

# Supplementary Materials

## The Print Media and the American Party System: Evidence from the 2016 Presidential Election

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# A Data Appendix

## A.1 Descriptive Statistics

TABLE A.1: SUMMARY STATISTICS, ONE ZIP CODE SAMPLE, 2016

Statistic	Mean	Median	St. Dev.	Min	Max	N
Libertarian Percent	2.546	2.554	0.921	0.653	4.718	181
Green Percent	0.584	0.573	0.317	0.000	2.017	181
Democratic Percent	37.414	34.425	14.249	14.330	89.167	181
Republican Percent	57.522	60.591	14.548	7.757	80.750	181
Circulation Percent	1.168	0.000	2.798	0.000	16.564	181
Percent Black	19.941	14.240	18.144	0.000	85.060	181
Percent over 65	17.802	17.151	8.515	0.737	100.000	181
Percent under 18	20.838	21.463	5.750	0.000	36.667	181
Population Density	0.425	0.077	0.886	0.010	4.989	181
Percent Renters	25.908	24.070	13.259	0.000	70.490	181
Median Income	55.341	52.211	17.656	25.339	118.152	178
Log(Population)	8.492	8.470	1.408	3.638	11.021	181
Percent Bachelors+	23.348	20.200	11.980	0.000	60.310	181
Percent Families	68.855	70.250	9.994	16.390	94.530	181
Percent Poor	32.813	32.540	13.188	0.000	69.700	181
Overall Circulation Percent	29.217	28.656	11.950	4.225	80.042	170

TABLE A.2: SUMMARY STATISTICS, ONE ZIP CODE SAMPLE, 2012

Statistic	Mean	Median	St. Dev.	Min	Max	N
Libertarian Percent	0.743	0.750	0.383	0.000	2.646	181
Green Percent	0.215	0.190	0.154	0.000	1.079	181
Democratic Percent	43.493	40.852	13.284	21.005	93.299	181
Republican Percent	54.823	56.928	13.146	6.144	77.542	181
Circulation Percent	1.422	0.000	3.170	0.000	17.456	181
Percent Black	20.324	15.120	18.335	0.000	84.570	178
Percent over 65	16.589	15.797	8.718	0.000	100.000	178
Percent under 18	21.291	22.008	5.832	0.000	32.719	178
Population Density	0.429	0.074	0.922	0.011	6.062	178
Percent Renters	24.467	22.555	13.373	0.000	71.430	178
Median Income	54.041	50.325	18.796	22.143	163.462	178
Log(Population)	8.492	8.497	1.405	3.664	11.059	178
Percent Bachelors+	6.862	4.800	10.738	0.000	100.000	175
Percent Families	70.001	71.110	9.469	28.570	100.000	178
Percent Poor	31.893	30.605	12.893	0.000	76.320	178
Overall Circulation Percent	33.747	31.165	18.552	4.384	172.821	172

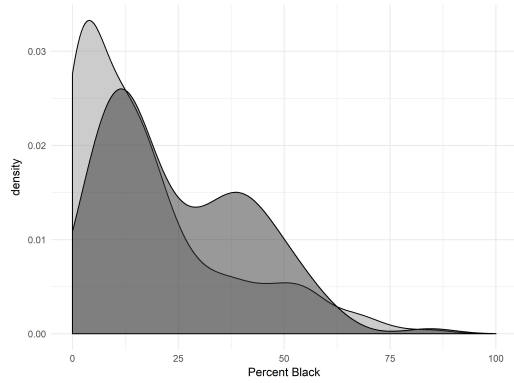
TABLE A.3: SUMMARY STATISTICS, TWO ZIP CODE SAMPLE, 2016

Statistic	Mean	Median	St. Dev.	Min	Max	N
Libertarian Percent	2.462	2.408	0.912	0.651	4.718	296
Green Percent	0.568	0.546	0.306	0.000	2.017	296
Democratic Percent	36.964	34.849	14.109	10.323	89.167	296
Republican Percent	58.261	60.531	14.279	7.757	86.452	296
Circulation Percent	2.531	0.000	5.600	0.000	36.191	296
Percent Black	19.559	14.690	17.611	0.000	85.060	296
Percent over 65	17.867	17.331	7.874	0.737	100.000	296
Percent under 18	20.780	21.098	5.668	0.000	44.697	296
Population Density	0.384	0.068	0.879	0.006	5.277	296
Percent Renters	24.959	23.380	13.046	0.000	96.260	296
Median Income	56.262	52.536	19.744	23.574	146.588	293
Log(Population)	8.426	8.423	1.356	3.638	11.031	296
Percent Bachelors+	23.042	20.230	11.719	0.000	66.160	296
Percent Families	69.722	70.240	9.821	16.390	100.000	296
Percent Poor	31.704	31.400	13.335	0.000	69.700	296
Overall Circulation Percent	27.061	27.031	11.859	3.902	80.042	284

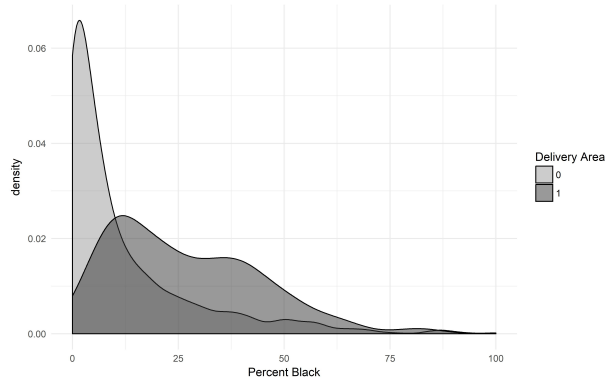
TABLE A.4: SUMMARY STATISTICS, FULL STATE SAMPLE, 2016

Statistic	Mean	Median	St. Dev.	Min	Max	N
Libertarian Percent	2.438	2.412	1.019	0.000	6.094	646
Green Percent	0.591	0.575	0.334	0.000	2.667	646
Democratic Percent	38.555	34.830	18.323	9.774	95.741	646
Republican Percent	56.633	60.714	19.136	2.484	87.970	646
Circulation Percent	3.420	0.000	7.633	0.000	55.847	646
Percent Black	16.316	9.695	17.823	0.000	100.000	644
Percent over 65	17.502	16.453	8.412	0.000	100.000	644
Percent under 18	20.610	21.073	5.963	0.000	44.697	644
Population Density	1.024	0.095	2.203	0.000	20.201	645
Percent Renters	27.071	24.455	14.937	0.000	100.000	644
Median Income	60.525	52.191	30.040	17.264	226.386	631
Log(Population)	8.560	8.627	1.504	0.000	11.296	645
Percent Bachelors+	27.166	21.020	18.189	0.000	100.000	643
Percent Families	68.516	69.085	10.941	16.390	100.000	644
Percent Poor	31.709	31.100	14.874	0.000	80.270	644
Overall Circulation Percent	26.613	25.763	13.220	2.052	173.913	597

