

Remittance usage for rural hometown investing in the Philippines: A mixed methods study

Jeremaih Opiniano^{a,b,*}, Yan Tan^{a,*}, Dianne Marie Rudd^a

^a The University of Adelaide, Australia

^b University of Santo Tomas, The Philippines

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ABSTRACT

This paper analyzes differences in attitudes and strategies for investing and entrepreneurship among families receiving remittances from their overseas emigrants at two rural communities in the Philippines. It examines how these households in the origin country determine how to invest remittances, and the extent to which these decisions are influenced by topographical, socio-economic, political, and cultural factors in their local spatial contexts. How do individual behaviors, along with risk appetite and financial capabilities, interact with such contexts as origin households assess the hazards and likely returns of investing locally? Primary data collected through household surveys in 2018–2019, and a rapid qualitative inquiry methodology, enable us in this mixed methods research to explore the interplay between individual financial behaviors and spatial factors affecting decision making. We can report that migrants' origin households, and local financial institutions and entrepreneurs, employ *relevant costing* in reaching economic decisions, and assess favorable and adverse investment considerations explicitly. Remittance-supported economic development in origin communities relies on enhancements in household financial knowledge, and on interventions—through policy and regulation—to sustain and improve the local investment climate. If these conditions are met, households and local investors and entrepreneurs will make productive decisions through this relevant costing strategy and will contribute resources that promote microeconomic development. Relevant costing is thereby vindicated as a valuable concept, in attempts to unravel besetting complexities in the migration–development nexus.

1. Introduction

Rural areas benefit from remittances sent by their absent emigrants, but these areas typically do not stand out as places conducive to remunerative investment (Korsgaard et al. 2015). Rural households in countries of origin are well adapted to local conditions and have lived experience of dealing with local entrepreneurs and financial institutions. They know where target markets are located and are familiar with the geographic make-up of their communities; but there have been only limited studies on the financial capabilities of these origin households (Clark 2014). Of particular interest are their efforts to take stock of economic and spatial contexts toward deciding whether investing would bring net advantages in amenities and well-being. The existing literature offers few insights into individual *and* spatial contexts that dictate local remittance usage for productive purposes.

This paper works to understand the differences in hometown investing and entrepreneurship by overseas migrants originating from

rural communities, through decisions made locally in those communities. It addresses the central question: *How do individual financial capabilities cognitively lead overseas migrants and their households to invest in rural hometowns while accounting for existing spatial contexts there?* We aim to determine how origin households arrive at decisions concerning the investment of remittances, and how these decisions are modulated by the geographical context. Specifically, we examine interactions between remittance-recipient households (agents) and enterprises and financial institutions (structures) in two rural hometowns in the Philippines: a major origin for international migrants, and among the five top countries for volume of overseas remittances before and during the COVID-19 pandemic (World Bank 2022). We are concerned with the extent to which the financial capabilities of overseas migrants' households lead to investment in rural hometowns, and the types of investment suitable for different locations. Understanding the socio-economic, investment, and geographic conditions of rural communities, and migrant households' interactions with local economic agents, is vital, for

* Corresponding authors.

E-mail addresses: jmopiniano@ust.edu.ph (J. Opiniano), yan.tan@adelaide.edu.au (Y. Tan), dianne.rudd@adelaide.edu.au (D. Marie Rudd).

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an adequate appreciation of investment decision making by households receiving remittances from their overseas workers.

Our study comes at a time when there is growing research into the role of human behavior in development. Using a range of quantitative and qualitative data-gathering methods, the mixed methods approach we adopt here contributes in two respects to the literature. First, as detailed above it generates new insights into how the origin households of migrants assess the risks and benefits of investing at rural hometowns. Second, it presents contextual analyses of rural entrepreneurship and investing (Müller & Korsgaard 2018) to elucidate the nuanced local dynamics that link international migration, remittances, and local development (Taylor et al. 1996). Borrowing from managerial accounting, the concept of relevant costing will help explain why moneyed migrant households use their foreign earnings variously for the whole local community, or for the exclusive benefit of family members left behind. Relevant costing helps select among quite distinct ways forward, especially as people seek to identify long-term costs associated with prospective courses of financial action (Carter et al. 1997).

2. Literature and theoretical review

2.1. Structure–agency interactions and their cognitive demands

Hein de Haas defines agency as the “capacity of human beings to make choices and impose these on the world,” and structure as the “pattern(s) of relations—social class, religion, gender, power, markets, etc.—which constrain or enable the opportunities that individuals have” (in UNU-MERIT & De Haas 2016, 00:31:38). A 2015 World Bank report titled *Mind, Society and Behavior* noted that people’s decision making may be easily influenced by events they notice (contextual cues), networks, and norms in communities, as well as by shared mental models (ways people understand the world, and what works in practice). Even decision making by remittance recipients can be “the product of an interaction between mind and context” (World Bank 2015: 2). Moreover, the report observes that “What individuals perceive as desirable, possible, or even ‘thinkable’ for their lives may be prompted by psychological and social influences” (World Bank 2015: 3). Understanding structure and agency, then, helps us come to terms with processes and experiences of migration (De Haas 2019)—but also with the dynamics of remittances.

Agency–structure interactions in the context of remittances are an understudied theme in remittances research (Page & Mercer 2012), itself an area of increasing salience—informing trade negotiations, aid and development priorities, and similar themes in transnational practice and policy. De Haas (2001: 394) argues that studying these interactions allows the capturing of “social, cultural and economic dimensions of (remittances) and their development interactions.” The interactions exhibit unique dynamics when they operate in rural areas, especially in communities identified as areas of origin for large numbers of overseas migrants.

2.2. Rural geographic contexts for foreign remittances

Migration scholars have long noted that rural-community investment conditions must be conducive, for migrants’ households to enjoy beneficial outcomes from remittances spent locally (Taylor et al. 1996). The geographic, economic, and social make-up of a region will set the stage, for the particular economic and social outcomes of remittances from migration. Rural areas extensively use natural resources for economic activities. They may be sparsely populated, and residents are exercised to maintain local cultural norms (Torre & Wallet 2016). Rural economies generate seasonally produced goods and services from their land and natural resource endowments, through some mix of traditional and advanced technologies, to deliver goods and services; and entrepreneurs rely on consumers in both proximate and distant markets (Marini & Mooney 2006). Regarding rural entrepreneurship, Korsgaard

et al. (2015) have noted that these income-generating activities are embedded locally, operationalizing entrepreneurs’ attachment to the place, its people, and their firms.

For rural enterprises and investments to thrive then, a “well-functioning” rural economy is a prerequisite. This kind of rural economy links its ventures to markets and investors. To foster business development, rural economies need available local labor, a sustainable agricultural sector, functioning financial services, reliable access to infrastructure (electricity, water, roads, communication signals, postal systems), fair regulations on entrepreneurship (business licencing, etc.), and adequate social services (World Bank 2006).

In particular, rural economies can be disadvantaged by “low service levels” in financial intermediation, physical infrastructure, the provision of utilities (power, water), and government services (World Bank 2006). These disadvantages can mean high transaction costs and excessive prices of goods and services, added risks in running a business locally, and limited choices for consumers. Therefore, rural areas are often perceived as offering poor investment opportunities (World Bank 2006); but many consider the potential overall impact of private rural enterprises a game-changer for rural development (Ang & Opiniano 2016). Depending on local attributes, remittances from abroad yield heterogeneous development outcomes (Taylor et al. 1996; De Haas 2003, 2006). The development paths “are significantly different from one another and each regional economy is profoundly influenced by its own cultural environment” (Marini & Mooney 2006: 99).

2.3. Factors determining the financial capability of remittance-recipient households

The efficient use of remittances is dependent on the financial knowledge and actions of households, and of their overseas migrant workers. While setting up favorable local investment conditions is the primary task of government (Massey et al. 1998), improving people’s financial knowledge, behaviors, and practices needs concerted efforts from the state, individuals, families, and interest groups. Financial capabilities are a product of ability and opportunity to act, in ways that contribute to high financial functioning (Burkenmaier & Huang 2014; Sherraden & Ansong 2016). A related definition comes from the World Bank (2013: 3):

“The internal capacity to act in one’s best financial interest, given socio-economic [and] environmental conditions ... encompasses the knowledge, attitudes, skills, and behaviors of consumers [on] managing their resources and understanding, selecting and making use of financial services that fit their needs.”

