Trust and Democracy: Political Stability in Times of Economic Crisis

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Motivation

- What we know
  - Politics $\rightleftharpoons$ Economics
  - Culture $\rightleftharpoons$ Economics
  - Culture $\rightleftharpoons$ Politics
- In reality, these relationships interact
  - Some theoretical evidence
  - Very little empirical evidence

- This paper: How do cultural traits (trust) interact with economic forces (recessions) in affecting political outcomes (leader turnover)?

Motivation

Observation: political responses to recessions vary widely, from:

1. Blaming politicians for incompetence, corruption, laziness, to...
2. Accepting that the downturn may be due to bad luck.

(1) or (2) appear correlated with interpersonal trust. Some examples....

Example 1: Brazil

During the late 1980s and early 1990s, Brazil suffered an economic downturn. Then-President Jose Sarney became unpopular and was blamed for the country's economic woes.

> *"Sarney [is] an easy target for those seeking to assign blame for Brazil's sudden economic decline" (Chicago Tribune, 1987).*

> *"For many Brazilians, Mr. Sarney's biggest failure has been the economy" (NYT, 1990).*

Example 2: Sweden

Sweden experienced the worst economic downturn in 50 years during 1991-1993. Media accounts described an environment of relative political harmony. For example, Hubert Fromlet, chief economist with Swedbank, said of the extremely high interest rate,

> *"'Yes, it is a crazy rate... but there is a high degree of acceptance among Swedes, because they realize that this is an emergency'" (Swisher, 1992).*

This paper

Question: Are countries with higher average trust less likely to experience political turnover during a recession?

- How important is trust in determining the political response to an economic crisis?
- Are the anecdotes representative?
- Can policy makers predict where political instability will arise?

What we do

- DiD: Compare the probability of leader turnover
  - Country-years with and without a recession
  - Countries with higher and lower trust
    - Long-run average, treat trust slow-moving
- Main challenge: Omitted variables
  - Baseline specification controls for leader characteristics; country-year economic and political characteristics (GDP, Polity score, etc.)
  - Each control interacted with recessions and trust
  - Additional robustness checks

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Related literature

- Culture and trust
  - Consequences (e.g., Algan and Cahuc 2010, etc.)
    - Under asymmetric information (e.g., Bloom and Van Reenen 2007)
  - Determinants (e.g., Lowes et al. 2017, Lowes and Montero 2017, etc.)
  - Interaction with other cultural traits (e.g., Martinez-Bravo 2017a, 2017b)
- The consequences of economic recessions
  - For political stability (e.g., Brender and Drazen 2008)
  - For trust (e.g., Stevenson and Wolfers 2011, Algan et al. 2017)

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Baseline equation

$$y_{it} = \beta\, Trust_i \times Recession_{it-1} + \mathrm{X}_{it-1}\Gamma + \gamma_t + \alpha_i + \varepsilon_{it} \qquad (1)$$

- country i,year t
- γ_t, α_i: year and country FE
- $\mathrm{X}_{\mathrm{it}-1}$:
  - characteristics of the leader in power (age when she entered office, gender, days in office and the number of times previously in office)
  - real per capita GDP
  - regime type, measured by the polity2 score
  - an indicator for the presence of a conflict or war
- $\mathrm{X}_{\mathrm{it}-1} \times Trust_i$ and $\mathrm{X}_{\mathrm{it}-1} \times Recession_{it-1}$
- Cluster std. err. at the country level