## A.2 Covariate Balance

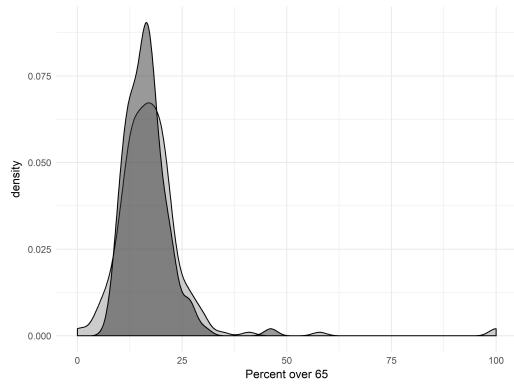


(a) One-ZIP Code Sample

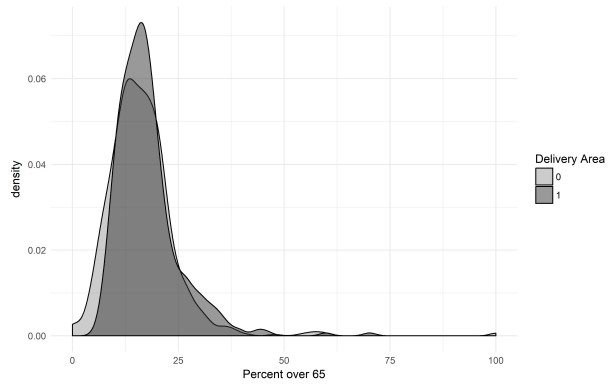


(b) Full State

Figure A.1: Percent African American by ZIP Code



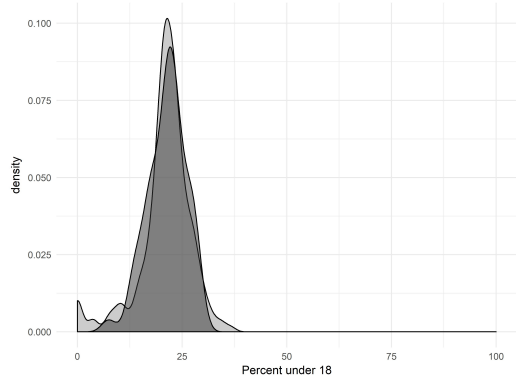
(a) One-ZIP Code Sample



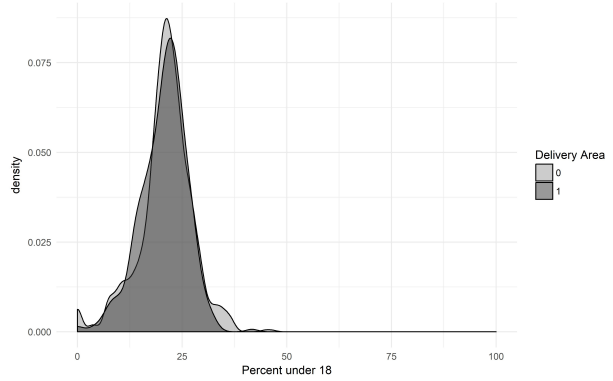
(b) Full State

Figure A.2: Percent Senior Citizen by ZIP Code



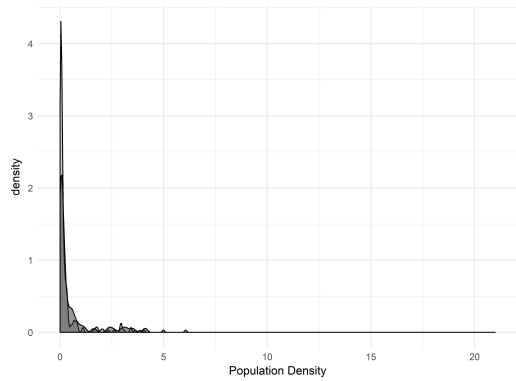


(a) One-ZIP Code Sample

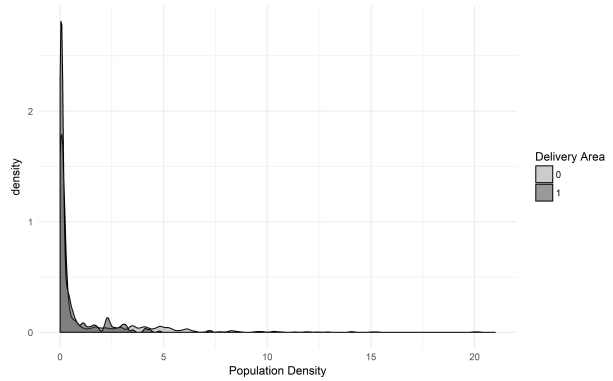


(b) Full State

Figure A.3: Percent Under 18 by ZIP Code

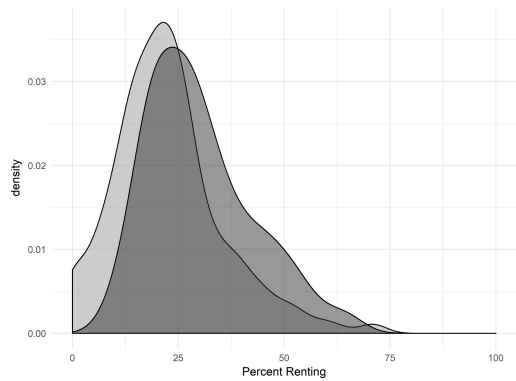


(a) One-ZIP Code Sample

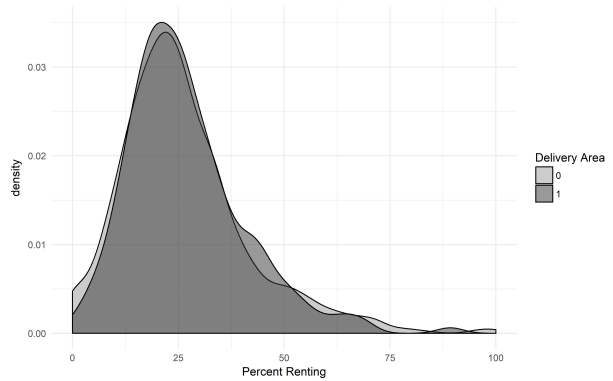


(b) Full State

Figure A.4: Population Density by ZIP Code

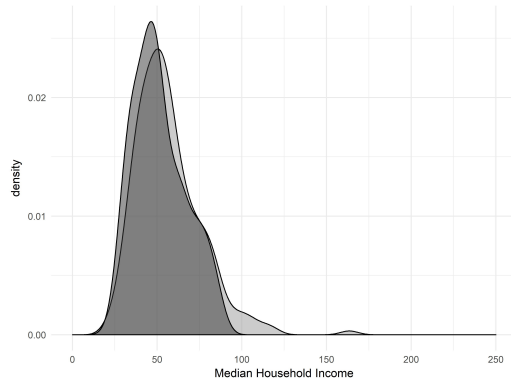


(a) One-ZIP Code Sample

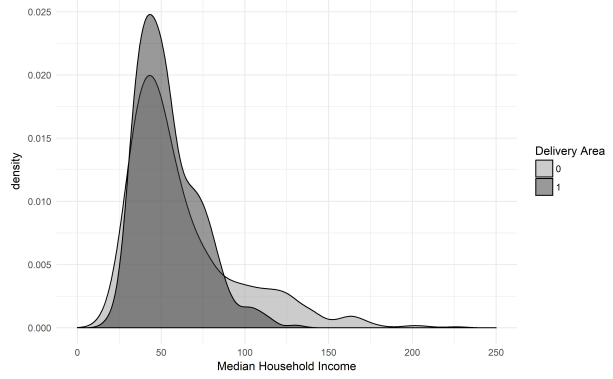


(b) Full State

Figure A.5: Percent Renters by ZIP Code

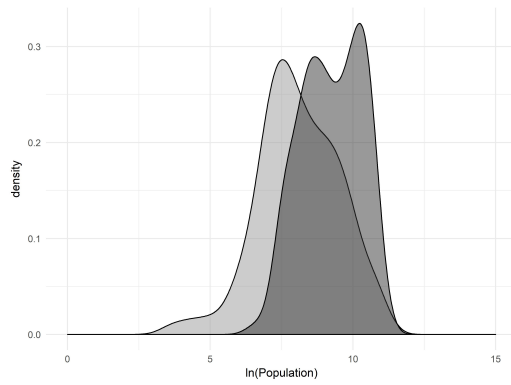


(a) One-ZIP Code Sample

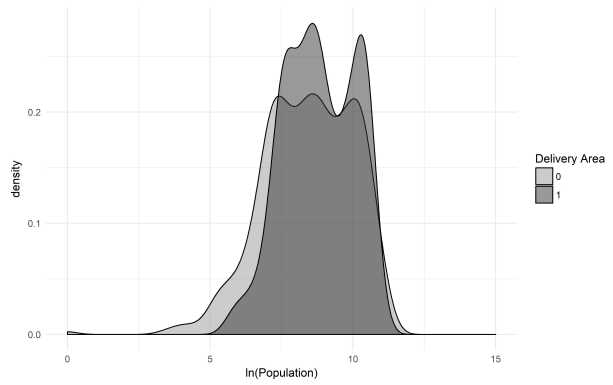


(b) Full State

Figure A.6: Median Income by ZIP Code

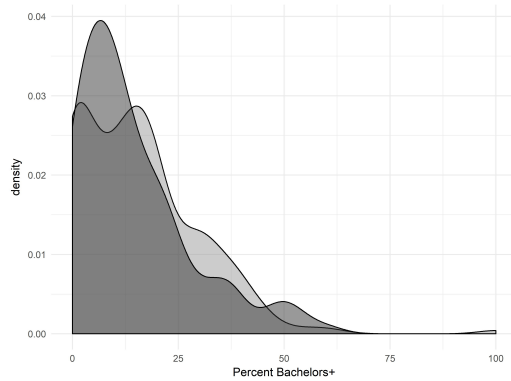


(a) One-ZIP Code Sample

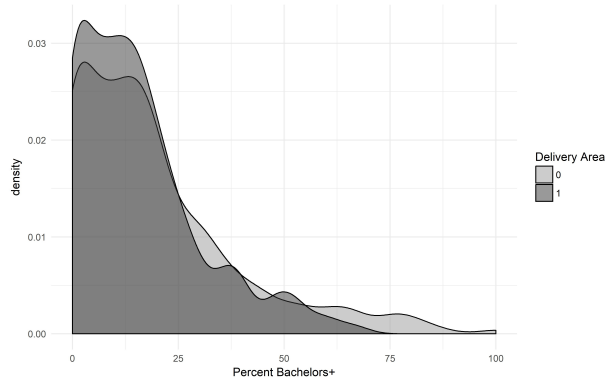


(b) Full State

Figure A.7: Log Population by ZIP Code

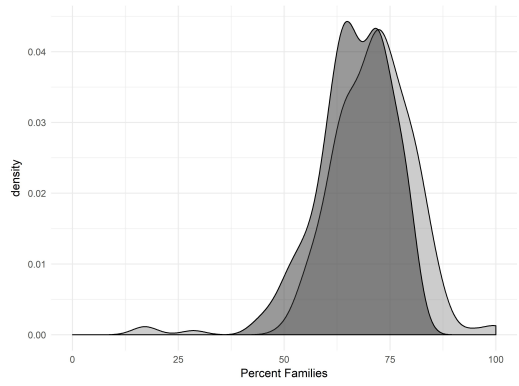


(a) One-ZIP Code Sample

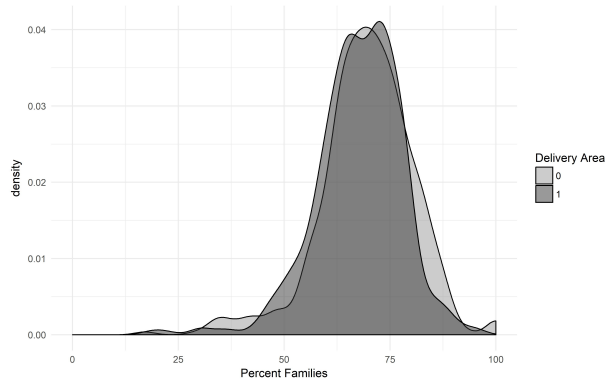


(b) Full State

Figure A.8: Percent with Bachelors Degree or Higher by ZIP Code

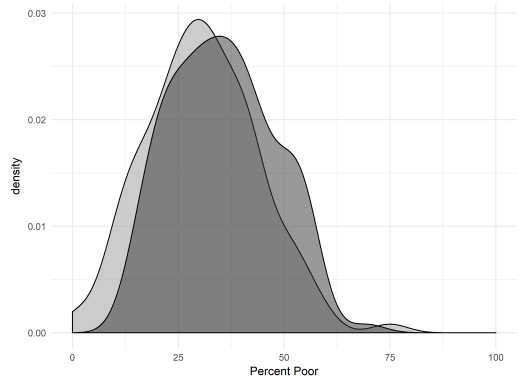


(a) One-ZIP Code Sample

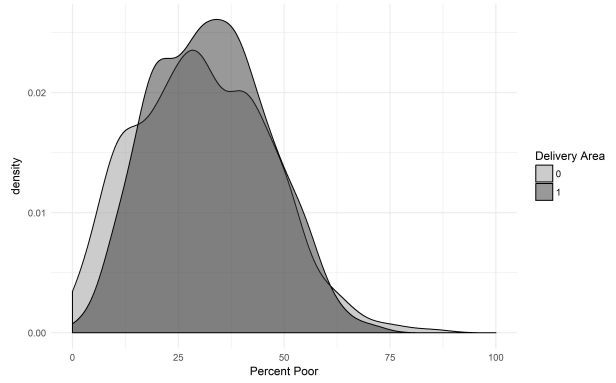


(b) Full State

Figure A.9: Percent of Households that are Families by ZIP Code

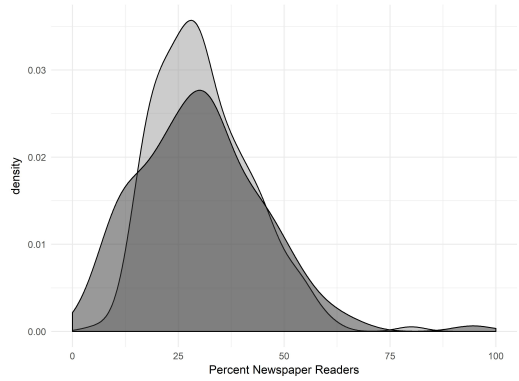


(a) One-ZIP Code Sample

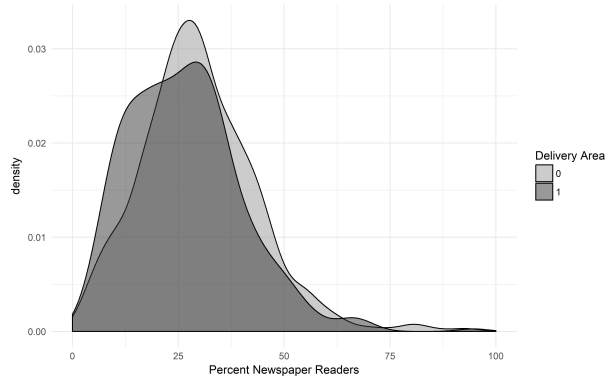


(b) Full State

