

Beyer, Andreas; Nobile, Lorenzo

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## The impact of climate litigation risk on firms' cost of bank loans

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## Abstract

Using a novel worldwide dataset of 5,264 syndicated loans issued to 329 firms from 2006 to 2021, we study how climate-related litigation risk affects firm's cost of borrowing. We find robust empirical evidence that firms targeted by climate lawsuits pay significantly higher spreads on their bank loans. These effects are more pronounced for firms with weaker environmental performance and higher ESG controversies. The results suggest that lender's view climate litigation as a material risk factor, which is increasingly priced into debt contracts.

**Keywords:** climate lawsuits, bank loans, loan spreads, litigation risk

**JEL Classification:** G21, G32, Q56, K32

## Non-technical Summary

This study examines the impact of climate-related litigation risk on bank lending practices. In recent years, there has been a notable increase in legal actions targeting firms to challenge their adverse contributions to climate change. This reflects a broader global effort to hold corporations responsible for their adverse environmental impacts. Although substantial attention has been devoted to climate risks in general, the specific financial implications of climate-related lawsuits have been rather underexplored in the academic literature, particularly how they influence banks' lending decisions. This paper investigates whether banks perceive climate litigation risk as a material financial risk and whether they adjust the loan terms in response thereto.

To address this question, we investigated a dataset comprising 5,264 bank loans issued to 329 firms worldwide between 2006 and 2021. We document each firm's involvement in climate-related lawsuits, including the frequency of such legal actions, and link this information to the corresponding loan data. The findings provide strong empirical support that banks do incorporate climate litigation risk considerations into their lending decisions. Firms involved in climate lawsuits face, on average, interest rates that are approximately 4% higher than those charged to firms without such legal exposure. In addition, these firms typically receive smaller loan amounts and shorter loan maturities, suggesting a broader pattern of risk aversion on the side of lenders.

Financial penalties are especially pronounced for firms with poor environmental performance or a history of environmental, social, and governance (ESG) controversies. Furthermore, banks appear particularly sensitive to novel or unprecedented types of climate litigation act, likely due to the heightened legal uncertainty that is inherent in such cases. In general, our results provide new insight into how the growing prevalence of climate litigation is shaping corporate finance. They underscore that climate-related legal challenges represent not only reputational risks, but also substantial financial risks that affect firms' access to capital. These findings have important implications for corporate decision makers, investors, policymakers, and others concerned with the response of the financial sector to climate change.

# 1 Introduction

In this study, we examine whether, and to what extent, climate-related lawsuits influence firms' cost of capital. Specifically, we investigate whether banks perceive climate litigation risk as a relevant consideration and incorporate it into the pricing and structuring of corporate loan contracts. This question is particularly salient considering the recent surge in climate litigation, which reflects a broader global shift towards environmental accountability and sustainable business practices. Despite the growing prominence of climate lawsuits, their financial implications remain underexplored (NGFS, 2021; European Central Bank, 2023). Regulatory bodies have intensified efforts to require companies to disclose climate-related risks - including litigation risk - through frameworks such as the Task Force on Climate-related Financial Disclosures (Financial Stability Board, 2017)<sup>1</sup>

In parallel, climate change has been recognized not only as a serious threat to sustainable development (UNESCO, 2021) and global health (Organization, 2014), but also as a potential source of systemic financial risk. These concerns have prompted policymakers and financial institutions to embed climate considerations into financial decision-making. In response to the increasing climate crisis, many governments have committed to achieving net-zero emissions by 2050 and limiting global warming to 1.5°C, in line with the Paris Agreement. Sustainable finance has thus emerged as a critical mechanism for supporting climate goals, with initiatives such as the United Nations Environment Programme Finance Initiative (UNEP FI) and the Equator Principles (EP) playing an increasingly prominent role in guiding bank lending practices.

Given the inherent difficulty in hedging climate litigation risk, an important question arises as to how investors incorporate this source of risk into their pricing decisions. In order to investigate this risk and get quantitative measures, we extract pricing information from bank loans. In parallel with the rise of socially responsible investing, there has been a notable expansion in environmentally conscious lending practices (Chava, 2014; Javadi and Masum, 2021) and emerging evidence indicates that banks are increasingly attentive to the risks associated with climate-related litigation (Richardson et al., 2023; Ma et al., 2022). However, the relationship between climate lawsuits and the cost of capital, in Europe, remains underexplored as yet. The existence of this knowledge gap is rather surprising, given that climate litigation risks have profound implications for firm financing, as evidenced by studies showing that lenders price in anticipated risks through higher loan costs (Solana, 2020; Karpoff et al., 2005).

Understanding the financial and operational implications of climate litigation is therefore critical, particularly for firms operating in sectors with elevated exposure to environmental and regulatory risks. Banks and financial institutions play a central role in this context, engaging directly with

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<sup>1</sup>For more details, see: Financial Stability Board, 2017, <https://assets.bbhub.io/company/sites/60/2021/10/FINAL-2017-TCFD-Report.pdf>.

firms through lending, deposit-taking, and investment activities. However, this involvement also exposes banks themselves to litigation-related risks, which can erode stakeholder confidence, provoke adverse market reactions, and materially reduce firm value (Bardos et al., 2013; Levy et al., 2018; Prince and Rubin, 2002). Importantly, the banking literature has long established that banks, as delegated monitors, possess access to proprietary borrower-specific information that is typically unavailable to external investors. This privileged informational position allows banks to assess borrower risk and repayment capacity more effectively (Javadi and Masum, 2021). Consequently, to the extent that climate litigation is perceived by investors as an economically significant risk factor, we hypothesize that banks are likely to incorporate this risk into their credit evaluation and loan pricing decisions for firms involved in climate-related lawsuits.

Our measure of climate litigation risk is based on the established view that a climate lawsuit event represents the firm's initial disclosure of this legal action to the capital market, following the approach developed by (Wei et al., 2011). Consistent with (Richardson et al., 2023), we compute a dummy variable denoted as 1 if the firm is exposed to at least one climate-related lawsuit in a given year and 0 otherwise. Although this dummy variable captures the presence of climate litigation risk, it can overlook important variation in the intensity and frequency of legal exposure. To address this concern and enhance the robustness of our results, we construct an alternative continuous measure of climate litigation exposure, defined as the natural logarithm of the cumulative number of climate-related lawsuits involving a given firm. This specification allows us to differentiate between firms with minimal legal exposure (e.g., a single case) and those subject to recurring or sustained litigation related to climate issues. By incorporating both binary and continuous measures, we aim to capture a broader spectrum of climate litigation risk while mitigating concerns related to measurement error and information loss that may arise from reducing a continuous phenomenon to a dichotomous variable.

Each individual loan in our sample we have extracted from the Dealogic database. We then identify the dates of climate lawsuit events associated with the borrowing firm using the Sabin Center for Climate Change Law Database and match them to our constructed measures of climate litigation risk. Our final dataset comprises 5,264 unique bank loans extended to 329 distinct firms worldwide over the period 2006 to 2021.

Supporting the view that climate litigation risk is a relevant risk factor for lenders, we find a robust positive association between our measures of climate litigation risk and loan spreads that is both statistically and economically significant. Loan spreads of firms involved in climate lawsuits events are about 3.89% larger than those of firms not involved. This finding is also robust to different model specifications, including fixed effects of the borrower, year, country, and loan type characteristics. Further, firms with poor environmental performance and higher exposure to ESG controversies are expected to exhibit greater exposure to climate litigation. Consequently, if lenders perceive climate litigation as a material risk factor, its adverse effects should be more

pronounced for firms with weaker environmental profiles and elevated concerns related to ESG. We explore these cross-sectional differences and our empirical results are consistent with this expectation.

Specifically, our findings indicate that the effect of climate-related litigation on loan pricing is significantly amplified for firms characterized by weak environmental performance (“brown” firms) and those with a high incidence of ESG-related controversies. We further examine whether specific characteristics of climate lawsuits - such as the stage of the legal process (filings versus decisions), the degree of novelty, the country of origin, and whether the plaintiff is a government entity differentially influence the cost of bank loans. Among these, we find that only novel climate lawsuits are associated with a significant increase in borrowing costs, suggesting that legal uncertainty and precedent-setting may potentially amplify lenders’ risk perception. Finally, we explore the broader implications of climate litigation by analyzing its relationship with non-price loan contract provisions, such as loan amounts, maturity, secured tranches, and lenders. Our findings reveal that climate litigation is negatively associated with loan amounts and loan size, further underscoring the financial impact of climate litigation on firms’ borrowing terms.

Our paper contributes to several themes covered by the existing academic literature. First, it contributes to a rapidly growing literature investigating the impact of climate litigation risk on firms and financial markets (Karpoff et al., 2005; Wei et al., 2011; Richardson et al., 2023; Ma et al., 2022). Although prior studies have examined the impact of environmental lawsuits in the United States and China (Richardson et al., 2023; Ma et al., 2022), the legal and institutional framework in these countries differs markedly from that of Europe. These differences limit the external validity of their findings and complicate the generalization of results from the U.S. and Chinese corporate loans markets to western institutional contexts, such as those in Europe. To our knowledge, our paper is the first study to empirically examine the effect of climate-related lawsuits on the cost of bank lending, offering novel evidence at both the European and global levels. Our main findings provide a more comprehensive picture of the adverse impact of climate litigation risk on firms’ cost of capital. Thus, our findings can be of interest to academia, industry decision makers, practitioners, and policymakers alike.

Second, our paper contributes to the growing body of evidence on the financial consequences of climate litigation risk. Although prior research has emphasized the effects of physical climate risk (Hong et al., 2019; Wei et al., 2011; Painter, 2020), regulatory uncertainty (Chava, 2014; Fard et al., 2020), and transition risks associated with climate-related innovation (Beyene et al., 2021; Bolton and Kacperczyk, 2021) the role of legal action - particularly in the form of climate-related lawsuits - has received comparatively less attention. Our findings indicate that lenders are sensitive to litigation-driven climate risk and incorporate this concern into loan pricing by demanding a premium to compensate for the heightened legal and reputational uncertainty.

Third, this study contributes to the literature on the determinants of the cost of bank loans. Our results reflect the sensitivity of banks to climate litigation risk and further strengthen the evidence on environmentally sensitive lending as provided by (Richardson et al., 2023) and (Ma et al., 2022). We show that the risks associated with climate litigation also affect the pricing and other non-pricing features of loans. We highlight the negative relationship between climate lawsuits and non-price loan contract provisions, specifically loan amounts and maturity.

The remainder of this paper is organized as follows. In Section 2 we review the literature and develop our main hypotheses. Section 3 discusses the data. We report our main empirical findings in Section 4 and conduct a subsample analysis in Section 5. We provide robustness checks of our results in Section 6 and investigate the impact of climate risk on other contractual features of loans in Section 7. We discuss alternative explanations in Section 8 and conclude in Section 9.

## 2 Literature Review and Hypothesis Development

Our paper contributes to the literature on the impact of climate lawsuits on the cost of bank loans. Previous research centres on quantifying the financial market reactions towards companies being subject to litigation around different lawsuit events. These studies are, predominantly, focusing on lawsuit filings or announcements (Dulak and Gnabo, 2024). There are different strands of the existing literature that we contribute to in our paper. First, we contribute to the literature on the financial risks associated with climate change, focusing not on physical and transition risks (Delis et al., 2024; Hong et al., 2019; Bolton and Kacperczyk, 2021), but on quantifying the impact of climate litigation risk, for which the existing literature is still scarce. Despite a growing interest for climate change-related financial risks, the only study to deal with climate litigation and cost of bank loans is (Richardson et al., 2023). This category of risk was however given the same importance as the other two by Mark Carney in his 2015 speech ‘Breaking the Tragedy of the Horizon - climate change and financial stability’ (Carney, 2015) and has become more prominent for corporations and financial institutions in recent years (Dulak and Gnabo, 2024). Out of the 2,180 climate-related lawsuits documented by the Sabin Center for Climate Change Law between 1990 and December 2022, a substantial proportion - 1,557 cases - were filed after 2015 (Setzer and Higham, 2023). This marked increase in climate litigation underscores rising concerns about its potential implications for corporations and financial institutions e.g., NGFS (2021). Furthermore, our research is part of the academic debate on the relationship between legal disputes and bank financing conditions, developing along two main strands of literature. The first area of focus concerns studies analysing the impact of litigation on corporate financial performance, with a focus on equity returns (Arena and Ferris, 2018). This research explores different categories of lawsuits, such as financial fraud,

environmental violations, and anti-competitive practices. The second strand of literature to which our study relates concerns intra-industry spillover effects, that is, the impact that isolated events - such as scandals, lawsuits, or bankruptcies - can have on other firms within the same sector (Barko et al., 2023). This phenomenon is particularly relevant in the banking context, as credit institutions, being lenders with a limited risk perspective, tend to adopt a cautious approach when assessing the creditworthiness of firms exposed to legal disputes. Previous studies show that banks respond to legal risk signals by increasing loan costs or imposing more stringent conditions, such as additional collateral requirements and shorter maturities (Bharath et al., 2008; Graham et al., 2008). Building on these findings, we extend the analysis to climate litigation, investigating whether banks adopt similar risk-mitigation strategies in response to climate lawsuits. In our study, using a novel and worldwide climate lawsuits events database, we aim to fill this knowledge gap in the literature by examining whether and to what extent climate litigation risk affects the cost of bank loans. Since these disputes can lead to significant legal expenses, settlements, and reputational damage, banks may incorporate such risks into their credit pricing models, with important implications for firms' financial decisions. Furthermore, existing studies on climate litigation and financial impacts are often limited to a single country or focus on specific economic or geographic regions, such as the United States. For example, Richardson et al. (2023) using a US sample of 7,684 loans from 1,409 firms between 1995-2015 finds that environmental lawsuits are positively correlated with higher loan costs, with a one standard deviation increase linked to a 2.07 basis point rise in costs. Furthermore, Ma et al. (2022), using a hand-collected dataset on environmental violations in China over the period 2008–2020, find that firms breaching environmental regulations face significantly higher bond financing costs. However, climate litigation risk varies significantly across jurisdictions due to differences in legal frameworks, regulatory environments, enforcement mechanisms, and societal attitudes toward environmental responsibility. Building on these considerations, to the best of our knowledge, this study is the first to examine the relationship between climate litigation risk and the cost of bank loans using a cross-country analysis on a global scale. By adopting this broader perspective, we aim to provide a more comprehensive understanding of how legal and regulatory disparities influence banks' risk assessment and lending conditions in response to climate lawsuits. As shown by the above literature review, there is broad consensus that climate litigation risks and costs might yield to an increase in firms' cost of capital. Given that bank loans constitute a critical - often the primary - source of external finance and considering that banks are sophisticated economic agents uniquely positioned to monitor borrowers and accurately assess risk, we posit that banks incorporate climate litigation risks into their lending decisions. This leads to the cross-sectional implication of our main hypothesis:

*H1: Firms involved in climate-lawsuits face significantly higher bank loan costs than firms not subject to such legal actions.*

## 3 Data and Empirical Design

### 3.1 Loan Data

We obtain global loan-level syndicated loan data from Dealogic. Our main dependent variable is the “all-in-spread-drawn” (AISD, henceforth “Spread”) that is paid over the London Interbank Offered Rate (LIBOR). It comprises all types of fees charged by the lender, including commitment fees (paid on unused amounts of loan commitments), utilization fees (paid on the drawn amount once a threshold has been exceeded), and fixed upfront fees. Berg et al. (2016) show the importance of fees in the overall pricing of loans. Each loan is identified as a distinct observation, and the price and non-price terms are fixed at the facility level. For each facility, we use the AISD to measure the cost of bank loans and is provided by Dealogic directly. In order to reduce the effect of outliers in our regression models, and consistent with Newton et al. (2020), we winsorize the sample for margins below the 1st percentile and above the 99th percentile. Firms with negative AISD are dropped. We also control for the size of the loan amount, the maturity of the loan facility, and whether or not a loan is leveraged and subordinated. Finally, we control the most common types of facility, including Term Loan A, revolvers, and others<sup>2</sup>.

