

# PartnerRe

**A Transparent Discussion on Risk**

September 2, 2009





## PartnerRe's Value Proposition

PartnerRe is committed to being a financially secure reinsurance trading partner providing certainty of our ability to satisfy claims payment obligations under any circumstances, through our:

- **Risk Assumption and Risk Management**

We evaluate, underwrite and manage risk for the long term

- **Commitment to Financial Strength**

We maintain substantial and consistent financial resources

- **Commitment to Transparent Communication**

We are open and willing to discuss our approach to risk management and our risk management framework





# Delivering Value Through Our Platform

Business unit structure instills accountability



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# Risk Assumption and Risk Management





## PartnerRe's Principles of Risk Assumption and Risk Management

Protect the company's balance sheet from shock loss risks – major risks that have the potential to materially damage economic value – greatest potential shock loss risks:

- Catastrophe
- Casualty reserving shortfall
- Equity and equity-like market decline

Integrate risk management processes across all risk classes

- Set maximum limits and risk tolerances for each potential shock loss
- Apply a technical approach to risk assumption
- Use diversification on multiple levels





# Catastrophe Shock Loss Risk

Loss of capital due to a single, large catastrophe event or loss of capital due to multiple events in any year





## **Managing Catastrophe Risk**

**Manage the absolute maximum foreseeable loss from any one event and the annual aggregate for multiple events**

**Real time monitoring & control of catastrophe limits for each exposure zone at the business unit level and across the Group**

- Limits established for foreseeable losses at various return periods

**Geographically diversified book of business – by premium and by aggregate exposure**

**Proprietary modelling combined with qualitative underwriting analysis and dedicated research team**

**Extensive analysis supplemented by vendor models when appropriate**

**We do not buy retro – “gross = net” underwriting approach**

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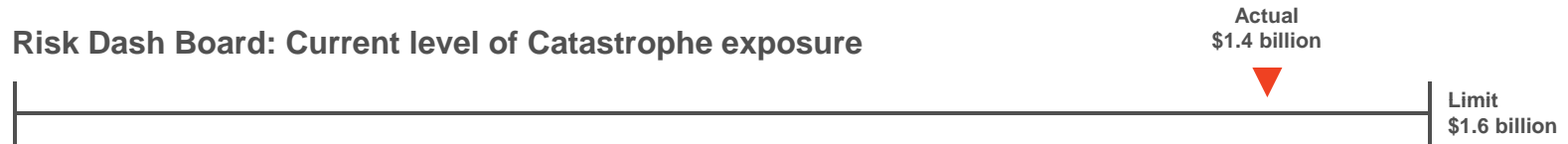




# Catastrophe Risk Limits

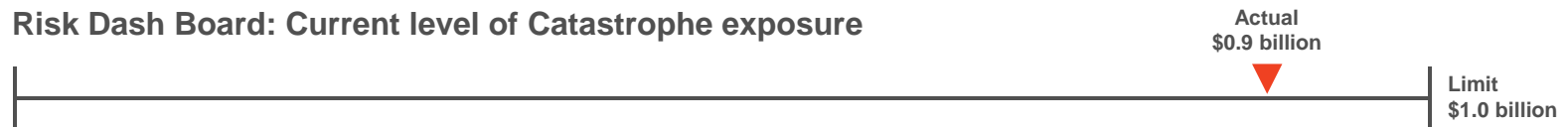
Risk Metric	Aggregate Limit	% of Total Capital
Max. aggregate exposure in any single zone on any single peril	\$1.6 billion	30%

Risk Dash Board: Current level of Catastrophe exposure



Risk Metric	Aggregate Appetite	% of Total Capital
Max. aggregate appetite for 1-in-75 year aggregate net annual loss for catastrophe	\$1.0 billion	18%

Risk Dash Board: Current level of Catastrophe exposure



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Based on exposure as at June 30, 2009



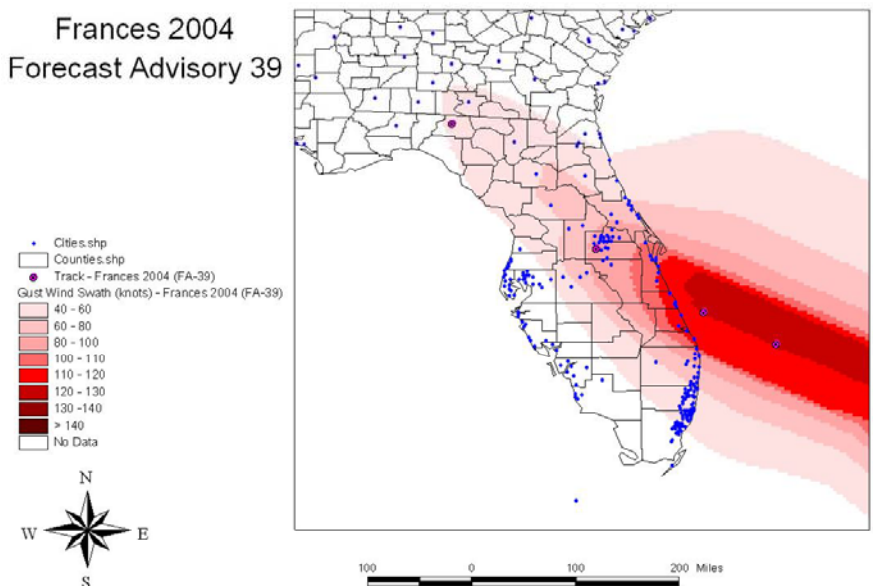


## Proprietary Modeling and Research Skills

Developing and utilizing our own models, as well as vendor models, and maintaining an in-house research team allows us to:

