

Private Shoes for Public Benefit: Evaluating a Reintegration Program in Colombia

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The process of reintegration requires that ex-combatants be presented with attractive social and economic alternatives to violence. This paper estimates the impact of vocational training on the livelihoods of former combatants in the process of reintegration. Among participants, income generation increases by 55.5%, yet other metrics of socioeconomic stability indicate varied results. I find that training programs must provide incentives that outweigh the opportunities of the informal sector to encourage formal sector adoption. Secondly, these incentives must extend beyond short-term income generation and workplace inclusion and ensure stability, security, and opportunity for growth.

I. Introduction

Colombia is facing a critical moment in history. In anticipation of a negotiated agreement with major non-state armed groups (NSAGs) and an end to conflict, the process of disarmament, demobilization, and reintegration (DDR) sits at the center of national debate.

Since 2003, a total of 57,082 ex-combatants have formally demobilized and entered the process of reintegration, among whom 6,918 are women. Sustainable peace in Colombia requires that these individuals be presented with attractive social and economic alternatives to violence. Big cities like Bogota and Cali present unique challenges to reintegration of ex-combatants, such as high rent expenses, crime, and a competitive job market. Especially when joining the formal sector, ex-combatants face barriers associated with low levels of training, lack of experience, and discrimination in the workplace.

Using mixed methodologies, this paper evaluates the impact of a public-private partnership launched by the International Organization for Migration (IOM) in partnership with USAID and the Colombian Agency for Reintegration (ACR). The program provides people in the process of reintegration (PPRs) and their spouses the opportunity to attend vocational training for the shoe- and leather-making sector. Post-graduation, program participants are presented with employment for leather-making factories or receive financing to begin their own small-scale enterprises.

The evaluation measures the individual, household-level and societal outcomes of this capacity-building program. In Bogota and Cali, we conducted surveys and in-depth interviews with PPRs, key program coordinators, and employers who hire PPRs. The research aims to evaluate the differential effect the program has on a set of indicators for sustainable livelihood formation. I analyze the results using an econometric and a human-centered approach, which inform a set of recommendations and design principles for improving the effectiveness of the program.

I find that among participants, income generation increases by 55.5% and the effect is larger for female PPRs, yet other metrics of socioeconomic stability fall short of the goals and expectations of the program. Vocational training programs for reintegration must outcompete opportunities

for income generation in the informal sector by extending incentives beyond short-term income generation and workplace inclusion to include services that ensure stability, security, and opportunity for growth.

II. Literature Review

A. *What is Reintegration?*

After the signing of a peace agreement, the process of disarmament, demobilization, and reintegration (DDR) is considered a condition *sine qua non* for reconstruction of stable and sustainable peace. Historically, the conglomeration of these terms has led *disarmament* and *demobilization* to take precedence over the long-term and more costly process of *reintegration*.

Widespread agreement that reintegration was the weakest phase of DDR inspired the evolution of international standards to integrate a more holistic approach. In 2006, the United Nations Inter-Agency Working Group on DDR published the *Integrated Disarmament, Demobilization and Reintegration Standards (IDDRS)* to offer practitioners better guidelines for addressing the multidimensional aspects of a post-conflict environment related to DDR-program planning.

Most recently, the United Nations Department of Peacekeeping Operations (UNDPKO) defines reintegration as “the process by which ex-combatants acquire civilian status and gain *sustainable employment and income*. It is a political, social and economic process with an open time-frame, primarily taking place in communities at the local level.”¹ This definition places sustainable livelihoods at the center of DDR programming.

A holistic, development-oriented approach to reintegration often follows the sustainable livelihood framework. A livelihood refers to the assets, capabilities, and strategies that a household uses to achieve food and income security in its political and institutional context.² Reintegration seeks to support livelihoods by addressing a household’s need for access to social, financial, human, and physical capital to maintain formal rather than illicit livelihood strategies. Further, in a post-conflict setting, vulnerability is endogenous to livelihoods, and assets become liabilities.³ Therefore, reintegration programming must also create security for ex-combatant households to ensure resources do not create additional risk. Under this framework, livelihoods development is integral to sustainable peace.

¹ UNDPKO, *DDR in Peace Operations: A Retrospective* (United Nations, New York: September 2010), 4.

² In the framework, a household has assets, which include human, natural, financial, physical, and social capital. The household is vulnerable to exogenous shocks and relies on processes, institutions, and policies (PIPs) to both respond to shocks and create economic opportunities. Based on the strength and support of PIPs, a household takes on livelihoods strategies (see Appendix A). Sue Lautze and Angela Raven-Roberts, “Violence and Complex Humanitarian Emergencies: implications for livelihoods models,” *Disasters*, 2006, 30(4): 383-401.

³ Lautze and Raven Roberts, 2006.

B. Economics of Reintegration

Governments often use formal labor market opportunities, such as job training, to reduce the threats demobilization may present to security. Theoretically, economic incentives should raise the opportunity costs of illicit activity and reduce recidivism.

Several studies link livelihood opportunities to crime and violence among ex-combatants. Collier (1994) finds that demobilization significantly reduces crime if former soldiers have access to productive assets, in a field study in Uganda.⁴ Further, Blattman (2014) tests the opportunity cost theory, confirming that an active labor market intervention that provided peaceful economic opportunities to Liberian ex-combatants reduced illegal and rebellious activity.

More generally, rebels' profits buy off individual combatants when they outweigh government services (Collier and Hoeffler, 2004).⁵ In rural Colombia, a reduction in the prices of agricultural exports reduced insurgency, through an opportunity cost mechanism (Dube and Vargas, 2008).⁶ However, not all illicit activities have a high opportunity cost⁷ (Berman et al., 2011), and we should expect combatants and non-combatants to act rationally when considering their economic opportunities (Popkin, 1979).⁸ Therefore, attractive private sector alternatives to violence should support the long-term objectives of reintegration.

C. Contribution to the Literature

The time is ripe for reintegration in Colombia. The economic benefits to rebellion are low, and the national government is strong. The preconditions necessary for successful reintegration, as established by IDDRS, include (1) the signing of a legal peace agreement, (2) trust of the parties to the conflict in the overall peace process, and (3) parties' willingness to reintegrate. Given the rising opportunity costs to insurgency, it is likely that these preconditions will hold.

Do these preconditions actually create an opportunity to incentivize formal sector entry and engagement among ex-combatants? In the Colombian context, this study considers the potential for government to partner with the private sector to provide competitive market opportunities and reduce NSAG membership. The results suggest that formal sector minimum wages do not compete with the economic incentives of the informal sector. Yet, augmented incentives that provide stability, security, and opportunity for growth will encourage formal sector adoption.

This study represents the first quasi-experimental impact evaluation of Colombia's approach to economic reintegration. According to the Director of Research at ACR, the agency will launch

⁴ Paul Collier, "Demobilization and insecurity: A study in the economics of the transition from war to peace," *Journal of International Development*, (Vol. 6, No. 3, 343-351, 1994), 1.

⁵ Paul Collier and Anke Hoeffler (2004) "Greed and Grievance in Civil War," *Oxford Economic Papers* 56: 563-595.

⁶ Oeindrila Dube and Juan Vargas, "Commodity price shocks and civil conflict: Evidence from Colombia," Harvard University (2008).

⁷ E. Berman, J. N. Shapiro, and J. H. Felter (2011), "Can hearts and minds be bought? The Economics of Counterinsurgency in Iraq," (*Journal of Political Economy*, 119), 4.

⁸ Popkin, Samuel L. *The rational peasant: The political economy of rural society in Vietnam*. Univ of California Press, 1979.

its first *ex-ante* econometric study using a randomized phase-in intervention this year. Until then, this *ex-post* study takes advantage of the natural phase-in of a single economic reintegration program to evaluate medium-term impacts within the greater reintegration strategy. The purpose is to develop key implementers' and policymakers' knowledge of how best to support sustainable livelihoods for PPRs.

III. Background

A. History of Colombia's Conflict

In 2015, Colombia entered its seventh decade of protracted conflict. Since 1964, over 5.7 million Colombians have been forcibly displaced from their homes, the highest number of internally displaced people (IDPs) in the world.⁹ Nearly 220,000 people have lost their lives in violence related to the armed conflict, including 40,787 combatants and 177,307 civilians.¹⁰ The long, invasive nature of the violence on civilian lives affects civil society's openness to reintegration of NSAGs.

Colombia's most powerful, armed insurgency, Fuerzas Armadas Revolucionarias de Colombia (FARC), was founded in 1966 by Manuel Marulanda as an agrarian movement against rampant inequality due to rural land distribution. What was once a low-grade civil war, however, escalated to a large-scale war over drugs and oil. Widespread lawlessness and poverty and the absence of state authority in rural areas reinforced a culture of violence and allowed for the emergence of three competing groups: the FARC, the most prominent guerrilla group on the continent; United Self Defense Groups of Colombia (AUC), a right-wing paramilitaries umbrella group; and a smaller leftist Catholic insurgency, the National Liberation Army (ELN).

Colombia finds itself at a political crossroads. Formal peace negotiations between the Colombian government and the FARC began in November of 2012. The agreement agenda covers six issues: land reform, political participation, disarmament, illicit drugs, reparations to victims, and the implementation of a peace agreement.¹¹ The implementation strategy for DDR is fully drafted but cannot be implemented until the entire agenda is agreed upon. The negotiations are entering their final stages, with no definitive timeline.

B. History of Reintegration Efforts in Colombia

Colombia is a pre post-conflict society. Despite ongoing conflict, the national government has operated four DDR initiatives since 1982. The history of national DDR experiences has set a precedent for two types of DDR, distinguished as either *individual* or *collective* demobilization.

Modern DDR programming began with the Pastrana administration in 1999 with the establishment of the General Directorate for Reinsertion under the Ministry of the Interior and with the extension of humanitarian aid to demobilized combatants in 2001. Aimed at improving

⁹ National Center for Historical Memory, (2013) "¡Basta ya! Colombia: Memorias de guerra y dignidad," <http://www.centrodememoriahistorica.gov.co/micrositios/informeGeneral/estadisticas.html>

¹⁰ National Center for Historical Memory (2013).

¹¹ Julia E. Sweig, "What kind of war for Colombia?," *Foreign Affairs* (2002), 123.

standards of living and political reconciliation, the DDR program supported the voluntary, *individual* demobilization of over 4,800 combatants, especially members of the FARC.¹²

Collective demobilization began under the Uribe administration, inspired by peace talks with the AUC. In 2003, President Uribe launched the Program for Reincorporation into Civilian Life (PRVC) under Executive Decree 128, which supported both *collective* (in the case of the AUC) and *individual* demobilization. In the first phase, the Ministry of Defense administered humanitarian aid to demobilized combatants, and in the second phase, the Ministries of the Interior and of Justice processed groups and individuals to receive health, education, psychosocial, and economic benefits. This progress led the national government to pass la Ley de Justicia y Paz in 2005, which gave combatants the opportunity for civilian status and resulted in a total 34,245 demobilizations in 2006 and the collection of over 18,000 arms.¹³

Despite their achievements, these DDR experiences are considered unsuccessful. Neither NSAG has fully demobilized and reintegrated due to a number of factors, but most importantly, the DDR programming did not have the capacity to receive all of the former combatants who applied.¹⁴ The national government, as a result, recognized the need to rethink reintegration as a multidimensional, long-term process that includes former combatants as well as their families and communities.

In 2007, the High Presidential Council for Reintegration was formed to consolidate a national sustainable reintegration policy, through the cooperation of ten government agencies.¹⁵ Finally, in 2011, the High Presidential Council became the Colombian Agency for Reintegration (ACR),¹⁶ an independent agency with administrative, financial, and budgetary autonomy to ensure continuous policy. The ACR continues to design, coordinate, and implement Colombia's multidimensional reintegration policy.

C. Reintegration Today

*We chose to create an ambitious law and to continue to strengthen and prepare national and state institutions to close the gap.*¹⁷

– Frank Pearl, High Presidential Advisor for Social and Economic Reintegration of Armed Groups, on La Ley de Justicia y Paz

From 2003 to 2014, a total of 57,082 individuals have formally demobilized and entered the process of reintegration (25,156 individually and 31,926 collectively). Of the total, 48% (27,451 PPRs) are currently receiving support from ACR. Among total PPRs, 6,918 (12.12%) are women and 6.25% are under 25 years of age.¹⁸

¹² FiP DDR Boletín, 38.

¹³ FiP DDR Boletín, 42.

¹⁴ Juan Carlos Palou and María Lucía Méndez. "Balance de los procesos de desmovilización desarme y reintegración en Colombia: 1990-2009." *Construcción de paz en Colombia* (2012), 364.

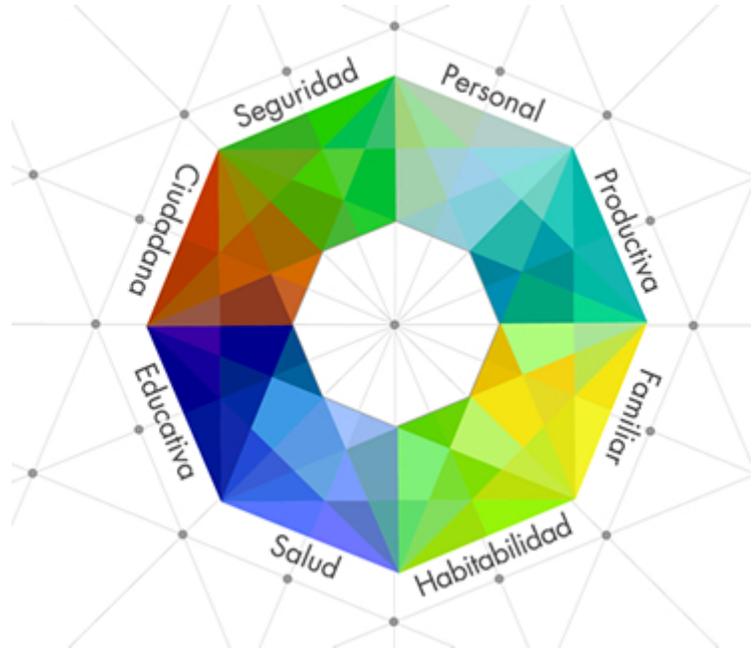
¹⁵ FiP DDR Boletín, 45.