As reported in Table 1, an average firm in our sample pays a loan spread of about 185 basis points. The average loan facility has a size of about \$1836 million, matures in about 5 years, and has about 12 participants in the loan syndicate.

### 3.2 Corporate governance, Balance Sheet, and ESG data

We have drawn firm-level corporate governance and firm-level ESG profile variables from Refinitiv. Firm-level financial data are obtained from DataStream. Table 1 shows the summary descriptive statistics of corporate governance, ESG, and firm-level financial data variables. We match the financial, governance, and ESG profile variables of the firms using the Refinitiv Identification Code (RIC) and the ISIN code. Then, following Altunbaş et al. (2010), to obtain borrower-specific characteristics, we hand-matched the borrower or borrower’s parent name to the Refinitiv Eikon and Datastream firm. Detailed information on all variables, their sources, and measurements is provided in Table A.1 in the Appendix.

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<sup>2</sup>A term loan provides a fixed lump sum disbursed upfront, which is repaid in scheduled installments over a specified period. It is more rigid in structure, making it suitable for long-term investments or financing fixed assets. A revolving credit facility allows borrowers to draw, repay, and redraw funds up to a pre-approved credit limit, like an overdraft or credit card. Interest is typically charged only on the amount drawn. This structure offers high flexibility and is well suited for managing short-term liquidity needs or working capital requirements.

### 3.3 Measuring Climate Lawsuits

We manually compile climate litigation events from the U.S. Climate Change Litigation and Global Climate Change Litigation databases, as provided by the Sabin Center for Climate Change Law. The Sabin Center maintains two separate databases, one for US litigation and one for “global” litigation, i.e, all cases outside the US. Together, these databases contain more than 2000 cases before judicial and quasi-judicial bodies that involve material issues of climate change science, policy, or law<sup>3</sup>. Following Sato et al. (2024), we exclude from our sample those cases where climate change is only incidental to main issues that are excluded from the Sabin database. We identify cases involving publicly listed companies in the US and Europe while non-traded companies are excluded from our sample<sup>4</sup>. Furthermore, cases filed in countries where risk factors are unavailable were dropped.

Our sample of filings includes 357 corporation-event observations between 2006 and 2021 in the US (319), and Europe<sup>5</sup> (38) with 279 filings events and 78 decisions (see Figure 1). Many companies are involved either in a single event or in more than one event (see Table A.2 in the Appendix), explaining why the number of unique firms targeted is limited to 71. Furthermore, among the 279 corporate filing events, 120 are novel (43.01%). To assess novelty, we use the classification of Sato et al. (2024). Firstly, the legal arguments are classified as “*novel*” in cases such as *Milieudefensie v.Shell* (see Appendix Supplementary Information), in which claimants relied on business and human-rights standards to argue that a corporation has an obligation to reduce carbon emissions from its global operations. Secondly, for cases such as *County of San Matteo v. Chevron*, one of the earliest cases in which the US subnational governments use Heede’s Carbon Majors<sup>6</sup> research as the basis for legal action against one or more major carbon-emitting companies. Thirdly, we consider whether a novel argument was applied against a new industry, as in the case of *Deutsche Umwelthilfe (DUH) v. BMW and Deutsche Umwelthilfe (DUH) v. Mercedes-Benz AG*<sup>7</sup>.

Moreover, out of the 279 corporate filing events, 170 cases (60.93%) have a government body as the plaintiff, while 256 cases (91.76%) originate from the United States. Additionally, we also collected 78 court decisions. Court decisions, which may include final judgments, significant interim judgements or procedural matters, or settlement decisions, are of course not always negative for the companies. Each decision can be either positive or negative for the targeted corporation. Positive decisions are often decisions where the case is dismissed (Sato et al., 2024).

<sup>3</sup>Data are available at: <https://climatecasechart.com>

<sup>4</sup>The firms’ countries of domicile are: United States, Canada, Germany, United Kingdom, Norway, Austria, Italy, Switzerland, Spain, France, Netherlands, Poland, and Ireland.

<sup>5</sup>Notably, in our sample, all climate lawsuits filed in Europe are directed solely at European companies.

<sup>6</sup>According with Dulak et al. (2024) where one or more of the companies are listed by Heede (2014), we classify the case as a Carbon Major case (Energy, utilities, and materials the so-called Carbon Majors).

<sup>7</sup>More detailed information about the novelty, are provided in the Appendix Supplementary information.

Among the 78 decisions, we identify 51 positive (65.38%) decisions for the corporation and 27 being negative (34.62%). Table 1 shows the sectoral distribution of filing and decisions company-events. Unsurprisingly, a significant proportion of corporate climate litigation has been directed at major emitters, particularly those operating within the Energy, Utilities, and Materials sectors - collectively referred to as the 'Carbon Majors'. The list of target-event observations for lawsuit filings and decisions (positive and negative) can be found in Tables A.2 in Appendix. The final climate lawsuit sample obtained is cross-referenced with the database of Dulak and Gnabo (2024), and Sato et al. (2024).

Finally, we match the firms' climate lawsuits event with our Dealogic loan, Refinitiv, and Datastream data based on the borrower's parent name, ISIN code and event dates. If any, we dropped observations with missing borrowers' corporate governance and environmental profile variables. If the firm financial-accounting data are missing for the current year ( $t_0$ ) we replace them with the previous non-missing values ( $t-1$ ), see e.g., Brogaard et al. (2017).

According to Wei et al. (2011), a climate lawsuit event describes the firm's initial disclosure of a climate lawsuit to the capital market<sup>8</sup>. Then, following Richardson et al. (2023), we compute a dummy variable and `Climate_Lawsuits`, denoted as 1 if the firm is exposed to a climate lawsuit, and 0 otherwise. This climate lawsuits measure has a mean value of 0.037. Thus, 3.70% of the firm-year observations in our sample face climate lawsuits (Table 2). The final dataset contains 5,264 individual bank loans issued to 329 unique worldwide firms from 2006 to 2021.

### 3.4 Empirical design

We empirically examine the impact of climate-related lawsuits on loan spreads using a panel fixed effects regression model, which addresses correlated omitted variable bias (Wooldridge, 2010):

$$\begin{aligned} \text{Log}(\text{Spread})_{s,i,b,j,t} = & \alpha_0 + \beta \text{Climate\_Lawsuits}_{i,t-1} + \gamma \text{Loan Controls}_{s,t-1} + \\ & + \psi \text{Governance Controls}_{i,t-1} + \delta \text{Firm Controls}_{i,t-1} + \\ & + \phi_i + \gamma_t + \theta_j + \omega_s + \delta_b + \varepsilon_{s,i,b,j,t} \end{aligned} \quad (1a)$$

The unit of observation is loan facility. The dependent variable,  $\text{Log}(\text{Spread})$ , is the natural logarithm of the loan spread, which is the all-in-drawn spread over the London Interbank Offered Rate (LIBOR) of the syndicated loan  $s$  for borrowing firm  $i$  operating in country  $b$  supplied by

<sup>8</sup>Lawsuit filings and court decisions are typically unforeseen events. Information regarding legal actions generally becomes publicly available only upon their official announcement, often through a press release or press conference on the date of filing marking the first public disclosure of the claim. Even in cases where investigations are ongoing and publicly acknowledged, the precise timing of a filing is rarely disclosed in advance. Likewise, the dates of court rulings are rarely announced in advance, and the substance of judicial decisions remains unknown until formally issued

the lead bank of the syndication  $j$ , at time (year)  $t$ .

Climate\_Lawsuits is our main variable of interest, the firm-level climate litigation profile, measured by a dummy variable that is denoted as 1 if the firm is exposed to a climate lawsuit and 0 otherwise. Climate\_Lawsuits denotes the initial disclosure by a firm of climate-related litigation to the capital market (Wei et al., 2011). The coefficient of interest is  $\beta$ . A positive and statistically significant  $\beta$  would suggest an adverse impact of climate lawsuits on the cost of bank loans and would be consistent with our main hypothesis.

Following the literature (e.g., Graham et al. (2008); Chava (2014)), we also include a wide range of control variables that could potentially affect the cost of bank loans, and which would influence firms' demand for bank credit and banks' commercial evaluation of the credit riskiness of the loan contract to the borrowing firms. The first set of control variables is related to loan characteristics. Following Graham et al. (2008), we control for loan amount and maturity to account for variations in loan size and duration, which influence credit risk, borrowing costs, and contractual terms.

The second set of control variables is related to corporate governance variables. Firm-specific corporate governance environment, including board size, board independence, board diversity, board industry expertise, and CEO duality. These measures closely relate to the seriousness of the principal agency problem between the shareholders and the management team of the firms and, therefore, would incentivize firms to use debt as a tool to mitigate the misalignment of interest between these two parties (Altunbaş et al., 2019).

The third set of controls for the characteristics of the borrower includes asset size, profitability, liquidity risk measure, and operational efficiency measures. It is important to control for size because, on the one hand, larger firms have less trouble accessing external financing and have fewer information asymmetry problems. Therefore, they are likely to have a lower cost of bank loans. On the other hand, due to their sheer size, larger firms can borrow more and as a result, they may have higher borrowing costs. This leads to leverage as another firm-level control variable. Leverage is one of the main inputs in Merton (1974) distance to default formula; thus, firms with higher leverage ratio have a higher default risk. All else equal, these firms are expected to have a higher cost of bank loans, making it imperative to control for leverage (Javadi and Masum, 2021). We also control for firms' profitability (RoA) because profitable firms have a lower chance of default and are expected to pay lower spreads on their loans. We also include firm-specific financial statement performance ratio including liquidity risk measure (operating cash flow to total sales ratio, leverage (debt to total assets), and operational efficiency (asset turnover)). Finally, we control for firm-specific systematic risk (Beta derived from standard Capital Asset Pricing Model).

In order to address issues of endogeneity (i.e., reverse causality), we follow the literature (e.g.,

Altunbaş et al. (2010)). Our analysis incorporates lagged variables for climate lawsuits, loan data, ESG profiles, and balance sheet characteristics. Detailed information on all variables, their sources, and measurements is provided in Table A.1 in the appendix.

We introduce firm fixed effects ( $\varphi$ ) to account for the unobserved heterogeneity between firms. We also include the time (year) fixed effect ( $\gamma$ ) to capture the world-wide economic environment. Furthermore, we also include fixed effects of the bank (lending) ( $\theta$ ) to capture all types of unobservable bank-specific time invariant factors relevant for the risk preference and organizational culture of the first lead arranger of each facility. Previous studies have shown that the time-invariant characteristics of banks have a significant impact on their lending decisions and have been used in their model specifications (e.g. Gropp and Heider (2010); Kroszner and Strahan (2001); Goss and Roberts (2011)). We also account for facility loan characteristics ( $\omega$ ) to capture heterogeneity in loan structures, credit risk, and contractual terms, ensuring a more precise estimation of the relationship between climate lawsuits and borrowing conditions.

Finally, we also consider country-fixed effects ( $\delta$ ) to account for the heterogeneity of credit riskiness across borrowing firms due to the production characteristics and country-level institutional setting.

## 4 Baseline Results

### 4.1 The impact of firm-level climate lawsuit profile on the cost of bank loans

We first report the empirical findings for the impact of climate lawsuits of borrowing firms on the spread in syndicated loans, testing our hypothesis (H1) above. The results of Equation 1(a) where the climate litigation profile of borrowing firms is measured by the `Climate_Lawsuits` variable is presented in Table 3. To check the robustness and stability of the estimated coefficients on the main variables, i.e., the climate litigation profile of the borrowing firms, we start from a model which includes the climate lawsuits (Column 1), and gradually add additional variables into the regressions<sup>9</sup>.

As shown in Table 3, the estimated coefficient on `Climate_Lawsuits` is positive and statistically significant in the model that only contains the climate litigation profile and gradually controls for the deal characteristics (Column 1 - Column 7). The finding remains qualitatively consistent in the model specification when firms-level corporate governance (Column 8-9) and financial performance ratios and market value ratios (Column 10 - Column 11) are controlled for. The findings suggest that firms involved in climate lawsuits, pay higher interest rates when borrowing

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<sup>9</sup>For robustness purpose, we report in Column 1 of Table 3 the results without incorporating a one-period lag ( $t-1$ ) in the firm's climate litigation profile.

in the syndicated loan market. In addition, the result appears to be economically significant. The economic magnitude of the Climate.Lawsuits coefficient in Column 11 of Table 3, when the baseline model was augmented with full set of control variables, indicates that, given that the Log(Spread) coefficient is 0.0382 ( $p < 0.05$ ) firms exposed to at least one climate-related legal action experience, have a 3.89% increase in their loan spread<sup>10</sup>.

The estimated coefficients on the loan characteristics (Column 6 - Column 11) in the baseline specification - specifically Deal Amount and Maturity - are both statistically significant and negatively associated with loan price (1% significance level). The findings are comparable to those found in previous studies by Altunbaş et al. (2019) and Graham et al. (2008). The results indicate that lenders systematically adjust contractual structures in response to perceived climate litigation risk. Specifically, they reduce credit limits and shorten loan maturities, consistent with efforts to enhance risk mitigation in the presence of heightened legal and regulatory uncertainty.

Turning to the augmented models with corporate governance controls, we find Ind\_Board to be positively related to the loan price. We also find that corporate governance of borrowing firms (in Column 11), Board.Diversity and Board.Skills, have a negative relationship with loan price (1% significance level). These results are in line with empirical evidence that indicates that better corporate governance quality could mitigate information asymmetry problems and therefore lower the cost of debt financing (Ghouma et al., 2018).

Regarding firm-level financial performance and market value ratio (in Column 11), the results show that borrowing firms with higher profitability (ROA) face lower loan prices. Furthermore, larger firms (Size) have lower loan spreads. In short, the coefficients of the control variables in all specifications have the expected sign and are consistent with the existing literature (Altunbaş et al., 2019; Chava, 2014; Bradley and Roberts, 2015).

## 5 Cross-sectional analyses

We also perform a cross-sectional analysis to explore potential channels through which climate lawsuits might influence bank loan costs. Specifically, we examine three distinct mechanisms: (i) the firm's environmental profile, (ii) exposure to ESG-related controversies, and (iii) the specific characteristics of the climate lawsuits. This analysis allows us to assess whether firms involved in climate litigation cases face higher borrowing costs due to increased perceived climate and

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<sup>10</sup>The coefficient of Climate.Lawsuits is significantly positively related to log(Spread) This means that when a firm is exposed to a climate lawsuit, its loan spread increases. Since our dependent variable is in log form, the coefficient translates into a percentage change in the loan spread using the formula: %change =  $e^\beta - 1$ . In our case,  $e^{0.0382} - 1 \approx 0.03895 = 3.895\%$ . This implies that a firm exposed to a climate lawsuit experiences an increase of approximately 3.895% in its loan spread.

environmental risks, reputational damage associated with ESG controversies, or variation in the nature and severity (filings vs decisions) of the lawsuits.

## 5.1 Environmental Profile

The positive relationship between climate lawsuits and bank loan costs might also be significantly influenced by a firm's environmental performance profile. Firms with weaker environmental profile often exhibit limited transparency in their climate-related disclosures, increasing lenders' uncertainty regarding borrower risk and thus prompting higher loan spreads. In order to address this hypothesis, we postulate that a firm's environmental risk profile serves as an essential moderator, intensifying the relationship between climate-related litigation and the cost of bank loans. Moreover, banks generally demonstrate higher informational opacity compared to bond markets, restricting external stakeholders - such as depositors, regulators, and environmental advocates - from effectively evaluating and disciplining banks' environmental lending practices. This opacity weakens market discipline mechanisms and allows banks to pursue lending relationships based predominantly on short-term profitability considerations, potentially encouraging environmentally harmful firms. Goss and Roberts (2011) highlight that banks might continue relationships with polluting firms because of immediate profitability, underscoring a possible short-term bias in lending decisions. In addition, firms operating in highly polluting industries are often classified as environmentally sensitive and high-risk due to their frequent targeting by environmental regulations and vulnerability to adverse environmental events (i.e., Wu et al. (2023)). We expect that firms with stronger environmental performance will experience a mitigated decline in loan accessibility, whereas those in heavily polluting industries will face greater restrictions.

