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**LABOUR SUPPLY EFFECTS OF CONDITIONAL TRANSFERS: ANALYZING THE DOMINICAN  
REPUBLIC'S SOLIDARITY PROGRAM**

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# Labour Supply Effects of Conditional Transfers: Analyzing the Dominican Republic's Solidarity Program\*

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## Abstract

This paper studies the impact of the conditional cash transfer program Solidaridad on changes in the labor market of the Dominican Republic based on statistical data from the Evaluation of the Social Security Survey 2010. The estimation methodology is based on matching techniques, which can discern the impact on both benefit-receiving and non-benefit-receiving households. The results show a negative but very small impact of the different components of the program on labor market indicators, especially for the components related to children. However, the estimates show some heterogeneity in the effects on the most vulnerable sectors of the population.

*Key terms:* Social Programs, Solidaridad, Labor Market, Conditional Cash Transfers

*JEL Classification:* H31, J08, J58

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# 1 Introduction

The policy of redistribution of resources through conditional cash transfers (CCT) has become one of the most important tools used by governments to reduce levels of poverty and improve citizens' quality of life. Currently, these programs have been implemented in a variety of countries that range from the poorest and developing (e.g., Bolivia, Bangladesh, Nigeria, etc.) to more developed countries (e.g., Japan and USA).<sup>1</sup>

Cash transfers are based on the contribution of cash to households that meet a number of previously stipulated objectives for investment in the human capital of the recipients' children to achieve health and education goals. The establishment of these goals not only assumes that households do not have enough resources to invest the "optimum" level in human capital based on social and political parameters but also assumes that these households may underestimate returns on investment in education. In the case of the Dominican Republic, for example, Jensen (2010) estimates that the perception of eighth graders on the return on investment in education is approximately one quarter of the rate of return derived from an income survey.<sup>2</sup>

One of the main issues to be discussed when CCT programs are implemented is their potential impact on the labor supply of adults. From a theoretical point of view, the impact of these programs can be diverse. For example, if we consider leisure as a normal good, the effect of transfer programs can be negative in terms of employment because an increase in the income of individuals via cash transfers could increase the consumption of leisure and reduce the labor supply. Additionally, workers may choose to reduce their labor supply to qualify for benefits, or individuals may demonstrate less availability for work. However, for those groups who are outside the labor market and for whom consumption of leisure relative to labor is high, the impact could result in greater efforts in the job search. Because individual preferences are crucial in this process, conclusions about the

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<sup>1</sup>In the case of Japan, the aid programs for secondary education stand out. In the United States, the cash transfer programs of New York City and Washington D.C. have been remarkable.

<sup>2</sup>Another way that parents may underestimate the return on the education of their children is when they discount the future with a higher weighted rate than they should.

impact of CCT on labor supply can only be determined empirically (Rosen, 2009).

Our investigation uses statistical information from the Dominican Republic's Evaluation of Social Security Survey 2010 to study the impact of the Solidaridad program on household behavior as measured through changes in labor force participation, income and informality. For this purpose, quasi-experimental methods are used as paired estimates (matching) that may help identify impacts on benefit-receiving households and non-beneficiaries. The contributions of this study will be useful not only for public policy in the Dominican Republic for defining the effect on labor markets (positive or negative) of the Solidaridad program, but it will also add new material to the existing literature in terms of the evaluation of the impact of such programs on informality.

From an empirical perspective, the issue has been addressed extensively in developed and medium-developed countries, and conclusions on the effects of CCT programs depend on the characteristics of each program and the incentives that participants receive. For example, Saez (2002) finds that cash transfer programs in the United States reduce the intensity of work of employees but increase the level of labor force participation of the unemployed. Similarly, Keane and Moffitt (1998) demonstrate that individuals who simultaneously participate in multiple transfer programs do not reduce their labor supply. However, these results differ from studies on the effects of *unconditional* transfer programs, where there is a significant reduction in the labor force participation of enrollees (Moffitt, 2002; Tabor, 2002).

In the case of Latin America, a number of studies have examined the effect of conditional transfers on labor market, poverty, health, education and food indicators. In general, there are significant positive relationship between participation in transfer programs, the increase in labor supply and improved incomes (Fizbein and Schady, 2009; L. Alzúa and Ripani, 2009). For example, CCT recipient households did not reduce in any way the labor supply in the case of Ecuador and Mexico. However, there is a significant reduction in the child labor supply, especially in Brazil, Ecuador, Mexico and Nicaragua (Cecchini and Madariaga, 2011). Moreover, it is estimated that the Red de

Protección Social program in Nicaragua has caused a decrease in poverty levels between five and nine points in the count rates and poverty gap. In Honduras, there is only a slight increase in consumption for households that receive conditional transfers compared to similar households that do not receive them, which is an expected result given the small size of the transfers.<sup>3</sup>

Some studies link the decisions of individuals to choose a type of employment (e.g., formal or informal) to the availability of additional income and/or funding from other sources. For example, in a recent report published by the World Bank (2005), the increase in micro-enterprise is attributed to the growth of remittances and the tourism sector. Dependence on external sources for these resources combined with the unfavorable international economic environment of recent years makes the informal-sector workers a very vulnerable segment of the Dominican population.<sup>4</sup>

Other studies focus on how economic growth and business cycles affect the employment level (OIT, 1975; García and Valdivia, 1985). In general, these studies indicate that although the Dominican economy has been characterized by strong GDP growth compared to other countries in the region, this growth has not manifested in a significant decrease in the unemployment level. However, the low response of unemployment to changes in the business cycle may be explained by the size and divergence of the definition of unemployment as well as by problems in its measurement (Gregory, 1997; Márquez, 1998).

In general, studies devoted to the analysis of the Dominican labor market have been characterized by a lack of technical rigor because they are based on descriptions of statistical information from sources that are sometimes not comparable. In turn, the lack of a systematic construction of economic indicators related to the labor market has led most

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<sup>3</sup>In terms of health and education, CCTs have significantly increased school enrollment and attendance in both Latin American middle-income countries such as Chile (7.5%), Colombia (2.1%) and Mexico (1.9%), and lower income countries such as Honduras (3.3%), Nicaragua (6.6%) and Ecuador (10.3%). However, despite the fact that CCT programs have a significantly positive impact on school attendance levels, these programs do not seem to influence school performance test results or learning levels. Furthermore, the effect of the programs on the use of preventive health services is not very clear (Fizbein and Schady, 2009).

<sup>4</sup>For an analysis of the importance of micro-enterprises in the creation of jobs in the Dominican Republic and the role that women have played in this sector, see Cabal (1993).

studies to focus on the analysis of surveys; the Labor Force Survey of the Central Bank is one of the most consulted sources (Sánchez-Fung, 2000).

