

Traditional or social media: Who Captures Employment Better?

Marija Logarušić, Mirjana Čizmešija

University of Zagreb, Croatia

Abstract

Politicians' speeches have the ability to spread either uncertainty or calm among the population. Economic upheavals of considerable magnitude can also spread ambiguity. Both newspaper articles and posts on Twitter reflect important events that have the potential to increase or decrease uncertainty from a citizen's perspective. We employ two measures of media uncertainty, one reflecting the uncertainty perceived by journalists and the other characterizing the uncertainty associated with Twitter users. More specifically, we use the Twitter Economic Uncertainty (TEU) constructed by Baker, Bloom, Davis and Renault (2021) and the Economic policy uncertainty (EPU) index by Baker, Bloom and Davis (2016). To investigate which uncertainty source better captures the employment variations, we apply two methods, a regression decision tree and linear regression. Our results speak in favor of the more traditional media uncertainty source as a measure that better explains employment in the United States. Finally, we compare the two applied methods. Linear regression outperforms the decision tree in both models. Indeed, there is a statistically significant negative relationship between both uncertainty measures and employment when controlling for other macroeconomic aspects such as industrial production, interest rates, and the S&P 500.

Keywords: decision tree, economic policy uncertainty, employment, machine learning, twitter economic uncertainty