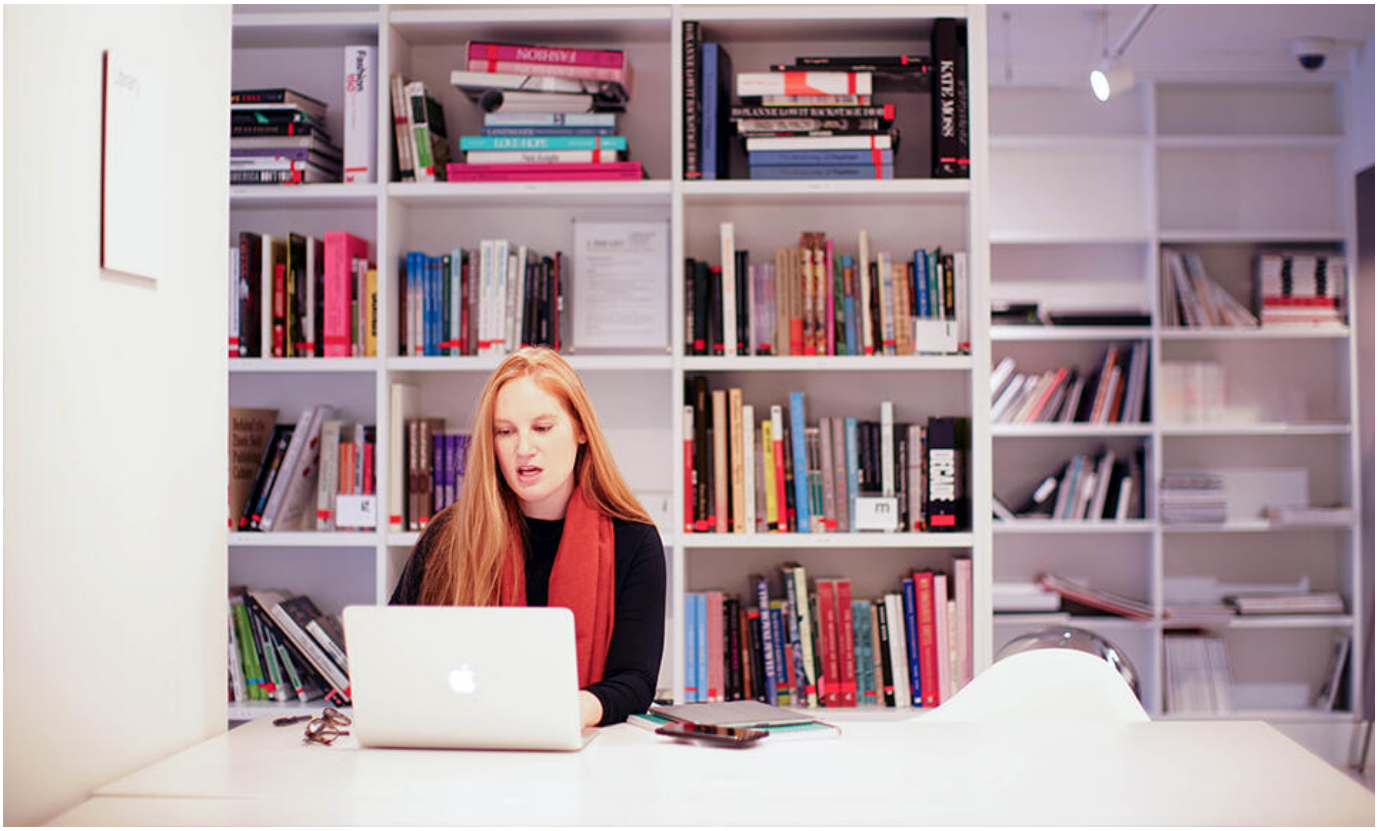
Does economic reporting affect business cycles?



Written by

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New research suggests newspaper reporting can be used to spot recessions early

There is a growing body of research that explores the question of whether the tone and volume of economic reporting can affect people's perceptions, and consequently have a significant impact on the business cycle.

One channel through which this can happen is what Nobel-prize winning economist Robert J. Shiller calls "narrative economics". It is the idea that stories, transmitted by news media, word of mouth, or social media can spread very quickly – "go viral" – and significantly impact people's economic decisions, both individually and collectively. Studying these narratives can, according to Shiller, "vastly improve our ability to predict, prepare for, and lessen the damage of financial crises, recessions, depressions, and other major economic events".

Bordalo, Gennaioli and Schleifer suggest another possible channel: people may wrongly overweight future outcomes when faced with a flow of new information. Or investors might have limited attention and rationally only update their expectations when news become more prominently mentioned (what Sims, and Mankiw and Reis call "rational inattention").