- Independently leverage a scientific knowledge base
- Understand key assumptions and limitations of vendor models
- Identify and evaluate biases in the market consensus
- Analyze business where no credible vendor models exist
- Advise clients based on a unique perspective
- Provide early estimates on “live” events

Frances 2004  
Forecast Advisory 39

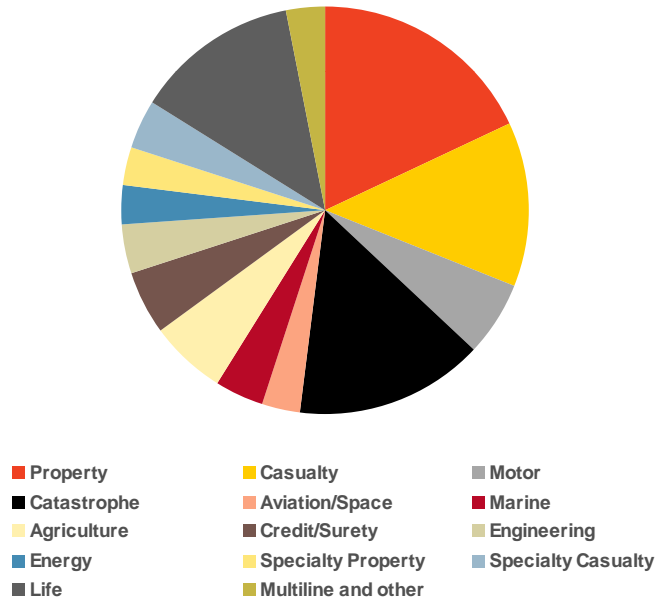




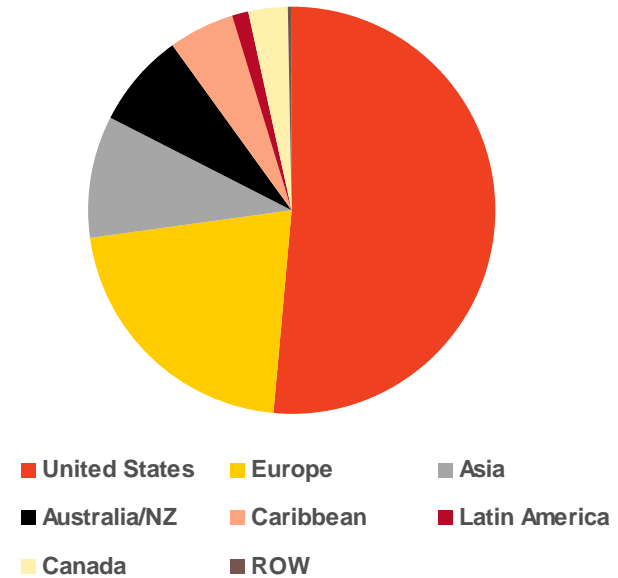
# Security through Diversification

## LOB and Geographic Diversification Enhances Stability

Distribution of Group NWP by Line of business



Distribution of Catastrophe NWP in force by Geography



June 30, 2009

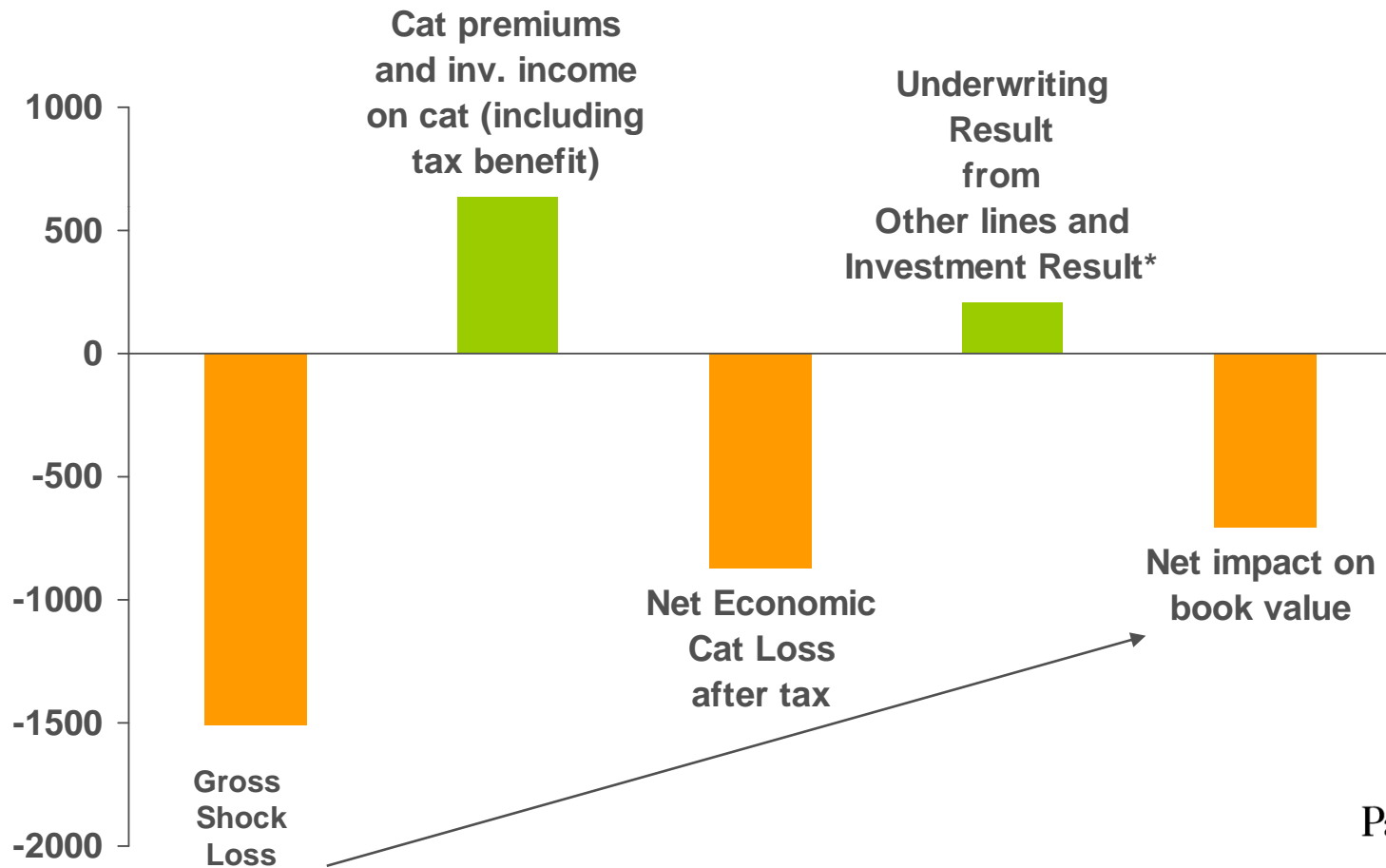
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## Mitigating the Effects of Shock Losses

Illustration of how diversification mitigates the effect of a 1-in-75 year annual aggregate catastrophe loss



\* Including other expenses





# Casualty Reserve Shock Loss Risk

Loss of capital due to substantial reserve strengthening as a result of misestimation of ultimate losses for casualty and other long-tail lines





## Managing Casualty Reserve Risk

**Limit amount of long-tail business written**

**Disciplined & technical underwriting approach**

**Rigorous underwriting process**

- Involve skills from multiple disciplines
- Strong governance structure around underwriting, actuarial pricing & actuarial reserving

