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# **Business Training for Microfinance Clients: How it Matters and for Whom?**

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# **BUSINESS TRAINING FOR MICROFINANCE CLIENTS: HOW IT MATTERS AND FOR WHOM?\***

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## Abstract

We measure the impact of a business training program for female microentrepreneur clients of a group banking program in Peru. Using the *credit with education* model, we assigned clients randomly to either treatment or control groups. Treatment groups received thirty to sixty minute entrepreneurship training sessions during their normal weekly group banking meeting. These lasted between one to two years. Control groups remained as they were before, meeting weekly with the group banking program solely for making loan and savings payments. We find that the treatment led to higher repayment and client retention rates for the microfinance institution, improved business knowledge and practices, but no measurable impact on business income or assets.

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## I. Introduction

The microfinance sector grew substantially over the past two decades with the hope of helping reduce poverty. Yet, existing programs and institutions have not been able to deliver on that promise (Morduch, 1998; 1999). Now, it is increasingly clear that the microfinance revolution may not be enough for the task and additional innovations are required.

Microfinance practitioners around the world are actively pursuing innovations that can help enhance their contribution to the welfare of their clients. A strong trend in these innovations is the combination of microfinance with other non-financial services, including business training (Dunford, 2002). This trend has raised tension in the development microfinance community with questions about whether lenders should specialize on financial services only, or should integrate non-financial services into their programs (McNelly, Watetip et al. 1996). The idea that specialization is good is certainly not new, but in this setting it is not tested whether the economies of scope outweigh the risks of having credit officers simultaneously become “teachers.” Aside from losing focus on the lending and savings activities, providing too detailed business advice may lead to higher default if the borrower then perceives the lender as partially responsible for any business changes that do not succeed.

Programs being implemented are strikingly heterogeneous, and little is known about their impact on economic outcomes for the poor<sup>1</sup>. In this paper, we evaluate the marginal

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<sup>1</sup> A notable exception is McKernan (2002) who uses a structural approach to estimate the impact of financial and non-financial services offered by microfinance institutions in Bangladesh. Prior

impact of adding entrepreneurship training to a microfinance program in Peru. We do that by implementing a randomized control trial to compare outcomes between those who receive financial services only and those who receive business training as well as financial services. The study was conducted with FINCA-Peru, a microfinance institution (MFI) that sponsors village banks for poor, female microentrepreneurs in Lima and Ayacucho in Peru. We randomly assigned pre-existing lending groups to either treatment or control. Treatment groups received the training as part of their mandatory weekly meetings. Control groups remained as they were before, a credit and savings only group. We conducted a baseline survey before the intervention and a follow-up survey after between one and two years. We find strong benefits for the microfinance institution in the form of higher loan repayment and client retention. We also find improved business processes and knowledge by the clients. However, we find no impact on business income and assets. We discuss below potential explanations.

In addition, we analyze the way the program was delivered and evaluated. We analyze the level of client participation in the training module and explore on the factors that explain large differences in the exposure to treatment. We find that the main factor is length of the permanence as bank client and not the lack of interest in training or lack of satisfaction with the course in itself. We further explore dropout reasons and find several individual and bank characteristics that play an important role. Finally, we explore the nature and magnitude of a potential bias associated to a small attrition problem when

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evaluations of Freedom from Hunger have measured the impact of the entire package of credit with education versus no services, not the marginal value of the education to the credit program.

analyzing business and household variables. We found it harder to reach those clients that left owing money to FINCA banks.

This paper is organized in seven sections including this introduction. Section II presents the nature of the intervention and basic hypothesis. Section III explains the experimental design and Section IV details the data collected and empirical strategy. Section V presents the results of the impact analysis while section VI discusses the nature of the delivery mechanisms and some limitations associated to attrition. Finally, Section VI concludes.

## **II. The intervention and its expected effects**

We measure the impact of adding business training sessions to a microfinance program for female microentrepreneurs in a group banking program in urban and rural areas in Peru. The goal of the business training intervention is two-fold: to improve business outcomes and overall welfare for clients and to improve institutional outcomes for the microfinance institution. Stronger business may demand more services, and clients may be less likely to default if they are satisfied (either due to higher cash flow or a stronger feeling of reciprocity). But the two goals do not need to reinforce each other. If business increases enough that clients “graduate” to larger formal sector banks, providing the business training could lead to lower client retention for this organization.

Foundation for International Community Assistance (FINCA) is a small, non-profit, but financially sustainable, MFI that has been operating in Peru since 1993, and is associated with FINCA International, a large, US-based, non-profit organization

responsible for creating and replicating the village banking methodology around the world. FINCA-Peru's mission is to improve the socio-economic situation of the poor and empower women through the promotion of the village-banking methodology. By providing them with working capital to increase inventory and invest in their businesses, FINCA expects to increase the earned income of its clients, primarily poor women with no collateral. In addition to providing credit, FINCA teaches its clients to save by requiring weekly or monthly savings deposits that correspond to the size of the loan the client has taken out and by encouraging additional voluntary savings for which they receive market interest rates. FINCA further empowers clients by giving them the opportunity to run their banks through their rotating participation on the village-bank board.

FINCA has operations in three particularly poor districts of Lima, and in two Andean provinces, Ayacucho and Huancavelica. As of June 2003, FINCA sponsored 273 village banks with a total of 6,429 clients, 96 percent of which were women. The total savings of its client base was \$1,630,823 with \$821,172 in outstanding loans. FINCA members, particularly those in Ayacucho, are relatively young and have little formal education. FINCA clients each hold, on average, \$233 in savings whereas the average loan is \$203, with a recovery rate of 99 percent. FINCA charges sufficient interest to be self-sustainable. Its sustainability indicator (Total income / Total expenses) was 99 percent in 1998; 105.5 percent in 1999; and 132.2 percent in August, 2000.

The business training materials were developed through a collaborative effort between FINCA, Atinchik,<sup>2</sup> and Freedom from Hunger (FFH).<sup>3</sup> Although the content of the training was similar in both locations, Lima and Ayacucho, they were organized and presented differently considering the considerable differences in educational levels and in learning processes.<sup>4</sup> In Lima, clients received handouts and did homework, whereas in Ayacucho, teaching relied more heavily on visual aids and was sometimes in Quechua. The training materials in Lima were organized in two modules. The first module introduced attendees to what a business is, how a business works, and the marketplace. Clients were taught to identify their customers, competitors, and the position of the business in the marketplace and then learned about product, promotional strategies and commercial planning. The second module explained how to separate business and home finances by establishing the differences between income, costs, and profit, teaching how to calculate production costs, and product pricing. See Appendix A for more details on the content of the business training.

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<sup>2</sup> Atinchik, a nine-year old firm, specializes in the generation of training materials in business management for micro-entrepreneurs. Atinchik had used similar training previously in a project for the World Bank.

<sup>3</sup> Since 1995, FFH has provided technical assistance to eighteen MFIs in Asia, Africa and Latin America, with its program *Credit with Education*, a combination of microcredit and educational services. Working with independent local partners, FFH provides training in microfinance products, MFI capacity building, and adult education in health and business development. Its business education curriculum was developed through market assessments using individual surveys, focus groups with key informants, pilot-testing, and the feedback of clients and staff.

<sup>4</sup> Among FINCA's Lima clients, the literacy rate is 98 percent, the majority has a secondary education and 40 percent have some post-secondary schooling as well. On the other hand, in the Ayacucho region, almost 70 percent of the FINCA clients did not finish secondary school and approximately 15 percent are illiterate.

Training began in October, 2002 in Lima and in March, 2003 in Ayacucho and was expected to last 22 weekly sessions in total. Each bank timed the beginning of the training with the beginning of new loan cycles, so not all banks began training at the same time. Ayacucho's meetings are weekly, whereas in Lima some groups meet weekly and others meet bi-weekly.

The goal of the program is to teach entrepreneurial skills. However, if the entrepreneurial "spirit" is a fixed characteristic, teaching an individual to engage in activities similar to a successful entrepreneur may not actually lead to improved business outcomes. The training aims to improve basic business practices such as how to treat clients, how to use profits, where to sell, the use of special discounts, credit sales, and the goods and services produced. These improvements should lead to more sales, more workers, and could eventually provide incentives to join the formal sector.

We also examine the impact of business training to household decision-making. The link to household decision-making is straightforward: improved business success could empower female microentrepreneurs with respect to their husbands/partners in business and family decisions by giving them more control of their finances.

In addition to impact on the client and her household, the training could have some indirect effects on the institution. The link between loan size, savings and repayment and the financial sustainability of the MFI is straightforward. However, there are other important variables such as client retention or dropout rates. First, high dropout rates increase the efforts required to achieve economies of scale (Copestake, 2002). On one hand, recruiting costs may be high especially in competitive markets. Also, village banks clients increase their loan size and savings with tenure so that high dropout rates make it more

difficult for the MFI to increase the portfolio and reduce unit costs. Second, high dropout rates may be associated to clients' unhappiness with the services provided. In that sense, the training, if valued by the clients, could generate more client loyalty, which in turn could increase client retention and repayment (due to reciprocity, not improved business outcomes). On the down side, training increases the length of the regular meetings by thirty to sixty minutes (meetings without education typically last forty to sixty minutes). This could negatively affect client retention.

### **III. The experimental design and the monitoring of the intervention**

We evaluate the effectiveness of integrating business training with microfinance services using a randomized-control trial in which pre-existing lending groups were assigned randomly to control and treatment groups. In Ayacucho, of the 140 village banks (3,265 clients), 55 were assigned to a mandatory treatment group (clients had to stay through the training at their weekly bank meeting<sup>5</sup>), 34 were assigned to a voluntary treatment group (clients were allowed to leave after their loan payment was made, before the training began), and 51 were assigned to a control group which received no additional services beyond the credit and savings program. In Lima, of 99 FINCA-sponsored banks (1,326 clients), 49 were assigned to mandatory treatment and 50 were assigned to control (there was no "voluntary" treatment group in Lima). The randomization was stratified by credit officer; hence each credit officer has the same proportion of treatment and control groups.

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<sup>5</sup> Fines were applied for absence or tardiness, and could result in expulsion from the bank.

