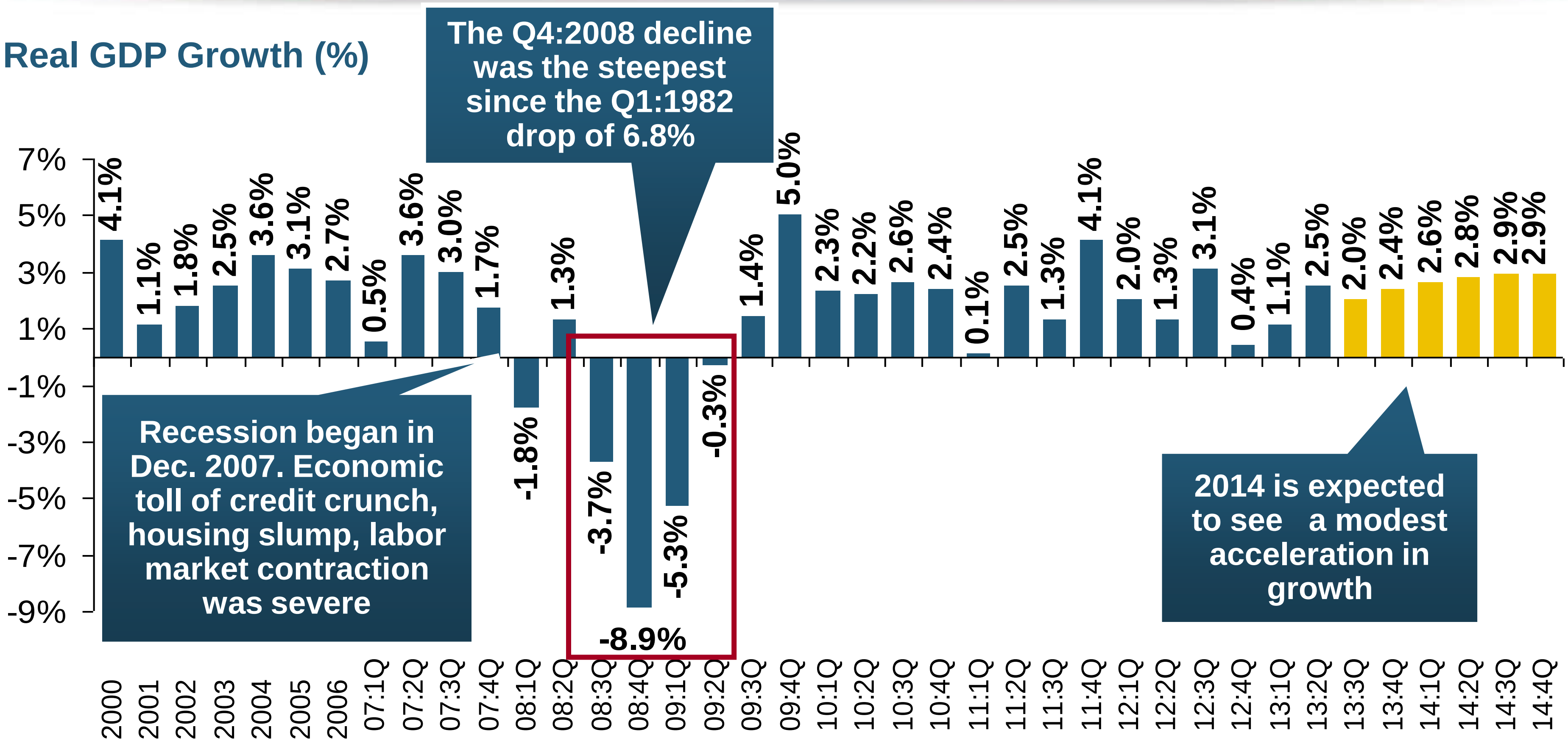
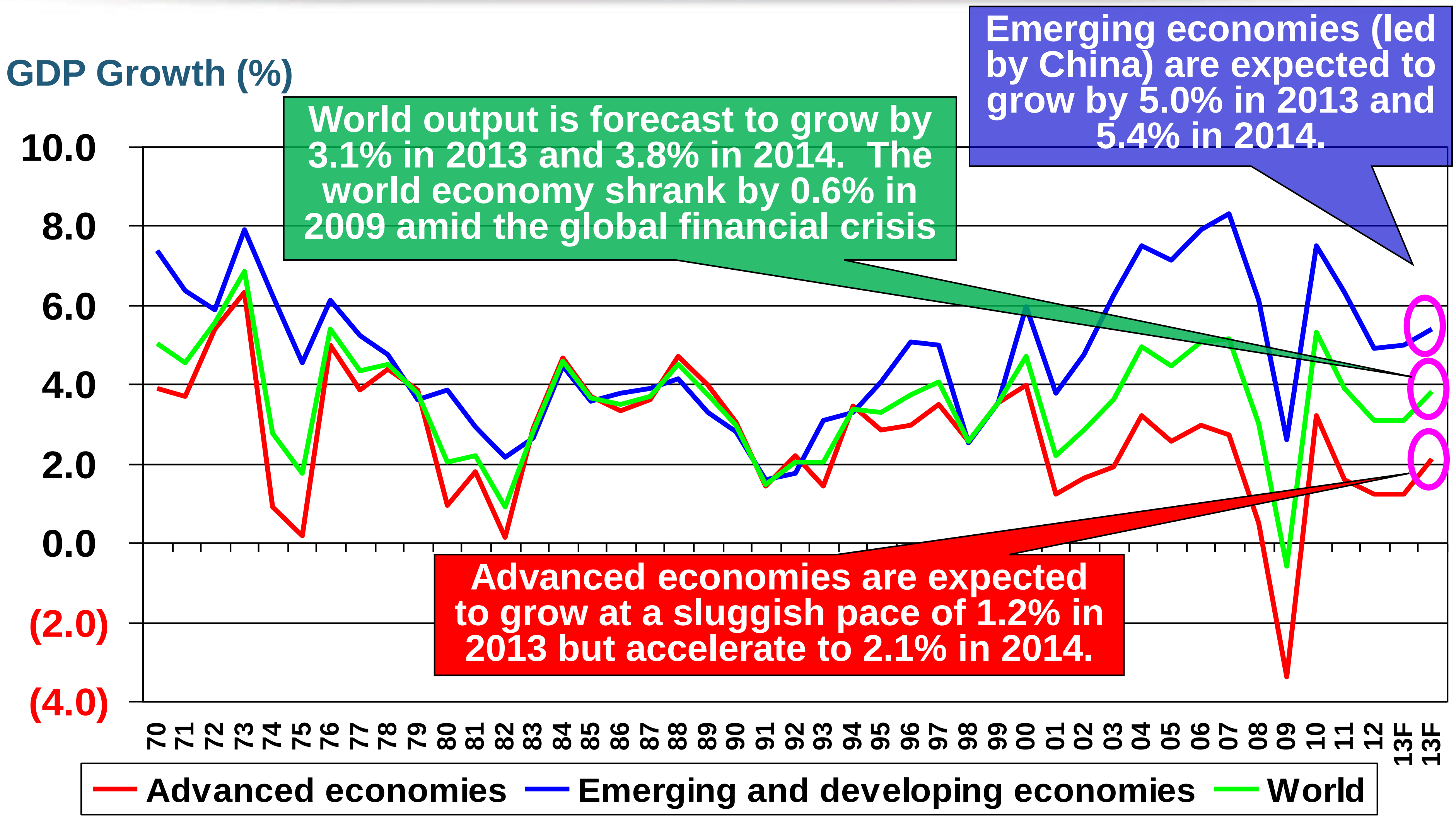


Demand for Insurance Continues To Be Impacted by Sluggish Economic Conditions, but the Benefits of Even Slow Growth Will Compound and Gradually Benefit the Economy Broadly

* Estimates/Forecasts from Blue Chip Economic Indicators.

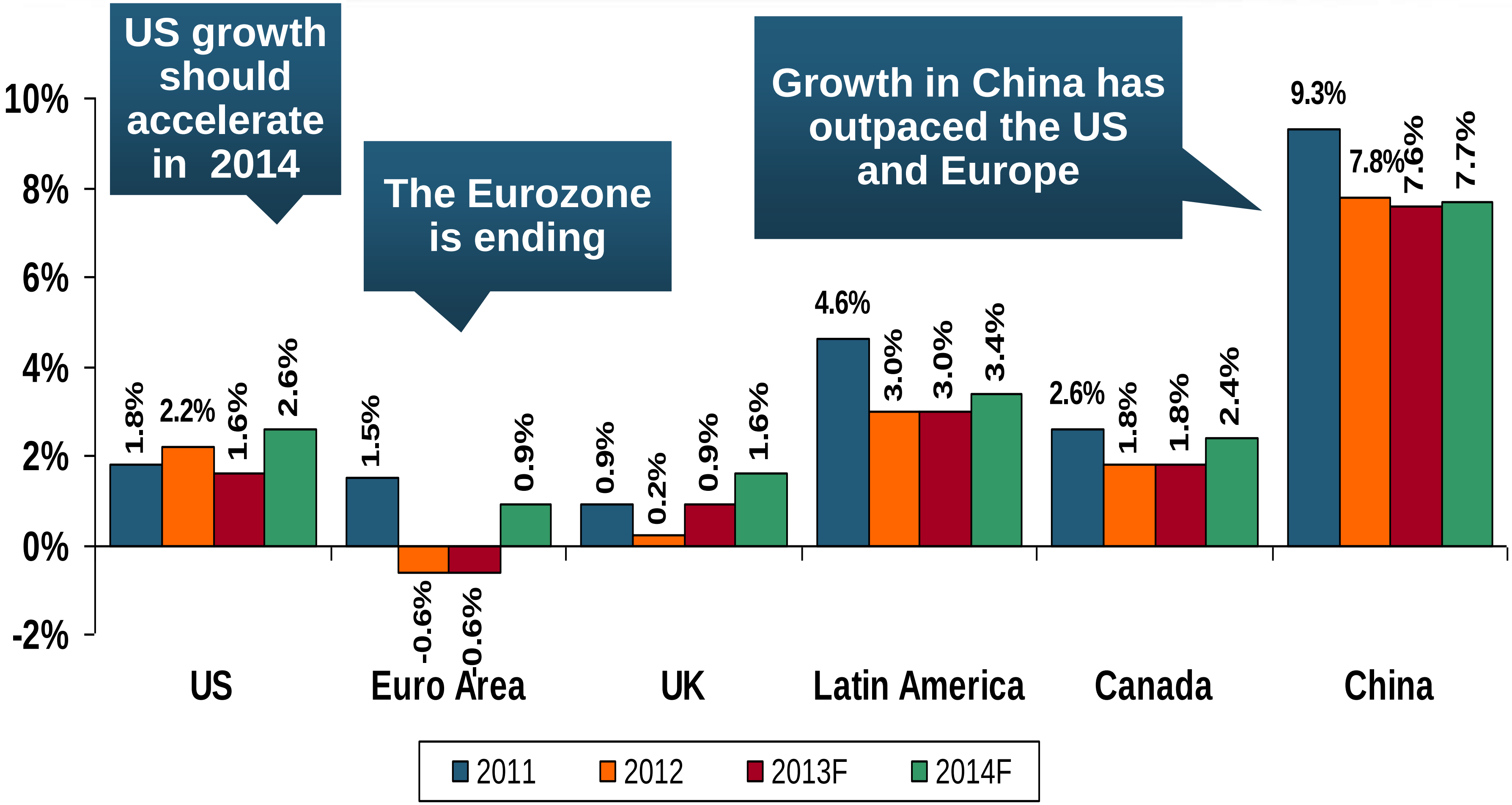
Source: US Department of Commerce, Blue Economic Indicators 10/13; Insurance Information Institute.

GDP Growth: Advanced & Emerging Economies vs. World, 1970-2014F



Source: International Monetary Fund, *World Economic Outlook* , July 2013 *WEO Update*; Ins. Info. Institute.

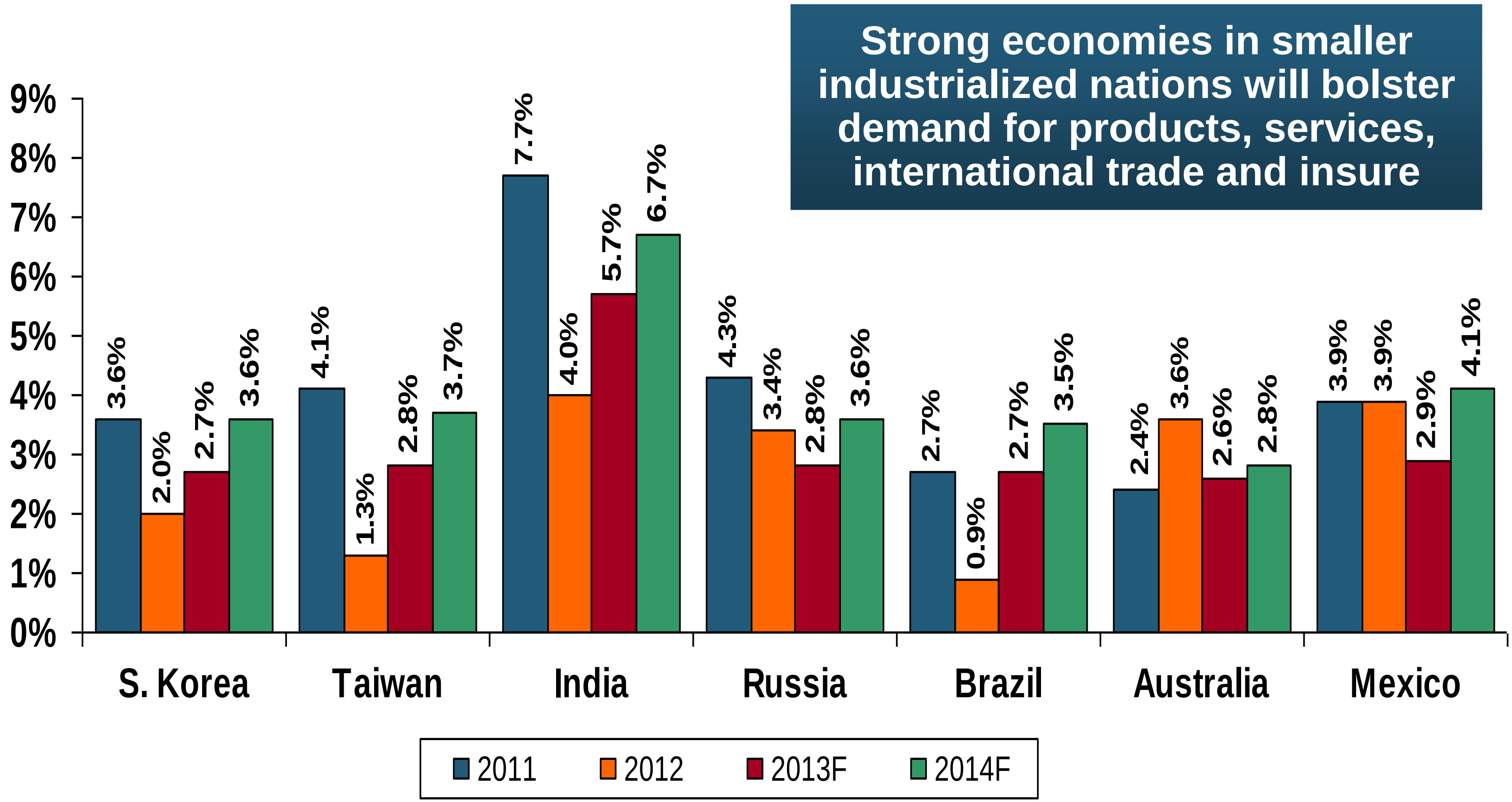
Real GDP Growth Forecasts: Major Economies: 2011 – 2014F



Growth Prospects Vary Widely by Region: Growth Returning in the US, Recession in the Eurozone, Some strengthening in Latin America

Sources: Blue Chip Economic Indicators (9/2013 issue); Insurance Information Institute.

