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Home Sweet Home: Embracing the Return to Returnees’ Migration

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Abstract

The literature on return migration emphasizes its development contribution through the money (savings) brought home by returnees as well as the knowledge and experience gained by studying or working abroad. A significant body of this scholarship focuses on the entrepreneurial activities of returnees due to its supposed spill over effects in reducing unemployment and poverty. However, it is essential to examine other outcomes that returnees have achieved for themselves and their family to completely comprehend the consequences of return migration. Exploiting the result of in-depth interviews in the Ecuadorian Austro, returnees reveal that building a house is one of their ardent aspirations for migration. We use this evidence to assess the consequences of migration by looking at household wellbeing through house ownership. Our results reveal that households that ever had a return migrant have higher probability of house ownership. Moreover, complementing migration-specific census data with in-depth interviews, we also get encouraging results as shown by the money brought home when they return, the setting-up of business by a few, and the gains in human capital demonstrated through kitchen-related training, knowledge of the English language, and acquired efficient work-culture.

Keywords: return migration, development, wellbeing, Ecuador
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1. Introduction

Numerous studies have elaborated the return to migration by examining its interconnection with development. Sutherland (2013) underscored the importance of migration post 2015 development agenda by elaborating ways in which migrants and governments may harness the highest benefit of migration. In view of the vast literature on migration-development nexus, Chappell & Sriskandarajah (2007) developed a framework that allows researchers and practitioners to trace and understand the different aspects by which migration may affect development. Their ‘tool’ is a result of the mapping of the different development outcomes following the theoretical underpinnings of capability approach and sustainable livelihoods approach. Based on their study, there are eight areas by which migration may impact development: ‘economic, education health, gender, wider social (other than education), governance, environmental sustainability, and disaster relief’ (Chappell & Sriskandarajah, 2007, p. 7).

In contrast to the wide-ranging migration-development impacts, return migration is said to affect development of the home country through investment and entrepreneurship, human capital gains, and transfer of norms and ideas from abroad (Wahba, 2014). Specifically, considerable attention is given to the entrepreneurial activities of returnees¹ due to its spillover effects in

¹ The terminologies ‘return migrants’ and ‘returnees’ will be used interchangeably in this paper to refer to the individuals who are citizens of one country but have been to another country for at least six consecutive months and who have returned to their home country with the intention to live there for at least six consecutive months.
Reducing unemployment and poverty (Wahba, 2014; Black & Castaldo, 2009; Jones, 2011; Marcu, 2013). However, beyond the entrepreneurial activities undertaken by return migrants, it is essential to examine several outcomes that returnees have achieved for themselves and their family as a result of migration. A pragmatic approach of doing this is to uncover circumstances before migration and after returning to their homeland by using in-depth interviews with return migrants and complementing it with a systematic analysis using survey or census data.

Our case study of return migrants in the Ecuadorian Austro show encouraging results as demonstrated by their gains in human capital through kitchen-related trainings, knowledge of the English language, and acquired efficient work-culture. In addition, the financial gains from migration can be observed through the money brought home when they return, the setting-up of business by a few, and the building of houses by most return migrants. It was evident that aside from acquiring a job and earning more income as reasons for migration, in-depth interviews with returnees reveal that establishing a house is one of their ardent aspirations.

De Haas (2005) noted that a migrant’s housing expenditure was once considered “unproductive and non-developmental” (p. 1274) as it channels remittances away from productive investments such as private enterprise. He argued however that this thinking is erroneous since housing-related expenditure improves the wellbeing of migrant households. Thus, it is considered developmental following the capability approach philosophy where individuals choose the outcome they have reason to value (De Haas, 2005; Sen, 1999). Indeed, return migrants in the Ecuadorian Austro have conscientiously expressed satisfaction with their migration despite some unpleasant experience because they were able to earn more money and build their house (Jokisch, 2002). As such, it is appealing to examine the consequences of
migration by looking at the returnees’ narratives of their migration and return experiences and consequently establish a link on its effect on their family’s wellbeing. Lapshyna & Düvell (2015) explored the nexus between life dissatisfaction, migration, and return and development in Ukraine but in the context of Andean Ecuador, given the importance of house ownership in the narratives of returnees, this paper specifically investigates the effect of return migration on the wellbeing of households using house ownership as an indicator of wellbeing.

This paper is organized as follows: the next part presents the theory on housing investment, the empirical evidence detailing its meaning for international migrants, the linkages between housing investment and household wellbeing, and the conceptual framework. Section 3 elaborates the overview of return migration in the case study area while Section 4 presents the methodology. Section 5 discusses the econometric results as well as the descriptive statistics that is corroborated by narratives from in-depth interviews. We provide conclusion and policy implications in the last section.

2. Housing investment: literature review and conceptual framework

2.1. Theoretical and practical insights

2.1.1. The housing investment theory

The literature on housing investment traces its roots in neoclassical economic theory on investment that was first elucidated by Irving Fisher. The model was framed using the firm as the unit of analysis where the optimal investment decision depends on considerations of the costs and benefits of capital. Jorgenson (1963) formally presented a theory of investment behaviour based
on optimal accumulation of capital where a firm decides to invest as long as the marginal product of capital exceeds its user cost, the latter being contingent on ‘purchase price, the opportunity cost of funds, as well as depreciation and taxes’ (Jud & Winkler, 2003, p. 380). An extension of this model is the so-called $Q$ theory, founded on Tobin’s $Q$, where an asset investment is hypothesized to be a function of the $Q$: the ratio of the market value of an asset over the replacement cost. Thus, it makes sense to invest if $Q>1$; to stop investing if $Q=1$; and not to invest if $Q<1$.

The limitation of the above model in the current analysis is its emphasis on the firm’s optimal investment decision instead of an individual consumer or household. Henderson & Ioannides’ (1983) theoretical work paved the way for a clear-cut conception of housing market behaviour and tenure decision of homeowners that rests on its dual nature of investment and consumption. Their model explains that individuals decide to purchase a house for occupation or rent as long as there is a difference between housing investment and consumption demand (Arrondel & Lefebvre, 2001). Ioannides & Rosenthal (1994) refined this model by linking housing investment demand, housing consumption demand, and tenure status through ‘subtenure’ housing categories that reflect preferences for housing services. These categories include (i) renting without owning a property, (ii) renting while owning a property, (iii) owning home without owning other property, and (iv) owning home and other properties.

Moreover, Struyk & Lynn (1983) provided a basis in understanding housing upgrading process using data of poor households in the urban shantytowns of Metro Manila. Their result corroborates with the study of Ioannides & Rosenthal (1994) where housing investment is affected by wealth and income. Specifically, poor households invest or upgrade their house if
they experience windfall income from a gainful earning year or have received gifts from relatives. They are also predisposed to upgrade their house if they have secured tenure of the land.