Recently, with the financial aid of international organizations, the establishment of new assistance and training programs has allowed a more rigorous analysis of the Dominican labor market. For example, Card et al. (2011) analyze the impact on employment generation of the Juventud y Empleo Program (2001-2006), which provides training and skills development for young people age 18 to 29. Using a random sample of applicants to the program, the authors find little evidence that participation in training programs affects the employment status (employed or unemployed) of individuals participating in the program, although they do encounter evidence of a slight increase in participants' levels of income (10).<sup>5</sup>

Finally, conditional transfer programs have experienced a major peak in Latin America since the mid-1990s, from only 3 countries in 1997 to 18 countries in 2010 (see Table 8 in the Appendix). The impact of these programs has been quantified. These programs have not only achieved significant impacts in reducing poverty and on social inequality indicators but are also considered instruments that are founded on beliefs in extensive social protection and universal notions of rights (Cecchini and Martínez, 2011). Therefore, the importance of these programs for the target population lies in the fact that they can still be used as tools for social policy in the region. It is to this aspect that this study aims to make a contribution.

## 2 Estimation Methodology

The methodology proposed to conduct the research is the impact evaluation methodology based on the propensity score matching technique developed by Rosenbaum and Rubin (1983). The analysis focuses on the full sample to determine the program's impact on the behavior of beneficiary households, measured by labor force participation, wages

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<sup>5</sup>The Juventud y Empleo Program was developed and implemented by the Dominican government with financial assistance from the Inter-American Development Bank (IDB).

and informality through the propensity score matching technique and the estimation of differences in average effect on treatment of the treated (ATT), described below.

## **2.1 Propensity Score Matching and Differences of the ATT**

To evaluate the program's impact on the labor market, it is necessary to consider two aspects: (i) the impossibility of knowing what would have been the participants' behavior (or result, called  $Y$ ) if they had not participated in the program - what is called the counterfactual state, and (ii) the possibility that participant and non-participant households differ systematically, i.e., there are intrinsic characteristics of each household group.

The first of these issues is important because, if in addition to information on the results of households that participate in the program it was also known what the results would be if they did not participate, it would only be necessary to calculate the difference between the result "with participation" ( $Y^1$ ) and the result "with no participation" ( $Y^0$ ). The second issue refers to the distribution of households participating, which is not purely random. If the results obtained by the participating households are only compared with non-participants, the differences might mistakenly be attributed to the results of participation, when in fact the differences are due to observable characteristics inherent to each group (socioeconomic status, for example).

The propensity score matching methodology allows us to manage both issues by pairing the receiving and not-receiving households that have similar observable characteristics. According to this methodology, "participation" can be treated as a "treatment" in which some households participate and others do not. Participating households make the "treatment group" and not-participating households constitute the "control group". The important issue is that the households in both groups have similar, observable characteristics. Thus, we can estimate the average effect of treatment on the treated (ATT) by finding the average of the difference between the results from households in the "treatment group" and the results from households in the "control group", which represents the counterfactual state. Formally:

Let  $P_i$  be an indicator of participation, which takes the value of 1 if the household participates and 0 otherwise, and let  $Y_i^1$  be the result (household behavior) conditioned by its participation ( $P_i = 1$ ) and  $Y_i^0$  be the result conditioned by its non-participation ( $P_i = 0$ ).

Then, the average effect of treatment on the treated is given by:

$$ATT = E(Y_i^1 - Y_i^0 | P_i = 1) = E[Y_i^1 | P_i = 1] - E[Y_i^0 | P_i = 1] \quad (1)$$

Equation 1 shows the difference between the current situations of households that participated compared with what their situation would have been if they had not participated. The first term,  $E[Y_i^1 | P_i = 1]$ , is fully observable because it represents the results given household participation. The second term,  $E[Y_i^0 | P_i = 1]$  presents a problem because when the household participates ( $P_i = 1$ ),  $Y_i^1$  is the variable that can be observed. Furthermore, with the information provided by non-participating households,  $E[Y_i^0 | P_i = 0]$  can be obtained, so the equation ATT cannot be solved with data observed in the same household.

The solution proposed through the matching methodology is based on the assumption that, given a set of observable characteristics  $X$ , the potential outcomes (when not participating) are independent of the state of participation (conditional independence assumption, CIA):  $Y_i^0 \perp P_i | X$ . Therefore, after controlling for observable differences, the average potential outcome is the same for  $P = 1$  and  $P = 0$ , that is,  $E[Y_i^0 | P = 1, X] = E[Y_i^0 | P = 0, X]$ . This enables the use of a control group.<sup>6</sup>

Instead of matching based on  $X$ , Rosenbaum and Rubin (1983) suggest using the household propensity to participate to reduce the dimensionality of the problem. This propensity, which can be influenced by a large number of factors, is reduced to a scalar  $p(X)$  called "propensity score,  $PS$ ". In formal terms, the PS is defined as the conditional probability of participating given a group of individual characteristics ( $X = x_i$ ) for each

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<sup>6</sup>Authors quote no. 3 in text.



household:

$$p(x) \equiv Pr(P_i = 1 | X = x_i) \quad (2)$$

After calculating the  $PS$  using a probabilistic model, various methods can be used to estimate the average effect of treatment on the treated, including:

- **Nearest Neighbor Matching:** This method carries out the matching by looking in each of the treated units for a unit in the control group whose  $PS$  is closest. That is, the  $j$  untreated unit is chosen to be the control group ( $C(p_i)$ ) of the  $i$  treated unit to minimize the difference between PS:

$$C(i) = \min_j [|P_i - P_j|] \quad (3)$$

- **Radius Matching:** This method uses all control units within a predefined radius of the  $PS$ , which is an advantage because it allows a larger number of control units in case there is not an appropriate match. The equation indicates that the treated unit  $i$  is matched to the control unit  $j$  such that:

$$\delta > |p_i - p_j| = \min_{k \in \{D=0\}} |p_i - p_k| \quad (4)$$

where  $\delta > 0$  is a specified radius. <sup>7</sup>.

- **Kernel Matching:** This methodology matches the benefit-receiving households with a weighted average of the control households that are closest, with weights that are inversely proportional to the distance between the propensity scores of the treated and the control groups. The weighted average is calculated as follows:

$$W_{ij} = K_{ij} \sum_{j=1}^p K_{ij} \quad (5)$$

where:

$$K_{ij} = \frac{K[(P(X_i) - P(X_j))/a_{N0}]}{\sum_{j=1}^p K[(P(X_i) - P(X_j))/a_{N0}]}$$

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<sup>7</sup>For more details, see ?.

where  $a_{N0}$  is a band or smoothing parameter and  $K(\cdot)$  is the kernel function of the difference between the *PS* of the participants and of the control group.<sup>8</sup>

To quantify the impact of participation in the program on labor market outcomes, we use the estimate of the difference of the *ATT*, which can be used to compare the situations of participating and not-participating households.

Let  $t$  be the period after the receipt of remittances and  $t'$  be the period before remittances; the estimation of the difference of the *ATT* is given by:

$$E(Y_{it}^1 - Y_{it}^0 | P_i = 1, X) - E(Y_{it}^0 - Y_{it}^0 | P_i = 0, X) \quad (6)$$

This indicator compares the results of the treatment group and the control group (first difference) before and after treatment (second difference), eliminating unobservable constant effects over time.

