Financial Education for Female Foreign Domestic Workers in Singapore¹

Rashmi Barua Jawaharlal Nehru University Gauri Kartini Shastry Wellesley College Dean Yang University of Michigan

July 2019

Abstract

We evaluate a randomized field experiment to study the effect of financial workshops for domestic workers in Singapore. Groups of women met monthly with a trained mentor. Take-up rates were low and our results are inconclusive as to whether invitations to these workshops improved financial knowledge and behavior. Unexpectedly, treatment assignment had a significant, negative effect on self-reported savings. Further exploration suggests that assignment to treatment could affect participants' awareness of accumulated savings. We find a reduction in the number of savings accounts reported and an increase in the probability respondents report having disagreements with family members over finances. Keywords: financial education; migrant workers; savings;

¹ We thank Sarah Mavrinac, Veronica Gomez and Nicola Pocock without whose support this project would not have been possible. We also thank Olivia Mitchell and Benedict Koh for guidance and support and Patrick McEwan for feedback. Special thanks goes to Lehui Liang and Bali Sodhi Kaur who were excellent project coordinators. Thanks to Jessica Walker and Xuna Gao for research assistance at later stages of the project. Rashmi Barua gratefully acknowledges funding from Sim Kee Boon Institute for Financial Economics (SKBI), Singapore Management University. Kartini Shastry gratefully acknowledges support from Wellesley College Faculty Awards. Corresponding author: Gauri Kartini Shastry, <u>gshastry@wellesley.edu</u>, Wellesley College, Department of Economics, 106 Central Street, Wellesley, MA 02481. Barua: barua.bhowmik@gmail.com. Yang: deanyang@umich.edu.

1. Introduction

Financial decisions are complex and can have serious consequences for individual and social well-being. Migrant workers face additional challenges related to sending sub-national, or even international, remittances. Besides impacting the well-being of transnational households, aggregate remittance flows are substantial, making up an important part of international financial flows. Migrant workers also face greater informational asymmetries arising from being geographically separated from their families. Compounding this with gender differences in financial literacy (Lusardi and Mitchell 2008) and intra-household control over finances, female migrant workers are especially vulnerable to making suboptimal financial decisions.

In this paper, we evaluate a savings intervention tailored to female Filipino domestic workers in Singapore. Randomly chosen women were invited to join savings clubs of 10-12 women who met with a mentor once a month for nine months. Mentors were trained and the clubs were organized by an NGO with experience in providing financial education for this specific population. The mentor covered financial material developed by the NGO, in addition to providing the participants with short-term savings goals and going over the participants' financial documents. The material focused on the importance of saving, as well as learning to say no to unnecessary expenses, either their own whims or requests from their family members in the Philippines.

We have three main findings. First, we document very low take-up. Only 16% of the women invited to join a club enrolled. This low take-up rate, along with high attrition arising from the transitory nature of employment and frequent phone number changes in this population, limit our statistical power. Consequently, our point estimates come with large standard errors. Nevertheless, while our intent-to-treat analysis reveals no statistically significant changes in financial knowledge or planning, our second finding is a statistically significant 9 percentage point

reduction in whether the women report having any savings.² We find negative point estimates on savings in both Singapore and the Philippines, separately, although these estimates are not statistically significant at conventional levels. Since the financial outcomes are self-reported, it is worth considering how accurately migrants know how much savings they or their families back home have; one explanation for this unexpected finding is that assignment to treatment urges women to seek more information on how much savings they have and how their remittances are spent or saved. Consistent with this explanation, our third finding is that women invited to join a savings club report having fewer savings accounts and are more likely to report disagreeing with their family members about how remittances are spent. Thus, it would be premature to conclude that assignment to treatment was harmful to participants: being more aware of how much savings one actually has could be beneficial in the long run. Similarly, there may be an optimal level of savings, and people may gain from both reducing and increasing their savings levels. We do not find support for other possible explanations that may be more harmful, such as a discouragement effect if participants decide their savings goals are unattainable.

Our primary analysis uses an intent-to-treat specification, documenting the effect of *invitations* to the savings clubs; this method addresses the endogeneity of enrollment by comparing women randomly assigned to receive an invitation to a club and women randomly assigned not to receive an invitation. One limitation of this strategy is that it does not allow us to separately identify the effect of participating in the club from the effect of receiving an invitation itself. In order to further investigate explanations for our unexpected results, we use propensity score matching methods to compare women with similar propensities to enroll in the club, following Ibarra, McKenzie, and Ortega (2017). This analysis warrants caution, due to our very small sample size

² It is worth noting that the intervention we study is longer than many financial literacy workshops studied in the literature, which are often only over a few days. This intervention therefore includes better reinforcement over time.

and limited pre-intervention data, as compared to Ibarra, McKenzie, and Ortega (2017), but it provides suggestive evidence that the negative impact on savings is driven by those who received an invitation to a savings club but chose *not* to enroll. One possible explanation has to do with the course fee. The S\$55 fee was paid up front by the student, but refunded over the following nine months in order to encourage regular attendance. In addition to possibly explaining the low take-up, this fee structure may have made participants more aware of their limited savings: Many women expressed concern about coming up with the money. Note that this result is not inconsistent with the explanation posited above that women might find savings more salient after filling out a survey and receiving an invitation to a financial literacy workshop; the women who enroll may then benefit from the workshop while those who do not are left simply with the realization that they have less savings than they previously thought. We are unable to provide a conclusive answer to this puzzle and must leave it to future work.³

The primary contribution of this paper is to the literature focused on financial literacy and financial education. A large literature documents correlations between financial literacy and a host of financial decisions, including planning for retirement, accumulating precautionary savings, and borrowing at high interest rates (see, for example, Lusardi and Mitchell 2007, Lusardi and Tufano 2015, van Rooij, Lusardi and Alessie 2012). However, existing research has yet to reach a consensus on whether and what kind of financial literacy training improves financial well-being

³ Other possible explanations are rooted in behavioral economics, but with such a small sample size and limited survey data, we are unable to investigate further. One relevant thread from the literature on behavioral biases, focusing on nudges and reminders, most often finds that reminders improve individual's behavior (see, e.g., Karlan et al. 2016 and Bhargava and Manoli 2015). There is a smaller literature on the possible costs of nudges, such as annoyance costs motivating individuals to unsubscribe from a charity's mailing list, for example (Damgaard and Gravert 2018). A related literature focuses on how scarcity may impair decision-making (Shah, Mullainathan, and Shafir 2012, Mani et al. 2013); making savings or the lack thereof salient may have similar effects. Finally, this paper also relates to work on the impact of being surveyed (Zwane et al 2011); while both the control group and the treatment group were surveyed, the treatment group received additional communication related to savings in the form of invitations to the workshop.

(see Hastings, Madrian, and Skimmyhorn 2013, Fernandes et al. 2014, Miller et al. 2015, and Kaiser and Menkhoff 2017 for reviews and meta-analyses of this literature).⁴ This paper focuses on financial education provided to migrant workers. A few recent studies have evaluated financial literacy training provided to similar populations as ours and found mixed impacts. Gibson, McKenzie, and Zia (2014) provide financial literacy training to migrants of both genders with a focus on remittance decisions and find a reduction in using costly remittance methods but no change in remittance frequency or amount. Doi, McKenzie, and Zia (2014), in a paper very close to ours, finds that financial training for migrating women has no impact, unless family members are provided with financial literacy training as well. Seshan and Yang (2014) provide a financial workshop to male migrants and find positive impacts for households with low pre-treatment savings levels and changes in behavior for wives as well.

These papers speak to the important role that gender differences and intra-household decision-making play in understanding the impact of financial education. Accordingly, this paper also contributes to the literature on gender differences in financial decision-making (Shurchkov and Eckel 2018) and the literature on intra-household financial decision-making. Ashraf (2009) studies the financial choices of married individuals in the Philippines and finds that individuals alter their savings choices when the choice is observed by their spouse. Ashraf et al. (2015) find that Salvadoran migrants in the U.S. (71% of whom are male) save more in the home country when

⁴ Studies from developed countries cover a range of populations, including children (Alan and Ertac 2018), high school students (Bernheim, Garrett, and Maki 2001, Cole, Paulson, and Shastry 2016, Brown et al. 2016, Luhrmann, Serra-Garcia, and Winter 2018, Bover, Hospido, and Villanueva 2018), college students (Gartner and Todd 2005, Stoddard, Urban and Schmeiser 2017,), and adults (Skimmyhorn 2016, Choi, Laibson, and Madrian 2011, Agarwal and Mazumder 2013, Frisancho 2018). While some of these papers find positive impacts, many have limited or mixed findings. In developing countries, evaluations of financial literacy training for individuals or households and business training interventions for micro-entrepreneurs or farmers also find mixed effects (see Drexler, Fischer, and Schoar 2014, Berge, Bjorvatn, and Tungodden 2014, Karlan and Valdivia 2011, Field, Jayachandran and Pande 2011, Kaiser and Menkhoff 2018, Sayinzoga et al 2016 for micro-entrepreneurs and Carpena et al. 2011, Bruhn, Ibarra, and McKenzie 2014, Bruhn et al. 2016, Cole, Sampson, and Zia 2011, Carpena et al. 2017, Berg and Zia 2017, Calderone et al 2018 on individuals).

offered financial products that give the migrant more control over savings. Abarcar, Barua, and Yang (2017) evaluate financial education and access for transnational households, focusing on the household back home, and find reductions in borrowing from informal sources, but no effects on well-being. Consistent with these papers, our results highlight the role of spousal control on savings decisions, but the intervention we provide primarily targets female migrants.⁵

This paper proceeds as follows. In section 2, we provide background information on the population of interest, foreign domestic workers in Singapore. Section 3 describes in detail the intervention and sample selection and presents descriptive statistics. The empirical results are presented in section 4 and finally, section 5 concludes.

2. Foreign Domestic Workers in Singapore

Our study population is composed of Singapore-based Filipino foreign domestic workers (FDWs). The Philippines is the second largest migrant-sending country and the third largest remittance-receiving country in the world. The concentration of Filipino women as international migrants is striking; 87% of international migrants in the services sector from the Philippines in 2010 were women. Among these, 70% were domestic workers (Bell and Muhidin 2009). Recent research in the economics of migration has documented several beneficial impacts of remittance flows on household well-being and investments. For instance, households in the Philippines experiencing exogenous increases in remittances become more likely to leave poverty status, to

⁵ We also draw from the general literature on intra-household decision-making in transnational households. For example, De Laat (2014) shows that male Kenyan migrants spend considerable resources monitoring their rural wives, consistent with the existence of moral hazard in wives' spending out of remittances relative to the husbands' preferences. Chen (2006) finds evidence in China that non-cooperative behavior by wives when husbands have migrated is greater for behaviors that are more difficult to monitor.

send their children to school, and to invest in new entrepreneurial enterprises (Yang and Martinez 2005, Yang 2006, Yang 2008).

Singapore is an interesting case study because it hosts a large migrant worker population, approximately one-fourth of its total population of 5 million (Singapore Department of Statistics 2011), and is also a major receiving country for female migrant labor. As of December 2010, there were 201,000 FDWs and the majority of them came from the Philippines. It has been estimated that one in five households employ a live-in maid (United Nations Development Fund for Women (UNIFEM Singapore 2011).

Government regulations differentiate employment contracts of FDWs from other types of employees. FDWs, almost all of whom are women, must be between 23 and 50 years old when first entering Singapore and may work up to the age of 60. The government of Singapore also requires that the women have at least 8 years of formal education. During the period of this study, domestic workers were not covered by standard employment regulations; there were no minimum wage regulations or minimum number of days off. However, the Philippine Overseas Employment Administration stipulated a minimum salary of S\$350 (approximately US\$278) per month for maids with no or little experience.

3. Financial literacy intervention and experimental design

Existing evidence documents a strong correlation between financial literacy and better savings, investment, and remittance behavior. One challenge in identifying a causal relationship is that people who seek financial education may be different from those who do not. For instance, Meier and Sprenger (2013) show that individual time preference helps explain which individuals choose to become financially literate. Discount rates also explain individual saving patterns, making it difficult to separate the impact of financial literacy and time preferences.

In order to establish a causal effect, our study incorporates random assignment of Filipino domestic workers to financial literacy training. This helps ensure that those who are offered training are statistically indistinguishable from those who are not, making it easier to attribute differences between the groups after the treatment (in terms of saving, borrowing, etc.) to the financial education offer. In this section, after describing the intervention and the experimental design, we verify that the treatment and control groups were comparable at baseline.

3.1. The financial literacy program

The intervention evaluated in this study was implemented in conjunction with a non-profit organization based in Singapore dedicated to providing financial education to female migrant workers. The organization offers courses in management and entrepreneurship training, financial education, computer skills and marketing and communication. Most of the students are female domestic workers who have migrated to support their families. In 2013-14, 600 women were enrolled in their classes.

At the time of the study, one of the NGO's core programs revolved around peer-based savings clubs. These savings clubs are organized as peer support groups. Each club consists of 10 to 12 members, who meet for three hours, once a month for nine months along with a life-planning coach to discuss savings goals and priorities. The mentors are trained by the NGO and provided with a standardized curriculum. The curriculum is structured around four main topics: a) Importance of savings and identifying reasons to save, b) Learning to say "no" to unnecessary

expenses, both by the individual and her family members, c) How to control remittances and d) Visualizing and accomplishing financial goals and business plans.

The nine sessions are organized with three keywords in mind: knowledge, goals and rewards. The mentor helps the participants acquire basic knowledge about budgeting, planning, opening bank accounts, investing in productive assets, and interest rates. The savings clubs leverage peer support groups, sustained intervention and non-monetary rewards. In each session, the women announce their goals, challenges and successes to one another. With the goals in place, they begin saving and motivating each other to put their learning into practice. Each week, four volunteers are tasked with sending out a weekly inspirational text message to their fellow club members. Finally, when goals are achieved and saving targets met, participants are rewarded to reinforce behavioral change. The rewards are generally in the form of certificates and badges.

At every meeting, members are encouraged to show the mentor their monthly bank statement including savings deposits and total bank balance. Some women do not have a bank account and instead ask their employers to save on their behalf. In this case, they are asked to present the mentor with a letter from their employer noting how much they have saved. There is a minimum monthly saving of S\$5 required for each member. Additionally, from the first session, members start tracking their expenses on a daily basis. The expense tracking notebooks are checked by the mentors each month.

3.2 Experimental set-up

Most domestic workers in Singapore get at least one Sunday off from work per month, while a majority get alternate Sundays off. On their days off, most women spend the day in religious observance or with friends in malls or parks around Singapore. In addition, some domestic workers choose to attend classes that are offered by various nonprofit organizations, schools or local community centers and churches. Domestic workers often take classes in cooking, baking, nursing, dressmaking, financial education, entrepreneurship, computer skills and English language. Courses are usually tailored to suit migrant workers with two Sundays off per month.

In August 2010, we began a pilot study, where trained enumerators approached women congregating at malls and parks around the commercial center of Singapore on a Sunday. Women who identified as FDWs were asked to fill out a short baseline survey in exchange for a S\$10 topup phone voucher; 127 women completed the baseline survey. Approximately half of these women were chosen to be invited to join a savings club. At the time of the pilot, we stratified by which Sunday these women were free (the 2nd or the 3rd of the month), interest in a financial education course, whether the respondent reported having financial disagreements with family members and whether she had been living in Singapore for more than 7 years. Due to unevenness in the stratification blocks, 46.5% of the women were assigned to the treatment group. Due to low take-up (12%, 7 students out of 59 invited), only one club was started during the pilot, beginning in October 2010 and running until July 2011.

Incorporating lessons learned during the pilot, we changed our recruitment procedure for the main experiment, primarily approaching women attending computer or cooking classes in two different locations. The baseline survey occurred in January/February 2011. We went to the location of the classes and gave a brief presentation that explained the financial literacy classes. Women who filled out the survey were entered into a lottery for a S\$10 phone top-up voucher.

During the main experiment, a total of 281 women were identified and randomized to be invited to a savings club, although only 243 of them completed the baseline survey. Given the low take-up from the pilot, we randomized 60% of respondents to the treatment group, stratifying just

by day of interview and preferred Sunday for club meetings. There was sufficient enrollment to start three clubs, all of which began meeting in April or early May of 2011. Twenty-nine women enrolled out of 169 invited (17%). Due to the limited sample size, we analyze the results pooling both pilot and main experiment, controlling for recruitment round.

The initial registration fee for the class, S\$55, was paid by the student. However, we offered a full refund if they attended all 9 sessions. To encourage regular attendance, we followed a staggered reimbursement scheme; \$10 was refunded after three sessions, another \$20 was refunded after the sixth session and the remaining \$25 were given back at the end of the last session. The partner NGO has many different classes that are offered simultaneously. In order to avoid confounding the treatment of the savings club from participation in other NGO activities, we held the study classes in a separate location. Besides the location, the clubs involved in the study were no different than the other clubs run by the organization: mentors were chosen from their pool of experienced mentors.

In September 2011, we hired a survey firm to survey all 408 women who had been randomized into either the treatment or control group, from both the pilot and main experiment. These surveys were conducted by telephone, unlike the baseline surveys that had been conducted in person. Respondents were given S\$40 grocery vouchers as an incentive to complete the survey. We managed to complete 256 surveys, yielding a relatively high attrition rate. We find no evidence of differential attrition by treatment status (described in detail below); we attribute this high level of attrition to the transitory nature of employment for many of these women and the high rate of changing phone numbers. Attrition was slightly higher from the pilot sample (48%) than the main sample (32%), possibly because more time had passed between surveys.

In both baseline and follow-up surveys, information was collected on individual and household characteristics, employment attributes, asset ownership, decision-making, expenditures, borrowing, savings, and remittances. In addition, following Lusardi and Mitchell (2011), the questionnaire included several simple math-based and problem-solving questions to measure financial literacy as well as a question measuring risk aversion. All survey instruments are available in the online appendix.

