
Politics in the Facebook era: How reading political ads on Facebook affects our voting behaviour (...and helped Trump to win the presidential election)

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The ways we access news and, with it, the nature of political communication have radically changed since the advent of social media. This column uses a unique dataset that matches individuals to Facebook audiences to examine the extent and intensity of online political campaigns conducted on the site before the 2016 US presidential elections. The social platform had a significant effect in persuading undecided voters to support Trump and in persuading Republican supporters to turn out on election day, but had no effect on Clinton's side.

The ways we access news and, with it, the nature of political communication have radically changed since the advent of social media. Predictive analytics provide social media platforms such as Facebook and Twitter with new tools for targeting voters at extremely granular levels. Such political 'micro-targeting' of voters with exquisitely tailored messages allows political campaigns to operate at relatively low cost, and with little or no regulatory constraints. At the same time, Facebook constitutes a main source of political information for a growing number of people. A recent study conducted by the Pew Research Center estimated that more than 60% of Americans learned about the 2016 US presidential election on Facebook.

Many political campaigners, scholars and journalists think that Facebook and Twitter may have significantly contributed to Donald Trump's election as the 45th president of the United States. The Trump campaign's primary communication channels consisted of social media, particularly Facebook and Twitter, and it reportedly spent \$44 million on Facebook, running 175,000 variations of political adverts. By contrast, Hillary Clinton's campaign spent an estimated \$28 million on social media, and it relied more heavily on traditional media outreach.

Many fear that this new way of campaigning may have large, and possibly unwanted, consequences on election results and on the functioning of democratic institutions – particularly given the recent scandals of Cambridge Analytica (related to the direct unauthorised access into people accounts) and of 'Russian fake news' (related to the spread of false political information).

Recently, the literature has devoted increasing attention to how campaigning adapts to the diffusion of the internet and social media. Bond et al. (2012) estimate that about 340,000 extra people turned out to vote in the 2010 US congressional elections because of a single Facebook political mobilisation message. Their results suggest that micro-targeting is an effective way to reach voters. Allcott and Gentzkow (2017) show that social media provided an important source of information during the 2016 election campaigns, during which most American adults were exposed to at least one piece of fake information on the Internet.

In a recent paper (Liberini et al. 2018), we bring into use a new and unique dataset that allows us to assess the effects and power of political micro-targeting. We use daily Facebook advertising prices, collected during the course of the 2016 election campaign, to exploit the variation across political ideologies, and to propose a measure for the intensity of online political campaigns. We then employ this measure to investigate:

- how intensely the presidential campaigns micro-targeted politically relevant audiences on Facebook, and
- what effect, if any, such campaigns had on voters who relied on social media for their political news.

A way of measuring the intensity and exposure to social media political campaigns

Despite recent changes, social media are still relatively closed platforms. They do not disclose most information, making the task of identifying the effects of political campaign conducted on their networks extremely challenging. At the time of the 2016 US elections, Facebook did not share information regarding the volume or content of political ads, or the identity of the campaigners who paid for these ads.

To conduct our analysis in the absence of such information, we built a proxy for political campaign intensity, which is based on variations in Facebook advertising prices charged for different audiences (defined by locations, political ideology and demographics) as observed during the critical campaign months leading up to the 2016 November elections. Facebook Marketing API, an ethical and completely privacy-preserving technology, provides novel and highly valuable data in this pursuit; the computer science literature has used this technology to address important socioeconomic problems such as gender divide worldwide.

The Facebook price data measure the intensity of political campaigns at the audience level. To estimate the effect of such campaigns on individual voting outcomes, we exploit the American National Election Survey database (ANES 2017) to derive measures of Facebook political campaign exposures based on respondents' Facebook habits. We then match each respondent to Facebook audiences based on demographic, political and location details and we compute a personalised measure of treatment to political campaign on Facebook.

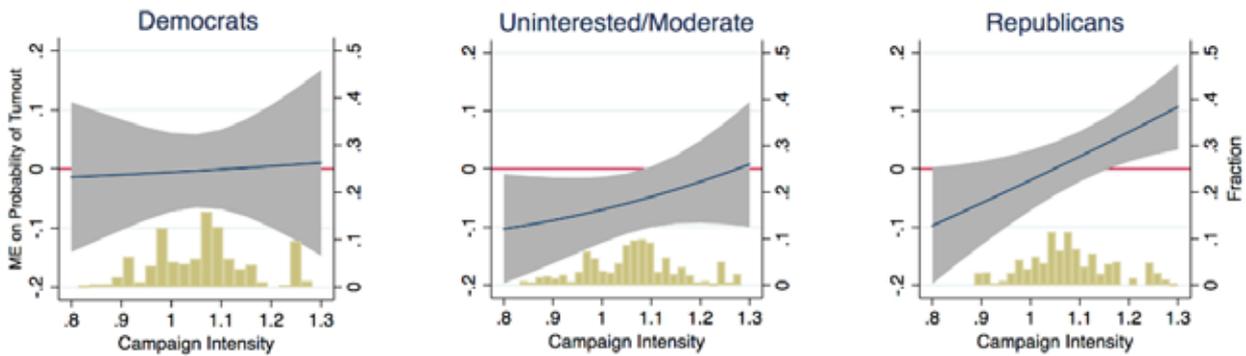
Main findings

We learn a number of lessons from our analysis. Our results indicate that, overall, Facebook exposure matters for voting choices. Advertising on Facebook is an effective way to persuade and mobilise voters, but this effect only surfaced in the direction favouring Donald Trump.

