

Online Appendix for “Effect of Nuclear Power Plants on Local Crop Yields”

Robustness of results

A.1. Alternative control counties

A specification with control counties being all the non-treated counties in the states with nuclear power plants (see Table A.1 and Table A.2) indicates an increase in yields similar to those reported in the main specifications.

A.2. Quadratic nuclear density

One may wonder if the relationship between the density and crop yields is non-linear. Table A.3 and Table A.4 report results for the estimations including quadratic density term. While the quadratic term is negative, it is not statistically significant. The linear term is still positive and statistically significant.

A.3. Taking into account wind directions

While the specification for soybeans taking into account wind direction yields results significant at the 5% level, the results for corn are only significant at a 10% level (with a p-value of around 6%). The coefficients, however, reported in Table A.5 and Table A.6, are larger in magnitude, thus, providing evidence that the mechanism is linked to the emissions (of water steam) into the atmosphere.

A.4. Explanatory variables binned at the quartiles

Graphs in Figure 12 to Figure 15 show yearly quartiles of GDD and precipitation. Based on these graphs, the first quartile is approximately 3,000 for GDD and 20 for precipitation. The median is approximately 3,200 for GDD and 23 for precipitation. The third quartile is approximately 3,500 for GDD and 27.5 for precipitation. Each of the explanatory variables is binned into four dummy variables: low (values below the first quartile), “25 to 50” (values between

the first quartile and the median), “50 to 75” (values between the median and the third quartile), and high (values above the third quartile). The resulting coefficients (see Table A.7 and Table A.8) are similar to those in the main regression. While coefficients for the dummies representing higher GDD are negative, they are not significant. Coefficients for the dummies representing higher precipitation levels, on the other hand, are positive and significant. Table A.9 and Table A.10 present the results for binning at the first and third quartiles.

A.5. Sine GDD

Results for the estimates using alternative, “sine”, way to calculate GDD are presented in Table A.11 and Table A.12. The results are similar to the ones in the main specification.

A.6. Cold weather

Cold weather is another factor that can affect plant growth. Estimations with number of cold days in a given year were performed and the results are presented in Table A.13 and Table A.14. The agricultural literature (for example, Elmore, Owen, Abendroth, 2006) suggests that growth of crops like corn is negatively affected by temperatures below 60 degrees Fahrenheit. Hence, cold days were defined in one of the two ways: days when the minimum temperature is below 60 degrees and days when the average of the minimum and maximum temperatures is below 60 degrees. The results do not show a significant effect of cold days. The coefficient on the density variable, however, is still statistically significant.

A.7. Dropping counties with high urbanization rates.

The estimations are performed dropping counties with high urbanization rates. Figure 16 and Figure 17 show the distribution of percentages of the urban population in soybeans and corn growing counties according to the 1972 County Book. The models are estimated after dropping counties with urbanization rate above 60%. The coefficient on the density variable, presented in

Table A.15 and Table A.16) is significant and is close to the magnitude of the coefficient in the main specification.

A.8. PDSI as an explanatory variable

Palmer Drought Severity Index (PDSI) is a measure of dryness that takes into account precipitation, temperature, latitude, and available water capacity of soil (Palmer 1965). It ranges from -10 to 10, where negative values correspond to dry weather and positive values correspond to wet weather with larger magnitudes corresponding to more extreme conditions. The average PDSI is calculated for each season. Table A.17 and Table A.18 explore cases of the linear relationship between yields and PDSI in each season (average PDSI in spring, summer, and fall). In Table A.19 and Table A.20, dry and wet weather are defined as weather with PDSI below -2 and above 2. In Table A.21 and Table A.22, dry and wet weather are defined as weather with PDSI below -3 and above 3. All the regressions including the PDSI variable indicate that dry summers negatively influence crop yields. More importantly, they produce the *density* variable coefficients comparable to those in the main model.

A.9. Alternative clustering levels

Table A.23 presents results for the main specification with alternative levels of standard error clustering. While results for soybeans are robust across all specifications, results for corn were only significant with state-level clustering.

A.10. Extended timeline

Table A.24 and Table A.25 present the results for specifications with extended timeline, from 1972 until 2011. The results for corn are similar to the ones in the main specification. However, the results for soybeans are not significant at the conventional levels with the p-value of 11%.

A.11. Unbalanced panels

Specifications considered so far relied on the balanced panel. The results for the unbalanced are presented in Table A.26 and Table A.27. The results are similar to those for the balanced panel.

Table A.1. Control are All Non-treated Counties in the States with Nuclear Power Plants.

Soybeans

	Yield	Yield	Yield
density	0.256***	0.255***	0.244***
	(0.0633)	(0.0684)	(0.0616)
gdd/1000		1.678***	1.254***
		(0.393)	(0.399)
(gdd/1000) ²		-0.349***	-0.245**
		(0.0888)	(0.0989)
precip			0.859***
			(0.169)
precip ²			-0.0142***
			(0.00318)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	18520	18520	18520
adj. <i>R</i> ²	0.847	0.847	0.855

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.2. Control are All Non-treated Counties in the States with Nuclear Power Plants. Corn

	Yield	Yield	Yield
density	0.224 (0.151)	0.242 (0.148)	0.220* (0.120)
gdd/1000		3.524** (1.533)	1.986* (1.134)
(gdd/1000) ²		-1.053** (0.382)	-0.591** (0.272)
precip			3.707*** (0.446)
precip ²			-0.0600*** (0.00838)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	26140	26140	26140
adj. <i>R</i> ²	0.843	0.844	0.854

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.3. Quadratic nuclear density. Soybeans

	Yield	Yield	Yield
density	0.422** (0.156)	0.419** (0.156)	0.380** (0.145)
densysq	-0.0350* (0.0198)	-0.0341* (0.0196)	-0.0297 (0.0188)
gdd1000		1.641** (0.616)	1.415** (0.594)
gdd1000sq		-0.363** (0.144)	-0.307* (0.147)
grow			0.866*** (0.130)
growsq			-0.0145*** (0.00234)
<i>N</i>	9720	9720	9720
adj. <i>R</i> ²	0.866	0.866	0.872

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.4. Quadratic nuclear density. Corn

	Yield	Yield	Yield
density	0.699 ^{***}	0.728 ^{***}	0.666 ^{**}
	(0.251)	(0.254)	(0.278)
densysq	-0.0369	-0.0384	-0.0347
	(0.0324)	(0.0329)	(0.0318)
gdd1000		2.087	1.285
		(1.322)	(1.222)
gdd1000sq		-0.783 ^{***}	-0.506 [*]
		(0.280)	(0.257)
grow			3.446 ^{***}
			(0.368)
growsq			-0.0545 ^{***}
			(0.00666)
<i>N</i>	14940	14940	14940
adj. <i>R</i> ²	0.868	0.868	0.876

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.5. Considering the Wind Directions. Soybeans

	Yield	Yield	Yield
density	0.350** (0.111)	0.340** (0.122)	0.339** (0.130)
gdd1000		-1.214 (5.139)	1.229 (4.784)
gdd1000sq		0.200 (0.691)	-0.139 (0.647)
grow			0.740*** (0.0981)
growsq			-0.0107*** (0.00267)
<i>N</i>	1080	1080	1080
adj. R^2	0.853	0.853	0.858

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.6. Considering the Wind Directions. Corn

	Yield	Yield	Yield
density	0.697 (0.441)	0.535* (0.250)	0.469 (0.267)
gdd1000		-27.14* (13.31)	-17.75 (12.63)
gdd1000sq		5.566*** (1.654)	4.125** (1.697)
grow			3.419*** (0.879)
growsq			-0.0567*** (0.0138)
<i>N</i>	1580	1580	1580
adj. <i>R</i> ²	0.864	0.870	0.874

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.7. Regressions with GDD and precipitation binned at the quartiles. Soybeans

	Yield	Yield	Yield
density	0.199** (0.0770)	0.188** (0.0773)	0.194** (0.0739)
gdd_25_50	-0.200 (0.272)		-0.212 (0.260)
gdd_50_75	-0.587 (0.408)		-0.520 (0.415)
gddmax	-0.911 (0.537)		-0.793 (0.531)
precip_25_50		1.454*** (0.299)	1.442*** (0.301)
precip_50_75		1.612*** (0.488)	1.593*** (0.498)
precipmax		1.369* (0.673)	1.348* (0.689)
_cons	28.47*** (0.289)	26.91*** (0.336)	27.34*** (0.539)
<i>N</i>	9720	9720	9720
adj. <i>R</i> ²	0.866	0.869	0.869

gdd_25_50 is growing season GDD between 3,000 and 3,200, precip_50_75 is growing season GDD between 3,200 and 3,500, and gdd_max is growing season GDD above 3,500. The omitted category is GDD below 3,000. precip_medium is growing season precipitation between 20 and

23, precip_50_75 is growing season precipitation between 23 and 27.5, and precip_max is growing season precipitation above 27.5. The omitted category is precipitation below 20.

Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.8. Regressions with GDD and precipitation binned at the quartiles. Corn

	Yield	Yield	Yield
density	0.337**	0.315**	0.323**
	(0.160)	(0.144)	(0.142)
gdd_25_50	-1.217		-1.144
	(1.032)		(1.019)
gdd_50_75	-2.717**		-2.150**
	(1.036)		(1.003)
gddmax	-3.240*		-2.476
	(1.652)		(1.631)
precip_25_50		6.373***	6.337***
		(0.580)	(0.591)
precip_50_75		8.096***	8.021***
		(0.868)	(0.878)
precipmax		8.181***	8.082***
		(0.949)	(0.943)
_cons	85.22***	77.90***	79.32***
	(0.799)	(0.559)	(1.141)
<i>N</i>	14940	14940	14940
adj. <i>R</i> ²	0.868	0.873	0.873

gdd_25_50 is growing season GDD between 3,000 and 3,200, precip_50_75 is growing season GDD between 3,200 and 3,500, and gdd_max is growing season GDD above 3,500. The omitted category is GDD below 3,000. precip_medium is growing season precipitation between 20 and

23, precip_50_75 is growing season precipitation between 23 and 27.5, and precip_max is growing season precipitation above 27.5. The omitted category is precipitation below 20.

Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.9. Regressions with GDD and precipitation binned at the first and third quartiles.

Soybeans

	Yield	Yield	Yield
density	0.197**	0.188**	0.193**
	(0.0778)	(0.0765)	(0.0736)
gdd_medium	-0.285		-0.278
	(0.285)		(0.279)
gdd_max	-0.674		-0.602
	(0.400)		(0.398)
precip_medium		1.486***	1.479***
		(0.333)	(0.333)
precip_max		1.293**	1.290**
		(0.571)	(0.573)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	9720	9720	9720
adj. <i>R</i> ²	0.866	0.869	0.869

gdd_medium is growing season GDD between 3,000 and 3,500, and gdd_max is growing season GDD above 3,500. The omitted category is GDD below 3,000. precip_medium is growing season precipitation between 20 and 27.5, and precip_max is growing season precipitation above 27.5. The omitted category is precipitation below 20.

Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.10. Regressions with GDD and precipitation binned at the first and third quartiles. Corn

	Yield	Yield	Yield
density	0.332*	0.318**	0.322**
	(0.162)	(0.144)	(0.143)
gdd_medium	-1.543		-1.397
	(0.959)		(0.952)
gdd_max	-2.202		-1.833
	(1.320)		(1.360)
precip_medium		6.746***	6.725***
		(0.644)	(0.650)
precip_max		7.348***	7.309***
		(0.774)	(0.770)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	14940	14940	14940
adj. <i>R</i> ²	0.868	0.873	0.873

gdd_medium is growing season GDD between 3,000 and 3,500, and gdd_max is growing season GDD above 3,500. The omitted category is GDD below 3,000. precip_medium is growing season precipitation between 20 and 27.5, and precip_max is growing season precipitation above 27.5. The omitted category is precipitation below 20.

Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.11. Sine GDD. Soybeans

	Yield	Yield	Yield
density	0.0911**	0.0907**	0.0889**
	(0.0416)	(0.0416)	(0.0408)
gdd1000		1.709	1.673
		(1.858)	(1.831)
gdd1000sq		-2.663	-2.020
		(1.951)	(1.903)
grow			0.901***
			(0.0579)
growsq			-0.0150***
			(0.00111)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	9720	9720	9720
adj. <i>R</i> ²	0.866	0.866	0.872

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.12. Sine GDD. Corn

	Yield	Yield	Yield
density	0.327*	0.330*	0.310**
	(0.163)	(0.164)	(0.125)
gdd1000		-9.821	-12.04
		(7.988)	(9.700)
gdd1000sq		15.92*	17.84*
		(8.594)	(9.751)
grow			3.471***
			(0.363)
growsq			-0.0548***
			(0.00659)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	14940	14940	14940
adj. <i>R</i> ²	0.868	0.868	0.876

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.13. Cold days. Soybeans

	Yield	Yield	Yield	Yield
density	0.0891**	0.0891**	0.0900**	0.0906**
	(0.0408)	(0.0408)	(0.0409)	(0.0408)
gdd1000	-0.255	-0.254	-0.188	-0.135
	(0.357)	(0.356)	(0.358)	(0.358)
gdd1000sq	-0.00330	-0.00329	-0.0114	-0.0161
	(0.0711)	(0.0711)	(0.0717)	(0.0716)
grow	0.901***	0.901***	0.900***	0.903***
	(0.0579)	(0.0579)	(0.0580)	(0.0581)
growsq	-0.0151***	-0.0151***	-0.0150***	-0.0151***
	(0.00111)	(0.00111)	(0.00111)	(0.00111)
cd_min	0.00366	0.00346		
	(0.00264)	(0.00704)		
cd_min_sq		0.00000121		
		(0.0000392)		
cd_mean			0.00452	-0.0136
			(0.00618)	(0.0150)
cd_mean_sq				0.000257
				(0.000196)
<i>N</i>	11900	11900	11900	11900
adj. <i>R</i> ²	0.872	0.872	0.872	0.872

Standard errors clustered at state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.14. Cold days. Corn

	Yield	Yield	Yield	Yield
density	0.311**	0.317**	0.310**	0.311**
	(0.123)	(0.128)	(0.124)	(0.122)
gdd1000	7.788*	8.016*	7.708*	6.956
	(4.222)	(4.331)	(4.310)	(4.401)
gdd1000sq	-1.015	-1.091	-1.012	-0.926
	(0.696)	(0.728)	(0.703)	(0.706)
grow	3.468***	3.455***	3.473***	3.451***
	(0.367)	(0.363)	(0.366)	(0.370)
growsq	-0.0547***	-0.0546***	-0.0548***	-0.0544***
	(0.00664)	(0.00660)	(0.00663)	(0.00668)
cd_min	-0.00441	0.0572*		
	(0.0102)	(0.0320)		
cd_min_sq		-0.000386**		
		(0.000182)		
cd_mean			-0.0155	0.114
			(0.0274)	(0.0758)
cd_mean_sq				-0.00189*
				(0.00107)
<i>N</i>	14940	14940	14940	14940
adj. <i>R</i> ²	0.876	0.876	0.876	0.876

Standard errors clustered at state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.15. Regressions excluding counties with urbanization rate above 60% in 1970.

Soybeans

	Yield	Yield	Yield
density	0.177*	0.177*	0.169**
	(0.0869)	(0.0911)	(0.0792)
gdd/1000		1.513**	1.244*
		(0.625)	(0.598)
(gdd/1000) ²		-0.338**	-0.275*
		(0.144)	(0.146)
precip			0.867***
			(0.141)
precip ²			-0.0144***
			(0.00239)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	7880	7880	7880
adj. <i>R</i> ²	0.862	0.862	0.868

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.16. Regressions excluding counties with urbanization rate above 60% in 1970. Corn

	Yield	Yield	Yield
density	0.342*** (0.117)	0.370*** (0.104)	0.340*** (0.100)
gdd/1000		2.340** (1.027)	1.677 (1.035)
(gdd/1000) ²		-0.781*** (0.240)	-0.588** (0.244)
precip		0.558*** (0.0908)	3.497*** (0.374)
precip ²			-0.0553*** (0.00678)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	11900	11900	11900
adj. <i>R</i> ²	0.861	0.865	0.870

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.17. Regressions using average PDSI for each season. Soybeans

	Yield	Yield	Yield	Yield	Yield
density	0.191** (0.0810)	0.189** (0.0832)	0.188** (0.0844)	0.184** (0.0836)	0.187** (0.0845)
pdsi_spring		0.102 (0.108)			-0.104 (0.111)
pdsi_summer			0.289*** (0.0921)		0.244** (0.0943)
pdsi_fall				0.256*** (0.0773)	0.131 (0.104)
County FE	Y	Y	Y	Y	Y
State-Year FE	Y	Y	Y	Y	Y
<i>N</i>	9720	9720	9720	9720	9720
adj. <i>R</i> ²	0.866	0.866	0.867	0.867	0.867

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.18. Regressions using average PDSI for each season. Corn

	Yield	Yield	Yield	Yield	Yield
density	0.327*	0.330*	0.327*	0.314*	0.323*
	(0.163)	(0.164)	(0.166)	(0.160)	(0.158)
pdsi_spring		0.478			-1.110***
		(0.288)			(0.235)
pdsi_summer			1.875***		2.602***
			(0.370)		(0.872)
pdsi_fall				1.192***	-0.185
				(0.327)	(0.717)
County FE	Y	Y	Y	Y	Y
State-Year FE	Y	Y	Y	Y	Y
<i>N</i>	14940	14940	14940	14940	14940
adj. <i>R</i> ²	0.868	0.868	0.871	0.870	0.872

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.19. Regressions using binned PDSI. Normal PDSI within -2 and 2. Soybeans

	Yield	Yield	Yield	Yield
density	0.191**	0.192**	0.189**	0.191**
	(0.0822)	(0.0799)	(0.0796)	(0.0793)
pdsi_spring_dry	-0.405			0.0296
	(0.301)			(0.286)
pdsi_spring_wet	-0.0732			-0.144
	(0.302)			(0.309)
pdsi_summer_dry		-1.663***		-1.540***
		(0.321)		(0.395)
pdsi_summer_wet		0.0512		0.105
		(0.167)		(0.110)
pdsi_fall_dry			-0.939*	-0.482
			(0.455)	(0.456)
pdsi_fall_wet			-0.0356	-0.0576
			(0.190)	(0.176)
County FE	Y	Y	Y	Y
State-Year FE	Y	Y	Y	Y
<i>N</i>	9720	9720	9720	9720
adj. <i>R</i> ²	0.866	0.867	0.866	0.867

Note: omitted variable for each season is “normal PDSI”, defined as PDSI between -2 and 2
Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.20. Regressions using binned PDSI. Normal PDSI within -2 and 2. Corn

