Institutional Arrangements, Community Ties and Remittance Hometown Investing in Two Philippine Municipalities

ABSTRACT

Remittances' development potential in overseas migrants' rural communities of origin hinges on what these areas offer. This potential from migrants' dollar earnings rests on prevailing institutions —both formal and informal, including norms and rules— and on localised efforts to improve rural investment climates. How can migrant households then determine the trustworthiness of local stakeholders, community ties and the overall entrepreneurial situation? Using a mixed methods approach, this study focuses on institutions to understand the interactions and behaviors of migrant households with their rural communities' prevailing norms, rules and socio-economic constraints (as well as with formal organisations). Done in two rural municipalities in the Philippines, this study analyses the extent that public authorities, local folk and local norms influence remittance usage for hometown investing. In this look at migrant household-community interactions under the lens of new institutionalism theory, what characterises the decision processes by migrant households and community stakeholders to utilise the former's remittances in a supposedly functioning hometown investment climate? Findings show that both parties employ *signaling* to bridge information asymmetries and reveal stakeholders' quality-laden attributes in exchange for each other's premiums, and (more importantly) trust. Signaling also presents itself as a new theoretical concept in the dynamic migration-development nexus.

Keywords overseas remittances | rural hometown investing | migration-development local governance | mixed methods | signaling

INTRODUCTION

Foreign remittances represent a major financial resource for the origin countries and communities of overseas migrants. For the longest time, migration scholars assert that providing a conducive economic environment becomes a prerequisite for remittances-supported community development (Taylor et al., 1996). Meanwhile, analyses of what is called the *remittance investment climate* (ReIC) provided additional pre-requisites: rural households' *levels of financial knowledge*, localities' *socio-economic conditions*; *local governance efforts* to ease the conduct of entrepreneurship and investments; and the *geographic location and make-up of rural communities* (Author 1, Author 2, Author 3, Author 4, Author 5). All these elements, as well as remittances' impacts, occur differently in origin communities (De Haas, 2009).

It is imperative that the conditions in local communities that influence remittance usage need to be further understood. Rural communities have prevailing norms and cultures, familial and institutional arrangements, relationship dynamics, regulations, and topographical and environmental conditions. It makes sense that geographically-contextualised remittances and local development analysis is investigated according to the interactions between people and place, and how human behaviors operate given local conditions that prevail. These overall local contexts obviously govern migrants' decisions and actions in using their remittances (VanWey, 2007).

Institutionalism thus becomes a relevant concept. Productive remittance usage rests on high quality institutions. Even if this hypothesis was previously looked at nationally, public trust on these institutions can enhance the positive impacts of remittances (Saydaliyev et al., 2020). Weak institutions however can drive away ventures financed by remittances (Borja and Hall, 2018). Depending on how institutions are organised in countries, and if

the policy roles (effectively) regulate markets in an "appropriate institutional setting" (Nepal et al., 2020: 480), we ascertain the above assertions on institutionalism in migrants' origin communities.

As well, the place of human behavior in development, and the things that rural communities and their members offer, both sway local decision making by overseas migrants and their families. People's decision making may be easily influenced by events people notice (i.e., contextual cues), by networks and norms in communities, and by shared mental models (i.e., how people understand the world and what works). Even decision making by remittance owners can be "the product of an interaction between mind and context … What individuals perceive as desirable, possible, or even 'thinkable' for their lives may actually be prompted by psychological and social influences" (World Bank, 2015: 2-3).

With institutionalism and human behavior as contexts, we purport to understand the household, institutional and geographic factors that influence remittance rural hometown investing. We respond to scanty research that look into localised "institutions" and their roles in remittances. Employing a mixed methods tool, we attempt to answer *To what extent do public authorities, local folk and local norms influence overseas remittance owners to invest in their rural hometowns*? This article emanates from the Philippines, among the top four origin countries of international migrants and overseas workers, and among the top five recipient-countries of remittances (World Bank, 2023). For the past 50 years (1975-2024), the Philippines has received over-US$560 billion in cash remittances, making up at least nine per cent of gross domestic product (Bangko Sentral ng Pilipinas, 2025).

NEW INSTITUTIONALISM AND MIGRATION-AND-LOCAL DEVELOPMENT DYNAMICS

Institutionalism explores how people's choices are influenced and directed by the institutional environment they are in. Essentially, institutionalists stress the importance of institutions and the policies that are embedded in these institutions (Peters, 2017).

What is an "institution?" More than its easily perceived organisational form, institutions refer to the formal and informal norms, codes, cultures and practices that all influence human action (Cuevas et al., 2015). North (1990: 3) calls institutions "the rules of the game in a society … the humanly devised constraints that shape human interaction". Institutions are "webs of interrelated rules and norms that govern social relationships, (comprising) the formal and informal social constraints that shape the choice set of actors" (Nee, 1998: 8). Institutions, thus saying, are "inanimate objects" (Prasetyo et al., 2020: 2) that guide individual agency (actions), and non-conformity with institutional expectations could lead people to be sanctioned (Peters, 2017).

The benefit of institutions in a society is the reduction of uncertainty, says North (1990: 6), "by establishing a stable (but not necessarily efficient) structure to human interaction". People create these institutions —and run formal and informal organisations that practice these "institutions" — to shape people's behaviors on human interaction and, in turn, shape these institutions (Meador & Sjerratt, 2017).

Institutionalism as an approach in the social sciences began in the 1950s. *Old institutionalism* studies the legal institutions and the formal, legal descriptive, normative and historical dimensions of these institutions. *New institutionalism,* on the other hand, studies individuals' purposive actions (Nee, 1998) and behaviors that relate to prevailing norms, codes, cultures, while interacting with formal and informal organisations. New institutionalism spans how a system impacts on behavior, processes and outcomes (for political science [Ray, n.d.]); strives to bring rational choice to terms with how humans normalise social and economic behaviors to minimize transaction costs (for economics [Meador and Skerratt, 2017: 145; Neee, 1998]); and explores how cultural beliefs, myths, customs and norms lead to "the reciprocal interactions between purposive action and social structure" (for sociology [Nee, 1998: 4]). This paper gives special attention is given to *new institutional economics* that focuses on the institutions that govern people's economic activities. NIE stresses key variables such as *institutional environments* (rules of the game) and *institutional arrangements* (institutions of governance), which span the ways of implementing and organising economic actors (the 'play of the game') (Nee, 1998).

Any place for new institutionalism and migration and development?

International migration and remittances have yet to apply new institutionalism in understanding migration-development dynamics. Institutional analyses of remittances and development are also structure-and-agency interactions at work as we see recursive interactions and outcomes by structures (embeddedness and institutional environments) and agents (economic actors like firms and individuals that execute institutional arrangements). Authors thus argue that lenses of new institutionalism theory broaden the understanding of the outcomes and processes of remittances' development potential.

Findings from previous studies reveal facets of new institutionalism, even if these studies did not explicitly utilise this concept. In Mexico, migrants and their families are mandated to help fulfil community obligations such as paying some community taxes, contributing labor to some construction projects, and making donations to hometown development projects (Conway & Cohen, 1998; VanWey et al., 2005). De Haas (2003) captured household- and community-level "institutions" dictating migration-development interactions in oasis communities of Mexico. He found that migration has encouraged the emancipation of rural women since the absence of their husbands increased their responsibilities, autonomy, and power. Even a "traditional village institution" that carried economic and political influence in Morroco, the *taqbilt* (*jema'a* in Arabic), got eroded; new patterns of social stratification plus the emancipation of ethnic groups and overseas remittances all eroded the *taqbilt* (De Haas, 2003). These few studies that did not explicitly employ new institutionalism theory provide useful insight into the potential of new institutionalism to further understand migration-development dynamics in migrants' origin communities.

NIE studies have always put premium on firms, not individuals. However, if bounded rationality surrounds the decision making of individuals running these firms, why not study also the decisions made by individuals? When uncertainty and imperfect information prevail while agents are bound by the parameters set by institutional environments, individual cognition and decision making can be both studied. It is why some think institutional

economics and *behavioral economics* are logically connected (Joskow, 2008) so that the nature and behavioral motivations of transactions are ascertained. Decisions by individual migrant remitters and their families are thus bound by prevailing institutional environments and governance arrangements.

New institutionalism theory may possibly answer how the quality of institutions is probably linked to the development outcomes of remittances to migrants' origin communities. Here we argue that the analysis of remittances' local development potential using new institutionalism can cover processes *and* outcomes. *Mixed methods* can possibly spring forth new theoretical insights into remittance studies guided by new institutionalism.

METHODS

Authors here implemented a mixed methods tool in two rural municipalities in the Philippines, called the *Remittance Investment Climate Analysis in Rural Hometowns* (Author 1). RICART sought to determine the readiness of both the rural hometown (investment climate) and of the overseas migrant household (financial capabilities) in using remittances as savings, investments and entrepreneurial capital. RICART had gone to eight municipalities spanning five rounds. This article covers the fifth round of RICART, done in San Nicolas in Ilocos Norte province (480 km north of the Philippine capital Manila) and Moncada in Tarlac province (150 km north of Manila). San Nicolas is beside a city while Moncada is distant from the nearest city (Figure 1).

[Figure 1 here]

A household survey and a rapid qualitative inquiry (Beebe, 2017) were conducted over nine months (September 2018 to June 2019). Fieldwork yielded a total of 905 survey respondents (migrant and non-migrant); 151 interviews with local stakeholders; object-centered interviews or OCIs with migrant household survey respondents (N=59) and overseas migrants (N=12); and 162 sets of documents or documentary data (Table 1).

[Table 1 here]

The household survey covered five domains: 1) *Risk appetites* and *local economic prospects*; 2) *Remittance behavior and use*; 3) *Family financial socialisation* (family interactions on finance [Gudmunson and Danes, 2011]); 4) *Financial capabilities* (Birkenmaier and Huang 2014), covering the concepts *financial literacy*, *financial inclusion* (i.e. having a bank account) and *financial functionings* (saving, investing, doing business); and 5) *Interactions with organisations and institutions* in rural hometowns.

Meanwhile, our rapid qualitative inquiry (RQI)[1] combined key informant interviews with local stakeholders, object-centered interviews with migrant households and overseas migrants, and documentary analysis. RQI determined the following five aspects: a) local economic competitiveness of the two municipalities; b) interactions between the organised institutions and the financial sector with migrants and their households; c) culture and norms of communities; d) locations of economic activities; and e) decision making efforts by migrant households on remittance hometown investing.

