



23rd Asia Pacific Agricultural Policy Forum

Consumption inequality between farm and non-farm households in rural Vietnam

Presented by **Pham Le Thong**,
Faculty of Agricultural Economics,
School of Economics, Can Tho University



Organization of the presentation

1. Introduction
2. The Vietnamese context
3. Estimation method
4. Data and variable description
5. Estimation results and discussion
6. Conclusion and Policy implication



Introduction

- The importance of non-farm employment is growing
- Rigg (2006) observes rural South countries and reports:
 - Non-farm activities are becoming central to rural livelihoods.
 - Agricultural development is no longer the best instrument for generating rural income and improving livelihoods



Introduction

- Non-farm income **in rural Vietnam** has risen from 48% in 1993 to 73% in 2016.
- The average growth rate of income per capita is estimated at 7.4% per annum (GSO, 1994, 2018).
- Non-farm employment has potentials to increase inequality among rural households.



Introduction

- Little is known about the sources of inequality between farm and non-farm households.
- This study decomposes the gap in household per capita consumption expenditure for the entire distribution
 - Use the 2016 Vietnam Living Standards Survey associated with the Unconditional Quantile Regression model.



The Vietnamese context

- Before 1980s, all agricultural land was assigned to cooperatives.
- The 1988 Land Law assigned agricultural land to individual households with 10-20 years of secure land use right.
 - Land use and crop choice decisions were still controlled by the state.
- Subsequent revisions of the land law granted more land title and security to households



The Vietnamese context

- Land has been re-allocated to households who are more productive
- Land acquisition due to rapid industrialization and urbanization also drives farmers out of traditional agricultural activities
- The proportion of households engaged in non-farm economy increased from 16.5% in 1993 to 34% in 2008.



The Vietnamese context

- Non-farm activities significantly not only increases rural household living standards but also the inequality.
 - Households with more favorable socioeconomic conditions are more likely to participate in high-return activities.
 - Poorer households partake in low-return activities.



Estimation method

- The decomposition method proposed by Firpo et al. (2018), also known as FFL.
- Two-stage procedure of estimation:
 - The first stage identifies determinants of real household expenditure at the mean and selected quantiles for both groups.
 - The second stage decomposes the expenditure gap into endowment effect and coefficient effect.



Data and variable description

- The data comes from the Vietnam Household Living Standards Survey (VHLSS) in 2016.
- Sampled households are randomly selected by a three-stage stratified sampling method.
- The 2016 consists of 6,570 rural households
 - 1,900 are farm households (28.9%)



Table 1. Description and summary statistics of key variables

Variable	Description	Farm household		Non-farm household	
		Mean	Standard deviation	Mean	Standard deviation
pce	Per capita expenditure (1,000 VND/year)	18,371	16,410	21,191	15,312
<i>Household heads' characteristics</i>					
age	Age of household head	48.96	13.00	52.24	14.49
ethnic	Kinh ethnicity = 0; others = 1	0.40	0.49	0.15	0.36
educ	Years of schooling of head	6.10	3.61	7.20	3.89
<i>Households' characteristics</i>					
hhsz	Household size	4.01	1.65	3.75	1.58
dep15	Ratio of household members under 15	0.22	0.21	0.20	0.21
dep65	Ratio of household members over 65	0.08	0.20	0.13	0.28
<i>Socio-economic characteristics</i>					
domrem	Domestic remittances (1,000 VND)	2,958	6,858	6,471	13,527
forrem	International remittances (1,000 VND)	263	3,621	2,777	24,220
income	Income per capita from economic activities (1,000 VND)	25,440	37,373	30,706	25,792
<i>Regions</i>					
reg_1	Red river delta	0.09	0.29	0.26	0.44
reg_2	Northern midlands and mountain areas	0.33	0.47	0.15	0.36
reg_3	North Central and Central coastal areas	0.17	0.38	0.24	0.43
reg_4	Central Highlands	0.13	0.33	0.04	0.21
reg_5	South East	0.05	0.23	0.09	0.29
reg_6*	Mekong Delta	0.22	0.42	0.21	0.41

