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# Climate Litigation as a Financial Risk: Evidence from a Global Survey of Equity Investors

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## Abstract

Climate litigation is growing in scale and complexity, yet its financial consequences remain poorly understood. We study how investors perceive climate litigation as a financial risk using a global survey of 811 equity investors and analysts. Most respondents regard climate litigation as financially material but they differ systematically in how and when they believe it matters. Many associate financial relevance with early-stage events such as media coverage or case filing, well before any court judgment, and they differ in the sectors they view as most exposed and in the legal channels they find most concerning. We recover latent dimensions of belief variation, and relate them to observable investor characteristics. We identify two dimensions - Litigation Salience and Risk Type Prioritization - which give rise to three investor profiles: Unconcerned, Regulatory-focused, and Physical/Litigation-focused. The two concerned groups relate litigation to climate in distinct ways: the former sees litigation and policy as complements, while the latter see them as substitutes, expecting litigation to arise from failures to regulate. Observable investor characteristics explain part but not all of this variation. Our findings show that disagreement over climate litigation is structured and economically meaningful suggesting it may be reducible through improved disclosure on firms' climate litigation exposures.

**Keywords:** climate litigation, investor beliefs, survey

**JEL codes:** G32, K29, Q54

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# 1 Introduction

Despite being difficult to observe directly, investor beliefs play a central role in financial markets, influencing asset prices, capital allocation, and firm behaviour (Fama and French, 2007; Giglio et al., 2021). For example, a growing literature highlights how differences in investor beliefs around ESG and climate-related issues can induce segmentation in financial markets (Pástor et al., 2021; Heinkel et al., 2001; Goldstein et al., 2022; Pedersen et al., 2021). Because beliefs are not observable in market data, surveys have become an increasingly important tool in this literature to extract relative beliefs (Jolliffe, 2001; Bergman et al., 2020; Fuster and Zafar, 2023). Survey-elicited expectations are shown to correlate meaningfully with investor behaviour, offering a forward-looking perspective on risks that can be difficult to discern from stock prices alone (Giglio et al., 2021; D’Acunto and Weber, 2024; Ceccarelli and Ramelli, 2024). As Giglio et al. (2025, p.3) argue, eliciting investor beliefs can “discipline theoretical models” and help distinguish between different investor motivations.

Survey methods have proven especially powerful in the context of climate finance. Recent studies document a substantial dispersion in investor expectations about climate risks, emissions pathways, and returns to sustainable investing (Krueger et al., 2020; Stroebel and Wurgler, 2021; Giglio et al., 2025; Ceccarelli and Ramelli, 2024; Bauer et al., 2025). This literature has improved our understanding of perceived climate risks in conjunction with observational data (Krutli et al., 2025; Sautner et al., 2023; Bolton and Kacperczyk, 2021; Hong et al., 2019). For example, Giglio et al. (2025) report that investors expect lower returns from ESG investments, as theoretical models predict (Pástor et al., 2021), contrary to observational evidence when assessed over a short window (Pástor et al., 2022).

Despite these advances, one increasingly salient climate-related risk remains underexplored in finance: climate litigation. These are lawsuits against firms for their role in contributing to, facilitating, or mismanaging climate change. They have expanded rapidly in both number and legal complexity (Setzer and Higham, 2025; Ganguly, 2024) and span a wide range of legal strategies, including damages claims, greenwashing, fiduciary duty, and human rights violations. Unlike conventional corporate litigation such as securities class actions, many climate cases are strategic in nature and aim not only to obtain compensation,

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but also to alter firms’ climate practices, shape corporate governance, set legal precedent, and influence the direction of climate policy (Setzer et al., 2024). As a result, climate litigation can impose material financial costs on firms, even when it does not lead to large direct penalties, for example, through reputational damage, operational disruption, financing conditions, and changes in investor expectations (Peel et al., 2022; Solana, 2020). Recent empirical work provides evidence consistent with these channels. Sato et al. (2024), for example, document negative stock market reactions to climate-related filings and unfavorable court decision.<sup>1</sup> Yet despite this growing evidence, we know little about how investors themselves perceive and process climate litigation risks.

This paper addresses this gap by providing the first systematic evidence on how investors perceive climate litigation risk. We conduct a global online survey of 811 equity investors and analysts primarily invested in North America and Europe, eliciting their expectations about the financial relevance of climate-related lawsuits, building on established survey approaches in finance (e.g., Krueger et al., 2020; Edmans et al., 2023; Giglio et al., 2025). We then combine the survey evidence with principal component analysis,  $k$ -means clustering, and regression analysis. This allows us to document heterogeneity between investors, following the literature on heterogeneous expectations about economic outcomes (Andre et al., 2022; D’Acunto and Weber, 2024; Laudenbach et al., 2024). Moreover, it also enables us to assess whether the heterogeneity is structured rather than idiosyncratic, to examine the internal coherence of the survey responses across related questions, and to relate belief profiles to observable investor characteristics.

We document three main findings. First, investors broadly regard climate litigation as financially material. Nearly one fifth of investors considers litigation as the most important climate-related risk. Litigation risk is similarly ranked as physical and technological risk, but less important than regulatory risk. Yet investors disagree sharply on *how* and *when* it matters. Nearly four-fifths of respondents view climate litigation as at least moderately important for firm value, and over 40% report that its financial relevance has already materialized. However, investors most often indicate early-stage events, including media coverage or filing dates, as the point at which litigation becomes financially relevant, well before any judgment. This pattern is consistent with the channels emphasized in the legal and policy literatures: reputational effects, financing conditions, and subsequent regulatory or policy responses (e.g., Peel and Osofsky, 2020; Setzer and Higham, 2024) and with survey evidence that investors pay attention to forward-looking climate risks even when price-based signals

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<sup>1</sup>This is in line with broader evidence on litigation risk in corporate finance (Kartapanis and Yust, 2024; Huang et al., 2019; Nelson and Pritchard, 2016; Arena and Ferris, 2018; Kim and Skinner, 2012) and with the literature on litigation against sin stocks (Hong and Kacperczyk, 2009; Beneish et al., 2008).

are noisy (Krueger et al., 2020; Giglio et al., 2025). Most respondents agree that the impact of climate lawsuits can reverberate beyond the focal firm, but relatively few see peer cases as a trigger of financial relevance, leaving the spillover effect an open empirical question.

Second, the dispersion in beliefs is structured, not idiosyncratic. To uncover more structure, we use principal component analysis (PCA) to correlated belief items covering perceived materiality, timing, and the relative importance of regulatory, litigation, and physical climate risks. This yields two orthogonal dimensions: Litigation Salience (overall concern) and Risk Type Prioritization. We cluster respondents identify three broad profiles: (A) investors who are largely unconcerned about any climate-related risks, (B) investors who place greater weight on regulatory risk, and (C) investors who place greater weight on physical risk. Both of the latter groups view climate litigation as financially important, but differ in how they relate it to the broader low-carbon transition. Profile (B) sees litigation and regulation as complements for climate action, for example, when courts impose emission reduction obligations or revoke plant permits. By contrast, profile (C) sees litigation and regulation as substitutes, in the sense that the failure to regulate may lead to a world where high physical damages lead to litigation for compensation. These results support recent survey evidence documenting systematic heterogeneity in ESG and climate-transition beliefs (Giglio et al., 2021; Ceccarelli and Ramelli, 2024; Giglio et al., 2025). The resulting belief dimensions also offer empirical inputs for models with heterogeneous agents and non-pecuniary motives (Fama and French, 2007; Pástor et al., 2021).

Third, these belief structures map into concrete assessments of financial exposure across sectors and to concrete case types (damages, greenwashing, human rights, and government actions), consistent with channels emphasized by the legal literature (Peel and Osofsky, 2020; Setzer and Higham, 2024). Investors with higher Litigation Salience assign greater exposure to carbon-intensive sectors (fossil fuels, utilities, basic materials), consistent with the observed targeting of strategic climate cases (Setzer and Higham, 2024). Along the Risk Type Prioritization dimension, one interpretation is that regulatory-focused investors (B) are more inclined to associate climate litigation with utilities, financials, and government cases related to policy enforcement and project approvals, whereas physical-risk focused investors (C) are more inclined to associate it with damages, greenwashing, and human-rights suits, especially for carbon majors. In regressions, observable characteristics help explain who holds which views: North America-focused investors place greater weight on damages and greenwashing cases; growth-oriented investors with longer horizons assign higher importance to litigation overall; larger assets under management (AUM) institutions and respondents with ESG mandates report broader concern across firm types; and analysts are more likely than managers to rate litigation as important. These patterns align with work

showing that geography, institutional scope, and mandates shape climate-risk assessment and investor behaviour (Stroebel and Wurgler, 2021; Krueger et al., 2020; Laudenbach et al., 2024), and they reinforce the idea that belief heterogeneity is a driver of how climate-related legal risks enter financial decision-making. Because this heterogeneity is structured rather than idiosyncratic, it is potentially reducible through improved disclosure on firms' climate litigation exposures - a point we develop in Section 4.

Our results contribute to three literatures. First, we add to the growing body of work on investor beliefs and market segmentation, that highlight the gap in traditional models that assume representative agents or homogeneous beliefs, for example, that investors fully agree on the future probabilities of cash flows (e.g. Fama and French, 2007; Pástor et al., 2021). In line with papers that assess investor beliefs about climate-related physical and transition risks (Giglio et al., 2025; Bauer et al., 2025; Stroebel and Wurgler, 2021; Krueger et al., 2020), we show that belief heterogeneity is not merely theoretical but can be measured, structured, and meaningfully predictive of financial risk assessments. While most prior work on climate-related risk has focused on macroeconomic variables or transition risk, we demonstrate that similar belief-driven dispersion arises in the context of legal risk.

Second, we contribute to the emerging literature on impacts of climate litigation, particularly economic and financial systems impacts. While recent econometric studies document short-term stock market reactions to litigation events (Sato et al., 2024; Voeten, 2024; Kolaric, 2024), these approaches offer limited insight into forward-looking expectations or cross-sectional investor heterogeneity. Our survey provides a complementary perspective, offering insights on investor beliefs that go beyond the average market-wide reaction.

Third, we relate to the broader literature on litigation risk and corporate finance. Prior work shows that ex-ante litigation risk is predictable from observable firm characteristics and has implications for valuation and governance (Kim and Skinner, 2012; Huang et al., 2019; Duanmu et al., 2022; Freund et al., 2023). However, unlike conventional corporate lawsuits such as securities class actions, many climate-related cases are strategic in nature, seeking to achieve broader societal impacts, set legal precedent for future cases or shift social norms, and influence long-term policy and regulatory changes, rather than achieve immediate financial gains (Setzer et al., 2024). There are also significantly less historical data on climate litigation cases and outcomes. These features motivate a survey-based design: by eliciting structured beliefs, we recover the expectation formation that standard price-based methods cannot observe and provide insights that can help calibrate and discipline asset-pricing models.

The paper proceeds as follows. Section 2 describes our survey design and sample. Section 3 documents how investors perceive the materiality, timing, and channels of climate litigation

risk. Section 4 uses clustering and principal component analysis to recover latent belief dimensions and investor profiles. Section 5 relates these to observable investor characteristics. Section 6 concludes and discusses implications.

## 2 Survey Design and Implementation

We conduct an online survey to evidence investor beliefs in a richer format than can usually be obtained from observational data. In particular, our aim is to draw out disagreements about the magnitude, channels, and timing of climate litigation risk, and to relate these to respondent characteristics. Understanding what kinds of heterogeneity matter is informative for models with heterogeneous agents, and complement existing empirical work.

### 2.1 Survey development and pilots

We developed the questionnaire by drawing on the economics, finance, and law literatures on capital allocation, investor beliefs and climate litigation. The survey followed standard recommendations in the survey literature, in particular the use of an iterative design process and question ordering intended to reduce framing, anchoring and social desirability bias (e.g., [Krosnick et al., 2010](#); [Krueger et al., 2020](#); [Krumpal, 2013](#); [Mummolo and Peterson, 2019](#)).<sup>2</sup> Manager and analyst versions were kept as close as possible; where wording diverged, it reflected the respondent’s role-specific decision context. To reduce misinterpretation, the survey also provided a concise definition of climate litigation. The final questionnaire and full consent language are reproduced in Appendix B and Appendix [A1.1](#).

The survey was refined through a process of expert review and pilot testing. We first convened a closed-door roundtable with 18 financial sector practitioners including asset managers, analysts, insurers, rating agencies, lawyers, and academics, to assess clarity, scope, and relevance of the questionnaire.<sup>3</sup> Based on their feedback, we revised the wording and reduced the number of questions from 26 to 19, in line with best practices to limit respondent burden while preserving analytical value ([Krosnick et al., 2010](#); [Kalton and Schuman, 1982](#)). We then

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<sup>2</sup>To address issues around framing of questions, we asked related questions in different sections of the survey and assessed the convergence of the answers following [Presser et al. \(2004\)](#). The survey design also explicitly avoids respondents opting for the socially desirable answer due to leading questions and biasing conditional probabilities, and decouples logically related items to mitigate overt prompts that could anchor responses ([Krumpal, 2013](#); [Mummolo and Peterson, 2019](#)). For example, although we assessed views on climate litigation risk conditional on views about the likelihood to exceed 2°C, we did not ask these questions together.

