

Nowcasting GDP Growth by Reading Newspapers*

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Key Question

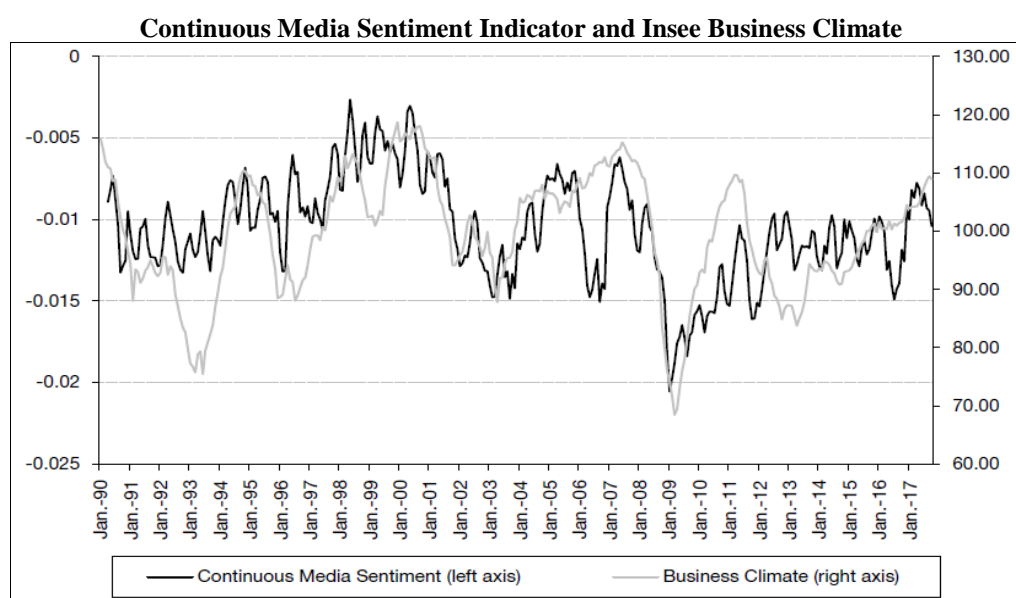
It is vital that economic planners have tools enabling them to forge a real-time analysis of the economic situation. The current explosion of internet content associated with the “Big Data” phenomenon offers the possibility of summarising alternative economic indicators in real time. But are these new indicators really appropriate? And what is their predictive power compared to that provided by conventional variables used by economic planners?

Methodology

A database is assembled containing more than a million articles published in the newspaper *Le Monde*. An indicator of “media sentiment” is calculated for each article using a list of terms with positive or negative connotations. The Media Sentiment indicator is then used in a model forecasting short-term French growth.

Main Results

- The Media Sentiment indicator shows a significant degree of similarity with the Business Climate indicator provided by Insee (see graph) and closely follows the major trends in economic activity during the study period.
- When the Business Climate and Media Sentiment indicators are combined, the model's predictive performance is better than with a model using only the Business Climate over certain forecasting timescales.
- Individually, however, the Insee Business Climate indicator remains a more reliable economic indicator than media sentiment.
- Using all the information from the database by means of a variables selection technique (penalised regression) has the advantage of being thorough and easy to implement, but yields inferior results to the approach using a predefined sentiment dictionary.



Note: This graph illustrates the change in the media sentiment indicator (3-month moving average) and the French business climate indicator.

Message

Media information is a promising tool for economic analysis. However, this indicator is in addition to and not a substitute for the Insee Business Climate indicator. Economic institutes must continue to develop their activity for the production of indicators: “Big Data” indicators would not be able to replace them since economists and public authorities need an independent and controlled source of measurement for the business climate.