

OUTCOME-BASED EVALUATION OF LEADERSHIP DURING THE COVID-19 PANDEMIC

by CALLUM CLARKE



supervised by DR MARGHERITA NEGRI and DR LUC BRIDET

1 ABSTRACT

Voters perform what is known as 'retrospective voting,' meaning that they vote for or against an incumbent politician based on the *outcome* of their term, considering their performance. We investigate to what extent national leaders are held responsible for their nation's response to COVID-19 in retrospective voting.

3 METHODOLOGY

We first find a sample of national leaders that have stood for at least *two* elections, namely:

1. An election before the pandemic, in which they were elected
2. An election during the pandemic, in which they were either elected or unelected

We take their vote share in each election and find the difference. This difference, labelled Y , is assumed to be a measurement of how 'well' they performed during their term, in the eyes of the voters.

$$Y = S_2 - S_1$$

The leader's vote share in the pre-pandemic election

The leader's vote share in the during-pandemic election

Next, we use Y in a 'regression' – in simple terms, a line of best fit – against various COVID-19 measurements. This tells us whether or not the two correlate (whether voters *respond* to this measurement). We make the assumption that:

$$Y = a + bX_1 + cX_2 + dX_3 + \dots$$

The difference in the leader's vote share between elections

Various COVID-19 measurements that may influence the voter

6 NOTE OF THANKS

This project would have been impossible without the help and support of Dr Margherita Negri and Dr Luc Bridet of the St Andrews School of Economics.

I am also grateful to Lord Laidlaw and the Laidlaw Foundation for funding and supporting this research project.



2 BACKGROUND

Few events have caused global disruption to the same extent as the COVID-19 pandemic. Studies have already sought to document its impact on elections. Baccini, Brodeur and Weymouth (2021)¹ found that local incidence of COVID-19 negatively affected Trump's vote share; we apply similar methodology on a global scale.

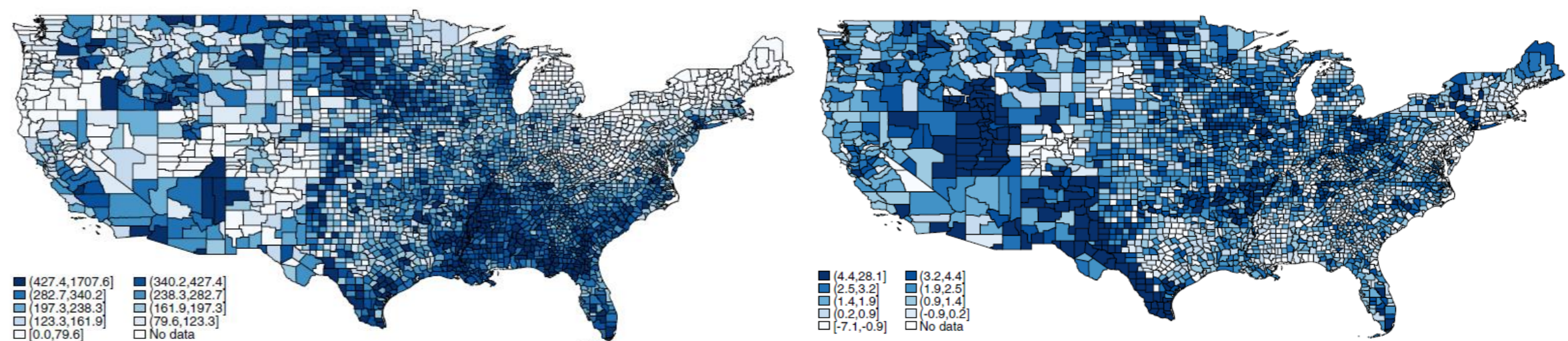


Fig 1. Left: Cumulative COVID-19 cases per 100,000 in October 2020. Right: change in vote share for Donald Trump between 2016 and 2020. Darker areas are higher COVID incidence (left) or an increase in vote share (right). Source: Baccini, Brodeur & Weymouth, 2021.

4 DATA

For the measurements X_n , we gather data on many COVID-19 variables for each leader's country, including:

1. COVID-19 cases and deaths
2. Days spent in lockdown
3. Vaccines distributed
4. Oxford Response Indexes, measuring factors such as economic support and effectiveness of testing

We finally *'control'* the data to account for factors such as population and time elapsed.