Researchers employed the following quantitative, qualitative and mixed methods analyses efforts (see also Figure 2 for this study's procedural diagram):

[Figure 2 here]

[1] Beebe defined RQI as a team-based applied research approach that: a) Focuses on an insider's perspective of the phenomenon; b) Uses triangulation (i.e., multiple sources); and c) Implements iterative data analysis and additional data collection over a period of at least eight-to-12 weeks (Beebe, 2017)

Quantitative analysis: Probit regression

We examined the probability of owning a business, having an investment and opening a savings account locally due to the remittances received. This probability is due to the financial behaviors of migrant households who may be encouraged to use their surplus incomes productively.

The probit model used here covered migrant households from the two towns. However, apart from *household characteristics* and the *levels of financial literacy* that may be associated with the financial actions of remittance households, we also account for: a) respondents' *risk profiles*; b) *family financial socialisation*; c) respondents' views on the *economic prospects of their hometown;* and d) respondents' social interactions and trust unto local people and organised institutions. For migrant households surveyed, the variables *amount of overseas remittances received*, *length of time receiving overseas remittances*, and *frequency of receiving overseas remittances* were added in the analysis.

Overall, owning a business, placing investments and owning a savings account in the rural hometown are modelled as a function of the demographic and financial literacy characteristics of migrant households, as shown in three equations expressed as follows:

$$BusinessOwnership = \alpha_1 + \beta_1 F + \gamma_1 H + \delta_1 Remittances + \varepsilon_1 \quad \text{(Eq. 1)}$$

$$InvestmentsinHometown = \alpha_2 + \beta_2 F + \gamma_2 H + \delta_2 Remittances + \varepsilon_2 \quad \text{(Eq. 2)}$$

$$SavingsAccount = \alpha_3 + \beta_3 F + \gamma_3 H + \delta_3 Remittances + \varepsilon_3 \quad \text{(Eq. 3)}$$

where,

$$BusinessOwnership \begin{cases} 1 \\ 0 \end{cases} \begin{vmatrix} if Business > 0 \\ Otherwise \end{vmatrix}$$

$$InvestmentsinHometown \begin{cases} 1 \\ 0 \end{cases} \begin{vmatrix} if InvestmentsinHometown > 0 \\ Otherwise \end{vmatrix}$$

$$SavingsAccount \begin{cases} 1 \\ 0 \end{cases} \begin{vmatrix} if Saving > 0 \\ Otherwise \end{vmatrix}$$

The *economic significance* of probit regression results, referred here to how big or small (i.e., magnitude) the treatment effect is, was determined through marginal effects (Bellemare 2016; Kachitova 2013).

Qualitative analysis: Case study comparison

Rich interview and documentary data have allowed researchers to provide municipal-level analyses of local economic competitiveness. Determined here were: a) local governments' efforts to manage their investment climates; b) the culture and norms of residents that influence community relations and economic activities; c) the locations of entrepreneurial and financial intermediation activities; and d) households' financial decision-making. Interview and documentary data were synthesised with the help of data triangulation.

Mixed methods analysis: Pilar integration

Mixed methods integration is emphasised in this article to "develop more complete, nuanced, valid and useful understandings" of the phenomenon under study (Plano Clark & Sanders, 2015: p. 178). Meta-inferences (the broader inference coming from both quantitative and qualitative data) form a major product of mixed methods data analysis and integration (Creamer, 2018).

Joint display tables were used to put together quantitative and qualitative data. A specific joint display table was used here: the *pillar integration process* (PIP) (Johnson et al., 2019). The PIP is a technique to systematically integrate quantitative results and qualitative findings during the analysis phase by listing the data; matching the data; checking the data which match and do not match; and making a meta-inference through pillar building (Johnson et al., 2019: 305-306). A PIP table was done per hometown, which was then subjected to another pillar integration process so that researchers can make an overall meta-inference that reflects observations in both municipalities. This overall meta-inference can be termed as a new concept that, as to be presented later, will help theorise the phenomenon under study.

HOMETOWNS' MIGRATION-AND-DEVELOPMENT CONDITIONS, AND MIGRANT HOUSEHOLDS' FINANCIAL CAPABILITIES

According to the Philippines' income classifications of local governments, San Nicolas is ranked at the second-tier after Moncada (first-tier). San Nicolas is sandwiched between two cities in Ilocos Norte province (Laoag and Batac) while Moncada is some 30 kms distant from the province's capital city (Tarlac City). San Nicolas is landlocked but its location is right at the center of the province that is connected by MacArthur Highway. Moncada, a farming town, is in the northmost tip of Tarlac province and bordering Pangasinan province.

International migration

San Nicolas is part of a province with more than a century-old history of overseas migration. The first Filipino workers who recruited for overseas jobs during the 20th century —sugar workers for plantations in Hawaii, United States —come from Ilocos Norte (Pertierra, 1992). Moncada and its residents rode on the tide of Filipino workers seeking work and permanent residency opportunities abroad. San Nicolas has more overseas migrants (N=7,938) plus a higher share of the overseas population against the hometown's total population (21.6%), compared to

Moncada (N=4,653 overseas migrants, or 8.1 per cent of the town's population). Poverty incidence is higher in Moncada than in San Nicolas (Table 2).

[Table 2 here]

Local economic competitiveness

We compare the municipalities using the Philippine government's Cities and Municipalities Competitiveness Index (CMCI), an annual monitor of local governments' economic performance. Data are presented in terms of three major criteria of the CMCI (Table 3): economic dynamism, government efficiency and infrastructure (Luz and Ang, 2013).

[Table 3 here]

On *economic dynamism*, San Nicolas has a more robust local economy than Moncada. The former has more registered businesses, more financial institutions operating locally, and higher labor productivity. The decade-long rise of economic activity in San Nicolas has led 27 financial institutions —banks, cooperatives, microfinance institutions, pawnshops and money changers— to operate there; Moncada hosts 23 financial institutions. San Nicolas has five home-grown cooperatives compared to Moncada's nine, but the latter is more vibrant for cooperativism because two of the largest cooperatives in the province operate in Moncada. San Nicolas enjoys the presence of a shopping mall complex, Robinsons Ilocos, that has helped propagate local enterprise creation.

A careful look at the towns' *governmental efficiency* will reveal nuances on how the governance of these municipalities stimulates entrepreneurship and investments differently. Both San Nicolas and Moncada have been awarded the Seal of Good Local Governance (SGLG) by the national government, at least twice. This recognition gives the impression that their local economies are competitive and investor friendly.

What have been the economic outcomes of this local governance recognition? San Nicolas has collected more local revenues than Moncada, particularly business taxes and real property taxes. More business taxes collected indicate more lively business activities locally. A related development is acquiring necessary permits: San Nicolas requires fewer steps in acquiring business permits than Moncada, whereas it was easier in Moncada to obtain building and occupancy permits.

As for infrastructure, Moncada has paved its entire road network. Resolving flooding issues in Moncada, however, remains a nagging concern. San Nicolas still has some 11.28 km of unpaved roads (especially in mountainous areas). Electricity, water and telecommunication utilities serve households all day even with the usual service interruptions (e.g., once a month, lasting for at least eight hours). Yet only three-fourths of Moncadenian households are serviced by the provincial electric cooperative, and a little more than half are serviced by the local water district. San Nicolas had more automated teller machine (ATM) terminals over Moncada (16 versus three).

Both municipalities have few natural resource endowments, but they attract tourists through man-made structures. San Nicolas promotes itself as a cultural heritage town, capitalising on its terra clay pot making tradition. Moncada's tourist attraction is a complex where the municipal hall, park and auditorium stand beside each other. The Moncada government also prides itself with cleanliness to draw tourists, and with sweet potato (*kamote* in Filipino) as its cultural showcase.

Financial capabilities of migrant households

The household surveys asked questions on financial capabilities (Birkenmaier and Huang, 2014). On financial literacy, over half of respondents in San Nicolas (56.6%) and Moncada (51.1%) claimed to have "satisfactory" skills and knowledge about money. At least half of respondents from both towns learned about money on their own, and at least 40 per cent say they do not need assistance with money management.

Respondents were then asked about their financial practices, allowing us to check if they practice what they claim to know. Nearly 60 per cent of them "know in general" how much money is earned and spent monthly. If their households run short of money (including from overseas remittances), majority of them spend what they have on consumer goods (San Nicolas: 37%; Moncada: 14%). If they have any unspent funds before the next income arrives, at least 40 per cent keep their money at home.

There are more migrant hometown savers and investors from San Nicolas. Nearly a third of those from San Nicolas (30.3%) own savings accounts locally compared to respondents in Moncada (16.2%). San Nicolas also had more migrant household entrepreneurs and investors (63.8% and 68.3% respectively) than in Moncada (37.4% and 36%). San Nicolas benefitted from Robinsons Ilocos. Moncada, a predominantly agricultural town, has limited commercial spaces and continually faces flooding in its southern part.

FINDINGS: INSTITUTIONS, COMMUNITY TIES AND REMITTANCES

Prospects of bounty

Household and hometown economic prospects

Migrant households were asked about their economic situation and current income levels over two reference periods: a year ago and a year from now. Respondents from San Nicolas think their economic situations will be "better" a year from now (54.3%), while those from Moncada think their situation will be "the same" a year from today (46.2%). San Nicoleños also think their household incomes will be "better" 12 months from now; Moncadenians think these incomes will remain "the same" a year to today.

What about their hometowns' economic growth? Unsurprisingly, majority of San Nicoleño respondents think economic growth became "better" 12 months ago and will become 'better' a year after (the latter response being

the same for Moncada's respondents). The survey results being said, some interviewees did feel the level of economic progress —like how Robinsons Ilocos helped expand a male store owner's profits [SN11], and Moncada's buoyant farming and poultry-related activities [M67].

Trust in people, families and local institutions

We then asked respondents how much they trust townmates and groups locally. At least three-fourths of these migrant households trusted their municipal governments the most, followed by their village (or *barangay*) governments (Table 4). Neighbors and other townmates came out as the least trusted. It seemed that the municipal governments' recognitions helped build citizens' trust unto local leaders' overall efforts to manage local affairs well [SN10 in San Nicolas, M25 in Moncada]. Households were also asked which specific family members they trust more regarding investing back home. Respondents trusted *children* the most.

