

Financial Education and Financial Access for Transnational Households: Field Experimental Evidence from the Philippines

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Abstract: We implemented a randomized controlled trial among transnational households in the Philippines estimating impacts on financial behaviors of a financial education treatment, a financial access treatment, and the combination of the two. We test whether there are complementarities between financial education and financial access interventions, and also provide insight into the nature of constraints operating in financial services markets. We find no evidence of complementarities between the financial education and financial access treatments. In addition, while we find no evidence of constraints in access to formal credit and savings products, our results do suggest that access constraints exist in the formal insurance market. Impacts on other financial behaviors are suggestive of the importance of information constraints in financial decision-making. These results provide guidance to designers of financial interventions in similar populations.

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I. Introduction

International migrants numbered 244 million worldwide in 2015, of which 190 million were born in middle- and low-income countries (United Nations 2015, 2016). The remittances that these migrants send to origin countries are an important but relatively poorly understood type of international financial flow. In 2015, migrant remittances sent to developing countries amounted to US\$432 billion, roughly three times official development aid. However, we are still learning what development policies might increase the development impact of remittances (McKenzie and Yang 2015). While migrant remittance flows are large in magnitude, they amount to only a minority of the total developed-country earnings of migrant workers from developing countries (Clemens, Montenegro, and Pritchett 2009; Clemens 2011; Yang 2011). The prospect that migrants might be encouraged to send even more remittances, and that these remittances might be better leveraged for the economic development of migrant-origin countries, has led to substantial interest in academic and policy circles in development policies related to migrant remittances (e.g., World Bank 2006, Fajnzylber and Lopez 2007).

Recent research in the economics of migration has documented several beneficial impacts of remittance flows on household well-being and investments. Households in the Philippines experiencing exogenous increases in remittances become more likely to leave poverty status, to send their children to school, and to invest in entrepreneurial enterprises (Yang & Martinez 2005, Yang 2006, Yang 2008a). In El Salvador, households receiving more remittances have higher rates of child schooling (Cox-Edwards & Ureta 2003). In Mexico, households with migrants invest more in small businesses than households without migrants (Woodruff & Zenteno 2007). In addition, remittances appear to serve as insurance, rising in the wake of negative shocks (Yang & Choi 2007, Yang 2008b).

In this paper, we seek to shed light on the potential interaction between two types of interventions that are commonly carried out with transnational households by government and non-government organizations (NGOs). The first type of intervention is financial education for

transnational household members. Theoretically, these are motivated by imperfect information market failures: households may have incomplete knowledge about financial services availability, how to use financial services, or about financial planning, budgeting, and financial decision-making more generally. Empirically, financial education has been shown to be associated with the quality of financial decision-making, in both observational and randomized experimental studies, in developed-country contexts.² Randomized studies of the impact of financial education interventions have been carried out in developing country populations, several of which find impacts on business practices of micro-entrepreneurs, while impacts on household and individual decision-making are typically more muted.³ Recent studies have examined impacts on transnational households. Gibson, McKenzie, and Zia (2014) found limited impacts of migrant financial education training aimed at improving remittance decision-making. Doi, McKenzie, and Zia (2014) examined the impact of pre-departure financial education training in Indonesia, finding that training has positive impacts on financial practices and on savings when migrants and family members are trained together. Seshan and Yang (2014) find that a motivational financial seminar provided to migrant Indian workers in Qatar has positive impacts in transnational households that have low pre-treatment savings levels, raising savings and remittances and leading to increases in joint decision-making between migrant husbands and wives left behind in India.

The second type of intervention involves improving financial access. Motivated by concerns about incompleteness or failures in financial services markets, a number of studies in a wide range of developing countries have examined the impacts of providing or facilitating access to financial services such as credit (e.g., Karlan and Zinman 2011, Banerjee et al 2015), savings

² See, among others, Bernheim, Garrett, and Maki (2001), Bernheim and Garrett (2003), Bertrand and Morse (2011), Cole, Paulson, and Shastry (2012), Duflo and Saez (2003), Lusardi (2004), Lusardi and Mitchell (2007a, 2007b), Lusardi and Tufano (2009), Stango and Zinman (2009), and van Rooij, Lusardi, and Alessie (2007).

³ Drexler, Fischer, and Schoar (2014), Berge, Bjorvatn, and Tungodden (2010), Bjorvatn and Tungodden (2010), Field, Jayachandran, and Pande (2010), and Karlan and Valdivia (2011) examine impacts of financial education training on micro-entrepreneurs, while studies of impacts on individuals include Carpena, Cole, Shapiro, and Zia (2011) and Cole, Sampson, and Zia (2011). Also see review articles by World Bank (2009), Miller et al (forthcoming) and Kaiser and Menkhoff (2016).

(e.g., Dupas and Robinson 2013a and 2013b, Brune et al 2016, Carter et al 2016), and insurance (Karlan et al 2014, Elabed and Carter 2014, Cole et al 2013). There has also been recent work examining the impact of providing new types of financial services targeted at transnational households, for which financial remittance services are additionally relevant. Ashraf et al (2015) find in a randomized study among migrants from El Salvador that improving monitoring and control over savings (by providing new types of savings accounts that allow migrant joint- or sole-ownership) leads to higher savings in the home country. Ambler et al (2015) and De Arcangelis et al (2015) examine, among El Salvador and Philippine transnational households respectively, the impact of novel remittance products that channel funds toward education in the home country. Jack and Suri (2014) and Blumenstock (2016) find that internal remittances via mobile (cellphone) money systems contribute to risk-sharing within Kenya and Rwanda, respectively.

Our contribution is to examine the impact of financial education and financial access interventions simultaneously in the same study. We implemented a randomized controlled trial among transnational households in the Philippines. The study population was households in and around Cabanatuan City (in central Luzon) with one or more members working overseas. Households were randomly assigned to a control group, a financial education treatment, a financial access treatment, and a treatment that combined financial education and financial access. The financial education treatment involved an invitation to a one-day workshop that covered topics such as financial goal-setting, budgeting and planning, savings, credit, and small enterprise investment. The financial access treatment involved offering formal credit (group microloans), savings, and insurance products in partnership with local financial institutions.

We are most interested in shedding light on how the impact of offering both financial education and financial access differs from the sum of impacts when simply offering one or the other (in other words, whether the two are *complementary* or *substitutes* for one another.) The two types of interventions may be complementary, leading to higher impacts than the sum of the two offered separately. Financial education, by improving knowledge about financial services and

suggesting strategies and planning approaches, could lead to higher demand for (take-up of) financial services. Offers of financial services could also lead to higher demand for financial education, if individuals realize that financial education could help them make better use of the offered services. On the other hand, it is also possible that the two could be substitutes, so that the impact of offering both is less than the sum of offering each separately. Theoretically, this could arise if, for example, financial education teaches households how to achieve their objectives by using the financial services they already have, or by using informal means that do not require new demand for formal financial services. In this case financial education could dampen demand for financial services, leading a concurrently-offered financial access intervention to have less impact than if the financial access intervention had been offered alone. To our knowledge, only one other study has explored the independent and combined effects of these two interventions. Jamison et al. (2014) randomized financial education and access, in the form of group savings accounts, among 250 Ugandan youth clubs and do not find any evidence of complementarities between the two types of interventions.

On this front, we actually find no evidence of either complementarity or substitutability. Take-up of the financial products we offered was not affected by whether or not study participants received the financial education treatment. And the reverse is also true: take-up of the financial education treatment was not affected by whether or not we made financial product offers to the study participants. This result provides guidance to organizations designing financial interventions in similar populations, suggesting that there is no substantial interaction between financial education and financial access interventions. Decisions regarding whether or not to provide financial education and financial access interventions can consider the costs and benefits of these interventions singly, without having to consider potential interactions between them in circumstances where they might be implemented simultaneously.

Other patterns in our results are suggestive of the underlying constraints households face. We find little evidence of constraints in access to certain financial services, in particular formal

credit and savings. When we offered these products to study participants, take-up was zero or very low. In addition, treatments involving financial education led to changes – and in some cases *reductions* – in usage of credit and savings products that were not related to our product offers. Both of these findings are inconsistent with binding constraints on access to these types of financial services. On the other hand, we do find substantial take-up of the formal insurance product that we offered to study participants. This finding suggests that households do face constraints on access to formal insurance.

The impact of financial education on financial decision-making also points to the potential importance of information constraints. In response to the financial education treatment (whether alone or in combination with financial access), study participants changed their borrowing decisions: they borrowed lower amounts on average, and (conditional on borrowing) shifted their borrowing from sources of credit that are informal (family and friends) to formal ones (e.g., banks and MFIs). These changes in financial decision-making in responses to the financial education treatment provide prima facie evidence of information constraints.

In addition, we examine the impact of financial education and access interventions, separately and together, on broader measures of well-being such as consumption, mental health, and self-reported life satisfaction. Outcome variables come from a follow-up survey that we implemented. We estimate impacts on financial decision-making, savings goals, remittances, and a variety of other outcomes. We find little evidence of the impact of treatments (either separately or together) on these measures of broader household well-being. While effects on individual variables are occasionally statistically significantly different from zero, we examine a large number of outcome variables, and when we make corrections for multiple inference we cannot reject the hypothesis of no effect on broader measures of household well-being.

The remainder of this paper is structured as follows. Section 2 presents the experimental design. Summary statistics are described in section 3, and we present the empirical analysis in section 4. Section 5 concludes.

II. Experimental Design

A. Partners and Study Sample

The project was a collaboration between a number of institutions that were brought together by the authors. Alalay sa Kaunlaran Inc. Global Ltd. (ASKI) is a large and well-known microfinance institution based in Cabanatuan City. The Overseas Workers Welfare Association (OWWA) is the lead government agency tasked to promote the well-being of overseas Filipino workers. The Bank of the Philippine Islands (BPI) is the oldest and most profitable bank in the country. OWWA was instrumental in endorsing the study and providing links to some study participants. Savings accounts offered were from BPI. ASKI delivered the financial literacy training and offered micro-loan and micro-insurance services to study participants. Both ASKI and BPI provided administrative data on take-up of financial products by study participants. Innovations for Poverty Action (IPA) conducted the fieldwork, which involved offering assigned treatments and collecting survey and administrative data.