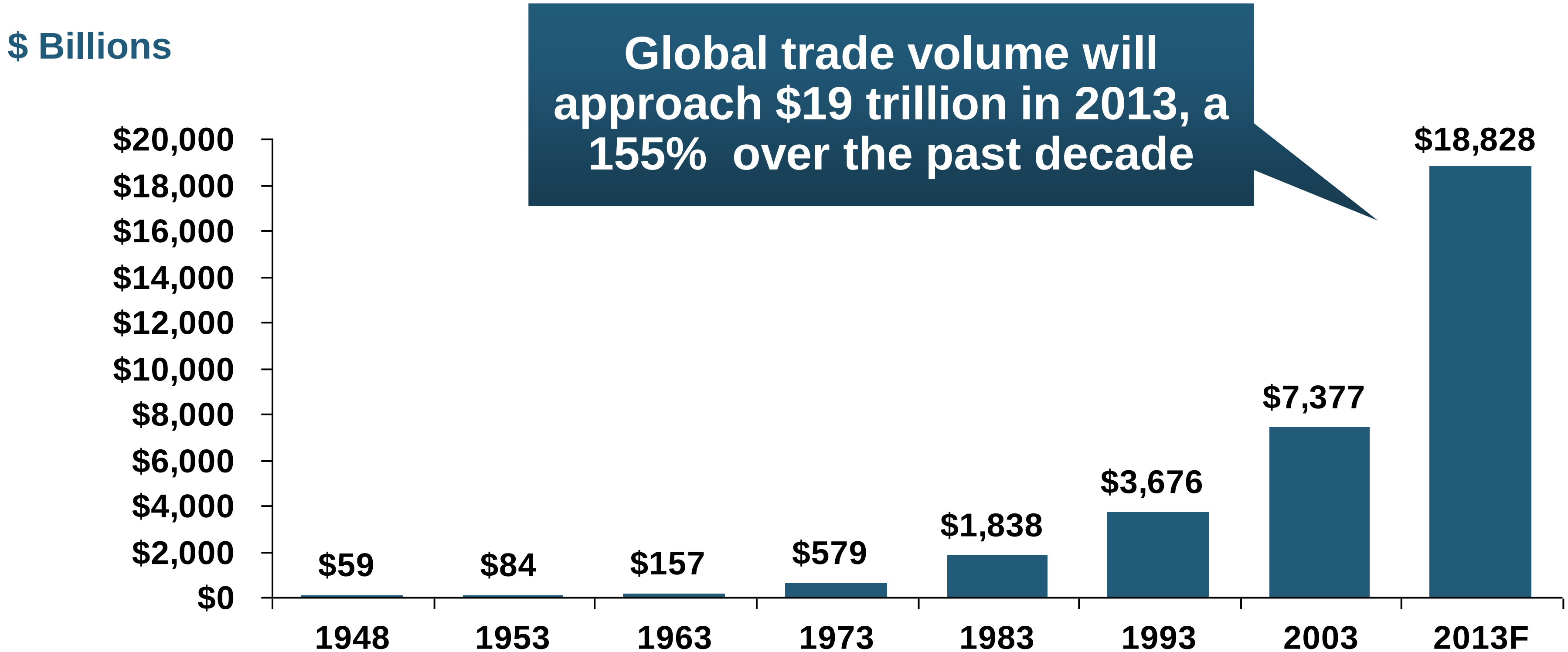
Real GDP Growth Forecasts: Selected Economies: 2011 – 2014F



Growth Outside the US, Europe and Japan is Relatively Strong

Sources: Blue Chip Economic Indicators (9/2013 issue); Insurance Information Institute.

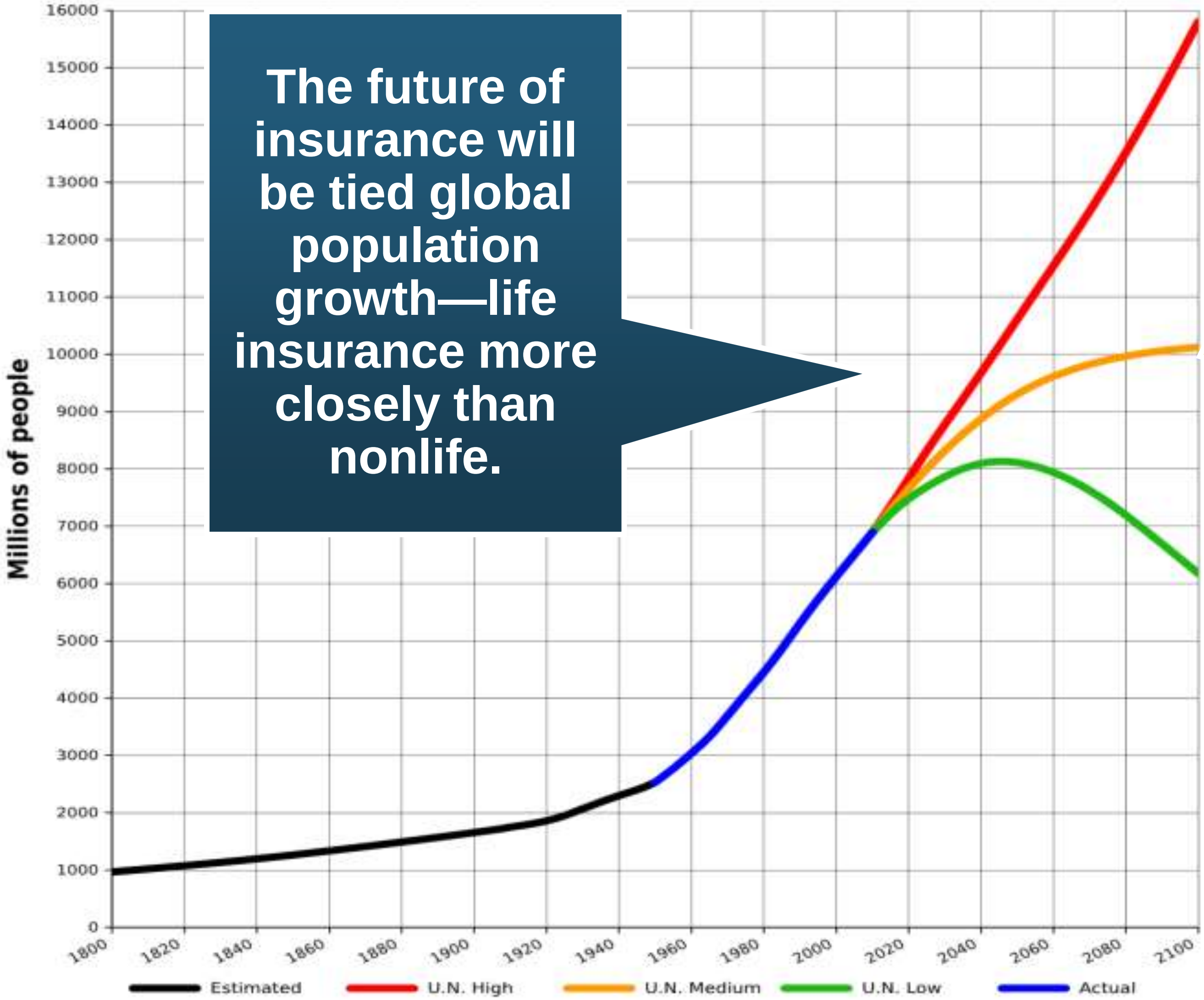
World Trade Volume: 1948—2013F



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

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

World Population Growth: 2010—2100F



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

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

Sources: United Nations, World Population Prospects, June 13, 2013; Insurance Information Institute .

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

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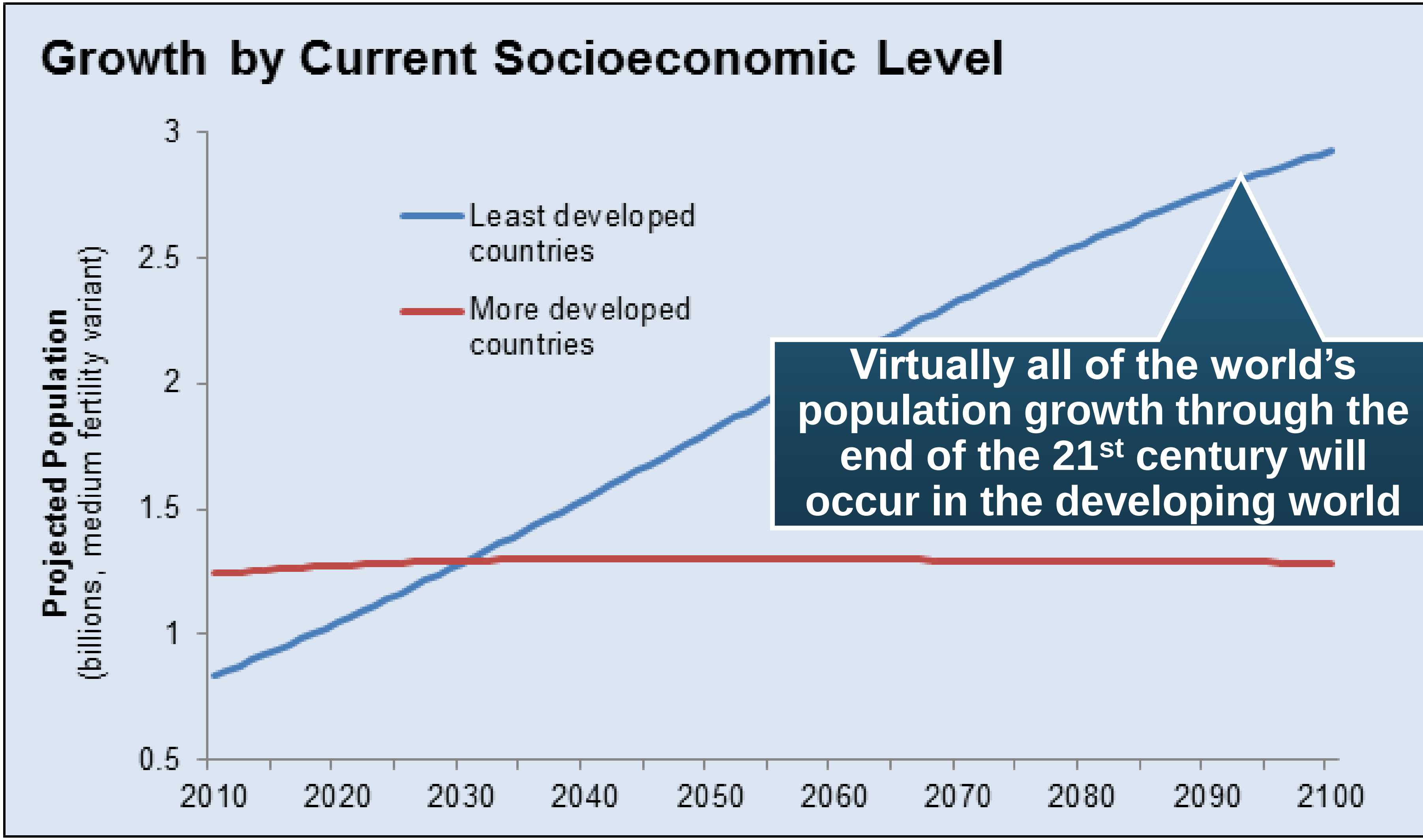
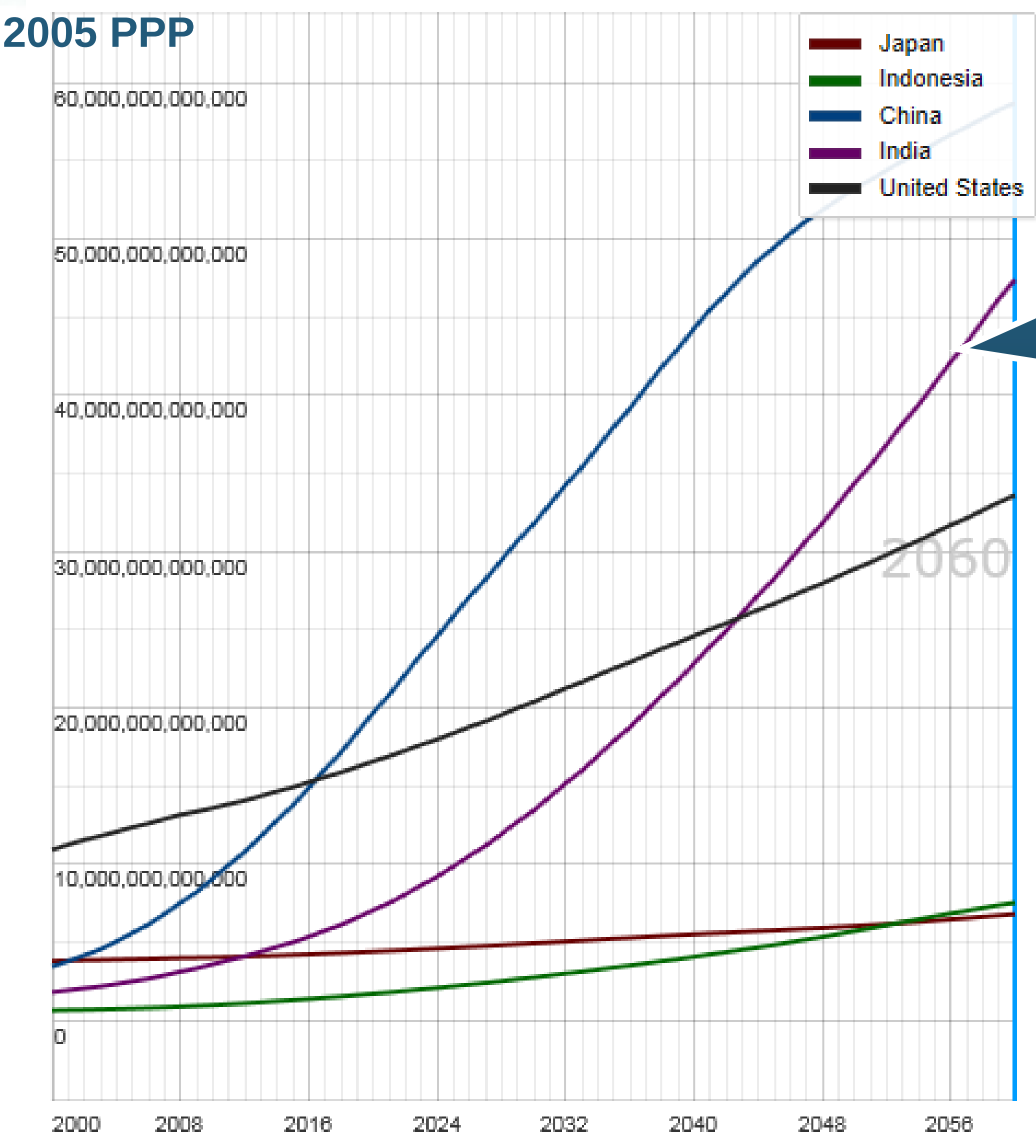


Sources: United Nations, World Population Prospects, June 13, 2013; Insurance Information Institute .