The elements elaborated above was also uncovered in an earlier work of Carliner (1974) where he identified four factors that affect household’s decision to own a house. These include ‘household’s income, the relative price of rental and owner-occupied housing, the stability of the household’s demand for housing, and the type of housing desired’ (p. 109).

2.1.2. The meaning of house investment for international migrants

While housing investment theory enlightens us of its dual nature of investment and consumption and that income affects investment decisions, it is vital to examine the meaning behind housing investments of international migrants to give light to what is otherwise considered as unproductive investment. Adams’ (1991) influential paper on the uses of international remittances cleared up the erroneous belief that it is mainly used for personal consumption. Using household data from rural Egypt, he conveyed significant lessons from his empirical results as follows: (i) rural households recipients consider remittances as temporary income and as such, they prefer to invest it in durable goods (housing); (ii) migrant households have higher propensity to spend in building or repairing houses compared to non-migrant households; and (iii) migrant households have higher propensity to invest than non-migrant households, a lion share of which is spent on the acquisition of land for agriculture or housing (Adams, 1991).

Several ethnographic country studies revealed that a house investment has both intrinsic and extrinsic meanings for migrants. For them, investing their hard-earned money either in
building or upgrading an existing structure is a practical and rational behaviour given personal considerations - which in most cases interact with economic, cultural, and social dimensions. For instance, in a multi-sited study of Ghanaian migrants in Amsterdam and their relatives in Accra, Smith & Mazzucato (2009) found that setting-up a house is an aspiration that is only possible through migration. A similar aspiration is displayed in the case of Ecuadorian migrants from the Austro who went to the United States to be able to purchase land and build a house (Jokisch, 2002; Mata-Codesal, 2011).

Furthermore, house investment is also linked to return plan. For Ghanaian migrants, an investment in the city of Accra allows them to set-up a business in preparation for their future return, sometimes even putting it for rent in the real estate market (Smith & Mazzucato, 2009). Similarly, Ecuadorian migrants from the Austro purchase land to be able to build a house that would serve as ‘possible retirement home’ (Jokisch, 2002, p. 543). In the Philippines, Aguilar (2009) explains house investment that may involve construction of a migrant’s house and renovation of the parent’s house. The migrant’s house serves as the base when the migrant returns, while the parent’s house symbolizes a migrant’s commitment to the family (Aguilar, 2009). Osili (2004) considers the latter as the family investment model. These accounts hardly indicate the house as an investment, particularly since some of them are built in rural areas with low prospects for resale. However, migrants consider them as an investment because unlike other durables, a land and house keeps up with inflation, a ‘safe and secure piggybank’ (Aguilar, 2009: 105) and a “life security” (Smith & Mazzucato, 2009, p. 665).

Moreover, house investment goes beyond the personal realms of the migrant as it represents certain meanings to the wider home community of the migrant. For instance, constructing a house in a migrant’s hometown serves as cultural security and prestige for
Ghanaians (Smith & Mazzucato, 2009). It shows that the migrant still belongs to the community and guarantees access for their planned return. The migrant’s house also serves as the centre of migrant’s life events where culmination ceremonies are usually held (Smith & Mazzucato, 2009). In the Philippines, a house represents ‘an embodiment of the migrant worker’s hard work […] a trophy of some sorts that the migrant earns by persevering’ (Aguilar, 2009, p. 105). A similar account can be observed for migrants in the Ecuadorian Austro where a house embodies a migrant’s success for overcoming the challenges encountered in crossing Central America and in entering, settling, and working in the US as an undocumented migrant (Jokisch, 2002). Mata-Codesal (2011) also observed the importance of using remittances for house construction in the migrant’s hometown because it not only symbolizes immobility of their rather mobile nature as migrants, but it also signifies allocation of resources in a place with strong familial foundation.

2.1.3. Linking home ownership and wellbeing

The literature on housing studies provides clarity on the ways in which home ownership affects wellbeing, particularly of the family or household that occupies it. Drawing from studies of different disciplines (i.e. economics, planning, social welfare, public health, medicine, sociology, public policy, housing policy, child development and psychology), Bratt (2002) identified three ways in which home ownership affects family wellbeing. First, owning a house with good quality materials have shown to improve physical health of the occupants. Second, home ownership may have diverse effects on the psychological wellbeing of household members depending on its size, cost, the feelings it generates for each family member, and the sense of security it provides. Third, home ownership may positively or negatively affect a family’s wellbeing depending on neighbourhood conditions.
The different aspects of home ownership that ultimately affect family wellbeing suggest either favourable or unfavourable outcomes contingent on the different conditions (Bratt, 2002). The extent at which home ownership results to certain outcomes require systematic analysis that examines housing behaviour. Dietz & Haurin (2003) provide a thorough review of housing behaviour and the economic and social consequences of home ownership using a broad collection of literature from different disciplines. They underscored some econometric shortcomings of studies before 1990s but observed a number of home ownership impacts based on recent studies using reliable data and improved econometric techniques. These include impacts on portfolio choice and wealth, household mobility, labour force behaviour, housing maintenance and property improvements, environment, society (i.e. local political, social activity, and crime), and child and teenage outcomes (Dietz & Haurin, 2003). Some results are mixed but the impact on child and teenage outcomes showed strong direct and indirect effects.

The numerous studies reviewed by Dietz & Haurin (2003) and Bratt (2002) show interconnectedness of home ownership impacts at the individual and society levels. Rohe, Van Zhandt, & McCarthy (2002) also echoed this in their study on the potential opportunities arising from home ownership. At the individual level, home ownership may affect a person’s opportunity set financially, physically and psychologically, and behaviourally. According to Rohe et al. (2002), home ownership may expand financial opportunities because home equity allows owners to acquire other loans. Second, home ownership is linked to improved physical and psychological health that allows a person to access better opportunities compared to the unhealthy ones. Third, having a house inculcates positive behaviours among youth members of the household, which translate to positive school performance or lower chances of teenage pregnancies. Overall, the
housing literature shows mixed results partly due to unavailable data but most of them lean towards favourable wellbeing impact depending on mediating factors.

