

# Climate Risk Disclosure Survey Analysis

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# Agenda

- Value of Climate-Related Financial Disclosures
- Academy Analysis of National Association of Insurance Commissioners (NAIC) Survey Responses
  - ▣ Yes/No Responses
  - ▣ Systematic, qualitative analysis of company responses
  - ▣ Systematic, qualitative analysis of response to Question #5, on investment strategy
- Implications of Academy Analysis
- Plans for Phase 2 Research: Beyond the Current Survey



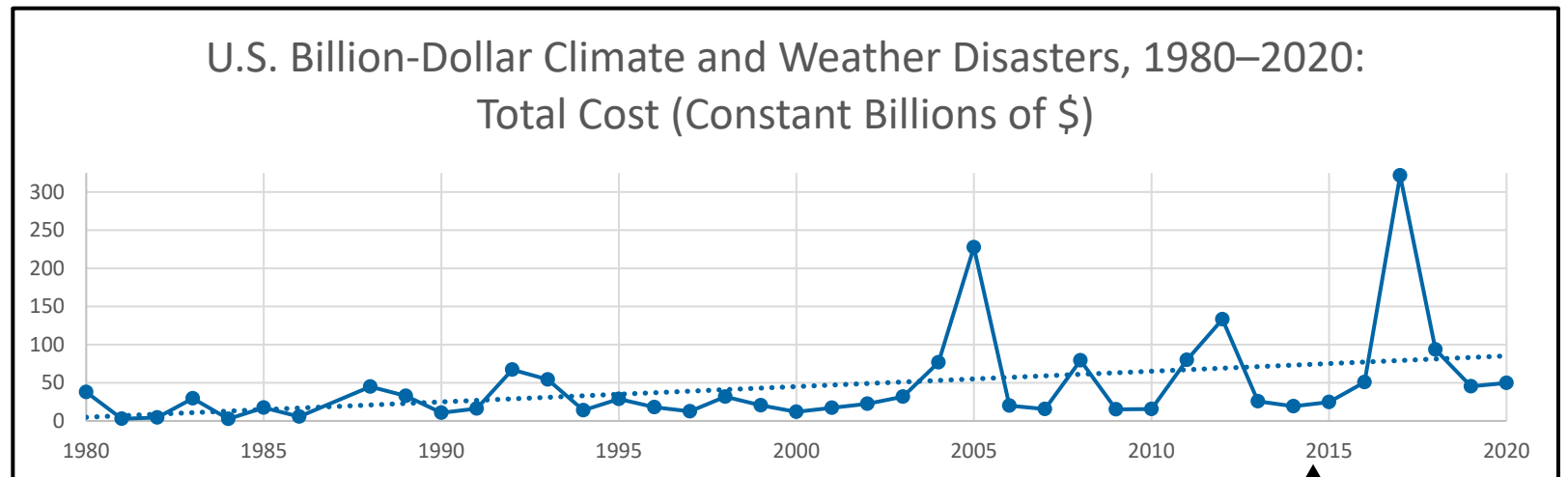
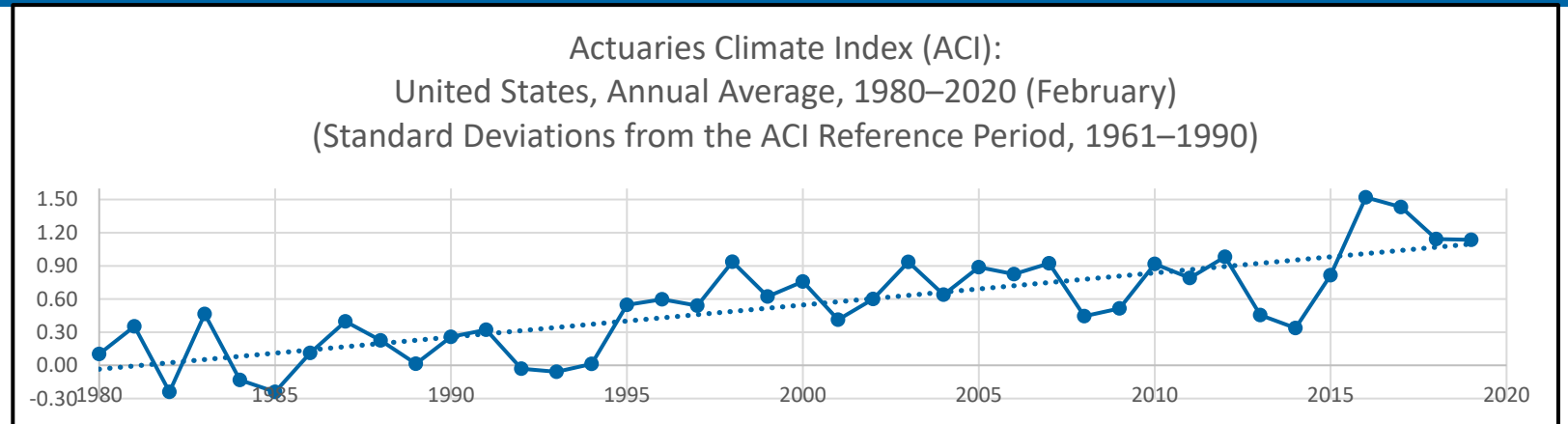
# Value of Climate-Related Financial Disclosures