Figure A.10: Percent of Households that are Poor or Struggling by ZIP Code



(a) One-ZIP Code Sample



(b) Full State

Figure A.11: Total Newspaper Readership Percentage by ZIP Code

### A.3 Alternative Samples

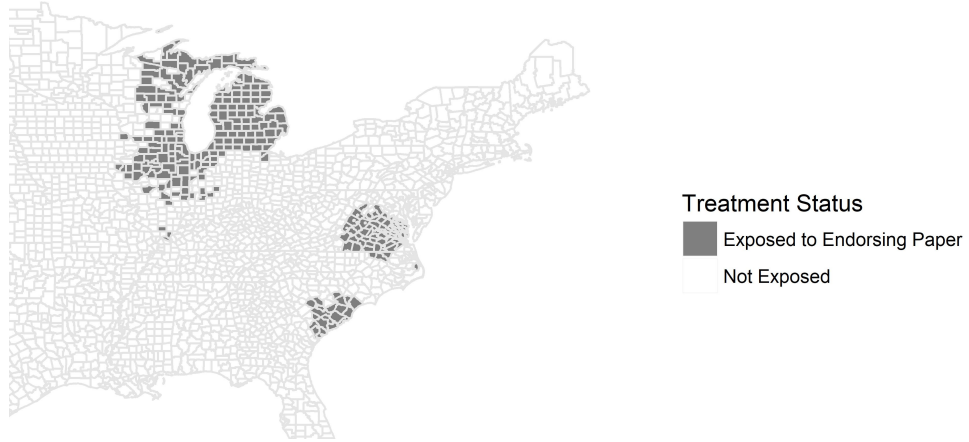


Figure A.12: Exposed and Control Counties, All Johnson-Endorsing Papers

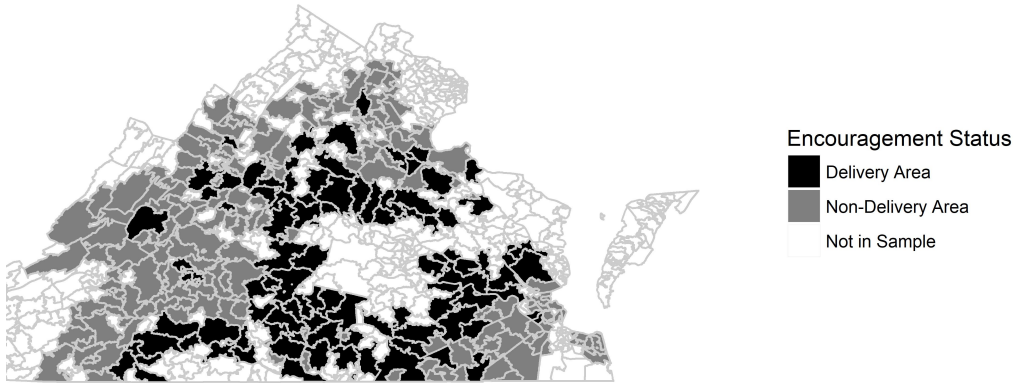


Figure A.13: Encouraged and Control ZIP Codes, Two-ZIP Code Sample



Figure A.14: Encouraged and Control ZIP Codes, Full State Sample

## B Additional Results and Robustness Checks

### B.1 Additional Placebo Tests

TABLE B.1: 2SLS ESTIMATES: GREEN VOTE SHARE ON ENDORSING PAPER READERSHIP

	<i>Dependent variable:</i>			
	Green Party Vote Share			
	(1)	(2)	(3)	(4)
Circulation Percent	0.002 (0.013)	-0.001 (0.012)	0.0001 (0.013)	-0.003 (0.012)
Percent Black		-0.004 (0.002)	-0.004 (0.002)	-0.004 (0.002)
Percent over 65		0.0001 (0.010)	-0.0001 (0.010)	0.001 (0.009)
Percent under 18		-0.009 (0.010)	-0.009 (0.010)	-0.007 (0.008)
Population Density		0.095 (0.035)	0.093 (0.034)	0.097 (0.034)
Percent Renters		0.002 (0.004)	0.002 (0.004)	0.002 (0.004)
Median Income		0.007 (0.004)	0.008 (0.005)	0.007 (0.004)
Log(Population)		0.011 (0.026)	0.010 (0.026)	0.013 (0.027)
Percent Bachelors+		0.002 (0.004)	0.002 (0.004)	0.002 (0.004)
Percent Families		-0.002 (0.004)	-0.002 (0.004)	-0.002 (0.004)
Percent Poor		0.008 (0.005)	0.008 (0.005)	0.007 (0.005)
Overall Circulation Percent			0.001 (0.003)	0.001 (0.003)
Lagged Green Vote Share				0.309 (0.259)
Constant	0.582 (0.029)	0.065 (0.456)	0.059 (0.456)	0.042 (0.448)
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code	One ZIP Code
Adj. $R^2$	-0.012	0.201	0.197	0.218
First Stage $F$	50.4	43.73	43.96	43.02
Observations	181	181	181	181