3.3 Summary statistics and attrition

Baseline summary statistics are reported in Table 1. Columns 1-3 present means and standard deviations for all women surveyed at baseline (during the pilot and main experiments) and then broken down by control and treatment. Column 4 shows the difference between the treatment and control groups. Column 5 reports the difference conditional on stratification block while Column 6 reports this conditional difference restricting the sample to women who responded to the follow-up survey. While there are a few statistically significant differences between the treatment and control group among women who responded to the endline survey when using robust standard errors, Romano-Wolf step down p-values (not shown in the interest of space) confirm that none of the differences are statistically significant when accounting for multiple hypothesis testing (Romano and Wolf 2005; Clarke 2016). The differences in the total amount of savings, while not statistically significant, are worth mentioning. The treatment group reports approximately S\$500 more savings than the control group at baseline. Further investigation into the distributions of savings reveals that these differences are driven by three outliers in the treatment group.⁶ Our preferred measure of savings, "any reported savings," is not affected by

⁶ The distributions of savings for the two groups are very similar when we ignore the three outliers: 25th percentile S\$50 to S\$50; 50th percentile S\$390 to S\$400; 75% percentile S\$936 to S\$1,031 and 99th percentile S\$6,250 to

these outliers. In addition, we account for possible differences at baseline by estimating lagged dependent variable models where we control for the baseline measure of the outcome variable, and providing robustness checks that exclude outliers or control for more baseline characteristics.

The average FDW in our sample is about 36 years old and has spent 7.5 years in Singapore. Since FDW salaries increase with experience, this explains the relatively higher mean monthly salary of S\$489 among this group. Their monthly expenses, excluding remittances, are about 40% of their average monthly salary. About half the women have children, averaging 2 children each, and about a third of the women are currently married.

Despite having almost a high school education on average (11.8 years of schooling), the average woman answered less than half of the financial literacy questions correctly. We measure numeric skills through a series of 4 mathematics questions on multiplication, division and interest rates. We also included a question on probabilities to measure risk aversion: "Suppose we had a jar with three blue balls and one red ball. You are playing a game and you have two choices. You can receive \$200 for certain. Or you can pick a ball from this jar with your eyes shut, and if you choose a blue ball you will receive \$400. Do you want \$200 for certain, or do you want to have a chance of getting \$400?" Sixty percent of women chose the option of \$200 with certainty.

Approximately 80% of women reported having any savings. We also consider savings in Singapore and savings in the Philippines, but do not report the breakdowns in the table, in the interest of space. Half of the women hold savings in Singapore, and half of the women hold savings in the Philippines (with a quarter of women reporting holding savings in both places). When asked about their control over remittances, 44 percent of women felt that they had no control over how

S\$5,814 for the control group and treatment group, respectively. The three outliers reported S\$8,314, S\$11,494 and S\$30,030 in savings at baseline but only the first two report savings at endline and report S\$200 and S\$1,778, respectively. This seems to us to be measurement error.

remittances were spent by their families back home and 52 percent of women reported disagreeing with their family members about how to spend remittances within the last 12 months.

Table 2 presents an analysis of attrition. Since we had high attrition, it is important to note that attrition is not different between the treatment and control groups (Column 1) and that it does not appear to be related to demographic indicators (Column 2). The characteristics of those who attrited also seem similar between the treatment and control groups (Column 3). The p-values at the bottom of the table indicate that F-tests testing the joint significance of all covariates in Column 2 and all interaction terms in Column 3 both fail to reject the null hypothesis that all coefficients are 0. As described below, we also estimate Lee (2009) bounds to account for attrition.

4. Results

To estimate the impact of financial education, we focus on intent-to-treat (ITT) estimates. That is, we compare those invited to join a savings club (the treatment group) to those not invited (the comparison group), regardless of whether they enrolled or attended the club. This accounts for the endogeneity of enrollment: comparing those who participated in a club to those who chose not to participate would yield a biased result. Since receiving an invitation to join a club is uncorrelated with participants' characteristics, the ITT estimate gives us the causal impact of the offer to join a club. In Appendix Tables A1-A3 available online, we estimate treatment-on-the-treated (TOT) estimates of the impact of participating in the club for interested readers. The TOT strategy requires the assumption that the instrument (assignment to treatment, randomly assigned) is unrelated to outcomes other than through enrollment in the club. Since being offered financial education may have its own effect, we prefer the ITT estimates to the TOT estimates. We also note that in settings where financial education is voluntary, the ITT estimate may be of greater policy

interest. In subsection 4.4, we use propensity score matching to estimate the effect of enrolling in a club without having to make the assumption that the invitation itself had no effect.

Let T_i be an indicator variable for whether an individual was invited to join a savings club, i.e. assigned to treatment. Y_i is an outcome of interest, such as savings, remittances, financial knowledge or behavior. We estimate the following ITT regression:

$$Y_i = \alpha_0 + \alpha_1 T_i + \alpha_2 X_i + \varepsilon_i \tag{1}$$

where α_1 is the parameter of interest, the conditional difference in outcomes for individuals assigned to the treatment and control groups. X_i is a vector of control variables. Many specifications include the baseline level of the outcome variable; we assign this to 0 if it is missing and include a dummy variable indicating missing baseline information. We also include a fixed effect for stratification block, which controls for baseline round as well, and use robust standard errors. In robustness checks, we include additional characteristics measured at baseline. Note that randomization was at the individual level, hence we do not cluster our standard errors.

4.1 Take-up

Table 3 studies take-up of the invitation to join a savings club, using a dummy variable for whether the individual chose to enroll in a club as the measure of take-up in Columns (1) to (4) and the number of classes attended in Columns (5) to (8). The number of classes attended does not condition on enrollment, which explains the average of less than 1 class. Conditional on enrollment, the average is about 5 classes. The first two of each set of columns presents results from regressing take-up on demographic characteristics and survey responses at baseline, conditional on being offered treatment. The next two of each set of columns present a more traditional first-stage regression, including those in the control group and an indicator variable for being invited to treatment. Columns (1) and (5) include a restricted set of control variables. Even numbered columns add baseline income, financial literacy, risk aversion and savings. These control variables are set to zero when missing and indicators for missing observations are included. All columns include fixed effects for stratification block.

The most robust predictor of take-up is years of schooling: an increase in one year of schooling increases take-up by approximately 1-2 percentage points. On a base of 16%, this is an economically significant increase. This finding is consistent with previous research that has focused on the decision to invest in financial literacy (see, for example, Lusardi, Michaud and Mitchell 2017). Women with more education also attend more classes. We find that women with lower amounts of self-reported savings are more likely to enroll and attend classes. Recall that foreign domestic workers in Singapore have few days off from work each month, a potential explanation for low take-up; however, we find no indication that those with more days off from work were more likely to enroll. Focusing on the first-stage regressions, we confirm the low take-up rates and find that very few individuals from the control group enrolled or attended classes (see the constant terms in Columns 3 and 7).

4.2 Effects on financial knowledge and behavior

Our survey instrument included questions on financial knowledge, attitudes and preferences. Table 4 presents OLS estimates from estimating equation (1) with these outcome variables. We report both robust standard errors corrected for heteroscedasticity (in parentheses) as well as Romano-Wolf step down p-values (in brackets), adjusting for multiple hypothesis testing for all outcome variables in this table (Romano and Wolf 2005; Clarke 2016).

Looking at the dependent variable means for individuals in the control group surveyed at endline, presented in the last row of Table 4, we note that 59% of women reported having gathered together their financial information, reviewed it in detail, and put together a specific financial plan in the past 6 months. A majority of the women (72%) also had plans to continue making financial plans in future. On average, participants could answer 65% of the financial literacy questions correctly. Only 55% of respondents could answer a simple question about budgeting but 93% knew what a pension plan was (although only 1% of women had a pension plan). About 30% of the sample regretted making a purchase in the past month.

The intent-to-treat results indicate that assignment to treatment had no statistically significant effect on financial knowledge or behavior for any of these variables, using either the robust standard errors or the Romano-Wolf p-values. In fact, most of the coefficients are negative. That said, it is important to point out that take-up is very low and the standard errors are quite large. While we can calculate the smallest positive effect we can reject (3.64 percentage points for the fraction of financial literacy questions participants answer correctly, for example), the fact that we have only about 16% take-up implies that the treatment-on-the-treated effects this rules out are large (22.7 percentage points). As noted above, estimating treatment-on-the-treated effects also requires assuming that assignment had no effect on non-compliers. Thus, we conclude that these results are inconclusive: we find no evidence that invitations to these workshops had any impact on financial knowledge, but cannot conclude that there was no effect.

A number of robustness checks (available online) confirm this lack of results: Appendix Tables A4 and A5 use probit and logit models for the dummy dependent variables; Appendix Table A6 omits the lagged dependent variable control;⁷ Appendix Table A7 includes the baseline demographic variables listed in Table 1 as controls (with indicators for whether the variable is missing at baseline). Finally, Appendix Table A8 presents Lee (2009) bounds to account for attrition. We first use the exact trimming procedure described in Lee (2009), using a Stata command described in Tauchmann (2014). Specifically, the sample is 'trimmed' to achieve equal attrition between the treatment and control groups. Since there is (slightly) more attrition in the control group than in the treatment group, we calculate lower bounds by dropping the participants in the treatment group with the highest values of the outcome variable and upper bounds by dropping participants in the treatment group with the lowest values of the outcome variable. Since the method in Lee (2009) is described for specifications with no control variables, we also use a method similar to Lee (2009) that allows for the inclusion of controls. The outcome variable is regressed on the lagged dependent variable and stratification block fixed effects and then the trimming is done with the residuals. We find no evidence to suggest that the lack of results on financial knowledge or behavior is due to attrition.

4.2 Effects on savings

Next, we study the effect of an invitation to join a savings club on savings. Table 5 displays OLS estimates from estimating equation (1) for savings outcomes. Column (1) looks at the impact on the probability of reporting any savings, Column (2) looks at the impact on the natural log of the total amount of savings (adding 1 to avoid dropping 0s) and Column (3) looks at the impact on the level of savings (in S\$). Columns (4)-(6) use the corresponding outcome variables focusing on

⁷ In the interest of brevity, most of these financial knowledge and behavior outcomes were not asked in the baseline survey; thus only the financial literacy measures, risk aversion and whether or not participants had a pension plan include lagged dependent variable controls.

savings in Singapore (in S\$) and Columns (7)-(9) focus on savings in the Philippines (in PhP). Stars in this table indicate significance based on robust standard errors shown in parentheses. In addition, we report Romano-Wolf step down p-values (in brackets) to adjust for multiple hypothesis testing in Columns (2) – (9). We do not include Column (1) in the Romano-Wolf estimation because "Any savings" is an aggregate indicator of the other savings outcomes in the table. All columns control for the lagged dependent variable and a dummy variable indicating missing baseline information.

The results are counter intuitive. We find a negative and statistically significant impact of the invitation to join a savings club on reporting any savings and on the amount of savings in logs. The magnitudes are meaningful: the probability of reporting any savings falls by 9 percentage points on a base of 89%. The magnitudes for the effect on the amount of savings (either in logs or levels) are quite large – an 88 percent decline or a \$422 decrease, respectively, relative to the control group. As noted above, the standard errors are quite large, allowing for much smaller effects; but the size of these point estimates also helps motivate further investigation into the mechanisms behind this impact. The point estimates for savings in Singapore and savings in the Philippines are always negative, but not statistically significant.

A number of robustness checks support these findings. Probit and logit models for the dummy dependent variables are presented in Appendix Tables A9 and A10. Appendix Table A11 omits the lagged dependent variable control, while Appendix Table A12 includes baseline demographic controls. The results are also robust to dropping the three outliers in the treatment group discussed above (Appendix Table A13). Appendix Table A14 presents Lee (2009) bounds to account for attrition, using both methods described above. Lower bound estimates are generally

significant, and for more savings outcomes than in Table 5. Upper bound estimates are usually negative, as in the main results, but not statistically significant.

Previous literature has often found that individuals with low baseline levels of financial literacy exhibit larger increases in knowledge as well as larger changes in behavior (see, e.g. Cole, Sampson, and Zia 2011). In Appendix Table A15, we find no evidence of differential effects on financial knowledge or behavior when we break up the sample by initial levels of financial literacy, but in Appendix Table A16, we find that the negative effect on savings is driven by individuals with below median levels of baseline financial literacy. In the next subsections, we explore several other outcome variables to shed more light on these findings.

4.3 Effects on other outcome variables

Recall that these outcomes, including the savings outcomes, are self-reported, making it difficult to determine whether treatment assignment affected actual savings or whether it simply affected whether women *report* that they have savings. Determining whether actual savings decreased is almost an impossible task absent bank account information. Nonetheless, we begin by considering that actual savings may have fallen if participants had greater monthly expenses or sent more money home in remittances. We find small, often negative, statistically insignificant changes in these variables at endline (Columns 1 and 2 in Table 6). We find no change in whether participants report that remittances were spent on particular budget items, such as education, food, entertainment, mobile phone bills, etc. (results left out in the interest of conciseness, but available upon request). We also find no evidence that individuals report less (liquid) savings because they are substituting to other forms of investments. Specifically, we find no change in whether they

report any assets (Column 3 in Table 6) or whether they report specific types of assets, such as a house, land, farm, livestock, vehicles, machinery or other assets (results available upon request).

Without corroborating evidence that actual savings fell, we next consider whether women are simply reporting less savings, either because they now believe that they have less savings or because they are more cautious about reporting savings to strangers in a survey. We cannot rule out the latter possibility, but believe it is unlikely since we find no differences in how much income they report (Column 4 in Table 6). It is not obvious whether they would believe assets in Singapore to be safer (given the legal structure in Singapore) or whether they would believe assets in Singapore to be less safe (since the surveyor is in Singapore), but it is worth noting that we found similar effects of financial education on savings in Singapore and in the Philippines in Table 5.

We are left with treatment assignment leading women to report they have less savings, believing it to be true. One possible explanation is that financial education makes these women pessimistic about being able to achieve their savings goals and they give up. Specifically, anecdotal evidence indicates that these women often save with the goal of returning to the Philippines and starting a small business, a goal that will require a fairly substantial amount of capital. Again, we cannot fully rule out this explanation, but we find no evidence that they report different savings goals (results available upon request).

The last explanation that we investigate is whether the treatment assignment led women to seek more accurate information about whether they have any savings and how much they have, in their own bank accounts in Singapore or held with family members in the Philippines. Recall that the class fee was paid upfront by participants who chose to enroll and then reimbursed in a staggered manner over the nine meetings. The need to come up with the S\$55 fee may have made women invited to join a club more aware of their own financial situation. Anecdotally, many

women expressed concern about coming up with the S\$55 since this amounted to more than 10% of their monthly earnings. We find two pieces of evidence that support this explanation, although we acknowledge that these results are, at best, suggestive. First, we see a marginally significant decrease in the number of bank accounts these women report having, including accounts other people have on their behalf (Column 6 in Table 6), even though there is no decline in whether women have any bank accounts. While this could be a financially-motived decision (to consolidate bank accounts and/or minimize account fees), this seems unlikely since the average woman in the control group has only 1 account (see last row of Table 6). Only one respondent out of 212 at endline reported more than 2 accounts. An alternate explanation is that women realized that they had one account less than they originally believed. For example, this could be because they had no balance in an old account or because their family members did not have savings in their accounts in the Philippines. Supporting this speculation, we find that women invited to a savings club are marginally more likely to report disagreeing with their family members about how to spend remittances they send back (Column 8 in Table 6).⁸

4.4 Separating out the effect of the club and the invitation

Our intent-to-treat analysis described above gives us the causal effect of the invitation to join a savings club, with the fee reimbursed in the manner described above. Since enrollment is

⁸ We conduct the same robustness checks for Table 6 as we did with Tables 4 and 5. Appendix Tables A9 and A10 use probit and logit models for the dummy dependent variables in Table 6. We lose many observations due to the stratification block fixed effects (and the low take-up), but the impact on intra-household disagreements is robust to the probit specification. All columns in Table 6 include lagged dependent variable controls except for the monthly remittances (Column 2) which was asked in a different way at baseline. These results are robust to omitting the lagged dependent variable (see Appendix Table A17), but we have insufficient power when we include baseline characteristics (see Appendix Table A18). In addition, Appendix Table A19 breaks up Table 6 by initial level of financial literacy and finds no evidence of differential effects. Finally, Appendix Table A20 presents Lee (2009) bounds to account for attrition. As in the savings results, one of the bounds is statistically significant but the other is not for the number of accounts and intra-household disagreements outcomes.

endogeneous, estimating the causal impact of the course itself requires making additional assumptions either about who chooses to enroll or about the effect of the invitation itself on those who choose not to enroll. For example, two stage least squares (treatment-on-the-treated) estimates of participating in a savings club, using treatment assignment as an instrument requires assuming that the invitation itself had no effect on behavior (other than through whether the participant enrolled). The mechanism for which we find the most support - that treatment assignment motivates women to seek out information about their own financial situation – could be a result of the course, but it could also come from having filled out a detailed survey, followed by an invitation to a financial literacy program, even if the participant ultimately decides not to enroll (perhaps because of the fee). Thus, in this section, we attempt to separately identify the effect of enrolling in the course from the effect of being invited to the course but not enrolling, using propensity score matching methods similar to Ibarra, McKenzie, and Ortega (2017).⁹ Ibarra. McKenzie, and Ortega (IMO, hereafter) study a financial literacy program offered to almost 75,000 randomly chosen credit card clients of a Mexican bank. To deal with a very low take-up rate of 0.8% leading to very imprecise intent-to-treat estimates, IMO use their rich administrative data to predict take-up for those in the control group using propensity score matching and then compare participants from the treatment group who enrolled in the course with similar participants from the control group who were not offered the course. The experimental variation from the randomization helps satisfy the concern with propensity score matching about why participants with similar propensity scores did not enroll – those in the control group were not invited.

We modify IMO's procedure to take into account our substantially smaller sample size and our limited pre-intervention data (self-reported financial behavior from the baseline survey).

⁹ We thank an anonymous referee for this suggestion.

Specifically, we regress outcomes at endline on indicators for enrollment and treatment assignment, and use propensity score matching methods to account for the endogeneity of enrollment. The results are presented in Table 7 for the outcomes that have statistically significant results in our main regressions (see Appendix Tables 21-23 for rest of the outcome variables from Tables 4-6). In Panel A, we begin with benchmark regressions that do not include propensity scores, but instead control for all the baseline demographic and financial behavior measures used in the take-up regressions in Table 3. For Panels B and C, we use the coefficients from Column 2 in Table 3 to predict enrollment for all individuals, regardless of whether they were invited to a workshop and then control for this propensity score in the regression. Panel B controls for this propensity score linearly, while Panel C includes indicators for 10 percentage point ranges of the propensity score distribution. In Panels B and C, we bootstrap the standard errors.

