Political Donor Motivations and Social Media: A Time-Series Analysis

The two predominant theories of political donor motivations are the access-oriented model and the consumption model. In the access-oriented model, political donors contribute to campaigns in order to seek and acquire access and influence with politicians in order to get them to support specific policy issues. The consumption model of donors sees political contributions as being an extension of voting along a participatory spectrum, and that donors support candidates who they already know support policy issues that the donors care about. This paper combines Twitter and Facebook posts from politicians in the 2016 election cycle to measure public support of policy issues and administrative political donation data. These two datasets are analyzed in conjunction with one another to see if politicians' public support of various policy issues on social media precede, lag, or have no relationship with donations from various clusters of political donors. The access-oriented model of political donors would predict that donations from specific groups of donors would precede public support of various policies. In contrast, the consumption model of political donors would predict that donations from various groups of donors would lag in response to public support of policy issues by candidates. This paper sets these two models of political donors against each to see if evidence of either model is found in observational data.

Data

Data for this research comes from two primary sources: politicians' social media posts and political donation data. For social media posts, this paper used the Facebook and Twitter APIs to collect social media posts from all candidates for the Wisconsin State Senate and Wisconsin State Assembly during the 2016 election cycle (n = 82,851). A subset of these posts were hand-coded into 27 topical categories. This subset was used to train

a BERT deep learning transfer model that was used to predict the remainder of the posts (train dataset = 8,242, 10% of posts; validation dataset = 4,122, 5% of posts). Political donation data for all candidates to the Wisconsin State Legislature during the 2016 election cycle was collected from the Wisconsin Campaign Information System (CFIS). These donations were used to create a network of political donations with candidates and donors serving as nodes and donations between them as edges. This network was clustered into distinct communities so that donors in each community are most similar to one another based on which campaigns they contributed to.

Methodology

These two datasets were analyzed against each other using the granger causality time-series methodology. This methodology detects whether movements in one time series precedes, lags, or is not related to another time series. Specifically, this paper compares time series of donations from clusters of political donors and times series of the number of social media posts by each topic that were made by campaigns that each donor cluster contributed to. For example, a time series of donations from a donor cluster was compared to the aggregate count of posts about a given topic made by candidates that the donor cluster contributed to.

Results

Initial results suggest that both models of political donor motivation–the access-oriented and consumptive models–are potentially found. Different clusters of political donors exhibit different behaviors. Some clusters of political donors show behavior that is in-line with the access-oriented model, where their donations precede public support of policy issues by the candidates that they contributed to. Contribution from other donor clusters align with the conumptive model of political donors and contributions from their cluster lag public support of various policy issues by candidates. Other donor clusters exhibit

no behavioral connection to candidates' public support of policy issues–suggesting that there is some confounding factor or motivation for donating to the campaigns that they contributed to.

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wordcountaddin:::text_stats()
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Method	koRpus	stringi
Word count	614	610
Character count	4017	4017
Sentence count	26	Not available
Reading time	3.1 minutes	3 minutes