<sup>3</sup>The roundtable lasted approximately four hours. Feedback emphasized the importance of capturing heterogeneity across mandates, investment horizons, and geographic focus.

conducted beta tests online with fund managers and sustainability researchers at investment firms to ensure that the wording and framing were appropriate for the target audience.

## 2.2 Sample selection, filtering and response quality

The target population is investment professionals responsible for equity portfolios or for research supporting equity investment decisions within asset management firms. This includes managers (asset, fund, and investment managers) and analysts/researchers. Managers were asked about mandates (e.g., ESG) and risk-management approaches, while analysts were asked who within their institution is responsible for addressing climate litigation risk. We targeted professionals primarily investing in North America and Europe, as these are the regions with the highest concentration of corporate climate litigation cases (Setzer and Higham, 2024).

We fielded the survey through a professional panel provider (QuestionPro) between June and August 2024, which has access to more than 5 million pre-screened investment professionals (Walters et al., 2023; Krueger et al., 2020). The panel provider screened respondents to ensure that they were active in equities and primary focused on our target regions. To increase participation, respondents received a small number of redeemable reward points. We also supplemented the panel with a small number of direct outreach invitations. In total, 5,138 invitations were distributed across major English-speaking markets, yielding 1,136 responses.

We follow standard protocols to filter low-quality or unreliable responses (e.g. Meade and Craig, 2012). For the main results, we apply the filters shown in Appendix Table A1.1. Specifically, we excluded incomplete responses ( $n=1051$ ), submissions completed in under one minute ( $n=876$ ), analysts not actively providing research to investment managers ( $n=865$ ), “odd” responses flagged for inconsistent or nonsensical answers, and responses with no valid answers ( $n=811$ ). We excluded incomplete responses to maintain a common sample across all belief questions. Additional details on the filtering procedure and response-quality checks are reported in Appendix A1.2. The final sample consists of 811 respondents (528 managers; 283 analysts). This sample size is comparable to those in recent studies of investor beliefs (e.g. Krueger et al., 2020; Edmans et al., 2023; Gjerde et al., 2025).<sup>4</sup>

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<sup>4</sup>Gjerde et al. (2025) survey 385 companies, Edmans et al. (2023) survey 203 non-executive directors and 159 investors, and Krueger et al. (2020) survey 439 institutional investors.

## 2.3 Respondent characteristics and representativeness

Table 1 summarizes the sample. Respondents primarily invest in North America (41.63%) and Europe (36.38%), and are generally associated with relatively large asset managers, with the highest share reporting assets under management in the \$1 billion–\$20 billion (43.53%). Most respondents also report having an ESG mandate and view exceeding 2°C by 2100 as more or less likely. Although the proportion with an ESG mandate (78.30%) may appear high, it is broadly consistent with industry-wide figures from the UN Principles for Responsible Investment, which covers over \$USD 100 trillion in AUM (Kim and Yoon, 2023; Pastor et al., 2023). The average completion time in the final sample is 7 minutes 37 seconds, close to that observed in the pilot study.

Table 1: Respondent characteristics

Primarily Invested	Percent	Exceed 2C by 2100	Percent
North America	41.63	Very likely (75%)	13.93
Europe	36.38	Relatively likely (50%)	28.61
Global	11.47	More or less likely (25%)	33.05
Asia-Pacific	9.49	Low likelihood (<5%)	17.88
Other	1.23	Very low likelihood (<1%)	6.54
Assets Under Management	Percent	Position	Percent
More than \$100 billion	4.07	Investment Manager	65.11
\$20 billion - \$100 billion	18.00	Analyst	27.50
\$1 billion - \$20 billion	43.53	Researcher	7.40
Less than \$1 billion	34.03		
ESG Mandate or Specialism	Percent	Style (Managers only)	Percent
Yes	78.30	Growth	37.61
No	21.70	Value	16.52
		Income	10.60
		NA <sup>1</sup>	35.26

*Notes:* This table reports the characteristics of respondents ( $n=811$ ). NA contains all analysts since they were not asked this question. It also contains managers that skipped the question.

To assess representativeness, we compare our sample’s AUM distribution and investment regions to FactSet institutional holdings. Our sample is skewed towards those primarily invested in North America and Europe (see Appendix A1.3, Figures A1.3–A1.4) as intended. These regions are where the vast majority of climate litigation cases to date have been filed (Setzer and Higham, 2025; Heede, 2014). Hence respondents are most likely to have encountered climate litigation in practice, rather than relying solely on the framing that we provide in the survey. Also the beliefs we elicit are therefore relevant for the setting in which such risks are currently most likely to materialize. At the same time, inference does not extend to investors with greater exposure to emerging markets, which constitute a significant part of the investment universe and account for growing share of global emissions.

One concern is whether our sample reflects the universe of equity investors in North

America and Europe. Approximately 30% of our respondents are small investors (AUM < \$1bn), compared with almost 90% in the broader investment universe (Appendix A1.3). The bias towards larger investors means that our results place greater weight on market participants with a disproportionate share of global assets, and therefore, a greater role in influencing market pricing and firm behaviour. For a survey about beliefs concerning systemic risk, this bias is arguably an advantage.

A limitation of the survey method is that we do not observe respondents’ actual trades or portfolio adjustments, so we cannot directly map beliefs to behaviour. However, recent work shows that the survey evidence can correlate meaningfully with real-world investment decisions, and we follow the design of such surveys closely (e.g. Giglio et al., 2021; Greenwood and Shleifer, 2014; Malmendier and Nagel, 2011). Moreover, because the climate transition is inherently forward-looking, the belief structures we recover through PCA and clustering provide useful empirical inputs for theories and future empirical work on climate-related financial risk (e.g., Giglio et al., 2025; Pástor et al., 2021). The next sections present the core findings of our survey.

## 3 Where litigation risk bites: descriptive evidence

### 3.1 Materiality and timing

We begin by documenting baseline perceptions of climate litigation as a financial risk. A large majority of respondents regard it as financially material: nearly 80% rate it at least “moderately important,” and 41% view it as very important for carbon majors (Table 2). In addition, 41% report that climate litigation has already become financially relevant (Figure 1). An additional 30% and 17% anticipate materialisation within five, and five to ten years, respectively. Altogether, over 80% of investors expect climate litigation risk to become financially relevant within the coming decade, if not already. Climate litigation risk is believed to be amplified for carbon majors compared to non-carbon majors in line with empirical findings (Sato et al., 2024).

When asked to rank the general importance of different climate-related risks, about one out of five investors perceives litigation as the most prominent risk, yet perceptions are highly heterogenous. 19% of investors rank litigation as the most important risk, similar to physical risk (19%) and technological risk (21%). The largest group (35%) ranks regulatory risk first and a small group (6%) ranks stakeholder risk first. Mean ranks follow a similar pattern (Figure C1.4 and Figure C1.3).

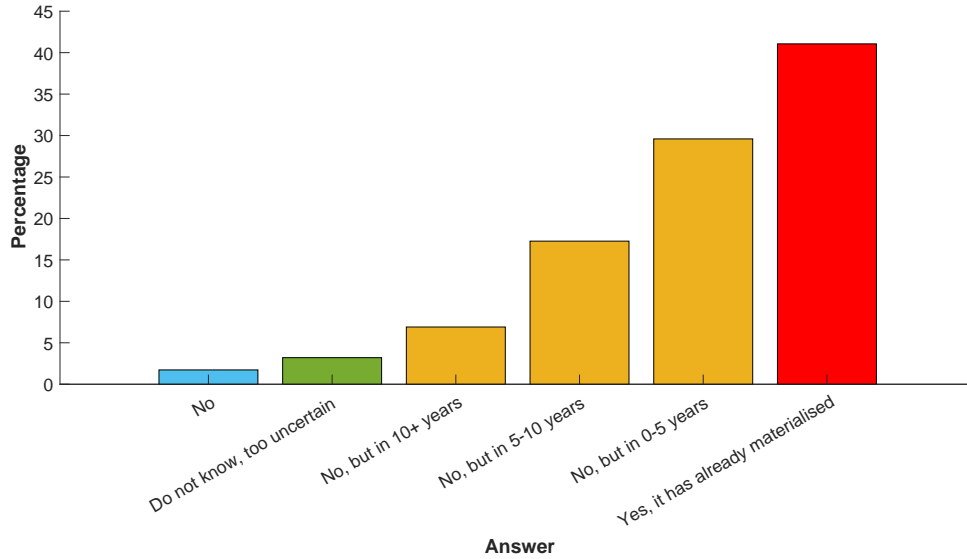
Table 2: Importance of climate litigation risk

	Carbon Majors	Non-Carbon Majors	
Answer	Percent		Difference
Not at all important	2.10	2.34	-0.25
Slightly important	18.62	20.35	-1.73
Moderately important	38.10	42.79	-4.69*
Very important	40.93	34.03	6.91***

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .

Notes: This table reports results from the question “When assessing climate-related risk exposure, how important is climate litigation risk”. The same question is asked about carbon majors and non-carbon majors. We compare the difference between proportions in the column “Difference” and label their statistical significance.

Figure 1: Timescale of climate litigation risk



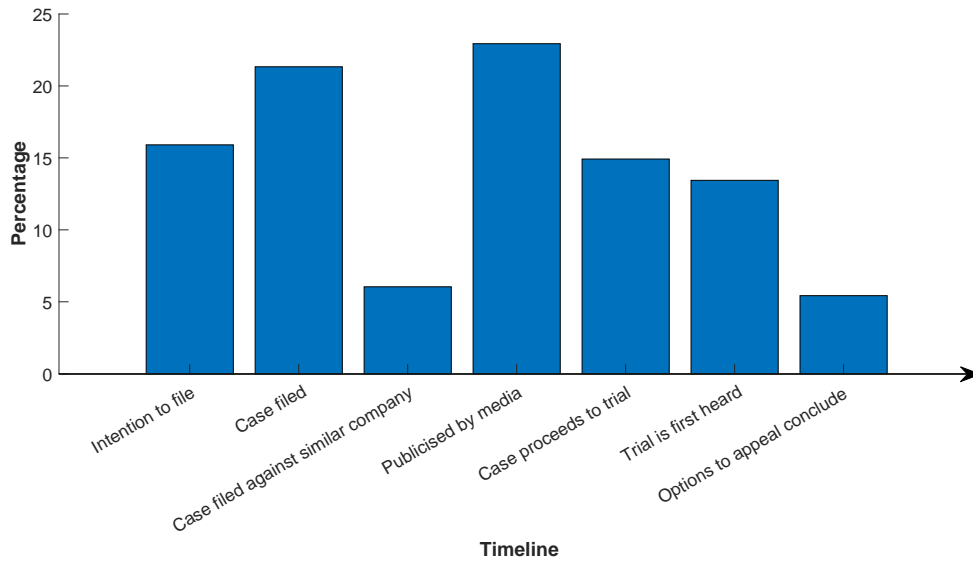
Notes: This figure reports results from the question “Do you think climate litigation risk has already materialised financially? If not, when do you expect it to materialise”.

These responses indicate that investors view litigation as a credible, near-term risk to firm value, consistent with channels emphasized in the legal and policy literatures such as reputational effects, changes in financing conditions, and regulatory or policy actions that follow litigation (e.g., [Peel and Osofsky, 2020](#); [Setzer and Higham, 2024](#)).

Responses also point to an early-stage onset of financial relevance. Figure 2 shows that the highest share of respondents indicate that risks become significant when a case is publicised by the media (23%), followed by when the case is filed (21%). By contrast, 15% report that litigation becomes financially relevant only once a case proceeds to trial. This somewhat surprising results suggest that previous studies that examined impacts narrowly around filing

or decision dates (e.g. [Sato et al., 2024](#); [Kolaric, 2024](#)) may understate the extent to which investors are responding to climate litigation. Our finding that litigation risk becomes significant early indicates that investors, in practice, may perceive litigation to exert pressure on firms’ “social licence to operate” ([Gunningham, 2020](#)), with the publicity of the threat of litigation already carrying financially material costs.

Figure 2: Materiality stage of climate litigation risk



*Notes:* This figure plots the results from the question “At what point would a climate litigation case become significant in your pricing of a firm’s climate-related risk exposure”.

In other words, investors commonly associate materiality with the arrival of public information and the initiation of legal action, well before judgment. This pattern is consistent with legal theory highlighting the strategic nature of climate litigation, where lawsuits aim to influence corporate behaviour and investor sentiment, not only to obtain damages ([Setzer and Higham, 2024](#)).<sup>5</sup> Since empirical research on the impact of strategic climate litigation on firms has so far been mainly based on anecdotal reports ([Peel et al., 2022](#)), and legal scholars have theorised that reputational costs can arise at all stages of a case ([Solana, 2020](#)), our survey evidence sheds new light on the materiality of these mechanisms.

That reputational costs are perceived to arise before legal judgments are made also mirrors

<sup>5</sup>As an example, in 2025 *Royal Dutch Shell* was sued for expanding its oil and gas production, having previously been challenged for its responsibility to limit carbon emissions. The previous ruling concluded that *Royal Dutch Shell* has a duty to limit emissions to combat climate change, but declined to impose specific absolute emissions reduction targets on the company.

findings from “sin stocks,” where firms suffer valuation penalties based on investor norms and anticipatory concerns (Hong and Kacperczyk, 2009; Beneish et al., 2008). Relatedly, a large literature uses news as a proxy for information that updates forward-looking beliefs (Engle et al., 2020; Ardia et al., 2023). By this logic, climate litigation can function as a reputational and informational trigger that shifts expectations about future firm performance - even absent legal liability - providing a rationale for modelling legal risk as operating through both direct and anticipatory channels.