The study sample consists of 1,800 transnational households residing in Cabanatuan City and surrounding localities. Figure 1 displays a map of the study area. Transnational households were defined as those with at least one household member who had departed for abroad in the past 3 years. OWWA provided contact details of OFW households in our study location from their database of workers who had attended a pre-departure orientation seminar.⁴ Simultaneously, our survey team conducted a door-to-door campaign in Cabanatuan and surrounding areas to locate households. OWWA provided a letter endorsing participation in the study, which minimized bias due to selective non-participation. These activities were carried out until the target number was achieved.

⁴ The Pre-Departure Orientation Seminar (PDOS) is a mandatory one-day event conducted for all departing OFWs to prepare them for life abroad. It teaches basic things such as how to board a plane and how to conduct oneself while in a foreign country. The PDOS is typically administered by the Philippine government through OWWA but accredited recruitment agencies may also administer it, so not all departing workers go through OWWA.

Figure 2 below provides a brief timeline of activities.

B. The Baseline Survey and Allocation to Treatment

We began by administering a baseline survey to consenting migrant households between September 2014 and April 2015. We interviewed the person considered to be the household head among remaining household members. The survey took approximately 45 minutes and covered information about household members, their education, household income, expenditures, savings, remittances, and work abroad of OFW members of the family. Survey data was collected electronically via tablet devices.

Random treatment assignment was conducted via tablet computers. At the end of each survey, the survey program automatically generated a random number for each household which determined assignment to treatment.

There were four treatment and control groups. We present the four groups in Table 1 below. First, households were randomized into either a financial education treatment, or into a group that receives no financial education at all. Then households were independently cross-randomized into being offered access to formal credit, and savings products, or into a group that is not offered any access. This generated four groups with approximately 450 households each. The offer to attend a financial education program and to avail of financial products constitutes an encouragement design, since in practice we could not require households to use these services.

We describe below each of the treatment and control groups in detail:

1. *Control Group*: No offer of financial education program and/or financial services was made to this group.
2. *Treatment 1: Invitation to attend a financial education program*: The household head was invited to attend a short workshop on financial education in ASKI's training center.

OWWA provided a letter endorsing participation in the program. The workshop covered topics ranging from financial planning, budgeting, savings, to investing in an enterprise, and credit management (Appendix A contains a full list of topics discussed in the financial education workshop). The session was free and scheduled on a Saturday. It lasted 6-8 hours and was completed in a day. To facilitate take-up, the household head was allowed to bring a companion.

3. *Treatment 2: Access to savings account and microloan products:* This treatment group was only provided access to financial services and not financial literacy training. In particular, enumerators invited respondents to open a BPI savings account; they specified requirements and indicated nearby branch offices and BPI representatives from whom they may obtain assistance. In addition, migrant families were also invited to avail of ASKI's microloan products for small enterprise development. Our enumerators provided a letter on how respondents could avail of such products and supplied contact information on loan officers from ASKI. At a later stage, we also invited this treatment group to avail of ASKI's life and accident micro-insurance product. We explain in the next section the reason for adding this product during the course of the experiment.

4. *Treatment 3: Invitation to a financial education program and access to financial products:* This treatment group was invited to attend both a financial education workshop and given access to financial services offered by ASKI and BPI, as in households in treatment groups 1 and 2.

Appendix A displays the written invitations and marketing materials we supplied to each treatment group.

C. Financial Incentives, Micro-insurance, and Follow-up

The biggest challenge to the project was the low take-up to our offered treatments. We began field activities in September 2014. Four months into the project, only 36 had participated in our financial education sessions out of the 487 invited. In the same period, only 4 individuals had availed of the BPI savings account following our invitations, while only one person had obtained an ASKI microloan, out of 438 respondents invited. We thus decided to more aggressively market our treatments.

Starting January 2015, we provided financial incentives to encourage households to take-up the treatments. The incentives were presented as compensating for time and transportation costs. We offered household heads in treatment group 1 (financial education) 500 pesos (approximately USD 11)⁵ to attend the financial education session.⁶ For treatment group 2 (financial access), we provided 100 pesos (approximately USD 2) per respondent to avail of the microloan, or bank account. Treatment group 3 (both financial education and access) respondents were provided both 500 pesos and 100 pesos incentives if they availed of both the financial education seminar and any of the financial products. These incentives applied to all households who had yet to be interviewed at that time, and to respondents who had not taken-up our offers.

Starting September 2015, we also offered a new product in the form of micro-insurance from ASKI to treatment groups 2 and 3, given that take-up rates for the financial products continued to be low. ASKI micro-insurance consisted of either life or accident insurance. These products covered losses caused by accidental death or bodily injury due to an accident occurring in any country in the world. Appendix A provides product details.

We revisited households in the financial education and product treatment groups between September to December 2015 to inform them of the incentives and the new product. To those in

⁵ On an average, in 2015, 1 Philippine peso was equal to 0.022 US dollars.

⁶ We initially set the incentive at 250 pesos group, but changed it to 500 pesos a few weeks after implementation after initial responses remained lukewarm.

treatment groups 2 and 3 who still had not taken-up any of our offered products at that point, we also conducted a short follow-up survey to get reasons for lack of interest. The revisits and incentives were relatively effective, as evidenced by positive and non-trivial take-up rates (presented below in Table 4).

III. Summary Statistics

Table 2 provides summary statistics of our baseline variables. The average age of the household head is 42 with only one-third of the household heads being males. Though average education levels are quite high (approximately 16 years of education), financial literacy scores at baseline are low. Only 20% of the sample answered both financial literacy questions in our survey correctly, suggesting a possible benefit of financial education. 42% of the sample reports being satisfied with their savings at baseline. On average, migrant members of the household have been abroad for 4 years. The rest of the table presents summary statistics for our main set of outcome variables on financial behavior.

IV. Empirical Results

A. Test for Balance on Baseline Characteristics and Attrition

We first test for balance along baseline characteristics between control and treatment groups. Randomization achieves its goal of balance in terms of these pre-treatment variables if the number of statistically different means between groups is not more than what is expected by chance.

We regress baseline characteristics on each of the treatment indicator variables in Table 3. None of the baseline characteristics are statistically predicted by treatment group assignment, which is as expected, except for gender. Respondents from treatment groups 1 and 3 are more likely to be female than those in the control group, although we have no reason to believe this is due to anything but chance. In the proceeding analysis, we correct for this apparent imbalance by controlling for gender and other baseline characteristics.

We next test for balance on attrition at endline. Overall attrition is relatively low; the endline survey success rate was 86%. To check whether attrition varied by treatment status, we regress an attrition indicator on each of the treatment indicator variables. The results are shown in Appendix Table B.2. The sample appears balanced in terms of attrition; attrition is not predicted by treatment assignment.

We proceed with two types of analyses that are of interest: 1) an analysis of the relative effects of our two interventions on behaviors related to credit, savings, and insurance utilization, and 2) estimation of the impact of treatments on individual outcomes such as income, remittances, educational expenditures, housing investments, and the like.

B. Effects of Financial Education and Financial Access on Credit, Savings, and Insurance

The treatments investigated in this study are all related to financial decision-making, and so our primary outcomes of interest are related to financial product take-up and usage, and take-up of financial education. We first examine impacts of the treatments on take-up of the financial education and financial products we offered (all of which are measured in our administrative data). We then turn to examining self-reported financial behaviors from our follow-up survey.

To measure impacts of our various treatments, we estimate the following regression equation:

$$Y_{it} = a + b_1 \text{Treat}_{1it} + b_2 \text{Treat}_{2it} + b_3 \text{Treat}_{3it} + b_4 X_{it-1} + e_{it} \quad (1)$$

The dependent variable is some financial behavior in the post-treatment period (t). Treat_{1it} , Treat_{2it} and Treat_{3it} are dummy variables indicating assignment to treatment 1 (financial education), 2 (financial access), and 3 (financial education and access), respectively. e_{it} is a mean-zero error term. The coefficients b_1 and b_2 provide the impact of the financial education program and financial services access respectively on take up, while the coefficient b_3 measures the impact of providing

both financial education and services simultaneously to the household. X_{it-1} is the vector of baseline/pre-treatment (t-1) characteristics.

i) Take-up of interventions

We first examine take-up of the offered interventions (either financial education or financial products). Regression results from estimation of equation (1) are in Table 4. Dependent variables are indicators for take-up of financial education or the different financial products. In the latter case we examine an indicator for taking up any of the financial products (“Take up of financial services”), as well as for take-up of each type of financial service (savings, credit, and insurance) separately. We use administrative data from our partner institutions to measure take-up.

There is positive take-up of financial education: treatments 1 (financial education) and 3 (both education and access) both lead to substantial increases in attendance of the ASKI financial education sessions, amounting to roughly 39-41 percentage points. These impacts are relative to a take-up rate in the control group of 3.7%.⁷

Examining take-up of financial services helps reveal whether our interventions helped remove or loosen any constraints on financial access. As background, rates of financial services usage are relevant. Non-trivial fractions of households do use financial services in general, but usage is far from universal. In the baseline survey, 52% of households in the sample do have formal bank accounts, and 9% have a bank account with BPI. 31% have some form of formal credit (from banks, microfinance lender, or private lender), and 29% have some form of informal credit (from immediate and extended family, friends, and neighbors). 58% have any credit at all (either formal, informal, or a combination).

