

# Migrant Remittance: Mixed Motives and the Impact on Household Expenditures

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## Objectives

- Investigate three potential motives of remittance sending: **altruism, insurance, identity norm**
- Explore the allocation of migrant remittances within rural households by examining changes in each category of expenditure following the receipt of remittance: **consumptive vs. productive expenditures**

## Introduction

Migration of labor out of agriculture is a primary feature of economic development. In many developing countries, rural laborers migrate to cities, or even abroad, for better job opportunities. Although physically separated, migrants are still connected with their households of origin via the remittance that they send back home.

Existing studies propose and analyze two theories of migrants' potential motive for remittance sending: remittance as altruism and remittance as insurance. This study builds on the literature and identifies an additional motive: identity norm.

In this study, I first develop a stylized theoretical framework to analyze all three potential motivations for migrants' remittance-sending behaviors. Then, using a panel dataset pooled from three waves of the China Laborforce Dynamic Survey (CLDS), I test whether the average amount of remittance from each migrant responds to household demographic structure, the experience of income shocks in the household, and the influence from peers via their remittance sending behaviors.

[Due to the limitation in space, this poster only presents a sketch of the theoretical framework and a brief summary of the empirical results. Please contact the author for the complete theoretical model, empirical results and relevant discussions if interested.]

## Theoretical Framework

The baseline two-period model, based on the framework in Rapoport and Docquier (2006), explores the two frequently discussed motives behind migrants' remittance sending, altruism and insurance. The head of the representative household (with  $m$  migrants and  $n$  non-migrants) solves the following problem:

$$\max_{\theta, R_b, R_g} E(V^m) + \lambda E(V^n),$$

where  $E(V^m)$  and  $E(V^n)$  are the expected utility of each migrant and each non-migrant that stays at the rural home, respectively;  $\lambda$  is the weight placed on non-migrants. Each Non-migrant help finance  $(1 - \theta)$  of the migration cost per migrant ( $c$ ). Migrants send back remittances in return ( $R_b$  in the bad state and  $R_g$  in the good state). Migration happens at the end of the first period. The two expected utilities are given by:

$$\begin{aligned} E(V^m) &= mv(w^0 - \theta c) + \beta m[pv(w^m - R_b) + (1 - p)v(w^m - R_g)], \\ E(V^n) &= nv(w^0 - (1 - \theta)c) + \beta n[pv(w^1(1 - s) + R_b) + (1 - p)v(w^1 + R_g)], \end{aligned}$$

where  $w^0$  is the deterministic income that each individual earns in the first period;  $w^1$  and  $w^m$  are the incomes in the second period if an individual stays at home and migrates to urban areas, respectively ( $w^m > w^1 > w^0$ ). In the second period, there is a potential income shock, with probability  $p$ , that may take the proportion  $s$  of each non-migrant's earned income. Assume everyone has the same preference over wealth, denoted by the utility function  $v(\cdot)$ . Solving the above optimization problem gives the optimal  $\theta^*$ ,  $R_b^*$  and  $R_g^*$ .

Then, I extend the baseline model and show how identity norm affects migrants' remittance behaviors by borrowing the framework in Benjamin et al. (2010), which is omitted here due to limitation of space.

## Empirical Methods

Based on the model predictions, I test the three potential motives of remittances using the following equation:

$$PMRemit_{it} = \rho + \alpha_1 Mig_{it} + \alpha_2 Dep_{it} + \beta Pov_{it} + \gamma PMComRemit_{it} + \mathbf{X}'_{it}\boldsymbol{\xi} + \mu_i + \lambda_t + \varepsilon_{it}, \quad (1)$$

where  $PMRemit_{it}$  denotes the average amount of remittances that flows from each migrant to household  $i$  in year  $t$ ;  $Mig_{it}$  is the number of migrants in household  $i$  in year  $t$ ;  $Dep_{it}$  is the number of dependents (children and elderly people) in household  $i$  in year  $t$ ;  $Pov_{it}$  is a dummy indicating whether household  $i$  is below the poverty line in year  $t$ ;  $PMComRemit_{it}$  denotes the average amount of per-migrant remittances that all households other than household  $i$  receive in year  $t$ ;  $\mathbf{X}_{it}$  is a vector of household characteristics;  $\mu_i$  is time-invariant household fixed effect;  $\lambda_t$  is year fixed effect;  $\varepsilon_{it}$  represents unobserved errors.

Then, I examine how the receipt of migrant remittances affect household expenditures using the instrumental variable approach, which is inspired by the effect of identity norms on remittance sending. The corresponding identification strategy can be specified as:

$$Remit_{it} = \delta_0 + \delta_1 ComRemit_{it} + \mathbf{X}'_{it}\boldsymbol{\phi} + \mu_i + \lambda_t + u_{it}, \quad (2)$$

$$PCExp_{it} = \theta_0 + \theta_1 \widehat{Remit}_{it} + \mathbf{X}'_{it}\boldsymbol{\varphi} + \mu_i + \lambda_t + v_{it}, \quad (3)$$

where  $Remit_{it}$  denotes the total amount of remittances that household  $i$  receives from all migrants it sends out in year  $t$ ;  $ComRemit_{it}$  is the average amount of remittances received by all other households in the same rural community;  $\widehat{Remit}_{it}$  is the predicted value of remittances received by household  $i$  from the first stage;  $PCExp_{it}$  is the per capita expenditure of household  $i$  on farm inputs (productive) and housing (consumptive) in the past twelve months of survey year  $t$ ;  $\mathbf{X}_{it}$  is a vector of household characteristics;  $\mu_i$  is time-invariant household fixed effect;  $\lambda_t$  is year fixed effect. The parameter of interest is  $\theta_1$ .

## Result Summary

- The average amount of remittances responds to the number of migrants sent out, the economic shocks that hit the household, and the average amount of remittances sent home by other migrants from the same community. Therefore, remittance sending in China, which flows from rural-to-urban migrants to their households of origin in rural communities, is very likely driven by mixed motives. Altruism, insurance and identity norm may simultaneously contribute to the observed remittance sending practices.
- The average per capita farm cost and housing expenditure of rural households in China both increase by 4 to 5 percent when migrant remittance is 10 percent higher. This result suggests that the inflow of remittance from migrants facilitates both productive and consumptive expenditures in the household.

## References

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