

PREDICTING MARKET REACTIONS TO NEWS: An LLM-Based Approach Using Spanish Business Articles

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Abstract

Empirical research shows that markets do not always efficiently incorporate news, particularly when information is complex or ambiguous. While existing studies employ sentiment analysis, topic modeling, or vector embeddings to analyze financial news, these methods often fail to capture the economic structure of information and its firm-specific implications. We propose a novel approach that leverages Large Language Models (LLMs) to analyze Spanish business news articles during a period of high uncertainty (2020-2021). Our methodology guides LLMs to systematically identify and classify firm-specific economic shocks in news articles according to their type (demand, supply, technological, policy, financial), magnitude (minor, major), and direction (positive, negative). This structured classification allows for a more nuanced understanding of how markets process complex information. Using a simple trading strategy, we demonstrate that our LLM-based classification significantly outperforms a benchmark based on vector embeddings clustering, generating consistent profits out-of-sample while maintaining transparent and durable trading signals. The results suggest that LLMs, when properly guided by economic frameworks, can effectively identify persistent patterns in how markets react to different types of firm-specific news. Our findings contribute to understanding market efficiency and information processing, while offering a promising new tool for analyzing financial narratives.

Keywords: Large Language Models, Business News, Stock Market Reaction, Market Efficiency

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