[Table 4 here]

San Nicolas embraces Ilocano culture, as do most of Moncada's households of Ilocano origin (with 94% of Moncadenian households being Ilocano). Ilocanos have imbibed two cultural traits, these being major local "institutions": *kuripot* or frugality (Andres, 2003), and *kaaruba*, a neighborhood form of kinship (Jocano, 1982). Being *kuripot* means people save resources while they prioritise basic needs (Andres, 2003). *Kaaruba* highlights neighborhood relationships in exercising reciprocity (Jocano, 1992), ensuring the Ilocano "a reliable source of assistance in times of need (while s/he) is expected to extend assistance to others" since that neighbor is "your sibling or relative" (Jocano, 1982: 200-1). In spite of *kaaruba,* neighbors and other townmates came out as the least trusted.

Townmates with no family members abroad visibly saw the improved economic lives of migrant households who, in return, have felt the usual warmth, solidarity, and generosity from non-migrant townmates (as interview

answers revealed). In both municipalities, however, non-migrant townmates envy the positive economic fortunes of remittance owners —and some even provide negative comments on the former:

> "They would say, 'That family buys those things first, but their house remains the same.' And when you carry a large shopping bag, they will say 'They were able to buy again. It has been how many years that their mother is overseas, and they haven't repaired their home' ... You will feel troubled because you just bond with your family weekly or monthly. You can't do away with those comments from others." [SN23, 36-year-old wife of a tricycle driver in San Nicolas]

> "They think we're getting rich because we have loved ones abroad. 'You have a motorcycle, a nice house, and appliances.' But little do they know our life is hard too; not all the time we get the remittance." [M23, 35-year-old *sari-sari* store owner in Moncada]

In response, migrant households in San Nicolas exhibit kindness and humility out of *kaaruba* (Andres, 2003), help townmates wishing to work overseas, or lend them money. Some Moncadenian remittance owners ask for townmates' help to show that they remain in solidarity with them while trying to be unassuming. In the end, however, these strategies hinge on how remittance owners deal with others:

> "In my neighborhood they will borrow money from you, but up to that point only. It's not that they will look up highly at you because 'you got rich.' And you still socialise (*nakikisalamuha*) with them… They at least repay their debt to me. It doesn't sound nice that others get envious at you. I like to relate with them as friends." [M25, 64-year-old female entrepreneur in Moncada]

> "The biggest problem is that my fellow villagers … all who are 'close' to me, had borrowed money from me … My villagers think I don't need money; their loans with me are for three or four years now … Anyway, they are your neighbors and relatives; they think I don't need money. That's why my daughter

abroad scolds me: 'Do noot lend any more money, Papa.' I don't collect their debts. It is up to them if they want to repay me or not." [SN10, male community leader in San Nicolas]

Community relations matter, however, when migrant households engage in economic activities. In San Nicolas, some migrant households join a rotating savings and credit association (ROSCA), a neighborhood savings group for women (*among* in Ilocano) that distributes returns according to a set schedule (Jocano, 1982). In Moncada, entrepreneurship in the immediate villages becomes a tool to relate with townmates and to earn for the business venture [M23, store owner whose husband works in Brunei Darussalam].

Probabilities of hometown investing, entrepreneurship and financial inclusion

We tested probabilities that households save, invest and do business in their hometowns. Their use of remittances for business (Model 1), investment (Model 2) and savings account ownership (Model 3) accounted for some explanatory and controlled variables. Variables were selected based on two criteria. The first criterion covered the results of a correlation analysis of all variables. Those that were significant were then compared with previous literature (e.g., Amuedo-Dorantes and Pozo, 2005; Brahmana and Brahmana, 2016), making this the second criterion. A total of 20 variables were included in the final probit regression model. Three outcome variables — business ownership, investment and savings accounts ownership— are *dichotomous* variables. Explanatory and control variables then carried a combination of dichotomous, categorical and/or continuous variables.

Explanatory variables cover four sets of variables that are less or are unexplored in the literature. Firstly, **Rk** (*risk profiles*) is a vector of risk dispositions by respondents (applying prospect theory [Kahneman, 2011]; perceptions on risk taking). Dispositions to risk may likely influence remittance usage or non-usage for productive purposes. Secondly, **Fs** (*family financial socialisation*) is a vector covering family discussions about money and handling money. Thirdly, **EP** (*economic prospects in hometown*s) covers prospects surrounding hometown economic growth and households' financial conditions there. It is hypothesised that family financial interactions help

remittance households discuss household finance concerns, and guide decisions on where best to use incomes given economic growth of their hometown. Finally, **ST** (*social interactions and trust*) is a vector of respondents' social interactions and of their trust with family members and with people and institutions locally. The context of trust here is if migrant households are to be asked by loved ones and by community members to invest in San Nicolas and Moncada. With community ties and functional organised institutions such as local governments and financial institutions being important locally, these factors may encourage remittance hometown investing.

Control variables cover two vectors. **D** (*demographic variables*) is a vector representing the demographic and remittance characteristics of respondents. **Fl** (*financial literacy*) is a vector of respondents' level of knowledge and skills about handling money. Previous studies have looked at the roles of these variables (Author 1; Author 3; Amuedo-Dorantes and Pozo, 2005) to rural hometown investing, with varying results depending on the location.

Probit results for San Nicolas

Table 5 shows that results for San Nicolas yielded more significant variables than those for Moncada, as explanatory variables under "financial literacy" did not yield significant coefficient results.

[Table 5 here]

- ***Economic prospects***. One household-related variable came out surprisingly significant. Projecting "worse" household economic situations may increase the probabilities of investing by 25.2 percentage points. This implies that challenging household financial situations may compel remittance owners to mitigate economic risks through investment opportunities.

- ***Risk profiles***. No prospect theory-related variables were significant, but two household-level variables under perceptions of risk were significant. The most important of these two variables is being "a real risk-taker,"

which increases probabilities to own businesses and to invest by 28.3 and 25.6 percentage points, respectively. Being "cautious" also decreases the probability of savings account ownership by 18.3 percentage points, holding other variables unchanged. Since most survey respondents perceive risks with caution (43.9%), there are possible gains if they make riskier economic decisions.

- ***Family financial socialisation***. Discussing money in the household "very rarely" and "very frequently" decreases probabilities to invest by 25.4 and 32.1 percentage points, respectively, with the other variables remaining constant. "Occasionally" discussing the handling of money increases probabilities for financial inclusion by 21.7 percentage points. These regression results imply that San Nicoleño remittance owners may be selective in discussing the purposes of using remittances with their families.

- ***Social interactions and trust***. Some household, institutional and locational variables were significant under this vector. Under household factors, all loved ones — parents, siblings, spouses, and children — yielded negative coefficients for Models 1 and 2. Trusting parents, spouses and children yielded negative probabilities to invest, implying that investing may not be a matter for migrants to trust their loved ones with. Under business ownership, saying "no comment" to siblings, spouses and children also yielded negative probabilities.

  For variables under locational factors, positive coefficients came out for "other townmates" across the three models, and for "immediate neighbors" in two models. "Much distrusting" other townmates leads to increased probabilities of running a business (24.3 percentage points) and of investing (21.4). On the other hand, trusting other San Nicoleños increases probabilities for savings account ownership by 20.4 percentage points, holding other factors unchanged. For immediate neighbors, "no comment" on other San Nicoleños leads to decreased probabilities of doing business (16.1) and investing (14.4).

Under institutional factors, positive coefficients came out for the municipal government and negative coefficients for financial institutions. “Trusting” and “much trusting” the municipal government increase investment probabilities by some 36 percentage points each, indicating the trust of migrant households to local leaders. On the contrary, having “no comment” to financial institutions decreases business and investment probabilities by 16.1 and 23 percentage points, respectively.

- ***Demographics***. Being married has increased probabilities to do business and to invest by 34.6 and 33.9 percentage points, respectively. Even being a widower leads to increased probabilities of doing business (24.9) and investing (24.1). These results may mean that life-cycle changes provide migrant households with opportunities to expand their incomes beyond receiving remittances. Finally, being a university undergraduate decreased the probability of owning savings accounts by 41.3 percentage points.

Probit results for Moncada

Table 6 shows less significant variables for Moncada; however, a question that employed a principle of prospect theory (Kahneman, 2011) showed a positive coefficient. There were also more positive coefficient results in Moncada than in San Nicolas, including trust to parents. Similar with San Nicolas, no “financial literacy” variables were significant.

[Table 6 here]

- ***Economic prospects***. “Better” prospects of economic growth in the next 12 months surprisingly decreased probabilities to do business and to invest, by 12.9 and 11 percentage points, respectively. The result for this locational variable means that migrant households may have yet to see significant economic changes locally to convince them to invest and do business.

- ***Risk profiles***. The prospect theory-related question (gambling for financial returns from an investment product) was significant. In particular, the answer choice revealing the less risky return (PhP2,000 profit and a profit/loss of PhP500) leads to increased probabilities of savings account ownership by 37 percentage points. To that same question, if respondents choose the "riskier" answer choice (earning PhP4,000 and losing PhP500), probabilities of business ownership increase by 36.6 percentage points. There are thus visible gains for mostly cautious remittance households should they make riskier decisions related to entrepreneurship and financial inclusion.

- ***Family financial socialisation***. More frequent household discussions about money and handling money provide increased probabilities for doing business and investing. For both "discussing money" and "discussing the handling money," the more frequent family discussions become, the more probable that remittance households will do business and invest.

  The most significant regression results came from Model 2. If talking about money and handling money "always," investment probabilities for each of these household-level variables increases by 59 percentage points —the highest marginal effects result for the two municipalities. Discussing money "occasionally" and "very frequently" increase probabilities of entrepreneurship by 23.3 and 24.1 percentage points, respectively. These results underscore the importance of frequent family communication for Moncada on entrepreneurship and investment.

- ***Social interactions and trust***. Fewer household, institutional and locational-level variables came out significant. Under household factors, parents yielded positive coefficients whereas siblings, spouses and children came out with negative coefficients. "Much trusting" parents may make migrant households possibly invest in Moncada. If "no comment" to these parents, respondents may also possibly do business. At least for Moncadenian migrant households, parents seem the most trusted family member for entrepreneurial and investment plans and decisions. In contrast, a "much trusting" remark of siblings, spouses and children yielded

negative probabilities of opening savings accounts. Migrant remitters may not necessarily trust those household members, even including spouses, to place savings in hometown-based financial institutions.

Under locational factors, having "no comment" to other townmates increased business probabilities by 14.6 percentage points; under institutional factors, giving "no comment" to village governments increases investment probabilities by a visible 35.2 percentage points. Results imply that migrants' current relations with townmates may see the latter help them in planned ventures, but that may not be the case with village officials.