Financial capabilities may be taken to involve three dimensions: financial literacy (knowledge, skills, attitudes), financial inclusion (access to formal and appropriate products and services), and financial functionalities (options concerning financial actions). Improving the financial capabilities of remittance households (beginning with financial education) may yield positive impacts on migrant households through enhanced decisions, functionalities, or actions. From a policy standpoint, financial literacy interventions promote change in the financial behaviors of migrants and their households at origin (Seshan & Yang 2014). Testing Indonesian migrant workers, Doi et al. (2012) found that training in financial literacy positively affected knowledge, stimulated savings, and diminished loan burdens. Given such literacy interventions, Seshan and Yang (2014) found, Indian migrant workers in Qatar and their spouses at home arrive jointly at financial decisions and achieve savings goals.

In sum, the present paper contributes much-needed research concerning overseas remittances, and how family members in two societies (primarily origin, but also destination) decide their financial use (including investment), together with how their financial capabilities account for the daily practices and lived experiences of people in different geographic locations. Page and Mercer (2012) argue that remitting is a “routinized form of behavior,” encompassing all possible

everyday activities and practices. Their remittance behaviors reveal outcomes of the relations between individuals and institutions. Therefore, agency-and-structure research on remittances compels researchers to:

... observe the accomplishment of daily life ... sometimes the things we see as development outcomes are the consequence of everyday life and are better understood as such ... As a result, those who concentrate on defining what (are) “normal ways of life” ... (rather than focusing on development per se) will generate different accounts of how practices are organized (Page & Mercer 2012: 13).

2.4. Theoretical bearings

Merely looking at the outcomes of remittance usage is insufficient. A broader understanding of geographically contextualized remittances, along with local development analyses, helps us differentiate the overall local contexts that govern decisions and actions in the use of remittances received (VanWey 2007). Such theoretical underpinnings concerning remittances and local development dynamics help in advancing a classic migration theory: the new economics of labor migration (NELM). NELM theory views migration itself as a household decision, and a strategy to address income and credit risks. Primary decisions to migrate comprehend the “mutual interdependence” of household members spanning the countries of origin and of destination, as a “calculated strategy” (Stark & Bloom 1985: 174–175). Remittances from migration are then capable of benefitting households and the immediate community at origin (Taylor 1999). Risk plays a part in NELM, with household accepting migration as a “risk handling” (Stark & Bloom 1985: 175), “risk sharing,” and “risk spreading” strategy (De Haas 2010: 242–243)—or a venture (Le 2011) to address prevailing economic constraints.

NELM’s focus on households implicates a “sophistication and adherence as a theory of migrant agency” (Abreu 2012: 57). However, NELM falls short in explaining underpinning reasons, processes, and contexts for the varied outcomes of remittances. “Context” here pertains to geographic, socio-economic, cultural, and familial factors governing the use of remittances. De Haas (2019) argues that NELM cannot decipher how structures (policies, norms, formalized institutions) mold people’s migration behaviors (perhaps even remittance behaviors). NELM might be insufficient to explain household and possibly institutional and locational factors in remittance usage.

Empirical research is needed for an agency–structure analysis of remittances and local development beyond the household-centric focus of NELM. Some have called for a conjoint analytical approach to people and places (Mata-Codesal 2018; Kusnose & Rignall 2018), to characterize their interactions for a better understanding of decisions. Community outcomes of remittances do not occur in a socio-economic or cultural vacuum (Mata-Codesal 2018). The present study closes an important research gap by analyzing the outcomes and processes of households at the source of migration—their place-oriented economic decisions and estimations—at two rural communities in the Philippines.

3. Data and methods

This study employed a mixed methods approach to examine the investment attributes of rural hometowns and the financial capabilities of overseas migrants’ households in the country of origin. This tool, the Remittance Investment Climate Analysis in Rural Hometowns (RICART) (Global Development Network 2018), was first implemented in 2011

and utilized in six municipalities spanning four rounds of implementation (Ang & Opiniano 2016).

3.1. Study areas

Two towns —San Nicolas and Moncada¹, both on Luzon Island (Fig. 1)— were selected as suitably contrasting case study areas: one community near a city, the other more removed. Distance from a city allows us to capture the relativities of rural and urban economic activities. San Nicolas (land area 40.18 km²; population 38,895) in Ilocos Norte province is located at the center of Ilocos Norte, sandwiched between Laoag and Batac cities. The agricultural town of Moncada (population 62,819) is some 30 km away from Tarlac City, the capital of Tarlac province. In 2017, San Nicolas had more overseas (7,938; 21% of its population) than Moncada had (4,653; 8%). The disparity can be explained by the 115-year-long history of emigration by Ilocos Norte residents, especially to the US and particularly the state of Hawaii. There were more permanent migrants (5,123) than temporary migrant workers (2,937) originating from San Nicolas, compared to 3,314 temporary migrants (mostly female domestic workers) and 1,339 permanent migrants from Moncada. Both temporary migration and permanent residency are prominent pathways for Filipinos seeking to migrate abroad.

3.2. Mixed methods design

This study’s mixed methods design used quantitative and qualitative methods simultaneously. Our RICART research rolled out a survey of households in the two Philippines study areas: migrant-sending households (N = 443) and (N = 463) non-migrant-sending households. We also implemented rapid qualitative inquiry (RQI) (Beebe 2017), which combines interviews with migrant-household heads (drawn from the household survey) and local stakeholders, documentary or secondary data collection, and participant field observations. A team of research assistants gathered data in San Nicolas and Moncada. These assistants included local university graduates in economics, public administration, sociology, and psychology. They received intensive training tailored to the fieldwork before going to each community. Respondents will be referred to in this paper through labels such as “SN3” (SN = San Nicolas) or “M6” (M = Moncada) to keep their identities anonymous.

3.2.1. Quantitative method: household surveys

The survey questionnaire was written in local dialects. Items on financial capabilities (Birkenmaier & Huang 2014) were measured by three sets of variables: financial literacy (with the aptitude and objective question items), financial inclusion (having a bank account), and financial functioning (e.g., saving, investing, and doing business locally). Respondents were also asked questions on risk-taking, testing the principles of prospect theory (Kahneman & Tversky 1979). Questions relating to financial capabilities concerned respondents’ daily rural living (Clark 2014), to capture the geographic context of households’ finances.

The survey sample size (confidence interval of $\alpha = 95$ percent; power = 0.5) covered at least 200 households per municipality (combined migrant and non-migrant). To recruit survey participants, quota and referral sampling techniques were employed, as a complete and accurate list of households with family members working and living abroad was unavailable. Non-migrant households served as a comparison group in the survey.

¹ Moncada is about 150 km north of Manila (the Philippine capital), while San Nicolas is some 484 km northwest of Manila. Metro Manila (i.e., the National Capital Region) is where the migration-related government agencies are located. These government agencies process documentary and contract requirements for overseas work and permanent residency.