	Yield	Yield	Yield	Yield
density	0.330*	0.344**	0.321*	0.339**
	(0.163)	(0.155)	(0.156)	(0.149)
pdsi_spring_dry	-1.992*			-0.0265
	(1.026)			(0.943)
pdsi_spring_wet	0.406			-0.216
	(0.882)			(0.906)
pdsi_summer_dry		-6.027***		-5.371***
		(1.157)		(1.360)
pdsi_summer_wet		0.943		0.414
		(0.686)		(0.705)
pdsi_fall_dry			-3.812*	-2.082
			(2.157)	(2.265)
pdsi_fall_wet			1.822***	1.667**
			(0.593)	(0.738)
County FE	Y	Y	Y	Y
State-Year FE	Y	Y	Y	Y
<i>N</i>	14940	14940	14940	14940
adj. <i>R</i> ²	0.868	0.870	0.869	0.870

Note: omitted variable for each season is “normal PDSI”, defined as PDSI between -2 and 2
Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.21. Regressions using binned PDSI. Normal PDSI within -3 and 3. Soybeans

	Yield	Yield	Yield	Yield
density	0.185**	0.190**	0.188**	0.184**
	(0.0825)	(0.0804)	(0.0813)	(0.0825)
pdsi_spring_dry	-1.380***			-1.062**
	(0.315)			(0.425)
pdsi_spring_wet	-0.331			-0.270
	(0.261)			(0.318)
pdsi_summer_dry		-1.582***		-1.029**
		(0.412)		(0.399)
pdsi_summer_wet		-0.277		-0.121
		(0.270)		(0.374)
pdsi_fall_dry			-1.593***	-1.298***
			(0.418)	(0.336)
pdsi_fall_wet			-0.228	-0.186
			(0.182)	(0.223)
County FE	Y	Y	Y	Y
State-Year FE	Y	Y	Y	Y
<i>N</i>	9720	9720	9720	9720
adj. <i>R</i> ²	0.866	0.867	0.866	0.867

Note: omitted variable for each season is “normal PDSI”, defined as PDSI between -3 and 3
Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.22. Regressions using binned PDSI. Normal PDSI within -3 and 3. Corn

	Yield	Yield	Yield	Yield
density	0.328*	0.329**	0.320*	0.320**
	(0.164)	(0.155)	(0.156)	(0.154)
pdsi_spring_dry	-1.197*			0.960
	(0.618)			(1.114)
pdsi_spring_wet	-0.391			-0.578
	(1.762)			(1.762)
pdsi_summer_dry		-6.772***		-5.935***
		(1.239)		(1.786)
pdsi_summer_wet		0.169		0.642
		(1.190)		(1.278)
pdsi_fall_dry			-6.029**	-4.092
			(2.359)	(2.432)
pdsi_fall_wet			-0.832	-0.969
			(0.592)	(0.714)
County FE	Y	Y	Y	Y
State-Year FE	Y	Y	Y	Y
<i>N</i>	14940	14940	14940	14940
adj. <i>R</i> ²	0.868	0.869	0.869	0.870

Note: omitted variable for each season is “normal PDSI”, defined as PDSI between -3 and 3
Standard errors clustered at the state level in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.23. Alternative Clustering Levels for Standard Errors

	Soybeans	Corn
State-level clustering	0.184 ^{***}	0.317 ^{**}
	(0.074)	(0.121)
Agricultural district-level clustering	0.184 ^{***}	0.317
	(0.070)	(0.274)
County-level clustering	0.184 ^{***}	0.317
	(0.065)	(0.225)

Standard errors in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.24. Extended timeline, 1972 - 2011. Soybeans

	Yield	Yield	Yield
density	0.0881*	0.0863*	0.0701
	(0.0454)	(0.0454)	(0.0443)
gdd1000		0.562**	0.428
		(0.284)	(0.278)
gdd1000sq		-0.0743	-0.0258
		(0.0682)	(0.0667)
grow			1.170***
			(0.0466)
growsq			-0.0203***
			(0.000879)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	15000	15000	15000
adj. <i>R</i> ²	0.890	0.890	0.895

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.25. Extended timeline, 1972 – 2011. Corn

	Yield	Yield	Yield
density	0.294**	0.286**	0.259**
	(0.124)	(0.125)	(0.120)
gdd1000		3.228***	2.521***
		(0.969)	(0.953)
gdd1000sq		-0.659**	-0.459*
		(0.270)	(0.269)
grow			4.365***
			(0.185)
growsq			-0.0715***
			(0.00354)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	17640	17640	17640
adj. <i>R</i> ²	0.884	0.884	0.891

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.26. Unbalanced panel. Soybeans

	Yield	Yield	Yield
density	0.103** (0.0506)	0.103** (0.0506)	0.101** (0.0477)
gdd1000		-0.180 (0.345)	-0.176 (0.349)
gdd1000sq		0.00241 (0.0704)	-0.00785 (0.0705)
grow			0.803*** (0.0484)
growsq			-0.0130*** (0.000891)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	14456	14456	14456
adj. <i>R</i> ²	0.844	0.844	0.849

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.27. Unbalanced panel. Corn

	Yield	Yield	Yield
density	0.300*	0.302*	0.282**
	(0.148)	(0.148)	(0.128)
gdd1000		-0.415	-0.496
		(1.256)	(0.886)
gdd1000sq		0.248	0.230
		(0.310)	(0.203)
grow			3.057***
			(0.372)
growsq			-0.0471***
			(0.00662)
County FE	Y	Y	Y
State-Year FE	Y	Y	Y
<i>N</i>	17183	17183	17183
adj. <i>R</i> ²	0.870	0.870	0.876

Standard errors clustered at the state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A.28. Placebo test results. Density is measured using nameplate capacities of nuclear power plants without cooling towers

	Soybeans		Corn	
	Yield	Yield	Yield	Yield
density	0.0281 (0.0737)	0.0134 (0.0615)	-0.0452 (0.253)	-0.0175 (0.234)
gdd/1000		-2.240 (2.828)		-2.870 (16.01)
(gdd/1000) ²		0.183 (0.416)		0.144 (2.425)
precip		1.372*** (0.145)		3.507*** (0.482)
precip ²		-0.0244*** (0.00294)		-0.0579*** (0.00868)
County FE	Y	Y	Y	Y
State-Year FE	Y	Y	Y	Y
<i>N</i>	4956	4956	8862	8862
adj. <i>R</i> ²	0.887	0.896	0.867	0.875

Standard errors clustered at state level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Fixed effects estimates

Table A.29. State-year dummy estimates from the main specification. Soybeans

State	Year	Coefficient
ALABAMA	1972	0 (.)
ALABAMA	1973	2.503*** (0.508)
ALABAMA	1974	3.464*** (0.356)
ALABAMA	1975	6.735*** (1.184)
ALABAMA	1976	3.018*** (0.441)
ALABAMA	1977	5.489*** (0.188)
ALABAMA	1978	3.496*** (0.326)
ALABAMA	1979	8.515*** (0.664)
ALABAMA	1980	-4.551*** (0.208)
ALABAMA	1981	6.995*** (0.0592)
ALABAMA	1982	7.100*** (0.308)
ALABAMA	1983	2.028*** (0.459)
ALABAMA	1984	1.588*** (0.257)
ALABAMA	1985	8.630***

ALABAMA	1986	(0.216) 5.644*** (0.180)
ALABAMA	1987	-0.982*** (0.0428)
ALABAMA	1988	7.763*** (0.251)
ALABAMA	1989	2.736*** (0.778)
ALABAMA	1990	-1.200*** (0.146)
ALABAMA	1991	3.737*** (0.385)
ARKANSAS	1972	-7.271*** (0.399)
ARKANSAS	1973	-3.939*** (0.380)
ARKANSAS	1974	-6.432*** (0.372)
ARKANSAS	1975	-3.863*** (0.125)
ARKANSAS	1976	-7.319*** (0.371)
ARKANSAS	1977	-4.907*** (0.336)
ARKANSAS	1978	-4.907*** (0.321)
ARKANSAS	1979	0.369 (0.507)
ARKANSAS	1980	-13.21*** (0.434)
ARKANSAS	1981	-5.853*** (0.150)

ARKANSAS	1982	-6.024*** (0.265)
ARKANSAS	1983	-10.83*** (0.282)
ARKANSAS	1984	-3.908*** (0.219)
ARKANSAS	1985	-1.566*** (0.444)
ARKANSAS	1986	-5.711*** (0.107)
ARKANSAS	1987	-2.803*** (0.466)
ARKANSAS	1988	-2.500*** (0.504)
ARKANSAS	1989	-5.318*** (0.214)
ARKANSAS	1990	-2.236*** (0.109)
ARKANSAS	1991	0 (.)
DELAWARE	1972	-9.472*** (0.458)
DELAWARE	1973	-5.948*** (0.423)
DELAWARE	1974	-7.454*** (0.363)
DELAWARE	1975	-9.376*** (0.688)
DELAWARE	1976	-8.949*** (0.390)
DELAWARE	1977	-8.245*** (0.389)
DELAWARE	1978	-5.470***