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Green Party, and the endogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. The instrument is an indicator variable for whether an endorsing paper is delivered to that ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using `Amelia` in R.

TABLE B.2: 2SLS ESTIMATES: DEMOCRATIC VOTE SHARE ON ENDORSING PAPER READERSHIP

	<i>Dependent variable:</i>			
	Democratic Party Vote Share			
	(1)	(2)	(3)	(4)
Circulation Percent	2.173 (0.640)	0.500 (0.426)	0.442 (0.450)	0.327 (0.137)
Percent Black		0.493 (0.065)	0.487 (0.066)	0.044 (0.029)
Percent over 65		-0.104 (0.132)	-0.090 (0.137)	0.012 (0.055)
Percent under 18		0.255 (0.231)	0.266 (0.232)	0.019 (0.077)
Population Density		0.921 (1.289)	1.002 (1.290)	0.183 (0.313)
Percent Renters		0.100 (0.147)	0.096 (0.146)	0.007 (0.043)
Median Income		0.059 (0.127)	0.041 (0.131)	0.007 (0.042)
Log(Population)		0.385 (0.910)	0.439 (0.920)	0.403 (0.475)
Percent Bachelors+		0.376 (0.117)	0.400 (0.120)	0.180 (0.038)
Percent Families		-0.324 (0.211)	-0.308 (0.209)	-0.069 (0.066)
Percent Poor		0.105 (0.146)	0.093 (0.148)	-0.016 (0.052)
Overall Circulation Percent			-0.057 (0.076)	0.038 (0.038)
Lagged Dem. Vote Share				0.974 (0.033)
Constant	34.877 (1.288)	24.140 (20.903)	24.799 (20.903)	-10.952 (5.472)
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code	One ZIP Code
Adj. $R^2$	-0.053	0.58	0.581	0.95
First Stage $F$	50.4	43.73	43.96	44
Observations	181	181	181	181

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Democratic Party, and the endogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. The instrument is an indicator variable for whether an endorsing paper is delivered to that ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.

