"Climate Change, Analyst Forecasts, and Market Behavior."

1) What are the research questions (summarize in one or two sentences)?

A.How do sell-side equity analysts' forecasts reflect the impact of climate change on firms?

B.Do analysts located in regions with higher sensitivity to climate change issue less optimistic but more accurate forecasts following significant temperature increases?

（Two sentences repeat）

A.Whether sell-side equity analysts help the market assimilate information contained in climate change.

2) Why are the research questions interesting?

These questions are interesting because they bridge the gap between environmental science and financial analysis, highlighting how global climate change can influence financial markets and forecasting behaviors, an area of increasing relevance and concern.

(Too general)

A growing body of research in economics and finance is exploring the impact of climate change on firm performance, as well as firms' capabilities in managing climate-related risks. In this context, analysts, acting as information intermediaries, are expected to incorporate the potential effects of global climate change into their earnings forecasts to accurately reflect its impact on firm performance. However, it is unlikely that all analysts will recognize the connection between climate change and the performance of firms.

3) What is the paper's contribution? (1. Find the literature; 2. Summarize the literature; 3. Summarize the marginal contributions to the literature)

A.Literature: The study situates itself at the intersection of climate change impacts on economies and the role of financial analysts in incorporating non-traditional risk factors into market forecasts.

B.Summarize Literature: Prior research has focused on the direct economic impacts of climate change or on the general accuracy of financial forecasts, with less attention to how climate factors are integrated into these forecasts.

C.Marginal Contributions: This paper uniquely contributes by empirically demonstrating that analysts in high temperature sensitivity (high-TS) states issue forecasts that more accurately incorporate the potential economic impacts of climate change, thus enriching our understanding of how climate risks are priced into markets.

(Citation needed)

Extreme temperatures affect agricultural production, aggregate industrial output, labor supply and establishments (Addoum etal., 2020).

Investors believe that some valuations do not fully reflect climate risks (Krueger et al., 2020).

Climate change and carbon-transition risk affect stock returns (Bolton and Kacperczyk, 2020).

4) What hypotheses are tested in the paper? list them explicitly.

Analysts in high-TS states are more likely to issue less optimistic and more accurate forecasts after significant temperature increases.(too general)

H1:Analysts located in areas where firms exhibit greater sensitivity to climate changes would be more aware and more sensitive to large temperature changes.

H2:Abnormally warmer climate can influence the accuracy of affected analysts.

H3:This effect could be amplified for firms that are more sensitive to climate change.

a) Do these hypotheses follow from and answer the research questions?

Yes, these hypotheses directly respond to the research questions by linking geographical climate sensitivity to forecasting behavior.

b) Do these hypotheses follow from theory or are they otherwise adequately developed ? Please explain the logic of the hypotheses (use visualization if possible)

The hypotheses are theoretically grounded in the premise that firsthand observation and regional sensitivity to climate effects enhance the incorporation of these factors into financial analyses.

5) Sample: comment on the appropriateness of the sample selection procedures.

The sample selection, based on firms' geographical location and sensitivity to temperature changes, is appropriate as it directly relates to the research questions and hypotheses.

6) Dependent and independent variables: comment on the appropriateness of variable definition and measurement (focus on the key dependent variables and independent variables).

Dependent Variables: Forecast accuracy and optimism.

Independent Variables: Firm location in high-TS states and observed temperature anomalies.

These variables are well-defined and measured, making them suitable for examining the relationship between climate change sensitivity and forecasting behavior.

7) Regression/prediction model specification: comment on the appropriateness of the regression/prediction model specification.

The regression model specification seems appropriate as it is designed to isolate the effect of temperature sensitivity on analysts' forecast behaviors, accounting for potential confounders.

8) What difficulties arise in drawing inferences from the empirical work?

Potential difficulties include isolating the effect of climate change from other factors affecting forecasts, and the generalizability of findings across different markets and climates.

9) Describe at least one publishable and feasible extension of this research.

A publishable extension could examine whether these findings hold in other contexts, such as across different industries with varying levels of exposure to climate risks, or in markets outside the U.S. where climate change might be perceived differently.