Moreover, the migration-development literature on house investment and ownership has long been linked to changes in material wellbeing. The earlier appreciation of these housing related expenditures was unfavourable because it siphons funds away from otherwise productive investments such as setting-up a business. However, De Haas (2005) refutes this flawed thinking by asserting that there are evidences in Asia, Latin America, and Africa showing migrant household investments in agriculture and private businesses. He also maintains that migrant house expenditure, among others, is not necessarily non-developmental since ‘such improvements in well-being and human capital also have the tendency to increase their productivity, freedom of choice, and the capacity to participate in public debate’ (p.1274). This line of reasoning is possible if development experts adhere to the broader concept of development framed by Amartya Sen, which puts greater emphasis on individual agency to lead the life he values, thus implying individual freedom to choose the outcomes (e.g. building a house) that are important for him. Indeed, studies disentangling the meaning of house investment among international migrants suggest individual freedom to pursue such goal considering that it is one of their migration aspirations. The resulting feeling of achieving one of their migration goals has

2 Preibisch, Dodd, & Su (2016) argue that while the capabilities approach is widely adopted in migration-developed nexus, most of the applications seem to overlook its core concept of freedom considering some violations of international migrants’ rights. They stress the need to be cautious in applying capabilities approach such that its ideological foundations are intact without neglecting the intrinsic human rights of migrants.
positive implications for their psychological health, which would ultimately accord them the freedom to pursue other beings and doings (i.e. functionings) they value.

Altogether, the literature on housing studies and migration-development nexus provide us with a simple framework to understand the link between house investment, migrant home ownership, and wellbeing (Figure 1). We will use this framework as a guide in framing our empirical strategy and drawing conclusions about the interconnectedness of these factors.

Figure 1 House Investment, Migrant Home Ownership and Wellbeing

Source: Authors’ compilation based housing and migration-development literature.
2.2 Conceptual framework

2.2.1. A general approach to understand house investment of international migrants

The technicalities laid-out by neoclassical economics on house investment evidently corroborates with the ethnographic accounts exposing the meaning of house investment for international migrants. Firstly, house investment responds to changes in wealth or income. As migrants leave to earn more, part of their remittances is allocated for the purchase of land and house construction because such investment allows them to hedge against inflation. Second, when migrant thinks of a house investment, it is partly influenced by their plans to return, commitment to their family, and linked with community membership rights (Osili, 2004). This strategy is in line with what Henderson & Ioannides (1983) consider as the housing’s dual role of consumption and investment. Lastly, there seems to be an irony for uninhabited migrant houses—in the case of the Philippines (Aguilar, 2009) and Ecuador—as it indicates inefficient investment. However, it is hardly inefficient when viewed from a portfolio theory perspective where owners balance consumption benefits with portfolio distortion (Brueckner, 1997). Altogether, these points can be summarized in Figure 2 using a life cycle approach.

Figure 2 Life Cycle Approach to House Investment of Migrants

Source: Authors’ compilation based on the theories and meanings of housing investment for international migrants.
Figure 2 shows that a migrant leaves his home country at time $t=1$ with an aspiration to earn more and eventually build his own house.\(^3\) While abroad ($t=2$), the migrant sends remittances to cover personal expenditure of the family in his home country. Considering that remittance is a temporary income, the migrant contemplates on investing part of the income. Buying a land, building a new house, or renovating an existing house become viable options since real estate investment keeps up with inflation, serves as life security, and ensures community membership right for future plan to return. Having been convinced with the viability of the investment, the migrant decides to invest in real estate at $t=3$. During this time, the migrant engages in transnational transactions to successfully build the house (Smith & Mazzucato, 2009). Once the house construction is completed ($t=4$), the migrant decides whether to consume the available housing investment stock or put it in the market for rent, given personal and economic circumstances (i.e. the dual role of housing investment). In most cases, the migrant decides to consume the housing investment stock by having it occupied by his immediate family (i.e. the family housing investment model). The migrant occupies the house when he returns at $t=5$. The migrant experience a sense of fulfilment and success for being able to put-up his own house through hard work and perseverance while abroad. Finally, the migrant occupies the house until he reached the end of time at $t=T$ (or his death).\(^4\)

One limitation of this general life cycle approach to house investment of international

\(^3\) Despite the figure’s reference to a ‘migrant’, it does not necessarily claim that migration-related decisions are made by the migrant alone but in fact are influenced by household decisions.

\(^4\) This simplified linear life cycle approach can also be applied in cases of temporary return migration. In this case, the migrant swings back to $t=1$ in this chronology of events, which implies that a migrant may once again contemplate to engage in housing investment in the second migration episode.
migrants pertains to the simultaneity of various household decisions. For instance, a migrant household may first decide to buy a piece of land for the construction of their house before they eventually decide to send a member abroad. Parrado (2004) addresses this challenge by incorporating life-course events - i.e. marring, migrating, starting a family, and buying a house - in his analysis of house investment and migration among Mexicans.

2.2.2. Tracing the impact of return migration on household wellbeing

This paper aims to contribute to the growing literature of return migration-development nexus by assessing the impact of return migration on the wellbeing of households. To the best of our knowledge, most return migration impact studies focus on human and financial capital changes such as employment opportunities (Mesnard, 2004), entrepreneurial activities (Black and Castaldo, 2009; Kilic, Carletto, Davis, & Zezza, 2007; McCormick & Wahba, 2012; Wahba, 2015; Wahba & Zenou, 2012), and local development (Jones, 2011). The novelty of our paper rests on its emphasis on an outcome (i.e. house ownership) that is greatly valued by returnees themselves.

The connection between home ownership and wellbeing identified in the housing studies literature typically use home ownership and its equivalent as control variable to assess its impact on various indicators of wellbeing such as financial, physical, and psychological aspects. Our study takes on a different approach since we want to investigate the impact of return migration on household wellbeing. Thus, return migration will be considered as the treatment variable and house ownership as the dependent variable. The reasons for using home ownership as an indicator of wellbeing are as follows: first, housing studies suggest that home ownership is linked to financial, physical, and psychological wellbeing. While this relationship is yet to be tested like
most studies in housing literature, we exploit the results of our in-depth interviews with Ecuadorian return migrants and the studies of Jokisch’s (2002) and Mata-Codesal (2011) highlighting house construction and ownership as a migration goal and symbol of success for return migrants. Second, following the idea that returnees attach a sense of achievement for having built their house, we also perceive home ownership as an indicator of improved material wellbeing.⁵

Taking cues from Figure 2, we proceed our analysis following the New Economics of Labour Migration (NELM). Specifically, the migrant covers financial responsibilities while the household members are in-charge of managing house construction and maintaining it (Smith & Mazzucato, 2009; Aguilar, 2009). Additionally, any welfare gains (losses) from house investment spillover to household members since they ultimately occupy the house.

