

# 12th Annual Survey of Emerging Risks

## Key Findings





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## Key Findings

### Introduction

The *12th Survey of Emerging Risks* tracks risk manager thoughts on the topic beyond the normal planning cycle, seeking strategic implications, and trends them over time. It is sponsored by the Joint Risk Management Section, a collaboration of the Canadian Institute of Actuaries (CIA), Casualty Actuarial Society (CAS), and Society of Actuaries (SOA). Questions are both quantitative and qualitative, allowing consistency between years and evolving risk management practices to be shared. The survey responses, especially the comments, give risk managers a way to network anonymously with peers and share the new ways they are thinking about risk.

The survey, completed in November 2018, included 267 participants. The anonymous online survey was primarily North America based (87%), with additional responses from Europe, Asia, South America, Africa, Caribbean/Bermuda, and the Middle East.

This report presents the major findings from the survey. The full report covering the *12th Survey of Emerging Risks* with complete updates and analysis of open-ended questions will be released later in the year.

## Key Finding 1: Cyber Concerns Continue, Climate Concerns Grow

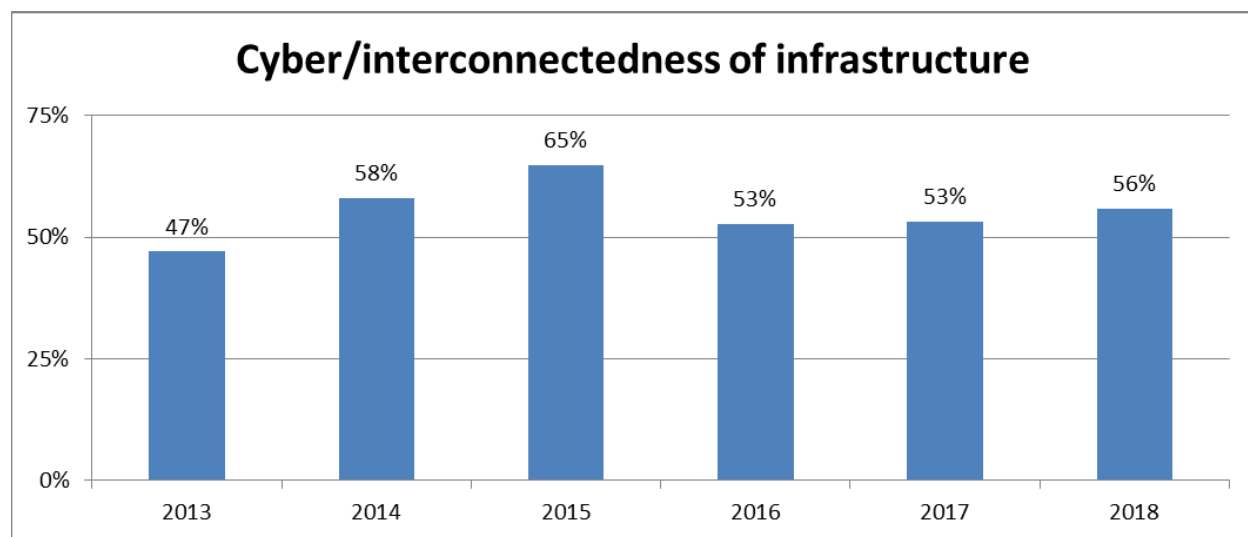
The recurring survey questions focus on four ways of looking at risk:

- Top current risk (participants vote for one);
- Top five emerging risks (vote for five);
- Top emerging risk (vote for one); and
- Top emerging risk combinations (vote for three combinations of two risks).

A set of 23 risks are presented to the participants, and they can add additional risks except for the combination questions. These are grouped into five categories: economic, environmental, geopolitical, societal, and technological.

