Remittance Receipts by Ghana's Households: Understanding Their Distribution and the Impact on Investment in Basic Education

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#### Introduction

- The emergence of remittances as a topical subject
- >The importance of migrant remittances
- >The growth in remittance-facilitation services
- >An increase in knowledge about the role of remittances
- Meaning of a remittance
- A monetary or in-kind transfer from one household to another, and for which no direct or explicit repayment is required.
- Motivation

The importance of knowing more about the impact of remittances.

#### Research questions

- i. What is the distribution of remittance receipts?
- ii. What is the impact of remittance receipts on households' investment in basic education?
- iii. What are the implications of the findings from (i) and (ii) on the distribution of welfare?

#### Relevant literature

 The impact of remittances on agricultural productivity Rempel and Lobdell (1978)

The impact of remittances on various aspects of wellbeing;

Adams and Page (2005); Boakye-Yiadom (2008)

 The impact of remittances on school attendance or educational attainment;

Mansour, Chaaban, and Litchfield (2011); Amuedo-Dorantes, Georges, and Pozo, 2010; and Lu and Treiman, 2011).

- The impact of remittances on households' investment in education;
- ➢Gyimah-Brempong and Asiedu (2014)

➢Pickbourn (2015)

#### Dataset and methodology

Dataset

Data from the 2012/2013 Ghana Living Standards Survey

- Methodology
- i. Descriptive statistics, by type of household;
- ➢An analysis of remittance receipts;
- ➢An analysis of remittance sizes;
- A comparison of remittance receipts with spending of basic education;
- ii. An econometric and counterfactual modelling of various scenarios:

#### Dataset and methodology (II)

- i. Specify an education expenditure equation
- ii. Divide the appropriate sample into remittance recipient households and non-recipient households;
- iii. Use these sub-samples of households to estimate remittance-recipient and remittance non-recipient education expenditure equations;
- iv. Use these two equations to generate appropriate counterfactual education expenditures for all the households in the sample;
- v. For each household, we are able to estimate its education expenditure as a remittance recipient, and its education expenditure as a remittance non-recipient;
- vi. Estimate the relevant average treatment effects (ATET and ATE);
- vii. Generate ATET and ATE using propensity score matching (PSM).

#### Dataset and methodology (III)

$$LnExpenditure = \beta LnHHIncome + \delta PupilsAge + \rho Scholarship + \mu Loc + \varepsilon$$
 (2)

For the *i*th household, the treatment effect of receiving remittances is expressed as:

$$Treat_i = LnE_{1i} - LnE_{0i}$$
 (1)

Where:

 $LnE_{1i}$  represents the *i*th household's log of education expenditure in a remittance-recipient scenario; and

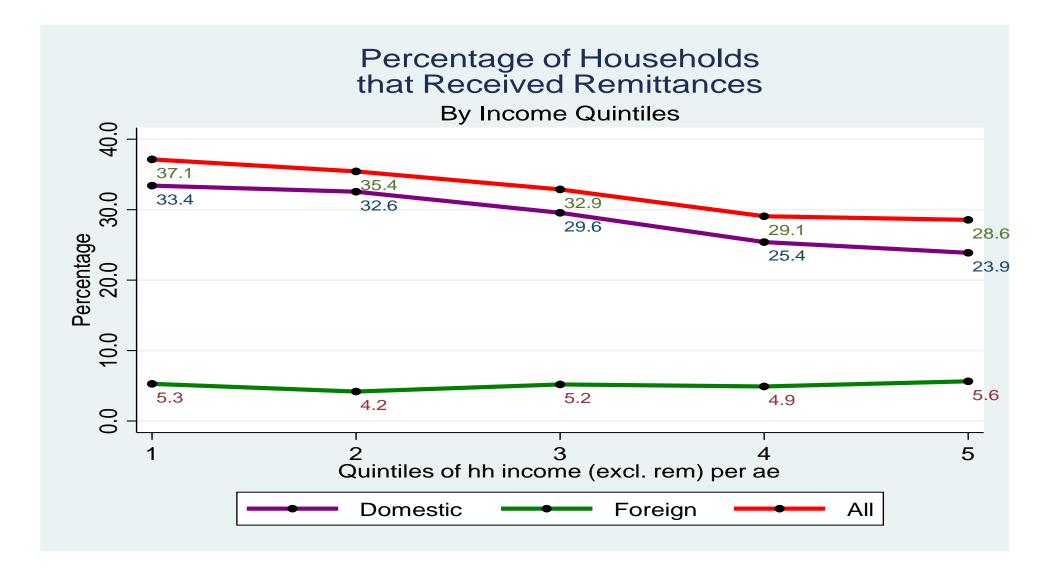
 $LnE_{0i}$  represents the *i*th household's log of education expenditure in a remittance non-recipient scenario;