### 3.2 Heterogeneity across sectors and case types

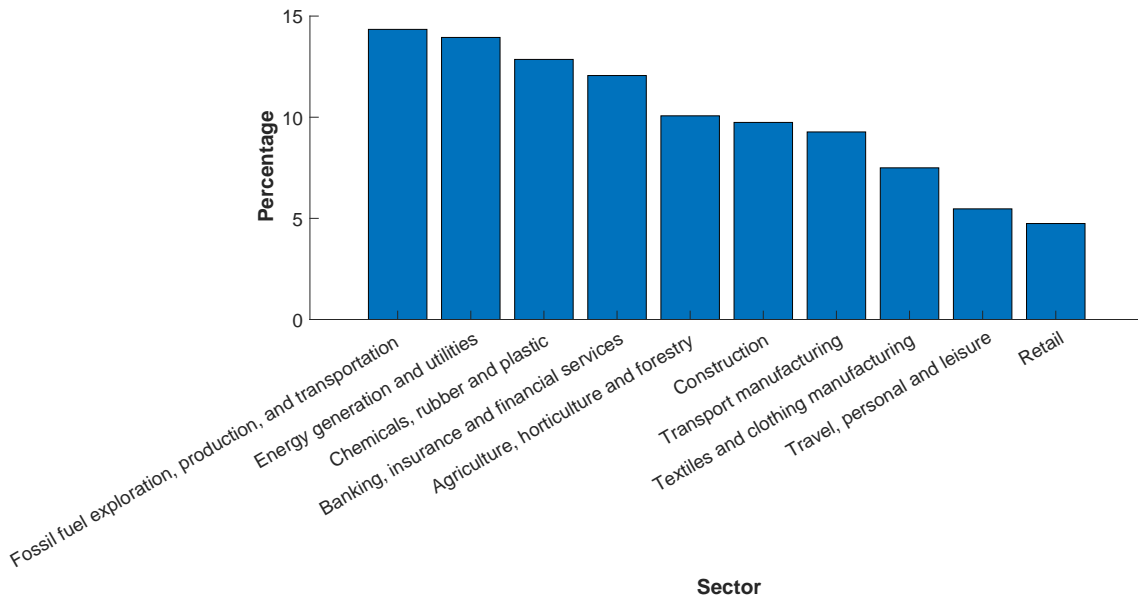
A central finding is that investors do not view climate litigation as a risk confined to carbon majors. While previous empirical evidence has mainly documented stock-market responses to filings against carbon-major firms (Sato et al., 2024), our survey shows that respondents perceive climate litigation risk across the full spectrum of sectors, including non carbon intensive ones. This is consistent with recent trends in climate litigation spreading beyond carbon majors to sectors such as food, aviation, and finance, as litigants increasingly seek to influence conduct across the wider value chain (Setzer and Higham, 2024).

At the same time, the intensity of perceived exposure remains clearly higher for carbon-intensive sectors. In line with Table 2, Figure 3 shows that fossil fuels, utilities, chemicals, and basic materials receive the highest exposure assessments, whereas exposure is lower for consumer and financial sectors. These patterns are consistent with the historical targeting of high-emitting activities and with the legal and policy focus on firms with large historical emissions and prominent public profiles (Heede, 2014; Setzer and Higham, 2025; Peel et al., 2022), which are often seen as legally vulnerable (Kartapanis and Yust, 2024; Kim and Skinner, 2012). They also align with evidence that investors assign greater climate-risk salience to sectors with direct emissions or transition bottlenecks (e.g., Stroebe and Wurgler, 2021; Krueger et al., 2020). The concentration of perceived exposure in carbon-intensive industries is therefore intuitive given the prevalence of strategic litigation aimed at emissions reduction, disclosure practices, and forward-looking transition plans (Peel and Osofsky, 2020; Setzer and Higham, 2024).

Respondents also differentiate across legal channels. We calculate a simple  $\chi^2$  test of independence to assess whether the distribution of concern levels (Very, Moderately, Slightly, Not at all) varies across case types. For firm cases, we find weak but suggestive evidence of heterogeneity between the firm case types Damages, Human Rights, and Greenwashing ( $\chi^2 = 12.32$ ,  $p = 0.055$ ). For government cases, the distributions differ significantly between limiting

emissions and stopping specific projects ( $\chi^2 = 15.90$ ,  $p = 0.001$ ), indicating that respondents meaningfully distinguish between these case types. Indeed, human rights and greenwashing cases are deemed more concerning than damage cases, and cases stopping specific projects are deemed more concerning than limiting emissions. We provide the distribution of concerns in the Appendix (Figure C1.1 and Figure C1.2). This finding sits in a wider context. Damage cases against firms remain relatively limited in number and investors may believe they lack clear visibility over what damages will ultimately be awarded in court, while project-related cases represent the largest category within climate litigation (Setzer and Higham, 2025).

Figure 3: Sectors considered exposed to climate litigation risk



*Notes:* This table reports results from the question “When pricing a firm’s climate-related risk exposure, for which sectors do you actively consider climate litigation risk? Select all that apply”.

### 3.3 Spillovers

A central question is whether climate lawsuits impose costs beyond directly named defendants. Our survey yields mixed evidence. On the one hand, the timing item in Figure 2 indicates that relatively few respondents select “*Case filed against similar company in my fund*” as the point when risk becomes financially significant, compared with earlier triggers such as “*publicised by media*” or “*case filed.*” On the other hand, the explicit spillover question (Appendix, Figure C1.4) shows much greater concern that lawsuits can propagate through

reputational channels, financing conditions, heightened regulatory scrutiny, or supply-chain linkages, thereby affecting related firms even absent direct legal exposure. In other words, respondents acknowledge sectoral and value-chain externalities from litigation in principle, even if they do not rank a peer case as the single most salient timing threshold in practice.

Two interpretations are plausible. First, when forced to identify one timing threshold, investors may prioritize information events that are broad and public, such as media coverage or the filing of a lawsuit—over narrower peer events. This ranking need not imply the absence of spillovers. Second, differences in question format or framing may produce divergence across responses, consistent with known sensitivities of survey evidence to item structure and wording (Presser et al., 2004; Krosnick et al., 2010; Krumpal, 2013; Mummolo and Peterson, 2019). We therefore treat spillovers as an open question for future research. Overall, descriptive evidence shows dispersion in how investors assess climate litigation risk. Respondents differ in where investors expect litigation risk to bite and through what mechanisms.

## 4 Structured Heterogeneity in Litigation Risk Beliefs

To explore whether observed differences in responses across investors reflect idiosyncratic variation across respondents or underlying belief structures, we combine clustering and principal component analysis (PCA). The clustering step is used to detect group structure in the high-dimensional survey responses, while PCA is used to interpret the dimensions along which those groups differ. We then relate the resulting belief structure to respondents’ assessments of sectoral exposure and case-type salience.

### 4.1 Latent Dimensions and Belief Profiles

We begin by applying  $k$ -means clustering to the standardized survey responses in order to assess whether respondents sort into a small number of groups with similar belief patterns (e.g., see Dew, 2025; Hoberg and Phillips, 2016, for recent examples). This is a useful data-driven approach for imposing structure on a high-dimensional set of survey responses, since respondents with similar answers across the questionnaire are grouped together. The method minimizes the Euclidean distance between respondents’ answers. It is non-hierarchical, meaning that it does not impose nested sub-groups. The Calinski–Harabasz pseudo- $F$  statistic indicates that a three-cluster solution provides the most meaningful partition of the data, with a value of 119 for three clusters compared to 106 for four clusters (see Appendix A3 for full loadings, robustness checks, and alternative clustering solutions). These clusters re-

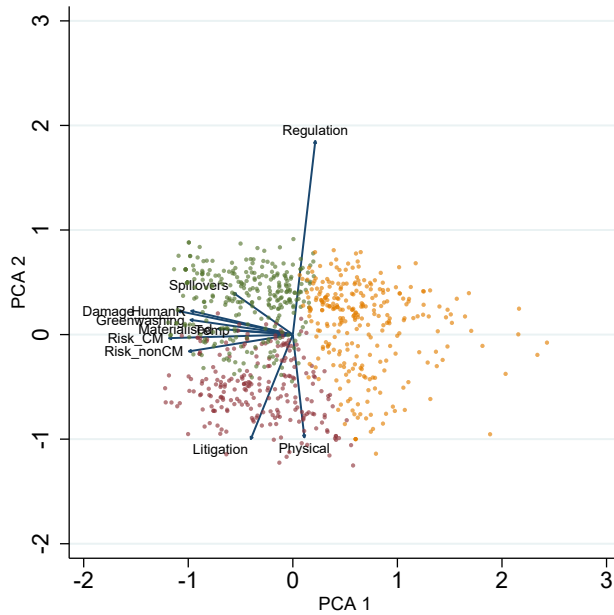
veal that respondents separate into three broad profiles that differ systematically in their perceptions of climate-related legal risk.

To interpret the dimensions along which these clusters differ, we then apply principal component analysis (PCA) to the same standardized survey items. Essentially, the PCA reduces a set of correlated survey responses into orthogonal dimensions that capture the main axes of belief variation. Each principal component corresponds to a linear combination of responses. This approach has been extensively used to reduce the dimensionality of risk factors in empirical asset pricing (Giglio et al., 2021; Kelly et al., 2019), and is increasingly applied to investor holdings (Betermier et al., 2024; Balasubramaniam et al., 2023). Here, we apply it to the beliefs of investors. Figure 4 plots respondents (dots) and variable loadings (arrows) for PC1 and PC2 (Figure 4a) and for PC2 and PC3 (Figure 4b). The first three components explain a substantial share of the overall variation and provide an interpretable representation of the latent belief structure.

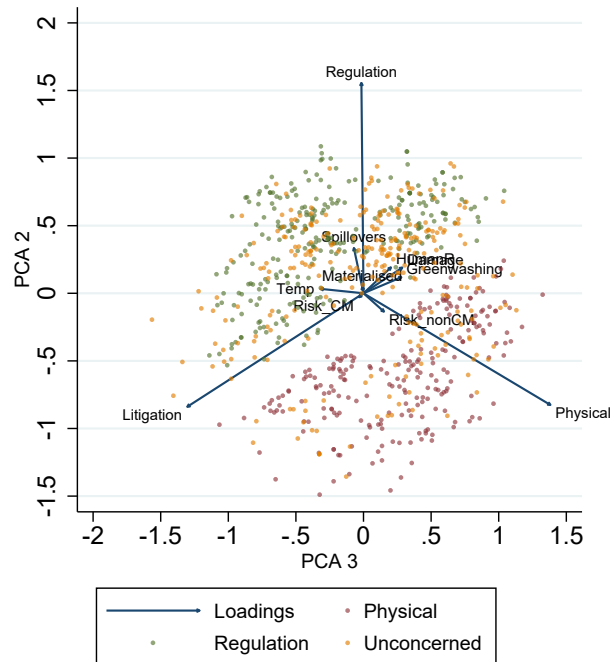
The first principal component, which explains 25% of the variance, captures *Litigation Salience*. It loads positively on all questions that express concern. Respondents scoring highly on this component tend to believe that the world is likely to exceed 2°C by 2100, that climate litigation is important for both carbon majors and non-carbon majors, that damages, human-rights, and greenwashing cases are all important, that litigation has spillover effects within the sector, and that litigation risk is already financially material. By contrast, the unconcerned group (Profile A, 35.4% of respondents) is distinguished almost entirely by this first dimension. In that sense, PC1 separates respondents who view climate litigation as financially material and pressing, consistent with the view that litigation has real consequences for firms and investors (Donelson et al., 2024; Kim and Skinner, 2012; Barabanov et al., 2008), from those who do not.

The remaining variation that separates the two climate-risk-aware groups is best understood jointly through the the second and third principal component space (Figure 4b), which we summarize as *Risk Type Prioritization*. PC2 reflects whether respondents place relatively greater weight on regulatory risk, on physical climate risk, or on litigation as the main transmission channel. This second principal component accounts for 12% of the variance, and distinguishes respondents who emphasize regulatory risk from those who place relatively greater weight on litigation and physical climate risks. It therefore reflects not the overall degree of concern, but the type of climate-related risk respondents see as most central. This interpretation is consistent with earlier survey evidence that regulatory risk is a major concern for investors (Stroebel and Wurgler, 2021).

Figure 4: Principal Component Analysis results



(a) PC 1 (Concern) and PC 2 (Regulation vs. Other risk)



(b) PC 2 (Regulation vs. Other risk) and PC 3 (Litigation vs. Climate risk)

*Notes:* Each dot is a respondent. Each arrow represents a question and its loadings on each principal component. Included questions are the relative ranking of regulation, physical, and litigation risk, the likelihood of exceeding 2°C by 2100 (Temp), the importance of litigation risk for carbon majors (Risk CM) and non-carbon majors (Risk nonCM), the importance of litigation claims for damages (Damage), human rights (HumanR) and greenwashing (Greenwashing), how litigation will affect other firms (Spillovers), and the horizon at which litigation risk will materialise (Materialise). Answers are standardized (mean 0, variance 1, higher values indicate higher concern). k-means clustering. Calinski-Harabasz pseudo F-value=119 for 3 clusters (106 for 4 clusters).

