Replication

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1 Predispositions and the Political Behavior of American Economic Elites: Evidence from Technology Entrepreneurs¹

2 Abstract

Broockman, Ferenstein, and Malhotra (2019) show that technology entrepreneurs have a unique set of political beliefs: they are liberal on social issues, globalism, and redistribution, but very conservative on government regulation.

3 Introduction

The authors seek to disprove the assumption that economic elites are homogenous and that increases in their political power necessarily increases inequality across the board—specifically, they focus on describing the political behavior of technology elites, who are growing increasingly wealthy and politically influential. They use four original surveys—of technology entrepreneurs in which the modal respondent is a millionaire who founded or runs a tech industry company with around 100 employees; of partisan donors with an oversample of top 1% donors; and subsamples of wealthy individuals and partisans in the mass public from Survey Sampling International. Throughout the paper, they compare the political beliefs of technology entrepreneurs to these other groups. They demonstrate that technology entrepreneurs support liberal redistributive, social, and globalist policies, but conservative regulatory policies. This is a unique bundle among other economic elites that the authors speculate stem from technology entrepreneurs' unique predispositions. Technology entrepreneurs believe more strongly in markets and entrepreneurship than general Democrats and large Democratic donors—they are more opposed than Democrats to regulation regardless of the industry and generally prefer private to public-sector management. Uniquely among groups, they support redistribution but oppose regulation. Thus, despite some popular belief, they are not very likely to be libertarians. Furthermore, the authors compared the results of entrepreneurs to Stanford CS and biology majors to show that these political predispositions are apparent in STEM undergraduates before they enter the tech workforce. Like the general public, economic elites' political views stem from values and predispositions, and if similar-minded people tend to cluster in similar industries, views of elites can be distinguished among industries. The authors surmise that their findings provide evidence of looming changes in the Democratic Party, since technology elites are have the financial means to influence candidates but are opposed to many government interventions that have been the standard Democratic answer to inequality and receive support from traditionally Democratic interest groups such as unions.

4 Replication

Numbers I have not been able to replicate correctly: 1) in Table 2: "Technology Entrepreneurs Do Not Agree with Libertarian Philosophy," my percentage for Tech Entrepreneurs is slightly off; 2) in Table 6: "Technology Entrepreneurs No More Likely to Oppose Regulating Technology Products Than Democratic Groups," my linear regression contains the wrong coefficients relating to the "tech product/service" indicator variable. I suspect this is due to scaling the variable incorrectly so I will continue looking into that.

 $^{^1}$ All analysis for this paper is available at https://github.com/michgao87/gov1006-milestone6

5 Extension

My proposed extension is to re-explore the paper's findings with a focus on age. I am interested in seeing how political beliefs vary with age among technology entrepreneurs, in particular. Just as it has been documented elsewhere that people tend to become more conservative as they grow older, I wonder if a similar trend exists among the entrepreneurs. While the survey of tech elites from this paper does not trace people over time, it did ask all respondents for their age. Considering how the tech landscape is consistently changing—I imagine respondents could span from the early tech era of the 1980s and 1990s, to the 2000s, to the early 2010s, when the survey was conducted—I believe there could be significant differences in beliefs among different age groups. I could foresee using age to explore the data in several ways. First, the paper presents descriptive results of survey responses for different groups such as the Democratic public, Democratic donors, and technology entrepreneurs. I would propose replicating these same analyses, since these are still questions of interest for me, and stratifying by age (perhaps not across all groups, but at least across the tech elites) to see what new patterns emerge. Second, the paper runs regressions that compare technology entrepreneurs' political dispositions with Democrats to show that they are not uniquely concerned about regulation of the tech industry as opposed to other industries and that they generally prefer private to public sector management. I would propose two strategies to include age. First, I could add age as an interaction term. This way, I could see the effect of age on being a technology entrepreneur. I could also compare the effect of age on different groups: is the effect stronger on tech entrepreneurs than Democratic donors, for example? Secondly, I could use age as a predictor categorical variable and run the regression only on the tech entrepreneur subset, if I wanted to break out the data by age group. Ultimately, if there are significant results when breaking down the data further by age, this could add to the authors' conclusions. In their discussion, they predict that tech elites will continue to grow their political influence as their financial means increase and they push for less government regulation. Since most of these tech entrepreneurs are Democrats, this means they may push the Democratic party away from their traditional philosophy and their traditional base of support, such as labor unions. If it turns out that younger tech entrepreneurs are the ones who are most pro-market and anti-regulation, this may suggest that the authors' predicted outcome is more likely to occur in the future. But if the younger tech entrepreneurs are also the ones who are most pro-redistribution, perhaps their increased influence in Democratic politics may help create a world that most Democrats would approve of in the whole.