Before discussing the results, it is important to be clear that while suggestive, these results are speculative. Our very small sample size and limited pre-intervention data make it difficult to fully believe the identifying assumptions for this strategy – selection into enrollment is likely not going to be determined by only these observable characteristics. Any omitted characteristics correlated with both the outcome variables and an individual's propensity to enroll, conditional on these observable characteristics, will bias these estimates. That said, the unobservable characteristics that spring to mind are likely positively related to both enrollment and savings behavior, leading to a positive bias for the coefficient on enrollment. As before, assignment to treatment should not suffer from these biases as it was randomly assigned.

The results suggest that the impact we estimated in Tables 4-6 are driven by the invitation to the club and not the club itself. The coefficient on being assigned to treatment is consistently of the same sign as our intent-to-treat effects (negative for the savings outcomes and the number of accounts and usually significant; positive for intra-household disagreements and only marginally significant in one specification). Relative to the negative impact on savings of the invitation, enrolling in the course has a positive (and sometimes marginally statistically significant) effect. The magnitudes of these coefficients are such that the two effects would cancel each other out: being invited to a savings club but not enrolling appears to have a negative effect on savings, while being invited and enrolling in it has no effect. This is consistent with the results from our exploration into mechanisms in Section 4.3: the invitation may have made women more aware of their financial situation, but those who paid the S\$55 fee to join the class report no more or no less savings while those who did not join the class report having less savings.

These results are also consistent with qualitative information from the savings club attendance logs. The women who enrolled were motivated, attending 82% of class meetings, with 65% attending all nine meetings. At each meeting, the mentor would record how much savings the participant had accumulated, usually from viewing bank statements. Comparing recorded savings from one meeting to the next, we find that on average savings are increasing and reported savings amounts are highly correlated one meeting to the next, but the median change is 0 and the increase is not statistically significant. Many women report lower savings over time; it would not be out of the question for the intervention to lead to a reduction in actual savings. However, we also find little correlation between savings reported in the baseline survey and savings reported at the first meeting participants attended; the change from baseline to first meeting report averages -\$317 and is negative for 75% of the women for whom we can match this information, even though there are on average 3 months between these two reports. While speculative, since we do not have similar data from the control group, this suggests a role played by differences between the survey responses and reports to mentors which required bank statements.

5. Conclusion

In this paper, we evaluated the impact of offering a financial education program to female Filipino foreign domestic workers in Singapore. The program focused on the importance of saving and controlling spending and remittances. We documented three main findings. First, we find very low take-up for the course and that women with more years of schooling are more likely to enroll. Second, we find that assignment to treatment has a negative effect on whether women report having any savings and on the amount of savings they report. We explore several channels that may drive this result, finding no evidence for many explanations. We find some support for the invitation to the course having increased awareness of savings and ones' own financial situation. We find that women invited to the course report having fewer savings accounts and disagreeing more with family members about how remittances are spent. We also find suggestive evidence that the effects are driven by those women who chose not to enroll in the class.

These results have two implications worth noting. First, invitations to workshops can impact behavior even for those who do not attend. The invitations were not particularly intrusive (a few text messages), but may still have had an effect, possibly because they were combined with a detailed survey on finances and the consideration of where to find S\$55 for the fee. The second implication relates to intra-household bargaining. It is somewhat surprising for limited bargaining power to have an effect on savings for these women since they are the primary earners in these households and have full immediate control over the income (it is paid to them in Singapore). That said, intra-household dynamics are likely to change slowly. We conclude that intra-household bargaining norms can limit the impact of financial education programs.

6. References

- Abarcar, Paolo, Rashmi Barua, and Dean Yang, (2017), "Financial Education and Financial Access for Transnational Households: Field Experimental Evidence from the Philippines," Working Paper. University of Michigan.
- Agarwal, Sumit, and Bhashkar Mazumder, "Cognitive Abilities and Household Financial Decision Making." *American Economic Journal: Applied Economics*, vol. 5, no. 1, 2013, pp. 193–207., doi:10.1257/app.5.1.193.
- Alan, Sule, and Seda Ertac, "Fostering Patience in the Classroom: Results from Randomized Educational Intervention." *Journal of Political Economy*, vol. 126, no. 5, 2018, pp. 1865–1911., doi:10.1086/699007.
- Ashraf, Nava, (2009), "Spousal Control and Intra-household Decision Making: An Experimental Study in the Philippines," *American Economic Review*, 99(4): 1245--77.
- Ashraf, Nava, Diego Aycinena, Claudia Martinez A. & Dean Yang, (2015), "Savings in Transnational Households: A Field Experiment among Migrants from El Salvador," *The Review of Economics and Statistics* 2(97): 332-351
- Bell M & Muhidin S (2009) "Cross National Comparisons of Internal Migration", UNDP human development research paper 2009/30.
- Bernheim, B. D., Daniel M. Garrett, and Dean M. Maki, (2001), "Education and Saving: The Long-Term Effects of High School Financial Curriculum Mandates," *Journal of Public Economics* 80: 435-465.
- Berg, Gunhild, and Bilal Zia, "Harnessing Emotional Connections to Improve Financial Decisions: Evaluating the Impact of Financial Education in Mainstream Media." *Journal of the European Economic Association*, vol. 15, no. 5, 2017, pp. 1025–1055., doi:10.1093/jeea/jvw021.
- Berge, Lars, Kjetil Bjorvatn, and Bertil Tungodden, (2014), "Human and Financial Capital for Microenterprise Development: Evidence from a Field and Lab Experiment," *Management Science* 61(4): 707-722.
- Bover, Olympia, Laura Hospido, and Ernesto Villanueva, (2018), "The Impact of High School Financial Education on Financial Knowledge and Choices: Evidence from a Randomized Trial in Spain." *SSRN Electronic Journal*, 2018, doi:10.2139/ssrn.3116054.
- Brown, Meta, John Grigsby, Wilbert van der Klaauw, and Basit Zafar, (2016), "Financial Education and the Debt Behavior of the Young," *Review of Financial Studies* 29(9): 2490-2522.
- Bruhn, Miriam, Gabriel Lara Ibarra, and David Mckenzie, (2014), "The minimal impact of a largescale financial education program in Mexico City," *Journal of Development Economics* 108: 184-189.
- Bruhn, Miriam, Luciana de Souza Leão, Arianna Legovini, Rogelio Marchetti, and Bilal Zia, (2016), "The Impact of High School Financial Education: Evidence from a Large-Scale Evaluation in Brazil." *American Economic Journal: Applied Economics*, vol. 8, no. 4, pp. 256– 295., doi:10.1257/app.20150149.
- Calderone, Margherita, Nathan Fiala, Florentina Mulaj, Santadarshan Sadhu, and Leopold Sarr, (2018), "Financial Education and Savings Behavior: Evidence from a Randomized Experiment among Low-Income Clients of Branchless Banking in India." *Economic Development and Cultural Change*, vol. 66, no. 4, pp. 793–825., doi:10.1086/697413.
- Carpena, Fenella, Shawn Cole, Jeremy Shapiro, and Bilal Zia, (2011), "Unpacking the casual chain of financial literacy," Working Paper 5798, World Bank.

- Carpena, Fenella, Shawn Cole, Jeremy Shapiro, and Bilal Zia, "The ABCs of Financial Education: Experimental Evidence on Attitudes, Behavior, and Cognitive Biases." *Management Science*, vol. 65, no. 1, 2017, pp. 346–369., doi:10.1287/mnsc.2017.2819.
- Chen, Joyce, (2006), "Migration and Imperfect Monitoring: Implications for Intra-household Allocation," American Economic Review: Papers and Proceedings 96(2): 227-231.
- Choi, James, David Laibson, and Brigitte C. Madrian, (2011), "\$100 bills on the sidewalk: suboptimal investment in 401(k) plans," *Review of Economics and Statistics* 93(3): 748-763.
- Clarke, Damian, (2016), "RWOLF: Stata module to calculate Romano-Wolf stepdown p-values for multiple hypothesis testing," Statistical Software Components S458276, Boston College Department of Economics, revised 06 Jun 2018.
- Cole, Shawn, Anna Paulson and Gauri Kartini Shastry, (2016), "High School Curriculum and Financial Outcomes: The Impact of Mandated Personal Finance and Mathematics Courses," *The Journal of Human Resources* 51(3): 656-698.
- Cole, Shawn, Thomas Sampson, and Bilal Zia, (2011), "Prices or Knowledge? What Drives Demand for Financial Services in Emerging Markets?" *Journal of Finance* 66(6): 1933–1967.
- De Laat, Joost, (2014), "Household allocations and endogenous information: The case of split migrants in Kenya," *Journal of Development Economics* 106: 108-117.
- Doi, Yoko, David McKenzie, and Bilal Zia, (2014) "Who you Train Matters: Identifying Complementary Effects of Financial Education on Migrant Households," *Journal of Development Economics* 109: 39-55.
- Drexler, Alejandro, Greg Fischer, and Antoinette Schoar, (2014), "Keeping It Simple: Financial Literacy and Rules of Thumb," *American Economic Journal: Applied Economics* 6 (2): 1-31.
- Fernandes, Daniel, John G. Lynch Jr, and Richard G. Netemeyer, (2014), "Financial Literacy, Financial Education, and Downstream Financial Behaviors." *Management Science*, vol. 60, no. 8, pp. 1861–1883., doi:10.1287/mnsc.2013.1849.
- Field, E., S. Jayachandran, and R. Pande, (2011), "Do Traditional Institutions Constrain Female Entrepreneurship? A Field Experiment on Business Training in India," *American Economic Review: Papers and Proceedings* 100: 125–129.
- Frisancho, Verónica, "The Impact of School-Based Financial Education on High School Students and Their Teachers: Experimental Evidence from Peru." 2018, doi:10.18235/0001056.
- Gartner, Kimberly and Richard M. Todd, (2005), "Effectiveness of online early intervention financial education programs for credit-card holders," Proceedings 962, Federal Reserve Bank of Chicago.
- Gibson, John, David McKenzie, and Bilal Zia, (2014), "The Impact of Financial Literacy Training for Migrants," *World Bank Economic Review* 28(1): 130-161.
- Hastings, Justine, Brigitte C. Madrian and William L. Skimmyhorn, (2013), "Financial Literacy, Financial Education, and Economic Outcomes," Annual Review of Economics, Annual Reviews 5(1): 347-373.
- Ibarra, Gabriel, David McKenzie, and Claudia Ortega, (2017), "Learning the Impact of Financial Education When Take-Up is Low," Policy Research Working Paper 8238, World Bank Group.
- Kaiser, Tim, and Lukas Menkhoff, "Active Learning Fosters Financial Behavior: Experimental Evidence." *SSRN Electronic Journal*, 2018, doi:10.2139/ssrn.3208637.
- Kaiser, Tim, and Lukas Menkhoff, "Does Financial Education Impact Financial Literacy and Financial Behavior, and If So, When?" *The World Bank Economic Review*, vol. 31, no. 3, 2017, pp. 611–630., doi:10.1093/wber/lhx018.

- Karlan, Dean and Martin Valdivia, (2011), "Teaching Entrepreneurship: Impact of Business Training on Microfinance Clients and Institutions," *Review of Economics and Statistics* 93(2): 510-527.
- Lee, David S, "Training, Wages, and Sample Selection: Estimating Sharp Bounds on Treatment Effects." *Review of Economic Studies*, vol. 76, no. 3, 2009, pp. 1071–1102., doi:10.1111/j.1467-937x.2009.00536.x.
- Lusardi, Annamaria and Olivia S. Mitchell (2007), "Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education," *Business Economics*, 35-44.
- Lusardi, Annamaria and Olivia S. Mitchell, (2008), "Planning and Financial Literacy: How Do Women Fare?," *American Economic Review* 98(2): 413-17.
- Lusardi, Annamaria and Olivia S. Mitchell, (2011), "Financial literacy around the world: an overview. Journal of Pension Economics and Finance, 10: 497-508.
- Lusardi, Annamaria and Peter Tufano, (2015), "Debt literacy, financial experiences, and overindebtedness," *Journal of Pension Economics and Finance* 14(04): 332-368.
- Lusardi, Annamaria, Pierre-Carl Michaud and Olivia Mitchell, (2017), "Optimal Financial Knowledge and Wealth Inequality," Journal of Political Economy 125(2): 431-476.
- Lührmann, Melanie, Marta Serra-Garcia, and Joachim Winter, (2018), "The Impact of Financial Education on Adolescents' Intertemporal Choices." *American Economic Journal: Economic Policy*, vol. 10, no. 3, pp. 309–332., doi:10.1257/pol.20170012.
- Meier, Stephan and Charles Sprenger, (2013), "Discounting Financial Literacy: Time Preferences and Participation in Financial Education Programs," *Journal of Economic Behavior and Organization* 95:159-174.
- Miller, Margaret J., Julia E. Reichelstein, Christian H.S. Pauliac and Bilal H. Zia, (2015), "Can you help someone become financially capable? : a meta-analysis of the literature," *The World Bank research observer* 30(2): 220-246.
- Romano, Joseph P., and Michael Wolf, "Stepwise Multiple Testing as Formalized Data Snooping." *Econometrica*, vol. 73, no. 4, 2005, pp. 1237–1282., doi:10.1111/j.1468-0262.2005.00615.x.
- Sayinzoga, Aussi, Erwin H. Bulte, and Robert Lensink, "Financial Literacy and Financial Behaviour: Experimental Evidence from Rural Rwanda." *The Economic Journal*, vol. 126, no. 594, 2015, pp. 1571–1599., doi:10.1111/ecoj.12217.
- Seshan, Ganesh and Dean Yang, (2014) "Motivating Migrants: A Field Experiment on Financial Decision-Making in Transnational Households," *Journal of Development Economics* 108: 119-127.
- Shurchkov, O., & Eckel, C. Gender Differences in Behavioral Traits and Labor Market Outcomes. In The Oxford Handbook of Women and the Economy. : Oxford University Press. Retrieved 16 May. 2018, from

http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780190628963.001.0001/oxford hb-9780190628963-e-14.

- Singapore Department of Statistics, (2011). *Yearbook of Statistics Singapore*. Singapore: Department of Statistics.
- Skimmyhorn, William L, (2016), "Assessing Financial Education: Evidence From Boot Camp." *American Economic Journal: Economic Policy* 8(2): 322-343.
- Stoddard, Christiana, Carly Urban, and Maximilian Schmeiser, (2017) "Can Targeted Information Affect Academic Performance and Borrowing Behavior for College Students? Evidence from Administrative Data." *Economics of Education Review* 56: 95-109.

- Tauchmann Harald, (2014), "Lee (2009) treatment-effect bounds for nonrandom sample selection." *The Stata Journal* 14(4): 884-94.
- The Singapore National Committee for the United Nations Development Fund for Women (UNIFEM Singapore), Humanitarian Organisation for Migration Economics (HOME) & Transient Workers Count Too (TWC2). (2011). "Made to work: Attitudes towards granting regular days off to migrant domestic workers in Singapore."
- van Rooij, Maarten, Annamaria Lusardi, and Rob Alessie, (2012), "Financial literacy, retirement planning, and wealth accumulation," *Economic Journal* 122(5): 449-478.
- Yang, Dean, (2008), "International Migration, Remittances, and Household Investment: Evidence from Philippine Migrants' Exchange Rate Shocks," *Economic Journal* 118: 591-630.
- Yang, Dean, (2006), "Why Do Migrants Return to Poor Countries? Evidence from Philippine Migrants' Exchange Rate Shocks," *Review of Economics and Statistics* 88(4): 715-735.
- Yang, Dean and Claudia Martinez A, (2005), "Remittances and Poverty in Migrants' Home Areas: Evidence from the Philippines," in Caglar Ozden and Maurice Schiff, eds., International Migration, Remittances, and the Brain Drain, World Bank, 2005.