Instead, PC3 accounts for 11% of the variance and captures litigation vs. physical emphasis. Lower scores on this component indicate stronger beliefs that lawsuits and legal strategies are the dominant risk channel, while higher scores reflect greater concern about direct physical climate impacts. The second and third principle components are particularly useful for distinguishing the two climate-risk-aware groups, Profiles B and C. Whereas Profile B (green) is most concerned about regulatory risk, Profile C (red) is best characterized by a stronger emphasis on physical risk. Since PC2 explains more variation than PC3, the main contrast in the data is between regulatory risk and the combined importance of litigation and physical risk, with the litigation vs. physical distinction operating as a second-order margin. Profile B (35.3% of respondents) and Profile C (29.3%) are similarly sized.

This opposition is economically intuitive. Rapid climate policy can increase transition and regulatory risk in the short run, while reducing physical climate damages in the longer run. Respondents in the physical-risk-focused group also tend to expect a hotter world. Although previous research finds that markets often react more strongly to transition risk than to physical risk (Cuculiza et al., 2024; Sautner et al., 2023), our results suggest that this may partly reflect heterogeneous investor beliefs rather than a single common market view.

Within both climate-risk-aware groups, however, respondents still vary in the degree to which they emphasize litigation itself. In Figure 4b, the litigation vector lies approximately orthogonal to the centroids of Profiles B and C, indicating that both a world with high regulatory risk and a world with high physical risk can be associated with different forms of litigation exposure. In a future with high regulatory risk, courts may impose emissions limits, reject permits, or constrain business plans. In a future with high physical risk, the materialization of climate damages may instead increase compensation claims, including so-called “failure to adapt” cases (Setzer and Higham, 2024). The value of the PCA is therefore not only to reduce dimensionality, but also to clarify how respondents organize the relationship between litigation, regulation, and physical climate risk.

## 4.2 Sectoral Exposure

The latent structure identified in Section 4.1 implies that investors differ not only in the overall importance they assign to climate litigation, but also in the sectors through which they expect that risk to operate. To help unpack which beliefs are most closely associated with sectoral exposure assessments, Table 3 reports regressions of sector selection on the original survey responses.<sup>6</sup>

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<sup>6</sup>We retain the underlying survey items here, rather than replacing them with the principal components, because the item-level coefficients are easier to interpret economically.

Table 3: Sectoral regressions

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	BankingInsurance	Agriculture	Construction	Chemicals	Electricity	Fossil	Retail	Textiles	Transport
Litigation	0.955	1.279***	1.242**	1.249***	1.324***	1.292***	1.054	1.016	1.281***
Temp	1.280***	1.111	1.014	1.026	1.171**	1.046	1.235*	0.959	1.110
Damage	0.956	0.944	0.817*	0.899	0.957	0.990	0.970	1.178	1.153
HumanR	1.244**	0.912	1.107	1.113	1.104	1.034	1.135	1.101	1.135
Greenwashing	0.991	1.190*	1.279**	1.142	1.160	1.086	1.148	1.193	1.159
Constant	0.424***	0.269***	0.225***	0.386***	0.401***	0.427***	0.116***	0.171***	0.245***
Observations	819	819	819	819	819	819	819	819	819

\*\*\* p&lt;0.01, \*\* p&lt;0.05, \* p&lt;0.1

*Notes:* This table reports logit regressions predicting the likelihood that a sector is indicated as a sector vulnerable to litigation risk using answers on other questions. Odds ratios are reported. Included questions are the relative ranking of litigation risk (compared to regulation, physical, stakeholder and technological risk), the likelihood of exceeding 2°C by 2100 (Temp), the importance of litigation claims for damages (Damages), human rights (HumanR) and greenwashing (Greenwashing). Regressors are standardized (mean 0, variance 1, higher values indicate higher concern). Sectors are as follows: 1) Banking, insurance and financial services, 2) Agriculture, horticulture and forestry, 3) Constructions 4) Chemicals, rubber and plastic, 5) energy generation and utilities 6) Fossil fuel explorations, production and transport 7) Retail, 8) Textiles and clothing manufacturing, 9) Transport manufacturing.

Section 3.2 showed descriptively that fossil fuels, utilities, and carbon-intensive industries are viewed as the most exposed sectors. Table 3 indicate that these assessments co-vary most strongly with the relative salience assigned to litigation risk itself. A one-standard-deviation increase in the Litigation measure is associated with 24-32% higher odds of selecting agriculture (1.279), construction (1.242), chemicals (1.249), electricity and utilities (1.324), fossil fuels (1.292), and transport (1.281) as exposed sectors. By contrast, it is not significantly associated with banking and insurance, retail, or textiles. This pattern is consistent with the view that investors who assign greater importance to litigation also tend to concentrate perceived exposure in sectors that are already prominent targets of strategic climate claims (Setzer and Higham, 2024; Peel and Osofsky, 2020).

Other survey responses provide further nuance. Expectations of a hotter world (Temp) are positively associated with selecting banking and insurance (1.280), electricity and utilities (1.171), and retail (1.235), suggesting that some respondents connect climate litigation risk to broader transition and physical-risk concerns rather than to liability exposure alone. Greenwashing concern is positively associated with agriculture (1.190) and construction (1.279), while human-rights concern is positively associated with banking and insurance (1.244). By contrast, damages concern is not a strong positive predictor of sector selection in these regressions and is weakly negatively associated with construction (0.817). The item-level results therefore indicate that sectoral exposure assessments are not driven by a single legal channel. Rather, they reflect a combination of general litigation salience, climate outlook, and concern about particular forms of litigation.

Thus the PCA and the regressions suggest that sectoral exposure assessments are neither random nor driven by a single factor. They reflect a structured combination of beliefs about

litigation salience, legal channels, spillovers, and the broader climate transition.

### 4.3 Risk Channels and Case Types

The same latent structure also helps interpret how respondents think about the legal channels through which climate litigation affects firms. Section 3.2 showed descriptively that respondents differentiate clearly across case types, assigning particularly high concern to damages, greenwashing, and government cases. Table 3 further suggests that exposure assessments co-vary not only with general concern about climate litigation, but also with concern about particular legal channels, further emphasising the three distinct profiles.

Although concerned investors rate damages, greenwashing, and human-rights cases highly (Figure 4a), these three case types load weakly on PC2 and PC3 and do little to distinguish the two concerned groups (Figure 4b). Investors do not yet differentiate structurally among them, perhaps because climate litigation remains young and convictions on these grounds are few.

Overall, we show that the heterogeneity documented in Section 3 is not random. Investors differ not only in the overall importance they assign to climate litigation, but also in the sectors and legal channels through which they expect it to matter. The latent dimensions and profiles therefore capture economically meaningful differences in how respondents map litigation into financial exposure. A natural question is what explains this structured dispersion. Some heterogeneity reflects genuine disagreement about the climate trajectory and policy response, on which reasonable investors may differ. However, part of the dispersion may stem from differential access to information about climate litigation itself. Unlike more established corporate risks, there is no widely adopted disclosure framework providing investors with a common baseline on firms' legal exposures and the potential financial consequences of pending cases. A large literature in financial economics shows that mandatory disclosure and improved information environments can reduce belief dispersion, lower information asymmetry, and improve price efficiency (e.g. [Diamond and Verrecchia, 1991](#); [Leuz and Wysocki, 2016](#); [Christensen et al., 2021](#)). More recently, [Ilhan et al. \(2023\)](#) document strong institutional investor demand for climate-related disclosure, and [Smoleńska et al. \(2025\)](#) highlight the particular salience of litigation-related disclosure for financial institutions. If part of the belief heterogeneity we observe reflects informational gaps rather than deep disagreements about the world, then standardising disclosure on climate litigation exposure may meaningfully narrow dispersion and improve the efficiency of risk pricing.

## 5 Investor Characteristics and Belief Heterogeneity

We now relate the belief variation documented above to observable respondent characteristics, estimating parsimonious regressions for perceived materiality and concern across legal channels (details and robustness checks are reported in Appendix A4).

### 5.1 Geographic exposure

Geographic context is a natural source of heterogeneity in litigation-risk perceptions. North America hosts the largest and longest-standing body of climate litigation globally (Setzer and Higham, 2024), and its legal environment has long given corporate liability a prominent role in shaping firm-level financial risk. It is therefore plausible that investors with North American exposure attach greater importance to climate-related legal risk.

Our regression results support this pattern. Respondents focused on North America are 28.10% more likely to rate climate litigation as “very important” for carbon majors, relative to those invested elsewhere (Table 4). They are also more likely to rate greenwashing cases against firms (33.5%) and cases against governments to limit emissions (30.7%) as “very concerning” (Table 5). These associations are consistent with the prominence of U.S. “climate liability” suits, brought by state and municipal governments alleging that fossil-fuel companies knowingly contributed to climate harms and misled the public about associated risks (Wentz and Franta, 2022). At the time of survey delivery, the U.S. Supreme Court had ruled that several such cases could proceed in state court, a development widely seen as increasing the likelihood of liability and potentially higher damages.

Legislative initiatives at the time of survey delivery may also have shaped these perceptions. For example, Vermont’s 2024 Climate Superfund Act requires fossil-fuel producers to contribute to adaptation costs, and similar bills were proposed in California, New York, and other states. These initiatives added to uncertainty about the financial consequences of regulatory and legal action, especially for firms with substantial U.S. exposure.

Beyond climate litigation specifically, U.S. investors are familiar with litigation-induced losses in adjacent domains. Experience with tobacco, asbestos, and automotive emissions litigation showed that lawsuits can generate substantial legal costs, reputational damage, and firm value reduction (Bhagat and Romano, 2002; Carroll et al., 2002; Nunes and Lee Park, 2016; Sloan et al., 2005; Wood et al., 2018). Parallels between these and climate damages cases, particularly the role of internal documents revealing corporate misrepresentation, may further strengthen perceptions of climate litigation as a salient financial risk.

Table 4: The importance of climate litigation risk and respondent characteristics

	Carbon Major Importance	Non-Carbon Major Importance	Material Now
Constant			1.356 (1.374)
Invested North America	1.281* (1.802)	1.019 (0.142)	1.183 (1.032)
Small	0.411*** (-5.818)	0.879 (-0.854)	1.035 (0.200)
Growth Style	1.459** (2.214)	1.368* (1.845)	1.715*** (2.824)
Prob. Exceed 2C > 50%	1.979*** (4.881)	2.146*** (5.392)	1.701*** (3.189)
ESG Mandate	1.326 (1.498)	1.763*** (2.983)	1.318 (1.383)
Manager	0.638** (-2.484)	0.913 (-0.525)	0.802 (-1.118)
Pseudo- $R^2$	0.05	0.03	0.02

*Notes:* This table reports the results of estimating ordered logistic regressions of respondent characteristics on the perceived importance of climate litigation for carbon majors and non-carbon majors. Respondents are asked “When assessing climate-related risk exposure for (non-)Carbon Majors, how important is climate litigation risk?”. The answer is on an ordered scale: Not at all important (1), slightly important (2), moderately important (3), and very important (4). Invested North America is a dummy equal to 1 if the respondent primarily holds equities in North America. Small is a dummy equal to 1 if the reported assets under management are less than \$1 billion. Growth Style indicates Growth rather than a Value of Income strategy. Prob. Exceed 2C > 50% is a dummy equal to 1 if the respondent believes the probability of exceeding 2C by 2100 have a higher than 50% chance. ESG Mandate is a dummy equal to 1 if the respondent reports they have a ESG mandate or specialism. Manager is a dummy equal to 1 if the respondent is an investment manager. t-statistics (z-scores) based on standard errors clustered at the respondent level are reported in parentheses. Coefficients are odds ratios. \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .