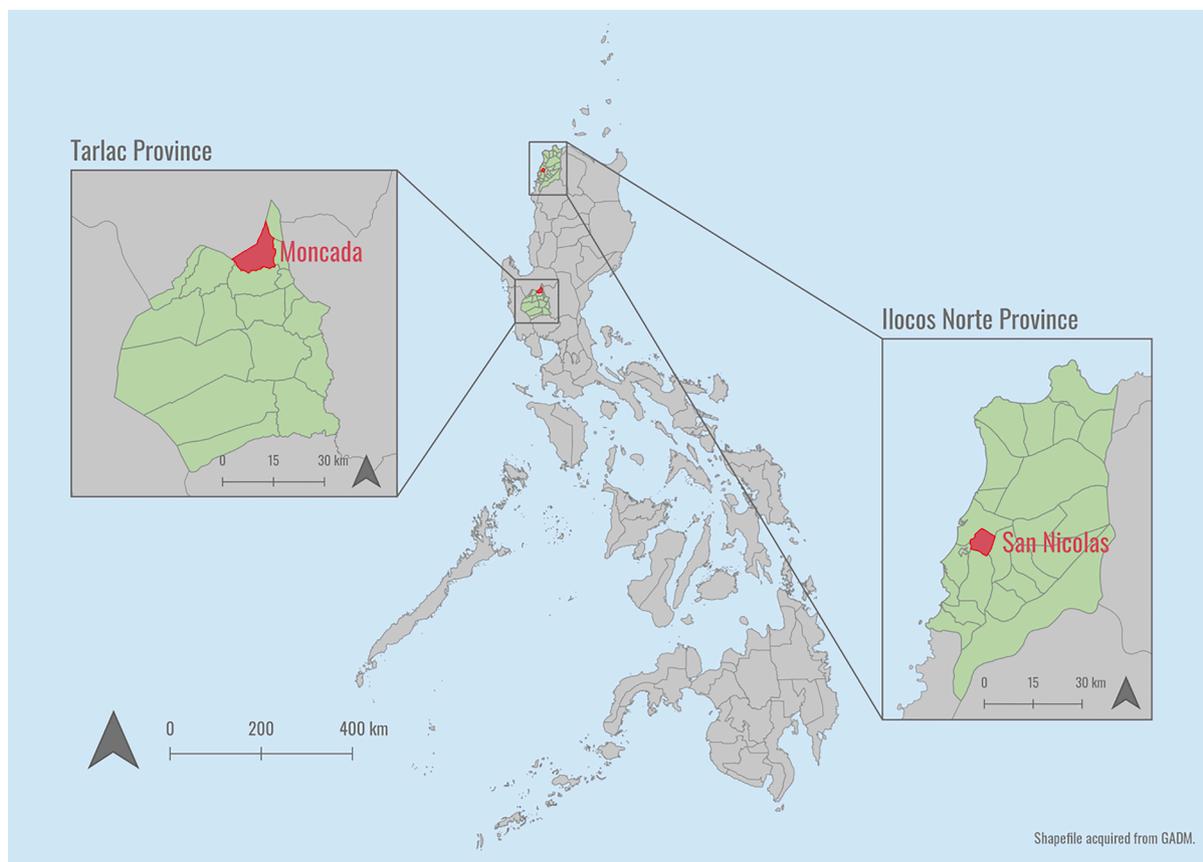


Fig. 1. RICART study sites in the Philippines. Map developed by Bernardino dela Cruz.

3.2.2. Qualitative method: rapid qualitative inquiry (RQI)

Several data-gathering methods were employed under the umbrella of RQI—a team-based, applied qualitative method aiming to quickly capture an insider’s perspective and understanding of local context (Beebe 2017). The two RQI teams in San Nicolas and Moncada interviewed a total of 222 community stakeholders, including municipal government officials, financial institutions (cooperatives, microfinance institutions, rural banks), community groups, provincial and regional representatives of national government agencies helping the two municipalities, associations of migrant households from these communities, and overseas migrant townmates in Hong Kong, Singapore, and the United States. Through nested sampling, the RQI team interviewed some 59 migrant household heads (those who agreed to a second interview). Qualitative interviews asked respondents about family financial interactions and decision making, and their dealings with local entrepreneurs and financial institutions.

Part of the RQI methodology also involved collecting documentary information on investment and economic conditions in the study areas, with 162 documents for San Nicolas (or 74 sets) and Moncada (or 88 sets). With permissions granted by municipal officials, interviews were undertaken with various community stakeholders and financial institutions. Finally, participant field observations were made in 24 villages (barangay) of San Nicolas and 37 villages in Moncada. Observations on the topographical terrain of the two municipalities provided a real-world understanding of where the enterprises, financial institutions and farming areas are located and how residents access hometown-based financial institutions.

3.3. Quantitative, qualitative, and mixed methods analysis

Several analytical techniques were employed to analyze the survey and qualitative data. Survey data covered the financial

capabilities—financial literacy, financial inclusion (savings account ownership), and financial functioning (or actions, particularly in entrepreneurship and investment)—to establish the financial capabilities and risk appetites of surveyed migrant households. Geographic information systems (GISs) were used to show both the entrepreneurial activities within the communities and the internal and external markets that hometown entrepreneurs target. Data on numbers of registered businesses, gross sales of registered firms and business taxes in San Nicolas, Moncada and their neighboring communities were grouped into their respective classes using the Natural Breaks or Jenks method embedded in ESRI’s ArcGIS software. The technique is one of the most typical and valuable data classification methods, able to determine modest or optimum cut-off points statistically inherent in the data (Yalcin & Gul 2017).

A mixed methods approach (Creamer 2018) integrates the “cuts” of survey data and the RQI data (Uprichard & Dawney 2019), to provide a communal display table (Guetterman et al. 2015). Specifically, the pillar integration process (PIP) was used: a four-stage technique that systematically mixes quantitative and qualitative data. First, quantitative and qualitative findings are listed on the two corners of a PIP table. Relevant quantitative results and qualitative findings then get matched. Meta-inferences, generated in the middle column of the table in the final PIP stage, were termed pillar building (Johnson et al. 2019).

4. Empirical findings

First, it is necessary to compare the socio-economic, investment, and geographic conditions of San Nicolas and Moncada, before presenting the financial capabilities and risk appetites of migrant households. These two parts then set the stage for how migrant households, local entrepreneurs, and financial institutions interact and estimate financial risks and opportunities.

4.1. Rural hometowns and economic actors: setting up individual decisions to invest

Research studies (Taylor et al. 1996; Ang & Opiniano 2016) found that the potential use of remittances for local development depends on a locality's available infrastructure, local entrepreneurship and financial services, agricultural development, and how local authorities govern their communities. An individual investor sees unique local conditions as a basis to make situational investment decisions (World Bank 2006), as observed in the two communities under study.

4.1.1. Geographical contexts

San Nicolas has the only shopping mall, Robinsons Ilocos, in the province. The 500 km MacArthur Highway extending north begins in San Nicolas, and facilitates the development of a wide range of large- and small-scale enterprises: retail stores and eateries, car dealerships, a local hotel, 27 banks and other financial institutions, Robinsons Ilocos, and two business-process outsourcing companies. The locale even has 152 ha of commercial space to spare. In contrast, Moncada (land area: 85.75 km²) is dominated by farming, producing high-value crops like sweet potato and onions, and abundant rice (the Philippine staple) and corn. The town's commercial center houses the public market (along MacArthur Highway's Moncada stretch), which cannot accommodate more vendors and entrepreneurs. A remote commercial area west of town, the village (barangay) called Sapang, produces abundant sweet potatoes and onions (volcanic ash spewed 32 years ago by Mt. Pinatubo has improved soil fertility). Many Moncadenian enterprises are micro-enterprises (with capital below Php100,000 or US\$2,000), such as small retail stores. Moncada has 23 financial institutions but no commercial bank. It is Tarlac province's reputed "cooperatives capital" because it hosts two of its largest, which are women's and agricultural cooperatives. Of particular note, Moncada faces two significant constraints related to its topography: there is little commercial space remaining for entrepreneurs (just 8.3 ha), especially near the public market, and the town is prone to flooding due to its basin-shaped terrain.

4.1.2. Regulating the local business climate

Business regulations and processes in both San Nicolas and Moncada were found to be friendly to local entrepreneurs. In less than half a day it was possible to go through all procedures to get a new business and construction and occupancy permit, or to process the annual renewal of these permits. The town's agricultural offices proactively help local farmers and their groups, with almost all town roads paved. However, more households in San Nicolas can access power and water services; San Nicolas also has more cellular phone sites, ATMs, and tourist facilities (hotels, inns, resorts) than Moncada.

Both towns are renowned for excellent local governance, receiving the Seal of Good Local Governance (SGLG) award (San Nicolas twice, Moncada three times). This annual citation² was handed out by the Philippines' interior and local government departments through independent appraisals of local governments' performances. Residents therefore get to know that local government personnel respond to their needs, including services to entrepreneurs and investors. San Nicolas has also enacted more municipal ordinances and council resolutions related to the business climate than Moncada, including a local investment code.

4.1.3. Internal and external markets for entrepreneurs

Sound local governance translates into economic rewards for San

² About 17 of 81 provinces, 57 of 105 cities and 306 out of 1489 municipalities received the SGLG in 2019, including San Nicolas and Moncada (Department of the Interior and Local Government, 2020). For more details on the SGLG, see https://dilg.gov.ph/PDF_File/issuances/memo_circulars/dilg-memocircular-202138_124de7730d.pdf.

Nicolas and Moncada, with opportunities for entrepreneurs to reach internal and external markets. The geographic distribution of business activities in the towns indicates that all 24 villages in San Nicolas have registered firms (Fig. 2), while in Moncada most of the firms are concentrated in the vicinity of the public market and only seven out of 37 villages had registered businesses (Fig. 3).

