Livelihood Disruption and Venture Creation: 
Entrepreneurship as Technology Adoption, 
A Case of Tobacco Farmer in Kentucky

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Introduction
• Technology adoption and entrepreneurial activity both involve substantial risks.
• The uncertainty in household income and changes in economic environment during the tobacco transition payment program lead many individuals into entrepreneurial activities.
• Heterogeneity in learning by doing, or knowledge generated by direct or indirect experience, is determined by the degree to which the individual is connected to an entrepreneurial social network.
• Entrepreneurs need complementary resources to produce and deliver their goods and service (Teece 1987). They need support, knowledge and access to distribution channels through social network.
• The link and the interaction among entrepreneurs and their social network can enlarge the availability of resources that help maintain a new firm (Hansen 1995).

Objectives
• Use the theory of technology adoption to study entrepreneurship
• Examine the role of social networks (learning by doing) in the adoption of entrepreneurship
• Study the factors associated with an entrepreneurial activity decision

Hypotheses
• The “push” hypothesis: farmers with decreased income are pushed into starting a new business
• Learning by Doing: Farmers who have friends who have started ventures will be more likely to start their own, controlling for other social connections.

Data
• A Survey of Kentucky Farmers: The Tobacco Buyout, 2005-2006
• 702 respondents

Methods
Bivariate Probit Model
\[
\max_{\phi} \sum_{i=1}^{n} U_{i}(\theta_{i} + \phi_{i}) + \sum_{j=1}^{n} U_{j}(\theta_{j} - \phi_{j})
\]
• \( \theta \): Social network
• \( \phi \): Current employment profit
• \( \phi \): Entrepreneurial activity random profit
• \( \gamma \): Percentage of working time devoted to the entrepreneurial activity
• \( T \): Leisure time
• \( U \): Standard utility of wealth function
• \( \phi \): Personal characteristics

Results
Bivariate Probit (Outcome equation)
\[
\text{inc Income} \quad 0.489^{**} \quad \text{age1} \quad 0.296^{*}
\]
• Tobacco farmers are more likely to start their own business if:
  • Low Income
  • Know others who started their own business
  • Under 54 years of age
  • White
  • Experienced a recent death in the household.

References