Land ownership, access to and cost of informal credit: Evidence from the Mekong Delta

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Background

• Credit in developing countries is severely rationed (Duong and Izumida, 2002; Bond et al., 2015 and Luan et al., 2015).

 Potential borrowers do not owe enough assets to provide collateral for credit.

 As a consequence they resort to informal lenders, who very often apply usury interest rates



Background

- The situation is worse in the countryside, where several farmers have no assets to offer as collateral, and where commercial banks often do not have branches (Nguyen and Luu, 2013).
- However, in its road to a market economy, Vietnam started to privatise land in the early Nineties.
- Today, many farmers own a share of the land that they cultivate (Griffin et al., 2002 and Tria Kerkvliet, 2006). This land might serve as a collateral to obtain formal credit, emancipating the farmers from usurers.

Aim of the present work

- The aim of the work I am presenting today is twofold:
 - Understanding whether land ownership decreases the probability for a farmer to resort to informal lenders
 - Assessing the magnitude of the economic benefit of land ownership, in terms
 of the interest rate paid by a borrower to an informal lender.

Data

 Data are from the World Bank and cover all the provinces of the Mekong Delta.

• This region is the largest producer of rice in Vietnam (which is the largest world exporter of this commodity).

• The primary industry is the major industry in the region and produces the most of the food consumed in the country.



Data

• The WB survey includes 603 households from the provinces of the region. All of the surveyed households live in the countryside and produce rice and other vegetables. Some grow fishes.

 The most of them own the land that they use, but only some of them own this entire extension.

Methodology

• First, I inquire whether land ownership emancipates from informal borrowing, i.e. whether as the share of land owned, the probability that a farmer resorts to informal lenders decrease.

• Second, I calculate the premium of land ownership, in terms of lower interest rates paid by landowners to informal lenders.

Results: descriptive statistics

Table 2. Descriptive statistics (s.e. in brackets)	
	Mean
Average monthly interest rate paid in the informal market	6,63
	(0.52)
Average amount borrowed in the informal market (million dongs)	5.06
	(10.41)
Average yearly interest rate paid in the formal market	47.35
	(0.559)
Average amount borrowed in the formal market (million dongs)	3.51
	(0.80)
Income and its sources	
Income from hired labour (million dongs)	2.45
	(0.52)
In-kind income (dongs)	70,083
	(47,430)
Remittances (dongs)	461,857
	(2,144,181)
Logarithm of the share of owned land	4.58
	(0.17)
Poor (dummy: 1 if yes)	0.19
	(0.39)
Income per capita (million dongs)	3.86
	(3.29)
Income from crops (% of total income)	68.39
	(25.98)
Allocation of working force	
Working time of household's members in the farm (% of total working time)	76.33
	(23.59)
Number of households members working outside the farm	1.56
	(0.50)
Working time of household's members outside the farm (% of total working time)	13.02
	(20.89)
Number of households members working in the farm	2.31
	(1.18)
Indicators of social capital	
Number of years in the village	36.61
	(13.54)
Age of the household's head	43.55
	(10.99)

Use of soil	
Hectares of rice soil	1.27
nectares of fice soil	
Heatanes of each and eath	(1.19)
Hectares of orchard soil	0.14
	(0.28)
Hectares of other crops	0.05
	(0.19)
Hectares of aquaculture	0.01
	(0.05)
Hectares of residential soil	0.38
	(0.43)
Indicators of past productivity and prices of crops	
Average yield per hectare of the main crop (second-to-last season)	2.11
	(3.03)
Average yield per hectare of the main crop (third-to-last season)	2.77
	(3.62)
Average price of the main crop (second-to-last season)	752.65
	(907.76)
Average price of the main crop (third-to-last season)	1,009.10
	(778.47)
Ownership of durable goods (percentage of owners)	
TV set	15.92
	(36.62)
Radio set	40.13
	(49.06)
Motorbike	58.54
	(49.31)
Refrigerator	94.86
nongorator	(22.10)
	(22.10)