TABLE B.3: 2SLS ESTIMATES: REPUBLICAN VOTE SHARE ON ENDORSING PAPER READERSHIP

	<i>Dependent variable:</i>			
	Republican Party Vote Share			
	(1)	(2)	(3)	(4)
Circulation Percent	-2.164 (0.670)	-0.577 (0.448)	-0.596 (0.465)	-0.472 (0.183)
Percent Black		-0.475 (0.068)	-0.477 (0.069)	-0.031 (0.032)
Percent over 65		0.109 (0.164)	0.114 (0.166)	0.019 (0.100)
Percent under 18		-0.270 (0.243)	-0.265 (0.246)	-0.023 (0.094)
Population Density		-1.566 (1.345)	-1.524 (1.339)	-0.612 (0.458)
Percent Renters		-0.154 (0.154)	-0.156 (0.155)	-0.071 (0.057)
Median Income		-0.059 (0.132)	-0.065 (0.137)	-0.023 (0.050)
Log(Population)		0.126 (1.025)	0.146 (1.054)	0.263 (0.584)
Percent Bachelors+		-0.458 (0.124)	-0.449 (0.128)	-0.232 (0.046)
Percent Families		0.223 (0.206)	0.229 (0.205)	-0.020 (0.071)
Percent Poor		-0.118 (0.146)	-0.122 (0.148)	0.009 (0.055)
Overall Circulation Percent			-0.021 (0.086)	-0.105 (0.047)
Lagged Rep. Vote Share				1.004 (0.037)
Constant	60.049 (1.319)	77.355 (20.491)	77.563 (20.564)	14.431 (6.586)
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code	One ZIP Code
Adj. $R^2$	-0.081	0.562	0.559	0.934
First Stage $F$	50.4	43.73	43.96	44.01
Observations	181	181	181	181

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Republican Party, and the endogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. The instrument is an indicator variable for whether an endorsing paper is delivered to that ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.



## B.2 Alternative Samples

TABLE B.4: OLS ESTIMATES: TWO-ZIP CODE BANDWIDTH

	<i>Dependent variable:</i>			
	Libertarian Party Vote Share			
	(1)	(2)	(3)	(4)
Circulation Percent	-0.035 (0.010)	-0.008 (0.009)	-0.007 (0.009)	-0.003 (0.008)
Percent Black		-0.017 (0.004)	-0.016 (0.004)	-0.012 (0.004)
Percent over 65		0.001 (0.022)	-0.001 (0.022)	0.001 (0.016)
Percent under 18		-0.005 (0.011)	-0.005 (0.011)	-0.001 (0.010)
Population Density		0.292 (0.048)	0.280 (0.049)	0.225 (0.041)
Percent Renters		0.004 (0.006)	0.004 (0.006)	0.001 (0.006)
Median Income		0.003 (0.006)	0.004 (0.006)	0.001 (0.005)
Log(Population)		0.161 (0.049)	0.153 (0.051)	0.140 (0.048)
Percent Bachelors+		0.015 (0.007)	0.013 (0.007)	0.014 (0.006)
Percent Families		-0.003 (0.008)	-0.005 (0.008)	-0.005 (0.007)
Percent Poor		-0.008 (0.006)	-0.007 (0.006)	-0.005 (0.006)
Overall Circulation Percent			0.006 (0.004)	0.002 (0.004)
Lagged Lib. Vote Share				0.693 (0.175)
Constant	2.552 (0.057)	1.324 (1.128)	1.308 (1.132)	1.003 (0.993)
Bandwidth	Two ZIP Codes	Two ZIP Codes	Two ZIP Codes	Two ZIP Codes
Adj. $R^2$	0.044	0.502	0.505	0.558
Observations	296	296	296	296

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Libertarian Party, and the assumed-exogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.

TABLE B.5: 2SLS ESTIMATES: TWO-ZIP CODE BANDWIDTH

	<i>Dependent variable:</i>			
	Libertarian Party Vote Share			
	(1)	(2)	(3)	(4)
Circulation Percent	-0.010 (0.016)	0.018 (0.014)	0.022 (0.014)	0.021 (0.013)
Percent Black		-0.020 (0.004)	-0.019 (0.004)	-0.014 (0.004)
Percent over 65		0.0002 (0.024)	-0.002 (0.024)	0.001 (0.017)
Percent under 18		-0.005 (0.011)	-0.006 (0.011)	-0.001 (0.010)
Population Density		0.340 (0.052)	0.333 (0.053)	0.264 (0.045)
Percent Renters		0.005 (0.006)	0.005 (0.007)	0.001 (0.006)
Median Income		0.003 (0.007)	0.005 (0.007)	0.002 (0.006)
Log(Population)		0.139 (0.052)	0.127 (0.054)	0.119 (0.051)
Percent Bachelors+		0.015 (0.008)	0.013 (0.008)	0.014 (0.007)
Percent Families		-0.004 (0.008)	-0.006 (0.008)	-0.006 (0.007)
Percent Poor		-0.007 (0.006)	-0.006 (0.006)	-0.005 (0.006)
Overall Circulation Percent			0.007 (0.005)	0.002 (0.004)
Lagged Lib. Vote Share				0.738 (0.181)
Constant	2.488 (0.061)	1.472 (1.192)	1.472 (1.200)	1.114 (1.034)
Bandwidth	Two ZIP Codes	Two ZIP Codes	Two ZIP Codes	Two ZIP Codes
Adj. $R^2$	0.02	0.479	0.476	0.539
First Stage $F$	99.79	85.92	78.26	81.73
Observations	296	296	296	296

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Libertarian Party, and the endogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. The instrument is an indicator variable for whether an endorsing paper is delivered to that ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using `Amelia` in R.

TABLE B.6: 2SLS ESTIMATES: 2012 PLACEBO TEST, TWO-ZIP CODE BANDWIDTH

	<i>Dependent variable:</i>		
	Libertarian Party Vote Share		
	(1)	(2)	(3)
Circulation Percent	-0.016 (0.006)	-0.001 (0.006)	-0.0003 (0.006)
Percent Black		-0.009 (0.002)	-0.009 (0.002)
Percent over 65		-0.008 (0.012)	-0.009 (0.013)
Percent under 18		-0.006 (0.006)	-0.007 (0.006)
Population Density		0.094 (0.037)	0.091 (0.037)
Percent Renters		0.004 (0.004)	0.004 (0.004)
Median Income		0.001 (0.002)	0.001 (0.002)
Log(Population)		0.023 (0.019)	0.019 (0.019)
Percent Bachelors+		0.002 (0.003)	0.002 (0.003)
Percent Families		0.003 (0.005)	0.003 (0.005)
Percent Poor		-0.002 (0.004)	-0.002 (0.004)
Overall Circulation Percent			0.002 (0.001)
Constant	0.762 (0.029)	0.625 (0.591)	0.573 (0.590)
Bandwidth	Two ZIP Codes	Two ZIP Codes	Two ZIP Codes
Adj. $R^2$	0.08	0.328	0.336
First Stage $F$	102.13	77.43	76.62
Observations	296	296	296

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Libertarian Party, and the endogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. The instrument is an indicator variable for whether an endorsing paper is delivered to that ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.

