Abstract - Are households with returnee migrants more entrepreneurial relative to household with non-migrants? We explore this question using household survey data from 31 districts in Nepal. Overall effect of returnee migrants on household’s business ownership/entrepreneurship depends on result of two opposing forces at work: on one hand returnee migrants can bring savings, experience and skills needed to set up business, however there is loss of social capital (personal networks) when they are out of the country. Estimating this causal effect is challenging because self-selection of household into outward migration at initial stage and into return migration at final stage. We address self-selection of initial outward migration using instrumental variable approach and address the self-selection at return stage by exploiting the circumstances forced return migration to Nepal due to expiration of work permit/work contract and health reasons. We examine the impact of having returnee migrants on household owning business (general) and agri-business (farming and live-stock). Our result shows that having a returnee migrant increases the probability of household owning agribusiness by 0.16. On the other hand, having a returnee migrant on household decreases the probability of owning general businesses by 0.24.

I. INTRODUCTION

The trend international migration of youth especially, to Gulf countries and Malaysia has been increasing in Nepal. This growing trend of out migration has substantial benefit for the households with migrants in form of remittance. As for the share of GDP, remittance receipt was 29% of Nepal's GDP (World Bank, 2016). This makes Nepal third largest recipient of remittance income as a share of GDP in the world. This trend of migration has benefit in terms of remittance but also has cost in terms of “brain drain”1 and labor. The focus of this paper is to explore another aspect of migration in Nepal, where 'brain drain' might be temporary but in the long term can contribute to economic development through returnee migrants. Returnee migrants can bring experience from high wage country, accumulated savings and new ideas along with potential of self-employment and for entrepreneurship in the origin country. Generally, the study that looks at migration and entrepreneurship explore the relationship in following ways: Are immigrants more entrepreneurial than natives? Are remittances likely to fund entrepreneurship in home countries? And Are return migrants more entrepreneurial than non-migrants? Naudet et al (2017) review the literature based on above mentioned questions. The focus of this paper is on the third question. In our study business ownership and or self-employment is proxy for entrepreneurship. Entrepreneurship is measured/estimated based on a response to question: whether household owns a business or not.

The strand of literature that looks at whether remittance is likely to fund entrepreneurship in home countries is based on New Economics of Labor Migration (NELM) where migration is household decision to deal with risks and market imperfections. If lack of liquidity and poor marketing condition is obstruction to establishing business, migration of family members and their remittance can be a way to overcoming such constraints (Lucas and Stark 1985). Woodruff and Zenteno (2004) studying 6000 micro enterprises in Mexico emphasizes the importance of remittance from USA, for micro-development in urban areas. Giuliano and Ruiz-Arranz (2009) find that in countries with under developed financial system remittances are used to overcome credit and liquidity constraints and are invested into small business development and contribution of remittance is stronger when development of financial sector is lower. Yang2 (2008) finds that a positive shock in destination country leads to increased level of investment and entrepreneurship in the origin households in Philippines. Similarly Vaaler (2011) also finds evidence that remittance support venture capital fund and firm start-up in home countries. Stable source of remittance can also help household's creditworthiness of household and helps them get small business loans (Ratha 2007). Vasco (2013) and Ameudo- Dorantes and Pozo (2006) do not find evidence of remittance having impact on likelihood of owning a business in rural Ecuador and Dominican Republic respectively.

1 "brain drain", the idea proposed by Gruber and Scott (1966) which refers to loss of human capital and potential productive activities in the country.

