SHAREHOLDER ACTIVISM AND FIRMS' VOLUNTARY DISCLOSURE OF CLIMATE CHANGE RISKS

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ABOUT ACTIVISM

- **Activism** consists of efforts to promote, impede, direct, or intervene in social, political, economic, legal, or **environmental** reform with the desire to make changes in society toward a perceived greater good.
- **Environmental activism**
- --the **protection of nature** or the **natural environment** driven by a utilitarian conservation ethic or a nature oriented preservationist ethic
- --the **protection** of the **human environment** (by pollution prevention or the protection of cultural heritage or quality of life)
- --the **conservation** of depletable **natural resources**
- --the **protection** of the function of critical **earth system** elements or processes such as the **climate**

CLIMATE-RELATED SHAREHOLDER ACTIVISM

- **Reason**:
- ① Shareholders **growingly recognize** increased **costs and risks** associated with **climate change**
- ② In many countries (including the U.S.), the disclosure of nonfinancial information is not mandated by law, companies often provide limited (if any) information.

- **Results:**
- ① Managers **increasingly** face shareholder pressure to disclose and manage their exposure to climate change risks.
- ② **More** companies faced a record number of climate-related shareholder proposals
- ③ This increase in shareholder pressure is not only reflected in the number of shareholder proposals submitted, but also in the **increasing** shareholder support and approval rates

RESEARCHING PROBLEMS

- ① In the absence of public governance, if **private governance**—in the form of shareholder activism—can elicit **greater disclosure** of firms' exposure to climate change risks along with information on how firms are managing those risks.

- ② The **heterogeneity** among shareholders, characterizing which shareholders are **particularly effective** in eliciting such disclosure.

- ③ Examine the valuation implications to assess whether investors **value the disclosure** of climate risk information