### 3 Data and Information from the Survey

In 2004, the Dominican Republic implemented the Solidaridad program to raise the human capital (health and education) of families living in poverty. This program provides cash assistance, subject to compliance by the participants with certain requirements, and aims to address problems related to poor levels of education, malnutrition and infant mortality, among others. Participants in this program are subject to strict monitoring control to ensure that they continue to meet the requirements that give them access to benefits. The Solidaridad program consists of two main components: (i) a health component and (ii) an education component.

The health component aims to address issues of family health problems, malnutrition and infant mortality, among others, through food and nutritional education and interventions focused on children from poor families. In the program, households must follow a series of specific protocols (e.g., vaccination plans for children, periodic checks for pregnant

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<sup>8</sup>Ídem

women, etc.) to obtain the transfer called "Comer es Primero". This transfer grants the household RD\$700 pesos (\$18 U.S. dollars) per month to heads of households in extreme and moderate poverty; the money must be used exclusively for the purchase of food.

The education component, or School Attendance Incentive (ILAE), consists of an in-kind transfer to beneficiary households with children between the ages of six and sixteen who are enrolled in basic education between first and eighth grade. Such transfers can only be used to purchase school supplies, books, uniforms and medicine. The amount transferred depends on the number of eligible children in the home and is set according to the following scale:

- Households with one or two eligible children = RD\$300.00
- Households with three eligible children = RD\$450.00
- Households with four or more eligible children = RD\$600.00

In 2010, the Inter-American Development Bank, in alliance with the Office of Social Policy Coordination (GASO) and the Central Bank of the Dominican Republic, made available to the public the new Evaluation of Social Security survey (EEPS), which covered 2,796 households, of which 52% were beneficiaries of charitable programs. This instrument collects the socioeconomic characteristics of the interviewed households and a significant number of other indicators for evaluation of the impact of social programs on the Dominican labor market.

### **3.1 Labor Market and Income Cycle**

The evolution of the labor market indicators and in particular the levels of employment and real income closely reflect the behavior of the Dominican economic cycle. For example, in 2000, approximately 486,000 workers (13.9% of the labor force) were unemployed. By October 2004, after the financial crisis, the number of unemployed individuals exceeded 796,000, a figure that took the unemployment rate to the highest level of the decade

(19.7%). By 2011, after a period of significant economic recovery, the unemployment rate stood at 14.6%.

As could be predicted, income figures underwent the reverse behavior in comparison to the unemployment rate: when labor supply is high (many unemployed workers), income falls. In the 2000-2004 period, the real hourly income of workers was reduced by almost 40% (especially in the crisis years 2003-2004). Real incomes recovered in subsequent years. However, in 2010, real incomes were still approximately 20% below their levels at the beginning of the decade.

As for the distribution of the Dominican labor force among the productive sectors, we can say that it has changed significantly over the past five decades. The agricultural sector has lost importance in job creation by reducing the percentage of individuals in the employed labor force from 73% in 1960 to less than 35% by the end of the 1980s. Since 1990, the Dominican economy has acquired a model of employment generation oriented to a service economy (e.g., tourism, trade and public administration).

One of the main characteristics of the Dominican labor market is its concentration in the informal sector. In the last decade, the share of informal workers has fluctuated approximately 54%, significantly increasing to 56.6% by the end of 2011. However, the large number of workers in this sector only indicates "the existence of a large proportion of small productive units" (Guzmán, 2011) because, contrary to popular opinion, the definition of informality does not necessarily relate to aspects of precariousness or illegality. In the case of the Dominican Republic, the National Workforce Survey defines informal workers as those employees working in businesses with less than five employees as well as unpaid workers, the self-employed, domestic service workers and bosses belonging to non-industrial economic sectors.<sup>9</sup>

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<sup>9</sup>These bosses are in the following occupational groups: farming, operators and drivers, artisans and laborers, merchants, salesmen and unskilled workers.

## 4 Estimates and Results

One of the main problems with conditional transfer programs is their potential to affect the labor market through labor supply disincentives. For example, a conditional cash transfer program can affect a household's budget constraints, allowing the substitution of leisure for work while still consuming the same basket of goods. Consequently, the benefits received from transfers can potentially generate incentives to reduce labor market participation and affect wages. Additionally, potential program enrollees could adjust their participation in the workforce and become inactive in their job searches.

Given the characteristics of the survey and to fully exploit its information, we choose the individual as the unit of analysis. To isolate the effect of the Solidaridad program on the Dominican Republic's labor market, households with at least one member participating in the program are assigned to the treatment group. This strategy allows us to identify the direct effects of the program on households and on individuals; the logic behind this estimate is that the behavior of individuals is a function of the household's behavior.

Although the survey does not allow the identification of a baseline period, its design does allow the generation of a control group. In fact, the survey takes a representative selection of beneficiary households identified as the intervention group and matches it with a set of households with similar conditions that for administrative reasons have not been incorporated into the program. While this strategy can correct the potential contamination of the control group, we additionally compile a set of structural variables (covariates) that simultaneously affect the implementation of the program (treatment) and are variables that affect labor market indicators (outcomes), as the literature has proven. These structural variables seek to correct biases that may exist. In the absence of a baseline, it is plausible that the selected variables are relatively stable over time and are not directly affected by the program. These variables are used in the analysis to control the observable differences among individuals who are affected by the Solidaridad

program and those who are not, thus isolating the impact of transfers. Control variables are placed into three groups that capture demographic, human capital and household characteristics. For demographic controls, we include gender (dummy = 1 if female), age and age squared. For human capital variables, we include years of education (and its square) and a dummy to indicate whether the participant can read and/or write. We also determine the interaction between age and education. Finally, for household characteristics, we include whether the individual is the head of the household, whether he/she is married, the household size (number of people), the number of adults of working age (age 18-64) and the number of seniors (age 65 or more). We also include as controls the number of infants in the household (age 0-5) and the number of school age children (age 6-16). Because the presence of children affects women's decisions to work or look for work, the interaction between "number of infants" and the woman dummy variable is included.

Outcome variables for the labor market are evaluated by taking into account three main components. First, the probability of finding a job is defined as a dummy variable that takes the value of 1 if the person is working and 0 if unemployed. This variable measures the effect of the programs on the possibility that participants are working. Because the programs do not directly affect the creation of new jobs, the impact of this variable is expected to be minimal. Because the definition of wage employment includes the self-employed, it is possible that many of the observed effects are generated through this channel. The second outcome variable is the probability of entering the labor market from inactivity, which is defined using a dummy with value 1 if the individual is employed or unemployed, and 0 if the individual is inactive. This variable is intended to directly capture the effects of the program.

Although there are different methods of propensity score matching to choose from, our specification is based on the method with the best balance for our control variables. Therefore, we use the nearest-neighbor methodology (in terms of the distribution of the control variables) because it provides the best balance and is more likely to satisfy the

CIA. This estimate allows replacement (which generally reduces bias but could increase the variance (Imbens and Wooldridge, 2009; Dehejia and Wahba, 2002)) during the stop.

Additionally, we estimate robust standard errors following Abadie and Imbens (2006). Our specification seeks to find individuals unaffected by the program who are observably similar to individuals affected by it, isolating only the remaining variation between the treatments related to the program. This method allows the use of an ATT estimator that is as unbiased as possible. An important feature of our matching estimator is its transparency because it allows the identification of average labor market outcomes through different programs.