We monitored the attendance at the weekly meetings and the training sessions. On average, training sessions in mandatory training banks had an 88% attendance rate while attendance in voluntary banks was 76%.<sup>6</sup> Several unexpected events were observed during implementation. First, some treatment banks dropped the trainings if they were having problems such as high default and drop out rates. In these cases, they would often enter a restructuring phase that involved reinforcement of the traditional FINCA training about good repayment practices and discipline. The training session was also skipped at the first and last meeting of each cycle, and when the meeting was paired with a group activity such as the celebration of birthdays and regional and religious holidays. In these cases, the session would be postponed until the following meeting. There were other cases in which the clients and credit officers decided that they needed more time to grasp fully the information offered in one session. In some cases, it became a normal practice for banks to agree to spend an extra meeting reviewing the material of the previous training session.<sup>7</sup>

These practices not only delayed the completion of the training materials, but also caused heterogeneity across banks. In Lima, for example, the average bank advanced 3.5 sessions per loan cycle over the 12-meeting cycles. However, it was common for banks to complete five training sessions in the first loan cycle, and slow to an average of 2.6 training sessions per cycle over time. As a result, after at least 24 months since the launch of the training, only half the banks had reached the 17<sup>th</sup> session out of a total of 22 programmed sessions. The empirical analysis will compare the village banks assigned to treatment to

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<sup>6</sup> Attendance in voluntary banks gradually slowed from an average of 80% at the beginning to 70% in the last two cycles observed. The number of training sessions also dropped over time.

<sup>7</sup> In the case of Lima, such revisions often implied using the sessions to work in groups, with the support from the credit officer, on the assigned homework.

those assigned to control, irrespective of how well they adhered to the training program. This is important not only to avoid a selection bias, but also because the delays experienced here are normal for credit with education programs. Had the training been adhered to more strictly, we would be estimating the impact of a treatment that is stronger than is normally implemented.

#### **IV. Data and methods**

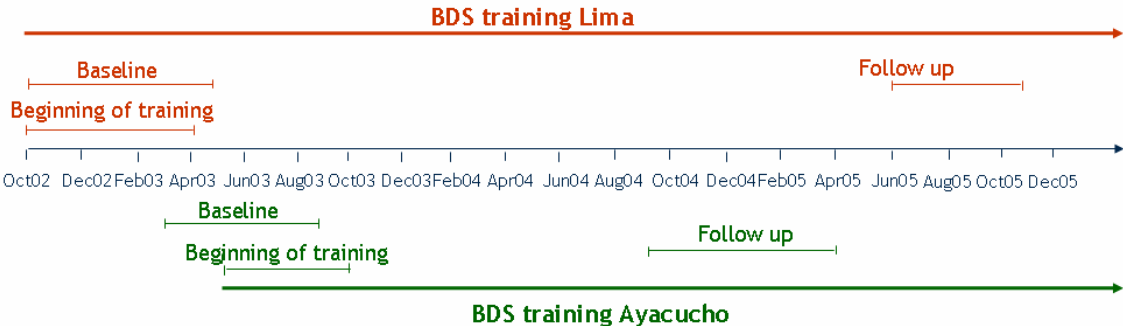
This evaluation uses three key data sources: FINCA financial-transaction data, a baseline survey before the randomization results were announced, and a follow-up survey up to two years later.

Financial-transaction data are from FINCA's database, which contains the reports of all the transactions made by each bank client at every scheduled meeting since 1999. It includes information on the loan cycles, broken down by loan payment, interest, mandatory and voluntary savings, fines for tardiness, and contributions to cover default of other members. The database also includes some socio-economic characteristics of the clients, such as age, education, and business main economic activity, registered when the client first joined a FINCA-sponsored village bank.

The baseline and follow-up surveys included a variety of questions on the socio-demographic characteristics and other general information about the client's household and business. Outcomes can be divided into four categories: (1) institutional outcomes, (2) business processes, knowledge and savings practices (i.e., testing whether the specific practices taught in the training were adopted), (3) business outcomes, (4) household outcomes, including empowerment in decision-making and child labor (the Lima follow-up

survey included questions related to the time children between six and fifteen years old dedicate to domestic work and school activities). The full list of outcome variables and their definitions are included in Appendix Table 1.

Figure 1: Timeline of the intervention and data collection



In treatment banks, the baseline survey was given immediately before the bank began the training. Figure 1 above shows the timeline of these components of the study for Ayacucho and Lima. Most baseline surveys were completed just before or after the client’s weekly meeting although, due to time constraints, some of them had to be applied at their home or place of business previous appointment with the microentrepreneur<sup>8</sup>. In Ayacucho, we used four surveyors for 3265 surveys, while in Lima, we used six surveyors for 1326 surveys.

Seventy-six percent of the clients in the baseline survey were reached and surveyed for the follow-up survey. For the 62% of the clients interviewed in the baseline who were no longer members of a FINCA-sponsored community bank when the follow-up surveys

<sup>8</sup> The ratio of surveys applied right after the periodic meetings of the village banks to those in the household/business is similar in Lima and Ayacucho.

began, we located them using addresses collected in the baseline survey or, in some cases, asked neighbors or FINCA members. However, some clients had moved away, were impossible to locate, or refused to be interviewed. In total, we interviewed 83% of remaining FINCA members, and about 72% of those who had dropped out of FINCA in the intervening period. As Table 10 shows, there was a survey response bias in Lima but not in Ayacucho, where control group individuals were *more* likely to complete the survey. This may be due to the training taking itself a long time, so individuals were less willing to spend the extra time to complete the survey. Also, among those who dropped out, the response rate is higher for the control group than the treatment group.

Table 1 shows some key demographic characteristics and financial-transaction history of the members of control and treatment groups before BDS training began. These results verify that the random assignment produced observably similar treatment and control groups. At the time of the randomization, data were available on prior repayment rates, the average loan size and the average savings size. The remaining variables were unobserved at the time of the randomization, but also are similar across treatment and control groups, as expected.

To estimate the impact of the business training program, we use the first-difference (FD) or the double-difference (DD) estimators, depending on whether we observe the outcome of interest only in the follow-up, or in both the baseline and follow-up survey. The FD estimator is obtained by comparing the levels of the outcomes variables between clients in the treatment and control groups. In turn, the DD estimator is obtained from comparing changes over time in a particular outcome variable between treatment and control groups. As long as the control and treatment groups were similar ex-ante, which

was assured through the randomization, we can argue that both estimators can provide an unbiased estimate of the impact of the intention to treat with business training program on a particular outcome variable.

Econometrically, the FD estimator is obtained by estimating the following linear regression:

$$Y_{ij} = \alpha + \beta D_j^T + \varepsilon_{ij} \quad (1)$$

where  $Y_{ij}$  denotes an outcome variable for client  $i$  in bank  $j$  after the treatment,  $D_j^T$  is a dummy variable that takes the value one if the client belonged to a treatment bank, and  $\varepsilon_{ij}$  denotes the error term which is assumed to be independent across banks but not necessarily within them. Thus,  $\beta$  measures the difference between the treatment and control groups in the outcome  $Y$  after the treatment, and is an unbiased estimate of the average impact of being assigned to a treatment group on the outcome variable  $Y$ . In the tables of results section, we also report estimates of  $\beta$  that result from a regression that adds to eq. (1) a set of covariates such as the clients' age and education, the number of loans received from FINCA, business type and size, and branch location<sup>9</sup>.

If the outcome variable is a dummy variable, then we estimate a probit model and use the marginal effect of  $D_i^C$  as the estimate of the impact of business training on outcome  $Y$ . In the model with interactions, the marginal effect for those with  $X = 0$  is obtained by estimating  $[\hat{\Pr}(Y = 1 / D = 1, X = 0) - \hat{\Pr}(Y = 1 / D = 0, X = 0)]$ . For those clients for whom

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<sup>9</sup> Since treatment was assigned randomly, we would expect the insertion of these covariates to unbiasedly reduce the variance of the estimated effect.

$X = 1$ , the marginal effect of treatment on those clients with  $X = 1$  is obtained with the following expression:  $\left[ \hat{\Pr}(Y = 1 / D = 1, X = 1) - \hat{\Pr}(Y = 1 / D = 0, X = 1) \right]$ .

The double difference estimator comes from the following expression:

$$Y_{ijt} = \alpha + \beta_1 Post_t + \beta_2 D_{jt}^T + \beta_3 Post_t D_{jt}^T + \varepsilon_{ijt} \quad (3)$$

where  $Post_t$  is a binary variable equal to one if the observation corresponds to the post-treatment time period. Then,  $\beta_3$  is the double difference estimator of the program's impact on outcome  $Y$ .

## V. Results: Impact of Business Training

We divide the analysis into five categories of outcome variables: (1) institutional outcomes, (2) business processes, knowledge, (3) business outcomes, and (4) household outcomes including empowerment in decision-making and child labor.

### *Institutional results*

The strongest results we found were in the institutional outcomes, with higher repayment and client retention among treatment groups. We looked at the repayment history of clients in treatment and control groups since training started and found that the former had four-five percentage points higher probability of maintaining a clean repayment history, that is, that they never finished a cycle with a debt larger than their cumulative savings (Table 1). One explanation for improved repayment would be the increase in business income to cover extra payments, but as we shall see below, no such impacts were detected.

With respect to client retention, 61% of the clients left FINCA banks at some point since the training but one out of four of those returned to FINCA before the follow-up survey. We find the business training reduce these exits in five percentage although no effect was found for permanent dropouts. We infer from the retention results that clients place high value on the training they receive, causing them to avoid temporary exits, remaining with the program longer than controls. On the other hand, treatment clients are more likely to cite the length of weekly meetings as a factor in dropping out of the program (Appendix Table 2). So while in net the business training is good for client retention, the program can expect to lose some clients due to lengthier meetings.

Another possible explanation for the increase in client retention for treatment group is the improvement of clients' business outcomes, leading to higher repayment capability. The increase in client retention could be driven by the reduction in default. We examine whether the treatment led to more dropout with default as well as dropout without default, and although the treatment effect is larger in reducing dropout without default, when disaggregated neither is significant statistically.

We find no change in loan size or cumulative savings. The improve default and client retention have strong implications for the profitability of the institution, as discussed in more detail in the conclusion.

### *Business skills and practices*

In the follow-up survey we asked clients questions about key elements of the training, such as business knowledge, marketing strategies, what to do with profits, and record-keeping (see Appendix Table 1 for the full list of survey questions and variable definitions).

