



Emerging Risks

ERM Symposium – Concurrent Session 6

May 3, 2019 11 am – 12:15 pm

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

Survey of Emerging Risks

5 Categories

- **Economic**
- **Environmental**
- **Geopolitical**
- **Societal**
- **Technological**

Survey of Emerging Risks

23 Risks (Slide 1 of 2)

Economic

- Energy price shock
- Currency shock
- Chinese economic hard landing
- Asset price collapse
- Financial volatility

Environmental

- Climate change
- Freshwater loss
- Tropical storms
- Earthquakes
- Severe weather

Survey of Emerging Risks

23 Risks (Slide 2 of 2)

Geopolitical

- Terrorism
- Weapons of mass destruction
- Interstate/civil wars
- Failed and failing states
- Transnational crime
- Globalization shift
- Regional instability

Societal

- Pandemics
- Chronic diseases
- Demographic shift
- Liability regimes/regulations

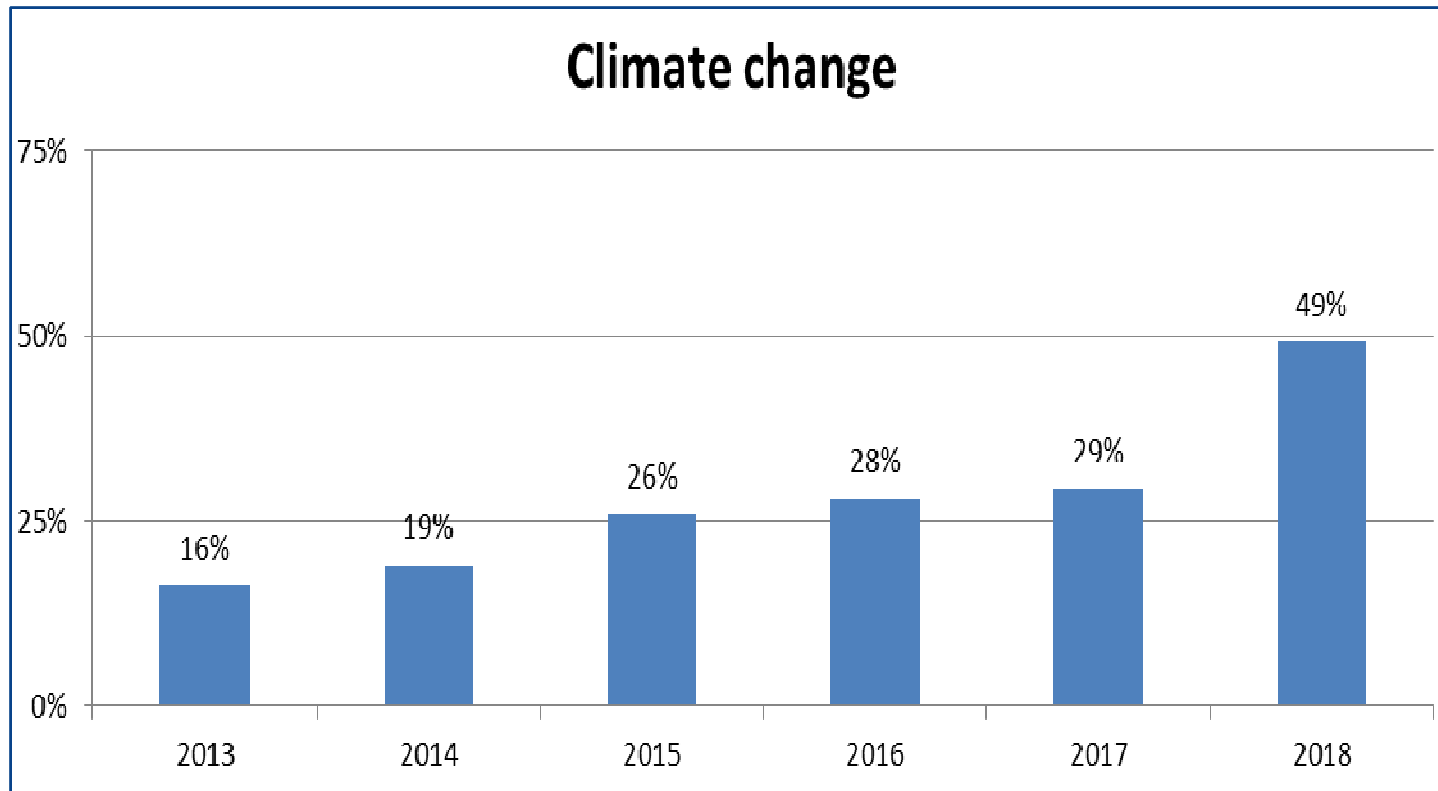
Technological

- Cyber
- Technology

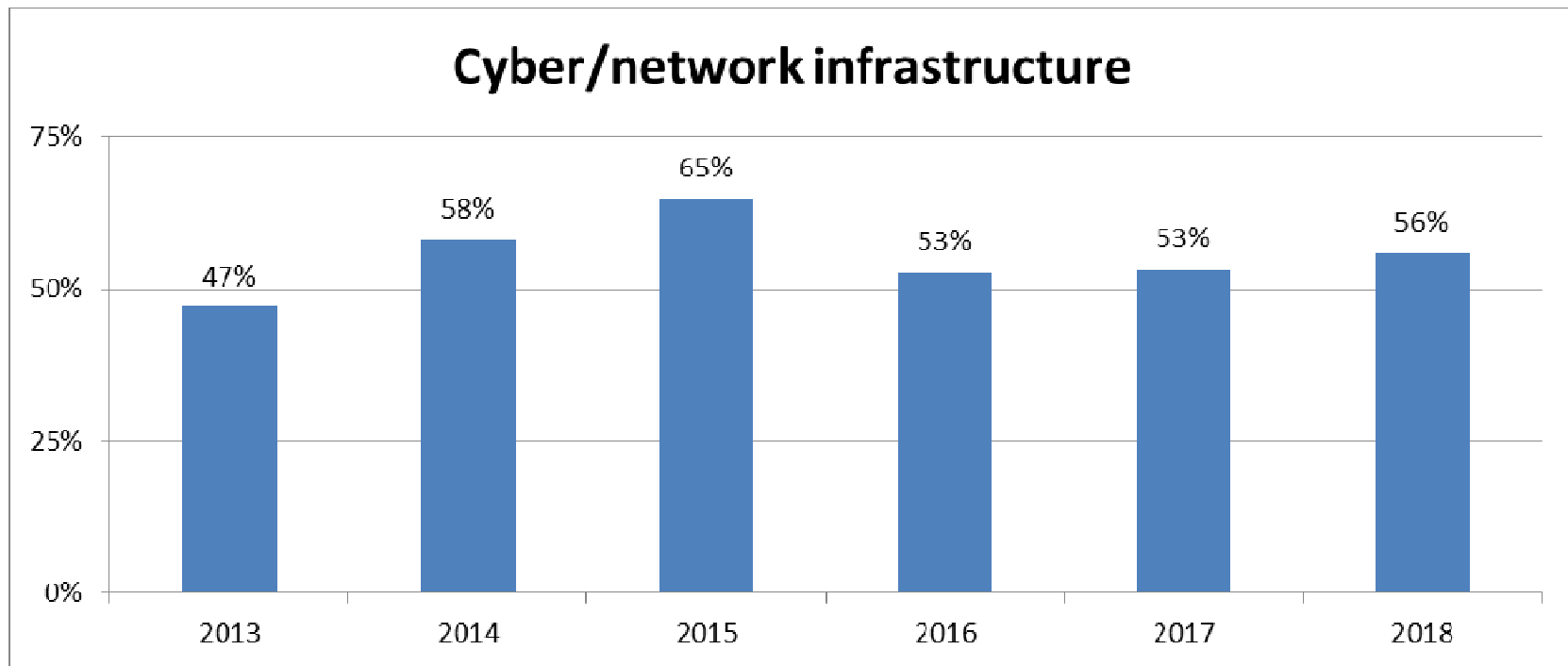
Questions Asked

- **Current risk**
- ***Top 5 emerging risks***
- **Top emerging risk**
- **Emerging risk combinations**