It was also found that San Nicolas contributes more business taxes to the local economy (Fig. 4), owing to more medium- and large-scale enterprises due to the existence of Robinsons Ilocos, attracting outside markets; local entrepreneurs provide services to customers through ventures such as retail trade and transient housing (for business process outsourcing or BPO workers) that some migrant households manage. The levels of entrepreneurship in Moncada were low compared to neighboring towns (Fig. 5) and were seen to lag economically, in relation to more registered businesses, firms' gross sales, and business taxes. One possible reason is that some Moncadenian entrepreneurs may have established businesses in neighboring towns, or their firms registered in Moncada reach external markets more easily. Some interviewees reported that it is logical for an investor to operate in Paniqui, a town south of Moncada, with a broad commercial area with an access road that leads to a retail center, which does not exist in Moncada given its topography. A respondent expressed:

... Overseas town mates are wiser because their hard-earned money will just wash away if they invest in Moncada, while they are not sure of their investment. I am not promoting Paniqui but if I have to decide, I will go to Paniqui. They have more people and there are some colleges over there. Here in Moncada, there are no colleges. [Female stakeholder interviewee M8]

4.1.4. Interactions with financial intermediaries

Looking at the initial interactions by financial institutions with migrant households, responses from financial institutions revealed three key findings. First, going abroad made clients subscribe to financial products and services, especially remittance services. Second, overseas migrants had broadened their financial capacities. Third, migration-related dynamics affected the regularity of remittance receipts at home, such as timely or delayed salaries, occupations abroad, and salary arrangements for domestic workers. Interestingly, five financial institutions (three in San Nicolas, two in Moncada) offer financial products and services customized to overseas migrant clients. These include loan products for migration expenses and enterprises, competitive time deposit packages, and an equity fund for cooperative membership.

However, financial institutions rapidly take stock of the financial abilities and behaviors of migrant household clients. For example, migrant households either repay on time or delay repayments (usually for two weeks or more) if overseas salaries are late. Some migrant household clients have tied loan repayments to their current enterprises, but these ventures do not grow. In the case of microfinance institutions (MFIs), if loans are not repaid the migrant abroad may write off the debt and stop the loved one's credit line and savings account with the MFI. One financial institution complained that some migrant household clients deliberately elude loan collectors, and two or three loan collectors had to meet in the house of the borrower to collect what was due:

Even clients with remittances ... are hard to approach or are hiding from us. No matter if they live in mansions, it's hard to collect from them. [Stakeholder interviewee SN3]

Some financial institutions noticed that migrants do not know where to invest their savings. That led a cooperative to conduct roadshows in Singapore and Hong Kong and hand out flyers³ to migrant workers for

³ Philippine financial institutions doing overseas roadshows can only distribute information on their products and services. They are not permitted to receive deposits or investments, or to have clients sign signature cards.

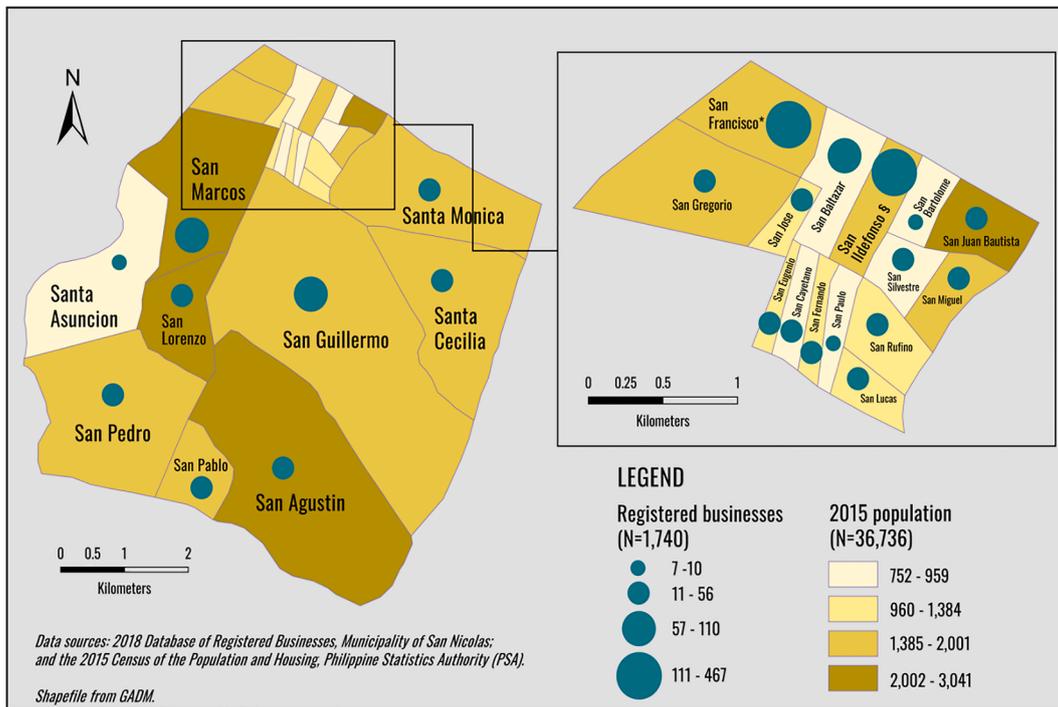


Fig. 2. Registered businesses and their village locations in San Nicolas. Notes: MacArthur Highway stretches within San Nicolas, the ‘entrepreneurial belt’ of the municipality. * Data from Barangay San Francisco includes the following: 217 firms inside Robinsons Place Mall; 21 firms at the Venvi IT Park; 20 firms at 365 Place; and one firm at the Valdez Centre. Thus, there are 208 registered firms in Brgy. San Francisco is found outside the four commercial areas mentioned. § Data from Barangay San Ildefonso include 225 firms inside the San Nicolas Public Market. Thus, there are 108 registered firms in Brgy. San Ildefonso was found outside the public market. Data sources: Secondary or documentary data from San Nicolas. Map developed by Bernardino dela Cruz.

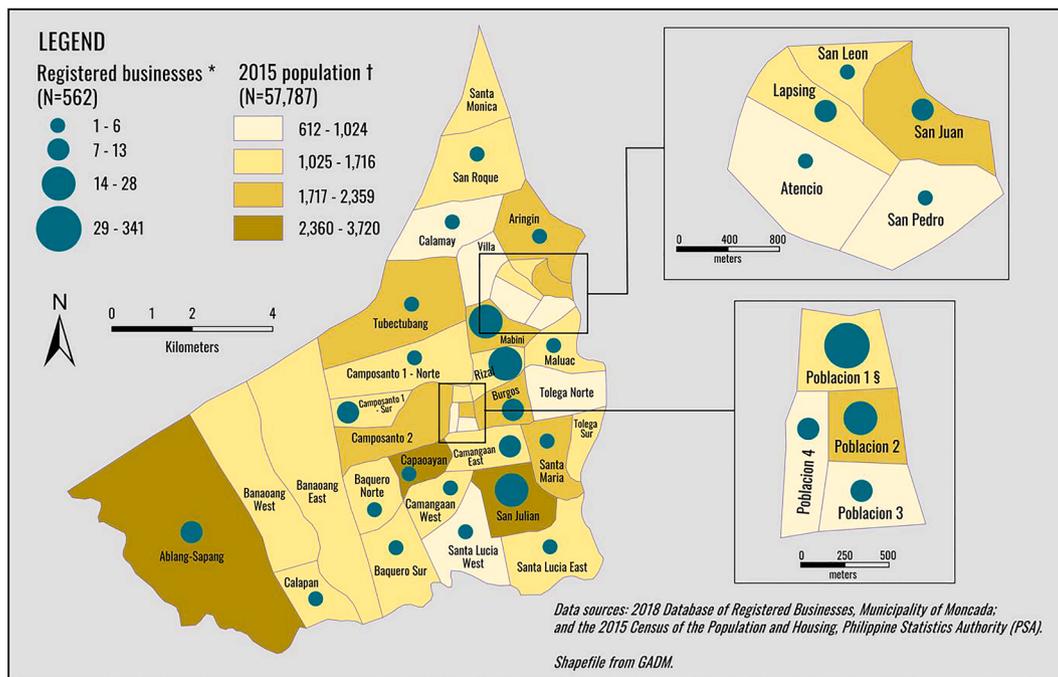


Fig. 3. Registered businesses and their village locations in Moncada. Notes: † The municipal database of registered firms reveals seven of the 37 villages or barangays do not have registered businesses. These villages are: Banaoang East (population: 1,312), Banaoang West (1,548), Camposanto 2 (2,232), Santa Monica (1,674), Tolega Norte (889), Tolega Sur (1,300) and Villa (668). § Data for Poblacion #1 includes 185 registered businesses found inside Moncada’s public market. Thus, 156 registered businesses are found outside the public market but are located within Poblacion #1. * Some 15 registered businesses did not mention the villages or barangays they are operating in. Data sources: Secondary or documentary data from Moncada. Map developed by Bernardino dela Cruz.