To empirically test our hypothesis, we classify firms in our sample as Strong Polluter (Less Polluter), if they are above (below) the median level of CO2 emissions, see also Altunbaş et al. (2022b). Table 4 reports our regression results, showing that the coefficient on `Climate_Lawsuits` is significantly positive ( $p < 0.10$ ) for firms characterized by higher environmental risk (poor environmental performance), whereas it is insignificant for firms with better environmental profiles (Columns 1-2). These findings support our hypothesis that poor environmental performance exacerbates the positive relationship between climate lawsuits and firm's bank loan spreads.

## 5.2 ESG controversies

We also examine whether ESG controversies impact the positive relationship between climate litigation and bank loan costs. Incorporating environmental, social, and governance (ESG) criteria into corporate management and investment decisions has increasingly become essential due to stakeholders' heightened expectations regarding sustainability practices (Gillan et al., 2021).

ESG considerations extend beyond purely economic and financial measures, encompassing a firm's broader impacts and responsibilities. ESG controversies typically arise from corporate events or practices linked to a firm's operations or products that generate significant reputational risks through adverse environmental, social, or governance outcomes. These controversies can severely damage the corporate reputation, often resulting in higher perceptions of risk among stakeholders, including financial institutions. Consequently, companies involved in ESG-related controversy are likely to experience a decline in stakeholder confidence and increased regulatory and public scrutiny, which may adversely affect their financial performance and reduce their financial attractiveness to investors (Aouadi and Marsat, 2018). Specifically, ESG controversies, stemming from adverse corporate events or operational practices, signal elevated managerial and operational risks to lenders, which can significantly influence loan pricing decisions. Lenders may interpret ESG controversies as indicators of inadequate corporate governance, compromised operational oversight, and increased reputational risks, prompting them to demand higher loan spreads to compensate for perceived increases in borrower risk (DasGupta, 2022).

To empirically test our conjecture, we classify firms in our sample as ESG\_Contro\_High (ESG\_Contro\_Low), if they are above (below) the median level of ESG Controversies score from Refinitiv<sup>11</sup> which aggregates information on 23 distinct controversy topics (for example, Business ethics controversies; Tax fraud controversies; Human rights controversies; Management compensation controversies; Consumer controversies; Environmental controversies; Shareholder rights controversies; Employee health and safety controversies). ESG controversy scores range from 0 (indicating significant controversies) to 100 (no controversies), reflecting the extent of firms' engagement in controversial practices (LSEG Data and Analytics, 2022).

Table 4 reports our regression results, showing that the coefficient on Climate\_Lawsuits is significantly positive ( $p < 0.10$ ) for firms with greater exposure to ESG-controversies, while it is insignificant for firms with a better ESG controversies score (Columns 3-4). These findings align with our conjecture that firms exposed to ESG controversies amplify the positive correlation between climate lawsuits and bank loan spreads.

### 5.3 Impacts of lawsuit-specifics on loan spread

In this section, we examine the conjecture that the relationship between climate litigation and corporate borrowing costs may be influenced by specific characteristics of climate lawsuits. To investigate this, we focus on loan facilities that have been affected by climate lawsuits. We first generate four dummy variables for each specific climate lawsuit (Type\_Lawsuit, Novel\_Lawsuit, Europe, and Government\_Plaintiff). Then we interact these dummy variables. Subsequently, we

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<sup>11</sup>For a list of all controversy measures that make up the ESG controversy category score, please refer to: [https://www.refinitiv.com/content/dam/marketing/en\\_us/documents/methodology/refinitiv-esg-scores-methodology.pdf](https://www.refinitiv.com/content/dam/marketing/en_us/documents/methodology/refinitiv-esg-scores-methodology.pdf)

replace `Climate_Lawsuits` with the dummies that we created. This model allows us to control for the differences across the specific's lawsuits. First, climate litigation reflects the long-term nature of climate-environmental risk, as legal actions addressing adverse climate-environmental actions often seek to hold corporations accountable for damages that may escalate over decades rather than just a few years. Then, we examine whether lenders differentiate between climate lawsuit filings and final decisions when pricing climate litigation risk into corporate borrowing costs. Specifically, we investigate whether firms subject to a climate lawsuit at the filing stage experience a greater or lesser increase in loan spreads compared to firms with climate lawsuits that have reached a final decision. At the filing stage, the outcome of the lawsuit remains highly uncertain, and the probability of a severe financial penalty or regulatory mandate is still speculative. Climate litigation often takes years to reach an ending, and many cases are dismissed, settled, or resolved with minimal financial consequences for the defendant. As a result, lenders may only partially adjust credit spreads at this stage, as the risk remains indeterminate. In contrast, once a court decision is reached, particularly an adverse ruling, lenders face greater certainty regarding financial penalties, compliance obligations, or regulatory consequences. This shift from uncertainty to concrete financial exposure leads to a more pronounced increase in loan spreads, as lenders price in the heightened default risk, operational constraints, and regulatory compliance costs associated with an unfavorable verdict. Therefore, borrowing firms involved in decisions are expected to face higher loan spreads compared to those involved in filings. We explore these cross-sectional variations and report the results in Table 5. Focusing on the coefficient in Column 5 (`Type_Lawsuit`), the difference between filing and final decisions is statistically insignificant. This finding indicates that lenders do not systematically differentiate between firms based on the stage of litigation, suggesting that even initial filings may already incorporate substantial legal risk into credit terms. Second, we examine whether firms subject to novel climate lawsuits face different loan spreads compared to those sued with traditional cases. Novel lawsuits introduce new legal arguments that may establish precedents, expanding corporate liability for climate-related damages, or imposing new compliance requirements. Unlike traditional climate lawsuits, which operate within established legal frameworks, novel cases create legal volatility that investors and lenders find difficult to anticipate or quantify. Therefore, companies seeking loans while facing novel climate lawsuits are more likely to experience adverse effects. Thus, borrowing firms involved in new climate litigation cases are expected to face higher loan spreads compared to those already involved in existing, yet open cases.

We use `Novel_Lawsuit` in Table 5. Results are consistent with our conjecture. The coefficient on `Novel_Lawsuit` presented in Column 5 is positive and statistically significant ( $p < 0.05$ ). This finding suggests that lenders perceive firms facing new types of climate litigation as riskier borrowers. This effect is likely driven by legal uncertainty, market reactions, reputational concerns, and the potential for regulatory changes. As a result, firms involved in novel lawsuits experience higher loan spreads, reflecting increased credit risk as assessed by lenders. Third, we examine

whether firms facing climate lawsuits in European jurisdictions experience different loan spreads compared to those sued in the United States, due to structural differences in legal and regulatory frameworks. The predictability of European legal systems, which operate within well-defined regulatory structures such as the EU Green Deal and the Corporate Sustainability Reporting Directive, provides greater clarity regarding corporate climate obligations. Moreover, European firms tend to be more aligned with de-carbonization policies, meaning that climate-related legal rulings are less likely to impose significant operational adjustments. Since many firms already integrate sustainability strategies into their business models, legal decisions in Europe often reinforce, rather than drastically alter, existing corporate climate commitments. Furthermore, European banks actively incorporate sustainability criteria into their lending decisions, fostering a financial environment where firms involved in climate litigation are not necessarily viewed as high-risk borrowers. Instead, such firms may be perceived as potential candidates for green financing, including sustainability-linked loans (SLLs) and ESG-aligned credit instruments, which could mitigate the negative financial consequences of litigation. Taken together, these factors suggest that European-originated climate lawsuits are less likely to result in significant increases in loan spreads, particularly when compared to similar litigation in the United States, where legal outcomes tend to be less predictable and financial penalties more severe. The results in Table 5, Column 5 indicate that climate lawsuits originating in Europe do not significantly affect loan spreads. This finding suggests that legal and regulatory uncertainty from European lawsuits is lower than in other jurisdictions. As a result, financial institutions do not perceive these lawsuits as materially affecting firms' creditworthiness. Finally, we examine whether the adverse financial impact of climate litigation is expected to be more pronounced for firms facing government-initiated lawsuits. When a government entity - being at the national, state, or local level-files a lawsuit against a corporation, the case is generally perceived as carrying greater legal and financial weight compared to litigation initiated by private parties. Government-initiated climate lawsuits amplify reputational risks by attracting greater media attention and investor scrutiny, which can lead to stock price declines, reduced investor confidence, and restricted access to financing. As lenders perceive these cases as more severe and policy-driven, they could demand a higher risk premium, increasing credit spreads and borrowing costs for affected firms. Consequently, the financial impact of climate litigation is expected to be more pronounced for firms facing government-led lawsuits due to their greater legal, financial, and reputational risks. The empirical results in Table 5, Column 5 indicate that lawsuits where the government is the plaintiff do not have a significant impact on loan spreads. This finding suggests that lenders do not systematically adjust credit risk pricing in response to climate litigation initiated by public authorities. One possible explanation is motivated by the fact that government-initiated lawsuits, particularly in the context of environmental and climate regulation, tend to follow established legal and regulatory frameworks. Unlike lawsuits filed by private entities or activist groups, which may introduce legal uncertainty and potential precedent-setting outcomes, government litigation often seeks compliance with existing policies rather than punitive finan-

cial damages. As a result, financial institutions may not perceive these cases as introducing significant new risks that would necessitate adjustments in loan pricing.

## 6 Robustness Checks

### 6.1 Continuous climate litigation exposure

To ensure the robustness of our findings, we replace, in the baseline specification, the dummy variable with the total number of climate-related lawsuits in which a firm is involved. This allows us to check for the intensity or frequency of such legal exposure and to account for the skewed distribution of lawsuits. Then, to examine whether the intensity of climate litigation is associated with firm outcomes, we construct a continuous measure of litigation exposure based on the natural logarithm of the total number of climate-related lawsuits in which a firm is involved. This approach enables us to distinguish between firms with marginal involvement in litigation (e.g., a single case) and those facing persistent or repeated legal challenges related to climate issues. By incorporating a continuous measure of climate litigation exposure, we gain a more granular understanding of how varying degrees of legal pressure may influence firms' behaviour or performance. This alternative specification also serves to mitigate concerns about measurement error and the potential loss of variability and nuance that may result from reducing a naturally continuous variable to a dummy variable.

The results presented in Table 6 are consistent with our baseline model and further corroborate our results. Furthermore, these results provide further evidence that climate-related legal risks are meaningfully associated with the cost of bank loans. The empirical results in Table 6, Column 5 suggest that the coefficient estimate of 0.066 implies that a 1 percent increase in climate-related litigation faced by firms is associated with a 0.066% increase in the cost of bank loans, as measured by the loan spread<sup>12</sup>. This result reinforces our baseline results and suggests that lenders perceive heightened climate-related legal risk as a material factor influencing the pricing of corporate debt.

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<sup>12</sup>In a log-log regression model, the coefficient represents the elasticity of the dependent variable with respect to the independent variable. In detail:  $\text{Log}(\text{Spread})_{s,i,b,j,t} = 0.066 \cdot \text{Log}(\text{ClimateLitExposure})_{i,t-1} + \gamma \cdot \text{LoanControls}_{s,t-1} + \psi \cdot \text{GovernanceControls}_{i,t-1} + \delta \cdot \text{FirmControls}_{i,t-1} + \varphi_i + \gamma_t + \theta_j + \omega_s + \delta_b + \varepsilon_{s,i,b,j,t}$ . Taking the derivative of  $\text{Log}(\text{ClimateLitExposure})$  with respect to  $\text{Log}(\text{Spread})$ , we get:  $\frac{\partial \text{Log}(\text{Spread})}{\partial \text{Log}(\text{ClimateLitExposure})} = 0.066$ , meaning that a 1% increase in  $\text{ClimateLitExposure}$  leads to a 0.066% increase in  $\text{Log}(\text{Spread})$ , ceteris paribus.

## 6.2 Instrumental variable approach

In this final robustness check, we further address potential endogeneity concerns. Although we have already mitigated the risk of reverse causality using one-year lagged firm-level variables, we strengthen our identification strategy by employing an instrumental variable (IV) approach. Specifically, we implement a two-stage least squares (2SLS) regression approach to isolate the exogenous variation in climate lawsuits, thereby extracting their causal impact on firm outcomes. The main challenge in using 2SLS is the identification of exogenous IVs that are not correlated with the dependent variable (Altunbaş et al., 2022a). The primary goal of employing the 2SLS approach is to isolate the exogenous variation in climate lawsuits, thereby mitigating potential biases arising from endogenous influences. By using an instrument that is correlated with these variables but not directly with the dependent variable -  $\text{Log}(\text{Spread})$  - we aim to obtain a more accurate estimate of their causal effects. This approach ensures that the estimates reflect the true impact of climate lawsuits on cost of bank loans, thus strengthening the robustness of our results and addressing potential biases inherent in our original estimations. Following Laeven and Levine (2009), we employ as an instrumental variable for climate lawsuits the industry-year-median number of climate lawsuits, calculated as the average number of lawsuits faced by all other firms in the same *industry* and *year*, excluding firm  $i$ <sup>13</sup>. This instrument captures exogenous variation arising from industry-level exposure to climate-related legal actions-reflecting broader regulatory, societal, or reputational pressures that are common across firms in the same sector. By excluding firm  $i$  from the calculation, we mitigate concerns about reflection bias and ensure that the instrument is not driven by firm-specific shocks. This approach helps isolating the component of climate litigation that is exogenous to firm  $i$ 's unobservable characteristics, thereby addressing endogeneity concerns. Column 1 of Table 7 reports the results of the first-stage regression, where our dependent variable ( $\text{ClimateLitExposure}$ ) is regressed on the explanatory variables that we use throughout the paper. In line with the requirements for a valid instrument,  $\text{Avg\_Industry\_ClimateLawsuits\_Events}$  is positively correlated with  $\text{ClimateLitExposure}$  and statistically significant at the 1% level (Column 1), suggesting the validity of the IV. Moreover, the instrument employed is strong, as shown by the Kleibergen-Paap and Cragg-Donald test statistics (Cragg and Donald, 1993; Stock and Yogo, 2005). Column 2 of Table 7 displays the results for the second-stage regression, which makes use of the predicted number of climate lawsuits from the first-stage regression ( $\text{ClimateLitExposure-predicted}$ ) to estimate the cost of bank loans. The results are similar (although stronger in magnitude) to those obtained in the baseline regression (Column 11), again suggesting a direct relationship between the climate lawsuits and the level of cost of bank loans.

<sup>13</sup>Several studies have used this instrument (see, e.g., Altunbaş et al. (2017)). Furthermore, to facilitate interpretation, we apply a log transformation to the variable, which is then used in our regression analyses.

## 7 Other loan contractual features

Our results up to this point provide evidence that lenders view climate litigation as a risk factor and therefore charge higher spreads on loans issued to firms that are comparatively more exposed to this risk. However, as pointed out in prior research (Richardson et al., 2023) in addition to directly increasing the cost of loans, lenders have the option to change other contractual features of their loans to mitigate the risk associated with their borrowers. Specifically, they can shorten the maturity, and reduce the size of their loans. Thus, in this section, we conduct additional analyses to investigate the extent to which climate lawsuits influence these alternative aspects of bank loan contracts. Specifically, we utilize firm fixed effects regressions to examine how climate lawsuits relate to the loan maturity, measured as the natural logarithm of loan maturity, as well as the loan amount, measured by the natural logarithm of the total loan facility. We also explore security requirements (Secured), a dummy variable, denoted as 1 if the bank loan is secured, and 0 otherwise. Firm fixed effects probit regression analysis tests the relationship between climate lawsuits and Secured (Graham et al., 2008). Finally, we also examine the number of lenders Log(Lenders), measured as the natural logarithm of the number of participants in a syndicated loan (Javadi and Masum, 2021). We report the results in Table 8. We find that banks shorten the maturity of their loans by about 7.52%<sup>14</sup>, when a borrowing firm is exposed to climate lawsuits compared to those that are not. Furthermore, the size of the loan syndicate is also about 12.54% smaller for exposed firms<sup>15</sup>. This result provides further evidence that lenders view climate litigation as a risk factor and that investors apply exclusionary filters based on climate litigation risk. Finally, the coefficients for Secured and Log(Lenders) are insignificant, suggesting that banks prioritize in setting the loan amount and maturity provisions over reducing lending when loans are secured for climate lawsuits.