Take-up of the savings and credit products that we offered study participants was very low. Only nine individuals ended up opening BPI savings accounts, and only two took up the ASKI

⁷ There is some take up in the control group because household heads were allowed to bring a companion to the financial education seminar; in some cases, the companion was a household head from the control group.

credit product. Regression coefficients in the credit regression are all very small in magnitude and not statistically significantly different from zero. For the savings regressions, the coefficients actually are statistically significantly different from zero for treatments 2 (financial access) and 3 (both interventions), but the magnitudes are very small, at only about 1 percentage point in both cases.⁸

The low demand for savings and credit that we observed is suggestive that constraints on access to these financial services are not binding for our study households, or at least were not loosened by our interventions.⁹

By contrast, there was substantial take-up of the insurance product we offered as part of the financial access treatment. Impacts of treatments 2 (financial access) and 3 (both interventions) amount to 25.1 and 28.0 percentage points, respectively, and are statistically significant at the 1% level. (These impacts are relative to a take-up rate in the control group of zero.) We conclude from this result that our intervention loosened constraints on access in the insurance market.

Driven by take-up of the insurance product, take-up of any financial service is also positive; impacts of treatments 2 and 3 each amount to 26-29 percentage points (both coefficients are statistically significantly different from zero at the 1% level).

ii) Are the two interventions complements or substitutes? The interaction between financial education and financial access

A key question our study is designed to answer is whether financial education and access turn out to be complements or substitutes to each other. Theoretically, offering financial education may bolster the effects of financial access, over and above the effects of providing each intervention

⁸ Take-up rates of the offered financial products are zero in the control group, which is sensible since we did not offer them these products in the course of field work.

⁹ In the follow-up survey, we asked households who did not take up the savings product why they failed to take it up. The dominant response by far (given by 46.9% of respondents) was that they preferred other establishments instead of BPI for savings products. (The next most common response was “Just not interested”, given by 18.1%. Appendix Table B3 provides a complete tabulation of responses.) That households felt that they had better products to avail of in the market also helps support the conclusion that households are not constrained in their access to savings products.

separately, if improved knowledge makes households demand more services because they can utilize such services better. Alternatively, financial education may dampen demand for services if it teaches alternate strategies for households to achieve goals apart from formal financial services, in which case the impact of financial access would be less than if it had been offered alone.

Answering this question involves seeking evidence for any interaction between the financial education and financial access treatments, in terms of affecting take up rates for the other intervention. Does financial education affect take-up of offered financial products? Does access to financial products affect take-up of financial education?

Comparison of regression coefficients in Table 4 helps answer these questions. It does not appear, in fact, that financial education increases take-up of BPI savings accounts, ASKI microloans, or ASKI micro-insurance. The coefficients in the financial product take-up regressions are very similar to one another across column 2 (impact of financial access) and column 3 (impact of both financial education and financial), and the differences between coefficients are never statistically significantly different from zero (as can be seen in the p-values for the comparison between coefficients for treatments 2 and 3 in the next-to-last column of the table). We conclude from this that combining financial education with financial access has no additional impact on take-up of financial services, over and above offering financial access alone.

We can also examine whether our financial access intervention affects take-up of the financial education program. This involves comparing coefficients on take up of financial education (first row) in columns 1 and 3. Again, the coefficients are very similar in columns 1 and 3, and the difference between the coefficients is not statistically significantly different from zero (p-value 0.431). The conclusion here is similar: combining financial education with financial access has no additional impact on take-up of financial education, over and above offering financial education alone.

A highly related comparison of coefficients in Table 4 yields the same conclusion. Another way to view complementarity or substitutability is to ask whether coefficient on the combined

treatment (in column 3) is different from the sum of coefficients on the treatments offered separately (columns 1 and 2). The p-value of this test is presented in the rightmost column of Table 4. For no outcome in the table do we find that the impact of the combined treatment is different from the sum of impacts when the treatments are offered separately (no p-value indicates statistical significance at conventional levels).

In sum, financial education and financial access appear to be neither complements nor substitutes for one another. These findings are relevant for design of programs that might consider combining financial education with financial access interventions. Notwithstanding theoretical reasons why interactions might exist, it does not appear that, in this study population, providing one of the interventions (either financial education or access) affects demand for the other type of intervention.

iii) Impacts on other financial decisions

We now examine the impact of the treatments on other financial decisions, using outcomes reported in the endline survey. Patterns of impacts can provide additional insight into the likely constraints or barriers that are operating in financial services markets.

In Table 5, we examine impacts on savings and borrowing. Regressions use the specification of equation (1) but with different dependent variables. There is suggestive evidence of impacts on bank account ownership due to the treatments involving financial education (whether alone or in combination with financial access). The financial education treatment alone (treatment 1) leads households to hold more bank accounts (statistically significant at the 10% level). The coefficient on the financial education and financial access treatment (treatment 3) is also positive, but slightly smaller in magnitude and not statistically significantly different from zero at conventional levels. When it comes to the total amount of savings (in pesos or in log of 1+pesos), coefficients on the treatments involving financial education are positive but not statistically

significantly different from zero. (Impacts of the financial access treatment are small in magnitude and not statistically significant.)

There is no large or statistically significant impact of any of the treatments on the extensive margin of borrowing (whether the respondent borrowed from any source in the last three months). That said, when examining amount borrowed in pesos (where those not borrowing are coded as zeros), treatments 1 and 3 (the two treatments that involve financial education, either alone or in combination with financial access) lead to reductions in borrowing.¹⁰ The financial education treatment does not appear to affect the extensive margin of borrowing, but does appear to affect the amount borrowed (conditional on borrowing).

It is also of interest to examine impacts on the composition or sources of borrowing, since the treatments could in principle shift respondents to different credit sources. In Table 6 we examine impacts on sources of borrowing for only those individuals who did any borrowing. (The sample of borrowers does not appear to be selected on the basis of treatment; as shown above, none of the treatments have a large or statistically significant impact on the extensive margin of borrowing.) Both treatments 1 and 3, which involve financial education, lead to shifts in the composition of borrowing from informal to formal sources of credit. Treatments 1 and 3 lead to shifts away from informal sources (family, friends, and neighbors) amounting to 13 to 16 percentage points (statistically significant at the 5% or 1% levels respectively), while leading to shifts towards formal sources (banks, microfinance lenders, or other private lenders) amounting to roughly 10 percentage points (statistically significant at the 10% level in both cases).¹¹

Considered all together, these results are suggestive of the types of constraints operating in financial services markets. First of all, financial education alone (treatment 1) – which simply provided financial education but not any change in access to services – caused an increase in bank

¹⁰ Results when borrowing is expressed in log (1+pesos borrowed) have similar signs, but are not statistically significantly different from zero.

¹¹ These shifts are fairly large compared to rates of each type of borrowing in the control group (53.3% of borrowers borrowed from informal sources, and 37.3% from formal sources).

account ownership and a reduction in amounts borrowed. Merely providing financial education led households to open more bank accounts, and actually caused them to voluntarily reduce amounts borrowed. This suggests that constraints on access to either savings or credit cannot be fully binding.

In addition, any effect of financial education on financial decisions is strongly suggestive of the importance of information constraints in financial services markets, again since the financial education sessions were focused on providing education rather than expanding financial access in any way.

C. Impacts of Financial Education and Financial Access on Other Outcomes

We also estimate impacts of the treatments on a wide variety of outcome variables. Regression specifications are along the lines of equation (1), and thus are ITT estimates. The outcomes are broadly grouped in eight categories: life satisfaction and mental stress; income; migration and remittances; consumption and expenditure; goals; savings; borrowing and lending; financial and literacy. The full set of outcomes included in the indices are presented in Appendix Table B.4.

Since we estimate impacts on a large number of outcomes within categories, we expect some of our treatments to show statistically significant impacts just by chance. Hence, following Kling, Liebman and Katz (2007), for each group of outcomes, we present the impact on an index of all of the outcomes taken together. In creating the index, we define each outcome so that higher values correspond to better outcomes. Then for each outcome, we create a z-score by subtracting the control group mean and dividing by the control group standard deviation. We average z-scores by category and standardize following the same procedure. We estimate treatment effects on these category indices. In addition, we account for the fact that we are reporting multiple families of outcomes. We correct for the potential issue of simultaneous inference using multiple inference testing. We calculate q-values using the Benjamini-Hochberg step-up method to control for the false discovery rate (FDR) and follow the procedure outlined in Anderson (2008), and test α at all

significance levels (1.000, 0.999, 0.998... 0.000). The q-value is the smallest α at which the null hypothesis is rejected.

We do not find statistically significant impacts of the treatments on any of the groups of outcome variables. Table 7 reports results displaying q-values, which correct for presenting results on multiple indices. We find no statistically significant effects of our interventions on household outcomes: no q-values achieve conventional statistical significance thresholds. Neither do we find any evidence which suggests complementarity (or substitution) between financial education and access in terms of their effect on outcomes. As shown in the last row of Table 7 ($T1 + T2 = T3$), in no case do we reject the hypothesis that the sum of b_1 and b_2 equals b_3 .

V. Conclusion

We implemented a field experiment in which transnational households (households with one or more members overseas) were randomly assigned to either a control group, a financial education treatment, a financial access treatment, or a joint treatment that offered both financial education and financial access.

To our knowledge, only one other study (Jamison et al 2014) has independently randomized financial education and financial access, as well as the combination, simultaneously in the same study population. However, our study would be the first to simultaneously offer access to formal credit (group microloans), savings, and insurance products. This innovation allows us to estimate the interaction of the two types of interventions, revealing whether the two are complementary or substitutes and whether these differ by type of financial product offered. In addition, patterns of impacts can help suggest the types of constraints or barriers faced by households in financial services markets.

We find no evidence of any interaction between the financial services and financial access treatments (the treatments are neither complements nor substitutes from the standpoint of generating demand for either financial services or financial education). Our results also suggest

that constraints on access to formal financial services are not binding for common services such as savings and credit, but do appear to exist for a relatively uncommon or novel product such as insurance. We do find that financial education does affect usage of financial services that were not offered in the context of our study, which is likely to reflect that financial education alleviated information constraints of some sort.