¹⁶ Agencia Colombiana para la Reintegración (ACR)

¹⁷ "Buscando el balance entre Justicia y Paz," Club El Nogal, Bogotá (18 May 2009).

¹⁸ ACR, "Reintegration in Colombia Facts & Statistics" (December 2014) http://www.reintegracion.gov.co/es/la-reintegracion/Documents/colombia_en.pdf

The current reintegration structure relies on an individual-centered, multidimensional path to sustainable livelihood and security. Figure 1 demonstrates how ACR has translated the sustainable livelihoods framework to a PPR household. The web represents the multifaceted and interwoven nature of the dimensions of reintegration. None of the dimensions are mutually exclusive and each one changes the full profile of a PPR household's asset structure. The dimensions include security, human capital, productivity, family, standard of living, health, education, and citizenship.



When an individual enters the ACR process, he or she follows a three-stage route to reintegration. In the first stage, she receives psychosocial support, healthcare, basic education and legal advice. She only interacts with close family and friends and institutional actors. In the second stage, she continues to receive psychosocial support and education, but these are augmented with social service, job training, and economic reintegration. Her network expands to the larger community. This is where she will spend most of her time. In the third and final stage, the PPR concludes dimension programming and focuses on income generation.

IV. Project Description

For the purpose of the study, it is important to discuss the program's context, the selection of participants, and its design features to contextualize results and consider potential selection on observables.¹⁹

A. Public-Private Partnership with CDP del Cuero

In 1994, Centro de Desarrollo Productivo de Cuero Calzado y Marroquinería (CDP)²⁰ was established as a nonprofit training school, regulated by private sector standards. CDP was founded to increase the competitiveness and production capacity of the leather and shoe-making sector in Cali through training, technical support, product development, and technology sharing. The nonprofit received its quality certification in 2000 from the Quality Management Corporation, fulfilling sector requirements to meet these standards, and becoming a legitimate

¹⁹ Martin Ravallion (2005), "Evaluating Anti-Poverty Programs," *Development Research Group, World Bank*.

²⁰ Productive Development Center for Leather Shoemaking and Leather-making

player in Cali's shoe and leather-making sector. CDP Cali achieved its primary objectives, and the model was replicated in two other cities, Bogota and Pereira.

Aligned with the *dimensión productiva* of ACR's reintegration framework, the International Organization for Migration (IOM), in conjunction with the ACR and funded by USAID, launched a partnership with CDP Cali and CDP Bogota. The program provides PPR and their spouses the opportunity to attend vocational training for the shoe- and leather-making sector. In the long-term, program participants become certified and are employed in leather-making factories or receive financing to begin their own small-scale enterprises. The program aims to provide skills development and sustainable income generation for PPR, framed as *shared responsibility* from la Corporación de Desarrollo Productivo del Cuero, Calzado y Marroquinería (CDP del Cuero).

The first vocational training programs that accepted demobilized participants received 357 million Colombian pesos (200,000 USD) and 493 million COP (300,000 USD) in Cali and Bogota to accept 85 PPR and 125 PPR, respectively. The programs spanned two years, from July 2009 to June 2011. Since then, the partnership between ACR, IOM, and CDP del Cuero has continued to receive funding and support from USAID. Between 2011 and 2013, 100 PPRs entered CDP in Pereira, 75 PPRs in Cali, and 75 PPRs in Bogota, totaling 250 program participants.

This study examines the most recent extension of this economic reintegration program in Bogota and Cali. In July of 2013, CDP in Bogota and Cali each received approximately 286 million COP (150,000 USD) from USAID and CDP del Cuero to support 50 PPRs at each program site. These 100 participants were to be selected between 2013 and 2014 to join the program.

The most recent extension of the program has underperformed with low levels of PPR interest and attrition post-certification. In Bogota, 21 PPRs enrolled in the first cohort. In the second cohort, only 5 PPRs of 18 selected (28%) arrived at the first class session, so the project was suspended until June when 12 PPRs enrolled. Cali performed closer to the program's expectations, enrolling 28 and then 10 PPRs of the intended 50. These issues may be attributed to the need for better advertisement through the ACR, the unwillingness of private factories to ensure renewable contracts, and low levels of success among previous beneficiaries.

B. Selection Process

The ACR regulates six areas of economic reintegration. These include volunteer work, apprenticeships in small businesses, individualized practical training, formal employment, exchange programs, and community-level reconciliation. CDP Taller Escuela is organized under "individualized practical training."²¹ At the beginning of the second stage of reintegration, PPRs may indicate their preference for "individualized practical training" to serve as the economic dimension of their route to reintegration. Then, PPRs select the shoe- and leather-making sector to be eligible for the CDP Taller Escuela program.

²¹ In Spanish: *Formación a la medida*. "Mecanismos de vinculación," Agencia Colombiana para la Reintegración, (<http://www.reintegracion.gov.co/es/la-reintegracion/Paginas/vinculacion.aspx>).

Once PPRs indicate their preference for the sector, CDP Taller Escuela goes through a selection process with each applicant that lasts up to one month. This process includes selection interviews with each potential beneficiary and practical sector-specific exercises to evaluate the technical abilities of each applicant. This is primarily to ensure that each PPR applicant has a good attitude towards the program and that his or her hands are steady enough to operate heavy machinery.²²

This categorization and selection process should distinguish the treatment group from the control group. Members of the control group are not in any individualized training program, but instead, they have self-selected into “formal employment.” This population consists of PPRs who may have been eligible for Taller Escuela but did not choose the shoe- and leather-making sector as well as PPRs who have successfully completed or are in the third stage of the route to reintegration and are looking for new employment.

This selection process creates potential for selection bias between the treatment and the control groups. The direction of the potential bias, however, works in two directions. Consider a PPR who does not select the shoe sector due to malaise towards formal employment. We would expect her to perform poorly on a set of livelihood indicators when compared to a PPR who opted into Taller Escuela. However, the control group also consists of PPRs who have completed the second stage of the ACR’s reintegration route, are in the third stage, and are going through a period of retrenchment. These PPRs are likely more advanced in the development of a sustainable livelihood than PPRs that have just graduated from Taller Escuela and received their leather-making certification. We will develop a more technical understanding of the measurable differences between the treatment and control groups in the following section. However, it is important to recognize the latent differences that may exist due to the selection process for PPRs in Taller Escuela. Fortunately, the potential for bias moves in both directions and should not predictably affect the direction of our results.

C. Program Details

Throughout the first six months of the program CDP selects new beneficiaries in four or five cohorts. Each cohort goes through three phases of vocational training (see Appendix A: Program Chronology).²³ Phase 1: “Theoretical Training” consists of 200 hours in 25 8-hour sessions over 5-6 weeks (1.5 months). These lessons cover decorative and sewing techniques, the process of preparing and mounting a sole, and advanced sewing and assembly for machine use.

Phase 2: “Practical Training” consists of an additional 200 hours over a 6-8 week period (1.5 months). In these sessions, PPRs are assembling shoes for businesses from the shoemaking sector using Taller Escuela’s facilities, taking the form of an internship. During the first week of Phase 2, the private sector employer decides whether the PPR’s performance meets business standards. If so, the PPR works for 6-7 more weeks as an intern with the promise that the employer will extend the relationship to a four-month contract. On occasion, the employer

²² “Selección de Beneficiarios,” *Ficha de Proyecto: Program de apoyo al proceso de reincorporación de excombatientes y comunidades receptoras*, (USAID: July 2013).

²³ The vocation training program is categorized at CDP Taller Escuela as “Formación Técnica” and “Vinculación Laboral/Creación de Unidades de Negocio.”

rejects a PPR after the first week of Phase 2, in which case the PPR has the opportunity to intern with two other businesses in pursuit of a contract.

Once the employer approves the working relationship with a PPR, CDP del Cuero works with the employer to draft the terms of a contract of no less than four months, and all parties must approve. Phase 3: “Vinculación Laboral” consists of this four-month contract, accompanied by monitoring and assessment for the contracted PPRs. Every 15 days, ACR advisors assess the individual performance of contracted PPRs, identifying any additional support they may need and, simultaneously, ensuring the possibility that PPRs establish good relationships with their employers and potentially secure permanent employment. After Phase 3, the cohort receives certification from CDP del Cuero.

In Phase 2, PPRs have the opportunity to apply for financing to start their own small-scale enterprises. Although the programs in Bogota and Cali each budget for 10 PPRs to receive this start-up capital, only one PPR in the 2013-2014 cycle had completed the business formation process successfully and would receive financing for his business plan. Many interviewed PPRs discussed their aspirations to start their own small-scale enterprises, yet the opportunity was not widely offered. This expectation is considered later in the analysis of beneficiaries’ expectations.

Box A: Phases of CDP Taller Escuela		
1	Theoretical training	200 hours (1.5 months)
2	Practical training & Internship	200 hours (1.5 months)
3	Short-term contract with employer	Full-time (4 months), ACR assessments every 15 days
4	Certified for formal employment	4-month incremental contract extension

At the time we instrumented the surveys, CDP Bogota had finished selecting its last cohort 10 days prior. CDP Cali selected its final cohort 2-months prior. In addition, we interviewed 7 beneficiaries at CDP Cali from the 2012-2013 cycle. Therefore, PPR were interviewed across each phase of the program, providing a natural phase-in experiment across a total of 11 cohorts.

V. Research Methodology

The purpose of this study is to measure the impact of CDP Taller Escuela on the reintegration of former combatants and to identify the factors that have been critical to the experiences of people in the process of reintegration (PPRs). To measure impact, the evaluation estimates the average differences between those who were selected into CDP Taller Escuela (treatment group) and those who did not participate in the selection process (control group) in order to measure the average program effect for participants.

A. Theory of Change

Based on interviews with key players in the design and implementation of CDP Taller Escuela, I developed a theory of change and a corresponding set of indicators to measure the impact of the program. The theory of change is outlined below:



The theory of change, linking the practical training of PPRs to building sustainable livelihoods, informed a set of measurable indicators. These include income generation, inclusion in the workplace, social inclusion, socioeconomic stability for the household, and sustainable livelihood development.

B. Data & Sample

The quantitative data used in this paper come from three primary sources. First, we conducted detailed surveys measuring individual participant and household characteristics. Second, we conducted in-depth interviews with business owners on their satisfaction and business-level indicators. Third, we pulled together baseline income and household characteristic survey data for each participant, collected by the implementing organization.

In addition, we conducted in-depth interviews with key policymakers and practitioners involved with reintegration to broaden our understanding of the expectations of the CDP Taller Escuela in the broader context of economic reintegration.

The survey instrument collected information on the five key indicators across a total of 64 questions in six parts. Repetition of information allowed for triangulation of survey responses as well as clarification during interviews. We matched each participant’s baseline income and household characteristic survey to our instrumented questionnaires to cross-verify self reported demographic information.

The survey design went through several iterations. It was first reviewed by program staff at OIM and ACR and then with the director of Taller Escuela, Bogota. We tested the questions with a focus group before instrumentation to revise language. The final questionnaire that was instrumented to survey participants can be found in Appendix B.²⁴

C. Sample Population

When interviewing the treatment population, we made four visits to CDP Bogota and three visits to CDP Cali. The study participants were sampled based on availability. Many PPRs attend Taller Escuela on certain days of the week or do not attend every week, and only a few employers were willing to allow interviews of their employees who were graduates of CDP Taller Escuela. In total, we interviewed 14 participants at CDP Bogota and 19 participants at CDP Cali (see Box B).

The control group was identified through the “Employability” arm of ACR. We attended a Support and Assessment workshop for PPRs in “Employability”. The interview was voluntary for those who attended the workshop during the allotted time. Out of 24 total attendees, 10 PPRs volunteered to be interviewed.

Box B: Program Participants across Phases		Phase
CDP Taller Escuela, Bogota, Bogota D.C.: 14 total participants	6 participants demobilized, beginning vocational training	(Phase 1)
	4 participants family of PPR, beginning vocational training	(Phase 1)
	2 participants (1 family, 1 demobilized), practical apprenticeship	(Phase 2)
	2 participants demobilized, employed	(Phase 4)
CDP Cuero, Cali, Valle de Cauca: 19 total participants	4 participants demobilized, practical internship	(Phase 2)
	8 participants demobilized, short-term contract	(Phase 3)
	7 participants demobilized, employed	(Phase 4)

²⁴ As the primary investigator, I was responsibly for respecting Do No Harm principles for a potentially vulnerable population. In factories, we remained anonymous and did not discuss the nature of our study to ensure that the identities of PPRs were kept confidential. All data was then kept separate from any identifying information. In addition, we kept interviews to 20-30 minutes in order to respect the opportunity cost to participants in volunteering to participate despite their time-intensive work schedules and to respect the time constraints faced by factories to meet output quotas.

In total, we interviewed 43 individuals. The sample is small, yet diverse. Study participants originate from 13 departments across Colombia, where multiple NSAGs operate. Participants range in age from 19 to 54 years of age, with an average age of 29 years. Participants were armed for 5.8 years on average, yet years-armed ranges from as short as one to as long as 25 years. Over 67 percent of the sample is the household head and supports a household of anywhere from one to 12 individuals. Lastly, for 50 percent of participants, this is or will be their first formal employment.

D. Balance of Treatment and Control Groups

Despite the diversity of the total sample, Table 1 suggests that the treatment and control groups are comparable across observable dimensions. Differences in individual and household characteristics are small and insignificant, with the exception of two variables. Average age was 29 years, and average household size was just over four. Pre-treatment education level was grade 5 in the treatment group and grade 6 in the control group, on average. These are equivalent to having completed primary school education. Fifty percent of the control group and thirty-nine percent of the treatment group were women, and on average, 67 percent of the participants are the head of their household.

Unsurprisingly, significant differences exist between the treatment and control group for the mean number of years-armed and mean rent expense. In the treatment group, PPRs were armed 7 years less, on average, than those in the control group. And on average, the treatment group spends 126,515 COP per month (76 USD) less on rent than those in the control group. These differences in means are statistically significant at the 1% level.

