

Heterogeneous Effects of Wage Work and Self-Employing Non-Farm Business on Farm Productivity in China

Huaiju Liu*

*Graduate School of Economics
Nagoya University*

Abstract: Using panel data from the China Health and Nutrition Survey, we estimate stochastic production frontier models to compare production frontiers and technical efficiency (TE) between households with and without self-employed non-farm business workers (type S and NS households). Production frontiers and TEs are similar for type S and type NS households, and lower output for type S households mainly comes from their less input use. Furthermore, these households have higher production frontiers and TEs and they are less sensitive to macroeconomic shocks than households with wage workers, suggesting the importance of heterogeneous effects of different off-farm work on farm productivity.

Keywords: Wage Work, Self-Employing Non-Farm Business, Production Frontier, Technical Efficiency, Panel Data

JEL Classification Number: Q12, D24

* Corresponding author. Ph.D. Program in Economics. Email: huaiju.liu.e8@s.mail.nagoya-u.ac.jp

This study uses data from the China Health and Nutrition Survey (CHNS). We acknowledge the National Institute for Nutrition and Health, China CDC, and the Carolina Population Center (UNC). We also acknowledge NIH support to CHNS; current grant numbers are listed on the CHNS website.