					Difference	Conditional
					Conditional on	Difference
					Stratification	Among Non-
	۵۱	Control	Treatment	Difference	Block	Attriters
	(1)	(2)	(3)	(4)	(5)	(6)
	(-)	(2)	(3)	()	(3)	(0)
Age	35.98	36.06	35.91	-0.142	0.881	0.854
-	(7.910)	(7.526)	(8.217)	(0.836)	(0.820)	(1.064)
Years of Schooling	11.79	11.95	11.67	-0.277	-0.279	-0.111
	(2.071)	(2.122)	(2.028)	(0.220)	(0.228)	(0.301)
Married	0.348	0.371	0.330	-0.0410	-0.0287	-0.0570
	(0.477)	(0.485)	(0.471)	(0.0507)	(0.0542)	(0.0698)
No. of Children	1.025	1.109	0.961	-0.148	-0.0845	-0.140
	(1.280)	(1.310)	(1.257)	(0.146)	(0.156)	(0.205)
Years in Singapore	7.574	7.717	7.468	-0.249	0.227	0.177
	(6.076)	(6.453)	(5.799)	(0.693)	(0.633)	(0.843)
No. of Days Off Each Month	3.259	3.192	3.313	0.120	0.0681	0.256
	(1.966)	(1.632)	(2.196)	(0.207)	(0.195)	(0.304)
Earnings (in SGD)	488.5	526.9	457.7	-69.17	-4.481	-0.0809
	(533.7)	(771.7)	(186.2)	(63.20)	(16.68)	(26.28)
Monthly Expenses (in SGD)	194.6	145.8	235.0	89.19	101.0	10.30
	(673.7)	(130.7)	(901.8)	(74.84)	(71.72)	(27.82)
Fin Lit Questions Correct	0.482	0.491	0.476	-0.0149	-0.00642	0.0445
	(0.333)	(0.340)	(0.328)	(0.0351)	(0.0354)	(0.0453)
Fin Lit Questions Attempted	0.754	0.779	0.734	-0.0450	-0.0424	-0.0231
	(0.338)	(0.328)	(0.345)	(0.0352)	(0.0354)	(0.0452)
Risk Aversion	0.597	0.649	0.550	-0.0990	-0.0848	-0.0480
	(0.492)	(0.480)	(0.500)	(0.0683)	(0.0714)	(0.0922)
Happy with Savings	0.739	0.741	0.737	-0.00389	-0.0139	-0.0397
	(0.440)	(0.440)	(0.442)	(0.0546)	(0.0587)	(0.0756)
Has a Pension Plan	0.396	0.432	0.368	-0.0649	-0.0694	-0.0715
	(0.490)	(0.497)	(0.483)	(0.0542)	(0.0555)	(0.0731)
Control over Remittances	0.556	0.718	0.443	-0.275***	-0.221***	-0.209**
	(0.498)	(0.452)	(0.498)	(0.0604)	(0.0669)	(0.0810)
Disagreements	0.517	0.575	0.472	-0.103*	-0.0605	-0.133*
	(0.501)	(0.496)	(0.501)	(0.0591)	(0.0517)	(0.0721)
Any Savings	0.801	0.807	0.795	-0.0119	-0.0568	-0.0666
	(0.400)	(0.396)	(0.405)	(0.0518)	(0.0524)	(0.0675)
Total Amount of Savings	1053.1	802.5	1250.1	447.6	589.3	978.6
	(2455.1)	(1290.8)	(3067.0)	(296.7)	(418.3)	(595.2)
Any Assets	0.621	0.699	0.563	-0.136***	-0.0745	-0.0629
	(0.486)	(0.460)	(0.497)	(0.0523)	(0.0550)	(0.0703)
N	369	162	207	369	369	239

Note: This table shows baseline characteristics for the individuals in the sample. Each cell of columns 1-3 provides the mean and standard deviation for the listed variable for the entire sample, the control group and the treatment group, respectively. Column 4 shows the difference between the treatment and control groups with robust standard errors in parenthesis. Column 5 shows the difference between the treatment and control groups, conditional on stratification block. Column 6 shows the difference between the treatment and control groups among those who responded to the follow-up survey.* 10% ** 5% *** 1%

Table 1: Summary statistics from baseline interview and balance

			Main Effect	Interactions with Treatment Indicator
	(1)	(2)	(3)	
Assigned to treatment	-0.029	0.0071	0.66	
-	(0.049)	(0.056)	(0.64)	
Age		-0.00057	-0.0024	0.00048
		(0.0046)	(0.0100)	(0.011)
Years of Schooling		0.0068	0.025	-0.030
		(0.014)	(0.022)	(0.031)
Married		-0.038	-0.057	0.050
		(0.068)	(0.099)	(0.14)
No. of Children		-0.017	-0.047	0.066
		(0.027)	(0.039)	(0.054)
Years in Singapore		-0.0046	0.00036	-0.0047
		(0.0059)	(0.0098)	(0.012)
No. of Days Off Each Month		-0.00097	0.011	-0.021
		(0.013)	(0.036)	(0.037)
Earnings (in SGD)		-0.000013	0.00081*	-0.00062
		(0.000097)	(0.00048)	(0.00052)
Monthly Expenses (in SGD)		-0.000018	-0.00062	0.00038
		(0.000094)	(0.00045)	(0.00055)
Fin Lit Questions Correct		-0.13	0.073	-0.52
		(0.17)	(0.26)	(0.36)
Fin Lit Questions Attempted		-0.015	-0.20	0.45
		(0.19)	(0.28)	(0.40)
Risk Aversion		0.084	0.20	-0.16
		(0.085)	(0.12)	(0.16)
Happy with Savings		0.072	0.11	-0.035
		(0.069)	(0.12)	(0.16)
Has a Pension Plan		-0.060	-0.030	-0.012
		(0.063)	(0.11)	(0.14)
Control over Remittances		0.084	0.13	-0.039
		(0.072)	(0.11)	(0.16)
Disagreements		-0.043	-0.072	0.052
		(0.077)	(0.12)	(0.14)
Any Savings		-0.0015	-0.10	0.12
		(0.10)	(0.16)	(0.20)
Total Amount of Savings		0.000036	0.000051	-0.000059
		(0.000018)	(0.000047)	(0.000050)
Any Assets		0.026	-0.039	0.055
		(0.067)	(0.11)	(0.14)
F-test (p-value)		0.84		0.61
Observations	408	408		408
K-SQUARED	018	0.26		037

Note: This table displays the results from a regression of whether the individual attrited from the sample on a treatment indicator and survey responses at baseline. All columns include stratification block fixed effects. Columns 2 and 3 also include indicators for missing observations for each of the covariates (values of the original variable are set to zero). The p-values at the bottom of the table are from the F-tests of joint significance of all covariates in Column 2 and of all interaction terms in Column 3. Robust standard errors are in parentheses. * 10% ** 5% *** 1%

Table 3: Predictors of take-up and attendance among the treatment group

Dependent Variable:	Enrolled				Number of classes attended				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Assigned to treatment			0.15***	0.15***			0.73***	0.80***	
			(0.025)	(0.029)			(0.14)	(0.17)	
Age	-0.00076	-0.0019		-0.000032	0.0090	-0.0070		0.0043	
	(0.0031)	(0.0028)		(0.0018)	(0.016)	(0.015)		(0.010)	
Years of Schooling	0.022*	0.020		0.013*	0.18**	0.16**		0.10***	
	(0.012)	(0.013)		(0.0070)	(0.071)	(0.072)		(0.039)	
Married	-0.022	-0.076		-0.037	-0.20	-0.52		-0.23	
	(0.065)	(0.073)		(0.035)	(0.33)	(0.41)		(0.19)	
No. of Children	0.018	0.021		0.0039	0.020	0.031		-0.027	
	(0.027)	(0.027)		(0.013)	(0.12)	(0.14)		(0.064)	
Years in Singapore	0.00063	0.0027		0.00014	-0.0066	0.016		-0.0012	
	(0.0049)	(0.0053)		(0.0025)	(0.030)	(0.030)		(0.014)	
No. of Days Off Each Month	0.014	0.012		0.015	0.071	0.074		0.078	
	(0.013)	(0.016)		(0.012)	(0.067)	(0.089)		(0.060)	
Earnings (in SGD)		-0.00013		0.000012		-0.00091		0.00023	
		(0.00014)		(0.000063)		(0.00085)		(0.00043)	
Monthly Expenses (in SGD)		0.00031		-0.0000081		0.0026*		0.00017	
		(0.00020)		(0.000059)		(0.0015)		(0.00041)	
Fin Lit Questions Correct		0.18		0.080		0.66		0.17	
		(0.17)		(0.094)		(0.87)		(0.49)	
Fin Lit Questions Attempted		-0.012		0.031		-0.086		0.16	
		(0.16)		(0.095)		(0.91)		(0.53)	
Risk Aversion		-0.12		-0.068		-0.92		-0.43	
		(0.10)		(0.047)		(0.57)		(0.27)	
Happy with Savings		0.058		-0.012		0.65*		0.12	
		(0.077)		(0.043)		(0.39)		(0.22)	
Has a Pension Plan		0.057		0.0059		0.48		0.15	
		(0.056)		(0.032)		(0.33)		(0.19)	
Control over Remittances		0.0067		0.033		0.43		0.38*	
		(0.071)		(0.035)		(0.36)		(0.19)	
Disagreements		0.026		0.0086		0.055		-0.010	
		(0.071)		(0.044)		(0.45)		(0.28)	
Any Savings		0.0069		0.039		-0.095		0.17	
		(0.089)		(0.049)		(0.47)		(0.30)	
Total Amount of Savings		-0.000017*		-0.000012*		-0.000088*		-0.000075**	
		(0.000093)		(0.0000064)		(0.000053)		(0.000038)	
Any Assets		0.0067		0.040		-0.15		0.13	
		(0.054)		(0.037)		(0.31)		(0.19)	
Constant	-0.12	-0.16	0.0084	-0.28*	-1.73	-1.60	0.037	-2.18**	
	(0.19)	(0.25)	(0.011)	(0.15)	(1.08)	(1.33)	(0.060)	(0.84)	
Observations	228	228	408	408	228	228	408	408	
R-Squared	0.39	0.50	0.26	0.36	0.46	0.57	0.30	0.40	

Note: This table displays the results from a regression of whether the individual chose to enroll (Columns 1-4) or the number of sessions attended (Columns 5-8) on demographic characteristics and survey responses at baseline, conditional on being offered treatment. All columns also include indicators for missing observations for each of the covariates (values of the original variable are set to zero) and fixed effects for stratification block. Robust standard errors are in parentheses.

* 10% ** 5% *** 1%

Table 4: Intent-to-Treat Effect on Financial Knowledge and Behavior

	Made Financial Plan Past 6 Months	Will Make Financial Plan Next 12 Months	Fin Lit Questions Correct	Fin Lit Questions Attempted	Knowledgable about Pension	Knowledgable about Budget	Risk Aversion	Regret Purchase in Past Month	Has a Pension Plan
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Assigned to treatment	-0.0128 (0.0682) [0.980]	-0.0227 (0.0639) [0.980]	-0.0305 (0.0341) [0.921]	0.00193 (0.0275) [0.980]	-0.0486 (0.0460) [0.891]	-0.0291 (0.0712) [0.941]	-0.0451 (0.0759) [0.941]	0.0520 (0.0660) [0.941]	0.00837 (0.00648) [0.802]
Observations	253	256	239	239	219	254	215	253	254
R-Squared	0.18	0.14	0.21	0.21	0.18	0.18	0.22	0.14	0.75
Dep var mean (control)	0.59	0.72	0.65	0.92	0.93	0.55	0.66	0.29	0.01

Note: This table displays the results from a regression of financial knowledge and behavior outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (Columns 3, 4, 7 and 9), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

Table 5: Intent-to-Treat Effect on Savings

	Any Savings	Ln (Total Amount of Savings + 1)	Total Amount of Savings	Any Savings in Singapore	Ln (Savings Amount in Singapore + 1)	Savings Amount in Singapore	Any Savings in Philippines	Ln (Savings Amount in Philippines + 1)	Savings Amount in Philippines
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Assigned to treatment	-0.0914**	-0.880**	-422.7*	-0.105	-0.739	-130.6	-0.0394	-0.481	-10265.6
	(0.0455)	(0.359)	(223.9)	(0.0740)	(0.451)	(138.2)	(0.0736)	(0.757)	(6536.9)
		[0.050]	[0.238]	[0.426]	[0.396]	[0.594]	[0.653]	[0.624]	[0.426]
Observations	256	231	231	231	231	231	231	231	231
R-Squared	0.24	0.29	0.25	0.23	0.21	0.13	0.19	0.19	0.27
Dep var mean (control)	0.89	5.70	1280.39	0.51	3.06	429.38	0.56	5.56	28721.65

Note: This table displays the results from a regression of savings outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

Table 6: Intent-to-Treat Effect on Other Outcomes

	Monthly Expenses Not including Remittances	Monthly Remittances	Any Assets	Earnings	Any accounts	Number of accounts	Has Full Control Over Remittances	Has Disagreements Over Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Assigned to treatment	-1.950 (8.558) [0.941]	-5.994 (17.06) [0.941]	-0.0112 (0.0598) [0.941]	-15.49 (11.88) [0.604]	-0.0371 (0.0600) [0.941]	-0.171* (0.101) [0.356]	-0.0265 (0.0699) [0.941]	0.0371* (0.0221) [0.386]
Observations	246	244	255	253	247	212	248	254
R-Squared	0.15	0.14	0.28	0.26	0.20	0.23	0.25	0.18
Dep var mean (control)	101.76	273.22	0.66	489.21	0.80	1.13	0.60	0.01

Note: This table displays the results from a regression of additional outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (all except Column 2), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.
	Any Savings	Ln (Total Amount of Savings + 1)	Total Amount of Savings	Number of accounts	Has Disagreements Over Spending
	(1)	(2)	(3)	(4)	(5)
Panel A					
Enrolled	0.0961	0.359	-320.6	0.239	-0.0181
	(0.0611)	(0.569)	(516.4)	(0.200)	(0.0354)
Assigned to treatment	-0.159***	-1.066**	-210.4	-0.134	0.0364
	(0.0595)	(0.452)	(267.1)	(0.112)	(0.0296)
Panel B					
Enrolled	0.0997*	0.619	-286.6	0.289	-0.0159
	(0.06)	(0.608)	(576.33)	(0.21)	(0.03)
Assigned to treatment	-0.113*	-1.016**	-378.4	-0.231**	0.0388*
	(0.06)	(0.436)	(212.6)	(0.098)	(0.02)
Propensity score	0.161	1.419	565.4	0.0580	0.0407
	(0.132)	(1.081)	(854.564)	(0.244)	(0.063)
Panel C					
Enrolled	0.0898*	0.954	10.71	0.251	0.000257
	(0.067)	(0.723)	(650.391)	(0.251)	(0.04)
Assigned to treatment	-0.110*	-1.112**	-465.3	-0.252**	0.0371
	(0.06)	(0.478)	(261.05)	(0.103)	(0.023)
Propensity score controls	Yes	Yes	Yes	Yes	Yes

Table 7: Propensity Score Matching Estimates

Note: This table displays the results from a regression of various outcomes from the endline survey on whether the individual enrolled in the course and whether the individual was randomly assigned to treatment. All regressions include the lagged dependent variable and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Panel A includes controls for baseline characteristics used in the even columns of Table 3 (along with dummies indicating missing values). Panel B includes, as a control variable, a propensity score estimated using the coefficients in Column 2, Table 3, while Panel C includes dummy variables indicating 10 percentage point ranges of the propensity score. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses in Panels B and C.

Singapore FDW Module (v1)

We are seeking to understand financial services used and desired by Filipinos in Singapore. This research effort is a joint initiative by Singapore Management University, Wellesley College, and University of Michigan. The results would be used to find innovative ways to help FDWs achieve their financial goals.

Interviewer Name:		Time Started:	Time Ended:
Location :		Date (mm/dd/yyyy):	//
Household ID :	_(assigned during encoding)	Respondent mobile num	ber:

SECTION 1: CURRENT STATUS

1. Where does your immediate family or your most closely connected family live in the Philippines?

Province: _____ Province Code No: _____

City/Town:	City Code:			
Municipality :	M'pality Code:			
(note that we are not asking for ' "bayan" or "munisipali	'baranggays" but rather dad")			

2. Age? _____ years

3. What is your marital status?
□1 Married: For how many years? _____ years
□2 Widowed □3 Divorced □4 Separated □5 Single

- 4. Do you have children? If so, how many?

 □ 1. YES: Number: _____ □ 2. NO
- 5. What is your **highest educational attainment**? Years completed: _____ OR
 - □1. Less than elementary
 - \Box 2. Elementary school graduate
 - \Box 3. Some high school
 - \Box 4. High school graduate
 - \Box 5. Some college
 - \Box 6. College graduate
 - \Box 7. Some post-graduate
 - □8. Post-graduate
- 6. When did you **first come to work in Singapore**? (*mm/dd/yyyy*)
- 7. When does your current work contract end? (*mm/dd/yyyy*) _____1. □ Open-ended
- 8. Do you plan to renew it?
 1. □ Will renew 2. □ Not Renewable/Won't renew 3. □ Not sure/don't know
- 9. When did you first leave the Philippines to work abroad? (*mm/dd/yyyy*) ____/____

IRB Number: «ID»

10. Did you take a loan for placement/recruitment fees?

No: 🗌 Yes: 🗌] Original Amour	ıt:	Php
	Outstanding Balance	ce:	Php
Loan Source: 1 . Family, 3 Commer 5 Employe 7 Other so	relatives or friends. rcial banks. ment agency purces	2 Money lender. 4 Other Lending 6. Employer	companies
11. How many da □1. 1 per r □2. 2 per r □3. 3 per r □4. 4 per r □5. >4 per □6. 0 per r	ys off a month do y nonth nonth nonth nonth month nonth	ou get?	
 12. Which days dd 1. First S 2. Secon 3. Third 4. Fourth 5. Other 	b you get off? (Cheo unday each month d Sunday each mont Sunday each month a Sunday each month days: Specify	ek all that apply) th h ingapore ? (<i>include ba</i>	usic and
overtime pay)		$_$ PHP \square S\$ \square	sic una
Payment period:	 □1. Weekly □2 □3. Monthly □4 □5. Others (speced) 	 Once every two we Once every two mo cify) 	eks onths
Alternatively,			
13b. In what incom □1. < or = to	ne bracket does yo \$\$ 200 to 225 to 250 to 275 to 300 to 375 to 400 00 to 425 to 450	ur monthly earnings fa $10. > S$ \$ 450 to 47 $11. > S$ \$ 475 to 50 $12. > S$ \$ 525 to 55 $13. > S$ \$ 550 to 57 $14. > S$ \$ 575 to 60 $15. > S$ \$ 600 to 62 $16. > S$ \$ 625 to 65 $17. > S$ \$R 650 to 6 $16. > S$ \$ 625 to 65 $16. > S$ \$ 625 to 65 $16. > S$ \$ 625 to 65	111? '5 10 5 10 55 10 55 10 575 75

- 14. Does your employer giro (direct deposit) your salary?
 - 1. Yes
 - 2. No

 $\boxed{3}$. Don't know/ no response

- 15. Do you receive other *cash* allowances aside from your basic salary (ex. housing, transport, travel, etc)?
 - □ 1 Yes: What is the total amount you receive? _____ □ PHP □ S\$ Payment period: _____ Payment Code (see Q.13) ____ □ 2 No

16.	What non-monetary benefits do you receive from your employer?
	(check all that applies).

1. Food	2. Housing
3. Transportation	4. Other
5. None	

17.	What are your average monthly expenses in Singapore? (include
	phone, food, transportation, clothing and entertainment not
	provided by employer, <i>exclude remittances/money sent abroad</i>)
	S\$per month

- 18. What is the largest expense you have in Singapore? (check one) □ 3. Transportation \Box 1. Food \Box 2. Rent
 - □ 4. Communication (cell phone, etc) □ 5. Entertainment
 - \Box 6. Loan payments (car, etc). □ 7. Others (specify)
- 19. Do you contribute to a pension plan, either here or in the Philippines?
 - 1. YES 2. NO 3. No response
- 20. In the last twelve months, have you sent money to someone in the Philippines?
 - 1. YES 2. NO 3. No response
- 21. In the last twelve months, have you and your remittance beneficiary experienced having differences in opinion on how the money is spent? How so?
 - YES. Reason: (Do not read options, check all that apply)
 - 1. You want them to spend on entertainment and your family wants to spend on more useful things (education, etc.)
 - 2. You want them to spend on more useful things and your family wants to spend on entertainment
 - 3. You want them to spend more, and they want to save
 - 4. You want them to save more, and they want to spend
 - 5. You want them to spend more, and they want to invest 6. You want them to invest, and they want to spend

 - 7. Because the remittance that you send is very small
 - 8. For another reason related to money
 - (specify)_
 - 9. NO
- 22. Do you know people who have had differences in opinion with their relatives in the Philippines over the use of the remittances they sent?
 - 1. Yes 2. No 3. No response

Page 3 of 9

23. SECTION 2: FINANCIAL LITERACY

- 1. How much is 18 + 7? Answer: _____
- 2. What is one-tenth of 400?

