APPENDICES FOR
THE VALUE OF POLITICAL GEOGRAPHY:
EVIDENCE FROM THE REDISTRICTING OF FIRMS

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This document contains appendices for online publication only, which present additional tables and robustness results.

APPENDIX A: ADDITIONAL TABLES

Table A1 – Dates Credible Maps are Released

State	Date Credible Map Released
Alabama	5/19/2011
Alaska	-
Arizona	10/3/2011
Arkansas	4/13/2011
California	6/10/2011
Colorado	11/10/2011
Connecticut	1/13/2012
Delaware	-
Florida	2/2/2011
Georgia	8/22/2011
Hawaii	-
Idaho	10/17/2011
Illinois	5/27/2011
Indiana	4/11/2011
Iowa	3/29/2011
Kansas	6/7/2011
Kentucky	2/6/2011
Louisiana	3/20/2011
Maine	9/27/2011
Maryland	10/4/2011
Massachusetts	11/7/2011
Michigan	6/17/2011
Minnesota	2/21/2012
Mississppi	12/19/2011
Missouri	4/27/2011
Montana	-
Nebraska	5/5/2011
Nevada	10/14/2011
New Hampshire	3/22/2012
New Jersey	12/23/2011
New Mexico	12/29/2011
New York	3/6/2012
North Carolina	7/25/2011
North Dakota	-
Ohio	12/14/2011
Oklahoma	4/14/2011
Oregon	6/29/2011
Pennsylvania	12/13/2011
Rhode Island	12/19/2011
South Carolina	7/26/2011
South Dakota	-
Tennessee	1/6/2012
Texas	2/28/2012
Utah	10/17/2011
Vermont	-
Virginia	1/10/2012
Washington	1/1/2012
West Virginia	8/5/2011
Wisconsin	7/8/2011

Table A2 – Effects of Change in Geographic Overlap on CARs

Dependent Variable	**Cumulative Abnormal Return (%)**		*Fraction of observations in Data*
	(1)	(2)	
Percentage Change in Geographic Overlap	-0.004		
	(0.004)		
Dummy - Change by 10-20%		0.775*	12.5%
		(0.412)	
Dummy - Change by 20-30%		-0.075	12.4%
		(0.626)	
Dummy - Change by 30-40%		0.200	7.9%
		(0.609)	
Dummy - Change by 40-50%		-0.389	8.0%
		(0.512)	
Dummy - Change by 50-60%		-0.420	5.6%
		(0.550)	
Dummy - Change by 60-70%		0.359	6.9%
		(0.526)	
Dummy - Change by 70-80%		-0.882**	6.5%
		(0.388)	
Dummy - Change by 80-90%		-1.468*	5.8%
		(0.802)	
Dummy - Change by 90-100%		0.659	11.5%
		(0.459)	
State-Fixed Effects	Yes	Yes	
N	2,541	2,541	

Notes:

Robust standard errors clustered by state are reported.

* indicates significance at the .1 level, ** at the .05 level, and *** at the .01 level.

Cumulative Abnormal Returns are estimated for an event window of (-1, +7) using a Fama-French 3 Factor model and a 250 day estimation window.

Dummy variables are calculated based on percentage changes in how much of the geography between a firms' pre-redistricting and post-redistricing district overlap with higher numbers indicating greater change.

APPENDIX B: ROBUSTNESS

This Appendix contains additional analysis aimed at robustness.

Falsification of and Robustness to Urbanization/Population Density Hypothesis

Our result that changes in the competitiveness of districts affect firm valuations around redistricting could also be explained by changes in population characteristics, such as urbanization. For example, we might expect suburban districts to be the most competitive, given that most rural districts are Republican and most urban districts are Democratic. Moreover, suburban districts becoming more urbanized might be related to the economic vibrancy of the area in which firms are headquartered which could have positive spillovers on firms.

Table B1 – Urbanization Transition Matrix

Before Redistricting \ After Redistricting	Urban	Suburban	Rural	
Urban	30.2%	5.0%	0.3%	***35.5%***
Suburban	9.0%	20.1%	2.2%	***31.3%***
Rural	1.7%	6.0%	25.5%	***33.2%***
	40.9%	***31.1%***	***28.0%***	***100.0%***

We created a series of population density-based metrics to capture these potential effects. First, we created a measure of rural, suburban, and urban districts. We define rural districts as having population densities of less than 500 people per square mile, urban districts as having population densities of greater than 2500 people per square mile, and suburban districts as anything in between. Table B1 presents a transition matrix between these various district types before and after redistricting. It looks very similar to our transition matrix between types of partisan competition in that 75% of firm-district pairings reside on the diagonal and do not change type.

