

Ninth Annual Survey of Emerging Risks: Summary of Findings

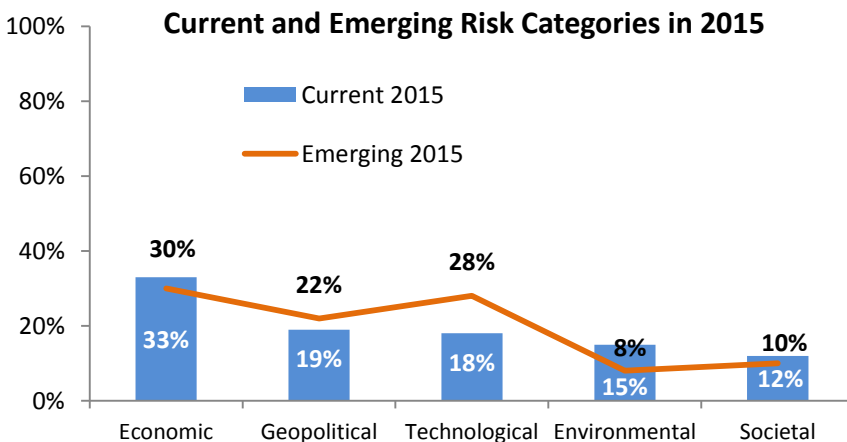
Cybersecurity ranks as both the greatest current and emerging risk, according to the ninth annual Emerging Risks Survey of risk managers. Economic risks have decreased in importance since the survey was first executed in 2008, but financial volatility still remains the second greatest current threat, followed by terrorism. This year’s results are consistent with previous surveys and demonstrate evidence of anchoring, where responses gravitate toward recent events. Increased cyber threats but reduced regional tensions and infectious disease coverage likely contributed to the latest rankings. The following summary highlights key findings from research conducted by Max Rudolph, FSA, CERA, MAAA, a Fellow of the Society of Actuaries and owner of Rudolph Financial Consulting, LLC.

2016 Outlook

Risk manager respondents indicated a conservative global economic outlook for 2016, with 73 percent indicating a moderate and 13 percent a good outlook. Another 13 percent of risk managers had poor expectations for 2016, consistent with previous surveys in the series.

Impact of Current and Emerging Risk Categories

Risk managers perceive cyber security, financial volatility and terrorism to be the most impactful current and emerging risk categories for the second year in a row.



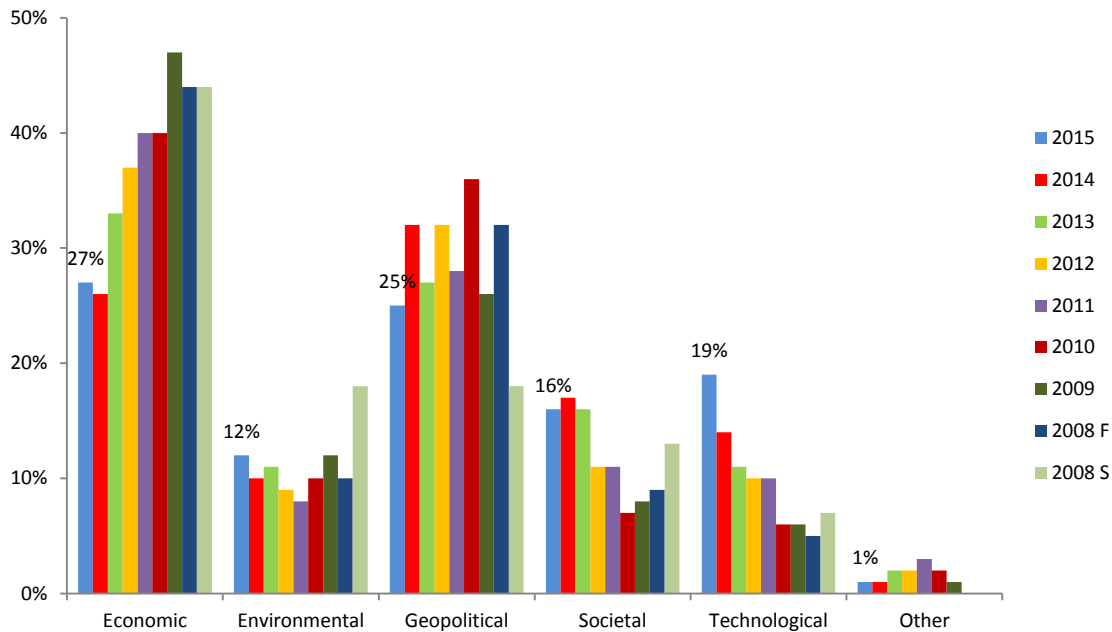
An analysis of gaps in current and emerging risk categories uncovers insightful conclusions about managers’ expectations for the future. There is a stark difference between the volume of risk managers who view cyber security as the greatest current risk (15 percent) compared to those who view cyber threats as the greatest emerging risk (23 percent). These differences may be due to the perception that these risks may have more volatility or strength in the future.

In addition, emerging geopolitical risks ceded ground to technological risks, and fell to the lowest result since the initial survey in spring 2008 (25 percent). Despite the decline, this category is still among the most prevalent perceived risks.

Other notable emerging risks trends include:

- Societal risk from pandemics and infectious disease decreased from 30 percent in 2014 to 17 percent this year, as the Ebola crisis faded (and Zika was not yet in the news).