Table 1: Difference in Means, Treatment vs. Control Group

<i>Individual and Household Characteristics</i>	Control Mean	Treatment		p-value
		Mean	Difference	
Female (indicator)	0.5	0.394	-0.11	0.562
Age	30.3	28.182	-2.12	0.487
Household size	4.1	4.515	0.42	0.595
Married (indicator)	0.6	0.606	0.01	0.973
Household head (indicator)	0.7	0.667	-0.03	0.848
Number of children	1.5	1.394	-0.11	0.824
Children live in household	0.889	0.7	-0.19	0.288
Percentage of children attend school	0.938	0.891	-0.05	0.605
Education level (before reintegration)	6.4	5.152	-1.25	0.316
Number of years in armed group	11.241	4.122	-7.12	0.002***
Number of years demobilized	4.281	5.337	1.06	0.398
Rent expense	343333.333	216818.2	-126515.15	0.007***
Salary, pre-treatment	521500	478666.7	-42833.33	0.746
Savings, pre-treatment (more/equal/less)	0.6	1.219	0.62	0.17
<i>Number of observations</i>	10	33		

*** (p<0.01), ** (p<0.05), * (p<0.1)

The concern with significant differences in means is two-fold. First, we must consider whether the significant differences indicate that there is selection bias between the treatment and control groups. And second, we consider whether the unobservable differences between the groups introduce bias into the measure of program effects. We expect to see selection bias in the treatment group due to two processes: (1) self-selection into the program and (2) pre-screening of participants. Given these conditions, the potential bias is less prevalent than expected with such a small sample, and years armed and rent expense do not pose a serious threat to the internal validity of the study.

The length of the period that study participants were armed could suggest some selection bias for the program and introduce a number of unobservable differences between the treatment and control groups. If less-experienced combatants tend to choose Taller Escuela, we must consider how that would affect comparative outcomes. The longer an combatant is armed, it is likely she has received more training and invested longer emotionally and psychologically in the group. The direction of the latent selection bias due to years armed, however, poses no threat to the comparing the two groups. While receiving more training could increase positive outcomes for PPRs along indicators such as income generation and workplace performance, the psychological and emotional trauma of long-term participation in an NSAG poses a negative threat to the same outcomes.

Rent expense may suggest selection bias if measure of relative expenditure on rent may serve as a proxy for higher income. On average, the sample population spends 253,550 COP on rent. Therefore, the control group spends 50% more on rent than the treatment group. This may depend on the time that a household has lived in the city and her social network more than her ability to pay. A household with a smaller social network may pay higher rent due to lack of knowledge. However, if we consider rent expense to be generally reflective of higher income pre-treatment, the direction of the latent bias would diminish the observable income generation effects of the program. Therefore, the study will control for rent expenses where relevant, however it does not pose a threat to the internal validity of the study.

Table 2 presents a comparison of means of individual and household characteristics across the different phases of the program. Column 1 presents the mean for individuals in training classes (Phases 1 & 2), column 2 presents the mean for individuals working on short-term contracts (Phase 3), and column 3 presents the mean for individuals who have been certified and work on longer-term contracts with employers (Phase 4). Columns 4 through 6 report the p-values for an F-test of the difference in means across these different treatment groups.

Table 2 suggests that the phases of the program are comparable across observable dimensions and represent a naturally balanced phase-in of the program. Between Phases 1 & 2 and Phase 3 of the program, there is only a significant difference in mean household size. Between Phase 1 & 2 and Phase 4, there are significant differences in mean rent expense and mean percent household head. Between Phase 3 and Phase 4, there is only one significant difference in mean percent married. The balanced nature of the phases of the program allow for a pipeline comparison of these treatment groups using a single-difference estimator, controlling for these observables across phases. The estimation strategy is described in the following section.

Table 2: Balance test, by treatment group

	(1)	(2)	(3)	<i>p-value</i>	<i>p-value</i>	<i>p-value</i>
Phase in Program (treatment)	Training	Internship	Certified	(1) = (2)	(1) = (3)	(2) = (3)
<i>Individual and Household Characteristics</i>						
	Mean (s.d.)	Mean (s.d.)	Mean (s.d.)			
Female (indicator)	0.625 (0.500)	0.250 (0.463)	0.111 (0.333)	0.1077	0.1397	0.2224
Age	27.25 (5.916)	27.88 (8.692)	30.11 (10.78)	0.7541	0.7137	0.8147
Household size	5.250 (2.720)	3.500 (1.927)	4.111 (1.616)	0.0925*	0.1375	0.4403
Married (indicator)	0.562 (0.512)	0.750 (0.463)	0.556 (0.527)	0.4499	0.9762	0.0824*
Household head (indicator)	0.438 (0.512)	0.875 (0.354)	0.889 (0.333)	0.1376	0.0639*	0.8295
Number of children	1.625 (1.544)	0.625 (1.061)	1.667 (1.323)	0.1973	0.6101	0.2224
Children live in household (indicator)	0.636 (0.505)	0.667 (0.577)	0.833 (0.408)	0.8616	0.2819	0.6016
Percentage of school aged children in scho	0.873 (0.220)	0.667 (0.471)	1 (0)	0.1462	0.2303	
Education level before reintegration	6.938 (2.235)	4.375 (4.274)	2.667 (3.873)	0.1634	0.1853	0.2174
No. of years member of armed group	3.300 (3.760)	5.024 (6.303)	4.875 (3.441)	0.3885	0.7521	0.964
No. of years demobilized	5.802 (4.049)	4.875 (1.885)	5.333 (2.598)	0.6367	0.7353	0.4428
Rent expense	231666.7 (80104.1)	214285.7 (124880.9)	208888.9 (85505.0)	0.7561	0.0658*	0.9248
Salary, pre-treatment	440333.3 (302837.3)	456666.7 (233809.0)	544444.4 (216455.0)	0.5268	0.4515	0.4354
Savings, pre-treatment (more/equal/less)	1.400 (1.352)	1.375 (1.302)	0.778 (1.302)	0.5268	0.5803	0.4778
Number of observations	16	8	9			

Notes: Column 1 presents the mean for individuals in training classes (phases 1 & 2), column 2 presents the mean for individuals in internships (phase 3), and column 3 presents the mean for individuals who have been certified (phase 4). Columns 4 through 6 report the p-values for an F-test of the difference in means across the different treatment groups. The p-values are robust for fixed effects and account for clustering at the city level.

*** significant at the 1% level ($p < 0.01$), ** significant at the 5% level ($p < 0.05$), * significant at the 10% level ($p < 0.1$)

VI. Empirical Approach

This field study takes advantage of the natural phase-in of the program to estimate the average treatment effect on the treated (ATT) of Taller Escuela.²⁵ To estimate the impact of vocational training on former combatants, I used two specifications. The first is a first-differences specification to look at the impact of the program, comparing the treatment and control groups. The second is a first-differences specification that tests the ATT across the different treatment groups.²⁶

Letting Y_h represent the outcomes for income generation, workplace inclusion, social inclusion, and socioeconomic stability, I examine the difference in Y_h between the treatment and control groups at the time the survey was instrumented. A description of the outcome variables can be found in Appendix D. The regression specification is the following:

$$(1) \quad Y_h = \beta_0 + \beta_1 taller_h + \mathbf{X}'_{ih} + \varepsilon_{ih}$$

where $taller_h$ is a binary variable equal to one if an individual (i) from household (h) attended Taller Escuela and equal to zero otherwise. \mathbf{X}'_i is a vector of variables that affect the outcomes of interest or showed significant difference between the treatment and control groups, including years-armed, education level, age, and gender. ε_{ih} is an error term. Standard errors are clustered at the city level. β_1 is the coefficient of interest.

Letting Y_h represent the same outcomes of interest, I estimate equation (2) to examine the difference in Y_h across phases 1 through 4 of the treatment group, excluding the control group from the sample.

$$(2) \quad Y_h = \beta_0 + \beta_1 practice_h + \beta_2 internship_h + \beta_3 certified_h + \mathbf{X}'_{iv} + \varepsilon_{ih}$$

where $practice_h$ is equal to one if an individual (i) from household (h) was in Phase 2 of the program and zero otherwise, where $internship_h$ is equal to one if an individual (i) from household (h) was in Phase 3 of the program and zero otherwise, and where $certified_h$ is equal to one if an individual (i) from household (h) was in Phase 4 of the program. β_0 represents the mean of individuals in Phase 1 for the set of Y_h , and $\beta_0, \beta_1, \beta_2,$ and β_3 are the coefficient parameters of interest. Similarly, \mathbf{X}'_i is a vector of variables that affect the outcomes of interest or showed significant difference between the program phases, including married, years-armed, education level, age, household size and gender. ε_{ih} is an error term. Standard errors are clustered at the city level.

²⁵ When feasible, pipeline comparisons offer a single-difference impact estimator that is likely to be more robust to latent heterogeneity. The estimates should, however, be tested for selection bias based on observables and (if need be) a method such as PSM can be used to clean out the observable heterogeneity prior to making the pipeline comparison (Galasso and Ravallion, 2004).

²⁶ Originally, I tested our data using a third and fourth specification that used differences-in-differences and ANCOVA to measure the ATT for dependent variables for which we were able to collect baseline data. However, due to missing information and small sample size, these estimations yielded no statistically significant results.

VII. Results

A. Summary of Findings

By entering Taller Escuela, the expectation is that PPRs will have the opportunity to formalize and increase their incomes. Subsequently, income generation should lead to a sense of inclusion in the workplace as well as in society. And lastly, economic and social inclusion should generate socioeconomic stability and the opportunity to build sustainable livelihoods for PPR households.

With respect to income generation, program participants earn a higher salary, increase monthly expenditures, and hold less debt as they progress through the phases of the program. These results indicate improvement in standards of living and generation of income for participants, with some income put towards debt repayment.

Regarding workplace inclusion, PPRs who participated in Taller Escuela are more likely to report that they are comfortable in their work environment and that their role in the workplace is valued, both compared to other PPRs and after completion of the program. However, program participants have less responsibility in the workplace than other PPRs and become progressively more concerned about being fired, especially as individuals graduate and work for factories.

Social inclusion takes place within the work environment. PPRs in the treatment group are less likely to attend community meetings and to be members of a social group, especially as they complete training and sign short-term contracts with employers. However, private sector partners seem to address challenges of stigmatization and exclusion in the workplace, and as PPRs progress through the phases of Taller Escuela, they are more likely to report having friends in the workplace and among their cohort.

It is not evident that the program is achieving socioeconomic stability and promoting sustainable livelihoods for all of its participants. While PPRs entering Taller Escuela are more likely to pay the expenses of their child's education than non-participants, graduates of the program often rely on others to pay these expenses. Secondly, as PPRs sign short and long-term contracts, they are more likely to invest a lump sum in their future. However, female-headed households continue to prioritize short-term household expenses and do not experience the same economic stability.

The differential effects for women who enter the program demonstrate its relative effectiveness in the context of economic reintegration. On average, women PPRs earn less than men; however, those who attend Taller Escuela earn more than women PPRs who do not. Within the program, this effect is amplified. While all members of the treatment group experience higher income as they progress through the program, the effect for women is larger than for men. These results demonstrate the differential attractiveness of working in the formal sector for women.

The statistically significant results of the regression models outlined above are presented in Tables 3 through 6. This section continues below with in-depth explanations of each of these results in the context of the program.

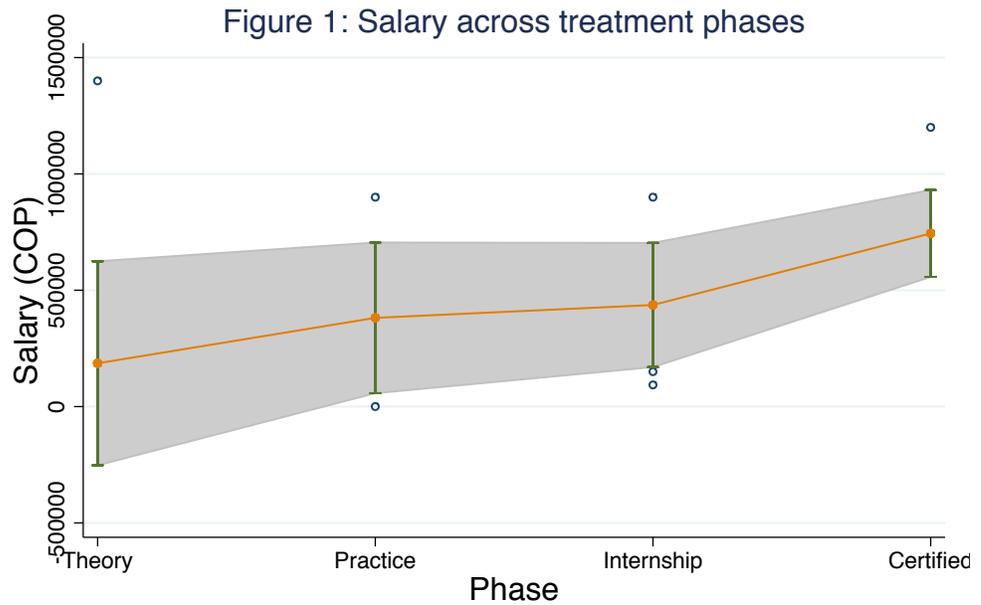
B. Impact of Taller Escuela on Income Generation

The expectation of PPRs in CDP Taller Escuela is that by entering the program, they will have the opportunity to formalize and to increase their income. In addition, a four-month, short-term contract or a longer, one-year contract is appealing to many PPRs who have worked informally with no stable or secure payment period. Of the 25 participants for whom we were able to collect baseline data, 16 participants (64%) report that the financial support they received pre-treatment from ACR was their major source of income. However, 95% of the same sample population reports having some employment, formal or informal. From this information, we expect that receiving minimum wage on a contract will be an increase in income for PPRs in Taller Escuela, compared to informal sector employment and ACR cash transfers.

Salary

We can examine the differences between reported salaries at the time of interview using the first-differences estimations. Within the program, graduates from the program report a salary 558,222 COP per month higher than those in Phase 1 of the program, statistically significant at the 5% level. PPRs in phase 3 report earnings of 250,625 COP higher than those in phase 1. Although other results are not statistically significant, it is apparent that on average salary increases across the phases of the program (see Table 7). Compared to the control group, the treatment group reported lower salaries, with no statistical significance, and the effect changes direction when we introduce rent expense.

Figure 1 represents salary for the treatment group across the phases of the program. The y-axis plots the mean, standard deviation, and outliers for salary against the program's phases along the x-axis. On average, income increases across the phases of the program and seems to converge as participants graduate from the Taller Escuela.