This literature suggests economic agents are more likely to pay attention to events that are more frequently mentioned in the media. With this motivation in mind, we built a simple and transparent measure based on the frequency the trigger-word "recession" is reported in major newspapers. We showed that such an index, especially when based on specialised newspapers like the Financial Times, can provide a useful high-frequency, real-time coincident and leading indicator of US economic activity.

This is illustrated in Figure 1, which plots at weekly frequency how often the word "recession" appears in articles published in the Financial Times between 1980 and March 2020. This index is a raw measure normalised by the number of articles discussing the US economy and is therefore relevant for the U.S. business cycle. In Figure 1, the shaded areas are NBER recessions, which are usually dated with a subs Figure 1 shows how the n ivity.

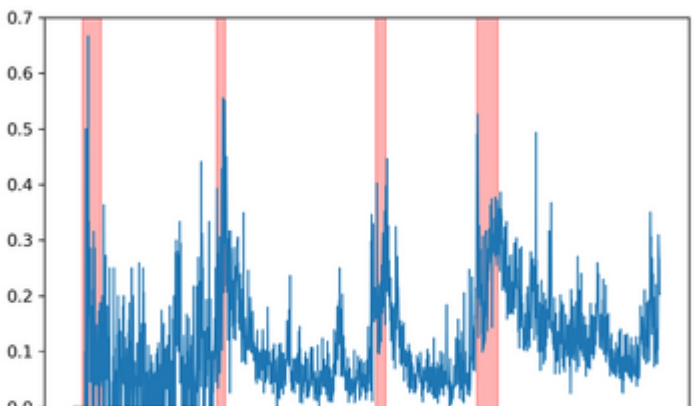

Fig. 1: Recession index (13 Apr 2020)

We extended this index by considering the number of times the word “depression” appears in these articles. We plotted the monthly frequency version of this index in Figure 2. This was available on 1 April 2020 and shows the recession probability for March 2020 in the US is already very high by historical standards, providing strong, quantitative, real-time evidence for the presence of a recession in March 2020.

For comparison, around three weeks later, on 20 April 2020, the March Chicago Fed National Activity index was released, showing elevated recession probability for March 2020. The Chicago Fed index is based on different measures from the ones we analysed, and provides consistent evidence with our measure, with a three-week lag. T r predictive busir

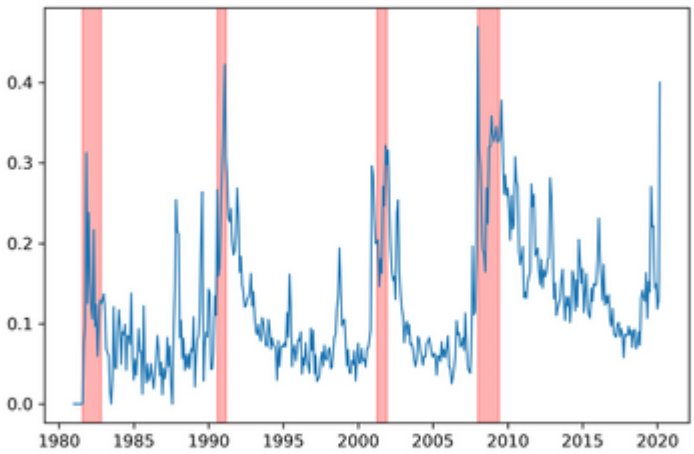

Fig. 2: Recession + depression index (1 Apr 2020)

This research programme is part of a broader programme to analyse and quantify the information available in text. Baker, Bloom and Davis provide a seminal

contribution in measuring economic policy uncertainty using similar methods. We have shown how this approach can be extended to provide a real-time measure of aggregate economic activity that can help guide policy and business decisions.

Analysing text as data to guide policy and investment decisions more broadly is a useful direction for future research, employing quantitative techniques from machine learning to guide policy and business decisions.

This article draws on findings from "Media and Business Cycles" by Salim Baz (Imperial Business School), Lara Cathcart (Imperial Business School) and Alex Michaelides (Imperial Business School, Centre for Economic Policy Research).

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Professor Cathcart holds a PhD in Finance from the University of London. She has a particular interest in the sovereign and corporate credit default swap markets, and more recently has been interested in the impact of the media on financial markets.

Read Lara's Imperial Profile for more information and publications.

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Professor Michaelides holds a PhD in Economics from Princeton University and a BA in Economics from Harvard. His research interests include household finance (for example, portfolio choice over the life cycle), asset pricing with heterogeneous agents and financial frictions, housing markets and topics in the intersection of macroeconomics and finance. His experience includes roles as a non-executive member of the Board of Directors of the Central Bank of Cyprus, visiting scholar positions at the Federal Reserve Bank of New York, a Wim Duisenberg Research Fellow at the European Central Bank, and a senior researcher at the Central Bank of Cyprus.

Read Alexander's Imperial Profile for more information and publications.