These results are relevant for helping policy-makers and non-government organizations (NGOs) design financial interventions for the households that migrants leave behind in their home areas. Where certain financial services are widespread (such as savings and credit in our context), interventions providing financial education could be prioritized over financial access interventions. On the other hand, for new financial services (such as microinsurance in our case), financial access interventions would still be helpful in promoting adoption. In addition, our finding that financial education changes financial decision-making points to the continued importance of information constraints, helping justify interventions aimed at alleviating information problems.

Our results also point to future directions for research. First, as in all empirical research, it is important for future studies to ask similar questions in different contexts and populations, to ascertain the generalizability of the results. For example, similar studies should be conducted in populations of families without migrant workers, and in other locales with varying income levels and financial services development. In addition, it would be important for future studies to further probe our results and provide a more nuanced understanding of mechanisms. For example, impacts we found of financial education raise the question of what aspect of financial education is having the impact: is it advice on budget and planning, or facilitation of household goal-setting, or more detailed information on how to use specific financial services such as credit and savings? Future studies could randomize the inclusion of these specific sub-components of financial education to tease out which are leading to changed financial behaviors.

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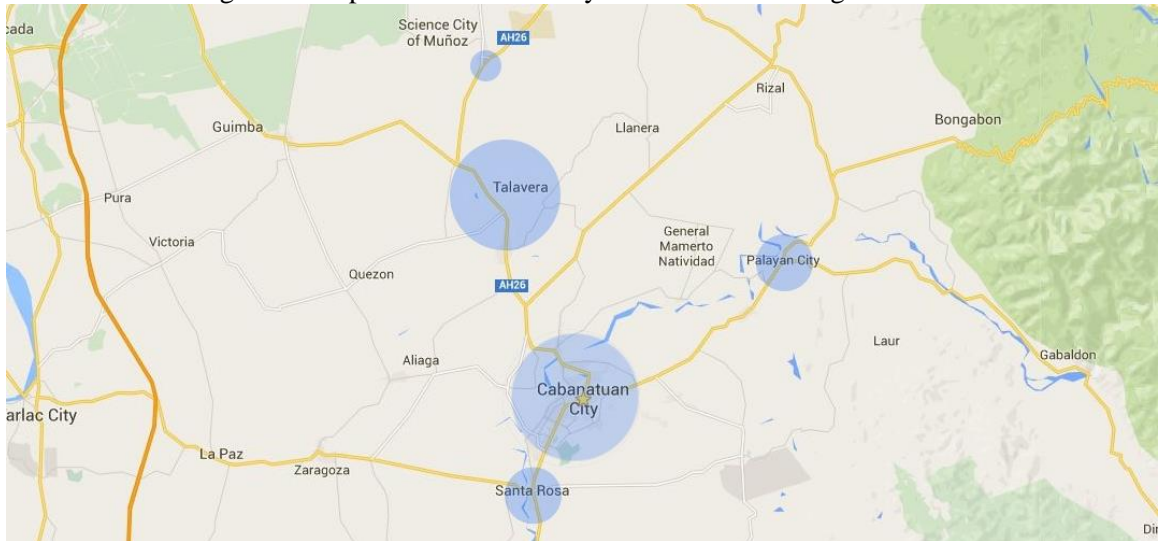
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Figure 1: Map of Cabanatuan City and the Surrounding Localities



Note: Data collection areas are in blue.

Figure 2: Project Timeline

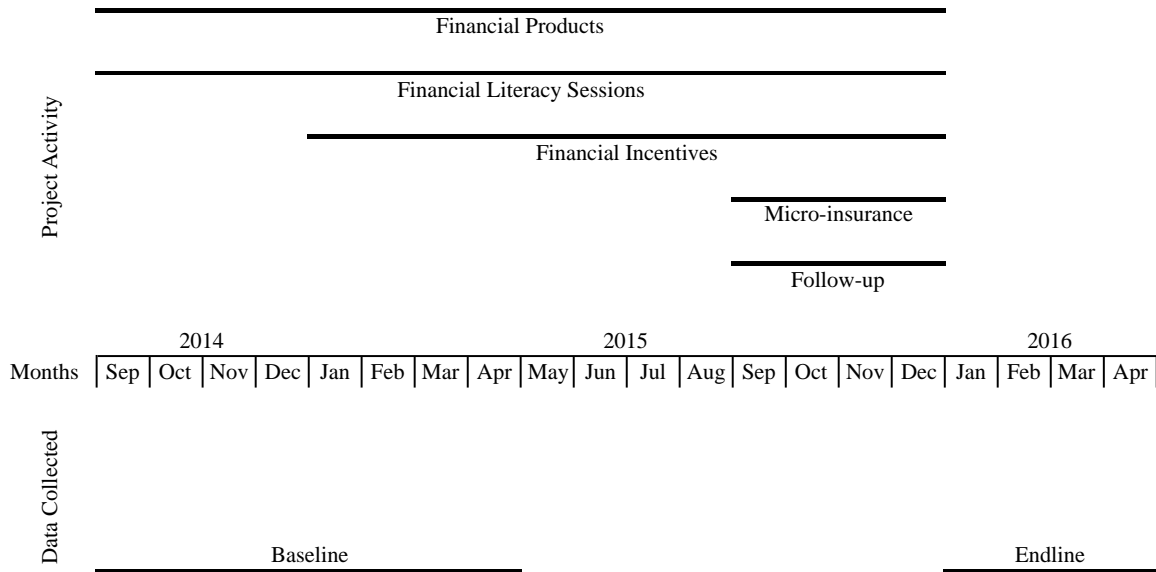


Table 1. The Treatment and Control Groups

<p>Control Group (N=434) Participants were not made offers for financial education or financial products.</p>	<p>Treatment 2: Financial Products Only (N=369) Participants were given access to ASKI microloans, ASKI micro-insurance (life or accident), and a BPI savings account.</p>
<p>Treatment 1: Financial Education Only (N=517) Participants were invited to attend a one-time financial education workshop that was 6-8 hours in length.</p>	<p>Treatment 3: Combined Financial Education and Financial Product Access (N=488) Participants were given combined access to both the financial education workshop and the full set of financial products.</p>

Table 2. Summary Statistics of Key Baseline and Outcome Variables

Variable Name	Mean	SD	10%	25%	Median	75%	90%	Count
Baseline Variables								
Gender of Household Head	0.259	0.438	0	0	0	1	1	1808
Age of Household Head	42.35	12.91	24	32	43	53	59	1808
Years of Education Completed	15.63	2.850	12	13	16	18	20	1808
Financial Literacy Score	0.206	0.404	0	0	0	0	1	1808
Household Size	5.768	2.163	3	4	5	7	9	1808
Migrant Duration Abroad in Years	3.936	5.243	0.167	0.750	2	5	10	1808
Log Household Income (monthly)	5.745	4.398	0	0	8.294	9.210	9.952	1808
Log Remittances Received	10.34	3.295	8.517	10.31	11.34	11.98	12.39	1808
Log Household Expenses	9.116	0.985	8.367	8.780	9.210	9.616	9.904	1808
Asset Index	0	1	-1.310	-0.671	0.0942	0.702	1.258	1808
Log Household Savings	1.547	3.48	0	0	0	0	8.517	1808
Satisfaction with Savings (Dummy = 1 if satisfied)	0.424	0.494	0	0	0	1	1	1808
Log of borrowing amount outstanding	3.069	4.399	0	0	0	8.294	9.904	1808
Log of loan amounts to others outstanding	1.920	3.739	0	0	0	0	9.105	1808
Key Outcome Variables								
<i>Borrowing</i>								
HH has borrowed from somewhere in past 3 months	0.309	0.462	0	0	0	1	1	1553
Total amount borrowed in past 3 months	4457	16627	0	0	0	2000	10000	1503
Log of amount borrowed in past 3 months	2.542	4.074	0	0	0	7.601	9.210	1503
Borrowed from a formal source	0.373	0.484	0	0	0	1	1	480
Borrowed from an informal source	0.533	0.499	0	0	1	1	1	480
Borrowed from other sources	0.098	0.298	0	0	0	0	0	480
<i>Saving</i>								
Total number of bank accounts	0.426	0.785	0	0	0	1	1	1386
Total savings in past 3 months (PHP)	3434	27074	0	0	0	0	3000	1248
Log total savings in past 3 months	1.624	3.328	0	0	0	0	8.007	1248

Formal sources of credit include banks, microfinance lenders, and private lenders while informal sources include immediate and extended family, friends, and neighbors. The respondent noted if credit did not come from any of these sources (other sources).

Table 3. Balance on Baseline Characteristics

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Gender	Age	Education	Financial Literacy	HH Size	Migration Duration	HH Income
Treatment 1: Financial Education	-0.085*** (0.029)	0.038 (0.855)	0.212 (0.189)	0.009 (0.026)	-0.158 (0.140)	0.183 (0.350)	-0.422 (0.284)
Treatment 2: Financial Services	-0.042 (0.032)	0.356 (0.931)	0.248 (0.203)	0.005 (0.028)	0.012 (0.155)	0.224 (0.367)	-0.027 (0.307)
Treatment 3: Education & Services	-0.088*** (0.029)	0.808 (0.851)	-0.095 (0.188)	0.023 (0.027)	-0.103 (0.141)	-0.281 (0.340)	-0.390 (0.290)
N	1,808	1,808	1,808	1,808	1,808	1,808	1,808
R-squared	0.007	0.001	0.003	0.000	0.001	0.001	0.002
F Stat	3.972	0.416	1.556	0.284	0.647	0.932	1.211
Prob >F	0.001	0.741	0.198	0.837	0.585	0.424	0.304
	(8)	(9)	(10)	(11)	(12)	(13)	(14)
	Remittances	Expenses	Assets	Savings	Satisfaction with Savings	Borrowing	Lending
Treatment 1: Financial Education	-0.263 (0.212)	0.054 (0.065)	0.038 (0.067)	-0.041 (0.220)	0.009 (0.032)	0.264 (0.285)	0.161 (0.241)
Treatment 2: Financial Services	-0.206 (0.226)	0.015 (0.076)	0.077 (0.072)	0.028 (0.243)	0.018 (0.035)	0.132 (0.309)	-0.093 (0.259)
Treatment 3: Education & Services	-0.191 (0.211)	0.037 (0.070)	0.010 (0.068)	0.344 (0.235)	-0.033 (0.032)	0.178 (0.287)	0.345 (0.248)
N	1,808	1,808	1,808	1,808	1,808	1,808	1,808
R-squared	0.001	0.000	0.001	0.002	0.002	0.000	0.002
F Stat	0.582	0.275	0.482	1.152	0.933	0.298	1.147
Prob >F	0.627	0.843	0.695	0.327	0.424	0.827	0.329