**Prudent reserving process**

- “Ground up” process with strong governance
- Reserve immature years conservatively
- Carry reserves above actuarial midpoint

**Diversified book of business on multiple levels**





# Casualty Reserve Risk Limit

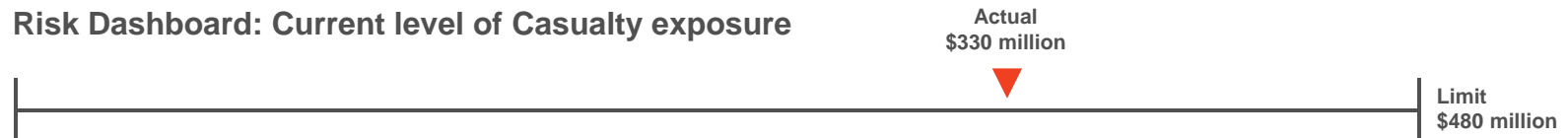
Risk Metric	\$billions
Earned premium limit for casualty and other long-tail lines for the 4 most recent underwriting periods	\$3.8
Actual 4-year aggregate long-tail premiums earned as % of all premiums earned in same period	24%

Risk Dashboard: Current level of 4-year aggregate long-tail earned premiums



Risk Metric	Aggregate Appetite	% of Total Capital
Max. aggregate appetite for 1-in-15 year Casualty reserve loss deterioration	\$480 million	9%

Risk Dashboard: Current level of Casualty exposure



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Based on exposure as at June 30, 2009





## Technical Underwriting Approach

### Technical Price vs. Participation at any price

- Importance of profitable business and fair price

### Strive for Consistency and Stability

### Underwriters, Pricing Actuaries and Reserving Actuaries work together to:

- Conduct a thorough evaluation of structure, clauses and exposure data
- Look beyond the models
- Provide value-added service to clients

### Analyze attritional losses vs. cat exposure

### Transparency





## Managing Reserve Risk

Bottom-up process, validated by quarterly internal peer reviews and regular external reviews