These increases in salary are economically significant for the study population. Minimum wage in Colombia is 616,000 COP per month, and the average reported pre-treatment salary among the treatment group was 478,666 COP. An increase of 558,222 COP to an average of 744,222 COP per month represents an increase of 90.6% of minimum wage and a 55.5% increase from average reported pre-treatment salary.

Income Satisfaction

Participants in the treatment group report higher income satisfaction than those in the control group. Controlling for time invariant differences between the treatment and control groups, the PPR who have attended Taller Escuela are on average 20 percentage points more likely to report income satisfaction than those who are not enrolled. These effects are statistically significant at the 10% level. Income satisfaction is higher for PPR in the first and second phases of the program. Before controlling for other factors, PPR are 6 percentage points more likely to report satisfaction in Phase 2 than Phase 1 of the program, significant at the 1% level. However, this satisfaction tends to decrease for those in Phase 3 and increase again for those in Phase 4 of the program (see Table 8).

Income satisfaction is an important measure of sustainable income generation for PPRs enrolled in Taller Escuela. Despite being self-reported, income satisfaction indicates the forward-looking preferences of program participants. If PPRs are satisfied with their current income, they anticipate their salary meeting their current and future needs. Therefore, these results suggest that the salary earned in Phases 1 and 2 of the program are an improvement for program participants. However, as time goes on, that salary meets fewer needs and there is a desire to earn a higher income once an individual has secured a short-term contract. Satisfaction increases again in Phase 4, compared to Phase 3. This indicates that a long-term contract is more valuable to participants than a short-term contract.

Monthly Expenses

Monthly expenses were surveyed to measure total household income, which is harder to measure when self-reported. On average, monthly expenses are lower in the treatment group than the control group by 286,000 COP per month (143 USD)²⁷, which equates to 4.77 USD per day. This difference, however, is not statistically significant.

Within the program, monthly expenses are higher in Phases 2 through 4 of the program, when compared to Phase 1. With relevant controls, graduates from the program spend 362,654 COP per month (181.50 USD) more than those in Phase 1 of the program, on average, which is statistically significant at the 5% level. In addition, PPRs in Phase 3 of the program report monthly expenses 88,997 COP per month higher (44.50 USD) than those in Phase 1, statistically significant at the 10% level (see Table 9). An increase of 362,654 COP represents a 42.2% increase in monthly expenses from the Phase 1 average.

These results indicate that over the course of the program, participants do improve their standard of living compared to the beginning of the program. The second result demonstrates that participants smooth their income over the course of the program, because they anticipate more steady, sustainable income in the future.

Debt and Expenses

A discussion of monthly expenses is irrelevant without an understanding of the average debt burden among study participants. Measuring debt holdings and interest payments was difficult, given the vast number of formal and informal credit sources available to participants. To be as

²⁷ Conversion rate for Colombian pesos (COP) to US dollars (USD) is used for July 2014, which was 1 COP = 0.0005 USD (source: Yahoo finance).

accurate as possible, we simplify our understanding of debt to a binary indicator variable describing whether or not the study participant currently holds any debt, formal or informal. Over 57% of study participants reported that they currently hold debt, and debt holdings are less common in the treatment group than in the control group, although the difference is not statistically significant.

Those who hold debt have higher monthly expenses by about 135,600 COP, on average, than those who hold no debt. Overall, program participants who held debt reported monthly expenses 58,333 COP above the treatment group average. And similarly, control group participants who held debt reported monthly expenses 68,889 COP above the control group average (see Table 10). These are not statistically significant estimates. Within the program, PPRs in Phases 2 and 3 are 30% points and 55% points less likely to hold debt, significant at the 1% level (see Table 11).

These results indicate that debt does increase monthly expenditures; however, the difference is not large enough to diminish the effect of the program on increased monthly expenditures. We learn that program participants increase monthly expenditures and hold less debt as they progress through the phases of the program, indicating improvement in standards of living and income generation put towards debt repayment.

C. Impact of Taller Escuela on Workplace and Social Inclusion

Within the theory of change, income generation should lead to a sense of inclusion in the workplace as well as in society. We tested the workplace inclusion outcome across several indicators, including an individual's comfort in her work environment, feeling that her role is valued, whether she worries about being fired, and her level of responsibility in the workplace (see Appendix B: Questionnaire). Similarly, we tested social inclusion across metrics such as having friends in her work environment, attending community meetings, membership in a social group, and performing community service.

Role in the Workplace

Across all estimations, PPRs in Taller Escuela feel as though their role is valued. On average, PPRs who enrolled in Taller Escuela are 25 percentage points more likely to report that their role is valued than those who did not, which is statistically significant at the 1% level. Further, when controlling for time invariant factors, the treatment group is 56 percentage points more likely to feel as though their role is valued, compared to the control group, on average. This is statistically significant at the 10% level. Within the treatment group, when controlling for significant variables such as years armed, education level, age, and gender, PPRs in Phase 4 of the program score 44 percentage points higher than Phase 3 and 19% points higher than Phase 2, statistically significant at the 10% level (see Table 12).

Comfort in Work Environment

In the treatment group, 94% of participants report being “comfortable” or “very comfortable” in their work environment, compared to the control group, in which 75% of participants report being “comfortable.” When inserting controls for years armed, education, age, and gender, PPRs in Taller Escuela are 98 percentage points more likely to report that they are comfortable in their work environment than the control group. This is statistically significant at the 1% level (see

Table 13). Responses to this question were more varied and decrease across the later phases of the program, which will be addressed later in the qualitative results section.

Responsibility in the Workplace

Of the total sample population, 50% report having responsibility in the work place and the other 50% do not. Between the treatment and control groups, there is no statistically significant difference. However, within the phases of the program, Phases 3 and 4 report having less responsibility, at the 1% and 10% significance level respectively. When introducing controls, Phases 2-4 report having less responsibility at statistically significant levels (see Table 14). This suggests that the shoe sector does not lend itself to high levels of responsibility for many employees, especially as PPRs move into working in factories.

When considering the relationship between work responsibility and level of inclusion in the workplace, many participants rank this as being of little importance. The expectations of program participants with regard to responsibility and independence will be addressed in the analysis section as well.

Concerns about being fired

As program participants progress in through the phases of Taller Escuela, they become progressively more concerned about being fired. The treatment group, on average, is 29 percentage points more likely to be concerned about being fired than the control group. This effect holds with controls and is statistically significant at the 10% level. In addition, within the treatment groups, PPRs in Phase 2 are 12 percentage points more likely to be concerned than those in Phase 1, statistically significant at the 10% level. PPRs in Phase 4 are 44 percentage points more likely to be concerned than those in Phase 1, although with less statistical significance (see Table 15).

These results have immediate implications. Because PPRs in Phase 1 of the program are not yet contracted, they have no reason to be concerned about losing their position. Similarly, those in Phase 2 of the program should be somewhat concerned about their contract; however, if the employer decides to terminate their relationship, the PPR has the opportunity to seek employment with two more employers, in what is like a three-strike system. Lastly, those who are in Phase 4 of the program and have secured a longer-term contract no longer have the support network of Taller Escuela to seek a new employer. Instead, they have much more to lose if the employer terminates or refuses to renew their contracts. This concern suggests that PPRs who have graduated from the program could benefit from contract negotiations support and labor rights training after receiving their formal certification. This is especially important in the shoe and leather-making industry, where employment tends to be seasonal and contracts are frequently up for renewal.

D. Social Inclusion

Responses to indicators of social inclusion were consistent across groups. When asked about community meetings and social groups, 60% of respondents reported that there were no community meetings to attend, and 79% explained that they simply have no time between

working and raising their families to be members of a social group. Those who did participate in community meetings, 5 are in the control group and 9 are in the treatment group. The 9 PPRs who are members of social groups described playing soccer in the evenings or attending church on Sundays, and they are 8 PPRs in the treatment group and 1 in the control group.²⁸

When testing the statistical significance of these differences, the sample is small and the model does not predict the variance, with very low R-squared estimates across the regressions. However, we can draw out some trends that indicate that PPRs in Taller Escuela have little time outside of work once contracted and employed. Among the 17 PPRs who have community meetings that they could attend, those in the treatment group are less likely to attend, although the difference is not statistically significant. Within the treatment groups, those in Phases 3 and Phase 4 were 33% points and 50% points less likely to attend community meetings where they were held. These relationships are statistically significant at the 1% level. Within the total sample, participants in Taller Escuela are less likely to be a member of a social group, with no statistical significance. Across the treatment groups, PPRs in Phase 3 are 17.5% points less likely to be a member of a social group than PPRs in Phase 1, statistically significant at the 1% level (see Table 16).

Despite reporting little involvement in their communities outside of the workplace, 85% of the sample population reports that PPRs find friendship among colleagues in the workplace. Among the treatment group, 79% of PPRs are friends with their colleagues and reintegration cohort. As PPRs progress within the phases of Taller Escuela, they are more likely to report having friends in the workplace and among their cohort. In Phase 2, PPRs are 40% points more likely to have workplace friends than Phase 1, 15% points more in Phase 3, and 29% points in Phase 4. The effects in Phases 1 and 2 are statistically significant at the 1% level (see Table 17).

Social exclusion and workplace discrimination are a large concern for both former combatants and the ACR. Historically, former combatants have faced serious discrimination and exclusion across sectors and within corporations. Despite the lack of extracurricular community involvement, the shoe and leather-making sector seems to have adapted to receiving PPRs and de-stigmatized their inclusion in the workplace. Addressing this challenge is one major achievement of the program.

E. Impact of Taller Escuela on Socioeconomic Stability

Having achieved positive outcomes for PPRs in the areas of income generation and workplace inclusion, Taller Escuela should affect socioeconomic stability for PPR households, according to the program's theory of change. We measured individual and household-level socioeconomic stability across several indicators, including paying the costs of children's education, emotional support, personal advice, ability to borrow from friends and family, emergency safety net, and the nature of discussions around household finances (see Appendix B). Among the indicators for socioeconomic stability, the ability to pay the costs of a child's education, access to emotional support, and ability to seek personal advice from family and friends showed significant results. Overall, it is not evident that the program is achieving socioeconomic stability for all of its

²⁸ Questions about community service were considered endogenous because depending on an individual's progress in the Reintegration Route, he or she may have been required to contribute to community service that year.

participants. However, there are opportunities for improvement, especially supporting PPRs' children through childcare and the costs of education.

Pays Costs of Children's Education

The costs of a child's education vary across households. Some school districts will require students to purchase uniforms and school supplies frequently, while other schools may charge families additional, illegal fees for attendance. Regardless of the exact costs to the household, reliance on someone else to pay the costs of a child's education indicates the inability to save for anticipated expenditures, and further, a lack of self-sufficiency in the long-term.

Within the total sample, 29 individuals have children, and of those households, 83% are responsible for paying the costs associated with education. PPRs in the program are 23% points more likely to pay the expenses of their children's education than those who are not in the program, significant at the 5% level. This relationship is consistent when including controls. Namely, paying the expenses of child's education is closely correlated to the years a participant was a member of a NSAG and the post-reintegration education level of PPRs. (See Table 18).

Within Phases 1 and 2, 100% of the PPRs who have children pay their children's school expenses. In Phases 3 and 4, 66.7% and 77% pay children's school fees. When controlling for relevant time invariant factors, Phase 4 PPRs are 23.7% points less likely to pay their children's education expenses, statistically significant at the 1% level.

While the treatment group does demonstrate a higher ability to support children's education than the control group, the effect is skewed left, towards Phases 1 and 2 of the program. This may be attributable to selection bias; however, drawing from the insights from in-depth interviews with participants, there are other reasons to why PPRs rely on others to pay the education expenses of their children. Primarily, PPRs who have relocated to an urban environment often find that it is better to send their children to stay with family members in the countryside. A discussion around PPRs' ability to support their children will continue in the analysis and inform a set of recommendations for the ACR and for the IOM.

Emotional Support & Personal Advice

The indicator for emotional support is based on PPRs' response to the question: "Do you have some one whom you can go to for emotional support?" On average, the 76.7% of the sample report having some one to go to for emotional support, with no distinction between the treatment and control groups, and PPRs who have advanced in the program are more likely to have emotional support, especially those with larger households. These results demonstrate the effectiveness of ACR's reintegration program to support PPRs in reconnecting with their immediate family and providing psychosocial support in the first and second stages of reintegration.

The indicator for personal advice was self-reported, in response to the question: "Do you have some one who you go to for personal advice, and who?" Overall, 86.1% of the total sample reports that they have some one whom they go to for personal advice. The control group had slightly more positive outcomes, with no statistical significance.

In the absence of baseline data on emotional support and personal advice, it is difficult to trace the exogenous source of these effects to Taller Escuela rather than to Stage 1 of ACR's reintegration route. However, we can examine these outcomes within the program to generate a relative understanding of the influence of the program.

Regression estimates predict that PPRs in Phases 2, 3, and 4 are more likely to have emotional support than those in the Phase 1, which is statistically significant for Phase 3. When including controls, household size is positively correlated to this outcome (see Table 19). Therefore advancement in the program and larger household size predict the presence of emotional support. Personal advice, however, does not differ significantly across the phases of the program (see Table 20).

The reported values for emotional support and personal advice are more meaningful when complemented by an understanding of whom these PPRs seek out for such social support. Of those who reported having emotional support, 26 PPRs reported that they go to family members, 2 PPRs go to friends, and 3 PPRs go to Taller Escuela or ACR staff. In addition, of those who reported having no one to go to for emotional support, 3 PPRs emphasized the importance of their "belief in God." These results indicate the importance of family and psychosocial programming for PPRs to develop social stability.

While measurement error due to self-reporting is an important consideration in the interpretation of these outcomes, the responses were triangulated throughout the survey, with reference to household members, family, and friends.

F. Sustainable Livelihoods: Use of a gift for investment in the future

Within the theory of change, socioeconomic stability should lead to the development of sustainable livelihoods for PPR households. To measure sustainable livelihoods, we collected information on school attendance for school-aged children, the use of a gift, and reported expectations for the future. Although it is not evident that the program is achieving socioeconomic stability for its participants, we examine the use of a gift as one measure of sustainable livelihoods to gain insights into the long-term effectiveness of the program. Then, PPRs' individual expectations for the future and children's education will be examined further as part of the analysis section.

The use of gift was measured in response to the question: "If you were to receive a gift of 200,000 COP (100 USD) from a friend or family, how would you use it?" The responses are coded for either use of the gift for an investment in the future or for immediate needs and expenses. Examples of investment in the future include buying inputs for a business, savings for future investment, and paying off a debt. Immediate needs and expenses included household purchases such as food and clothing.

