

“Social Media and Political Donations: Evidence from Twitter”

by Maria Petrova, Ananya Sen, Pinar Yildirim

Discussion prepared by Daniel L. Chen

June 2016

Research Question

Does Opening a Twitter Account Increase Campaign Contributions?

- Broader question about the role of technology in electoral politics and access

Identification Strategy

- Differences-in-differences
 - Before-after among adopters
 - High-low Twitter penetration

Summary

- 2% increase in campaign contributions
 - Effects solely for newly elected
 - Larger effects for new donors and with low newspaper circulation

One Picture

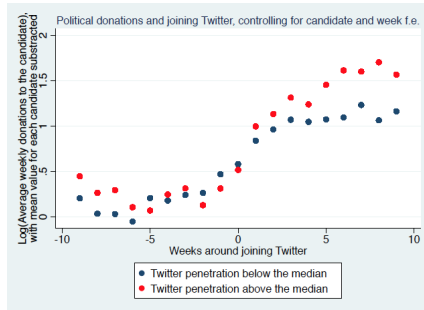
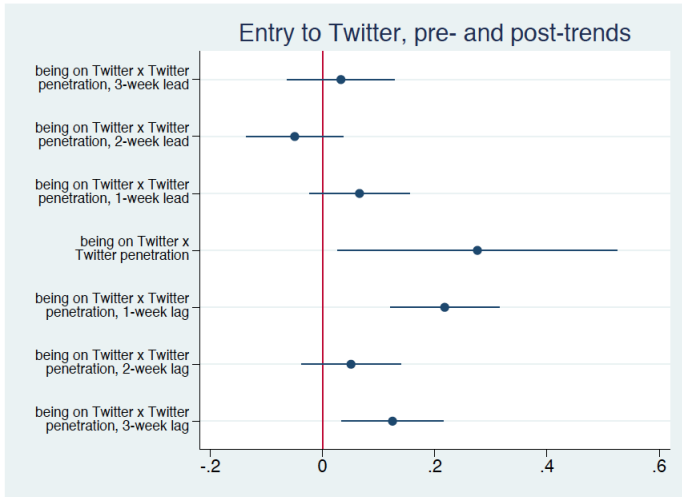


Figure 2: Donations and Twitter Penetration

- Paper acknowledges that joining Twitter is not exogenous or random so focuses on heterogeneity
 - Pre-trend (up to) 5 weeks prior to joining Twitter for both groups
 - Candidate-specific linear trends rather than week fixed effects or candidate-month fixed effects
 - Pre-trend differences in weeks 5-10 prior to joining Twitter

Second Picture



- Missing the 5-week et.al leads

Baseline

Table 3: Joining Twitter and Aggregate Donations: Baseline Estimates

VARIABLES	Log (aggregate donations)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	All Politicians					New	Experienced
on Twitter x Twitter penetration	-0.340*** [0.117]	0.359** [0.148]	0.353** [0.147]	0.349** [0.147]	0.378** [0.144]	0.692*** [0.169]	-0.217 [0.256]
on Twitter	1.312*** [0.116]	0.435*** [0.104]	0.406*** [0.103]	0.161 [0.100]	0.700 [2.404]	-3.185 [3.268]	7.496* [4.450]
Log (campaign expenditure)			0.094*** [0.004]	0.091*** [0.004]	0.091*** [0.004]	0.121*** [0.007]	0.079*** [0.004]
Politician-Month Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes
Time trend				Week	Week	Week	Week
Baseline controls x on Twitter					Yes	Yes	Yes
Observations	565,968	565,968	565,764	565,764	565,764	236,700	329,064
R-squared	0.019	0.820	0.821	0.823	0.823	0.885	0.787

- Row 1: the paper focuses on this heterogeneous effect
- Row 2: main effect disappears with seasonality control (week f.e.) in Column 4
- Politician-Month Fixed Effects
 - Means if I opened the account on July 5, I have 4 days in the pre-period and 26 days in the post-period
 - May be sensitive to who opens at the beginning or end of month; it's not controlling for pre-trend
 - Should have politician-Linear time trends or polynomial time trends (think of this like RDD with higher-order polynomials of the forcing variable)
- Column 6: Need same battery of robustness checks (figures & gauntlet) for new politicians

Comments

- Donor fixed effects?
 - Is there displacement from future donations or from other candidates?
- Tweet content analysis is not causal
- Log of 0
- Table 8 is main “balancing test”, what about Twitter X State FE? Type of candidate FE? etc?

Table 8: Demographic Characteristics and Donations

VARIABLES	Log (aggregate donations per week)					
	(1)	(2)	(3)	(4)	(5)	(6)
on Twitter x penetration	0.349** [0.147]					
on Twitter x median household income		-0.017 [0.015]				
on Twitter xshare of rich			-0.031 [0.083]			
on Twitter xshare of those with college education				-2.175 [1.839]		
on Twitter xvote share of Bush in 2004					0.164 [0.858]	
on Twitter xshare of African Americans						0.279 [1.024]
onTwitter	0.161 [0.100]	1.112* [0.622]	0.480** [0.216]	2.161 [1.489]	0.323 [0.417]	0.374*** [0.129]
Log (campaign expenditures)	0.091*** [0.004]	0.091*** [0.004]	0.091*** [0.004]	0.091*** [0.004]	0.091*** [0.004]	0.091*** [0.004]
Politician-Month Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Time trend	Week	Week	Week	Week	Week	Week
Observations	565,764	565,764	565,764	565,764	565,764	565,764