

Data Description Sheet

Responding to Climate Change Crises: Firms’ Trade-offs

Felix Fritsch, Qi Zhang, and Xiang Zheng

June 25, 2025

1. A description of which author(s) handled the data and conducted the analyses.

All authors participated in data collection and empirical analyses. The data is centrally stored, and all authors have access to the data.

2. A detailed description of how the raw data were obtained or generated, including data sources, the specific date(s) on which data were downloaded or obtained, and the instrument used to generate the data (e.g., for surveys or experiments). We recommend that more than one author is able to vouch for the stated source of the raw data.

On October 22, 2020, we used the Twitter advanced search feature to retrieve firms’ historical tweets.

We downloaded firms’ negative ESG incidents from the RepRisk database via WRDS subscription on July 24, 2021.

We obtained firms’ ESG transparency data from Refinitiv Eikon on August 9, 2022.

We obtained firms’ fundamental data from Compustat on July 3, 2021, trading data from CRSP on October 7, 2021, and filings along with historical headquarters information from the SEC EDGAR on August 19, 2021. Compustat and CRSP were accessed via WRDS subscription.

We accessed firms' Twitter sentiment data via Bloomberg on August 5, 2021.

3. If the data are obtained from an organization on a proprietary basis, the authors should privately provide the editors with contact information for a representative of the organization who can confirm data were obtained by the authors. The editors would not make this information publicly available. The authors should also provide information to the editors about the data sharing agreement with the organization (e.g., non-disclosure agreements, any restrictions imposed by the organization on the authors, such as restrictions to publish certain results).

Not applicable.

4. A complete description of the steps necessary to download, obtain or collect as well as process the data used in the final analyses reported in the paper. For experimental and survey papers, we require information about the instructions and instruments used to generate the data, subject eligibility and/or selection, as well as any exclusion criteria. The full set of instructions and instruments can be provided in the online appendix.

A detailed, step-by-step procedure for creating the sample is provided in Sections 2 and 3 of the paper. The sources of the raw data and the definitions of each variable are explained in Section 3 and Appendix A.

5. After downloading or obtaining the raw data, all manipulations of the data should be done via computer programs. The code for these manipulations should be included in the code submitted upon acceptance (see below). No manipulations of raw data can take place manually or outside the computer code provided. If compliance with this requirement is not feasible, the authors need to explain and disclose any manipulations of the raw data (e.g., manually created variables or file conversions). When feasible, we also encourage the authors to share the code that downloads the data.

All manipulations of raw data are performed by the computer programs included in our replication package.

6. The computer programs (i.e., code) used to (1) convert the raw data into the final dataset used in the analysis, (2) to execute the statistical or econometric analysis, and (3) to generate the tables or to produce the output used in constructing tables of the manuscript. A brief description that enables other researchers to understand and run the code should be provided. The

purpose of this requirement is to facilitate replication and to help other researchers understand in detail how the raw data were processed, the final sample was formed, variables were defined, outliers were treated, and which commands were used in the analysis, etc. This code or programming is in most circumstances not proprietary. However, we recognize that some parts of the code or data generation process may be proprietary, including from the authors' perspective. Therefore, instead of disclosing the proprietary portion of the code or program, researchers can provide a detailed step-by-step description of the code or the relevant parts of the code such that it enables other researchers to arrive at the same results that the authors obtained and presented in their manuscript. In such cases, the authors should inform the editors upon initial submission, so that the editors can consider an exemption allowing the step-by-step description. Whenever feasible, authors are required to provide the identifiers (e.g., CIK, CUSIP) for their final sample. Authors should consult our FAQ Sheet on the JAR website for further details.

The codes are described in README.md in the replication package. The identifiers are stored in identifier.csv in the replication package.

7. A comprehensive log file that shows the execution of the entire code. This log file should cover all the steps that convert the raw data into a final dataset and the execution of all statistical and econometric analyses presented in the tables of the manuscript. The portion of the log file that shows proprietary code or data may be masked. In this case, the reader should be referred to the step-by-step description provided as per the requirements in Item 6.

The replication package includes log files for all code executions.

8. An assurance that the data and programs will be maintained by at least one author (usually the corresponding author) for at least six years, consistent with National Science Foundation guidelines.

We will maintain the data and programs from the paper for at least six years.