Since our analysis centres on the impact of return migration on household wellbeing, we choose the period where the migrant already returned and currently occupies the house along

⁵ We do not discount the possibility of having different results if we use specific variables that capture financial, physical and psychological wellbeing using house as a control variable. However, this is beyond the scope of this research. Nevertheless, the results of our fieldwork showing home ownership as an achievement among returnees suggest that we can attach financial and psychological wellbeing to it. One would argue that we cannot generalize and make this simplifying assumption for the entire population of returnees but we strongly endorse this assumption based on the results of our fieldwork. Additionally, other studies on migration in the Austro also support this assumption.
with the household members (i.e. \( t=6 \) before reaching \( t=T \)).\(^6\) The mechanism by which house ownership translates to household wellbeing at \( t=6 \) are as follows: we assume that migrant households embark on house construction only if they own the land.\(^7\) Upon return, the returnee who took financial responsibility in building the house lives there with the household members. The returnee feels a great sense of achievement and fulfilment for having established their house. This high self-esteem felt by the return migrant is radiated to the household members, thus cultivating a general positive feeling inside the household. As the house was built using temporary-windfall income from remittances and saving brought home upon return, the materials and provisions are of good quality, thus creating favourable conditions for physical health. Beyond this, the house is an indicator of material wealth not only to the return migrant household but also to the wider community. Putting these altogether yields a prediction that return migration will more likely improve the wellbeing of return migrant households through higher probability of house ownership.

3. Overview of international migration from Biblián, Ecuador

Biblián is one of the seven cantons that belong to the province of Cañar in the Austro region of

\(^6\) We limit our analysis at \( t=6 \) since it covers the period by which we can assess household wellbeing while the returnee is still alive. Extending this analysis beyond returnee’s lifetime requires overlapping generations model. While this is an interesting study, we limit our research to the immediate impact of return migration partly due to data limitations.

\(^7\) Based on Mata-Codesal’s (2011) study, this assumption is realistic in the case of inhabitants in the highlands province of Ecuador where parents usually bequeath a small piece of land to newly-wedded children. The land inherited from the parents motivates children to build their house in the village.
Ecuador. Historical and anthropological accounts reveal that the Austro provinces of Azuay and Cañar are home to the pioneer migrants who went to the United States (US). According to Kyle (2000), though international migration surged during the 1970s, it was limited to a specific sector, mostly urban professionals from the Azuay capital of Cuenca who preferred North American destinations. When the Panama hat trade experienced its downfall, several comisionistas – individuals who had business connections through the Panama hat trade – went to the US. This harmless and marginal migration of urban elites soon evolved into a network that facilitated migration of the young and adventurous male rural peasants from Azuay and Cañar. Soon after, mass emigration to the US, particularly in New York City, occurred in 1980s until 1990s.

The pioneer migrants later came back to Ecuador and acted as intermediaries for clandestine trips to New York. They are referred to as tramitadores who made the trip possible by offering services en route to the US through their network of travel agencies (Kyle, 2000; Jokisch & Pribilsky, 2002). Additionally, tramitadores help an aspiring migrant who has financial difficulties by connecting them to chulqueros – money lenders who levy interest rates as high as 10%-12% with personal properties as collateral (Kyle, 2000; Jokisch & Pribilsky, 2002). The enabling services offered by these tramitadores and chulqueros for rural dwellers with limited resources made mass migration from the Austro to the US possible, so that in 1990s, Ecuadorians are the largest group of undocumented migrants in New York City (Miles, 2004).

The circumstances surrounding international migration in the US are risky as it involves physical, psychological, and financial vulnerabilities. First, one must endure the physical exhaustion of land travel crossing Central America until they reach the mainland US. Second, once settled in the US, the physical separation from their family poses a huge negative
psychological wellbeing to migrants. Third, the interest rate levied by chulqueros who paid the
cost of migration creates extra burden for migrants. As such, these undocumented migrants
normally stay as long as they could in the US to be able to repay chulqueros and attain their
migration goals, unless fortuitous events happen such as being caught by authorities, immigration
policy shifts, economic crisis, and health issues. Return migration in the Austro have been
influenced by the US economic crisis in the last decade as well as the favourable policy shift on
return migration in Ecuador under the government of Rafael Correa (Vancluysen, Calfat, &
Pesántez, 2016).

4. Methodology

4.1. Econometric Specification

The mechanism discussed in section 2.2.2 tracing the impact of return migration on household
wellbeing will be estimated using limited dependent variable (LDV) regression of Equation 1
since the wellbeing variable is unobservable. The latent dependent variable (H) takes on the value
of 1 if the household owns a house and 0 otherwise. Based on literature review, house ownership
is affected by income, demographic variables, relative price of rental and owner-occupied
housing, stability of the household’s demand for housing, and type of housing desired (Arrondel
& Lefebvre, 2001; Carliner, 1974; Stryuk & Lynn, 1983). Fieldwork observation revealed that
the type of housing desired is uniform across households while data on the relative price of rental
and owner-occupied housing is not available since the housing market is not well-developed in
Biblián. Thus, the context in our case study indicates that income, stability of housing demand,
and demographic variables are the relevant variables to account for in the estimation.
Moreover, we include a treatment variable in the right-hand side, which is a dummy variable representing return migration \((R_i)\) taking the value of 1 if the household ever had a return migrant and 0 otherwise. The rationale for using return migration to capture windfall income rests on the fact that majority of the return migrants brought money when they return (see Table 1). Based on available data, our vector of control variables includes log of per capita income \((I)\) and the demographic and household head characteristic variables \((X)\) namely household size, location, age, age-squared, gender, and education. In the spirit of Parrado (2014), we capture life-course transition of migration, marriage, and house ownership by including marital status as part of the vector of control variables.

\[
H_i^* = \alpha R_i + \delta I_i + \beta X_i + \varepsilon_i \quad H_i = \begin{cases} 
1 & {if} \ H_i^* > 0 \\
0 & {otherwise}
\end{cases} \quad (Equation \ 1)
\]

The coefficient estimates in Equation 1 cannot be interpreted directly due to the nonlinearity of the relationship between the dependent and independent variables. The coefficients are interpreted as probabilities and the sign gives us a clue on the direction of effect of the independent variable to the dependent variable. Specifically, we expect the sign of the coefficient of return migration to be positive, indicating that a household that ever had a return migrant increases the probability of owning a house compared to household that never had a return migrant, holding all the other independent variables constant.
One complication in running the LDV regression of Equation 1 concerns the endogeneity of the return migration treatment variable. This endogeneity arises due to simultaneity of household decisions, which can lead to reverse causality, plus the possibility of self-selection in return migration. We address this complication by running a seemingly unrelated regression (SUR) of house ownership and return migration using full information maximum likelihood estimation. These two equations seem unrelated because the house ownership equation is independent of the return migration equation. However, their errors ‘can be correlated, sharing a multidimensional distribution’ (Roodman, 2011, p. 168). This estimation is possible by running a conditional mixed process estimation (cmp) in Stata, a command that was developed by Roodman (2011).