More specifically, targeted Facebook campaigning increased turnout among core Republican voters but not among Democrats or independent voters. Figure 1 plots the differential marginal effect of campaign exposure on voter turnout between Facebook regular users and non-users, as a function of campaign intensity for three groups of potential voters: Democrats, Republicans, and swing voters (i.e. the moderate, undecided, or uninterested voters). The results show a clear positive effect of the Facebook campaign on turnout among Republican supporters, but not on the other two groups (Democrats and swing voters). As Figure 1 shows, this effect is not only significantly different from zero but also large in magnitude. Our estimates indicate that exposure to political ads on Facebook increases the likelihood of voting by between 5% and 10%. Note that this difference vanishes as the campaign become less intense. This suggests that

Trump (or someone on his side) was effective in mobilising his core supporters to turn out.

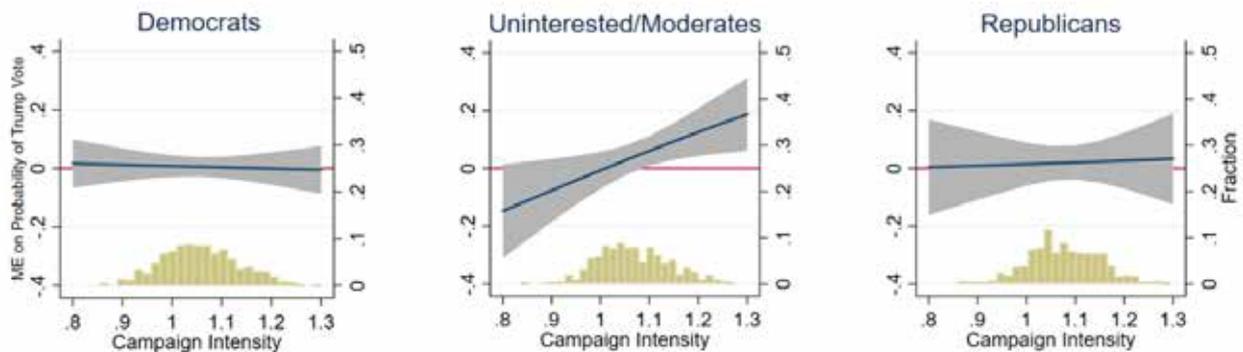
Figure 1. Differential marginal effect of campaign exposure on voter turnout.



Notes: The solid line represents the differential marginal effect of campaign exposure on voter turnout between 'regular' Facebook users and non-users; the grey-shaded area shows the 95% confidence interval. The bar-histogram below each line represents the distribution of campaign intensity across each group of respondents.

A second finding indicates that targeted Facebook campaigning increased the probability that a previously non-aligned voter would vote for Trump; as shown in Figure 2, if the voter used Facebook regularly, the probability increased by at least 5%. Similar effects emerged among those who do not have a university or college degree.

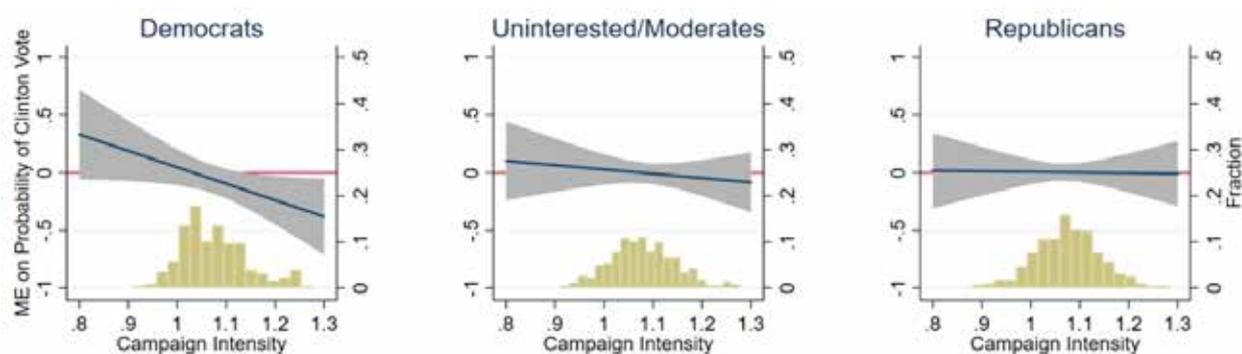
Figure 2. Differential marginal effect of campaign exposure on Trump vote



Notes: The solid line represents the differential marginal effect of campaign exposure on Trump vote between 'regular' Facebook users and non-users; the grey-shaded area shows the 95% confidence interval. The bar-histogram below each line represents the distribution of campaign intensity across each group of respondents.

A third result shows that this micro-targeting was ineffective for Clinton, failing to boost turnout or to sway voters in her favour (Figure 3).

Figure 3. Differential marginal effect of campaign exposure on Clinton vote



Notes: The solid line represents the differential marginal effect of campaign exposure on Clinton vote between 'regular' Facebook users and non-users; the grey-shaded area shows the 95% confidence interval. The bar-histogram below each line represents the distribution of campaign intensity across each group of respondents.

Our work shows that targeted Facebook campaigning appears to have reduced the probability of a voter changing his mind about which candidate to support. This was true among males, those without college education, and those who initially declared themselves to be aligned with the Republican party. These results provide some support for the hypothesis that exposure to social media strengthens polarisation.

Our analysis also suggests that reading political ads on Facebook does not make individuals more politically informed, but accessing news on newspapers and surfing the internet does, as a simple test employed to measure respondents' improvement in political knowledge during the US presidential campaign showed.

Overall, our results show that social media effectively empowered politicians to influence key groups of voters in electoral races. It provides further evidence that recent political outcomes, such as Brexit and the election of President Trump, might be largely due to the effective use of data analytics.

References

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