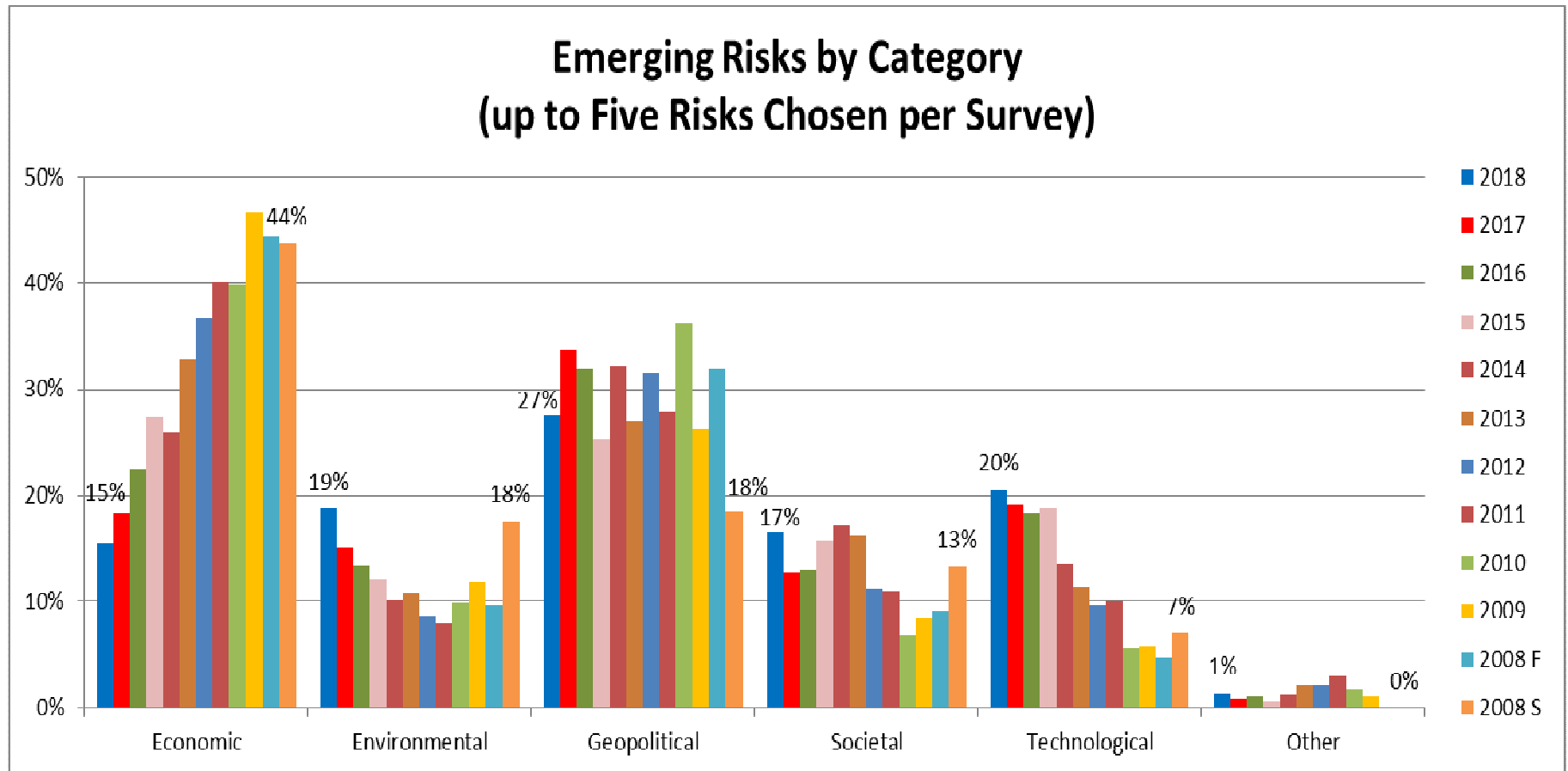
Climate Change (top 5 emerging)



Cyber concerns continue (top 5 emerging)