Of the total sample, 42% uses a gift of 200.000 COP for an investment in the future, and gender has the largest influence on the use of a gift. Women are more likely to spend money on household needs than save or invest in the future. In the total sample, women are 25% points less likely to invest than men, when including controls. This is statistically significant at the 5% level.

The use of a gift does not vary significantly for women in the treatment group and the control group (see Table 21).

Within the treatment group, PPRs in Phase 3 of the program are 33% points more likely to invest in the future on average than those in Phase 1, statistically significant at the 1% level. When including controls, participants in Phase 2 of the program are 55% points more likely to invest in the future than those in Phase 1, significant at the 5% level. Other variables also influence use of a gift, including education level and household size. Education level increases the propensity to invest, whereas household size increases propensity to pay household expenditures, as expected. Phase 4 shows no consistent result across models (see Table 21).

These results demonstrate that a segment of the treatment population anticipate a stable and consistent income within Taller Escuela and allows some PPRs to consider investing beyond basic household needs and expenses.

The lower propensity of women in the sample to save for the future is affected by their role in the household. Among the women who participated in the study, 44% are the head of their household. While the women who do not head their households are evenly split across investment of a gift, women who head their households predominantly use the gift for expenditures. On average, female-headed households are 54% points less likely to invest a gift in the future rather than use it for expenses than male-headed households. This is statistically significant at the 10% level. When controlling for household income level, the difference widens, increasing to 58% points and is significant at the 10% level (see Table 21).

These results indicate that male-headed households have or anticipate having the economic viability to make different choices about expenditures than female-headed households. They also indicate that female-headed households do not have the same economic stability that male-headed households seem to have. We do not know if this was true at baseline, but examining the support and services that Taller Escuela provides its beneficiaries, disaggregated by gender and household characteristics, yields insights into potential opportunities for closing the gender gap.

G. Heterogeneous Effects for Women

Gender discrimination is rampant in the Colombian workplace. Therefore, it is critical to the relevance of this study to consider the gender dimensions of reintegration and the relative difference for women who enter Taller Escuela.

Salary

Women, on average, earn less than men; however, women who attend Taller Escuela are better off than women who do not. On average, women across the treatment and control groups earn 260,961 COP less per month than the men in the sample. When including relevant controls, this difference is statistically significant at the 1% level. Although the treatment group earns less on average than the control group, the women in the treatment group earn more relative to the women in the control group. Within the program, this effect is amplified. Women in Phases 3 and 4 of the program earn 185,452 COP and 407,452 COP more than women in Phase 1 of the program, respectively (See Table 22).

These results demonstrate the proportionate difference for women working in the formal sector. While members of the treatment group experience higher income as they progress through the program, on average, the effect for women is larger than for men. And further, women who are job searching outside of the program are much more likely to earn a lower income than those in the program. This suggests that participation in the formal sector provides women with an opportunity to earn a steady income, in the absence of other opportunities. Conversely, we must consider the opposite effect for men. If men are presented with a smaller opportunity than those of potential income generation activities outside of the program, they may face a higher opportunity cost joining Taller Escuela than women. And further, the incentive to maintain a formal sector status may be less attractive than it is to women. The disproportionate opportunity cost for men and for women who enroll in Taller Escuela is explored further in the analysis and recommendations sections.

VII. Limitations to the Data

The primary limitation to the data is measurement error. The study relies primarily on self-reported data and assumes time invariance across basic demographic variables. When examining measurement error and its threat to internal validity, we consider whether the measurement error affects the outcomes for treatment and comparison units identically. If the measurement error is uncorrelated with the control variables then it should not present an issue for estimating the average treatment effect. There is no reason that the measurement error in self-reported data varied across treatment and comparison groups, and therefore, the error should not bias our results.

A second limitation is many participants have experienced a pre-program earnings dip (“Ashenfelter’s dip”) due to a retrenchment period before the first phase of the program.²⁹ There is potential for bias due to an Ashenfelter’s dip when inferring the long-term impacts of the program. In addition, there is the problem of post-program dip in the process of recovery from retrenchment.³⁰

The high number of independent statistical tests performed to determine results presents another limitation to the accuracy of the results. Conducting a large number of comparisons introduces potential for spurious positives. I correct for this error using the Bonferroni correction. This multiple-comparison correction allows me to reject the null hypothesis by dividing each individual test’s critical values by the number of comparisons performed. After performing this correction, we can reject the null for all models except for role in the workplace, indicating that this result may be a spurious positive (see Tables 3, 4, and 5).

The sample size is small and the power of my calculations is consistently low throughout the results of the quantitative analysis. Small sample size often results in the sample population misrepresenting the characteristics of the total population. Recognizing this threat to internal and external validity, I include a qualitative analysis of interviews with participants, key

²⁹ (Ashenfelter, 1978)

³⁰ Reference to (2005) Ravallion, 210.

implementers, and policymakers to validate and question the findings of the quantitative analysis.

Lastly, the sample population does not suffer from attrition bias within the first year of the program. However, many PPRs leave the shoe and leather-making sector after their first 4-month contract. This would introduce potential upward bias for those who have remained in the sector beyond 4 months. In our sample, seven PPRs who were certified (70%) were over 4-months beyond graduation. And of those seven, one PPR had left the shoe sector to work in private security and one PPR was starting his own business. Therefore, 50% of the sample in phase 4 may upwardly bias the results. This potential attrition bias after year 1 of the program makes it especially pertinent for the analysis to examine the challenges program beneficiaries face once certified and contracted in order to capture the reasons why PPRs leave the sector.

VIII. Analysis

Drawing on insights from one-on-one interviews with beneficiaries and meetings with program staff, this section presents common aspirations and challenges among program participants, which have driven their decisions to attend CDP Taller Escuela and shaped their expectations for the program. Within a diverse sample, I identify the converging trends in expectations among PPRs and develop three archetypes to represent frequently observed livelihood-seeking behaviors. These behavioral archetypes alongside the study's quantitative results enable me to identify specific recommendations that will meet the livelihood-seeking preferences of the beneficiary population and provide an attractive alternative to illicit, informal activity.

Common aspirations and challenges among program participants were unsurprisingly aligned. PPRs aspire to earning enough income to afford expenses, pay off debts, and save for a home. They aspire to send some money to their family in the countryside, ensure a better future for their children, and sometimes start their own businesses. Similarly, PPRs struggle to find stable employment, fear the termination of their contracts during the low season, earn insufficient income relative to high rent and household expenses, face over-indebtedness, and worry about the security and future of their families. Aspirations and challenges shape beneficiaries' livelihood-seeking behavior and translate to expectations of the program.

Understanding beneficiaries' expectations of the program is critical to successfully moving beyond income generation to socioeconomic stability and sustainable livelihoods. PPRs face a significant opportunity cost when enrolling in the program, forgoing three months or more of income and exerting themselves over 400 hours in training, before the consideration of travel and other unattended responsibilities. The true opportunity cost to participants depends on the utility preferences and relative potential for income generation outside of the program, and therefore, are not approximated in this study. However, average baseline opportunity cost to each participant, derived from average pre-program salary amounts to 957,333 COP (479 USD) of forgone income.³¹ As we found in the previous section, the opportunity cost to participation in the program and in the formal sector is disproportionate across participants, especially for male and female PPRs.

³¹ In the treatment group, average monthly income pretreatment is 478,666 COP with a standard deviation of 256,938.

A. Behavioral Archetypes

The Survivor

The survivor entered Taller Escuela seeking security and freedom from the pitfalls of the informal sector. She sees Taller Escuela as an opportunity to learn practical skills and build her capacity to enter the shoe and leather-making sector. She is both forward-looking and forced to exercise present-bias. Capacity building is an investment in her and her children's future, but she has no ability to save or mitigate the risk of unexpected expenses and overspends her small earnings. She has little or no social network to rely on for financial or physical security.

Aspirations:

- Provide a future for herself and her children
- Earn a higher and more stable income
- Ensure income generation in the long-run
- Feel respected

Expectations:

- Learn practical skills that open doors for income generation
- Earn a living wage
- Enter a supportive work environment
- Work a fair and manageable schedule

Challenges:

- Cannot pay her immediate expenses
- Struggles to pay childcare and leaves her children alone
- Worries for her and her children's safety

The Supporter

Like the survivor, the supporter sees the formal sector as a viable alternative to the challenges of the informal sector. He entered Taller Escuela with the intention of working consistently and earning a salary large enough to support the needs of his immediate and extended family. As the caretaker and household head, the supporter is patient and under pressure. He intends and manages to save here and there, but he must prioritize putting food on the table and paying rent. Most importantly, the supporter is a diligent worker and is focused on building a life day-by-day.

Aspirations:

- Earn a stable income with potential for promotion
- Work in an inclusive environment
- Pay off debts, afford rent, and save for a house
- Build a sustainable livelihood for himself and his family

Expectations:

- Produce shoes and earn an income
- Earn a title and the necessary skills for leather-making
- Receive consistent payment for his work

Challenges:

- Per production income is insufficient to meet expenses
- Fears termination of his contract
- The shoe and leather-making sector is seasonal, creating income uncertainty
- Worries about leaving his wife and child home alone

“Of course I am satisfied with my income. I can’t imagine not having a salary now. Please, I don’t even want to think about bad things.”

- PPR

The Mover

For the mover, Taller Escuela is an opportunity for income generation, for capacity building, and for growth. He enters the program with the intention of someday owning his own machine and starting his own small-scale enterprise. The mover is young and entrepreneurial. He juggles many income-generating activities, and he may have held a higher level of responsibility when he was a combatant. He is an individual. He views his colleagues as coworkers, not as friends. If he has a family, he often supports them from afar, shielding them from his risk-seeking behavior. The mover takes chances, moves in and out of opportunities, and invests frequently in income-generating assets, rather than daily expenses.

Aspirations:

- Start a business and develop his own product
- Save for and own a home
- Support his dreams and the dreams of his family

Expectations:

- Receive capital to buy a machine and start a small-scale enterprise
- Develop skills in design and shoemaking
- Earn a title
- Gain responsibility and independence in the workplace
- Manage his own schedule
-

Challenges:

- Demand and employment in the shoe sector are seasonal
- Salaries do not increase, and minimum wage is insufficient
- Work schedule is demanding and constraining

B. Addressing Expectations

Box C below places participant's expectations of the program into three categories: achieving, underachieving, and unachieved. While Taller Escuela is meeting some basic expectations of program participants (achieving), there are opportunities to meet expectations that are currently being met for only a subset of participants (underachieving) and that have yet to be addressed (unachieved).

Box C: Addressing Expectations	
Achieving	<ul style="list-style-type: none">■ Gain practical skills and build capacity that will lead to income generating opportunities■ Supportive work environment
Underachieving	<ul style="list-style-type: none">■ Salary increases (short-term and medium-term)■ Income stability, the benefits of formal employment■ Children and family support
Unachieved	<ul style="list-style-type: none">■ Responsibility and independence in the workplace■ Opportunity to start a small-scale business

All three behavioral archetypes expect that by joining Taller Escuela they will gain practical skills and build their capacity to work in shoe and leather making. The survivor and the supporter also emphasize the importance of a supportive work environment. According to study participants and the results from the quantitative survey, the program is achieving these basic expectations.

On the other hand, we have found that the program is not supporting the socioeconomic stability for all its beneficiaries. The under- and unachieved expectations and their corresponding challenges present opportunities for Taller Escuela to improve its model and, further, to support sustainable livelihoods that prove to be a large enough incentive to keep its beneficiaries out of the illicit, informal sector.

C. Overpromising and Underserving

In Bogota and in Cali, the programs are overpromising and underserving their beneficiaries. In enrollment and skills training, the programs are operating at about 66% and 76%, respectively. In Bogota, the program enrolled a total of 33 PPRs, and in Cali, the program enrolled a total of 38 PPRs. Each had aimed to enroll 50 and employ 38 PPRs. By March 2014, 41 of 50 eligible PPRs (82%) found a form of employment in the shoe or leather-making sector, and the remaining PPRs had yet to complete the training and internship phases. However, of the 41 employed, only 9 could be located for an interview, indicating that by July and August, many PPRs had left their employment.

The issues of low levels of PPR interest and attrition post-certification demonstrate the program's incapacity to meet beneficiaries' expectations. Such ineffectiveness can be attributed

to lack of capitalization for small-scale enterprises, little opportunity for salary increases among graduated beneficiaries, and the unwillingness of private factories to ensure renewable contracts.

In the program proposal, PPRs have the opportunity to apply for financing to start their own small-scale enterprises. Although the programs in Bogota and Cali each budget for 10 PPRs to receive this start-up capital, only one PPR in the 2013-2014 cycle had completed the business formation process successfully and would receive financing for his business plan. 4 PPRs in Bogota and 4 PPRs in Cali had also drafted business plans; however, business proposals must be approved by CDP del Cuero and by the ACR, which is described as a prohibitively lengthy process.

By deprioritizing the incubation of small-scale enterprises, Taller Escuela is not only failing to meet the expectation of the movers, who have been drawn to the program with the aspirations of owning their own businesses, but also, the program is missing an opportunity to provide an attractive incentive for entrepreneurial PPRs to start viable businesses and to scale CDP del Cuero's network and influence in the shoe and leather-making sector.

“[E]n los procesos de aprobación de planes de negocios ya que se han extendido los plazos y los participantes se encuentran disgustados.”

– Director, Taller Escuela, Bogota

D. “Todo es Plata”: Money is Everything

Across all behavioral archetypes, income generation is at the core of PPRs' aspirations and expectations entering the program. Within the treatment group, 79% expect their salaries to increase in the first year of the program, and 94% expect their salaries to increase in the next five years. Although we see incomes rise as PPRs progress through the program, participants describe high expenses, insufficient income, and their unmet aspiration to save to invest in their futures.

On average, men in the treatment group earn 787,667 COP monthly (394 USD), yet income is varied, ranging from 93,000 to 2,200,000 COP. For many, a monthly income equivalent to minimum wage (616,000 COP) is less than they would earn working in multiple informal occupations. If the income participants generate is not large enough to meet their needs, and other opportunities in the informal and often illicit market exist, we can expect these participants to act rationally and choose to work for higher, less stable income. This explains low levels of interest in the program, where higher-income, lower-cost opportunities attract potential participants.