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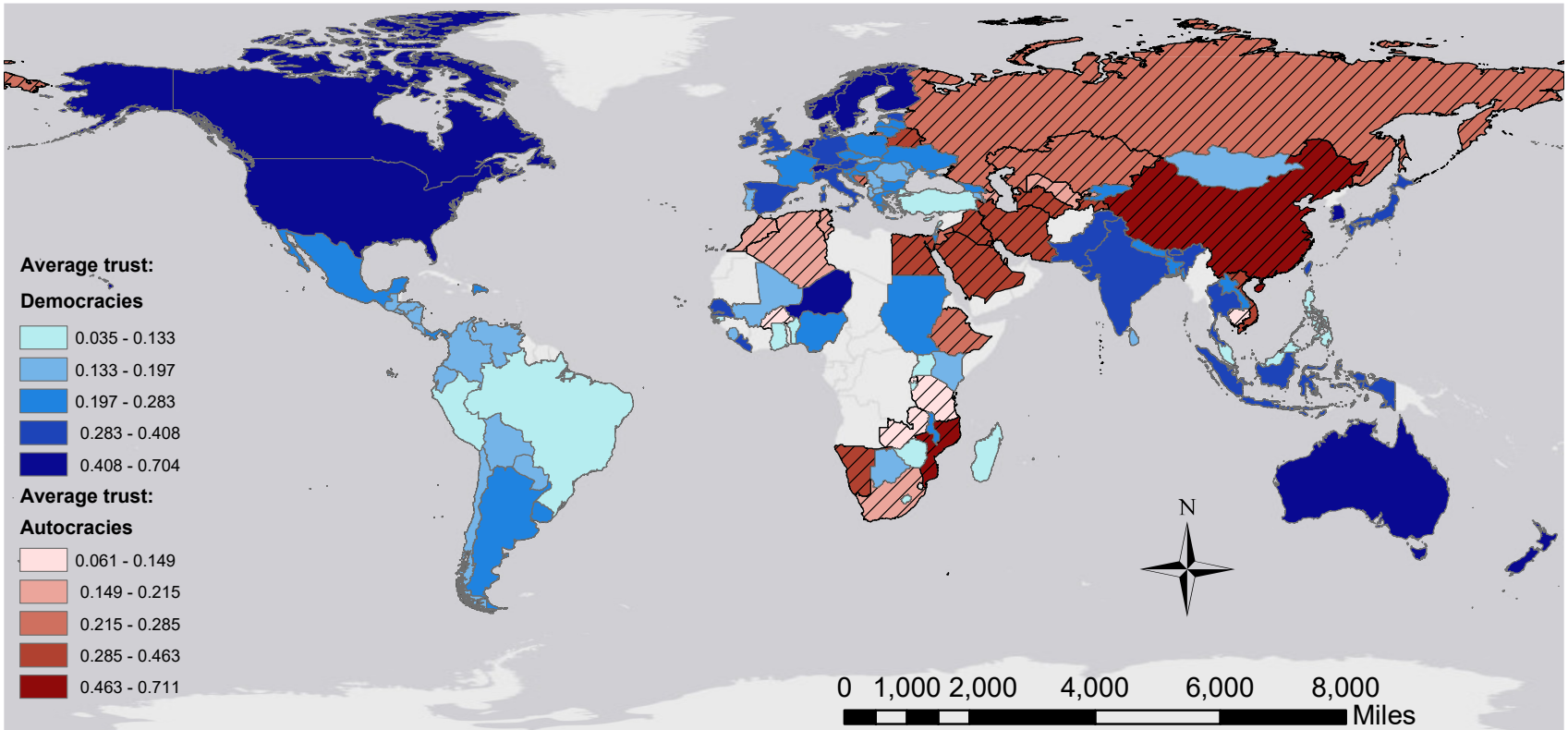
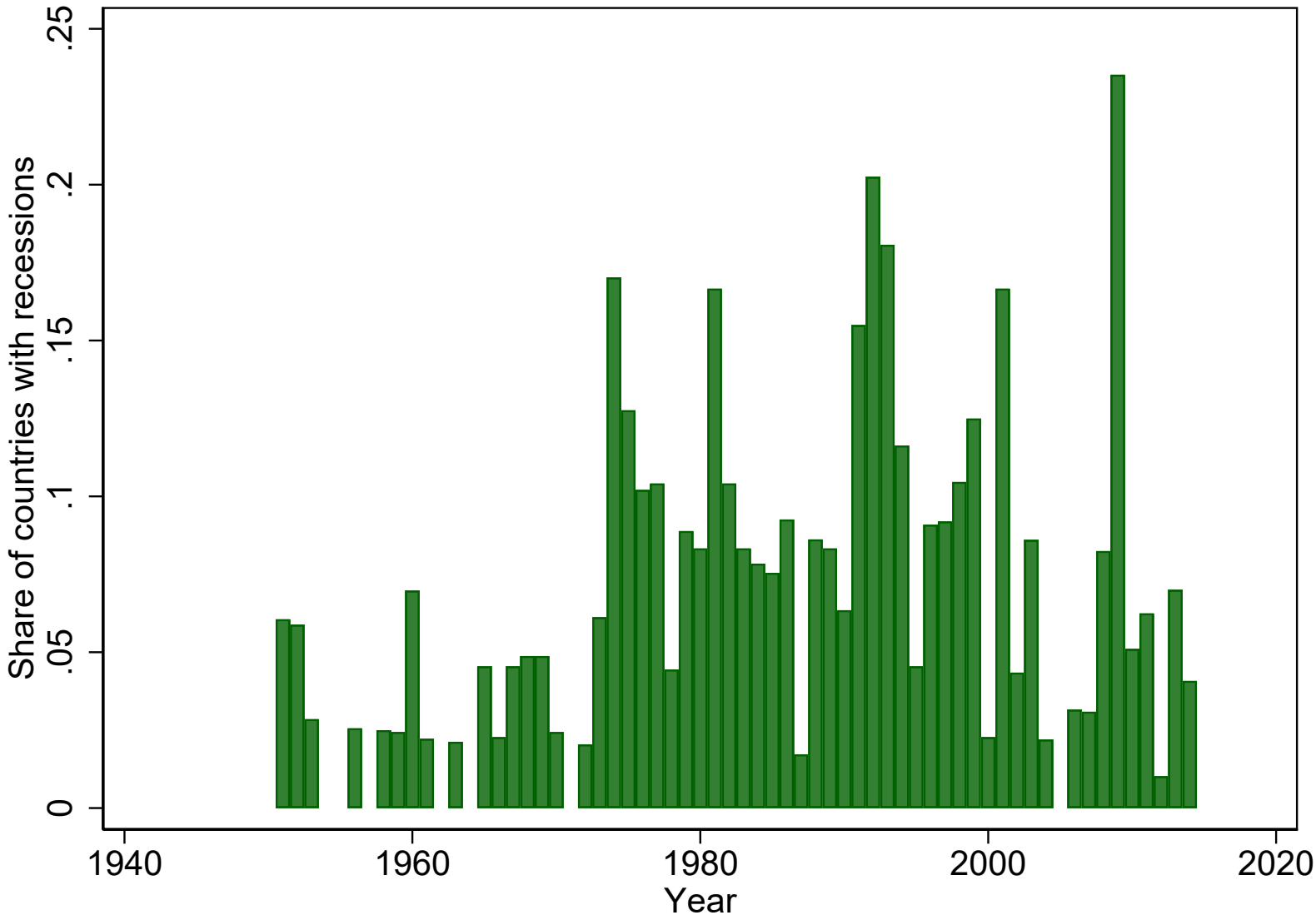
Data