Answer:

3. If you have four friends and would like to give each friend four sweets, how many sweets in total must you have to give away?

Answer: _____

4. If you saved S\$500 and received 10% interest per month, how much interest would you earn after one month?

Answer:

- 5. If you put \$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? (*read options*)
 - \Box 1. Less than 200
 - \Box 2. 200 exactly
 - \square 3. Between 200 and 220
 - \Box 4. Exactly 220
 - \Box 5. More than 220
 - \Box 6. Don't know/ no response
- 6. Suppose we had a jar with three blue balls and one red ball. You are playing a game and you have two choices. You can receive \$200 for certain. Or you can pick a ball from this jar with your eyes shut, if you choose a blue ball you will receive \$400. Do you want \$200 for certain, or do you want to have a chance of getting \$400?
 - □1. \$200 guaranteed
 - \Box 2. \$400 with 75% chance of getting it
 - \Box 3. Don't know/ no response

SECTION 3: SAVINGS

Do you have any savings or deposits in either Singapore or Philippines in a bank, lender or at your residence? (*note: rarely will a respondent not have savings, so query further if the initial answer is no*)
 Yes: 1 No: 2 (skip to next section)

2.	How much savings do yo	u have in			
	Singapore?	\$S	Philippines?	PHP	□ Don't know
		Ŧ~			
	Alternatively, in Singap	ore			
	1. < or = to S \$100	5. >S\$ 500 to 750	9. > \$ 1,500	to 2,000	13.>S\$ 5,000 to 7,500
\Box^2	2. >S\$ 100 to 200	6. > \$\$ 750 to 1,000	$\boxed{10.>}$ S\$ 2,000	to 3,000	14.>S\$ 7,500 to 10,000
	3. >S\$ 200 to 300	7. >S\$ 1,000 to 1,250	11.>S\$ 3,000	to 4,000	15.>S\$ 10,000 to 15,000
	4. >S\$ 300 to 500	8. >\$\$ 1,250 to 1,500	12.>S\$ 4,000	to 5,000	16.>Above S\$ 15,000
	In Philippines?				
	1. < or = to PHP 10,000	5. >PHP 50,000 to 75,000	0 □9. > PHP 150	0,000 to 200,000	13.>PHP 500,000 to 750,000
\square^2	2. >PHP 10,000 to 20,000	6. >PHP 75,000 to 100,0	00	,000 to 300,000	14.>PHP 750,000 to 1,000,000
	3. >PHP 20,000 to 30,000	7. >PHP 100,000 to 125,0	000	,000 to 400,000	15.>PHP 1,000,000 to 1,500,000

12.>PHP 400,000 to 500,000

3. Which among these assets do you currently own in the Philippines and approximately how much money are they worth?

House: PHP Land: PHP Farm: PHP	
4. Livestock: Types	Total value PHP
6. Machines: Types	Total value PHP Total value PHP
☐7. Other: Please specify:	Total value PHP

4. >PHP 30,000 to 50,000 8. >PHP125,000 to 150,000

4. How many bank accounts do you have including the accounts that other people have on your behalf? No. of bank a/c : ______ (Include all savings accounts, including joint accounts, irrespective of location. If there are savings, which are kept in the accommodation in Singapore or with the household in Philippines, record it in column 5)

Let's talk about each savings account in turn, beginning with the one which you have in Singapore, if any.

Ask for each account AND ALSO IF THEY HAVE SAVINGS IN ANOTHER PLACE	(1)	(2)	(3)	(4)	(5) SAVINGS NOT IN BANK
5. In which country is the account?1. Singapore2. Philippines3. Other (specify)			□1 □2 □3	□1 □2 □3	□1 □2 □3
 6. What type of account is this? 1. Savings 2. Checking account 3. Time deposit 4. Another type (specify) 	□1 □2 □3 □4	□1 □2 □3 □4	□1 □2 □3 □4	□1 □2 □3 □4	□1 □2 □3 □4
7. When did you open this account? (mm/yyyy)	Date:	Date:	Date:	Date:	Date:

5

16.>Above PHP 1,500,000

					6
 8. Who is the accountholder? (<i>if joint, check all parties</i>). 00. Self 01. Spouse 02. Son/Daughter 03. Parents 04. Son-in-law/Daughter-in-law 05. Brother/Sister 06. Brother-in-law/Sister-in-law 07. Step-son/Step-daughter 08. Other relative 09. Others non-relative 	$ \begin{array}{c} 0\\ 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9 \end{array} $	$ \begin{array}{c} 0\\ 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9 \end{array} $	$ \begin{array}{c} 0\\ 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9 \end{array} $	$ \begin{array}{c} 0\\ 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9 \end{array} $	$ \begin{array}{c} 0\\ 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9 \end{array} $
 9. How do you make deposits to this account? 1. By ATM 2. Through a bank teller in Singapore 3. Through a bank teller in the Philippines 4. Indirectly, you send money through family/relatives 5. Other (specify) 	□1 □2 □3 □4 □5	□1 □2 □3 □4 □5	□1 □2 □3 □4 □5	□1 □2 □3 □4 □5	□1 □2 □3 □4 □5
10. How much do you have in each account?	□PHP □ S\$ Amt:	□PHP □ S\$ Amt:	□PHP □ S\$ Amt:	□PHP □ S\$ Amt:	□PHP □S\$ Amt:
11. Considering all your savings, what do you expect to use your funds for? (<i>do not read options, check all that applies</i>) For specific categories, follow-up question: What is your savings goal for this category? [01 For your own savings / the future [02 For your family back in the Philippines [03 Rent / Mortgage Payment]PHP]S\$ Amt: [13 To buy durable goods for the household (fridge, washing machine, etc.) [03 Rent / Mortgage Payment]PHP]S\$ Amt: [14 Emergency]PHP]S\$ Amt: [04 To buy a land / house]PHP]S\$ Amt: [15 Education (tuition fees, textbooks, etc.) [05 Utilities (electricity, water, etc) [06 Medical expenses / health insurance [07 To buy a car]PHP]S\$ Amt: [16 To pay debts or loans [17 Investments [08 Other transportation [09 Cell phone loading/Post-paid billing [10 Food [11 Entertainment [12 Celebrations / ceremonies [PHP]S\$ Amt: [20 Other: (specify) [20 Other: (specify)					
 12a. In general, are you saving as much as you would lik 1 Yes 2 No 3 Don't know/No response 	12b. If no, why □1 Not enoug □2 Others wii □3 Don't hav □4 Cannot co □5 Others:	not? (<i>Do not real</i> gh money. Il ask to borrow m e discipline. ntrol myself in spo	<i>d options, check a</i> oney if I had save ending.	<i>ll that apply)</i> d more.	

SECTION 4: REMITTANCES

This section is about money you send *abroad* to Philippines or elsewhere. Remittances could also be sent directly to yourself (e.g. into an individual bank account) or for payments to a vendor for a particular purpose (e.g. home mortgage payments). Please answer these questions first for the most important person you send money to, then again for the next most important and then we'll group the others together.

	Person 1 (most important)	Person 2 (next important)	Others
1. To which city/village/town do you send remittances? (ask if there are more than one persons and record it)City: Province/State: Country: Same address as person 1?Same address as person 2?		 1. Yes2. No	□1. Yes □2. No □1. Yes □2. No
 2. To whom do you send remittances? 00. Self 01. Spouse 02. Son/Daughter 03. Parents 04. Son-in-law/Daughter-in-law 05. Brother/Sister 06. Brother-in-law/Sister-in-law 07. Grand child 08. Grand parent 09. Step-son/Step-daughter 10. Other relatives 11. Others non-relative 12. Directly to pay bills 13. Others (specify) 	(check one) 0 1 2 3 4 5 6 7 8 9 10 11 12 13	(check one) 0 1 2 3 4 5 6 7 8 9 10 11 12 13	(check one) 0 1 2 3 4 5 6 7 8 9 10 11 12 12 13
 3. In the last 12 months, how often on average do you send remittances? How much do you remit each time? Frequency Codes: 	Frequency: Code PHP [] (Check the	Frequency: Code PHP [] (Check the	Frequency: Code PHP [] (Check the
 Weekly Monthly Once every two months Other times (specify) 	S\$ appropriate US\$ currency)	S\$appropriate US\$currency) Amt	S\$ appropriate US\$ currency)
4. How do you decide how much to send?			
 01 Upon request; I send amount requested 02 Upon request but I decide final amount. 03 Depends on whether I have enough money to send. 04 Fixed Amount 05 Other (specify) 	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ \end{array} $	□1 □2 □3 □4 □5	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ \end{array} $
5. Do you have control over how this money is spent?	□ 1. YES □ 2. NO	□ 1. YES □ 2. NO	□ 1. YES □ 2. NO
6. How were these funds spent? <i>Do not read</i>			

IRB: «IRB»

options, check all that apply			
01 For your own savings 02 For savings for your family 03 Rent / Mortgage Payment 04 To buy a land / house 05 Utilities (electricity, water, etc) 06 Medical expenses / health insurance 07 To buy a car 08 Other transportation 09 Cell phone loading/Post-paid billing 10 Food 11 Entertainment 12 Celebrations / ceremonies 13 To buy durable goods for the household (fridge, washing machine, etc.) 14 Emergency 15 Education (tuition fees, textbooks, etc.) 16 To pay debts or loans 17 Investments 18 To fund a business Business Type:	$ \begin{array}{c} 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 20\\ 21\\ \end{array} $	$ \begin{array}{c} 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 19\\ 20\\ 21\\ \end{array} $	$ \begin{array}{c} 1\\ 2\\ 3\\ 4\\ 5\\ 6\\ 7\\ 8\\ 9\\ 10\\ 11\\ 12\\ 13\\ 14\\ 15\\ 16\\ 17\\ 18\\ 20\\ 21\\ \end{array} $
7. In the past 3 months, has this person asked you to give or loan them money but you refused or didn't give the full amount?If so, how much did they ask for and how much did you send?For what purpose was the money requested? (use codes from question 6)?	☐ 1. YES ☐ 2. NO PHP ☐ (Check the S\$ ☐ appropriate US\$ ☐ currency) Amt Requested	☐ 1. YES ☐ 2. NO PHP ☐ (Check the S\$ ☐ appropriate US\$ ☐ currency) Amt Requested	☐ 1. YES ☐ 2. NO PHP ☐ (Check the S\$ ☐ appropriate US\$ ☐ currency) Amt Requested
	Amt Sent	Amt Sent	Amt Sent
	Code	Code	Code

8. In the last 12 months, what means did you use most often to send money abroad? State any fees involved. (check all that applies)

	Institution	Fees	
	Name	(S\$)	
□1. Bank transfer			
□2. Exchange houses			
☐3 Door-to-door delivery			
4 Western Union			
□5. Relative or friend that	travels		
□6. He/she takes it himself	herself		
□7. Other (specify)			_
Reason for using this/these n	neans?		

IRB: «IRB»

8

SECTION 5: FOLLOW-UP STUDY

- 1. If you were invited to join a group that met for 1.5 hours once a month and discussed how to manage your finances, such as how to save up to start a small business and understand interest rates and budgeting, would you be interested in attending?
 - □1. Yes □2. No
 - $\boxed{3}$. Don't know/ no response
- 2. Do you think such a financial education course would be beneficial for you?
 - □1. Yes □2. No
 - 3. Don't know/ no response
- Had you heard of Aidha before today?
 1. Yes
 2. No
 3. Don't know/ no response
- 4. Are you at present, or have you been in the past, part of a formal peer support group (e.g. Church, clubs, paluwagan, etc)?

1. Yes: (specify:	
2. No	
\Box 3. Don't know/ no response	

Would you and your most closely connected household be willing to participate in our future studies? Your household contact will also receive cellphone credits so it's important you provide a current number.

Singapore Contact Information:

Full Name of Respondent:

Mobile Phone No. in Singapore: ____

Mobile Phone Provider:

Name/Type of Mobile SIM Card: _____

Additional Contact No. in Singapore:

Location of Residence:

Email address: ____

Philippines Contact Information:

Full Name of Household Contact:

Relationship to respondent: (check one) \Box 1. Spouse \Box 2. Father \Box 3. Mother \Box 4. Sibling (brother/sister) □5. Son □6. Daughter □7. Other: Specify _____ Landline No.: Cellphone No.: Additional Contact No.:_____ Complete Home Address: City/Town: _____ City Code: _____ Province Code: Province : _____ Municipality : _____ _____ Municipality ("bayan" or "munisipalidad") Code: _____ Additional Contact Information in the Philippines: Note: The additional contact person should personally know how to reach the Household Contact. Full Name: Relationship to respondent: (check one) 1. Spouse 2. Father 3. Mother 4. Brother / Sister 5. Son 6. Daughter 7. Other: (specify) Landline No.:_____ Cellphone No.: ____ Additional Contact No.: Home Address: City/Town: _____ City Code: ____ Province : _____ Province Code: _____

 Municipality :
 Municipality

 ("bayan" or "munisipalidad")
 Code:

THANK YOU FOR YOUR PARTICIPATION!

Document Approved On: «ApprovalDate»

Appendix: Baseline Survey

Singapore FDW Module (v1)

We are seeking to understand financial services used by Filipinos in Singapore. This research effort is a joint project by Singapore Management University, Wellesley College, and University of Michigan. The results would be used to find better ways to help FDWs achieve their goals.

Full Name:		Date (mm/dd	/yyyy):/
Mob	ile number in Singapore:	Additional C	ontact No. in Singapore:
Loca	ation of residence:	Email addre	SS:
SEC 1. Prov	CTION 1: CURRENT STATUS Where does your immediate family or your most closely connected family live in the Philippines? ince:	13.	What is the largest expense you have in Singapore? (<i>only check one</i>) 1. Food 2. Rent 3. Transportation 4. Communication (cell phone, etc.) 5. Entertainment 6. Loan payments (car, etc.) 7. Others (specify)
City		_ 14	De serve servet iberte te server i en state side en bere ser in des Dhillion in se
Mun	Are?	_ 14.	Do you contribute to a pension plan, either here or in the Philippines? I. YES 2. NO 3. No response
2.	Age: years	15.	Do you currently own any assets in the Philippines?
3.	What is your marital status? 1. Married 2. Widowed 3. Divorced 4. Separated 5. Single		1. House PHP 2. Land PHP 3. Farm PHP 4. Livestock PHP
4.	Do you have children? 1. YES: Number: 2. NO		. Types:
5.	What is your highest educational attainment ?		6. Machines PHP Types:
	1. Less man elementary 5. Some conege 2. Elementary school graduate 6. College graduate 3. Some high school 7. Some post-graduate 4. High school graduate 8. Post-graduate		☐7. Others PHP Specify: □ NO ASSETS
6.	When did you first come to work in Singapore ? Month: Year:	SE	CTION 2: FINANCIAL LITERACY
7.	How many days off a month do you get? days a month	1.	What is one-tenth of 400? Answer: Do not know
8.	Which days do you get off? (Check all that apply) 1. 1st Sunday each month 2. 2nd Sunday each month 5. Other days: (specify)	2.	If you have four friends and would like to give each friend four sweets, how many sweets in total must you have to give away? Answer: Do not know
9.	Are you at present, or have you been in the past, part of a formal peer support group (e.g. church, clubs, paluwagan, etc.)?	5.	interest would you earn after one month? Do not know
	□ 1. Yes: (<i>specify</i>) □ 2. No □ 3. Do not know / no response	4.	If you put \$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?
10. (incl	(a) How much are you earning in Singapore <i>monthly</i> ? <i>ude basic and overtime pay</i>) S\$ per month OR		1. Less than 200 4. Exactly 220 2. 200 exactly 5. More than 220 3. Between 200 and 220 6. Do not know / no response
	(b) In what income bracket does your monthly earnings fall? $<$ or = to S\$ 250 $>$ S\$ 325 to 350 $>$ S\$ 450 to 475 $>$ S\$ 250 to 275 $>$ S\$ 350 to 400 $>$ S\$ 475 to 500 $>$ S\$ 275 to 300 $>$ S\$ 400 to 425 $>$ S\$ 500 to 600 $>$ S\$ 300 to 325 $>$ S\$ 425 to 450 Above S\$ 600	5.	Suppose we had a jar with three blue balls and one red ball. You are playing a game and you have two choices. You can receive \$200 for certain. Or you can pick a ball from this jar with your eyes shut, if you choose a blue ball you will receive \$400. Do you want \$200 for certain, or do you want to have a chance of getting \$400?
11.	Do you receive other <i>cash</i> allowances aside from your basic salary (ex. transport, travel, phone etc)? 1. YES: Total amount you receive <i>monthly</i> ? S\$ per month 2. NO		 1. \$200 for certain 2. \$400 with 75% chance of getting it 3. Do not know / no response
12.	What are your average monthly expenses in Singapore? (include phone, food, transportation, clothing and entertainment not provided by employer, <i>exclude remittances/money sent abroad</i>) S\$per month		
IRB: •	«IRB» IRB Number: «ID»		Document Approved On: «ApprovalDate»

SECTION 3: SAVINGS

1.	How much savings do you have in					
	Singapore? S\$ Philippines? PHP					
	Do not know					
	Alternatively, in Singapore					
	< or = S\$ 100		>S\$ 500 to 75	50	무무	>S\$ 1,500 to 2,000
	>S\$ 100 to 200		>S\$ 750 to 1,	000	ᆜᆜ	>S\$ 2,000 to 3,000
	>S\$ 200 to 300		>S\$ 1,000 to	1,250		>S\$ 3,000 to 4,000
	>S\$ 300 to 500		>S\$ 1,250 to	1,500		Above S\$ 4,000
	In Philippines					
	< or = to PHP 10,000		>PHP 50,000 75,000	to		> PHP 150,000 to 200,000
	>PHP 10,000		>PHP 75,000	to		>PHP 200,000 to
	to 20,000		100,000		Ш	400,000
	>PHP 20.000 to		>PHP 100.00	0 to	_	Above PHP
	30,000		125,000			400,000
	>PHP 30,000 to		>PHP125,000) to		
	50,000		150,000			
2.	In general, what at 1. For your of 2. For your of 3. Rent / Mo 4. To buy at 5. Utilities (c) 6. Medical 7. To buy at 8. Other tran 9. Mobile ph 10. Food 11. Entertainn 12. Celebratic	re you own sa family ortgag land / electri car asporta none b nent ons / c	r reasons for sa avings / the futu back in the Ph e Payment house city, water, etc.	aving? ure ilippin PHP PHP .) PHP		 \$ Amt:
3.	In general, are you	ı saviı]2. N	ng as much as y No □3. Do n	ou wo ot kno	uld lik w / nc	ke? o response
4	How mony bonk o		ta da yay haya	أمدامه	ling th	a accounts that

How many bank accounts do you have including the accounts that 4. other people have on your behalf?