For the model to be identified, we include an exclusion restriction variable Z representing unemployment rate at the city of destination the year before the recorded first return of a migrant household member. We construct this variable using data from the US Bureau of Labor Statistics for US-bound migrants and World Bank’s World Development Indicators for non-US bound migrants. In this SUR estimation, we rewrite Equation 1 into 1.1 to exclude return migration in the right-hand side of house ownership equation; and include Equation 2 that specifies the regression of the dummy endogenous variable, represented by return migration, with its instrument and vector of control variables.

\[
H_i^* = \delta l_i + \beta X_i + \varepsilon_i \quad H_i = \begin{cases} 1 & \text{if } H_i^* > 0 \\ 0 & \text{otherwise} \end{cases} \quad \text{(Equation 1.1)}
\]
\[ R_i^* = \theta Z_i + \beta X_i + \mu_i \quad R_i = \begin{cases} 1 & \text{if } R_i^* > 0 \\ 0 & \text{otherwise} \end{cases} \]  

(Equation 2)

We also extend our estimation to include selection into migration as specified in Equation 3. Our exclusion restriction for this equation is migration network (N), which is based on the stock of migrants in Biblián as reported in the 2010 census conducted by the Ecuadorian government’s Instituto Nacional de Estadística y Censo (INEC). We interacted this migrant stock data with the number of household members aged 20-65 years old to create variability as well as capture migration propensity of individual migrant members (Sobreviñas, 2017).

\[ M_i^* = \gamma N_i + \beta X_i + \nu_i \quad M_i = \begin{cases} 1 & \text{if } M_i^* > 0 \\ 0 & \text{otherwise} \end{cases} \]  

(Equation 3)

4.2. Data collection method

This study focuses on return migration in the province of Cañar, particularly in canton Biblián. Cañar consists of 7 cantons and canton Biblián was chosen after running principal components analysis based on levels of migration, poverty, economic, education, social protection, vulnerability, and demographic dimensions. This canton is made up of urban and rural parishes: Biblián is the urban parish; while Nazon, Sageo, Turupamba, and Jerusalen are the rural parishes. Through the institutional cooperation grant from VLIR-IUC, the team of researchers from the University of Antwerp’s Institute of Development Policy and Universidad de Cuenca implemented a comprehensive migration census in Biblián (Figure 3) on February 2015. The questionnaire captures individual and household level data on migration history comprising of
internal, international, and return migration; economic and social remittances; transnationalism; and household income and expenses (Verdezoto, Abainza, Calfat, & Neira, 2015).

Overall, there were 1,557 households with a total of 6,381 individuals who participated in the census. The urban parish of Biblián represented 84% of the total respondents while the rest live in the centre of rural parishes of Nazon (4%), Sageo (4%), Turupamba (2%), and Jerusalen (6%). In terms of age and gender composition, Biblián residents are relatively old with 57% aged 26 above, and a slightly more female than male composition (Figure 4). Additionally, 46% of the total population has never been married.
We also conducted 20 in-depth interviews with returnees in June-July 2016 to provide depth and clarity with respect to the information we have obtained through the census. The interviews lasted from 30 minutes to over an hour; some involved several encounters and were accompanied by participant-observations with the returnee-entrepreneur respondents. To uphold the conditions laid out in the informed consent, we used fictitious name whenever we present the narratives of respondents in this paper.

8 It has to be noted that the respondent for the census is sometimes a household representative who is not necessarily the household head nor the returnee. Considering that the questionnaire contains many recall questions, we believe that it is important to corroborate the result of the census with the narratives of the returnees themselves.
5. Results and Discussions

5.1. Descriptive statistics

The result of the Biblián census shows that around 15% of the residents have been international migrants and half of them are current international migrants (48.6%). Roughly four decades since the first migration wave, the US remains to be the favourite destination (93.7%) but residents appear to be trying other destinations such as Spain (3.1%) and Canada (0.9%), though the numbers are immaterial. The persistence of US migration in this canton suggests a strong and cohesive migration network (see also Mata-Codesal, 2017).

Table 1. Characteristics of return migrants

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean/Share</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Returnees from the US</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>45.8</td>
<td>321</td>
</tr>
<tr>
<td>Gender: Male</td>
<td>73.2</td>
<td>235</td>
</tr>
<tr>
<td>Civil status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married / Living together</td>
<td>76.0</td>
<td>244</td>
</tr>
<tr>
<td>Single</td>
<td>11.2</td>
<td>36</td>
</tr>
<tr>
<td>Other (Widowed / Divorced / Separated)</td>
<td>12.8</td>
<td>41</td>
</tr>
<tr>
<td>Highest education**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>11.2</td>
<td>36</td>
</tr>
<tr>
<td>Primary</td>
<td>49.8</td>
<td>160</td>
</tr>
<tr>
<td>Secondary</td>
<td>31.2</td>
<td>100</td>
</tr>
<tr>
<td>Higher education</td>
<td>7.2</td>
<td>23</td>
</tr>
<tr>
<td>Occupation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Administrative (sales, customer service, secretarial)</td>
<td>5.9</td>
<td>19</td>
</tr>
<tr>
<td>Restaurant-related (cook/chef, waiter, dishwasher)</td>
<td>33.3</td>
<td>107</td>
</tr>
<tr>
<td>Machine operator and trade (mechanic, driver, plumber, mason, factory worker)</td>
<td>30.5</td>
<td>98</td>
</tr>
<tr>
<td>Other (elderly/child care, cleaning service, hairdresser, housewife)</td>
<td>25.9</td>
<td>83</td>
</tr>
<tr>
<td>Missing observations</td>
<td>4.4</td>
<td>14</td>
</tr>
<tr>
<td>Length of stay abroad***</td>
<td>9.3</td>
<td>320</td>
</tr>
<tr>
<td>Reasons for return</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>57.3</td>
<td>184</td>
</tr>
<tr>
<td>Economic</td>
<td>6.5</td>
<td>21</td>
</tr>
</tbody>
</table>
Furthermore, the census results show that 36.7 percent of US-bound migrants have returned in Biblián. Table 1 shows that majority of these returnees are male (73.2%) with an average age of 46 and who are mostly married or living with a partner (76%). This male-dominated migration confirms previous accounts describing international migration from Cañar. Additionally, in terms of education, most of them have finished either primary (49.8%) or secondary (31.2%), which explains the relatively low-skill jobs they obtain in the US.

Specifically, restaurant related jobs such as cooking, attending to customers, and dishwashing are the common entry posts. This information was validated during our in-depth interviews with returnees who mentioned the different physical-intensive jobs they go through to be able to earn a living in the US.