## 8 Discussion and Alternative Explanations

We have found strong evidence that the cost of bank loans is higher for firms involved in climate-related lawsuits compared to firms that are not. Through a battery of robustness tests, we show that the positive relationship between loan spreads and climate litigation risk is likely to be driven by firms' involvements in episodes that lead to climate lawsuits. These findings naturally

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<sup>14</sup>The coefficient of `ClimateLawsuits` is significantly negatively related to `Log(Maturity)`, meaning that when a firm is exposed to a climate lawsuit, its loan maturity decreases. Since the dependent variable is in log form, the coefficient translates into a percentage change in maturity using the formula: % change =  $e^\beta - 1$ . In our case,  $e^{-0.0793} - 1 \approx -7.52\%$ .

<sup>15</sup>The coefficient of `ClimateLawsuits` is significantly negatively related to `Log(DealAmounts)`, meaning that when a firm is exposed to a climate lawsuit, its loan size decreases. Since the dependent variable is in log form, the coefficient translates into a percentage change in loan size using the formula: % change =  $e^\beta - 1$ . In our case,  $e^{-0.1339} - 1 \approx -12.54\%$ .

give rise to two important questions: (i) *Why are banks concerned about a borrower's exposure to climate litigation risk?* and (ii) *What specific climate lawsuits are banks primarily worried about?* Given that our analysis focuses on the relationship between climate litigation risk and loan pricing, climate lawsuit events emerge as the most immediate and plausible concern from a lender's perspective. It is therefore reasonable to posit that banks are particularly apprehensive about the potential increase of a firm's financial leverage induced either directly through legal liabilities or indirectly via reputational damage. Consequently, both would eventually induce higher financial risk. In response, lenders may charge a risk premium to borrowers facing elevated climate litigation exposure. We further investigate this mechanism as a potential driver of lender behavior and present evidence that supports this interpretation. By documenting consistent results for carbon-intensive firms and those with higher levels of ESG controversies, we demonstrate the robustness of our findings. Our findings indicate that banks are increasingly incorporating climate-related litigation risk into their credit assessments, reflecting a broader shift driven by both regulatory developments and investor demand for sustainable finance. This evolution underscores the growing role of financial institutions in promoting environmental accountability and managing climate-related financial risks within the credit allocation process. In Model 2 of Table 3, we find a positive and statistically significant relationship between climate litigation risk and the cost of bank loans. This relationship remains robust even in Model 11, where we augment the specification to include a comprehensive set of corporate governance variables, as well as financial and loan facility controls. The consistency of this effect suggests that climate litigation risk independently contributes to higher borrowing costs, beyond firm-level fundamentals and contract-specific characteristics. In Model 1 of Table 4, we restrict the sample to firms identified as strong polluters. Even within this high-risk environmental group, we continue to observe a positive and significant relationship between climate litigation risk and loan spreads. In Model 3 of the same table, we further narrow our focus to firms with high levels of ESG controversies. Within this subsample as well, climate litigation risk is priced by lenders, with significance at the 10% level, indicating that reputational and governance concerns that are linked to ESG controversies may reinforce lenders' sensitivity to legal risk. Turning to the nature of the lawsuits, Model 1 of Table 5 examines whether the litigation stage (initial filing versus final decision) affects loan pricing. The results show that the difference between these stages is statistically insignificant, suggesting that lenders respond to the presence of litigation risk at the time of filing and do not wait for case resolution to adjust credit terms. This implies that even early-stage legal exposure carries substantial weight in lenders' risk assessments. In Model 2 of Table 5, we investigate whether novel climate lawsuits - as defined in Section 3.3 - are associated with a differential impact on loan spreads relative to more conventional forms of litigation.

Novel lawsuits may impose heightened uncertainty due to their potential to broaden corporate liability or regulatory obligations. Consistent with this conjecture, we find that novel

lawsuits are significantly associated with higher loan spreads, with statistical significance at the 5% level. By contrast, Model 5 of Table 5 shows that novel climate lawsuits originating in Europe do not significantly affect loan spreads. This finding suggests that legal and regulatory uncertainty in European jurisdictions is perceived to be lower, and hence less pronounced on firms' creditworthiness. Similarly, we assess whether government-initiated lawsuits pose a greater financial threat. Model 5 also shows that lawsuits where the plaintiff is a government entity do not have a statistically significant effect on loan pricing, indicating that the identity of the litigant may not, in itself, be a key driver of lender behaviour. Finally, Table 8 provides further evidence that climate litigation risk affects not only the pricing of bank loans but also non-price contractual terms. Specifically, we observe a significant negative association between climate litigation exposure and loan maturity (Model 1), as well as loan amount (Model 2). These results suggest that lenders make broader adjustments to contractual structure in response to perceived climate litigation risk, shortening maturities and reducing credit limits as additional risk-mitigation strategies. From a policy point of view, our findings underscore the increasing importance of climate litigation risk as a financially material factor shaping corporate access to credit. First, this study provides novel empirical evidence on the economic consequences of climate-related lawsuits, extending the literature by adopting a cross-country perspective an area that has remained largely unexplored. Second, we document a significant relationship between climate litigation risk and non-price loan contract terms, with affected firms receiving smaller loan amounts and facing shorter maturities. The latter result highlights that the impact of climate-related legal exposure extends beyond pricing to the broader structure of financial contracts. Third, our analysis offers critical insights into how financial institutions evaluate firms' exposure to climate litigation and integrate this information into credit decisions. The observed "market penalty" and hence market discipline associated with climate litigation risk illustrates the need to align financial incentives with long-term environmental objectives. Policymakers can leverage these insights to design regulatory mechanisms that promote more robust climate risk disclosure and support ESG-aligned lending practices aimed at channeling capital toward lower-carbon, more sustainable business models. For firms, our findings emphasize the strategic necessity of embedding environmental and legal risk management within corporate governance frameworks to secure and maintain favourable financing conditions.

## 9 Conclusions

We provide empirical evidence that climate litigation is perceived by lenders as a material risk factor and is reflected not only in the loan spreads they charge but also in other contractual features of loan agreements. Leveraging the economic link between firms and their customer base, we further document that a firm's cost of borrowing is adversely affected by its customers' exposure to climate litigation risk. Subsample analyses reveal that the impact of climate liti-

gation is primarily driven by firms with weak environmental performance and a high incidence of ESG controversies, suggesting that lenders are particularly sensitive to sustainability-related reputational and regulatory risks. Moreover, we observe a significant negative association between climate litigation exposure and non-price loan terms, such as loan maturity and amount, indicating broader contractual adjustments beyond pricing alone. Our findings contribute to the literature in several ways. First, we provide novel insights into the economic effects of climate litigation, addressing a gap in prior research. Second, we highlight the relationship between climate lawsuits and non-price loan contract provisions, specifically loan amounts and maturity. Third, we offer critical insights into how banks assess firms' exposure to climate litigation risk, which has important implications for managerial and board-level decision-making regarding climate lawsuits. The results reveal that lenders are increasingly integrating climate-litigation risks into credit risk assessments, driven by regulatory pressures and market demands for sustainable finance. This integration underscores the evolving role of financial institutions in promoting environmental accountability and mitigating climate-related financial risks. From a policy perspective, our findings emphasize the need for regulatory frameworks that enhance transparency and encourage proactive risk management. The observed deterioration in financing conditions for firms subjected to climate-related litigation underscores the imperative to incentivize the adoption of low-carbon strategies and to proactively manage environmental liabilities. Policymakers can leverage these insights to design mechanisms that align financial markets with climate objectives, such as enhanced disclosure requirements and support for sustainable lending practices. For firms, these findings underscore the need to integrate environmental and legal risk management into corporate strategies to secure cost-effective financing. Lenders, in turn, can refine ESG-aligned credit models to better support the transition to a sustainable, low-carbon economy. Future research should explore the long-term implications of these dynamics on financial stability, corporate behavior, and global climate goals, providing further evidence of the interaction between environmental accountability and economic outcomes.

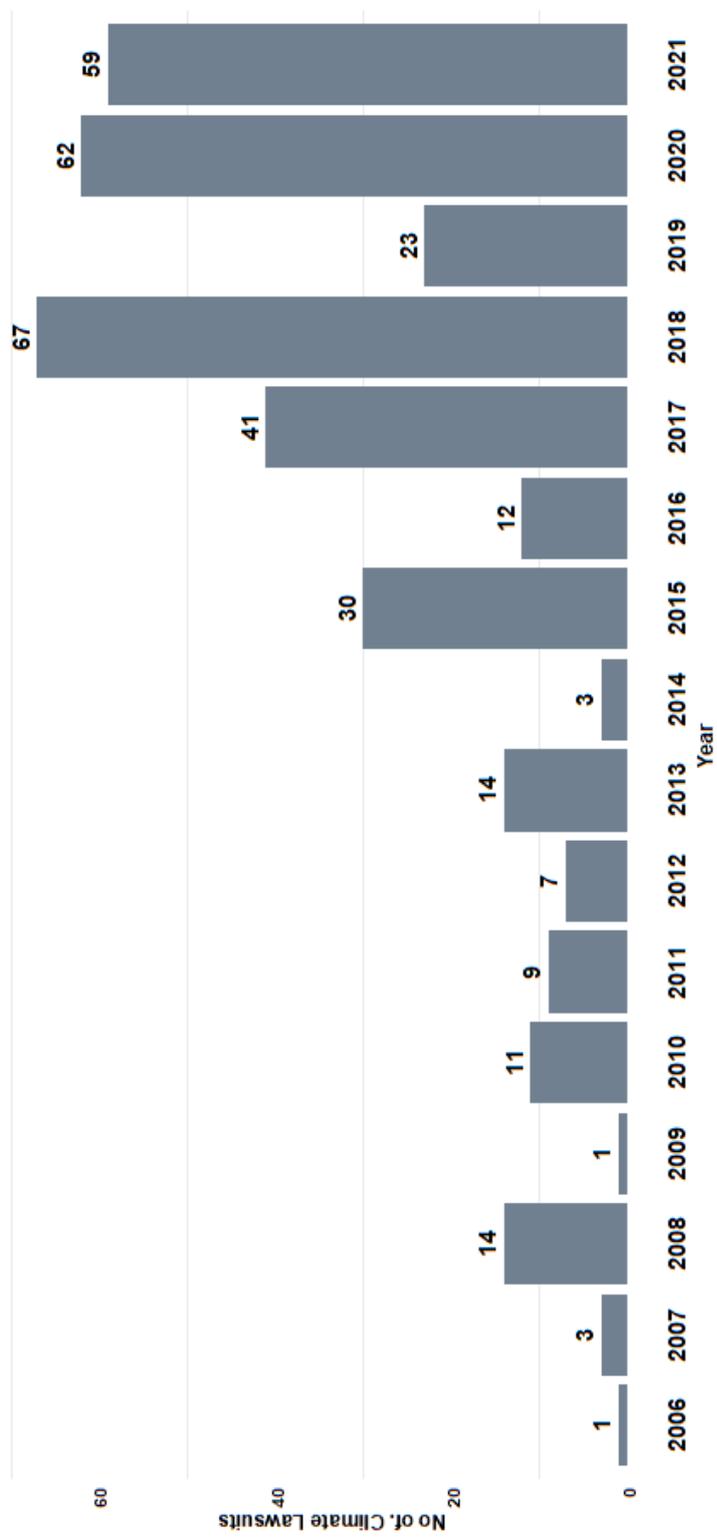
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**Figure 1: Number of Climate Lawsuits.**  
 The figure displays the annual number of climate-related lawsuits filed globally (US and EU) between 2006 and 2021.

**Table 1: Summary Statistics.**

This table reports summary statistics of different variables from our main dataset constructed based on a cross-section of 5264 different loan facilities (data source: Dealogic) issued to 329 worldwide unique firms during the years 2006 to 2021. Table A.1 (appears in Appendices) provides detailed descriptions and sources of all variables.

Variable	Obs.	Mean	Std. Dev.	Min	Max
<b>Panel A. Dependent Variables</b>					
Spread (basis points)	5264	184.705	143.177	15	800
<b>Panel B. Climate Lawsuits Variables</b>					
Climate_Lawsuits	5264	0.037	0.188	0	1
ClimateLitExposure (log)	5264	0.034	0.193	0	2.398
Type_Lawsuit	1065	0.792	0.405	0	1
Novel_Lawsuit	1065	0.482	0.499	0	1
Europe	1065	0.262	0.439	0	1
Government_Plaintiff	1065	0.312	0.463	0	1
<b>Panel C. ESG Variables</b>					
Log(CO2)	5264	11.210	4.347	2.630	19.060
Strong_Polluter	5264	0.514	0.499	0	1
ESG_Controversies_Score	5264	79.763	31.098	0	100
<b>Panel D. Loan Features Variables</b>					
Deal Amount (\$ million)	5264	1836.351	3356.288	1	56900.99
Maturity (years)	5264	4.676	2.484	0.270	27.02
Maturity (log)	5264	1.393	0.604	-1.309	3.296
Lenders	5264	11.665	10.104	2	64
Secured_Loan	5264	0.223	0.416	0	1
Subordinated_Loan	5264	0.012	0.109	0	1
Leveraged_Loan	5264	0.232	0.422	0	1
Loan_Sponsor	5264	0.062	0.241	0	1
Investment_Grade	5264	0.701	0.458	0	1
Term_Loan	5264	0.354	0.478	0	1
<b>Panel E. Corporate Governance Variables</b>					
Board_Size	5264	10.973	3.249	5	20
Ind_Board	5264	68.884	23.601	0	100
Board_Diversity	5264	18.599	12.728	0	64.29
Board_Skills	5264	48.521	23.267	0	100
CEO_duality	5264	0.346	0.475	0	1
<b>Panel F. Firm Characteristics</b>					
Size (log)	5264	16.385	2.158	10.226	23.06
Cashfl_Sales	5264	17.292	16.799	0	290
Debt_Ta	5264	29.457	19.642	0	199.13
Beta	5264	1.123	0.758	-5.43	4.99
RoA	5264	4.859	11.275	-122.47	157.56
Asset_Turnover	5264	0.807	0.818	0	16.516

**Table 2: Number of Events per Industry.**

This table shows the distribution of climate litigation events with respect to industries, going from the most targeted to the least targeted.

