



**CAS/CARe Seminar**  
*Boston - Monday, June 4, 2012*

John Buchanan, FCAS, MAAA  
ISO – Principal, Reinsurance Division

**INT-2: International Casualty  
Overview Slides**

THE SCIENCE OF RISK<sup>SM</sup>

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## Intermediate Track 2 International Pricing Approaches - Casualty

This session will apply and extend the concepts from IT1 for International Casualty lines of business. Similarities and differences between US and European cultures and approaches will be discussed. Different data sources, benchmarking uses, and coverage adjustments will be highlighted. This session will include a case study approach to highlighting sensitivities and pitfalls of applying US and other benchmarks in exposure modeling as proxies to other countries.

**Moderator / Panelist:**

John Buchanan, ISO – Principal, Reinsurance Division

**Panelists:**

Robert Bender, Swiss Re – SVP, Head Analytical Services Americas

Ana Mata, Matβlas Ltd-London – Managing Director

## Agenda – IT2

- **Overview** (10 mins – John)
  - Framing the Presentations
  - Reinsurance Market Benchmarking
- **Perspectives on European vs US Casualty Costing** (30 mins – Bob)
  - The Same But Different
  - European View of ISO Curves
  - European ILF Method and Curves
- **Int'l Casualty Reinsurance Pricing Approaches** (30 mins – Ana)
  - Comparison of Methodologies – US/UK/Europe
  - Case Study – UK Motor XOL
  - Other Issues
- **Questions**

# Today's Presentations

## Intermediate Track 2 (International Casualty)



Benchmark Assessment Matrix - Today's Presentations - Intl 2

	1	2	3	4	5	6	7	
	Trends							
	Ground Up			Excess		Loss Dev't Factors		
	Severity	Freq	Exposure	Severity	Freq	Ground Up	Excess	
Property								
Casualty	IT2-AM							
Specialty	IT2-AM							
	8	9	10	11	12	13	14	15
	Rate Changes		Ground-Up	Excess		Region/	Layer	
	Primary	Reinsurance	Loss Costs	Loss	ALAE	Hazard/	Experience/	Emergence
				Factors		Subline	Exposure	Testing
Property								
Casualty	IT2-AM	IT2-AM		IT2-JB/AM/RB	IT2-AM		IT2-AM	
Specialty				IT2-AM/RB				
	16	17	18	19	20	21	22	23
	External	Loss Ratios			Aggregate	Industry	LOB	Where
	Forces	Primary	Reinsurers	Volatility	Distribution	Macro	Redund/Def/	in the
						Application	Correlations	Cycle?
Property								
Casualty	IT2-AM/RB				IT2-AM			
Specialty								

## Reinsurance Market

- Reinsurance business mix<sup>1</sup>

	<u>Europe</u>	<u>US / Can</u>
• Property	46%	34%
• Motor	21%	8%
• Liability & WC	20%	35%
• Other	3%	23%
- Reinsurance type<sup>2</sup>

• Proportional	70%	50%
• Non-Proportional	30%	50%
- P & C Reinsurance Demand<sup>3</sup>

	\$ 51 b	\$ 65 b
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Original source: Tim Aman CARE-Phila 2007: 1 Axco, 2 Estimated, 3 A M Best Co

Source: CARE-London July 2007 – J. Buchanan

## Exposure Benchmarks



Insurance business mix	Europe	US / Can
• Property	24%	27%
• Motor	38%	41%
• Liability	10%	14%
• WC	0%	11%
• A&H	17%	2%
• Other	11%	5%

Lloyds, SRe, MRc  
 GLD (dated)  
 ISO  
 NCCI  
 Consultants

- Lots of US Exposure Curves available
- Many sub-lines don't have standard curves or are under development – D&O, E&O, FI, EPLI, Umbrella; earlier European Motor and Liability curve fits much different than standard US curves, especially above £1mm
- Companies need to accumulate own: difficult, credibility issues
- *New Initiative under way by ISO – Global Benchmarking Services (2012)*

Original source: Tim Aman CARE-Phila 2007

Mix Source: Tim Aman CARE-Phila Axco

## ISO - Global Benchmarking Services (GBS)

- Approach Type
  - Proxy
  - Data collection
  - Combination
- Lines of Business
  - Property, Casualty, Specialty
- Types of Analysis
  - Excess loss distributions
    - Sensitivity ranges, macro-industry, cross-country, other industry studies
  - Excess trend factors
  - Excess development factors
- European Territories (2012)