## **Appendix A: Empirical Results**

The empirical estimates cited in this paper come from an ordinary least squares (OLS) regression model designed to gauge the influence of a number of demographic and policy variables on the rate of entrepreneurship. The model is cross-sectional and uses data from all 50 states for the year 2007.

The dependent variable was the low-income entrepreneurship rate that was calculated by dividing the number survey respondents who self-identified as entrepreneurs in the Kauffman Foundation survey but who also fell within the bottom-two income quintiles by the total number of low-income respondents in the survey.

The year 2007 was chosen for the analysis for the purposes of decreasing the influence of "necessity entrepreneurs" in the analysis. Necessity entrepreneurs are those who may be self-employed because there are no other traditional employment options available but who would rather be working in such traditional employment if given the chance. This type of entrepreneur is more likely to be prevalent during a recession than during a boom period. Therefore, a year that is near the high-water mark of a boom cycle is likely to yield fewer of these types of observations.

Data for the regression comes from the Census Bureau, the Bureau of Economic Analysis, the Bureau of Labor Statistics, the Institute for Justice, and the Kauffman Foundation.

The results of the OLS regression analysis are below. They indicate that a state's level of licensure of low-income occupations has a significant effect on the overall level of low-income entrepreneurship. Based on the coefficients, the share of a state's population composed of Hispanics and Latinos, the median age, and the percentage of males in the population also has a significant effect on the level of low-income entrepreneurship, as expected. However, the scope of occupational licensing and the percent of Hispanics and Latinos in the state's population had greater explanatory power based on their t-scores.

The unemployment rate had a sign different than expected—the basic hypothesis put forward in this paper would seem to predict a positive sign on the unemployment variable since necessity entrepreneurship thrives best in an environment of high unemployment. However, upon further reflection, choosing 2007 may explain the negative correlation since it was a period that included many alternative employment opportunities. Including the unemployment variable is important to adjust for the general macroeconomic conditions of a state. The

results here indicate that, on average, a state with a low unemployment rate had a higher rate of low-income entrepreneurship. This seems to indicate that the states with high rates of low-income entrepreneurship in this analysis are not necessity entrepreneurs at all, but instead are "opportunity entrepreneurs" who are starting their own businesses even though the healthy economy is providing ample alternative opportunities in traditional employment.

	Coefficient	I-stat
Constant*	-0.0215	-1.30
Unemployment rate*	-0.0244	-1.32
Male percent of population*	0.04434	1.45
Median age*	0.00013	1.35
Percentage of jobs in construction	-0.00014	-0.03
Share of licensed occupations**	-0.00198	-1.86
Hispanic/Latino percent of population***	0.00708	3.65

R-squared = 0.35

<sup>\* -</sup> significant at the 90 percent level

<sup>\*\* -</sup> significant at the 95 percent level

<sup>\*\*\* -</sup> significant at the 99 percent level