Industry <sup>1</sup>	NAICS2	Events		
		Filing	Decisions	All
Mining, Quarrying, and Oil and Gas Extraction	21	198	35	233
Manufacturing	31	45	16	61
Utilities	22	20	15	35
Transportation	48	7	8	15
Retail-Wholesale Trade	44-45	6	2	8
Finance and Insurance	52	3	2	5
<b>Total</b>		<b>279</b>	<b>78</b>	<b>357</b>

<sup>1</sup> Industry classification is based on the North American Industry Classification System (NAICS):  
[https://tbed.org/industry/index.php?tablename=naics\\_vw&function=search&execute\\_search=1&search\\_from\\_filter=1](https://tbed.org/industry/index.php?tablename=naics_vw&function=search&execute_search=1&search_from_filter=1)

**Table 3: Baseline regression results.**

This table presents the regression results of Equation (1). The sample of loan facilities is from the Dealogic database, originated between 2006 and 2021 to worldwide based non-financial firms. The dependent variable is Log(Spread) and the analysis is conducted at the loan facility level. Climate\_Lawsuits is a dummy variable and denoted as 1 if the firm is exposed to a climate lawsuit, and 0 otherwise. Borrower FE is firms fixed effect. Year FE is time fixed effect. Bank (lending) FE is bank fixed effect. Country FE is country fixed effect and DCC FE is deal loan characteristics fixed effect (Lenders, Secured\_Loan, Subordinated\_Loan, Leveraged\_Loan, Loan\_Sponsor, Investment, Term\_Loan). The variables' definitions and summary statistics are presented in Table 1 and in Table A.1 (Appendices). Standard errors are double-clustered by both firm and year and are reported in parentheses. \*\*\*, \*\*, and \* correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Dependent variable: Log(Spread)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Climate_Lawsuits (t)	0.0781*** (0.0188)										
Climate_Lawsuits (t-1)		0.0624*** (0.0199)	0.0526*** (0.0195)	0.0462** (0.0199)	0.0362* (0.0195)		0.0445** (0.0181)		0.0431** (0.0181)		0.0382** (0.0178)
Deal_Amount						-0.0247*** (0.0049)	-0.0242*** (0.0049)		-0.0241*** (0.0049)		-0.0176*** (0.0049)
Maturity						-0.0645*** (0.0088)	-0.0638*** (0.0088)		-0.0633*** (0.0088)		-0.0603*** (0.0086)
Board_Size								-0.0312 (0.0248)	-0.0263 (0.0235)		-0.0376* (0.0229)
Ind_Board								0.0222*** (0.0085)	0.0207** (0.0082)		0.0262*** (0.0080)
Board_Diversity								-0.0059 (0.0045)	-0.0121*** (0.0043)		-0.0107** (0.0042)
Board_Skills								-0.0092* (0.0051)	-0.0113** (0.0048)		-0.0058 (0.0046)
CEO_Duality								-0.0020 (0.0125)	-0.0119 (0.0114)		-0.0023 (0.0111)
Size										-0.0300*** (0.0073)	-0.0166** (0.0069)
Cashfl_sales										-0.0178*** (0.0059)	-0.0049 (0.0054)
RoA										-0.0134** (0.0052)	-0.0112** (0.0048)
Beta										-0.0247* (0.0148)	-0.0174 (0.0132)
Asset_Turnover										-0.0402 (0.0308)	-0.0139 (0.0276)
Leverage										0.0016 (0.0059)	0.0064 (0.0054)
Intercept	2.7427*** (0.0526)	2.7475*** (0.0550)	2.7479*** (0.0031)	2.6861*** (0.0562)	2.7484*** (0.0031)	2.9584*** (0.0348)	2.9524*** (0.0348)	2.7809*** (0.0658)	3.0045*** (0.0701)	3.3436*** (0.1249)	3.2360*** (0.1353)
Borrower FE	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank (lending) FE	No	No	No	No	No	No	No	No	No	No	No
Country FE	No	No	No	No	No	No	No	No	No	No	Yes
DCC FE	No	No	No	No	No	No	No	No	No	No	Yes
Obs.	5264	4935	4935	4935	4935	4935	4935	4935	4935	4935	4935

**Table 4: Regression results - Cross-sectional analyses.**

This table presents the regression results of Equation (1). The sample of loan facilities is from the Dealogic database, originated between 2006 and 2021 to worldwide based non-financial firms. The dependent variable is Log(Spread) and the analysis is conducted at the loan facility level. Climate\_Lawsuits is a dummy variable and denoted as 1 if the firm is exposed to a climate lawsuit, and 0 otherwise. Borrower FE is firms fixed effect. Year FE is time fixed effect. Bank (lending) FE is bank fixed effect. Country FE is country fixed effect and DCC FE is deal loan characteristics fixed effect (Lenders, Secured\_Loan, Subordinated\_Loan, Leveraged\_Loan, Loan\_Sponsor, Investment, Term\_Loan). The variables' definitions and summary statistics are presented in Table 1 and in Table A.1 (appears in Appendices). Standard errors are double-clustered by both firm and year and are reported in parentheses. \*\*\*, \*\*, and \* correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Dependent variable: Log(Spread)	Strong_Polluter (1)	Less_Polluter (2)	ESG_Contro.High (3)	ESG_Contro.Low (4)
Climate_Lawsuits	0.0418* (0.0229)	-0.0636 (0.0451)	0.0651* (0.0394)	0.0044 (0.0224)
Deal_Amount	-0.0681*** (0.0077)	-0.0504*** (0.0067)	-0.0388*** (0.0113)	-0.0619*** (0.0061)
Maturity	0.0409*** (0.0128)	-0.0391*** (0.0121)	-0.0371** (0.0183)	0.0447*** (0.0109)
Board_Size	0.0348 (0.0376)	-0.0852*** (0.0284)	-0.0634 (0.0463)	-0.0286 (0.0298)
Ind_Board	0.0153 (0.0122)	0.0296*** (0.0113)	0.0132 (0.0209)	0.0088 (0.0097)
Board_Diversity	0.0005 (0.0069)	-0.0102* (0.0052)	-0.0279*** (0.0104)	-0.0023 (0.0050)
Board_Skills	0.0020 (0.0079)	0.0021 (0.0057)	-0.0075 (0.0110)	-0.0011 (0.0058)
CEO_Duality	-0.0248 (0.0190)	0.0082 (0.0142)	0.0063 (0.0244)	-0.0064 (0.0148)
Size	-0.0023 (0.0137)	-0.0310*** (0.0079)	-0.0672*** (0.0149)	-0.0015 (0.0087)
Cashfl_sales	-0.0131 (0.0102)	-0.0073 (0.0061)	0.0025 (0.0113)	-0.0149** (0.0070)
RoA	-0.0072 (0.0083)	-0.0122** (0.0056)	-0.0069 (0.0100)	-0.0149** (0.0061)
Beta	-0.0271 (0.0225)	-0.0002 (0.0174)	-0.0542* (0.0313)	-0.0120 (0.0168)
Asset_Turnover	0.0575 (0.0464)	-0.1811*** (0.0377)	-0.2456*** (0.0743)	-0.0021 (0.0335)
Leverage	0.0247* (0.0144)	0.0066 (0.0053)	0.0068 (0.0193)	0.0014 (0.0068)
Intercept	3.3583*** (0.2675)	3.4231*** (0.1593)	4.5484*** (0.3023)	3.2105*** (0.1696)
Borrower FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Bank (lending) FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
DCC FE	Yes	Yes	Yes	Yes
Obs.	2550	2385	1519	3416

**Table 5: Regression results - Climate lawsuits characteristics.**

This table presents the regression results of climate lawsuits characteristics. The sample of loan facilities is from the Dealogic database, originated between 2006 and 2021 to worldwide based non-financial firms. The dependent variable is Log(Spread) and the analysis is conducted at the loan facility level. Climate\_Lawsuits is a dummy variable and denoted as 1 if the firm is exposed to an environmental lawsuit, and 0 otherwise. Type\_Lawsuit is a dummy variable and denoted as 1 if the firm is exposed to a filing climate lawsuit, and 0 otherwise. Novel\_Lawsuit is a dummy variable and denoted as 1 if the firm is exposed to a novel climate lawsuit, and 0 otherwise. Europe is a dummy variable and denoted as 1 if the climate lawsuit is filed in Europe, and 0 otherwise. Government\_Plauntiff is a dummy variable and denoted as 1 if the plaintiff is a government body, and 0 otherwise. Borrower FE is firms fixed effect. Year FE is time fixed effect. Bank (lending) FE is bank fixed effect. Country FE is country fixed effect and DCC FE is deal loan characteristics fixed effect (Lenders, Secured\_Loan, Subordinated\_Loan, Leveraged\_Loan, Loan\_Sponsor, Investment, Term\_Loan). The variables' definitions and summary statistics are presented in Table 1 and in Table A.1 (appears in Appendices). Standard errors are double-clustered by both firm and year and are reported in parentheses. \*\*\*, \*\*, and \* correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Dependent variable: Log(Spread)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Type_Lawsuit	0.0674 (0.0519)				-0.0104 (0.0477)	-0.0192 (0.0963)	-0.0004 (0.0956)	-0.0052 (0.0897)	-0.0108 (0.0792)	-0.0006 (0.0767)	-0.0091 (0.0792)	0.0135 (0.1065)
Novel_Lawsuit		0.1052** (0.0478)			0.1319** (0.0519)	0.0999 (0.1206)	0.1306 (0.0747)	0.1312* (0.0742)	0.1535 (0.0877)	0.1045 (0.1149)	0.1318 (0.0765)	0.1476 (0.2026)
Europe			-0.0147 (0.0303)		0.0146 (0.0496)	0.0247 (0.0775)	0.0398 (0.1082)	0.0136 (0.0768)	0.1047 (0.1255)	0.0201 (0.0701)	0.0109 (0.0826)	0.0985 (0.1732)
Government_Plauntiff				0.0417 (0.0533)	0.0925 (0.0621)	0.0967 (0.1222)	0.0911 (0.1221)	0.1152 (0.2425)	0.1030 (0.1274)	0.0635 (0.1673)	0.0896 (0.1262)	0.1276 (0.2970)
Type_Lawsuit * Novel_Lawsuit						0.0379 (0.0965)						-0.0247 (0.1264)
Type_Lawsuit * Europe							-0.0458 (0.0999)					0.0095 (0.0756)
Type_Lawsuit * Government_Plauntiff								-0.0251 (0.1643)				-0.0582 (0.1776)
Novel_Lawsuit * Europe									-0.1359 (0.1085)			-0.1368 (0.1837)
Novel_Lawsuit * Government_Plauntiff										0.0547 (0.1218)		0.0512 (0.1322)
Europe * Government_Plauntiff											0.0878 (0.1296)	-0.0483 (0.3513)
Intercept	4.8774*** (0.3683)	5.0010*** (0.3665)	4.9811*** (0.3712)	4.8726*** (0.3826)	4.7900*** (0.3960)	4.7784*** (0.5871)	4.8140*** (0.5817)	4.7919*** (0.5778)	4.8414*** (0.5754)	4.8120*** (0.6238)	4.7974*** (0.5922)	4.8653*** (0.5949)
Deal Controls Variables	Yes											
Corporate Governance Variables	Yes											
Firm's specifics Variables	Yes											
Borrower FE	Yes											
Year FE	Yes											
Bank (lending) FE	Yes											
DCC FE	Yes											
Obs.	1065	1065	1065	1065	1065	1065	1065	1065	1065	1065	1065	1065

**Table 6: Robustness results - Continuous climate litigation exposure.**

This table presents the regression results of Equation (1). The sample of loan facilities is from the Dealogic database, originated between 2006 and 2021 to worldwide based non-financial firms. The dependent variable is Log(Spread) and the analysis is conducted at the loan facility level. ClimateLitExposure is the log of the number of climate lawsuits per firm per year. Borrower FE is firms fixed effect. Year FE is time fixed effect. Bank (lending) FE is bank fixed effect. Country FE is country fixed effect and DCC FE is deal loan characteristics fixed effect (Lenders, Secured Loan, Subordinated Loan, Leveraged Loan, Loan-Sponsor, Investment, Term Loan). The variables' definitions and summary statistics are presented in Table 1 and in Table A.1 (appears in Appendices). Standard errors are double-clustered by both firm and year and are reported in parentheses. \*\*\*, \*\*, and \* correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Dependent variable: Log(Spread)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
ClimateLitExposure (t)	0.1045*** (0.0186)										
ClimateLitExposure (t-1)		0.1064*** (0.0197)	0.0989*** (0.0195)	0.0912*** (0.0199)	0.0836*** (0.0196)	-0.0247*** (0.0049)	0.0764*** (0.0184)		0.0747*** (0.0184)		0.0660*** (0.0183)
Deal_Amount						-0.0237*** (0.0048)	-0.0237*** (0.0048)		-0.0236*** (0.0049)		-0.0173*** (0.0049)
Maturity						-0.0645*** (0.0088)	-0.0634*** (0.0088)		-0.0628*** (0.0088)		-0.0599*** (0.0086)
Board_Size								-0.0312 (0.0248)	-0.0257 (0.0234)		-0.0371 (0.0229)
Ind_Board								0.0222*** (0.0085)	0.0211*** (0.0082)		0.0266*** (0.0080)
Board_Diversity								-0.0059 (0.0045)	-0.0116*** (0.0043)		-0.0103*** (0.0042)
Board_Skills								-0.0092* (0.0051)	-0.0114** (0.0047)		-0.0059 (0.0046)
CEO_Duality								-0.0020 (0.0125)	-0.0118 (0.0113)		-0.0019 (0.0111)
Size										-0.0300*** (0.0073)	-0.0152** (0.0069)
Cashfl_sales										-0.0178*** (0.0059)	-0.0049 (0.0053)
RoA										-0.0134** (0.0052)	-0.0112** (0.0048)
Beta										-0.0247* (0.0148)	-0.0186 (0.0132)
Asset_Turnover										-0.0402 (0.0308)	-0.0071 (0.0277)
Leverage										0.0016 (0.0059)	0.0062 (0.0054)
Intercept	2.7419***	2.7462***	2.7465***	2.6861***	2.7470***	2.9584***	2.9478***	2.7809***	2.9953***	3.3436***	3.2050***
Borrower FE	No	No	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank (lending) FE	No	No	No	No	No	No	No	No	No	No	Yes
Country FE	No	No	No	No	No	No	No	No	No	No	Yes
DCC FE	No	No	No	No	No	No	No	No	No	No	Yes
Obs.	5264	4935	4935	4935	4935	4935	4935	4935	4935	4935	4935

**Table 7: Regression results – Instrumental variable approach.**

This table presents the regression results of Equation (1). The sample of loan facilities is from the Dealogic database, originated between 2006 and 2021 to worldwide based non-financial firms. *Avg\_Industry\_ClimateLawsuits\_Events* is the log of the average number of lawsuits faced by all other firms in the same industry and year, excluding firm *i*. *ClimateLitExposure* is the log of the number of climate lawsuits per firm per year. *Spread* is the log of all-in-drawn interest paid by borrowers annually over LIBOR in basis points. *Borrower FE* is firm fixed effect; *Year FE* is year fixed effect; *Bank FE* is bank fixed effect; *Country FE* is country fixed effect; *DCC FE* is deal loan characteristics fixed effect (including Lenders, Secured\_Loan, Subordinated\_Loan, Leveraged\_Loan, Loan\_Sponsor, Investment, Term\_Loan). Variable definitions and summary statistics are in Table 1 and Appendix Table A.1. Standard errors are double-clustered by firm and year, reported in parentheses. \*\*\*, \*\*, and \* denote significance at the 1%, 5%, and 10% levels, respectively.

	ClimateLitExposure (1)	Log(Spread) (2)
Avg_Industry_ClimateLawsuits_Events	0.065*** (0.018)	
ClimateLitExposure-fitted		0.109** (0.048)
Deal_Amount	-0.009** (0.004)	-0.032*** (0.005)
Maturity	-0.003* (0.002)	0.007*** (0.002)
Board_Size	0.000 (0.020)	-0.024 (0.025)
Ind_Board	0.001 (0.007)	0.026*** (0.008)
Board_Diversity	0.007** (0.003)	0.009** (0.004)
Board_Skills	-0.000 (0.000)	-0.000 (0.000)
CEO_Duality	-0.016 (0.010)	-0.013 (0.013)
Size	-0.016*** (0.005)	0.003 (0.007)
Cashfl_sales	0.004 (0.005)	-0.017*** (0.006)
RoA	-0.016*** (0.004)	-0.016*** (0.005)
Beta	0.034*** (0.012)	-0.021 (0.015)
Asset_Turnover	-0.191*** (0.025)	-0.029 (0.032)
Leverage	0.010** (0.005)	0.005 (0.006)
Borrower FE	Yes	Yes
Year FE	Yes	Yes
Observations	4,935	4,935
Kleibergen-Paap rk LM statistic	756.152	
Cragg-Donald Wald F-statistic	901.919	
Stock-Yogo weak ID CV (10% IV size)	16.38	

**Table 8: Regression results - Other loan contractual features.**

This table presents the regression results of other loan contractual features. The sample of loan facilities is from the Dealogic database, originated between 2006 and 2021 to world-wide based non-financial firms. The dependent variable is Log(Maturity), Log(Deal\_Amount), Secured\_Loan, Log(Lenders) and the analysis is conducted at the loan facility level. Climate\_Lawsuits is a dummy variable and denoted as 1 if the firm is exposed to a climate lawsuit, and 0 otherwise. Borrower FE is firms fixed effect. Year FE is time fixed effect. Bank (lending) FE is bank fixed effect. Country FE is country fixed effect and DCC FE is deal loan characteristics fixed effect. The variables' definitions and summary statistics are presented in Table 1 and in Table A.1 (appears in Appendices). Standard errors are double-clustered by both firm and year and are reported in parentheses. \*\*\*, \*\*, and \* correspond to statistical significance at the 1%, 5%, and 10% level, respectively.

