

# MENTAL MODELS AND FINANCIAL FORECASTS <sup>\*</sup>

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## Abstract

We uncover financial professionals’ mental models—the narratives they use to explain their subjective beliefs. Using 82,000 equity reports, we prompt large language models (LLMs) to extract 3.5 million narratives, each combining a topic, valuation channel, sentiment, and time outlook. To validate the reliability of our output, we introduce a multi-step LLM-based approach and new diagnostic tools. We establish three sets of findings. First, narratives are centered around a limited set of topics, primarily focused on top-line items, with variation in topic focus over time and across industries. Narratives are mostly forward-looking, with three times as many arguments focusing on the future as on the past. Second, differences in topic focus, sentiment, and time outlook across forecasters strongly predict the extent of disagreement in their subjective quantitative forecasts. Lastly, time-series variation in the average narrative’s sentiment and in the average narrative’s focus on top-line items closely track Shiller’s CAPE ratio ( $\rho = 0.84$  and  $\rho = 0.42$ ), and the cross-sectional variation in narratives predicts key asset pricing patterns. Narratives associated with growth stocks are more optimistic and forward-looking than those for value stocks, consistent with forecasters (mis)perceiving growth stocks as having above-average growth potential. Overall, this paper helps bridge the gap between ‘what forecasters believe’ and ‘why they believe it.’

**Keywords:** Mental Models, Professional Forecasters, Large Language Models, Beliefs

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