Note(s): * reference group

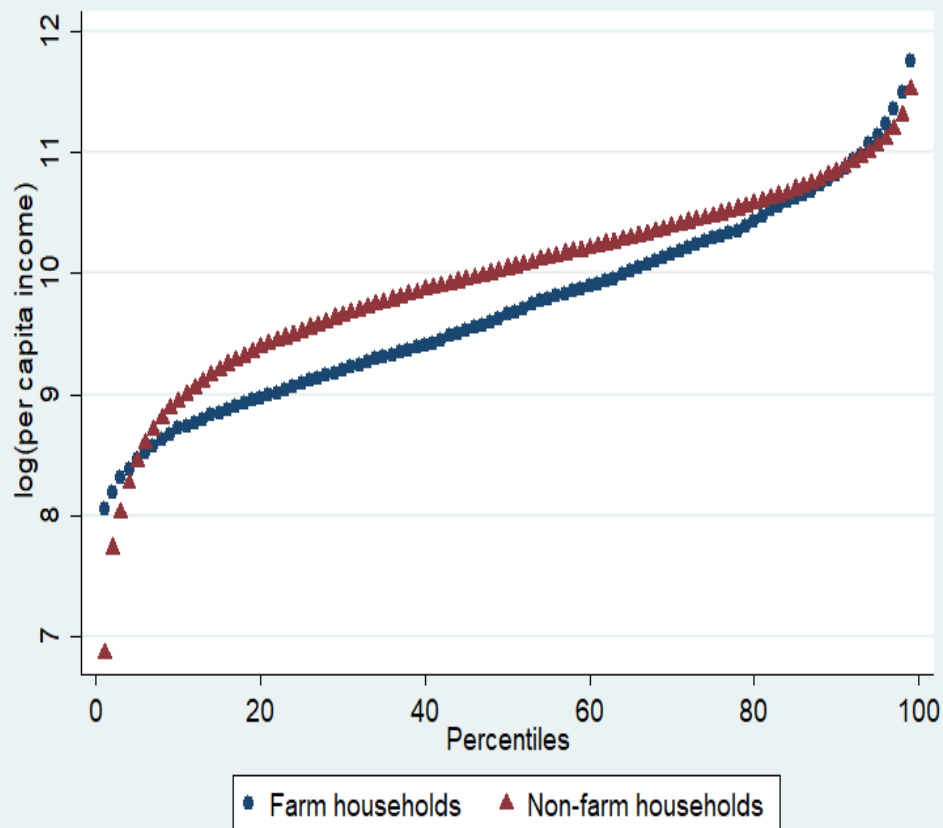
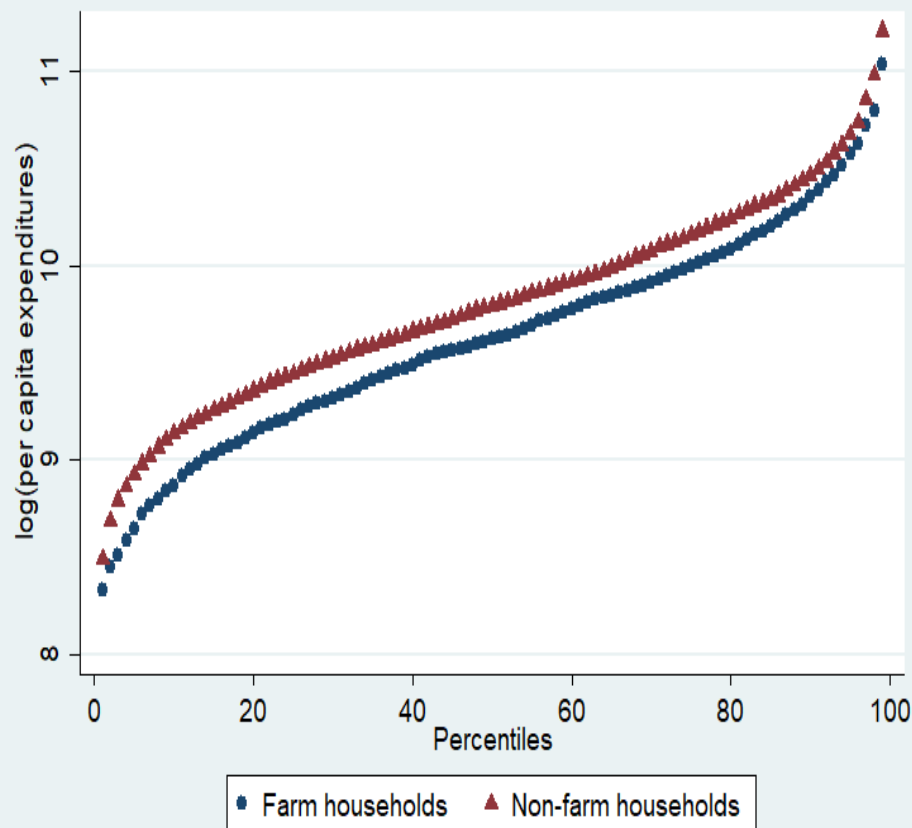
VND stands for Vietnamese currency (dong). The exchange rate was 22,800 VND/USD in 2016

Source(s): Authors' calculation from 2016 VHLSS



CANTHO UNIVERSITY

Expenditure and income gap between farm and non-farm households across percentiles



Source: Computed from 2016 Vietnam Household Living Standards Survey 16



Decomposition results from the extended OB model at mean and selected percentiles

Quantiles	Mean		10 th percentile		25 th percentile		50 th percentile		75 th percentile		90 th percentile	
Predicted gap	0.175	***	0.271	***	0.209	***	0.172	***	0.153	***	0.111	***
Endowment effects	0.177	***	0.250	***	0.222	***	0.188	***	0.139	***	0.114	***
Coefficient effects	-0.002		0.021		-0.013		-0.016		0.014		-0.003	

- The per capita expenditure gap almost comes from the endowment effect.
- The gap is estimated at 27.1% at 10th percentile and steadily decreasing to 11% at 90th percentile.



Decomposition results

- Ethnic differential accounts for the largest proportion in the endowment effects
- Education enlarges the gap in both endowment and coefficient effect.
 - The size of the coefficient effects is much larger than that of endowment effects, indicating the importance of the returns to education in terms of expenditure in non-farm activities
- Remittances, household composition are also key predictors of the expenditure gap.



Conclusion and policy implication

- Non-farm employment not only increase rural household welfare but also the inequality.
 - Households with better access to non-farm activities enjoy more benefits.
- Differences in household characteristics such as ethnicity, education, household composition, transmittances and income explain most of the gap



Conclusion and policy implication

- Policy implication
 - Training and education are crucial to help rural workers get access to non-farm activities,
 - Help the poor access to productive resources, including capital, education, etc.
 - Increasing access to non-farm employment for ethnic minorities by vocational training.
 - improvement of infrastructures in disadvantage areas.

**Thank you for
your attention!**

Cám ơn!