Dependent variable:	Log(Maturity) (1)	Log(Deal_Amount) (2)	Secured (3)	Log(Lenders) (4)
Climate_Lawsuits (t-1)	-0.0793** (0.0315)	-0.1339** (0.0547)	-0.1624 (0.1316)	-0.0001 (0.0398)
Deal_Amount	-0.0398*** (0.0085)		-0.0594*** (0.0145)	0.1046*** (0.0106)
Maturity		-0.1205*** (0.0257)	0.0228 (0.0359)	0.0285 (0.0185)
Board_Size	0.0215 (0.0398)	0.2054*** (0.0692)	0.0383 (0.0732)	-0.0988* (0.0504)
Ind_Board	-0.0001 (0.0137)	-0.0647*** (0.0238)	0.0334 (0.0323)	0.0207 (0.0172)
Board_Diversity	-0.0262*** (0.0073)	-0.0342*** (0.0126)	0.0372** (0.0189)	0.0208** (0.0092)
Board_Skills	0.0019 (0.0082)	-0.0095 (0.0143)	-0.0576*** (0.0219)	0.0202* (0.0103)
CEO_Duality	0.0384* (0.0201)	-0.0940*** (0.0350)	-0.0853* (0.0447)	-0.0388 (0.0254)
Size	-0.0005 (0.0119)	0.1416*** (0.0206)	-0.1795*** (0.0116)	0.0222 (0.0150)
Cashfl_sales	0.0262*** (0.0094)	-0.0213 (0.0165)	-0.0714*** (0.0243)	-0.0096 (0.0120)
RoA	-0.0008 (0.0084)	0.0271* (0.0146)	-0.1481*** (0.0275)	0.0060 (0.0106)
Beta	0.0258 (0.0239)	0.0173 (0.0416)	-0.0266 (0.0611)	-0.0987*** (0.0302)
Asset_Turnover	-0.0925* (0.0493)	-0.0201 (0.0858)	-0.1873** (0.0732)	0.0334 (0.0625)
Leverage	0.0011 (0.0095)	0.0544*** (0.0164)	0.0682*** (0.0214)	-0.0037 (0.0120)
Intercept	1.6261*** (0.2341)	4.2199*** (0.4047)	2.7506*** (0.2971)	0.2163 (0.2962)
Borrower FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Bank (lending) FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
DCC FE	Yes	Yes	Yes	Yes
Obs.	4935	4935	4935	4935

## Appendix

**Table A.1. Variable Definitions**

Variable	Definition	Source
<b>Climate Litigation Risk Proxies</b>		
Climate.Lawsuits	Dummy variable (=1 if the firm is exposed to a climate lawsuit, =0 otherwise)	Sabin Center for Climate Change Law; Author's Calculation
ClimateLitExposure (log)	Log of the number of climate lawsuits per firm per year	Sabin Center for Climate Change Law; Author's Calculation
Type.Lawsuit	Dummy (=1 if the firm is exposed to a filing, =0 otherwise)	Sabin Center for Climate Change Law; Author's Calculation
Novel.Lawsuit	Dummy (=1 if the firm is exposed to a novel climate lawsuit, =0 otherwise)	Sabin Center for Climate Change Law; Author's Calculation
Europe	Dummy (=1 if the lawsuit is filed in Europe, =0 otherwise)	Sabin Center for Climate Change Law; Author's Calculation
Government.Plaintiff	Dummy (=1 if the plaintiff is a government body, =0 otherwise)	Sabin Center for Climate Change Law; Author's Calculation
<b>Loan Features and Loan Type</b>		
Log(Spread)	Log of all-in-drawn spread over LIBOR (basis points)	Dealogic; Author's Calculation
Log(Deal.Amount)	Log-transformed total deal amount	Dealogic; Author's Calculation
Log(Maturity)	Log-transformed loan maturity in years	Dealogic; Author's Calculation
Log(Lenders)	Log-transformed number of lenders in syndication	Dealogic; Author's Calculation
Secured.Loan	Dummy (=1 if the loan is secured, =0 otherwise)	Dealogic; Author's Calculation
Subordinated.Loan	Dummy (=1 if the loan is subordinated, =0 otherwise)	Dealogic; Author's Calculation
Leveraged.Loan	Dummy (=1 if the loan is leveraged, =0 otherwise)	Dealogic; Author's Calculation
Loan.Sponsor	Dummy (=1 if the loan is sponsor-backed, =0 otherwise)	Dealogic; Author's Calculation
Investment.Grade	Dummy (=1 if S&P credit rating is BBB- or above, =0 otherwise)	Dealogic; Author's Calculation

Table A.1. Variable Definitions (continued)

Variable	Definition	Source
Term.Loan	Dummy (=1 if the loan is a term loan, =0 otherwise)	Dealogic;Author's Calculation
<b>ESG Variables</b>		
Log(CO2)	Log of total carbon emissions (Scope 1 and Scope 2, in tons)	Refinitiv Eikon;Author's Calculation
ESG_Controversies_Score	Index measuring exposure to ESG controversies and negative media events	Refinitiv Eikon
<b>Corporate Governance Variables</b>		
Board_Size	Log of the number of board members	Refinitiv Eikon; Author's Calculation
Ind_Board	Percentage of independent board members	Refinitiv Eikon
Board_Diversity	Fraction of female board members	Refinitiv Eikon
Board_Skills	Percentage of board members with industry-specific or financial expertise	Refinitiv Eikon
CEO_Duality	Dummy (=1 if the CEO also serves as Board Chair, =0 otherwise)	Refinitiv Eikon;Author's Calculation
<b>Firm Characteristics</b>		
Size (log)	Log of total firm assets	Datastream;Author's Calculation
Cashfl_Sales	Ratio of cash flow to sales	Datastream
Debt_Ta	Ratio of debt to total assets	Datastream
Beta	60-month beta: measures stock volatility relative to market index	Datastream
RoA	Return on assets, calculated using adjusted net income and asset averages	Datastream
Asset_Turnover	Ratio of revenue to total assets	Datastream

**Appendix Table A.2: Climate lawsuit events.**

No	Issued Date	Event	Company	Type
1	20/09/2006	California v. GM Corp.	General Motors Company	Filing
2	07/05/2007	Germanwatch vs. Volkswagen	Volkswagen AG	Filing
3	16/01/2008	Australian Competition & Consumer Commission v. GM	General Motors Company	Filing
4	12/02/2008	Sierra Club v. Duke Energy Indiana	Duke Energy Corporation	Filing
5	26/02/2008	Native Village of Kivalina v. Exxon-Mobil Corp.	BP	Filing
6	26/02/2008	Native Village of Kivalina v. Exxon-Mobil Corp.	Chevron Corporation	Filing
7	26/02/2008	Native Village of Kivalina v. Exxon-Mobil Corp.	ExxonMobil Corporation	Filing
8	26/02/2008	Native Village of Kivalina v. Exxon-Mobil Corp.	Peabody Energy Corporation	Filing
9	26/02/2008	Native Village of Kivalina v. Exxon-Mobil Corp.	Shell	Filing
10	09/05/2008	Connecticut v. Am. Elec. Power	American Electric Power Company, Inc.	Filing
11	16/07/2008	Southern Alliance for Clean Energy v. Duke Energy	Duke Energy Corporation	Filing
12	23/10/2008	Burton v. Dominion Nuclear Connecticut, Inc.	Dominion Energy, Inc.	Filing
13	24/06/2010	Conservation Law Foundation v. Dominion Energy New	Dominion Energy, Inc.	Filing
14	09/09/2010	Sierra Club v. Wisconsin Power & Light Co.	Alliant Energy Corp	Filing
15	27/12/2010	Sao Paulo Public Prosecutor's Office v. United Air	Delta Air Lines, Inc.	Filing
16	27/12/2010	Sao Paulo Public Prosecutor's Office v. United Air	United Airlines Holdings, Inc.	Filing
17	28/01/2011	United States v. DTE Energy	DTE Energy Company	Filing
18	27/05/2011	Comer v. Murphy Oil USA, Inc.	Chevron Corporation	Filing
19	27/05/2011	Comer v. Murphy Oil USA, Inc.	ExxonMobil Corporation	Filing
20	27/05/2011	Comer v. Murphy Oil USA, Inc.	Honeywell International Inc.	Filing
21	27/05/2011	Comer v. Murphy Oil USA, Inc.	Murphy Oil Corporation	Filing
22	27/05/2011	Comer v. Murphy Oil USA, Inc.	Shell	Filing
23	28/11/2011	Norwegian Climate Network et al vs Statoil	Equinor ASA	Filing
24	09/03/2012	California Health Communities Network v. City of P	Walmart Inc.	Filing
25	22/02/2013	Conservation Law Foundation v. Dominion Energy Bra	Dominion Energy, Inc.	Filing
26	30/12/2013	In re Vienna-Schwechat Airport Expansion	Flughafen Wien AG	Filing
27	02/07/2014	Northwest Environmental Defense Center v. Cascade	Global Partners LP	Filing
28	03/09/2014	United States v. Costco Wholesale Corp. No.3:14-	Costco Wholesale Corporation	Filing
29	25/03/2015	Nucor Steel-Arkansas v. Big River Steel, LLC, No.	United States Steel Corporation	Filing
30	09/06/2015	Roe v. Arch Coal, Inc.	Arch Resources Inc Class A	Filing
31	11/06/2015	Lynn v. Peabody Energy Corp.	Arch Resources Inc Class A	Filing
32	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C	Apa Corporation	Filing
33	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C	Anadarko Petroleum Corporation	Filing

**Table A.2 (continued)**

No	Issued Date	Event	Company	Type
34	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Anglo American	Filing
35	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Arch Resources Inc Class A	Filing
36	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	BP	Filing
37	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	CNX Resources Corporation	Filing
38	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Chevron Corporation	Filing
39	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	ConocoPhillips Company	Filing
40	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Devon Energy Corporation	Filing
41	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Eni SpA	Filing
42	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	ExxonMobil Corporation	Filing
43	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Glencore plc	Filing
44	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Heidelberg Cement AG	Filing
45	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Hess Corporation	Filing
46	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Husky Energy Inc.	Filing
47	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Marathon Oil Corporation	Filing
48	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Murphy Oil Corporation	Filing
49	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Occidental Petroleum Corporation	Filing
50	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Ovintiv Inc.	Filing
51	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Peabody Energy Corporation	Filing
52	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	RWE AG	Filing
53	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Repsol SA	Filing
54	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Shell	Filing
55	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Suncor Energy Inc.	Filing
56	22/09/2015	In re Greenpeace Southeast Asia et al., 2015-...(C)	Total Energies SE	Filing
57	23/11/2015	Lliuya v. RWE	RWE AG	Filing
58	07/12/2015	California v. Southern California Gas Co.	Sempra Energy	Filing
59	26/01/2016	California ex rel. South Coast Air Quality Managem	Sempra Energy	Filing
60	02/02/2016	People v. Southern California Gas Co.	Sempra Energy	Filing
61	03/02/2016	Benton v. Global Companies, LLC, No. 1:16-cv-00125	Global Partners LP	Filing
62	19/04/2016	Shupak v. Reed	Sempra Energy	Filing

**Table A.2 (continued)**

No	Issued Date	Event	Company	Type
63	25/07/2016	California v. Southern California Gas Co., No.BC6	Sempra Energy	Filing
64	29/09/2016	Conservation Law Foundation v. ExxonMobilCorp.	ExxonMobil Corporation	Filing
65	07/11/2016	Ramirez v. Exxon Mobil Corp.	ExxonMobil Corporation	Filing
66	23/11/2016	Fentress v. Exxon Mobil Corp.	ExxonMobil Corporation	Filing
67	08/05/2017	BankTrack, et al. vs. ING Bank	ING Groep NV	Filing
68	18/05/2017	In re Amended and Restated Preliminary Prospectus	Kinder Morgan, Inc.	Filing
69	17/07/2017	County of San Mateo v. Chevron Corp.	Apa Corporation	Filing
70	17/07/2017	County of San Mateo v. Chevron Corp.	Anadarko Petroleum Corporation	Filing
71	17/07/2017	County of San Mateo v. Chevron Corp.	BP	Filing
72	17/07/2017	County of San Mateo v. Chevron Corp.	Chevron Corporation	Filing
73	17/07/2017	County of San Mateo v. Chevron Corp.	ConocoPhillips Company	Filing
74	17/07/2017	County of San Mateo v. Chevron Corp.	Devon Energy Corporation	Filing
75	17/07/2017	County of San Mateo v. Chevron Corp.	Eni SpA	Filing
76	17/07/2017	County of San Mateo v. Chevron Corp.	ExxonMobil Corporation	Filing
77	17/07/2017	County of San Mateo v. Chevron Corp.	Hess Corporation	Filing
78	17/07/2017	County of San Mateo v. Chevron Corp.	Marathon Petroleum Corporation	Filing
79	17/07/2017	County of San Mateo v. Chevron Corp.	Occidental Petroleum Corporation	Filing
80	17/07/2017	County of San Mateo v. Chevron Corp.	Ovintiv Inc.	Filing
81	17/07/2017	County of San Mateo v. Chevron Corp.	Repsol SA	Filing
82	17/07/2017	County of San Mateo v. Chevron Corp.	Shell	Filing
83	17/07/2017	County of San Mateo v. Chevron Corp.	Total Energies SE	Filing
84	28/08/2017	Conservation Law Foundation, Inc. v. Shell Oil Pro	Shell	Filing
85	19/09/2017	City of Oakland v. BP p.l.c.	BP	Filing
86	20/09/2017	City of Oakland v. BP p.l.c.	Chevron Corporation	Filing
87	21/09/2017	City of Oakland v. BP p.l.c.	ExxonMobil Corporation	Filing
88	22/09/2017	City of Oakland v. BP p.l.c.	ConocoPhillips Company	Filing
89	16/11/2017	Harris County v. Arkema, Inc.	Arkema S.A.	Filing
90	20/12/2017	County of Santa Cruz v. Chevron Corp.	Apa Corporation	Filing
91	20/12/2017	County of Santa Cruz v. Chevron Corp.	Anadarko Petroleum Corporation	Filing
92	20/12/2017	County of Santa Cruz v. Chevron Corp.	BP	Filing
93	20/12/2017	County of Santa Cruz v. Chevron Corp.	ConocoPhillips Company	Filing
94	20/12/2017	County of Santa Cruz v. Chevron Corp.	Chevron Corporation	Filing