2 Yang (2008) explores exogenous variation in Filipino migrant income caused by the 1997 Asian financial crisis to find a positive impact of migrant income on investment in entrepreneurial activities in home countries.
Another strand of literature examines whether return migrants are more likely than non-migrants to be entrepreneurs (set up business) or engage in self-employment activities. Dustmann¹ and Kirchkamp (2002) show that more than half of the migrants are economically active after return and most of them choose entrepreneurial activity. Gebert and Nordman (2011) find that almost 30% of sample of returnees to Algeria, Tunisia and Morocco are engaged in self-employment and entrepreneurship. Arif et. al (1997) looks at factors affecting occupational composition of Pakistani workers upon their return from Middle East and study finds that 44% of returnee changed their pre-migration occupation upon return from employment in production and service sector to small business-related employment. The study also finds that occupational change is strongly related to duration of stay in the Middle East, age upon return and level of educational attainment. Piracha and Veden² (2010) also find strong evidence that return migrants are more likely to be self-employed in business relative to non-migrants in Albania. More recently Kilic et. al (2012) also finds that returnees in Albania are more likely than non-migrants or stayers to become entrepreneurs. McCormick and Whaba (2004) studying the entrepreneurial activity of returnee migrants in Egypt finds that proceedings from return migration promote investments in small household enterprises and with large share of it in urban areas. Recently Whaba and Zenou³ (2012) find that Egyptian returnees have higher likelihood of setting up entrepreneurial activity. Murillo castano (1988) studying Columbian return migrants from Venezuela used their savings to establish business or self-employment activities one their basic needs had been satisfied. Illahi (1999) also studying return migrants in Pakistan finds that upon return migrants with high savings choose self-employment while other choose wage employment. Mensard⁴ (2004) studying entrepreneurial activities started by Tunisian return migrants finds that the activities are financed through overseas savings. Marchetta (2012) finds that entrepreneurs' migration experience significantly improves the chance of survival of their entrepreneurial activities after return in Egypt after controlling for non-random selection into return migration. In case of rural to urban migration China Demurger and Xu (2011) find that return migrants are more likely than non-migrants to start up enterprise and likelihood is enhanced by savings accumulated and experience. Giulietti et. al (2013) also finds that return migrants are more likely than non-migrants to engage in self-employment in China. The channel through which returnee migrants can be more entrepreneurial relative to the non-migrants is they can acquire new productive skills, human capital and entrepreneurial ideas while at foreign land and also, they can have access to financial resources as a result of higher earnings and savings from foreign employment (Marchetta 2012). Hamdouch and Wahba (2015) study the determinants of entrepreneurial activity of return migrants in Morocco finds overseas migration experience plays significant role and upon return almost a third invest in productive projects. However there is down side to it which can affect entrepreneurial activity in a negative way is through the channel of loss of social capital (personal networks) during their absence from home country. Thus over-all impact of return migration on entrepreneurial activity is result of these two opposing forces. How-ever to the extent credit constraint and lack of skills and experience are constraint to business ownership and social capital (network) is not as crucial it is likely that return migrants are more likely to star up business than non-migrants (Whaba and Zenou 2012). The studies/literatures that have investigated impact of remittance and migration in Nepal has looked into issues like: impact of remittance and migration on household expenditures (Thapa and Acharya 2017) labor supply (Lokshin and Glinskaya 2009), on agricultural yield (Tuladhar et. al 2014), overall macroeconomic effect (Sapkota, 2013) and impact on educational outcomes and child labor (Karki Nepal 2016; Bansak et. al (2015)). To the best of our knowledge there have not been any studies that have looked into impact of returnee migrants⁵ in likelihood of household owning business relative to household without migrants. This niche is our contribution in context of Nepal. In addition, our approach of the study closely follows study by Batista et. al (2017) which studies if returnee migrants are more entrepreneurial relative to satyrs in Morocco accounting for double unobservable migrant self-selection both at initial outward migration and at the final inward return migration. This is another contribution of our study which takes of self-selection into migration at both stages instead of naïve OLS estimate. We take care of double self-selection in  

³Returnee migrants are defined as migrants who have worked abroad in the previous 10 years for at least three months and have returned to Nepal to live permanently

¹They develop a model where migrants decide simultaneously the optimal migration duration and their activities after return.
²They differentiate between two types of self-employers: individuals working as own account workers and owner of enterprise with paid employees.
³The study also finds that experience and duration abroad matter to starting up business and loss of social capital due to being out of country does not outweigh the benefits of experience and finance in starting up a firm.
⁴Mesnard (2004) models migration as a way to overcome credit constraints in the presence of capital market failures

Survey in Nepal
following ways: we account for initial self-selection into migration using instrumental variable that proxies for migration network (our instrument is number of work permit issued in district two years prior to the survey) and later self-selection into return migration by restriction of sample that were forced to return because of expiration of visa/work permit and health reasons. Controlling for household characteristics and instrumental variable approach we find negative effect of having returnee migrant on household setting up a general business. Having a returnee migrant decreases household’s likelihood of owning general business by .24. However, for agribusiness we do find positive effect of having returnee migrant in the household relative to household without non-migrant. Having a returnee migrant in household increases probability of owning agribusiness by .16. Migration and Return Migration in Context of Nepal Much of the history of labor migration for foreign employment from Nepal is characterized by the outflow of labor to India up to the mid-1980s. During 1990’s restoration of democracy and liberalization of economy in Nepal created different migratory patterns beyond India. Liberalization of economy led to ease of labor mobility. In addition, increased demand for labor in the Middle East played role in increased migration of Nepalese labors beyond India.