	BANK ACCOUNT (1)	BANK ACCOUNT (2)	SAVINGS OUTSIDE OF BANK (at home or with other people)
 In which country is the account? <i>Singapore</i> <i>Philippines</i> <i>Other (specify)</i> 	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ \end{array} $	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ \end{array} $	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ \end{array} $
 6. What type of account is this? 1. Savings 2. Checking account 3. Time deposit 4. Another type (specify) 	□1 □2 □3 □4	□1 □2 □3 □4	□1 □2 □3 □4
7. When did you open this account?	Month: Year:	Month: Year:	Month: Year:
 8. Who is the accountholder? (If joint, check all parties) 0. Self 1. Spouse 2. Son/Daughter 3. Parents 4. Brother/Sister 5. Others (relative) (specify) 6. Others (non-relative) (specify) 	□0 □1 □2 □3 □4 □5 □6	□0 □1 □2 □3 □4 □5	$ \begin{array}{c} 0\\ 0\\ 1\\ 2\\ 3\\ 4\\ 5\\ 6\\\\ 6\\\\\\\\\\\\$
 How do you make deposits? By ATM Through a bank teller in Singapore Through a bank teller in the Philippines Indirectly, you send money through 	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ \hline 4 \end{array} $	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ \hline 4 \end{array} $	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ \hline 4 \end{array} $
<i>jamity/relatives</i> 5. Other (specify) 10. How much is in this account?	5 PHP \$ (check	□5 □PHP □ S\$ (check	5 PHP \$\$ (check
	<i>currency</i>) Amt:	<i>currency</i>) Amt:	<i>currency</i>) Amt:

SECTION 4: REMITTANCES

This section is about money you send *abroad* to Philippines or elsewhere. Remittances could also be sent directly to yourself (e.g. into your own bank account) or direct payments to pay bills (e.g. home mortgage payments).

	Person 1 (most important)	(next important)	Others
 To whom do you send money? Self Spouse Son/Daughter Parents Brother/Sister Others (relatives) (specify) Others (non-relative) (specify) Directly to pay bills In the last 12 months, here 	□0 □1 □2 □3 □4 □5 □6 7 PHP □	□0 □1 □2 □3 □4 □5 □6 7 PHP □	□0 □1 □2 □3 □4 □5 □6 7 PHP □
2. In the last 12 months, now often on average do you send remittances? How much do you remit each time?	S\$ US\$ Amt:	S\$ US\$ Amt:	S\$ US\$ Amt:
 Weekty Monthly Once every two months Other times (specify) 	$ \begin{array}{c} 1 \\ 2 \\ $	$ \begin{array}{c} 1 \\ 2 \\ $	$ \begin{array}{c} $
 How do you decide how much to send? (only check one) Upon request; I send amount requested 	1	1	1
2. Upon request but I decide final amount	2	2	2
3. Depends on whether I have enough money	□3	□3	□3
4. Fixed amount5. Other (specify)	□4 □5	□4 □5	□4 □5
4. Do you have control over how this money is spent?	☐ YES ☐ NO	□ YES □NO	□ YES □ NO
 4. Do you have control over how this money is spent? 5. How was the money spent? (check all that apply) 1. For your own savings 2. For savings for your family 3. Rent/Mortgage payment 4. To buy a land/house 5. Utilities (electricity, etc.) 6. Medical 7. To buy a car 8. Other transportation 9. Mobile phone bills 10. Food 11. Entertainment 12. Celebrations/ceremonies 13. To buy durable goods for the household (fridge, etc.) 14. Emergency 15. Education (fees, books) 16. To pay debts or loans 17. Investments 18. To fund a business 	☐ YES ☐ NO ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 Type:	YES NO 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Type:	YES NO □1 □2 □3 □4 □5 □6 □7 □8 □9 □10 □11 □12 □13 □14 □15 □16 □17 □18 Type:
 4. Do you have control over how this money is spent? 5. How was the money spent? (check all that apply) 1. For your own savings 2. For savings for your family 3. Rent/Mortgage payment 4. To buy a land/house 5. Utilities (electricity, etc.) 6. Medical 7. To buy a car 8. Other transportation 9. Mobile phone bills 10. Food 11. Entertainment 12. Celebrations/ceremonies 13. To buy durable goods for the household (fridge, etc.) 14. Emergency 15. Education (fees, books) 16. To pay debts or loans 17. Investments 18. To fund a business 19. Other (specify) 20. I do not know 	☐ YES ☐ NO ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12 ☐ 13 ☐ 14 ☐ 15 ☐ 16 ☐ 17 ☐ 18 Type: ☐ 19 ☐ 20	YES NO 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Type: 19 20	YES NO □1 □2 □3 □4 □5 □6 □7 □8 □9 □10 □11 □12 □13 □14 □15 □16 □17 □18 Type: □19 □20
 4. Do you have control over how this money is spent? 5. How was the money spent? (check all that apply) 1. For your own savings 2. For savings for your family 3. Rent/Mortgage payment 4. To buy a land/house 5. Utilities (electricity, etc.) 6. Medical 7. To buy a car 8. Other transportation 9. Mobile phone bills 10. Food 11. Entertainment 12. Celebrations/ceremonies 13. To buy durable goods for the household (fridge, etc.) 14. Emergency 15. Education (fees, books) 16. To pay debts or loans 17. Investments 18. To fund a business 19. Other (specify) 20. I do not know 21. No response 	□ YES □ NO □ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □ 10 □ 11 □ 12 □ 13 □ 14 □ 15 □ 16 □ 17 □ 18 Type: □ 19 □ 20 □ 21	YES NO 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 Type: 19 20 21	□ YES □ NO □ 1 □ 2 □ 3 □ 4 □ 5 □ 6 □ 7 □ 8 □ 9 □ 10 □ 11 □ 12 □ 13 □ 14 □ 15 □ 16 □ 17 □ 18 Type: □ 19 □ 20 □ 21

6.	In the last 12 months, have you had disagreements about how the money
	you send is spent? How so?
	YES, I would like them to (only check one)

YES, I would like them to (only check one)	
spend on entertainment spend on education	save
but they want to (<i>check one different from above</i>) spend on entertainment spend on education	save
Other reasons: (specify)	

	NO

7. In the last 12 months, **what means** did you use most often to **send money abroad**? State any **fees** involved. (*check all that apply*)

		Institution name	Fees (S\$)
$\Box 1$	Bank transfer		
$\Box 2$	Exchange houses		
	Door-to-door		
_ 5	delivery		
4	Western Union		
□5	Relative or friend		
\Box^{j}	who travels		
	Bring money back		
	myself		
 7	Other (specify)		
Rease	on for using		
this/tl	nese means		

THANK YOU FOR YOUR PARTICIPATION!

Document Approved On: «ApprovalDate»

Appendix: Endline Survey

Singapore FDW Module (v1)

We are seeking to understand financial services used by Filipinos in Singapore. This research effort is a joint project by Singapore Management University, Wellesley College, and University of Michigan. The results would be used to find better ways to help FDWs achieve their goals.

Eal	
Ful Mo	Name: Date (<i>mm/dd/yyyy</i>);/
Loc	ation of residence: Email address:
SE	CTION 1: CURRENT STATUS
1.	What is your marital status? 1. Married 2. Widowed 3. Divorced 4. Separated 5. Single
2.	How many days off a month do you get? days a month
3.	Identify your employer's region of origin: □1. Europe □2. Australia □5. Singapore □3. India □6. Other Asian □6. Other Asian □ □ □
4.	a. Do you currently attend any classes in Singapore? \Box 1. Yes (if yes, move on to parts <i>b</i> , <i>c</i> , and <i>d</i>) \Box 2. No (if no, move on to question 6)
	 b. If yes, what kind of classes? (tick all that apply) 1. Cooking 2. Finances 3. Language 4. Computers 5. Other (specify)
	c. Who pays for these courses?
	d. How much do you pay for these courses? S\$ per months
5.	Are you at present, or have you been in the past, part of a formal peer support group (e.g. church, clubs, paluwagan, etc.)? 1. Yes: (specify) 2. No 3. Do not know
6. (inc	(a) How much are you earning in Singapore monthly? lude basic and overtime pay) S\$ per month
	(b) In what income bracket does your monthly earnings fall? $< or = to S\$ 250$ $> S\$ 325 to 350$ $> S\$ 450 to 475$ $> S\$ 250 to 275$ $> S\$ 350 to 400$ $> S\$ 475 to 500$ $> S\$ 275 to 300$ $> S\$ 400 to 425$ $> S\$ 500 to 600$ $> S\$ 300 to 325$ $> S\$ 425 to 450$ Above S\\$ 600
7.	Do you receive other <i>cash</i> allowances aside from your basic salary (ex. transport, travel, phone etc)? 1. YES: Total amount you receive <i>monthly</i> ? S\$ per month 2. NO 3. Do not know
8.	What are your average monthly expenses in Singapore? (include phone, food, transportation, clothing and entertainment not provided by employer, <i>exclude remittances/money sent abroad</i>)
	a. Including remittances/money sent abroad S\$ per month
	b. Excluding remittances/money sent abroad S\$per month

	 1. Food 2. Rent 3. Transportation 4. Communication (cell phone, etc.) 5. Entertainment 6. Loan payments (car, etc.) 7. Others (specify)
	b. How much do you spend a month on:
	1. Food (S\$) 2. Rent (S\$) 3. Transportation (S\$) 4. Communication (cell phone, etc.) (S\$) 5. Entertainment (S\$) 6. Loan payments (car, etc.) (S\$) 7. Others (as specified above) (S\$)
10.	Do you contribute to a pension plan, either here or in the Philippines?
	□ 1. YES □ 2. NO □ 3. Don't know
11.	Do you currently own any assets in the Philippines? Total value Image: Problem of the probl
SE	CTION 2: FINANCIAL LITERACY/ATTITUDES
0.	What is one-fifth of 500? Answer: Do not know
1.	If you have three friends and would like to give each friend six sweets, how many sweets in total must you have to give away? Answer: Do not know
2.	If you saved S\$400 and received 10% interest per month, how much interest would you earn after one month? Answer: Do not know
3.	If you put \$200 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? 1. Less than 400 4. Exactly 420 2. 400 exactly 5. More than 420 3. Between 400 and 420 6. Do not know
5.	Suppose we had a jar with three green balls and one red ball. You are playing a game and you have two choices. You can receive \$100 for certain. Or you can pick a ball from this jar with your eyes shut, and if you choose a green ball you will receive \$200. Do you want \$100 for certain, or do you want to have a chance of getting \$200? 1. \$100 for certain 2. \$200 with 75% chance of getting it 3. Do not know
9.	Maria is preparing a budget for her household. Which of the following needs to be included in the budget? 1. Earnings 2. Expenses 3. Both 4. Neither
10.	Did you make any purchases last month that you wish you hadn't made? 1. YES 2. NO 3. Don't know
IRB:	«IRB» IRB Number: «ID» Document Approved On: «ApprovalDate»

a. What is the **largest expense** you have in Singapore? (only check one)

9.

11. (a) In the past 6 months, have you gathered together your financial information, reviewed it in detail, and put together a specific financial plan for your long term future?

□ 1. YES □ 2. NO □ 3. Don't know

(b) Do you plan to do this in the next 12 months?

□ 1. YES □ 2. NO □ 3. Don't know

12. What is a pension plan?

- 1. A plan that takes your money and does not pay you back
- 2. A plan that pays you back more money than you had saved after you retire
- \Box 3. A plan that collects tax for the government

4. Don't know

SECTION 3: SAVINGS

- 1.
 Do you have any savings in Singapore or in the Philippines?

 □
 1. YES
 □
 2. NO
 □
 3. Don't know
- How much savings do you have in Singapore? S\$ _____ Philippines? PHP _____ Do not know

Alternatively, in Singapore

< or = S \$ 100	>S\$ 500 to 750	>S\$ 1,500 to 2,000
>S\$ 100 to 200	>S\$ 750 to 1,000	>S\$ 2,000 to 3,000
>S\$ 200 to 300	>S\$ 1,000 to 1,250	>S\$ 3,000 to 4,000
>S\$ 300 to 500	>S\$ 1,250 to 1,500	Above S\$ 4,000

In Philippines

< or = to PHP 10,000	>PHP 50,000 to 75,000	> PHP 150,000 to 200,000
>PHP 10,000 to 20,000	>PHP 75,000 to 100,000	>PHP 200,000 to 400,000
>PHP 20,000 to 30,000	>PHP 100,000 to 125,000	Above PHP 400,000
>PHP 30,000 to 50,000	>PHP125,000 to 150,000	

- 3. Who saves for you? (check all that apply)
 - 1. I save for myself
 - \Box 2. My employer saves for me
 - \Box 3. My spouse saves for me
 - \Box 4. Other (specify) _

4. How frequently do you save?

- 1. Regularly from monthly income (*specify amount*) S\$_____
- 2. Every other month (*specify amount*) S\$ _____
- \Box 3. Sometimes whenever there is spare cash
- 4. Only on specific occasions (*specify*)
- 5. Other (*specify*)_____

In gene	In general, what are your reasons for saving? (Check all that apply)								
\Box 1.	For your own future/retirer	nent							
$\overline{\Box}2.$	For your family back in the	For your family back in the Philippines							
□3.	Rent / Mortgage Payment	Rent / Mortgage Payment PHP S\$ Amt:							
□4.	To buy a land / house	PHP	🗆 S\$	Amt:					
□5.	Livestock (e.g. cow, buffal	Livestock (e.g. cow, buffalo, chickens, etc.)							
□6.	Utilities (electricity, water,	etc.)							
□7.	Medical								
□8.	To buy a car	🗆 S\$	Amt:						
□9.	Other transportation (e.g. th	ricycles, r	notorcyc	cles, jeepneys etc.)					
\Box 10.	Mobile phone bills								
□ 11.	Food								
1 12.	Entertainment								
□ 13.	Celebrations / ceremonies	□PHP	🗆 S\$	Amt:					
 ☐ 14. In case I get sick or lose my job and can't earn ☐ 15. No specific reason 									
							IRB: «IRB»	IF	RB Numb

(*a*) In general, are you saving as much as you would like?□ 1. Yes □ 2. No □ 3. Do not know 6.

(b) In general, how satisfied are you with your savings?

Not Satisfied At All							Very S	Satisfied	
1	2	3	4	5	6	7	8	9	10

- (c) If you are not satisfied with your savings or answered less than 5 on the scale, what is the reason why?

1. Not enough income
2. Family asks for too much money

- □ 3. Difficult to control my spending habits

- Do you have any bank accounts? 8. 1. YES \square 2. NO \square 3. Do not know
- How many bank accounts do you have including the accounts that other people have on your behalf? 9.

No. of bank accounts : _

(Include all savings accounts, including joint accounts, irrespective of location. If there are savings, which are kept in the accommodation in Singapore or with the household in Philippines, record it in column 3)

	BANK ACCOUNT (1)	BANK ACCOUNT (2)	SAVINGS OUTSIDE OF BANK (at home or with other people)
4. In which country is the account?1. Singapore2. Philippines3. Other (specify)	□1 □2 □3	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ \end{array} $	□1 □2 □3
 What type of account is this? Savings Checking account Time deposit Another type (specify) 	□1 □2 □3 □4	□1 □2 □3 □4	□1 □2 □3 □4
6. When did you open this account?	Month: Year:	Month: Year:	Month: Year:
 Who is the accountholder? (If joint, check all parties) Self Spouse Son/Daughter Parents Brother/Sister Others (relative) (specify) Others (non-relative) (specify) 	□0 □1 □2 □3 □4 □5 □6	□0 □1 □2 □3 □4 □5 □6	□0 □1 □2 □3 □4 □5 □6
 How do you make deposits? By ATM Through a bank teller in Singapore Through a bank teller in the Philippines Indirectly, you send money through family/relatives Other (specify) 	□1 □2 □3 □4	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 4 \\ 5 \end{array} $	$ \begin{array}{c} $
 9. How often do you make deposits? 1. Weekly 2. Monthly 3. Once every two months 4. Other times (specify) 10. How much is in this account? 	□1 □2 □3 □4 □PHP □ S\$ (check currency) Amt:	□1 □2 □3 □4 □PHP □ S\$ (check currency) Amt:	□1 □2 □3 □4 □PHP □ S\$ (check currency) Amt:

SECTION 4: REMITTANCES

Number of recipients:

This section is about money you send *abroad* to Philippines or elsewhere. Remittances could also be sent directly to yourself (e.g. into your own bank account) or direct payments to pay bills (e.g. home mortgage payments).

1. How many people in the Philippines do you send money to (including yourself if you send money to your own bank account in the Philippines)?

