## NAIC Risk-Based Capital

Walter Bell
NAIC President and
Alabama Insurance Commissioner
Vice Chair of IAIS Executive Committee

ASSAL ANNUAL CONFERENCE
Santiago, Chile



## History of Risk Based Capital

- Risk based capital concept began in 1989
- September 1990, Examination Oversight Task
   Force of NAIC determined Risk Based Capital
   requirements were preferable to minimum
   capital and surplus requirements
- December 1990, NAIC formed two RBC working groups (one life and one property and casualty)



- 1991 and 1992 Risk-Based Capital survey distributed to companies
- Life RBC formula finalized in 1993
- P/C RBC formula finalized in 1994
- RBC standards for health organizations were implemented in 1998



- The NAIC RBC formula is generally a formula-based calculation of a minimum level of capital
- Total Adjusted Capital is compared to 4 action levels of RBC where action is taken by the company or the regulator:



- RBC Action Levels:
  - Company Action Level
  - Regulatory Action Level
  - Authorized Control Level
  - Mandatory Control Level



The number of companies at action levels has remained relatively constant for life and property/casualty (non-life) RBC since inception:



## Life and P/C RBC Statistics

	2000	1999	1998	1997	1996	1995
Company	44	41	37	55	60	44
Regulatory	25	18	18	14	22	20
Authorized	5	8	9	8	11	9
Mandatory	30	27	28	27	34	25
Total Action	104	94	92	104	127	98
Total Co's	3,628	3,546	3,781	3,843	3,925	3,933
% of Total	2.9%	2.7%	2.4%	2.7%	3.2%	2.5%



### Life and P/C RBC Statistics

	2006	2005	2004	2003	2002	2001
Company	28	37	44	43	60	38
Regulatory	19	19	29	16	32	32
Authorized	7	6	8	11	11	6
Mandatory	35	35	44	39	33	40
Total Action	89	97	125	109	136	116
Total Co's	3,526	3,501	3,532	3,475	3,594	3,625
% of Total	2.5%	2.8%	3.5%	3.1%	3.8%	3.2%



- As a result of P/C insolvencies in the early 2000's, a 'trend test' was added to P/C RBC in 2005
- The 'trend test' may trigger a company action level if a ratio of the companies claims and expenses to premiums is unfavorable



The number of health companies at action levels started high and has declined subsequently:



### **Health RBC Statistics**

	2002	2001	2000	1999	1998
Company	37	48	19	30	37
Regulatory	33	43	16	22	33
Authorized	17	23	46	29	17
Mandatory	21	26	42	36	21
Total Action	108	140	123	117	108
Total Co's	672	578	543	563	672
% of Total	16.1%	24.2%	22.7%	20.8%	16.1%



### **Health RBC Statistics**

	2006	2005	2004	2003	2002
Company	9	12	8	23	32
Regulatory	7	5	8	21	25
Authorized	6	1	2	4	12
Mandatory	12	9	7	10	14
Total Action	34	27	25	58	83
Total Co's	791	754	704	698	687
% of Total	4.3%	3.6%	3.5%	8.3%	12.1%



## Principles-Based Capital Property and Casualty RBC

- Catastrophe Risk
  - Potentially use modeling of catastrophe risk in the RBC formula
  - Allow companies to use their own RMS, Equecat, etc. models



## Principles-Based Capital Life RBC

- C-3 Interest Rate Risk and Market Risk
  - C-3 Phase I 2000
  - C-3 Phase II 2005
  - C-3 Phase III 2008 or 2009
  - C-3 Phase IV
  - Future ?



### C-3 Phase I

- Interest rate risk of annuities and single premium life
- Based on cash flow testing of assets and liabilities
- Originally, only companies that triggered one of two tests for materiality
- May be changed to a CTE methodology for modeling in the future.



### C-3 Phase II

- Interest rate risk and market risk of annuities with guaranteed benefits
  - VAGLB (Variable Annuity with Guaranteed Living Benefits)
  - GMIB (Guaranteed Minimum Income Benefit)
  - GMDB (Guaranteed Minimum Death Benefit)
- Modeling using a CTE approach
- Relatively small number of companies



#### C-3 Phase III

Interest rate risk and market risk for life products

Modeling using a CTE approach

Affect a large number of companies



### C-3 Phase IV

Interest rate risk for all annuities

Modeling using a CTE approach

Replace current C-3 Phase I and perhaps Phase II



#### **Future**

Combine C-3 Phases into one ?

Asset Risk ?

Insurance Risk ?

Comprehensive internal models ?



## Future (Continued)

- NAIC Overarching Consideration:
  - Capital standards and compliance measurements should be firmly rooted in an auditing, accounting, and actuarial context that is cost-justified, practical, and workable.
    - Especially, when regarding an adversarial regulatory action that must proceed based on legal findings.



### THANK YOU

Walter Bell
NAIC President and
Alabama Insurance Commissioner
Vice Chair of IAIS Executive Committee

Walter.Bell@insurance.alabama.gov

