

# CURRENT ISSUES IN U.S. REINSURANCE REGULATION

Casualty Actuaries of the Mid-Atlantic Region

Spring Meeting  
Malvern, PA



# Current Legislative and Regulatory Focus

## **Federal**

- Following the financial crisis, the focus is on systemic risk and regulatory reform
  - Dodd-Frank/NRRA
  - FIO
  - FSOC
- Preservation/Expansion of Markets
  - Federal Disaster Financing Role
  - Privatization
    - NFIP
    - Mortgage Reinsurance

# Current Legislative and Regulatory Focus

## **Federal**

- Tax Issues
  - Affiliated Offshore Reinsurance
  - FET
  - FATCA
  - Tax Reform Proposals

# Current Legislative and Regulatory Focus

## State

- Credit for Reinsurance/Collateral Reform
- Natural Catastrophe
- NRRA
- Solvency Modernization Initiative
  - ORSA/ERM
- RBC
  - Catastrophe Risk Charge
  - Credit Risk Charge for Reinsurance Recoverables
  - Underwriting Risk Factor Methodology

# Federal Regulation of Reinsurance?

## Dodd-Frank Wall Street Reform and Consumer Protection Act

- July 21, 2010 signed into law.
- 2,319 pages - 16 titles
- Requires regulators to create 243 rules (11 Federal agencies), conduct 67 studies, and issue 22 periodic reports
- Stated purpose of the legislation:
  - To promote the financial stability of the United States by improving accountability and transparency in the financial system, to end "too big to fail," to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes

# Federal Regulation of Reinsurance?

Dodd-Frank Wall Street Reform and Consumer Protection Act

## NONADMITTED AND REINSURANCE REFORM ACT

- Single regulator by home State for financial solvency purposes for reinsurers.
- Credit for reinsurance decided by cedent's domiciliary regulator.
  - No other state can deny this credit for reinsurance.
- Host State's Preemption of Extraterritorial Regulation
  - Interfering with contractually agreed to arbitration;
  - Requiring specific reinsurance contract terms;
  - Enforcing agreements on terms different than reflected in agreement; and
  - Otherwise applying laws to reinsurance agreements of insurers not domiciled in that State.



# Federal Regulation of Reinsurance?

Dodd-Frank Wall Street Reform and Consumer Protection Act

## FEDERAL INSURANCE OFFICE

- In Treasury Department
- Michael McRaith (former IL Ins. Dept. Director) is first Director of FIO
- Excludes health, LTC and crop insurance
- Authority
  - Monitor industry
  - Non-voting member of FSOC
  - Conduct studies
    - Role of global reinsurance market
    - Impact of Reinsurance Section of NIRA
    - How to modernize/improve regulation – due 1/21/12
  - Recommend insurers as systemically important
  - Run TRIA Program
  - Coordinate/develop federal policy on international matters



# Federal Regulation of Reinsurance?

Dodd-Frank Wall Street Reform and Consumer Protection Act

## FEDERAL INSURANCE OFFICE (Cont.)

- Secretary w/USTR negotiates “covered agreement”
  - Written bi/multilateral recognition agreement that recognizes prudential measure for business of (re)insurance that achieves level of protection for (re)insurance consumers that is substantially equivalent to level of protection achieved under State regulation
    - Outcomes determinative test
  - Must consult with 4 Congressional Committees before, during and after negotiations.
- Director can preempt State measures subject to covered agreement.
  - Savings Clause: Preemption cannot affect State capital or solvency requirement except where State measure = less favorable treatment of non-U.S. insurer
  - Onerous process
    - Before determination of inconsistency: notify and consult with State and USTR + comment period
    - After determination: notify State + 4 Congressional Committees
    - Determination subject to APA and de novo judicial review





# Federal Regulation of Reinsurance?

Financial Stability Oversight Council

## Final Rule and Interpretive Guidance

- Evaluation Framework for Non-bank Financial Institutions
  - (1) Size, (2) Interconnectedness, (3) Substitutability, (4) Leverage, (5) Liquidity and Maturity Mismatch, (6) Existing Regulatory Scrutiny
- Stage 1 Trigger: Size Threshold of \$50B plus one of the following:
  - \$30B in gross notional credit defaults outstanding for which the company is the reference entity
  - \$3.5B in derivative liabilities
  - \$20B of total debt outstanding
  - 15 to 1 leverage ratio, as measured by total consolidated assets (excluding separate accounts) to total equity
  - 10% ratio of short-term debt to total consolidated assets.
- Stage 2 & 3 Quantitative and Qualitative Measures

# Definitions of Systemic Risk

## Financial Stability Board

- “The risk of disruption to the flow of financial services that is (i) caused by an impairment of all or parts of the financial system; and (ii) has the potential to have serious negative consequences for the real economy.”
- Fundamental to this definition is the notion that systemic risk is associated with negative externalities and/or market failure and that a financial institution’s failure or malfunction may impair the operation of the financial system and/or the real economy.

# P&C Reinsurance—Not a Significant Source of Systemic Risk

Federal Reserve Chairman Ben Bernanke

“The possibility that the failure of a large interconnected firm could lead to a breakdown in the wider financial system; systemic risks threaten the stability of the financial system as a whole and consequently the broader economy, not just that of one or two institutions.”

# (Re)insurance Business Model

The (re)insurance business model is not a source of systemic risk.

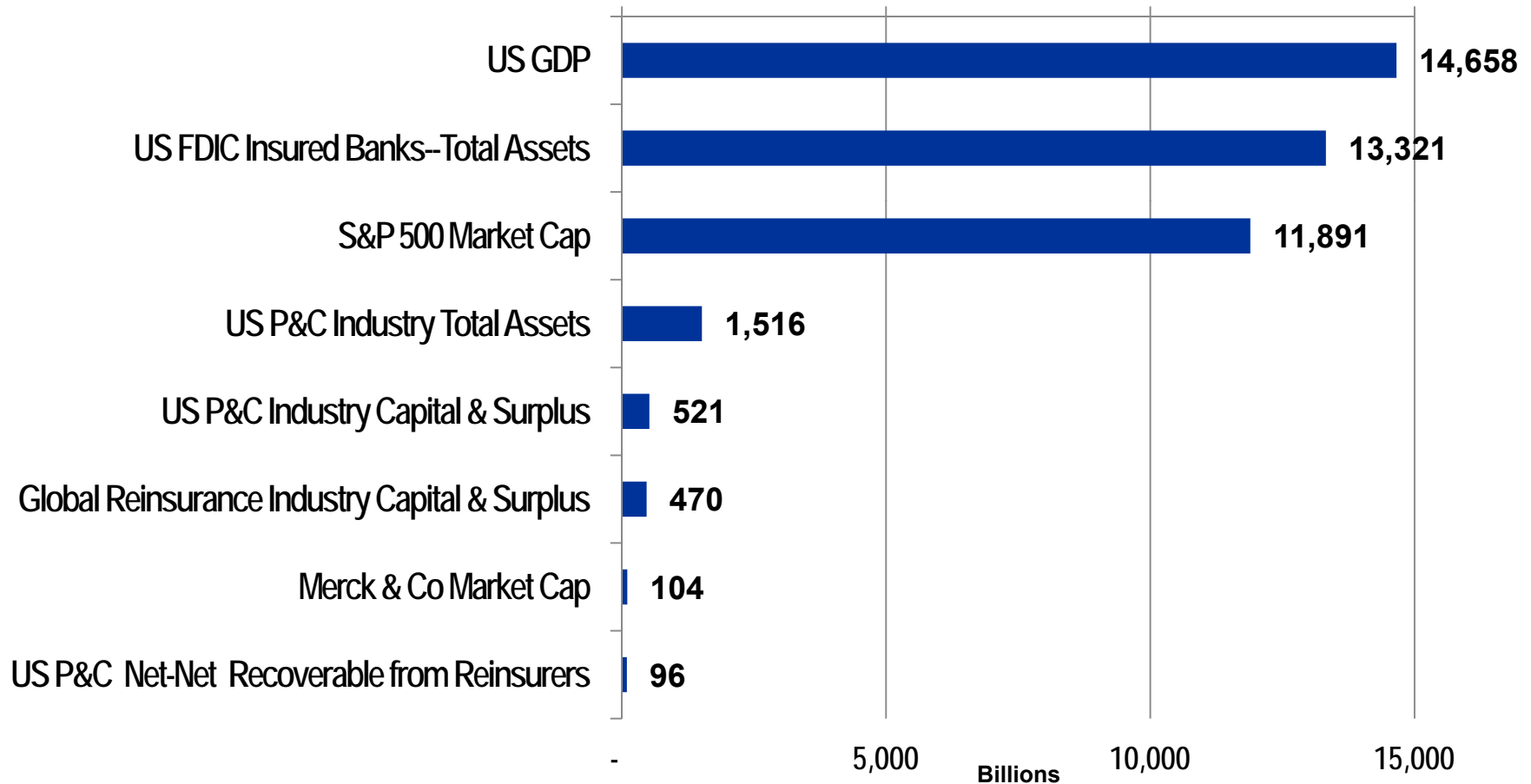
- It is fundamentally different from other financial institutions.
- Inverted production cycle: obligations are pre-funded at the inception of the policyholder relationship.
- Lack of leverage limits interconnectedness.
- (Re)insurance obligations are not callable. Cash outflows may only be triggered by an external insured event.
- Insured loss events are not correlated with financial crises or economic cycles.

# FSB Systemic Risk Attributes

The FSB has identified four primary attributes for the evaluation of systemic risk

- Size
- Interconnectedness
- Substitutability
- Time / Liquidity

**Size** - Reinsurance recoverables are not systemic risk amounts relative to U.S. financial markets or economy.



**Size** - Small relative size / reinsurance credit risk is further reduced by offsetting amounts.

## U.S. P&C Industry Exposure to Reinsurance Recoverables

### 2009 Results

**\$ Millions**

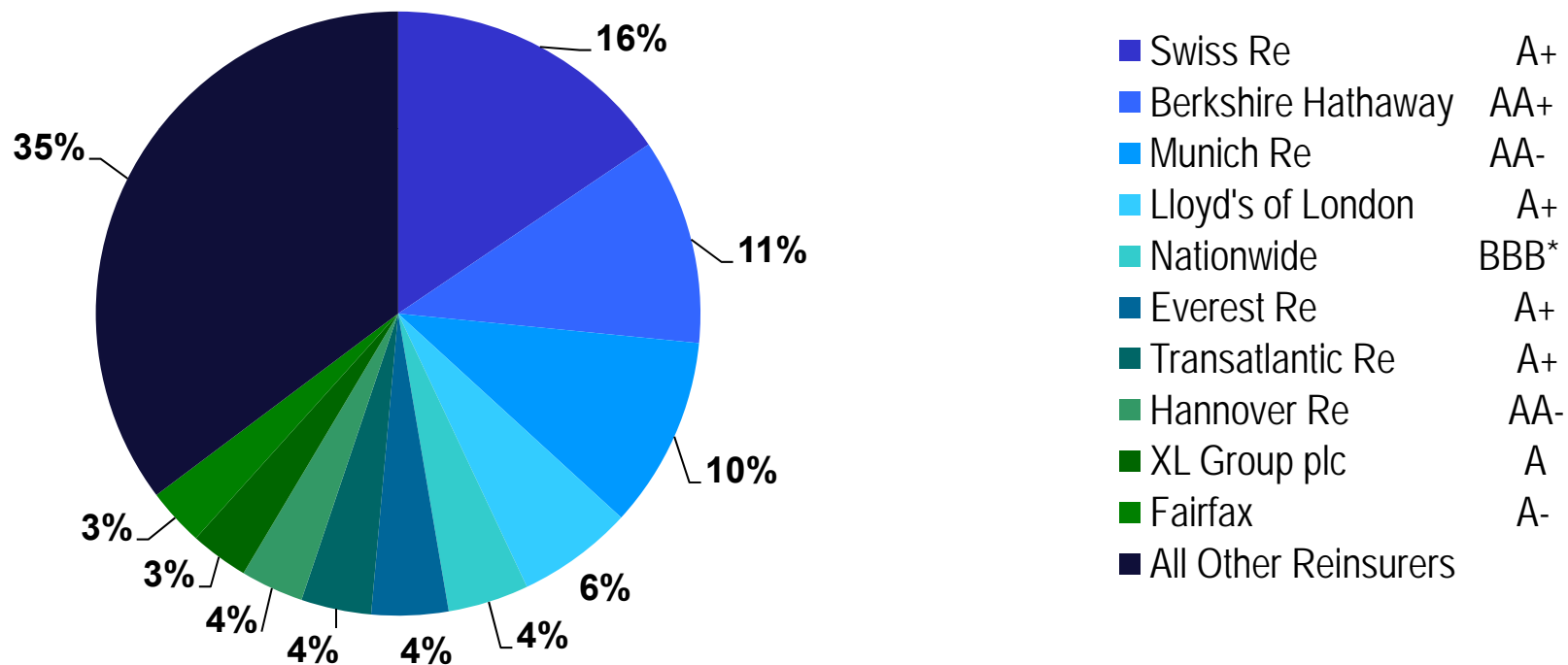
Total Assets	1,515,926
Reinsurance Recoverables on Paid Losses	14,444
Policyholders' Surplus	520,600
Net Recoverables (Paid, Case & IBNR, net of amounts owed to reinsurer)	233,816
Less Funds Held	23,502
Less LOCs, Trust Funds, & Other Collateral	114,654
Equals Net Net Recoverable	95,661