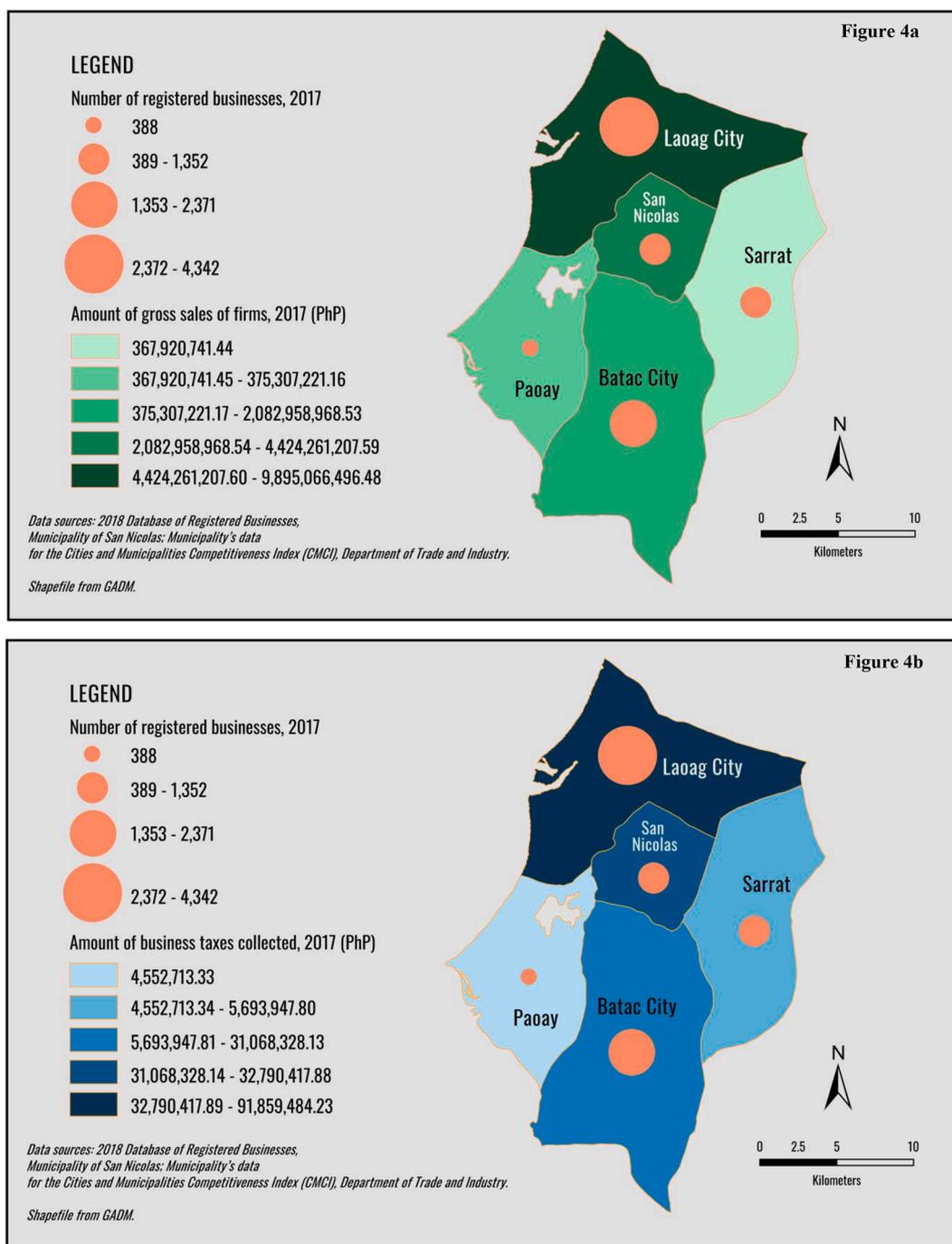


Fig. 4. Indications of business activities in San Nicolas and its neighboring markets. Notes on populations (as of 2015): San Nicolas – 36,736; Laoag City – 111,125; Sarrat – 25,212; Paoay – 24,866; and Batac City – 55,021 Data sources: Secondary or documentary data from San Nicolas. Map developed by Bernardino dea Cruz.

cooperative membership and an equity investment product. Some institutions also noticed that migrant family dynamics affect savings accumulation and loan repayments. One institution even devised a repayment scheme for spouses left behind (especially husbands) when the migrant worker remits money. An interviewee expressed how migration-and-family dynamics affect financial behaviors:

That is why now and then, a client told us: “Please, Madam, I will make my payment through him so that my husband does not get mad at me.” So monthly, we check if the husband goes to the cooperative. Then if the husband does not lodge payment, I ask, “Why did you not pay?” I pity our member who works overseas; her husband is acting out like that.

... The cooperative tries to “program” our migrant worker clients when they repay their loans. Let’s say they will repay PhP7,000 (US \$132.07). We tell them to use PhP5,000 (US\$94.34) to repay the loan and place PhP2,000 (US\$37.74) in their savings account. We always advise them to “add up your savings.” Only a few follow our advice because their family incomes “are not enough.” They consume all their incomes ... Other (overseas Filipino workers) members tell me: “We don’t have savings, Madam, because we spend for our children’s schooling.” “We don’t have savings because we have purchased farm machines.” Well, those are (also) investments. [Stakeholder interviewee M15]

