Introduction

It has been argued that micro businesses lead to creation of employment, alleviation of poverty, movement of people from welfare to work, decrease in population loss in communities, improvement of farm and nonfarm earnings, and increase women employment (Miller, 1991; Henderson, 2002; Deller and McConn, 2009; Rupasingha and Goetz, 2011).

Despite these claims, anecdotal evidence, and a growing literature on the economic importance of small businesses, less is known about factors associated with the formation and growth of these firms in the rural United States.

The main objective of this study is to identify and determine factors associated with the regional variation of microenterprise in rural areas of the United States.

Method

• Many studies have modeled decision to become an entrepreneur as an expected utility-maximizing choice between paid employment and self-employment:

\[ L_i = U_a - U_o = X\beta + \epsilon_i \]

Where \( X \) is a vector of explanatory variables that affect the choice and \( \epsilon \) is a random term.

• The stochastic nature of the index function (Borjas, 1986) implies that the probability that self-employment is selected by the representative individual equals:

\[ P_i = \text{Prob}(U_a - U_o > 0) = \text{Prob}(\epsilon_i > X\beta) \]

Variables in \( X \) are the individual’s socioeconomic, demographic and other characteristics.

• We focus on the labor market choice of all individuals in a region. Equation takes the following form when all the self-employed individuals in region \( i \) are presented as a ratio of total labor force (Ni):

\[ S_i = \frac{1}{N_i} \sum_{j=1}^{N_i} \text{Pr}[\epsilon_{ij} = 1] = F(U_{ia} - U_{io} + \delta_i) \]

• Self-employment rate is affected by a set of m regressors. Typically, it is assumed that \( S_i \) is a linear combination of the explanatory variables:

\[ S_i = \theta_0 + \theta_1 X_{i1} + ... + \theta_m X_{im} \]

• This framework allows derivation of microenterprise activities as a function of numerous regional explanatory factors as well as stochastic variables. The \( S_i \) is the dependent variable that measures the spatial variation of microenterprise activities.

• To estimate the model, we use economic and labor force characteristics, demographic characteristics, government policies, regional characteristics and social policies.

• We used a Spatial error model (SEM) to estimate regressors.

Results

Fig1. Spatial variation of employer microenterprises as a percent of total employment

Fig2. Microentreprises as a percent of total employment, 1997-2007

Tab1. Estimation results – Spatial error model (SEM)

Conclusions

• Results suggest that most of the economic and labor force, demographic, policy, regional, and socio-cultural factors are important in explaining the regional variation of microenterprise rates in rural counties in the United States.

• However, when we separate micro enterprises growth rate by nonemployers and employers, these factors have different relative importance. These results indicates that may not be a good idea to pool these two types of establishments together in policy research and analysis.