Reserve immature years conservatively

Carry reserves above actuarial mid-estimate

\$millions	Carried Reserves	High*	Low*
U.S.	\$2,717	\$2,966	\$2,114
Global (Non U.S.) P&C	\$2,197	\$2,334	\$1,920
Global (Non U.S.) Specialty	\$2,090	\$2,195	\$1,824
Catastrophe	\$267	\$282	\$238

As at June 30, 2009

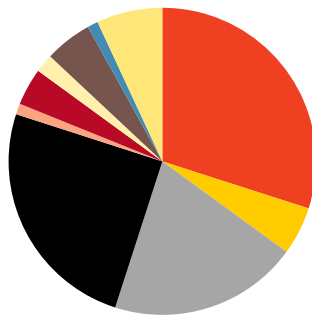
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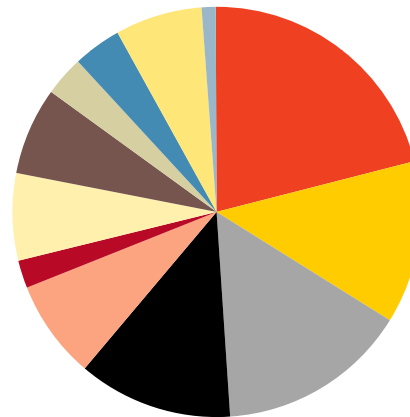


# Security through Diversification Enhances Stability of Business

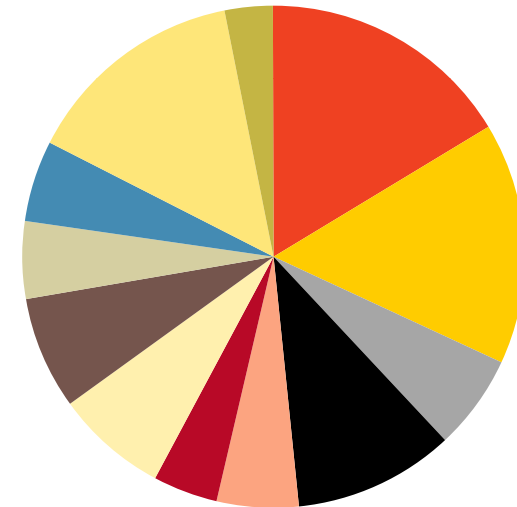
**NWP 1998**  
\$687 Million



**NWP 2001**  
\$1,825 Million



**NWP 2008**  
\$3,989 Million



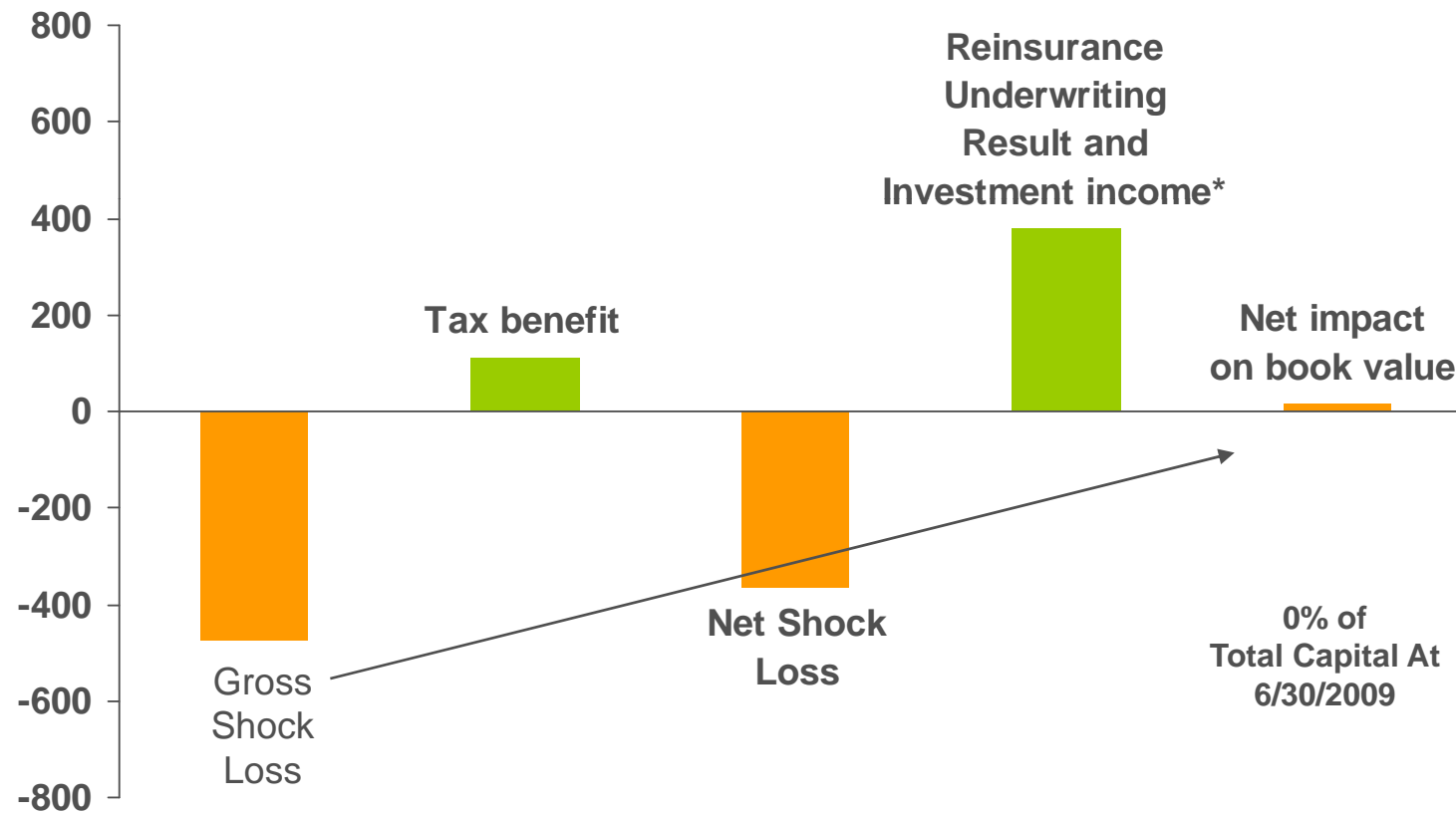
- Property
- Casualty
- Motor
- Catastrophe
- Aviation/Space
- Marine
- Agriculture
- Credit/Surety
- Engineering/Energy
- Special Risk
- Life
- Financial Guaranty
- Multiline and other