Financial institutions have observed that remittances elicit differing

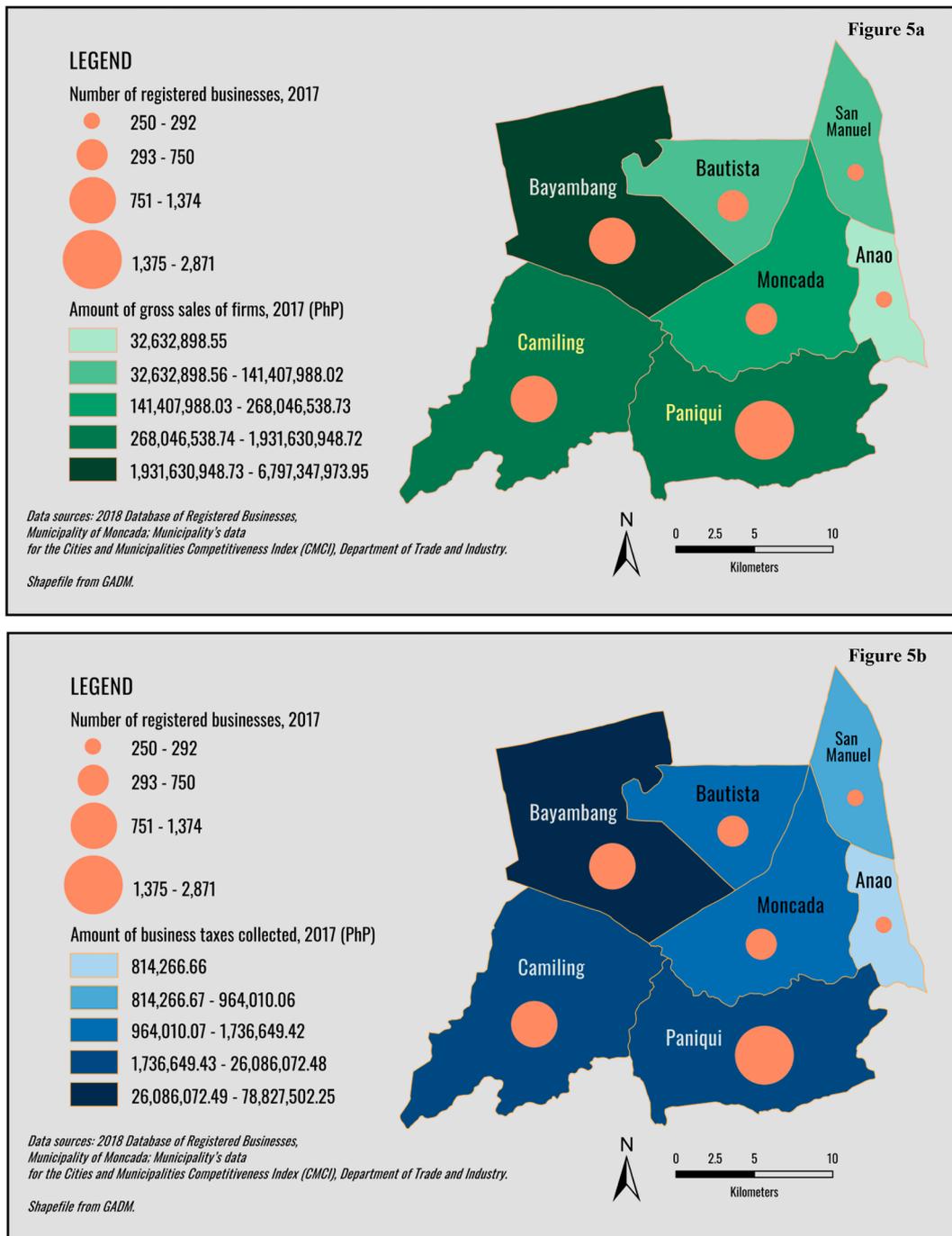


Fig. 5. Indications of business activities in Moncada and its neighboring markets. Notes on populations (as of 2015): Moncada – 57,787; San Manuel – 25,504; Anao – 11,528; Paniqui – 92,606; Camiling – 83,248; Bautista (Pangasinan) – 32,307; and Bayambang (Pangasinan) – 118,205. Sources: Secondary or documentary data from Moncada. Map developed by Bernardino dela Cruz.

entrepreneurial behaviors in migrant households. For example, some discontinued their businesses since remittances are higher than business profits, while others use only a small amount of their remittances to make their enterprises grow.

Migrant household clients of these financial institutions shared their satisfaction or dissatisfaction with these banks, cooperatives, and microfinance institutions. The positive reactions cover how financial products (such as savings accounts) can make migrant households seek entrepreneurial credit, and push for financial discipline and forced savings habits. However, migrant households' discontent ranged from customer services, to not meeting promised returns from financial products, to being pestered during loan collection periods, to the

inconvenience of not getting hold of their money when emergencies arise.

These lived experiences reveal the complexity of interactions among migrant households, entrepreneurs and financial institutions. For us to understand how migrant households have arrived at these varied outcomes of their entrepreneurship and financial product subscription, it is necessary to know their financial capabilities and behavior (Birkenmaier & Huang 2014; Sherraden & Ansong 2016).

4.2. Individual financial capabilities and risk appetites: The cognitive setting that induces remittance investing

Assessing people’s financial capabilities through the household survey provided valuable answers concerning what migrants and their families do with their remittance incomes, their application of the financial knowledge they possess, and how far their risk appetites can take them.

4.2.1. Financial knowledge

Most respondents from San Nicolas claimed “satisfactory” levels of knowledge and skills, while just over half of their counterparts in Moncada did so. Most respondents from both communities learned about money on their own (over 55%) and did not need assistance regarding finance (over 44%). Respondents were asked about their knowledge of three basic finance concepts—interest rates, inflation, and loans—to determine their understanding and application. Only a third of respondents from both towns answered the question on interest rates correctly, indicating difficulties in assessing favorable interest rates for credit or investment ventures (Table 1). Most from San Nicolas knew

Table 1
Financial capabilities by migrant households in San Nicolas and Moncada.

Financial literacy and related financial behaviors	San Nicolas (N=221)	Moncada (N=222)	χ^2 results: statistical differences between the two towns
A. Level of knowledge and skills about money, % (top answer)	‘Satisfactory’ (56.6)	‘Good’ (51.4)	$p \leq .01$
B. Learning sources of information about money, % (top answer)	‘Own experience’ (64.3)	‘Own experience’ (55.0)	–
C. Assistance needed about handling money, % (top answer)	‘No need’ (46.6)	‘No need’ (44.1)	–
D. Knowledge of basic finance concepts (% of those answering correctly)			
• Interest rates	32.6	38.3	$p \geq .01$
• Inflation	70.6	48.2	$p \leq .05$ *
• Loans	62.4	61.3	$p \geq .01$
E. Keeping records of household finances, % (top answer)			
• ‘No, we don’t keep records of everything, but we know in general how much money is received and spent in a month.’	58.8	59.0	$\leq .01$ *
F. Extent of having unspent money from previous earnings before next income arrives, Mean (1=Strongly agree, 7=strongly disagree)			
• Unspent money from previous earnings	$M = 3.48$	$M = 4.48$	–
• Unspent overseas remittances from previous earnings	$M = 2.44$	$M = 5.36$	$p \leq .01$ *

Note: * p value significant at 0.05 significance level.

about inflation, perhaps given their exposure to the prices of goods in the public market versus Robinsons Ilocos. The survey data showed little difference between the two municipalities surrounding knowledge about loans.

When asked if they applied their knowledge and skills about money and finance, almost 60% said that they “do not keep financial records,” but they know “in general” how much money they receive and spend monthly. Differences were observed between the towns suggesting that the recording of finances varies geographically (Table 1). Ilocanos (the ethnic group of Ilocos Norte, plus some from Tarlac) are known to be frugal: *kuripot*, in the Ilocano dialect (Pertierra 1992).

The survey data (Table 1) revealed that respondents may not manage their finances, which they claimed to know; or remittance recipients may carry out certain financial practices that are logical for them, but neglect others. This observation leads us to determine the risk appetites of migrant- and non-migrant households from both towns.

As apparent in Table 2, at least 32% of respondents from both municipalities were “cautious” about taking risks. Statistically significant differences were identified regarding how respondents perceive risk-taking ($p < .01$), suggesting that migrant households possess different risk appetites according to where they live and work.

Table 2 also provides survey items concerning risk-taking, applying the principles of prospect theory (Kahneman & Tversky 1979; Kahneman 2011). Respondents were asked about whether to take a raffle draw or make a gamble on prospective investment returns. Most migrant and non-migrant respondents from both towns chose “assured returns and no losses (then no risks)”. Most respondents also chose the “sure prize” for the raffle question and the “zero-loss” option for the investment product question. The investment product question found statistically significant differences at $p < .01$, implying that remittance recipients from San Nicolas are more risk-taking than Moncada.

4.2.2. Financial inclusion and financial functioning: Their hometown investing

Survey data enabled us to see how far their financial knowledge and risk appetites went. Questioned whether ownership of savings accounts (financial inclusion), and investment or operation of enterprises (financial functioning), it was found that San Nicolas has more entrepreneurs, investors, and savings account holders than Moncada (Fig. 6). Significant differences in business ownership and investment ($p \leq 0.01$) show disparities in local investment conditions. Foot traffic to Robinsons Ilocos presented opportunities to San Nicolas’ enterprise-owning migrant households. Given the topography of Moncada (see 4.1.1), respondents commonly ventured in farming and some ran small retail (*sari-sari*) stores in Moncada’s inner villages (according to municipal government data used to develop Fig. 3, above).

These survey results on savings (financial inclusion), investment, and entrepreneurship (financial functioning) provided us with the outcomes surrounding hometown investing actions by migrant households that respond to prevailing local economic conditions (spatial contexts) and their financial capabilities (individual-level contexts). However, overseas migration remains the primary venture of San Nicoleño and Moncadenian migrant households we surveyed.

4.3. Relevant costing: The process of estimating and providing future costs to remittances-induced ventures

Research (Le 2011; Stark & Lucas 1985; Bowles 1970) has established that earning overseas remittances is a “venture” that recognizes international migration as a risk and as a means to meet economic needs, undertake investment, and run businesses. Remittances for business capital purposes need to have family members scale up their venture: the business encouraging effect (Le 2011). Entrepreneurship and financial product subscriptions thus become “additional ventures” for remittance households (Le 2011).

Local entrepreneurs, financial institutions, and migrant households

Table 2
Perceived risk-taking by migrant households.