- Archigos 4.1 1945-2015
  - Effective ruler (e.g., no constitutional monarchs)
- Penn World Tables (GDP measured in 2005 USD)
  - Recession if value is $<$ global 10th percentile (robust to many variants)
- *World Value Surveys*, *European Values Surveys*, *Latinobarometer Surveys*, the *Asiabarometer Surveys*, and the *Afrobarometer Surveys, 1984-2014*
  - WVS "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?"
  - *Barometer* Surveys, "Generally speaking, would you say that you can trust most people, or that you can never be too careful when dealing with others?"

Trust across democracies and autocracies



Frequency of country-level recessions over time



Correlates of trust

	Correlation with Trust		Correlation with Trust
Panel A: Correlates of Trust		**Panel C: Macroeconomic Characteristics**	
Average Years of Education	0.48***	Real GDP, mean	0.16***
% with Primary Education	0.04	Real GDP, variance	0.12***
Gini Coefficient	-0.61***	Real GDP Growth, mean	-0.24***
% Urban Population	0.48***	Real GDP Growth, variance	-0.25***
% Immigrant Population	0.40***	Unemployment Rate, mean	-0.29***
Average Conflict Count	-0.14	Unemployment Rate, variance	-0.15
Ethnic Fractionalization	-0.38***	Trade Intensity, mean	0.00
Linguistic Fractionalization	-0.11	Trade Intensity, variance	-0.05
Polity2 Score	0.48***		
Leader Turnover	0.11		
Quality of Governance	0.68***	**Panel D: Sectoral Shares**	
		Agriculture (% GDP)	-0.43***
		Mining (% GDP)	0.31**
Panel B: Cultural Traits		Manufacturing (% GDP)	0.22**
Self: Avoid Danger	0.61***	Construction (% GDP)	0.22*
Self: Take Risks	0.31***	Retail (% GDP)	0.00
Self: Value Tradition	0.58***	Transportation (% GDP)	0.24*
Child: Thrift	-0.18	Other (% GDP)	0.27**
Child: Obedience	-0.51***		
Locus of Control	0.11		
Individualism	0.69***		

Notes: All controls vary at the country-level. Coefficients in column (2) come from a regression at the country-year level, and controls are interacted with the recession indicator. All rows cover 64 years.

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Baseline estimates

	(1) Baseline	(2) Region FE x Year FE	(3) Logit (Odds Ratios)
Mean of Dependent Variable	0.240	0.240	0.226
Trust x I(Growth<global 10th percentile)	-0.558***		
	(0.210)		
I(Growth<global 10th percentile)	-0.350		
	(0.409)		
Effect of I(Growth<global 10th percentile) at variable means	*0.299*** (0.069)*		
R-squared	0.181		
Country FE	Y	Y	Y
Year FE	Y	N	Y
Number of Clusters (Countries)	95	95	90
Observations	3,255	3,255	3,177

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Mean of Dependent Variable	0.240	0.240	0.226
Trust x I(Growth<global 10th percentile)	-0.558***	-0.683***	0.0177**
	(0.210)	(0.239)	[0.015]
I(Growth<global 10th percentile)	-0.350	-0.575	0.0827
	(0.409)	(0.404)	[0.322]
Effect of I(Growth<global 10th percentile) at variable means	*0.299*** (0.069)*	*0.324*** (0.072)*	*6.69*** [0.000]*
R-squared	0.181	0.252	
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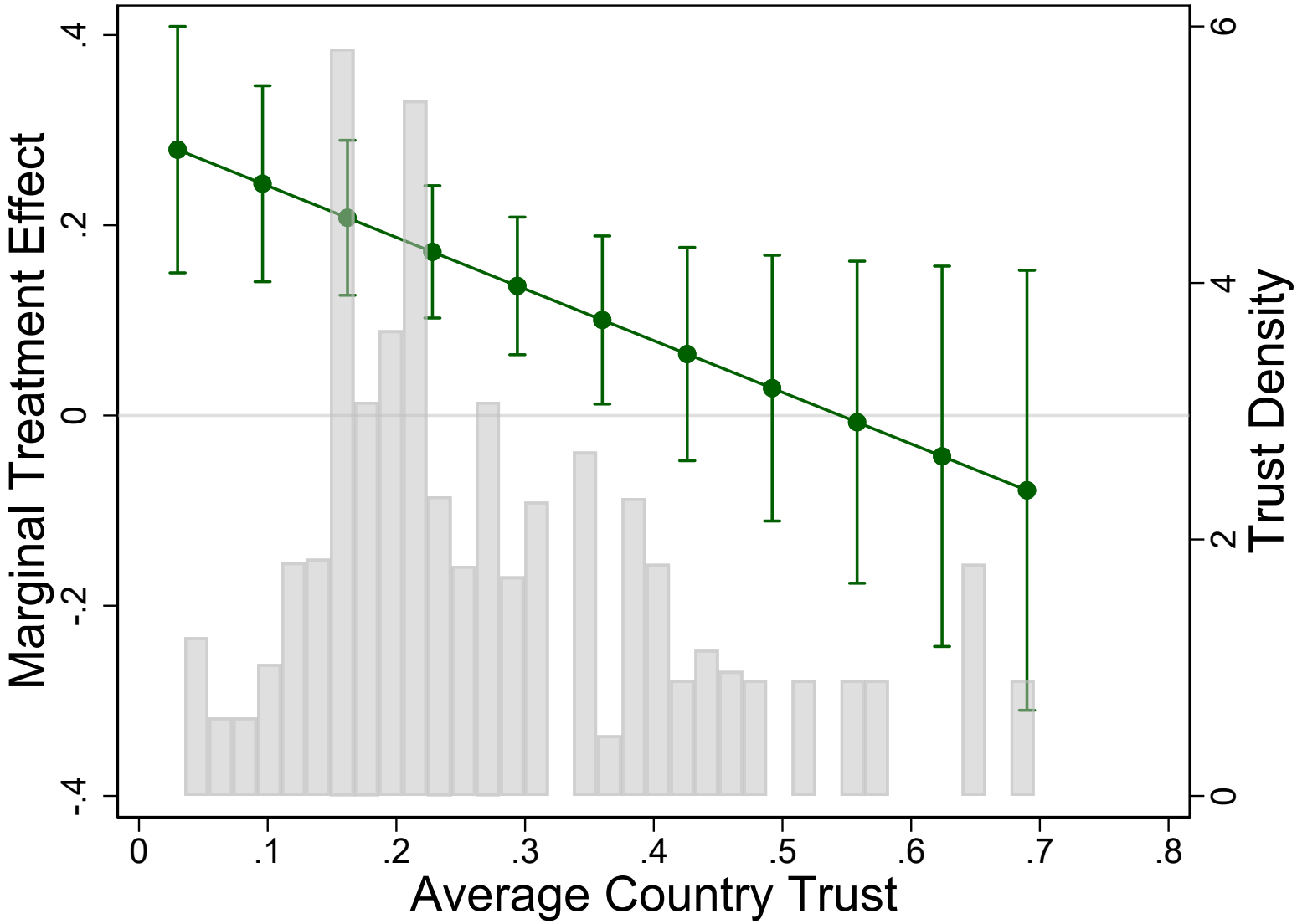
- No effect in autocracies.