## 4.1 Main Results

Table 1 presents the descriptive statistics from the sample; these statistics are close to those that represent the official Dominican Republic statistics. While the Solidaridad program components do not cover the entire universe of potential beneficiaries, programs such as CEP and Bono Gas reach more than half of the population. Within the sample, we observe parameters that complement those in the Dominican Republic and are similar to those in the Latin American region. About half of the sample is female (49%), which follows the official statistics. The level of literacy of the sample reaches 82%, the average age is 33 years, the average household size is 4-5 members and approximately 13% of the sample experience extreme poverty. While the extreme poverty indicator is higher than expected, the result is justified by the sample and the program objectives.

Following Imbens and Abadie (2006) and Canavire-Bacarreza and Hanauer (2012), the main criterion for the choice of the best estimator is the balance between the control group and the treatment group. Table 2 presents the results of balance between the groups for the preferred estimator (Kernel matching). The differences between the treatment group and the control group in the structural variables are not significant.

Table 3 presents the main results of the matching. In general, the results show heterogeneous effects on the labor market of the various Solidaridad program components.

**Table 1:** Descriptive Statistics

	<b>Observ.</b>	<b>Media</b>	<b>Desv. Est.</b>	<b>Min</b>	<b>Max</b>
CEP	9963	0.5217	0.4996	0.00	1.00
ILAES	9963	0.1933	0.3949	0.00	1.00
Bono Gas	9963	0.7142	0.4518	0.00	1.00
Female	9963	0.4915	0.5000	0.00	1.00
Literate	9963	0.8287	0.3768	0.00	1.00
Age	9963	33.6590	21.7703	6.00	99.00
Age <sup>2</sup>	9963	16.0683	18.6547	0.36	98.01
Schooling	9963	5.6918	4.1551	0.00	19.00
Schooling <sup>2</sup>	9963	49.6590	55.2134	0.00	361.00
Schooling X Age	9963	170.4910	158.4612	0.00	1216.00
Head of Household	9963	0.2764	0.4473	0.00	1.00
Hosehold Size	9963	4.8498	1.9455	1.00	10.00
# Adults 18-65	9963	2.4828	1.3160	0.00	8.00
# Adults 65+	9963	0.3861	0.6577	0.00	4.00
Married	9963	0.3581	0.4795	0.00	1.00
# Children 0-5	9963	0.4162	0.6969	0.00	4.00
# Children 6-15	9963	1.2916	1.2071	0.00	4.00
Female x # Child 0-5	9963	0.2222	0.5551	0.00	4.00
Extreme Poverty	9963	0.1607	0.3673	0.00	1.00

*Note.* Data obtained by the authors from the survey.



In general, the implementation of the program has slightly negative effects (although reduced) on the labor market, which suggests that although there is an income effect of the program, it tends to be small in terms of the labor market.

The programs focused on children, such as *Comer es Primero* and the school attendance incentive program, have negative (although small) effects on earnings and participation in the labor force. Given the size of the *Solidaridad* program effects on labor market outcomes, it is possible to argue that the program has not had a significant impact in terms of reduction in the labor supply. These results are in line with those found in other studies (Ribas and Soares, 2011; Borraz and Gonzales, 2009; Rodriguez and Freije, 2011). However, our results differ significantly in that we find a small, positive effect of labor force participation from the program. This fact leads us to carefully analyze the heterogeneous effects that the program may have.

The results of the program components that are targeted directly to households, such as *Bono Gas*, show the same trend as the programs aimed at children. The results show positive (but not significant) effects on income, and negative and small effects on participation in the labor market and individuals' desire to work (job search).

## **4.2 Robustness and Heterogeneity of the Effects**

Next, we check the robustness of our main estimator. First, we evaluate the sensitivity of the estimator to unobserved heterogeneity between households that received treatment and those that did not receive treatment by applying Rosenbaum bands. The aim of this strategy is to identify how much the selected groups should differ (treatment and control) to cancel the results in terms of the labor market. Second, we evaluate the robustness of our estimators to changes in the control group by using placebo groups that seek to imitate the treatment group. Additionally, one of the main questions to assess the impact of conditional cash transfer policies on the labor market lies in the heterogeneity of the effects across different groups (although this question goes beyond the scope of this document, it can provide insight into the different effects that may exist). We review the

effects through different cohorts of age, sex and geographic area.

#### **4.2.1 Internal Robustness of the Matching Specification**

In any observational study, the ability to remove the bias associated with nonrandom selection is limited by the understanding of the underlying selection process (Meyer, 1995). The selection process should be analyzed from factors that can be observed and obtained. If the selection and results processes are systematically determined only through observable characteristics (that are controlled), then the treatment effect obtained through a matching estimate that provides the right balance will be unbiased and consistent. However, if there are unobservable characteristics that are uncorrelated with observable characteristics that can be controlled but also contribute to the selection and results, then the estimates may be biased. The survey provides sufficient structural factors that control the unobserved heterogeneity bias. However, we evaluate the sensitivity of our estimators to unobserved heterogeneity or bias using Rosenbaum bands (Rosenbaum, 2002).

Sensitivity analysis of Rosenbaum bands measures the level of unobserved heterogeneity necessary to undermine the results of the matching process. If a large (small) amount of heterogeneity is necessary to weaken the significance of the results, then the results are relatively robust (sensitive). Table 9 in the Appendix indicates that the level of unobserved heterogeneity (not considered) that would nullify the results is 10%. In other words, the results are robust regarding potential unobserved heterogeneity.

#### **4.2.2 External robustness of the matching specification through placebo analysis**

In our main specification, as well as in the heterogeneity analysis, we show that the Solidaridad program generally has a negative effect (although small) on the labor market. However, it may be that this result is a consequence of our inability to select a control group that reflects the treatment group closely enough. To evaluate this potential problem, we apply a placebo analysis. The objective of this analysis is to evaluate whether our set of variables (covariates) behaves appropriately to the construction of a counterfactual

for households that are similar (in mean) but do not receive treatment. In other words, the placebo analysis evaluates whether the differences are due to other factors outside the program. If the program was the only remaining source of variation across the treatments, then we should not observe a significant difference between the placebo group and the other controls. In this sense, the placebo is evaluated with two different strategies. First, we generate two different control groups that are contrasted with the treatment group. Second, we select a placebo group (within the control group) that is similar to the originally treated group and we run the same specification, assigning the placebo group as treated, in a procedure similar to the main analysis. This group is similar to the treated group with the exception that the Solidaridad program did not affect the placebo group.

Consequently, if the variables capture the labor market trajectories correctly, we should not observe significant differences between the groups. The results in Table 10 of the Appendix show the different placebo strategies and demonstrate that there is no placebo effect in the estimates. In other words, our set of variables seems to predict the trajectory of labor market results relatively well.

### **4.2.3 Heterogeneity of the results**

While the results found in the main estimation show small but negative effects of the Solidaridad program on the labor market, there is a possibility that these effects are different for different groups. It is therefore necessary to analyze the heterogeneity, and although such an analysis goes beyond the objective of this document, it can identify some parameters for program evaluation.