In comparing this year’s results to prior year results, the cyber/interconnectedness of infrastructure risk remained strong, no longer with a clean sweep but at least second place in each of the four questions listed above. This risk continued its position as number one for top five emerging risks, increasing to 56% as shown in figure 1. For the other three questions it fell to number two. It was runner-up for top current risk (12%), top emerging risk (15%), and combination risk (9% of all the risks chosen, in combination with another risk).<sup>1</sup> Climate change risk, the survey’s big mover, now is considered the top current risk (12%),<sup>2</sup> top emerging risk (22%), top combination risk (11%), and is second among top five emerging risks (49%, with a leading increase of 20% as shown in figure 2).

Figure 1

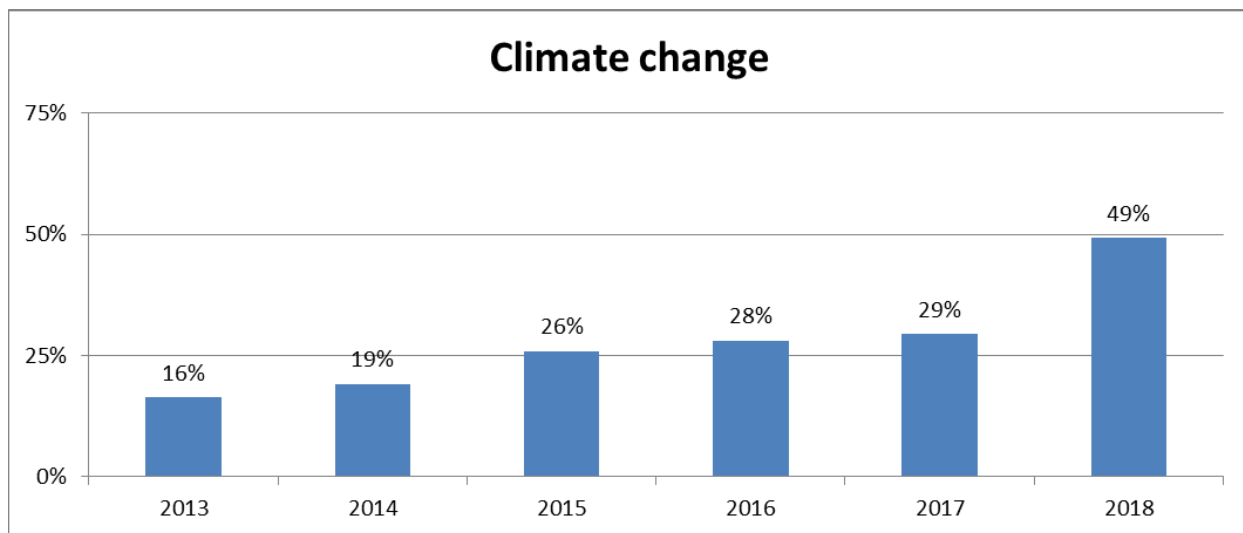


<sup>1</sup> Percentages for the top five emerging risks are based on the number of respondents, so they add up to more than 100%. Other results, except for rounding, add to 100%.

<sup>2</sup> Climate change is the top current risk at 12.0% followed by cyber/interconnectedness of infrastructure at 11.6%.

While news about cyberattacks was similar to the prior year (or perhaps we have become numb to new breaches), climate change surged and has become a common front-page story. The IPCC (Intergovernmental Panel on Climate Change) report was released in October 2018, just prior to the survey, and severe climate-related events included hurricanes, wildfires, and drought.

Figure 2



Although general consistency is found among the top risks, each year recent events highlight some while others fade. Those that drop out of the top five are monitored as contrarian indicators. This year, terrorism, regional instability (both geopolitical risks), and asset price collapse dropped out of the top five when choosing five emerging risks. Returning to the top five are climate change, financial volatility, and demographic shift (see table 1). Terrorism had the largest negative move, down 18%, in this version of the survey.