**Table A.2 (continued)**

<b>No</b>	<b>Issued Date</b>	<b>Event</b>	<b>Company</b>	<b>Type</b>
95	20/12/2017	County of Santa Cruz v. Chevron Corp.	Devon Energy Corporation	Filing
96	20/12/2017	County of Santa Cruz v. Chevron Corp.	Eni SpA	Filing
97	20/12/2017	County of Santa Cruz v. Chevron Corp.	ExxonMobil Corporation	Filing
98	20/12/2017	County of Santa Cruz v. Chevron Corp.	Hess Corporation	Filing
99	20/12/2017	County of Santa Cruz v. Chevron Corp.	Occidental Petroleum Corporation	Filing
100	20/12/2017	County of Santa Cruz v. Chevron Corp.	Ovintiv Inc.	Filing
101	20/12/2017	County of Santa Cruz v. Chevron Corp.	Phillips 66	Filing
102	20/12/2017	County of Santa Cruz v. Chevron Corp.	Repsol SA	Filing
103	20/12/2017	County of Santa Cruz v. Chevron Corp.	Shell	Filing
104	09/01/2018	City of New York v. BP p.l.c.	BP	Filing
105	09/01/2018	City of New York v. BP p.l.c.	Chevron Corporation	Filing
106	09/01/2018	City of New York v. BP p.l.c.	ConocoPhillips Company	Filing
107	09/01/2018	City of New York v. BP p.l.c.	ExxonMobil Corporation	Filing
108	09/01/2018	City of New York v. BP p.l.c.	Shell	Filing
109	22/01/2018	City of Richmond v Chevron	Hess Corporation	Filing
110	23/01/2018	City of Richmond v Chevron	Apa Corporation	Filing
111	24/01/2018	City of Richmond v Chevron	BP	Filing
112	25/01/2018	City of Richmond v Chevron	Chevron Corporation	Filing
113	26/01/2018	City of Richmond v Chevron	ExxonMobil Corporation	Filing
114	29/01/2018	City of Richmond v Chevron	Ovintiv Inc.	Filing
115	30/01/2018	City of Richmond v Chevron	Anadarko Petroleum Corporation	Filing
116	31/01/2018	City of Richmond v Chevron	Shell	Filing
117	01/02/2018	City of Richmond v Chevron	Devon Energy Corporation	Filing
118	02/02/2018	City of Richmond v Chevron	Repsol SA	Filing
119	05/02/2018	City of Richmond v Chevron	Phillips 66	Filing
120	06/02/2018	City of Richmond v Chevron	Marathon Petroleum Corporation	Filing
121	17/04/2018	Board of County Commissioners of Boulder County v.	ExxonMobil Corporation	Filing
122	17/04/2018	Board of County Commissioners of Boulder County v.	Suncor Energy Inc.	Filing
123	09/05/2018	King County v. BP p.l.c.	BP	Filing
124	10/05/2018	King County v. BP p.l.c.	Chevron Corporation	Filing
125	11/05/2018	King County v. BP p.l.c.	ExxonMobil Corporation	Filing
126	02/07/2018	Rhode Island v. Chevron Corp.	BP	Filing
127	02/07/2018	Rhode Island v. Chevron Corp.	Chevron Corporation	Filing
128	02/07/2018	Rhode Island v. Chevron Corp.	ConocoPhillips Company	Filing
129	02/07/2018	Rhode Island v. Chevron Corp.	ExxonMobil Corporation	Filing
130	02/07/2018	Rhode Island v. Chevron Corp.	Hess Corporation	Filing
131	02/07/2018	Rhode Island v. Chevron Corp.	Marathon Petroleum Corporation	Filing
132	02/07/2018	Rhode Island v. Chevron Corp.	Phillips 66	Filing
133	02/07/2018	Rhode Island v. Chevron Corp.	Shell	Filing
134	05/07/2018	Friends of the Earth et al. v. Prefect of of Bouch	Total Energies SE	Filing
135	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	BP	Filing
136	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	CNX Resources Corporation	Filing

**Table A.2 (continued)**

<b>No</b>	<b>Issued Date</b>	<b>Event</b>	<b>Company</b>	<b>Type</b>
137	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	Chevron Corporation	Filing
138	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	ConocoPhillips Company	Filing
139	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	Consol Energy Inc.	Filing
140	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	ExxonMobil Corporation	Filing
141	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	Hess Corporation	Filing
142	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	Marathon Petroleum Corporation	Filing
143	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	Phillips 66	Filing
144	20/07/2018	Mayor & City Council of Baltimore v. BP p.l.c.	Shell	Filing
145	06/08/2018	Development YES – Open-Pit Mines NO v.Group PZU	Powszechny Zaklad Ubezpieczen Spolka Akcyjna (PZU SA)	Filing
146	24/10/2018	ClientEarth v Enea	ENEAS.A. (Enea S.A.)	Filing
147	24/10/2018	People of the State of New York v. Exxon Mobil Cor	ExxonMobil Corporation	Filing
148	31/10/2018	Mapuche Confederation of Neuquén v. YPF et al.	ExxonMobil Corporation	Filing
149	31/10/2018	Mapuche Confederation of Neuquén v. YPF et al.	Total Energies SE	Filing
150	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Apa Corporation	Filing
151	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Anadarko Petroleum Corporation	Filing
152	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	BP	Filing
153	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Chevron Corporation	Filing
154	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	ConocoPhillips Company	Filing
155	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Devon Energy Corporation	Filing
156	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Eni SpA	Filing
157	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	ExxonMobil Corporation	Filing
158	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Hess Corporation	Filing
159	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Occidental Petroleum Corporation	Filing
160	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Ovintiv Inc.	Filing
161	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Phillips 66	Filing
162	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Repsol SA	Filing
163	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Shell	Filing
164	14/11/2018	Pacific Coast Federation of Fishermen’s Associatio	Total Energies SE	Filing
165	16/11/2018	Barnes v. Edison International	Edison International	Filing

**Table A.2 (continued)**

<b>No</b>	<b>Issued Date</b>	<b>Event</b>	<b>Company</b>	<b>Type</b>
166	06/12/2018	New York City Employees' Retirement System v. Tr	TransDigm Group Incorporated	Filing
167	10/12/2018	California Fueling, LLC v. Best Energy Solutions	Innospec Inc.	Filing
168	08/02/2019	Von Oeyen v. Southern California Edison Co.	Edison International	Filing
169	22/03/2019	City of Torrance v. Southern California Edison Co.	Edison International	Filing
170	05/04/2019	Milieudefensie et al. v. Royal Dutch Shell.	Shell	Filing
171	02/05/2019	In re Exxon Mobil Corp. Derivative Litigation Tex	ExxonMobil Corporation	Filing
172	06/08/2019	Saratoga Advantage Trust Energy & Basic Materials	ExxonMobil Corporation	Filing
173	29/08/2019	Public Watchdogs v. Southern California Edison Co.	Edison International	Filing
174	05/09/2019	Stourbridge Investments v Avery	ExxonMobil Corporation	Filing
175	09/10/2019	Spoon v. Bayou Bridge Pipeline LLC	Energy Transfer, L.P.	Filing
176	24/10/2019	Commonwealth v. Exxon Mobil Corp.	ExxonMobil Corporation	Filing
177	29/10/2019	Friends of the Earth et al. v. Total	Total Energies SE	Filing
178	12/11/2019	Specific instance under the OECD Guidelines for Mu	Ascent Resources	Filing
179	02/12/2019	In re Exxon Mobil Corp. Derivative Litigation N.J	ExxonMobil Corporation	Filing
180	03/12/2019	Complaint against BP in respect of violations of t	BP	Filing
181	20/12/2019	Italian Competition Authority Ruling Eni's Diesel+	Eni SpA	Filing
182	28/01/2020	Notre Affaire a Tous and Others v. Total	Total Energies SE	Filing
183	09/03/2020	City & County of Honolulu v. Sunoco LP	BP	Filing
184	09/03/2020	City & County of Honolulu v. Sunoco LP	Chevron Corporation	Filing
185	09/03/2020	City & County of Honolulu v. Sunoco LP	ConocoPhillips Company	Filing
186	09/03/2020	City & County of Honolulu v. Sunoco LP	Energy Transfer, L.P.	Filing
187	09/03/2020	City & County of Honolulu v. Sunoco LP	ExxonMobil Corporation	Filing
188	09/03/2020	City & County of Honolulu v. Sunoco LP	Marathon Oil Corporation	Filing
189	09/03/2020	City & County of Honolulu v. Sunoco LP	Phillips 66	Filing
190	09/03/2020	City & County of Honolulu v. Sunoco LP	Shell	Filing
191	15/05/2020	Beyond Pesticides v. Exxon Mobil Corp.	ExxonMobil Corporation	Filing
192	24/06/2020	State of Minnesota v. American Petroleum Institute	ExxonMobil Corporation	Filing
193	25/06/2020	District of Columbia v. Exxon Mobil Corp.	BP	Filing
194	25/06/2020	District of Columbia v. Exxon Mobil Corp.	Chevron Corporation	Filing

**Table A.2 (continued)**

<b>No</b>	<b>Issued Date</b>	<b>Event</b>	<b>Company</b>	<b>Type</b>
195	25/06/2020	District of Columbia v. Exxon Mobil Corp.	ExxonMobil Corporation	Filing
196	25/06/2020	District of Columbia v. Exxon Mobil Corp.	Shell	Filing
197	18/08/2020	Walkover v Woods	ExxonMobil Corporation	Filing
198	02/09/2020	City of Hoboken v. Exxon Mobil Corp.	BP	Filing
199	02/09/2020	City of Hoboken v. Exxon Mobil Corp.	Chevron Corporation	Filing
200	02/09/2020	City of Hoboken v. Exxon Mobil Corp.	ConocoPhillips Company	Filing
201	02/09/2020	City of Hoboken v. Exxon Mobil Corp.	ExxonMobil Corporation	Filing
202	02/09/2020	City of Hoboken v. Exxon Mobil Corp.	Phillips 66	Filing
203	02/09/2020	City of Hoboken v. Exxon Mobil Corp.	Shell	Filing
204	09/09/2020	City of Charleston v. Brabham Oil Co.	BP	Filing
205	09/09/2020	City of Charleston v. Brabham Oil Co.	Chevron Corporation	Filing
206	09/09/2020	City of Charleston v. Brabham Oil Co.	ConocoPhillips Company	Filing
207	09/09/2020	City of Charleston v. Brabham Oil Co.	ExxonMobil Corporation	Filing
208	09/09/2020	City of Charleston v. Brabham Oil Co.	Hess Corporation	Filing
209	09/09/2020	City of Charleston v. Brabham Oil Co.	Marathon Oil Corporation	Filing
210	09/09/2020	City of Charleston v. Brabham Oil Co.	Murphy Oil Corporation	Filing
211	09/09/2020	City of Charleston v. Brabham Oil Co.	Phillips 66	Filing
212	09/09/2020	City of Charleston v. Brabham Oil Co.	Shell	Filing
213	14/09/2020	Connecticut v. Exxon Mobil Corp.	ExxonMobil Corporation	Filing
214	09/10/2020	Delaware v. BP America Inc.	Apa Corporation	Filing
215	09/10/2020	Delaware v. BP America Inc.	Chevron Corporation	Filing
216	09/10/2020	Delaware v. BP America Inc.	CNX Resources Corporation	Filing
217	09/10/2020	Delaware v. BP America Inc.	ConocoPhillips Company	Filing
218	09/10/2020	Delaware v. BP America Inc.	Consol Energy Inc.	Filing
219	09/10/2020	Delaware v. BP America Inc.	Devon Energy Corporation	Filing
220	09/10/2020	Delaware v. BP America Inc.	ExxonMobil Corporation	Filing
221	09/10/2020	Delaware v. BP America Inc.	Hess Corporation	Filing
222	09/10/2020	Delaware v. BP America Inc.	Marathon Oil Corporation	Filing
223	09/10/2020	Delaware v. BP America Inc.	Marathon Petroleum Corporation	Filing
224	09/10/2020	Delaware v. BP America Inc.	Murphy Oil Corporation	Filing
225	09/10/2020	Delaware v. BP America Inc.	Occidental Petroleum Corporation	Filing
226	09/10/2020	Delaware v. BP America Inc.	Ovintiv Inc.	Filing
227	09/10/2020	Delaware v. BP America Inc.	Phillips 66	Filing
228	09/10/2020	Delaware v. BP America Inc.	Shell	Filing
229	09/10/2020	Delaware v. BP America Inc.	TotalEnergies SE	Filing
230	12/10/2020	County of Maui v. Sunoco LP	BP	Filing
231	12/10/2020	County of Maui v. Sunoco LP	Chevron Corporation	Filing
232	12/10/2020	County of Maui v. Sunoco LP	ConocoPhillips Company	Filing
233	12/10/2020	County of Maui v. Sunoco LP	ExxonMobil Corporation	Filing

**Table A.2 (continued)**

<b>No</b>	<b>Issued Date</b>	<b>Event</b>	<b>Company</b>	<b>Type</b>
234	12/10/2020	County of Maui v. Sunoco LP	Marathon Petroleum Corporation	Filing
235	12/10/2020	County of Maui v. Sunoco LP	Phillips 66	Filing
236	12/10/2020	County of Maui v. Sunoco LP	Shell	Filing
237	11/11/2020	Adorers of the Blood of Christ v. Transcontinental	The Williams Companies, Inc.	Filing
238	16/12/2020	Greenpeace, Inc. v. Walmart Inc.	Walmart Inc.	Filing
239	22/02/2021	Annapolis v API	BP	Filing
240	22/02/2021	Annapolis v API	Chevron Corporation	Filing
241	22/02/2021	Annapolis v API	CNX Resources Corporation	Filing
242	22/02/2021	Annapolis v API	ConocoPhillips Company	Filing
243	22/02/2021	Annapolis v API	Consol Energy Inc.	Filing
244	22/02/2021	Annapolis v API	ExxonMobil Corporation	Filing
245	22/02/2021	Annapolis v API	Hess Corporation	Filing
246	22/02/2021	Annapolis v API	Marathon Oil Corporation	Filing
247	22/02/2021	Annapolis v API	Phillips 66	Filing
248	22/02/2021	Annapolis v API	Shell	Filing
249	02/03/2021	Envol Vert et al. v. Casino	Casino, Guichard-Perrachon SA	Filing
250	04/03/2021	Last Beach Cleanup v. TerraCycle, Inc.	Campbell's Co	Filing
251	04/03/2021	Last Beach Cleanup v. TerraCycle, Inc.	Colgate-Palmolive Company	Filing
252	04/03/2021	Last Beach Cleanup v. TerraCycle, Inc.	Nestle	Filing
253	04/03/2021	Last Beach Cleanup v. TerraCycle, Inc.	Procter & Gamble Company	Filing
254	04/03/2021	Last Beach Cleanup v. TerraCycle, Inc.	Clorox Company	Filing
255	04/03/2021	Last Beach Cleanup v. TerraCycle, Inc.	Coca-Cola Company	Filing
256	22/04/2021	City of New York v. American Petroleum Institute,	BP	Filing
257	22/04/2021	City of New York v. American Petroleum Institute,	ExxonMobil Corporation	Filing
258	22/04/2021	Patrick Pouyanné (CEO of TotalEnergies) v. Greenp	Marathon Petroleum Corporation	Filing
259	22/04/2021	City of New York v. American Petroleum Institute,	Shell	Filing
260	26/04/2021	Anne Arundel v BP	BP	Filing
261	26/04/2021	Anne Arundel v BP	Chevron Corporation	Filing
262	26/04/2021	Anne Arundel v BP	CNX Resources Corporation	Filing
263	26/04/2021	Anne Arundel v BP	ConocoPhillips Company	Filing
264	26/04/2021	Anne Arundel v BP	Consol Energy Inc.	Filing
265	26/04/2021	Anne Arundel v BP	ExxonMobil Corporation	Filing
266	26/04/2021	Anne Arundel v BP	Hess Corporation	Filing
267	26/04/2021	Anne Arundel v BP	Marathon Oil Corporation	Filing
268	26/04/2021	Anne Arundel v BP	Phillips 66	Filing
269	26/04/2021	Anne Arundel v BP	Shell	Filing
270	08/06/2021	Earth Island Institute v. Coca-Cola Co.	Coca-Cola Company	Filing
271	16/06/2021	Swartz and Muto v. Coca-Cola Co.	Coca-Cola Company	Filing
272	07/07/2021	Conservation Law Foundation v. Shell Oil Co.	Shell	Filing
273	14/09/2021	State of Vermont v Exxon	ExxonMobil Corporation	Filing
274	14/09/2021	State of Vermont v Exxon	Shell	Filing
275	14/09/2021	State of Vermont v Exxon	Sunoco LP	Filing