- ***Demographics***. Being a female respondent increases probabilities of savings account ownership by just 10.4 percentage points. This result is the only gender-related significant result for both municipalities. Having more income earners in the household also increases investment probabilities, though by only 5.4 percentage points. Finally, being a university degree holder or graduate also produces probabilities to open savings accounts.

Contextualised outcomes can be observed surrounding the interactions of household, institutional and locational factors vis-à-vis using remittances in San Nicolas and Moncada. Depending on individual-and-household level behaviors about money and family relationships, remittance households note the level of progress of their municipalities and the quality of organised institutions and community relationships there. Meanwhile, none of the financial literacy variables were significant in both hometowns —raising concerns that financial knowledge is rendered irrelevant, and remittance households may be mostly relying on intuition when making financial transactions.

Structures and institutions in the hometowns

'Good governance' towns?

The national government had awarded the SGLG to San Nicolas and Moncada at least twice. The SGLG annually assesses Philippine local governments for meeting certain local governance criteria, including *business friendliness* and *competitiveness*. Meanwhile, the Ilocos Norte municipality had won the *Galing Pook* Awards twice[2] (in English, excellent place), a separate local governance award. Both municipalities were also recognised in various areas of local governance: agriculture, child-friendly local governance, environmental protection, anti-drug abuse, business friendliness, local culture and heritage, literacy, and promoting freedom of information. These external recognitions[3] attest to reforms implemented by the two municipal governments, keen on improving various frontline services for constituents. Frontline services also involve reducing the costs of doing business and of providing economic interventions (e.g., livelihood funds, entrepreneurial training, job facilitation, farm inputs and equipment) to residents, including migrant households.

Inter-agency coordination for investing and economic activities

An indication of improvements is the coordination between and among departments within the municipal government to handle the local investment climate, and to roll out economic services (Figure 3). Municipal departments can be grouped into two: The *Business Facilitation Cluster* and the *Economic Activities Cluster.* The first group handles services that ease investors' costs of doing business, such as issuing business, occupancy and building permits, as well as coordinating vendors in public markets. The second group, meanwhile, provides agricultural and non-agricultural economic services.

[2] *Galing Pook* is an annual award, handed out by the nonprofit group Galing Pook Foundation, that recognises specific innovative local projects. San Nicolas won the Galing Pook for constructing small water impounding projects (SWIPs) to catch rain and irrigate farmlands, and for mainstreaming its local culture in the local schools system. *Galing pook* in English means excellent place.

[3] During their annual town fiestas (late December for San Nicolas and early February for Moncada), the mayors told these accomplishments to townmates abroad during *Balikbayan Nights* (*balikbayan* is Filipino for returning overseas Filipino). Doing so gives migrants a feeling of a sense of pride of how their hometowns have progressed over the years.

[Figure 3 here]

Coordination by offices under the Economic Activities Cluster operates when they provide services according to: a) *Target beneficiaries* (e.g. farmers, micro-entrepreneurs, migrant workers, beneficiaries of conditional cash transfer program, agrarian reform beneficiaries); b) *Mandates* that relate to the functions of other units vis-à-vis the business and investment climate, such as job facilitation, livelihood projects, entrepreneurial training, and farming. In a related development, regional/provincial/local units of national government agencies also coordinate and provide support to these offices under the Economic Activities cluster (including national agencies for overseas Filipino workers).

Meanwhile, offices under the Business Facilitation Cluster relate to the collection of taxes, fees (e.g., rental, application processing) and other charges, not to mention those offices here actively coordinate. An external agency helping the Business Facilitation Cluster is the Department of Trade and Industry (DTI) through its *Negosyo* Centers nationwide (*negosyo* means business in Filipino). These centers help owners of micro, small and medium enterprises (MSMEs) register and upscale their businesses. Like the earlier cluster, the Business Facilitation Cluster also gets support from national, regional and provincial government offices.

Policy making on local investing and entrepreneurship

Both towns differed in crafting and updating economic- and investment-related policies. Their local revenue codes, which spell out rules for levying, assessing and collecting taxes and fees, differed in terms of when they were updated. San Nicolas' amended local revenue code was enacted as an ordinance (thus, an enforceable local policy) in 2017; Moncada's counterpart code was freshly revised in 2019, updating its 2005 version. A corollary but important local policy is the local investments and incentives code (LIIC), which spells out benefits to investors such as tax and non-tax incentives. San Nicolas' LIIC is a 2014 ordinance that amended a 2004 version.

Moncada's LIIC, however, is only a municipal council resolution[4], thus rendering itself shorthanded in enforceability.

San Nicolas also has an ordinance on "employment prioritisation" that compels medium-to-large scale businesses to hire 60 per cent of their workers from the municipality, and the remaining 40 per cent from anywhere. Since business process outsourcing (BPO) companies also operate in San Nicolas, this trend helped stimulate demands for transient housing coming from workers outside of the municipality. Residents, including households with loved ones abroad, then constructed transient houses and apartments —providing the local government with additional real property taxes. Both municipalities also created local consultative councils for small and medium-sized enterprises (SMEs) as well as local investment "boards". On the operational side, San Nicolas and Moncada set up business one-stop shops (BOSS) to put together relevant municipal offices (e.g., business permits and licensing, fire department, etc.) to quickly process annual business permit applications.

Improvements in frontline services have thus led to rising demand from residents. The municipalities, however, have visibly enforced certain local policies that entrepreneurs and investors should follow. The most discernible is waste segregation and sanitation: Moncada's local chief executive vigilantly closes poultry and piggery farms that disregard sanitation laws. For its part, San Nicolas enforces a policy of not collecting unsegregated wastes since 2011.

Differences in local economic activities

The differences in the municipalities' business landscapes were found to be significant, with San Nicolas balancing agriculture with urbanisation, the latter marked by the presence of Robinsons Place Ilocos that had triggered domestic tourism, job generation, and local business creation. On the other hand, Moncada's agriculture

[4] No updates to that LIIC have happened as of this writing. This LIIC as a municipal resolution was not applied when Philippine fast food giant Jollibee opened its Moncada branch in February 2019. A Moncadenian overseas couple opened a tourism-related business, but they were not aware of local investment incentives.

remains a stronghold of the local economy, offsetting the constraints of limited commercial spaces, nil available slots in the public market, and flooding.

Moncada's support for farmers particularly excels in rice and corn production, leading to the awards the town has received for rice and corn productivity. San Nicolas is not known for agricultural productivity. Yet given a landlocked topography, the municipal government has constructed at least 14 small water impounding projects that have stored rainwater and have irrigated farmlands.

The towns' agricultural and non-agricultural economic activities thus gave residents at home and abroad various income options. Outcomes of economic development and investment climate interventions by local authorities differed, particularly the following: the local revenues generated; the number and village locations of registered enterprises; the number of financial institutions; and inevitably the local jobs generated. These economic outcomes somewhat matched survey results that there were more entrepreneurs and investors in San Nicolas than in Moncada.

Financial institutions 'reliable' to serve residents?

Both the financial institution and the rural borrower (including those with remittances) are challenged to prove their trustworthiness. It is only during the financial relationship wherein financial institutions realise the money behaviors of remittance owners, as migrant households also become fully aware how "reliable" financial institutions are. The roles of (deposit-taking) financial institutions are highlighted not only because they are among the organized institutions locally. The presence of these financial intermediaries gives cues of how active economic activities are in San Nicolas and Moncada to motivate financial institutions —27 in San Nicolas and 23 in Moncada— to provide credit.

Migrant households display financial behaviors tied to their remittances. It was observed that they have increased capacity to pay off loans, but remittance receipt does not automatically stir their savings habits. Migrants abroad

may be pressured to sustain or increase remittance amounts, especially to meet children's needs and appease the guilt of parental absence. If the migrant household has unpaid debts with financial institutions, the breadwinner abroad writes these debts off and ends relationships with financial institutions. Notably, in San Nicolas, some financial institutions report of migrant households hiding from loan collectors and being ashamed to seek help from abroad.

This is why demonstrating a different, painstaking approach to running a financial institution may elicit the trust of borrowers. This is the case of one Moncadenian financial institution whose office is found in one of the poorest villages (having a scant few remittance households), and with residents reportedly showing listless attitudes. The financial institution hands out farming loans but it requires early repayment by sending reminders to members via mobile phone messaging, especially before harvest time. A surprising outcome was that the financial institution's loan with a national government-owned bank (Landbank) was paid early, and the former even got a rebate. The lesson here, says key informants, is the need to institute a more efficient system for individual borrowers with their financial institution:

> "We wanted to emphasize the importance of what they borrowed. That's not their money; we all borrowed that money… You inject a system that allots amounts daily for loan repayments. We also tell them about self-discipline… They should think of essential things… Over the years they have seen progress, when the seeds, farm inputs and medicines arrive. They were amazed because we don't have those things before. Now they can go to our office and borrow a *cavan* (sack) of rice. That aspect alone helps our community… [As for repaying our loan with Landbank early] We want to give Landbank the message that not all farmers are like its previous borrowers who cannot repay their loans." [discussion group M5]

Migrant households as 'moneyed' investors?

Both hometowns have felt the economic and social influence of overseas migration, in particular the bungalow houses that stood in the middle of rice fields in San Nicolas, or the concrete house with a Canadian flag at an

inner village in Moncada. Local officials, however, do not have accurate information on how townmates abroad spend their money. Publicly, it is through *Balikbayan Night* celebrations[5], staged during annual fiestas, that local government units and non-migrant villagers see glimpses of their overseas townmates' economic success. These celebrations also become occasions for local governments to prod townmates abroad to donate to causes back home, and to report about the socio-economic progress of their hometowns. The latter development matters for temporary migrant workers who wish to return for good. A Singapore-based Moncadenian and a Hong Kong-based San Nicoleño expressed the following:

> "Oh yes, I will still invest in Moncada, starting with our village. I will invest on the needs of farmers like fertilizer, livestock feeds… I also wish to open a rice mill … For me, it's nice to invest in… the centre of town where customers, students are. The church is also there. Those places are near the national highway, isn't it?" [migrant interviewee M1]

> "I will construct a house in my lot there since that is near the church, the public market. That area is also filled with apartments, isn't it? … San Nicolas has had many improvements." [migrant interviewee SN17]

MIXED METHODS INTEGRATION

We have presented the interactions between migrant households and with local stakeholders and the prevailing norms, regulations and cultures in San Nicolas and Moncada. On this score, community stakeholders (including migrant households) essentially try to decipher each other's traits. Organized institutions at home communicate their unobservable attributes to people (Su et al., 2016), and this matters for local governments that spend as much

[5] Moncada started its *Balikbayan Nights* event (as part of the annual *Kamote* (sweet potato) Festival in 2018. San Nicolas' *Balikbayan Night* is decades old, and is marked by the crowning of a "Miss San Nicolas International" (with candidates from each village and from overseas countries).

effort to roll out reforms and improved public services. Financial institutions also exert efforts given their role of providing needed rural credit. Community-based groups also showcase dependability by displaying community solidarity. Seals of approval such as external recognition and community regard may help these institutions relay gestures of efficiency.