6 Literature Review

Of interest:

Gregory Ferenstein's "The Age of Optimists"

7 Appendix

Below are replicated figures and tables in the order they appear in the paper. I did not replicate text-only tables.

Milestone 5 Graphic: I included a caption for Figure 4, "Average of Policy Indices by Area." Since I replicated all figures, I put them all here in the Appendix, but that would be considered my graphic from Milestone 5.

Figure 1: Technology Entrepreneurs' Wealth Is Growing, and They Increasingly Contribute It to Democrats

Share of Forbes 400 Who Are in Tech Industry, by Year

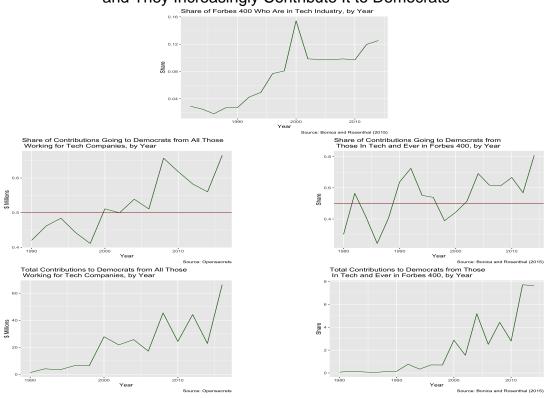


Figure 2: Democratic Donors' Forecasts of Groups
That Will Gain and Lose Influence in the Party

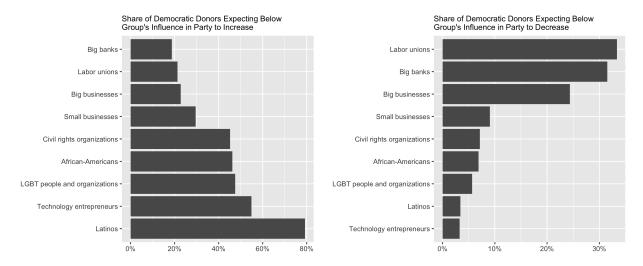
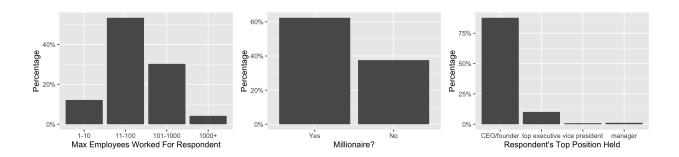


Figure 3: Self–Reported Respondent Characteristics: Technology Entrepreneur Survey



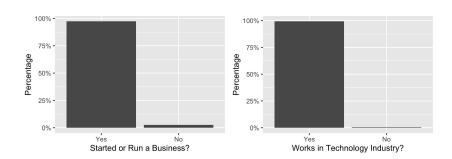


Table 2: Technology Entrepreneurs Do Not Agree with Libertarian Philosophy

	Technology Entrepreneur Survey	Democratic Donor Survey	Republican Donor Survey	Democrats (Public Survey)	Republicans (Public Survey)
Agree with Libertarian Philosophy	22.4%	5.1%	68.4%	43.8%	62.5%

Note: ^a Data are from our technology entrepreneur donor, and mass public surveys. The surveys asked whether individuals agreed or disagreed with the statement "I would like to live in a society where government does nothing except provide national defense and police protection, so that people could be left alone to earn whatever they could." This question wording is from Page, Bartels, and Seawright (2013). Cell probabilities above give the percent of respondents who either somewhat or strongly agreed.

Table 3: Technology Entrepreneurs Uniquely Support Redistribution But Oppose Regulation

	Technology Entrepreneurs	Democratic Donors	Republican Donors	Democrats (Public)	Republicans (Public)	Millionaires (Public)
Do Reg, Do Redist	17.9%	62.6%	2.8%	53.8%	28.8%	31.8%
Don't Reg, Do Redist	60.1%	34.7%	20.9%	36.3%	34.5%	30.3%
Do Reg, Don't Redist	2.8%	1.2%	1.6%	6.0%	9.3%	9.1%
Don't Reg, Don't Redist	19.3%	1.5%	74.7%	3.9%	27.4%	28.8%