How do you perceive risks?	Migrant households #		Non-migrant households	
	San Nicolas (N=221)	Moncada (N=222)	San Nicolas (N=251)	Moncada (N=212)
The respondent (%)				
Cautious	43.9	32.4	45.0	37.3
Willing to take risks after getting as much information	25.3	31.1	24.3	30.2
Avoid risks	15.4	29.3	10.8	28.8
A real risk-taker	13.1	1.8	14.7	1.4
Between avoiding risks and taking risks	2.3	5.4	5.2	2.4
Mean (M) and standard deviation (SD)	M=2.77 SD=1.337	M=2.44 SD=1.252	M=2.87 SD=1.305	M=2.38 SD=1.228
The respondent's family (%)				
Cautious	42.1	35.6	41.4	37.7
Willing to take risks after getting as many information	29.0	31.1	31.5	30.2
Avoid risks	15.4	26.6	11.6	29.7
A real risk-taker	10.9	1.8	9.6	0.5
Between avoiding risks and taking risks	2.7	5.0	6.0	1.9
Mean (M) and standard deviation (SD)	M=2.78 SD=1.311	M=2.46 SD=1.231	M=2.86 SD=1.249	M=2.34 SD=1.207
Situations on risk taking that apply prospect theory				
Best choice of a chance to win #				
"Your family joined a raffle during the annual fiesta in your hometown. Prizes are in cash. Which alternative will you take?"				
PhP5,000 in cash	69.7	73.4	74.5	67.0
- 75% chance to win	17.2	9.0	12.0	14.2
PhP15,000				
- 50% chance to win	2.3	8.1	4.0	8.0
PhP30,000				
- 25% chance to win	0.9	2.7	2.0	-
PhP60,000				
- 5% chance to win	10.0	6.8	7.6	10.8
PhP75,000				
Gamble question ##				
"A cooperative in the rural hometown offered you an investment product. The minimum amount for you to invest is PhP50,000. Which alternative will you prefer, with the product having best-case and worst-case scenarios?"				
- Best case: A profit of PhP500 & Worst case: A profit / loss of PhP0	84.2	77.9	93.2	76.9
- Best case: A profit of PhP2,000 & Worst case: A loss of PhP500	6.8	4.5	2.8	6.6
- Best case: A profit of PhP3,000 & Worst case: A loss of PhP1,000	1.4	1.8	0.4	3.8

Table 2 (continued)

How do you perceive risks?	Migrant households #		Non-migrant households	
	San Nicolas (N=221)	Moncada (N=222)	San Nicolas (N=251)	Moncada (N=212)
- Best case: A profit of PhP4,000 & Worst case: A loss of PhP500	3.2	3.2	0.8	3.3
- Best case: A profit of PhP8,000 & Worst case: A profit / loss of PhP2,000	4.5	12.6	2.8	9.4

Migrant households: χ^2 results — # p < .01; ## p > .05.
Data source: Authors' household surveys in 2018–2019.

all consider many factors before arriving at key economic decisions. Factors for decision making by local entrepreneurs may encompass additional costs to upscale their ventures (similarly for financial institutions), or the additional costs necessary to pursue remittance households as clients. Migrant households have remittance inflows and amounts as major factors for their decision making. Breadwinners abroad bear the future costs of their family's needs, their entrepreneurial capital and their financial product subscription.

Enterprises and financial institutions consider the quality of their products and services, consumer feedback (for enterprises) and the financial behaviors of moneyed clients (for financial institutions). Remittance recipients value their overall welfare and well-being when deciding on "additional ventures." All parties are affected by geographical factors when estimating future costs. Examples include the number of businesses and financial services locally, customer density and traffic, a place's connectivity with other target markets, or even the local culture with regard to money.

These economic agents also use their risk mitigation tools. Entrepreneurs and financial institutions turn to their business experience, regulations, buffer resources, and variable costs. Migrant households primarily mitigate risk by calling on remittances. If these migrant households achieve some success in their "additional" ventures, their entrepreneurial experiences and buffer resources become additional risk mitigation tools. Migrant households with no investments or businesses have recognized overseas remittances as their stable, solitary venture.

All these dynamics explain why migrant households do or do not save and invest in their rural hometowns, not to mention that unique conditions in hometowns give rise to different outcomes of remittance use. Entrepreneurial and investing estimations by migrant households in San Nicolas consider the buoyant local business landscape, while in Moncada (with its limited commercial spaces) agriculture enterprises influence some remittance recipients' entrepreneurial and investing decisions.

When migrant households, entrepreneurs, and financial institutions come to terms with each other's utilitarian objectives, they all employ decision-making processes and tools to ascertain risks and maximize opportunities. As noted earlier, these interactions can be described metaphorically by borrowing from managerial accounting the concept of *relevant costing*, defined here as a decision making and risk assessment process to ascertain the future costs necessary to commence and sustain additional ventures induced by overseas remittances.

In accounting, relevant costing aims to compare alternatives that help make sound business and investment decisions. These future-oriented costs differ among alternatives (Carter et al. 1997; Nurre n. d.), and these costs matter in the decisions that are made. Relevant costs represent future cash flows (expenses) that cover the direct outcomes of an economic decision. Relevant costing also involves adding future costs and decreasing opportunity costs, both of which lead to revenues (ACCA Global n.d.). Relevant costing also includes factors such as a place's level

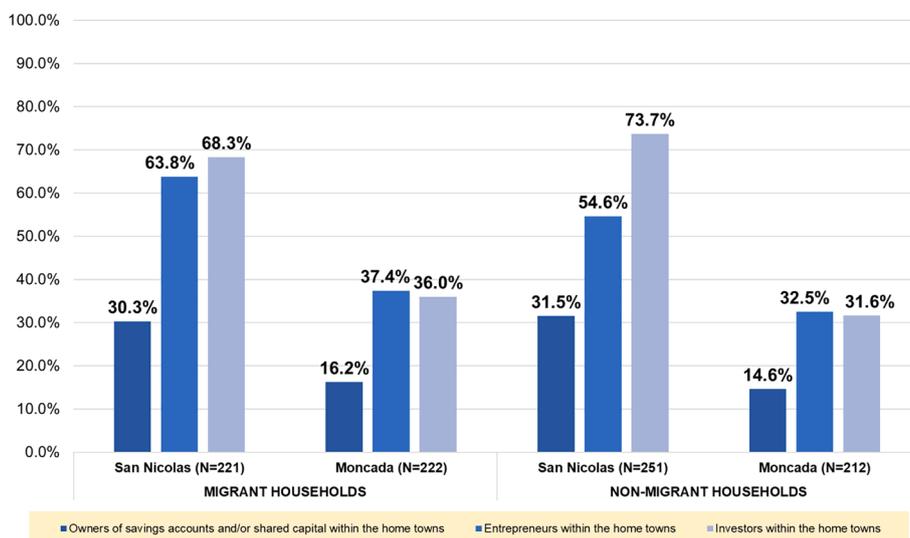


Fig. 6. Migrant household savers, entrepreneurs and investors in San Nicolas and Moncada: Those who said ‘yes’ (%). For migrant households: Savings account ownership, Entrepreneurship* and Investment* — $p \leq 0.01$ Source: Authors’ household surveys in 2018–2019.

of commercial activity. Entrepreneurs and financial institutions take stock of the quality of their products and services, as well as customer relations and other matters. Remittance households consider the family’s well-being, since their primary aim is earning foreign remittances. And if migrants sending remittances find their additional ventures fruitful, they are likely to increase money transfers to loved ones: the business encouraging effect (Le 2011). Failure to secure additional ventures, however, may pose risks (debt, financial stress, family conflicts).

4.3.1. Hometown case studies of relevant costing

Table 3 shows relevant examples of costing actions by migrant households, entrepreneurs, and financial institutions in San Nicolas and Moncada. These demonstrate that relevant costing could become a valuable tool if migrant households equip themselves with better financial knowledge and skills. The economic players determine the less risky-yet-propitious choices, and opportunities to gamble on engaging in other ventures. Positive and negative outcomes of relevant costing actions can be distilled from these cases.

Some migrant households have gained entrepreneurial success, and overseas remittances provide additional business capital as forms of relevant costs. For example, a sidecar venture was undertaken by the children of a Singapore-based domestic worker from San Nicolas, extending now over other provinces [migrant household interviewee SN58]; and the opening of a resort by a dual citizen in Moncada [migrant interviewee M13]. The business encouraging effect (Le 2011) was demonstrated in both cases, with prospective overseas earnings serving as future costs. In contrast, one financial institution claimed that migrant household borrowers were relying more on remittances and less on business incomes [financial institution interviewee M1]. These borrowers may not have the time or skills to expand their businesses, as family duties take priority. In effect remittances from abroad being used as buffer capital and to meet loan repayment can become wasteful relevant costs.