1. Climate is becoming more extreme—in temperature, precipitation, wind, and sea level—as seen in the Actuaries Climate Index (ACI).

Source: Calculations by Academy staff of data provided at [actuariesclimateindex.org](http://actuariesclimateindex.org).

2. Economic losses from extreme climate-related events are increasing, as seen in NOAA’s Billion-Dollar Disasters database.

Source: Calculations by Academy staff of data provided at [www.ncdc.noaa.gov/billions/](http://www.ncdc.noaa.gov/billions/).



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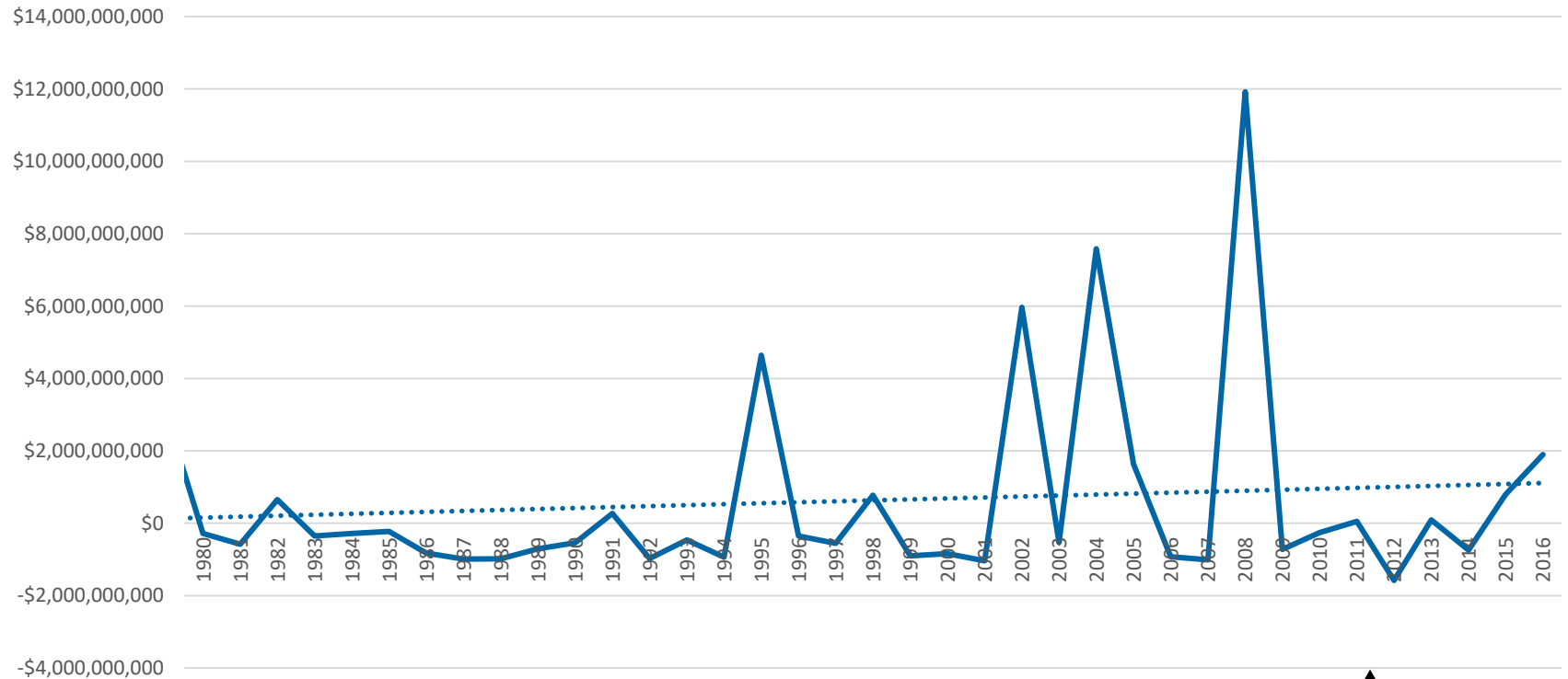
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# Value of Climate-Related Financial Disclosures