### Recoverables Analysis

Net Net Recoverable as % of PHS	18.4%
Net Net Recoverable as % of Total Assets	6.3%
Recoverable on Paid Loss as % of PHS	2.8%
Recoverable on Paid Loss as % of Total Assets	1.0%

**Interconnectedness** - Insurance risk is spread broadly and globally.  
 Reinsurance is a net credit enhancement for many cedents.

### Top US P&C Groups 3<sup>rd</sup> Party Reinsurance Net-Net Recoverables Concentration



\*Note: Nationwide's AM Best Rating = A+. Approximately 90% of this net-net recoverable is due from Nationwide Indemnity Co., an entity used to run off asbestos and environmental obligations.

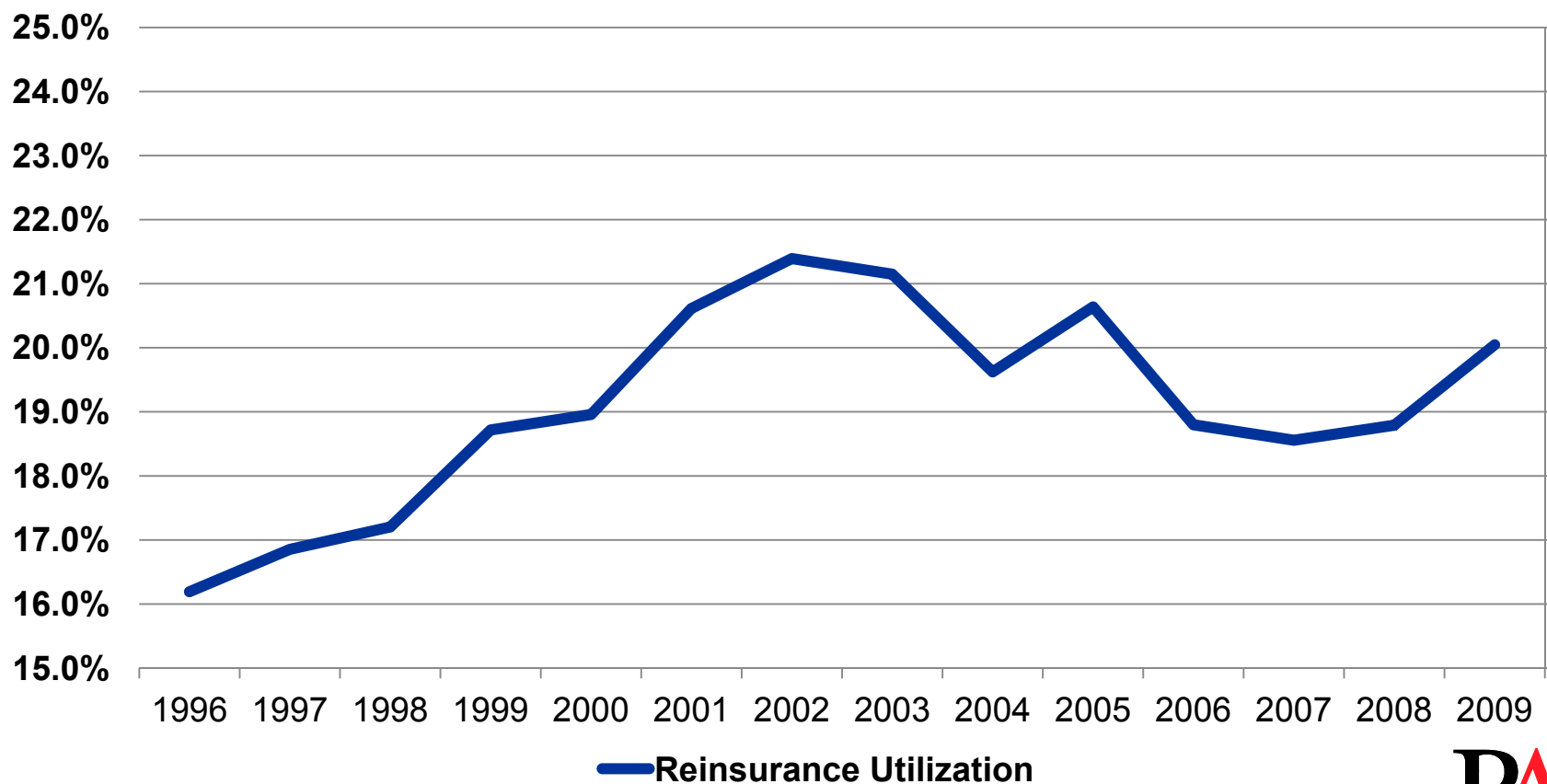




## Interconnectedness & Substitutability

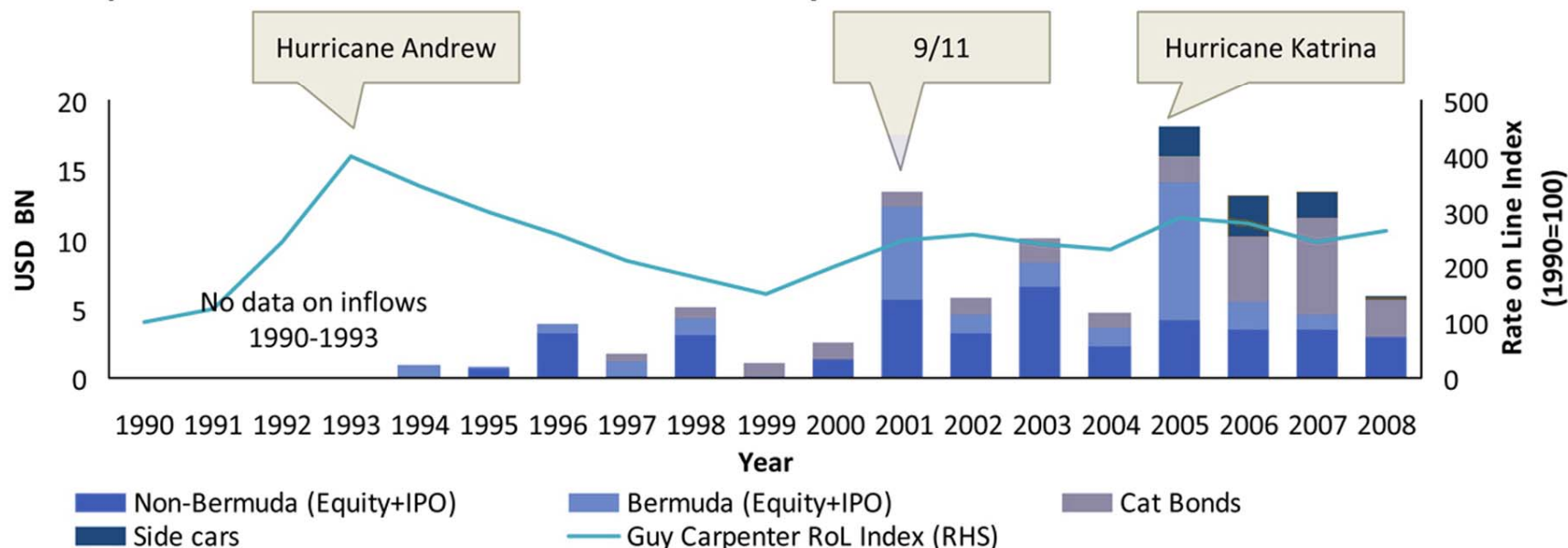
P&C industry cessions to the global reinsurance market are only 20% of gross premium.

### U.S. P&C Industry: Reinsurance Utilization Rates



## New capital inflow into reinsurance shows high substitutability

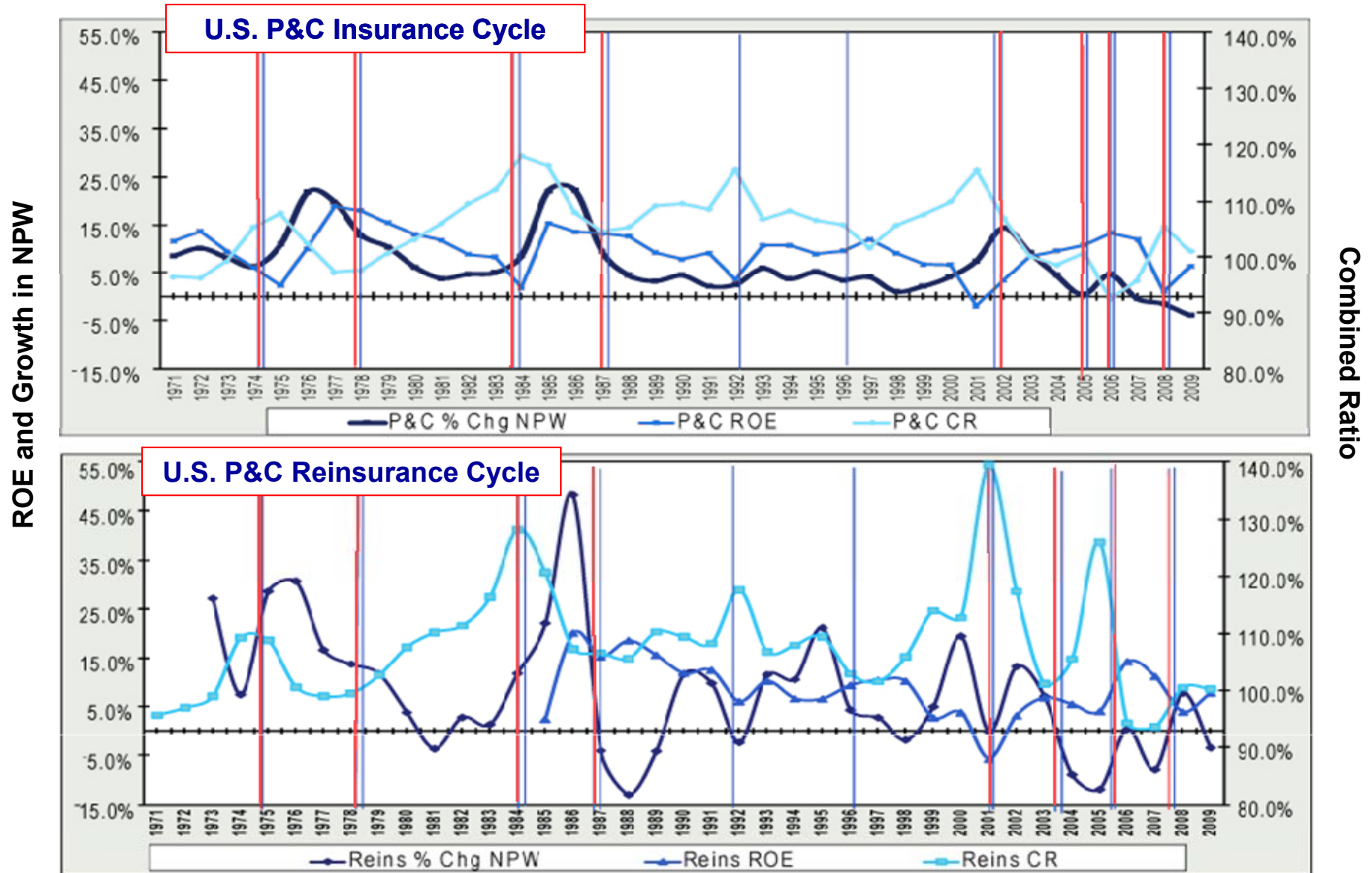
### New capital flows into nat cat reinsurance industry and nat cat reinsurance rates



