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Economic news contains qualitative and forward-looking information that traditional data cannot capture. The sentiment and uncertainty indices synthesize this information and translate it into useful signals to enhance the analysis of short-term dynamics and turning points in economic activity.

Approach

This document proposes a method to measure economic sentiment and uncertainty in Colombia through text mining. The sentiment and uncertainty indices are built from national and regional economic news published on digital media, including news portals and the online versions of traditional outlets. Each economic news item was analyzed by counting positive and negative words based on a predefined dictionary. The proposed indices are calculated for each region of Colombia, as well as for the national aggregate. The sentiment index identifies the tone of the news content—optimistic, pessimistic, or neutral—while the uncertainty index captures perceptions of risks surrounding the state of the economy. In this context, the document focuses on analyzing and empirically validating the qualitative and forward-looking information detected by these indices, particularly regarding relevant economic shocks, and on illustrating how such information complements traditional quantitative data.

Contribution

The study proposes an alternative measure to assess the state of the national and regional economy in real time, with minimal delay and greater sensitivity to identify relevant economic events. The indices exhibit leading-series properties and maintain statistically significant relationships with monthly-frequency economic variables. These indices, characterized by the qualitative and forward-looking information extracted from economic news, significantly complement traditional economic data, enhancing the analysis of short-term dynamics and the anticipation of turning points in Colombian economic activity.

Results

The sentiment and uncertainty indices highlighted key macroeconomic episodes, such as the gradual reopening after the pandemic, the 2021 National Strike, and the slowdown in demand amid high inflation. Comparing them with monthly-economic data revealed statistically significant correlations. Furthermore, when integrated with traditional data in conventional models for predicting economic activity, the indices provided robust results and improved real-time forecasting performance for the Colombian economy.