First one must wash dishes… one enters as dishwasher and then one is ascending, ascending, learning to do other things and ends up cooking as well. (Andres, 52 years old, interviewed July 2014)
Even though the job is physically demanding, a return migrant named Fernando admitted liking the work in the US. However, things have become more difficult recently due to the 2008 economic crisis. This prompted him to return in Biblián but for other migrants, return decisions do not materialize easily as there are many things to consider. First, their irregular status leaves them without much option of traveling back and forth as they wish; and second, they are financially indebted to *chulqueros* due to the travel costs incurred. As such, data show that migrants stay an average of 9 years in the US.

I decided to come here since a year ago because the jobs there are bad …are no longer good now. It is not the same as before, but then I like being there, work, work for income, work for food… (Fernando, 43 years old, interviewed June 2016)

During the census, we asked household representatives on the reasons why their returnee-relative returned. The results show that family reason is the primary motivation (57.3%), while economic motivations take-up a relatively small share (6.5%). Whereas most returnees consulted their partner or family, returning is ultimately as personal decision. During in-depth interview with returnees, their narratives supported the census data and one of them explain further:

I decided to come back here for my children…for my children. One gets tired of too much work there… stress and then one gets tired. As I had a house, money and a car, then I came here to rest a little longer. (Pablo, 64 years old, interviewed June 2016)
The above narrative not only tells us of family reason but also of work fatigue. It is not surprising to hear about returnees’ articulation of exhaustion because they normally work extended hours and do not take holidays to earn as much as they could. However, given their undocumented status to work and live in the US, the unlucky few are caught by authorities and deported back to Ecuador, sometimes returning to Biblián still indebted with the loan used to finance their migration.

In the Biblián census, household respondents revealed that most returnees came back with money or savings (60.8%). Returnee respondents validated this fact during in-depth interviews, affirming that the savings they brought from the US was used for various investments such as purchasing a piece of land, building a house, or setting-up a small business.

Interviewer: Were the savings you brought helped your business […]?
Respondent: Yes, was unemployed for a year…spent the money I brought. Then I bought the house, then when I was running out of money, started looking for business. (Juan, 53 years old, interviewed June 2016)

Since Biblián migrants left mainly to work, one would expect them to return without educational qualifications. However, a few of them managed to learn the English language (14.6%) and attend training (14.3%), which is primarily about cooking. Even though some returnees admitted not keen on their life in the US, they still acknowledged the opportunities and accomplishments they have realized.
USA has given me opportunities…all. One can have a house, land, and money if one knows how to use it…if one does not know, one will go back. (Jerick, 55 years old, interviewed July 2016)

Well, I can say at least that by going there, I was able to make myself a responsible man. I had the opportunity to send my daughter to school, I had the opportunity to build my house because practically if you are here… what you can do? […] here you do not have a good job or … at least you have to be a professional to acquire a loan […] That is the benefit I got from my work there. (Hugo, 61 years old, interviewed July 2016)

It is clear from the foregoing narratives that owning a house is an important aspiration. However, the limited opportunities available in Biblián makes migration an important strategy. In the census (see Table 2), households with migrant members – either return migrant or international migrant – have relatively higher share of house ownership (i.e. 76 and 61 percent respectively) compared to non-migrant households (58%). Even in terms of the number of bedrooms, bathrooms, and housing quality, return migrant households have relatively more rooms and better quality compared to non-migrant households. Moreover, if we compare housing characteristics and housing quality between migrant and return migrant households, we clearly see from Table 2 that return migrant households are better off compared to migrant households. We exploit the foregoing facts underscoring the importance of building a house for the family as one of the migrant’s aspiration and corroborate it with that fact that they bring money and savings when they return to further investigate to what extent return migration affects the probability of home ownership.
Table 2. Characteristics of Households in Biblián, by type of migrant

<table>
<thead>
<tr>
<th>Variables</th>
<th>All HHs</th>
<th>Return Migrant HHs (RM)</th>
<th>Migrant HHs (M)</th>
<th>Difference (RM-M)</th>
<th>Non-Migrant HHs (NM)</th>
<th>Difference (RM-NM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age of HH head (years)</td>
<td>50.58</td>
<td>49.29</td>
<td>52.81</td>
<td>-3.53</td>
<td>50.35</td>
<td>-1.06</td>
</tr>
<tr>
<td></td>
<td>(17.82)</td>
<td>(13.50)</td>
<td>(17.88)</td>
<td></td>
<td>(18.56)</td>
<td></td>
</tr>
<tr>
<td>Married HH head (%)</td>
<td>63.14</td>
<td>76.69</td>
<td>57.20</td>
<td>19.49</td>
<td>61.01</td>
<td>15.68</td>
</tr>
<tr>
<td></td>
<td>(48.26)</td>
<td>(40.64)</td>
<td>(49.58)</td>
<td></td>
<td>(48.80)</td>
<td></td>
</tr>
<tr>
<td>HH head w/ primary educ (%)</td>
<td>83.98</td>
<td>89.91</td>
<td>75.00</td>
<td>14.91</td>
<td>84.77</td>
<td>5.14</td>
</tr>
<tr>
<td></td>
<td>(36.69)</td>
<td>(30.19)</td>
<td>(43.39)</td>
<td></td>
<td>(35.95)</td>
<td></td>
</tr>
<tr>
<td>Income per capita (annual in $)</td>
<td>3,122.55</td>
<td>3,624.57</td>
<td>2,248.28</td>
<td>1,376.29</td>
<td>3,216.83</td>
<td>407.74</td>
</tr>
<tr>
<td></td>
<td>(4,537.14)</td>
<td>(6,979.77)</td>
<td>(3,912.44)</td>
<td></td>
<td>(3,963.21)</td>
<td></td>
</tr>
<tr>
<td>Urban (%)</td>
<td>83.20</td>
<td>80.37</td>
<td>77.12</td>
<td>3.25</td>
<td>85.16</td>
<td>-4.79</td>
</tr>
<tr>
<td></td>
<td>(37.40)</td>
<td>(39.81)</td>
<td>(42.10)</td>
<td></td>
<td>(35.57)</td>
<td></td>
</tr>
<tr>
<td>Household size</td>
<td>4.03</td>
<td>4.26</td>
<td>5.10</td>
<td>-0.84</td>
<td>3.75</td>
<td>0.51</td>
</tr>
<tr>
<td></td>
<td>(2.01)</td>
<td>(1.95)</td>
<td>(2.11)</td>
<td></td>
<td>(1.91)</td>
<td></td>
</tr>
<tr>
<td>House ownership (%)</td>
<td>61.16</td>
<td>76.26</td>
<td>60.59</td>
<td>15.66</td>
<td>58.14</td>
<td>18.12</td>
</tr>
<tr>
<td></td>
<td>(48.76)</td>
<td>(42.65)</td>
<td>(48.97)</td>
<td></td>
<td>(49.36)</td>
<td></td>
</tr>
<tr>
<td>Number of bedrooms</td>
<td>3.20</td>
<td>3.49</td>
<td>3.31</td>
<td>0.18</td>
<td>3.11</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>(1.43)</td>
<td>(1.22)</td>
<td>(1.58)</td>
<td></td>
<td>(1.43)</td>
<td></td>
</tr>
<tr>
<td>Number of bathrooms</td>
<td>1.78</td>
<td>2.03</td>
<td>1.73</td>
<td>0.30</td>
<td>1.74</td>
<td>0.29</td>
</tr>
<tr>
<td></td>
<td>(0.87)</td>
<td>(0.93)</td>
<td>(0.84)</td>
<td></td>
<td>(0.86)</td>
<td></td>
</tr>
<tr>
<td>High quality wall materials (%)</td>
<td>87.76</td>
<td>92.56</td>
<td>89.83</td>
<td>2.73</td>
<td>86.28</td>
<td>6.27</td>
</tr>
<tr>
<td></td>
<td>(32.78)</td>
<td>(26.31)</td>
<td>(30.29)</td>
<td></td>
<td>(34.42)</td>
<td></td>
</tr>
<tr>
<td>High quality floor materials (%)</td>
<td>58.95</td>
<td>59.91</td>
<td>55.51</td>
<td>4.40</td>
<td>59.54</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>(49.21)</td>
<td>(49.12)</td>
<td>(49.80)</td>
<td></td>
<td>(49.11)</td>
<td></td>
</tr>
<tr>
<td>High quality roof materials (%)</td>
<td>12.62</td>
<td>16.51</td>
<td>10.59</td>
<td>5.92</td>
<td>12.26</td>
<td>4.25</td>
</tr>
<tr>
<td></td>
<td>(33.21)</td>
<td>(37.22)</td>
<td>(30.84)</td>
<td></td>
<td>(32.81)</td>
<td></td>
</tr>
<tr>
<td>Observations</td>
<td>1506</td>
<td>219</td>
<td>236</td>
<td></td>
<td>1051</td>
<td></td>
</tr>
</tbody>
</table>