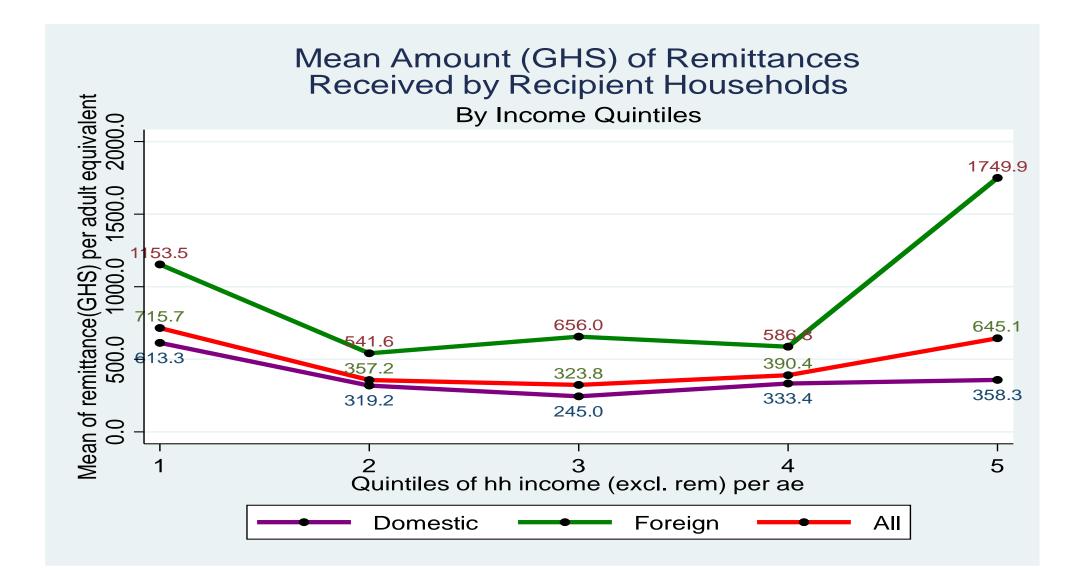
### Households' receipt of remittances and their expenditure on basic education

