Report on Ph.D. Thesis Defence

Ph.D. Candidate	Chakra Pani Acharya
Main referee	Roberto Leon-Gonzalez
Referees	黒澤　昌子
	大山　達雄
	田中　隆一
	澤田　康幸(東京大学)
Dissertation Title	Migration and Development: Assessing the Impacts of Migration and Remittance on Household welfare in Nepal

Result: Pass (subject to minor changes)

1. Abstract
Presentation and Results:

1.   Mr. Acharya presented an overview of his thesis for about 1 hour.
2.   The presentation was followed by a series of comments and questions by the examiners.
3.   The Examination Committee met immediately after the presentation, chaired by Professor Oyama. After discussion and scoring the Committee decided that both the contents of the thesis and its public defense were satisfactory for conferring the doctoral degree. It was further agreed that some minor changes in the thesis would improve it. It was, therefore decided that
     1.   Revisions recommended by the individual examiners would be made to the dissertation before the final submission.
     2.   Associate Professor Leon would be responsible for scrutinising and approving the revisions.

2. Result /Notes from the Examining meeting / Final Evaluation
Professor Kurosawa commented that

1.   Mr. Acharya's thesis is a very interesting in-depth analysis to disentangle the effect of migration/remittance on current consumption and human capital investment.
2.   Considering the fact that around 50% of the domestic migrants in the urban

area migrate for education purposes, it is better that Mr. Acharya should try to differentiate the migration for investment purpose vs migration for labor supply (to supplement household income). The former in fact might be the result of past migration of some other members of the household. Those households with a member migrating for education purposes may even experience a decline in current consumption. If it is impossible to identify which households have migrants for education purposes, it might make sense to exclude households with migrants receiving zero remittance when running the consumption function if most of the migrants for education purposes send zero remittance (one could probably find this out from the remittance and migration equation analysis).

3. The analysis of remittance and migration equations does not seem to be well utilized or well integrated to the other parts, in particular to the consumption equation. One rationale for running remittance equation is to test the validity of instruments for remittance, so that should be done (for that purpose, Tobit might be better than just running OLS using only non-zero remittance household samples). Also, the remittance and migration equation part should be written in a separate section from the consumption equation section—so that the findings from the remittance and migration equations could be utilized to set-up the consumption equation model (including the rationale for the instruments).

4. With regard to chapter 3: to the extent that investment in education needs a substantial fund, it might make sense to examine the relationship not only between the current remittance and the current investment decision but also between the past or accumulated remittance receipts and the current investment decision. Some households may save the current remittance in order to use the fund to invest in education of their children in some later date. This issue is also relevant in the consumption equation.

Professor Oyama recommended that,

1. More explanation be included in an introductory chapter: background on migration and remittance (international and domestic, social, economic and political aspects) and importance of research topics (such as impacts on poverty, inequality, school choices and education achievement).

2. Estimate jointly equations 2.1 and 2.2 (choice of remittance location and remittance equation).

3. Do not include a motivation in each chapter (motivation for all chapters should be

presented only in introductory chapter). Instead, each chapter should emphasize the importance of the contribution made.

    4. In conclusions and policy implications include a table that summarizes the impacts of migration and remittances on individual, family, society, local, area, country and education. This will help evaluate the impact of policies on remittances and migration.

Professor Sawada commented that,

1. Mr. Acharya's thesis is a well-written dissertation. Particularly, Chapter 2 and 3 have potential for important contribution to the literature. I have the following comments so that the author can polish each chapter into publishable manuscripts.

2. Regarding chapter 2:

    1. Equations (2.1) and (2.2) should be estimated jointly. One tractable way is to employ a two-step method. Let us specify the multinomial logit model as follows:

$, j=0, \cdots, 3.$

  In the second stage of estimating (2.2), we correct the self-selection bias that arises from endogenously determined migration destination. Based on Kurosaki and Khan (2006), the correction term can be calculated using the predicted values estimated in the multinomial logit model as follows:

  Where is the predicted value of household i at time t that choose destination j, and $\phi[\cdot]$ and $\Phi[\cdot]$ are the density and distribution functions for a standard normal variable. Using these correction terms, the second-stage regression is estimated as follows:

Reference

  Kurosaki, T. and Khan, H. (2006) Human capital, productivity, and stratification in rural Pakistan. *Review of Development Economics,* 10(1),pp. 116-134.
b. Need to clarify the difference from Lokshin et al. (2010) RDE paper.
c. The identification strategy of causal impacts seems to be weak. Mr. Acharya needs to explain carefully why the ward-level variables can be effective IVs.
d. While this comment may be beyond the current scope of this paper, the intertemporal dimension can be potentially incorporated. There are three separate issues: poverty dynamics; dynamic migration decisions; and remittance as an insurance device against income risks.

1. Regarding chapter 3:
    1. Table 3.5: The role of credit constraint is not necessarily clear in the empirical analysis. You need to show some evidence that landless/small landholders face binding credit constraints.
    2. Table 3.5: The information constraint story can be strengthened. For example, you can present an alternative hypothesis of intra-household (labor) time allocation. While the intra-household hypothesis implies asymmetry between male and female members, the information constraint hypothesis would be consistent with the symmetric effect. So, you can divide the analysis of Table 3.5 into male and female.
    3. Table 2.8 indicates that OLS
    4. Different supply-side and demand side channels in education decisions should be carefully compared.
    5. The "brain effect," i.e., effect of expected returns to migration on human capital investments, should be noted.
2. Regarding chapter 4:
    1. The estimation bias which generate "bTobit>bOLS" should be explained and interpreted properly.
    2. There is a potential room to write a very good paper on migration if the start of Maoist insurgency in 1996 (and regional variations in intensities) can be used as exogenous variations to account for migration. This is in line with Dean Yang (2008) EJ.

Professor Tanaka commented that,
1. The dissertation is well-written.
2. It is not clear that the results of chapter 3 can be interpreted as 'information constraints'. It is possible that the reason that uneducated mothers behave differently is related to other things different from information. For example, it might be because their reservation wages are different. I would like Mr. Acharya to add some discussion on the possible interpretations of these findings.
3. It would be better to test for the 'independence of irrelevant alternatives' (IIA) assumption in the multinomial Logit analysis of Chapter 2.

Mr Acharya has made the changes recommended by the examination committee members and has given written report of the changes to me. I have gone through the thesis, examining the alterations made and I am now satisfied that he has implemented

the recommendations of the examination committee.

Roberto Leon

Associate Professor of Economics,

Dissertation Chair