TABLE B.7: OLS ESTIMATES: FULL STATE SAMPLE

	<i>Dependent variable:</i>			
	Libertarian Party Vote Share			
	(1)	(2)	(3)	(4)
Circulation Percent	0.017 (0.007)	0.014 (0.005)	0.013 (0.005)	0.015 (0.005)
Percent Black		-0.009 (0.002)	-0.007 (0.002)	-0.003 (0.002)
Percent over 65		-0.013 (0.010)	-0.016 (0.010)	-0.014 (0.009)
Percent under 18		0.011 (0.009)	0.010 (0.009)	0.014 (0.007)
Population Density		-0.023 (0.024)	-0.022 (0.024)	-0.026 (0.018)
Percent Renters		0.003 (0.004)	0.002 (0.004)	-0.001 (0.004)
Median Income		-0.009 (0.003)	-0.009 (0.003)	-0.008 (0.003)
Log(Population)		0.176 (0.038)	0.162 (0.038)	0.139 (0.036)
Percent Bachelors+		0.020 (0.005)	0.019 (0.005)	0.018 (0.004)
Percent Families		-0.013 (0.006)	-0.015 (0.006)	-0.013 (0.005)
Percent Poor		-0.024 (0.004)	-0.024 (0.004)	-0.020 (0.004)
Overall Circulation Percent			0.010 (0.004)	0.007 (0.003)
Lagged Lib. Vote Share				0.716 (0.141)
Constant	2.381 (0.043)	2.609 (0.588)	2.687 (0.597)	2.059 (0.537)
Bandwidth	Full State	Full State	Full State	Full State
Adj. $R^2$	0.014	0.445	0.458	0.522
Observations	646	645	645	645

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Libertarian Party, and the assumed-exogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.

TABLE B.8: 2SLS ESTIMATES: FULL STATE SAMPLE

	<i>Dependent variable:</i>			
	Libertarian Party Vote Share			
	(1)	(2)	(3)	(4)
Circulation Percent	0.012 (0.008)	0.016 (0.007)	0.018 (0.007)	0.022 (0.006)
Percent Black		-0.009 (0.003)	-0.008 (0.003)	-0.004 (0.002)
Percent over 65		-0.013 (0.011)	-0.017 (0.011)	-0.014 (0.009)
Percent under 18		0.011 (0.009)	0.010 (0.009)	0.014 (0.007)
Population Density		-0.021 (0.024)	-0.018 (0.024)	-0.022 (0.019)
Percent Renters		0.003 (0.004)	0.003 (0.004)	-0.0002 (0.004)
Median Income		-0.009 (0.003)	-0.008 (0.003)	-0.008 (0.003)
Log(Population)		0.173 (0.038)	0.158 (0.039)	0.134 (0.036)
Percent Bachelors+		0.020 (0.005)	0.018 (0.005)	0.017 (0.004)
Percent Families		-0.013 (0.006)	-0.014 (0.006)	-0.013 (0.005)
Percent Poor		-0.024 (0.004)	-0.024 (0.004)	-0.020 (0.004)
Overall Circulation Percent			0.009 (0.004)	0.007 (0.003)
Lagged Lib. Vote Share				0.724 (0.141)
Constant	2.399 (0.045)	2.610 (0.586)	2.688 (0.593)	2.053 (0.533)
Bandwidth	Full State	Full State	Full State	Full State
Adj. $R^2$	0.013	0.445	0.456	0.52
First Stage $F$	259.81	251.8	240.28	235.44
Observations	646	645	645	645

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Libertarian Party, and the endogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. The instrument is an indicator variable for whether an endorsing paper is delivered to that ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.

TABLE B.9: 2SLS ESTIMATES: 2012 PLACEBO, FULL STATE SAMPLE

	<i>Dependent variable:</i>		
	Libertarian Party Vote Share		
	(1)	(2)	(3)
Circulation Percent	-0.012 (0.003)	-0.003 (0.002)	-0.003 (0.002)
Percent Black		-0.007 (0.001)	-0.006 (0.001)
Percent over 65		-0.014 (0.008)	-0.015 (0.008)
Percent under 18		-0.004 (0.006)	-0.005 (0.006)
Population Density		-0.005 (0.014)	-0.003 (0.014)
Percent Renters		0.003 (0.004)	0.002 (0.004)
Median Income		-0.0004 (0.001)	-0.001 (0.001)
Log(Population)		0.013 (0.023)	0.009 (0.023)
Percent Bachelors+		0.001 (0.002)	0.001 (0.002)
Percent Families		-0.006 (0.004)	-0.006 (0.004)
Percent Poor		-0.006 (0.003)	-0.005 (0.003)
Overall Circulation Percent			0.003 (0.001)
Constant	0.792 (0.020)	1.622 (0.463)	1.586 (0.463)
Bandwidth	Full State	Full State	Full State
Adj. $R^2$	-0.029	0.252	0.265
First Stage $F$	195.26	160.37	152.25
Observations	646	645	645

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Libertarian Party, and the endogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. The instrument is an indicator variable for whether an endorsing paper is delivered to that ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in *R*.

### B.3 Panel Analysis

TABLE B.10: PANEL 2SLS ESTIMATES: LIBERTARIAN VOTE SHARE ON ENDORSING PAPER READERSHIP

	<i>Dependent variable:</i>		
	Libertarian Party Vote Share		
	(1)	(2)	(3)
Percent Black		0.003 (0.011)	0.003 (0.011)
Percent over 65		-0.038 (0.026)	-0.038 (0.026)
Percent under 18		-0.006 (0.024)	-0.006 (0.024)
Population Density		-0.464 (0.443)	-0.470 (0.444)
Percent Renters		0.014 (0.013)	0.015 (0.013)
Median Income		0.004 (0.013)	0.004 (0.013)
Log(Population)		-0.068 (0.545)	-0.065 (0.544)
Percent Bachelors+		0.021 (0.010)	0.021 (0.010)
Percent Families		0.002 (0.017)	0.002 (0.016)
Percent Poor		-0.004 (0.011)	-0.005 (0.011)
Overall Circulation Percent			0.002 (0.010)
Circulation Percent	-0.106 (0.367)	0.088 (0.311)	0.092 (0.309)
Circulation Percent $\times$ Year=2016	0.061 (0.070)	0.079 (0.059)	0.079 (0.059)
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code
ZIP Code FE	✓	✓	✓
Year FE	✓	✓	✓
Adj. $R^2$	0.747	0.781	0.78
First Stage $F$	5.84	4.71	4.73
Observations	362	362	362

*Note:* Standard errors, clustered by ZIP Code, in parentheses. The unit of analysis is ZIP Code, and the dependent variable is the percent of the vote acquired by the Libertarian Party. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.