Recessions on turnover, marginal effects



Regular turnovers, scheduled elections

	Dependent Variable: Leader Turnover				
	(1)	(2)	(3)	(4a)	(4b)
				Multinomial Logit (Relative Risk Ratios)	
Dependent Variable:	Leader Turnover			Regular Turnover	Irregular Turnover
Sample:	Democracies			All Regimes	
	Baseline	Election Years	Non-Election Years		
Mean of Dep. Var.	0.240	0.509	0.150		
Trust x I(Growth	-0.558***	-1.413**	0.0566	0.0476***	0.775
<global 10th percentile)	(0.210)	(0.592)	(0.270)	[0.004]	[0.939]
Observations	3,255	521	1,918	6,611	
R-squared	0.181	0.481	0.254		
Number of Clusters (Countries)	95	86	94	135	

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Robustness

- Omitted variables
  - Correlates of trust x recession
- Spurious correlations
  - Omit outliers; omit global recessions
  - Placebo: lagged turnover as the outcome
- Alternative measures of trust
  - Base year trust, omit trust from recession years
  - Omit unreliable or unrepresentative surveys
  - Use only WVS, Gallup, or experimental measures
- Alternative measures of recession
  - Rolling cutoffs; country, region, and global percentile cutoffs

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Robustness to correlates of trust x recession

