Non-farm employment and agricultural mechanisation adoption: A reciprocal relationship

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Electronic supplementary material (ESM)

Supplementary Table S1

Table S1. First-stage regressions of endogenous variables

Variable	Non-farm employment		Mechanisation adoption	
	pooled OLS	random effects	pooled Probit	RE Probit
Household characteristics				
Head's gender	−0.626***	−0.590***	0.038	0.049
	[0.12]	[0.15]	[0.04]	[0.05]
Head's age	-0.033***	−0.035***	0.002*	0.003
	[0.00]	[0.00]	[0.00]	[0.00]
Head's education	0.084***	0.071***	0.020***	0.020***
	[0.01]	[0.02]	[0.01]	[0.01]
Ethnicity	1.371***	1.599***	0.807***	0.869***
	[0.13]	[0.16]	[0.04]	[0.05]
Household labour	0.938***	0.930***	−0.004	−0.006
	[0.10]	[0.04]	[0.01]	[0.01]
Farm land characteristics				
Farmland	−0.418***	−0.355***	0.053***	0.053***
	[0.03]	[0.04]	[0.01]	[0.02]
Number_plot	−0.118***	−0.098***	0.046***	0.048***
	[0.02]	[0.02]	[0.01]	[0.01]
Irrigation_condition	0.008***	0.005***	0.005***	0.005***
	[0.00]	[0.00]	[0.00]	[0.00]
Social capital				
Credit (log)	−0.011	−0.004	0.035***	0.036***
	[0.01]	[0.01]	[0.01]	[0.01]
Extension services	0.856***	0.862***	0.234***	0.234***
	[0.17]	[0.16]	[0.06]	[0.07]
FRO-member	0.241**	0.151	0.079**	0.092**
	[0.10]	[0.11]	[0.04]	[0.04]
Instrumental variables for mechanisation equation				
Distance to the extension centre	–	–	−0.003**	−0.004**
			[0.00]	[0.00]
Distance to the extension shop	–	–	−0.008***	−0.008***
			[0.00]	[0.00]
Instrumental variables for non-farm equation				
Non-farm employment opportunity	0.857***	0.517***	–	–
	[0.12]	[0.12]		
Distance to the nearest daily market	−0.053***	−0.046***	–	–
	[0.01]	[0.01]		
Year dummy variables (based 2008)	yes	yes	yes	yes
Constant	−0.449	0.016	−0.887***	−0.912***
	[0.32]	[0.37]	[0.12]	[0.13]
Number of observations	8 012	8 012	8 012	8 012
F-test for instruments	43.02	45.92	45.12	40.88

***, ** and *significance at 1%, 5% and 10% levels, respectively; values in parentheses indicate standard errors
OLS – Ordinary Least Squares; RE – random effects; FRO – farmer related organisations
Source: Authors' estimation