Observing Tables 4 through 7, it is confirmed that the effects are slightly higher for the ILAE in relation to the other two programs. The positive employment effect is greater for the most vulnerable groups (young and old) in relation to the rest of the adults (Table 4). Additionally, the effects on wages are higher in these groups, demonstrating the vulnerability of these sectors. The overall results are in line with those found in the main estimation, emphasizing a slightly negative effect on the probability of the program for

the older working group. When examining the results by gender, Table 5 shows that the programs have a greater impact on women, particularly in relation to Bono Gas. This result is expected because other studies have shown a greater income effect in developing countries. When evaluating the effect by geographical area, we observe that the ILAE tends to have a negative effect in terms of the probability of being employed in urban areas, but not the other two components of the Solidaridad program (Table 7). In general, the effects on participation in the labor market and on wages are higher in rural areas, which is in line with the previous literature.

## 5 Conclusions

In 2004, the Dominican Republic implemented the Solidaridad program to increase the human capital (health and education) of families living in poverty. The program has two main components, health and education, and it attempts to reduce the problems related to poor education, malnutrition and infant mortality through the provision of incentives for the affected population through the sub-programs Comer es Primero, ILAE, and Bono Gas. The objective of this study is the evaluation of the impact of the Solidaridad program on the decisions of enrolled individuals to participate in the workforce.

The estimation methodology is based on matching estimates, which enables us to discern the impact on beneficiary households and non-beneficiaries. The robustness of the estimates is reviewed through three different methodologies: (i) Rosenbaum bands sensitivity analysis, (ii) placebo strategies and (iii) analysis of the heterogeneity of the results. In the first case, the results are robust to potential unobserved heterogeneity. Furthermore, the different placebo strategies show that there is no placebo effect in the estimations, meaning that our set of variables seems to predict the trajectory of labor market outcomes. Finally, the estimates show some heterogeneity in their effects in that those sectors of the population who are most vulnerable, such as children and young adults, are most affected.

In general, the implementation of the program has negative effects of a small magnitude

on the labor market. This result means that while it is true that individuals reduce their labor supply due to the income effect of the program, the impact is small relative to the Dominican labor market. More specifically, we observe that the programs *Comer es Primero* and the school attendance incentive program (ILAE) have negative effects on income and participation in the labor force. However, given the magnitude of the effect, combined with the size and coverage of the *Solidaridad* program, we think that the program has not had a significant impact in terms of reduction of the labor supply in the market. Additionally, the results of the program components that are targeted directly to households, such as *Bono Gas*, show the same trend as the programs aimed at children: positive (but not significant) on labor income and negative and small on participation in the labor market and individuals' desire to work (job search).

Finally, the estimates show great heterogeneity in the results. Specifically, the effects of the *Solidaridad* program are slightly higher in the ILAE component in relation to the other two programs. Additionally, the positive effect on employment is higher for groups of young and older adults compared to the other adult groups, and the negative effect on wages is higher in these groups, illustrating the vulnerability of these sectors. The reduction in labor supply is more significant for women relative to men and among individuals living in rural areas compared with urban areas.

**Table 2: Balance Results (normalized bias) for Kernel Matching**

	CEP			ILAE			Bono Gas		
	Works <sup>1</sup>	Wage <sup>2</sup>	Desire to Work <sup>3</sup>	Works	Wage	Desire to Work	Works	Wage	Desire to Work
Female	7.57	6.5	1.2	8.9	5.73	0.86	0.89	0.78	0.16
Literate	3.35	3.5	0.85	3.58	5.54	0.2	0.09	1.8	0.94
Age	7.27	4.12	0.77	11.25	10.13	0.49	1.29	0.14	0.42
Age <sup>2</sup>	7.13	3.76	0.54	11.31	8.82	0.67	0.27	1.04	0.58
Schooling	1.09	0.26	0.81	7.08	7.19	0.59	3.18	1.46	1.62
Schooling <sup>2</sup>	2.12	0.9	0.75	6.4	6.45	1.03	2.5	0.19	1.36
Schooling X Age	3.22	3.46	0.67	2.62	1.22	0.49	3.06	2.34	2.2
Head of Household	4.83	3.99	0.84	7.87	9.61	2.07	6.29	6.39	2.95
Household Size	1.39	3.6	1.49	11.27	4.7	4.41	0.98	0.33	0.05
# Adults 18-65	2.57	3.7	1.55	9.49	3.25	3.25	4.65	1.2	1.69
# Seniors 65+	3.27	2.84	2.3	0.14	2.38	0.12	0.04	1.03	3.17
Married	2.63	2.11	0.09	2.77	0.32	2.51	3.62	3.57	0.5
# Children 0-5	1.18	0.07	0.28	0.09	1.89	0.57	2.33	2.26	1.91
# Children 6-15	1.46	1.79	0.75	4.76	0.6	2.14	4.34	3.28	0.45
Female x # Child 0-5	6.43	1.44	0.5	2.86	4.35	0.48	1.38	0.05	0.84
Extreme Poverty	0.43	0.34	0.1	8.33	4.43	4.54	2.34	1.62	0.73

*Note.* These tables present the value of the statistic of the normalized bias. The general rule is that if the value of the statistic is less than 20, the difference of values between the control group and the treatment is not significant. The estimated population includes 15-65 years old. The control group was selected using the corresponding variables in the database of the survey. To evaluate all programs (last table), families who have benefited from any of the three programs (CEP, ILAES and BONOGAS) are defined as treatment.

<sup>1</sup>The Work variable is a dummy variable that takes the value of 1 if the individual works and 0 if unemployed. <sup>2</sup>The wage is measured as the natural logarithm of the monthly labor wage. <sup>3</sup>The desire to work is measured as a variable that assumes 1 if the subject works or is looking for work (unemployed) and 0 if the subject is not working nor looking for work (not in the labor force).

**Table 3:** Matching Results

Evaluated Variable	Sample	Treatment	Control	Difference	Std. Dev.	t-test
Comer es Primero						
Works	Unmatch	0.878	0.845	0.033	0.01	3.205
	Match	0.88	0.855	0.026	0.014	1.868
Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
	Match	8.209	8.268	-0.059	0.044	-1.335
Desire to Work	Unmatch	0.567	0.617	-0.05	0.011	-4.424
	Match	0.569	0.594	-0.024	0.015	-1.651
ILAES						
Works	Unmatch	0.878	0.845	0.033	0.01	3.205
	Match	0.88	0.855	0.026	0.014	1.868
Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
	Match	8.209	8.268	-0.059	0.044	-1.335
Desire to Work	Unmatch	0.567	0.617	-0.05	0.011	-4.424
	Match	0.569	0.594	-0.024	0.015	-1.651
Bono Gas						
Works	Unmatch	0.878	0.845	0.033	0.01	3.205
	Match	0.88	0.855	0.026	0.014	1.868
Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
	Match	8.209	8.268	-0.059	0.044	-1.335
Desire to Work	Unmatch	0.567	0.617	-0.05	0.011	-4.424
	Match	0.569	0.594	-0.024	0.015	-1.651

