

Unusual Financial Communication: Evidence from ChatGPT, Earnings Calls, and the Stock Market

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IBEFA Summer 2024

Summary

- Exciting paper!
- RQ: Identify S&P 500 firms' unusual financial communication using Chatgpt4-turbo and analyze how the stock market responds to this unusual communication.
- Findings: The stock market reacts negatively to unusual financial communication (various dimensions like executive, analysts, content), with elevated trading activity; more dimensions larger negative reaction.

Chatgpt identified unusual financial communication

- Temperature zero.
- S&P 500 earnings call Q&A, Jan 2015 - Dec 2023.

Table 1: Dimensions of Unusual Financial Communication

The table shows the 25 identified dimensions of unusual financial communication, clustered by the four broader categories *executives*, *analysts*, *content* and *technical*.

Executives	Analysts
1) Lengthy Responses	1) Repeated Focus on Specific Participants or Topics
2) Informal Tone	2) Repetitive Questions
3) Unusual Dialogue Patterns	3) High Volume of Questions
4) Emotional Responses	4) Off-Topic Questions
5) Management Evasiveness	5) Lack of Critical Questioning
6) Management Unpreparedness	6) Unusual Financial Queries
7) Conflicting Information	
Content	Technical
1) Detailed Discussion on Non-Financial Topics	1) Technical Difficulties & Disruptions
2) In-Depth Product or Service Discussions	
3) Detailed Financial Discussions	
4) Forward-Looking Statements & Strategic Insights	
5) Significant Leadership or Corporate Changes	
6) External Events Impact	
7) Macroeconomic Considerations	
8) Competitive & Market Analysis	
9) Operational & Management Issues	
10) Legal or Regulatory Issues	
11) Surprising Announcements	

Comment 1. how unusual? what it captures?

- The frequency of unusual is high.
- What it captures?
 - Market risk;
 - Industry risk;
 - Firm Risk.
- What adds to the literature.

Comment 1. how unusual? what it captures?

“Let Me Get Back to You”—A Machine Learning Approach to Measuring NonAnswers

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Published Online: 16 Nov 2022 | <https://doi.org/10.1287/mnsc.2022.4597>

Abstract

Using a supervised machine learning framework on a large training set of questions and answers, we identify 1,364 trigrams that signal nonanswers in earnings call questions and answers (Q&A). We show that this glossary has economic relevance by applying it to contemporaneous stock market reactions after earnings calls. Our findings suggest that obstructing the flow of information leads to significantly lower cumulative abnormal stock returns and higher implied volatility. As both our method and glossary are free of financial context, we believe that the measure is applicable to other fields with a Q&A setup outside the contextual domain of financial earnings conference calls.

Comment 2: data and method

- Data expand?
- Out of sample?
- Sensitivity tests.
- Concerns: terminology, well known manager personal style, etc.
- Construct surprise.

Comment 3: miscellaneous

- Quotation marks.
- Explain VIX.
- Some others.

Conclusion

- Very interesting research!
- How AI helps identify ambiguous expression

Thanks!