The Government’s first effort at regulating foreign employment was issued in 1985 in the form of the Foreign Employment Act. The Act was a response to the growing demand of labor in the global market and encouraged people to migrate to selected countries. The law was amended three times and governed all activities of foreign employment until it was repealed to give way to a new Act in 2007. The 2007 Foreign Employment Act was legislated after the Comprehensive Peace Agreement between the insurgents and the Government in 2006. The Act was designed to address the new issues brought by the rapid growth in labor migration for foreign employment. The Act contains several provisions that respond to the changing dynamics of foreign labor migration patterns and differs from the 1985 legislation in one fundamental way: the original law and its subsequent amendments aimed at regulating the foreign labor market and preventing an outflow of higher-skilled individuals whereas the 2007 law sought to make the process of migration safe and facilitate the process of Nepalese seeking foreign employment. The enactment of the 2007 Foreign Employment Act led to the establishment of Department of Foreign Employment (DoFE). The Department’s objectives revolve around promoting safe and dignified foreign employment, including regulating to operations of the recruiting agencies and other business offering related services to ensure they conduct fair and decent practices. Notifications of jobs that are available in foreign countries, typically coured through the recruiting agencies, are provided to the Department, which reviews the terms and conditions of a contract to affirm it is within the law and gives an “approval notice” for that job listing. Once a migrant is recruited for a particular job and has signed the contract, the handling agency registers the migrant with the Department through the application for the labor permit to travel abroad. At that point, the recruiting agency provides the Department with the “appointment letter” from the employer in the destination country, again specifying the terms and conditions of the job they are now contracted to perform. The labor permit issued by the government is a sticker that is placed in the worker’s passport. Individuals can also apply for labor permit without going through recruiting agency. The earliest record of labor permits issued by the Government shows that 3,565 Nepali labors left for foreign employment in 1993/94, primarily to Bahrain, Kuwait, Oman, Qatar, Saudi Arabia and the United Arab Emirates (UAE) (MoLE 2014). Nepali labor migrants have obtained permits to work in as many as 142 countries over the past seven fiscal years (2008/09–2014/15). Malaysia and the GCC countries have been the most attractive destinations, receiving 85 per cent of all labor migrants in the past seven fiscal years. Of the total 2,723,587 labor permits issued over that period, 33.3 per cent were for employment in Malaysia, followed by Qatar (19 per cent), Saudi Arabia (18.9 per cent) (MoLE 2014). To break down the number of work permit issued yearly, highest number of labor permits issued is 519,638 in year 2013/14 and in year 2016/17, 382,871 work permits were issued by Department of Foreign Employment (MoLE 2017).

The duration of stay of Nepalese migrants with work permit is dictated by the duration of contract of employment from destination countries. For gulf countries the duration of contract is for two years and for Malaysia the duration of work contract is three years. After expiration of visa/employment contract workers must return to Nepal and again go through process of obtaining employment contract and work permit if they wish to migrate to other countries.

The Department of Foreign Employment also keeps record of re-entry permission of workers that left country with work permit. Statistics from DoFE shows that, in 2011 around 146,140 workers returned to Nepal.

8 All Nepalese workers working abroad does need to get work permit/approval from Government of Nepal except for India. In our sample all returnee migrants are from countries that requires work permit.

9 Fiscal year in Nepal starts from August and ends in July

Are Households with Returnee Migrants More Likely to be Entrepreneurial than Households with non-Migrants? A Study from Household Survey in Nepal
II. DATA AND DESCRIPTIVE STATISTICS

This study is based on primary data collected from nationally representative household survey in Nepal. The survey was conducted over period of eight months in 2015/2016. The survey was conducted by KOICA (Korea International Cooperation Agency), IOM (International Organization for Migration), EwhaWomans University (EWU) and IIDS (Institute for Integrated Development Studies). The survey used multi stage stratified cluster based sampling methods. First 31 districts out of 75 districts were randomly chosen. These districts represent 10 districts from each ecological zone (mountain, hill and terai) in Nepal. Then 460 ward were selected from 31 districts using probability proportional to sample size. Wards were the cluster for the survey. From each cluster 50 households were chosen using systematic random sampling. A total of 23,000 household were screened to identify non-migrant, migrant, returnee migrant and potential migrant household for detailed survey. This study uses sub-sample of households with returnee migrants and non-migrants. The dataset has 877 household with returnee migrants (approximately two per cluster) and 911 non-migrant households (approximately two per cluster), making 1788 total study sample of this study. The data set contains information on demographic profile (age, sex, education, marital status etc) of respondent, income, saving, investment behaviors, whether household owns business or not and assets of household.