Person 2 Person 1 (most (next Others important) important) 1. To whom do you send money? $\begin{bmatrix} 0\\ 0\\ 1 \end{bmatrix}$ 0. Self $\Box 0$ $\Box 0$ <u>|</u>1 <u>[</u>1 1. Spouse $\Box 2$ 2. Son/Daughter $\Box 2$ $\Box 2$ 3. Father 3 $\square 4$ $\square 5$ 4. Mother 5. Brother/Sister 6 6 6. Others (relatives) (specify) $\Box 7$ <u>7</u> 7. Others (non-relative) (specify) 8. Directly to pay bills 8 PHP PHP PHP 2. In the last 12 months, how S\$ S\$ S\$ often on average do you send US\$ US\$ US\$ remittances? How much do Amt: Amt: Amt: you remit each time? $\boxed{1}$ $\boxed{2}$ $\boxed{1}$ $\boxed{2}$ 1. Weekly 2. Monthly <u></u>]3 ⊡3 3. Once every two months 4. Other times (specify) $\Box 4$ $\Box 4$ $\Box 4$ 3. How do you decide how much to send? (only check one) 1. Upon request; I send amount $\Box 1$ $\Box 1$ $\Box 1$ requested 2. Upon request but I decide $\Box 2$ $\Box 2$ $\Box 2$ final amount 3. Depends on whether I have □3 □3 3 enough money $\square 4$ $\square 5$ $\square 4$ $\square 5$ 4 4. Fixed amount □5 5. Other (specify) ☐ YES ☐ NO ☐ YES □NO ☐ YES ☐ NO 4. Do you have control over how this money is spent? DON'T DON'T DON'T KNOW KNOW KNOW 5. How was the money spent? (check all that apply) $\square 1$ $\square 2$ 1. For your own savings $\begin{array}{c}
 1 \\
 2 \\
 3
\end{array}$ 2. For savings for your family 3. Rent/Mortgage payment ⊡3 4. To buy a land/house $\Box 4$ $\Box 4$ $\Box 4$ $\square 5$ $\square 6$ 5. Utilities (electricity, etc.) 6. Medical $\overline{\Box}_7$ 7. To buy a car 8 8. Other transportation $\square 8$ □9 □10 □9 □10 □9 □10 9. Mobile phone bills 10. Food 11 $\overline{\Box}_{11}$ 11. Entertainment $\Box 11$ 12. Celebrations/ceremonies 12 12 12 13. To buy durable goods for the 13 **1**13 13 household (fridge, etc.) 14. Emergency $\Box 14$ $\Box 14$ $\Box 14$ □15 □16 □17 **1**15 15. Education (fees, books) 15 □16 □17 16. To pay debts or loans 17. Investments 18. To fund a business $\Box 18$ $\Box 18$ $\Box 18$ Type: Type: Type:

IRB: «IRB»

IRB Number: «ID»

7

19. Other (specify)	19	19	19
20. I do not know 21. No response	$ \begin{array}{c} \hline 20 \\ 21 \end{array} $	□20 □21	□20 □21
 6. What proportion of the money you send home is spent on daily consumption? (e.g. food, clothing, utilities) 1. None of it 2. Some of it 3. ¼ of it 4. ½ of it 5. Most of it 6. All of it 	$ \begin{array}{c} 1 \\ 2 \\ 3 \\ 2 \\ 2 \\ 2 \\ 6 \\ \end{array} $	□1 □2 □3 □4 □5 □6	□1 □2 □3 □4 □5 □6

7. In the last 12 months, have you had disagreements about how the money you send is spent? How so? ☐ YES, I would like them to _____

	spend on	save
	but they want to spend on	save
🗌 NO		

8. In the last 12 months, what means did you use most often to send money abroad? State any fees involved. (*check all that apply*) Institution name Fees (S\$)

		institution name	rees (35)				
$\Box 1$	Bank transfer						
$\Box 2$	Exchange houses						
	Door-to-door						
	delivery						
$\Box 4$	Western Union						
	Relative or friend						
	who travels						
	Bring money back						
ЦО	myself						
 7	Other (specify)						
Reason for using this/these means							

THANK YOU FOR YOUR PARTICIPATION!

	Made Financial Plan Past 6 Months	Will Make Financial Plan Next 12 Months	Fin Lit Questions Correct	Fin Lit Questions Attempted	Knowledgable about Pension	Knowledgable about Budget	Risk Aversion	Regret Purchase in Past Month	Has a Pension Plan
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Enrolled	-0.0675 (0.361) [0.980]	-0.121 (0.342) [0.980]	-0.224 (0.260) [0.921]	0.0134 (0.192) [0.980]	-0.237 (0.235) [0.891]	-0.152 (0.375) [0.941]	-0.199 (0.340) [0.941]	0.275 (0.349) [0.941]	0.0442 (0.0357) [0.802]
Observations	253	256	239	239	219	254	215	253	254
Dep var mean (control)	0.59	0.72	0.65	0.92	0.93	0.55	0.66	0.29	0.01

Appendix Table A1: Treatment-on-the-Treated Effect on Financial Knowledge and Behavior

Note: This table displays the results from an IV regression of financial knowledge and behavior outcomes from the endline survey on whether the individual enrolled in the treatment, using assignment to treatment as an instrument. All regressions include the lagged dependent variable, when available from the baseline surveys (Columns 3, 4, 7 and 9), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

Annondiv	Table A2.	Troatmont	on_tho_	Trastad	Effoct o	n Savinge
Appendix	Table AZ.	meatment	-on-the-	meateu	Ellecto	ii saviiigs

	Any Savings	Ln (Total Amount of Savings + 1)	Total Amount of Savings	Any Savings in Singapore	Ln (Savings Amount in Singapore + 1)	Savings Amount in Singapore	Any Savings in Philippines	Ln (Savings Amount in Philippines + 1)	Savings Amount in Philippines
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Enrolled	-0.495* (0.278)	-4.736** (2.270) [0.050]	-2189.4* (1222.7) [0.238]	-0.583 (0.444) [0.426]	-4.025 (2.697) [0.396]	-702.1 (760.1) [0.594]	-0.213 (0.402) [0.653]	-2.594 (4.124) [0.624]	-52617.4 (34371.0) [0.426]
Observations Dep var mean (control)	256 0.89	231 5.70	231 1280.39	231 0.51	231 3.06	231 429.38	231 0.56	231 5.56	231 28721.65

Note: This table displays the results from an IV regression of savings outcomes from the endline survey on whether the individual enrolled in the treatment, using assignment to treatment as an instrument. All regressions include the lagged dependent variable and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

Appendix Table A3: Treatment-on-the-Treated Effect on Other Outcomes

	Monthly Expenses Not including Remittances	Monthly Remittances	Any Assets	Earnings	Any accounts	Number of accounts	Has Full Control Over Remittances	Has Disagreements Over Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enrolled	-9.717	-30.75	-0.0613	-81.92	-0.186	-0.842	-0.140	0.193
	(42.70)	(87.61)	(0.329)	(64.47)	(0.305)	(0.554)	(0.368)	(0.123)
	[0.941]	[0.941]	[0.941]	[0.604]	[0.941]	[0.356]	[0.941]	[0.386]
Observations	246	244	255	253	247	212	248	254
Dep var mean (control)	101.76	273.22	0.66	489.21	0.80	1.13	0.60	0.01

Note: This table displays the results from an IV regression of additional outcomes from the endline survey on whether the individual enrolled in the treatment, using assignment to treatment as an instrument. All regressions include the lagged dependent variable, when available from the baseline surveyss (all except Column 2), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

	Made Financial Plan Past 6 Months	Will Make Financial Plan Next 12 Months	Knowledgable about Pension	Knowledgable about Budget	Risk Aversion	Regret Purchase in Past Month
	(1)	(2)	(3)	(4)	(5)	(6)
Assigned to treatment	-0.0148	-0.0222	-0.0855	-0.0293	-0.0516	0.0526
	(0.0706)	(0.0634)	(0.0658)	(0.0713)	(0.0751)	(0.0658)
Observations	225	227	125	236	189	229
Dep var mean (control)	0.55	0.69	0.85	0.53	0.63	0.32

Appendix Table A4: Intent-to-Treat Effect on Financial Knowledge and Behavior using Probit

Note: This table displays the marginal effects from a probit regression of financial knowledge and behavior outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (Column 5), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses.

	Made Financial Plan Past 6 Months	Will Make Financial Plan Next 12 Months	Knowledgable about Pension	Knowledgable about Budget	Risk Aversion	Regret Purchase in Past Month
	(1)	(2)	(3)	(4)	(5)	(6)
Assigned to treatment	-0.0610	-0.118	-0.585	-0.135	-0.208	0.261
	(0.297)	(0.303)	(0.517)	(0.301)	(0.335)	(0.306)
Observations	225	227	125	236	189	229
Dep var mean (control)	0.55	0.69	0.85	0.53	0.63	0.32

Appendix Table A5: Intent-to-Treat Effect on Financial Knowledge and Behavior using Logit

Note: This table displays the coefficients from a logit regression of financial knowledge and behavior outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (Column 5), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses.

	Fin Lit Questions Correct	Fin Lit Questions Attempted	Risk Aversion	Has a Pension Plan
	(1)	(2)	(3)	(4)
Assigned to treatment	-0.0250 (0.0348) [0.861]	0.000359 (0.0278) [0.861]	-0.0427 (0.0755) [0.861]	0.00906 (0.00702) [0.525]
Observations	239	239	215	254
R-Squared	0.19	0.20	0.21	0.75
Dep var mean (control)	0.65	0.92	0.66	0.01

Appendix Table A6: Intent-to-Treat Effect on Financial Knowledge and Behavior, no Lagged Dependent Variable Control

Note: This table displays the results from a regression of financial knowledge and behavior outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

	Made Financial Plan Past 6 Months	Will Make Financial Plan Next 12 Months	Fin Lit Questions Correct	Fin Lit Questions Attempted	Knowledgable about Pension	Knowledgable about Budget	Risk Aversion	Regret Purchase in Past Month	Has a Pension Plan
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Assigned to treatment	0.0243 (0.0800) [0.980]	-0.0686 (0.0748) [0.950]	-0.0166 (0.0354) [0.980]	-0.00465 (0.0324) [0.980]	-0.0325 (0.0452) [0.980]	0.0238 (0.0819) [0.980]	0.0406 (0.0899) [0.980]	0.0986 (0.0742) [0.772]	0.0106 (0.00856) [0.842]
Observations	253	256	239	239	219	254	215	253	254
R-Squared	0.29	0.28	0.34	0.32	0.34	0.30	0.35	0.33	0.77
Dep var mean (control)	0.59	0.72	0.65	0.92	0.93	0.55	0.66	0.29	0.01

Appendix Table A7: Intent-to-Treat Effect on Financial Knowledge and Behavior, with Demographic Baseline Controls

Note: This table displays the results from a regression of financial knowledge and behavior outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (Columns 3, 4, 7 and 9), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. All regressions also include baseline characteristics listed in Table 1. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

	(1)	(2)	(3)	(4)	(5)	(6)	
	Made Financ	cial Plan Past	Will Make Fi	inancial Plan			
Dep variable:	6 Mc	onths	Next 12	Next 12 Months		Fin Lit Questions Correct	
Lower bound	-0.0536	-0.0592	-0.0724	-0.0531	-0.0564	-0.0566	
	(0.0747)	(0.0763)	(0.0654)	(0.0663)	(0.0349)	(0.0365)	
Upper bound	0.0236	0.0434	-0.00773	0.0287	0.0245	0.0261	
	(0.0811)	(0.0812)	(0.0815)	(0.0820)	(0.0663)	(0.0467)	
	Fin Lit Q	uestions	Knowledga	able about	Knowledga	able about	
Dep variable:	Atten	npted	Pen	sion	Buc	lget	
Lower bound	-0.0182	-0.0214	-0.0759*	-0.0552	-0.105	-0.0818	
	(0.0276)	(0.0309)	(0.0445)	(0.0540)	(0.0790)	(0.0793)	
Upper bound	0.0417	0.0465	-0.0454	-0.0140	-0.0202	0.0315	
	(0.0277)	(0.0301)	(0.0922)	(0.0883)	(0.0780)	(0.0751)	
			Regret Purc	hase in Past			
Dep variable:	Risk Av	version	Мо	nth	Has a Per	ision Plan	
Lower bound	-0.0795	-0.0497	0.0241	-0.00998	-0.00917	0.00364	
	(0.0779)	(0.0914)	(0.0820)	(0.0825)	(0.00917)	(0.00463)	
Upper bound	-0.0633	-0.0243	0.101	0.0909	-0.00193	0.00790	
	(0.0876)	(0.0991)	(0.0688)	(0.0689)	(0.0117)	(0.00584)	

Appendix Table A8: Lee Bounds on Impact of Assignment to Treatment

Note: This table displays Lee Bounds on the estimates from Tables 5 to account for attrition. Columns (1), (3), and (5) estimate classic Lee (2009) bounds, estimated using the Stata command described in Tauchmann (2014). Columns (2), (4), and (6), we modify the trimming method by first estimating residuals from a regression of the outcome variable on the control variables listed in Tables (5) and estimating Lee Bounds on the residuals. Standard errors are shown in parentheses. * 10% ** 5% *** 1%

	Any Savings	Any Savings in Singapore	Any Savings in Philippines	Any Assets	Any accounts	Has Full Control Over Remittances	Has Disagreements Over Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assigned to treatment	-0.139** (0.0589)	-0.122 (0.0758)	-0.0471 (0.0745)	-0.0219 (0.0704)	-0.0391 (0.0641)	-0.0263 (0.0769)	0.115** (0.0568)
Observations	162	212	210	228	207	222	72
Dep var mean (control)	0.85	0.55	0.55	0.63	0.76	0.58	0.04

Appendix Table A9: Intent-to-Treat Effect on Savings and Other Outcomes using Probit

Note: This table displays the marginal effects from a probit regression of savings and other outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses.

	Any Savings	Any Savings in Singapore	Any Savings in Philippines	Any Assets	Any accounts	Has Full Control Over Remittances	Has Disagreements Over Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Assigned to treatment	-0.882** (0.434)	-0.512 (0.325)	-0.187 (0.310)	-0.0750 (0.321)	-0.230 (0.362)	-0.101 (0.330)	1.897 (1.271)
Observations	162	212	210	228	207	222	72
Dep var mean (control)	0.85	0.55	0.55	0.63	0.76	0.58	0.04

Appendix Table A10: Intent-to-Treat Effect on Savings and Other Outcomes using Logit

Note: This table displays the coefficients from a logit regression of savings and other outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses.

	Any Savings	Ln (Total Amount of Savings + 1)	Total Amount of Savings	Any Savings in Singapore	Ln (Savings Amount in Singapore + 1)	Savings Amount in Singapore	Any Savings in Philippines	Ln (Savings Amount in Philippines + 1)	Savings Amount in Philippines
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Assigned to treatment	-0.0960**	-0.853**	-369.5*	-0.116	-0.762	-123.3	-0.0348	-0.440	-8309.6
	(0.0456)	(0.365)	(221.1)	(0.0751)	(0.462)	(134.6)	(0.0743)	(0.760)	(6458.2)
		[0.079]	[0.416]	[0.465]	[0.416]	[0.604]	[0.723]	[0.683]	[0.465]
Observations	256	231	231	231	231	231	231	231	231
R-Squared	0.22	0.27	0.24	0.20	0.19	0.12	0.18	0.18	0.25
Dep var mean (control)	0.89	5.70	1280.39	0.51	3.06	429.38	0.56	5.56	28721.65

Appendix Table A11: Intent-to-Treat Effect on Savings, no Lagged Dependent Variable Control

Note: This table displays the results from a regression of savings outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

	Any Savings	Ln (Total Amount of Savings + 1)	Total Amount of Savings	Any Savings in Singapore	Ln (Savings Amount in Singapore + 1)	Savings Amount in Singapore	Any Savings in Philippines	Ln (Savings Amount in Philippines + 1)	Savings Amount in Philippines
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Assigned to treatment	-0.142**	-1.004**	-266.5	-0.148	-0.834	2.630	-0.00664	-0.147	-8173.1
	(0.0566)	(0.427)	(241.2)	(0.0904)	(0.535)	(150.8)	(0.0847)	(0.857)	(7075.6)
		[0.069]	[0.574]	[0.307]	[0.356]	[0.980]	[0.980]	[0.980]	[0.574]
Observations	256	231	231	231	231	231	231	231	231
R-Squared	0.39	0.49	0.39	0.34	0.35	0.29	0.36	0.37	0.40
Dep var mean (control)	0.89	5.70	1280.39	0.51	3.06	429.38	0.56	5.56	28721.65

Appendix Table A12: Intent-to-Treat Effect on Savings, with Demographic Baseline Controls

Note: This table displays the results from a regression of savings outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. All regressions also include baseline characteristics listed in Table 1. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

	Ln (Total Amount of Savings + 1)	Total Amount of Savings	Ln (Savings Amount in Singapore + 1)	Savings Amount in Singapore	Ln (Savings Amount in Philippines + 1)	Savings Amount in Philippines
	(1)	(2)	(4)	(5)	(7)	(8)
Panel A						
Assigned to treatment	-0.865**	-425.3*	-0.668	-113.1	-0.456	-10144.3
	(0.362)	(222.3)	(0.451)	(132.0)	(0.760)	(6491.5)
R-Squared	[0.099]	[0.198]	[0.337]	[0.614]	[0.614]	[0.337]
Observations	229	229	229	229	229	229
R-Squared	0.29	0.28	0.22	0.14	0.19	0.29
Dep var mean (control)	5.70	1280.39	3.06	429.38	5.56	28721.65

Appendix Table A13: Intent-to-Treat Effect on Savings, Dropping Outliers in Total Savings

Note: This table displays the results from a regression of savings outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys, and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Two outliers with total savings at or above the 99% percentile of the distribution have been dropped. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

Appendix Table A14: Lee Bounds on Impact of Assignment to Treatment										
	(1)	(2)	(3)	(4)	(5)	(6)				
Den variable [.]	Any S	avings	Ln (Total / Savin	Amount of	Total Amount of Sovings					
				5. 1/	10101741100					
Lower bound	-0.0927*	-0.111**	-1.009**	-1.092***	-681.7**	-673.9**				
	(0.0484)	(0.0521)	(0.468)	(0.420)	(290.8)	(272.5)				
Upper bound	-0.0280	-0.0274	-0.239	-0.318	-208.6	-189.1				
	(0.0811)	(0.0747)	(0.607)	(0.532)	(251.4)	(242.5)				
			Ln (Savings	Amount in	Savings A	mount in				
Dep variable:	Any Savings	in Singapore	Singap	ore + 1)	Singapore					
Lower bound	-0.107	-0.155*	-0.887	-1.093**	-301.5**	-319.7***				
	(0.0874)	(0.0821)	(0.595)	(0.547)	(122.3)	(113.2)				
Upper bound	-0.0168	-0.0291	-0.179	-0.243	-30.94	-23.48				
	(0.0816)	(0.0831)	(0.500)	(0.523)	(136.5)	(142.8)				
			Ln (Savings	Amount in	Savings A	mount in				
Dep variable:	Any Savings i	Any Savings in Philippines		Philippines + 1)		Philippines				
Lower bound	-0.0695	-0.0926	-0.933	-1.026	-16651.3**	-15823.7**				
	(0.0827)	(0.0819)	(0.908)	(0.835)	(7823.5)	(7199.7)				
Upper bound	0.0212	0.0293	0.166	0.217	-5996.1	-4476.5				
	(0.0860)	(0.0867)	(0.867)	(0.877)	(6847.3)	(6460.1)				