		(0.312)
DELAWARE	1979	-5.007***
		(0.472)
DELAWARE	1980	-12.31***
		(0.267)
DELAWARE	1981	-6.114***
		(0.257)
DELAWARE	1982	-9.704***
		(0.174)
DELAWARE	1983	-6.909***
		(0.308)
DELAWARE	1984	-8.840***
		(0.210)
DELAWARE	1985	-3.812***
		(0.194)
DELAWARE	1986	-7.512***
		(0.457)
DELAWARE	1987	-13.29***
		(0.264)
DELAWARE	1988	-6.937***
		(0.0988)
DELAWARE	1989	-6.565***
		(0.783)
DELAWARE	1990	-0.561*
		(0.294)
DELAWARE	1991	0
		(.)
FLORIDA	1972	-6.944***
		(0.747)
FLORIDA	1973	-1.233*
		(0.709)
FLORIDA	1974	0.466
		(0.578)

FLORIDA	1975	0.155
		(1.206)
FLORIDA	1976	-1.140**
		(0.499)
FLORIDA	1977	-1.626***
		(0.298)
FLORIDA	1978	-2.682***
		(0.218)
FLORIDA	1979	4.828***
		(0.705)
FLORIDA	1980	-3.582***
		(0.284)
FLORIDA	1981	-3.094***
		(0.630)
FLORIDA	1982	-1.976***
		(0.275)
FLORIDA	1983	-3.653***
		(0.391)
FLORIDA	1984	-2.315***
		(0.347)
FLORIDA	1985	0.324
		(0.330)
FLORIDA	1986	-3.940***
		(0.687)
FLORIDA	1987	-2.386***
		(0.382)
FLORIDA	1988	3.081***
		(0.224)
FLORIDA	1989	-3.220***
		(0.344)
FLORIDA	1990	-4.818***
		(0.681)
FLORIDA	1991	0

		(.)
GEORGIA	1972	-9.711***
		(0.483)
GEORGIA	1973	-5.238***
		(0.169)
GEORGIA	1974	-2.125***
		(0.250)
GEORGIA	1975	-0.932***
		(0.224)
GEORGIA	1976	-2.681***
		(0.232)
GEORGIA	1977	-4.788***
		(0.494)
GEORGIA	1978	-7.792***
		(0.435)
GEORGIA	1979	1.536***
		(0.179)
GEORGIA	1980	-12.25***
		(0.530)
GEORGIA	1981	-4.604***
		(0.543)
GEORGIA	1982	1.086***
		(0.232)
GEORGIA	1983	-4.394***
		(0.408)
GEORGIA	1984	-5.369***
		(0.313)
GEORGIA	1985	-1.286***
		(0.374)
GEORGIA	1986	-5.079***
		(0.747)
GEORGIA	1987	-4.975***
		(0.545)

GEORGIA	1988	-0.687*
		(0.370)
GEORGIA	1989	-0.672***
		(0.174)
GEORGIA	1990	-9.669***
		(0.748)
GEORGIA	1991	0
		(.)
ILLINOIS	1972	-5.900***
		(0.753)
ILLINOIS	1973	-7.585***
		(0.612)
ILLINOIS	1974	-15.68***
		(0.516)
ILLINOIS	1975	-2.715***
		(0.420)
ILLINOIS	1976	-5.641***
		(0.170)
ILLINOIS	1977	-1.046**
		(0.460)
ILLINOIS	1978	-5.076***
		(0.450)
ILLINOIS	1979	0.101
		(0.383)
ILLINOIS	1980	-3.431***
		(0.501)
ILLINOIS	1981	0.0691
		(0.823)
ILLINOIS	1982	-0.563
		(0.453)
ILLINOIS	1983	-4.200***
		(0.427)
ILLINOIS	1984	-5.909***

		(0.307)
ILLINOIS	1985	5.149***
		(0.173)
ILLINOIS	1986	-0.665
		(0.496)
ILLINOIS	1987	2.191***
		(0.341)
ILLINOIS	1988	-8.057***
		(0.424)
ILLINOIS	1989	2.438***
		(0.399)
ILLINOIS	1990	2.044***
		(0.625)
ILLINOIS	1991	0
		(.)
INDIANA	1972	-10.44***
		(0.610)
INDIANA	1973	-8.034***
		(0.316)
INDIANA	1974	-15.08***
		(0.266)
INDIANA	1975	-6.354***
		(0.525)
INDIANA	1976	-5.733***
		(0.246)
INDIANA	1977	-2.033***
		(0.349)
INDIANA	1978	-6.387***
		(0.188)
INDIANA	1979	-1.544***
		(0.251)
INDIANA	1980	-2.329***
		(0.384)

INDIANA	1981	-5.818***
		(0.901)
INDIANA	1982	-0.163
		(0.223)
INDIANA	1983	-7.401***
		(0.261)
INDIANA	1984	-7.162***
		(0.254)
INDIANA	1985	2.013***
		(0.0832)
INDIANA	1986	-4.566***
		(0.443)
INDIANA	1987	2.810***
		(0.355)
INDIANA	1988	-7.378***
		(0.183)
INDIANA	1989	-0.155
		(0.438)
INDIANA	1990	2.804***
		(0.555)
INDIANA	1991	0
		(.)
IOWA	1972	-9.760***
		(0.373)
IOWA	1973	-11.45***
		(0.458)
IOWA	1974	-17.52***
		(0.309)
IOWA	1975	-9.607***
		(0.170)
IOWA	1976	-10.61***
		(0.228)
IOWA	1977	-7.480***

IOWA	1978	(0.169) -7.749***
IOWA	1979	(0.269) -5.596***
IOWA	1980	(0.145) -3.899***
IOWA	1981	(0.144) -3.967***
IOWA	1982	(0.265) -7.602***
IOWA	1983	(0.280) -8.081***
IOWA	1984	(0.100) -10.93***
IOWA	1985	(0.155) -4.949***
IOWA	1986	(0.192) -3.260***
IOWA	1987	(0.423) 1.001***
IOWA	1988	(0.0753) -12.67***
IOWA	1989	(0.564) -4.493***
IOWA	1990	(0.130) -1.004**
IOWA	1991	(0.474) 0 (.)
LOUISIANA	1972	-4.460*** (1.308)
LOUISIANA	1973	-5.442*** (0.587)

LOUISIANA	1974	-2.992*** (0.931)
LOUISIANA	1975	-2.483*** (0.238)
LOUISIANA	1976	-0.640 (1.283)
LOUISIANA	1977	-4.109*** (0.913)
LOUISIANA	1978	-4.061*** (1.129)
LOUISIANA	1979	-0.510 (0.585)
LOUISIANA	1980	-8.149*** (1.058)
LOUISIANA	1981	-6.457*** (1.263)
LOUISIANA	1982	-3.201** (1.121)
LOUISIANA	1983	-3.182*** (0.579)
LOUISIANA	1984	-2.405** (1.135)
LOUISIANA	1985	-7.075*** (1.203)
LOUISIANA	1986	-7.866*** (1.320)
LOUISIANA	1987	-4.258*** (1.189)
LOUISIANA	1988	0.809 (1.218)
LOUISIANA	1989	-6.647*** (0.510)
LOUISIANA	1990	-2.593*

LOUISIANA	1991	(1.371) 0 (.)
MARYLAND	1972	-9.925*** (0.632)
MARYLAND	1973	-5.708*** (0.344)
MARYLAND	1974	-7.718*** (0.339)
MARYLAND	1975	-8.587*** (0.815)
MARYLAND	1976	-9.519*** (0.181)
MARYLAND	1977	-7.010*** (0.121)
MARYLAND	1978	-4.209*** (0.340)
MARYLAND	1979	-5.916*** (0.740)
MARYLAND	1980	-11.00*** (0.0980)
MARYLAND	1981	-6.459*** (0.362)
MARYLAND	1982	-6.391*** (0.317)
MARYLAND	1983	-11.22*** (0.500)
MARYLAND	1984	-6.939*** (0.422)
MARYLAND	1985	-2.996*** (0.327)
MARYLAND	1986	-5.460*** (0.246)

MARYLAND	1987	-11.22*** (0.0525)
MARYLAND	1988	-3.803*** (0.180)
MARYLAND	1989	-6.104*** (0.834)
MARYLAND	1990	0.00838 (0.508)
MARYLAND	1991	0 (.)
MICHIGAN	1972	-17.22*** (0.216)
MICHIGAN	1973	-16.15*** (0.0887)
MICHIGAN	1974	-18.90*** (0.121)
MICHIGAN	1975	-14.71*** (0.379)
MICHIGAN	1976	-18.02*** (0.0835)
MICHIGAN	1977	-8.013*** (0.0766)
MICHIGAN	1978	-15.20*** (0.0913)
MICHIGAN	1979	-8.161*** (0.110)
MICHIGAN	1980	-7.146*** (0.364)
MICHIGAN	1981	-9.997*** (0.453)
MICHIGAN	1982	-7.329*** (0.108)
MICHIGAN	1983	-8.426***

MICHIGAN	1984	(0.191) -13.36*** (0.103)
MICHIGAN	1985	-6.029*** (0.0576)
MICHIGAN	1986	-9.325*** (0.456)
MICHIGAN	1987	-3.361*** (0.121)
MICHIGAN	1988	-10.40*** (0.140)
MICHIGAN	1989	-3.581*** (0.245)
MICHIGAN	1990	-1.583*** (0.159)
MICHIGAN	1991	0 (.)
MINNESOTA	1972	-11.01*** (0.327)
MINNESOTA	1973	-8.442*** (0.374)
MINNESOTA	1974	-16.14*** (0.597)
MINNESOTA	1975	-11.54*** (0.406)
MINNESOTA	1976	-11.68*** (1.003)
MINNESOTA	1977	-3.697*** (0.272)
MINNESOTA	1978	-4.282*** (0.132)
MINNESOTA	1979	-3.914*** (0.367)