3. Preliminary estimates of economic losses, 1980–2016, due to changes in climate risk *controlling* for changes in exposure show a pattern of increase similar to those seen in the ACI and in the NOAA database.

Source: Adapted by Academy staff from Figure 2, [Actuaries Climate Risk Index: Preliminary Findings](#), American Academy of Actuaries, January 2020.

Actuaries Climate Risk Index:  
Annual Totals, 1980–2016, USA  
(Constant Billions of \$)



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# Value of Climate-Related Financial Disclosures

- Given changes in climate risk, observed and projected:
- Policymakers and stakeholders may need to know how companies are responding to and planning for the changes in climate risk.
  - Regulators may need to know how particular companies are managing climate risk, especially relative to norms for the industry and line of business.



# Value of Climate-Related Financial Disclosures

- ❑ Policymakers and regulators may need to determine best format for gathering information: continue with NAIC Survey; move to Task Force on Climate-related Financial Disclosures (TCFD) guidance; or other.
  - ❑ Financial Stability Board's TCFD issued recommendations for disclosures in 2017. Narrative responses plus scenario testing required.
  - ❑ European Commission (EC) requests compliance with TCFD guidance from all companies with more than 500 employees.
  - ❑ Globally, more than 1,600 companies support TCFD, including 64 insurance companies. Four of those insurance companies are in the U.S.
- ❑ Useful to know what responses to current survey produce.



# Academy Analysis of NAIC Survey Responses: Background

- NAIC's Climate Risk Disclosure Survey, adopted in 2010, has asked nine Yes/No questions and required eight narrative responses each year.
- What exactly has been disclosed?
  - 2019 survey responses > 2,500,000 words
  - Yes/No questions are easily analyzed but difficult to interpret
  - Narrative responses contain much information but are long and time-consuming to process, with no baseline against which to judge
  - Considerable duplication among company/legal entities, with 1,228 entities responding (as of 10/23/20) for 2019, reduced to 463 distinct reports (distinct survey responses > 550,000 words)

## Topics of Survey Questions

1. Emissions Plan
2. Risk Management Policy
3. Process for Identifying Risks
4. Current or Anticipated Risks
5. Investment Policy & Strategy
6. Encourage Policyholders
7. Engage Key Constituencies
8. Actions to Manage Risks



