Summary of A quantity-based approach to constructing climate risk hedge portfolios

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1 What are the research questions?

- How to build climate risk hedge portfolio with a quantity-based approach?

2 Why are the research questions interesting?

- Climate change disrupts economic activity and poses financial risks.
- Rising demand by investors for instruments(bonds, stocks...) that hedge risks.
  - Little suited approachs to hegde climate risk(historical comovement)
  - Propose a new methodology to build hedge portfolios for climate risks

3 What is the paper' s contribution?

- Literature on interaction between climate change and asset markets
  - Prior: Climate risk affects real estate, equity markets...
  - This study: mutual fund investors hedge climate risks
- Literature on using quantity and holdings data in asset pricing
  - This study: quantity information is useful for predicting price movements
- Literature on belief formation and action
  - This paper: mutual funds' trading responses to idiosyncratic changes in climate beliefs

4 What hypotheses are tested in the paper?

- Hypotheses
  - mutual funds' portfolios change with managers' idiosyncratic climate belief shocks(not all industries)
  - hedge portfolio gains in periods with negative climate news shocks.
- Logic
  - climate belief shocks affects climate change attention or beliefs($\beta^{I,S}$ are generally noisy)
  - quantity-based approach uses cross-sectional information

5 Sample

- Portfolio Holdings Data(CRSP, Compustat), Investor Location Data(SEC filings)

6 Dependent and independent variables

- Idiosyncratic Belief Shocks: Extreme Heat, Investor Disclosure

7 Regression/prediction model specification

- Quantity-based approach, alternative approach, mimicking portfolio approach

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

- why the correlation of the two belief shocks in the table1panelB is zero

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

- how investors behavior affect corporate decisions: when investors make large-scale reallocations of assets–>drive companies to adjust carbon emission strategies