Note: The table presents regression results of baseline characteristics on treatment indicator variables. Each column is a separate regression. Robust standard errors are in parenthesis. See data appendix for more information on baseline characteristics. * p<0.10, ** p<0.05, *** p<0.010

Table 4. Determinants of Financial Service Take-up in Post Treatment Period Across Treatment Groups (Admin data)

	(1)	(2)	(3)	Mean in Control Group	N	R ²	Joint tests of treatment groups on outcomes			
	Treatment 1: Financial Education	Treatment 2: Financial Access	Treatment 3: Financial Education and Access				T1=T2 (p-value)	T1 = T3 (p-value)	T2 = T3 (p-value)	T1+T2=T3 (p-value)
Take up of financial education	0.414*** (0.024)	-0.009 (0.013)	0.389*** (0.024)	0.037	1808	0.227	0	0.431	0	0.647
Take up of financial services	0.010 (0.006)	0.256*** (0.023)	0.288*** (0.021)	0	1808	0.177	0	0	0.302	0.485
Take up of BPI savings product	-0.001 (0.001)	0.011* (0.005)	0.010** (0.004)	0	1808	0.019	0.0394	0.0228	0.885	0.984
Take up of ASKI credit product	0.004 (0.003)	0.003 (0.003)	0.002 (0.002)	0	1808	0.015	0.755	0.606	0.876	0.319
Take up of ASKI insurance product	0.007 (0.005)	0.251*** (0.023)	0.280*** (0.020)	0	1808	0.177	0	0	0.348	0.474

Note: Data taken from administrative data from partner institutions. Each row is a separate regression. All regressions include baseline control variables. Regressions also include indicator for missing baseline covariates. Observations with missing baseline covariate set to 0 for that variable. See data appendix for further details. * p<0.10, ** p<0.05, *** p<0.010

Table 5. Utilization of Similar Products and Services

	(1)	(2)	(3)	Mean in Control Group	N	R ²	Joint tests of treatment groups on outcomes			
	Treatment 1: Financial Education	Treatment 2: Financial Access	Treatment 3: Financial Education and Access				T1=T2 (p-value)	T1 = T3 (p-value)	T2 = T3 (p-value)	T1+T2=T3 (p-value)
Savings										
Total # of household bank accounts	0.091* (0.055)	-0.013 (0.060)	0.061 (0.055)	0.377	1386	0.096	0.0811	0.588	0.225	0.838
Total savings (PHP)	817.987 (1355.118)	-140.497 (1322.629)	2834.286 (2172.257)	1667	1248	0.038	0.544	0.474	0.246	0.513
Log of total household savings	0.291 (0.254)	0.351 (0.276)	0.408 (0.260)	1.309	1248	0.046	0.824	0.650	0.838	0.537
Borrowing										
Respondent borrowed from any source in past 3 months	-0.028 (0.033)	-0.056 (0.034)	-0.031 (0.033)	0.329	1553	0.067	0.385	0.924	0.441	0.251
Total amount borrowed in past year (PHP)	-1935.530* (1134.367)	-1942.959 (1557.960)	-2033.035* (1168.528)	5724	1503	0.050	0.996	0.919	0.947	0.301
Log of total amount borrowed in past year	-0.184 (0.294)	-0.476 (0.307)	-0.256 (0.295)	2.693	1503	0.072	0.316	0.792	0.452	0.328

Note: Data taken from endline survey. Each row is a separate regression. All regressions include baseline control variables. All financial services data in table are self-reported. Regressions also include indicator for missing baseline covariates. Observations with missing baseline covariate set to 0 for that variable. See data appendix for further details. * p<0.10, ** p<0.05, *** p<0.010

Table 6. Source of Borrowing

	(1)	(2)	(3)	Mean in Control Group	N	R ²	Joint tests of treatment groups on outcomes			
	Treatment 1: Financial Education	Treatment 2: Financial Access	Treatment 3: Financial Education and Access				T1=T2 (p-value)	T1 = T3 (p-value)	T2 = T3 (p-value)	T1+T2=T3 (p-value)
Formal Source	0.097* (0.054)	0.070 (0.061)	0.100* (0.060)	0.292	480	0.152	0.650	0.973	0.651	0.430
Informal Source	-0.127** (0.057)	-0.188*** (0.065)	-0.160*** (0.062)	0.658	480	0.145	0.344	0.585	0.680	0.0818
Other Source	0.008 (0.036)	0.075 (0.047)	-0.008 (0.036)	0.083	480	0.060	0.145	0.636	0.0734	0.127

Note: Data taken from endline survey. Formal sources of credit include banks, microfinance lenders, and private lenders while informal sources include immediate and extended family, friends, and neighbors. The respondent noted if credit did not come from any of these sources (Other). Each row is a separate regression. All regressions include baseline control variables. All financial services data in table are self-reported. Regressions also include indicator for missing baseline covariates. Observations with missing baseline covariate set to 0 for that variable. See data appendix for further details. * p<0.10, ** p<0.05, *** p<0.010

Table 7: Impact on Categorical Indices

	Life Satisfaction Index	Income Index	Migrant Index	Consumption Expenditures Index	Goals Index	Savings Index	Borrow and Lend Index	Financial Literacy Index
	b/se/p/q	b/se/p/q	b/se/p/q	b/se/p/q	b/se/p/q	b/se/p/q	b/se/p/q	b/se/p/q
Treatment 1: Financial Education Only	0.064 (0.069)	0.073 (0.066)	0.024 (0.067)	-0.054 (0.063)	-0.078 (0.070)	0.123* (0.070)	-0.056 (0.069)	0.067 (0.071)
P-values for the coefficients	0.353	0.264	0.718	0.395	0.266	0.078	0.415	0.343
Q-values for all 8 hypotheses	0.475	0.475	0.718	0.475	0.475	0.475	0.475	0.475
Treatment 2: Financial Services Only	0.056 (0.074)	0.038 (0.072)	0.004 (0.076)	0.036 (0.058)	0.205** (0.101)	0.117 (0.075)	-0.093 (0.071)	0.007 (0.077)
P-values for the coefficients	0.451	0.597	0.957	0.538	0.043	0.121	0.189	0.928
Q-values for all 8 hypotheses	0.796	0.796	0.957	0.796	0.344	0.484	0.504	0.957
Treatment 3: Financial Education and Services	0.072 (0.073)	0.115* (0.068)	0.090 (0.067)	-0.129 (0.084)	0.060 (0.080)	0.148** (0.069)	-0.044 (0.069)	0.136* (0.073)
P-values for the coefficients	0.32	0.090	0.181	0.126	0.453	0.031	0.523	0.063
Q-values for all 8 hypotheses	0.427	0.240	0.290	0.252	0.518	0.240	0.523	0.240
Mean in Control Group	0	0	0	0	0	0	0	0
N	1558	1560	1558	1558	1531	1557	1557	1560
R Squared	0.059	0.099	0.074	0.151	0.039	0.082	0.065	0.037
<i>P-values for the following tests</i>								
T1 = T2 (p-value)	0.904	0.607	0.774	0.113	0.005	0.935	0.590	0.417
T1 = T3 (p-value)	0.907	0.529	0.285	0.358	0.057	0.709	0.861	0.331
T2 = T3 (p-value)	0.823	0.279	0.229	0.037	0.163	0.672	0.483	0.092
T1 + T2 = T3 (p-value)	0.636	0.969	0.530	0.268	0.577	0.362	0.284	0.555

Note: Data from endline survey. Each column is a separate regression. To create categorical indices, for each outcome, we create a z-score by subtracting the control group mean and dividing by the control group standard deviation. Then, we average z-scores by category and standardize again following the same procedure. We estimate treatment effects on these category indices. Simultaneous inference is corrected for using multiple inference testing. The q-values are calculated using the Benjamini-Hochberg step-up method to control for the false discovery rate (FDR). We follow the procedure outlined in Anderson (2008), and test α at all significance levels (1.000, 0.999, 0.998... 0.000). The q-value is the smallest α at which the null hypothesis is rejected. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.010$

ONLINE APPENDIX

APPENDIX A: Invitations to Financial Education and Financial Access

Treatment 1 Letter



TREATMENT 1

Greetings!

In line with our study's objectives, we offer you the opportunity to participate in our financial literacy training, facilitated by our partner, Alalay sa Kaunlaran (ASKI). The training is a 6-hour seminar which caters to OFW families to hone their skills in business and financial management.

You will be given the chance to learn about financial goals, efficient budgeting, savings, investment, insurance and credit management. The training will be held at ASKI on _____. An alternative date for the training, should you be unable to come, is on _____.

You may bring with you an additional member of your household if you wish. An outline of the program is attached in this sheet, together with additional details. Participation is free and lunch will also be provided. Kindly contact Ms. Chinny Jin Cruz at 0927-338-5401 to confirm your attendance to the training by ____ or if you have any questions about the event.

In the event of your interest, we will follow up on your attendance at a certain date as well as inform you of any changes in the details of this event.

Thank you very much. We are looking forward to your attendance to this event.

Magandang araw po!

Alinsunod sa layunin ng pag-aaral, nais naming kayong anyayahan sa isang Financial Literacy Training ng aming partner, ang Alalay sa Kaunlaran (ASKI). Ang training po na ito na tatagal ng 6 na oras ay naglalayong matulungan ang mga pamilyang OFW sa kanilang kasanayan at kakayahan sa pagnenegosyo at tamang paghawak ng pananalapi.