	Correlation with Trust	Coefficient		Correlation with Trust	Coefficient
Baseline Coefficient		-0.558***	**Baseline Coefficient**		-0.558***
Panel A: Correlates of Trust			**Panel C: Macroeconomic Characteristics**		
Average Years of Education	0.48***	-0.608***	Real GDP, mean	0.16***	-0.636***
% with Primary Education	0.04	-0.634***	Real GDP, variance	0.12***	-0.618***
Gini Coefficient	-0.61***	-0.688***	Real GDP Growth, mean	-0.24***	-0.5**
% Urban Population	0.48***	-0.401*	Real GDP Growth, variance	-0.25***	-0.561***
% Immigrant Population	0.40***	-0.549***	Unemployment Rate, mean	-0.29***	-0.651***
Average Conflict Count	-0.14	-0.544***	Unemployment Rate, variance	-0.15	-0.615**
Ethnic Fractionalization	-0.38***	-0.596***	Trade Intensity, mean	0.00	-0.599***
Linguistic Fractionalization	-0.11	-0.604***	Trade Intensity, variance	-0.05	-0.560***
Polity2 Score	0.48***	-0.552***	All Controls in Panel		-0.539*
Leader Turnover	0.11	-0.552***			
Quality of Governance	0.68***	-0.657**	**Panel D: Sectoral Shares**		
All Controls in Panel		-0.900**	Agriculture (% GDP)	-0.43***	-0.561***
			Mining (% GDP)	0.31**	-0.561**
Panel B: Cultural Traits			Manufacturing (% GDP)	0.22**	-0.572***
Self: Avoid Danger	0.61***	-0.859**	Construction (% GDP)	0.22*	-0.547**
Self: Take Risks	0.31***	-0.596**	Retail (% GDP)	0.00	-0.595***
Self: Value Tradition	0.58***	-0.571**	Transportation (% GDP)	0.24*	-0.574**
Child: Thrift	-0.18	-0.682***	Other (% GDP)	0.27**	-0.55**
Child: Obedience	-0.51***	-0.809***	All Controls in Panel		-0.556**
Locus of Control	0.11	-0.758***			
Individualism	0.69***	-0.72**			
All Controls in Panel		-1.464***			

Notes: All controls vary at the country-level. Coefficients in column (2) come from a regression at the country-year level, and controls are interacted with the recession indicator. All rows cover 64 years.

Within-U.S. analysis

- Holds political institutions constant

$$y_{ct} = \beta\, Trust_c \times Recession_{t-1} + X_{ct-1}\Gamma + \gamma_t + \alpha_c + \varepsilon_{ct}, \qquad (2)$$

- c counties; t years. 1972-2016, presidential election years
- y_{ct}: presidential vote share to non-incumbent party candidate
- $Trust_c$: General Social Survey, 1972-2016; Social Capital Community Survey, 2000 and 2006
- $Recession_{t-1}$: FRED and NBER indicators
- Analogous covariates to baseline
  - Lagged leader characteristics, gdp, interacted with trust and recession