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

Source: OECD; Insurance Information Institute .

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Global Insurance Premium Growth Trends: Life and Non-Life

Growth Is Uneven Across Regions and Market Segments

Premium Growth by Region, 2012

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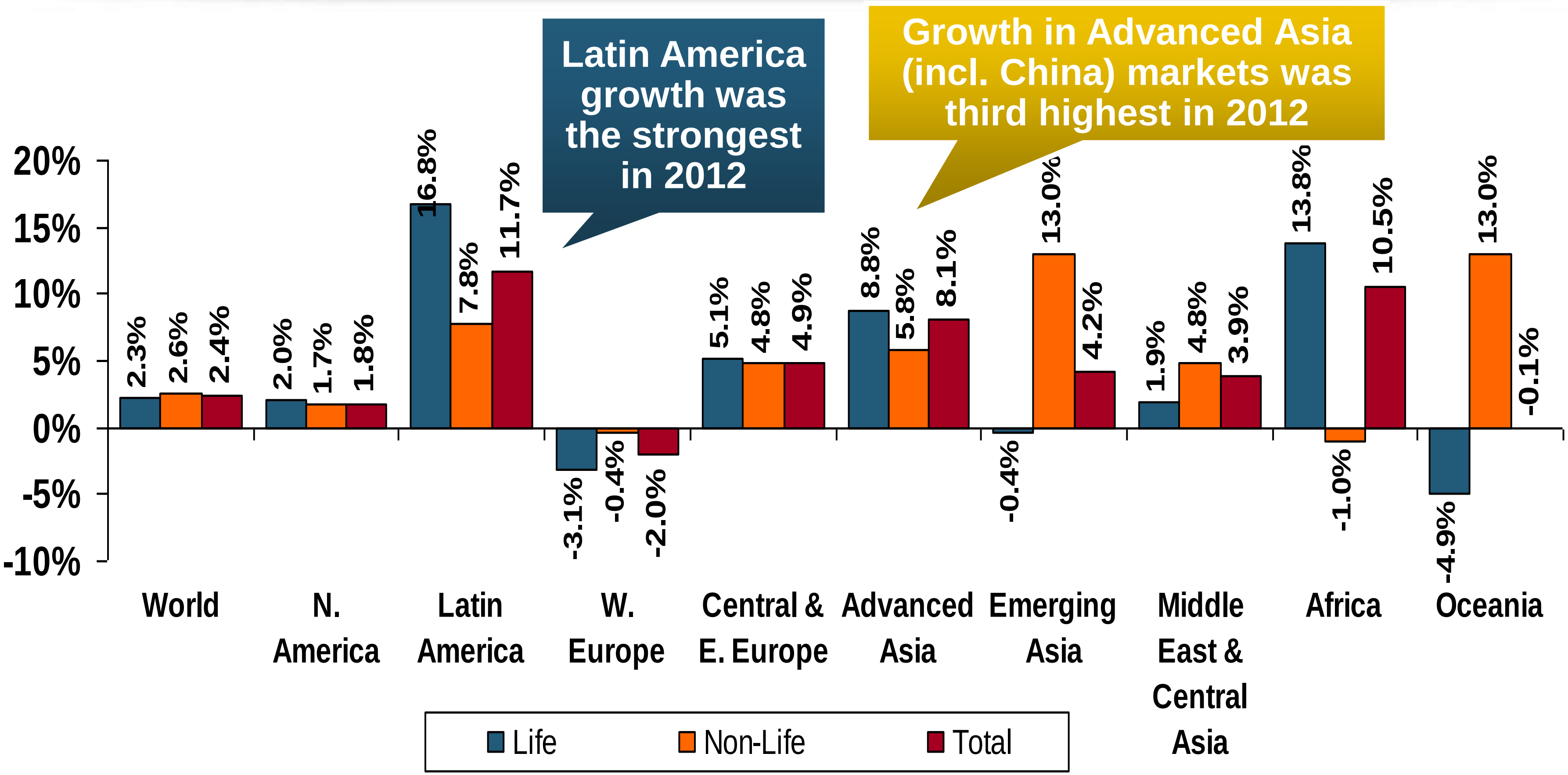
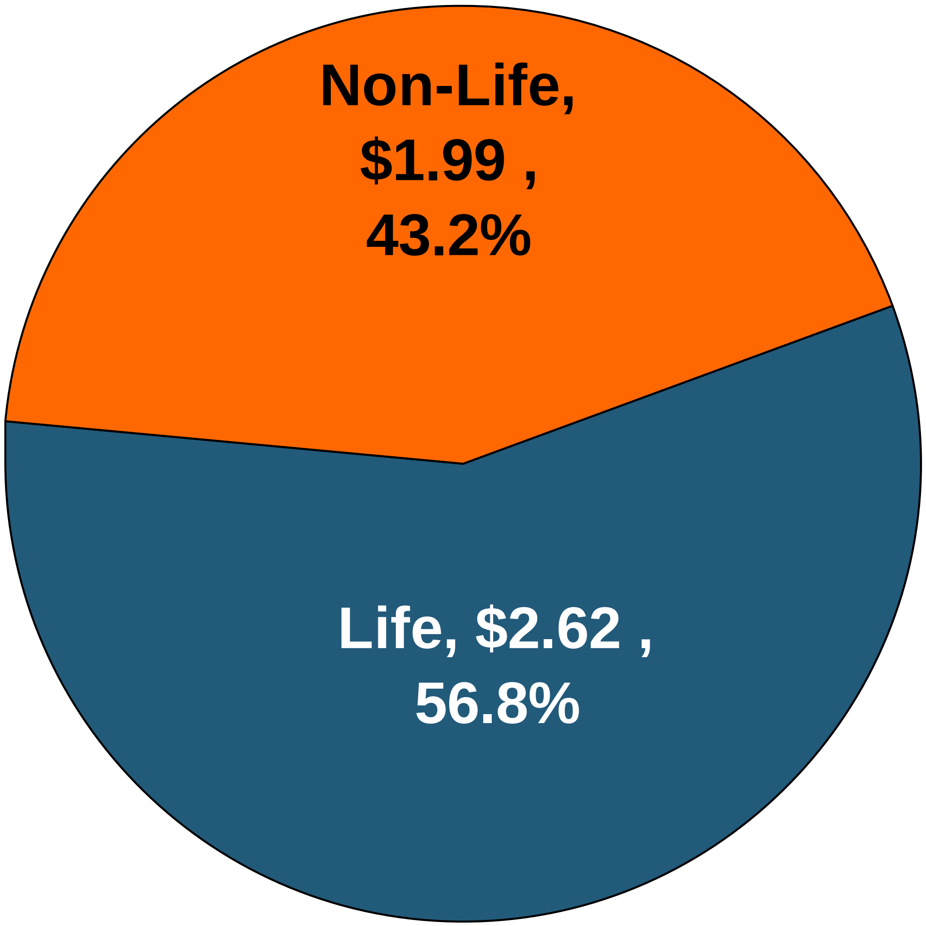


Global Premium Volume Totaled $4.613 Trillion in 2012, up 2.4% from $4.566 Trillion in 2011. Global Growth Was Weighed Down by Slow Growth in N. America and W. Europe and Partially Offset by Emerging Markets

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

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

Source: Swiss Re, *sigma*, No. 3/2013; Insurance Information Institute.

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

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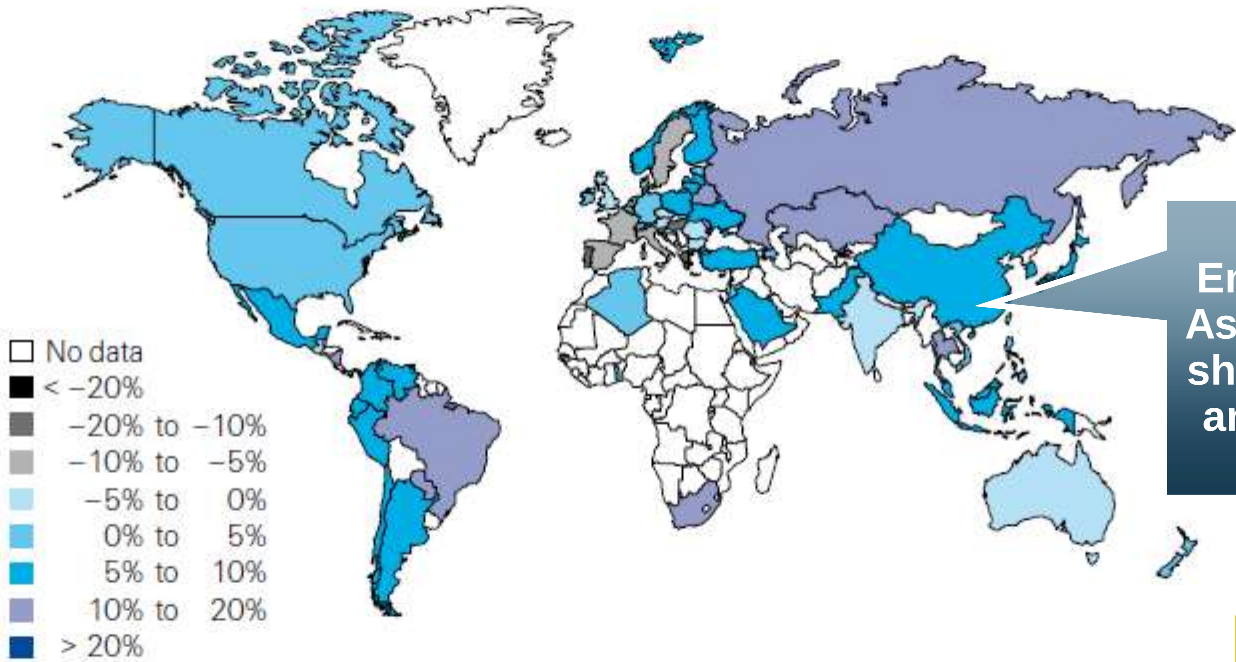


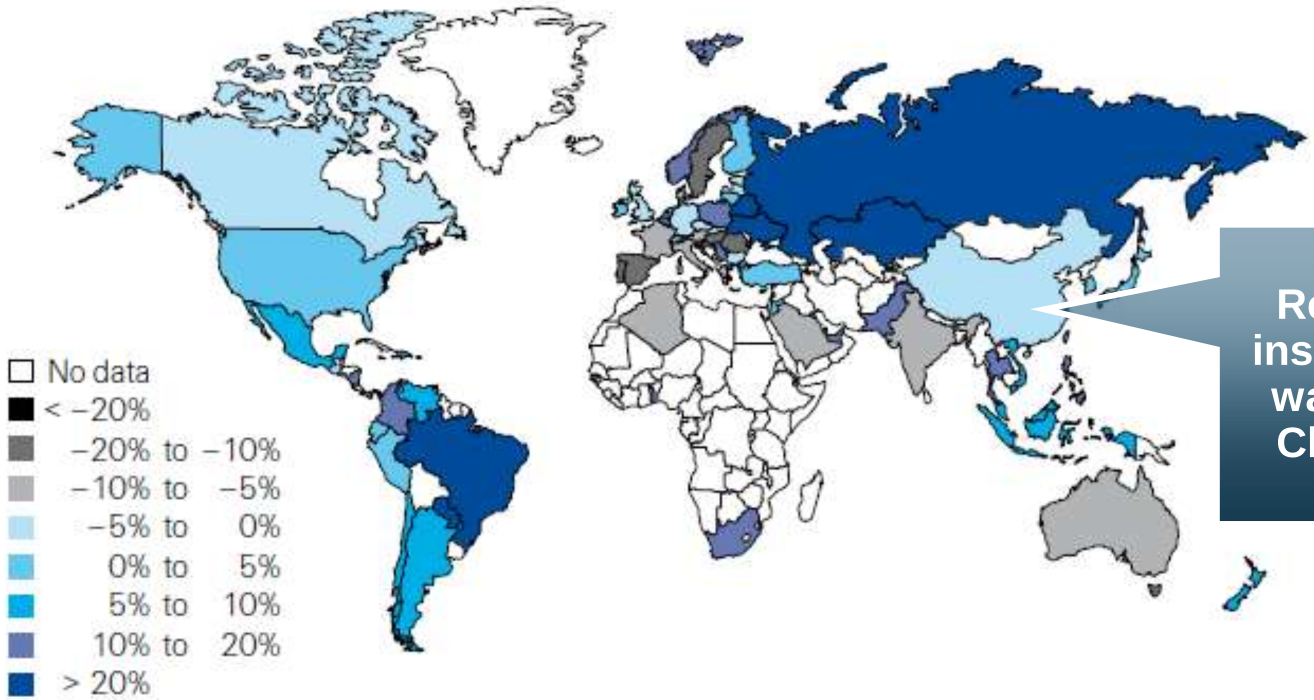
Emerging markets in Asia, including China, showed faster growth an the US or Europe

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

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

Source: Swiss Re, *sigma*, No. 3/2013; Insurance Information Institute.