## B.4 Covariate Selection

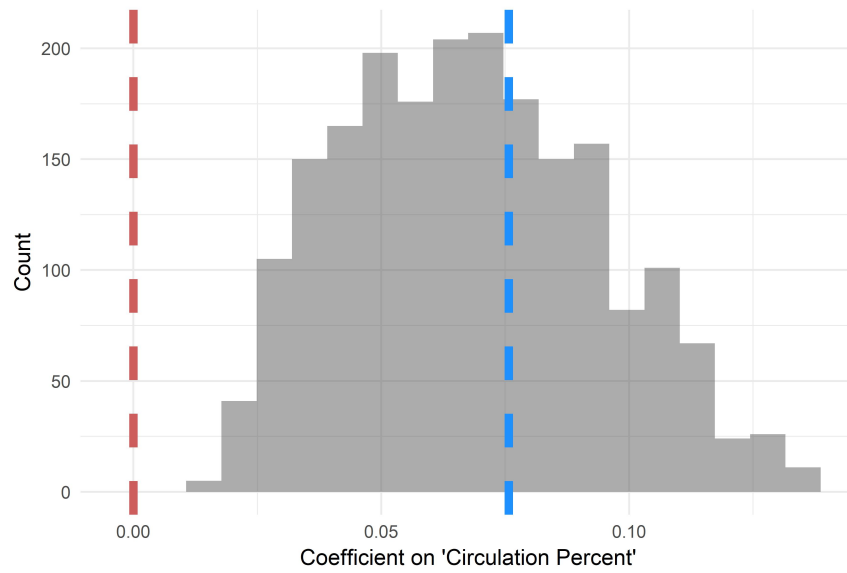


Figure B.1: Estimated Effect of Circulation across All Combinations of Covariates



## B.5 Listwise Deletion Results

TABLE B.11: OLS ESTIMATES: LISTWISE DELETION

	<i>Dependent variable:</i>			
	Libertarian Party Vote Share			
	(1)	(2)	(3)	(4)
Circulation Percent	-0.054 (0.030)	0.017 (0.013)	0.025 (0.012)	0.028 (0.012)
Percent Black		-0.019 (0.004)	-0.020 (0.004)	-0.016 (0.004)
Percent over 65		-0.031 (0.012)	-0.041 (0.010)	-0.033 (0.010)
Percent under 18		0.010 (0.015)	0.0001 (0.015)	0.001 (0.015)
Population Density		0.266 (0.076)	0.225 (0.082)	0.167 (0.069)
Percent Renters		-0.001 (0.009)	0.004 (0.006)	0.003 (0.007)
Median Income		0.001 (0.008)	0.008 (0.008)	0.005 (0.008)
Log(Population)		0.121 (0.080)	0.072 (0.058)	0.076 (0.056)
Percent Bachelors+		0.023 (0.008)	0.019 (0.008)	0.020 (0.008)
Percent Families		-0.006 (0.010)	-0.025 (0.010)	-0.021 (0.009)
Percent Poor		-0.006 (0.007)	-0.006 (0.008)	-0.007 (0.008)
Overall Circulation Percent			0.005 (0.005)	0.0004 (0.005)
Lagged Lib. Vote Share				0.602 (0.200)
Constant	2.608 (0.075)	2.093 (1.119)	3.733 (0.733)	3.049 (0.786)
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code	One ZIP Code
Observations	181	178	169	169
Adjusted R <sup>2</sup>	0.021	0.573	0.601	0.639

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Libertarian Party, and the assumed-exogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates.

TABLE B.12: 2SLS ESTIMATES: LISTWISE DELETION

	<i>Dependent variable:</i>			
	Libertarian Party Vote Share			
	(1)	(2)	(3)	(4)
Circulation Percent	0.066 (0.048)	0.085 (0.032)	0.089 (0.033)	0.077 (0.031)
Percent Black		-0.022 (0.004)	-0.024 (0.004)	-0.018 (0.004)
Percent over 65		-0.036 (0.013)	-0.046 (0.011)	-0.036 (0.011)
Percent under 18		0.009 (0.016)	-0.001 (0.015)	-0.0002 (0.015)
Population Density		0.333 (0.086)	0.281 (0.089)	0.208 (0.075)
Percent Renters		0.001 (0.009)	0.005 (0.006)	0.004 (0.007)
Median Income		0.0003 (0.008)	0.007 (0.008)	0.005 (0.008)
Log(Population)		0.082 (0.084)	0.040 (0.063)	0.052 (0.061)
Percent Bachelors+		0.023 (0.008)	0.018 (0.008)	0.019 (0.008)
Percent Families		-0.005 (0.010)	-0.025 (0.010)	-0.021 (0.009)
Percent Poor		-0.009 (0.008)	-0.009 (0.009)	-0.009 (0.008)
Overall Circulation Percent			0.008 (0.005)	0.003 (0.005)
Lagged Lib. Vote Share				0.620 (0.197)
Constant	2.469 (0.076)	2.555 (1.127)	4.069 (0.742)	3.288 (0.794)
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code	One ZIP Code
First Stage $F$	50.4	41.74	40.81	42.24
Observations	181	178	169	169
Adjusted $R^2$	-0.112	0.536	0.568	0.619

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Libertarian Party, the endogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code, and the assumed-exogenous instrument is an indicator for whether the endorsing paper is delivered to that ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates.

TABLE B.13: 2SLS ESTIMATES: 2012 PLACEBO, LISTWISE DELETION

	<i>Dependent variable:</i>		
	Libertarian Party Vote Share		
	(1)	(2)	(3)
Circulation Percent	0.001 (0.017)	0.007 (0.015)	0.008 (0.014)
Percent Black		-0.010 (0.002)	-0.010 (0.002)
Percent over 65		-0.023 (0.009)	-0.027 (0.007)
Percent under 18		-0.009 (0.009)	-0.003 (0.006)
Population Density		0.120 (0.041)	0.100 (0.043)
Percent Renters		0.001 (0.004)	0.002 (0.003)
Median Income		0.003 (0.003)	0.001 (0.003)
Log(Population)		0.017 (0.031)	-0.002 (0.027)
Percent Bachelors+		-0.003 (0.002)	-0.002 (0.003)
Percent Families		0.002 (0.006)	-0.004 (0.005)
Percent Poor		0.0001 (0.004)	-0.002 (0.003)
Overall Circulation Percent			0.003 (0.001)
Constant	0.741 (0.039)	0.999 (0.587)	1.511 (0.502)
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code
First Stage $F$	51.63	43.51	42.29
Observations	181	175	168
Adjusted $R^2$	-0.011	0.339	0.363

*Note:* Robust standard errors in parentheses. The unit of analysis is ZIP Code, the dependent variable is the percent of the vote acquired by the Libertarian Party, the endogenous independent variable is the percentage of households receiving an endorsing paper in a ZIP Code, and the assumed-exogenous instrument is an indicator for whether the endorsing paper is delivered to that ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates.

