

Does economic reporting affect business cycles?

Written by

[Salim Baz](#), [Lara Cathcart](#), [Alexander Michaelides](#)

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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 substantial lag, especially relative to the onset of the recession. Figure 1 shows how the media-based index can be a useful indicator of economic activity.

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. These results illustrate the value of analysing text as data for predictive business cycle analysis.

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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About Salim Baz

PhD Student at Imperial College London

Salim is a PhD student, studying in the Department of Finance at Imperial College Business School.

About Lara Cathcart

Professor of Finance – Academic Director for MSc Finance, MSc Financial Technology, and MSc Risk Management & Financial Engineering

Lara Cathcart is Professor of Finance, as well as Academic Director of the MSc Finance, MSc Risk Management & Financial Engineering, and MSc Financial

Technology programmes. Her current research interests encompass the key areas of credit risk and behavioural finance.

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.

About Alexander Michaelides

Professor of Finance - Academic Director, MRes and Doctoral

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.