Taller Escuela has the opportunity to provide a competitive source of income and incentivize PPRs to maintain a formal sector status. The source of income does not necessarily need to be larger to compete, but instead, could ensure stability and opportunity for growth.

The program is not meeting the income-earning needs of its female participants. Women experience proportionately higher income generation within the program, yet they are unable to translate higher income to investment in their future. While the survivor has fewer attractive alternatives outside of the program and is less likely to drop out of the sector to pursue other

income than the supporter or the mover, she faces serious trade-offs investing two months in training and leaving her children at home alone or spending her savings on informal childcare.

By presuming female participants can make this trade-off without supporting savings and investment, Taller Escuela is not meeting the expectations of the women who enter the program at very high costs. But, the program has the opportunity to augment its support services for the survivor, whether she is a female household head or he is an older, unskilled worker, and provide secure and sustainable services to support PPR households' needs.

E. Private Sector Incentive Structure

The relationship between CDP del Cuero and the shoe and leather-making sector enables factories to exploit the short-term expiration of contracts and pass the burden of seasonal demand onto the employee. CDP del Cuero is a nonprofit training school that was founded for the purposes of increasing the competitiveness and production capacity of the leather and shoe-making sector. Therefore, the incentive structure was designed to build mutual benefit for unskilled beneficiaries and for factories with a shortage of skilled labor. However, this incentive structure has stayed in place, passing the fluctuation and risk of a seasonal industry from privately owned factories to program beneficiaries, who consistently fear being fired.

First, there is an issue of perverse incentives and information asymmetry between short-term contracted PPRs and the factories. The factories receive subsidized labor, paying CDP del Cuero per unit production during the PPR's internship in Phase 2 of the program over the course of 1.5 months. Then, about 75% of PPRs are expected to secure a short-term contract with their employer, and the ACR continues to support a subsidized wage. The factories receive a subsidy of 500,000 COP for every four-month contract, and they continue to be eligible for the subsidy indefinitely.

Unfortunately, this creates a perverse incentive for employers to overwork short-contract employees to encourage dropout. If a PPR receives minimum wage for her work, the subsidy is equivalent to a 20% discount. However, if the contracted PPR leaves her position, the factory still receives the full 500,000 COP subsidy. Thus, if the PPR works only two months, the subsidy is actually a 41% discount on labor expenses.

Further, there is information asymmetry between program beneficiaries and employers that allows factories to sign short-term contracts during peak season and not renew contracts when demand subsides. The asymmetry is derived from the initial contract negotiation, in which PPRs agree to the terms of a contract drafted in the first week of Phase 2, only 7 weeks after entering the program. PPRs understand that they are signing a short-term contract with the potential for renewal, contingent on good performance. The employer, on the other hand, knows his demand for labor fluctuates throughout the year and will most likely be able to employ this subsidized employee for one to two terms per year. Taller Escuela does not provide technical support for PPRs during renegotiation of short-term contracts post-certification.

The perverse incentive to overwork employees and to terminate contracts after the first or second term undermines the purpose of securing formal sector employment for socioeconomic stability.

The economics of the relationship make income generation stable in the short-term, but uncertain in the long-term. Further, employers' power to renew only short-term contracts keeps wages at or below minimum wage and provides no opportunity for salary increases.

“Salaries do not increase here.”
- PPR

It is important to recognize that some employers are providing attractive and stable income for PPRs, especially in the smaller factories. For those PPRs who do secure longer-term contracts, the factory hours are long and production minimums are set high. However, if the opportunity provides stable income over a longer period, and the factory invests in the skills development and promotion of its employees, it remains attractive, at least to the supporter and the survivor. These employers, specifically, discuss their commitment to destigmatizing their inclusion in the workplace.

Taller Escuela has the opportunity to mitigate exploitative practices by changing the incentive structure presented to employers. In addition, the program has the opportunity to support PPRs in the negotiation of longer-term contracts and push for the possibility of salary increases.

D. Per-Production Pay and In-House Employment

CDP del Cuero mitigates low market demand for some PPRs who do not secure employment by housing machinery and hosting per production, outsourced labor. Similar to a small-scale enterprise, CDP del Cuero takes on output-based contracts for the PPRs that work on the machinery provided for the school. CDP del Cuero sells handmade shoes without soles in bulk to sole-making factories, and PPRs are then paid per individual output. This allows PPRs to work flexible hours and to meet their individual earning needs.

Through in-house per-production employment, Taller Escuela is meeting more of the expectations of its beneficiaries. Insourcing production from factories allows PPRs to work in a comfortable environment, manage their income and schedules, and continue their skills development. Taller Escuela has the opportunity to expand this model and offer program participants a stable income in a secure environment with the opportunity for personal growth.

“I have a roof, I have food to put on the table. Step-by-step I am building a life.”
- PPR

E. Financial Mediation

Socioeconomic stability is more likely to lead to sustainable livelihood formation if PPRs are able to translate stable income generation into savings and investment. On average, male graduates anticipate the ability to smooth their incomes and the desire to invest lump sums in assets. Yet, many beneficiaries face formal and informal over-indebtedness and forgo paying children’s school fees, and female graduates specifically struggle to meet daily household expenses. See Box D, which describes the financial mediation behavior across the sample population. There is an opportunity to provide support for debt repayment and goal-based savings to ensure higher levels of economic stability for participants.

Box D: Study Population’s Financial Mediation Statistics

- Access to Credit*
- 57% of the total sample reports holding formal or informal debt at the time of the interview.
 - Across all study participants, 69.7% of PPRs reported that they have some one from whom they can borrow.
 - 72% of female PPRs report access to informal credit.

- Purpose of Savings*
- 65% of the sample population and 75% of the treatment group report wanting to save to buy a house.

- Remittances*
- 63% of PPRs remit to family members.
 - PPRs are 40% more likely to send remittances if married.

IX. Recommendations

Taller Escuela, in partnership with IOM and the ACR, can improve its model to drive socioeconomic stability, to keep PPRs in formal employment, and to generate opportunity for graduates to fulfill their livelihood aspirations. To provide a competitive source of income, salaries do not necessarily need to be larger, but rather, should be augmented to ensure their security, stability, and opportunity for growth.

For CDP del Cuero, ACR and IOM

Provide on-site childcare services to increase household security.

CDP del Cuero should provide childcare on-site for PPRs enrolled in Taller Escuela and for graduates of the program. Many male and female PPRs struggle to pay the costs of childcare, and boys and girls are often surrounded by crime and violence when left home alone. To avoid predisposing children to violent outcomes and to shield households from abusive childcare services, a small staff could support on-site daycare for beneficiaries. This service would mitigate the risks PPRs take enrolling in Taller Escuela and could continue to support the long-term wellbeing of participant households.

Support certified PPRs with contract renewal.

CDP del Cuero and the ACR should support PPRs in the negotiation of longer-term contracts and increase information available to participants on sector seasonality.

Frequent termination of short-term contracts is due in part to knowledge asymmetry between the PPR and her employer. In the short-term, CDP del Cuero and the ACR should support certified PPRs in contract negotiation:

- CDP del Cuero should offer basic contract negotiation training as part of the vocational program and inform PPRs of the pitfalls of the seasonal and competitive sector.
- ACR monitoring staff should attend all contract negotiations to provide the PPR with technical and emotional support during the physical discussion.

Reducing knowledge asymmetry will enable PPRs to renew short-term contracts or to anticipate the low season, pursue additional income sources in those months, and return when labor demand rises, rather than leaving the sector permanently.

In the long-term, IOM should push to reform the incentive structure between CDP del Cuero and private sector factories such that employers are encouraged to renew PPRs' contracts. This would require subsidized labor reimbursements to be paid at the end of term, rather than at the beginning, to ensure that employers take responsibility for dropout rates. In addition, employing factories could receive tiered incentives that increase based on employee retention to incentivize contract renewal.

Direct more efforts towards *unidades productivas*.

CDP Taller Escuela can support entrepreneurial PPRs and incubate viable small-scale enterprises that will scale CDP del Cuero's network and influence in the sector. These PPRs are the most likely to quickly transition away from the leather-making sector, constrained by the low returns and demanding schedule. Yet, these are the PPRs who can have the capacity to create value for other PPRs through job formation and other network effects. The entire sector will derive mutual benefit if small-scale enterprises receive capital through CDP and reach profitable scale.

There are many potential structures for reforming the existing business incubation model. The possibilities outlined below need to be tested and co-designed with beneficiaries and CDP del Cuero to adequately meet market demand and operate self-sufficiently.

- IOM could increase funding for the existing model and make efforts to accelerate the approval process to meet the program's original targets.
- CDP del Cuero could receive funding to increase its capacity to take on in-sourced labor and incubate business plans in-house.
- PPRs could develop joint business plans and co-invest in launching enterprises.
- IOM could provide or bring in additional financing mechanisms for PPRs to own their own machines.

Support and incentivize goal-based savings.

IOM and ACR should support goal-based savings in order to enable higher levels of economic stability for participants and provide opportunities for growth.

Like business incubation, there are many potential structures for supporting goal-based savings. The possibilities outlined below need to be tested and co-designed with beneficiaries, CDP del Cuero, and financial service providers to adequately meet needs of program participants.

- Through the existing cash transfer cycle, the ACR could partner with a bank to encourage goal-based savings through subsidized accounts. Small deposits may lead to asset acquisition and loan eligibility in the future.
- Mobile transfers through a partner bank (i.e. Davivienda) could link cash transfers to mobile financial services in order to encourage goal-based savings, as well as reduce the costs of sending remittances.
- IOM could support small accounts by providing machinery on loan for PPRs to purchase on credit.

Support future efforts to monitor program graduates and advocate for Taller Escuela within *La Ruta de Empleabilidad*.

CDP del Cuero in conjunction with ACR should continue to monitor PPRs post-graduation to gather medium-term information on PPR placement and retention. Subsequently, PPRs who have demonstrated the benefits to enrolling in the program should advocate for Taller Escuela with *La Ruta* and within his or her networks to increase enrollment.

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XI. Tables and Appendices

Table 3: Income Generation

	(1)	(2)	(3)	(4)
	Salary	Income Satisfaction	Monthly Expenses	Debt
First-differences, treatment and control				
Treatment	-97,632.40 (87,729.18)	0.20* (0.03)	-286,225.17 (83,009.35)	-0.12 (0.21)
Mean for Control	758888.9	0.2	51,000	0.67
Control variables	yes	yes	yes	no
Observations	38	39	39	42
First-differences, Phase-in treatment				
Phase 2	195,333.33 (55,090.34)	0.06*** (0.00)	334,095.37 (54,446.98)	-0.30*** (0.00)
Phase 3	250,625.00*** (0.00)	-0.07 (.)	88,997.17* (9,847.51)	-0.55*** (0.00)
Phase 4	558,222.22** (21,579.64)	0.22 (0.08)	362,654.12** (25,629.51)	-0.24 (0.21)
Bonferonni correction*	yes	yes	yes	yes
Mean for Phase 1	186,000	0.44	627,500	0.8
Control variables	no	no	yes	no
Observations	33	32	30	33

Controls include years-armed, education level, age, and a binary variable for female.

Robust standard errors are reported in parentheses and are clustered by location.

*If yes, the $(t\text{-statistic}/n) > \text{critical value}$, where n is the number of individual statistical comparisons, and I can reject the null hypothesis.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 4: Workplace and Social Inclusion

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Role in the Workplace	Comfort in Work Environment	Workplace Responsibility	Concerns about being fired	Attends community meetings	Member of social group	Friends in Workplace
First-differences, treatment and control							
Treatment	0.56* (0.08)	0.98*** (0.01)	-0.77 (0.27)	0.26* (0.04)	-0.25 (0.08)	0.01 (0.23)	-0.14 (0.09)
Mean for Control	3.6	3.3	3.4	0.29	0.5	0.1	1
Control variables	yes	yes	yes	yes	no	yes	yes
Observations	23	36	24	23	34	39	38
First-differences, Phase-in treatment							
Phase 2	0.25*** (0.00)	-0.20*** (0.00)	-2.31** (0.16)	0.13* (0.01)	-0.00 (0.00)	-0.13 (0.23)	0.40*** (0.00)
Phase 3	-	-0.20*** (0.00)	-2.09* (0.18)		-0.33*** (0.00)	-0.18*** (0.00)	0.15 (.)
Phase 4	0.44* (0.05)	-0.42 (0.34)	-0.91** (0.07)	0.44 (0.08)	-0.50*** (0.00)	0.03 (0.16)	0.29 (0.05)
Bonferonni correction*	no	yes	no	no/yes	yes	yes	yes
Mean for Phase 1	-	4.2	5	-	0.4	0.3	0.6
Control variables	no/yes	no	yes	yes	no	no	no
Observations	19/17	32	18	17	24	33	33

Controls include years-armed, education level, age, and a binary variable for female.

Robust standard errors are reported in parentheses and are clustered by location.

*If yes, the $(t\text{-statistic}/n) >$ critical value, where n is the number of individual statistical comparisons, and I can reject the null hypothesis.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Table 5: Socioeconomic Stability

	(1)	(2)	(3)
	Pays costs of child's education	Emotional Support	Invest gift
First-differences, treatment and control			
Treatment	0.23** (0.01)	-0.04** (0.00)	0.38 (0.38)
Mean for Control	0.7	0.9	0.2
Control variables	no	yes	yes
Observations	29	39	39
First-differences, Phase-in treatment			
Phase 2	-0.04 (0.08)	0.23 (0.12)	0.55** (0.02)
Phase 3	-0.84 (0.14)	0.15*** (0.00)	0.46 (0.45)
Phase 4	-0.24*** (0.00)	0.18 (0.13)	0.10 (0.37)
Bonferonni correction*	yes	yes	yes
Mean for Phase 1	1	0.6	0.3
Control variables	yes	no	yes
Observations	19	33	30

Controls include years-armed, education level, age, and a binary variable for female.

Robust standard errors are reported in parentheses and are clustered by location.

*If yes, the (t-statistic/n) > critical value, where n is the number of individual statistical comparisons, and I can reject the null hypothesis.

