Appendix for "Old Patronage during the New Deal: Did Urban Machines use Work Relief Programs to Benefit the National Democratic Party?"

Table A1: Descriptive Statistics

	For Figure 2, Cross-Sectional	
	Non-Machine	Machine
Works Grants per Capita	92	91
Unemployment Rate 1930	6	7
Change in Unemployment, 1930-1940	4	4
Avg. Dem Vote Share, Prior 6 Yrs	40	54
Electoral Competitiveness	14	12
Congressional Apportionment	0.6	0.7
# Dem Governor and Congress Reps	3	4
Retail Sales per Capita 1929	491	511
Retail Sales Growth, 1929-1933	-0.4	-0.4
% Paying Income Tax 1929	4	4

	For Table 2, 1932-1940 Avg Values	
	Non-Machine	Machine
Democratic Presidential Vote Share	59	66
Democratic Senatorial Vote Share	56	70
Work Grants Per Capita	9	9
Unemployment Rate	10	10
% Black	7	10
% Female	50	51
% Foreign-Born	12	12
% Pop > 65	6	6
# Dem Governor and Congress Reps	2	4
Other New Deal Spending Per Capita	17	16

Table A2: First Differences Regression of Changes in City Spending in Machine Cities vs. Non-Machine Cities

This regression identifies whether machines had different changes in per capita work relief spending compared to non-machines in the periods specified in each column. We predict changes in work relief spending per capita (over multiple periods, shown in columns 1-3), with an indicator for whether or not a city was a machine. This provides a test of whether omitted variables influence the results shown in Figure 2. The null result for Machine City shows that, consistent with Figure 2, machine cities did not appear to receive significantly more work relief per capita than non-machine cities.

	1933-1936	1933-1940	1936-1940
	(1)	(2)	(3)
Machine City	1.873	-0.164	-2.446
	$(-3.042, 6.788)$	$(-2.876, 2.548)$	$(-6.949, 2.057)$
Constant	13.533***	8.157***	-5.437***
	$(11.395, 15.670)$	$(7.010, 9.305)$	$(-7.302, -3.573)$
Observations	74	67	70
R^2	0.008	0.0002	0.016

Note: 95 % confidence interval shown in parentheses.

*p$<$0.05; **p$<$0.01; ***p$<$0.001

Table A3: OLS Regression of Work Relief Public Spending in Counties

Unemployment 1930	5.491**
	(1.453, 9.528)
Change in Unemployment, 1930-1940	5.204***
	(2.732, 7.677)
Avg Dem Vote	0.627
	(−0.094, 1.348)
Dem Closeness	1.214*
	(0.302, 2.126)
State Apportionment	−15.611
	(−39.011, 7.788)
# Dem Governor and Congress Reps	−0.093
	(−5.176, 4.989)
Retail Sales per Capita 1929	−0.050
	(−0.135, 0.034)
Retail Sales Growth, 1929-1933	7.784
	(−57.395, 72.964)
% Paying Income Tax 1929	0.896
	(−6.097, 7.890)
% Black	−0.593
	(−2.160, 0.973)
% Foreign-Born	−0.496
	(−2.199, 1.207)
% Pop > 65	0.965
	(−6.253, 8.184)
% Female	6.307
	(−2.319, 14.934)
Constant	−250.599
	(−673.479, 172.281)
Observations	87
R^2	0.621
Region FEs	Yes

Note: 95 % confidence interval shown in parentheses.

*p<0.05; **p<0.01; ***p<0.001

Table A4: Work Relief Spending & Democratic Vote Share in Machine vs. Non-Machine Counties, 1932-1940

	Presidential		Senatorial	
	(1)	(2)	(3)	(4)
Work Grants per Capita	0.118	0.068	−0.324	−0.217
	(−0.292, 0.527)	(−0.290, 0.426)	(−1.428, 0.781)	(−1.286, 0.852)
Work Grants per Capita:Machine County	−0.270	−0.313	0.285*	0.399*
	(−0.557, 0.017)	(−0.633, 0.007)	(0.043, 0.526)	(0.059, 0.739)
Other New Deal Spending per Capita		−0.128		0.053
		(−0.262, 0.006)		(−0.094, 0.199)
% Black		−0.872		2.205
		(−3.034, 1.290)		(−1.723, 6.133)
% Female		−3.791*		−3.047
		(−7.334, −0.247)		(−12.320, 6.227)
% Foreign Born		−0.068		0.472
		(−1.285, 1.148)		(−1.515, 2.460)
Pop Density		−0.0003		0.012
		(−0.012, 0.011)		(−0.012, 0.035)
Pop > 65		1.591		−3.004
		(−2.978, 6.161)		(−12.271, 6.264)
Unemployment Rate		−0.233		0.761
		(−0.929, 0.464)		(−0.179, 1.701)
# Dem Governor and Congress Reps		0.233		−0.932
		(−0.700, 1.165)		(−2.854, 0.990)
Year & County FEs	Yes	Yes	Yes	Yes
Region FEs	No	Yes	No	Yes
Time-Varying Covariates	No	Yes	No	Yes
Observations	271	271	274	274
R^2	0.908	0.915	0.861	0.865