- Reinsurance rates increase for years following big catastrophes
- This attracts steady inflow of capital in the industry through new entrants or capital increases of existing reinsurers (including side cars and cat bonds)
- In addition, capital base of reinsurers is also progressively rebuilt after large natural catastrophes through the higher reinsurance rates

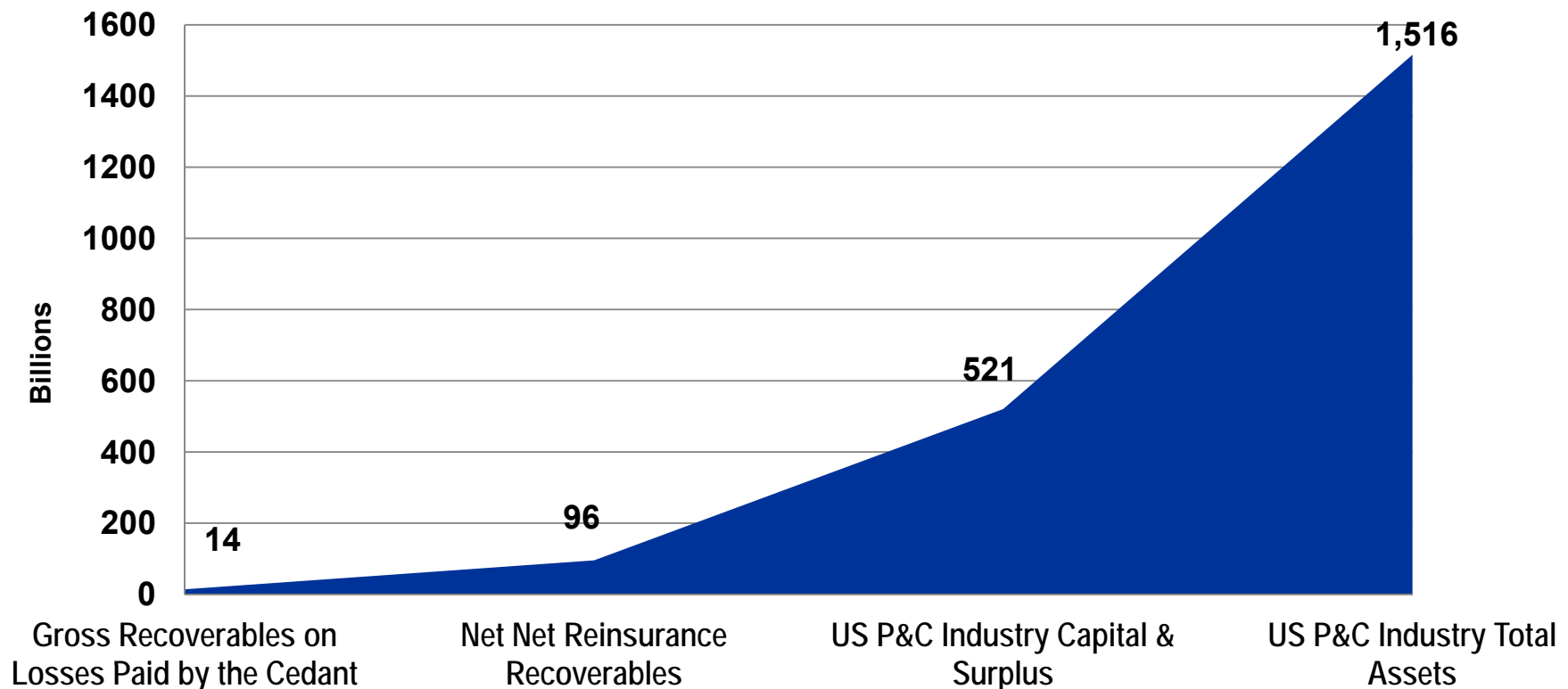
**Reinsurance capacity has always increased after natural catastrophes – insurance capacity is highly substitutable**

Substitutability - Capital flows follow the reinsurance cycle.  
 Reinsurance absorbs insurance industry volatility and adds stability.



**Time/Liquidity** - (Re)insurance obligations are not callable, significantly limiting the systemic risk potential.

## US P&C Recoverables on Paid Losses Compared to Surplus and Assets

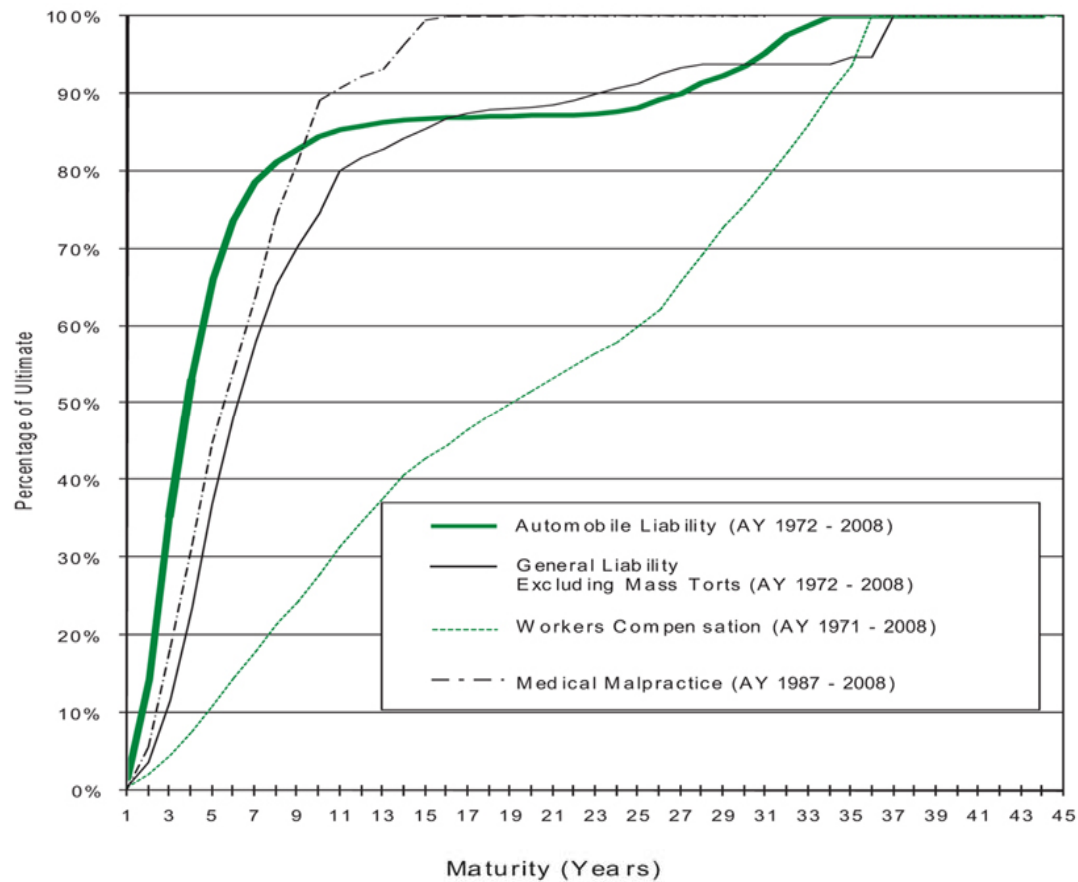


\$14 Billion Reinsurance Recoverable on Paid Losses are the only amounts currently due. Reflects the illiquid nature of insurance and reinsurance obligations.



Time/Liquidity - Liability reinsurance losses emerge over many years.

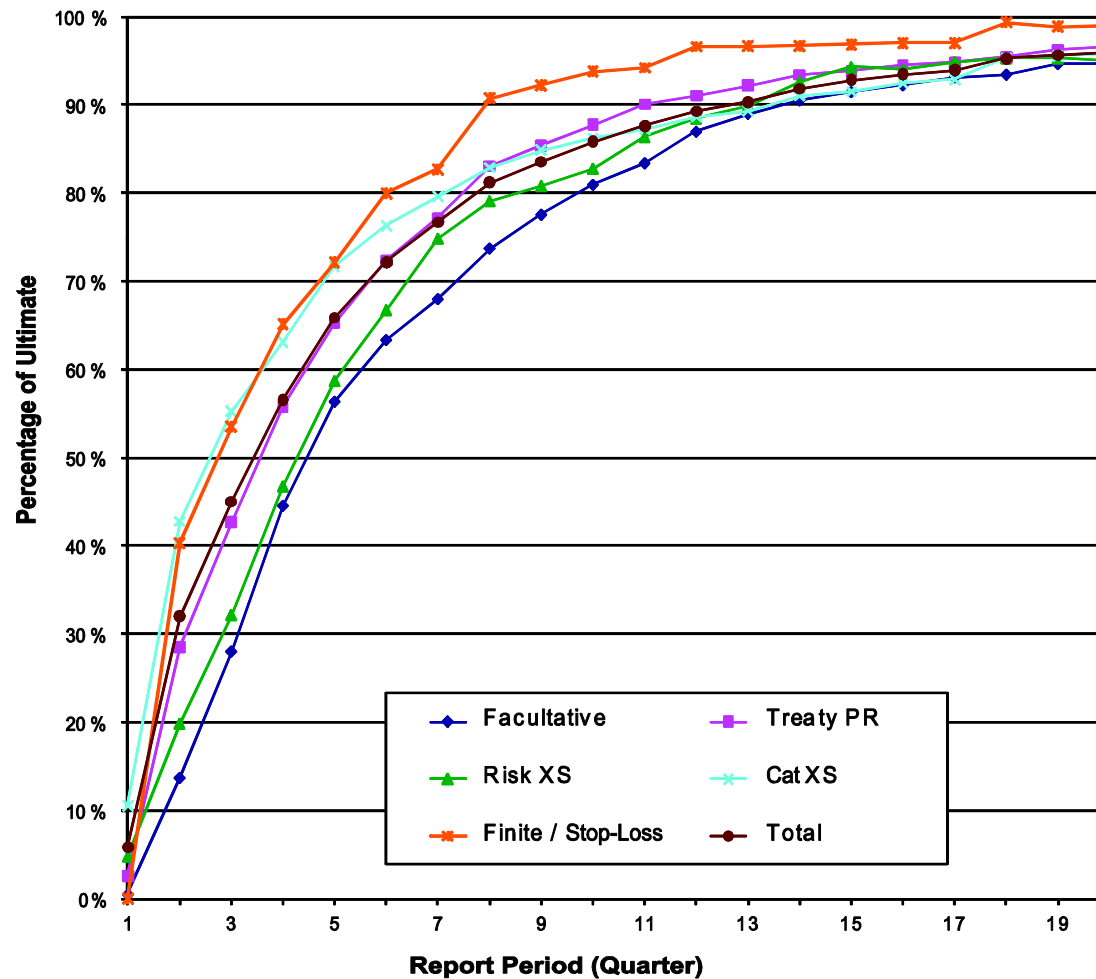
## Historical Loss Development Paid Losses Excess Reinsurance




# Time / Liquidity

Reinsured property catastrophe losses also emerge more slowly than might be expected.