Sa programang ito, magkakaroon kayo ng pagkakataong matuto tungkol sa financial goals, tamang pagbabadyet, kahalagahan ng pag-iipon, investment, insurance at tamang pamamahala ng utang. Makapagpapatibay po ito ng inyong pang-unawang pinansiyal na maaring makatulong sa inyo sa hinaharap. Gaganapin ang training sa ASKI sa _____. Sakaling hindi po kayo makakapunta, may alternatibo kayong dumalo sa _____.

Maari po kayong magsama ng isa pang miyembro ng inyong pamilya. Ang balangkas ng training ay kalakip din kasama ng iba pang detalye tungkol sa training. Ang paglahok dito ay walang bayad at may kasama na rin pong libreng tanghalian. Makipag-ugnayan lamang kay Ms. Chinny Jin Cruz sa numerong 0927-338-5401 para sa kumpirmasyon ng inyong pagdalo bago ang (deadline) o kung may tanong kayo tungkol sa training.

Kung sakaling kayo'y interesado, ipapaalam nalang po naming sa inyo ang eksaktong petsa o kung may pagbabago sa schedule ng training.

Maraming salamat po. Inaasahan po naming ang inyong pagdalo.

Financial Education Program Outline

- **FINANCIAL GOALS (1 hour)**
 - Different Financial Goals
 - Priority Setting
 - Increasing the Financial Literacy Quotient
- **BUDGETING and PLANNING (1.5 hours)**
 - Budgeting Tips and Exercise: How to Stick to your Budget
 - Household-based and Business-based budgeting
 - Introduction of the Financial Education Notebook
 - Remittances and its Usages
- **SAVINGS (1 Hour)**
 - Why save?
 - Power of Compounding
 - Saving tips and exercise
 - The Ant and the Grasshopper Video
- **INVESTING IN AN ENTERPRISE (1.5 hours)**
 - Different Types of Investment in an Enterprise
 - Objectives in Setting up a Business
 - Sole Proprietorship vs. Franchise
 - Sources of Funds
 - Risk Management
- **Credit Management (1 hour)**
 - Sources of Credit
 - Acceptable Purposes vs. Avoidable Purposes of Credit
- **FINANCIAL FREEDOM and FAILURE (45 minutes)**
 - Common Reasons for Financial Failure
 - Essential Personal Finance Skills
 - Redwood Tree Video
- **PERSONAL COMMITMENT (15 minutes)**
 - Ask the family members to write their personal commitments and how they could help their Overseas Workers' family member achieve FINANCIAL FREEDOM!
 - Achieving FINANCIAL FREEDOM is a collective effort, OFW and family members in the country of origin

Treatment 2 Letter



TREATMENT 2

Greetings!

In line with the objectives of our study, we have partnered with the Bank of the Philippine Islands (BPI) in providing a sustainable solution to address the challenges of financial management in the context of overseas earnings. We would like to invite you to enroll in BPI's remittance program as well as ASKI's microloan products. These initiatives especially cater to families with overseas Filipinos and are a means for sustainable financial management.

BPI is offering a fast and reliable way to receive remittances from abroad through its savings and remittance account – BPIInoy Remittance. Opening an account will only require an initial deposit of 100 pesos and there is no maintaining balance as long as you receive remittances at least 4 times in a year. At the same time, you can enjoy 0.25% interest to your savings every year. To enroll, just bring this the attached referral form to any BPI branch near you by (deadline). The requirements are also detailed in the form.

We would also like to refer you to ASKI's Alalay sa OFW program which caters to OFW families who need additional capital for their business or to uplift their standard of living on the condition that loan amortization will be supported by the remittance coming from their relatives abroad. To apply for the Alalay sa OFW program, bring this the attached referral form to any ASKI branch near you. The requirements are also detailed in the form.

Thank you very much!

Magandang araw po!

Alinsunod sa mga layunin ng aming pag-aaral, nakipagtulungan kami sa BPI sa pagbibigay ng mahusay na solusyon sa hamong pampinansyal ng mga pamilyang may mahal sa buhay na nagtatrabaho sa ibang bansa. Inaanyayahan po namin kayong mag-enroll sa remittance at savings programs ng BPI at / o sa micro loan program ng ASKI. Mabisang paraan ang mga programang ito upang maitaguyod ang mahusay at tamang paghawak ng pananalapi.

Mayroon pong inaalok ang BPI na matipid, mabilis at maaasahang savings account - Ang BPIInoy Remittance. Ito po ang pinakamabilis na paraan para matanggap ang inyong remittance na masasama sa inyong savings account. Inaanyayahan po namin kayong magbukas ng BPIInoy Remittance account na may isang daang piso lamang na initial deposit, walang maintaining balance hangga't napapadalhan ng apat na beses sa isang taon. Kikita pa po ng 0.25% ang inyong ipon bawat taon. Para po makapag-enroll, dalhin niyo lamang po ang referral form na ito sa inyong piling BPI branch bago ang (deadline). Ang mga requirements ay matatagpuan na rin po sa form na ito.

Iniimbitahan din po namin kayo sa Alalay sa OFW na programa ng ASKI. Ito po may layunin na makatulong sa mga pamilyang OFW na madagdagan ang kanilang kapital pang-negosyo at itaas ang antas ng pamumuhay sa kondisyon na ang panghulog sa loan ay manggagaling sa remittance ng inyong kapamilya sa ibang. Para po mag-apply, dalhin niyo lamang po ang referral form na ito sa pinakamalapit na ASKI branch sa inyo bago ang (deadline). Ang mga requirements ay nakalagay narin po diyan sa form.

Maraming salamat po!

BPI Savings and Remittance Marketing Materials



The advertisement is a vertical banner with a red top and bottom section. The top section contains the BPI logo and the word "Remittance" in white. The middle section is split into two horizontal panels. The top panel shows a woman smiling, with the Golden Gate Bridge in the background. The bottom panel shows two children, a boy and a girl, smiling, with a house in the background. The text "Ang marunong humawak ng pera" is overlaid on the top panel, and "sa BPI Remittance nagpapadala." is overlaid on the bottom panel. The bottom section contains contact information and the BPI logo with the tagline "Make the best happen."

BPI
Remittance

Ang marunong
humawak ng pera

sa BPI Remittance
nagpapadala.

Remit with BPI now!
Visit <http://www.bpiexpressonline.com> for details
Talk to us on www.facebook.com/bpi

BPI
Make the best happen.

Alam namin na mahalaga ang bawat sentimong iyong pinapadala kaya sinisiguro ng BPInoy na ito ay mapupunta sa iyong pinaglalaanan.

Send money to your loved ones in the Philippines through BPInoy Remittance!

Your beneficiary will receive your remittance, quickly and conveniently through any of the following options:

Direct Credit to a BPInoy Savings Account

Ito ang pinakamabilis at matipid na paraan para matanggap ng iyong beneficiary ang pinadalang pera.

- Your remittance will be credited to your beneficiary's BPInoy Savings or to any account in BPI or BPI Family Savings Bank.
- Your beneficiary can withdraw anytime, anywhere from over 12,742 BPI, Expressnet, Megalink and Bancnet ATMs.
- You can also remit to your own account so you can start saving for your future. BPInoy Savings Account earns higher interest than other regular savings accounts. It's so easy to open, just log on to www.bpidirect.com.

At dahil diretso sa bank account, susi ito sa pangarap mong bahay, sasakayan at edukasyon ng iyong anak. May **Financial Literacy Program** pa na magtuturo sa iyong i-manage ang pera mo.

Pick-Up Anywhere

Maaari ring makuha ng cash ng iyong beneficiary ang pinadalang pera. Pwede nyang i-pick up sa anumang BPI or BPI Family Savings Bank branch na malapit sa kanya. There are over 800 branches nationwide to choose from. May BPI branches rin sa Malls na bukas ng Sabado at Linggo hanggang 7:30pm. Your beneficiary can also pick up your remittance from over 2,500 outlets of our Remittance partners: Cebuana Lhuillier, M Lhuillier and One Network Bank.

Door-to-Door

Your remittance can also be delivered directly to your beneficiary's address, in cash or in check.

Credit to Other Bank's Account

You can also send your remittance to other banks in the Philippines aside from BPI.

Gift Remittance

Maaari ring matanggap ng iyong beneficiary bilang regalo ang iyong remittance. Your remittance can come in the form of healthcare services*, meal and birthday packages, appliances, gadgets, grocery items and more!

What's more, with BPInoy Remittance, both you and the beneficiary will receive a **free text message**** that your remittance has been sent and received. Just make sure to indicate the cellphone numbers on the Remittance Application form.

* Available soon.

** Only for remittances sent thru BPI Express Remittance Centers. Not yet available for Pick-Up from Remittance Outlets and Gift Remittance transactions.

You can also remit through our partner Correspondent Banks. Please indicate the BPI SWIFT address **BOPIPHMM** if you sending through direct credit to a BPInoy Savings, BPI, BPI Direct or BPI Family Savings Bank Express Teller Savings Account.