Remittance owners reveal their financial capacities just by simply using their remittances, visibly showing their ability to contribute to local development. Using money, however, may not be enough to show their uprightness as community members, as law-abiding citizens, and as financial clients. Local folk and institutions must decipher the qualities of migrant households if they relate well with others.

Information asymmetry prevails on both sides. Local stakeholders often do not have knowledge about the financial and social attributes and behaviors of overseas townmates. For their part, migrants feel handicapped to personally feel any improvements at home given their physical absence. Getting a sense of these local improvements will aid migrants in making sound economic decisions. Both parties then continue sending indications to themselves, hoping to encourage economic activities. Reaching that level of dependability exacts a cost from community stakeholders and remittance owners —not just financial, but also in terms of competence, relational skills and values systems. Whatever information each party manages to obtain then becomes the basis for risk assessment, decision making, and actual engagement. It is here that we will introduce the most important meta-inference of this article.

Migrant households and community stakeholders thus employ ***signaling*** to each other. Signaling covers the costly demonstration of one's attributes in exchange for premiums from involved parties (Su et al., 2016). We adopt signaling as the theory in economics (Spence, 1973) where signalers and receivers bridge information asymmetries to reveal their quality-laden attributes, and eventually win each other's confidence (Raaphorst & Van de Walle, 2020).

The challenge for involved parties is to "(show) their unobservable attributes" using observable mechanisms (Su et al., 2016: 480). For example, shunning corruption in government frontline services bares traits of incorruptible public service (Raaphorst & Van de Walle, 2020). The number and geographic spread of businesses may reveal the ease of doing business locally. Houses constructed or businesses opened using remittances provide hints that migrant households carry "sound" financial behaviors. These "signals" though still do not provide complete information unless parties engage themselves, over a period of time. Eventual engagement already reveals decisions to trust each other (Connely et al., 2011; Raaphorst & Van de Walle, 2020), and that each party conveys truthfulness (Gambetta, 2011). The challenge in sustaining the engagement lies in how parties overcome skepticism to one another (Gambetta, 2011), and in how they show generosity and trustworthiness (Przepiorka & Berger, 2017).

The cost of producing signals is expensive. For truth-tellers, that cost fades over time since they have already spent time, effort, and money on the overall signal they wanted to convey. An example is the annual efforts of municipal governments to meet the requirements of the SGLG. Those parties, however, whose truthfulness may be suspect must spend more time, effort, and money just to prove themselves (Gambetta, 2011).

The decisions of migrant households and stakeholders to make remittances work for local development hinge on their acts of signaling. Even as parties may be somewhat familiar with each other and with the place in which they used to live and work, these parties all try to earnestly become more reliable. Organized institutions, especially the local government, spend as much effort to be credible to earn people's confidence. Remittance households may have to use their earnings, family ties, social networks, and financial knowledge to showcase their dependability as constituents and as financial clients. These parties decide with prevailing asymmetric information and based on the signals they see and feel within their locality and transnationally. These stakeholders then try to mitigate risks given the resources that they have (financial, human, mental) and the observable mechanisms (e.g. human judgment, legal regulations, quality of social relations) they activate. Outcomes of

signaling between migrant households and local stakeholders then reveal how migrants' communities of origin were able to maximize the development potential of remittances.

DISCUSSION AND CONCLUSION

This mixed methods study looked at how remittance households appraise prospects of rural hometown investing given their affinity with people and institutions locally. This article is anchored on new institutionalism; looking at institutional arrangements, local governance conditions and community ties matters in determining the conduciveness of the remittance investment climate (Author 1) in these origin communities of migrants. For a baseline, involved parties largely get indications surrounding their competence and, more importantly, trustworthiness. Remittance households search for these attributes because monetary resources are involved here. Local institutions, especially local governments, know that reducing transaction costs to do business sends messages of a place's investment worthiness.

Analyzed here was the *quality of institutions* of San Nicolas and Moncada in the Philippines. The importance of institutions —that "triad of (commonly known] rules, social structures and values" (Cuevas et al., 2015: 125)— thus extends the things required to make remittances work for local development. The quality of institutions indeed counts. It was found that both municipalities strive to improve the quality of their institutions to foster community trust. The quality of institutions then couples with the geographic nuances these places carry (e.g., topography, connectedness to other markets) to *contextualise* the buoyancy of a migrant's rural origin community.

It is in deciphering these unobservable traits of local stakeholders that they use *signaling*. This migration-and-development concept sees migrant households and community stakeholders sense, send, and receive indications when utilizing remittances for development, given the quality of institutions in a geographic community. In this study's case, involved parties wish to receive *reliable signals*. First, San Nicolas and Moncada show business

friendliness. Second, institutions show their competence and incorruptibility. Third, financial institutions use secure and profitable mechanisms to safeguard customers' money. Fourth, local groups employ shared values and solidarity. Lastly, remittance owners are financially capable and sociable. The community-level dynamics between migrant households and local stakeholders can help explain differences in hometown saving, investing and entrepreneurship by migrant households from San Nicolas and Moncada.

While both migrant households and local stakeholders utilise signaling, stakeholders involved then employ risk mitigation measures when engagements with each other face problems. Local authorities enforce laws and regulations. Financial institutions employ their rules to handle productive and erring borrowers. Migrant households use community networks, prevailing social norms, and migrants' experiences of better systems abroad to assert fair and correct practices for parties concerned. When local systems struggle to keep things in order, migrant households then use remittances to mitigate risks.

The good governance efforts of the two municipalities have led to improvements in frontline basic services and investment climate conditions, amid the contrasting ways that San Nicolas and Moncada regulate and formulate policies on investing and entrepreneurship. In a sense, good local governance by these two municipalities has developed into an "institution" for people to see and feel. Meanwhile, at least in San Nicolas, the cultural norm of being *kuripot* (frugal) is being challenged by the lure of exponential incomes from abroad and desires of improving lifestyles (perhaps induced by the presence of a shopping mall).

Remittance owners therefore bind their economic and financial decisions given prevailing institutional arrangements and community relations. This individual-institution interface is governed by remittance owners' financial knowledge and risk appetites that then meet up with local norms (*kuripot, kaaruba*) and with the rules of organised institutions. As for overseas migrants, since families at home are the former's initial sources of information, frequent communication may help yield better financial decision making and signaling.

Consideration here should be given also to the geographic make-up of the two municipalities, as signals in migrant households' economic decisions.

This article contributes new theoretical and policy insights on maximising the local development potential of remittances. Regardless of the *quality* of institutions in migrants' origin communities, overseas migrants or home-based financial decision makers arrive at ways to capture effective signals and cue their hometown investing. Local stakeholders, for their part, also try to haul signals that townmates abroad are trustworthy and that they help sustain prevailing levels of hometown economic growth. This manuscript also benefits from the use of mixed methods in not only capturing both outcomes and processes of remittances-local development dynamics under a new institutionalist lens, but in formulating the theoretical concept of *signaling.* Future studies on remittances will find mixed methods, even if laborious, a helpful research design to broaden understandings of migration-and-local development dynamics.

This mixed methods study has highlighted the role of *signaling* as a way for migrant households to ensure more harmonious relationships and more beneficial use of remittances within rural communities. Our investigation gives a good measure of empirical support to the thesis that the quality of institutions matter, in efforts to untangle the dynamic migration–development nexus at the community level.

References

Author 1

Author 2

Author 3

Author 4

Author 5

Amuedo-Dorantes, C., & Pozo, S. (2006). Remittance receipt and business ownership in the Dominican Republic. *The World Economy, 29*(7), 939-56.

Andres, T. (2003) *Understanding Ilocano values.* Giraffe Books.

Bangko Sentral ng Pilipinas (2025). Overseas Filipinos' cash remittances. https://www.bsp.gov.ph/Statistics/External/ofw2.aspx

Beebe, J. (2017). Rapid Qualitative Inquiry (RQI): Team-based Assessment. http://rapidqualitativeinquiry.com/reosurces/RQIWorkshop2017.pptx

Bellemare, M. (2016). Metrics Monday: Statistical vs. economic significance. https://marcfbellemare.com/wordpress/11680

Birkenmaier, J., & Huang, J. (2014, January 15-19). *A new framework for financial capability* [Conference session]. Annual Conference of The Society for Social Work and Research, San Antonio, Texas, United States.

Borja, K., & Hall, J.D. (2018). Remittances, institutions, and inequality in developing countries. *Journal for the Advancement of Developing Economies, 7*(1), 18-40.

Brahmana, Ra., & Brahmana, Ri. (2016). The financial planning and financial literacy of ex-Malaysia Indonesian migrant workers. *Acta Oeconomica Pagensia, 24*(5), 47-59.

Conway, D., & Cohen, J. (1998). Consequences of migration and remittances for Mexican transnational communities. *Economic Geography, 74*(1), 26-44.

Creamer, E. (2018). *An introduction to fully integrated mixed methods research*. SAGE.

Cuevas, S., Peterson, A., & Morrison, T. (2015). An analytical framework for investigating complex institutions in climate change adaptation: The Institutional Environment Matrix. In W. Leal Filho (ed), *Handbook of climate change adaptation* (pp. 123-149). Springer. https://doi.org/10.1007/978-3-642-38670-1_18

De Haas, H. (2003). *Migration and development in Southern Morocco: The disparate socio-economic impacts of out-migration on the Todgha Oasis Valley.* [PhD Thesis, Radboud University of Nijmegen]

De Haas, H. (2009). Migration and development: A theoretical perspective. *International Migration Review, 44*(1), 227–264.

Gambetta, D. (2009). Signaling. In P. Bearman and P. Hedström P (Eds.), *The Oxford handbook of analytical sociology* (pp. 168-194). Oxford University Press.