### Historical Net Paid Loss Development Mature Events

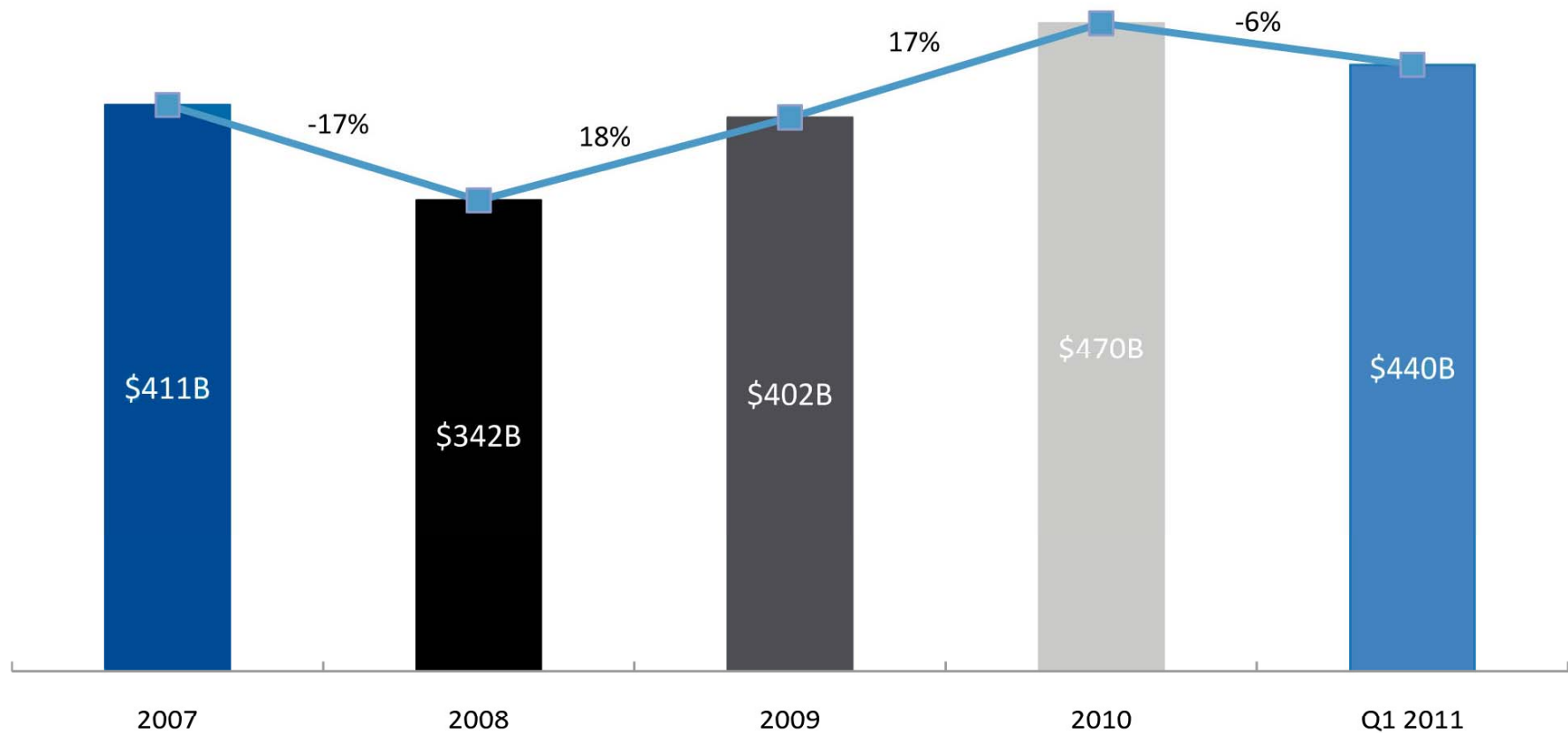




# Assumptions Underlying A Global Reinsurance Stress Test Scenario

Reinsurer capital was minimally impacted by the financial crisis. It recovered quickly and remains adequate for demand.


### Change in Reinsurer Capital



Source: Individual Company Reports, Aon Benfield Analytics







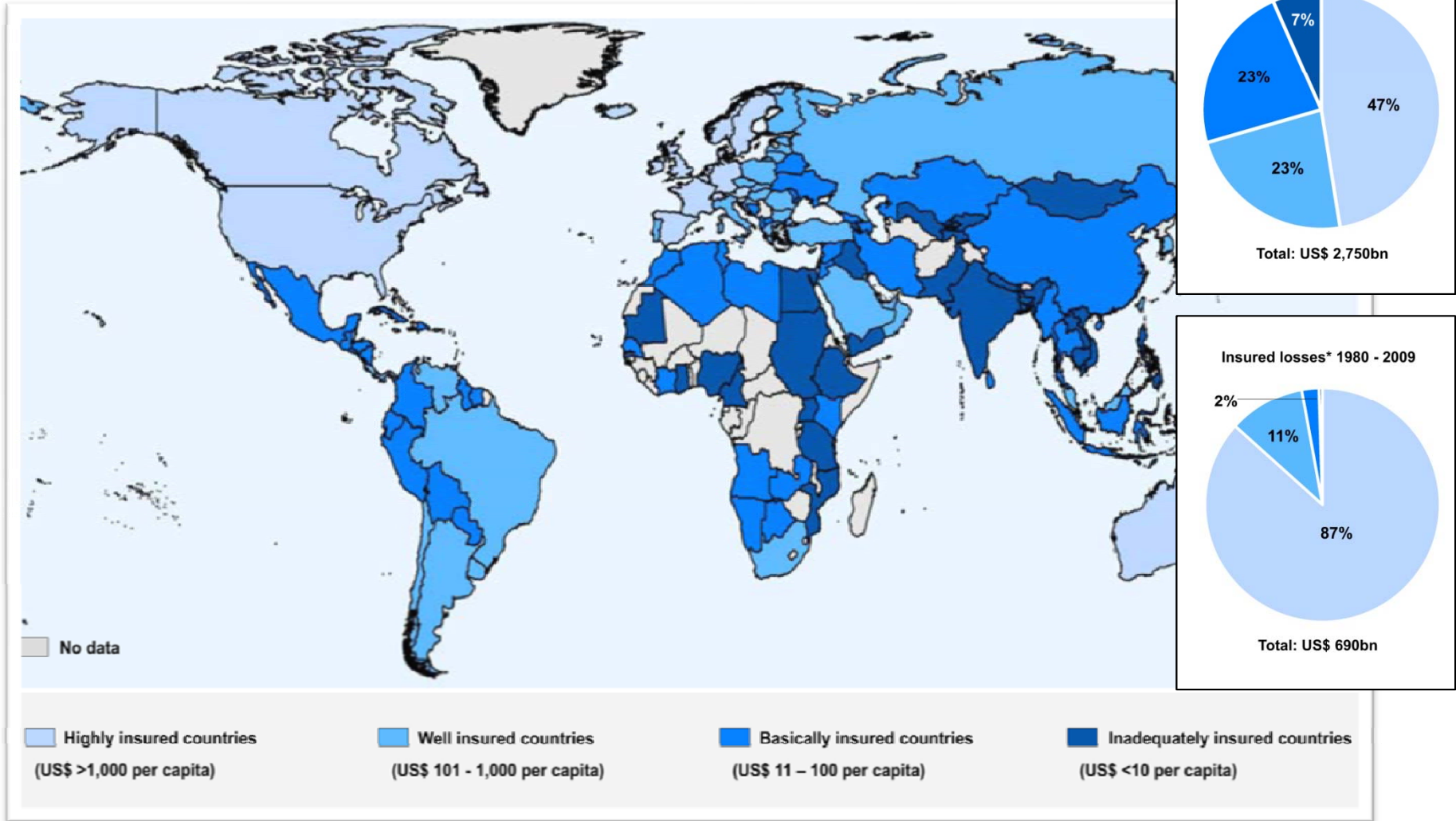
Reinsurers' share of a catastrophe loss event ranges between 5% and 20% of the total economic loss.

**The Range can be impacted by:**

- type of reinsurance (XOL v. QS)
- type of peril (take-up rate/exclusions)
  - e.g. Earthquake/Flood
- location (insurance penetration)
  - e.g. developed v. developing economies
- level of government participation in the reinsurance market

# Natural Catastrophes in differently insured countries

Classification of the world by property insurance premium (non-life including health) per capita

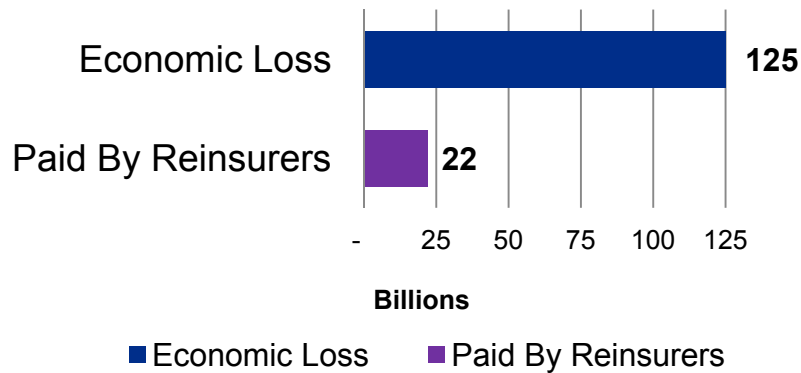


Source: MR NatCatSERVICE as at July 2010

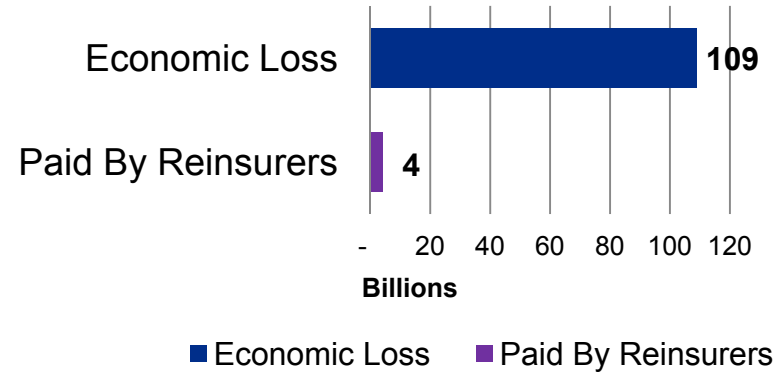
# Economic Losses are 5 to 20 Times Greater than Reinsured Losses

Reinsurance is not nearly as significant a source of risk compared to uninsured loss.