Note: 95 % confidence interval shown in parentheses. Standard errors are clustered at the state level
*p<0.05; **p<0.01; ***p<0.001

Table A5: Time-Varying Machine Definition - Work Relief Spending & Democratic Vote Share in Machine vs. Non-Machine Counties, 1932-1940

	Presidential		Senatorial	
	(1)	(2)	(3)	(4)
Work Grants Per Capita	0.093	0.043	−0.376	−0.249
	(−0.312, 0.499)	(−0.316, 0.401)	(−1.450, 0.697)	(−1.273, 0.776)
Work Grants Per Capita:Machine County	−0.187	−0.218	0.523**	0.620**
	(−0.468, 0.094)	(−0.525, 0.088)	(0.161, 0.885)	(0.206, 1.035)
Other New Deal Spending per Capita		−0.126		0.066
		(−0.262, 0.011)		(−0.087, 0.220)
% Black		−0.846		1.815
		(−3.000, 1.308)		(−2.311, 5.940)
% Female		−3.610		−2.741
		(−7.181, −0.039)		(−11.660, 6.177)
% Foreign Born		−0.096		0.540
		(−1.338, 1.145)		(−1.424, 2.505)
Pop Density		−0.0002		0.014
		(−0.012, 0.011)		(−0.010, 0.038)
Pop > 65		1.223		−2.804
		(−3.428, 5.874)		(−11.389, 5.781)
Unemployment Rate		−0.245		0.779
		(−0.964, 0.475)		(−0.149, 1.708)
# Dem Governor and Congress Reps		0.197		−0.953
		(−0.738, 1.131)		(−2.817, 0.910)
Observations	271	271	274	274
R^2	0.907	0.913	0.863	0.868
Year & County FEs	Yes	Yes	Yes	Yes
Region FEs	No	Yes	No	Yes
Time-Varying Covariates	No	Yes	No	Yes

Note: 95 % confidence interval shown in parentheses. Standard errors are clustered at the state level.
*p<0.05; **p<0.01; ***p<0.001

Table A6: State-Level Time Trends - Work Relief Spending & Democratic Vote Share in Machine vs. Non-Machine Counties, 1932-1940

	Presidential		Senatorial	
	(1)	(2)	(3)	(4)
Work Grants Per Capita	−0.044	−0.040	−0.374	−0.129
	(−0.413, 0.325)	(−0.392, 0.311)	(−2.152, 1.403)	(−1.983, 1.724)
Work Grants Per Capita:Machine County	−0.225	−0.249	0.373*	0.469+
	(−0.486, 0.035)	(−0.676, 0.178)	(0.037, 0.709)	(−0.003, 0.935)
Other New Deal Spending per Capita		0.070		−0.058
		(−0.120, 0.260)		(−0.763, 0.647)
% Black		−0.509		2.338
		(−2.771, 1.753)		(−3.921, 8.597)
% Female		−1.093		2.283
		(−7.604, 5.417)		(−5.662, 10.227)
% Foreign Born		−0.378		−0.320
		(−1.952, 1.195)		(−1.576, 0.937)
Pop Density		−0.003		0.014
		(−0.025, 0.019)		(0.0001, 0.028)
Pop > 65		1.444		−3.051
		(−6.336, 9.223)		(−13.683, 7.582)
Unemployment Rate		−0.508		0.392
		(−1.182, 0.165)		(−0.342, 1.127)
# Dem Governor and Congress Reps		0.462		−1.861
		(−0.531, 1.456)		(−4.595, 0.874)
Observations	271	271	274	274
R^2	0.938	0.940	0.886	0.890
Year & County FEs	Yes	Yes	Yes	Yes
Region FEs	No	Yes	No	Yes
Time-Varying Covariates	No	Yes	No	Yes
State Time Trends	Yes	Yes	Yes	Yes

Note: 95 % confidence interval shown in parentheses. Standard errors are clustered at the state level.
+p<0.1; *p<0.05; **p<0.01; ***p<0.001

Figure A1: Residual Graph (from Figure 2) - Machines vs. Non-Machine Cities

This graph of the residuals from the regression run for Figure 2 and Table A3 shows whether there was any perceptible relationship between machine counties and non-machine counties that may explain the difference in predicted work relief spending per capita, on top of the variation explained by economic and political differences. As the residuals for machine and non-machine counties are distributed relatively evenly across the plot, we see that machines did not receive perceptibly more work relief per capita than non-machine cities that is not explained by other economic and political factors. The correlation between being a machine and the residuals is 0.00.

Machine   Not Machine