Table 2 shows the results on these outcome measures. Training participants demonstrated greater business knowledge, answering more questions correctly (10 percentage points, which is 0.07 standard deviations). The greater knowledge displayed by the treatment group did in fact translate into better business practices, though only in limited areas. The training increased the likelihood that individuals reinvested profits in their business by four percentage points (0.08 standard deviations), maintained sales records for their business by three-four percentage points (0.07 standard deviations), and maintained withdrawal records from their business by seven percentage points (0.17 standard deviations). Lastly, individuals were asked to identify problems of their businesses, and to name changes or innovations they have planned and implemented to their businesses over the prior year. We found that those in the treatment group were five percentage points more likely to report having implemented changes to improve their businesses.

### *Business results*

Despite the changes in business practices, we observed no change in business outcomes. Table 3 presents these results. We examine both, the level and variation in sales, as well as the employment within the enterprise.

We posit several alternatives for why the change in business practices does not translate to improved business outcomes. One explanation would be that we can teach an entrepreneur to mimic the business practices of successful entrepreneurs, but that inevitably the success is largely driven by something deeper about the drive and determination of the individual. Nevertheless, we are not ready to concede the lack of a positive effect on business results. First, it may be that impacts on revenues and profits take more time to

show up. It is possible that more immediate effects would be cost reductions but we do not have any such measures. Second, business income likely contains more measurement error than asking about specific business practices.

#### *Household decision-making*

Table 4 also reports the results on the client's empowerment in decision-making. We detect no impact on household decision-making such as how to use the FINCA loan and savings, whether to take money or products from the business, or family size decisions. Participants are also no more likely to keep track of household bills or separate their money from that of their husband or partner.

## **VI. Results: Exposure to treatment, Dropout and Attrition**

The original evaluation design may have been affected by different factors and events that took place during the intervention delivery stage. Although the impact estimates reported in section V are not affected by the level of exposure, as they measured intention to treat, it is important to understand the way the program was delivered and evaluated. First, we study the level of client participation in the training module and explore the factors that help explain large variability in the exposure to the BDS program. As long as one of the factors that could influence the level of exposure of the client is her permanence in a FINCA bank, we next take a look at dropout reasons. Finally, we explore the nature and magnitude of potential attrition bias when analyzing business and household variables.

### *Exposure to treatment*

Not all the clients originally included in treatment groups were equally exposed to the BDS intervention. This heterogeneity could have been caused by individual and/or bank characteristics, but it could also have been related to client's ex ante attitude towards training. One may expect that people that were more interested in BDS training would have revealed higher attendance rates, and therefore, higher levels of exposure to the treatment. In this section, we analyze the level of exposure of women in treatment groups. Second, we proceed to identify the factors that could explain individual's level of exposure.

The first mechanism through which heterogeneity in exposure may arise is variability in the banks' progress on the training modules. In Ayacucho, the complete training program includes 27 sessions. Only 7.5% percent of the banks in the mandatory treatment group have already completed the program. Moreover, 60% of the banks in the voluntary treatment group have not received any session of the training program<sup>10</sup>. Nevertheless, excluding non-beginners, we find a significant but small difference in the number of sessions received in mandatory and voluntary treatment groups. While the first group completed 23 sessions on average, banks in the voluntary group achieved to progress until the 19<sup>th</sup> session of the program.

In Lima, 20% of the banks in Lima have already completed the 21-session training program. On the other hand, 14.3% of the banks did not start the training at all. Without taking into account these banks, the rest of the treatment banks have completed 16 sessions, on average.

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<sup>10</sup> Only 5.5% of the banks in the mandatory treatment group did not start the training at all.

The second mechanism that affects heterogeneity in exposure is individual attendance rate. Therefore, exposure measurement should resume information both from bank progress and individual attendance rates while the person was a member of a treatment bank. Graph 1 and Graph 2 show the distribution of this measurement. Notice that individual progress in the training modules is smaller in Ayacucho than in Lima.

As long as attitude towards training could presumably be an important factor determining individual attendance rate, we first explore demographic and business factors that determine ex-ante high interest in training. In general, Table 5 exposes that the younger and more educated women are the ones that expressed the most positive attitude towards training in baseline survey. Women with larger businesses who work in the services sector also reveal a higher interest in training. However, the most important effect is obtained for the people with higher education levels, which is the only effect that remains significant even when we split the sample by location. Nevertheless, the effect of education is higher in Ayacucho, region that exposes lower levels of formal educational and reported lower ex-ante interest in training than Lima<sup>11</sup>.

Surprisingly, when we try to figure out the characteristics that could lead to higher exposure, we notice that ex-ante high interest in training has no effect on individual progress on the training (see Table 6). On the other hand, client's tenure after the beginning of the training is far the biggest effect influencing the level of exposure: clients that stay in FINCA between one and two years after the intervention was launched are 49 percentage points more likely to be highly exposed to the treatment. Moreover, clients that stay in the

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<sup>11</sup> In Lima, 64% of the sample expressed that they were very interested in BDS training, while in Ayacucho, only 38% did.

program for more than two years increase their probability of being highly exposed by 70 percentage points. There is also a significant but small effect of the bank characteristics on the level of individual exposure. Apparently, clients in banks with serious default problems are less likely to progress in the training modules while clients in mandatory treatment banks are more likely to be highly exposed to the training.

In Table 7 we run separate regressions for locations and type of treatment in Ayacucho. It is clear that the highest effect of client's permanence appears in Lima, where banks were more likely to progress in the modules. On the other hand, mandatory training is the most important factor determining exposure in Ayacucho. We may expect that high interest in training should influence the level of exposure at least among women in the voluntary treatment group. Once more, results on that line are not obtained.

In general, it can be said that individuals highly interested in training are the most educated ones but that this perception does not traduce on high exposure rates. What can be probably happening is that more educated individuals appreciate the value of education but they also have higher expectations of the training modules and classes. In a future, it should be important to analyze the voluntary group to find out where the potential "disappointment" is coming from. Are the contents of the modules insufficient? Do the clients like the training materials? Are the teaching methodologies employed by the promoters adequate for village banks?

### *Dropout*

The previous section found that differences in individual exposure to the training are mostly explained by the individual decision to stay or leave FINCA's village banks rather

than the progress by the bank or the decision to attend the training sessions. Therefore, we now need to understand who is leaving FINCA to better characterize highly exposed clients. First, Table 8 shows that clients in Lima were less likely to leave FINCA than the ones in Ayacucho. With respect to demographic characteristics of those who dropped out, we know that older, more educated and married women are less likely to leave FINCA. Moreover, bank characteristics are also playing an important role in client retention rates. Default problems in the bank tend to influence clients to leave. The effect of this variable remains similar when we include a variable to control for the bank's heterogeneity in the tenure of the clients. Another result is that banks with highest heterogeneity in tenure are more likely to retain clients. This could be related to the dynamics of the internal account: when "young" and "old" clients are altogether in the same bank, it is more possible that the global cumulative savings of the group can cover the needs of all the clients, those that want to borrow much and those that prefer to save and lend.

When the analysis is conducted for global and permanent dropout by locations, the results for the two dependent variables hold similar within locations. However, analyzing the results for all locations, we find that bank characteristics are only important for retention rates in Ayacucho banks (see Table 9).

### *Attrition*

To measure the impact of the training on client's and business' outcomes, the sample had to be constrained only to those people that were interviewed in the baseline survey and that could be reached during the follow up survey. Therefore, the characteristics of the individuals in the original treatment and control groups could have been affected by the

attrition in the panel. In this sense, some of the results presented in this document might be potentially biased depending on the nature of the attrition. In this section, we characterize these problems.

In general, the original sample in the baseline included 3,237 and 1,326 FINCA clients in Ayacucho and Lima, respectively. In the follow up survey, 76% of the total sample was reached. In particular, Ayacucho had a response rate of 75%, which left a final sample of 2,410 clients to conduct the client's and business' outcomes evaluation. In Lima, response rate was a little higher; 80% of the original sample was reached in the follow up survey. In this location, attrition reduced the sample to 1,063 individuals<sup>12</sup>.

On average, the distribution of the sample between control and treatment groups was slightly affected by the attrition in the panel (see Table 10). Attrition affected more the treatment group. However, the difference accounts for less than three percentage points. Analyzing attrition by location, we find that although Lima had a higher response rate, it is only there that we find a potential attrition bias.

Since the attrition may have generated small biases in the sample, we need to know more about the nature of the problem. We conduct a multivariate analysis to confirm the characteristics of those we could not reach for the follow-up survey. The results in Table 13 show that we had problems finding those that had left FINCA at the moment of the follow-up, especially if they had defaulted. This is true in both locations, Ayacucho and Lima

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<sup>12</sup> In Ayacucho, almost half of the attritioners were not reached because they had moved and did not give FINCA a new address, or because they gave a false address to get into a village bank. Another important group was not found because they had moved to another department or they were on long trips outside the region. In Lima, the most frequent reasons to attrite were related to temporary or permanent trips (within or outside the country).

(Table 14). Table 13 also shows that being single and having a business with productive activities increase the probability of not reaching that client.

## **VII. Conclusion**

We find positive impacts on repayment rates and client retention for FINCA, the lender. Clients appear more satisfied with the program (as indicated by the higher client retention rates) and report engaging in some of the exact activities being taught in the program: separate money between business and household, reinvest profits in the business as much as possible, maintain records of sales and expenses, and think proactively about new markets and opportunities for profits. However, these changes did not lead to a measurable increase in business income or assets.

Several reasons could exist for the lack of impact on business income or assets. First, these are likely the noisiest to measure, and hence perhaps true impacts have occurred but simply are not detectable. Second, the length of time, one to two years, may not be long enough to measure the impact. Third, related to the first and second, perhaps the true impact of making these changes to one's business process are simply too small to detect with this sample size. Fourth, perhaps these business changes do not in fact lead to improved business income or assets. These may be the type of business processes that good entrepreneurs do, but merely doing these activities is not sufficient to become a good entrepreneur. Further experimentation, perhaps with tighter control or influence on the changes in business practices, may be necessary in order to establish whether these practices are indeed beneficial for individuals to undertake.

Nevertheless, this was a successful intervention from the perspective of the MFI. Freedom from Hunger has found that the marginal cost to organizations is 6%-9% of total costs. The marginal revenue will come from the increased client retention and repayment rates (no change in loan sizes was observed). The fixed cost of managing a village bank is high, but the variable cost of each individual client is quite low. The improved client retention rate (sixteen percent improvement in client retention) generates more increased revenue than the marginal cost of providing the training. The improved client repayment is more difficult to estimate, since the true benefit to FINCA comes through lower enforcement costs (the eventual default is virtually nonexistent). Thus, this is a profitable undertaking for FINCA.