## B.6 Newspaper-Specific Estimates

TABLE B.14: OLS, FIRST-STAGE, IV, AND REDUCED-FORM ESTIMATES: RICHMOND TIMES-DISPATCH SAMPLE

	<i>Dependent variable:</i>			
	Libertarian Vote Share	Circulation Percent	Libertarian Vote Share	
	(1)	(2)	(3)	(4)
Circulation Percent	0.013 (0.018)		0.069 (0.034)	
Delivery Area		4.050 (0.671)		0.277 (0.133)
Percent Black	-0.012 (0.005)	0.014 (0.013)	-0.014 (0.005)	-0.013 (0.005)
Percent over 65	0.006 (0.024)	0.008 (0.030)	0.004 (0.026)	0.004 (0.024)
Percent under 18	0.016 (0.014)	0.006 (0.037)	0.015 (0.014)	0.016 (0.013)
Population Density	0.212 (0.079)	-0.157 (0.271)	0.262 (0.088)	0.252 (0.080)
Percent Renters	0.001 (0.009)	-0.032 (0.018)	0.003 (0.009)	0.001 (0.009)
Median Income	0.003 (0.009)	0.010 (0.018)	0.003 (0.009)	0.004 (0.009)
Log(Population)	0.114 (0.075)	-0.090 (0.197)	0.072 (0.083)	0.065 (0.082)
Percent Bachelors+	0.016 (0.009)	-0.011 (0.021)	0.015 (0.010)	0.014 (0.009)
Percent Families	-0.004 (0.012)	0.014 (0.023)	-0.004 (0.012)	-0.003 (0.012)
Percent Poor	-0.005 (0.008)	0.029 (0.020)	-0.007 (0.009)	-0.005 (0.008)
Overall Circulation Percent	0.003 (0.007)	-0.026 (0.015)	0.005 (0.007)	0.003 (0.006)
Lagged Lib. Vote Share	0.671 (0.228)	-0.846 (0.481)	0.725 (0.241)	0.667 (0.227)
Constant	0.589 (1.388)	0.222 (2.119)	0.888 (1.447)	0.903 (1.394)
Specification	OLS	First-Stage	IV	Reduced-Form
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code	One ZIP Code
Adj. $R^2$	0.552	0.472	0.526	0.564
First Stage $F$			41.58	
Observations	162	162	162	162

*Note:* Robust standard errors in parentheses. The unit of analysis is the ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.

TABLE B.15: OLS, FIRST-STAGE, IV, AND REDUCED-FORM ESTIMATES: DANVILLE REGISTER & BEE SAMPLE

	<i>Dependent variable:</i>			
	Libertarian Vote Share	Circulation Percent	Libertarian Vote Share	
	(1)	(2)	(3)	(4)
Circulation Percent	0.024 (0.150)		-0.019 (0.161)	
Delivery Area		5.793 (4.652)		-0.110 (0.867)
Percent Black	-0.008 (0.025)	-0.051 (0.088)	-0.008 (0.026)	-0.007 (0.025)
Percent over 65	0.005 (0.063)	0.039 (0.281)	0.014 (0.079)	0.014 (0.071)
Percent under 18	0.135 (0.140)	-0.094 (0.838)	0.161 (0.179)	0.163 (0.182)
Population Density	0.302 (0.778)	-0.859 (4.190)	0.443 (0.944)	0.459 (1.012)
Percent Renters	-0.037 (0.078)	0.066 (0.356)	-0.054 (0.099)	-0.055 (0.101)
Median Income	0.029 (0.064)	-0.021 (0.325)	0.032 (0.065)	0.032 (0.067)
Log(Population)	0.072 (0.229)	0.240 (0.736)	0.118 (0.321)	0.113 (0.280)
Percent Bachelors+	0.034 (0.036)	-0.134 (0.232)	0.032 (0.039)	0.035 (0.040)
Percent Families	-0.083 (0.072)	0.118 (0.395)	-0.098 (0.091)	-0.100 (0.100)
Percent Poor	0.035 (0.053)	-0.115 (0.322)	0.044 (0.064)	0.046 (0.072)
Overall Circulation Percent	0.002 (0.018)	0.029 (0.117)	-0.001 (0.019)	-0.002 (0.022)
Lagged Lib. Vote Share	1.856 (1.237)	-3.987 (6.078)	2.002 (1.411)	2.078 (1.740)
Constant	0.848 (3.390)	-1.071 (22.127)	0.713 (3.702)	0.734 (3.644)
Specification	OLS	First-Stage	IV	Reduced-Form
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code	One ZIP Code
Adj. $R^2$	0.81	0.454	0.798	0.807
First Stage $F$			8.75	
Observations	22	22	22	22

*Note:* Robust standard errors in parentheses. The unit of analysis is the ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.

TABLE B.16: OLS, FIRST-STAGE, IV, AND REDUCED-FORM ESTIMATES: DANVILLE REGISTER & BEE INDICATOR

	<i>Dependent variable:</i>			
	Libertarian Vote Share	Circulation Percent	Libertarian Vote Share	
	(1)	(2)	(3)	(4)
Circulation Percent	0.013 (0.018)		0.072 (0.033)	
Delivery Area		3.871 (0.618)		0.277 (0.119)
Percent Black	-0.011 (0.005)	0.010 (0.012)	-0.013 (0.005)	-0.013 (0.005)
Percent over 65	0.006 (0.025)	0.014 (0.026)	0.003 (0.027)	0.004 (0.025)
Percent under 18	0.017 (0.013)	0.002 (0.035)	0.016 (0.014)	0.017 (0.013)
Population Density	0.200 (0.067)	-0.045 (0.228)	0.248 (0.075)	0.245 (0.069)
Percent Renters	0.001 (0.009)	-0.037 (0.018)	0.003 (0.009)	0.001 (0.009)
Median Income	0.001 (0.009)	0.005 (0.017)	0.001 (0.009)	0.002 (0.009)
Log(Population)	0.124 (0.070)	0.033 (0.170)	0.080 (0.077)	0.083 (0.074)
Percent Bachelors+	0.018 (0.009)	-0.007 (0.019)	0.016 (0.010)	0.016 (0.009)
Percent Families	-0.004 (0.010)	0.011 (0.021)	-0.003 (0.011)	-0.003 (0.010)
Percent Poor	-0.005 (0.008)	0.031 (0.019)	-0.008 (0.008)	-0.006 (0.008)
Overall Circulation Percent	0.0004 (0.005)	-0.022 (0.012)	0.003 (0.006)	0.001 (0.005)
Lagged Lib. Vote Share	0.706 (0.231)	-1.121 (0.471)	0.763 (0.243)	0.683 (0.231)
Danville Register & Bee	-0.279 (0.159)	-0.896 (0.453)	-0.194 (0.171)	-0.258 (0.150)
Constant	0.592 (1.312)	-0.099 (1.952)	0.877 (1.365)	0.870 (1.310)
Specification	OLS	First-Stage	IV	Reduced-Form
Bandwidth	One ZIP Code	One ZIP Code	One ZIP Code	One ZIP Code
Adj. $R^2$	0.58	0.477	0.554	0.593
First Stage $F$			44.56	
Observations	181	181	181	181

*Note:* Robust standard errors in parentheses. The unit of analysis is the ZIP Code. Bandwidth describes the sample of ZIP Codes used in producing estimates. Missing data was multiply imputed using *Amelia* in R.