**Table 1**  
**Top Five Emerging Risks, 2015–2018**

Year	2015	2016	2017	2018
1	Cybersecurity/ interconnectedness of infrastructure	Cyber/ interconnectedness of infrastructure	Cyber/ interconnectedness of infrastructure	Cyber/ interconnectedness of infrastructure
2	Financial volatility	Financial volatility	Terrorism	Climate change
3	Terrorism	Terrorism	Technology	Technology
4	Asset price collapse	Technology	Regional instability	Demographic shift
5	Regional instability	Retrenchment from globalization	Asset price collapse	Financial volatility

Among other questions, the top five risks for the current survey are as follows:

**Top Current Risk**

1. Climate change (12%)
2. Cyber/interconnectedness of infrastructure (12%)
3. Financial volatility (11%)
4. Asset price collapse (8%)
5. Technology (7%)

### Top Emerging Risk

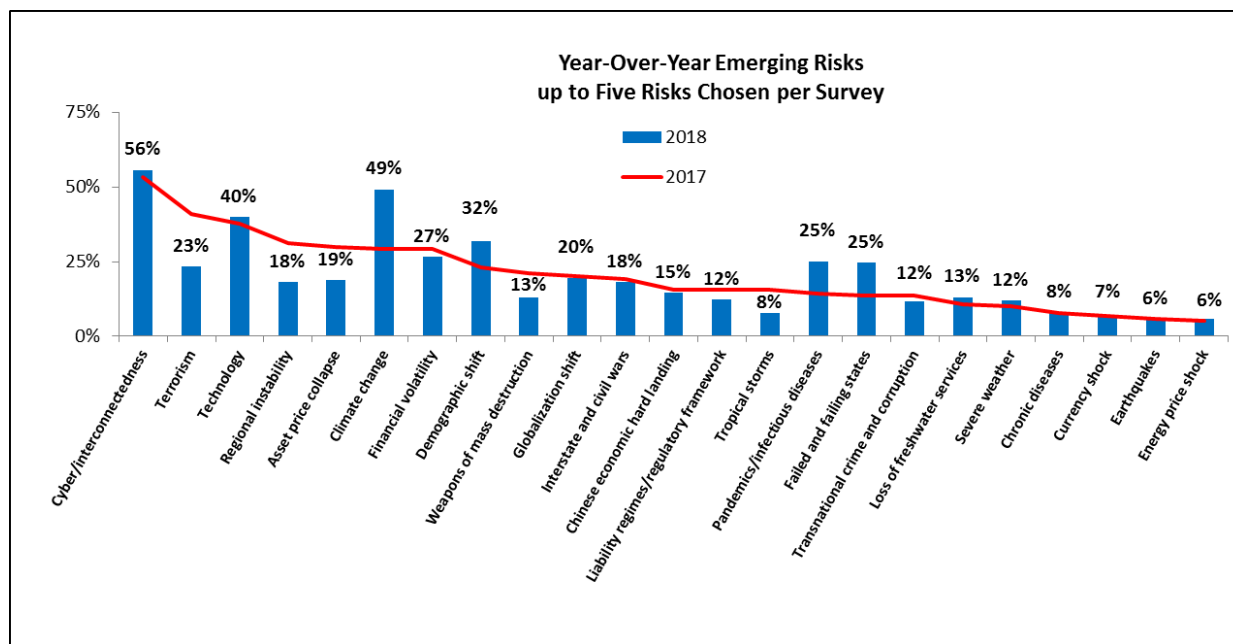
1. Climate change (22%)
2. Cyber/interconnectedness of infrastructure (15%)
3. Technology (13%)
4. Financial volatility (5%)
5. Demographic shift (5%)

### Top Risk Combination

1. Climate change (11%)
2. Cyber/interconnectedness of infrastructure (9%)
3. Financial volatility (8%)
4. Asset price collapse and technology (tied with 7%)<sup>3</sup>

Results for the top five emerging risks in figure 3 have been sorted based on the previous survey (2017) to highlight the differences in the most recent survey.