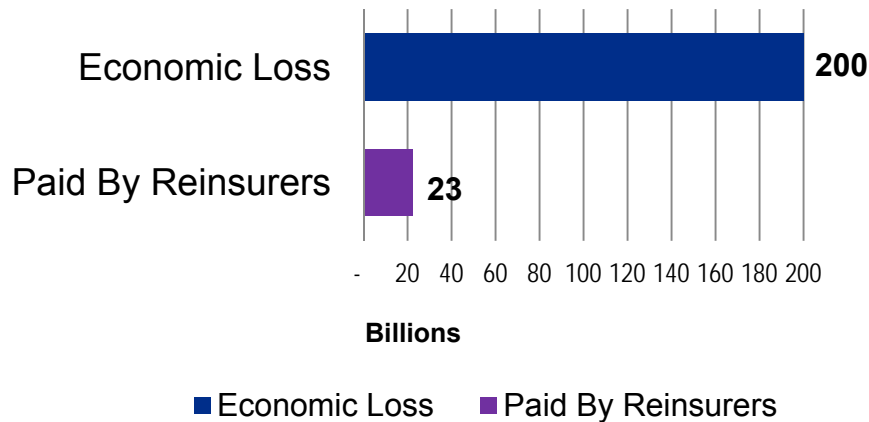
## Hurricane Katrina



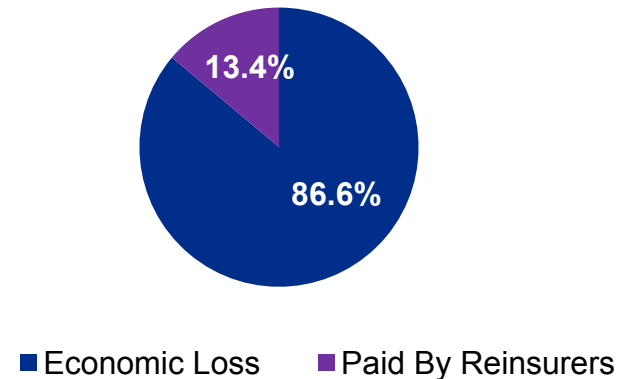
## U.S. 1-in-250 Yr EQE



## 9/11/2001 Terrorist Attack



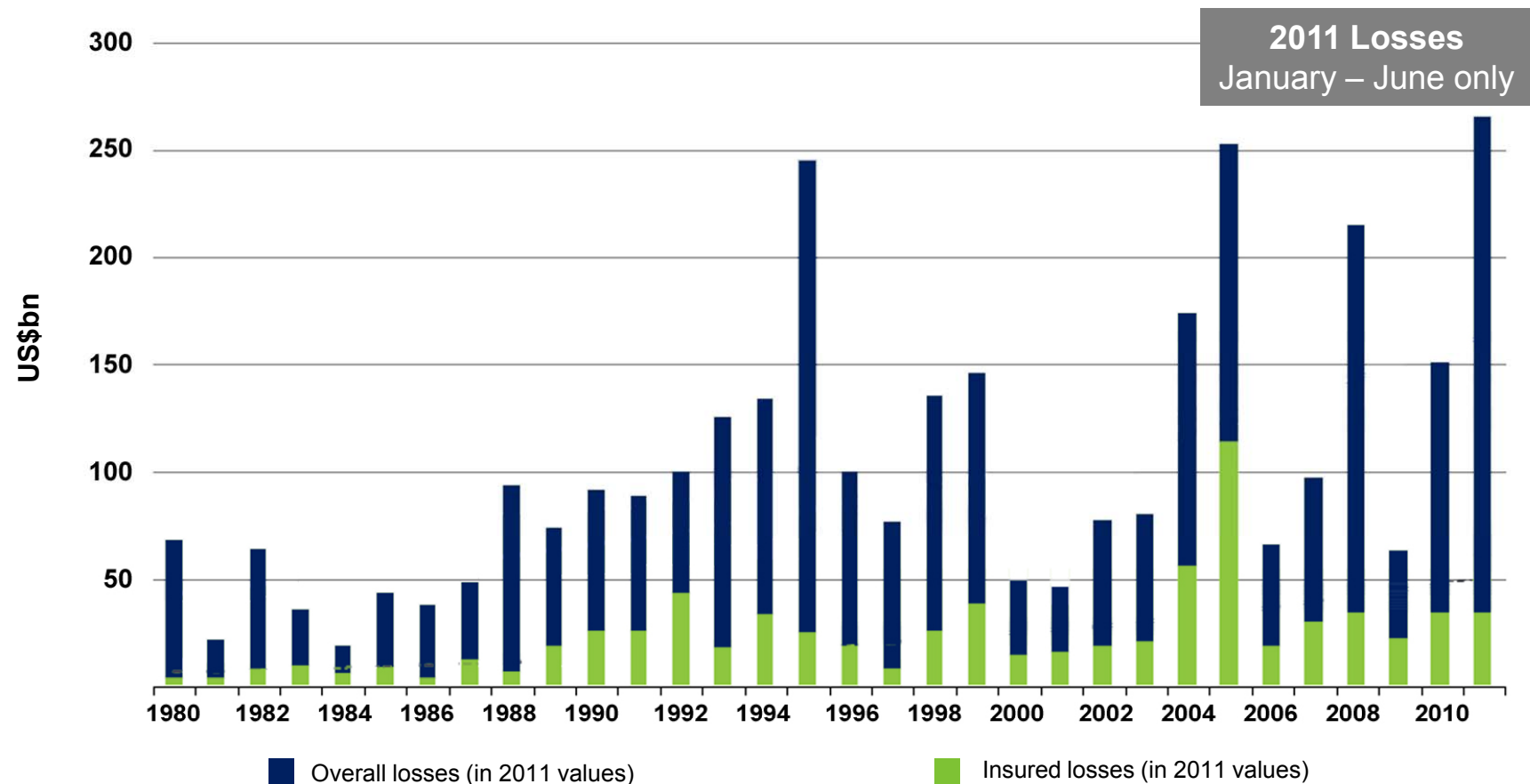
## Average of Significant Historical Events



# Worldwide Natural Disasters 1980 - 2011

## Overall Economic versus Insured Losses

Insured losses are a small portion of economic losses: Reinsurance loss is an even smaller portion.

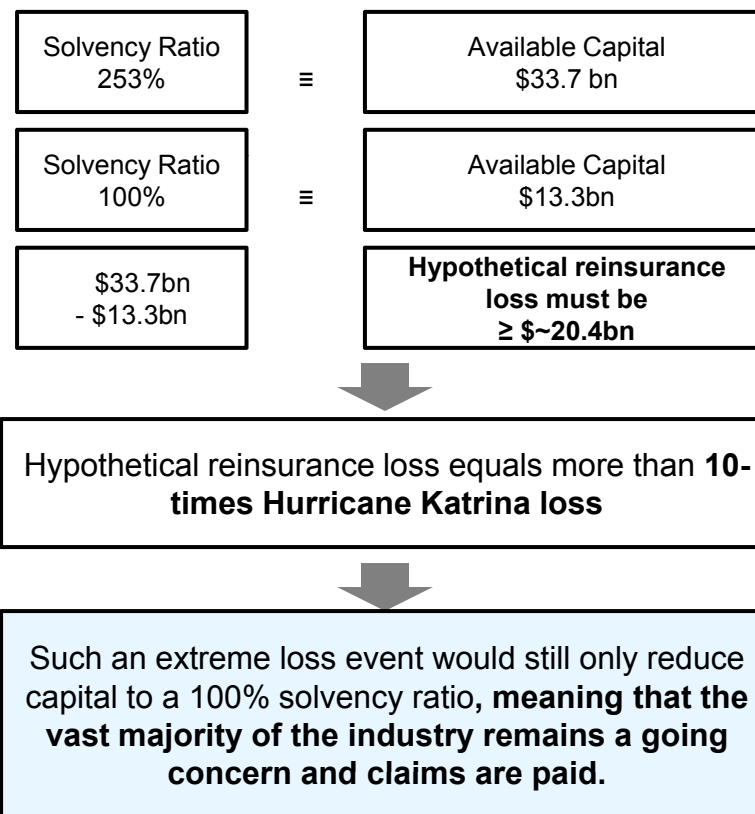




**Stress Test Scenario:  
100% Solvency Ratio**

## Creating an extreme scenario: What would it take to bring down a major reinsurer?

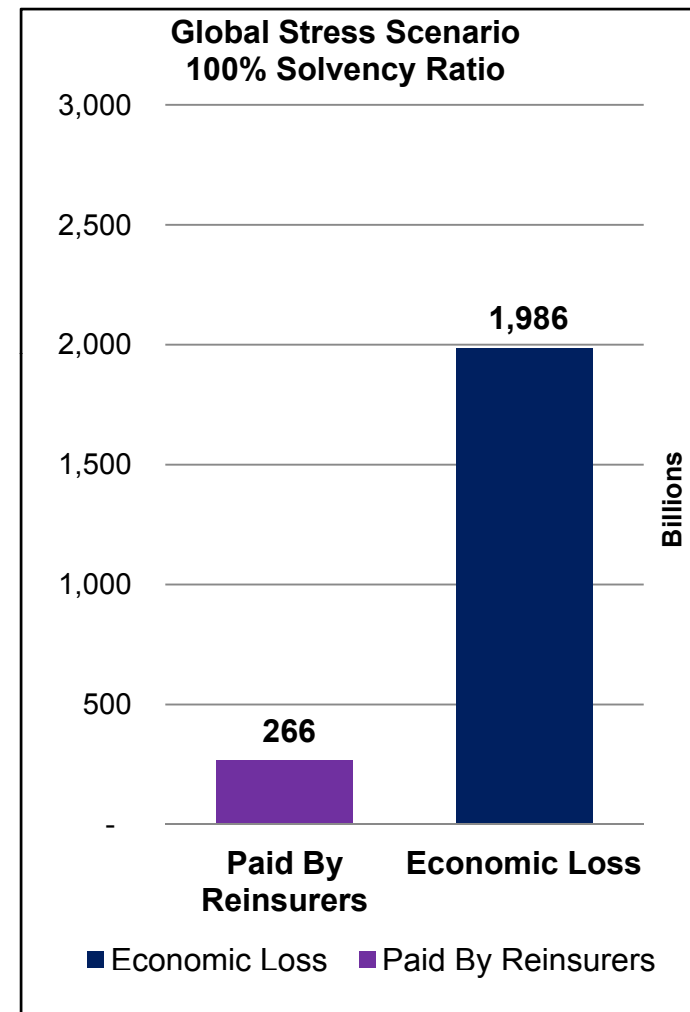
- To start with: let's focus on a leading global reinsurer to see **what amount of losses would be needed to reduce its capital base to 100% of the solvency ratio**. Let's use published data for Munich Re and Swiss Re (the global TOP2) and think of this **hypothetical reinsurer as a simple average of the two market leaders** (thus all numbers used in this example will be based on a simple average of the respective Munich Re and Swiss Re number).
- Taking into account an average 2009 solvency ratio of 253% for this hypothetical reinsurer and available capital of \$33.7 bn., a fall to the 100% solvency ratio level (capital at \$13.3 bn.) would imply a cumulated loss event in the magnitude of \$~20.4 bn.
- This would imply a loss more than ten times the loss from Hurricane Katrina (~\$1.9bn. for Munich Re and Swiss Re on average), the by far largest (re)insured loss event in history.
- Thus, it would take such an extremely large loss event (or equivalently, a series of very large loss events taking place within a short period of time) just to bring the level of capital to 100% of the solvency margin. One should therefore extend this stress scenario to the entire industry to see what level of economic loss would cause the whole reinsurance industry's capital to fall to a 100% solvency ratio level.



## Extreme scenario at 100% solvency ratio shows: Respective economic loss would by far exceed the reinsurance industry loss.