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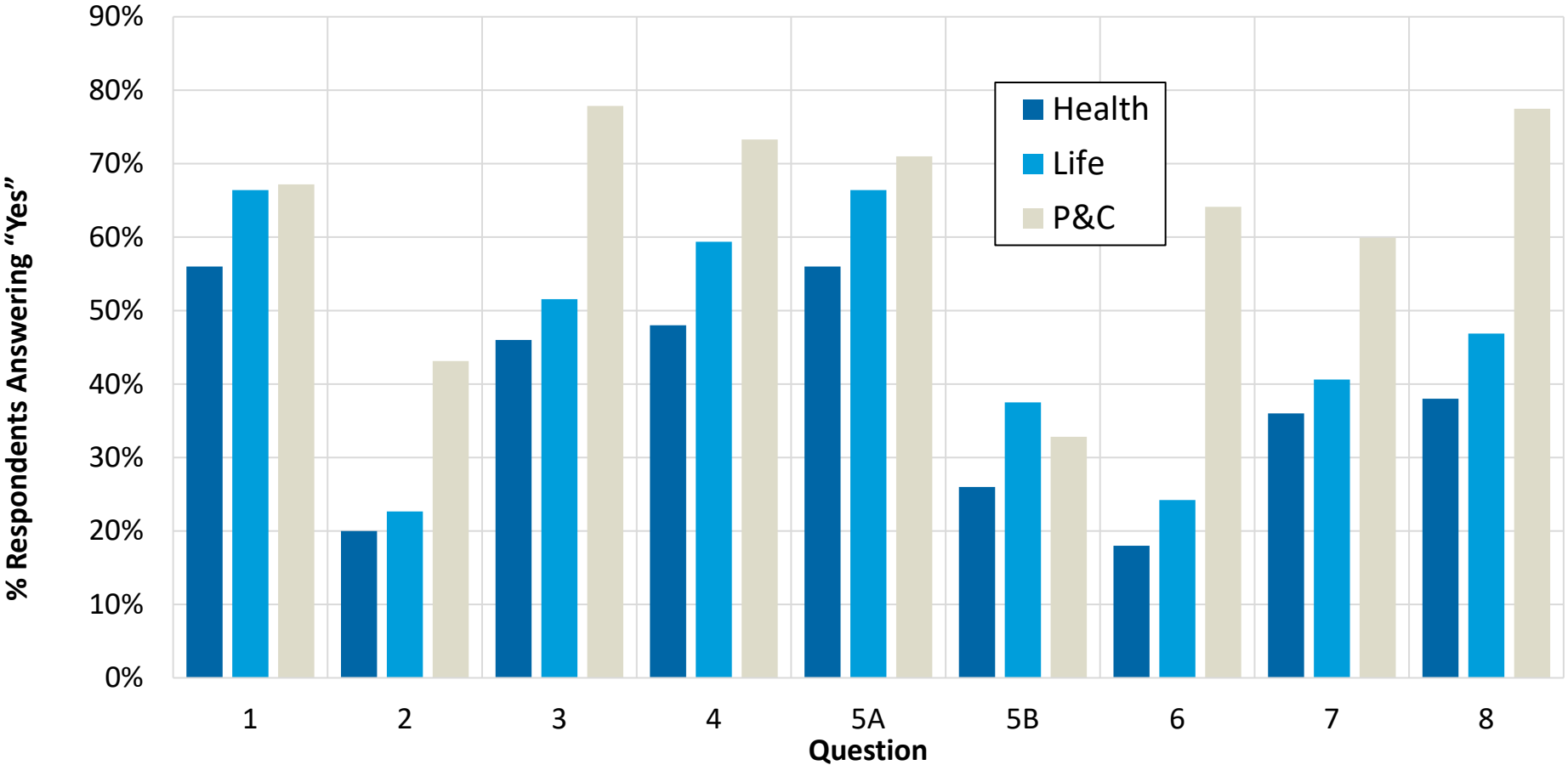
# Academy Analysis of NAIC Survey Responses: Summary

- Y/N responses reveal differences over time, across questions, and across lines of business.
- Y/N responses must be interpreted with caution
- Systematic, qualitative analysis reveals:
  - ~10-15% of companies provide robust responses
  - ~10-15% of companies provide some detail
  - ~70-80% indicate little of their assessment of climate risk or plans for management of that risk.





# Academy Analysis of NAIC Survey Responses: “Yes”



**Questions**

1. Emissions Plan
2. Risk Management Policy
3. Process for Identifying Risks
4. Current or Anticipated Risks
5. Investment Policy & Strategy
6. Encourage Policyholders
7. Engage Key Constituencies
8. Actions to Manage Risks

- P&C companies answer “Yes” most frequently to most questions
- Health companies answer “Yes” least often for every question



# Academy Analysis of NAIC Survey Responses: “Yes” Interpreted with Caution

- “No” does not necessarily mean bad for climate risk
  - ▣ 31% of all companies responded “Yes” to “reviewed investment policy” and “No” to “changed investment policy”
  - ▣ Typical comment: “[Our] investment strategy and risk management process address those [climate-related] risks and others.”
- “No” and “Yes” may not be that different:
  - ▣ Between 2018 and 2019, 259 responses changed from “No” to “Yes” or “Yes” to “No”; 35% were accompanied by identical text responses.