With respect to the demand for business training, we find that there was significant heterogeneity in exposure to treatment. Surprisingly, those differences were not that related to differences in progress across banks, or in individual attendance to training sessions, but to the decision to remain as a FINCA client. Treatment did affect retention, though, but some other bank characteristics were important, in particular that the bank had default problems. In that sense, it is plausible to assume that our intention to treat measure captures the way these credit with education programs are normally delivered within village banks.

Overall, we suggest that this program evaluation exercise is a necessary one. Given the plethora of these projects, and given the importance of human capital to our thinking about growth and development, it is imperative that we know the answer to this fundamental question: can entrepreneurship be taught? And does it lead to improved business outcomes? In our setting, the answer is yes, we can teach individuals to engage in certain practices, but that no, it does not lead to improved business outcomes. Further

experimentation is needed to understand whether the failure to find impacts on business outcomes is an artifact of sample size and measurement error, or something deeper about the difficulty in translating entrepreneurial business practices into successful outcomes. Another key issue to explore is whether credit officers are the appropriate agents through whom we want to transfer business skills to microfinance clients as the scope economies may be overturned by the advantages of specialization.

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Table 1: Ex-ante differences between clients by location

	Treatment	Control	Difference	T-stat
Tenure in FINCA (Cycles)				
Lima	5.2	5.2	0.0	0.030
Ayacucho	6.0	5.8	-0.2	-1.220
Years of Education				
Lima	9.9	9.7	0.2	0.946
Ayacucho	8.1	8.1	0.0	0.009
Age				
Lima	42.6	42.3	0.3	0.529
Ayacucho	36.3	36.5	-0.2	-0.510
Loan Size (external account) <sup>a/ b/</sup>				
Lima	293	308	15	1.09
Ayacucho	173	167	-6	-0.85
Accumulated Savings <sup>a/ b/</sup>				
Lima	174.9	185.2	-10.3	-0.703
Ayacucho	360.4	348.6	11.7	0.577
Default Rate <sup>b/</sup>				
Lima	0.04	0.03	0.01	1.126
Ayacucho	0.02	0.02	0.00	0.604
Drop out Rate <sup>b/</sup>				
Lima	22.5	23.3	-0.8	-0.37
Ayacucho	22.8	23.4	-0.6	-0.47
Last week sales (log)				
Lima	7.4	7.4	0.0	-0.071
Ayacucho	6.3	6.3	0.0	-0.086
Number of total workers				
Lima	1.2	1.2	0.0	-0.202
Ayacucho	0.8	0.8	0.0	0.793
Number of paid workers				
Lima	0.4	0.3	0.1	0.894
Ayacucho	0.2	0.2	0.0	0.442
Ex-ante high interest in training				
Lima	0.6	0.6	0.0	0.446
Ayacucho	0.4	0.4	0.0	0.797

Source: FINCA-Peru historical database and baseline client survey.

Averages were calculated for the cycle before the BDS training program was started.

<sup>a/</sup> In US \$.

<sup>b/</sup> In the last cycle before the beginning of training

Table 2. Impact of training on institutional outcomes

OLS, Probit

Dependent variable <sup>a/</sup>	Mean & S.D. of dependent variable	N° of clients	Treatment impact without covariates	Treatment impact with covariates <sup>d/</sup>
Loan size <sup>b/</sup>	212.28 (207.76)	3171	2.31 (13.689)	8.73 (12.911)
Cumulative savings <sup>b/</sup>	304.48 (411.25)	3171	-11.71 (15.826)	-4.53 (16.019)
Repayment <sup>c/ e/</sup>	0.78 (0.41)	3171	0.04* (0.025)	0.05** (0.024)
Client retention <sup>c/</sup>	0.55 (0.50)	3171	0.02 (0.025)	0.03 (0.026)
Dropout <sup>c/</sup>				
Global	0.61 (0.49)	3171	-0.04 (0.026)	-0.05* (0.026)
Permanent	0.45 (0.50)	3171	-0.02 (0.025)	-0.03 (0.026)
Global dropout <sup>c/</sup>				
Dropout with default	0.17 (0.38)	3171	-0.01 (0.019)	-0.01 (0.018)
Dropout without default	0.41 (0.49)	3171	-0.02 (0.021)	-0.02 (0.021)
Permanent dropout <sup>c/</sup>				
Dropout with default	0.15 (0.35)	3171	0.00 (0.018)	0.00 (0.016)
Dropout without default	0.29 (0.46)	3171	-0.02 (0.018)	-0.02 (0.018)

Each coefficient reported in the table is from a separate regression. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%. Standard errors clustered by village bank in parentheses. Marginal effects reported for probit specifications (repayment, client retention, default, and all dropout variables).

<sup>a/</sup> Dependent variables are defined as follows. Loan size: Amount borrowed from FINCA's external account at beginning of loan cycle (US\$). Cumulative savings: Balance at end of loan cycle (US\$). Repayment: Binary variable equal to one if client's weekly payments and cumulative savings cover external account loan's principal, interests and mandatory savings. Client retention: Binary variable equal to one if client was in any FINCA's village bank by December 2005. Dropout, Global: Binary variable equal to one if client had ever left FINCA since the beginning of the training. Dropout, Permanent: Binary variable equal to one if client had permanently left FINCA by December 2005. Dropout with default: Binary variable equal to one if client defaulted by the time she left the village bank. Dropout without default: Binary variable equal to one if client did not defaulted by the time she left the village bank.

<sup>b/</sup> Double difference estimate reported.

<sup>c/</sup> First difference estimate reported.

<sup>d/</sup> The covariates include location (Ayacucho or Lima), business activity, business size, age, schooling and number of FINCA loans received by the client.

<sup>e/</sup> Mean & S.D. calculated for individuals in the two-year period prior to the beginning of the training.

Table 3. Impact of training on business practices

OLS, Probit

Dependent variable <sup>a/</sup>	Mean & S.D. of dependent variable	N° of clients	Treatment impact without covariates		N° of clients	Treatment impact with covariates <sup>f/</sup>	
Tax formality <sup>b/</sup>	0.14 (0.35)	3398	0.01 (0.012)		3398	0.01 (0.011)	
Profit used for business growth <sup>c/</sup>	0.67 (0.47)	3427	0.04 (0.020)	**	3427	0.04 (0.019)	**
Thinking of keeping business safe when taking money from it <sup>c/</sup>	0.26 (0.44)	3427	-0.002 (0.016)		3427	-0.0002 (0.015)	
Fixed salary <sup>b/</sup>	0.04 (0.20)	3424	-0.02 (0.017)		3424	-0.02 (0.017)	
Keeping records of:							
Sales <sup>b/</sup>	0.29 (0.45)	3388	0.03 (0.020)	*	3388	0.04 (0.021)	*
Withdrawals <sup>b/d/</sup>	0.11 (0.31)	969	0.07 (0.042)	*	969	0.07 (0.043)	*
Payments to workers <sup>c/</sup>	0.23 (0.57)	2992	0.005 (0.015)		2992	0.004 (0.013)	
Business knowledge index <sup>c/</sup>	3.32 (1.40)	3427	0.10 (0.060)	*	3427	0.08 (0.055)	
Started new business <sup>c/</sup>	0.14 (0.35)	3427	-0.02 (0.012)		3409	-0.02 (0.012)	
Number of sales locations <sup>b/</sup>	1.07 (0.32)	3424	0.01 (0.026)		3424	0.01 (0.026)	
Allows sales on credit <sup>b/</sup>	0.59 (0.49)	3424	-0.002 (0.015)		3424	-0.002 (0.015)	
Proportion of clients who faced problems with business <sup>c/c/</sup>	0.65 (0.48)	1033	0.02 (0.034)		1030	0.02 (0.034)	
Proportion of clients who: <sup>c/</sup>							
Planned innovations in their businesses	0.65 (0.48)	3427	0.02 (0.019)		3409	0.03 (0.018)	
Executed innovations in their businesses	0.39 (0.49)	3427	0.05 (0.020)	**	3427	0.05 (0.019)	**

Each coefficient reported in the table is from a separate regression. \* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%. Standard errors clustered by village bank in parentheses. Marginal effects reported for probit specifications (tax formality, profit used for business growth, thinking of keeping business safe when taking money from it fixed salary, keeping records, started new business, allowing sales on credit and proportion of clients who faced problems/planned innovations/executed innovations).

<sup>a/</sup> Dependent variables are defined as follows. Tax Formality: Binary variable equal to one if client has a tax ID number. Profit used for business growth: Binary variable equal to one if client reported re-investing profits for the growth or continuity of the business. Thinking of keeping business safe when taking money from it: Binary variable equal to one if client considers the needs of the business when taking money from the business for family use. Fixed

salary: Binary variable equal to one if client pays herself a fixed salary. Keeping records: Binary variable equal to one if client records sales/withdrawals/payments to workers in a registry or notebook. Business knowledge index: Number of right answers given by the client when asked about what should be done to increase business sales and to plan for a new business. Started new business: Binary variable equal to one if client reports that she began a new business in the last year (Ayacucho) or the last two years (Lima). Number of sales locations: Number of locations where the client sells her main business's products. Number of income sources: Number of income sources the client reports (personal/family businesses, other jobs or working activities, etc). Importance of the main product: Discrete variable indicating if the sales of the most profitable product represent 1) all; 2) more than half; or 3) less than half of business sales. Allows sales on credit: Binary variable equal to one if client makes sales on credit. Proportion of clients who faced problems with business: Binary variable equal to one if client reports that her business faced a specific problem in the last year (Ayacucho) or the last two years (Lima). Proportion of clients who planned/ executed innovations in their businesses: Binary variable equal to one if client had an idea for /implemented a change or innovation to improve the business (Ayacucho) or to solve the problems faced (Lima).

<sup>b/</sup> Double difference estimate reported.

<sup>c/</sup> First difference estimate reported.

<sup>d/</sup> Only for Lima

<sup>e/</sup> Only in Lima. This outcome can be divided between business and family/health related problems.

<sup>f/</sup> The covariates include location (Ayacucho or Lima), business activity, business size, age, schooling and number of FINCA loans received by the client.

