Summary of *CHATGPT AND CORPORATE POLICIES*

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September 18, 2024 Yanrui Zhou

1. **What are the research questions?**
   - Can ChatGPT extract incremental information about corporate policies from conference calls? Whether these information can predict firms' future behavior and returns?

2. **Why are the research questions interesting?**
   - Extracting complicated information such as the firm's expected investment policy from earnings call is hard for researchers, but ChatGPT may help them extract useful information and provide detailed answers, thus studying ChatGPT score can reveal whether ChatGPT is useful and there are new information in earnings call.

3. **What is the paper's contribution?**
   1. – **Past studies:** Studies on investment-q relation (Tobin, 1969) show strong relation between Tobin's q and investment in theory but their empirical relation is weak.
      – **Expand:** AI-based investment score provides new information for firms' future investment opportunities that complements Tobin's q and total q.
   2. – **Past studies:** There are feedback literature in which managers learn from prices in making investments and other corporate decisions(Chen et al., 2007).
      – **Expand:** This paper shows that market can also learn from managers.
   3. – **Past studies:** The literature on managerial and firm expectations usually use survey as a tool to obtain non-standard data(Weber et al., 2022).
      – **Expand:** This article complements them by generating measures based on executives' plans for a large of firms through a new set of tools and data.
   4. – **Past studies:** Researchers have utilized textual analysis to analyze unstructured text information(Tetlock, 2007).
      – **Expand:** This article shows that ChatGPT can help to extract information about complex concepts such as future corporate policies.

4. **What hypotheses are tested in the paper?**
   - H1: ChatGPT investment score is valid.
   - H2: ChatGPT investment score can predict future investment.
   - H3: ChatGPT investment score can positively/negatively predict short/long-term returns.
   - H4: ChatGPT investment score aligns with analyst forecasts

   a) **Do these hypotheses follow from and answer the research questions?**
      – yes, they answer the questions.

   b) **Do these hypotheses follow from theory?Explain logic of the hypotheses.**
      – Theory: H3: there is negative association of investment and expected returns.
      – Logic: H1 studies whether the score is a valid proxy of managers' expectation of firm policies and H2-H3 study the effect of this variable, while H4 studying the relation between ChatGPT and analyst based forecasts.

5. **Sample: comment on the appropriateness of the sample selection procedures.**
   - This article uses 74,586 conference call transcripts for 3,878 unique companies from 2006 to 2020, but there are more than 4,000 firms in USA, maybe this article is too strict while merging firm data.

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

   - Independent variable: **ChatGPT-based investment score** is got by ChatGPT3.5 ,it has two disadvantages.
     - 1. the study splits earnings call since GPT3.5 has a limit;
     - 2. The score only has 5 levels which may not specify extreme cases.
   - Dependent variable: **future investment/returns** are constructed properly.

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

   - The main regressing models have controlled firm * year-quarter FEs and standard errors are clustered by firm, the regress models are specified correctly. It's better if the article can add more control variables.

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

   - Merging the earnings call transcripts with CRSP and Compustat databases has reduces the sample size from 160,195 to 115,620, nearly 28% of the sample are dropped, this may cause sample selecting bias.
   - There may exist omitted variables that could influence ChatGPT score and firms' future investment, for example the earnings call in the past, thus the results are not so convincing.

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

   - This paper could research if a firm doesn't obey its investment promise in earnings call, will the effect of ChatGPT investment score change?