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



Real growth in life insurance premiums was a bit slower in China than the US

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

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

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

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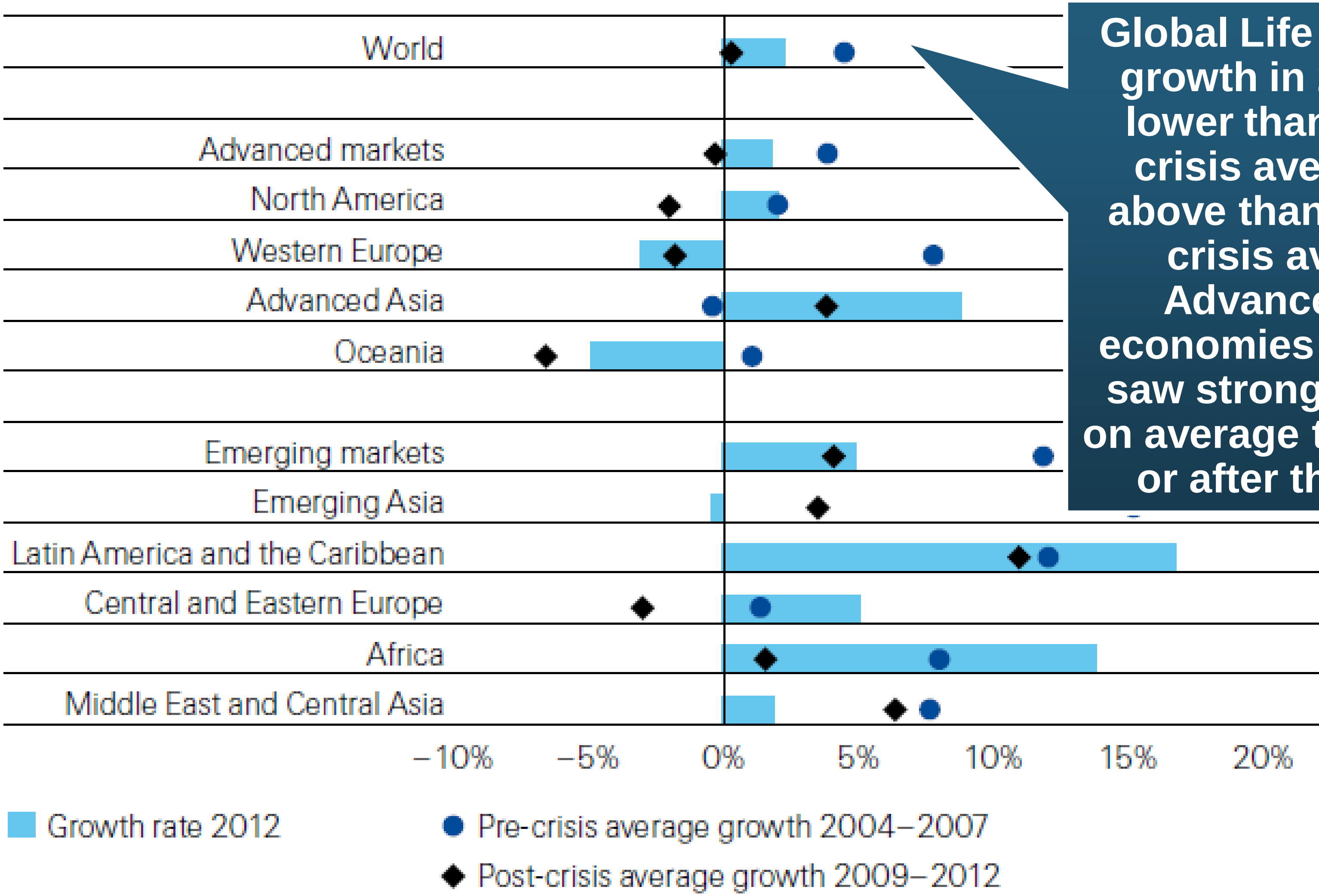

Global Life Insurance growth in 2012 was lower than the pre-crisis average but above than the post-crisis average. Advanced Asia economies like China saw stronger growth on average than before or after the crisis.

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

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

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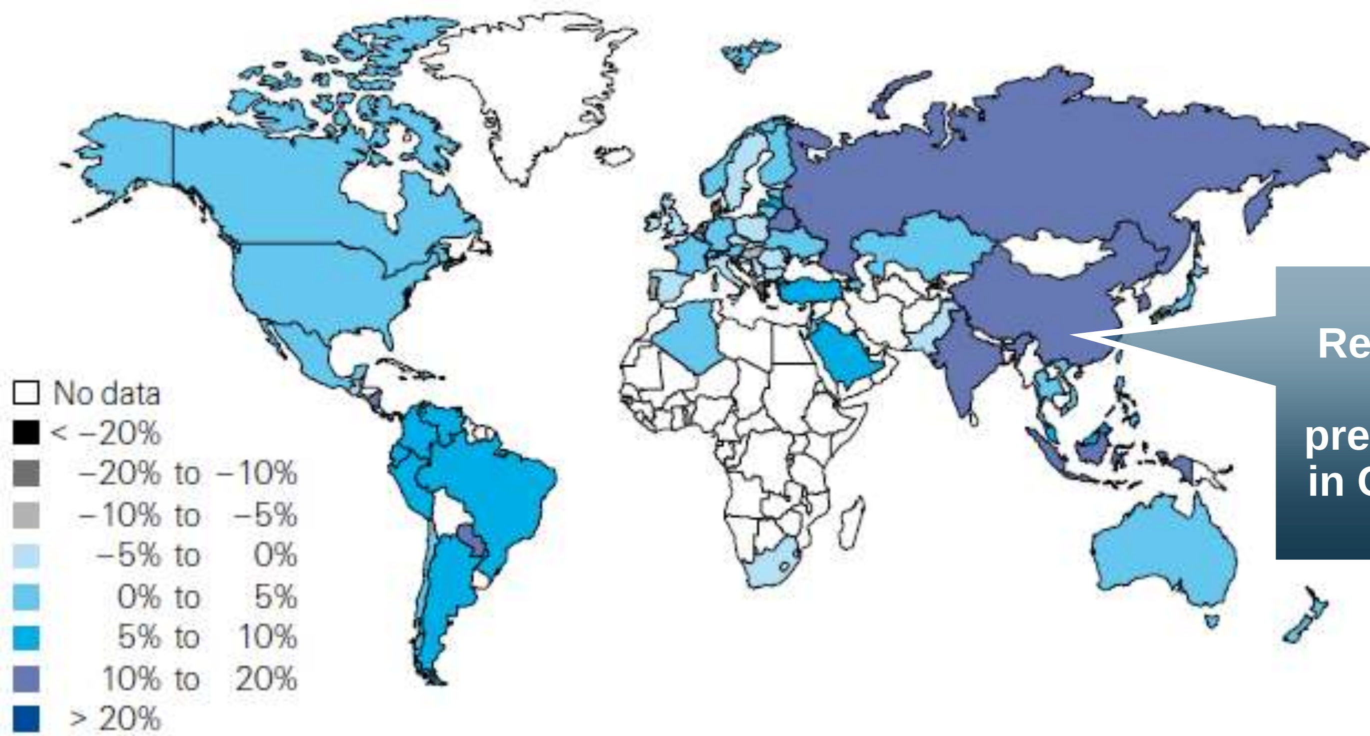

Real growth in non-life insurance premiums was faster in China than the US

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

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

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

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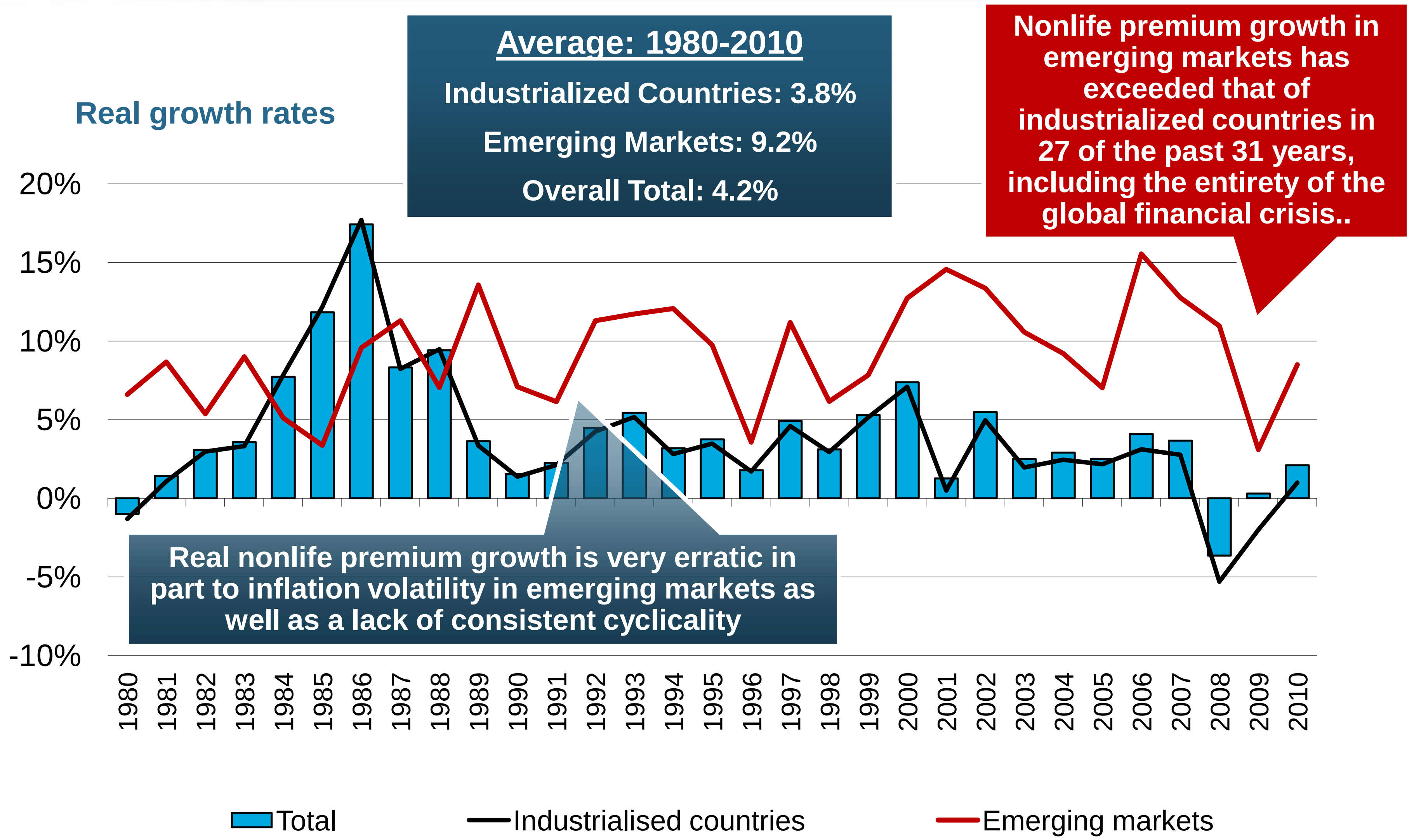
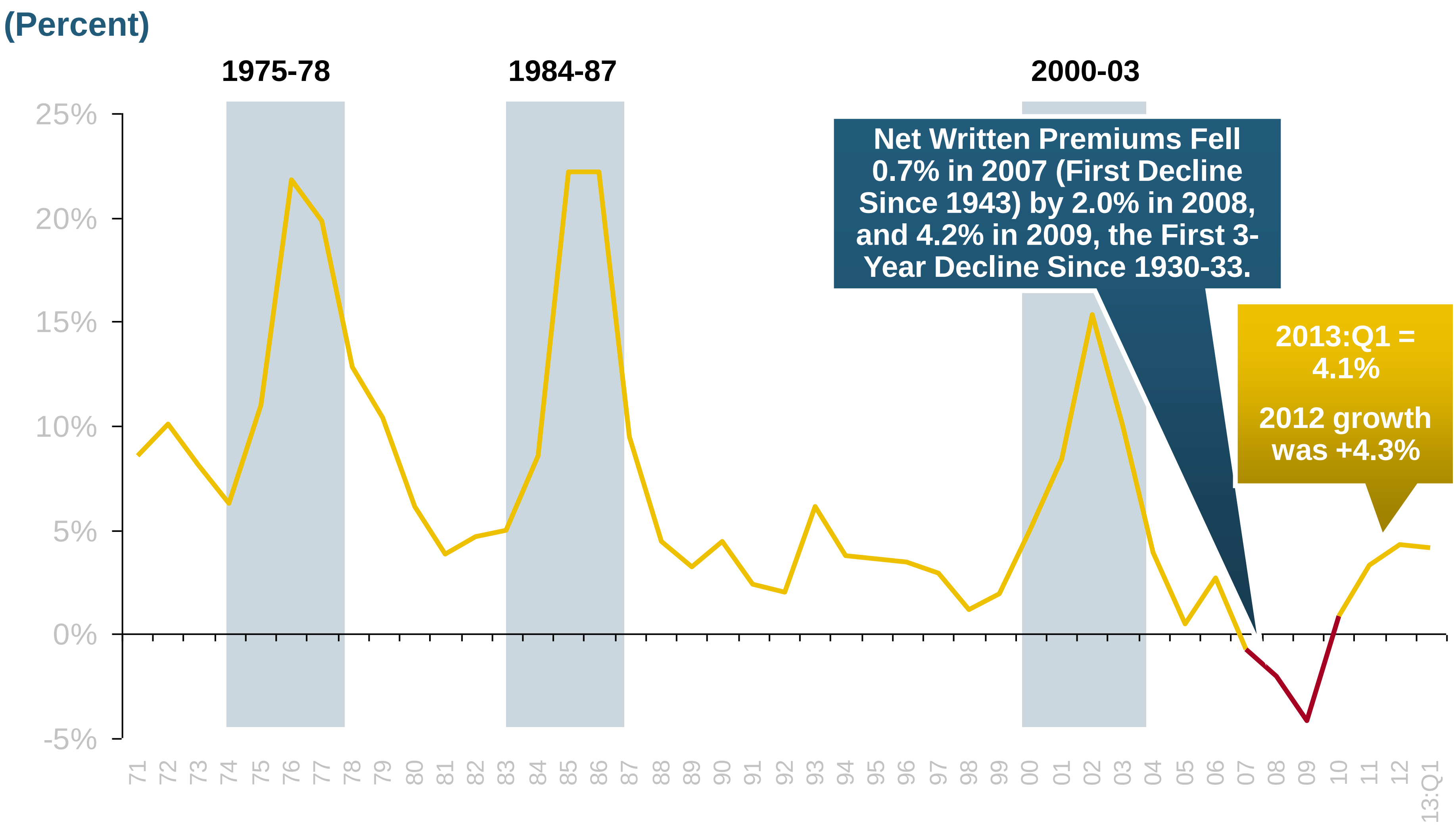


Source: Swiss Re, *sigma*, No. 2/2010.

