



The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

Papers downloaded from AgEcon Search may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.



**Farm expansion under credit constraint: evidence from commercial rice
farmers in Guangxi, China**

Xinjian Chen^{①a}, Di Zeng^b, Hui Zhang^c and Chen Kang^d

^aAssociate professor, ^cResearch fellow, ^dPhD student, Business School, Guangxi University, 100 Daxue Road, Nanning 53004, China P.R.

^bLecturer, The Centre for Global Food and Resources, The University of Adelaide, Nexus 10, Adelaide 5005, Australia

^①Corresponding author: Xinjian Chen – email: xjchen@gxu.edu.cn

Table S1. First stage regression estimation of 2SLS model.^a

	Credit constraint (model of farm expansion in the past five years)	Credit constraint (model of farm expansion willingness in future)
Distance to nearest financial institution	0.006*** (0.002)	0.006*** (0.002)
Number of financial institutions	-0.218*** (0.013)	-0.220*** (0.013)
Rice cultivation area (2013)	0.002 (0.001)	—
Rice cultivation area (2017)	—	0.001 (0.001)
Head age	-0.001 (0.002)	-0.001 (0.002)
Head gender	-0.001 (0.049)	-0.004 (0.049)
Head education	-0.009 (0.006)	-0.009 (0.007)
Family income	-0.046** (0.022)	-0.039** (0.021)
% off-farm income	-0.037 (0.054)	-0.044 (0.054)
Family labourers	0.001 (0.009)	0.001 (0.009)
Number of dependents	-0.018* (0.011)	-0.018* (0.011)
Cooperative membership	0.110*** (0.041)	0.109*** (0.042)
Mechanical service	0.070*** (0.023)	0.069*** (0.023)
Informal credit	0.102*** (0.037)	0.102*** (0.037)
Number of enterprises	0.066*** (0.019)	0.067*** (0.019)
Distance to wholesale market	-0.001 (0.001)	-0.001* (0.001)
Flat area	-0.037 (0.028)	-0.038 (0.028)
Observations	462	462
F-value	222.61*** (0.000)	224.54*** (0.000)

^a The dependent variable is credit constraint, the endogenous variable, in both regressions. Standard errors are clustered at township level and reported in parentheses. ***, **, * indicate 1, 5 and 10% significance, respectively.

Table S2. Regression results of farm size changes in 2013-2017.^a

Variables	OLS	2SLS
Credit constraint	-1.415 ** (0.649)	-1.886 ** (0.943)
Rice cultivation area (2013)	0.265 (0.170)	0.268 (0.165)
Head age	0.008 (0.024)	0.007 (0.023)
Head gender	-0.162 (0.513)	-0.152 (0.505)
Head education	0.263 ** (0.107)	0.246 ** (0.109)
Family income	0.591 (0.491)	0.548 (0.479)
% off-farm income	-1.345 (0.867)	-1.386 (0.861)
Number of family labours	-0.228 (0.208)	-0.024 (0.202)
Number of dependents	0.202 (0.196)	0.186 (0.185)
Cooperative membership	1.672 ** (0.724)	1.759 ** (0.717)
Mechanical service	0.878 ** (0.448)	0.956 ** (0.451)
Informal credit	0.606 (0.565)	0.701 (0.538)
Number of enterprises	-0.695 (0.442)	-0.649 (0.443)
Distance to wholesale market	-0.016 * (0.008)	-0.016 ** (0.008)
Flat area	0.0179 (0.219)	-0.032 (0.227)
Observations	462	462
F-value	8.86 *** (0.000)	7.68 *** (0.000)

^a Standard errors are clustered at township level and reported in parentheses. ***, **, * indicate 1, 5 and 10% significance, respectively.