# Mitigating the Effects of Shock Losses

Illustration of how diversification mitigates the effect of a casualty reserving shock loss event



0% of Total Capital At 6/30/2009

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\* Including other expenses





# Equity Investment Shock Loss Risk

Loss of capital due to a substantial decline in the value of our equity and equity-like investments during the year





## Managing Investment Risk

**Limit exposure to equity and equity-like assets**

**Distinction between assets we hold to support clients' liabilities and capital funds**

- Funds supporting reinsurance liabilities are invested only in high quality investment grade, fixed income securities
- Match assets and liabilities generally as to duration and currency
- Invest in higher risk / higher return assets only with capital funds, subject to strict limits

**Manage portfolio for diversity and portfolio balance**

- Over 95% of investments managed in-house for maximum control

**Strict governance and guidelines**





## Equity Investment Risk Limit

Risk Metric	Absolute Limit	% Total Capital
Maximum investment in equity and equity-like assets	\$2.4 billion	45%
Current investments in equity and equity-like assets	\$1.0 billion	19%

### Risk Dashboard: Current level of Equity exposure



Risk Metric	Aggregate Appetite	% of Total Capital
Max. aggregate appetite for 1-in-75 year equity and equity-like asset risk	\$720 million	14%

### Risk Dashboard: Current level of Casualty exposure

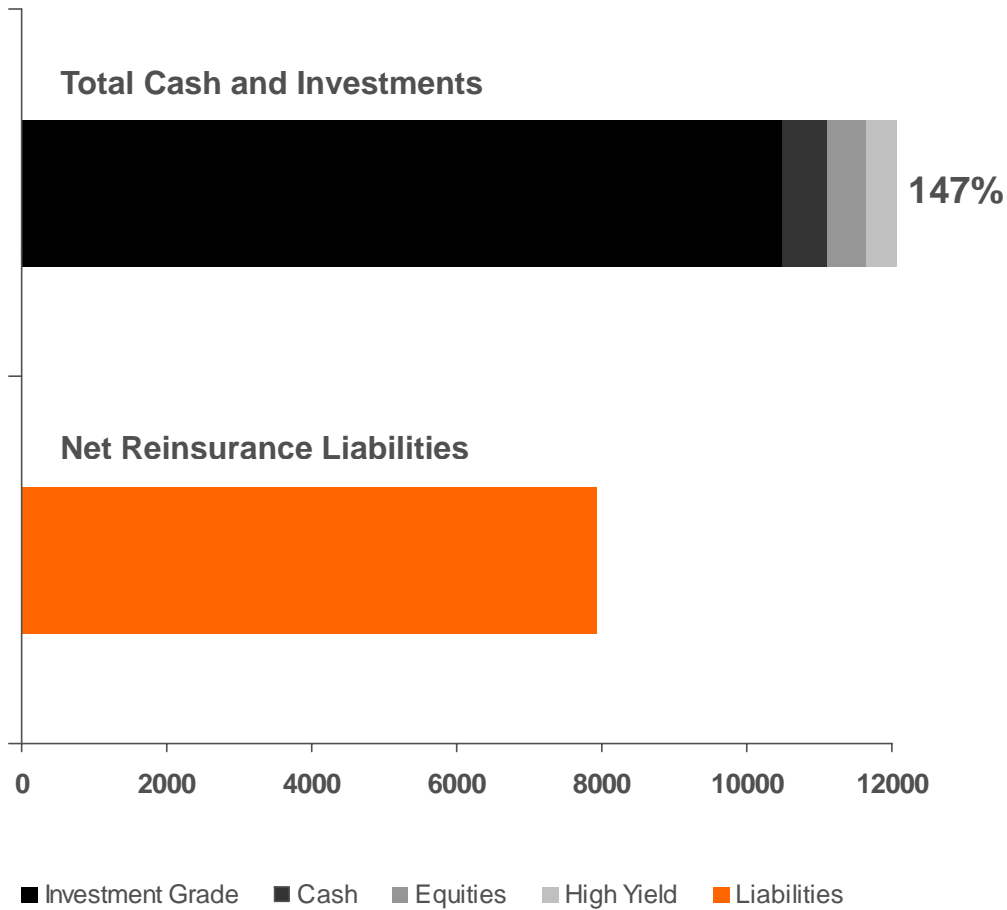


Based on exposure as at June 30, 2009





## Security through Appropriate Management of Investment Risk (in \$millions)



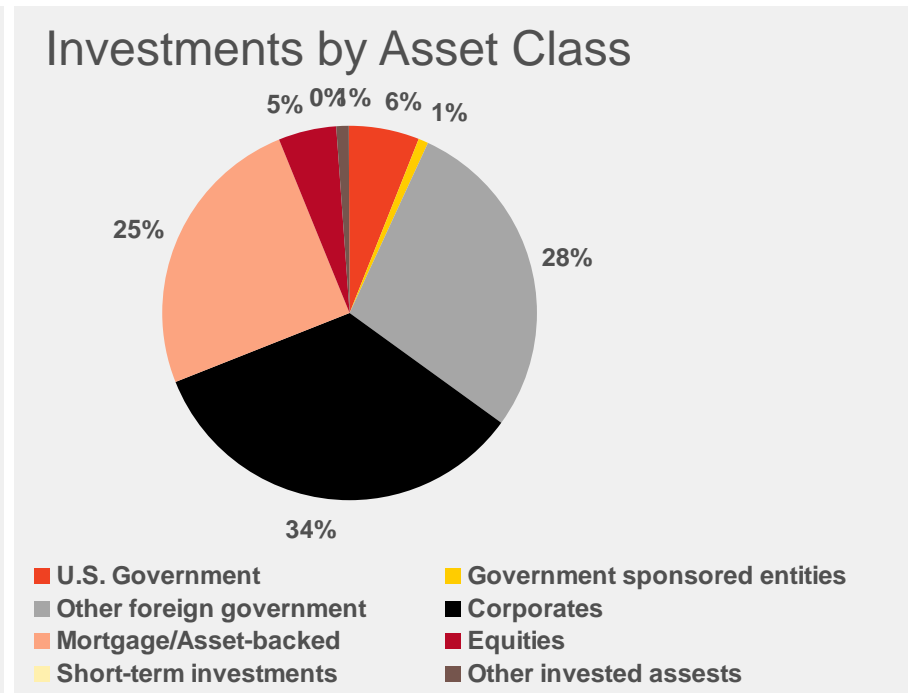
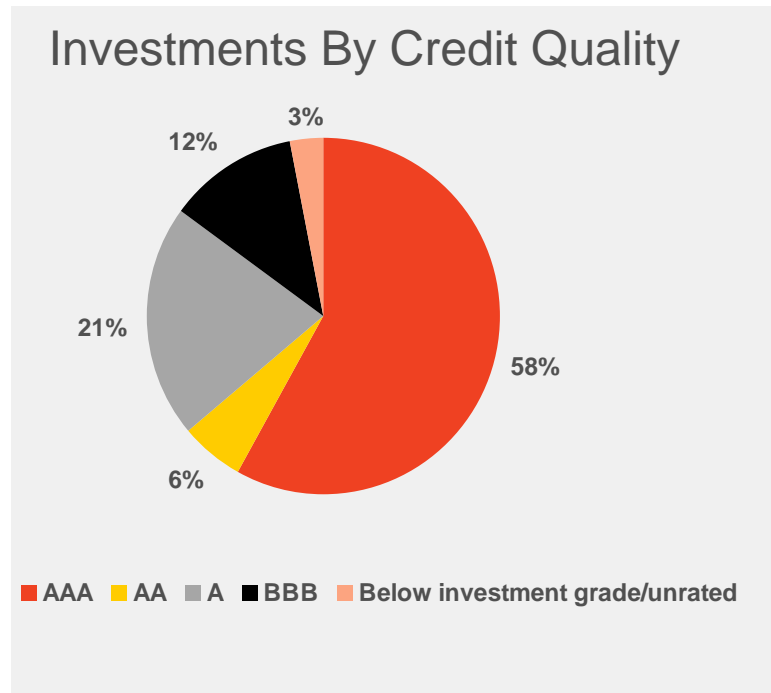