Table 1 presents the summary of country visited by the migrants in our sample and reasons for returning to Nepal. Most frequently visited countries are: Malaysia, Qatar, Saudi Arabia and UAE. End of contract period and health and family issues are the reasons for migrants returning to Nepal.

Table 2 presents summary of key variables. 68.17 % of non-migrant household own business whereas only 31.36% of household with returnee migrant own business. Hill Brahmin and hill chhetri and hill/mountain janajati are ethnicity with higher frequency in our sample. In our dataset 43% of non-migrant household has bank account compared to 28% of household with returnee migrant. The data set has information on age, gender and education of respondent but not of the household head, these summary is not presented in the table. Top two category of occupation of household head is construction and agriculture. For household without migrant the top occupation of household head is in construction sector and for household with returnee migrant the top occupation of household head is in agriculture sector. Table 3 presents summary of t-test of key variables. The variables are statistically different between household without migrant and household with returnee migrants.

III. METHODOLOGY

To estimate the effect of returnee migrant on household’s likelihood of owning a business, we specify following econometric model:

\[
Y = \beta_0 + \beta_1 R + \beta_2 X + \epsilon
\]

Where \( Y \) is our dependent variable that takes on value of 1 if household owns a business and zero otherwise. \( R \) is our interest variable which takes value of 1 if household has a returnee migrant and zero otherwise. \( X \) denotes set of household and individual control variables like occupation of household head, ethnicity of household head, household assets and whether household has a bank account. The estimate of \( \beta_1 \) can give us the causal effect of interest only if the selection bias (or non-random selection into migration and return migration) disappears conditioning on observable characteristics. However this is unlikely as the return migration is

---

10 Total household surveyed for this project is 5837 households: 3271 migrant household, 877 returnee migrant, 911 non-migrant and 708 potential migrant. Each type of households had slightly different questionnaire tailored specifically for types of household.
most often correlated with the error term which may include unobservable characteristics like motivation, ambition etc. These characteristics can affect the entrepreneurial outcome of non-migrant and counterfactual outcome of return migrants had they decided not to migrate and return. In absence of proper identification strategy OLS result only can give an association, not an causal effect.

IV. IDENTIFICATION STRATEGY

Central problem of identification to estimate the causal effect of returnee migrant in business ownership by household, is non-random selection of household into migration at initial stage and into return migration at final stage. In an ideal condition the parameter of interest could give us causal impact of return migration on entrepreneurial activity if we had information on randomly selected individuals who migrated and then returned to home country. In absence of such ideal condition, one of the approach to tackle the selection issue at both initial migration stage and at return stage is combination of sample restriction and use of instrumental variable. Such approach is used by Batista et. al (2017). The paper uses combination of incidences of agricultural plagues in Mozambique (home country) and social unrest in destination country to account for double unobservable self-selection at initial outward migration and final inward return migration. We use instrumental variable to account for self-selection at initial migration stage and event of forced return migration (expiration of work permit and health reasons) to account for self-selection at return migration stage. This strategy exploits the special case of forced return migration to Nepal. All migrants are required to return to Nepal after expiration of their work permit/work contract. Some returnee also have returned due to health reasons. The instrument to be effective must be related to the outward migration decision but not to the outcome variable. Proxies for migration network is generally used as instrument to account for self-selection into out-ward migration decision (for example: cite some studies). One of the popular instrument to account for self-selection in to initial migration decision is a proxy for migration network in the area (PSU, Village, District etc). Such migration network proxy variables can be proportion of migrants in the area, distance between area and destination countries etc. Such instruments are used by the study like: Batista et. al (2017). We use total number of work-permits issued in the district two years prior to the survey as instrument. We obtained the number of work permit issued by district from status report issued by Ministry of Labour and Migration in 2013. Residence from districts with higher number of work permits issued by DoFe are likely to migrate more than residence from district that does not have higher number of work permit issued (similar to the effect of historical proportion of

migrants in village or district) however this has no effect on entrepreneurial activities.