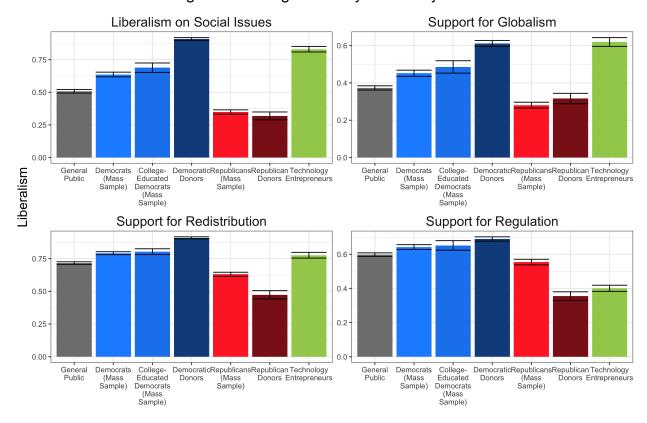
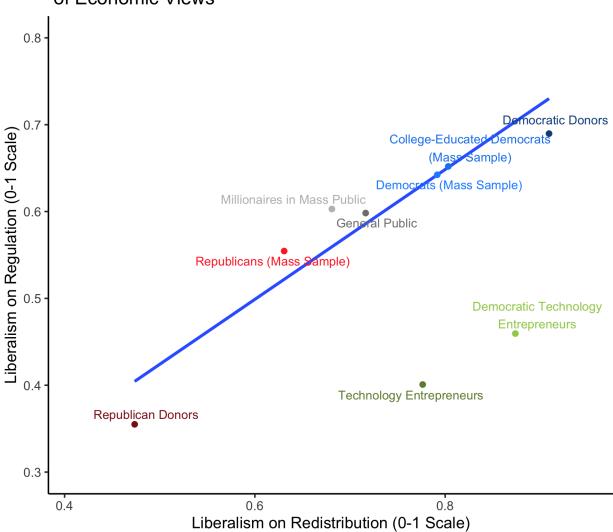


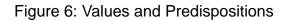
Figure 4: Average of Policy Indices by Area

Figure 4 sums up the main finding of the paper – technology entrepreneurs' distinctive bundle of policy views. Technology entrepreneurs have liberal views in many areas. On social issues, globalism, and redistribution, they are more supportive than the Democratic public, educated Democrats, and Democratic donors. Yet on the topic of regulation (the questions included "government regulation of business does more harm than good" and "regulate 'gig' workers like regular workers"), tech entrepreneurs were significantly less supportive than those same groups of Democrats. On regulation, tech entrepreneurs actually resemble Republicans much more.

Figure 5: Technology Entrepreneurs' Distinctive Set of Economic Views



Note: Each point shows the mean of each sample's scores on the redistribution and regulation scales on the x-s y-axes, respectively. The blue line shows the line of best fit for samples other than the technology sample.



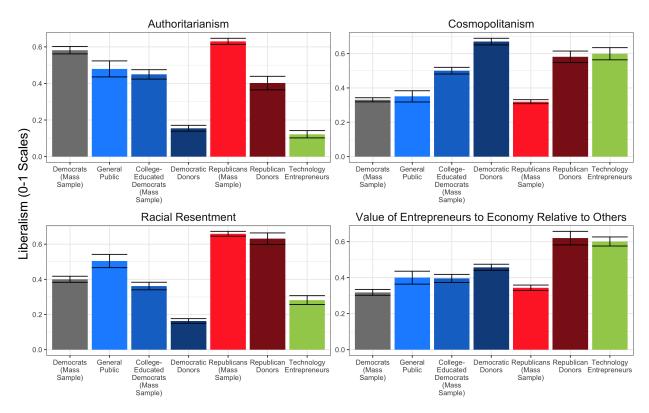
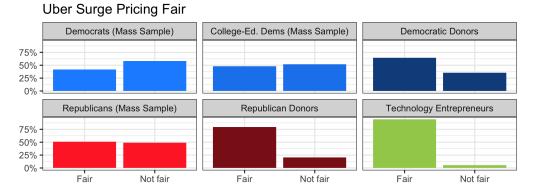


Figure 7: Uber versus Florists Survey Experiment



Florists' Raising Prices on Holidays Fair

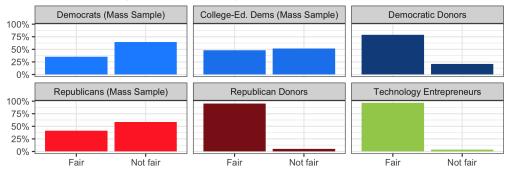


Table 5: Technology Entrepreneurs More Likely to Oppose Regulation of Technology, and Less Likely to Oppose of Other Industries, But So Are Other Democrats