**Table 4:** Matching Results by Program and Age Group

Evaluated Variable	Sample	Comer es Primero			ILAE			Bono Gas		
		Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test
Young adults: 15-24 years old										
Works	Unmatch	0.059	0.03	1.982	0.082	0.04	2.035	0.021	0.032	0.637
	Match	0.012	0.041	0.285	0.068	0.055	1.231	0.047	0.042	1.134
	Unmatch	-0.144	0.085	-1.689	-0.163	0.116	-1.409	-0.103	0.093	-1.103
	Match	-0.109	0.122	-0.895	-0.015	0.152	-0.099	-0.042	0.12	-0.352
Wants to Work	Unmatch	-0.065	0.022	-2.918	-0.103	0.028	-3.706	-0.068	0.025	-2.719
	Match	-0.066	0.028	-2.354	-0.051	0.034	-1.509	-0.052	0.029	-1.778
Adults: 25-64 years old										
Works	Unmatch	0.025	0.011	2.309	0.016	0.015	1.088	0.014	0.012	1.192
	Match	0.017	0.014	1.225	0.01	0.017	0.603	0.022	0.014	1.613
Wage	Unmatch	-0.144	0.038	-3.78	-0.049	0.051	-0.966	0.023	0.042	0.555
	Match	-0.092	0.048	-1.913	0.036	0.064	0.557	0.032	0.048	0.668
Wants to Work	Unmatch	-0.046	0.013	-3.424	-0.028	0.018	-1.562	-0.03	0.015	-1.997
	Match	-0.021	0.017	-1.207	-0.008	0.021	-0.4	-0.018	0.016	-1.116
Seniors: 65+ years old										
Works	Unmatch	-0.003	0.034	-0.084	0.054	0.042	1.289	-0.013	0.037	-0.343
	Match	0.009	0.053	0.166	0.023	0.059	0.387	-0.03	0.059	-0.51
Wage	Unmatch	-0.247	0.106	-2.341	-0.019	0.141	-0.133	-0.109	0.118	-0.931
	Match	-0.312	0.148	-2.104	-0.152	0.197	-0.769	-0.217	0.153	-1.416
Wants to Work	Unmatch	0.053	0.03	1.793	0.064	0.04	1.572	0.001	0.034	0.019
	Match	0.016	0.039	0.413	0.018	0.054	0.327	-0.04	0.041	-0.971



**Table 5:** Matching Results by Program and Gender

Evaluated Variable	Sample	CEP			ILAE			Bono Gas		
		Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test
Men										
Works	Unmatch	0.027	0.011	2.464	0.02	0.015	1.389	-0.003	0.012	-0.228
	Match	0.017	0.015	1.174	0.012	0.017	0.708	0.008	0.014	0.547
Wage	Unmatch	-0.168	0.042	-3.945	-0.019	0.056	-0.339	-0.03	0.047	-0.64
	Match	-0.077	0.054	-1.422	-0.007	0.073	-0.092	0.006	0.054	0.112
Wants to Work	Unmatch	-0.009	0.011	-0.797	0.028	0.015	1.874	-0.015	0.012	-1.244
	Match	0	0.014	0.019	0.008	0.017	0.464	0	0.014	-0.032
Women										
Works	Unmatch	-0.003	0.022	-0.142	0.001	0.03	0.021	0.031	0.024	1.32
	Match	0.047	0.028	1.695	0.018	0.039	0.454	0.016	0.03	0.541
Wage	Unmatch	-0.264	0.064	-4.129	-0.147	0.088	-1.677	0.035	0.069	0.509
	Match	-0.098	0.082	-1.2	0.007	0.114	0.06	0.125	0.085	1.478
Wants to Work	Unmatch	-0.112	0.021	-5.414	-0.066	0.027	-2.431	-0.055	0.023	-2.42
	Match	-0.063	0.026	-2.444	-0.08	0.034	-2.347	-0.037	0.027	-1.377

**Table 6:** Matching Results by Level of Income

Evaluated Variable	Sample	Comer es Primero			ILAE			Bono Gas		
		Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test
Low Income										
Works	Unmatch	0.091	0.031	2.969	0.102	0.037	2.777	0.06	0.034	1.773
	Match	0.093	0.046	2.028	0.065	0.051	1.276	0.061	0.046	1.324
	Unmatch	-0.064	0.069	-0.927	0.087	0.082	1.067	-0.035	0.076	-0.457
Wants to Work	Match	0.028	0.106	0.267	-0.132	0.119	-1.107	-0.035	0.097	-0.36
	Unmatch	-0.019	0.028	-0.687	0.029	0.034	0.867	-0.028	0.031	-0.886
Match	0.016	0.037	0.435	0.021	0.044	0.482	-0.008	0.039	-0.192	
Middle Income										
Works	Unmatch	0.037	0.016	2.278	0.007	0.022	0.3	0.027	0.018	1.552
	Match	0.03	0.022	1.377	-0.021	0.028	-0.76	0.019	0.022	0.868
Wage	Unmatch	0.003	0.048	0.068	0.054	0.063	0.845	0.097	0.052	1.868
	Match	0.053	0.063	0.833	-0.023	0.082	-0.283	0.11	0.063	1.756
Wants to Work	Unmatch	-0.05	0.022	-2.261	-0.01	0.029	-0.358	-0.043	0.024	-1.797
	Match	-0.042	0.028	-1.476	-0.039	0.037	-1.06	-0.036	0.028	-1.309
High Income										
Works	Unmatch	0.006	0.013	0.423	0	0.02	-0.014	-0.021	0.015	-1.432
	Match	0.02	0.017	1.227	0.007	0.024	0.276	-0.018	0.016	-1.122
Wage	Unmatch	-0.056	0.058	-0.966	0.167	0.086	1.945	0.004	0.063	0.069
	Match	-0.082	0.076	-1.076	0.113	0.106	1.067	-0.068	0.077	-0.883
Wants to Work	Unmatch	-0.016	0.02	-0.79	-0.05	0.029	-1.714	-0.011	0.022	-0.487
	Match	0.006	0.025	0.227	-0.05	0.037	-1.345	0.001	0.026	0.04

**Table 7:** Matching Results by Location

Evaluated Variable	Sample	CEP			ILAE			Bono Gas		
		Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test
Urban Area										
Works	Unmatch	0.021	0.018	1.149	-0.017	0.026	-0.635	0.015	0.016	0.928
	Match	0.032	0.032	1.001	-0.001	0.047	-0.025	0.054	0.027	2.039
Wage	Unmatch	-0.139	0.059	-2.372	-0.123	0.084	-1.463	0.043	0.054	0.795
	Match	-0.05	0.103	-0.486	0.034	0.16	0.214	0.139	0.09	1.539
Wants to Work	Unmatch	-0.025	0.021	-1.197	-0.013	0.03	-0.429	-0.018	0.019	-0.93
	Match	-0.023	0.033	-0.686	-0.048	0.053	-0.906	-0.012	0.029	-0.41
Rural Area [U+FFFD]										
Works	Unmatch	0.011	0.017	0.629	0.023	0.017	1.329	0.007	0.018	0.369
	Match	0.013	0.029	0.434	0.04	0.039	1.026	-0.015	0.03	-0.492
Wage	Unmatch	0.055	0.065	0.843	0.059	0.066	0.901	0.091	0.067	1.359
	Match	-0.05	0.117	-0.424	-0.106	0.146	-0.728	0.047	0.122	0.381
Wants to Work	Unmatch	-0.02	0.024	-0.843	-0.018	0.023	-0.769	-0.019	0.024	-0.778
	Match	-0.04	0.036	-1.128	-0.076	0.041	-1.857	-0.06	0.036	-1.634