MINNESOTA	1980	-5.737*** (0.415)
MINNESOTA	1981	-4.806*** (0.273)
MINNESOTA	1982	-2.909*** (0.428)
MINNESOTA	1983	-4.153*** (0.280)
MINNESOTA	1984	-4.278*** (0.297)
MINNESOTA	1985	-5.670*** (0.273)
MINNESOTA	1986	-2.158*** (0.152)
MINNESOTA	1987	3.862*** (0.606)
MINNESOTA	1988	-8.543*** (0.799)
MINNESOTA	1989	0.0532 (0.559)
MINNESOTA	1990	1.118*** (0.0939)
MINNESOTA	1991	0 (.)
MISSISSIPPI	1972	-8.380*** (1.044)
MISSISSIPPI	1973	-5.483*** (0.567)
MISSISSIPPI	1974	-5.973*** (0.542)
MISSISSIPPI	1975	-6.174*** (0.244)
MISSISSIPPI	1976	-4.755***

MISSISSIPPI	1977	(1.025) -6.490*** (0.896)
MISSISSIPPI	1978	-4.368*** (0.808)
MISSISSIPPI	1979	2.170*** (0.310)
MISSISSIPPI	1980	-12.24*** (0.751)
MISSISSIPPI	1981	-8.385*** (1.052)
MISSISSIPPI	1982	-3.837*** (0.855)
MISSISSIPPI	1983	-7.452*** (0.346)
MISSISSIPPI	1984	-4.434*** (0.950)
MISSISSIPPI	1985	-3.057*** (0.942)
MISSISSIPPI	1986	-10.70*** (1.038)
MISSISSIPPI	1987	-7.242*** (0.979)
MISSISSIPPI	1988	-4.636*** (1.027)
MISSISSIPPI	1989	-10.30*** (0.478)
MISSISSIPPI	1990	-9.282*** (0.985)
MISSISSIPPI	1991	0 (.)
MISSOURI	1972	-6.105*** (0.239)

MISSOURI	1973	-6.277*** (0.417)
MISSOURI	1974	-10.05*** (0.284)
MISSOURI	1975	-7.629*** (0.162)
MISSOURI	1976	-11.39*** (0.557)
MISSOURI	1977	-0.903*** (0.0333)
MISSOURI	1978	-5.409*** (0.175)
MISSOURI	1979	-0.471* (0.242)
MISSOURI	1980	-7.054*** (0.363)
MISSOURI	1981	-4.526*** (0.743)
MISSOURI	1982	-2.198*** (0.470)
MISSOURI	1983	-13.38*** (0.190)
MISSOURI	1984	-14.21*** (0.192)
MISSOURI	1985	0.809*** (0.253)
MISSOURI	1986	-1.739*** (0.209)
MISSOURI	1987	-0.848*** (0.151)
MISSOURI	1988	-3.408*** (0.487)
MISSOURI	1989	-1.035***

MISSOURI	1990	(0.199) -3.898*** (0.342)
MISSOURI	1991	0 (.)
OHIO	1972	-12.03*** (0.723)
OHIO	1973	-12.51*** (0.472)
OHIO	1974	-11.38*** (0.354)
OHIO	1975	-5.704*** (0.521)
OHIO	1976	-4.784*** (0.357)
OHIO	1977	-2.303*** (0.552)
OHIO	1978	-5.589*** (0.274)
OHIO	1979	-2.578*** (0.646)
OHIO	1980	-0.668 (0.579)
OHIO	1981	-9.002*** (0.719)
OHIO	1982	-0.698*** (0.204)
OHIO	1983	-1.693*** (0.419)
OHIO	1984	-0.434 (0.418)
OHIO	1985	4.023*** (0.262)

OHIO	1986	2.076*** (0.525)
OHIO	1987	0.990** (0.412)
OHIO	1988	-6.912*** (0.0766)
OHIO	1989	-7.866*** (0.576)
OHIO	1990	0.474 (0.700)
OHIO	1991	0 (.)
OKLAHOMA	1972	-2.244*** (0.526)
OKLAHOMA	1973	-2.036*** (0.598)
OKLAHOMA	1974	-3.364*** (0.398)
OKLAHOMA	1975	-2.917*** (0.242)
OKLAHOMA	1976	3.217*** (0.301)
OKLAHOMA	1977	1.515*** (0.360)
OKLAHOMA	1978	-11.99*** (0.568)
OKLAHOMA	1979	-1.235*** (0.273)
OKLAHOMA	1980	-16.57*** (0.496)
OKLAHOMA	1981	0.971*** (0.226)
OKLAHOMA	1982	-7.795***

OKLAHOMA	1983	(0.328) -8.834*** (0.406)
OKLAHOMA	1984	-7.307*** (0.271)
OKLAHOMA	1985	-1.842*** (0.339)
OKLAHOMA	1986	-2.111*** (0.179)
OKLAHOMA	1987	-2.288*** (0.184)
OKLAHOMA	1988	-6.130*** (0.467)
OKLAHOMA	1989	-3.599*** (0.185)
OKLAHOMA	1990	-0.850 (0.758)
OKLAHOMA	1991	0 (.)
TENNESSEE	1972	-7.249*** (0.272)
TENNESSEE	1973	-7.577*** (0.418)
TENNESSEE	1974	-6.692*** (0.276)
TENNESSEE	1975	-6.099*** (0.184)
TENNESSEE	1976	-5.962*** (0.246)
TENNESSEE	1977	-5.816*** (0.431)
TENNESSEE	1978	-4.599*** (0.0640)

TENNESSEE	1979	-3.006*** (0.701)
TENNESSEE	1980	-11.17*** (0.180)
TENNESSEE	1981	-4.291*** (0.0928)
TENNESSEE	1982	-1.658*** (0.141)
TENNESSEE	1983	-10.76*** (0.266)
TENNESSEE	1984	-6.066*** (0.378)
TENNESSEE	1985	0.457*** (0.127)
TENNESSEE	1986	-3.503*** (0.181)
TENNESSEE	1987	-8.991*** (0.276)
TENNESSEE	1988	-7.312*** (0.186)
TENNESSEE	1989	-3.821*** (0.925)
TENNESSEE	1990	-3.054*** (0.153)
TENNESSEE	1991	0 (.)
VIRGINIA	1972	-8.522*** (0.735)
VIRGINIA	1973	-3.341*** (0.358)
VIRGINIA	1974	-6.425*** (0.459)
VIRGINIA	1975	-4.729***

VIRGINIA	1976	(0.812) -8.421***
VIRGINIA	1977	(0.194) -9.300***
VIRGINIA	1978	(0.0672) -2.252***
VIRGINIA	1979	(0.461) -1.906**
VIRGINIA	1980	(0.781) -12.11***
VIRGINIA	1981	(0.111) -2.443***
VIRGINIA	1982	(0.272) -0.369
VIRGINIA	1983	(0.423) -13.46***
VIRGINIA	1984	(0.269) 0.391
VIRGINIA	1985	(0.452) -2.763***
VIRGINIA	1986	(0.347) -4.169***
VIRGINIA	1987	(0.0415) -8.042***
VIRGINIA	1988	(0.401) -3.504***
VIRGINIA	1989	(0.287) 1.632**
VIRGINIA	1990	(0.751) 2.198***
VIRGINIA	1991	(0.391) 0
		(.)

WISCONSIN	1972	(0.488) -15.26***
WISCONSIN	1973	(0.234) -17.93***
WISCONSIN	1974	(0.118) -21.21***
WISCONSIN	1975	(0.176) -17.10***
WISCONSIN	1976	(0.0706) -19.18***
WISCONSIN	1977	(0.596) -9.168***
WISCONSIN	1978	(0.0231) -12.86***
WISCONSIN	1979	(0.295) -9.051***
WISCONSIN	1980	(0.157) -9.721***
WISCONSIN	1981	(0.229) -10.67***
WISCONSIN	1982	(0.0952) -11.99***
WISCONSIN	1983	(0.115) -8.238***
WISCONSIN	1984	(0.0937) -11.65***
WISCONSIN	1985	(0.0801) -10.72***
WISCONSIN	1986	(0.186) -6.995***
WISCONSIN	1987	(0.288) -4.290***
WISCONSIN	1988	(0.0459) -18.13***

WISCONSIN	1989	(0.488) -4.826***
WISCONSIN	1990	(0.216) -1.313***
WISCONSIN	1991	(0.129) 0
		(.)