Gudmunson, C., & Danes, S. (2011). Family financial socialization: Theory and critical review. *Journal of Family and Economic Issues, 3*(4), 644-667.

Jocano, F. (1982) *The Ilocanos: An ethnography of family and community life in the Ilocos Region,* University of the Philippines Asian Center.

Johnson, R., Grove, A., & Clarke, A. (2019) The Pillar Integration Process: A joint display technique to integrate data in mixed methods research. *Journal of Mixed Methods Research, 13*(3), 301-20.

Joskow, P. (2008). Introduction to New Institutional Economics: A report card. In E. Brousseau & J-M. Glachant (Eds.), *New Institutional Economics: A guidebook* (pp. 1-19). Cambridge University Press.

Kachitova, A. (2013). *Probit and Logit models*. Econometrics Academy. https://sites.google.com/site/econometricsacademy/econometrics-models/probit-and-logit-models

Kahneman, D. (2011). *Thinking fast and slow.* Farrar, Straus and Giroux.

Luz, G., & Ang, A. (2013, October 1-2). Building regional competitiveness through strong statistical coordination [Conference session]. 12th National Convention on Statistics, Mandaluyong City.

Meador, J.E., & Skerratt, S. (2017). On a unified theory of development: New Institutional Economics & the charismatic leader. *Journal of Rural Studies, 53*, 144-155

Nee, V. (1998). Sources of the new institutionalism. In M. Brinton & V. Nee (Eds.), *The new institutionalism in sociology* (pp. 1-16). Russell Sage Foundation.

North, D. (1990). *Institutions, institutional change and economic performance*. Cambridge University Press.

Pertierra, R. (1992). *Remittances and returnees: The cultural economy of migration in Ilocos.* New Day Publishers.

Peters, G. (2017). *The New Institutionalism approaches.* IPPA Public Policy. https://www.ippapublicpolicy.org/teaching-ressource/the-new-institutionalism-approaches/5

Plano Clark, V. & Sanders, K. (2015). The use of visual displays in mixed methods research: Strategies for effectively integrating the quantitative and qualitative components of a study. In M.T. McCrudden, G. Schraw & C.W. Buckendahl (Eds.), *Use of visual displays in research and resting: Coding, interpreting and reporting data* (pp. 177–206). Information Age Publishing.

Prasetyo, P.E., Setyadharma, A., & Kistanti, N. (2020). Potential of New Institutional Economics for rural community development. *Proceedings of the SHS Web of Conferences, 86*, article 01015.

Przepiorka, W., & Berger, J. (2017). Signaling theory evolving: Signals and signs of trustworthiness in social exchange. In B. Jann, & W. Przepiorka (Eds.), *Social dilemmas, institutions and the evolution of cooperation* (pp. 373–392). De Gruyter Oldenbourg.

Raaphorst, N., & Van de Walle, S. (2018). A signaling perspective on bureaucratic encounters: How public officials interpret signals and cues. *Social Policy & Administration, 52*(7), 1367-1378.

Ray, K. (n.d.) New institutionalism. https://dudhnoicollege.ac.in/online/attendence/classnotes/files/1653320659.pdf

Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics, 87*(3), 355-374.

Su, W., Peng, M., Tan, W. & Cheung, Y-L. (2016). The signaling effect of corporate social responsibility in emerging economies. *Journal of Business Ethics, 134*(3), 479-491.

Taylor, J.E., Arango, J., Hugo, G., Kouaouci, A., Massey, D., & Pellegrino, A. (1996). International migration and community development. *Population Index, 62*(3), 397-418.

VanWey, L.K. (2007). The power of home: Remittances to families and communities. In S. Pozo (ed.), *Immigrants and their international money flows* (pp. 123-147). W.E. Upjohn Institute for Employment Research.

World Bank (2015). *World Development Report 2015: Mind, society and behavior*. World Bank.

World Bank (2023). *Migration and development brief 39: Leveraging diaspora finances for private capital mobilization*. World Bank.

Table 1. Summary of data gathering activities

Quantitative design and method employed: Household surveys

Municipality	Respondent-groups		Sampling methods employed
	Migrant households	Non-migrant households	
San Nicolas (24 villages)	221	251	*Quota and referral sampling*, covering all villages (sample determined through statistical power — confidence interval of α = 95 percent and 0.5 power [medium effect size])
Moncada (37 villages)	222	212	

Qualitative design and methods employed: Rapid qualitative inquiry (RQI)

Municipality	Respondent-groups			Secondary data analysis
	KIIs / FGIs with local stakeholders	KIIs / FGIs with overseas migrants	OCIs with surveyed migrant households	
San Nicolas (24 villages)	27 KIIs: 27 pax 9 FGIs: 68 pax	4 FGIs, 1 KII (9 from Hong Kong and 1 seafarer)	24 pax	74 document sets
Moncada (37 villages)	27 KIIs: 27 pax 9 FGIs: 29 pax	2 KIIs (1 apiece from Singapore and the USA)	35 pax	88 document sets
Sampling methods employed	*Key informant sampling*	*Referral sampling*	*Nested sampling* (from household survey)	*Maximum variation sampling*

Acronyms: KIIs – key informant interviews; FGIs – focus group interviews; OCIs – object-centered interviews

Table 2. Profiles of the municipal research sites

Geographic, demographic and migration profiles	San Nicolas, Ilocos Norte	Moncada, Tarlac
Founding year	1584	1875
Provincial location	Ilocos Norte (capital: Laoag City)	Tarlac (capital: Tarlac City)
Distance to capital city (km)	3.0	30.4
Total land area (km^2)	60.11	85.75
Number of villages (*barangays*)	24	37
Income classification	second income-tier (PhP45-55 million)	first income-tier (> PhP55 million)
Municipal population	36,736 (2015)	57,787 (2015)
Population growth rates	1.86% (2000), 0.64% (2010), 1.35% (2015)	1.53% (2000), 1.08% (2010), 0.54% (2015)
Regional groupings of residents	*Ilocano* (Ilocos region)	*Ilocano, Pangasinense* (from Pangasinan province), *Kapampangan* (from Pampanga province)
Total overseas migrants	7,938	4,653
Temporary migrants (as of Sept. 2017)	2,815	3,314
Permanent migrants (1988-2015)	5,123	1,339
Share of overseas migrants to municipality's population (%)	21.6%	8.1%
Identified destination countries of overseas migrants from the provinces of Ilocos Norte (including San Nicolas) and Tarlac (including Moncada)	132 countries and territories	180 countries and territories
Poverty incidence		
Poorest households identified for conditional cash transfers, 2017 (%)	7.8	17.5
Small area poverty estimates using the national family income survey, 2015 (%)	7.7	17.7

Sources: Compiled unpublished data coming from the municipal websites of San Nicolas and Moncada; from the Philippine Statistics Authority (PSA), the Overseas Workers Welfare Administration or OWWA (2017); the Commission on Filipinos Overseas or CFO (2017); and the Department of Social Welfare and Development or DSWD (2019)

Table 3. Salient local competitiveness conditions of San Nicolas and Moncada, 2017

Indicator	San Nicolas Population: 36,736 (2015) Land area: 60.11 km^2	Moncada Population: 57,787 (2015) Land area: 85.75 km^2
I. Economic dynamism		
Size of the economy		
Number of annual registered businesses	1,352	511
Amount of money in circulation	PhP2.4 billion, from 24,382 deposit accounts in 11 banks	PhP483.3 million, from 4,300 deposit accounts in 4 banks
Total capital of new local businesses	PhP222 million	PhP20.5 million
Growth of economy and investments		
Gross sales of registered businesses	PhP4.4 billion	PhP268.04 million
Employment		
Number of employees in registered firms	5,591 employees	1,109 employees
Financial deepening		
No. of banks (commercial, thrift, rural)	10	3
No. of cooperatives & microfinance institutions	10	13
No. of pawnshops	7	7
No. of remittance centers	12	9
Productivity		
Labor productivity (gross sales over revenue vis-a-vis the number of employees)	PhP791,318 / employee	PhP241,701 / employee
II. Government efficiency		
Public finance (local revenues)		
Total, tax and non-tax	PhP75.61 million	PhP33.09 million
Business taxes (PhP, % of local revenues)	PhP32.79 million (43.37%)	PhP1.74 million (5.25%)
Real property taxes (PhP, % of local revenues)	PhP11.19 million (14.79%)	PhP2.24 million (13.13%)
Recognition of performance		
Seal of Good Local Governance (SGLG)	Years 2017 and 2018	Years 2017 and 2018
Responsiveness to business		
Has automated business licensing system	Yes	Yes
Business permits – no. of steps to get permits	Three steps, within the day	Five steps, within the day
Building permits – no. of steps to get permits	Six steps, within the day	Five steps, within the day
Occupancy permits – no. of steps to get permits	Four steps, within the day	Three steps, within the day
III. Infrastructure		
Basic infrastructure		
Share of paved roads total land area (km; % to total that are paved)	150.03 km (93%)	94.72 km (100%)
Percentage of households serviced by utilities		
Electricity (24-hour availability)	99.16%	75%
Water (24-hour availability)	99.68%	53%
Technology infrastructure		
No. of cellular phone sites	5	7
No. of automated teller machines (ATM)	16	3
Social and tourism infrastructure		
No. of tourist facilities (hotels, inns, resorts, pension houses, etc.)	7	3

Data sources: Municipalities' administrative data submitted to the Philippine government for the Cities and Municipalities Competitiveness Index (CMCI); documentary data collected in San Nicolas and Moncada

Table 4. Trusting family members, people and institutions in San Nicolas and Moncada (% - those who answered 'trusted,' 'much trusted' and 'very much trusted')

Institutions and people in the rural hometown outside of the family	San Nicolas, Ilocos Norte						Moncada, Tarlac					
	Migrant HHs (N=221)			Non-migrant HHs (N=251)			Migrant HHs (N=222)			Non-migrant HHs (N=212)		
	%	*M*	*SD*	%	*M*	*SD*	%	*M*	*SD*	%	*M*	*SD*
Municipal government	74.7	4.94	0.872	77.7	4.98	0.795	74.3	4.77	0.574	76.9	4.79	0.627
Village government/s	73.8	4.90	0.896	74.9	4.92	0.816	76.6	4.82	0.655	81.2	4.90	0.575
Provincial government	65.6	4.73	1.057	69.7	4.88	0.876	63.2	4.66	0.644	71.2	4.74	0.603
Financial institutions	51.6	4.43	0.935	53.0	4.43	0.954	64.5	4.62	0.674	64.1	4.63	0.694
Immediate neighbours	40.7	4.11	1.026	40.7	4.18	1.032	39.2	4.30	0.700	35.4	4.18	0.831
Town mates who are not neighbours	20.4	3.63	1.060	15.9	3.60	1.001	19.4	3.81	0.790	12.7	3.68	0.827