# Academy Analysis of NAIC Survey Responses: Length of Response

## Median Length of Survey Response (# of Words)

	Health	Life	Property & Casualty
Smallest 25% of Companies	519	414	530
Middle 50% of Companies	450	555	720
Largest 25% of Companies	1,975	1,100	1,265

- Length of response is an imperfect indicator of attention to the questions asked.
- In all Lines of Business (LoBs), the largest companies file longer responses than small and midsize companies.
- The largest health companies file particularly lengthy responses.
- Midsize P&C companies file longer responses than midsize Health or Life companies.
- Size of business appears to be one driver for attention given to the survey, with the largest 25% of companies in each LoB providing the most robust responses.



# Academy Analysis of NAIC Survey Responses: Cluster Analysis of Companies' Use of Key Words or Phrases

- Most companies (80%) are in clusters where only three basic terms (“climate,” “risk,” and “change”) are mentioned frequently.
- A small proportion of the companies (8%) are in clusters where several terms (eight or more; adding to the basic terms words and phrases such as “climate change,” “management,” “policy” and “impact”) are mentioned frequently.
- Some companies (12%) are in clusters where a few terms beyond the basics are mentioned frequently.



# Academy Analysis of NAIC Survey Responses: Assessing Responses to Question #5

- Each of the eight questions requires closer analysis. We have begun with *Question #5*.
- *Question #5: Has the company considered the impact of climate change on its investment portfolio? Has it altered its investment strategy in response to these considerations?*
- *Question #5: two Yes/No questions followed by text response, with six specific follow-up questions.*



# Academy Analysis of NAIC Survey Responses: Assessing Responses to Question #5

- Six, specific follow-up questions for Question #5:
  - ▣ *Does the company consider regulatory-, physical-, litigation-, and competitiveness-related climate risks, among others, when assessing investments?*
  - ▣ *Has the company considered the implications of climate change for all of its investment classes, e.g., equities, fixed income, infrastructure, real estate?*
  - ▣ *Does the insurer use a shadow price for carbon when considering investments in heavy emitting industries in markets where carbon is either currently regulated or is likely to be regulated in the future?*
  - ▣ *Does the insurer factor the physical risks of climate change (water scarcity, extreme events, weather variability) into security analysis or portfolio construction? If so, for what asset classes and issuers (corporate, sovereign, municipal)?*
  - ▣ *How does climate change rank compared to other risk drivers, given the insurer's asset liability matching strategy and investment duration?*
  - ▣ *Does the insurer have a system in place to manage correlated climate risks between its underwriting and investments?*
- Are companies responding to these questions?
  - ▣ Only regulatory risk (12%) appears to have been addressed by more than 10% of companies.



# Academy Analysis of NAIC Survey Responses: Conclusions

- Some evidence of inattention or confusion in responses
- Variation in attention by LoB and size
- Certain Qs predominantly Y; others predominantly N
- Qualitative responses make clear that most companies in all LoBs provide narrow responses
- In each LoB, a small percentage of companies provide broad responses
- Most companies are answering Question #5 about their investment strategy with little detail, and limited attention to specific issues raised.



# Implications of Academy Analysis

- A. Research May Raise Considerations for the NAIC Climate and Resiliency Task Force to Consider:
- Encouraging broader responses from most companies
  - Providing more guidance to those tasked with completing survey responses
  - Making information from survey responses more easily accessible, whether NAIC surveys or TCFD or others
- B. To accomplish these goals, may need more research





# Plans for Phase 2 Research: Beyond the Current Survey

- Beginning in January, examining two gaps:
  - ▣ Gap between most robust Survey responses and the requirements of TCFD
  - ▣ Gap between most robust and less robust Survey responses
- Assess different possible methods of encouraging more robust responses from most companies, including:
  - ▣ Careful construction and testing of questions
  - ▣ More guidance for preparers
  - ▣ More Y/N and/or multiple-choice questions
- Expect results by summer 2021



# Questions?

Or if you have any further questions, please contact us:

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