

# The Heterogeneity of Migrants in the Impact of Remittances on Educational Expenditure: Empirical Evidence from Cambodian Household Economic Survey\*

Masamune Iwasawa,<sup>†</sup> Mitsuo Inada,<sup>‡</sup> and Seiichi Fukui<sup>§</sup>

April 20, 2014

## Abstract

The increasing numbers of people migrating and the large amount of remittance flows in developing countries have drawn significant attention of policy makers and researchers to their roles in economic development. However, empirical evidence on the impact of remittances on childhood education is mixed because their positive impact may be offset by the adverse impact of absent migrated members. Moreover, the magnitude of the negative impact depends significantly on characteristics of the absent migrated members who may remit. Specifically, it has been argued in the theoretical literature that parents play a significant and irreplaceable role in their children's education. This indicates that parental migration not only leads to a workforce shortage in the household but also induces an insufficiency in parental input of childhood education. Thus, to investigate the impact of remittances without taking account of heterogeneity of migrants produces misleading results. To unravel the heterogeneity of migrants in the impact of remittances, we use Cambodia Socio-Economic Survey 2009, which is well suited for investigating our empirical question as it has sufficient sample size for estimation with each subsample of children according to three self-selected migration types of households: parental, other members', and no migration. Estimating each subsample enables us to disentangle the net impact of remittances from that of migration and measure the impact of remittances allowing for heterogeneity of migrants. We employ the sample selection bias correction method in the 2SLS procedure to deal with the issues of self-selection and endogeneity of remittances received by households. The results are consistent with the theoretical prediction that remittances have a positive impact on childhood education. In contrast, migration has a negative impact and it even offsets the positive impact of remittances when parents are the ones who migrated.

**JEL Code:** 015; I25; J13

**Keywords:** Remittance; Heterogeneity of migrants; Educational expenditure

---

\*We would like to gratefully thank Hisaki Kono for his continuous suggestions in this project. We would also like to thank Katsunori Yamada for his valuable comments in the early stage of this project. We are indebted to Yoshihiko Nishiyama, Ryo Okui, Kohtaro Hitomi, Yoko Konishi, and Naoya Sueishi for their guidance and suggestions. We are grateful to Atsuyuki Asami, Shintaro Asaoka, Naoto Jinji, Tatsuya Kikutani, Keisuke Kondo, Takahide Yanagi, Hiromi Yamamoto, Go Yano, and the seminar participants at Kyoto University and the Kyoto meeting of the Kansai Econometric Society for their useful comments. We thank Likanan Luch for his help with the data. The authors acknowledge funding from a Grant-in-Aid for Japan Society for the Promotion of Science Fellows.

<sup>†</sup>Corresponding author: Graduate School of Economics, Kyoto University and Research Fellow of Japan Society for the Promotion of Science, Yoshida-honmachi, Sakyo-ku, Kyoto 606-8501, Japan. Email: iwasawa.masamune.88m@st.kyoto-u.ac.jp

<sup>‡</sup>Division of Natural Resource Economics, Graduate School of Agriculture, Kyoto University, and Research Fellow of Japan Society for the Promotion of Science, Email: inada.mitsuo.84z@st.kyoto-u.ac.jp

<sup>§</sup>Division of Natural Resource Economics, Graduate School of Agriculture, Kyoto University, Email: seifukui@kais.kyoto-u.ac.jp