- Assuming similar solvency ratios<sup>1</sup> for the rest of the industry and using numbers on total industry capital<sup>2</sup>, it would take a loss to the reinsurance industry of \$~266.1 bn. to create such a scenario that reduces industry capital to a 100% solvency ratio level.
- In contrast to these already very large numbers, the estimated **total economic loss** from such a series of extreme events is likely to be close to **\$1,986 bn.** (for comparison again: the economic loss from Hurricane Katrina was \$~125 bn.).
- All of the Great Natural Catastrophes that have occurred World-wide from 1950 – 2010 amount to \$2,100 bn.** (adjusted to 2010 values), which is about the size of loss from a series of events occurring in a single year that would be needed to bring industry capital down to a 100% solvency ratio

- The respective total economic loss of this extreme scenario would by far exceed the reinsurance industry loss. Moreover at a 100% solvency ratio, the reinsurance industry would not see widespread default as the existing capital base and reserves would be sufficient to pay the claims.**



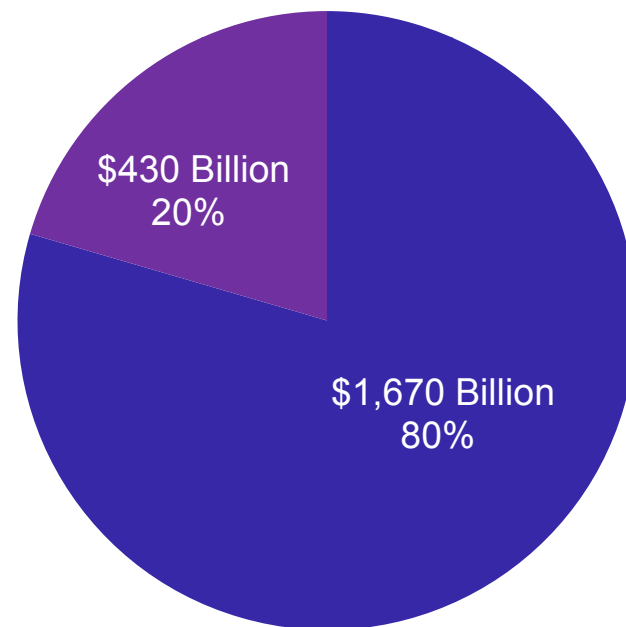
1) clearly a simplifying assumption, as solvency ratios differ between reinsurers; 2) taken from Aon Benfield's estimate that global reinsurance capital is \$440 bn.

Source: RAA Analysis Based on Underlying Assumptions Provided by a Munich Re and Swiss Re Analysis

## Great natural catastrophes worldwide 1950-2010

The total economic losses used in the global stress test are greater than all of the great natural catastrophes worldwide between 1950-2010.

**Total Economic Loss of \$2,100 Billion  
(Adjusted to 2010 Values)**



■ Uninsured Losses ■ Insured Losses

Source: Munich Re Nat Cat SERVICE, As of January 2011


**RAA**





# Stress Test Scenario: 40% Solvency Ratio

Extreme Stress Test Scenario Analysis	Swiss Re / Munich Re Combined	Global Industry
	\$ in Billions	
Solvency Ratio 253%	33.7	440.0
Solvency Ratio 100%	13.3	173.9
Solvency Ratio 40%	5.3	69.6
Implied Cuml. Loss @ 100%	20.4	266.1
Implied Cuml. Loss @ 40%	28.4	370.4



Economic Loss Scenarios Needed to Reduce Industry Capital to 100% of Solvency Ratio			Example Type of Events
	Global Re Loss	Global Economic Loss	
Reins Loss = 20% of Economic Loss	102.0	1,330.4	Hurricanes (U.S. /Developed Economies)
Reins Loss = 13.4% of Economic Loss	152.2	1,985.7	Mix of Global Events
Reins Loss = 5.5% of Economic Loss	370.8	4,837.9	Earthquake/Flood w/low take-up rate

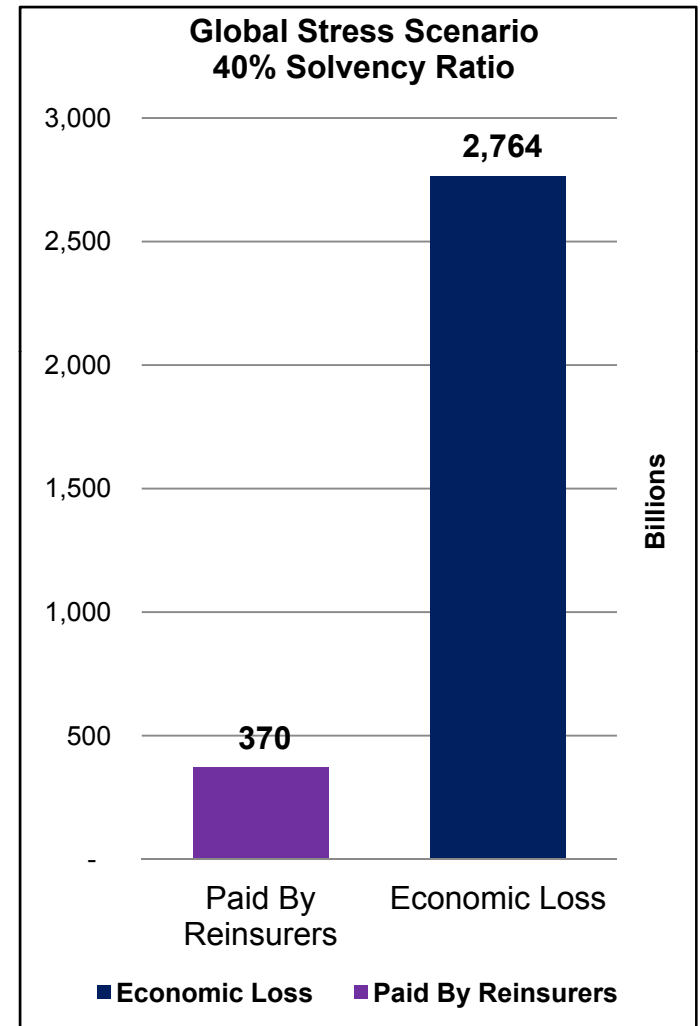
Economic Loss Scenarios Needed to Reduce Industry Capital to 40% of Solvency Ratio			Example Type of Events
Reins Loss = 20% of Economic Loss	142.0	1,852.2	Hurricanes (U.S. /Developed Economies)
Reins Loss = 13.4% of Economic Loss	211.9	2,764.4	Mix of Global Events
Reins Loss = 5.5% of Economic Loss	516.2	6,735.2	Earthquake/Flood w/low take-up rate

## Extreme scenario at 40% solvency ratio shows: Respective economic loss would by far exceed the reinsurance industry loss.

- Assuming similar solvency ratios<sup>1</sup> for the rest of the industry and using numbers on total industry capital<sup>2</sup>, it would take a loss to the reinsurance industry of (\$~370.4 bn.) to create such a scenario.
- In contrast to these already very large numbers, the estimated **total economic loss** from such a series of extreme events is likely to be close to **\$2,764 bn.**
- For comparison, a loss of \$2,800 bn. equates to nearly twice the amount of economic losses from all hurricanes and earthquakes that occurred in the U.S. between 1900 and 2005 based on normalized loss statistics as published in studies by Dr. Roger Pielke—University of Colorado.



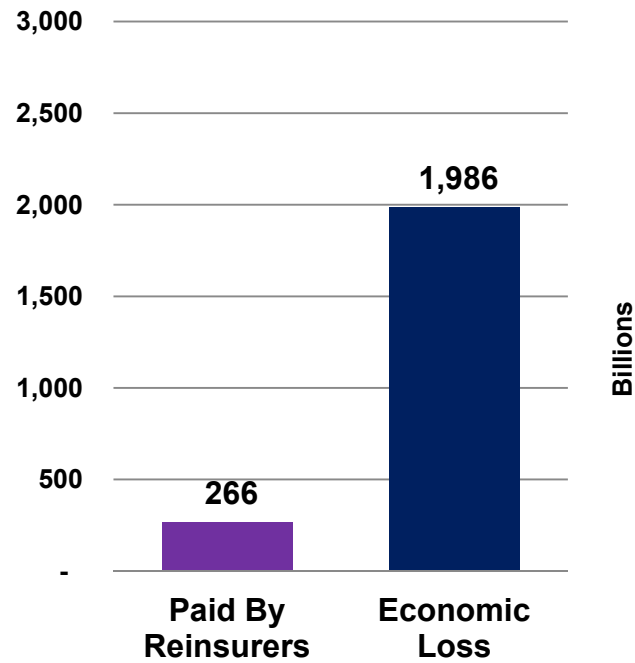
- **The respective total economic loss of this extreme scenario would by far exceed the reinsurance industry loss. Moreover the reinsurance industry's loss would largely be paid given their present \$440 bn. in capital.**



1) clearly a simplifying assumption, as solvency ratios differ between reinsurers; 2) taken from Aon Benfield's estimate that global reinsurance capital is \$440 bn.

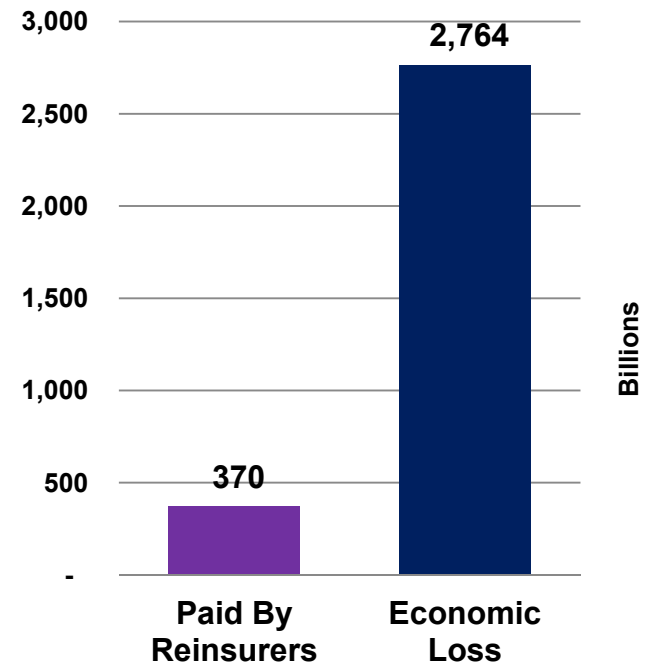
# Economic losses (not reinsurance losses) are the true source of systemic risk following extreme loss events.