Standard errors clustered at state level
in parentheses

* p < 0.10, ** p < 0.05, *** p < 0.01

Table A.30. State-year dummy estimates from the main specification. Corn

State	Year	Coefficient
ALABAMA	1972	0 (.)
ALABAMA	1973	-9.997*** (0.640)
ALABAMA	1974	-14.02*** (0.547)
ALABAMA	1975	0.250 (1.897)
ALABAMA	1976	0.510 (0.592)
ALABAMA	1977	-27.14*** (0.390)
ALABAMA	1978	-8.044*** (0.535)
ALABAMA	1979	1.948** (0.813)
ALABAMA	1980	-22.64*** (0.384)
ALABAMA	1981	-5.170*** (0.128)
ALABAMA	1982	5.288*** (0.507)
ALABAMA	1983	3.414*** (0.618)
ALABAMA	1984	8.044*** (0.409)
ALABAMA	1985	21.49*** (0.351)
ALABAMA	1986	-0.572**

		(0.250)
ALABAMA	1987	19.63*** (0.0885)
ALABAMA	1988	-13.39*** (0.385)
ALABAMA	1989	20.15*** (0.974)
ALABAMA	1990	8.951*** (0.302)
ALABAMA	1991	23.59*** (0.636)
CALIFORNIA	1972	-59.13*** (0.313)
CALIFORNIA	1973	-45.41*** (0.317)
CALIFORNIA	1974	-52.38*** (0.209)
CALIFORNIA	1975	-44.89*** (0.104)
CALIFORNIA	1976	-45.99*** (0.280)
CALIFORNIA	1977	-43.14*** (0.254)
CALIFORNIA	1978	-37.00*** (0.774)
CALIFORNIA	1979	-41.88*** (0.0583)
CALIFORNIA	1980	-21.58*** (0.179)
CALIFORNIA	1981	-22.41*** (0.176)
CALIFORNIA	1982	-35.29*** (1.185)

CALIFORNIA	1983	-39.09*** (1.167)
CALIFORNIA	1984	-19.15*** (0.263)
CALIFORNIA	1985	-10.19*** (0.194)
CALIFORNIA	1986	-1.262*** (0.249)
CALIFORNIA	1987	5.651*** (0.400)
CALIFORNIA	1988	-20.65*** (0.633)
CALIFORNIA	1989	-0.874** (0.341)
CALIFORNIA	1990	-11.51*** (0.621)
CALIFORNIA	1991	0 (.)
DELAWARE	1972	-21.72*** (0.674)
DELAWARE	1973	-18.53*** (0.615)
DELAWARE	1974	-24.45*** (0.655)
DELAWARE	1975	-16.33*** (0.788)
DELAWARE	1976	-5.557*** (0.838)
DELAWARE	1977	-34.20*** (0.809)
DELAWARE	1978	-9.365*** (0.595)
DELAWARE	1979	-6.475***

		(0.597)
DELAWARE	1980	-27.82***
		(0.531)
DELAWARE	1981	-19.26***
		(0.425)
DELAWARE	1982	-2.083***
		(0.422)
DELAWARE	1983	-34.81***
		(0.430)
DELAWARE	1984	6.344***
		(0.339)
DELAWARE	1985	2.467***
		(0.276)
DELAWARE	1986	-9.886***
		(1.098)
DELAWARE	1987	-23.73***
		(0.581)
DELAWARE	1988	-35.15***
		(0.247)
DELAWARE	1989	-10.42***
		(0.965)
DELAWARE	1990	5.448***
		(0.392)
DELAWARE	1991	0
		(.)
FLORIDA	1972	-17.61***
		(0.991)
FLORIDA	1973	-23.33***
		(0.654)
FLORIDA	1974	-23.26***
		(0.561)
FLORIDA	1975	-19.51***
		(1.395)

FLORIDA	1976	-9.463***
		(0.772)
FLORIDA	1977	-32.36***
		(0.866)
FLORIDA	1978	-16.88***
		(0.630)
FLORIDA	1979	-9.993***
		(0.908)
FLORIDA	1980	-12.47***
		(0.574)
FLORIDA	1981	-3.941***
		(1.085)
FLORIDA	1982	-2.113***
		(0.541)
FLORIDA	1983	-3.712***
		(0.796)
FLORIDA	1984	-6.360***
		(0.804)
FLORIDA	1985	-5.278***
		(0.431)
FLORIDA	1986	-9.529***
		(0.880)
FLORIDA	1987	-4.342***
		(0.904)
FLORIDA	1988	-15.12***
		(0.743)
FLORIDA	1989	2.076***
		(0.404)
FLORIDA	1990	5.851***
		(0.974)
FLORIDA	1991	0
		(.)
GEORGIA	1972	-36.45***

		(0.759)
GEORGIA	1973	-42.48***
		(0.298)
GEORGIA	1974	-37.33***
		(0.516)
GEORGIA	1975	-35.85***
		(0.315)
GEORGIA	1976	-31.76***
		(0.502)
GEORGIA	1977	-62.95***
		(0.657)
GEORGIA	1978	-41.33***
		(0.596)
GEORGIA	1979	-29.73***
		(0.373)
GEORGIA	1980	-48.28***
		(0.675)
GEORGIA	1981	-36.89***
		(0.779)
GEORGIA	1982	-10.48***
		(0.449)
GEORGIA	1983	-23.52***
		(0.678)
GEORGIA	1984	-11.37***
		(0.554)
GEORGIA	1985	-7.406***
		(0.539)
GEORGIA	1986	-27.27***
		(0.989)
GEORGIA	1987	-9.161***
		(0.736)
GEORGIA	1988	-30.84***
		(0.592)

GEORGIA	1989	-6.441*** (0.353)
GEORGIA	1990	-18.89*** (1.042)
GEORGIA	1991	0 (.)
ILLINOIS	1972	-1.264 (0.986)
ILLINOIS	1973	-8.982*** (0.906)
ILLINOIS	1974	-31.17*** (0.829)
ILLINOIS	1975	6.414*** (0.681)
ILLINOIS	1976	5.225*** (0.333)
ILLINOIS	1977	-2.202*** (0.784)
ILLINOIS	1978	4.223*** (0.720)
ILLINOIS	1979	18.87*** (0.632)
ILLINOIS	1980	-8.278*** (0.792)
ILLINOIS	1981	16.04*** (1.063)
ILLINOIS	1982	23.68*** (0.744)
ILLINOIS	1983	-22.64*** (0.698)
ILLINOIS	1984	9.371*** (0.515)
ILLINOIS	1985	33.86***

		(0.291)
ILLINOIS	1986	22.38*** (0.812)
ILLINOIS	1987	21.83*** (0.568)
ILLINOIS	1988	-20.09*** (1.096)
ILLINOIS	1989	19.03*** (0.694)
ILLINOIS	1990	17.64*** (0.974)
ILLINOIS	1991	0 (.)
INDIANA	1972	5.830*** (0.924)
INDIANA	1973	7.931*** (0.549)
INDIANA	1974	-23.85*** (0.469)
INDIANA	1975	1.820** (0.853)
INDIANA	1976	19.76*** (0.427)
INDIANA	1977	10.28*** (0.657)
INDIANA	1978	9.740*** (0.340)
INDIANA	1979	19.82*** (0.449)
INDIANA	1980	-9.170*** (0.668)
INDIANA	1981	10.43*** (1.123)

INDIANA	1982	36.02*** (0.425)
INDIANA	1983	-12.47*** (0.465)
INDIANA	1984	18.97*** (0.456)
INDIANA	1985	27.65*** (0.186)
INDIANA	1986	21.93*** (0.755)
INDIANA	1987	36.58*** (0.656)
INDIANA	1988	-4.680*** (0.466)
INDIANA	1989	38.05*** (0.746)
INDIANA	1990	34.43*** (0.877)
INDIANA	1991	0 (.)
IOWA	1972	-3.673*** (0.550)
IOWA	1973	-13.33*** (0.591)
IOWA	1974	-30.08*** (0.506)
IOWA	1975	-15.24*** (0.327)
IOWA	1976	-9.381*** (0.428)
IOWA	1977	-23.71*** (0.400)
IOWA	1978	-3.398***

		(0.449)
IOWA	1979	15.73***
		(0.291)
IOWA	1980	1.855***
		(0.287)
IOWA	1981	11.41***
		(0.427)
IOWA	1982	6.794***
		(0.472)
IOWA	1983	-27.84***
		(0.204)
IOWA	1984	3.075***
		(0.322)
IOWA	1985	14.02***
		(0.338)
IOWA	1986	18.05***
		(0.572)
IOWA	1987	14.13***
		(0.184)
IOWA	1988	-34.55***
		(1.120)
IOWA	1989	-2.668***
		(0.269)
IOWA	1990	9.533***
		(0.620)
IOWA	1991	0
		(.)
LOUISIANA	1972	-26.59***
		(2.169)
LOUISIANA	1973	-43.39***
		(1.243)
LOUISIANA	1974	-39.04***
		(1.922)

LOUISIANA	1975	-28.31***
		(0.375)
LOUISIANA	1976	-20.23***
		(2.232)
LOUISIANA	1977	-33.14***
		(1.408)
LOUISIANA	1978	-25.23***
		(2.057)
LOUISIANA	1979	-31.34***
		(1.275)
LOUISIANA	1980	-42.94***
		(1.760)
LOUISIANA	1981	-8.705***
		(2.169)
LOUISIANA	1982	-10.90***
		(2.170)
LOUISIANA	1983	-5.438***
		(0.954)
LOUISIANA	1984	16.81***
		(2.186)
LOUISIANA	1985	13.02***
		(2.177)
LOUISIANA	1986	22.90***
		(2.260)
LOUISIANA	1987	11.51***
		(2.116)
LOUISIANA	1988	6.450***
		(1.979)
LOUISIANA	1989	5.757***
		(1.110)
LOUISIANA	1990	23.33***
		(2.207)
LOUISIANA	1991	0

		(.)
MARYLAND	1972	-21.67***
		(1.012)
MARYLAND	1973	-16.89***
		(0.776)
MARYLAND	1974	-14.27***
		(0.722)
MARYLAND	1975	-11.82***
		(1.104)
MARYLAND	1976	-3.837***
		(0.421)
MARYLAND	1977	-19.78***
		(0.186)
MARYLAND	1978	-2.279***
		(0.654)
MARYLAND	1979	-4.134***
		(1.024)
MARYLAND	1980	-24.96***
		(0.244)
MARYLAND	1981	1.299*
		(0.653)
MARYLAND	1982	2.005***
		(0.557)
MARYLAND	1983	-32.57***
		(0.806)
MARYLAND	1984	16.43***
		(0.779)
MARYLAND	1985	7.796***
		(0.564)
MARYLAND	1986	-14.44***
		(0.468)
MARYLAND	1987	-16.73***
		(0.297)

