

Summary of Biodiversity Risk

(Zheng Zhou ; Nov 16, 2025)

- 1) The research question: the effects of physical and regulatory risks related to biodiversity loss on economic activity and asset values
- 2) Motivation: Biodiversity risks already affect equity prices.
- 3) The **marginal contributions to the literature**:
1、 develop a news-based measure of aggregate biodiversity risk
2、 construct several firm-level measures of exposure to biodiversity risk
- 4) Hypotheses: identify biodiversity risk as a new dimension of risk that is distinct from climate risk
- 5) Data sources: textual analysis, cross-sectional pricing information, and survey data
- 6) Indicators: 1、 NYT-Biodiversity News Index 2、 Google Biodiversity Attention Index 3、 10K-Biodiversity-Count Score 4、 10K-Biodiversity-Negative Score 5、 10K-Biodiversity-Regulation Score 6、 Survey-Based Measures of Biodiversity Risk Exposures 7、 Holding-Based Measure of Biodiversity Risk Exposures
- 7) Model specification: Bidirectional Encoder Representations from Transformers (BERT) model
- 8) Difficulties: The complexity of biodiversity risk and the associated difficulty of measuring and quantifying its various elements
- 9) Publishable and feasible extension of this research: employ this kind of textual analysis to construct indicators of other aspects of environment problems and estimate its risk

Summary of Do Investors Care about Biodiversity? (Zheng Zhou ; Nov 16, 2025)

- 1) The research question: Whether have investors started to require a risk premium upon the prospect of, and uncertainty about, future regulation or litigation to preserve biodiversity?
- 2) Motivation: the potentially dramatic financial consequences of the loss of biodiversity
- 3) The **marginal contributions to the literature**: introduce a new measure of a firm's negative impact on biodiversity, the corporate biodiversity footprint (CBF) and explore whether investors price this footprint
- 4) Hypotheses: 1、Large-CBF stocks will earn higher returns, as these firms potentially face higher transition risks. 2、Large-CBF stocks will earn higher returns due to mispricing, which may originate from unexpected cash flow shocks. 3、Large-CBF stocks will earn lower returns, due to unexpected shifts in investors' preferences for green stocks and as climate attention or concerns increased.
- 5) Sample: 2,106 listed firms from 34 countries for which CBF data are available from Iceberg Data Lab(IDL) over the years 2018–2021
- 6) Key independent variable: The CBF reflects the extent to which ecosystems affected by a firm's activities have been degraded from their pristine natural state.
- 7) Regression prediction model specification: cross-sectional regressions relating individual firms' returns to their CBF values
- 8) Difficulties: The complexity of biodiversity risk and the associated difficulty of measuring and quantifying its various elements
- 9) Publishable and feasible extension of this research: Introduce more indicators as CBF to better estimate the risk of the effect of firms on the environment and explore whether it is priced by investors.