Table B2 – Falsification/Robustness to Urbanization of District Hypothesis

Dependent Variable	Cumulative Abnormal Return (%)			
	(1)	(2)	(3)	(4)
Dummy - Reassigned to Safe District			0.595	0.624
			(0.613)	(0.628)
Dummy - Reassigned to Competitive District			-1.599***	-1.630***
			(0.567)	(0.588)
Dummy - Reassigned to More Dense Category	0.257		0.281	
	(0.341)		(0.350)	
Dummy - Reassigned to Less Dense Category	-0.385		-0.373	
	(0.480)		(0.505)	
Dummy - Reassigned to >25% More Density		0.178		0.253
		(0.308)		(0.319)
Dummy - Reassigned to >25% Less Density		-0.261		-0.253
		(0.390)		(0.425)
State-Fixed Effects	Yes	Yes	Yes	Yes
N	2,541	2,541	2,541	2,541

Notes:
Robust standard errors clustered by state are reported.
* indicates significance at the .1 level, ** at the .05 level, and *** at the .01 level.
CARs are estimated for a (-1, +7) event window using a Fama-French 3 Factor model and a 250 day estimation window.
District Safety is defined as a 10% total margin so party balance outside a 45/55 or 55/45 split defines a "safe district" while party balance falling within those ranges define "competitive districts".
Districts defined as reassigned to more dense category / less dense category if transitioned in that direction where urban is defined as >2500 people per square mile and rural is defined as <500 people per square mile.
Districts defined as reassigned to 25% more density / less density if population per square mile changed by >25% in that direction.

We show results using population density metrics in Table B2. Columns 1 and 2 show no independent and measurable effects of transitioning to a more or less dense district. Columns 3 and 4 show our core result about partisan competition being the main driver of changes in CARs survives when measures of population density are included in the regression.[1]

Table B3 – Regressions with Alternative Margin on Competitive/Safe Districts

Dependent Variable	Cumulative Abnormal Return (%)			
	(1)	(2)	(3)	(4)
Dummy - Move to Safe District	0.491		0.442	0.416
	(0.441)		(0.618)	(0.622)
Dummy - Move to Competitive District	-1.124*		-1.125*	-1.085*
	(0.603)		(0.603)	(0.623)
Dummy - Move to Safe District of Other Party			0.074	-0.434
			(0.410)	(0.514)
Dummy - Move to Democratic District		0.287		0.225
		(0.400)		(0.615)
Dummy - Move to Republican District		1.010**		0.996*
		(0.407)		(0.577)
State-Fixed Effects	Yes	Yes	Yes	Yes
N	2,541	2,541	2,541	2,541

Notes:
Robust standard errors clustered by state are reported.
* indicates significance at the .1 level, ** at the .05 level, and *** at the .01 level.
Cumulative Abnormal Returns are estimated for a (-1, +7) event window using a Fama-French 3 Factor model and a 250 day estimation window.
District Safety is defined as a 5% total margin so party balance outside a 47.5/52.5 or 52.5/47.5 split defines a "safe district" while party balance falling within those ranges defines a "competitive district".
Districts defined as belonging to a party (Democratic or Republican) if more than 50% of voters lean towards it.

Robustness to Different Cut-Points for Safe Districts

Another measurement question we might be concerned about is how we define districts as being safe or competitive. Throughout the paper, we use a 55/45 vote margin, where firms inside that range are considered to be in competitive districts and those outside that range are considered

[1] We also ran tests with interactions between changing competitiveness and changing density before and after redistricting, but do not display the results. Those regressions once again show our core results survive, without yielding any new inferences about the role of changes in population density around firms as a result of redistricting.

to be in safe districts. Alternatively, we could have defined that range as 52.5/47.5—or any number of other bands. We may be concerned about whether our results remain robust to this narrower margin defining which districts are safe versus which are competitive. The results in Table B3—which replicate Table 2 exactly but switch the definition of safe/competitive districts to the narrower range—show that our results remain robust to the alternatively defined measure.