MARYLAND	1988	-29.99*** (0.436)
MARYLAND	1989	5.823*** (0.985)
MARYLAND	1990	15.38*** (0.855)
MARYLAND	1991	0 (.)
MICHIGAN	1972	-27.70*** (0.368)
MICHIGAN	1973	-29.26*** (0.124)
MICHIGAN	1974	-49.34*** (0.325)
MICHIGAN	1975	-35.35*** (0.615)
MICHIGAN	1976	-36.83*** (0.255)
MICHIGAN	1977	-19.24*** (0.0856)
MICHIGAN	1978	-27.22*** (0.207)
MICHIGAN	1979	-10.45*** (0.341)
MICHIGAN	1980	-18.83*** (0.584)
MICHIGAN	1981	-20.40*** (0.637)
MICHIGAN	1982	-1.339*** (0.301)
MICHIGAN	1983	-19.82*** (0.317)
MICHIGAN	1984	-26.15***

MICHIGAN	1985	(0.292) -2.686*** (0.119)
MICHIGAN	1986	-10.08*** (0.669)
MICHIGAN	1987	-11.51*** (0.207)
MICHIGAN	1988	-38.44*** (0.376)
MICHIGAN	1989	1.541*** (0.406)
MICHIGAN	1990	0.356 (0.288)
MICHIGAN	1991	0 (.)
MINNESOTA	1972	-26.27*** (0.406)
MINNESOTA	1973	-19.45*** (0.489)
MINNESOTA	1974	-48.64*** (0.860)
MINNESOTA	1975	-41.92*** (0.532)
MINNESOTA	1976	-37.03*** (1.977)
MINNESOTA	1977	-15.18*** (0.327)
MINNESOTA	1978	-14.71*** (0.161)
MINNESOTA	1979	-14.51*** (0.531)
MINNESOTA	1980	-18.01*** (0.594)

MINNESOTA	1981	-5.848*** (0.368)
MINNESOTA	1982	-3.378*** (0.611)
MINNESOTA	1983	-26.91*** (0.375)
MINNESOTA	1984	-8.247*** (0.397)
MINNESOTA	1985	-3.973*** (0.348)
MINNESOTA	1986	1.373*** (0.265)
MINNESOTA	1987	17.49*** (0.958)
MINNESOTA	1988	-36.40*** (1.330)
MINNESOTA	1989	8.508*** (0.850)
MINNESOTA	1990	5.469*** (0.144)
MINNESOTA	1991	0 (.)
MISSISSIPPI	1972	-19.28*** (1.674)
MISSISSIPPI	1973	-32.01*** (1.094)
MISSISSIPPI	1974	-28.68*** (1.194)
MISSISSIPPI	1975	-25.28*** (0.435)
MISSISSIPPI	1976	-16.92*** (1.711)
MISSISSIPPI	1977	-40.13***

MISSISSIPPI	1978	(1.607) -13.64*** (1.459)
MISSISSIPPI	1979	-15.12*** (0.838)
MISSISSIPPI	1980	-42.04*** (1.449)
MISSISSIPPI	1981	-8.558*** (1.693)
MISSISSIPPI	1982	-8.595*** (1.688)
MISSISSIPPI	1983	4.352*** (0.558)
MISSISSIPPI	1984	5.744*** (1.721)
MISSISSIPPI	1985	-4.105*** (1.626)
MISSISSIPPI	1986	10.58*** (1.684)
MISSISSIPPI	1987	11.48*** (1.657)
MISSISSIPPI	1988	-8.648*** (1.644)
MISSISSIPPI	1989	0.613 (1.145)
MISSISSIPPI	1990	13.48*** (1.620)
MISSISSIPPI	1991	0 (.)
MISSOURI	1972	-7.389*** (0.535)
MISSOURI	1973	-10.09*** (0.545)

MISSOURI	1974	-38.57*** (0.540)
MISSOURI	1975	-31.20*** (0.338)
MISSOURI	1976	-28.07*** (1.350)
MISSOURI	1977	-11.78*** (0.135)
MISSOURI	1978	-5.615*** (0.376)
MISSOURI	1979	7.653*** (0.579)
MISSOURI	1980	-43.43*** (0.823)
MISSOURI	1981	3.578*** (0.879)
MISSOURI	1982	-0.574 (0.551)
MISSOURI	1983	-41.67*** (0.427)
MISSOURI	1984	-18.05*** (0.403)
MISSOURI	1985	4.653*** (0.382)
MISSOURI	1986	10.80*** (0.256)
MISSOURI	1987	19.15*** (0.354)
MISSOURI	1988	-8.790*** (1.010)
MISSOURI	1989	7.824*** (0.499)
MISSOURI	1990	3.084***

MISSOURI	1991	(0.442) 0 (.)
NEW JERSEY	1972	-37.16*** (0.434)
NEW JERSEY	1973	-30.70*** (0.410)
NEW JERSEY	1974	-26.70*** (0.374)
NEW JERSEY	1975	-29.10*** (0.927)
NEW JERSEY	1976	-14.21*** (0.526)
NEW JERSEY	1977	-36.33*** (0.339)
NEW JERSEY	1978	-19.68*** (0.484)
NEW JERSEY	1979	-22.11*** (0.526)
NEW JERSEY	1980	-26.10*** (0.413)
NEW JERSEY	1981	-10.65*** (0.261)
NEW JERSEY	1982	-6.426*** (0.348)
NEW JERSEY	1983	-42.81*** (0.299)
NEW JERSEY	1984	-0.989** (0.440)
NEW JERSEY	1985	1.688*** (0.181)
NEW JERSEY	1986	-0.961*** (0.300)

NEW JERSEY	1987	-10.30*** (0.221)
NEW JERSEY	1988	-35.02*** (0.303)
NEW JERSEY	1989	-7.867*** (1.030)
NEW JERSEY	1990	8.560*** (0.421)
NEW JERSEY	1991	0 (.)
NEW YORK	1972	-38.01*** (0.822)
NEW YORK	1973	-26.87*** (0.404)
NEW YORK	1974	-28.26*** (0.561)
NEW YORK	1975	-21.04*** (0.727)
NEW YORK	1976	-26.48*** (0.771)
NEW YORK	1977	-21.24*** (0.640)
NEW YORK	1978	-12.31*** (0.213)
NEW YORK	1979	-13.09*** (0.393)
NEW YORK	1980	-5.856*** (0.121)
NEW YORK	1981	-10.00*** (0.444)
NEW YORK	1982	-8.329*** (0.284)
NEW YORK	1983	-14.48***

		(0.394)
NEW YORK	1984	-15.83*** (0.731)
NEW YORK	1985	-3.195*** (0.180)
NEW YORK	1986	-6.748*** (0.647)
NEW YORK	1987	0.330 (0.524)
NEW YORK	1988	-13.40*** (0.158)
NEW YORK	1989	-10.56*** (0.670)
NEW YORK	1990	-8.046*** (0.585)
NEW YORK	1991	0 (.)
N CAROLINA	1972	-20.04*** (0.417)
N CAROLINA	1973	-14.95*** (0.209)
N CAROLINA	1974	-21.19*** (0.428)
N CAROLINA	1975	-25.82*** (0.343)
N CAROLINA	1976	-17.27*** (0.524)
N CAROLINA	1977	-43.10*** (0.352)
N CAROLINA	1978	-17.49*** (0.280)
N CAROLINA	1979	-15.69*** (0.557)

N CAROLINA	1980	-27.66*** (0.343)
N CAROLINA	1981	-10.21*** (0.301)
N CAROLINA	1982	5.880*** (0.260)
N CAROLINA	1983	-32.19*** (0.553)
N CAROLINA	1984	1.373*** (0.452)
N CAROLINA	1985	-4.114*** (0.280)
N CAROLINA	1986	-24.39*** (0.580)
N CAROLINA	1987	-24.84*** (0.170)
N CAROLINA	1988	-15.64*** (0.369)
N CAROLINA	1989	0.965 (0.708)
N CAROLINA	1990	-20.20*** (0.463)
N CAROLINA	1991	0 (.)
OHIO	1972	-9.059*** (1.135)
OHIO	1973	-14.56*** (0.875)
OHIO	1974	-20.57*** (0.738)
OHIO	1975	-6.586*** (0.975)
OHIO	1976	6.586***

		(0.682)
OHIO	1977	11.57***
		(1.000)
OHIO	1978	6.812***
		(0.580)
OHIO	1979	12.64***
		(1.148)
OHIO	1980	11.86***
		(1.066)
OHIO	1981	-0.628
		(1.202)
OHIO	1982	21.18***
		(0.368)
OHIO	1983	-3.793***
		(0.847)
OHIO	1984	20.47***
		(0.778)
OHIO	1985	30.58***
		(0.456)
OHIO	1986	30.25***
		(0.859)
OHIO	1987	21.72***
		(0.819)
OHIO	1988	-7.703***
		(0.191)
OHIO	1989	9.206***
		(1.084)
OHIO	1990	19.53***
		(1.204)
OHIO	1991	0
		(.)
OREGON	1972	-73.24***
		(0.360)