Table 5: Concern, types of cases, and respondent characteristics

	Firm Cases			Government Cases	
	Damages	Human Rights	Greenwash	Emissions	Project
Invested North America	1.089 (0.637)	1.106 (0.738)	1.335** (2.104)	1.307** (1.975)	1.226 (1.502)
Small	0.881 (-0.832)	0.834 (-1.227)	0.824 (-1.339)	0.699** (-2.384)	0.931 (-0.478)
Growth Style	1.300 (1.531)	1.114 (0.633)	1.525** (2.575)	1.377* (1.854)	1.127 (0.721)
Prob. Exceed 2C > 50%	1.251* (1.672)	1.631*** (3.585)	1.346** (2.187)	1.602*** (3.411)	2.065*** (5.119)
ESG Mandate	2.386*** (5.016)	1.479** (2.131)	1.724*** (2.803)	1.428* (1.890)	1.415** (1.968)
Manager	0.581*** (-3.080)	0.860 (-0.909)	0.658** (-2.461)	0.631*** (-2.641)	0.816 (-1.176)
Pseudo- $R^2$	0.02	0.01	0.02	0.02	0.02

*Notes:* This table reports the results of estimating ordered logistic regressions of respondent characteristics on the perceived importance of particular case types. Respondents are asked “What types of climate litigation cases would you consider most concerning when assessing a firm’s climate-related risk exposure?”. The answer is on an ordered scale: Not at all concerning (1), slightly concerning (2), moderately concerning (3), and very concerning (4). We consider three cases against firms: a firm is taken to court and asked to pay damages for contributing to climate change by releasing high historic greenhouse gases (Damages), a firm is sued for violating human rights by not doing enough to cut emissions (Human Rights), and a firm is sued for greenwashing (i.e., misleading advertising about their products or operations) (Greenwash). We consider two cases against governments: a government is sued for not doing enough to address climate change (Emissions) and a government is sued for approving high-emitting projects (Projects). Invested North America is a dummy equal to 1 if the respondent primarily holds equities in North America. Small is a dummy equal to 1 if the reported assets under management are less than \$1 billion. Growth Style indicates Growth rather than a Value of Income strategy. Prob. Exceed 2°C > 50% is a dummy equal to 1 if the respondent believes the probability of exceeding 2°C by 2100 have a higher than 50% chance. ESG Mandate is a dummy equal to 1 if the respondent reports they have a ESG mandate or specialism. Manager is a dummy equal to 1 if the respondent is an investment manager. t-statistics (z-scores) based on standard errors clustered at the respondent level are reported in parentheses. Coefficients are odds ratios. \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .

## 5.2 Institutional characteristics

Beyond geography, the regressions indicate that litigation-risk perceptions vary systematically with investment style, institutional scale, mandate, and professional role (Krueger et al., 2020; Gibson et al., 2020; Barber et al., 2021; Laudenbach et al., 2024).

Respondents with a growth-oriented investment style are more likely to view climate litigation as a present rather than future source of financial risk. In particular, growth-oriented investors are 71.5% more likely to believe that climate litigation is financially material now rather than only at some future point (Table 4). This suggests that at least some investors view climate lawsuits not only as event-driven shocks but also as structural risks that may affect firms’ long-run value. This interpretation is consistent with the rise of “corporate framework” cases, which target governance structures and emissions trajectories rather than isolated acts or disclosures. The high-profile *Milieudéfense v. Shell* case, for example, sought to impose binding emissions reductions across Shell’s operations, including Scope 3 emissions. Although that ruling was later overturned, it illustrates how litigation may reshape corporate strategy over multi-year horizons (Setzer, 2022; Setzer and Higham, 2024). This can be particularly problematic for growth investors who target increasing dividend streams far in the future, rather than value investors who target a market correction over a more flexible horizon or income investors targeting dividends.

Larger institutions are also more likely to regard climate litigation as important, especially for carbon majors. Respondents associated with institutions managing more than \$1 billion in assets are 58.9% more likely to rate climate litigation as important for carbon majors, with a similar but weaker pattern for non-carbon majors (Table 4). One interpretation is that larger investors may face greater reputational stakes and fiduciary scrutiny, increasing the incentives to monitor emerging liability channels (Krueger et al., 2020).

Respondents with ESG mandates display consistently higher concern, both in general importance ratings and across several case types. This pattern is visible in Table 4 for both carbon majors and non-carbon majors, and in Table 5 for damages, human-rights, and government-action cases. For example, respondents with an ESG mandate are more than twice as likely to regard damages cases as concerning as those without such a mandate. These findings are consistent with prior work showing that ESG-oriented investors are more attentive to non-traditional risk channels and to forward-looking uncertainties (Harnett, 2017; Krueger et al., 2020).

Finally, analysts are more likely than managers to rate climate litigation as important. Analysts often specialize in particular sectors, engage closely with firms, and follow legal

and regulatory developments in greater detail. This may make them more likely to identify litigation as a financially relevant risk at an earlier stage. More broadly, prior work shows that analysts shape market expectations by surfacing underappreciated risks (Riedl, 2022).

Taken together, these results show that heterogeneity in beliefs about climate litigation is associated not only with where respondents invest, but also with how they invest and the institutional settings in which they operate. Investment horizon, organizational scale, ESG mandate, and professional role all help explain which investors are more likely to view climate litigation as financially important and already material.

## 6 Conclusion

This paper studies how investors perceive climate litigation as a financial risk. Using a global survey of 811 investors and analysts, we show that investors differ systematically in how they assess the materiality, timing, sectors, and legal channels of climate litigation. Most respondents regard climate litigation as financially material, but they differ in when they believe it becomes relevant and in the mechanisms through which it affects firms.

A central result of the paper is that this heterogeneity is structured rather than idiosyncratic. Using clustering and principal component analysis, we identify two latent dimensions of belief heterogeneity: Litigation Salience, capturing the perceived importance and urgency of climate litigation and Risk Type Prioritization, distinguishing between investors who emphasize regulatory risk (stringent climate policies) vs. physical climate risk (impacts from warming); and litigation risk. These dimensions, in turn, give rise to three broad investor profiles - Unconcerned, Regulatory-focused, and Litigation/Physical-focused. Each profile is associated with distinct assessments of sectoral exposure and help organize differences in how respondents interpret legal channels. We further show that observable characteristics help explain part of this variation. Exposure to North America, investment style, assets under management, ESG mandate, and professional role are all associated with differences in how respondents perceive climate litigation risk. At the same time, these characteristics do not fully account for the structured disagreement documented in the survey.

Overall, these results extend recent work on investor belief heterogeneity (e.g. Giglio et al., 2021, 2025; Stroebel and Wurgler, 2021; Krueger et al., 2020; Bauer et al., 2025; Ceccarelli and Ramelli, 2024; Laudenbach et al., 2024) by showing that similar structured disagreement arises in the context of climate-related legal risk. They also complement the emerging literature on climate litigation and financial markets (e.g. Sato et al., 2024; Voeten, 2024; Kolaric, 2024) by providing direct evidence on how investors interpret this risk, beyond

what can be inferred from average market reactions to specific events.

For practitioners and policymakers, the evidence points to the importance of information and interpretation. Investors differ not only in how much importance they attach to climate litigation, but also in the channels through which they expect it to matter. This suggests that clearer information on firms' legal exposures, climate strategies, and related governance processes may help reduce uncertainty in how such risks are assessed. More broadly, as climate litigation expands in number, scope, and jurisdictional reach, understanding how investors interpret these developments will become increasingly relevant for climate-related disclosure (Smoleńska et al., 2025) and financial supervision (NGFS, 2023).

Finally, the paper underscores the value of survey methods in the study of forward-looking, legally mediated risks. In settings where observational data are sparse, evolving, or difficult to interpret, surveys can provide direct evidence on beliefs that would otherwise remain unobserved. In the case of climate litigation, this perspective is particularly valuable because the risk is still emerging, heterogeneous across jurisdictions, and closely tied to expectations about regulation, transition, and physical climate outcomes.

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# A1 Supplementary Methodological Information

## A1.1 Consent and Anonymity

To encourage candid responses (Batinic et al., 2002), the survey was fully anonymized. We explicitly communicated that institutional affiliations would not be recorded. This is important particularly since well-known investment firms and financial institutions have already been subject to high-profile climate litigation (e.g. BlackRock and BNP Paribas) and respondents should not feel that they are commenting on behalf of their employers. The following consent language was included in the invitation:

By completing this survey, you confirm that you consent to the following conditions:

1. Your participation in this survey is voluntary. It is your choice whether or not to participate.
2. All information you provide will be kept anonymous and will be securely stored.
3. Neither your name, nor the name of your institution will be mentioned or associated in any way with your answers.
4. The results of this study, including any anonymised data, may be published in policy reports and peer-reviewed journals.

## A1.2 Further details on Survey Filtering and Response Quality

We want to test whether our choice to drop incomplete responses is appropriate, given the possibility that some well-informed investors provide informative responses but skip other questions. To do so, we estimate an ordered logistic regression of each respondent's progress in the survey on an important question in our analysis: their beliefs about exceeding 2°C (Table A1.4). This particular question is used because it is an important belief that we are trying to understand and is answered by both those who completed the survey and those who did not. The results show no statistically significant difference between the partial and full completers.

Further, we validate the one minute threshold filter through a series of sensitivity tests since it may be deemed an arbitrary choice. These tests are performed on a lightly filtered version of the dataset, using the lighter filters in Table A1.2. Figure A1.1 shows the histogram of the time taken to complete the survey using these lighter filters. We find that most

respondents fall within ten minutes (similar to our pilot tests) and take between 1-5 minutes to complete the survey, with a short left tail and a long right tail.

Table A1.3 reports the Cohen’s  $d$  statistic to compare differences in effect sizes between respondents who take different times to complete the survey. We find a “small/merely statistical” (Cohen, 2013; Fritz et al., 2012) difference between respondents who took more than two, five, and ten minutes compared to those who took less than two, five, and ten minutes, respectively. The difference between respondents who took more than one minute compared to those who took less than one minute is larger and closer to a “medium/subtle” difference (Cohen, 2013; Fritz et al., 2012), implying a lack of consistency across groups. Again, this suggests our decision to remove respondents that take less than 1 minute to complete the survey is sensible. Figure A1.2 plots the average ranking of climate litigation in deciles based on the time taken to complete the survey. We see a kink at the first decile (58 seconds), suggesting respondents that take less than 1 minute may have systematically different responses. This reaffirms our filter choice to drop observations that take less than 1 minute (Table A1.1).

Table A1.1: Filtering steps

Step	Filter	$n$
	Full sample	1336
1	Remove if the survey progress is not 100%	1051
2	Remove if the duration is less than 1 minute	876
3	Remove if the analyst/researcher said they do not provide research to managers	865
4	Remove if the start date is before the pilot cut-off date 25-Jun-2024	850
5	Remove based on qualitative assessment of odd responses	812
6	Remove if no questions are answered	811

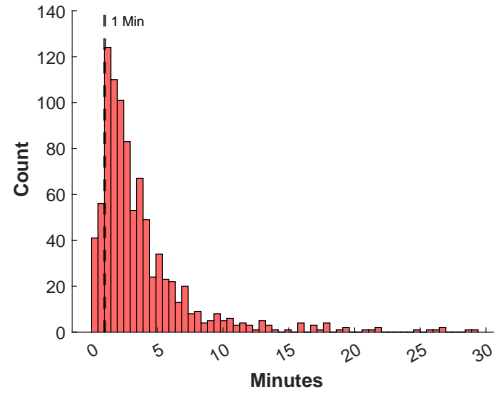
*Notes:* This table reports the quality filters that we apply to our survey sample. The criteria for “odd” responses is (a) nonsensical grammar; (b) nonsensical response to the question; (c) an unfinished response, indicating carelessness; or (d) odd duplicate responses (e.g., same misspelling), indicating a potential risk of redundancy.  $n$  is the sample remaining after each filter.

Table A1.2: Lighter filtering steps

Step	Filter	$n$
	Full sample	1336
1	Remove if the analyst/researcher said they do not provide research to managers	1020
2	Remove if the start date is before the pilot cut-off date 25-Jun-24	983
3	Remove based on qualitative assessment of odd responses	945
4	Remove if no questions are answered	935

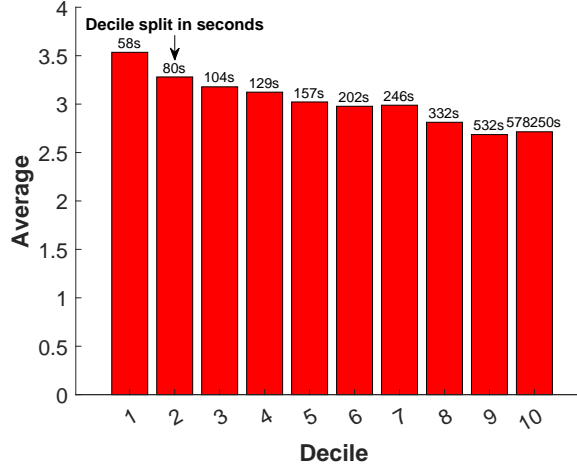
*Notes:* This table reports lighter quality filters that we apply to our survey sample in order to assess the suitability of our filters. The criteria for “odd” responses is (a) nonsensical grammar; (b) nonsensical response to the question; (c) an unfinished response, indicating carelessness; or (d) odd duplicate responses (e.g., same misspelling), indicating a potential risk of redundancy.  $n$  is the sample remaining after each filter.

Figure A1.1: Distribution of survey completion times (minutes)



*Notes:* This figure plots the time taken to complete the survey using light filters. We only plot observations that take less than 30 minutes. Observations after this are particularly sparse. We remove observations if the analyst/researcher said they do not provide research to managers, if the start date is before our pilot cut-off date of 25-Jun-24, if our qualitative assessment shows the answer is odd/illogical, and if no questions are answered (final  $n = 935$ ). This is larger than our main sample ( $n = 811$ ) which also removes observations if the survey is not 100% completed and if the duration is less than 1 minute.

Figure A1.2: Average rank of climate litigation by duration



*Notes:* This figure plots the average rank given to climate litigation when respondents are asked “Please rank the general importance of these climate-related risks to typical businesses and investors in terms of financial risk. (1 being the most important, and 5 the least important)” using light filters. We remove observations if the analyst/researcher said they do not provide research to managers, if the start date is before our pilot cut-off date of 25-Jun-24, if our qualitative assessment shows the answer is odd/illogical, and if no questions are answered (final  $n = 935$ ).