Family members and relatives in the rural hometown	San Nicolas, Ilocos Norte						Moncada, Tarlac					
	Migrant HHs (N=221)			Non-migrant HHs (N=251)			Migrant HHs (N=222)			Non-migrant HHs (N=212)		
	%	*M*	*SD*	%	*M*	*SD*	%	*M*	*SD*	%	*M*	*SD*
Children	91.4	5.98	1.062	90.4	6.05	1.114	88.7	5.91	0.980	89.6	5.18	0.991
Spouses	87.8	5.84	1.152	90.5	6.04	1.184	75.2	5.32	0.803	81.1	5.75	1.223
Siblings	83.3	5.50	1.135	84.9	5.67	1.145	88.8	5.67	1.250	89.1	5.29	0.778
Parents	84.2	5.55	1.050	86.9	5.71	1.080	69.8	5.11	0.942	77.3	5.15	0.827
Extended relatives (grandparents, in-laws, cousins)	60.6	4.74	1.164	68.5	4.96	1.084	71.7	4.71	0.731	6.97	4.62	0.843

Legend: M – mean; SD – standard deviation

Source: Authors' household surveys 2018-2019

Table 5. Probit model results on using remittances for business, investment and saving in San Nicolas

Variables	Model 1: Entrepreneurship			Model 2: Investment			Model 3: Savings		
	Coefficient	Standard error	Marginal effects	Coefficient	Standard error	Marginal effects	Coefficient	Standard error	Marginal effects
EXPLANATORY VARIABLES									
Economic prospects									
Household situation									
Worse	0.425	0.417	0.129	**1.002****	0.489	0.252	-0.130	0.440	-0.043
Risk-taking profiles									
Risk perception									
Cautious	0.320	0.276	0.107	0.189	0.282	0.063	—**0.547****	0.278	-0.183
Real risk-taker	**0.945****	0.383	0.283	**0.889****	0.395	0.256	-0.339	0.345	-0.118
Family financial socialisation									
Discuss money									
Very rarely	—0.211	0.392	—0.066	—**0.820****	0.395	—0.254	—0.270	0.444	—0.067
Very frequently	—0.908	0.578	—0.293	—**1.016***	0.582	—0.321	—0.252	0.716	—0.064
Discuss handling money									
Occasionally	0.273	0.346	0.082	—0.176	0.346	—0.053	**0.647***	0.343	0.217
Trust									
Household factors									
Parents									
No comment	—0.470	0.302	-	—**0.519***	0.312	-	—0.344	0.300	-
Trusted	—0.135	0.253	-	—**0.459***	0.256	-	—0.080	0.234	-
Siblings									
No comment	—**1.338****	0.661	—0.380	—0.622	0.577	—0.188	0.317	0.654	0.080
Spouses									
No comment	—**0.880*****	0.331	-	—**0.909*****	0.336	-	—0.203	0.338	-
Trusted	—0.386	0.240	-	—**0.819*****	0.246	-	0.019	0.226	-
Children									
No comment	—**1.494*****	0.412	-	—**1.295*****	0.377	-	—0.035	0.359	-
Trusted	—0.229	0.233	-	—**0.820*****	0.241	-	0.074	0.219	-

*Significance levels: *** p < 0.01, ** p < 0.05, * p < 0.1*

Table 5. Probit model results on using remittances for business, investment and saving in San Nicolas (continued)

Variables	Model 1: Entrepreneurship			Model 2: Investment			Model 3: Savings		
	Coefficient	Standard error	Marginal effects	Coefficient	Standard error	Marginal effects	Coefficient	Standard error	Marginal effects
Trust (continued)									
Locational factors									
Immediate neighbors									
No comment	—**0.488***	0.255	—0.161	—**0.446***	0.263	—0.144	—0.185	0.262	—0.054
Other town mates									
Much distrusted	**1.105****	0.559	0.243	**0.873***	0.530	0.214	—0.005	0.399	—0.001
Trusted	—0.217	0.619	—0.069	0.089	0.295	0.028	**0.617****	0.281	0.204
Institutional factors									
Municipal government									
Trusted	0.516	0.442	0.167	**1.071****	0.469	0.360	0.021	0.471	0.007
Much trusted	0.246	0.459	0.082	**1.094****	0.489	0.367	0.025	0.486	0.009
Financial institutions									
No comment	—**0.512***	0.302	—0.161	—**0.787****	0.325	—0.230	—0.105	0.303	—0.031
CONTROL VARIABLES									
Civil status									
Married	**1.014*****	0.293	0.346	**0.977*****	0.289	0.339	0.439	0.316	0.130
Widower	**0.722***	0.378	0.249	**0.678***	0.378	0.241	0.575	0.398	0.177
Number of income earners	**0.413*****	0.095	0.133	**0.339*****	0.095	0.107	—0.073	0.074	—0.024
Education									
University undergraduate	-0.828	0.912	—0.241	—0.806	0.887	—0.242	**-1.320***	0.758	—0.413
No. of observations		221			215			218	
LR Chi^2		108.6			144.2			95.45	
Log likelihood		—69.35			—52.88			—77.08	
AIC		276.7			243.8			292.1	
BIC		499.6			471.0			518.0	

*Significance levels: *** p < 0.01, ** p < 0.05, * p < 0.1*

Source: Authors' migrant household surveys 2018-2019

Table 6. Probit model results on using remittances for business, investment and saving in Moncada

Variables	Model 1: Entrepreneurship			Model 2: Investment			Model 3: Savings		
	Coefficient	Standard error	Marginal effects	Coefficient	Standard error	Marginal effects	Coefficient	Standard error	Marginal effects
EXPLANATORY VARIABLES									
Economic prospects									
Local growth									
Better	—**0.362***	0.189	—0.129	—**0.315***	0.191	—0.110	0.066	0.230	0.015
Risk taking profiles									
Prospect theory: Gamble									
Least risky	0.555	0.502	0.191	—0.107	0.541	—0.032	**1.397****	0.604	0.370
Riskier	**1.028***	0.599	0.366	0.455	0.605	0.157	0.190	0.928	0.032
Family financial socialization									
Household factors									
Discuss money									
Rarely	0.453	0.481	0.134	**0.868***	0.489	0.242	—0.211	0.540	—0.056
Occasionally	**0.771***	0.422	0.246	**0.908****	0.436	0.256	—0.281	0.445	—0.073
Very frequently	0.716	0.437	0.226	**1.005****	0.453	0.291	—0.740	0.485	—0.162
Always	0.944	0.796	0.310	**1.875****	0.908	0.594	-	-	-
Discuss handling money									
Rarely	0.456	0.480	0.135	**0.869***	0.489	0.243	—0.200	0.541	—0.053
Occasional	**0.735***	0.422	0.233	**0.876****	0.436	0.245	—0.259	0.448	—0.067
Very frequently	**0.756***	0.438	0.241	**1.049****	0.454	0.306	—0.722	0.487	—0.157
Always	0.937	0.797	0.308	**1.870****	0.909	0.592	-	-	-
Trust									
Household factors									
Parents									
No comment	**0.818****	0.407	-	**1.148****	0.467	-	—1.412	0.966	—0.417
Trusted	0.636	0.407	-	**0.991***	0.463	-	—1.148	0.953	—0.362
Much trusted	0.516	0.411	-	**1.044****	0.465	-	—1.252	0.966	—0.385

Table 6. Probit model results on using remittances for business, investment and saving in Moncada (continued)

Variables	Model 1: Entrepreneurship			Model 2: Investment			Model 3: Savings		
	Coefficient	Standard error	Marginal effects	Coefficient	Standard error	Marginal effects	Coefficient	Standard error	Marginal effects
Trust (continued)									
Household factors (continued)									
Siblings									
No comment	—0.375	1.002	—0.138	—0.041	1.023	—0.015	—**1.652*****	0.617	-
Trusted	—0.329	0.961	—0.122	—0.150	0.983	—0.053	—**1.340*****	0.436	-
Much trusted	—0.166	0.965	—0.062	0.196	0.987	0.072	—**1.568*****	0.462	-
Spouses									
Much trusted	—0.241	0.232	-	—0.199	0.231	-	—**0.558****	0.314	-
Children									
Much trusted	—0.149	0.218	-	—0.017	0.218	-	—**0.515****	0.266	-
Locational factors									
Other town mates									
No comment	**0.419***	0.218	0.146	—0.237	0.305	—0.082	—0.134	0.273	—0.028
Institutional factors									
Village government									
No comment	0.951	0.703	0.256	**1.128***	0.648	0.352	0.077	0.743	0.017
CONTROL VARIABLES									
Female	0.235	0.21	0.084	0.067	0.210	0.024	**0.464***	0.280	0.104
Number of income earners	0.064	0.075	0.023	**0.154****	0.076	0.054	0.119	0.088	0.027
Education									
University graduate	—0.324	0.402	-	0.029	0.405	-	**1.249****	0.613	-
Observations		214			214			208	
LR Chi²		62.19			79.97			76.25	
Log likelihood		—98.72			—87.97			—35.56	
BIC		529.0			501.6			334.5	