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**Table 8:** Conditional Cash Transfer Programs in Latin America and the Caribbean

<b>Country</b>	<b>Programs Operating (Year Started)</b>	<b>Country</b>	<b>Programs Operating (Year Started)</b>
Argentina	Asignacion Universal por Hijo para proteccion social (2009); Programa Ciudadania Portena (2005)	Bolivia	Bono Juancito Pinto (2006); Bono Madre Nino-Nina (2009)
Brasil	Bolsa Familia (2003)	Chile	Chile Solidario
Colombia	Familias en Accion (2001); Red Juntos (2007); Subsidios Asistencia Escolar (2005)	Costa Rica	Avancemos (2006)
Ecuador	Bono de Desarrollo Humano (2003)	El Salvador	Comunidades Solidarias Rurales (2005)
Guatemala	Mi Familia Progresiva (2008)	Honduras	Programa de Asignacion Familiar (1990); Bono 10.000 Educacion, Salud y Nutricion (2010)
Jamaica	Programa de Avance Salud y Educacion (2002)	Mexico	Oportunidades (1997)
Panama	Red de Oportunidades (2006)	Paraguay	Tekopora (2005); Abrazo (2005)
Peru	Juntos (2005)	Dominican Republic	Solidaridad (2005)
Trinidad y Tobago	Programa de Transferencias Monetarias Condicionadas (2006)	Uruguay	Asignaciones Familiares (2008)

Source: Cecchini, S. and Aldo Madariaga (2011), Table 1.1, pg. 11.

**Table 9:** Rosenbaum Results

Evaluated Variable	Sample	Comer es Primero			ILAE			Bono Gas		
		Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test
Band=0.1										
Works	Unmatch	0.025	0.011	2.309	0.016	0.015	1.088	0.014	0.012	1.192
	Match	0.019	0.014	1.356	0.018	0.016	1.13	0.007	0.013	0.594
Wage	Unmatch	-0.144	0.038	-3.78	-0.049	0.051	-0.966	0.023	0.042	0.555
	Match	-0.049	0.047	-1.038	0.019	0.057	0.33	0.011	0.043	0.253
Wants to Work	Unmatch	-0.046	0.013	-3.424	-0.028	0.018	-1.562	-0.03	0.015	-1.997
	Match	-0.025	0.017	-1.506	-0.002	0.02	-0.094	-0.023	0.015	-1.544
Band=0.01										
Works	Unmatch	0.025	0.011	2.309	0.016	0.015	1.088	0.014	0.012	1.192
	Match	0.016	0.015	1.092	0.024	0.016	1.438	0.01	0.014	0.731
Wage	Unmatch	-0.144	0.038	-3.78	-0.049	0.051	-0.966	0.023	0.042	0.555
	Match	-0.062	0.05	-1.248	0.052	0.06	0.864	0.042	0.046	0.927
Wants to Work	Unmatch	-0.046	0.013	-3.424	-0.028	0.018	-1.562	-0.03	0.015	-1.997
	Match	-0.026	0.017	-1.504	0.01	0.021	0.484	-0.007	0.016	-0.432
Band=0.001										
Works	Unmatch	0.025	0.011	2.309	0.016	0.015	1.088	0.014	0.012	1.192
	Match	0.017	0.014	1.225	0.01	0.017	0.603	0.022	0.014	1.613
Wage	Unmatch	-0.144	0.038	-3.78	-0.049	0.051	-0.966	0.023	0.042	0.555
	Match	-0.092	0.048	-1.913	0.036	0.064	0.557	0.032	0.048	0.668
Wants to Work	Unmatch	-0.046	0.013	-3.424	-0.028	0.018	-1.562	-0.03	0.015	-1.997
	Match	-0.021	0.017	-1.207	-0.008	0.021	-0.4	-0.018	0.016	-1.116
Band=0.0001										
Works	Unmatch	0.025	0.011	2.309	0.016	0.015	1.088	0.014	0.012	1.192
	Match	0.012	0.018	0.687	-0.021	0.023	-0.932	0.011	0.017	0.632
Wage	Unmatch	-0.144	0.038	-3.78	-0.049	0.051	-0.966	0.023	0.042	0.555
	Match	-0.15	0.063	-2.382	-0.014	0.085	-0.16	0.021	0.058	0.365
Wants to Work	Unmatch	-0.046	0.013	-3.424	-0.028	0.018	-1.562	-0.03	0.015	-1.997
	Match	-0.039	0.02	-1.897	-0.035	0.028	-1.266	-0.017	0.02	-0.874

**Table 10:** Placebo Matching Test Results

Evaluated Variable	Sample	Comer es Primero		ILAE		Bono Gas				
		Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test	Difference	Std. Dev.	t-test
Treatment vs. Control 1										
Works	Unmatch	0.029	0.013	2.204	0.016	0.016	1.016	0.016	0.015	1.065
	Match	0.031	0.018	1.668	0.021	0.017	0.411	0.017	0.018	0.98
	Unmatch	-0.132	0.046	-2.87	0.055	0.034	-0.949	0.034	0.053	0.648
Wants to Work	Match	0.008	0.061	0.131	0.073	0.03	0.659	0.03	0.06	0.504
	Unmatch	-0.044	0.016	-2.652	0.019	-0.029	-0.957	-0.029	0.019	-1.517
Match	-0.036	0.022	-1.647	0.025	0.005	0.585	0.021	0.021	0.235	
Treatment vs. Control 2										
Works	Unmatch	0.021	0.013	1.633	0.016	0.016	1.015	0.012	0.016	0.766
	Match	0.025	0.018	1.393	0.02	0.017	0.803	0.017	0.018	0.934
	Unmatch	-0.157	0.047	-3.335	0.056	0.011	-0.834	0.011	0.056	0.192
Wants to Work	Match	-0.116	0.064	-1.8	0.074	-0.016	-0.395	-0.016	0.064	-0.254
	Unmatch	-0.049	0.017	-2.887	0.019	-0.03	-1.939	-0.03	0.02	-1.526
Match	-0.037	0.022	-1.675	0.024	-0.02	-1.627	-0.02	0.022	-0.913	
Control 1 vs. Control 2										
Works	Unmatch	0.007	0.016	0.458	0.013	0.003	-0.639	0.003	0.018	0.18
	Match	0.008	0.017	0.487	0.014	-0.004	-0.785	-0.004	0.022	-0.161
	Unmatch	0.026	0.054	0.474	0.046	0.112	2.376	0.112	0.062	1.81
Wants to Work	Match	0.007	0.059	0.119	0.05	0.073	1.361	0.073	0.073	1.004
	Unmatch	0.005	0.019	0.254	0.016	0.005	1.819	0.005	0.021	0.256
Match	0	0.02	0.013	0.017	0.017	1.281	0.017	0.025	0.66	