5 RESULTS

We find that cases and deaths share the strongest connection to a leader's performance: leaders are seemingly rewarded for keeping cases low. If 1% of the population tests positive, we expect the leader to lose 1.15% of overall votes.

This extends to the short-term; if cases are high during the month before the election, the leader is likely to perform worse.

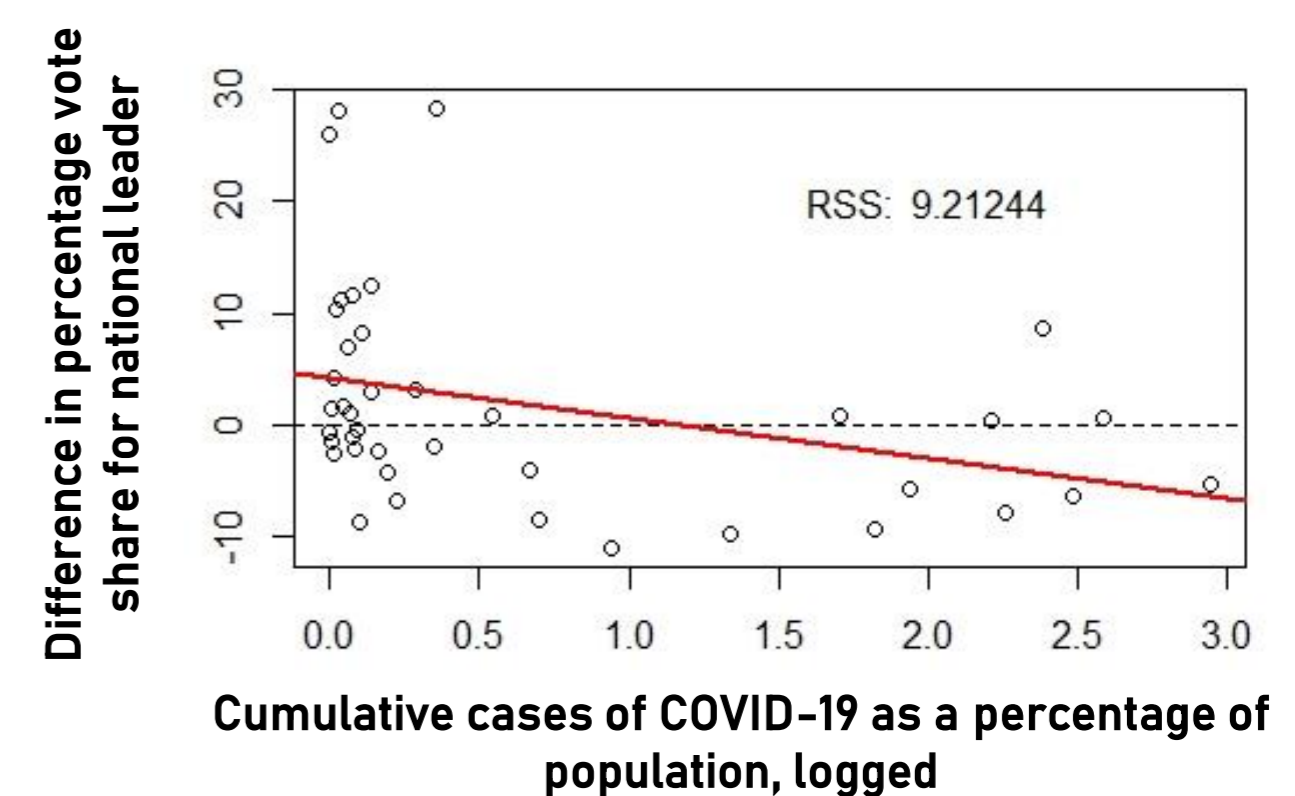


Fig 3. One of our regressions, showing the difference in a leader's vote share plotted against cases as a percentage of population (with a transformation applied). The slope is -1.15, and the regression has an adjusted R^2 of 0.05.

Overall, we learn that voters seem to respond to cases and deaths when voting, but we did not find evidence for other factors such as lockdown durations and vaccinations.

1. Baccini, L., Brodeur, A. & Weymouth, S. The COVID-19 pandemic and the 2020 US presidential election. *J Popul Econ* 34, 739–767 (2021)