

# The News in Earnings Announcement Disclosures Capturing Word Context Using LLM Methods

作者: Siano, et al.

阅读: 程心烨

## 1. What are the research questions ?

- How much news is there in earnings announcement text beyond accounting numbers?
- Under what economic circumstances and which textual information in earnings announcements do investors value?

## 2. Why are the research questions interesting?

- Traditional textual analysis mostly ignores context, reducing earnings press releases' explanatory power for stocks. Exploring related questions solves this, clarifies text's role, fills literature gaps and provides practical insights.

## 3. What is the paper's contribution?

- Earnings press release text explains short short-term markets, correcting prior underestimation. It shows accounting text drives stock moves, finds quick investor responses, uses LLM for valuation, and expands big data applications.

## 4. What hypotheses are tested in the paper? List them explicitly.

- H1: Text in earnings announcements contains incremental pricing information beyond numbers.
- H2: LLMs outperform conventional methods that ignore word context in extracting pricing information from earnings announcement text .
- H3: During periods of high uncertainty, textual information is more valuable .
- H4: Textual information is more valuable for firms with lower earning persistence.
- H5: Sentences that directly discuss numbers, appear at the beginning of the text, and contain new content are more valuable.

(a) Do these hypotheses follow from and answer the research questions? • Yes.

(b) Do these hypotheses follow from theory or are they otherwise adequately developed? • Yes. These hypotheses have solid theoretical and literature foundations.

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

- Sample selection is rigorous. Focusing on core channels, reasonable exclusions, balanced periods, valid data, sufficient size; exclusions don't hurt representativeness.

## 6. Dependent and independent variables: comment on the appropriateness of variable definition and measurement.

- DVs include CAR[0,1] and immediate return variables. IVs cover LLM-predicted returns, other textual measures, and financial statement surprises.

## 7. Regression/prediction model specification: comment on the appropriateness of the regression/ prediction model specification.

- The model fits research goals. OLS tests text's explanatory power, controls fixed effects, uses non-linear modeling, out-of-sample prediction. Sensitivity analyses address uncontrolled factors.

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

Unobserved factors, endogenous timing, and causal ambiguity challenge textual-stock return links.

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

- Supplement analyst coverage data, divide into high/low groups, use the paper's LLM method to calculate the correlation between textual information and stock returns in both groups.

# Context-Based Interpretation of Financial Information

作者: Kim, et al.

阅读: 程心烨

## 1. What are the research questions ?

- To what extent narrative disclosures alter informativeness of accounting numbers?
- How economically important this complementarity shaping investors' belief?
- When does textual context matter most?

## 2. Why are the research questions interesting?

- Accounting standard setters seek to boost contextual disclosure. Answering related questions offers evidence for new standards. Prior studies note limited narrative value; understanding its role aids stakeholders' decisions..

## 3. What is the paper's contribution?

- Proposes a new deep-learning method to quantify textual contextuality, extendable to other communication modes. Quantifies numeric-narrative interaction value, exceeds direct narrative value. Contributes to textual analysis via deep learning, addresses prior unreachable questions. Introduces context-based earnings persistence measure, outperforming context-free ones.

## 4. What hypotheses are tested in the paper? List them explicitly.

- H1: Accounting number context boosts informativeness for future beliefs, especially if numeric data is less reliable.
- H2: Numeric-narrative interaction value outweighs direct narrative context value.
- H3: Markets and analysts use numeric-narrative interactions for forecasts.
- H4: Narrative context is more valuable if numeric data is less reliable or macro uncertainty is high.
- H5: Context-based earnings persistence measure captures heterogeneity, outperforming context-free ones in predicting future earnings.

(a) Do these hypotheses follow from and answer the research questions? • Yes.

(b) Do these hypotheses follow from theory or are they otherwise adequately developed? • Yes. These hypotheses have solid theoretical and literature foundations.

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

- Sample selection is appropriate. Filtered to reduce noise, the final sample is large enough for model training and analysis, aligning with research goals.

## 6. Dependent and independent variables: comment on the appropriateness of variable definition and measurement.

- DVs are clearly defined with standard measures, aligning with testing context's role. IVs include classic financial inputs, inputs solving encoding issues, and contextuality quantifying interactions.

## 7. Regression/prediction model specification: comment on the appropriateness of the regression/ prediction model specification.

- The model specification is appropriate. It uses two benchmarks and two comparison models to isolate narrative context and its interaction value, with clear logic.

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

- BERT black-box limits interpretability; unobserved variables may bias inferences.

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

- Extend the method to study the role of interactions between vocal cues and narrative content in earnings conference calls.