## Diversification of Risks and Asset Classes

97% = investment grade securities

58% = AAA

Average duration = 3.0 years



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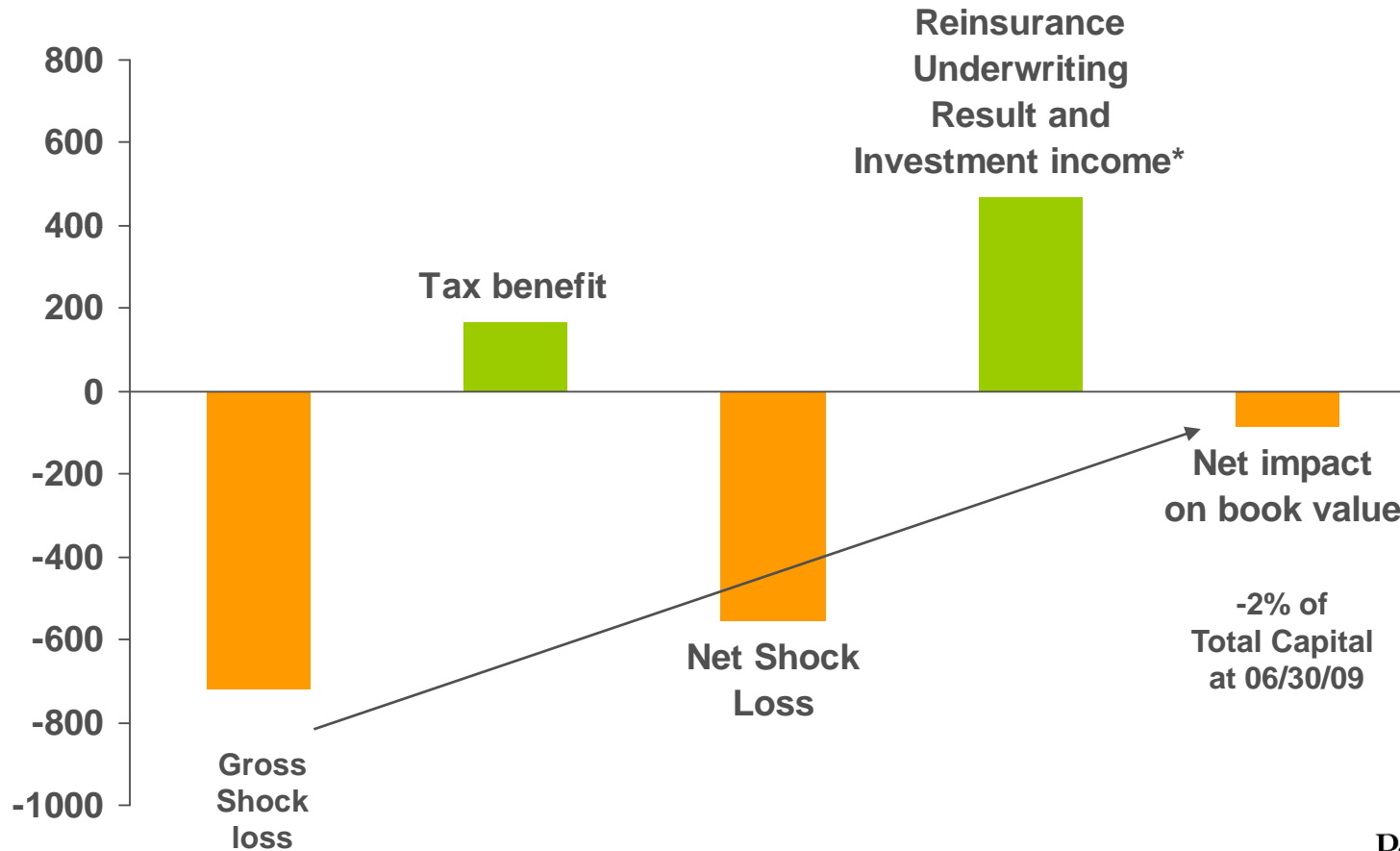
As of June 30, 2009





# Mitigating the Effects of Shock Losses

Illustration of how diversification mitigates the effect of an equity shock loss event



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\*Including other expenses



## The “Perfect Storm”

Shock Loss Scenario	Shock Loss (after tax)
1-in-75 year annual aggregate net Catastrophe loss after tax	\$(870)m
12.5% Casualty loss ratio development after tax	\$(365)m
30% drop in value of equity and equity-like assets after tax	\$(555)m
Contributions from other operations	\$155m
Estimated net loss	\$(1,635)m
Estimated net loss as percentage of Total Capital:	31%

**Even if we increase our exposure to our limit on all three shock loss scenarios, and all three scenarios occur in one year, PartnerRe will**

- Be able to pay all claims
- Be able to raise capital on good standing

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Total Capital as at June 30, 2009





# Financial Strength





## PartnerRe's Principles for Financial Strength

### Maintain strong capitalization at all times

- Able to meet all scenarios
- Preserve continuity of offer/risk appetite

### High quality balance sheet

- High grade investment portfolio
- High level of liquidity

### Reserving philosophy

- Reserve immature years conservatively
- Carry reserves above actuarial midpoint