Figure 3



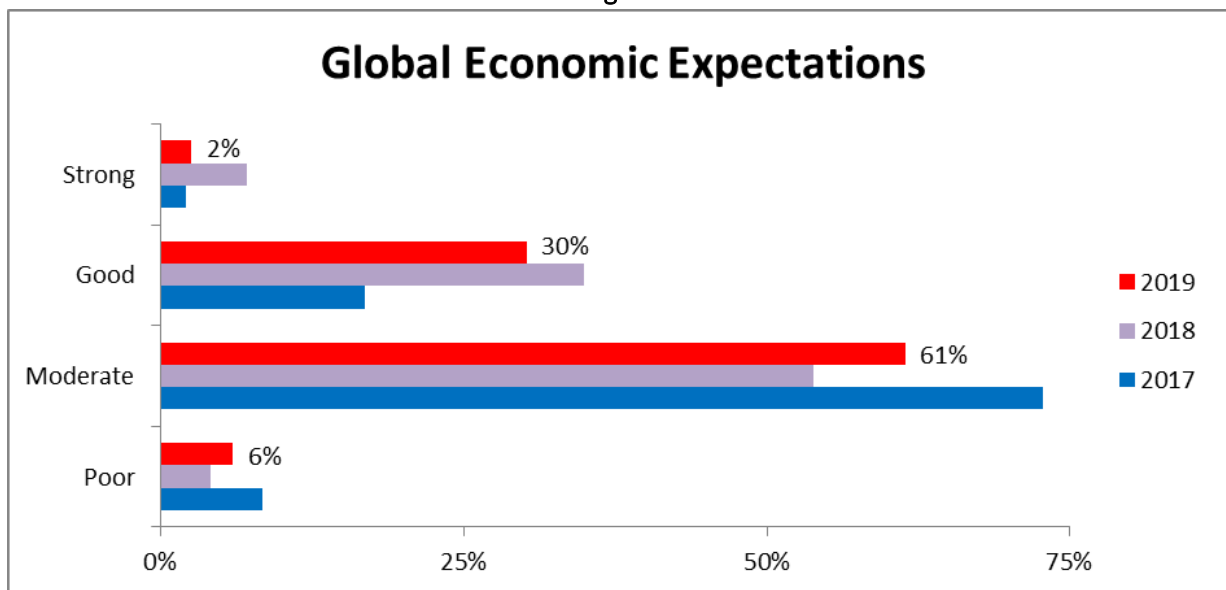
<sup>3</sup> Asset price collapse and technology are tied with 6.7%.



## Key Finding 2: Global Economic Outlook Good for 2019

Global economic expectations are still hardy, but down from the previous survey, with more than 30% of respondents expecting 2019 to be good or strong (see figure 4).