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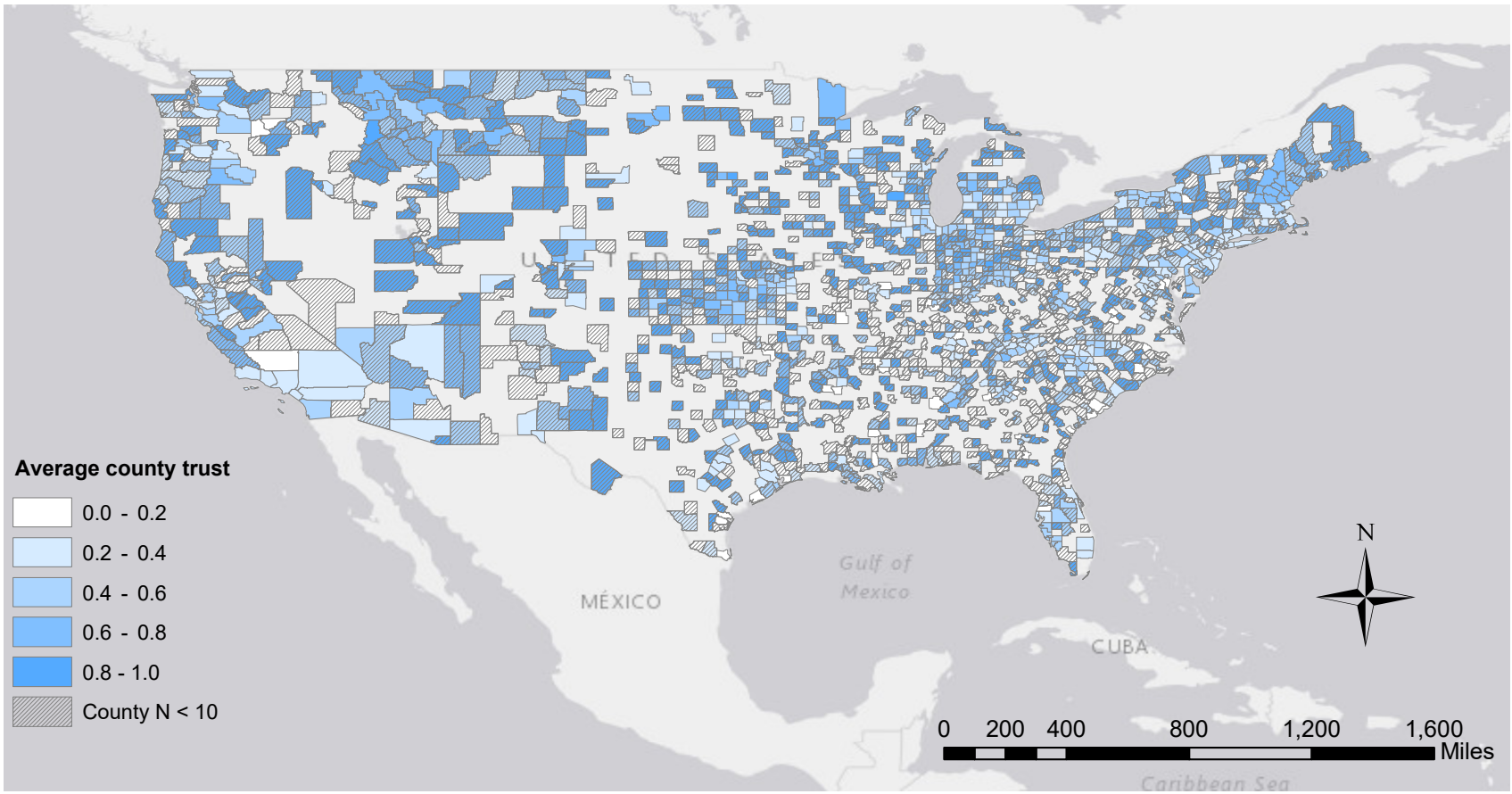

General Social Survey, 1972-2016, 2000 and 2006; Social Capital Community Survey, 2000 and 2006

Within-U.S. analysis

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	FRED recession measure				NBER recession measure			
	All counties		Counties with trust variable based on N>10		All counties		Counties with trust variable based on N>10	
	Panel A. Dependent Variable: Fraction of a county's votes for the presidential challenger							
Mean of Dependent Variable	0.463	0.463	0.457	0.457	0.461	0.461	0.454	0.454
Trust x Recession Indicator	-0.00952***	-0.00662***	-0.0419***	-0.0254***	-0.0166***	-0.00665***	-0.0701***	-0.0217**
	(0.00212)	(0.00207)	(0.00939)	(0.00921)	(0.00248)	(0.00207)	(0.0120)	(0.0100)
Observations	21,339	21,339	5,319	5,319	22,956	22,956	5,723	5,723
R-squared	0.350	0.434	0.208	0.301	0.330	0.414	0.203	0.299
Number of Clusters (Counties)	1665	1665	415	415	1665	1665	415	415

Notes: This table uses United States election and trust data to test the main hypothesis. Observations are at the county and year level. All regressions control for county fixed effects, county fixed effects times incumbent party fixed effects, year fixed effects, the uninteracted recession indicator variable, as well as the full set of baseline controls, which include: lag leader characteristics (the age of the president when he entered office and the number of times he was previously in office), lag state GDP, lag United States GDP. We also include the interaction of each lag control variable with trust and the interaction of each lag control variable with the recession indicator variable. Standard errors are clustered at the county level. *, ** and *** indicate statistical significance at the 10%, 5% and 1% level.

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Conclusion

- Evidence that trust changes how voters respond to economic shocks
  - Only democracies, regular turnovers, and scheduled elections
  - Within-U.S. exercise produces similar results
  - Consistent with voter accountability channel
- Policy implications
  - Can better predict political instability
- Future work: is the low trust efficient?
  - This paper is agnostic
  - Can be inefficient now, even if it was efficient historically

Thank you!

Comments and suggestions are very welcome! jwen@hbs.edu