Geopolitical risks strengthen



Top (5) Emerging Risks Over Time

Year	2015	2016	2017	2018
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

Top Current Risks

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

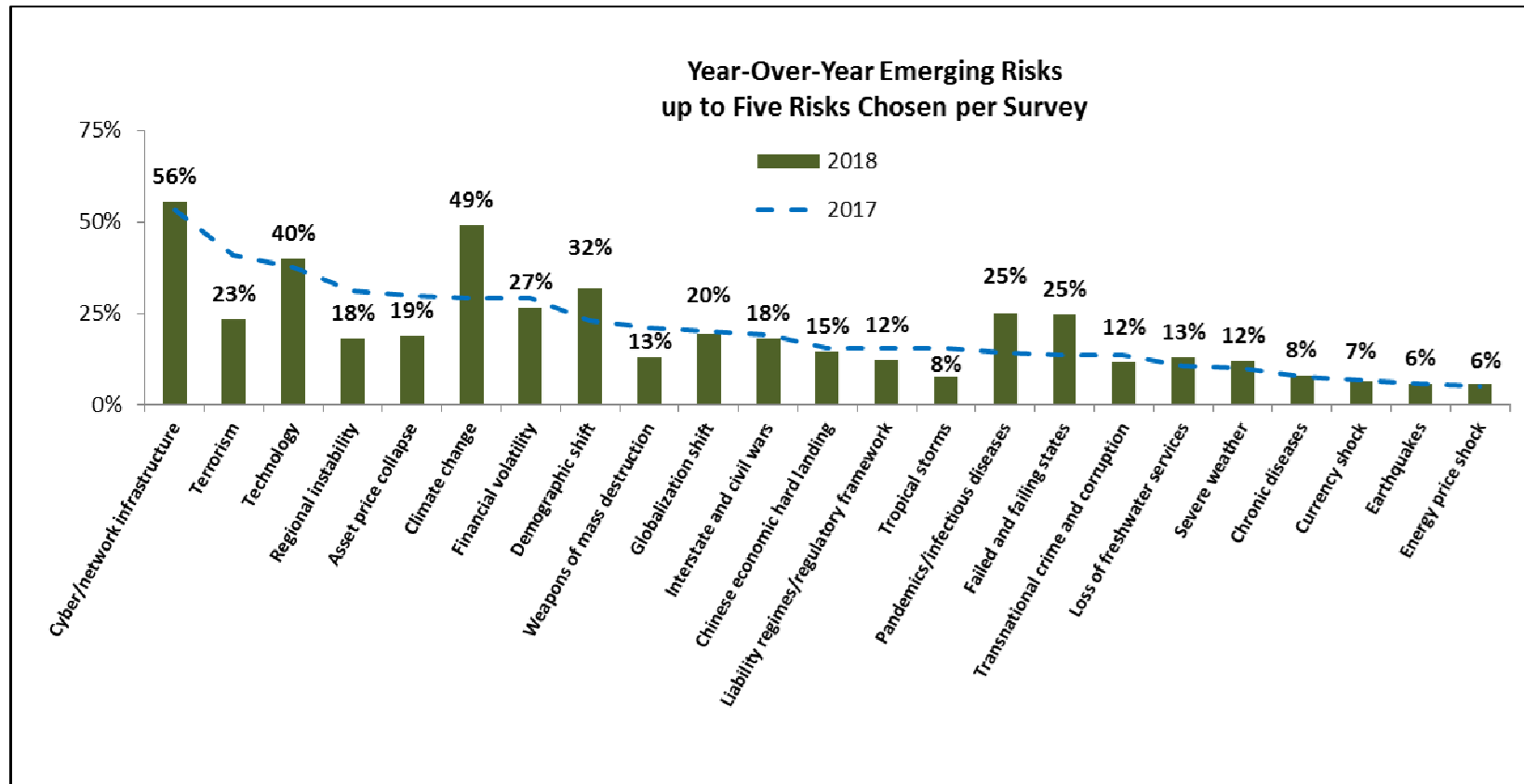
Top Emerging Risks

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

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%)**

Changes from prior year



To access surveys/articles

<https://www.soa.org/research-reports/2015/research-emerging-risks-survey-reports/>

Articles based on the Survey of Emerging Risks

SOA blog for Canadian members

ERM practitioners' advice for the next generation

<https://www.soa.org/Files/Research/Projects/erm-lessons-master.pdf>

How a risk team adds value

<https://blog.soa.org/2019/02/22/how-a-risk-team-adds-value/>

Thank you!

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