Mag-BPInoy Remittance na sa mga sumusunod na BPI Overseas Remittance Offices at BPI Remittance Tie-up companies:

ASIA PACIFIC AND HONG KONG

BPI REMITTANCE CENTRE HONG KONG LTD

Worldwide 115 Branch
115 / 116 Worldwide House,
19 Des Voeux Road, Central HK
Tel. Nos.: (852) 2522-7105 / 2521-5366
E-mail: bpeworldwide@bpi.com.ph

Hong Hom Branch
Shop 07-08 Planet Square Bldg.
No. 1-15 Tak Alan St., Hong Hom, Kowloon
Tel. No.: (852) 2954-4833
Fax No.: (852) 2954-4044
E-mail: bpihonghom@bpi.com.ph

Tsuen Wan Branch
Shop 176 1/F, Lik Sang Plaza
No. 269 Castle Peak Road, Tsuen Wan,
New Territories, Hong Kong
Tel. No.: (852) 2684-9088
Fax No.: (852) 2692-4088
E-mail: bpitsuenwan@bpi.com.ph

Yuen Long Branch
Shop 18 B2 2nd Floor, Tung Yik Building,
Yu King Square, Yuen Long
Tel. No.: (852) 2443-5377
Fax No.: (852) 2443-5477
Email Address: bpilyuenlong@bpi.com.ph

BPI REMITTANCE TIE-UP COMPANIES

AUSTRALIA

EXPED GLOBAL
24 Bantock Circuit Macquarie Links, NSW
Australia 2565
Tel. Nos. (612) 9605 2693 / 9605 2695

FORXWORLD PTY. LTD.
6/312 Houston Park Road, Prestons NSW
Australia 2170
Tel. No. (612) 8777 0000

GRANSTAR GLOBAL SERVICES PTY. LTD.
Suite 5/57-59, Main Street,
Blackdown, New South Wales,
Australia 2140
Tel. Nos. (614) 2627-3186 / (02) 800-54352

J & J EXPRESS
6 Marlburg Crescent, Rowville,
Victoria 3178 Australia
Tel. No. (613) 9764 8707

JALANDONI & COMPANY PTY. LTD.
30 Vaucluse Road, Vaucluse, New South
Wales, Australia 2030
Tel. No. 612-9388-8888
Fax No. 612-9388-8858

JIC REMITTANCE AND CARGO SERVICES
63/12 Pecks Road, Sydenham, Victoria,
Australia 3037
Tel. No. (613) 9489-3606

PAGASA
32 Binney Road Kings Park, New South
Wales, Australia 2148
Tel. Nos. (612) 989-89267 / (612) 277-6781
(612) 291-7226

PHIL-AUSTRAL PTY. LTD.
3 The Cloisters, Cherybrook, New South
Wales, Australia 2126
Tel. No. 612-9899-5598
Fax No. 612-9899-5796

SALAZAR KWARTA PADALA
16A Young Street, Southport,
Gold Coast, Queensland, Australia 4215
Tel. Nos. (617) 5668-1899 / (617) 5503-1055
Fax No. (617) 4318-30624

TECHCASH PTY. LTD.
PO Box 618 Parramatta NSW Australia 2124
Tel. No. 612-9687-1900
Fax No. 612-8088-4348

CAMBODIA

CAMBODIA MEKONG BANK PUBLIC LTD.
298, Mao Teu Young Boulevard, #08-00,
Phnom Penh, Kingdom of Cambodia
Tel. No. 855-23-424320
Fax No. 855-23-424326

EAST TIMOR

ROCKY CONSTRUCTION PTY LTD.
Bicau Leidore, Dil, East Timor
Tel. No. (670) 723-5373

HONG KONG

CZARINA REMITTANCE COMPANY LTD.
Shop 163 1/F, World Wide House,
#19 Des Voeux Road, Central Hongkong
Tel. No. (852) 3101-9872

Shop 21, G/F, Seven Seas Shopping Centre,
121 Kings Road, North Point, Hongkong
Tel. No. (852) 2882-0781
Fax No. (852) 2887-8917

Shop 231 Lik Sang Plaza,
No. 269 Castle Peak Road, Tsuen Wan
Tel. No. (852) 2416-0618
Fax No. (852) 2416-0617

Shop No. 110 on 1st Floor,
Worldwide House, (World-wide Plaza),
No. 19 Des Voeux Road, Central, Hong Kong
Tel. No. (852) 2537-6016

Unit A068 On 1/F Of Nan Fung Centre,
264-298 Castle Peak Road, Tsuen Wan
Tel. No. (852) 2498-0108
Fax No. (852) 2498-0848

JAPAN

SPEED MONEY TRANSFER JAPAN
KABUSHIKI KAISHA TOKYO
Yusakucho 4 Square Bldg., 2/F., Yasuakucho
1-2-12, Chiyoda-ku Tokyo 100-0006
Tel. No. (813) 6268-8010 / (813) 6268-8040
Fax No. (813) 3504-1946

Speed Money Transfer Japan K.K. NAGOYA
9F Koasa Building, 4-2-10 Sakae, Naka-ku,
Nagoya-shi, Aichi-ken 460-0008 Japan
Tel. Nos. (81-52) 265-9797
(81-52) 265-9898
Fax No. (81-52) 265-9595

KOREA

WOORI BANK
203 Haebyeon-dong, 1-ga-chung-gu,
Seoul 100-792 Korea
Tel. No. 8222-0023-428

MALAYSIA

IME (M) SDN BHD
Suite 20-11-2, Block 20, Level 11, Plaza
Sentral, Jalan Stesen, Sentral 5, 50470 KL,
Malaysia
Tel. 603-22614030 / 31/33/46
Fax 603-22614051/52

ASKI Microloan Marketing Materials

Want to Avail a Loan? ASK us





Image source: english.org

Alalay sa OFW Program (AOP)

This credit program caters to overseas Filipino workers (OFW). The program is aimed at supporting OFW and their families back home by helping them establish their own businesses and have an entrepreneurial mindset so they will no longer rely on remittances.



Loan Term

Loan Size: Php 30,000 to Php 300,000
Loan Term: 3 months to 2 years
Mode of Payment: Monthly
Insurance Required

Loan Requirements

- Barangay Clearance
- CTC (Cedula)
- Recent 1x1 colored picture
- Recent 2x2 colored picture
- Recent 5R business picture
- Business Permits
- Photocopy of passport (OFW)
- Photocopy of employment contract (OFW)
- Photocopy of working permit card (OFW)

Capital Build-Up (CBU) required:
15% (of existing loan amount)
Interest: 3% based on outstanding loan balance

For more information, please call or visit the ASKI branch near you.

Komento Mo, i-text Mo:
GLOBE and TM: 0906 490 1081
SMART and TNT: 0999 885 2174
SUN CELLULAR: 0932 845 1897

Treatment 3 Letter



TREATMENT 3

Greetings!

In line with our study's objectives, we offer you the opportunity to participate in our financial literacy training, facilitated by our partner, Alalay sa Kaunlaran (ASKI). The training is a 6-hour seminar which caters to OFW families to hone their skills in business and financial management.

You will be given the chance to learn about financial goals, efficient budgeting, savings, investment, insurance and credit management. The training will be held at ASKI on _____. An alternative date for the training, should you be unable to come, is on _____. You may bring with you an additional member of your household if you wish. An outline of the program is attached in this sheet, together with additional details. Participation is free and lunch will also be provided. Kindly contact Ms. Chiny Jin Cruz at 0927-338-5401 to confirm your attendance to the training or if you have any questions about the event.

In addition, we have partnered with the Bank of the Philippine Islands in providing a sustainable solution to address the challenges of financial management in the context of overseas earnings. We would like to invite you to enroll in BPI's remittance program as well as ASKI's microloan products.

BPI is offering a fast and reliable way to receive remittances from abroad through its savings and remittance account – BPIInoy Remittance. Opening an account will only require an initial deposit of 100 pesos and there is no maintaining balance as long as you receive remittances at least 4 times in a year. At the same time, you can enjoy 0.25% interest to your savings every year. To enroll, just bring this the attached referral form to any BPI branch near you. The requirements are also detailed in the form.

We would also like to refer you to ASKI's Alalay sa OFW program which caters to OFW families who need additional capital for their business or to uplift their standard of living on the condition that loan amortization will be supported by the remittance coming from their relatives abroad. To apply for the Alalay sa OFW program, bring this the attached referral form to any ASKI branch near you. The requirements are also detailed in the form.

Thank you very much! We are looking forward to your participation.

Magandang araw po!

Alinsunod sa layunin ng pag-aaral, nais naming kayong anyayahan sa isang Financial Literacy Training ng aming partner, ang ASKI. Layunin po ng programang ito na matulungan ang mga pamilyang OFW sa kanilang kasanayan at kakayahan sa pagnenegosyo at tamang paghawak ng pananalapi.

Sa Financial Literacy Training, magkakaroon kayo ng pagkakataong matuto tungkol sa financial goals, tamang pagbabadyet, kahalagahan ng pag-iipon, investment, insurance at tamang pamamahala ng utang. Makapagpapatibay po ito ng inyong pang-unawang pinansiyal na maaring makatulong sa inyo sa hinaharap. Ang training pong ito na tatagal ng anim na oras ay gaganapin sa ASKI at wala pong bayad ang pagsali dito. May kasama na rin po itong libreng tanghalian. Makipag-ugnayan lamang kay Ms. Chiny Jin Cruz sa numerong 0927-338-5401 para sa kumpirmasyon ng inyong pagdalo bago ang _____ o kung may karagdagang katanungan tungkol sa training.

Mayroon pong inaalok ang BPI na matipid, mabilis at maaasahang savings account - Ang BPI Inoy Remittance. Ito po ang pinakamabilis na paraan para matanggap ang inyong remittance na masasama sa inyong savings account. Inaanyayahan po namin kayong magbukas ng BPI Inoy Remittance account na may isang daang piso lamang na initial deposit, walang maintaining balance hangga't napapadalhan ng apat na beses sa isang taon. Kikita pa po ng 0.25% ang inyong ipon bawat taon. Para po makapag-enroll, dalhin niyo lamang po ang referral form na ito sa inyong piling BPI branch bago ang (deadline). Ang mga requirements ay matatagpuan na rin po sa form na ito.

Inilimbihan din po namin kayo sa Alalay sa OFW na programa ng ASKI. Ito po may layunin na makatulong sa mga pamilyang OFW na madagdagan ang kanilang kapital pang-negosyo at itaas ang antas ng pamumuhay sa kondisyon na ang panghulog sa loan ay manggagaling sa remittance ng inyong kapamilya sa ibang. Para po mag-apply, dalhin niyo lamang po ang referral form na ito sa pinakamalapit na ASKI branch sa inyo bago ang (deadline). Ang mga requirements ay nakalagay narin po diyan sa form.