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



Shaded areas denote "hard market" periods
Sources: A.M. Best (historical and forecast), ISO, Insurance Information Institute.

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

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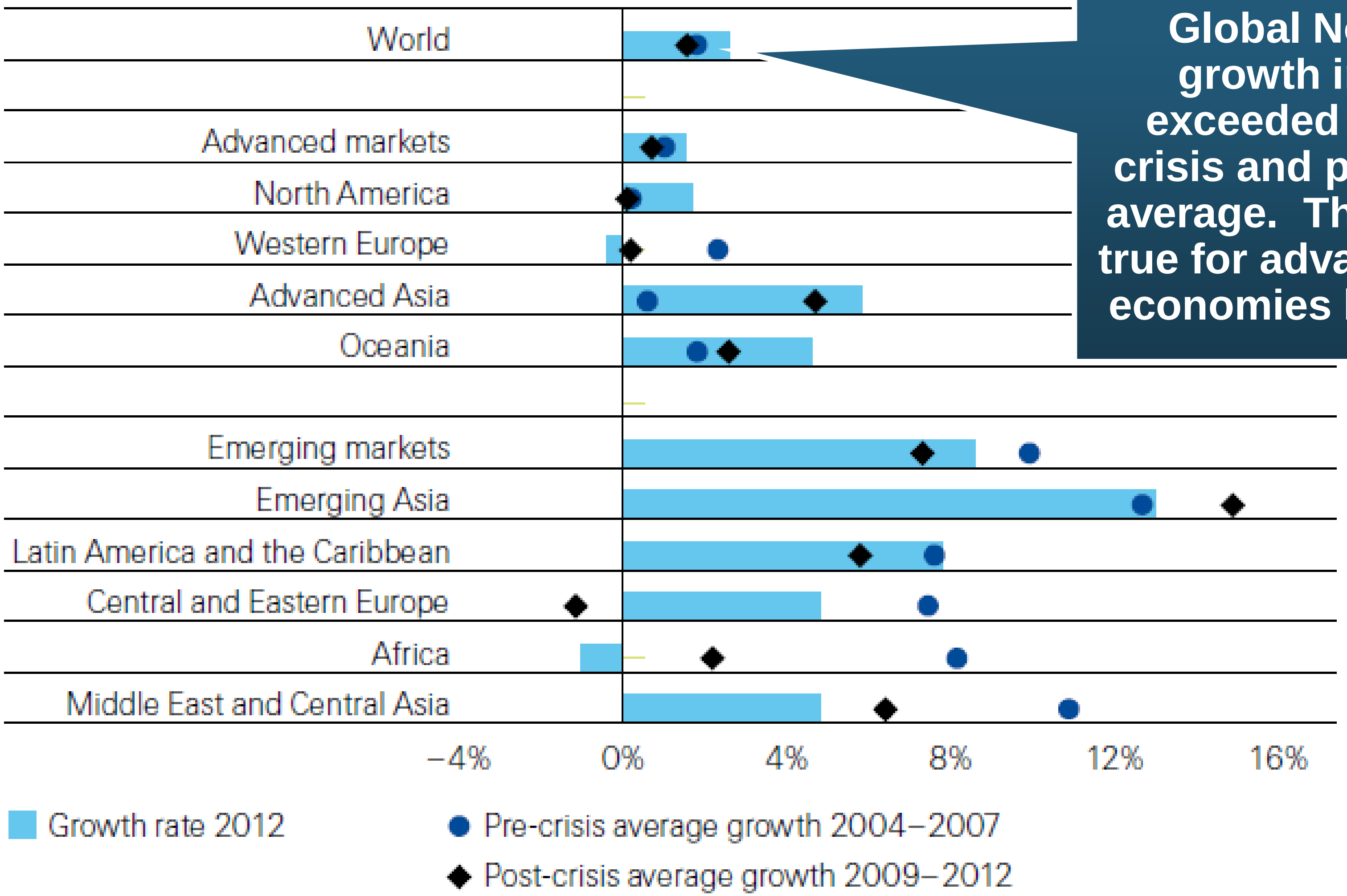
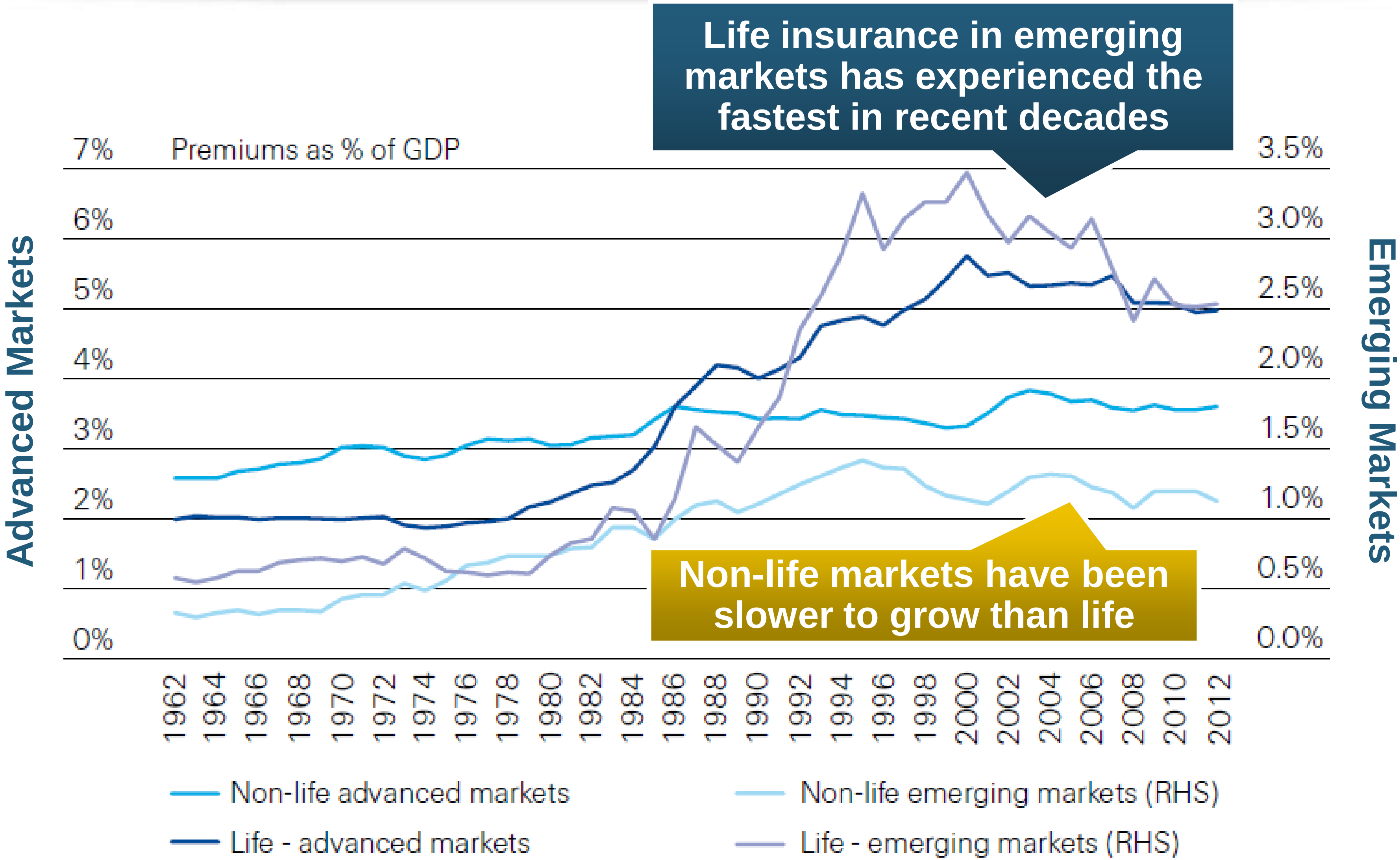


Global Non-Life growth in 2012 exceeded the pre-crisis and post-crisis average. The same is true for advanced Asia economies like China

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

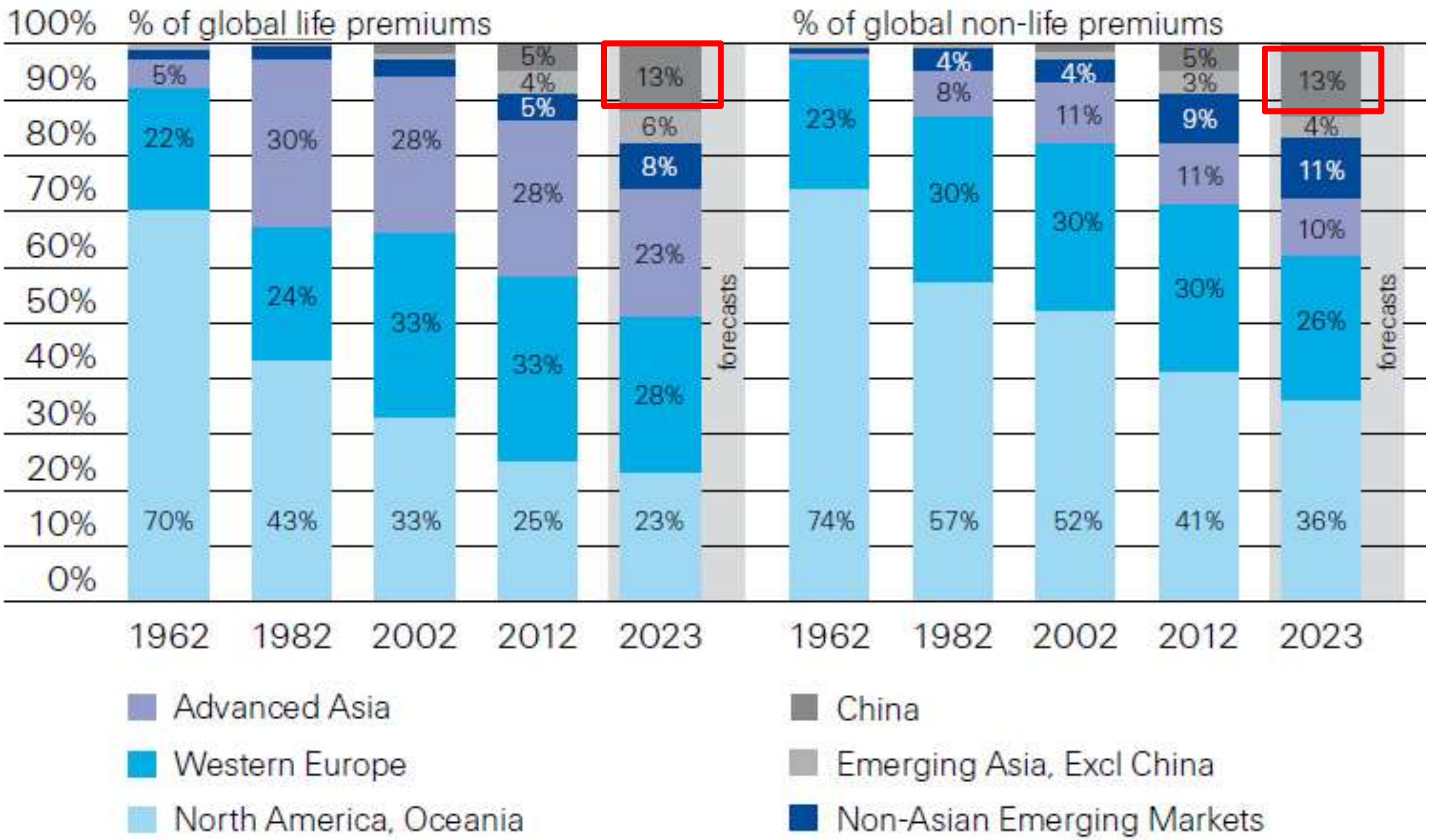
Life and Non-Life Insurance Penetration as a % of GDP: 1962-2012



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

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

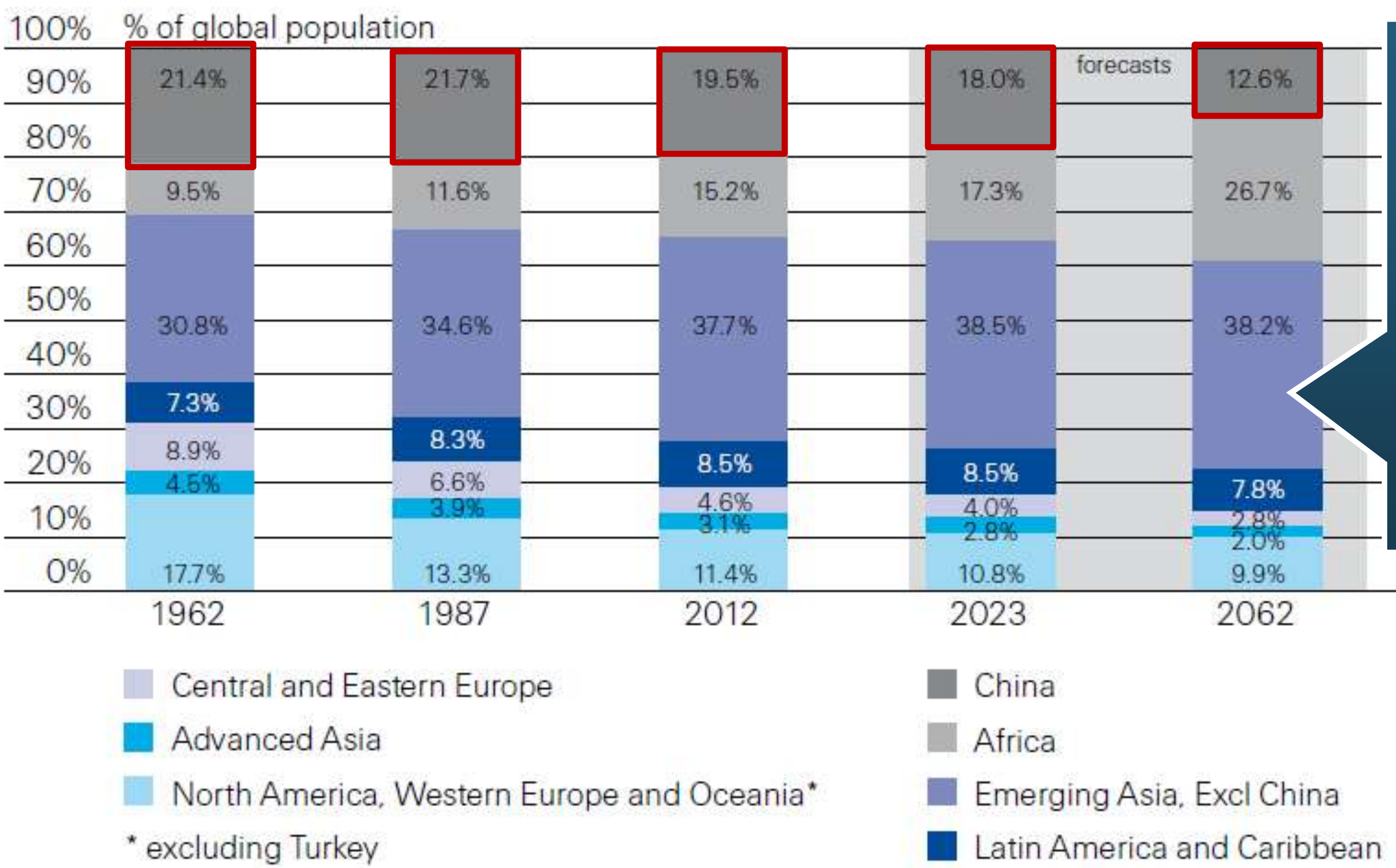
Emerging market shares rose rapidly over the past 50 years



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

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

Source: Swiss Re, *sigma*, No. 3/2013 from United Nations Department of Economic and Sovial Affairs, Population Division.