Note: Standard deviations are in parentheses. 51 households with both current international and return migrants members are excluded in this table to simply analysis.
Source: IOB-Ucuenca VLIR-IUC Biblián Census 2015

5.2. Econometric results

The link between return migration and house ownership can be assessed by running regressions of equations 1, 1.1 and 2.
Disregarding the binary nature of house ownership and endogeneity of return migration, we estimate Equation 1 using linear probability model (LPM) and probit regressions. The results presented in Table 3 show reasonable sign of coefficients that are statistically significant except for household size. We first focus our attention on return migration since it is the variable we are most interested in. Both the LPM and probit results show positive signs of the coefficient and marginal effect respectively. For the LPM, we expect return migrant households to have 11.9 percent probability of owning a house. This is corroborated by the average marginal effect presented in the probit regression, which implies that on average, return migrant households have 11.4 percentage points higher probability of owning a house than non-migrant households.

We also look at the effect of the other variables in the regression model. As expected, per capita income increases the probability of house ownership as shown by the positive coefficient in both the LPM and probit regressions. While household size does not affect the probability of house ownership, household location does. Specifically, households who live in the urban area would have negative effect on house ownership, perhaps due to higher cost of acquiring land and property in urban areas. Furthermore, the control variables related to household head characteristics are all significant with reasonable sign of the coefficients as expected. Overall, the effects of the right-hand side variables on the probability of house ownership are almost of the same magnitude as shown in the LPM and probit regressions results.
A table illustrating regression results for LPM and Probit models. The dependent variable is House ownership, and the model includes various independent variables such as Return migrant HH, Income per capita, Household size, and Living in urban area. The results are presented with coefficients (dy/dx) and p-values for both LPM and Probit models. The table also includes additional statistics such as $\chi^2$ (8), Pseudo-R2, and R-squared.

### Table 3. Regression results: LPM and Probit

<table>
<thead>
<tr>
<th>Variables</th>
<th>LPM</th>
<th>Probit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable: House ownership</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Return migrant HH: (1=yes; 0=no)</td>
<td>0.119***</td>
<td>0.114***</td>
</tr>
<tr>
<td></td>
<td>(4.05)</td>
<td>(3.94)</td>
</tr>
<tr>
<td>Income per capita (in log)</td>
<td>0.053***</td>
<td>0.054***</td>
</tr>
<tr>
<td></td>
<td>(3.92)</td>
<td>(4.01)</td>
</tr>
<tr>
<td>Household size</td>
<td>0.002</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(0.36)</td>
<td>(0.54)</td>
</tr>
<tr>
<td>Living in urban area</td>
<td>-0.085**</td>
<td>-0.084**</td>
</tr>
<tr>
<td></td>
<td>(-2.83)</td>
<td>(-2.85)</td>
</tr>
<tr>
<td><strong>Household Head Characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.029***</td>
<td>0.026***</td>
</tr>
<tr>
<td></td>
<td>(7.04)</td>
<td>(5.62)</td>
</tr>
<tr>
<td>Age_squared</td>
<td>-0.000***</td>
<td>-0.000***</td>
</tr>
<tr>
<td></td>
<td>(-4.57)</td>
<td>(-3.31)</td>
</tr>
<tr>
<td>Married</td>
<td>0.121***</td>
<td>0.121***</td>
</tr>
<tr>
<td></td>
<td>(4.83)</td>
<td>(4.83)</td>
</tr>
<tr>
<td>Finished primary education</td>
<td>0.139***</td>
<td>0.145***</td>
</tr>
<tr>
<td></td>
<td>(3.96)</td>
<td>(4.16)</td>
</tr>
<tr>
<td>Constant</td>
<td>-0.937***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(-6.86)</td>
<td></td>
</tr>
<tr>
<td>$\chi^2$ (8)</td>
<td></td>
<td>254.43</td>
</tr>
<tr>
<td>Pseudo-R2</td>
<td></td>
<td>0.1655</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.2052</td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>1503</td>
<td>1503</td>
</tr>
</tbody>
</table>

Note: t and z statistics in parentheses for LPM and Probit regressions with robust standard errors respectively; * p<0.05, ** p<0.01, *** p<0.001

We further take into consideration endogeneity by running conditional mixed process estimation of equations 1.1 and 2 (Table 4, columns 2 and 3). We also extend our analysis to incorporate selection into migration (Table 4, columns 4, 5, 6). Including this analysis allows us to verify whether migration is also significant in predicting the probability of house ownership. In reading the results in Table 4, it is important to look at the correlation of the error of the different equations. In the SUR of house ownership and return migration, the correlation of the error terms (atanhrho_12, column 3) is positive and significant, which implies that households that ever had a
return migrant member are more likely to own a house. This result is further corroborated when we estimate SUR that take into consideration selection into migration: the correlation of the error term between house ownership and return migration (atanhrho_12, column 5) is also positive and significant. Moreover, the correlation of the error between house ownership and migration (atanhrho_13, column 6) is not significant suggesting that having a migrant member does not necessarily increase the likelihood of owning a house. In addition, the correlation of the return migration and migration error terms (atanhrho_23, column 6) is not significant implying no selection between migration and return.

