Summary of *CHATGPT AND CORPORATE POLICIES*

Manish Jha,Jialin Qian,Michael Weber,Baozhong Yang(Working paper, 2021)

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1. **What are the research questions?**
   - Can an advanced AI model such as ChatGPT help understand corporate policies?
   - Does the ChatGPT-extracted expected investment policy provide information beyond existing measures of investment opportunities, such as Tobin's q or cash flows?
   - Does such information have further implications on asset prices and returns?
2. **Why are the research questions interesting?**
   - These questions raise the possibility that ChatGPT may provide additional information, which could help improve existing financial models.
   - These questions offer new research directions for empirical finance, namely, how to utilize AI technology to extract, analyze, and utilize unstructured data.
   - These questions touch upon the core issue of market efficiency, that is, whether market prices can fully reflect all available information, and where we can obtain additional information.
3. **What is the paper's contribution?**
   - Provides a new method to forecast corporate policies using ChatGPT.
     - Recent paper:
       - AI applications in finance: Limited to structured data and quantitative analysis.
     - Extend:
       - Utilize ChatGPT to analyze textual data for predicting capital expenditures and investment strategies.
       - Demonstrate the predictive power of ChatGPT-generated scores for future financial outcomes.
   - Methodological contribution: Emphasizes the interpretability of AI models in finance.
     - Recent paper:
       - Often criticized for lack of transparency.
     - Extend: Showcase ChatGPT's ability to provide interpretable outputs that align with human understanding.
   - Contributes to the literature on AI in economic research.
     - Recent paper:
       - Primarily focused on consumer behavior and market trends.
       - AI in corporate finance: Limited exploration.
     - Extend:Highlight the role of AI in extracting valuable signals from corporate disclosures.
4. **What hypotheses are tested in the paper?**
   - H1: The ChatGPT investment score positively predicts future capital expenditures.
   - H2: The ChatGPT investment score is negatively associated with future abnormal returns.

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

   - Yes, they directly address the research questions by examining the predictive power of the AI-generated investment score on future corporate actions and market responses.

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

- If the ChatGPT investment score captures additional private managerial information not fully reflected in market prices, it should provide incremental predictive power for future capital expenditures beyond what is explained by Tobin's q.
- If the ChatGPT investment score effectively captures firms' future investment opportunities, it should be negatively related to future stock returns, as the market may not have fully incorporated this information into current prices.

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

   - Comprehensiveness:After requiring all main variables in our analyses to be non-missing, the final sample consists of 74,586 firm-quarter-level conference calls and merged corporate data from 2006 to 2020, representing 3,878 unique US public firms.
   - Limitations:Private companies or non-U.S. companies are not considered.

6. **Comment on the appropriateness of variable definition and measurement.**

   - The decision-making process of ChatGPT is not transparent, which may make it difficult to fully understand how the model derives specific investment scores from the text.

7. **Comment on the appropriateness of the regress/predict model specification.**

   - The model may not capture all the complex factors affecting company decisions, such as the non-financial motivations of management.

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

   - The endogeneity between variables can lead to biased estimation results.

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

   - Exploring the predictive power of ChatGPT investment scores in other economic environments.
   - Discuss how companies can use ChatGPT investment scores to optimize risk management strategies, such as adjusting hedging strategies to cope with expected investment changes.
   - Develop a real-time data processing system that integrates ChatGPT with other real-time data sources to construct dynamic forecasting models, thereby enhancing the timeliness and accuracy of predictions.