Note: This table displays Lee Bounds on the estimates from Tables 5 to account for attrition. Columns (1), (3), and (5) estimate classic Lee (2009) bounds, estimated using the Stata command described in Tauchmann (2014). Columns (2), (4), and (6), we modify the trimming method by first estimating residuals from a regression of the outcome variable on the control variables listed in Tables (5) and estimating Lee Bounds on the residuals. Standard errors are shown in parentheses. * 10% ** 5% *** 1%

	Made Financial Plan Past 6 Months	Will Make Financial Plan Next 12 Months	Fin Lit Questions Correct	Fin Lit Questions Attempted	Knowledgable about Pension	Knowledgable about Budget	Risk Aversion	Regret Purchase in Past Month	Has a Pension Plan
	(1)	(2)	(3)	(4)	(5) (6)		(7)	(8)	(9)
Panel A: Below median fi	nancial litera	cy at baseline							
Assigned to treatment	-0.0718	0.0363	-0.0199	0.0317	0.0230	-0.0691	-0.0830	0.184**	•
	(0.103)	(0.0985)	(0.0595)	(0.0475)	(0.0866)	(0.107)	(0.120)	(0.0915)	(.)
	[0.980]	[0.980]	[0.980]	[0.980]	[0.980]	[0.980]	[0.980]	[0.238]	[0.000]
Observations	120	123	123	123	105	121	99	121	122
R-Squared	0.28	0.22	0.25	0.28	0.33	0.31	0.28	0.24	
Dep var mean (control)	0.61	0.67	0.60	0.87	0.85	0.53	0.72	0.24	0.00
Panel B: Above median fi	nancial litera	cy at baseline							
Assigned to treatment	0.0770	-0.0420	-0.0504	-0.0550	-0.104*	-0.0368	0.0875	-0.0110	0.0214
	(0.121)	(0.102)	(0.0506)	(0.0474)	(0.0575)	(0.123)	(0.137)	(0.123)	(0.0189)
	[0.980]	[0.980]	[0.921]	[0.861]	[0.455]	[0.980]	[0.980]	[0.980]	[0.861]
Observations	116	116	116	116	98	116	101	115	115
R-Squared	0.38	0.37	0.35	0.24	0.47	0.34	0.51	0.28	0.76
Dep var mean (control)	0.53	0.76	0.70	0.97	1.00	0.59	0.58	0.33	0.02

Λ.	برزام مرم مراري	Tabla	A 1 F.		THAAT	ff a at a m	Financial	1/ manulada		havian		s a a line a		1 +
A	nnennix	Table	A I 5'	intent-to	-тгеат н	TTect on	Financiai	Knowledg	е апо ве	navior	nv Ba	isenne	Financiai	THEFACV
<i>'</i> '	ppenaix	TUDIC		mile ile ile	II CUL L	incer on	i maneiai	I I I I I I I I I I I I I I I I I I I			.,	Jochine	maneiai	LICCIACY

Note: This table displays the results from a regression of financial knowledge and behavior outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (Columns 3, 4, 7 and 9), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

	Any Savings	Ln (Total Amount of Savings + 1)	Total Amount of Savings	Any Savings in Singapore	Ln (Savings Amount in Singapore + 1)	Savings Amount in Singapore	Any Savings in Philippines	Ln (Savings Amount in Philippines + 1)	Savings Amount in Philippines
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: Below median f	inancial litera	cy at baseline							
Assigned to treatment	-0.196***	-1.930***	-945.2***	-0.0617	-0.890	-401.9*	-0.162	-1.920	-18200.6**
	(0.0692)	(0.526)	(316.7)	(0.117)	(0.722)	(210.8)	(0.115)	(1.156)	(7975.6)
		[0.000]	[0.030]	[0.554]	[0.317]	[0.149]	[0.317]	[0.218]	[0.069]
Observations	123	111	111	111	111	111	111	111	111
R-Squared	0.33	0.37	0.49	0.29	0.28	0.29	0.27	0.28	0.59
Dep var mean (control)	0.94	6.22	1590.72	0.51	3.26	608.33	0.58	5.92	33155.56
Panel B: Above median f	inancial litera	cy at baseline							
Assigned to treatment	-0.00486	-0.329	-169.4	-0.159	-0.816	11.31	0.147	1.475	-4152.6
	(0.0868)	(0.650)	(330.3)	(0.134)	(0.799)	(123.5)	(0.125)	(1.326)	(10507.0)
		[0.911]	[0.911]	[0.634]	[0.653]	[0.911]	[0.634]	[0.653]	[0.911]
Observations	116	107	107	107	107	107	107	107	107
R-Squared	0.38	0.47	0.52	0.39	0.38	0.36	0.40	0.40	0.54
Dep var mean (control)	0.82	5.09	926.89	0.48	2.83	295.65	0.52	5.04	21304.35

Appendix Table A16: Intent-to-Treat Effect on Savings, by Baseline Financial Literacy

Note: This table displays the results from a regression of savings outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.
	Monthly Expenses Not including Remittances	Monthly Remittances	Any Assets	Earnings	Any accounts	Number of accounts	Has Full Control Over Remittances	Has Disagreements Over Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Assigned to treatment	-1.784 (8.472) [0.941]	-5.994 (17.06) [0.941]	-0.0363 (0.0627) [0.941]	-16.20 (12.15) [0.653]	-0.0419 (0.0605) [0.941]	-0.188* (0.0994) [0.297]	-0.0617 (0.0678) [0.911]	0.0367* (0.0219) [0.396]
Observations	246	244	255	253	247	212	248	254
R-Squared	0.15	0.14	0.21	0.23	0.19	0.21	0.23	0.18
Dep var mean (control)	101.76	273.22	0.66	489.21	0.80	1.13	0.60	0.01

Appendix Table A17: Intent-to-Treat Effect on Other Outcomes, no Lagged Dependent Variable Control

Note: This table displays the results from a regression of additional outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

	Monthly Expenses Not including Remittances	Monthly Remittances	Any Assets	Earnings	Any accounts	Number of accounts	Has Full Control Over Remittances	Has Disagreements Over Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Assigned to treatment	-2.258 (8.985) [0.980]	-14.30 (18.65) [0.931]	0.00632 (0.0682) [0.980]	-17.40 (12.38) [0.703]	-0.0326 (0.0611) [0.931]	-0.0858 (0.105) [0.822]	-0.0195 (0.0730) [0.980]	0.0332 (0.0282) [0.822]
Observations	246	244	255	253	247	212	248	254
R-Squared	0.32	0.35	0.39	0.46	0.42	0.44	0.42	0.29
Dep var mean (control)	101.76	273.22	0.66	489.21	0.80	1.13	0.60	0.01

Appendix Table A18: Intent-to-Treat Effect on Other Outcomes, with Demographic Baseline Controls

Note: This table displays the results from a regression of additional outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (all except Column 2), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. All regressions also include baseline characteristics listed in Table 1. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

	Monthly Expenses Not including Remittances	Monthly Remittances	Any Assets	Earnings	Any accounts	Number of accounts	Has Full Control Over Remittances	Has Disagreements Over Spending
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Below median financia	l literacy at base	line						
Assigned to treatment	-20.49	16.66	0.0322	-16.06	-0.0728	-0.188	-0.0295	0.0398
	(14.53)	(25.76)	(0.0945)	(14.55)	(0.102)	(0.159)	(0.117)	(0.0447)
	[0.743]	[0.931]	[0.931]	[0.931]	[0.931]	[0.881]	[0.931]	[0.931]
	440	110	100	100	440	100	120	422
Observations	118	118	123	122	119	102	120	122
R-Squared	0.24	0.28	0.40	0.55	0.22	0.33	0.29	0.18
Dep var mean (control)	116.02	273.98	0.63	492.70	0.77	1.17	0.53	0.02
Panel B: Above median financia	l literacy at base	line						
Assigned to treatment	12.66	-33.22	0.0462	-14.13	0.0256	-0.141	-0.00292	0.0182
	(15.07)	(33.98)	(0.104)	(21.63)	(0.0919)	(0.170)	(0.115)	(0.0249)
	[0.970]	[0.960]	[0.970]	[0.970]	[0.980]	[0.970]	[0.980]	[0.970]
Observations	111	110	115	114	111	94	111	115
R-Squared	0.29	0.27	0.46	0.43	0.47	0.55	0.47	0.61
Dep var mean (control)	91.06	271.49	0.63	488.96	0.82	1.13	0.61	0.00

Appendix Table A19: Intent-to-Treat Effect on Other Outcomes, by Baseline Financial Literacy

Note: This table displays the results from a regression of additional outcomes from the endline survey on whether the individual was assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (all except Column 2), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses and Romano-Wolf step down p-values, adjusting for multiple hypothesis testing, are shown in square brackets.

	(1)	(2)	(3)	(4)	(5)	(6)	
		.					
	Monthly Ex	penses Not					
Dep variable:	including R	emittances	Monthly R	emittances	Any A	ssets	
Lower bound	-6.514	-10.20	-31.14	-21.02	-0.0444	-0.0473	
	(11.50)	(11.15)	(20.52)	(19.04)	(0.0689)	(0.0709)	
Upper bound	6.607	3.837	1.392	9.870	0.0130	0.0376	
	(9.348)	(10.02)	(22.05)	(20.84)	(0.0813)	(0.0818)	
Dep variable:	Earnings		Any ac	counts	Number of accounts		
Lower bound	-27.84*	-25.99*	-0.101	-0.0694	-0.300**	-0.224*	
	(15.20)	(13.42)	(0.0613)	(0.0641)	(0.148)	(0.133)	
Upper bound	-2.590	-4.641	-0.0331	0.0231	-0.160	-0.0690	
	(14.03)	(11.96)	(0.0840)	(0.0837)	(0.135)	(0.130)	
		ntral Ovar		amanta Ovar			
5				ements Over			
Dep variable:	Remit	tances	Sper	nding			
Lower bound	-0.0961	-0.0276	-0.00869	-0.00850			
	(0.0752)	(0.0884)	(0.0810)	(0.0437)			
Upper bound	-0.0893	-0.0161	0.0415*	0.0469**			
	(0.0755)	(0.0881)	(0.0212)	(0.0212)			

Appendix Table A20: Lee Bounds on Impact of Assignment to Treatment

Note: This table displays Lee Bounds on the estimates from Tables 5 to account for attrition. Columns (1), (3), and (5) estimate classic Lee (2009) bounds, estimated using the Stata command described in Tauchmann (2014). Columns (2), (4), and (6), we modify the trimming method by first estimating residuals from a regression of the outcome variable on the control variables listed in Tables (5) and estimating Lee Bounds on the residuals. Standard errors are shown in parentheses. * 10% ** 5% *** 1%

	Made Financial Plan Past 6 Months	Will Make Financial Plan Next 12 Months	Fin Lit Questions Correct	Fin Lit Questions Attempted	Knowledgable about Pension	Knowledgable about Budget	Risk Aversion	Regret Purchase in Past Month	Has a Pension Plan
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A									
Enrolled	0.149	0.0734	-0.0133	-0.0730	0.130	0.158	0.188	0.0812	-0.00754
	(0.130)	(0.118)	(0.0669)	(0.0624)	(0.0839)	(0.128)	(0.151)	(0.116)	(0.00709)
Assigned to treatment	-0.00149	-0.0812	-0.0148	0.00522	-0.0590	-0.00368	0.00459	0.0843	0.0119
	(0.0854)	(0.0772)	(0.0364)	(0.0331)	(0.0500)	(0.0861)	(0.0933)	(0.0763)	(0.00954)
Panel B									
Enrolled	0.161	0.0882	-0.00375	-0.0659	0.108	0.163	0.198	0.0883	-0.00556
	(0.104)	(0.125)	(0.099)	(0.064)	(0.084)	(0.138)	(0.12)	(0.103)	(0.008)
Assigned to treatment	-0.0450	-0.0427	-0.0314	0.00943	-0.0712*	-0.0549	-0.0864	0.0280	0.00939
	(0.072)	(0.06)	(0.034)	(0.025)	(0.04)	(0.067)	(0.088)	(0.074)	(0.01)
Propensity score	0.0644	0.113	0.178	0.0880	0.0126	-0.168	-0.112	0.246	0.00118
	(0.207)	(0.142)	(0.11)	(0.086)	(0.136)	(0.219)	(0.195)	(0.227)	(0.013)
Panel C									
Enrolled	0.174	0.0248	0.0341	-0.0158	0.0818	0.187	0.181	0.0357	-0.00385
	(0.125)	(0.147)	(0.115)	(0.078)	(0.094)	(0.142)	(0.144)	(0.121)	(0.01)
Assigned to treatment	-0.0422	-0.0221	-0.0371	-0.000658	-0.0740	-0.0756	-0.0890	0.0388	0.00974
	(0.072)	(0.068)	(0.036)	(0.028)	(0.049)	(0.074)	(0.099)	(0.077)	(0.01)
Propensity score controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Appendix Table A21: Propensity Score Matching Estimates of the Effect on Financial Knowledge and Behavior

Note: This table displays the results from a regression of financial knowledge and behavior outcomes from the endline survey on whether the individual enrolled in the course and whether the individual was randomly assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (Columns 3, 4, 7 and 9), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Panel A includes controls for baseline characteristics used in the even columns of Table 3 (along with dummies indicating missing values). Panel B includes, as a control variable, a propensity score estimated using the coefficients in Column 2, Table 3, while Panel C includes dummy variables indicating 10 percentage point ranges of the propensity score. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses in Panels A and on bootstrapped standard errors shown in parentheses in Panels B and C.

		Ln (Savings			In (Sovings	
	Any Savings in Singapore	Amount in Singapore	Savings Amount in Singapore	Any Savings in Philippines	Amount in Philippines + 1)	Savings Amount in Philippines
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A						
Enrolled	0.247*	1.317	-186.0	-0.0700	-0.524	-5213.0
	(0.142)	(0.888)	(423.2)	(0.136)	(1.326)	(11605.8)
Assigned to treatment	-0.190**	-1.060*	36.43	0.00560	-0.0551	-7225.1
	(0.0945)	(0.575)	(209.4)	(0.0882)	(0.887)	(6784.9)
Panel B						
Enrolled	0.238*	1.358*	-145.5	0.0107	0.119	-4219.3
	(0.133)	(0.77)	(296.121)	(0.195)	(1.761)	(12680.42)
Assigned to treatment	-0.148**	-0.990**	-102.8	-0.0435	-0.525	-9891.2
	(0.07)	(0.418)	(189.683)	(0.07)	(0.723)	(6224.094)
Propensity score	0.00620	0.157	-49.01	0.158	1.550	21987.8
	(0.21)	(1.391)	(468.876)	(0.229)	(2.324)	(20361.86)
Panel C						
Enrolled	0.244*	1.488	-105.5	0.0506	0.691	4184.1
	(0.15)	(0.882)	(331.177)	(0.224)	(2.098)	(14294.41)
Assigned to treatment	-0.153**	-1.031**	-116.9	-0.0516	-0.646	-12277.6
	(0.074)	(0.448)	(211.518)	(0.076)	(0.788)	(6768.877)
Propensity score controls	Yes	Yes	Yes	Yes	Yes	Yes

Appendix Table A22: Propensity Score Matching Estimates of the Effect on Savings

Note: This table displays the results from a regression of savings outcomes from the endline survey on whether the individual enrolled in the course and whether the individual was randomly assigned to treatment. All regressions include the lagged dependent variable and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Panel A includes controls for baseline characteristics used in the even columns of Table 3 (along with dummies indicating missing values). Panel B includes, as a control variable, a propensity score estimated using the coefficients in Column 2, Table 3, while Panel C includes dummy variables indicating 10 percentage point ranges of the propensity score. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses in Panels A and on bootstrapped standard errors shown in parentheses in Panels B and C.

	Monthly						
	Expenses Not	Monthly	Any Assats	Fourings	A los concernation	Has Full Control Over	
	including	Remittances	Any Assets	Earnings	Any accounts	Remittances	
	Remittances						
	(1)	(2)	(3)	(4)	(5)	(6)	
Panel A							
Enrolled	10.84	25.21	0.0775	7.108	0.0699	-0.133	
	(19.72)	(29.65)	(0.114)	(21.07)	(0.105)	(0.127)	
Assigned to treatment	-4.231	-18.81	-0.00711	-18.62	-0.0459	0.00359	
-	(9.282)	(19.41)	(0.0728)	(12.31)	(0.0648)	(0.0797)	
Panel B							
Enrolled	9.866	29.52	0.100	13.69	0.0414	-0.155	
	(17.617)	(32.353)	(0.142)	(18.059)	(0.137)	(0.131)	
Assigned to treatment	-2.934	-12.21	-0.0282	-18.49	-0.0506	-0.00397	
	(9.533)	(19.883)	(0.059)	(14.831)	(0.055)	(0.069)	
Propensity score	-33.83	17.00	-0.107	12.70	0.206	0.297	
	(30.066)	(57.233)	(0.176)	(37.129)	(0.204)	(0.234)	
Panel C							
Enrolled	14.81	17.73	0.178	19.12	0.0385	-0.198	
	(19.971)	(39.012)	(0.152)	(19.432)	(0.16)	(0.135)	
Assigned to treatment	-3.031	-12.46	-0.0620	-19.77	-0.0662	0.00926	
	(9.75)	(20.271)	(0.061)	(15.715)	(0.06)	(0.071)	
Propensity score controls	Yes	Yes	Yes	Yes	Yes	Yes	

Appendix Table A23: Propensity Score Matching Estimates of the Effect on Other Outcomes

Note: This table displays the results from a regression of savings outcomes from the endline survey on whether the individual enrolled in the course and whether the individual was randomly assigned to treatment. All regressions include the lagged dependent variable, when available from the baseline surveys (all except Column 2), and a dummy variable indicating whether the baseline response is missing (the variable itself is set to 0), as well as fixed effects for stratification block. Panel A includes controls for baseline characteristics used in the even columns of Table 3 (along with dummies indicating missing values). Panel B includes, as a control variable, a propensity score estimated using the coefficients in Column 2, Table 3, while Panel C includes dummy variables indicating 10 percentage point ranges of the propensity score. Stars (* 10% ** 5% *** 1%) are based on robust standard errors shown in parentheses in Panels A and on bootstrapped standard errors shown in parentheses in Panels B and C.