The rest of the control variables have signs and significance levels as expected except for the household size, which is not significant across different estimations. The location variable indicates that households that live in the urban area are less likely to own a house, conceivably because the cost of house ownership is higher in the urban compared to the rural area.

Table 4. Conditional Mixed-Process Regression

<table>
<thead>
<tr>
<th>Variables</th>
<th>SUR (Eqns 1.1, 2)</th>
<th>SUR (Eqns 1.1, 2, 3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Equation 1.1</td>
<td>Equation 2</td>
</tr>
<tr>
<td>Dependent variable</td>
<td>House ownership</td>
<td>Return migrant HH</td>
</tr>
<tr>
<td>Income per capita (in log)</td>
<td>0.170*** (4.00)</td>
<td>0.173*** (4.06)</td>
</tr>
<tr>
<td>Household size</td>
<td>0.014 (0.74)</td>
<td>-0.083** (-2.96)</td>
</tr>
<tr>
<td>Living in urban area</td>
<td>-0.299** (-3.12)</td>
<td>-0.082 (-0.58)</td>
</tr>
<tr>
<td>Household Head Characteristics</td>
<td>Age 0.087*** (7.18)</td>
<td>-0.098*** (4.21)</td>
</tr>
<tr>
<td></td>
<td>Age_squared -0.000*** (-4.44)</td>
<td>-0.001*** (-4.50)</td>
</tr>
</tbody>
</table>

...
<table>
<thead>
<tr>
<th></th>
<th>Coefficient</th>
<th>Standard Error</th>
<th>p-value</th>
<th>t-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>0.400***</td>
<td>0.354**</td>
<td>0.399***</td>
<td>0.359**</td>
</tr>
<tr>
<td></td>
<td>(5.22)</td>
<td>(2.81)</td>
<td>(5.22)</td>
<td>(2.92)</td>
</tr>
<tr>
<td>Finished primary education</td>
<td>0.470***</td>
<td>0.481**</td>
<td>0.470***</td>
<td>0.438*</td>
</tr>
<tr>
<td></td>
<td>(4.39)</td>
<td>(2.89)</td>
<td>(4.39)</td>
<td>(2.53)</td>
</tr>
<tr>
<td>Constant</td>
<td>-4.351***</td>
<td>-1.856**</td>
<td>-4.366***</td>
<td>-2.342**</td>
</tr>
<tr>
<td></td>
<td>(-9.90)</td>
<td>(-2.80)</td>
<td>(-9.94)</td>
<td>(-2.92)</td>
</tr>
</tbody>
</table>

**Probability or return migration**

- Unemployment rate at destination city: -0.072** (-2.76)  
- -0.073** (-2.85)

**Probability of migration**

- Migration network: 0.0276*** (6.10)

- /atanhrho_12: 0.219** (2.70)  
- 0.227** (2.89)

- /atanhrho_13: 0.079 (1.63)

- /atanhrho_23: 0.340 (0.87)

- Log likelihood: -1157.4171  
- -2023.3719

- Number of observations: 1510  
- 1524

Note: z statistics are in parentheses.
* p<.1; ** p<.05; *** p<.01 ****p<.001

6. Conclusions and policy implications

The literature on return migration emphasizes its development contribution through the financial and human capital gains of the returnees, which spill over to their family and society. Our study aims to contribute to this growing literature by examining the consequences of return migration not only to the returnees but also to their family. We are able to accomplish this by choosing a location that is home to pioneer migrants and returnees in the Austro region of Ecuador. Using information from in-depth interviews and census data, we discovered that one of the goals of
migration in canton Biblián was to build a house for the family. The prominence of this response during in-depth interviews prompted us to assess the impact of return migration on the wellbeing of return migrant households by using house ownership as an indicator of wellbeing. Our results suggest that households that ever had a return migrant increases the probability of owning a house compared to a non-return migrant household counterpart. This is largely because most returnees bring money or savings home when they return. This finding points to the need for policy that guarantees safe return of migrants.

Considering practical solutions related to return migration means that policymakers should assume that the undocumented nature of migration in the Austro cannot be completely prevented even with the looming construction of the US border wall in Mexico. This is because potential migrants are willing to take risks in the hope of improving their life. Since these migrants expressed eagerness to return, the Ecuadorian government may step-in to improve and craft policies for successful return. At present, the government has a return and reintegration program called *Plan Retorno* that encourages international migrants to return by (i) allowing them to bring home personal goods and working tools tax-free, and (ii) implementing policies that would reintegrate returnees in the national labour market by providing access to credit for those who intend to start their own business and/or build their houses (Boccagni, 2011; Vancluysen et al., 2016). This policy is noteworthy but there is certainly a scope to improve it by taking-off from that fact that most migrants bring money or savings home. The amount of this savings is not very clear since respondents are not keen to divulge it. Nevertheless, it is sensible to consider the investment potential of this money so that the government addresses not only credit constrained return migrant households but also encourages others to invest. For instance, the government may partner with banks and set-up a savings facility that would yield slightly
higher interest rate compared to the foregoing market interest rate. Of course, we propose for a thorough review and study of this policy that includes discussions with the different stakeholders, most importantly the returnees. Thus far, our discussions with returnees are indicative of the need for enhanced government assistance in reintegration.

In addressing our goal of understanding the wellbeing impact of return migration, we also examined other aspects that affect wellbeing of the returnees themselves. Our descriptive analysis shows encouraging results as demonstrated by some returnees having acquired efficient work culture abroad, received work-related and English trainings abroad, and established business in their hometown. More importantly, the satisfaction they express for having built a house for their family is inspiring but a proactive role of the government is essential to minimize their potential vulnerabilities and bottlenecks during reintegration.

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Instituto Nacional de Estadistica y Censos (http://www.ecuadorencifras.gob.ec/estadisticas/)


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