Case Studies in ERM

CAS Annual Meeting

Moderator: Stephen Lowe, Towers Perrin

Panelists: Michael Belfatti, Validus Holdings

Eberhard Mueller, Hannover Re

Tuesday, December 16, 2008

Session overview

- Update on ERM progress based on recent Towers Perrin ERM survey
- Case study presentations on progress toward ERM implementation
 - Hannover Re
 - Validus Holdings
- Q&A with audience participation

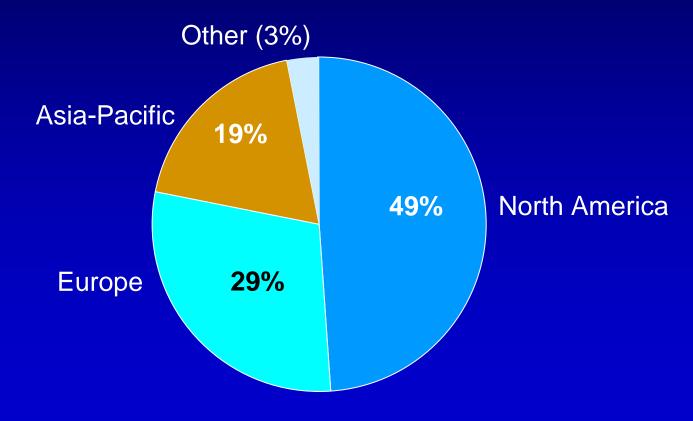
Our panelists

- Eberhard Muller Managing Director and Chief Risk Officer Hannover Re eberhard.mueller@hannover-re.com
- Michael Belfatti Executive Vice President and Chief Actuary Validus Holdings michael.belfatti@validusre.bm

Towers Perrin biennial ERM survey



- World's largest insurance industry ERM survey
 - Life insurance (34%), P/C insurance (33%), Reinsurance (20%), Multiline insurers (13%)



ERM is now influencing decisions



Since 2006, roughly one-third made changes to:

- Risk strategy or appetite (36%)
- Asset strategies (35%)
- Reinsurance strategy (33%)
- Product pricing (31%)

European insurers are leading progress

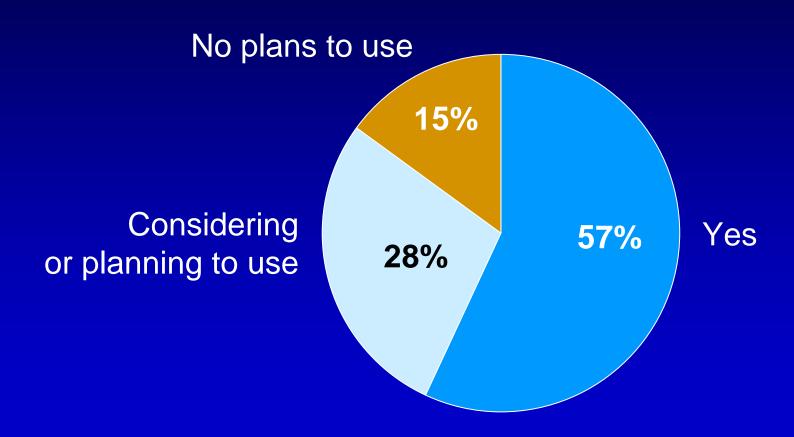


- Over 80% of European insurers will use economic capital (EC) in major decisions compared to:
 - Roughly two-thirds of North American firms
 - More than half of Asia-Pacific firms
- 52% of European insurers have documented risk appetite compared to 40% of North American firms
- More European firms set risk limits for day-to-day management issues

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EC use will continue to increase

85% of respondents calculate EC or plan to



Use of EC is poised to expand dramatically



Currently use No future plans to use Plan to use Capital adequacy 44% 35% 21% Investment/hedging strategy 36% 32% 32% Reinsurance purchasing 33% 33% 34% Strategy/capital deployment 31% 47% 22% Annual business planning 30% 44% 26% Product design and pricing 28% 39% 33% M&A and divestiture 27% 15% 58% Performance measurement 17% 42% 41% Incentive compensation 10% 24% 66%