*Significance levels: *** p < 0.01, ** p < 0.05, * p < 0.1*

Source: Migrant household surveys 2018-2019

Figure 1. RICART study sites in the Philippines

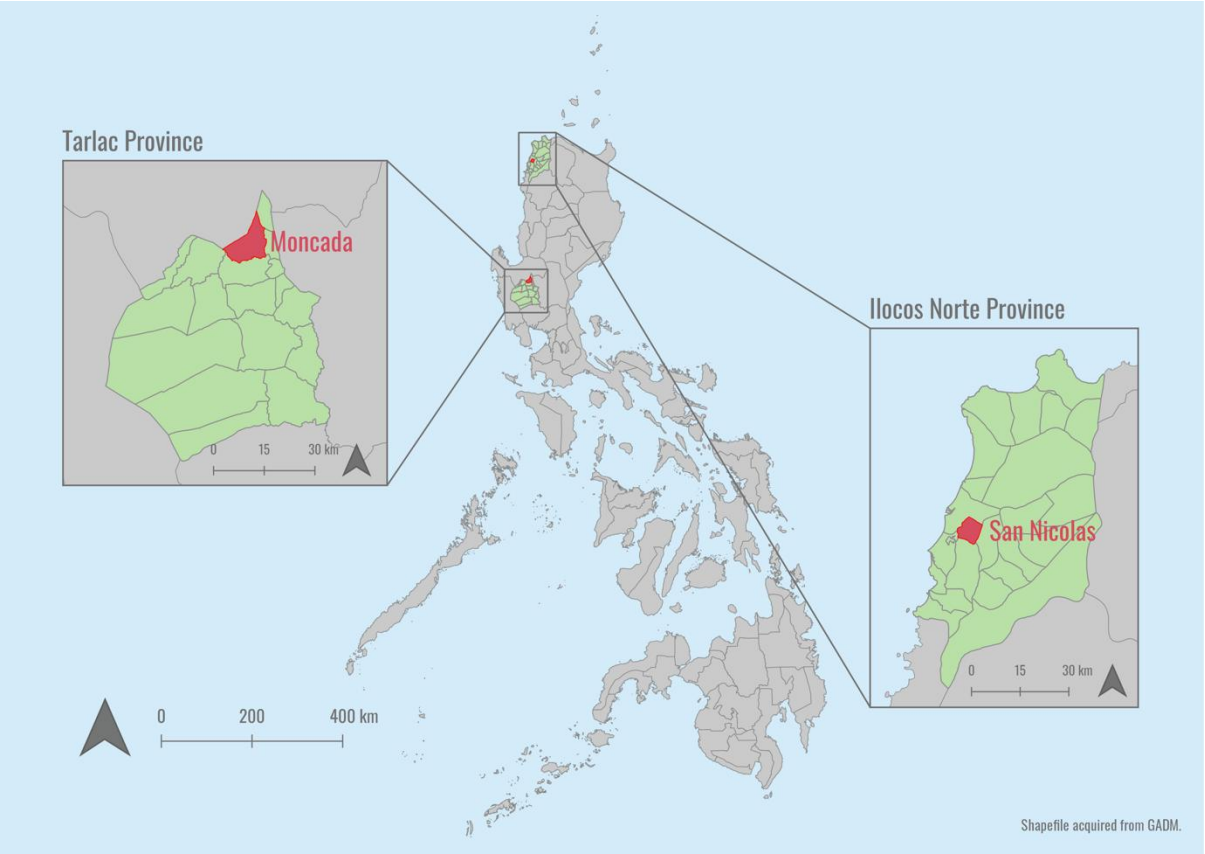


Figure 2. Mixed methods procedural diagram of the study, covering two rural hometowns

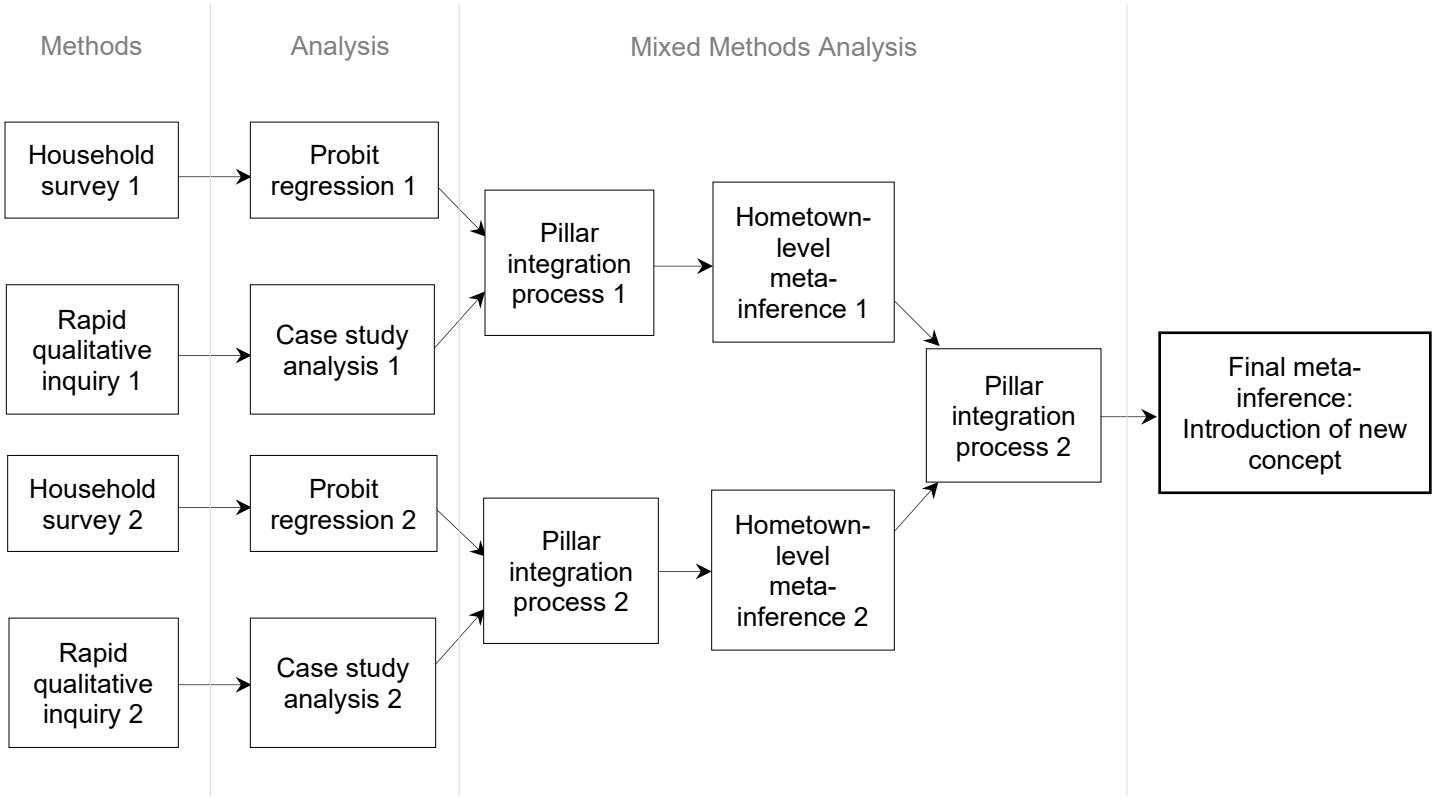
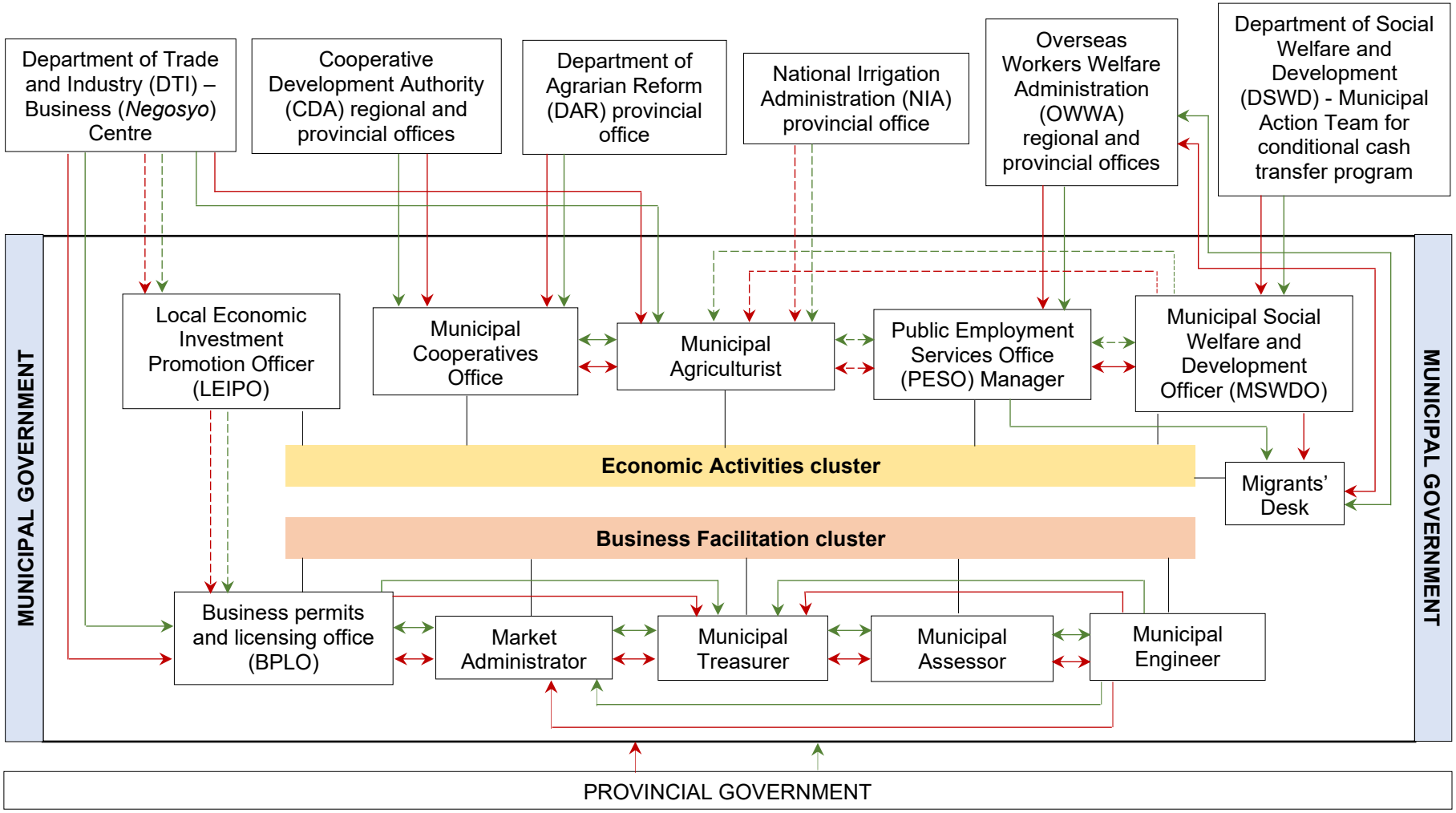


Figure 3. Institutional coordination for investment climate and economic interventions in San Nicolas and Moncada (schematic diagram)



Notes: *Maroon line - San Nicolas; Green line - Moncada; Black line – a certain office is under a specified cluster of offices.*

Solid colored lines denote active coordination between offices, while dashed colored lines reveal passive coordination.