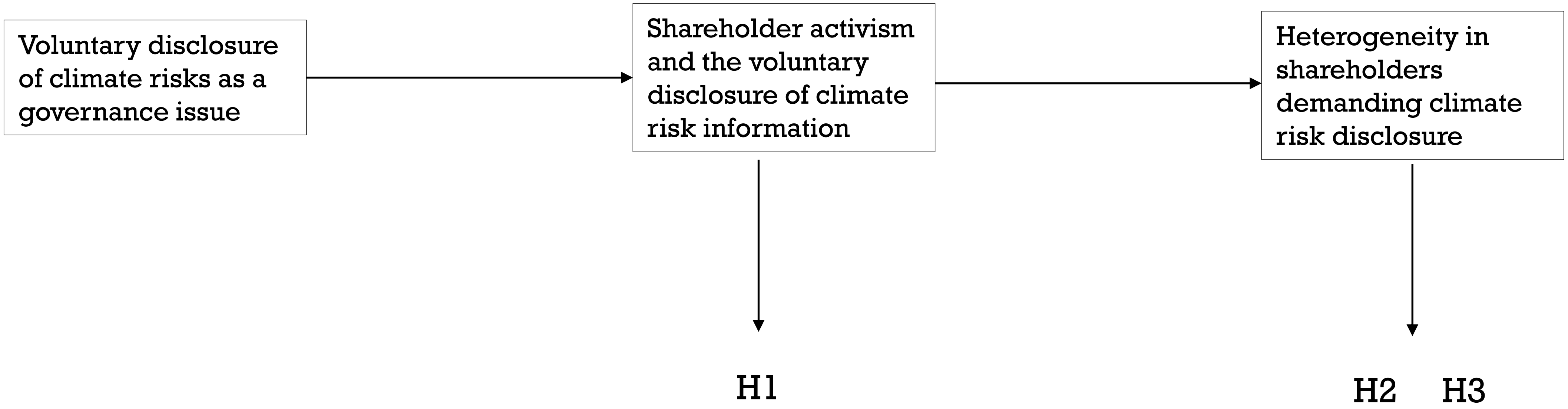
STUDY CONTRIBUTION

- ① Writers complement the literature that studies the **disclosure of firms' environmental impact**.
- ② Writers add to the literature that examines the **mandatory disclosure of firms' nonfinancial information**.
- ③ Study contributes to the strategy and management literature that examines **how shareholders shape corporate behavior**.
- ④ Study accounts for the **heterogeneity** among shareholder types and examines how these **differences** influence corporate behavior.
- ⑤ Writers highlight investors' ability to elicit greater corporate transparency with respect to climate change risks and thereby contribute to their portfolio companies' governance, especially in the absence of **mandatory disclosure requirements**.

THEORY

- **Hypothesis 1**: Environmental shareholder **activism increases** companies' **voluntary disclosure** of climate change risk information.
- **Hypothesis 2**: Companies are more likely to voluntarily disclose climate change risk information if the environmental shareholder activism is initiated by **institutional investors**.
- **Hypothesis 3**: Companies are more likely to voluntarily disclose climate change risk information if the environmental shareholder activism is initiated by **long-term institutional investors**.

THEORY


Voluntary disclosure of climate risks as a governance issue
Shareholder activism and the voluntary disclosure of climate risk information
Heterogeneity in shareholders demanding climate risk disclosure
H1
H2
H3

DATA——DATA SOURCES

Climate change risk disclosure —— CDP (Carbon Disclosure Project)

Shareholder activism —— ISS (Institutional Shareholder Services)

Duration: Mainly focus on the firm's data from 2010 to 2016

DATA—DEFINITION OF VARIABLES

Dependent variable

In the CDP questionnaire, companies are asked to disclose information on three types of climate change risks:

1) regulatory risks

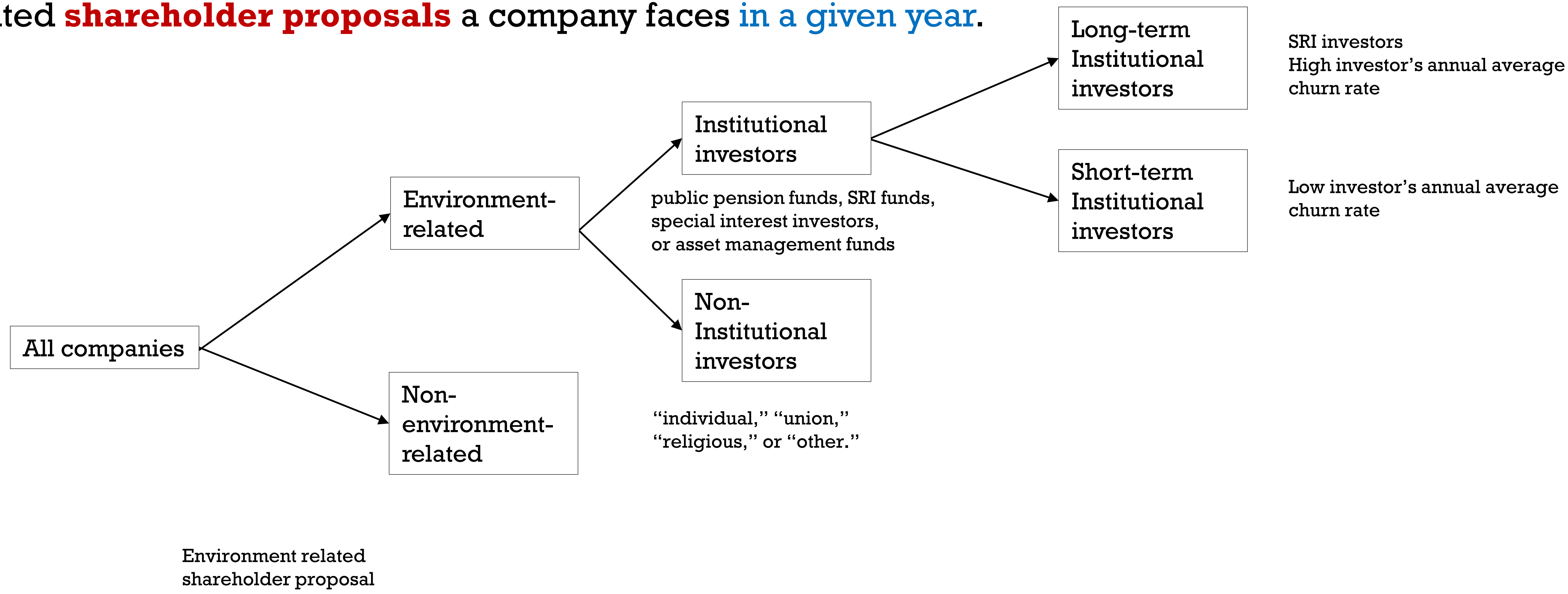
2) physical risks

3) other risks

DATA—DEFINITION OF VARIABLES

Independent variables

We measure environmental shareholder **activism** as the number of environment-related **shareholder proposals** a company faces in a given year.



DATA—DEFINITION OF VARIABLES

Control variables

--Return on assets

--Market-to-book

--Leverage

--Cash holdings

Note: all ratios are winsorized at their 5th and 95th percentiles

METHODOLOGY—BASELINE REGRESSION

To examine whether environmental shareholder activism induces firms to voluntarily disclose climate change risks：

Dependent variable

$$\textit{disclosure of climate change risks}_{it} = \alpha_i + \alpha_t + \beta \times \textit{environmental shareholder activism}_{it\text{-}1} + \boldsymbol{\gamma}'\mathbf{X}_{it\text{-}1} + \varepsilon_{it},$$

i indexes firms;
firm fixed effects

t indexes years;
year fixed effects

Captures the change in the voluntary disclosure of climate change risks following environmental shareholder activism

Independent variables

the vector of control variables

The regression is estimated by **ordinary least squares** (OLS)

METHODOLOGY—2SLS REGRESSION

Endogeneity:

In the analysis, we consider the **potential endogeneity** of environmental shareholder activism with respect to climate risk disclosure.

To address this concern, we exploit the fact that shareholder activism often comes in "waves": a given shareholder adopts an agenda and submits the same proposal to all firms in her portfolio. In such cases, the active shareholder targets a wide set of firms (regardless of their characteristics)—that is, the targeting itself is plausibly exogenous with respect to any specific firm characteristics. Our results continue to hold when using such "waves" as instrument, suggesting that they are unlikely to be driven by endogeneity.

In the research, to construct an instrument for environmental shareholder activism, we exploit the fact that shareholder activism often comes in "waves."

We then re-estimate baseline model by **two-stage least squares (2SLS) regression**, instrumenting environmental shareholder activism with environmental activism wave in the first stage.

The 2SLS analysis confirms that results **are unlikely to be driven by endogeneity bias**.

RESULTS

① Environmental shareholder **activism increases** companies' **voluntary disclosure** of climate change risks;

② The voluntary disclosure of all three types of climate risk **increases** in response to environmental shareholder activism;

③ Shareholder activism initiated by **institutional investors** is **more effective** in inducing the disclosure of climate risk information;

④ Shareholder activism initiated by **long-term institutional investors** is **more effective** in inducing the disclosure of climate risk information.

⑤ Targeted companies achieve a **higher stock market valuation** post disclosure, suggesting that **investors value** the (voluntary) **disclosure** of climate change risks.

What's more:

The 2SLS estimates are larger in magnitude than the OLS estimates.

Overall, the 2SLS analysis confirms that our results are **unlikely** to be driven by **endogeneity** bias.

MY PLAN

I need more time to think about it.

@Try to distinguish the possible difference on climate risk disclosure between investors with different characteristics.

@Try to clarify other effective channels or stakeholders to make firms' disclosure voluntarily.

@Other interesting topics…… Local ballot vs environment shareholder activism