Table 4. Impact of training on business and individual outcomes

OLS, Probit

Dependent variable <sup>a/</sup>	Mean & S.D. of dependent variable	N° of clients	Treatment impact without covariates	N° of clients	Treatment impact with covariates <sup>d/</sup>
<i>Business outcomes</i>					
Sales <sup>b/</sup>					
Last week (log)	6.66 (1.26)	3375	0.07 (0.062)	3375	0.06 (0.060)
Number of workers <sup>b/</sup>					
Total	0.96 (1.46)	3398	-0.04 (0.212)	3398	-0.05 (0.212)
Paid workers, not family members	0.25 (1.05)	3396	-0.17 (0.284)	3396	-0.17 (0.285)
<i>Individual outcomes</i>					
Client's decision power on <sup>b/</sup>					
Loans/savings for hh/business	0.01 (1.24)	3422	-0.07 (0.064)	3422	-0.08 (0.062)
Number of children	4.04 (0.81)	2782	0.02 (0.047)	2782	0.02 (0.046)
Taking money/products from business	4.76 (0.72)	3356	0.00 (0.037)	3356	0.00 (0.036)
Keeping track of household bills <sup>b/</sup>	3.50 (1.60)	3416	-0.02 (0.076)	3416	-0.03 (0.075)
No need to separate money <sup>c/</sup>	0.62 (0.49)	3413	-0.01 (0.019)	3413	-0.01 (0.019)

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%. Standard errors clustered by village bank in parentheses.

<sup>a/</sup> Dependent variables are defined as follows. Last week sales: Logarithm of main business's sales in the week preceding each survey. Number of total workers: Number of workers in the main business. Number of paid workers: Number of workers in the main business that are not household members. Client's decision power: Index aggregating the responses to questions on who makes key decisions on household and business finance, the number of children to have, and the amount of money/products taken from the business; a higher number is associated with greater decision making power for the client. Keeping track of household bills: A categorical variable indicating who is in charge of paying household bills; a higher number is associated with more responsibility for the client. No need to separate money: Binary variable equal to one if client thinks that is not necessary to separate her money from that of her husband/partner or other adult in the household to control expenses and savings.

<sup>b/</sup> Double difference estimate reported.

<sup>c/</sup> First difference estimate reported.

<sup>d/</sup> The covariates include location (Ayacucho or Lima), business activity, business size, age, schooling and number of FINCA loans received by the client.

Table 5. Characteristics of clients highly interested in training <sup>a/</sup>  
(marginal effects reported)

	Total				Lima	Ayacucho
	I	II	III	IV		
location (Lima = 1)	0.277 (0.016)***	0.280 (0.016)***	0.272 (0.017)***	0.271 (0.017)***		
age [30 - 50]	-0.027 (0.019)	-0.026 (0.019)	-0.030 (0.019)	-0.030 (0.019)	0.023 (0.044)	-0.037 (0.020)*
age [more than 50]	-0.128 (0.023)***	-0.128 (0.023)***	-0.128 (0.023)***	-0.128 (0.023)***	-0.071 (0.050)	-0.135 (0.025)***
higher education	0.267 (0.017)***	0.269 (0.018)***	0.259 (0.018)***	0.257 (0.018)***	0.172 (0.029)***	0.276 (0.022)***
married		-0.016 (0.018)	-0.019 (0.018)	-0.020 (0.018)	0.021 (0.034)	-0.033 (0.021)
household size <sup>b/</sup>		0.005 (0.004)	0.005 (0.004)	0.005 (0.004)	0.002 (0.007)	0.006 (0.004)
business size <sup>b/</sup>			0.047 (0.016)***	0.050 (0.016)***	0.035 (0.028)	0.053 (0.018)***
workers			0.007 (0.006)	0.004 (0.006)	-0.013 (0.010)	0.012 (0.007)*
tax formality <sup>c/</sup>			0.035 (0.024)	0.032 (0.024)	-0.014 (0.035)	0.070 (0.032)**
bs. activity (prepared food)				0.007 (0.025)	-0.010 (0.040)	0.016 (0.030)
bs. activity (services)				0.083 (0.031)***	0.035 (0.049)	0.098 (0.037)***
bs. activity (production)				0.030 (0.028)	0.053 (0.039)	0.017 (0.035)
Observations	4563	4561	4490	4490	1329	3161
# highly interested	2,091	2,090	2,066	2,066	856	1,210
Log likelihood	-2875.5	-2873.0	-2821.5	-2817.6	-838.0	-1968.0

Standard errors in parentheses

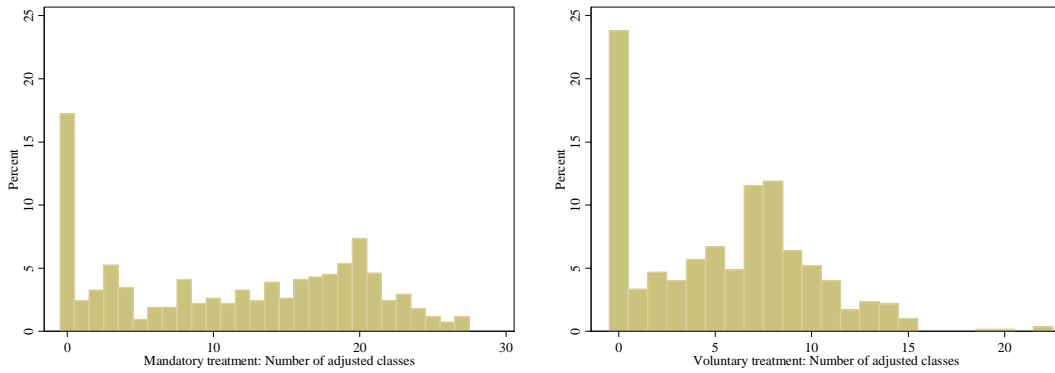
\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

<sup>a/</sup> Dependent variable is defined as follows. Ex-ante high interest in training: Binary variable equal to one if client declared to be very interested in training by the time of the baseline survey.

<sup>b/</sup> Independent variables are defined as follows. Household size: Number of people that live in the household, including FINCA's client. Business size: Binary variable equal to one if client's business has monthly sales above the upper half of the sample in the baseline survey.

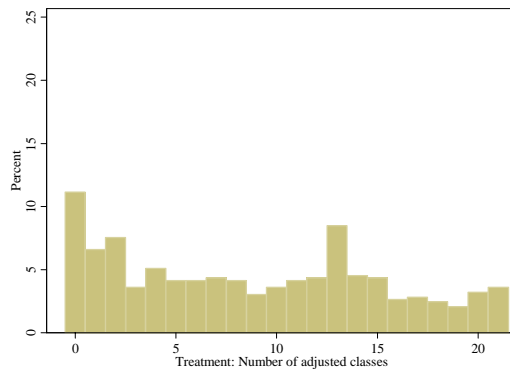
<sup>c/</sup> Variables are defined identically to those in tables in the previous section.

Graph 1. Distribution of the individual attendance in Ayacucho, by kind of treatment <sup>a/</sup>



<sup>a/</sup> Individual attendance is calculated as the number of classes that the client was exposed to during her tenure in the treatment bank, adjusted by percentage of classes attended.

Graph 2. Distribution of the individual attendance in Lima <sup>a/</sup>



Graph 3. Level of the exposure, by location

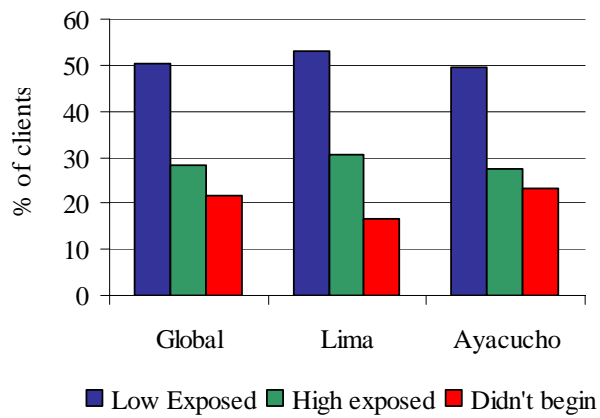


Table 6. High exposure determinants <sup>a/ b/</sup>  
(marginal effects reported)

	I	II	III	IV	V
location	0.005 (0.013)	0.003 (0.013)	0.030 (0.012)**	0.038 (0.012)***	0.064 (0.014)***
age [30 - 50]	0.129 (0.027)***	0.128 (0.027)***	0.115 (0.028)***	0.115 (0.029)***	0.045 (0.030)
age [more than 50]	0.176 (0.042)***	0.172 (0.042)***	0.144 (0.040)***	0.136 (0.041)***	0.005 (0.040)
higher education	0.004 (0.032)	0.009 (0.031)	-0.007 (0.029)	-0.007 (0.030)	-0.008 (0.030)
married	0.007 (0.026)	0.006 (0.026)	0.007 (0.026)	0.005 (0.026)	-0.027 (0.027)
business size	-0.004 (0.023)	-0.003 (0.023)	0.004 (0.024)	0.002 (0.025)	-0.013 (0.023)
bs. activity (prepared food)	0.004 (0.035)	0.004 (0.035)	-0.005 (0.036)	0.001 (0.036)	-0.002 (0.040)
bs. activity (services)	0.032 (0.041)	0.033 (0.041)	0.059 (0.045)	0.060 (0.045)	0.059 (0.053)
bs. activity (production)	0.023 (0.039)	0.024 (0.038)	0.007 (0.040)	0.007 (0.039)	0.014 (0.046)
ex-ante high interest in training		-0.023 (0.025)	-0.036 (0.024)	-0.034 (0.024)	-0.034 (0.026)
mandatory training			0.450 (0.029)***	0.439 (0.030)***	0.455 (0.025)***
age of the bank in cycles (ex ante)			0.008 (0.003)**	0.004 (0.004)	-0.001 (0.004)
bank w/ high default rate (ex ante)			-0.129 (0.037)***	-0.114 (0.035)***	-0.059 (0.035)*
bank w/ high dropout (ex ante)				-0.118 (0.045)***	-0.044 (0.049)
client's ex post tenure [1 - 2 yrs]					0.423 (0.042)***
client's ex post tenure [more than 2 yrs]					0.691 (0.031)***
Observations	2159	2158	2158	2158	2158
# highly exposed	778	778	778	778	778
Log likelihood	-1394.2	-1393.1	-1157.4	-1145.2	-840.2

Standard errors in parentheses.

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

<sup>a/</sup> Includes people whose banks started the training.

<sup>b/</sup> Dependent variable is defined as follows. High exposure: Binary variable equal to one if client was highly exposed in terms of bank's progress and individual attendance rate during the period she was in a treatment bank.