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

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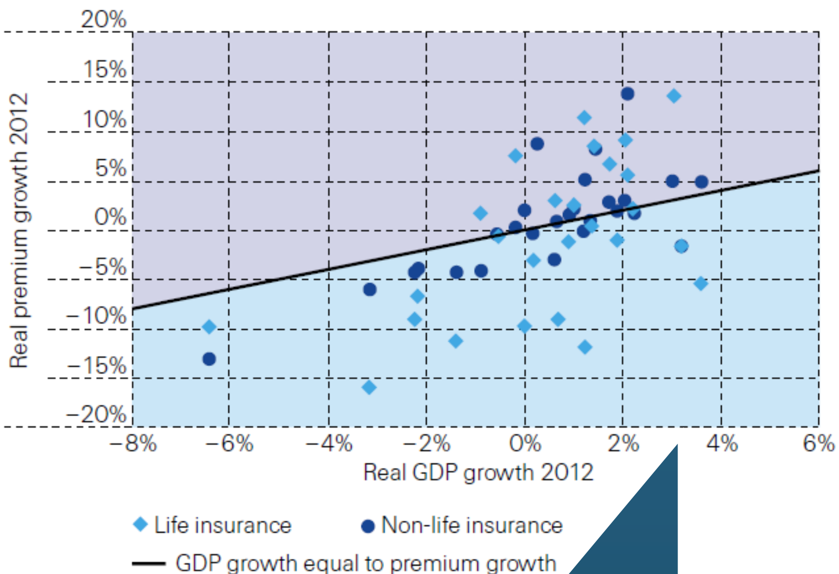
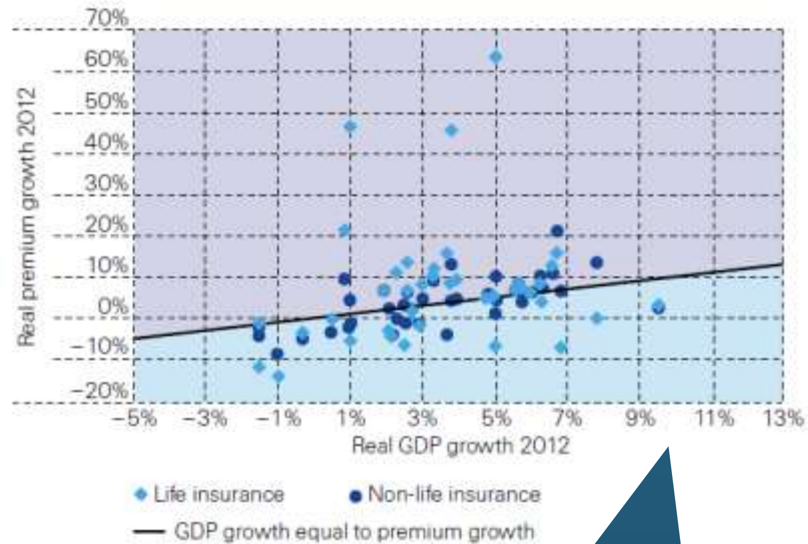
Advanced Markets



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

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

Insurance Density and Penetration for Advanced and Emerging Markets, 2012

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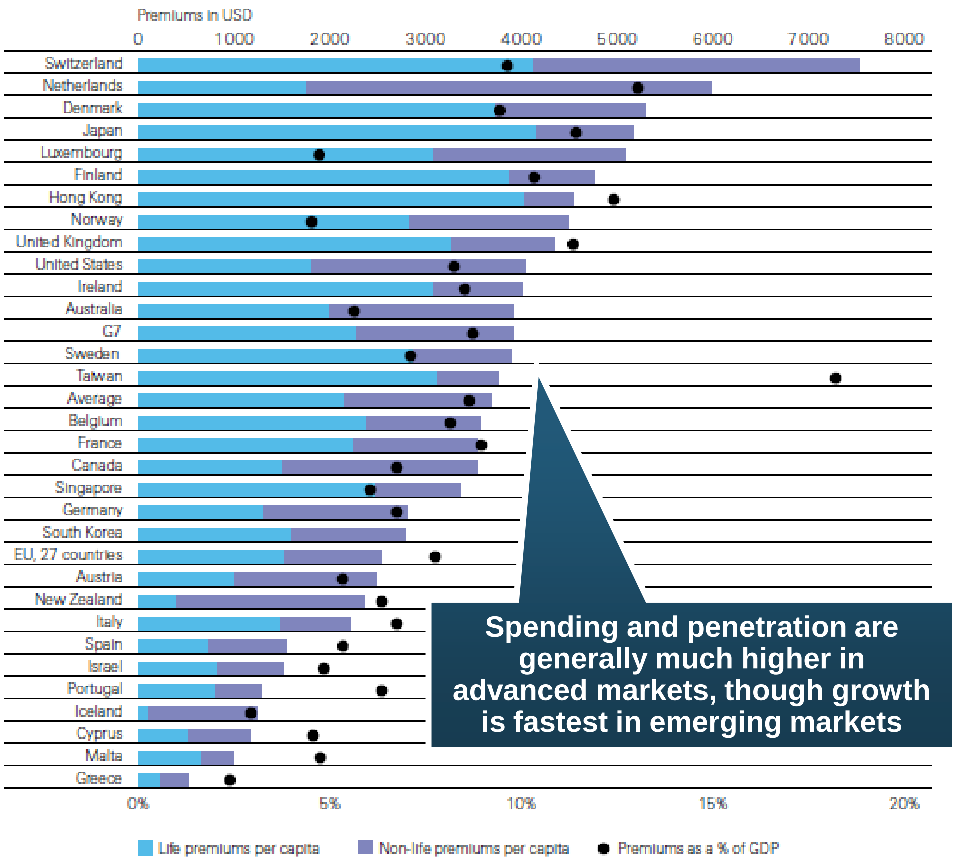
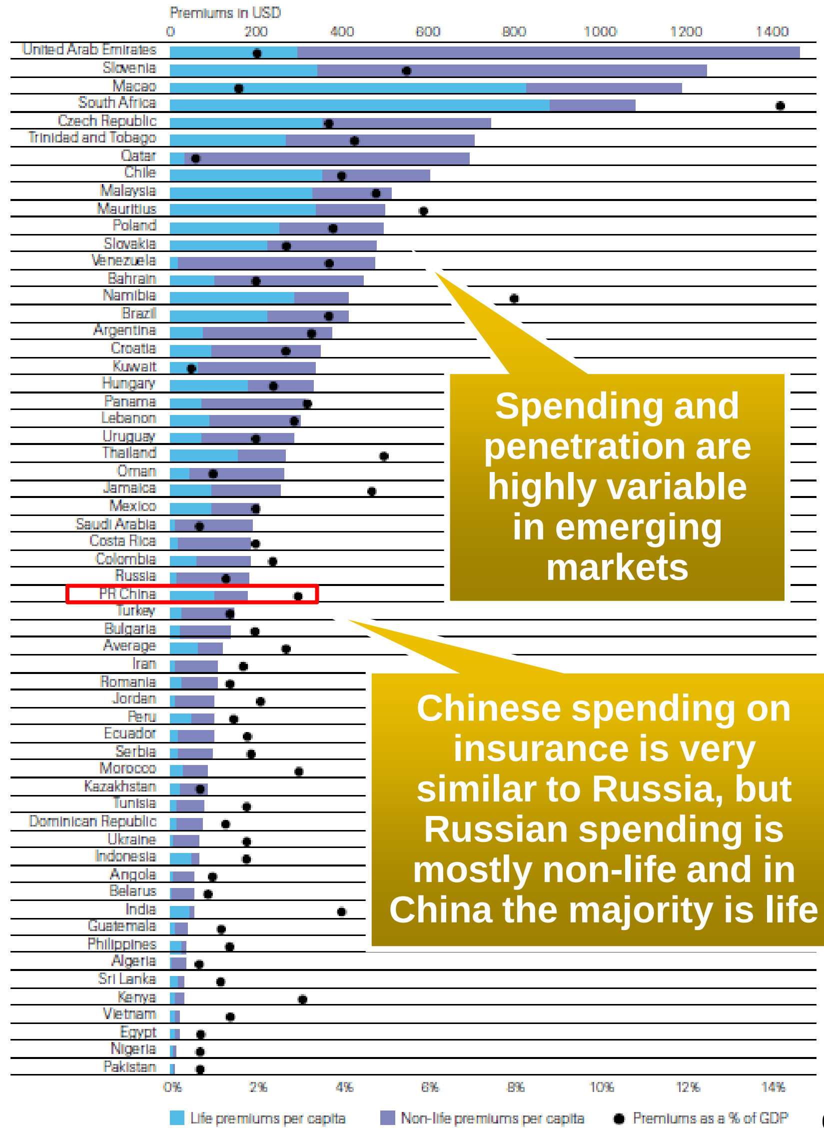
Advanced Markets



Emerging Markets



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

Political Risk in 2011/12: Greatest Business Opportunities Are Often in Risky Nations

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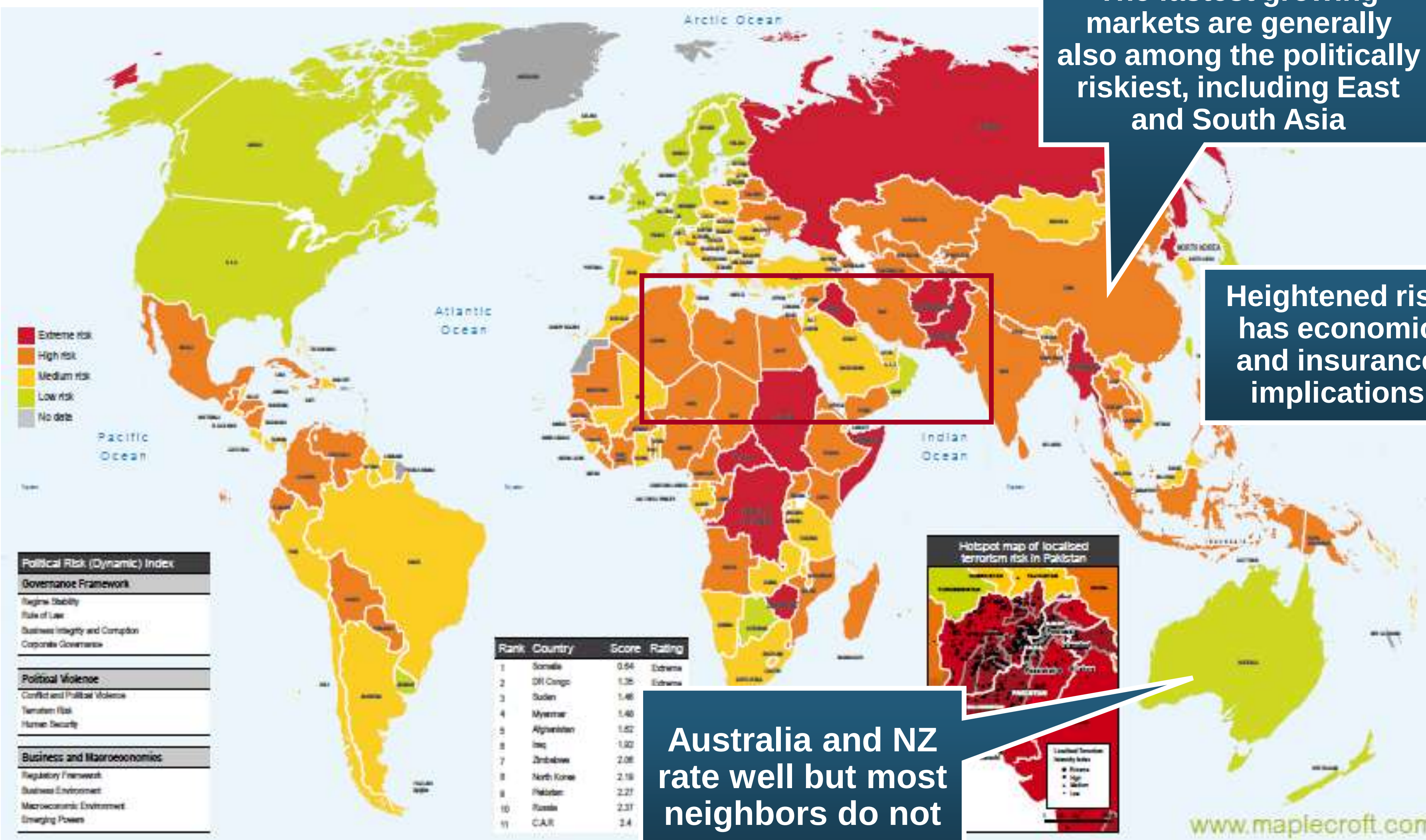


The fastest growing markets are generally also among the politically riskiest, including East and South Asia