	DV = "Government regulation of [CATEGORY] does more harm than good." (1-4 scale)			
	Technology Entrepreneurs	Democratic Donors	Democratic Partisans	All Three Groups
Treatments "the technology industry"	0.28** (0.11)	0.46*** (0.07)	0.19** (0.09)	0.28** (0.11)
"the financial industry	(0.11)	(0.07)	(0.09)	(0.11)
(such as banks)"	-0.50^{***} (0.11)	-0.32^{***} (0.08)	-0.20^{**} (0.09)	-0.50^{***} (0.12)
"the pharmaceutical industry"	-0.37^{***} (0.11)	-0.08 (0.07)	-0.10 (0.08)	-0.37^{***} (0.11)
Sample Dummies (Technology	, ,	, ,	, ,	, ,
Entrepeneurs = Base Category) Democratic Donors				-0.94***
Democrats (Mass Public)				(0.10) -0.03
Treatment x Sample Interactions Technology \times Democratic Donors				(0.10) 0.18
${\it Technology} \times {\it Democrats} \; ({\it Mass Public})$				(0.14) -0.09
Finance \times Democratic Donors				(0.14) 0.19 (0.14)
$Finance \times Democrats \; (Mass \; Public)$				0.30^{**} (0.14)
Pharmaceuticals \times Democratic Donors				0.29** (0.14)
$Pharmaceuticals \times Democrats \; (Mass \; Public)$				0.27^* (0.14)
Constant (Base Category $=$ Tech.				,
Entrepeneurs' Responses				
When No Industry Is Specified)	2.61^{***} (0.08)	$1.67^{***} $ (0.05)	2.58*** (0.06)	2.61^{***} (0.08)
Observations	439	846	817	2,102
\mathbb{R}^2	0.13	0.12	0.02	0.25

Standard errors are in parentheses.

Note:

^{***}p < .001, **p < .01, *p < .05 (two-tailed).

Table 6: Technology Entrepreneurs No More Likely to Oppose Regulating Technology Products Than Democratic Groups

	DV = "Opposition to regulation of particular products and services" (0-1 scale)
Technology Elites	0.083***
	(0.016)
Tech Product/Service	1.306***
,	(0.011)
Technology Elites x	,
ech Product/Service	0.107***
,	(0.023)
onstant (Base Category =	` ,
Democratic Samples)	0.200***
1 /	(0.008)
Observations	$12{,}65\overset{\circ}{6}$
2	0.611

Data are stacked at the respondent-by-product/service level.
Only technology elites, Democratic donors, and Democratic partisans in the public are included in this regression.
Robust standard errors are clustered by respondent in parentheses

**p < .01, *p < .05 (two-tailed).

Note:

Table 7: Relative to Democrats, Technology Entrepreneurs Prefer Private- to Public-Sector Management Generally

	Approval of Privately Run Programs (1–5) Minus Approval of Govt-Run Social Programs (1–5)	Govt Does Good Job Running Social Programs (1–4)	Entrepreneurs Get Too Much Credit (1–4)
Dem. Donors	-1.73***	0.64***	0.43***
	(0.10)	(0.05)	(0.05)
Dem. (Mass Public)	-0.62^{***}	0.17***	0.76***
	(0.10)	(0.05)	(0.05)
Rep. Donors	1.16***	-0.89***	-0.06
	(0.13)	(0.07)	(0.06)
Rep. (Mass Public)	-0.05	-0.15^{***}	0.76***
- ,	(0.10)	(0.05)	(0.05)
Constant	0.44***	2.19***	2.20***
	(0.08)	(0.04)	(0.04)
Observations	2,952	2,940	3,069
\mathbb{R}^2	0.22	0.21	0.13

Standard errors are in parentheses.

Note: ***p < .001, **p < .01, *p < .05 (two-tailed).

Liberalism on Social Issues Support for Globalism 0.6 0.75 0.50 0.4 0.25 0.2 0.00 Tech Entrepreneurs Dem College Public Tech Entrepreneurs Bio Majors CS Majors Bio Majors Dem Donors CS Majors Liberalism Support for Redistribution Support for Regulation 0.75 0.6 0.50 0.4 0.25 0.2 0.00 Dem College Public CS Majors Bio Maiors Dem Donors CS Majors Bio Majors Dem Donors Tech Tech Entrepreneurs Entrepreneurs College Public

Figure 8: Comparing Democrats, Technology Entrepreneurs, and Undergraduates: Policy Views

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