Table A1.3: Differences in key survey variables by completion time

	Litigation Rank	Damage Cases	Carbon Major Importance	$ \bar{d} $
Greater than 1 minute v. Less than 1 minute	-0.35	0.36	0.39	0.37
Greater than 2 minutes v. Less than 2 minutes	-0.27	0.16	0.34	0.26
Greater than 5 minutes v. Less than 5 minutes	-0.26	0.20	0.38	0.28
Greater than 10 minutes v. Less than 10 minutes	-0.13	0.10	0.14	0.12

*Notes:* This table reports the Cohen’s  $d$  statistic to compare differences between two samples (Cohen, 2013). We create two samples by splitting our survey by the time taken  $t$  to complete it. We calculate and report  $d = \frac{M_g - M_l}{\sigma_{g+l}}$ , where  $M_g$  is the mean value for a variable of interest for the subset of the sample that takes longer than  $t$  to complete the survey,  $M_l$  is the mean value for the same variable for the subset of the sample that takes less than  $t$  to complete the survey, and  $\sigma_{g+l}$  is the standard deviation for a variable of interest for the full sample. Our thresholds for  $t$  are 1 minute, 2 minutes, 5 minutes, and 10 minutes. We compare the two samples for key variables in our analysis: the rank given to climate litigation, the importance of damage cases, and the importance of climate litigation for carbon majors. The interpretation of  $d$  is slightly ad-hoc (Goulet-Pelletier and Cousineau, 2018). A large  $d$  implies a large difference between two means. Cohen (2013) and Fritz et al. (2012) propose to view the statistic as representing a small/merely statistical difference ( $\approx 0.2$ ), a medium/subtle difference ( $\approx 0.5$ ), and a large/obvious ( $\approx 0.8$ ) difference. We do not report the unbiased version of Cohen’s  $d$ , known sometimes as Hedges  $g$ , since our sample is larger than 100 and the correction factor is consequently negligible (Goulet-Pelletier and Cousineau, 2018). We remove observations if the analyst/researcher said they do not provide research to managers, if the start date is before our pilot cut-off date of 25-Jun-24, if our qualitative assessment shows the answer is odd/illogical, and if no questions are answered (final  $n = 935$ ).

Table A1.4: Views on the future global mean temperature and survey duration

	Exceed 2C
Log(Progress)	0.725 (-1.041)
Manager	1.274 (1.920)
Pseudo- $R^2$	0.00

t-statistics (z-scores) based on standard errors clustered at the respondent level are reported in parentheses. Coefficients are odds ratios.

\*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ .

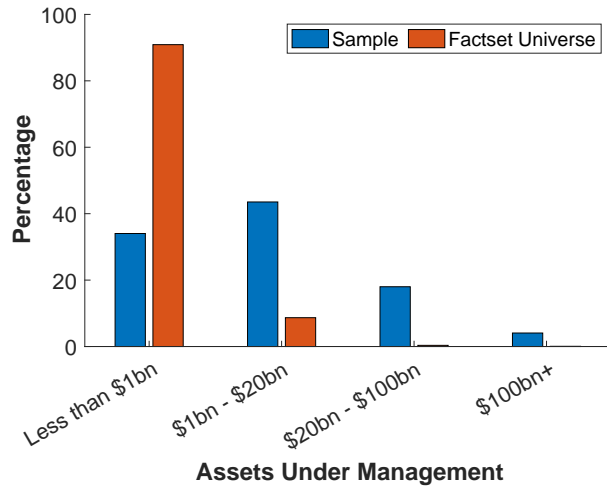
*Notes:* This table reports the results of estimating an ordered logistic regression of the time taken to complete the survey on the perceived likelihood of exceeding 2°C by 2100:  $\Pr(\text{Exceed } 2^\circ\text{C}_i > j) = \frac{\exp(\beta_1 \log(\text{Progress}_i) + \beta_2 \text{Manager Dummy}_i + \beta_j)}{1 + \exp(\beta_1 \log(\text{Progress}_i) + \beta_2 \text{Manager Dummy}_i + \beta_j)}$ , where  $j$  indexes the ordinal belief of exceeding 2°C. Respondents are asked “The Paris Agreement aims to keep the global temperature rise ‘well below 2°C’ and to pursue efforts to limit the increase to 1.5C. In your opinion (best guess), what is the likelihood that global temperature risk will exceed 2°C by the end of the century?”. The answer is on an ordered scale: Very low (1), Low (2), More or less likely (3), Relatively likely (4), and Very likely (5). Manager is a dummy equal to 1 if the respondent is an investment manager.

### A1.3 Representativeness Benchmarks

Although our sample may not be statistically representative of the full investment universe, we benchmark key respondent characteristics—such as AUM and investment region—against institutional investor characteristics using data from FactSet. Figure A1.3 and Figure A1.4 show that our sample is skewed toward large investors and North America/Europe, which is both intentional and justified: large investors are more likely to influence market pricing, and these regions account for the vast majority of climate litigation activity globally (Setzer and Higham, 2025; Heede, 2014). A similar bias is reported in Krueger et al. (2020).

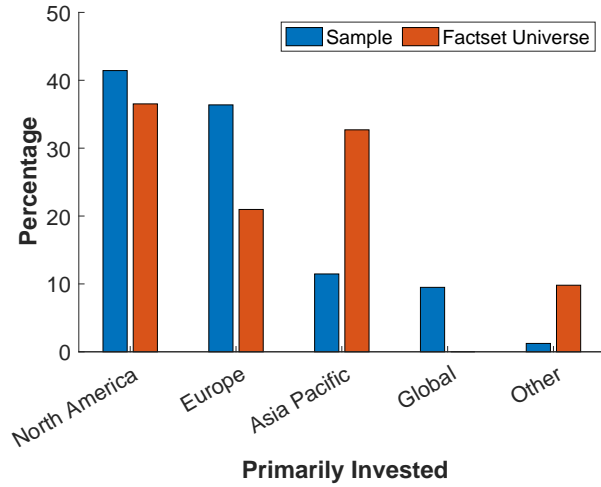
Specifically, we use Owner Identifiers in Factset in 2023. We restrict to equity holdings and, for each unique fund ID, compute the market value of holdings on the last reporting date. For AUM benchmarking, we aggregate equity holdings per fund and compare distributions between our respondents and the FactSet universe (Figure A1.3). For regional benchmarking, we map securities’ ISO codes to regions (North America, Europe, Asia Pacific, Other) and assign each fund to the region with the largest market value. Our survey includes a “Global” category; the FactSet mapping does not, so we include non-NA/EU/Asia in “Other.”

Figure A1.3: Assets under management



*Notes:* This figure plots the distribution of the answer to the question “What is the total value of assets that you manage?” (managers) and “What is the total value of assets managed under your institution?” (analysts) for our sample and for the wider universe of equity investors. For the latter, we obtain the Factset Owner Identifiers dataset for the full year 2023. We filter the dataset to include only holdings in equity and calculate the sum of all equity holdings for each unique fund ID, using the *last* date in which they report.

Figure A1.4: Primarily invested



*Notes:* This figure plots the distribution of the answers to the question “Where are your equity securities primarily invested?” (managers) and “Where is your research on equity securities primarily focused in?” (analysts) for our sample and the primary investment region for the wider universe of equity investors. For the latter, we obtain the Factset Owner Identifiers dataset for the full year 2023. We filter the dataset to include only holdings in equity and match the ISO code of each security to the regions North America, Europe, Asia Pacific, and Other. We then calculate the sum of all equity holdings per region for each unique fund ID, using the *last* date in which they report. We take the region that has the highest market value for each fund ID. Our survey includes a category called “Global” but for the Factset universe we cannot measure this. Instead, we put all non-North American, non-European, and non-Asian answers in the category “Other”.

## A3 Principal Component Analysis

This appendix provides additional information on the PCA. The unrotated PCA was performed on a set of survey responses covering perceptions of (i) the financial materiality of climate litigation, (ii) the relative importance of litigation, regulatory, and physical risks, and (iii) the expected timing of litigation relevance. More specifically we include the following questions:

1. The importance of litigation risk, separately for carbon majors and non-carbon majors (4-point Likert scale)
2. The ranking of *litigation*, *regulatory*, and *physical* risks for assessing climate-related financial exposure in a set of 5 risks which also includes TechnologicalInnovation risk and Stakeholder risk (ranking from 5 to 1).
3. Expectations regarding the timing of when climate litigation risk becomes financially material (categorical: already materialized; 0–5 years; 5–10 years; 10+ years; never).
4. Concern about specific case types, including damages, human rights and greenwashing (4-point Likert scale).
5. Belief about the probability of exceeding 2°C warming by 2100 (5-point Likert scale).
6. Belief that climate litigation against a given company may create material risks for other companies in the same sector (binary).

These variables are in essence all questions that reveal opinions that are prone to be expressed by a number. For ease of interpretation, higher scores are oriented such that they consistently indicate greater concern or earlier expected materialization. By design, PCA standardizes variables to have zero mean and variance 1.

Table A3.1 reports component loadings and Table A3.2 shows how much of the variance is explained by each principal component, which is also visualized in the scree plot in Figure A3.1. Three principal components are retained based on a combination of the Kaiser criterion (eigenvalues > 1), inspection of the scree plot, and interpretability of the results. Together, the first three components account for 48% of the total variance.

Table A3.1: Principal Components Analysis

Variable	Comp1	Comp2	Comp3	Unexplained
Temperature exceeding 2°C	-0.20	0.01	-0.17	85.0%
Risk Carbon Majors	-0.45	-0.03	-0.02	42.6%
Risk non-Carbon Majors	-0.38	-0.08	0.07	57.9%
Litigation Risk	-0.15	-0.41	-0.66	19.1%
Regulation Risk	0.08	0.76	0.01	20.8%
Physical Risk	0.04	-0.43	0.69	18.6%
Damage Risk	-0.42	0.09	0.15	46.3%
Human Rights	-0.38	0.09	0.11	57.0%
Greenwashing	-0.37	0.05	0.15	57.9%
Spillovers	-0.22	0.19	-0.05	80.6%
Materialised already	-0.26	0.03	-0.02	80.1%

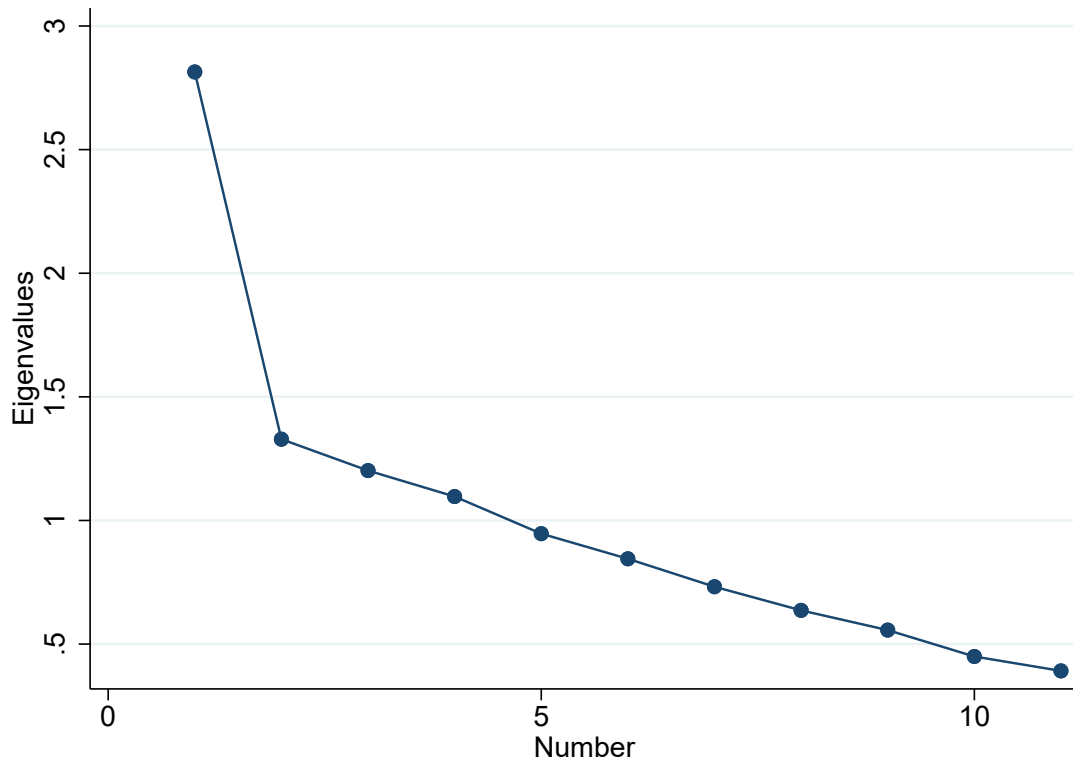
*Notes:* Columns 1 to 3 give the loadings of variables on the three first principal components (eigenvectors). Column 4 gives the sum of the squared loadings on the remaining components and corresponds to the fraction of the variable's variance that is not accounted for by the first three components.