**Emerging Risks by Category
(up to five risks chosen per survey)**



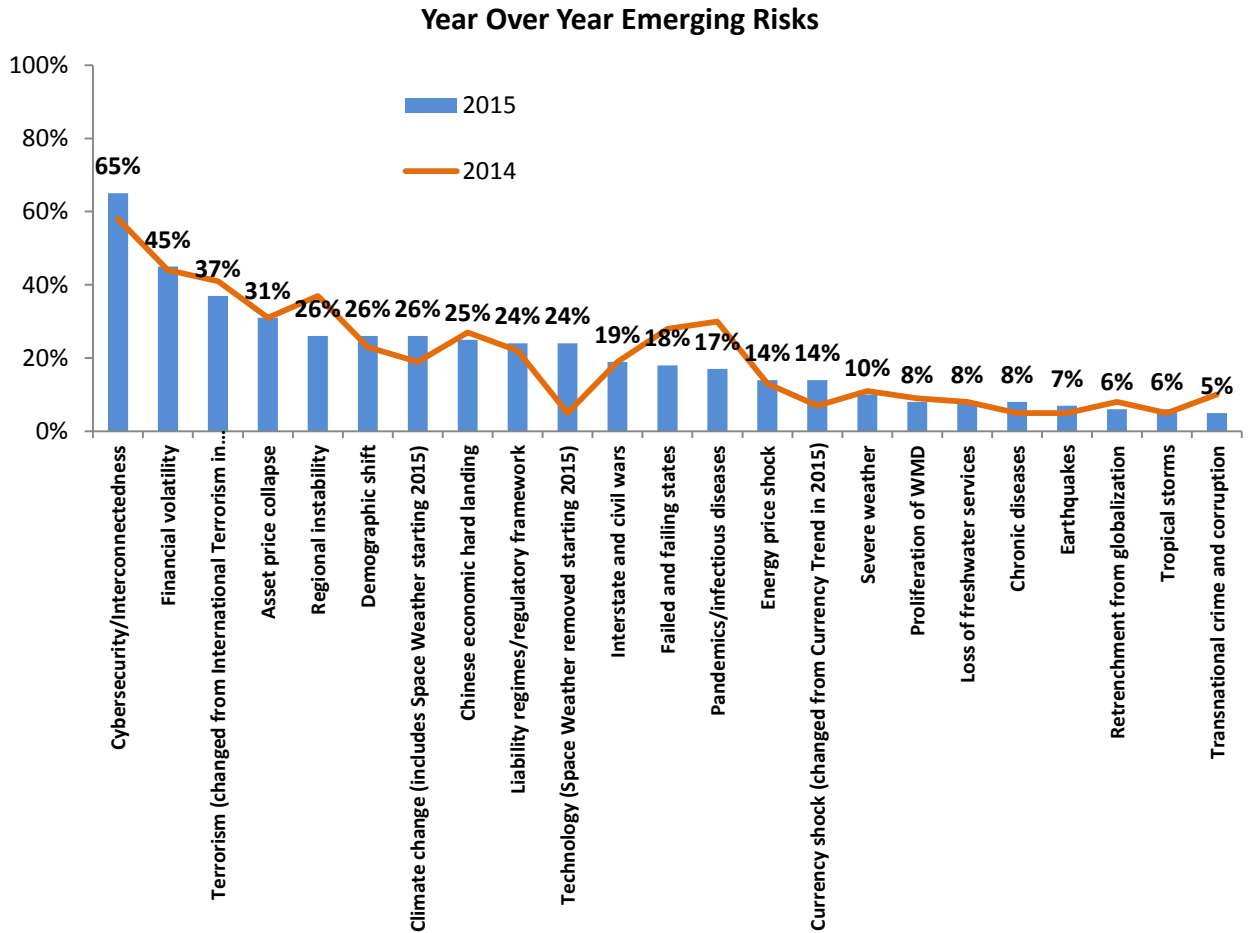
Impact of Specific Emerging Risks

When asked to choose up to five emerging risks, cyber security emerges as the clear winner with 65 percent of respondents, followed by financial volatility (45 percent), terrorism (37 percent), asset price collapse (31 percent) and regional instability (26 percent).

Year over year data illuminate notable changes in managers’ perceptions of impactful emerging risks from 2014 to 2015:

- Cyber security increased seven points from 58 percent in 2014 to 65 percent in the most recent survey. The shift in perception of cyber security risks (ranked three, two, one and currently one over the past four years) demonstrates how concerns are evolving away from economic risks.
- Financial volatility increased slightly from 44 percent to 45 percent. The response is relatively stable year-over-year, but represents a decline from the recent high of 59 percent in 2013.
- Terrorism risk decreased four points from 41 percent in 2014 to 37 percent. This particular risk tends to ebb and flow with recent events, and 2015 was a relatively inactive period.
- Chronic disease is an emerging risk that may pose a greater threat in the future. After years in a range of two to four percent, the last two surveys marked an increase to 5 percent last year and 8 percent this year.

- Climate change risk rose from 19 to 26 percent, and has the potential to increase in the future given recent severe weather episodes.



About the Survey

A total of 248 risk managers from across the globe participated in this online survey in November 2015. The research was funded by the Joint Risk Management Section of the Society of Actuaries, the Canadian Institute of Actuaries, and the Casualty Actuarial Society.