*** p<0.01, ** p<0.05, * p<0.1

Table 6: Effects for Women

	(1)
	Salary
First-differences, treatment and control	
Treatment*Female	197,988.46 (73,679.51)
Mean for Female	272,235
Control variables	no
Observations	42
First-differences, Phase-in treatment	
Phase 2*Female	350,285.71 (249,404.42)
Phase 3*Female	185,452.38*** (0.01)
Phase 4*Female	407,452.38** (25,738.69)
Mean for Phase 1*Female	65,714
Control variables	no
Observations	33

Controls include years-armed, rent expense, education level, age, and household size.

Robust standard errors are reported in parentheses and are clustered by location.

*** p<0.01, ** p<0.05, * p<0.1

Table 7: Program Effects on Salary

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable: Salary</i>						
Treatment	-324,373.74 (117,024.55)	-97,632.40 (87,729.18)	80,769.83 (42,167.80)			
Practice (Phase 2)				195,333.33 (55,090.34)	77,159.87 (51,565.48)	152,416.14 (46,913.33)
Short-Term Contract (Phase 3)				250,625.00*** (0.00)	77,618.68 (52,246.30)	275,512.64 (109,643.67)
Certified (Phase 4)				558,222.22** (21,579.64)	299,030.57 (132,703.11)	734,923.51 (165,206.99)
Years armed		21,568.92 (19,634.45)	39,060.10 (29,177.44)		-7,232.03 (24,817.33)	41,144.80 (26,361.63)
Education level		33,415.67 (47,365.40)	54,164.00 (54,267.13)		-7,024.14 (24,360.89)	-24,798.82 (18,071.02)
Age		15,452.91 (7,763.31)	18,955.55*** (94.30)		-3,151.29 (9,106.04)	-14,618.50 (14,215.58)
Female (indicator)		-275,764.56** (19,416.44)	-90,504.28* (13,027.07)		-268,101.57 (226,470.36)	69,657.11 (221,684.87)
Household size					42,097.37* (4,046.45)	-12,433.40 (56,440.70)
Married (indicator)					-81,105.93 (102,470.06)	273,314.25 (293,726.03)
Household Head (indicator)					284,801.97** (6,916.31)	-42,395.26 (40,598.92)
Rent expense (monthly)			0.44 (0.79)			0.84* (0.08)
Constant	758,888.89 (0.00)	-126,817.41 (834,416.33)	-784,140.50 (503,149.40)	186,000.00*** (0.00)	289,200.28 (133,969.57)	237,878.76 (385,452.72)
Observations	42	38	27	33	30	20
R-squared	0.08	0.42	0.50	0.33	0.52	0.69

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 8: Program Effects on Income Satisfaction

	(1)	(2)	(3)	(4)	(5)
<i>Dependent variable: Income Satisfaction</i>					
Treatment	0.30*	0.20*			
	(0.03)	(0.03)			
Phase 2			0.06***	-0.01	0.22
			(0.00)	(0.32)	(0.10)
Phase 3			-0.07	-0.30***	-0.31
			(.)	(0.00)	(0.16)
Phase 4			0.22	-0.05	0.16
			(0.08)	(0.24)	(0.07)
Years in armed group		-0.01		-0.02	0.01
		(0.01)		(0.00)	(0.03)
Education level		-0.06		0.01	0.08
		(0.05)		(0.09)	(0.09)
Age		-0.00		-0.00	0.01
		(0.02)		(0.03)	(0.03)
Female (indicator)		-0.19		-0.17	0.11
		(0.21)		(0.31)	(0.39)
Household size				-0.11	-0.23
				(0.05)	(0.13)
Married (indicator)				-0.32	-0.09
				(0.12)	(0.02)
Household head (indicator)				0.08	-0.04
				(0.06)	(0.07)
Rent Expense					0.00*
					(0.00)
Constant	0.20	0.92	0.44	1.34	0.57
	(.)	(1.02)	(.)	(1.48)	(2.52)
Observations	42	39	32	30	20
R-squared	0.07	0.13	0.05	0.37	0.46

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 9: Program Effects on Monthly Expenses

	(1)	(2)	(3)	(4)
<i>Dependent variable: Monthly expenses</i>				
Treatment	-268,494.95 (99,294.49)	-286,225.17 (83,009.35)		
Phase 2			312,500.00 (203,087.28)	334,095.37 (54,446.98)
Phase 3			55,208.33*** (0.00)	88,997.17* (9,847.51)
Phase 4			132,500.00 (102,710.81)	362,654.12** (25,629.51)
Years in armed group		5,779.73 (4,474.03)		15,369.45 (8,587.35)
Education level		20,564.26 (26,774.21)		16,046.89 (36,997.47)
Age		-5,778.23 (7,923.46)		-8,712.08 (9,307.69)
Female (indicator)		52,519.62* (5,590.96)		235,249.50 (102,569.10)
Household size				26,148.14 (32,607.04)
Married (indicator)				164,157.72 (36,417.01)
Household head (indicator)				-52,659.55 (41,861.43)
Constant	1,002,333.33*** (0.00)	991,003.02 (402,307.34)	627,500.00*** (0.00)	340,008.67 (459,936.56)
Observations	43	39	33	30
R-squared	0.11	0.20	0.11	0.37

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 10: Debt and Monthly Expenses

	(1)	(2)
<i>Dependent variable: Monthly expenses</i>		
Treatment		-275,555.56 (92,561.84)
Debt	135,601.85 (106,500.62)	68,888.89 (.)
Treatment*Debt		58,333.33 (66,516.80)
Constant	710,370.37*** (80,506.90)	940,000.00 (.)
Observations	42	42
R-squared	0.04	0.12

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 11: Program Effects on Debt

	(1)	(2)	(3)	(4)
<i>Dependent variable: Debt</i>				
Treatment	-0.12 (0.21)	-0.05 (0.21)		
Phase 2			-0.30*** (0.00)	-0.12 (0.14)
Phase 3			-0.55*** (0.00)	-0.44 (0.10)
Phase 4			-0.24 (0.21)	-0.02 (0.22)
Years in armed group		-0.03 (0.01)		-0.01 (0.02)
Education level		-0.02 (0.05)		0.01 (0.02)
Age		0.04** (0.00)		0.02 (0.02)
Female (indicator)		0.24 (0.05)		0.25 (0.15)
Household size				0.01 (0.08)
Married (indicator)				0.08** (0.00)
Household head (indicator)				-0.01 (0.08)
Rent Expense		0.00 (0.00)		
Constant	0.67*** (0.00)	-0.67 (0.58)	0.80*** (0.00)	-0.09 (0.11)
Observations	42	27	33	30
R-squared	0.01	0.39	0.17	0.32

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 12: Program Effects on Role Valued

	(1)	(2)	(3)	(4)	(5)
<i>Dependent variable: Feels as though role is valued in the workplace</i>					
Treatment	0.17 (0.03)	0.56* (0.08)	0.29 (0.27)		
Phase 2				0.25*** (0.00)	-0.04 (0.01)
Phase 4				-0.25 (0.13)	0.44* (0.05)
Years in armed group		0.11* (0.01)	0.15 (0.04)		0.22*** (0.00)
Education level		0.17* (0.02)	0.29 (0.08)		0.21** (0.01)
Age		-0.03 (0.03)	-0.07** (0.00)		-0.11* (0.01)
Female		0.11 (0.47)	0.11 (0.54)		0.48* (0.04)
Household size					-0.15** (0.00)
Married					0.90** (0.06)
Household head					-0.18 (0.04)
Rent expense			-0.00* (0.00)		
Constant	3.57 (0.00)	2.12 (1.12)	2.89 (1.24)	3.75*** (0.00)	3.99** (0.13)
Observations	26	23	21	19	17
R-squared	0.01	0.34	0.60	0.10	0.55

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 13: Program Effects on Comfort in the workplace

	(1)	(2)	(3)
<i>Dependent variable: Comfortable in the workplace?</i>			
Treatment	0.75 (0.19)	0.98*** (0.01)	
Phase 2			-0.20*** (0.00)
Phase 3			-0.20*** (0.00)
Phase 4			-0.42 (0.34)
Years armed		-0.02 (0.00)	
Education level		0.04 (0.04)	
Age		0.07 (0.03)	
Female		0.32 (0.50)	
Constant	3.25*** (0.00)	0.76 (1.29)	4.20*** (0.00)
Observations	40	36	32
R-squared	0.10	0.32	0.05

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 14: Program Effects on Work Responsibility

	(1)	(2)	(3)	(4)
<i>Dependent variable: Work Responsibility</i>				
Treatment	-0.23 (0.27)	-0.77 (0.27)		
Phase 2			-2.75 (0.00)	-2.31** (0.16)
Phase 3			-1.86*** (0.00)	-2.09* (0.18)
Phase 4			-1.50* (0.14)	-0.91** (0.07)
Years in armed group		-0.11 (0.06)		0.05*** (0.00)
Education level		-0.03 (0.03)		0.03 (0.03)
Age		0.08 (0.07)		0.03 (0.02)
Female (indicator)		-0.05 (0.20)		1.07* (0.09)
Household size				-0.48*** (0.01)
Married (indicator)				1.42* (0.12)
Household head (indicator)				-1.27** (0.09)
Constant	3.43 (0.00)	2.62 (1.37)	5.00 (0.00)	5.48** (0.11)
Observations	27	24	20	18
R-squared	0.01	0.16	0.26	0.65

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 15: Program Effects on Feeling of Job Security

	(1)	(2)	(3)	(4)
<i>Dependent variable: Worried about being fired</i>				
Treatment	0.29*	0.26*		
	(0.05)	(0.04)		
Phase 2			-0.07***	0.13*
			(0.00)	(0.01)
Phase 4			0.05	0.44
			(0.10)	(0.08)
Years in armed group		-0.02		0.08***
		(0.04)		(0.00)
Education level		-0.19		-0.12*
		(0.06)		(0.02)
Age		0.02		-0.05
		(0.04)		(0.01)
Female (indicator)		-0.17		0.36
		(0.03)		(0.06)
Household size				-0.04*
				(0.00)
Married (indicator)				0.55*
				(0.09)
Household head (indicator)				0.04
				(0.06)
Constant	0.29	1.58*	0.57***	1.98*
	(0.00)	(0.17)	(0.00)	(0.20)
Observations	26	23	19	17
R-squared	0.07	0.40	0.01	0.41

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 16: Program Effects on Social Group Membership

	(1)	(2)	(3)	(4)	(5)
<i>Dependent variable: Member of a social group</i>					
Treatment	0.14 (0.04)	0.01 (0.23)	-0.05 (0.12)		
Phase 2				-0.13 (0.23)	-0.31 (0.11)
Phase 3				-0.18*** (0.00)	-0.40 (0.09)
Phase 4				0.03 (0.16)	-0.12 (0.26)
Years in armed group		-0.02 (0.02)	-0.02 (0.02)		0.01 (0.03)
Education level		-0.02 (0.02)	-0.02 (0.02)		-0.02 (0.01)
Age		-0.01 (0.01)	-0.00 (0.00)		-0.02 (0.01)
Female (indicator)		-0.30 (0.13)	-0.39 (0.14)		-0.28 (0.12)
Household size					0.01 (0.00)
Married (indicator)					0.20 (0.10)
Household head (indicator)					0.09 (0.13)
Rent Expense			0.00 (0.00)		
Constant	0.10 (.)	0.78 (0.21)	0.48 (0.50)	0.30*** (0.00)	1.00 (0.24)
Observations	43	39	28	33	30
R-squared	0.02	0.15	0.36	0.04	0.21

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 17: Program Effects on Workplace Friendship

	(1)	(2)	(3)	(4)	(5)
<i>Dependent variable: Friends with colleagues in the workplace</i>					
Treatment	-0.21 (0.06)	-0.14 (0.09)	-0.19 (0.22)		
Phase 2				0.40*** (0.00)	0.43 (0.09)
Phase 3				0.15 (.)	0.23 (0.13)
Phase 4				0.29 (0.05)	0.57 (0.16)
Years in armed group		0.02 (0.01)	0.00 (0.01)		0.04 (0.01)
Education level		-0.03 (0.02)	0.01*** (0.00)		-0.02 (0.01)
Age		-0.01 (0.01)	0.01 (0.02)		-0.01 (0.01)
Female (indicator)		0.02 (0.06)	0.02 (0.27)		0.22 (0.14)
Household size					-0.02* (0.00)
Married (indicator)					0.35 (0.07)
Household head (indicator)					-0.31* (0.03)
Rent Expense			-0.00 (0.00)		
Constant	1.00*** (0.00)	1.41*** (0.00)	0.94 (1.21)	0.60 (.)	0.82 (0.46)
Observations	42	38	28	33	30
R-squared	0.05	0.13	0.14	0.13	0.45

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 18: Program Effects on Paying Education Expenses

	(1)	(2)	(3)	(4)
<i>Dependent variable: Pay child's educational expenses</i>				
practice			-0.00 (.)	-0.04 (0.08)
internship			-0.33*** (0.00)	-0.84 (0.14)
certified			-0.17 (0.24)	-0.24*** (0.00)
years_armed		0.03 (0.01)		0.04 (0.04)
post_education_level		0.06*** (0.00)		0.08 (0.07)
age		-0.01 (0.02)		-0.01 (0.01)
female		0.13 (0.18)		0.28 (0.51)
household_size				-0.03 (0.08)
married				0.15 (0.07)
household_head				0.34 (0.34)
taller	0.23** (0.01)	0.50 (0.19)		
Constant	0.67 (.)	0.04 (0.57)	1.00 (.)	0.23 (0.98)
Observations	29	27	20	19
R-squared	0.08	0.28	0.17	0.73

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 19: Program Effects on Emotional Support

	(1)	(2)	(3)	(4)
<i>Dependent variable: Emotional Support</i>				
practice			0.23 (0.12)	0.11 (0.09)
internship			0.15*** (0.00)	0.24 (0.13)
certified			0.18 (0.13)	0.14 (0.04)
years_armed		0.02 (0.01)		-0.00 (0.04)
post_education_level		-0.02 (0.07)		-0.05 (0.10)
age		-0.02 (0.01)		-0.02 (0.02)
female		-0.11 (0.16)		-0.26 (0.06)
household_size				0.04* (0.00)
married				0.16 (0.29)
household_head				-0.03 (0.07)
taller	-0.17 (0.07)	-0.04** (0.00)		
Constant	0.90*** (0.00)	1.47 (0.70)	0.60*** (0.00)	1.58 (1.59)
Observations	43	39	33	30
R-squared	0.03	0.13	0.04	0.25