Table A3.2: Principal Components Analysis

Component	Eigenvalue	Proportion explained
Comp1	2.81	25.6%
Comp2	1.33	12.1%
Comp3	1.20	10.9%
Comp4	1.10	10.0%
Comp5	0.95	8.6%
Comp6	0.85	7.7%
Comp7	0.73	6.7%
Comp8	0.64	5.8%
Comp9	0.56	5.1%
Comp10	0.45	4.1%
Comp11	0.39	3.6%

*Notes:* The proportion of the variance that is explained by each principal components is proportional to the eigenvalues.

Figure A3.1: Scree Plot of PCA Eigenvalues



## A4 Regression Analysis

Since our survey contains Likert responses, we estimate a series of ordered logistic regressions to understand which respondent characteristics  $\mathbf{X}_i$  drive beliefs about climate litigation. Specifically, we estimate:

$$\Pr(\text{Belief}_{i\kappa} > j) = \frac{\exp(\beta'_\kappa \mathbf{X}_i + \tau_j)}{1 + \exp(\beta'_\kappa \mathbf{X}_i + \tau_j)}, \quad (1)$$

where  $\text{Belief}_{i\kappa}$  is an ordinal response indicating how important or concerning respondent  $i$  considers climate litigation for topic  $\kappa$ , measured on a four-point Likert scale, and the matrix of observable characteristics  $\mathbf{X}_i$  are characteristics measured in our survey: a dummy variable equal to 1 if the respondent states they primarily hold equities in North America, a dummy variable equal to 1 if they report AUM less than \$1 billion, a dummy variable equal to 1 if the respondent believes the probability of exceeding 2°C by 2100 is > 50%, a dummy variable equal to 1 if the respondent reports having a ESG mandate or specialism, and a dummy variable equal to 1 if the respondent is a manager.

The model estimates the probability that a respondent assigns a level of importance strictly greater than the threshold  $j$ , for  $j \in \{1, 2, 3\}$ , where  $\tau_j$  denotes the threshold between category  $j$  and  $j + 1$ . We report the odds ratio,  $\exp(\hat{\beta}_\kappa)$ , to aid interpretation, where an odds ratio greater than one indicates that a change in the characteristic of a respondent increases the probability of selecting a higher outcome category on the Likert scale. Standard errors are clustered at the respondent level to account for within-respondent heteroskedasticity.

We focus on seven topics. The first and second are the importance assigned to carbon majors and non-carbon majors, respectively, which use the scale “not at all important” (1), “slightly important” (2), “moderately important” (3), and “very important” (4) where we ask investors “when assessing climate-related risk exposure for (non-)Carbon Majors, how important is climate litigation risk?”.

We then focus on five case types. Three types of case are against firms: a firm is taken to court and asked to pay damages for contributing to climate change by releasing high historic greenhouse gas emissions (damages), a firm is sued for violating human rights by not doing enough to cut emissions (human rights), and a firm is sued for greenwashing (i.e., using misleading advertising about their products or operations) (greenwash). Two types of case are against governments: a government is sued for not doing enough to address climate change (emissions), and a government is sued for approving high-emitting projects (projects). We ask investors “what types of climate litigation cases would you consider most concerning

when assessing a firm’s climate-related risk exposure” and allow them to respond with “not at all concerning” (1), “slightly concerning” (2), “moderately concerning” (3), and “very concerning” (4).

We binarize responses and estimate binary logistic regressions in situations where an obvious Likert scale does not exist. This is the case when we ask “do you think climate litigation risk has already materialised financially? If not, when do you expect it to materialise?”. Since we allow respondents to be uncertain (that is, they can answer “do not know, the uncertainty of climate litigation risk is too great to provide a best guess”), it is unclear how such an answer should be ordered on a Likert scale. A binary logistic regression is appropriate in these scenarios, as we can distinguish between respondents who believe the risk has or has not materialized. Specifically, we estimate:

$$\Pr(\text{Belief}_{i\kappa} = 1) = \frac{\exp(\beta'_\kappa \mathbf{X}_i)}{1 + \exp(\beta'_\kappa \mathbf{X}_i)}, \quad (2)$$

where  $\text{Belief}_{i\kappa}$  is an indicator variable equal to 1 if respondent  $i$  answers “yes, climate litigation risk has already materialised financially” or “no, I expect climate litigation risk to materialise in 0-5 years”, and 0 if they answer “no, I do not expect climate litigation to materialise financially”, “do not know, the uncertainty of climate litigation risk is too great to provide a best guess”, “no, I expect climate litigation risk to materialise in 10+ years”, or “no, I expect climate litigation risk to materialize in 5-10 years”. Clearly, our differentiation is between whether the respondent believes that the risk of climate litigation is material *now* (< 5 years) versus in the future (> 5 years, if at all).

## Online Appendix B. Survey Questions

# Perceptions of Climate Litigation Risk by Equity Investors

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This survey was compiled by a team of researchers at the London School of Economics, Grantham Research Institute on Climate Change and the Environment led by Joana Setzer. This survey aims to understand whether and how equity investors consider and incorporate climate litigation risk when making investment decisions. The survey will take about 15 minutes.

By completing this survey, you confirm that you consent to the following conditions:

1. Your participation in this survey is voluntary. It is your choice whether or not to participate.
2. All information you provide will be kept anonymous and will be securely stored.
3. Neither your name, nor the name of your institution will be mentioned or associated in any way with your answers.
4. The results of this study, including any anonymised data, may be published in Grantham Research Institute policy reports and peer-reviewed journals.

Thank you for participating in this survey. If you have any questions, please contact us. Dr Joana Setzer, Assistant Professorial Research Fellow ([j.setzer@lse.ac.uk](mailto:j.setzer@lse.ac.uk)); Catherine Higham, Policy Fellow ([c.m.higham@lse.ac.uk](mailto:c.m.higham@lse.ac.uk)); and Tiffanie Chan, Policy Analyst ([t.s.chan@lse.ac.uk](mailto:t.s.chan@lse.ac.uk)).

Q1 Which of the following best describes your professional role?

- Asset / Fund / Investment Manager
  - Analyst
  - Researcher
-

# Asset / Fund / Investment Manager Questions

If you manage multiple funds, please answer this survey with **one** of your funds in mind.

---

## Section 1: General Information

Q2 Where are your equity securities primarily invested?

- Europe and United Kingdom
  - North America
  - Asia-Pacific
  - Global
  - Other (please specify) \_\_\_\_\_
- 

Q3 What is the total value of assets that you manage?

- Less than \$1 billion
  - Between \$1 billion and \$20 billion
  - Between \$20 billion and \$100 billion
  - More than \$100 billion
-

Q4 How would you best describe your investment mandate?

- Growth-focused
  - Value-focused
  - Income-focused
  - Other (please specify) \_\_\_\_\_
- 

Q5 Do you have ESG or sustainability requirements in your mandate?

- Yes
  - No
- 

Q6 The Paris Agreement aims to keep the global temperature rise "well below 2°C" and to pursue efforts to limit the increase to 1.5°C. In your opinion (best guess), what is the likelihood that global temperature risk will exceed 2°C by the end of the century?

- Very low likelihood (<1%)
- Low likelihood (<5%)
- More or less likely (25%)
- Relatively likely (50%)
- Very likely (75%)

## **Section 2: Climate litigation risk in investment decisions**

In this survey, 'climate litigation risk' is defined as risks caused by or associated with cases brought before judicial or quasi-judicial bodies (e.g., consumer watchdogs), that involve material issues of climate change science, policy or law.

---

Q7 When assessing climate-related risk exposure for Carbon Majors (big fossil fuel companies), how important is climate litigation risk?

- Not at all important
  - Slightly important
  - Moderately important
  - Very important
- 

Q8 When assessing climate-related risk exposure for non-Carbon Majors, how important is climate litigation risk?

- Not at all important
  - Slightly important
  - Moderately important
  - Very important
- 

Q9 Please rank the general importance of these climate-related risks to typical businesses and investors in terms of financial risk. (1 being the most important, and 5 the least important.)

\_\_\_\_\_ Policy and regulatory transition risk: risks associated with policy changes that attempt to constrain actions that contribute to the adverse effects of climate change, or changes that seek to promote adaptation to climate change

\_\_\_\_\_ Physical risk: risks associated with the physical impacts from climate change

\_\_\_\_\_ Technological risk: risks associated with technological innovations that support the transition to a low-carbon world

\_\_\_\_\_ Climate litigation risk: risks caused by or associated with cases brought before judicial or quasi-judicial bodies, that involve material issues of climate change science, policy or law

\_\_\_\_\_ Stakeholder risk: risks associated with increased stakeholder concern or negative stakeholder feedback

---

Q10 Do you agree with the following statements? Select all that apply.

Considering climate litigation risk when making investments in firms...

- is not necessary
- is necessary to avoid direct financial impacts (e.g., legal and administrative costs, fees, damages)
- is necessary to avoid indirect financial impacts (e.g., premiums under liability insurance policies, capital costs, etc.)
- is necessary because of our investment mandate and it reflects our asset owners' investment preferences
- is necessary to reduce our own reputational risk
- is necessary because of other reasons (please specify):  
\_\_\_\_\_

-----

Q11 What types of climate litigation cases would you consider most concerning when assessing a firm's climate-related risk exposure? Rank each of the following types of litigation against companies. We adapted these from the Bank of England's 2021 Climate Biennial Exploratory Scenario.

	Not at all concerning	Slightly concerning	Moderately concerning	Very concerning
A company is taken to court and asked to pay damages for contributing to climate change by releasing high historic greenhouse gases.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A company is sued for violating human rights by not doing enough to cut emissions, which could lead to them having to stop or cut back on some of their operations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A company is sued for greenwashing (i.e., misleading advertising about their products or operations).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q12 Cases against governments may also have implications for regulatory risk. What types of climate litigation cases would you consider most concerning when assessing a firm's climate-related risk exposure? Rank each of the following types of litigation against governments.

	Not at all concerning	Slightly concerning	Moderately concerning	Very concerning
A government is sued for not doing enough to address climate change (e.g. setting weak 2030 and 2050 targets). The court is asked to make the government reduce emissions or increase targets.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A government is sued for approving high-emitting projects (e.g. oil or natural gas pipeline, new airport). A court decision could result in a delay or termination of the project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-----

Q13 At what point would a climate litigation case become significant in your pricing of a firm's climate-related risk exposure?

- When an intention to file a case is first publicly announced by the claimant
  - When a case is filed
  - When a case is publicised widely by the media
  - When a case proceeds to trial
  - When a case is decided by a court of first instance (where a trial is first heard)
  - Only when all options for appeal conclude
  - When a case is filed against a company similar to one that my fund holds shares in
-

Q14 When pricing a firm's climate-related risk exposure, for which sectors do you actively consider climate litigation risk? Select all that apply.

- Agriculture, horticulture and forestry
  - Banking, insurance and financial services
  - Construction
  - Chemicals, rubber and plastic
  - Fossil fuel exploration, production, and transportation
  - Energy generation and utilities
  - Retail
  - Textiles and clothing manufacturing
  - Transport manufacturing
  - Travel, personal and leisure
  - Other (please specify):

---
  - None
-

Q15 Do you think that climate litigation against a given company may create material risks for other companies in the same sector?

- Yes
  - No
  - Do not know
- 

Q16 Do you think climate litigation risk has already materialised financially? If not, when do you expect it to materialise?

- Yes, climate litigation risk has already materialised financially
  - No, I expect climate litigation risk to materialise in 0-5 years
  - No, I expect climate litigation risk to materialise in 5-10 years
  - No, I expect climate litigation risk to materialise in 10+ years
  - Do not know, the uncertainty of climate litigation risk is too great to provide a best guess
  - No, I do not expect climate litigation to materialise financially
-

Q17 Which approaches (if any) have you taken to incorporate climate litigation risk in your investment process? Select all that apply.

- None
  - Engagement with portfolio firms
  - Analysing and reducing the carbon footprint of portfolio firms
  - Divestment
  - Wider diversification
  - Change to firm valuation models that incorporate climate litigation risk
  - Shareholder proposals
  - ESG integration
  - Analysing and reducing stranded asset risk
  - Hedging against climate risk
  - Other (please specify)
-

Q18 Where do you go for information on climate litigation risk? Select all that apply.

- Analysts internal to my institution
  - External paid services, analysts and knowledge providers (e.g., proxy advisors, consultants etc.)
  - Publicly available research (e.g., academic, industry or media outlets)
  - Other (please specify) \_\_\_\_\_
- 

Q19 Do you consider climate litigation risk to be different from other types of litigation risk?

- Yes (please explain): \_\_\_\_\_
  - No
  - Do not know
-

## Analyst/Researcher Questions

Q2 Do you work in an asset management firm, or provide research that supports asset managers in their investment decisions?

- Yes
- No

*[Internal note: the survey will then end for those who select 'no'. We are not recording responses from those who do not provide research to asset managers directly.]*

### Section 1: General Information

Q3 Where is your research on equity securities primarily focused in?

- Europe and United Kingdom
  - North America
  - Asia-Pacific
  - Global
  - Other (please specify): \_\_\_\_\_
- 

Q4 What is the total value of assets managed under your institution?

- Less than \$1 billion
  - Between \$1 billion and \$20 billion
  - Between \$20 billion and \$100 billion
  - More than \$100 billion
-

Q5 Do you specialise in ESG or sustainability analysis?