V. RESULT AND DISCUSSION

The entrepreneurial outcome we measure is general ownership and agribusiness ownership at the household level. First model we estimate in this study is simple OLS model (column 1). Since OLS measure only associations and not causal relationship in absence of proper identification strategy, we further estimate the regression with IV (column 2). To account for heterogeneous effect of having returnee migrants on type of business ownership, we further estimate the regression on agribusiness (combination of farm business and/or livestock business). T-stat and F-stat from first stage regression of IV model suggests that instrument we are using does not suffer from weak instrument problem. We control for district level fixed effect for LPM but we do not use district level fixed effect for IV as our instrument number of work permit issued two years prior to the survey is at district level.

Returnee migrant and overall business ownership

The entrepreneurial outcome we examine is business ownership at household level. Table 4 presents the result of LPM (column 1) and result of IV (column 2). The coefficient is negative and significant (at 1% significance level) for both LPM and IV. Focusing on result of IV, the causal effect of having returnee migrant on household is negative suggesting it decreases the probability of owning the general business. Having returnee migrant decreases probability of owning business by .24.

Returnee migrant and agri-business

The entrepreneurial outcome we examine is agri-business ownership at household level. Table 5 presents the result of LPM (column 1) and result of IV (column 2). The coefficient is positive and significant (at 1% significance level) for both LPM and IV. Focusing on result of IV, the causal effect of having returnee migrant on household is positive suggesting it increases the probability of owning the business. Having returnee migrant increases probability of owning business by .16. Our result is fairly similar to results from studies like: Batista et. al (2017), Kilic et. al (2015) that these studies find positive impact (increased probability) of having returnee migrant on household owning business. In our study the positive effect is for household owning agri-business.

Table 4. Impact of returnee migrant on probability of owning business

<table>
<thead>
<tr>
<th>VARIABLES</th>
<th>LPM</th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household with returnee</td>
<td>-0.263***</td>
<td>-0.240***</td>
</tr>
</tbody>
</table>

Are Households with Returnee Migrants More Likely to be Entrepreneurial than Households with non-Migrants? A Study from Household Survey in Nepal
Are Households with Returnee Migrants More Likely to be Entrepreneurial than Households with non-Migrants? A Study from Household Survey in Nepal

of having returnee migrant in the household relative to household that do not have migrant in Nepal. Migration is one of the important aspect of Nepali economy. There is an argument of brain drain that comes with migration. However there is one positive aspect that can counter the brain drain. The way it can counter is when returnee migrants bring their experience, savings and ideas along with potential for entrepreneurship when they return to Nepal. This gain in terms of experience and spirit of entrepreneurship from return migration adds to the benefit of remittance and its productive uses that comes with migration in Nepal. Measuring the causal effect of return migration on entrepreneurship (or owning a business) is difficult because of self-selection into migration and return migration. We address these self-selection issues with combination of restricted sample and use of instrumental variables. We use IV to accounts for self-selection at initial migration stage. And we exploit the case of forced return migration (due to expiration of work permit/work contract) to account for self-selection at return stage. This methodological approach highlights the importance of going beyond the simple naïve comparison of entrepreneurial outcomes between household with returnee migrant and household without migrant. Using nationally representative sample from 31 districts in Nepal and controlling for household characteristics there is no strong evidence of effect of returnee migrants on probability of household owning a business. Having returnee migrants decreases the probability of household owning general business by .24. However, there is strong evidence of positive causal effect of returnee migrant on owning agri-business. Having a returnee migrant increases the probability of owning agri-business by .16. One of the possibility of positive impact of having returnee migrant on agribusiness could be that most returnee household might have been involved in agriculture before they migrated, and they picked up the agriculture business after returning. For the negative impact of returnee migrants on probability of household owning general business needs more exploration. Current result suggests that return migrants household could be less equipped in entrepreneurial capabilities relative to non-migrant household. Nepal needs to capitalize the savings, skills and knowledge that returnee brings to Nepal when they return. In light of the result there is needs of policy intervention both for safer migration to destination countries that can increase entrepreneurial skills of Nepali migrants and also support the returnee migrant to start their business.

**REFERENCE**


Are Households with Returnee Migrants More Likely to be Entrepreneurial than Households with non-Migrants? A Study from Household Survey in Nepal

from the Middle East. The Pakistan development review, 1-37.


