



Proprietor Growth in the Upper Midwest

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Motivation

Examine how local conditions impact potential entrepreneurs’ decision to start a business in ten upper Midwest states.

Research Question

Does entrepreneurship grow faster in counties where a larger share of the population holds a Bachelor’s degree?

Method

Used the multiple regression technique to examine how the growth rate in entrepreneurs is related to the initial values of selected independent variables.

Model

$$\begin{aligned} &\log(\text{Ent 2018/Ent 2015}) \\ &= \beta_0 + \beta_1 * \log(2015 \% \text{ Bachelor's Degree}) \\ &+ \beta_2 * \log(2015 \text{ DIR income per capita}) + \beta_3 * (2015 \text{ Top marginal Tax Rate}) + \\ &\beta(4-12) * (\text{Beale 2015}) \end{aligned}$$

Literature Review

Bunten, D., Thompson, E., Weiler, S., & Zahran, S. (2014). Entrepreneurship, Information, and Growth. *Journal of Regional Science*, 560-584.

Dunn, T., & Holtz-Eakin, D. (2000). Financial Capital, Human Capital ,and the Transition to Self-Employment: Evidence from Intergenerational Links. *Journal of Labor Economics*, 282-305.

Results

Regression Results for Entrepreneur County Level Growth		
Explanitory Variable	Coefficients	Standard Error
Constant	0.00685227	0.022702767
Log(2015 Bachelor's Per Capita)	0.0289403**	0.01233550
Log(2015 DIR Per Capita)	-0.0379977**	0.01760186
Top Marginal Tax Rate 2015	-0.0014048***	0.00051499
Beale 1	0.0226981***	0.00876341
Beale 2	0.0156632*	0.00922282
Beale 3	0.01244222	0.00841995
Beale 4	-0.00046249	0.00979875
Beale 6	0.00099748	0.00808121
Beale 7	0.00213670	0.00787790
Beale 8	0.00297874	0.00890165
Beale 9	0.01212338	0.00775812
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Multiple R	0.29545389	
R Square	0.08729300	
Adjusted R Square	0.07468021	
Standard Error	0.03996942	
N	808	

***Significant at the 1% level
**Signigicant at the 5% level
*Signigicant at the 10% level

Data

US Census Bureau, Bureau of Economic Analysis, Tax Foundation, United States Department of Agriculture

Discussion

I find that my measure of educational attainment is positively correlated with the rate of entrepreneur growth at the county level. I also find a negative relationship between entrepreneur growth and both DIR income per capita and the top marginal tax rate. Entrepreneur growth is faster in larger metropolitan areas (Beale Codes 1 and 2). This model explains 7.5% of the variation in growth of entrepreneurs.

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