- Yes
  - No
- 

Q6 The Paris Agreement aims to keep the global temperature rise "well below 2°C" and to pursue efforts to limit the increase to 1.5°C. In your opinion (best guess), what is the likelihood that global temperature risk will exceed 2°C by the end of the century?

- Very low likelihood (<1%)
  - Low likelihood (<5%)
  - More or less likely (25%)
  - Relatively likely (50%)
  - Very likely (75%)
- 

## Section 2: Analysis on climate litigation risk

In this survey, 'climate litigation risk' is defined as risks caused by or associated with cases brought before judicial or quasi-judicial bodies (e.g., consumer watchdogs), that involve material issues of climate change science, policy or law.

---

Q7 When assessing climate-related risk exposure for Carbon Majors (big fossil fuel companies), how important is climate litigation risk?

- Not at all important
  - Slightly important
  - Moderately important
  - Very important
-

Q8 When assessing climate-related risk exposure for non-Carbon Majors, how important is climate litigation risk?

- Not at all important
  - Slightly important
  - Moderately important
  - Very important
- 

Q9 Please rank the general importance of these climate-related risks to typical businesses and investors in terms of financial risk. (1 being the most important, and 5 the least important.)

\_\_\_\_\_ Policy and regulatory transition risk: risks associated with policy changes that attempt to constrain actions that contribute to the adverse effects of climate change, or changes that seek to promote adaptation to climate change

\_\_\_\_\_ Physical risk: risks associated with the physical impacts from climate change

\_\_\_\_\_ Technological risk: risks associated with technological innovations that support the transition to a low-carbon world

\_\_\_\_\_ Climate litigation risk: risks caused by or associated with cases brought before judicial or quasi-judicial bodies, that involve material issues of climate change science, policy or law

\_\_\_\_\_ Stakeholder risk: risks associated with increased stakeholder concern or negative stakeholder feedback

---

Q10 Do you agree with the following statements? Select all that apply.

Incorporating climate litigation risk in my analysis and research to clients...

- is not necessary
- is necessary to reduce our own reputational risk
- is necessary because it reflects our clients' preferences
- is necessary to help fund / asset managers avoid direct financial impacts (e.g., legal and administrative costs, fees, damages)
- is necessary to help fund / asset managers avoid indirect financial impacts (e.g., premiums under liability insurance policies, capital costs, etc.)
- is necessary because of other reasons (please specify):  
\_\_\_\_\_

-----

Q11 What types of climate litigation cases would you consider most concerning when assessing a firm's climate-related risk exposure? Rank each of the following types of litigation against companies. We adapted these from the Bank of England's 2021 Climate Biennial Exploratory Scenario.

	Not at all concerning	Slightly concerning	Moderately concerning	Very concerning
A company is taken to court and asked to pay damages for contributing to climate change by releasing high historic greenhouse gases.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A company is sued for violating human rights by not doing enough to cut emissions, which could lead to them having to stop or cut back on some of their operations.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A company is sued for greenwashing (i.e., misleading advertising about their products or operations).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q12 Cases against governments may also have implications for regulatory risk. What types of climate litigation cases would you consider most concerning when assessing a firm's climate-related risk exposure? Rank each of the following types of litigation against governments.

	Not at all concerning	Slightly concerning	Moderately concerning	Very concerning
A government is sued for not doing enough to address climate change (e.g. setting weak 2030 and 2050 targets). The court is asked to make the government reduce emissions or increase targets.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A government is sued for approving high-emitting projects (e.g. oil or natural gas pipeline, new airport). A court decision could result in a delay or termination of the project.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

-----

Q13 At what point would a climate litigation case become significant enough to include in your research or analysis of a firm's climate-related risk exposure?

- When an intention to file a case is first publicly announced by the claimant
  - When a case is filed
  - When a case is publicised widely by the media
  - When a case proceeds to trial
  - When a case is decided by a court of first instance (where a trial is first heard)
  - Only when all options for appeal conclude
  - When a case is filed against a company similar to one that I conduct research on
-

Q14 For your research and analysis on a firm's climate-related risk exposure, for which sectors do you actively consider climate litigation risk? Select all that apply.

- Agriculture, horticulture and forestry
  - Banking, insurance and financial services
  - Construction
  - Chemicals, rubber and plastic
  - Fossil fuel exploration, production, and transportation
  - Energy generation and utilities
  - Retail
  - Textiles and clothing manufacturing
  - Transport manufacturing
  - Travel, personal and leisure
  - Other (please specify):

---
  - None
-

Q15 Do you think that climate litigation against a given company may create material risks for other companies in the same sector?

- Yes
  - No
  - Do not know
- 

Q16 Do you think climate litigation risk has already materialised financially? If not, when do you expect it to materialise?

- Yes, climate litigation risk has already materialised financially
  - No, I expect climate litigation risk to materialise in 0-5 years
  - No, I expect climate litigation risk to materialise in 5-10 years
  - No, I expect climate litigation risk to materialise in 10+ years
  - Do not know, the uncertainty of climate litigation risk is too great to provide a best guess
  - No, I do not expect climate litigation to materialise financially
-

Q17 In your institution, who manages or is responsible for understanding and addressing climate litigation risk? Select all that apply.

- Analyst
- Researcher
- Asset / Fund / Investment Manager
- Executive Director / Senior Management team
- In-house legal counsel / Risk & Compliance department
- Other (please specify):  

---
- No one

-----

Q18 Where do you go for information on climate litigation risk? Select all that apply.

- External paid services and knowledge providers (e.g., proxy advisors, consultants etc.)
- Publicly available research (e.g., academic, industry or media outlets)
- Other (please specify)  

---

Q19 Do you consider climate litigation risk to be different from other types of litigation risk?

Yes (please explain): \_\_\_\_\_

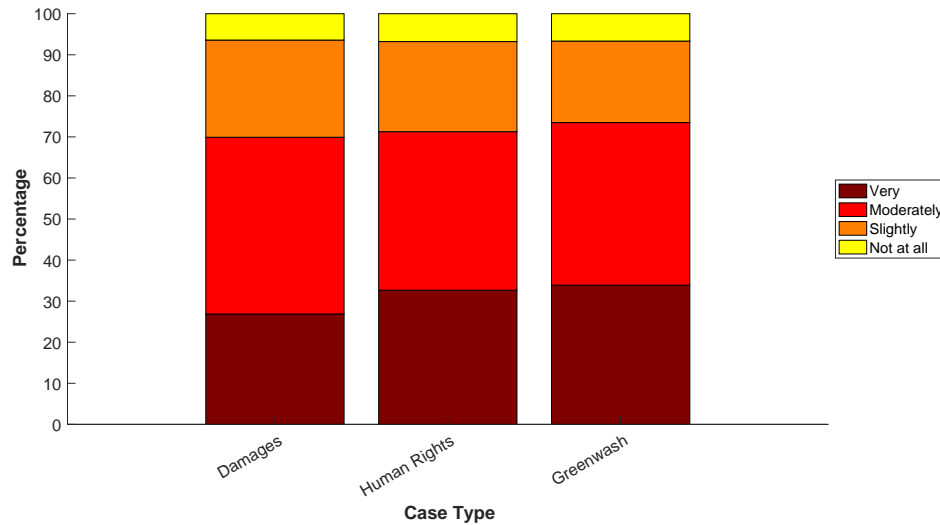
No

Do not know

# Appendix C. Other Figures and Tables

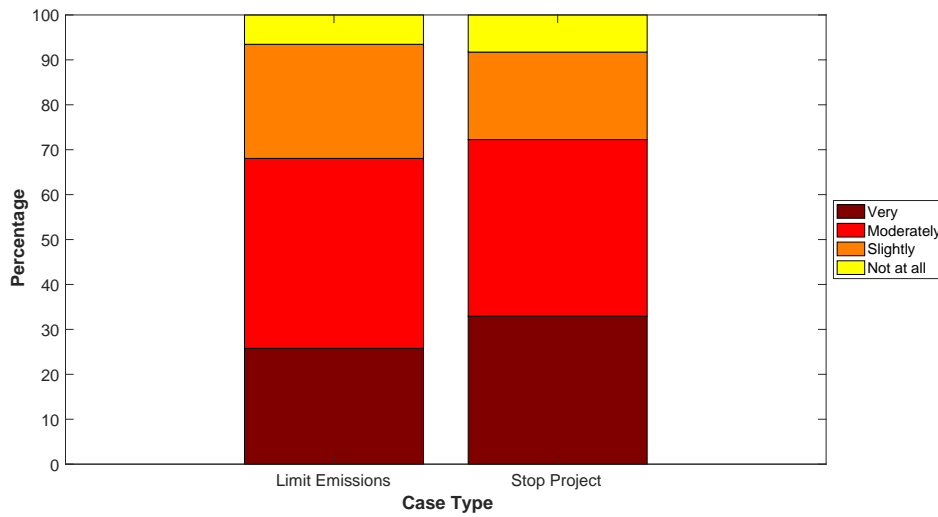
## C1 Figures

Figure C1.1: Concerning climate litigation cases against firms



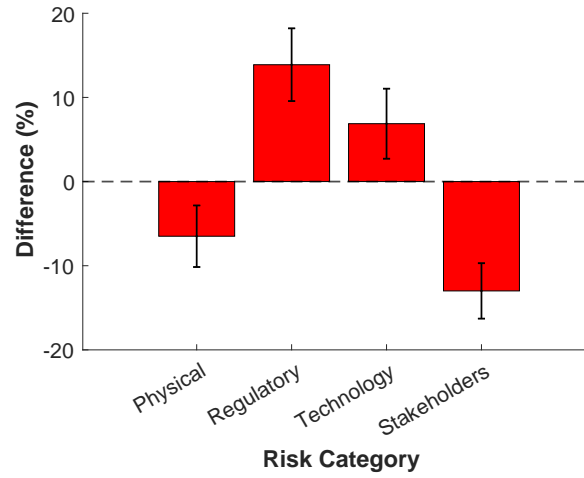
*Notes:* This table reports results from the question “What types of climate litigation cases would you consider most concerning when assessing a firm’s climate-related risk exposure? Rank each of the following types of litigation against firms. We adapted these from the Bank of England’s 2021 Climate Biennial Exploratory Scenario”. We provide the proportion of each response for each type of case.

Figure C1.2: Concerning climate litigation cases against governments



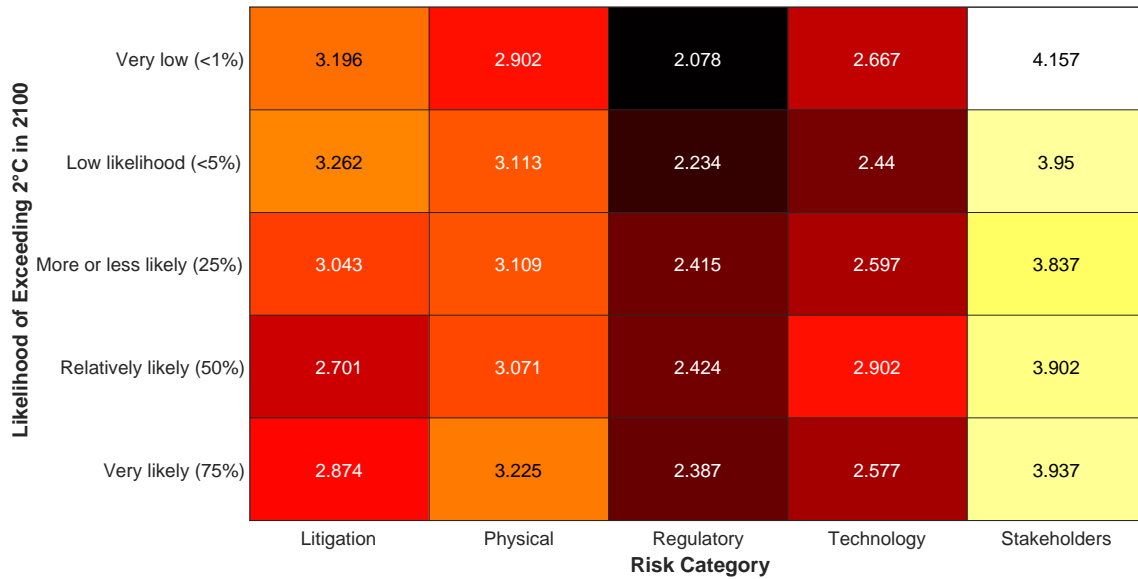
*Notes:* This table reports results from the question “What types of climate litigation cases would you consider most concerning when assessing a firm’s climate-related risk exposure? Cases against governments may also have implications for regulatory risk. What types of climate litigation cases would you consider most concerning when assessing a firm’s climate-related risk exposure? Rank each of the following types of litigation against governments”. We provide the proportion of each response for each type of case.

Figure C1.3: Climate litigation versus other risks



*Notes:* This figure plots the difference between the proportion of respondents that ranked climate litigation as the most important risk and the proportion of respondents that ranked each other risk category as the most important risk when asked “Please rank the general importance of these climate-related risks to typical businesses and investors in terms of financial risk. (1 being the most important, and 5 the least important)”. We plot the confidence interval at the 95% level.

Figure C1.4: Average rank of climate risks conditional on beliefs



Notes: This figure plots the average rank of each climate risk conditional on the perceived likelihood of the global mean temperature exceeding 2C by 2100. Respondents are asked to rank each risk from highest (rank=1) to lowest (rank=5).