**Table A.2 (continued)**

No	Issued Date	Event	Company	Type
276	16/09/2021	Complaint to Ad Standards on HSBC's Great Barrie	HSBC Holdings plc	Filing
277	20/09/2021	Deutsche Umwelthilfe (DUH) v. BMW	BMW AG	Filing
278	20/09/2021	Deutsche Umwelthilfe (DUH) v. Mercedes-Benz AG	Mercedes-Benz Group AG (formerly Daimler AG)	Filing
279	09/11/2021	Kaiser et al v. Volkswagen AG	Volkswagen AG	Filing
280	17/09/2007	California v. GM Corp.	General Motors Company	Positive Decision
281	20/11/2007	Germanwatch vs. Volkswagen	Volkswagen AG	Positive Decision
282	29/04/2008	Australian Competition & Consumer Commission v. De	De' Longhi S.p.A.	Negative Decision
283	25/06/2008	Australian Competition & Consumer Commission v. Go	The Goodyear Tire & Rubber Company	Negative Decision
284	18/09/2008	Australian Competition & Consumer Commission v. GM	General Motors Company	Negative Decision
285	02/12/2008	Southern Alliance for Clean Energy v. Duke Energy	Duke Energy Corporation	Negative Decision
286	24/06/2009	California v. GM Corp.	General Motors Company	Positive Decision
287	13/05/2010	Connecticut v. Am. Elec. Power	American Electric Power Company, Inc.	Positive Decision
288	28/05/2010	Comer v. Murphy Oil USA, Inc.	Chevron Corporation	Positive Decision
289	28/05/2010	Comer v. Murphy Oil USA, Inc.	ExxonMobil Corporation	Positive Decision
290	28/05/2010	Comer v. Murphy Oil USA, Inc.	Honeywell International Inc.	Positive Decision
291	28/05/2010	Comer v. Murphy Oil USA, Inc.	Murphy Oil Corporation	Positive Decision
292	28/05/2010	Comer v. Murphy Oil USA, Inc.	Shell	Positive Decision
293	24/11/2010	Sierra Club v. Duke Energy Indiana	Duke Energy Corporation	Positive Decision
294	19/04/2011	Burton v. Dominion Nuclear Connecticut, Inc.	Dominion Energy, Inc.	Positive Decision
295	20/06/2011	Connecticut v. Am. Elec. Power	American Electric Power Company, Inc.	Positive Decision
296	13/03/2012	Norwegian Climate Network et al vs Statoil	Equinor ASA	Positive Decision
297	21/09/2012	Native Village of Kivalina v. Exxon-Mobil Corp.	BP	Positive Decision
298	21/09/2012	Native Village of Kivalina v. Exxon-Mobil Corp.	Chevron Corporation	Positive Decision
299	21/09/2012	Native Village of Kivalina v. Exxon-Mobil Corp.	ExxonMobil Corporation	Positive Decision
300	21/09/2012	Native Village of Kivalina v. Exxon-Mobil Corp.	Peabody Energy Corporation	Positive Decision
301	21/09/2012	Native Village of Kivalina v. Exxon-Mobil Corp.	Shell	Positive Decision
302	18/03/2013	Sao Paulo Public Prosecutor's Office v. United Air	United Airlines Holdings, Inc.	Positive Decision
303	18/03/2013	Sao Paulo Public Prosecutor's Office v. United Air	Delta Air Lines, Inc.	Positive Decision
304	14/05/2013	Comer v. Murphy Oil USA, Inc.	Chevron Corporation	Positive Decision
305	14/05/2013	Comer v. Murphy Oil USA, Inc.	ExxonMobil Corporation	Positive Decision
306	14/05/2013	Comer v. Murphy Oil USA, Inc.	Honeywell International Inc.	Positive Decision
307	14/05/2013	Comer v. Murphy Oil USA, Inc.	Murphy Oil Corporation	Positive Decision
308	14/05/2013	Comer v. Murphy Oil USA, Inc.	Shell	Positive Decision
309	20/05/2013	Native Village of Kivalina v. Exxon-Mobil Corp.	BP	Positive Decision
310	20/05/2013	Native Village of Kivalina v. Exxon-Mobil Corp.	Chevron Corporation	Positive Decision

**Table A.2 (continued)**

<b>No</b>	<b>Issued Date</b>	<b>Event</b>	<b>Company</b>	<b>Type</b>
311	20/05/2013	Native Village of Kivalina v. Exxon-Mobil Corp.	ExxonMobil Corporation	Positive Decision
312	20/05/2013	Native Village of Kivalina v. Exxon-Mobil Corp.	Peabody Energy Corporation	Positive Decision
313	20/05/2013	Native Village of Kivalina v. Exxon-Mobil Corp.	Shell	Positive Decision
314	03/09/2014	California Health Communities Network v. City of P	Walmart Inc.	Negative Decision
315	08/06/2016	Nucor Steel-Arkansas v. Big River Steel, LLC, No.	United States Steel Corporation	Positive Decision
316	13/09/2016	People v. Southern California Gas Co.	Sempra Energy	Negative Decision
317	18/10/2016	Sao Paulo Public Prosecutor's Office v. United Air	Delta Air Lines, Inc.	Positive Decision
318	18/10/2016	Sao Paulo Public Prosecutor's Office v. United Air	United Airlines Holdings, Inc.	Positive Decision
319	07/02/2017	California ex rel. South Coast Air Quality Managem	Sempra Energy	Negative Decision
320	30/03/2017	Lynn v. Peabody Energy Corp	Peabody Energy Corporation	Positive Decision
321	01/06/2017	In re Vienna-Schwechat Airport Expansion	Flughafen Wien AG	Positive Decision
322	30/11/2017	Lliuya v. RWE	RWE AG	Negative Decision
323	28/03/2018	In re Vienna-Schwechat Airport Expansion	Flughafen Wien AG	Positive Decision
324	08/08/2018	California v. Southern California Gas Co.	Sempra Energy	Negative Decision
325	14/08/2018	Ramirez v. Exxon Mobil Corp,	ExxonMobil Corporation	Negative Decision
326	18/01/2019	New York City Employees' Retirement System v. Tr	TransDigm Group Incorporated	Negative Decision
327	04/02/2019	Fentress v. Exxon Mobil Corp.	ExxonMobil Corporation	Positive Decision
328	25/02/2019	California v. Southern California Gas Co.	Sempra Energy	Positive Decision
329	14/03/2019	Conservation Law Foundation v. ExxonMobil Corp.	ExxonMobil Corporation	Negative Decision
330	19/04/2019	BankTrack, et al. vs. ING Bank	ING Groep NV	Negative Decision
331	06/05/2019	City of Birmingham Relief & Retirement System v.E	ExxonMobil Corporation	Negative Decision
332	26/07/2019	Development YES – Open-Pit Mines NO v. Group PZU	Powszechny Zaklad Ubezpieczen Spolka Akcyjna (PZU SA)	Negative Decision
333	31/07/2019	ClientEarth v Enea	ENEAS.A. (Enea S.A.)	Negative Decision
334	10/12/2019	People of the State of New York v. Exxon Mobil Cor	ExxonMobil Corporation	Positive Decision
335	05/02/2020	ASA Ruling on Ryanair Ltd t/a Ryanair Ltd	Ryanair Hold.plc	Negative Decision
336	08/06/2020	Advertising Standards Authority's Ruling on Shell	Shell	Negative Decision
337	16/06/2020	Complaint against BP in respect of violations oft	BP	Negative Decision
338	22/09/2020	ClientEarth v. Polska Grupa Energetyczna	Polska Grupa Energetyczna S.A.	Negative Decision
339	28/09/2020	Conservation Law Foundation, Inc. v. Shell Oil Pro	Shell	Negative Decision
340	17/03/2021	City of Torrance v. Southern California Edison Co.	Edison International	Negative Decision
341	01/04/2021	City of New York v. BP p.l.c.	BP	Positive Decision

**Table A.2 (continued)**

<b>No</b>	<b>Issued Date</b>	<b>Event</b>	<b>Company</b>	<b>Type</b>
342	01/04/2021	Friends of the Earth et al. v. Prefect of of Bouch	TotalEnergies SE	Negative Decision
343	27/04/2021	Barnes v. Edison International	Edison International	Positive Decision
344	26/05/2021	Milieudéfense et al. v. Royal Dutch Shell plc.	Shell	Negative Decision
345	22/06/2021	Commonwealth v. Exxon Mobil Corp.	ExxonMobil Corporation	Negative Decision
346	20/09/2021	Greenpeace, Inc. v. Walmart Inc.	Walmart Inc.	Positive Decision
347	28/09/2021	King County v. BP p.l.c.	BP	Positive Decision
348	30/09/2021	Adorers of the Blood of Christ v. Transcontinental	The Williams Companies, Inc.	Positive Decision
349	15/11/2021	Last Beach Cleanup v. TerraCycle, Inc.	Campbell's Co	Positive Decision
350	15/11/2021	Last Beach Cleanup v. TerraCycle, Inc.	Colgate-Palmolive Company	Positive Decision
351	15/11/2021	Last Beach Cleanup v. TerraCycle, Inc.	Nestle	Positive Decision
352	15/11/2021	Last Beach Cleanup v. TerraCycle, Inc.	Procter & Gamble Company	Positive Decision
353	15/11/2021	Last Beach Cleanup v. TerraCycle, Inc.	Clorox Company	Positive Decision
354	15/11/2021	Last Beach Cleanup v. TerraCycle, Inc.	Coca-Cola Company	Positive Decision
355	18/11/2021	Notre Affaire a Tous and Others v. Total	Total Energies SE	Negative Decision
356	06/12/2021	Public Watchdogs v. Southern California Edison Co.	Edison International	Positive Decision
357	16/12/2021	Friends of the Earth et al. v. Total	Total Energies SE	Negative Decision

## Supplementary information

### Case study 1. Milieudefensie et al. v. Royal Dutch Shell plc

A distinctive aspect of the Milieudefensie et al. v. Royal Dutch Shell plc case was the unprecedented level of transparency and public involvement that characterized the period leading up to its formal filing. In April 2018, a full year prior to the formal initiation of legal proceedings, Milieudefensie (Friends of the Earth Netherlands) issued an open letter to Mr. Ben van Beurden, Chief Executive Officer of Royal Dutch Shell plc. Published online<sup>16</sup>, the letter articulated the organization's view that Shell was in violation of its legal duty of care by failing to align its corporate strategy and investment decisions with the climate objectives set forth in the Paris Agreement. Milieudefensie contended that Shell's ongoing contribution to global greenhouse gas emissions amounted to an unlawful act, and it urged the company to take corrective measures. In the aftermath of the letter, the organization launched a nationwide public campaign aimed at mobilizing citizen support. Dutch residents were invited to endorse the initiative by signing a petition and registering as co-plaintiffs in the prospective legal action. By May 2018, the campaign had garnered the support of over 10,000 individuals.

In February 2019, six additional organizations - ActionAid Netherlands, Both ENDS, Fossilvrij NL, Greenpeace Netherlands, Wadden Sea Forum, and Jongeren Milieu Actief-formally joined Milieudefensie in issuing a second letter to Royal Dutch Shell. This correspondence reiterated their initial demands and explicitly warned that, in the absence of substantive corrective measures, legal proceedings would be initiated on April 5, 2019. By the end of March, more than 17,000 individuals had registered their intent to join the action as co-plaintiffs. As announced, the plaintiffs proceeded to file the lawsuit before the District Court of The Hague on the specified date. Shell was granted a period of three months to submit its initial response to the claim. Following subsequent procedural developments, the District Court scheduled four days of oral hearings, which took place in December 2020. Unusually, the Court pre-announced the date of its judgment, indicating that a decision would be rendered on May 26, 2021. As scheduled, the judgment was delivered and livestreamed, garnering significant attention from both national and international media outlets.

On July 20, 2021, Shell publicly confirmed its intention to appeal the decision, and the formal notice of appeal was filed on August 23. It is expected that the appellate proceedings will take approximately two to three years before a final judgment is rendered<sup>17</sup>.

On April 25, 2022, Milieudefensie issued a formal letter to Shell's Board of Directors urging immediate compliance with the May 26, 2021, court ruling and cautioning that failure to act could expose board members to personal liability risks toward third parties. Finally, on November 12, 2024, the Court of Appeal in The Hague issued its decision in the Shell climate case, affirming that Shell has a legal duty of care to mitigate dangerous climate change under Dutch tort law, interpreted considering international human rights and climate law. While the Court upheld the broader legal framework established by the lower court, it overturned the specific requirement that Shell reduce its emissions by 45% by 2030 relative to 2019 levels. The Appeals Court concluded that there is insufficient scientific and legal consensus to impose a fixed emissions reduction target on an individual company. Although the Court acknowledged that Shell's duty of care extends to Scope 1, 2, and 3 emissions, it emphasized legal and practical challenges - particularly regarding Scope 3 - in setting enforceable reduction obligations. The Court also noted that Shell is already pursuing its own voluntary target of a 45% reduction by 2035 compared to 2016. While the Court expressed concern that future fossil fuel investments could conflict with Shell's duty of care, it found that such issues were not central to the present case and declined to impose binding emissions targets<sup>18</sup>.

<sup>16</sup><https://www.bloomberg.com/news/articles/2021-05-25/court-decision-to-test-shell-s-responsibility-for-climate-change>

<sup>17</sup>See: [https://www.foei.org/wp-content/uploads/2018/06/Milieudefensie\\_legallettershell4\\_April\\_2018.pdf](https://www.foei.org/wp-content/uploads/2018/06/Milieudefensie_legallettershell4_April_2018.pdf)

<sup>18</sup>For more details see: <https://climatecasechart.com/non-us-case/milieudefensie-et-al-v-royal-dutch-shell-plc>

## Case study 2. New York Attorney General Issued Subpoena to Exxon Mobil Regarding Climate Disclosures

In a notable legal confrontation involving state attorneys general and Exxon Mobil Corporation, the Attorneys General Offices of New York and Massachusetts initiated securities lawsuits against the corporation, following public investigations that commenced on November 4, 2015, as reported by the Bloomberg on the subsequent day<sup>19</sup>.

On October 24, 2018, the New York Attorney General formally filed a highly anticipated lawsuit. The legal action alleged that Exxon Mobil had misled investors and regulatory bodies by publicly downplaying the severity of climate change, despite internal advisories from the company's own scientists indicating otherwise. Although there was considerable anticipation surrounding this potential lawsuit, the exact filing date remained uncertain until its occurrence. The case proceeded to trial in October 2019, culminating in a 12-day judicial examination. Ultimately, on October 12, 2019, the court determined that the New York Attorney General's Office failed to substantiate claims that Exxon Mobil had misled investors regarding its methodologies and procedures for evaluating climate risk.

During the New York trial, the Massachusetts Attorney General initiated another securities suit against Exxon Mobil on October 24, 2019. This legal action was preceded by an investigation launched by Attorney General Maura Healey on April 19, 2016. The Massachusetts lawsuit contends that Exxon Mobil engaged in deceptive practices that adversely affected Massachusetts investors and consumers. Specifically, the company is accused of failing to adequately disclose climate change risks, misrepresenting its business practices concerning the use of proxy carbon costs, misleadingly advertising its products, neglecting to disclose the environmental impacts of its products on climate change, and executing greenwashing campaigns. Exxon Mobil's attempt to shift the case from state court to federal jurisdiction was thwarted by a federal district court in Boston. In contrast to the New York litigation, the Massachusetts lawsuit remains pending in state court<sup>20</sup>.

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<sup>19</sup>See:<https://www.bloomberg.com/news/articles/2015-11-05/exxon-mobil-said-to-be-probed-by-n-y-over-climate-change>

<sup>20</sup>For more details, see:<https://climatecasechart.com/case/people-v-exxon-mobil-corporation/>

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### Andreas Beyer

European Central Bank, Frankfurt am Main, Germany; email: [andreas.beyer@ecb.europa.eu](mailto:andreas.beyer@ecb.europa.eu)

### Lorenzo Nobile

European Central Bank, Frankfurt am Main, Germany; email: [lorenzo.nobile@ecb.europa.eu](mailto:lorenzo.nobile@ecb.europa.eu)

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Postal address 60640 Frankfurt am Main, Germany

Telephone +49 69 1344 0

Website [www.ecb.europa.eu](http://www.ecb.europa.eu)

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