Rural Household Non-farm Businesses: Startup, Expansion, Contraction, or Exit?

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Introduction

Most household businesses in developing countries are self-employment enterprises without paid employees. These businesses face several constraints, such as access to capital, skilled labor, entrepreneurial ability, and government registry requirements, that limit growth and expansion. Self-employment leads to enterprise growth and employment creation (Mondragon-Velez and Penoi-Parga, 2008; de Mel et al., 2008; Schor, 2009).

Among push and pull factors for rural households to start and expand a business, one might expect wealth to be the most important factor. Specifically, in the entrepreneurship literature, levels of household wealth often determine the probability of becoming an entrepreneur instead of a wage worker (Evans and Jovanovic, 1989; Banerjee and Newman, 1993; Hurst and Newman, 2004). We will explore the characteristics of non-farm household entrepreneurs who expand their businesses by hiring non-family members.

Objectives

This study aims to understand the mechanism on the household side beyond the entry, the growth process and the contraction of rural non-farm microenterprises and small-medium enterprises in Thailand. It will also explore the characteristics of non-farm household entrepreneurs who expand their businesses by hiring non-family members.

Methodology

Data

The Thai Socio-Economic Survey (SES) panel data were collected by the National Statistical Office of Thailand in 2005 - 2007, and 2010. The data are restricted to household whose members were employed and lived in rural areas and were younger than 70 years old in all 4 rounds of survey. Results are robust to possible attrition and sample selection problems.

Empirical framework

For non-farm business production function as

\[ y_{NFt} = \alpha_{0} + \alpha_{1} \text{wage}_{NFt} + \alpha_{2} \text{wage}_{NFt}^{2} + \alpha_{3} \text{wage}_{NFt}^{3} + \epsilon_{NFt} \]

where \( y_{NFt} \) is the profits from starting/expanding business will be positive. Depending on whether household decides to start operating non-farm business by

\[ \ln y_{NFt} = \beta_{0} + \beta_{1} \text{wage}_{NFt} + \beta_{2} \text{wage}_{NFt}^{2} + \beta_{3} \text{wage}_{NFt}^{3} + \epsilon_{NFt} \]

we have

\[ \frac{\partial y_{NFt}}{\partial \text{wage}_{NFt}} = \frac{\partial \ln y_{NFt}}{\partial \text{wage}_{NFt}} \cdot \frac{1}{y_{NFt}} \cdot \frac{\partial y_{NFt}}{\partial \text{wage}_{NFt}} \]

Empirical framework

1. Probit estimations on having NF business in 2010 on linear in asset/net wealth (in 2005) and on quadratic terms. Also check robustness with linear probability model >> similar graphs

2. Probit estimations of operating NF business (in 2010) on linear in asset/net wealth (in 2005) and on quadratic terms. Evaluate all other controls, except asset index/net wealth, at their sample means. The scattered average marginal effects of

3. Multinomial logit of choices: never having NF business in both 2006&2010, enter in 2010, exit in 2010, and still operating

Results & Discussion

Table 1: Multinomial logit of change in NF business status 2005/10

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>p-value</th>
<th>Odds Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset index</td>
<td>0.325**</td>
<td>1.399**</td>
</tr>
<tr>
<td>Age, years</td>
<td>0.001***</td>
<td>0.998**</td>
</tr>
<tr>
<td>Education</td>
<td>0.295**</td>
<td>1.305*</td>
</tr>
<tr>
<td>Gender</td>
<td>0.005*</td>
<td>0.995**</td>
</tr>
<tr>
<td>Wealth index</td>
<td>0.006***</td>
<td>1.565***</td>
</tr>
</tbody>
</table>

Average marginal effects are reported. *p<0.1, **p<0.05, ***p<0.01, #p<0.001, results are significant level

Conclusion

This study finds wealth effects on running NF business at the lower and above 90th wealth distribution and on maintaining NF business status. We also observe the reduction in firm size rather than business expansion. It is difficult to see rural NF business growth.

Further limitations include (i) specifying ordered probit estimation in transitions of NF business status given initial status; (ii) estimating effects of NF business status changes on changes in wealth; (iii) exploring possible exogenous shock, e.g. rainfall, to mitigate potential endogeneity problem.

References


"Entrepreneurship Development.


"Lusardi (2004). "Liquidity Constraints, Household Wealth, and

"Stata Data


"Evans and Jovanovic, 1989; Parga, 1989; to mitigate potential endogeneity problem.


"Lusardi (2004). "Liquidity Constraints, Household Wealth, and