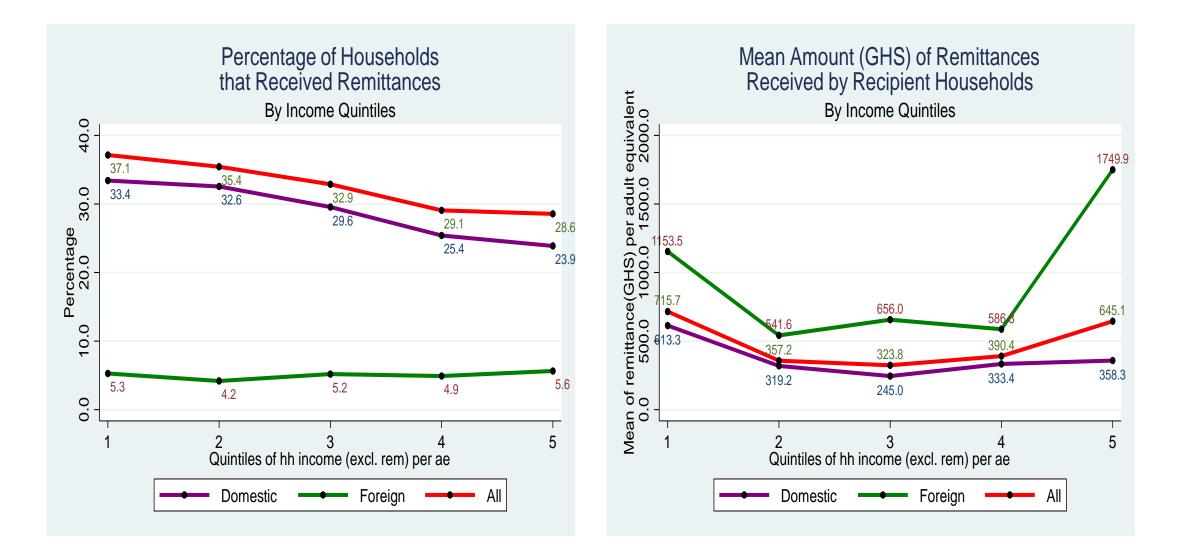
Households' remittance receipt status	Percentage	Mean of average expenditure (GHS) on basic education
Received domestic remittances only	27.14	259.02
Received foreign remittances only	3.70	606.28
Received domestic and foreign remittances	1.37	289.21
Did not receive any remittance	67.79	382.63
Total	100	356.82

#### Mean yearly amounts (GHS) of remittances received

Households' remittance receipt status	Mean amount of domestic remittances received	Mean amount of foreign remittances received	Mean amount of remittances received
Received domestic remittances only	623.83	n/a	623.83
Received foreign remittances only	n/a	2,132.89	2,132.89
Received both types of remittances	731.43	1,099.69	1,831.12
All	628.99	1,854.22	848.49







#### Covariates in the regressions

#### OLS:

Household income excluding remittances Mean age basic school pupils Household's scholarship status Location variables (urban-rural, region) Probit: household income excluding remittances Sex of household head Household head's age group Number of elderly persons Household's child fostering status Scholarship status Location variables (urban-rural, region)

## Impact of remittance receipt on households' investment in basic education

Type of impact	Method	Estimated impact	Statistical significance of estimate (p-value)
ATET	IPWRA	0.01	0.733
ATET	PSM	0.007	0.889
ATE	IPWRA	-0.008	0.799
ATE	PSM	0.002	0.960

Impact of receipt of "domestic remittances only" on households' investment in basic education

Type of impact	Method	Estimated impact	Statistical significance of estimate (p-value)
ATET	IPWRA	0.032	0.323
ATET	PSM	0.028	0.574
ATE	IPWRA	-0.052	0.10
ATE	PSM	-0.053	0.202

Impact of receipt of "international remittances only" on households' investment in basic education

Type of impact	Method	Estimated impact	Statistical significance of estimate (p-value)
ATET	IPWRA	0.307	0.000
ATET	PSM	0.190	0.10
ATE	IPWRA	0.152	0.264
ATE	PSM	0.415	0.017

Impact of receipt of "domestic and international remittances" on households' investment in basic education

Type of impact	Method	Estimated impact	Statistical significance of estimate (p-value)
ATET	IPWRA	0.364	0.000
ATE	IPWRA	0.545	0.000

#### Conclusion

- On the whole, households' receipts of remittances appears to have little effect on their investment in basic education;
- Households' receipts of international remittances have considerable impact on their investments in basic education;
- The impact remittance receipts could have an adverse effect on Ghana's welfare distribution;
- International remittances offer an opportunity for enhancing Ghana's human capital.

# Thank you!