Heightened risk has economic and insurance implications

Australia and NZ rate well but most neighbors do not

Source: Maplecroft

Thoughts on Near-Term Risks

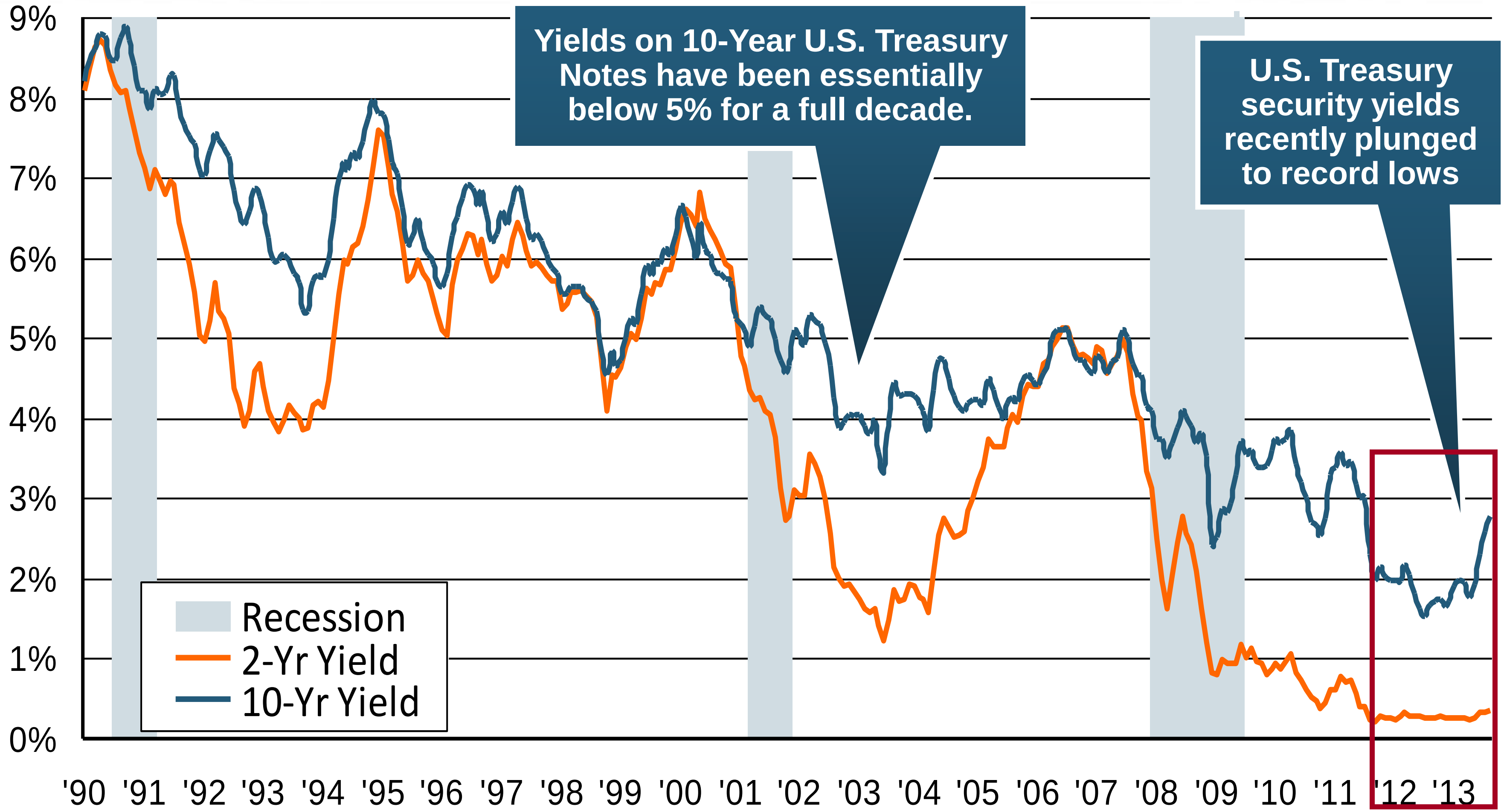
New Risks Pose New Regulatory Questions

Near-Term Risks—Can They Be Managed?

- **Dysfunction in Washington is Unquestionably a Systemic Risk**
  - **Affects every industry**
  - **Institutional investors concerned when dysfunction threatens default**
- **Persistently Low Interest Rates**
- **Rising Catastrophe Loss Trends/Climate Change**
- **Terrorism (TRIA Reauthorization Debate)**
- **Cyber Risk**
- **Big Data/Advanced Data Analytics**
- **Convergence/Alternative Capital in Reinsurance Markets**
- **Proposed New FASB Accounting Rules for Insurance**
- **Insurer Board of Director Governance Issues**
- **Financial Services Regulatory "Black Holes": China**

Sources: Insurance Information Institute.

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



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

*Monthly, constant maturity, nominal rates, through August 2013.

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

Top 16 Most Costly Disasters in U.S. History

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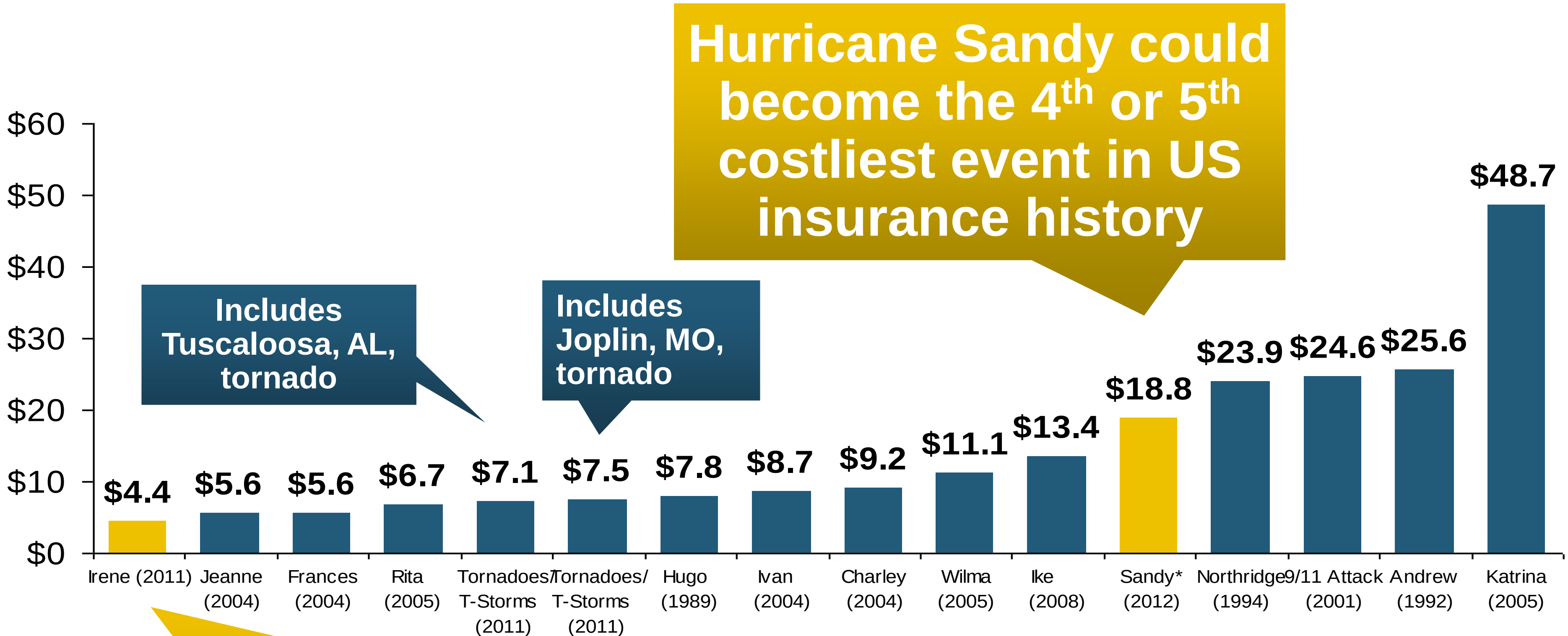
(Insured Losses, 2012 Dollars, $ Billions)



Hurricane Irene became the 12th most expense hurricane in US history in 2011

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

*PCS estimate as of 4/12/13.

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

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

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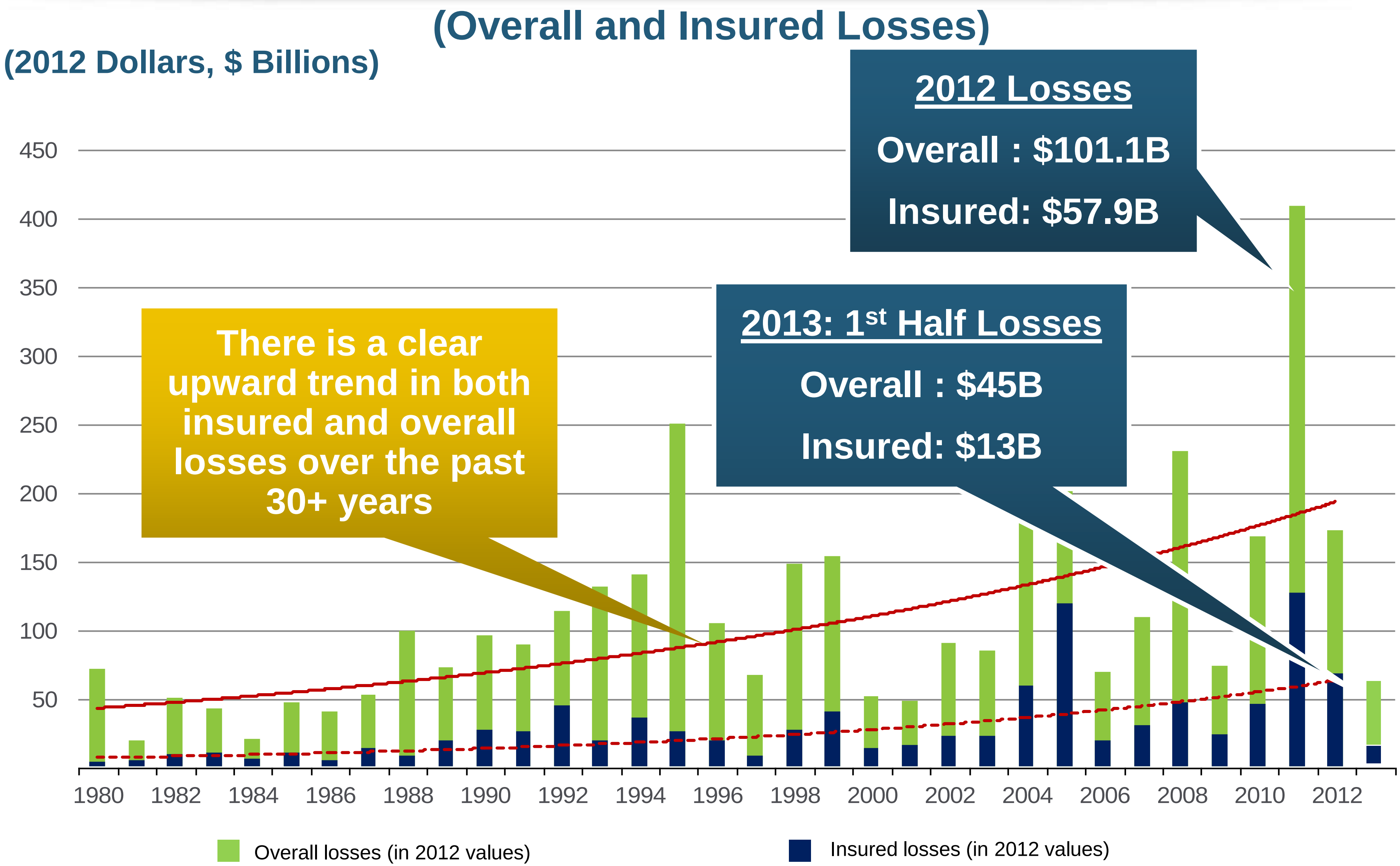

*Through June 30, 2013.
Source: MR NatCat*SERVICE*

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

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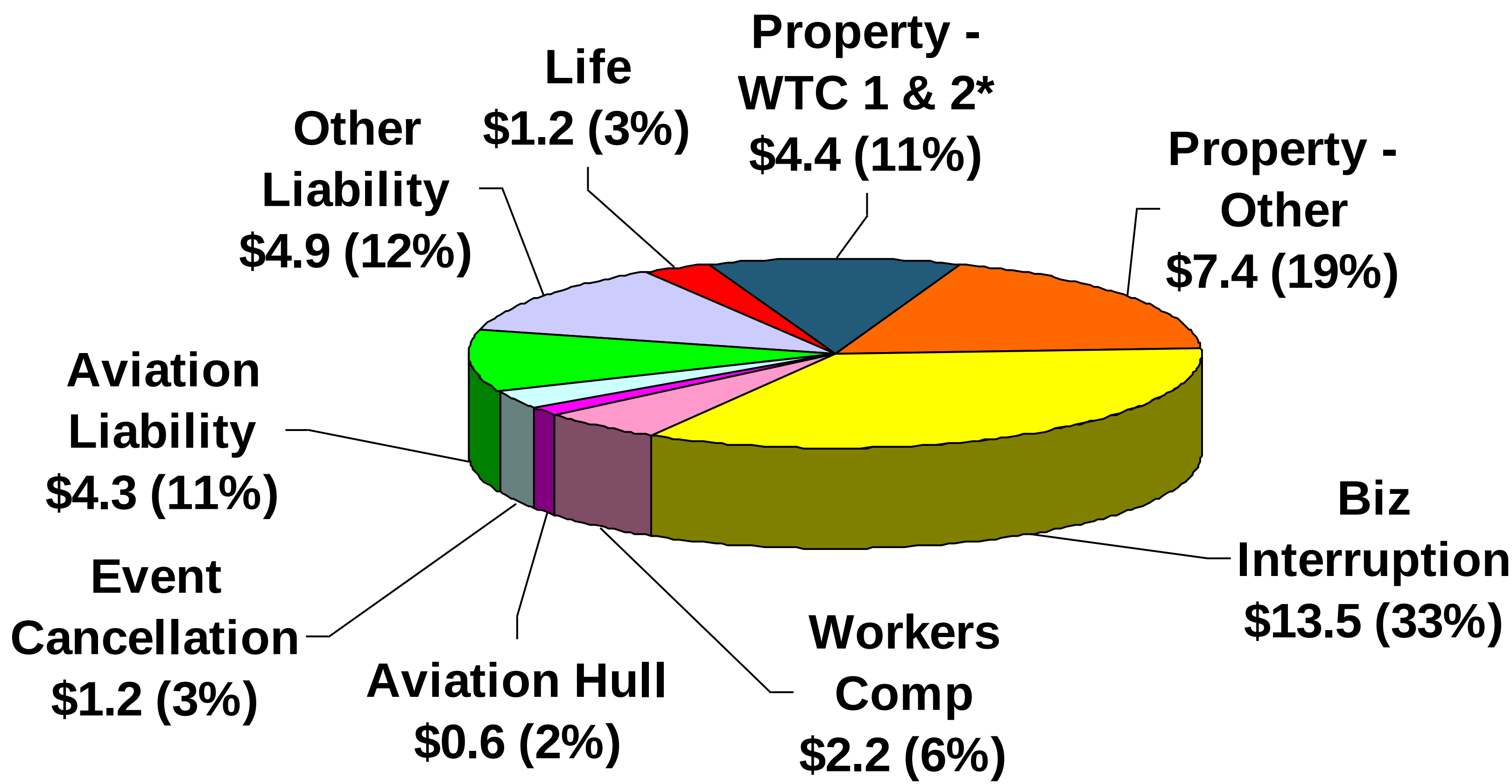
($ Billions)



Total Insured Losses Estimate: $40.0B**

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

**$32.5 billion in 2001 dollars.

Source: Insurance Information Institute.