Two case studies prioritized family rearing “venture” bankrolled by remittances over financial products and services to which they were committed. Some financial clients, who could not keep up with loan repayment and interest rate accruals, needed their migrant breadwinners to fully repay the loan [financial institution interviewee SN3]. One financial institution employed a different approach: programming a “repayment-and-savings scheme” for migrant households struggling to repay their loans. Another financial institution claimed that a considerable portion went to loan repayment, and the remainder to the

member’s forced savings account [financial institution interviewee M15].

Financial institutions were lucky if their migrant household borrowers were diligent in their loan repayments, and unlucky if these borrowers defaulted and were hard to reach. An informant from one of these institutions said:

You are told they do not have money, but they still manage to buy things themselves. They [migrant household clients] do not dress up in cheap clothes, yet it is hard to collect repayments from them ... Other clients with loved ones abroad are shy to admit they have family members overseas since these clients in San Nicolas are ashamed of seeking help from abroad to repay loans. [Male stakeholder interviewee SN3]
Some overseas Filipino worker members repay their amounts correctly. Then sometimes, they will call us to borrow again since they plan to use the money for a sibling who runs a farm or a business. “I will be the one to pay,” one OFW member told me. Only about two percent of these members have repayment problems. [Female stakeholder interviewee M15]

These responses show that relevant costing reveals the bounded rational and the rational behaviors of migrant households, entrepreneurs, and financial institutions. Each transacting party tends to either go on with their ventures (let businesses and financial products proceed quietly without making any extra effort) or cease hometown ventures that incur losses. Both remittance households and overseas breadwinners face challenges in accomplishing effective relevant costing actions and decisions. For their “additional ventures” to succeed, migrant household heads at home and breadwinners abroad need to acquire suitable financial knowledge or entrepreneurial skills. The successful cases shown in Table 3 reflect somewhat remittance recipients’ knowledge and skill proficiency in finance and entrepreneurship.

5. Discussion and conclusion

It is clear from the analysis that both geographical and household contexts are vital to an understanding of the use of overseas remittances for entrepreneurship, investment, and savings, in the rural hometowns of Filipino overseas migrants. Employing contextual analysis on entrepreneurship-related studies as developed by Müller & Korsgaard (2018), considering both individuals’ financial capabilities and risk appetites (agency) and the socio-economic and investment conditions of rural hometowns (structure) provides a better explanation of the

Table 3
Examples of relevant costing in San Nicolas and Moncada (entrepreneurship and financial intermediation).

Hometown	Remittance households and entrepreneurs	Remittance households and financial institutions
San Nicolas, Ilocos Norte	<p>Case 1: Children at home prodded their domestic worker-mother in Singapore to finance a venture on buying and selling sidecars. The household sells sidecars to three other provinces. The children have another venture: selling afternoon snacks on the streets. The mother continued sending additional capital. [female household interviewee SN58]</p> <p>Case 2: A mother manages a small retail store, a small farm, and a piggery. She also sells roasted peanuts and charcoal (the latter earning her PhP39,000 weekly). On the side, she acts as an informal money lender. Apart from receiving remittances from a daughter in Singapore, the mother uses some remittances as added capital for some businesses. [female household interviewee SN27]</p>	<p>Case 3: Some migrant households do not admit to having family members working and living abroad when they are approached by loan collecting agents. To avoid non-performing loans, the financial institution continues serving these borrowers amid their attitudes toward repayment. [financial institution representative SN3]</p> <p>Case 4: Only two migrants availed a financial institution's migrant-tailored product that allows them to save, avail of accident insurance, and be given interest-rate discounts for prospective loans. Unless marketing efforts and migrant client outreach accelerate, the financial institution may discontinue offering this product in San Nicolas. [financial institution representative SN4]</p>
Moncada, Tarlac	<p>Case 1: A dual citizen opened a tourism-related venture, using years of savings as well as pension funds from her adopted country. She runs the firm full time, anticipating higher returns in the medium term. The hometown is not a renowned tourist destination, a risk this Moncadenian took. [female migrant interviewee M13]</p> <p>Case 2: Few clients use remittances for businesses. The prevailing ventures thus remain micro-enterprises in scale (e.g., small retail stores), with no guarantee of business expansion. [financial institution representatives M1]</p>	<p>Case 3: Given family-level dynamics beside migration, a financial institution provides some financial coaching to remittance-owning clients. This financial coaching became an added service, just to sustain the membership of migrant members into this financial institution. [financial institution representative M15]</p> <p>Case 4: Migrant clients who were once physically present write off their unbearable loans and 'offset' (close) their accounts with financial institutions. Sending money home seems the more important 'venture'. [financial institution representatives M1]</p>

Sources of information: Interviews with key informants or officials from financial institutions, and interviews with migrant household heads, in San Nicolas and Moncada, in 2018–2019.

likelihoods of hometown investment occurring. Clear policy implications are also evident.

Relevant costing becomes a kind of armor for these households (agents) when ascertaining the gains of engaging with entrepreneurs and financial institutions (structures), given the geographic make-up of San Nicolas and Moncada. Relevant costing efforts in San Nicolas, a buoyant business landscape that is connected to external areas, attract outside markets to the municipality, giving rise to the riskier appetites of migrant households. Relevant costing deliberations of those in Moncada, for their part, tend to dwell on the limited commercial spaces available; expansive areas for agricultural development; the culture of cooperativism that offsets the absence of commercial banking; and responsive local governance. All these considerations lead to the risk-averse dispositions of Moncada's migrant households when it comes to money.

Relevant costing also saw local entrepreneurs and financial institutions estimate the gains in dealing with these migrant households.

Migrant- and non-migrant entrepreneurs were found to co-exist, and search for their niche markets locally and elsewhere—thus leading to either similar or higher costs for their enterprises. Financial institutions, for their part, realize that migrant households possess unique financial behaviors tied to their remittance inflows and their family dynamics influencing financial decisions and actions. Productive savings, investing, and business management behaviors lead migrants abroad to absorb future costs to upscale these “additional ventures” on top of earning foreign remittances. However, issues with handling remittance incomes not only affect their forced savings habits, current loans for enterprises, and possibly mismanaged investments. Notwithstanding the interventions of some financial institutions to coach and program the financial transactions of these migrant households, it is necessary to emphasize the relevance of financial education so that relevant costing-related decisions by migrant households (saving, investing, running a business) are improved and become more productive in the future.

From the analysis of these two rural hometowns, remittance uses and their outcomes vary. The differences all but reveal the heterogeneity of migration and local development conditions (De Haas 2001, 2009a, 2009b; Gamlen 2014). What can also account for these differences is the salience of positioning individual financial capabilities (Clark 2014) in a geographic context. This has the person acting “in one's best financial interest, given socio-economic [and] environmental conditions” (World Bank 2015: 3), given daily needs and localized realities (Page & Mercer 2012). In rural areas, there are opportunities for improved local governance efforts, so those at home and those working abroad—given their financial capabilities—can more effectively and efficiently put their financial resources to good use in their home town.

This paper has extended the theoretical understanding of relationships between remittance and local development beyond the New Economics of Labor Migration (Stark & Bloom 1985). In geographically positioning (Clark 2014) the migrant or migrant household's financial capabilities (Sherraden & Ansong 2016) and their risk appetite levels (Kahneman & Tversky 1979), it situated rural remittance recipients' bounded-rational economic decisions and estimations. This was possible using mixed methods to capture the dynamics between agents and structures to engage or not engage in rural hometown investing, and also develop the concept of relevant costing through data integration.

In conclusion, we have sought to highlight the complexities of investing overseas remittances in local hometowns, which can vary significantly with respect to investment opportunities, types of financial institutions, and financial capabilities of households. It is therefore important that relevant costing actions by local economic agents consider individual and spatial contexts. Continued financial education will be vital to complement overall local interventions and improve business, investment, and local governance conditions. Joint efforts by remittance recipients and their rural hometowns need to envisage a localized remittances-for-development strategy that entices townmates abroad to make the most logical economic decisions, and further their life-long financial learning and opportunities to make additional earnings apart from incomes coming from overseas migration.

CRedit authorship contribution statement

Jeremaiah Opiniano: Conceptualization, Formal analysis, Investigation, Data curation, Methodology, Project administration, Validation, Writing – original draft, Writing – review & editing. **Yan Tan:** Conceptualization, Supervision, Formal analysis, Funding acquisition, Investigation, Writing – original draft, Writing – review & editing. **Dianne Marie Rudd:** Conceptualization, Supervision, Formal analysis, Writing – review & editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence

the work reported in this paper.

Data availability

Data will be made available on request.

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