Results: accessing informal credit

Dependent	variable
Dependent	· variable

VARIABLES	Marginal effect	Marginal effect	Marginal effect	Marginal effect	
Interest rate paid on formal loan			-0.00630	-0.00456	
			(0.00398)*	(0.00273)*	
Amount borrowed from formal moneylender			2.55e-10	1.82e-10	
			(1.55e-10)	(9.98e-11)*	
Share of owned land	-0.000312	-0.000301	-0.000275	-0.000171	
	(0.000192)*	(0.000178)*	(0.000176)*	(0.000114)*	
Hectares of rice soil	-0.00682	-0.00606	-0.00594	-0.00265	
	(0.00422)	(0.00377)*	(0.00337)*	(0.00175)*	
Hectares of other crops	-0.0262	-0.0226	-0.0226	-0.0116	
	(0.0243)	(0.0218)	(0.0211)	(0.0114)	
Hectares of orchards	-0.00163	-0.000422	-0.000926	0.000431	
	(0.0129)	(0.0110)	(0.0106)	(0.00605)	
Income from crops	0.000176	0.000154	0.000147	0.000101	
	(0.000114)	(9.56e-05)*	(9.15e-05)*	(6.85e-05)*	

Other controls: number of household members, education, income per capita, wealth (several indicators), years of experience, years of presence in the village

Probit estimates, standard errors in brackets



Results: cost of informal credit

Dependent variable	Average monthly interest rate paid in the informal credit market						
Average amount borrowed in the informal market (million dongs)	-0.250	-0.147	-0.0194	-0.00541	0.0794	0.116	0.0668
	(0.241)	(0.208)	(0.0520)	(0.0409)	(0.0373)**	(0.0529)**	(0.0715)
Average yearly interest rate paid in the formal market	-0.0101	-0.407	-0.984	-0.787	-1.205	-1.692	-1.040
	(1.377)	(1.121)	(1.053)	(0.885)	(0.960)	(0.971)*	(0.961)
Average amount borrowed in the formal market (million dongs)	2.067	2.012	2.113	2.102	2.234	2.281	2.054
	(0.775)***	(0.742)***	(0.807)***	(0.793)***	(0.695)***	(0.562)***	(0.469)***
Logarithm of the share of owned land	-3.178	-3.365	-3.452	-4.183	-4.195	-3.964	-4.198
	(1.507)**	(1.531)**	(1.400)**	(1.563)***	(1.435)***	(1.318)***	(1.329)***

Other controls: number of household members, education, income per capita, wealth (several indicators), years of experience, years of presence in the village Tobit estimates (censoring at 0)



Results: cost of informal credit

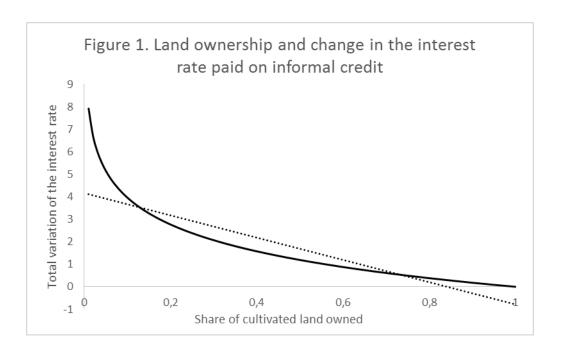
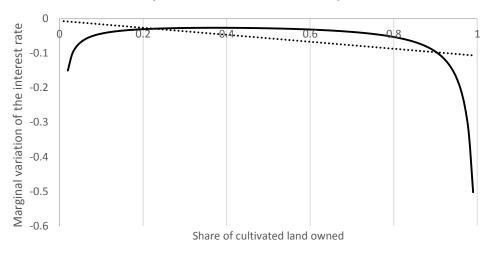


Figure 2. Marginal variation of the interest rate paid by share of land ownership



Conclusions

- Land ownership decreases the probability of demanding informal credit; however, the magnitude of the effect is small -> too few branches in the countryside.
- However, land ownership decreases the cost of informal credit, suggesting that land may serve as a direct or as an indirect collateral.
- This last fact may also induce some increase in the demand for informal credit: on the one hand land ownership open the access to formal credit, but on the other it decreases its cost rising the demand.

Conclusions

• The process of land privatisation has had positive effects on the side of informal credit and on development more in general.

 However the lack of bank branches and the general scarcity of collaterals still favour the informal market of credit in rural Vietnam.

• The government should provide incentives to the banks to operate also in the agricultural regions. The government should also intensify its prevention against usurers.



THANK YOU FOR LISTENING!

COMMENTS ARE WELCOME!

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