



Linkage Between Small Business Innovation Research Grants and Innovation Factors in the States

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Motivation

To assess the impact on award dollar distribution from 2010-2019 as states adopt Small Business Innovation Research (SBIR) award matching programs.

Research Question

Do states with SBIR award matching programs have increased SBIR award grant amounts, in total and per capita, and increased innovation?

Data/References

- 2010-19 American Community Survey
- 2010-19 SBA-SBIR Award Data for multiple agencies
- Kauffman Innovation Index
- Lanahan, Laura. "Multilevel public funding for small business innovation: a review of US state SBIR match programs"

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State Level	Dependent Variable			
	Award Dollars per Capita		Total Award Dollars	
			(in 10's of millions)	
Intercept	-25.210 (2.373)	0.000***	-21.340 (2.400)	0.000***
State Matching Program	3.558 (0.739)	0.000***	1.486 (0.634)	0.0195*
Pop. Estimate	0.000 (0.000)	0.446	0.000 (0.000)	0.000***
Median Income	0.000 (0.000)	0.061	0.000 (0.000)	0.001**
% Pop. w/ College Degrees	106.700 (7.713)	0.000***	56.870 (6.618)	0.000***
% Foreign Born	-0.720 (8.199)	0.930	-3.439 (7.035)	0.625
Z (Innovation) Index	-0.286 (0.136)	0.030*	0.127 (0.131)	0.332
Observations	500		500	
R-squared	0.394		0.644	
Adjusted R-squared	0.375		0.633	

Notes: *p<.05; **p<.01; ***p<.001

Methodology

Data was collected for all 50 states receiving SBIR grants from 10 federal agencies. Total award dollars and per capita rates were regressed on state level SBIR policies.

Control variables include population, median income, percent college educated, percent foreign born, and the Kauffman entrepreneurship index.

Conclusions

The regression indicates a positive association between total award dollars granted to a state and a state adopting a matching program. The states with the matching programs average 14 million more dollars in awards than states that do not have matching programs.

