

Online Appendix for Jurisdictional Competition, Market Power, and the Compensation of Public Employees

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Supplemental Online Appendix

Table A1: Labor Market Concentration and Average Teacher Compensation with State-Year Fixed Effects

VARIABLES	(1) log(Salary)	(2) log(Benefits)	(3) log(Tot. Comp.)
HHI	0.126*** (0.0336)	0.156*** (0.0389)	0.133*** (0.0332)
Observations	38,296	38,296	38,296
R-squared	0.594	0.883	0.741
Number of Counties	1,870	1,870	1,870
Time-Varying Controls	X	X	X
County FE	X	X	X
State-Year FE	X	X	X

Robust standard errors clustered by county in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Control variables include percent of enrolled students who are white, percent free and reduced-priced lunch, and the log of total county teacher employment (FTEs).

Table A2: Testing Parallel Trends: Lags and Leads

VARIABLES	(1) log(Tot. Comp.)	(2) log(Tot. Comp.)
HHH _{t-1}	-0.0602 (0.0371)	-0.0206 (0.0177)
HHI _t	0.227*** (0.0673)	0.0944*** (0.0172)
HHI _{t+1} ,	-0.0728** (0.0340)	-0.0209 (0.0145)
HHI _{t+2} ,	0.0139 (0.0218)	-0.0394*** (0.0120)
HHI _{t+3} ,	0.0365 (0.0237)	0.0232 (0.0154)
Unit	County	District
Time-Varying Controls	X	X
Unit FE	X	X
Year FE	X	X

Robust standard errors in parentheses clustered by county and district, respectively
 *** p<0.01, ** p<0.05, * p<0.1

Control variables include percent of enrolled students who are white, percent free and reduced-priced lunch, and the log of total county or teacher teacher employment (FTEs).

Table A3: Measuring Commute Zone-Level Market Concentration

VARIABLES	(1) log(Salary)	(2) log(Salary)
HHI (County)	0.0550*** (0.0209)	0.0704*** (0.0251)
HHI (Commute Zone)	0.0157*** (0.00325)	0.0156*** (0.00326)
Market Share		-0.000511 (0.000382)
Observations	239,945	239,945
R-squared	0.160	0.160
Number of School Districts	15,146	15,146
Time-Varying Controls	X	X
District FE	Yes	Yes
Time FE	Years	Years

Robust standard errors clustered by school district in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Control variables include percent of enrolled students who are white, percent free and reduced-priced lunch, and the log of total district teacher employment (FTEs).

Table A4: Labor Market Concentration and Other Spending Outcomes

VARIABLES	log(Tot. Spending per Student)	log(Non-Instructional Spending per Student)	log(Teacher FTEs)	Student-Teacher Ratio
HHI	0.130*** (0.0394)	0.00666 (0.0547)	-0.845*** (0.0749)	2.441*** (0.611)
Observations	38,296	38,296	38,296	38,296
R-squared	0.536	0.388	0.133	0.237
Number of Counties	1,870	1,870	1,870	1,870
Time-Varying Controls	X	X	X	X
County FE	X	X	X	X
Year FE	X	X	X	X

Robust standard errors clustered by county in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Control variables include percent of enrolled students who are white and percent free and reduced-priced lunch.

Table A5: Labor Market Concentration and Average Teacher Compensation, Controlling for No. of Districts

VARIABLES	(1) log(Salary)	(2) log(Benefits)	(3) log(Tot. Comp.)
HHI	0.266*** (0.0362)	0.206*** (0.0455)	0.237*** (0.0350)
District Count	-0.000148 (0.000419)	0.000376 (0.000355)	-2.41e-05 (0.000351)
Observations	38,296	38,296	38,296
R-squared	0.299	0.715	0.537
Number of Counties	1,870	1,870	1,870
Time-Varying Controls	X	X	X
County FE	X	X	X
Year FE	X	X	X

Robust standard errors clustered by county in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Control variables include percent of enrolled students who are white, percent free and reduced-priced lunch, and the log of total county teacher employment (FTEs).

Table A6: Labor Market Concentration and Academic Achievement

VARIABLES	(1) 4th Grade ELA	(2) 8th Grade ELA	(3) 4th Grade Math	(4) 8th Grade Math
HHI	0.185*** (0.0599)	0.0437 (0.0675)	0.114 (0.0755)	0.180* (0.0990)
Observations	10,845	10,861	10,847	10,863
R-squared	0.055	0.084	0.051	0.023
Number of Counties	1,846	1,849	1,847	1,850
Time-Varying Controls	X	X	X	X
County FE	X	X	X	X
Year FE	X	X	X	X

Robust standard errors clustered by county in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Control variables include percent of enrolled students who are white, percent free and reduced-priced lunch, and the log of total county teacher employment (FTEs).

Table A7: Labor Market Concentration and Academic Achievement, with State-Year FEs

VARIABLES	(1) 4th Grade ELA	(2) 8th Grade ELA	(3) 4th Grade Math	(4) 8th Grade Math
HHI	0.240*** (0.0580)	0.0849 (0.0665)	0.223*** (0.0722)	0.209** (0.0992)
Observations	10,845	10,861	10,847	10,863
R-squared	0.193	0.177	0.207	0.159
Number of Counties	1,846	1,849	1,847	1,850
County FE	X	X	X	X
State-Year FE	X	X	X	X

Robust standard errors clustered by county in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Control variables include percent of enrolled students who are white, percent free and reduced-priced lunch, and the log of total county teacher employment (FTEs).

Table A8: Labor Market Concentration and Productivity of Education Spending

VARIABLES	(1) Productivity (4th Grade)	(2) Productivity (8th Grade)
HHI	0.0118** (0.00541)	0.00707 (0.00572)
Observations	10,844	10,861
R-squared	0.052	0.042
Number of Counties	1,846	1,849
County FE	X	X
Year FE	X	X

Robust standard errors clustered by county in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Control variables include percent of enrolled students who are white, percent free and reduced-priced lunch, and the log of total county teacher employment (FTEs). Productivity is defined as average student achievement in math and reading per \$1,000 of per-pupil spending.