

Summary of *ChatGPT and Corporate Policies*

Manish Jha, Jialin Qian, Michael Weber, Baozhong Yang(Working Paper, 2024)

2024.09.18 喻清言

1. What are the research questions?

- Can ChatGPT effectively extract managerial expectations from company conference call transcripts to predict future investment activities and stock returns?

2. Why are the research questions interesting?

- Private information such as investment policies may not yet be fully incorporated into market prices.
- ChatGPT can extract firm-level corporate expectations of future investment policies from managerial quarterly earnings conference calls.

3. What is the paper' s contribution?

- the literature on the investment-q relation
 - Existing literature: focus on refining the investment-q relation.
 - Extension: AI-based investment score provides new information for firms' future investment opportunities that complements q.
- the feedback literature
 - Existing literature: managers learn from prices in making investments and other corporate decisions.
 - Extension: the other direction of the link is also important: the market can also learn from managers.
- research on textual analysis
 - Existing literature: using textual analysis to analyze unstructured text information.
 - Extension: ChatGPT can help to extract interpretable information about complex concepts such as future corporate policies.

4. What hypotheses are tested in the paper?

- H1: ChatGPT-based investment score represents firms' investment expectations, is able to predict future investment.
- H2: ChatGPT-based investment score contains incremental predictive power for future capital expenditure relative to Tobin' s q.

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

- Yes, they focus on the validation and usage of the investment policies information extracted by ChatGPT.

b) Do these hypotheses follow from theory? Explain logic of the hypotheses.

-
- Since the managers' expectation extracted by ChatGPT will influence future investment plan, the investment scores will be strongly correlated to future investment. As ChatGPT-based investment score represents firms' investment expectations that are not yet fully incorporated in market prices, it should contain incremental predictive power for future capital expenditure relative to Tobin's q .
5. **Sample: comment on the appropriateness of the sample selection procedures.**
 - The sample period is from 2006 to 2020, which is included in the training data of ChatGPT.
 6. **Dependent and independent variables: comment on the appropriateness of variable definition and measurement.**
 - Independent variable is the ChatGPT-based investment score, which is the main contribution by the literature.
 7. **Regression/prediction model specification: comment on the appropriateness of the regress/predict model specification.**
 - The regression includes abundant control variables such as former capital expenditure and Tobin's q .
 8. **What difficulties arise in drawing inferences from the empirical work?**
 - The regression result is only used to conclude that ChatGPT can effectively extract firms' expectations, the inference is logical.
 9. **Describe at least one publishable and feasible extension of this research.**
 - The similar procedure can be applied to other material from corporations such as financial reports and conference calls. In order to predict future returns more precisely, we can not only generate investment score but also combine employment score and ESG score.