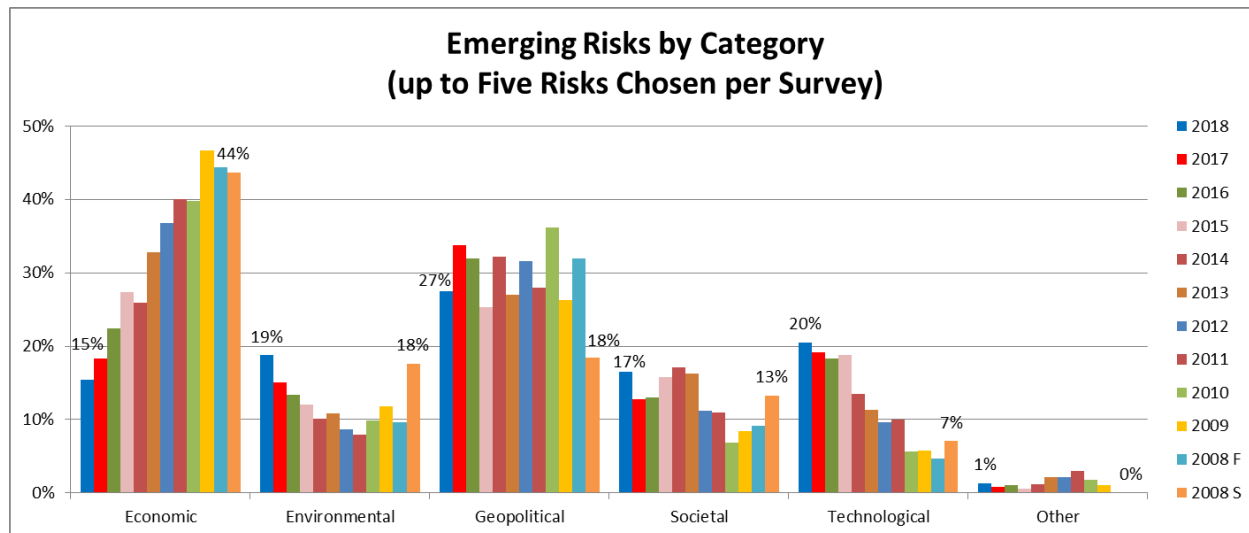
Figure 4



### Key Finding 3: Geopolitical Risks Lead among Categories, but Lead Shrinks

Geopolitical category emerging risks are down from 2017, and are surprisingly low compared to prior American election year cycles. Environmental risks increased (climate change increased by 20%, offset by the reduction in “natural catastrophe: tropical storms” after the bump in the previous survey due to heavy hurricane activity), as did the societal (due to increases in pandemics/infectious diseases and demographic shift) and technological categories. Asset price collapse drove the economic category lower (see figure 5).<sup>4</sup>

Figure 5



### Key Finding 4: Common Terms

There are several concepts used in risk management where authors and presenters have not typically used consistent terms. Respondents were asked for their views about what to call how often an event occurs, and how bad the event is. Frequency gets a slight nod over likelihood (with probability an also-ran) for the first question, shown in figure 6, and severity was a strong winner over impact, as seen in figure 7. Most of the “other” responses said that the terms they used varied with the circumstances.

<sup>4</sup> The current survey is the 12<sup>th</sup> version of the survey. The survey was completed twice in 2008 (spring, fall) and then annually.

Figure 6

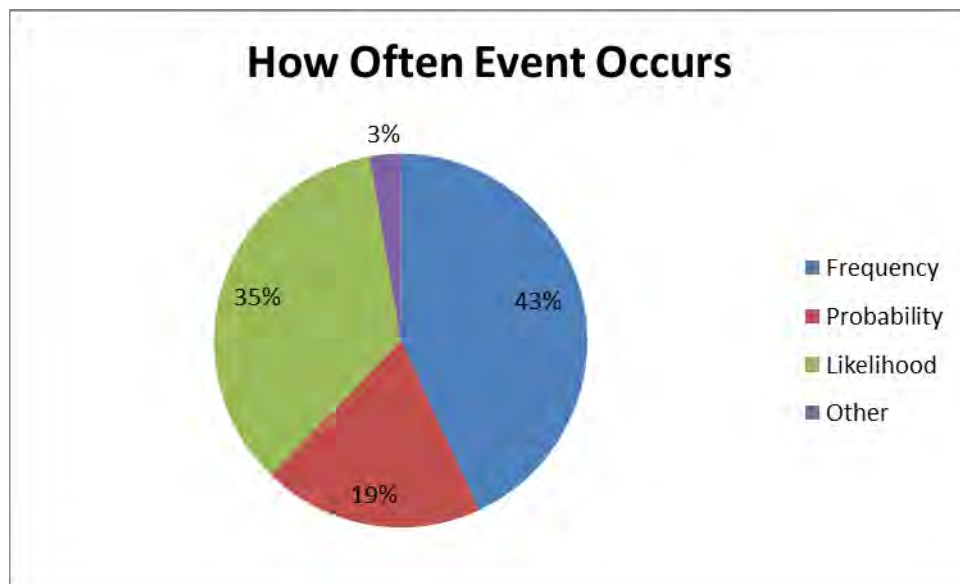


Figure 7

