



# Accounting and Actuarial Issues

## Recent and Pending Changes to Accounting Rules

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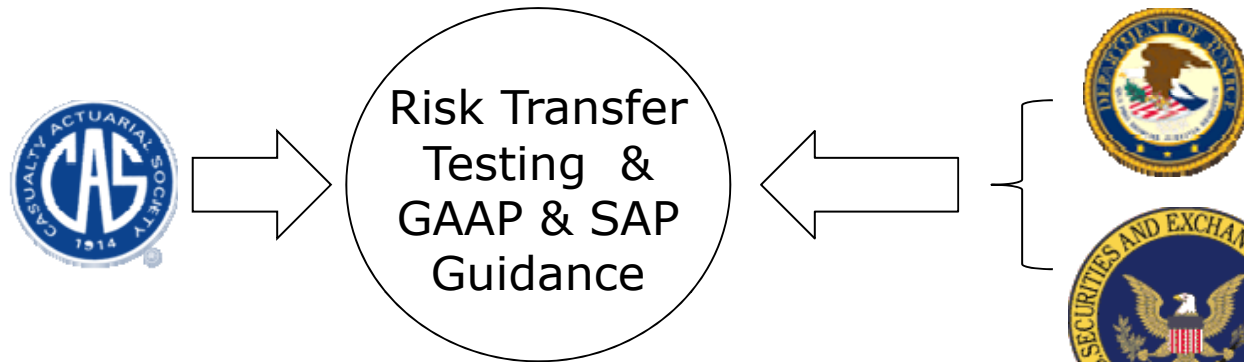
**Myles Tilley, CPA**

Managing Director

*Insurance Resolutions, Inc.*

# Accounting Developments: Risk Transfer problems put pressure on guidance

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## Standard Setters

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## Risk Transfer Efforts:

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- NAIC Annual Statement Disclosure Enhancements (2005)
- CAS "Risk Transfer Analysis & Testing" research paper (2005)
- FASB Risk Transfer Project (2005 – 2008)
- FASB Invitation to Comment "*Bifurcation of Insurance and Reinsurance Contracts for Financial Reporting*" (2006)

# Accounting Developments: International Accounting Standards

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## Standard Setter

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- ❑ International Accounting Standards Board (IASB) issues Phase I IFRS 4 – “*Insurance Contracts*” (2004)
- ❑ FASB issues Invitation to Comment “*An FASB Agenda Proposal: Accounting for Insurance Contracts by Insurers and Policyholders, including the IASB Discussion Paper, Preliminary Views on Insurance Contracts*” (2007)
- ❑ FASB announces joint Insurance Contracts Project with IASB to create Phase II IFRS 4 - “*Insurance Contracts*” (2008)
- ❑ SEC issues “*Roadmap to Convergence*” (2008)

### **Leading to:**

- ❑ By 2014 – Phase II IFRS 4 will likely replace GAAP for Insurance Contracts
- ❑ Four year transition is preferred

# Accounting Developments: Impacts of Phase II IFRS 4 “Insurance Contracts”

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## Standard Setter

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International  
Accounting Standards  
Board®

- Technical
  - Scope
  - Approach; Accounting Models
  - Liability Measurement (Discounting)
  - Policy Acquisition Costs
  - Bifurcating (Unbundling)
  - Statutory Accounting
  
- Cultural
  - More Principles based than Rules based
  - Role of the Actuary

# Accounting Developments: Other NAIC Activity

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## Standard Setter

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- ❑ Model Audit Rule
- ❑ Solvency Regulation : Impact of Solvency II
- ❑ Reinsurance Regulatory Modernization



# Accounting and Actuarial Issues

## Actuarial Concerns with the Economy

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**Noelle Fries, FCAS**

Consulting Actuary

*Insurance Resolutions, Inc.*

# Actuarial Issues

## Continuation of Risk Transfer Testing

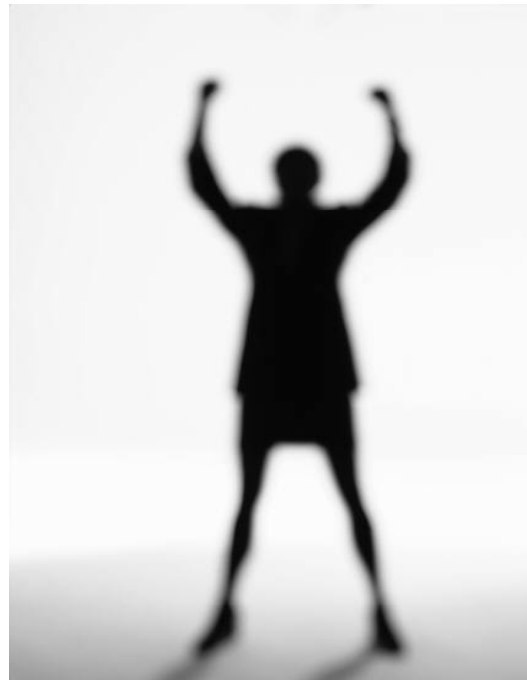
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- Expected Reinsurer Deficit (ERD):
  - $ERD = (p \cdot T) / P$ 
    - $p$  = probability of net economic loss
    - $T$  = average severity of net economic loss (when it occurs)
    - $P$  = expected premium
  - Economic loss considers:
    - All components of business captured including loss, expense and investment income
    - At NPV
  - Mathematically, "10-10" rule corresponds to a 1% ERD rule
- Risk Coverage Ratio (RCR):
  - Risk/Return measure
  - $RCR = (p \cdot T) / E[G]$ 
    - $E[G]$  = expected economic gain across all possibilities
- Right-tailed Deviation (RTD):
  - $RTD(x) = E^*(x) - E(x)$
  - Risk transfer exists if  $\beta \cdot RTD(x) > \text{contract premium}$

# Actuarial Issues

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## SUPER-CRUNCHERS





# Actuarial Issues

## Behavioral Economics

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- Examples of Cognitive and Behavioral Biases
  - Anchoring
  - Framing
  - Loss Aversion
  - Endowment Effect
  - Availability Heuristic
  - Status Quo Bias
  - Optimism Bias
  - Herd Behavior

# Actuarial Issues

What's an Actuary to do?

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- Predictive Modeling
- Choice Architecture
- Consumer side versus Insurance  
Management side of behavioral economics