Stress Scenario at 100% Solvency Ratio



■ Economic Loss ■ Paid By Reinsurers

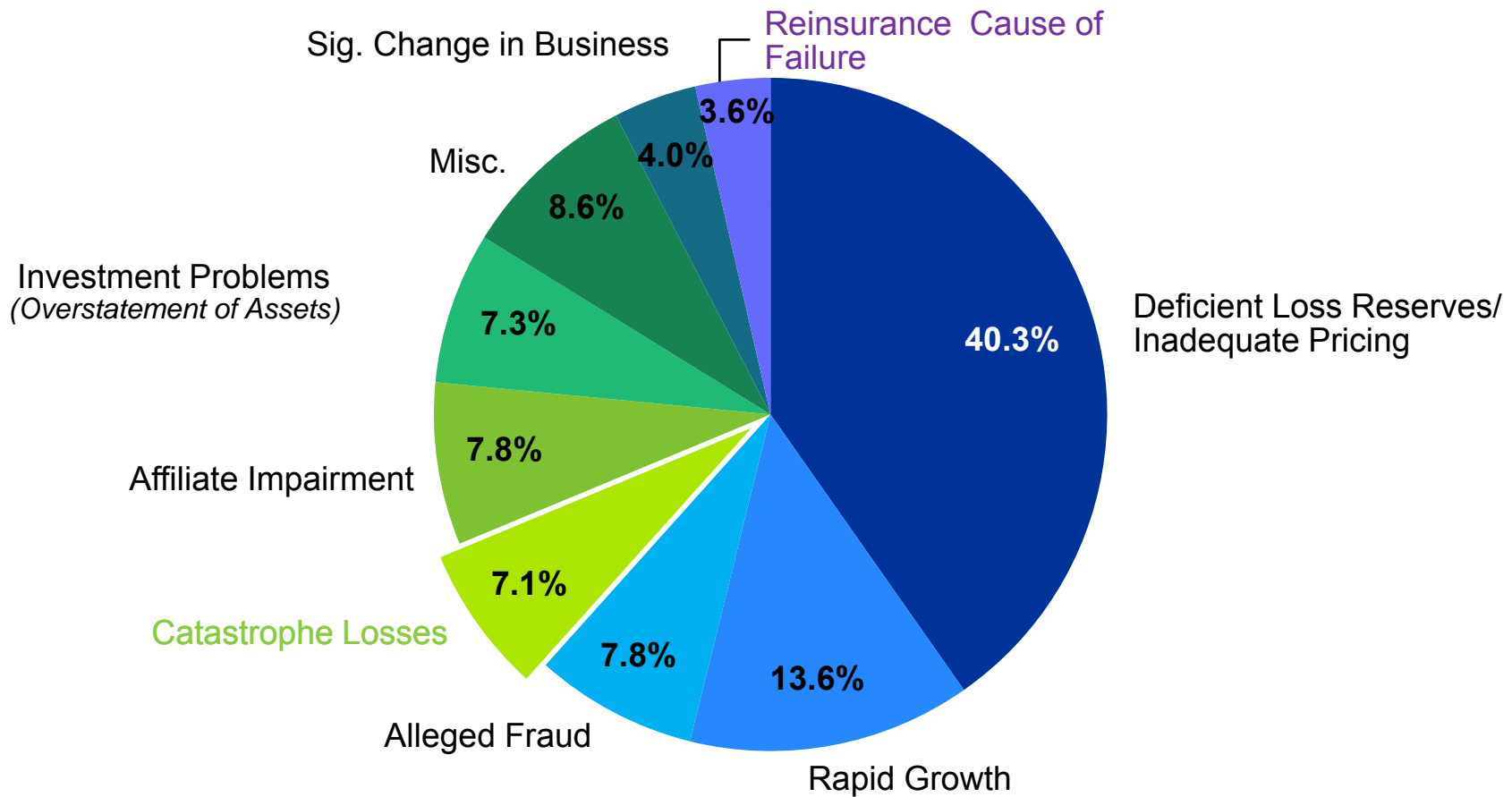
Stress Scenario at 100% Solvency Ratio



■ Economic Loss ■ Paid By Reinsurers

Insurance impairments attributed to reinsurance as the cause of failure are historically insignificant.

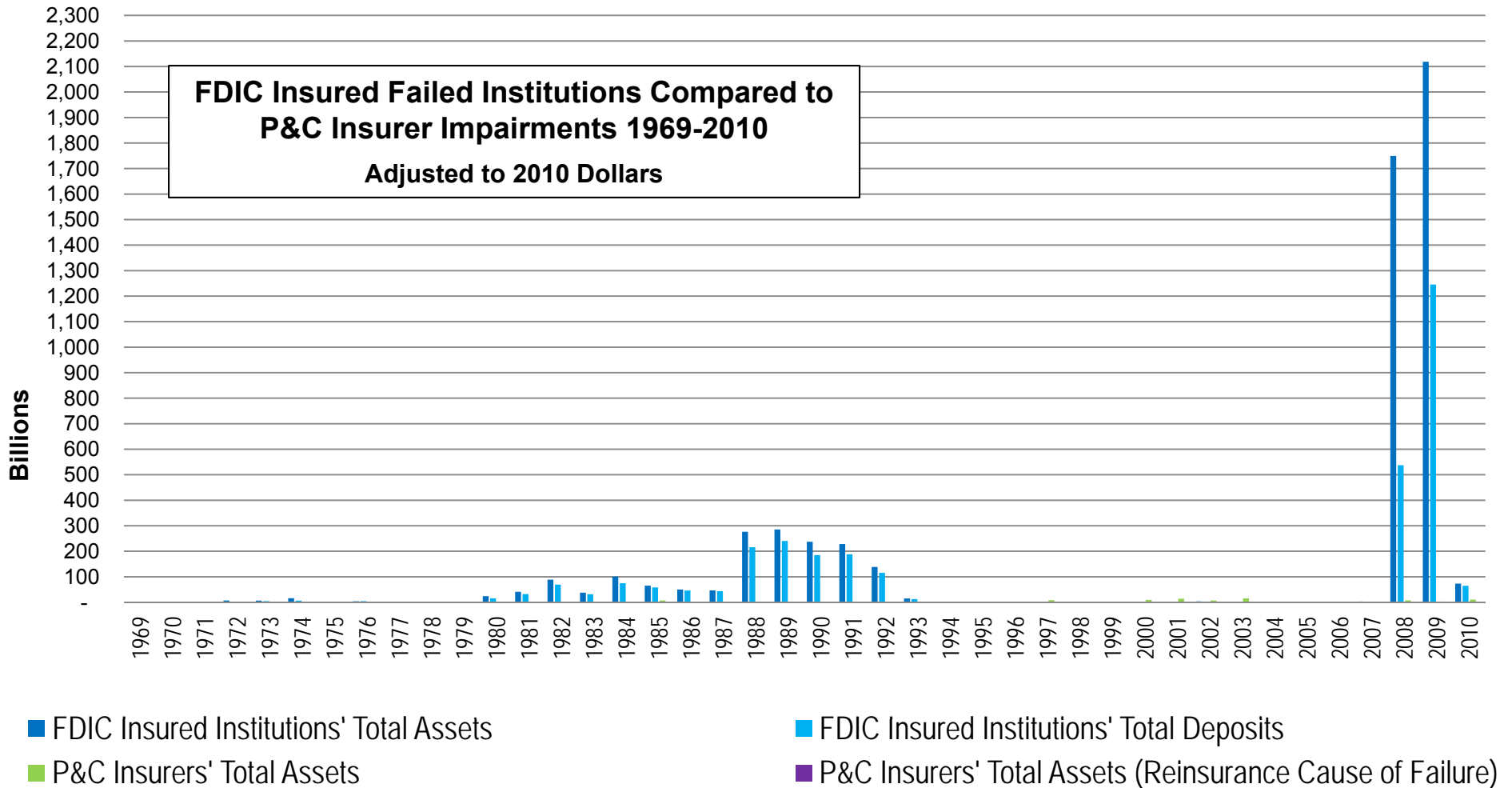
### Reasons for US P/C Insurer Impairments, 1969–2010



Source: A.M. Best: 1969-2010 Impairment Review, Special Report, April 2011.

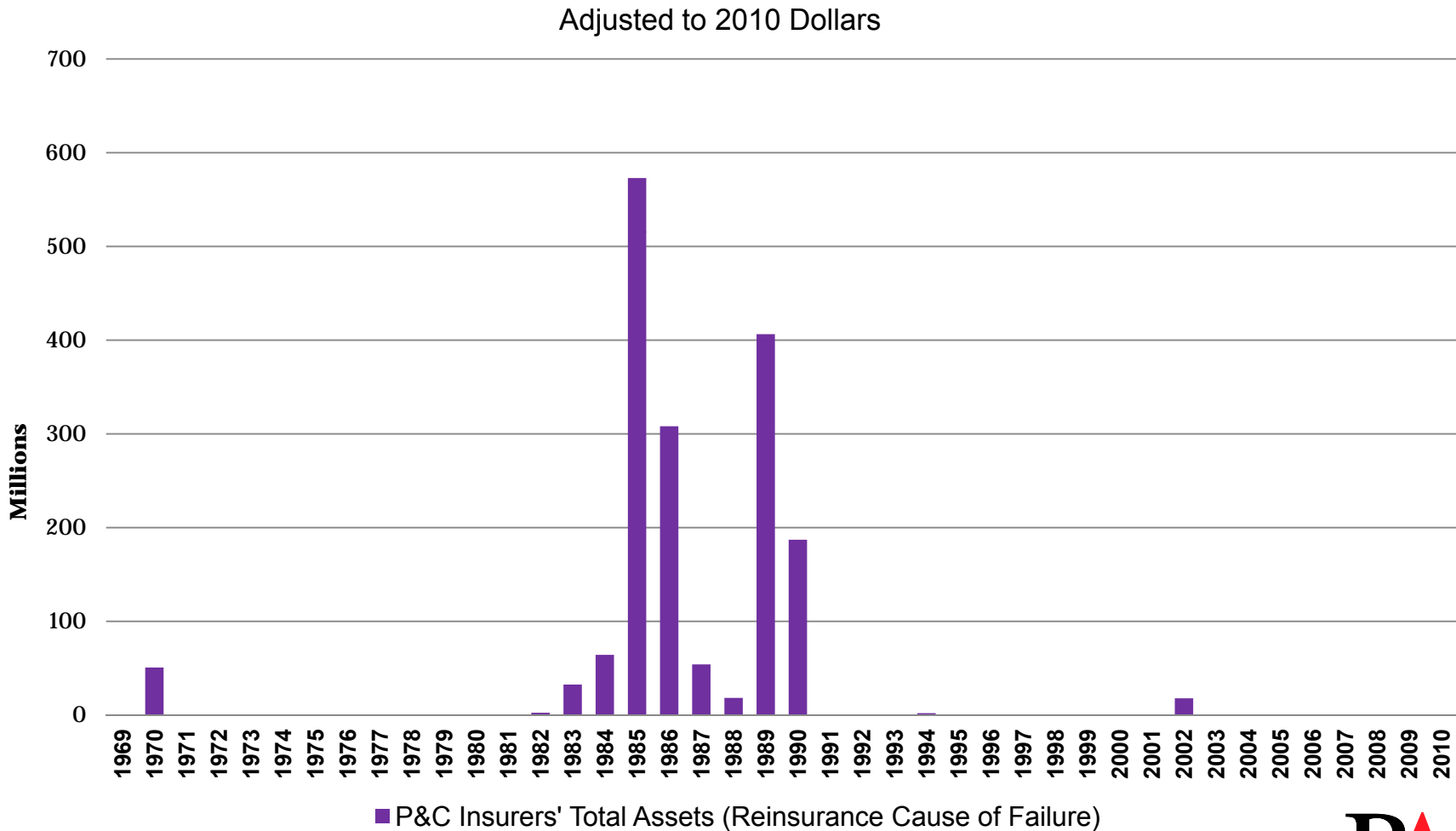


Insurance impairments are insignificant compared to bank impairments in past crises and over several economic cycles.



Source: A.M. Best: 1969-2010 Impairment Review, Special Report, April 2011; FDIC.

Insurance impairments attributed to reinsurance failure are insignificant over the same period.