Maraming salamat po! Inaasahan naming ang inyong partisipasyon.

ASKI Micro-insurance Product

	Life Insurance	Accident Insurance																																	
Eligibility	Those aged 18-70 who are of good health >Those with terminal illnesses are not eligible >Those with high blood or heart diseases may be eligible	Those aged 18-70																																	
Premium and Benefits	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;"><u>Age 18-65 (Exit age 75)</u></th> <th style="text-align: center;"><u>Age 66-70 (Exit age 75)</u></th> <th style="text-align: center;"><u>Insurance Benefit</u></th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">₱ 250.00</td> <td style="text-align: center;">₱ 575.00</td> <td style="text-align: center;">₱ 30,000.00</td> </tr> <tr> <td style="text-align: center;">400.00</td> <td style="text-align: center;">925.00</td> <td style="text-align: center;">50,000.00</td> </tr> <tr> <td style="text-align: center;">600.00</td> <td style="text-align: center;">1,400.00</td> <td style="text-align: center;">80,000.00</td> </tr> <tr> <td style="text-align: center;">750.00</td> <td style="text-align: center;">1,800.00</td> <td style="text-align: center;">100,000.00</td> </tr> </tbody> </table>	<u>Age 18-65 (Exit age 75)</u>	<u>Age 66-70 (Exit age 75)</u>	<u>Insurance Benefit</u>	₱ 250.00	₱ 575.00	₱ 30,000.00	400.00	925.00	50,000.00	600.00	1,400.00	80,000.00	750.00	1,800.00	100,000.00	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">Premium</th> <th style="text-align: center;">Death Due to an Accident</th> <th style="text-align: center;">Hospitalization Due to an Accident</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">PHP 20</td> <td style="text-align: center;">PHP 30,000</td> <td style="text-align: center;">PHP 2,000</td> </tr> <tr> <td style="text-align: center;">PHP 40</td> <td style="text-align: center;">PHP 60,000</td> <td style="text-align: center;">PHP 4,000</td> </tr> <tr> <td style="text-align: center;">PHP 60</td> <td style="text-align: center;">PHP 90,000</td> <td style="text-align: center;">PHP 6,000</td> </tr> <tr> <td style="text-align: center;">PHP 80</td> <td style="text-align: center;">PHP 120,000</td> <td style="text-align: center;">PHP 8,000</td> </tr> <tr> <td style="text-align: center;">PHP 100</td> <td style="text-align: center;">PHP 150,000</td> <td style="text-align: center;">PHP 10,000</td> </tr> </tbody> </table> <p>Micro-insurance does not cover accidents caused by the following:</p> <ul style="list-style-type: none"> • War/Terrorism • Military Service • Self-inflicted injury or Suicide • Drag Race • Death from giving birth • Cosmetic Surgery • Under the influence of alcohol or drugs • Murder o Assault • Mental instability • Motorcycle accident (unless it's personally owned) 	Premium	Death Due to an Accident	Hospitalization Due to an Accident	PHP 20	PHP 30,000	PHP 2,000	PHP 40	PHP 60,000	PHP 4,000	PHP 60	PHP 90,000	PHP 6,000	PHP 80	PHP 120,000	PHP 8,000	PHP 100	PHP 150,000	PHP 10,000
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Insurance Coverage	1 year	6 months																																	
	Effective from the date of payment Renewal must be done at least one month before the policy expires																																		
Spiel	<p>We invite you to take part in our new micro-insurance programs brought to you ASKI, our implementing partner.</p> <p>First, you may choose to enroll in a life insurance plan for individuals ages 18-70 years old of healthy physical standing. In this program, your enrollment allows for a 1-year coverage period in accordance with this scheme.</p> <p>On the other hand, we proudly presents another viable financial planning option for you in times of accidents following these specifics, within a 6-month coverage period</p> <p>To enroll in either or both programs, follow these simple instructions:</p> <ul style="list-style-type: none"> • Fill-out an IPA-stamped micro-insurance application form • Submit the document to any IPA Field Officer or ASKI Professional Partner for verification and processing • Pay the premium of preferred micro-insurance plan through payment channels (BDO or ASKI) • ASKI to issue receipts to applicants • Coverage starts from the date of payment <p>We believe that it is important to prepare for unforeseen circumstances to protect not only our own welfare but also our loved one's wellbeing. For your peace of mind, avail of these micro-insurance programs today!</p>																																		

APPENDIX B: Supplementary Tables on Baseline Covariates, Balance, and Outcomes Variables Used to Construct Category Indices

Table B.1. Baseline Covariates and Definitions

Variable	Description	Question in the Baseline Survey
Gender	Dummy variable = 1 if household head is male = 0 if household head is female	Section 1 (gender of household head)
Age	Age of household head in years	Section 1 (age of household head)
Education	Education in years completed, computed for highest level attained	Section 1 (highest level of education completed of household head)
Financial Literacy	Dummy variable = 1 if both questions on financial literacy answered correctly = 0 otherwise	Section 6 (Q1 + Q2)
Household Size	Number of household members	Section 1 (person #)
Migration Duration	Years since first migration of earliest migrant in the household, computed from date first left for overseas	Section 3 (date migrant first left for overseas)
Income	Log (1 + household income). Household income is the sum of the average monthly wage and entrepreneurial income of all household members, excluding migrants.	Section 1 (wage and entrepreneurial income)
Remittances	Log (1 + remittances). Remittances is the sum of all remittances received from migrant household members.	Section 3 (remittances received from migrant)
Expenses	Log (1 + household expenses)	Section 2 (Expenses, Q1)
Assets	Asset index, computed from the first principal component of dummy variables indicating ownership of various assets	Section 2 (Assets, Q3)
Savings	Log (1 + household savings) Household savings are the sum of savings in the Philippines and overseas held inside and outside banks, converted to Philippine pesos.	Section 4 (Q4 + Q5)
Satisfaction with Savings	Dummy variable = 1 if “satisfied” or “very satisfied” with level of savings = 0 if otherwise	Section 4 (Q6)
Borrowing	Log (1 + amount of loans outstanding)	Section 5 (Q5)
Lending	Log (1 + amount of lent money outstanding)	Section 5 (Q11)

Table B.2 Balance on Attrition

	(1) Completed Survey
Treatment 1: Financial Education	0.032 (0.022)
Treatment 2: Financial Services	0.013 (0.025)
Treatment 3: Education & Services	0.014 (0.023)
N	1,808
R-squared	0.026

Note: The table presents regression results of survey completion at endline on each of the treatment indicator variables. The regression includes controls for all baseline characteristics. Robust standard errors are in parenthesis. * p<0.10, ** p<0.05, *** p<0.010

Table B.3. Reasons for not Applying for the BPI Savings Product

BPI: Reasons for not applying	Total
Has other preferred establishments	46.9%
Just not interested	18.1%
No approval from the OFW	9.0%
Rigid requirements	6.8%
Accessibility	6.5%
Bound by preset conditions	1.8%
Other	21.6%

Note: Percentages sum up to more than 100% as respondents could provide multiple answers

Table B.4. Components of Categorical Indices

Variable	Description
I. Life Satisfaction and Mental Stress	
Satisfaction with life	Answer to question (integer value from 1 – 10) Dummy variable = 1 if at or above sample median
Index of i. – vi.	Index of i. – vi. using principal components of these answers
i. Felt sad	Number of times felt this way
ii. Cried a lot	Number of times felt this way
iii. Did not feel like eating	Number of times felt this way
iv. Did not feel like working	Number of times felt this way
v. Sleep was restless	Number of times felt this way
vi. Worried, tense or anxious	Dummy variable = 1 if YES = 0 if otherwise
II. Income	
Total income	Total average income of all household members, excluding migrants, in logs or levels. ¹²
Total migrant income	Migrant income of all migrants in the household in Philippine pesos, in logs or levels
III. Migrant Workers and Remittances	
Total number of migrants	Number of household members who are currently migrants
Total remittances	Remittances from all migrants in Philippine pesos, in logs or levels
IV. Consumption and Expenditure	
Total expenses	Total household expenses, in logs or in levels
Lack of money	Number of times household missed meals
V. Goals	
Household's important goals	
i. education of children	Dummy variable = 1 if category was mentioned
ii. acquire or build own home or land	Dummy variable = 1 if category was mentioned
iii. make major renovations to home	Dummy variable = 1 if category was mentioned
iv. acquire transportation vehicle	Dummy variable = 1 if category was mentioned

¹² All dependent variables denominated in money terms are examined in logs and levels. The log transformation of X is $\log(1+X)$ to deal with zeros. Variables in levels are money values truncated at the 99th percentile (all values above the 99th percentile will be replaced with the value of the 99th percentile), to deal with outliers.

v. acquire other major asset	Dummy variable = 1 if category was mentioned
vi. set up household enterprise	Dummy variable = 1 if category was mentioned
vii. expand own enterprise	Dummy variable = 1 if category was mentioned
viii. vi. other (specified)	Dummy variable = 1 if category was mentioned

VI. Savings

Total number of bank accounts	Number
Total savings in all forms (in and out of banks)	Total savings, in logs or levels
Satisfaction with savings	Dummy variable = if “satisfied” or “very satisfied” with level of savings = 0 if otherwise

VII. Borrowing and Lending

Borrowed from somewhere	Dummy variable = if YES = 0 if otherwise
Amount borrowed	Amount borrowed, in logs or levels
Lent to someone	Dummy variable = if YES = 0 if otherwise
Amount lent	Amount lent, in logs or levels

VIII. Financial Literacy

Financial Literacy	Dummy variable = 1 if both questions on financial literacy answered correctly = 0 otherwise
	Question 1: If you saved PhP 500 and received 10% interest per month, how much interest would you earn after one month? Answer _____
	Question 2: If you put Php 100 into a savings account that paid you 10% compound interest per year, if you never took anything out, how much would you have in 10 years? (multiple choice) -Less than 200 -200 exactly -between 200 and 220 -exactly 220 -more than 220 -don't know/no response