<sup>c/</sup> Independent variables are defined as follows. Age of the bank: Bank's tenure in cycles before the beginning of the training. Bank w/ high default rate: Binary variable equal to one if the bank had default rates over 5% by the end of the last cycle before to the training. Bank w/ high dropout rate: Binary variable equal to one if the bank had dropout rates over 65% by the end of the last cycle before the training. Client's ex-post tenure: Months/years that the client stayed in a FINCA bank after the beginning of the training.

<sup>d/</sup> Variables are defined identically to those in tables in the previous section.

Table 7. High exposure determinants, by location and type of treatment <sup>a/ b/</sup>  
(marginal effects reported)

	Lima	Ayacucho		
		All Treatment	Mandatory	Voluntary
age [30 - 50]	0.002 (0.013)	0.054 (0.034)	0.075 (0.040)*	0.003 (0.019)
age [more than 50]	-0.004 (0.014)	0.017 (0.047)	0.017 (0.067)	0.005 (0.021)
higher education	0.010 (0.012)	-0.022 (0.031)	-0.011 (0.050)	-0.010 (0.009)
married	-0.005 (0.010)	-0.028 (0.031)	0.016 (0.046)	-0.046 (0.022)**
business size	0.007 (0.007)	-0.024 (0.027)	-0.022 (0.039)	-0.014 (0.014)
bs. activity (prepared food)	0.017 (0.017)	-0.032 (0.046)	-0.045 (0.077)	0.008 (0.019)
bs. activity (services)	0.020 (0.020)	0.039 (0.071)	0.006 (0.097)	0.018 (0.031)
bs. activity (production)	0.000 (0.012)	0.024 (0.062)	0.007 (0.095)	0.031 (0.034)
ex-ante high interest in training	-0.014 (0.009)	-0.014 (0.031)	-0.006 (0.044)	-0.006 (0.016)
mandatory training		0.516 (0.032)***		
bank w/ high default rate (ex ante)	-0.014 (0.011)	-0.056 (0.040)	-0.008 (0.054)	-0.052 (0.026)**
bank w/ high dropout rate (ex ante)	-0.018 (0.014)	-0.020 (0.052)	-0.106 (0.058)*	0.045 (0.030)
client's ex post tenure [1 - 2 yrs]	0.993 (0.002)***	0.393 (0.045)***	0.406 (0.043)***	0.042 (0.033)
client's ex post tenure [more than 2 yrs]	0.985 (0.006)***	0.654 (0.039)***	0.699 (0.033)***	0.136 (0.053)**
Observations	585	1573	963	610
# highly exposed	214	564	521	43
Log likelihood	-236.5	-590.7	-436.2	-127.5

Standard errors in parentheses.

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

<sup>a/</sup> Includes people whose banks started the training.

<sup>b/</sup> Dependent and independent variables are defined identically to those in the previous table.

Table 8. Global Dropout determinants <sup>a/</sup>  
(marginal effects reported)

	I	II	III	IV
location (Lima = 1)	-0.075 (0.022)***	-0.069 (0.024)***	-0.072 (0.025)***	-0.144 (0.028)***
age [30 - 50]	-0.003 (0.018)	0.006 (0.018)	0.004 (0.019)	0.010 (0.018)
age [more than 50]	-0.125 (0.017)***	-0.123 (0.017)***	-0.127 (0.017)***	-0.122 (0.017)***
higher education	-0.208 (0.026)***	-0.211 (0.026)***	-0.215 (0.026)***	-0.203 (0.026)***
married	-0.060 (0.016)***	-0.061 (0.017)***	-0.060 (0.017)***	-0.059 (0.017)***
household size	0.001 (0.003)	0.001 (0.003)	0.002 (0.003)	0.002 (0.003)
business size		-0.035 (0.015)**	-0.036 (0.015)**	-0.030 (0.015)*
bs. activity (prepared food)		0.046 (0.022)**	0.048 (0.022)**	0.049 (0.022)**
bs. activity (services)		-0.003 (0.026)	0.001 (0.026)	-0.003 (0.025)
bs. activity (production)		-0.016 (0.025)	-0.017 (0.025)	-0.017 (0.025)
high interest in training <sup>b/</sup>		-0.020 (0.017)	-0.017 (0.017)	-0.017 (0.017)
mandatory training		-0.003 (0.022)	-0.009 (0.022)	-0.002 (0.020)
bank w/ high default rate (ex ante) <sup>b/</sup>			0.078 (0.022)***	0.061 (0.020)***
bank w/ medium heterogeneity (ex ante) <sup>c/</sup>				-0.047 (0.029)
bank w/ high heterogeneity (ex ante) <sup>c/</sup>				-0.141 (0.028)***
Observations	4433	4378	4343	4343
# ex-clients	3,095	3,048	3,024	3,024
Log likelihood	-2639.5	-2608.4	-2574.5	-2549.3

Standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

<sup>a/</sup> Dependent variable is defined as follows. Global Dropout: Binary variable equal to one if client dropped ever after the beginning of the training.

<sup>b/</sup> Variables are defined identically to those in the previous table.

<sup>c/</sup> Independent variables are defined as follows. Bank w/ medium or high heterogeneity: Binary variables that indicate bank's heterogeneity in terms of differences between the tenure of its clients in the cycle previous to the training.

Table 9. Global and Permanent dropout determinants <sup>a/ b/</sup>  
(marginal effects reported)

	All locations		Lima		Ayacucho	
	Global	Permanent	Global	Permanent	Global	Permanent
location (Lima = 1)	-0.144 (0.028)***	-0.082 (0.030)***				
age [30 - 50]	0.010 (0.018)	0.015 (0.020)	0.039 (0.035)	0.041 (0.039)	-0.001 (0.023)	0.002 (0.023)
age [more than 50]	-0.122 (0.017)***	-0.123 (0.021)***	-0.121 (0.043)***	-0.135 (0.047)***	-0.117 (0.018)***	-0.120 (0.023)***
higher education	-0.203 (0.026)***	-0.176 (0.025)***	-0.213 (0.059)***	-0.229 (0.058)***	-0.191 (0.030)***	-0.150 (0.028)***
married	-0.059 (0.017)***	-0.061 (0.017)***	-0.075 (0.035)**	-0.085 (0.033)***	-0.053 (0.019)***	-0.054 (0.021)***
family size	0.002 (0.003)	0.001 (0.004)	0.004 (0.007)	0.003 (0.007)	0.001 (0.004)	0.001 (0.004)
business size	-0.030 (0.015)*	-0.030 (0.016)*	0.014 (0.028)	0.016 (0.028)	-0.046 (0.017)***	-0.049 (0.018)***
bs. activity (prepared food)	0.049 (0.022)**	0.019 (0.024)	0.032 (0.041)	0.019 (0.048)	0.064 (0.026)**	0.029 (0.027)
bs. activity (services)	-0.003 (0.025)	-0.013 (0.028)	-0.057 (0.055)	-0.039 (0.061)	0.015 (0.030)	-0.011 (0.033)
bs. activity (production)	-0.017 (0.025)	-0.014 (0.027)	-0.025 (0.039)	-0.003 (0.042)	-0.015 (0.036)	-0.024 (0.040)
high interest in training	-0.017 (0.017)	-0.005 (0.018)	0.024 (0.032)	0.023 (0.033)	-0.032 (0.020)	-0.012 (0.021)
mandatory training	-0.002 (0.020)	0.009 (0.021)	0.056 (0.037)	0.107 (0.035)***	-0.022 (0.022)	-0.029 (0.024)
bank w/ high default rate (ex ante)	0.061 (0.020)***	0.059 (0.021)***	0.017 (0.041)	0.024 (0.040)	0.078 (0.022)***	0.072 (0.023)***
bank w/ medium heterogeneity (ex ante)	-0.047 (0.029)	-0.053 (0.031)*	0.007 (0.043)	0.007 (0.045)	-0.120 (0.044)***	-0.120 (0.043)***
bank w/ high heterogeneity (ex ante)	-0.141 (0.028)***	-0.148 (0.031)***	-0.012 (0.047)	0.024 (0.043)	-0.196 (0.039)***	-0.212 (0.040)***
Observations	4343	4343	1287	1287	3056	3056
# ex-clients	3,024	2,428	801	801	2,223	2,223
Log likelihood	-2549.3	-2895.8	-835.9	-865.4	-1692.0	-2004.9

Standard errors in parentheses.

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

<sup>a/</sup> Dependent variable is defined as follows. Permanent Dropout: Binary variable equal to one if client was not in a FINCA bank by December 2005.

<sup>b/</sup> Global dropout and independent variables are defined identically to those in the previous table.

Table 10. Response rate

	Treatment	Control	Difference	T-stat	
Global	75.2	77.9	-2.7	2.060	**
By Location					
Lima	77.2	83.5	-6.2	2.845	***
Ayacucho	74.5	74.8	-0.3	0.170	
By permanence					
Clients	83.2	83.9	-0.6	0.339	
Ex-clients	69.9	74.2	-4.3	2.436	***

Table 11. Pre intervention characteristics, by attrition status

Characteristics	Global			
	Reached	Not reached	Difference	T-stat
Age				
less than 30	0.23	0.33	-0.11	-7.207 ***
[30 - 50]	0.57	0.52	0.05	3.129 ***
more than 50	0.21	0.15	0.05	3.962 ***
Education level				
None	0.08	0.08	0.00	0.014
Primary	0.29	0.29	0.00	0.085
Secondary	0.42	0.41	0.01	0.345
Higher	0.22	0.23	-0.01	-0.446
Language (Spanish = 1)	0.80	0.79	0.01	0.987
Married	0.77	0.69	0.08	5.618 ***
Household size <sup>b/</sup>	5.39	5.05	0.34	4.420 ***
Location (Lima = 1)	0.31	0.24	0.06	3.986 ***
Business size <sup>b/</sup>	0.47	0.45	0.02	1.063
Workers in the business	0.96	0.82	0.14	2.643 ***
Tax Formality <sup>b/</sup>	0.14	0.12	0.02	1.638 *
Economic activity				
Commerce	0.71	0.76	-0.05	-2.928 ***
Prepared food	0.11	0.10	0.01	0.756
Services	0.07	0.07	0.01	0.933
Production	0.10	0.07	0.03	2.847 ***
Dropped out ever since beginning of training <sup>a/</sup>	0.64	0.90	-0.26	-16.500 ***
Dropped out permanently <sup>b/</sup>	0.49	0.80	-0.32	-18.601 ***
Defaulted ever since beginning of training <sup>a/</sup>	0.19	0.24	-0.05	-3.689 ***
High interest in training <sup>b/</sup>	0.46	0.45	0.01	0.484

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

<sup>a/</sup> Variables are defined as follows. Dropped out ever since beginning of training: Binary variable equal to one if client had ever left a FINCA bank ever since the beginning of the training. Defaulted ever since beginning of training: Binary variable equal to one if client's weekly payments had not cover loan's principal and interests, and mandatory savings at least once since the beginning of the training.