### Focus on profitability from operations

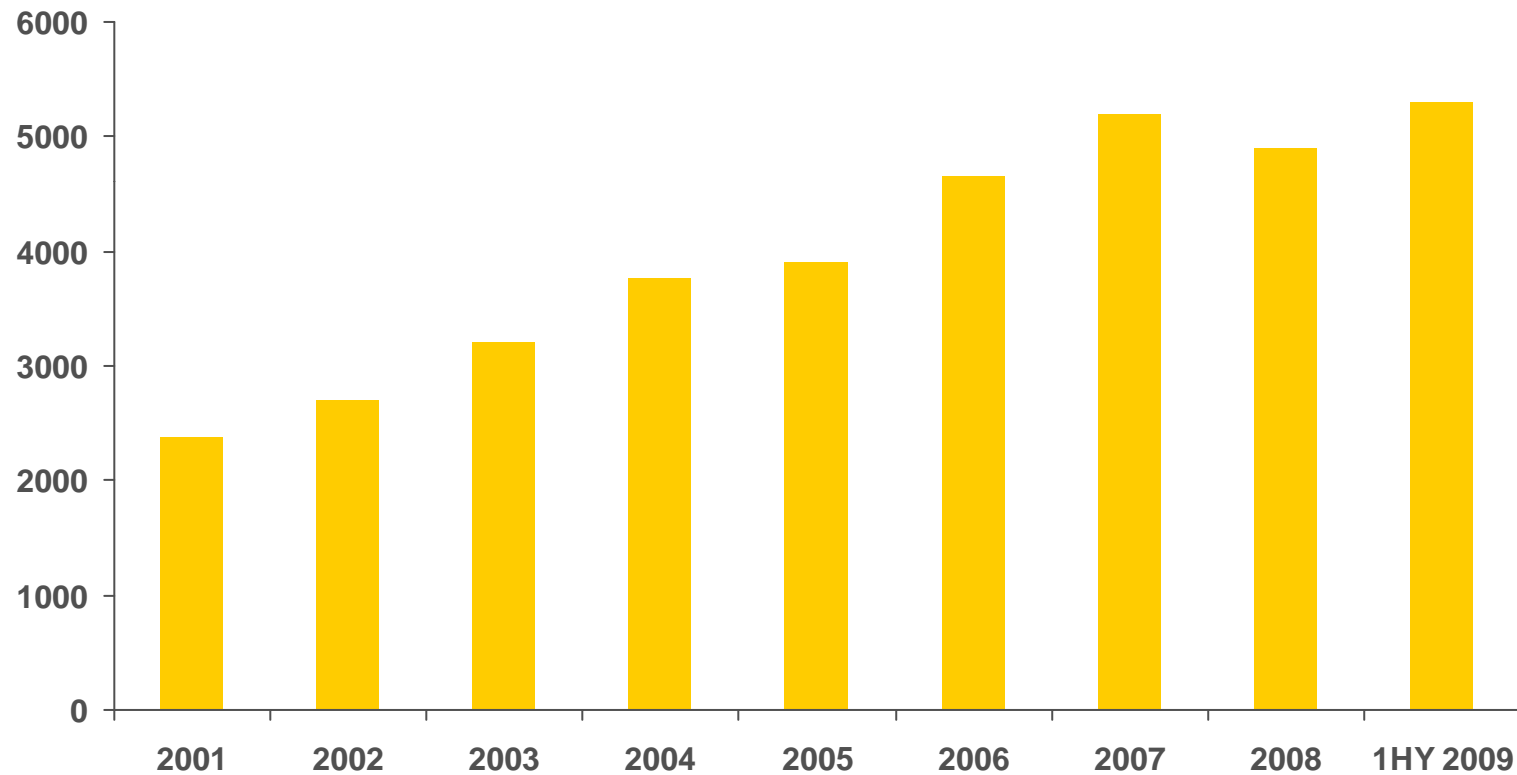
- Underwriting excellence and accountability
- Technical approach to pricing





# Security Through Consistent Capital Growth: Continuity of Offer

Total Capital 2001-2009



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## The “Perfect Storm”

Shock Loss Scenario	Shock Loss (after tax)
1-in-75 year annual aggregate net Catastrophe loss after tax	\$(910)m
12.5% Casualty loss ratio development after tax	\$(385)m
30% drop in value of equity and equity-like assets after tax	\$(645)m
Contributions from other operations	\$165m
Estimated net loss	\$(1,775)m
Estimated net loss as percentage of Total Capital:	36%

**Even if we increase our exposure to our limit on all three shock loss scenarios, and all three scenarios occur in one year, PartnerRe will**

- Be able to pay all claims
- Be able to raise capital on good standing

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Total Capital as at December 31, 2008





# PartnerRe: Transactional Excellence Superior Underwriting Performance

Non-Life  
Combined Ratio (%)

Average Difference 1998-2007  
PartnerRe : RAA : 12.9%  
PartnerRe : Global : 5.8%



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Note: Source for Global data 1998-2007 is S&P; 2008 data has not been published





# Transparent Communication





## **PartnerRe's Principles for Transparent Communication**

### **Open discussion on risk assumption and risk management**

- Limits and aggregation
- Diversification
- Underwriting process

### **Dialogue around capital and balance sheet**

- Reserve triangles are available

### **Disclose actual exposure levels**

- Risk dashboard



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