

The Impact of Remittances on Rural Households in Nang Rong, Thailand

Barbara Entwisle and Yuying Tong
September 22, 2004

The impact of out-migration on places of origin depends, in the first instance, on remittance flows back to the origin, and in the second instance, on how those remittances are used. This paper uses prospective survey data collected from almost 5000 rural households in Nang Rong, Thailand to explore the effects of migration and remittances on the subsequent ownership of productive assets and consumer goods. Examples of productive assets in this setting are large and small tractors, itans (a locally made multipurpose vehicle), and sewing machines. Examples of consumer goods are televisions, telephones, and refrigerators. In addition, there are some items that may be either or both, including motorcycles, cars, pickups, or trucks. We examine each of these possibilities separately.

We draw on a prospective longitudinal data set from Nang Rong, Thailand that collected detailed information about rural households in 1994 and 2000, including assets in both years, as well as tracking migrants in and out of these households over time. We examine whether the number of migrants in 1994 and the number sending money or goods in the previous year affects household assets in 2000, controlling for assets in 1994 as well as other household and village variables in that year. Preliminary results are shown in Tables 1-2, attached.

The descriptive statistics shown in Table 1 indicate that, on the whole, rural households in Nang Rong improved their position over the six year period, from 1994 to 2000. Within each asset type—consumer, productive, and mixed—the mean value of owned assets increased. Moreover, the statistics show how common migration is in this setting. Migrants are former household members who had been away for two or more months in 1994. There were 1.85 such persons in the average household in 1994, .70 of whom had sent money and .49 of whom had sent goods in the previous year. The question is: are households with more migrants, and more remitting migrants, in 1994 doing better in 2000? We address this question separately for different types of assets.

Table 2 presents the results for different groupings of assets: logged productive assets, logged consumer assets, and logged mixed assets. According to the results, remittances have a positive effect on all types of assets, but especially productive assets. The number of migrants has an opposite effect. Controlling for the number remitting, increases in the number of migrants leads households to be in a relatively worse position than otherwise. This might reflect the impact of losing important labor power previously provided by the migrant, which is not being made up through other kinds of transfers. We will explore this result further as we continue to work on the paper.

Table 1: Descriptive Statistics for Selected Variables

Variables	Year	Mean	Std. Dev.	Min	Max
<i>Dependent Variables</i>					
Sum of consumer assets (in Thailand Baht/1000)	2000	9.101	8.140	0.000	146.678
Sum of productive assets(in Thailand Baht/1000)	2000	32.618	51.839	0.000	906.357
Sum of mixed assets(in Thailand Baht/1000)	2000	69.455	192.035	0.000	5170.500
Sum of consumer assets (logged)	2000	0.686	3.179	-2.303	6.810
Sum of productive assets (logged)	2000	1.299	1.988	-2.303	4.989
Sum of mixed assets (logged)	2000	1.435	3.232	-2.303	8.551
<i>Independent Variables</i>					
<i>Household Variables</i>					
Number of migrants	1994	1.850	1.770	0.000	11.000
Number of migrants who sent money in previous year	1994	0.704	1.135	0.000	8.000
Number of migrants who sent goods in previous year	1994	0.490	0.975	0.000	7.000
Number of household members in agriculture	1994	3.646	2.224	0.000	14.000
Number of dependent age people in household	1994	0.719	0.791	0.000	4.000
Any original household members doing non-agricultural work	1994	0.152	0.359	0.000	1.000
Any household members having more than primary school education	1994	0.869	0.338	0.000	1.000
Sum of consumer assets(in Thailand Baht/1000)	1994	7.264	5.503	0.000	45.582
Sum of productive assets(in Thailand Baht/1000)	1994	12.045	29.046	0.000	539.157
Sum of mixed assets(in Thailand Baht/1000)	1994	38.736	144.863	0.000	2580.960
Sum of consumer assets (logged)	1994	1.079	1.984	-2.303	3.822
Sum of productive assets (logged)	1994	-0.710	2.607	-2.303	6.290
Sum of mixed assets (logged)	1994	-0.241	3.011	-2.303	7.856
Owned land(logged, in wa ²)	1994	2.365	1.648	-2.303	5.522
<i>Village variables</i>					
Proportion of the village population that has migrated	1994	0.223	0.044	0.045	0.350
% of surrounding lands in alluvial plain/low terrance	1994	61.582	41.997	0.000	100.000
Euclidean distance to nearest district town (KM)	1994	5.878	3.501	0.120	14.740
Length of road linking the village to a main highway	1994	6005.368	5621.085	3000.000	35000.000
Whether the village has a bus that goes to Nang Rong District	1994	0.895	0.306	0	1

Table2: Linear Regression of Logged Household Assets in 2000 on Number of Migrants and the Number Remitting in 1994, Controlling for Assets in 1994 and other Household and Village Characteristics

Variable Names	Model 1		Model 2		Model 3	
	Productive Household Assets	Consumer Household Assets	Mixed Household Assets			
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Intercept	-1.124	0.431	0.422	0.292	1.345***	0.373
<i>Migrant Remittances in 1994</i>						
Number of migrants who sent money in previous year	0.448***	0.06	0.127**	0.043	0.215***	0.074
Number of migrants who sent goods in previous year	0.038	0.069	0.051	0.043	0.022	0.058
Number of migrants	-0.385***	0.037	0.023	0.02	-0.245***	0.031
<i>Household Assets in 1994</i>						
Productive Household Assets (logged)	0.372***	0.022	0.076***	0.011	0.169***	0.021
Consumer Household Assets(logged)	0.099**	0.03	0.177***	0.018	0.236***	0.027
Mixed Household Assets(logged)	-0.003	0.019	0.124***	0.009	0.299***	0.019
Owned land(logged)	0.218***	0.04	0.059***	0.022	0.139***	0.037
<i>Productive Activity in Household</i>						
Number of household members in agriculture	0.198***	0.022	-0.064***	0.015	-0.004	0.029
Any original household members doing non-agricultural work	-0.608***	0.108	0.006	0.094	0.298*	0.129
Any household members having more than primary school education	0.312*	0.131	0.611***	0.109	0.637***	0.131
Number of dependent age people in household	-0.152**	0.054	-0.021	0.035	-0.181***	0.053
<i>Village variables</i>						
Proportion of village population that has migrated	1.719	1.477	1.519	1.055	-1.218	1.529
Percent of surrounding land in alluvial plain	0.002	0.002	-0.002	0.001	-0.003	0.002
Euclidean distance to nearest district town (KM)	-0.064***	0.019	0.020	0.011	0.034	0.027
Length of road linking the village to a main highway	-7.76e-06	-0.53e-04	-6.59e-06	7.13e-06	-6.09e-06	1.97e-04
Whether the village has a bus that goes to Nang Rong District	-0.042	0.240	-0.145	0.99	0.251	0.237
R Square	0.2379		0.1725		0.2437	
Number of cases	4954		4953		4955	

Note: ***p<0.001 **p<0.01 * p<0.05

S. E. is robust standard error, cluster effect is controlled at village level