OREGON	1973	-56.80***
		(1.032)
OREGON	1974	-39.45***
		(0.761)
OREGON	1975	-64.92***
		(0.724)
OREGON	1976	-56.78***
		(0.314)
OREGON	1977	-57.91***
		(0.235)
OREGON	1978	-61.15***
		(0.465)
OREGON	1979	-41.95***
		(0.228)
OREGON	1980	-38.82***
		(0.104)
OREGON	1981	-20.28***
		(0.173)
OREGON	1982	6.597***
		(0.177)
OREGON	1983	3.511***
		(0.195)
OREGON	1984	-4.363***
		(0.341)
OREGON	1985	16.72***
		(0.617)
OREGON	1986	9.351***
		(0.468)
OREGON	1987	23.25***
		(1.138)
OREGON	1988	25.12***
		(0.187)
OREGON	1989	17.71***

		(0.194)
OREGON	1990	18.50***
		(0.281)
OREGON	1991	0
		(.)
PENNSYLV	1972	-17.31***
		(1.116)
PENNSYLV	1973	-5.666***
		(1.026)
PENNSYLV	1974	-3.640***
		(0.946)
PENNSYLV	1975	-3.553***
		(1.087)
PENNSYLV	1976	8.076***
		(0.763)
PENNSYLV	1977	10.07***
		(0.820)
PENNSYLV	1978	12.15***
		(0.854)
PENNSYLV	1979	9.161***
		(1.004)
PENNSYLV	1980	-0.576
		(0.525)
PENNSYLV	1981	12.47***
		(0.807)
PENNSYLV	1982	13.63***
		(0.719)
PENNSYLV	1983	-8.581***
		(0.877)
PENNSYLV	1984	21.78***
		(1.001)
PENNSYLV	1985	27.66***
		(0.652)

PENNSYLV	1986	24.82 ^{***} (0.658)
PENNSYLV	1987	11.55 ^{***} (0.947)
PENNSYLV	1988	-12.47 ^{***} (0.584)
PENNSYLV	1989	14.42 ^{***} (1.033)
PENNSYLV	1990	24.31 ^{***} (1.003)
PENNSYLV	1991	0 (.)
S CAROLINA	1972	-25.45 ^{***} (0.662)
S CAROLINA	1973	-28.29 ^{***} (0.360)
S CAROLINA	1974	-27.29 ^{***} (0.458)
S CAROLINA	1975	-23.10 ^{***} (0.244)
S CAROLINA	1976	-10.75 ^{***} (0.523)
S CAROLINA	1977	-43.48 ^{***} (0.689)
S CAROLINA	1978	-31.82 ^{***} (0.572)
S CAROLINA	1979	-7.463 ^{***} (0.431)
S CAROLINA	1980	-31.63 ^{***} (0.709)
S CAROLINA	1981	-22.24 ^{***} (0.687)
S CAROLINA	1982	1.186 ^{***}

S CAROLINA	1983	(0.411) -23.35 ^{***} (0.869)
S CAROLINA	1984	-7.373 ^{***} (0.592)
S CAROLINA	1985	1.005 [*] (0.567)
S CAROLINA	1986	-38.07 ^{***} (0.822)
S CAROLINA	1987	-8.314 ^{***} (0.539)
S CAROLINA	1988	-22.76 ^{***} (0.528)
S CAROLINA	1989	3.415 ^{***} (0.263)
S CAROLINA	1990	-25.13 ^{***} (0.980)
S CAROLINA	1991	0 (.)
TENNESSEE	1972	-26.55 ^{***} (0.379)
TENNESSEE	1973	-26.56 ^{***} (0.511)
TENNESSEE	1974	-32.00 ^{***} (0.420)
TENNESSEE	1975	-31.64 ^{***} (0.305)
TENNESSEE	1976	-12.54 ^{***} (0.474)
TENNESSEE	1977	-31.84 ^{***} (0.546)
TENNESSEE	1978	-18.27 ^{***} (0.198)

TENNESSEE	1979	-9.650 ^{***} (0.967)
TENNESSEE	1980	-50.23 ^{***} (0.454)
TENNESSEE	1981	-14.43 ^{***} (0.238)
TENNESSEE	1982	-4.683 ^{***} (0.282)
TENNESSEE	1983	-40.62 ^{***} (0.335)
TENNESSEE	1984	-2.902 ^{***} (0.473)
TENNESSEE	1985	-0.814 ^{***} (0.273)
TENNESSEE	1986	-26.51 ^{***} (0.263)
TENNESSEE	1987	-20.52 ^{***} (0.385)
TENNESSEE	1988	-34.65 ^{***} (0.328)
TENNESSEE	1989	-4.948 ^{***} (1.286)
TENNESSEE	1990	-7.527 ^{***} (0.378)
TENNESSEE	1991	0 (.)
VIRGINIA	1972	-12.33 ^{***} (0.975)
VIRGINIA	1973	-5.746 ^{***} (0.591)
VIRGINIA	1974	-12.19 ^{***} (0.701)
VIRGINIA	1975	-0.792

VIRGINIA	1976	(0.991)
		-11.37***
		(0.325)
VIRGINIA	1977	-33.20***
		(0.181)
VIRGINIA	1978	-6.049***
		(0.691)
VIRGINIA	1979	-7.024***
		(0.976)
VIRGINIA	1980	-26.27***
		(0.114)
VIRGINIA	1981	4.566***
		(0.504)
VIRGINIA	1982	12.62***
		(0.665)
VIRGINIA	1983	-39.50***
		(0.484)
VIRGINIA	1984	16.04***
		(0.717)
VIRGINIA	1985	7.987***
		(0.497)
VIRGINIA	1986	-29.48***
		(0.126)
VIRGINIA	1987	-28.56***
		(0.740)
VIRGINIA	1988	-11.66***
		(0.467)
VIRGINIA	1989	17.43***
		(0.984)
VIRGINIA	1990	7.083***
		(0.638)
VIRGINIA	1991	0
		(.)

WASHINGT	1972	-69.57***
		(0.141)
WASHINGT	1973	-60.36***
		(0.866)
WASHINGT	1974	-70.31***
		(0.557)
WASHINGT	1975	-68.69***
		(0.377)
WASHINGT	1976	-65.70***
		(0.443)
WASHINGT	1977	-53.57***
		(0.211)
WASHINGT	1978	-56.88***
		(0.303)
WASHINGT	1979	-41.29***
		(0.528)
WASHINGT	1980	-47.42***
		(0.256)
WASHINGT	1981	-40.56***
		(0.116)
WASHINGT	1982	-22.24***
		(0.116)
WASHINGT	1983	-7.493***
		(0.196)
WASHINGT	1984	-19.46***
		(0.142)
WASHINGT	1985	-7.473***
		(0.527)
WASHINGT	1986	-1.445***
		(0.423)
WASHINGT	1987	-1.771**
		(0.642)
WASHINGT	1988	-8.986***

		(0.234)
WASHINGT	1989	-5.717***
		(0.380)
WASHINGT	1990	-4.042***
		(0.226)
WASHINGT	1991	0
		(.)
W VIRGINIA	1972	-10.89***
		(1.378)
W VIRGINIA	1973	-1.722
		(1.226)
W VIRGINIA	1974	-7.061***
		(1.136)
W VIRGINIA	1975	-1.885
		(1.468)
W VIRGINIA	1976	7.783***
		(0.945)
W VIRGINIA	1977	-5.166***
		(0.864)
W VIRGINIA	1978	-6.676***
		(1.235)
W VIRGINIA	1979	3.431**
		(1.391)
W VIRGINIA	1980	5.378***
		(1.027)
W VIRGINIA	1981	6.758***
		(1.099)
W VIRGINIA	1982	15.17***
		(0.771)
W VIRGINIA	1983	-2.460**
		(0.989)
W VIRGINIA	1984	16.02***
		(0.986)

W VIRGINIA	1985	29.06*** (0.620)
W VIRGINIA	1986	19.69*** (0.393)
W VIRGINIA	1987	-7.177*** (1.075)
W VIRGINIA	1988	-23.99*** (0.805)
W VIRGINIA	1989	9.188*** (1.187)
W VIRGINIA	1990	18.30*** (1.157)
W VIRGINIA	1991	0 (.)
WISCONSIN	1972	-25.48*** (0.333)
WISCONSIN	1973	-35.22*** (0.204)
WISCONSIN	1974	-46.35*** (0.360)
WISCONSIN	1975	-32.90*** (0.193)
WISCONSIN	1976	-38.18*** (1.265)
WISCONSIN	1977	-12.70*** (0.0665)
WISCONSIN	1978	-22.95*** (0.389)
WISCONSIN	1979	-11.49*** (0.291)
WISCONSIN	1980	-17.08*** (0.331)
WISCONSIN	1981	-7.388***

		(0.225)
WISCONSIN	1982	-10.09*** (0.258)
WISCONSIN	1983	-18.47*** (0.174)
WISCONSIN	1984	-10.39*** (0.192)
WISCONSIN	1985	-8.900*** (0.342)
WISCONSIN	1986	-1.614*** (0.389)
WISCONSIN	1987	2.177*** (0.0803)
WISCONSIN	1988	-44.57*** (0.916)
WISCONSIN	1989	1.576*** (0.392)
WISCONSIN	1990	0.279 (0.230)
WISCONSIN	1991	0 (.)

Standard errors clustered at state level
in parentheses

* p < 0.10, ** p < 0.05, *** p < 0.01