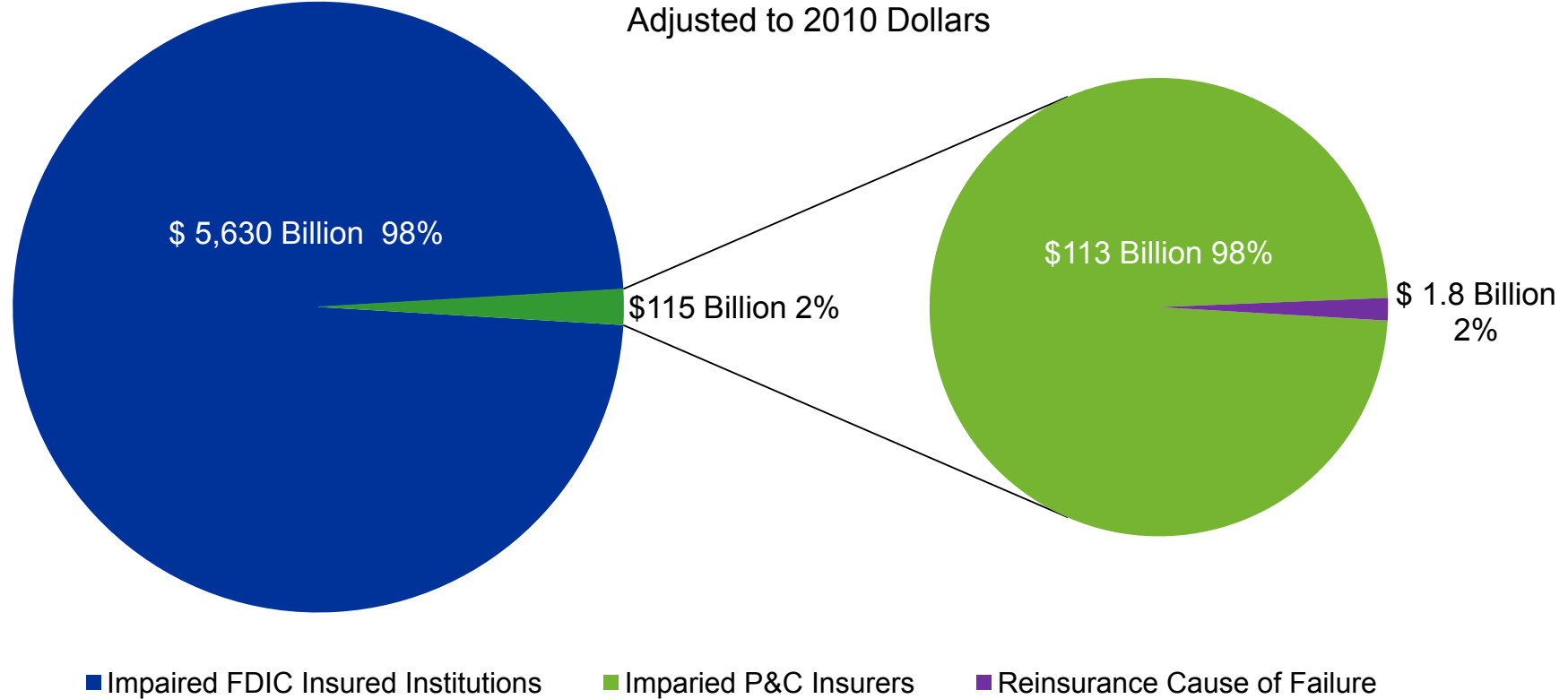


Source: A.M. Best: 1969-2010 Impairment Review, Special Report, April 2011.



Reinsurance failure is not a significant cause of insurance impairment and pales in comparison to the systemic risk in the banking industry.

## Total Assets of FDIC Insured Failed Institutions Compared to P&C Insurer Impairments 1969-2010





# “Flood the Hill”

## NFIP Reform/Extension

- **S1940/H1309 NFIP Reform Legislation**
  - Allows NFIP to purchase reinsurance
  - Requires NFIP to solicit reinsurance proposals
  - Provides for a protocol for the release of data to the private reinsurance market
  - Calls for an assessment of claims paying capacity including the role private reinsurance could play
- **Short-term extension**

# Mortgage Reinsurance Reform

- **S1963 Mortgage Finance Act**
  - Restructuring the mortgage finance market
  - Mortgage Finance Agency
  - Purchase of supplemental insurance (i.e. reinsurance)
  - Phased-in implementation

# Tax Policy Issues and Reform Proposals

- **FATCA regulation**
  - Exclusion for indemnity reinsurance
- **Federal excise tax on insurance (cascade ruling)**
- **Taxation of reinsurance placed with offshore affiliates**
- **Tax Reform Proposals**
  - Camp
  - Enzi
  - Obama
  - Wyden-Coats
  - Simpson-Bowles

# NAIC Reinsurance Modernization Collateral Reduction Initiative - Key Points

- Changes to Model Law and Model Regulation on Credit for Reinsurance were approved by the NAIC at the November National Meeting
  - (Models must be adopted by individual states to be authoritative.)
- Goal: Reduction in Collateral requirements for well capitalized, well run, well regulated non-U.S. reinsurers from qualifying jurisdictions

# NAIC Reinsurance Collateral Reduction Initiative - Key Aspects

- ❖ A non-U.S. reinsurer may be categorized as a Certified Reinsurer if:
  - ✓ Licensed as an insurer or reinsurer in a Qualified (after analysis) jurisdiction
  - ✓ Has minimum surplus of \$250 million
  - ✓ Maintains ratings (on an entity basis) from at least two nationally recognized rating agencies
  - ✓ Submits to jurisdiction
  - ✓ Submits financial information for regulatory review
  - ✓ Satisfies other requirements established by the regulator

# NAIC Reinsurance Collateral Reduction Initiative - Key Aspects (Cont.)

- Qualified Jurisdiction
  - Evaluation of appropriateness and effectiveness of reinsurance supervisory system
  - Evaluation of similar treatment of U.S reinsurers
  - Adequate and prompt enforcement of U.S. judgments
  - Cooperation and information sharing
  - NAIC to publish list of qualified jurisdictions
    - If state approves jurisdiction not on NAIC list, must provide justification

# NAIC Reinsurance Collateral Reduction Initiative - Key Aspects (Cont.)

- **Certified Reinsurer**
  - In addition to capital and surplus, ratings, submission to jurisdiction and financial information requirements the regulator will consider:
    - Business practices
    - Reputation for prompt payment
    - Any regulatory actions against reinsurer
    - Receivership considerations
    - Participation in solvent schemes
  - Special provisions for Lloyd's

# NAIC Reinsurance Collateral Reduction Initiative - Key Aspects (Cont.)

- “Slow Paying” Reinsurers
- the commissioner shall, at a minimum, increase the security the certified reinsurer is required to post by one rating level if the commissioner finds that:
  - (a) more than 15% of the certified reinsurer’s ceding insurance clients have overdue reinsurance recoverables on paid losses of 90 days or more which are not in dispute and which exceed \$100,000 for each cedent; or
  - (b) the aggregate amount of reinsurance recoverables on paid losses which are not in dispute that are overdue by 90 days or more exceeds \$50,000,000.



# NAIC Reinsurance Collateral Reduction Initiative - Key Aspects (Cont.)

- Secure 1 = 0%
- Secure 2 = 10%
- Secure 3 = 20%
- Secure 4 = 50%
- Secure 5 = 75%
- Vulnerable = 100%

# Risk Based Capital Modernization

- **Explicit CAT Risk Charge (R-6, R-7)**
- **Credit Risk Charge for Reinsurance Recoverables**
- **Methodology for Developing Underwriting Risk Factors (R-4, R-5)**

# Explicit CAT Risk Charge

- Based on the 1-in-100 year modeled loss for hurricanes and earthquakes determined on a value at risk (VaR) basis.
- Any 1 or a combination of the 3 commercially available models (EQECAT, AIR, RMS). Other vendor and proprietary models would still be allowed for non-RBC purposes such as ERM, economic, and rating agency capital requirements.

# Explicit CAT Risk Charge

- Model choices and parameters must be the same as the company uses in its internal risk management processes.
- The risk charge is net of reinsurance.
- A contingent credit risk charge will be applied to modeled reinsurance recoverable amounts for both hurricanes and earthquakes.
- All U.S. affiliated reinsurance recoverables are excluded from the contingent credit risk charge.

# Explicit CAT Risk Charge

- The CAT risk charge will not be tax effected
- Covariance adjustment would work as follows:
  - The hurricane catastrophe risk charge net of reinsurance and hurricane contingent credit risk charge are added together, then squared.
  - The earthquake catastrophe risk charge net of reinsurance and earthquake contingent credit risk charge are added together, then squared.
  - These two values are added to the sum of the squares of all the other RBC risk elements, and finally the square root of this new total is taken

# Explicit CAT Risk Charge

- Financial examination requirements for validation of model input accuracy and
- Methodology to avoid double counting by removing historical losses from the existing R-5 factors.
- The P&C RBC Working group has asked the American Academy of Actuaries to determine if the current 10% contingent credit risk charge is too high and to develop a recommendation for what the charge should be.

# Explicit CAT Risk Charge

- Exempting companies with minimal catastrophe risk exposure.
- Disclosure and reporting requirements for the Confidential RBC Report.
- Use of insurer-developed models.
- Beta testing and implementation concerns.

# AAA Project: RBC Charge for Reins Recoverables

- 10% is probably too high
- Offsets for collateral ?
- Diversification Credit?
- Financial Strength Rating of Reinsurer/Cedent?
- Timing—End of 2012?



# AAA Project: Propose New RBC Underwriting Risk Factor Methodology

- Requested by the NAIC Capital Adequacy Task Force
- Requested CAS to research problems with the existing methodology and to propose solutions
- CAS Underwriting Risk Working Party Report

# History of the Recalibration Proposal

- In 2006, the AAA was asked to recalibrate the original 1991 analysis underlying the RBC underwriting Risk Factors
- The primary change in the calibration was a move from the worst arithmetic average of companies over the past 10 years to the 87.5 percentile of all data points
- In September 2007, the proposed new recalibrated factors indicated very large increases for the reinsurance lines

# History of the Recalibration Proposal, Continued

- Indicated reserve factor increases ranged from 56% to 324% for the two reinsurance lines
- Indicated capital increases were counter-intuitive, reinsurers have experienced reserve redundancy and reserve releases for past several years

# History of the Recalibration Proposal, Continued

- RAA raised questions about the existing methodology, filtering criteria and other assumptions
  - Application of the filtering methodology and resulting small sample size for reinsurance (including switch to 87.5 percentile method)
  - Impact of intercompany pooling
  - Data anomalies (sensitivity to 10-yr period, filtering, one-time events, etc.)
  - Exclusion of companies with less than 10 years of data

# Specific Concerns

## Filtering and use of Pooled Data:

- Only 22 of 483 companies were included in the sample size after application of the filters (Exhibit I)
  - The 22 companies were **NOT** representative of the U.S. professional reinsurance industry
  - Of the 22 companies, 4 are members of the same pool and those companies have the highest observed reserve run-off ratios in the sample
  - The largest company in the sample is 50% of the data and is 17 times larger by volume than the pooled companies, but the pooled companies are given 4 times the weight of the largest company

## Impact on Capital - Leverage

	Current (2009)	Indicated Before Cap	Adopted w/Cap (PCRBC WG)
Industry NPW	\$7.2B	\$7.2B	\$7.2B
NPW to 300% ACL	0.27	0.13	0.26
Ratio of PHS per \$ of Premium	\$3.68	\$7.73	\$3.87
Required PHS	\$26.5B	\$55.6B	\$27.8B

If fully implemented current methodology calls for \$7.73 in RBC capital to write \$1.00 in premium, which raises significant concerns about its accuracy and appropriateness.



# Impact on Capital for NP Liab. Reinsurance Comparison to BCAR

AM Best BCAR	
Booked Reserves	\$24.7 Billion
Deficiency Factor	1.112
Discount Factor	0.812
Adjusted Reserves	\$22.3 Billion
Capital Factor	0.402
Required Capital	\$8.97 Billion

Proposed Uncapped RBC Factor	
Booked Reserves	\$24.7 Billion
Investment Income	
Offset	0.838
Reserve Runoff	
Ratio	1.357
Reserve Charge	
Factor	0.975
Required Capital	\$24.1 Billion

**The Current Methodology indicates an RBC capital requirement that is 2.6 times higher than BCAR**




# Opportunities for Improvement

A new methodology that considers:

- Treatment of pooled data
- Filtering process
- Legacy issues and the weight given to historical experience
- Diminished role of certain risks due to changes in underwriting practice
- Incorporation of results for companies with less than 10 years of data
- OR – an entirely new probabilistic / stochastic approach





**Most importantly**, the results of any revised methodology should be evaluated for reasonableness and compared to other regulatory and economic capital models:

- Common leverage benchmarks
- Solvency II
- Swiss Solvency Test (SST)
- AM Best BCAR
- Other capital models

**Reinsurance Association of America**  
**[www.reinsurance.org](http://www.reinsurance.org)**



W. Scott Williamson  
[williamson@reinsurance.org](mailto:williamson@reinsurance.org)

