

Summary of *Business News and Business Cycles*

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1. What are the research questions?

- How to measure the state of the economy via textual analysis of business news?

2. Why are the research questions interesting?

- News text is a mirror of the prevailing economic issues that are important to both news consumers and producers.
- little work has directly studied the structure of news.

3. What is the paper's contribution?

- the literature on textual data
 - Former literature: avoid directly using text data since topic model was not popular.
 - Extension: provide a complete solution for macroeconomic textual analysis.
- the literature on predicting stock market returns
 - Existing literature: use news sentiment or news-implied volatility as factors.
 - Extension: topic models distill reliable market-timing signals from news text.

4. What hypotheses are tested in the paper?

- Themes in business news can be summarized into interpretable topics, and these topics can quantify the evolution of news attention over time.
- News attention can accurately track a wide range of economic activities and have predictive power for macroeconomic outcomes.

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

- Yes, they are seek measures to forecast macro state through news text.

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

- Yes, they are rooted in economic theories that explore the relationship between information, market behavior, and macroeconomic outcomes.

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

- The WSJ news text chosen is authoritative and information abundant for textual analysis.

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

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- S&P500 index, Fed funds rate, employment, and industrial production are chosen as dependent variables to be forecasted by news.

7. Regression/prediction model specification: comment on the appropriateness of the regress/predict model specification.

- The topic model can reduce an inherently ultrahigh-dimension representation of a text corpus into a relatively low-dimensional set of common topics and quantify the amount of news attention allocated to each topic.

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

- This literature provides methodology for macro-news textual analysis, and the empirical work proved the forecast ability of news text on macro variables.

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

- The textual analysis methodology can be applied to People's Daily to establish proxy for macro- and political attention.