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 20: Program Effects on Personal Advice

	(1)	(2)	(3)	(4)
<i>Dependent variable: Personal Advice</i>				
practice				-0.30 (0.11)
internship				0.03 (0.06)
certified				-0.12 (0.13)
years_armed		-0.02 (0.01)	-0.01 (0.02)	-0.01* (0.00)
post_education_level		-0.01 (0.05)	-0.01 (0.05)	-0.04 (0.03)
age		0.01 (0.01)	0.01 (0.01)	0.00 (0.00)
female		-0.19 (0.16)	-0.19 (0.05)	-0.23 (0.27)
household_size				0.04 (0.02)
married				-0.01 (0.05)
household_head				-0.04 (0.21)
taller	-0.05* (0.01)	-0.17 (0.03)	-0.03 (0.06)	
rent_expense			0.00 (0.00)	
Constant	0.90 (.)	1.00 (0.73)	0.87 (0.51)	1.24 (0.56)
Observations	43	39	28	30
R-squared	0.00	0.10	0.12	0.15

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 21: Program effects on the use of a gift for investment

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<i>Dependent variable: Invest a gift in the future</i>							
		Only household heads		Only household heads			
practice						0.37 (0.47)	0.55** (0.02)
internship						0.32*** (0.00)	0.46 (0.45)
certified						0.14 (0.03)	0.10 (0.37)
years armed			0.01 (0.05)	0.00 (0.04)	0.01 (0.04)		0.00 (0.03)
education level			0.05 (0.03)	0.00 (0.06)	0.01 (0.04)		0.08** (0.00)
age			-0.00 (0.02)	-0.01 (0.01)	-0.01 (0.01)		0.03 (0.03)
female		-0.35 (0.27)	-0.26** (0.01)	-0.54** (0.04)	-0.58* (0.06)		-0.26 (0.43)
household size							-0.03* (0.00)
married							-0.04 (0.06)
household head							-0.43 (0.21)
taller	0.28 (0.17)	0.12 (0.15)	0.38 (0.38)	0.29 (0.46)	0.28 (0.44)		
household income					-0.00 (0.00)		
Constant	0.20 (.)	0.39 (0.08)	-0.08 (0.11)	0.55 (0.84)	0.51 (0.50)	0.30*** (0.00)	-0.58 (0.87)
Observations	43	29	39	26	26	33	30
R-squared	0.06	0.12	0.22	0.29	0.33	0.09	0.46

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

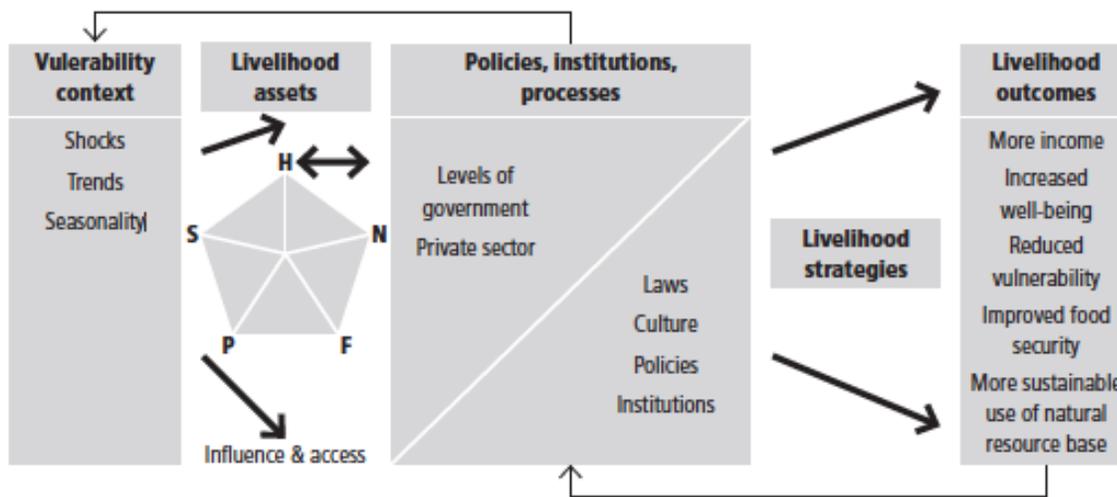
Table 22: Salary Outcomes for Women

	(1)	(2)	(3)	(4)
<i>Dependent variable: Salary</i>				
Female	-389,404.71 (118,755.57)	-260,961.48*** (870.45)	-556,000.00*** (0.02)	-400,952.38*** (0.01)
Treatment			-430,450.00* (35,036.16)	
Female*Treatment			197,988.46 (73,679.51)	
Phase 2				-60,000.00 (65,368.09)
Phase 3				23,833.33*** (0.00)
Phase 4				276,833.33* (25,738.69)
Female*Phase 2				350,285.71 (249,404.42)
Female*Phase 3				185,452.38*** (0.01)
Female*Phase 4				407,452.38** (25,738.69)
Years in armed group		26,163.61 (17,579.45)		
Education level		35,544.57 (46,065.37)		
Age		14,441.84 (7,014.70)		
Constant	661,640.00* (70,299.40)	-223,418.37 (695,629.25)	1,006,000.00*** (0.01)	466,666.67*** (0.00)
Observations	42	38	42	33
R-squared	0.16	0.41	0.26	0.42

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Appendix A: Livelihoods Framework



Key: H = Human capital; N = Natural capital; F = Financial capital; P = Physical capital; S = Social capital

Source: <http://www.livelihoods.org>

Appendix B: Questionnaire

Participant #		1111						
Instrumentation : Interview Questions								
MODULE 1 : General Information/ Demographics								
Region in Colombia where Interview took place?								
	Bogota	Cali	Pereira	Other	Notes:			
Location of interview								
	Male	Female						
Participants Gender								
How old are you?								
Where were you born? Name of the city/community?								
Where do you work? What is the name of the business?								
How long have you worked at this business?								
	And on your team?							
How many people work at this business with you?								
	2	3	4	5	6	7	8	9
How many people live in your household?								
	Yes	No						
Are you the head of household?								
	Yes	No	How many?					
Do you have children? How many?								
	Yes	No						
If yes, do they live with you?								
	Yes	No	How many days per week?					
Do you children go to school?								
	Yes	No						
In your life, did you attend school?								
	some primary	primary	some secondary	secondary	some advanced	advanced	professional degree	other
What is the highest level of education that you have achieved?								
	Yes	No	Where?	How many days/week?	If no, would you like to?			
Are you currently taking any educational courses?								
transition	Yes	No	No. of years					
Are you demobilized? Since when?								
If yes, for how long were you a member of an armed group?								
If no, are you a victim of the armed conflict?								
If no, do you have a relationship to the armed conflict?								
	Yes	No	Where did you work before?					
Is working in shoe and leathermaking your first occupation after completing the reintegration process?								

Participant #	1111							
Instrumentation : Interview Questions								
MODULE 1B: Individual Economic and Social Outcomes								
Income/Expenditures/Savings								
On average?								
This week, how much did you spend on food?								
On average, how much do you spend on household items per week?								
	Yes	No	What was the occasion?					
Were any of these expenditures for a special occasion, holiday, or vacation?								
How much is your current salary?								
		On average?						
What was your household income this week?								
	No	Not really	More or less	Yes	Very	Why?		
Are you satisfied with your income?								
	Yes	No						
Do you currently hold debt?								
If at all, how much did you save this past week?								
	Yes	No						
Would you like to save? Or save more?								
	Health Emergencies	Retirement	Family	Education	Other			
Why do you save?								
What was your primary source of income before participating in Taller Escuela?								
		More?	Less?					
How much did you make in those activities?								
		More?	Less?					
On average, how much did you spend on food per week before participating in Taller Escuela?								
	Yes	No						
Did you save before participating in Taller Escuela?								
Why did you make the decision to participate in Taller Escuela?								

Stabilization								
	To start a new business	To invest in an existing business	To invest in agriculture	To buy goods for yourself or your family	To pay off a debt	To save	Other	
If you received a gift of \$100 from friends or family, how would you use it?								
	Yes	No	Why?					
Are you better off now, having become certified in leather and shoemaking techniques?								
	Uncomfortable 1	Somewhat uncomfortable 2	Neutral 3	Comfortable 4	Very Comfortable 5			
Do you feel comfortable in your work environment and working with your coworkers?								
Why?								
	Yes	No	Why?					
At work, are you worried about being fired?								
	1 Not at all	2 Not really	3 More or less	4 Valued	5 Very Valued			
Do you feel as though your role at work is valued (1-5)								
	1 No responsibility	2 Not much	3 Sometimes	4 Yes	5 Always			
At work, do you have the responsibility to make decisions?								
		Why?						
How long do you anticipate being in your current position?								
		How?						
Do you think that your salary will increase this year?								
		How?						
Or in the next five years?								
Integration with Society								
Are you friends with other Taller Escuela participants?	Yes	No	If not, why?					
	Yes	No	Length of membership					
Are you a member of a group? Since when have you been a member?								
	Yes	No	Time in role					
Are there any groups or activities in which you have a leadership role? Since when have you been in this role?								
	Yes	No	If yes, yes	If yes, no				
Does your community hold meetings? And if so, do you attend?								
	Yes	No	What type of public work?					
Did you contribute any funds or time to public projects this year?								

Social Support								
	Yes	No						
Do you have some one to turn to for comfort when distressed?								
If yes, who?								
	Yes	No						
Do you have some one who you turn to for personal advice?								
If yes, who?								
	Yes	No						
Do you have some one from whom you can borrow in times of need?								
If yes, who?								
	Family	Friends	Coworkers	Religious Group	Other			
In an emergency, who do you turn to for help and support?								
Family Relations/Indirect Beneficiaries								
	Yes	No						
If you do not reside with your family, are you able to support them financially?								
	Never	Sometimes	Often	Always				
Do you consult with your family over how to spend and save money?								
	Yes	Sometimes	No	Often	Not often			
Do family arguments ever relate to finances? If so, how often?								
	Yes	No	What are these costs?					
with your children's education (for example, school supplies or school uniforms)?								
What are the difficulties do you face in providing for your family?								
	very little support 1	no support 2	neutral 3	some support 4	a lot of support 5			
How much support do Taller Escuela and being employed support you with these difficulties? (1-5)								
What are some of the difficulties you face living in the city?								
Before we end, do you have any additional questions for us?								

Appendix C: Program Chronology

Actividades	Tiempo en meses												
	Mes 1	Mes 2	Mes 3	Mes 4	Mes 5	Mes 6	Mes 7	Mes 8	Mes 9	Mes 10	Mes 11	Mes 12	Mes 13
ETAPA 1 – FORMACION TÉCNICA, VINCULACIÓN LABORAL Y CREACIÓN DE UNIDADES DE NEGOCIO													
1.1 Selección de beneficiarios													
1.2 Fase lectiva de capacitación													
1.3 Fase práctica de capacitación													
1.4 Formación en emprendimiento													
2.1 Formalización de convenios con empresas y vinculación laboral													
3.1 Formulación de planes de negocio													
3.2 Aprobación de planes de negocio													
3.3 Montaje y puesta en marcha													
4.1 Acompañamiento psicosocial a empleados													
4.2 Acompañamiento técnico a empleados													
4.3 Acompañamiento psicosocial a unidades productivas													
4.4 Acompañamiento técnico a unidades productivas													
ETAPA 2 - DISEÑO DE KIT DE HERRAMIENTAS Y TRANSFERENCIA A ACR													
5.1 Diseño y construcción conjunta con Escuelas Taller de Calzado de Pereira y Cali de caja de herramientas													
5.2 Transferencia y entrega de caja de herramientas y metodología a ACR													
5.3 Talleres de capacitación a profesionales reintegradores del Centro de Servicios ACR													

Appendix C: Outcome Variables

Indicator	Variable	Label	Description
Income Generation	monthly_expenses	Monthly expenses	Expenses in Colombian pesos (COP)
	post_salary	Current salary	Monthly salary in COP
	post_HH_income	Current household income	Monthly income for the household in COP
	post_income_satisfaction	Current income satisfaction	Binary variable, 1 if satisfied, 0 if unsatisfied
	post_debt	Current debt	1 if holds debt, 0 if holds no debt
	post_monthly_savings	Current monthly savings	Monthly savings in COP
	save_more	Save more	1 if would like to save more, 0 if not
	purpose_save	Purpose of saving	descriptive, string variable
Workplace Inclusion	pre_salary	Pre-treatment salary	Monthly salary before treatment in COP
	comfortable_work_environ	Comfortable at work	categorical 1 - 5, where 5 is very comfortable and 1 is uncomfortable
	worry_fired	Worried about being fired	1 if worried, 0 if not
	role_valued	Role is valued	categorical 1 - 5, where 5 is very valued and 1 is not valued at all
	work_responsibility	Work responsibility	categorical 1 - 5, where 5 is a lot of responsibility and 1 is none at all
Social Inclusion	friends_workplace	Friends in the workplace	1 if participant has friends, 0 if not
	social_group	Social group	1 if member of a social group, 0 if not
	borrow_support	Borrow support	1 if has some one to borrow from, 0 if not
	attend_community_meeting	Attends community meetings	1 if attends community meetings where they exist, 0 if not
	social_work	Social work	1 if performed social work this year, 0 if not
	emotional_support	Emotional support	1 if has some one to go to for emotional support, 0 if not
	personal_advice	Personal advice	1 if has some one to go to for personal advice, 0 if not
	emergency_support	Emergency support	1 if has some one to go to in an emergency, 0 if not
Socioeconomic Stability	better_off	Better off	1 if considers his/herself better off, 0 if not
	salary_increase_y1	Expects salary to increase in 1 year	1 if expects salary to increase this year, 0 if not
	salary_increase_y5	Expects salary to increase in 5 years	1 if expects salary to increase in the next 5 years, 0 if not
	remits_family	Remits to family	1 if remites to family, 0 if not
	consult_fam_finances	Consults family on finances	categorical, 0 if never, 1 if sometimes, 2 if usually, 3 if always
	financial_disputes_fam	Financial disputes in the family	categorical, 0 if never, 1 if sometimes, 2 if usually, 3 if always
	pay_child_edu	Pays the costs of child's education	1 if pay costs, 0 if not
	invest_gift	Would use a gift to invest in future	1 if would use a gift for investment, 0 otherwise