Emerging Risks

ERM Symposium – CS24 May 3, 2019 11 am – 12:15 pm Max J. Rudolph, FSA CFA CERA MAAA

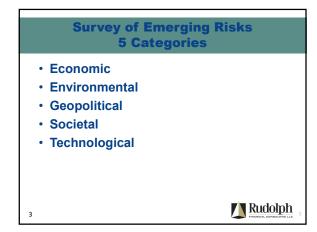
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Survey of Emerging Risks

- Annually since 2008
- Sponsored by Joint Risk Management Section
 - Canadian Institute of Actuaries (French translation)Casualty Actuarial Society
 - Casualty Actuarial So
 Society of Actuaries

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- Mix of quantitative and qualitative
- Expect full report to be released in late summer

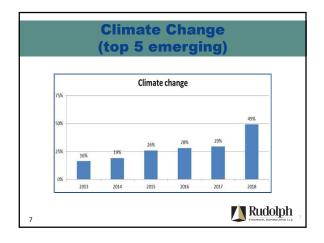


Survey of Emerging Risks 23 Risks (Slide 1 of 2)							
Economic	Environmental						
Energy price shock	Climate change						
Currency shock	Freshwater loss						
Chinese destabilization	Tropical storms						
Asset price collapse	Earthquakes						
 Financial volatility 	Severe weather						

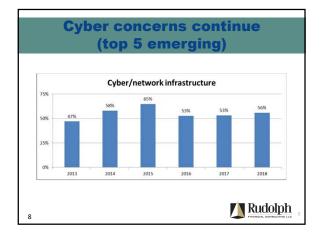
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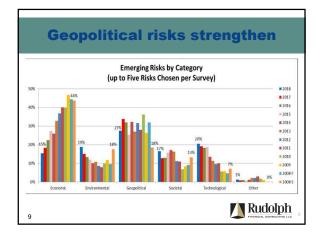


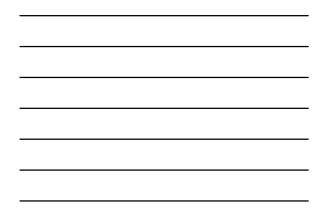












Top (5) Emerging Risks Over Time							
	Year	2015	2016	2017	2018	1	
	1	Cyber/network infrastructure	Cyber/network infrastructure	Cyber/ network infrastructure	Cyber/ network infrastructure		
	2	Financial volatility	Financial volatility	Terrorism	Climate change		
	3	Terrorism	Terrorism	Technology	(Disruptive) Technology		
	4	Asset price collapse	Technology	Regional instability	Demographic shift		
	5	Regional instability	Retrenchment from globalization	Asset price collapse	Financial volatility		
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• Climate change (12%)

- Cyber/network infrastructure (12%)
- Financial volatility (11%)
- Asset price collapse (8%)
- Technology (7%)

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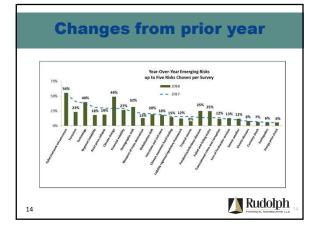
Top Emerging Risks

- Climate change (22%)
- Cyber/network infrastructure (15%)
- Technology (13%)
- Financial volatility (5%)
- Demographic shift (5%)

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Top Risks in Combination Financial volatility (11%) Cyber/network infrastructure (10%) Terrorism (9%) Asset price collapse (7%) Globalization shift and Regional instability (tied with 6%)





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Thank you! Max J. Rudolph, FSA CFA CERA MAAA						
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