<sup>b/</sup> Variables are defined identically to those in previous tables in this section.

Table 12. Pre intervention characteristics, by attrition status and location

Characteristics <sup>a/</sup>	Ayacucho				Lima				
	Reached	Not reached	Difference	T-stat	Reached	Not reached	Difference	T-stat	
Age									
less than 30	0.28	0.40	-0.12	-6.289 ***	0.10	0.14	-0.04	-1.657 **	
[30 - 50]	0.53	0.47	0.06	3.123 ***	0.65	0.65	0.00	-0.125	
more than 50	0.19	0.13	0.05	3.529 ***	0.25	0.21	0.04	1.359 *	
Education level									
None	0.10	0.09	0.01	0.541	0.02	0.02	0.00	0.217	
Primary	0.32	0.32	0.00	0.120	0.22	0.19	0.02	0.880	
Secondary	0.36	0.38	-0.02	-0.955	0.53	0.49	0.04	1.140	
Higher	0.22	0.21	0.01	0.668	0.24	0.30	-0.07	-2.216	
Language (Spanish = 1)	0.72	0.72	-0.01	-0.315					
Married	0.75	0.68	0.08	4.317 ***	0.81	0.72	0.09	3.296 ***	
Household size	5.55	5.15	0.40	4.219 ***	5.04	4.74	0.30	2.316 **	
Business size	0.47	0.43	0.04	1.993 **	0.47	0.52	-0.05	-1.415 *	
Workers in the business	0.83	0.69	0.15	2.456 ***	1.23	1.21	0.02	0.203	
Tax Formality	0.11	0.09	0.02	1.651 **	0.22	0.23	-0.01	-0.325	
Economic activity									
Commerce	0.75	0.78	-0.03	-1.644 *	0.62	0.68	-0.07	-1.974 **	
Prepared food	0.10	0.10	0.00	-0.062	0.14	0.11	0.03	1.132	
Services	0.07	0.06	0.01	0.678	0.08	0.08	0.01	0.501	
Production	0.08	0.05	0.02	2.152 **	0.16	0.13	0.03	1.192	
Dropped out ever since beginning of training	0.66	0.95	-0.29	-16.676 ***	0.60	0.74	-0.15	-4.297 ***	
Dropped out permanently	0.49	0.83	-0.35	-17.869 ***	0.49	0.71	-0.22	-6.313 ***	
Defaulted ever since beginning of training	0.16	0.22	-0.07	-4.278 ***	0.27	0.31	-0.04	-1.253	
High interest in training	0.38	0.39	0.00	0.245	0.64	0.66	-0.02	-0.525	

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

<sup>a/</sup> Variables are defined identically to those in the previous table.

Table 13. Attrition Probits <sup>a/ b/</sup>  
(marginal effects reported)

	I	II	III	IV	V
location (Lima = 1)	-0.039 (0.014)***	-0.031 (0.014)**	-0.044 (0.014)***	-0.012 (0.015)	-0.017 (0.015)
age [30 - 50]	-0.070 (0.015)***	-0.066 (0.016)***	-0.059 (0.016)***	-0.040 (0.015)***	-0.039 (0.015)**
age [more than 50]	-0.107 (0.016)***	-0.104 (0.016)***	-0.092 (0.017)***	-0.065 (0.017)***	-0.063 (0.017)***
higher education	-0.016 (0.015)	-0.009 (0.016)	-0.013 (0.016)	-0.014 (0.015)	-0.016 (0.015)
married	-0.068 (0.015)***	-0.064 (0.016)***	-0.069 (0.016)***	-0.055 (0.015)***	-0.056 (0.016)***
household size	-0.012 (0.003)***	-0.012 (0.003)***	-0.010 (0.003)***	-0.010 (0.003)***	-0.010 (0.003)***
business size		-0.005 (0.013)	-0.007 (0.013)	0.000 (0.013)	-0.001 (0.013)
workers		-0.002 (0.005)	-0.003 (0.005)	-0.001 (0.005)	-0.001 (0.005)
tax formality		-0.012 (0.020)	0.002 (0.021)	0.002 (0.020)	0.007 (0.020)
bs. activity (prepared food)		-0.020 (0.020)	-0.014 (0.020)	-0.024 (0.019)	-0.022 (0.019)
bs. activity (services)		-0.027 (0.024)	-0.024 (0.024)	-0.025 (0.024)	-0.025 (0.024)
bs. activity (production)		-0.051 (0.021)**	-0.050 (0.021)**	-0.046 (0.021)**	-0.049 (0.021)**
defaulted (ever since training)			0.066 (0.017)***		0.014 (0.016)
dropped out (ever since training)				0.210 (0.011)***	0.206 (0.012)***
Observations	4,563	4,492	4,328	4,371	4,328
# not reached	1092	1067	996	1013	996
Log likelihood	-2460.6	-2410.8	-2279.2	-2193.5	-2163.1

Standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

<sup>a/</sup> Dependent variable is defined as follows. Attrition: Binary variable equal to one if client was surveyed in the baseline survey but not reached in the follow up survey.

<sup>b/</sup> Independent variables are defined identically to those in the previous table.

Table 14. Attrition Probits, by location <sup>a/</sup>  
(marginal effects reported)

	Ayacucho				Lima			
	I	II	III	IV	I	II	III	IV
age [30 - 50]	-0.076 (0.018)***	-0.069 (0.018)***	-0.042 (0.017)**	-0.042 (0.017)**	-0.038 (0.035)	-0.033 (0.035)	-0.027 (0.035)	-0.025 (0.035)
age [more than 50]	-0.121 (0.020)***	-0.106 (0.020)***	-0.073 (0.020)***	-0.072 (0.020)***	-0.057 (0.035)	-0.056 (0.035)	-0.045 (0.036)	-0.042 (0.036)
higher education	-0.027 (0.019)	-0.028 (0.020)	-0.026 (0.019)	-0.026 (0.019)	0.044 (0.027)	0.034 (0.027)	0.031 (0.027)	0.029 (0.027)
language (Spanish = 1)	-0.014 (0.018)	-0.021 (0.019)	-0.018 (0.018)	-0.021 (0.018)				
married	-0.059 (0.019)***	-0.064 (0.019)***	-0.045 (0.018)**	-0.047 (0.018)**	-0.084 (0.030)***	-0.090 (0.030)***	-0.084 (0.030)***	-0.083 (0.030)***
family size	-0.013 (0.003)***	-0.011 (0.003)***	-0.011 (0.003)***	-0.011 (0.003)***	-0.009 (0.006)	-0.008 (0.006)	-0.008 (0.006)	-0.008 (0.006)
business size	-0.017 (0.016)	-0.020 (0.016)	-0.007 (0.016)	-0.009 (0.016)	0.027 (0.024)	0.030 (0.024)	0.029 (0.024)	0.029 (0.024)
workers	-0.004 (0.006)	-0.004 (0.006)	0.001 (0.005)	0.000 (0.005)	0.003 (0.008)	0.002 (0.008)	0.002 (0.008)	0.002 (0.008)
tax formality	-0.021 (0.027)	-0.011 (0.028)	-0.002 (0.028)	-0.001 (0.028)	-0.004 (0.028)	0.012 (0.029)	0.004 (0.028)	0.012 (0.029)
bs. activity (commerce)	-0.003 (0.026)	-0.004 (0.026)	-0.014 (0.024)	-0.016 (0.024)	-0.047 (0.030)	-0.030 (0.031)	-0.039 (0.030)	-0.033 (0.031)
bs. activity (services)	-0.021 (0.031)	-0.022 (0.031)	-0.030 (0.029)	-0.028 (0.029)	-0.032 (0.038)	-0.022 (0.039)	-0.016 (0.039)	-0.019 (0.039)
bs. activity (production)	-0.061 (0.028)**	-0.054 (0.029)*	-0.058 (0.027)**	-0.055 (0.027)**	-0.044 (0.031)	-0.046 (0.031)	-0.034 (0.031)	-0.044 (0.031)
defaulted (ever since training)		0.088 (0.022)***		0.020 (0.020)		0.028 (0.025)		0.009 (0.025)
dropped out (ever since training)			0.270 (0.013)***	0.268 (0.013)***			0.087 (0.022)***	0.080 (0.022)***
Observations	3141	3032	3057	3032	1329	1274	1292	1274
# not reached	798	750	759	750	266	243	251	243
Log likelihood	-1742.1	-1654.4	-1536.9	-1520.3	-652.5	-607.9	-616.6	-601.9

Standard errors in parentheses

\* significant at 10%; \*\* significant at 5%; \*\*\* significant at 1%

<sup>a/</sup> Dependent and independent variables are defined identically to those in the previous table.