Alternative Capacity as a Percentage of Global Property Catastrophe Reinsurance Limit

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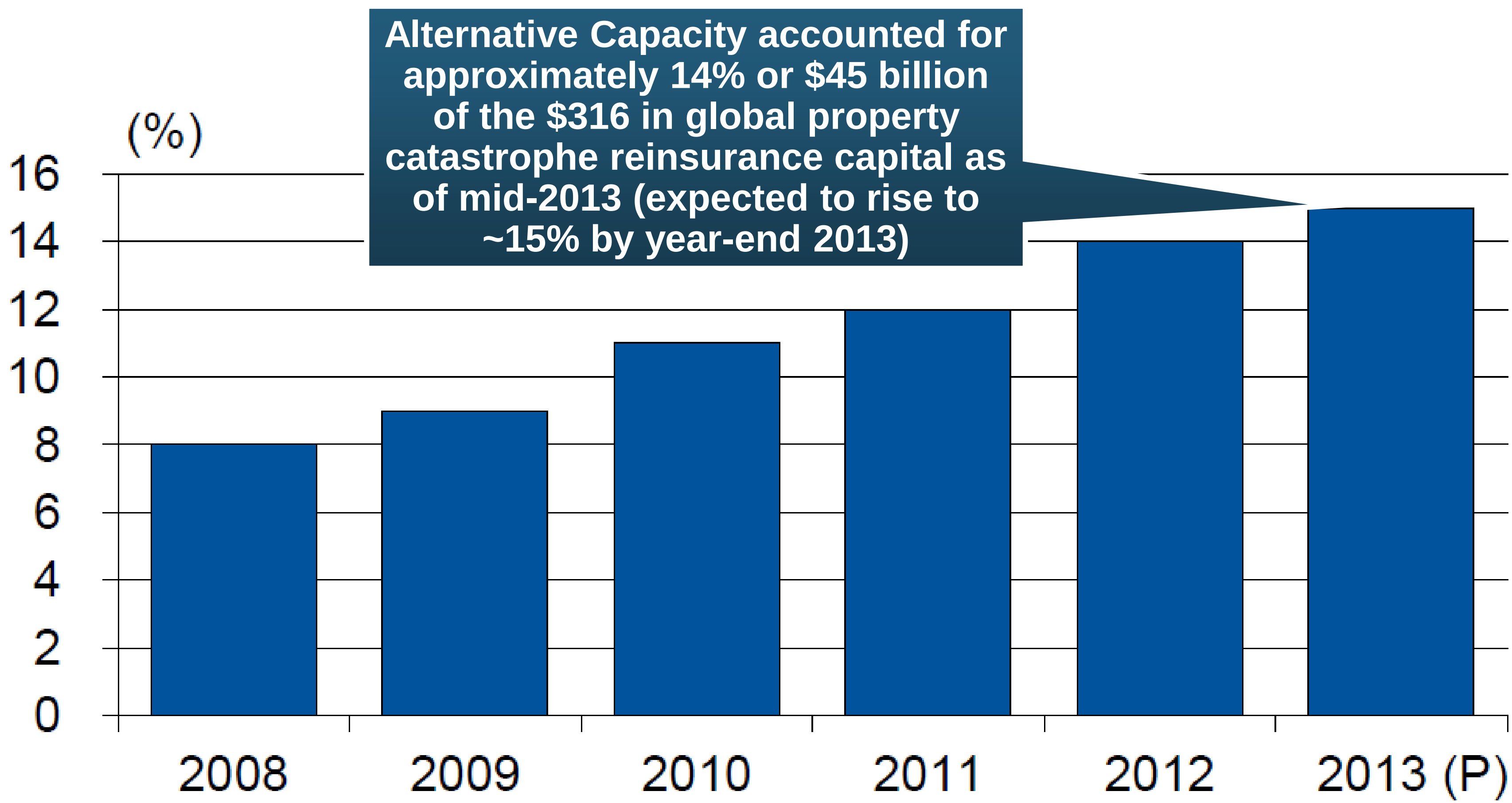
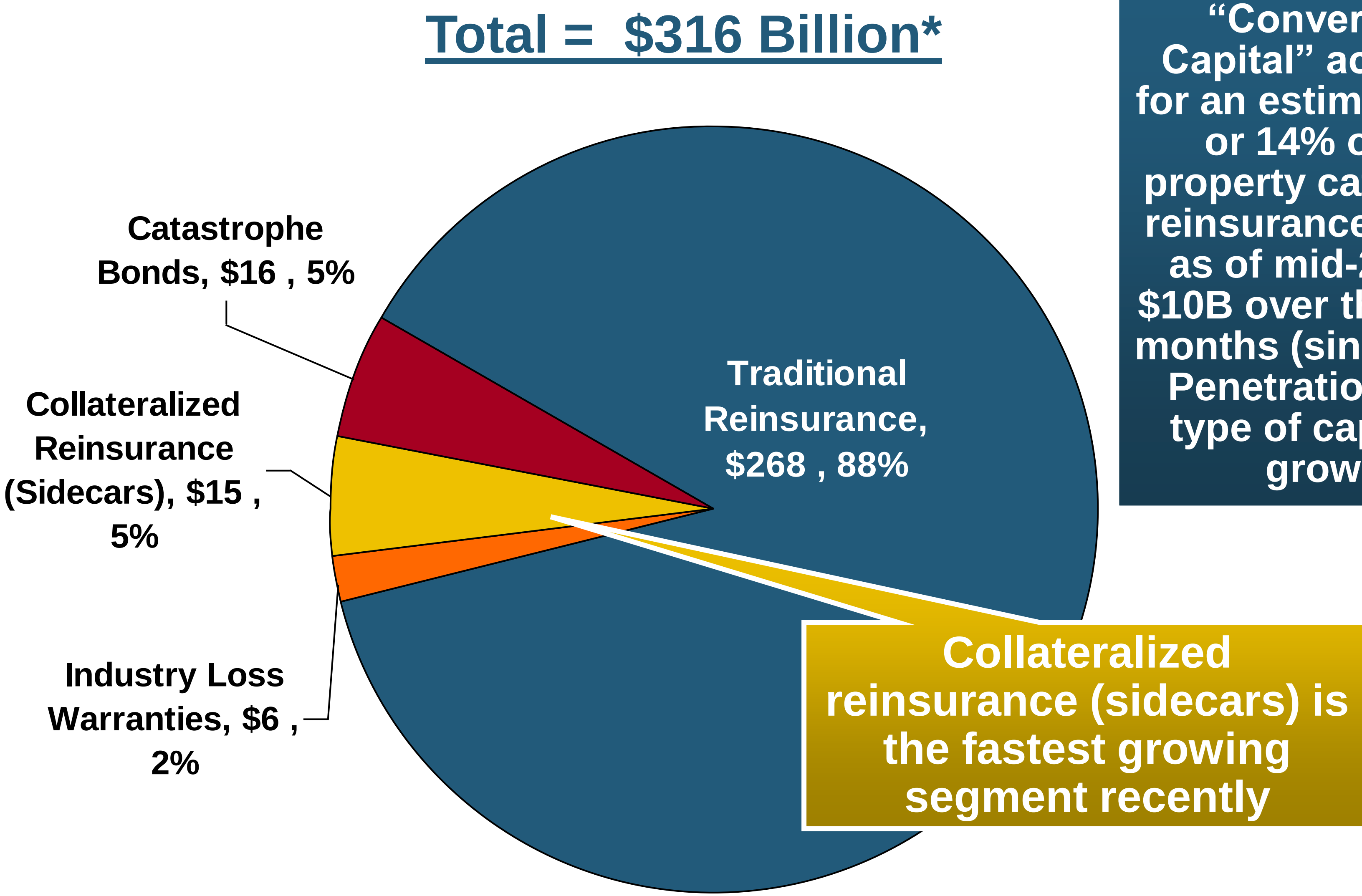
(As of Year End)



Source: Guy Carpenter

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



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

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

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

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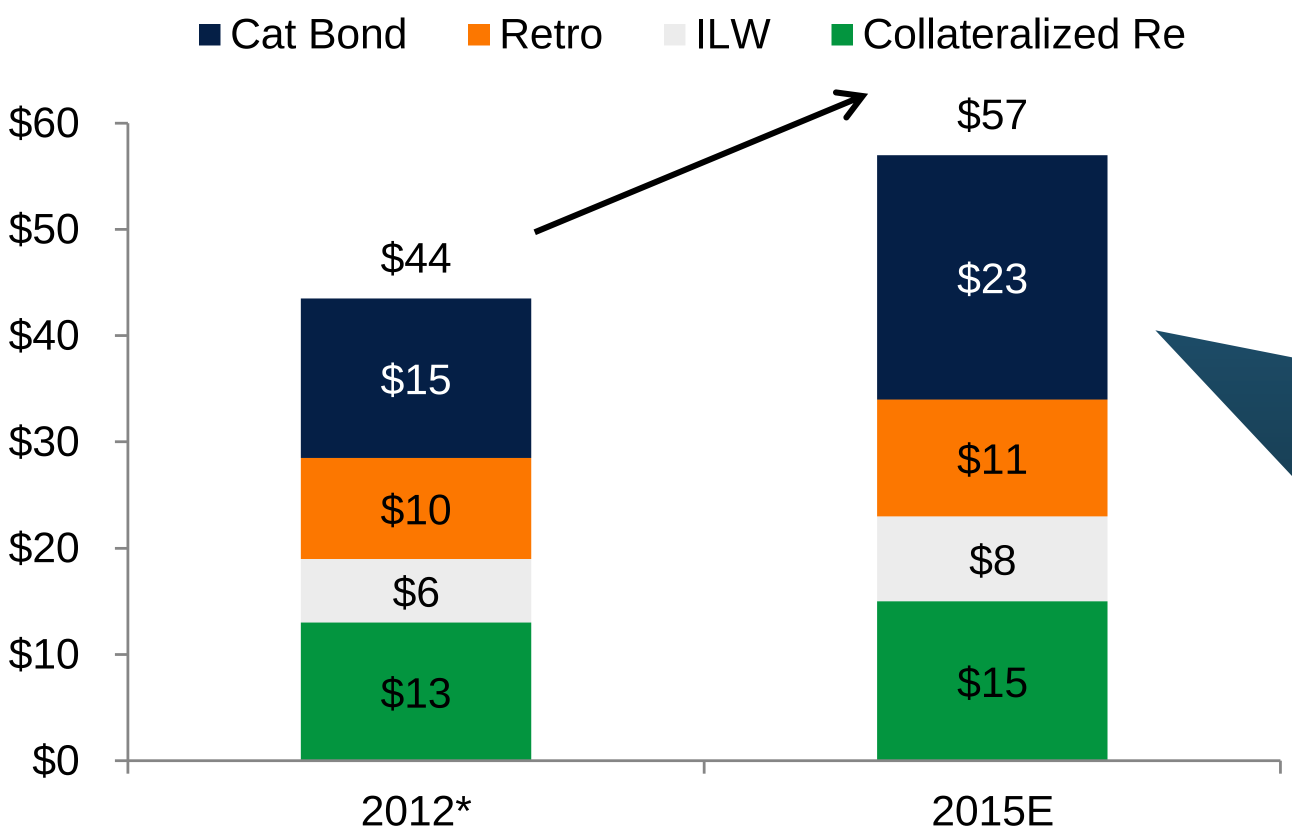
NON-TRADITIONAL P/CAT LIMITS BY TYPE



Source: Guy Carpenter; *As Of Mar-2013

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

Source: Guy Carpenter; Reinsurance Association of America; Insurance Information Institute.

Summary

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- **Insurance Markets Evolve Gradually Whereas Regulation Is Characterized by Waves or Pulses of Activity**
- **These Quantum Changes Exacerbate What Is and Always Will Be an Inherent Tension Between the Regulator and the Regulated**
- **We Have Experienced at Least 8 Regulatory Waves or Pulses Since 1850 in the US**
- **The Next Decade’s Regulatory Thrust is a Confluence of Post-Crisis and Globalization Influences**
- **Insurance and Insurance Regulation Must Both Change at an Accelerating Pace in the Decades Ahead to Remain Relevant in a World Where Economies, Technology, Society and Government Are Changing Rapidly**

Insurance Information Institute Online:

www.iii.org

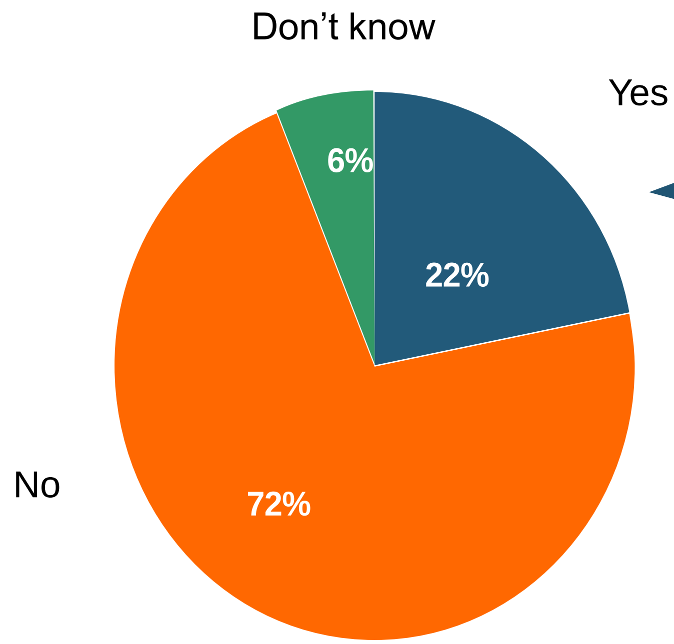
Thank you for your time and your attention!

Twitter: twitter.com/bob_hartwig

Download at www.iii.org/presentations

I.I.I. Poll: Disaster Preparedness

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



More than 20 percent cut back on insurance coverage in expectation of government disaster aid

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

Source: Insurance Information Institute Annual *Pulse* Survey.