

Appendix Q: Findings of peer-reviewed research

TABLE Q-1

Summary of empirical research of effects of coal tax credits, enterprise zones, and industrial park development

Paper	Region	Units of analysis	Dependent variables	Method	Data sources	Findings
Coal tax credits						
Findeis and Shortle (1985)	Pennsylvania and six state coal consumption region	States	Coal consumption	Two stage least squares using pooled cross-section time series, 1973–1982	Energy Information Administration	Coal severance tax rate has small effect on coal consumption and coal mining employment
Gerking et al. (1999)	Wyoming and Powder River Basin	Electric power plants	Coal consumption	Panel data regression with instrumental variable, 1983–1998	Energy Information Administration; Surface Transportation Board; Other proprietary data	Coal severance tax rate has small effect on mining production
Enterprise zones						
Bondonio and Engberg (2000)	California, Kentucky, New York, Pennsylvania and Virginia	Zip Code Tabulation Area	Employment	Propensity Score Matching	Standard Statistical Establishment List, Census Bureau	No statistically significant effect.
O'Keefe (2004)	California	Census Tract	Employment	Propensity Score Matching	California Employment Development Department, 1990 Census	First six years after designation 3.1% increase in employment growth, second 6 years -3.2% decline.
Greenbaum and Engberg, (2004)	California, Florida, New Jersey, New York, Pennsylvania, and Virginia	Zip Code Tabulation Area	Employment	Difference in Difference, 1984–1993	Longitudinal Research Database, Census Bureau	No statistically significant effect.

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Elvery (2009)	California and Florida	Census Tract	Employment	Propensity Score Matching	Standard Statistical Establishment Lists (restricted access establishment-level data), Census Bureau	No statistically significant effect.
Neumark and Kolko (2010)	California	Enterprise Zone	Employment	Difference in Difference, 1992-2004	National Establishment Time Series (NETS)	No statistically significant effect.
Neumark and Young (2019)	United States	Census Tract	Unemployment rate and poverty	Triple Difference (DDD estimator), 1980, 1990, and 2000	Neighborhood Change Database, Geolytics Inc.	No statistically significant effects on unemployment rate or poverty.
Neumark and Young (2020)	Thirteen states including Virginia	Census Tract	Unemployment rate; poverty rate; wage and salary income; and the level of employment	Triple Difference, 1990-2000 and 1990-2010	Neighborhood Change Database, Geolytics Inc.	Some statistically significant short-run effects, but they are conflicting (some suggest positive effects and some suggest negative). Long-term effects are more uniformly statistically insignificant or negative. Various enterprise zone features cannot be linked to positive effects.