Appendix Table 1: Descriptions of outcome variables

Variable	Description	Time of measurement
<i>1. Institutional outcomes</i>		
Loan size	Amount borrowed from FINCA's external account at beginning of loan cycle (US\$).	Last cycle before and last available after the training
Cumulative savings	Savings balance (voluntary and mandatory) at end of loan cycle.	Last cycle before and last available after the training
Repayment	Binary variable equal to one if, since the beginning of training, the client made all her payments on time or had sufficient savings to cover missed payments	Every cycle since the beginning of training
Client retention	Binary variable equal to one if the client remained a client of a FINCA village bank at the time of the follow-up survey.	Every cycle since the beginning of training
Default	Binary variable equal to one if any portion of the loan had not been repaid upon the maturity of the loan.	
Dropout, global	Binary variable equal to one if client had ever left a FINCA village bank since the beginning of the training.	
Dropout, permanent	Binary variable equal to one if client had left a FINCA village bank by December 2005.	
Dropout with default	Binary variable equal to one if client defaulted by the time she left the village bank.	
Dropout without default	Binary variable equal to one if client did not defaulted by the time she left the village bank.	
<i>2. Business practices</i>		
Tax formality	Binary variable equal to one if the client has a tax ID number.	BL and FU
Profits used for business growth	Binary variable equal to one if the client reported re-investing profits for the growth or continuity of the business.	FU
Thinking of keeping business safe when taking money from it	Binary variable equal to one if client considers the needs of the business when taking money from the business for family use.	FU
Fixed salary for herself	Binary variable equal to one if the client pays herself a fixed salary.	BL and FU
Records sales	Binary variable equal to one if the client records her sales in a registry or notebook.	BL and FU
Records withdrawals	Binary variable equal to one if the client records her cash and in-kind withdrawals in a registry or notebook.	BL and FU
Records wages	Binary variable equal to one if the client records in a registry or notebook the wage payments she makes to workers that are not household members.	FU

Business knowledge	Number of right answers given by the client when asked about what should be done to increase business sales and to plan for a new business.	FU
Starting a new business	Binary variable equal to one if the client reports having begun a new business in the last year (Ayacucho) or the last two years (Lima).	FU
Number of sales locations	Number of locations where the client sells the products of her main business.	BL and FU
Allows credit sales	Binary variable equal to one if the client makes sales on credit.	FU, but recalling situation 12 months before survey
Faced problems with business	Binary variable equal to one if the client reported that her business faced a specific problem in the last year (Ayacucho) or the last two years (Lima).	FU
Planned change/innovation	Binary variable equal to one if the client had an idea for a change/innovation to improve the business (Ayacucho) or to solve the problems faced (Lima).	FU
Implemented change/innovation	Binary variable equal to one if the client implemented a change/innovation to improve the business (Ayacucho) or to solve the problems faced (Lima).	FU
<i>3. Business results</i>		
Last week's sales (log)	Logarithm of sales from the client's main business in the week preceding each survey.	BL and FU
Number of total workers	Number of workers in the main business.	BL and FU
Paid workers, not family	Number of workers in the main business that are not household members.	BL and FU
<i>4. Empowerment outcomes</i>		
Financial decisions	Index aggregating the answers to questions on who makes decisions on savings and credit for the household and the business. For each specific question, a categorical variable is generated and a higher number means more decision making power on the part of the client. Index was constructed using principal component analysis for discrete/categorical data.	BL and FU
Family size decisions	Variable indicating power in making decisions regarding family size. Uses same categories as above.	BL and FU
Taking money/product from business	Variable that indicates who decides to take products/money from the business. Uses same categories as above.	BL and FU
Keeping track of household bills	Variable that indicates who is in charge of ensuring that the household bills have been paid. Uses same categories as above.	BL and FU
Need to separate money	Binary variable equal to one if the client needs to separate her money from that of her husband/partner or other adult in the household to control expenses and savings.	FU

Appendix Table 2: Post intervention differences for dropout reasons, Ayacucho &amp; Lima

	Total		Treatment		Control		Difference	T-stat	
	# obs	%	# obs	%	# obs	%			
Number of clients	3457		2093	60.54	1364	39.46			
<i>5-I. Reasons related with the policies and procedures of the FINCA program</i>									
Dissatisfied with FINCA's loan terms	227	6.57	131	6.26	94	6.89	-0.633	-0.737	
Dissatisfied with FINCA's saving terms	51	1.48	28	1.34	23	1.69	-0.348	-0.830	
Dissatisfied with the solidary discounts (only Lima) <sup>a/</sup>	47	4.42	20	3.68	27	5.19	-1.509	-1.196	
The meetings were too long or too far (interference with business' schedule and/or personal activities)	404	11.69	256	12.23	145	10.63	1.601	1.437	*
Unequal / bad treatment to bank members	142	4.11	82	3.92	59	4.33	-0.408	-0.592	
Because of the training	0	0.00	0	0.00	0	0.00	0.000	-	
FINCA discovered loans from other institutions (only Ayacucho) <sup>b/</sup>	13	0.54	7	0.45	6	0.71	-0.259	-0.825	
Found an institution with better loan terms	18	0.52	11	0.53	7	0.51	0.012	0.049	
<i>5-II. Reasons related with the group loans</i>									
The village bank “graduated” (or was dissolved)	30	0.87	14	0.67	13	0.95	-0.284	-0.928	
Personal conflicts in the bank (with other bank members or with the bank's president )	170	4.92	106	5.06	63	4.62	0.446	0.594	
<i>5-III. Reasons related to the client's business</i>									
No credit needs because of the good situation of the business (sufficient capital in the business or the business operates seasonally)	29	0.84	18	0.86	11	0.81	0.054	0.169	
No credit needs/could not pay the loan because of the bad situation of the business or other reasons	304	8.79	187	8.93	116	8.50	0.430	0.437	
Closed the business / new activity or job	69	2.00	38	1.82	30	2.20	-0.384	-0.794	
<i>5-IV. Personal Reasons</i>									
Expenses resulting from a family crisis (i.e. illness) or family event (i.e. wedding)	312	9.03	193	9.22	118	8.65	0.570	0.573	
Other personal problems	124	3.59	74	3.54	50	3.67	-0.130	-0.201	
Left the region/went on a long trip	215	6.22	140	6.69	75	5.50	1.190	1.417	*
A relative influenced the client	37	1.07	23	1.10	14	1.03	0.073	0.202	
<i>5-V. Reasons due to Environmental Factors</i>									
Environmental / macroeconomic factors	57	1.65	31	1.48	26	1.91	-0.425	-0.959	
<i>5-VI. Other Reasons</i>									
Other / Did not respond	221	6.39	134	6.40	85	6.23	0.171	0.201	

<sup>a/</sup> There are 1063 observations: (543 received treatment)

<sup>b/</sup> There are 2394 observations: (1550 received treatment)

## Appendix A: Business Training Materials

In Lima, the training was administered as a two-part program.<sup>13</sup> Module 1, “Training for Success,” consists of 15 sessions that introduce the topics of business administration and marketing. Classes begin by introducing attendees to what a business is, how a business works, and the marketplace. Women are taught to identify their customers, business competitors, and the position of the business in the marketplace. Later in the module, sessions cover topics on product, price, and promotional strategies and a commercial plan. The module also includes review sessions and a business game that participants play in several sessions.

The second module, “Business and Family: Costs and Finances,” consists of 10 sessions that explain how to separate business and home finances. The classes cover the differences between income, costs, and profit, how to calculate production costs, and product pricing. Other sessions cover maintaining records of business’ operations, business growth, loan repayment, and taxes.

Every session of these two modules included worksheets on the topics taught for the clients to practice and review at the meetings or at home.

In Ayacucho, the training program was grouped into 3 modules with topics less advanced than those taught in Lima.<sup>14</sup> Sessions were presented in 30 minute classes and did not use worksheets as in Lima. Module 1, “Manage Your Business Money,” begins by defining the differences between money for personal expenses and for the business. Women are taught how

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<sup>13</sup> Table A1 provides a list of lessons presented in modules 1 and 2 in Lima.

<sup>14</sup> Table A2 provides a list of lessons presented in modules 1 -3 in Ayacucho.

to calculate profits and about the use of profits for the household and business. Sessions cover how to handle selling to customers on credit, how to record business expenses, how to prevent losses, and the importance of investing in the business. The module also includes a review session.

Module 2, “Increase Your Sales” begins by providing an overview of five key elements in sales: 1) customers, 2) business product or service, 3) product placement, 4) pricing, and 5) marketing. Many of the following sessions are dedicated to provide women with practical means of applying these concepts. The topics covered include the key elements of good customer relations, how to target sales to different types of customers, and approaches for varying the types and timing of the products that are sold in order to increase sales. Participants are also taught about how to identify locations, price goods, and conduct activities that increase sales and profits.

The third module, “Plan for a Better Business,” teaches members how to incorporate planning into their business. Sessions begin by presenting why planning is beneficial and what traits characterize a successful business. Attendees are instructed on how to solve business problems and how to introduce new products or changes. Later sessions teach the tools needed to prepare a sales plan, calculate business and loan costs, search for new resources, and handle unexpected problems and opportunities.

Appendix A, Table 1. Business Training Sessions Presented in Lima

<b>Module 1: Training for Success</b>		<b>Module 2: The Business and the Family: Costs and Finances</b>	
<b>Session</b>	<b>Title</b>	<b>Session</b>	<b>Title</b>
1	Training for Success	1	The Business and the Family
2	What is a business?	2	Income, Costs, and Profit
3	How does a business work?	3	My Costs of Production and Operating Resources
4	The Market	4	How Do I Calculate the Cost of Production of My Product?
5	Who are my customers?	5	Prices and Price Equilibrium
6	Who are my competitors?	6	How to Make a Good Price Decision
7	Review Session 1	7	The Registers and Controls in My Business
8	Business game: Module 1	8	The Growth of My Business
9	My business' position in the market	9	Will I Be Able to Pay My Loan?
10	Product and Price Commercial Strategy	10	Taxes
11	Marketplace and Promotion Commercial Strategy		
12	My Commercial Plan		
13	Review Session 2		
14	Business Game: Module 2		
15	Business Game: Module 3		

Appendix A, Table 2: Business Training Sessions Presented in Lima

<b>Module 1: Manage Your Business Money</b>		<b>Module 2: Increase Your Sales</b>	
<b>Session</b>	<b>Title</b>	<b>Session</b>	<b>Title</b>
1	Separate Business and Personal Money	1	Know Your Customers
2	Use Business Loans for Your Business	2	Treat Your Customers Well
3	Calculating Profits	3	Sell to Different Kinds of Customers
4	Track, Plan and Invest Your Business Money	4	Improve Your Products and Services
5	Decide How to Use the Profits of the Business to Satisfy the Needs of the Business and Your Personal Needs	5	Sell New and Complementary Products and Services
6	Prevent Business Losses	6	Seize Opportunities to Sell
7	Manage Credit Sales	7	Sell Where Customers Buy the Most
8	Review of the Learning Sessions of “Manage Your Business Money”	8	Set the Right Price
		9	Promote Your Business With Good Selling Practices
		10	Plan for Increased Sales

<b>Module 3: Plan for a Better Business</b>	
<b>Session</b>	<b>Title</b>
1	Use Planning Steps to Grow Your Business
2	Examine How Your Business Is Doing
3	Decide How You Can Improve Your Business
4	Develop and Test New Business Ideas
5	Plan How Much to Make and Sell
6	Plan Business Costs
7	Plan for More Profit
8	Find Resources for Your Business
9	Prepare for Unexpected Events