**Table A-1: Normalized bias (standardized) - Comer es Primero Program**

Variables	1-1 matching			K near matching			Radius Matching		
	Works	Wage	Desire to Work	Works	Wage	Desire to Work	Works	Wage	Desire to Work
<b>Female</b>	5.52	7.44	1.34	7.49	5.71	0.63	7.48	6.56	1.23
<b>Literate</b>	0.04	2.34	2.54	3.61	3.53	1.13	3.74	3.69	1.01
<b>Age</b>	7.78	5.97	0.03	6.69	3.34	0.07	7.77	4.15	1.00
<b>Age^2</b>	7.03	5.05	1.09	6.47	2.93	0.16	7.67	3.86	0.85
<b>Schooling</b>	0.98	1.89	0.69	0.60	0.04	1.52	1.17	0.42	0.80
<b>Schooling^2</b>	1.84	3.52	1.22	1.72	1.23	1.42	2.29	0.74	0.65
<b>Schooling X Age</b>	4.65	3.42	0.90	3.36	2.71	1.09	3.55	3.61	0.86
<b>Head of Household</b>	8.35	4.78	0.63	4.95	4.58	0.07	5.14	4.24	0.89
<b>Household Size</b>	3.15	3.43	2.49	1.55	3.29	1.76	0.85	3.69	1.64
<b># Adults 18-65</b>	6.36	3.85	0.53	2.99	3.33	1.73	2.37	3.61	1.66
<b># Seniors 65+</b>	4.78	1.67	2.18	2.92	2.12	2.33	2.78	2.24	1.99
<b>Married</b>	4.84	2.23	0.12	2.13	1.93	0.33	2.72	2.58	0.09
<b># Children 0-5</b>	1.12	1.31	2.14	2.32	0.14	0.38	1.30	0.04	0.07
<b># Children 6-15</b>	2.03	0.95	1.80	2.41	1.98	0.75	2.19	2.02	0.55
<b>Female x # Child 0-5</b>	8.32	2.04	0.86	7.66	1.12	0.55	6.52	1.14	0.29
<b>Extreme Poverty</b>	0.12	0.67	0.78	0.33	0.30	0.36	0.43	0.34	0.12

NOTE: These tables present the value of the standardized bias statistic after the matching. The general rule is that if the value of the statistic is less than 20, the difference between the values of the control group and the treatment group is not significant.

NOTE 2: Different methodologies for the entire population were used for these tables (15-98 years old).

NOTE 3: The control group was selected using the corresponding variables in the database of the survey. To evaluate all programs (last table), families who have benefited from any of the three programs are defined as treatment (CEP, and Bonogas ILAES).

NOTE 4: The Work variable is a dummy that takes the value of 1 if the individual works and 0 if unemployed. The wage is measured as the natural logarithm of monthly labor wage, the desire to work is measured as a variable that assumes 1 if the subject works or is looking for work (unemployed) and 0 if the individual is not working nor looking for work (not in the workforce). For the rest of the analysis Kernel matching is used as selected methodology.

**Table A-1: Normalized bias (standardized) - Comer es Primero Program (Cont.)**

Variables	Kernel Matching			Local linear regression			Mahalanobis		
	Works	Wage	Desire to Work	Works	Wage	Desire to Work	Works	Wage	Desire to Work
<b>Female</b>	7.57	6.50	1.20	6.10	8.36	1.34	2.66	0.90	0.26
<b>Literate</b>	3.35	3.50	0.85	1.89	0.40	5.92	0.51	0.70	0.27
<b>Age</b>	7.27	4.12	0.77	5.86	4.23	0.70	1.82	1.33	1.26
<b>Age^2</b>	7.13	3.76	0.54	5.18	3.19	1.52	2.90	2.36	2.01
<b>Schooling</b>	1.09	0.26	0.81	0.46	2.07	0.44	5.12	4.52	2.68
<b>Schooling^2</b>	2.12	0.90	0.75	0.65	3.80	1.15	3.72	3.08	1.42
<b>Schooling X Age</b>	3.22	3.46	0.67	4.36	2.55	0.37	3.63	3.87	2.05
<b>Head of Household</b>	4.83	3.99	0.84	5.97	4.35	1.89	1.54	2.09	0.80
<b>Household Size</b>	1.39	3.60	1.49	0.49	4.36	3.43	19.98	18.31	16.15
<b># Adults 18-65</b>	2.57	3.70	1.55	3.28	5.43	1.17	7.05	7.40	7.00
<b># Seniors 65+</b>	3.27	2.84	2.30	7.13	1.47	2.95	9.29	7.47	7.26
<b>Married</b>	2.63	2.11	0.09	2.77	0.22	0.54	2.16	1.05	0.20
<b># Children 0-5</b>	1.18	0.07	0.28	1.22	1.09	2.83	5.34	5.97	4.75
<b># Children 6-15</b>	1.46	1.79	0.75	0.91	0.12	1.11	14.50	12.55	9.29
<b>Female x # Child 0-5</b>	6.43	1.44	0.50	9.11	2.16	1.19	2.96	3.36	2.87
<b>Extreme Poverty</b>	0.43	0.34	0.10	0.54	0.43	1.39	10.15	10.11	8.15

NOTE: These tables present the value of the standardized bias statistic after the matching. The general rule is that if the value of the statistic is less than 20, the difference between the values of the control group and the treatment group is not significant.

NOTE 2: Different methodologies for the entire population were used for these tables (15-98 years old).

NOTE 3: The control group was selected using the corresponding variables in the database of the survey. To evaluate all programs (last table), families who have benefited from any of the three programs are defined as treatment (CEP, and Bonogas ILAES).

NOTE 4: The Work variable is a dummy that takes the value of 1 if the individual works and 0 if unemployed. The wage is measured as the natural logarithm of monthly labor wage, the desire to work is measured as a variable that assumes 1 if the subject works or is looking for work (unemployed) and 0 if the individual is not working nor looking for work (not in the workforce). For the rest of the analysis Kernel matching is used as selected methodology.

**Table A-2: Normalized bias (standardized) - ILAE Program**

Variables	1-1 matching			K near matching			Radius Matching		
	Works	Wage	Desire to Work	Works	Wage	Desire to Work	Works	Wage	Desire to Work
Female	1.67	3.42	1.78	6.67	5.15	1.50	9.04	5.52	0.98
Literate	4.45	8.36	1.26	5.90	6.33	0.94	4.15	5.38	0.09
Age	9.66	10.46	1.85	13.34	12.13	1.33	11.83	10.38	0.84
Age^2	8.98	8.19	2.14	13.42	10.55	1.25	11.89	9.02	1.06
Schooling	4.39	6.13	2.35	8.89	6.74	1.20	8.31	7.85	0.04
Schooling^2	3.02	3.71	3.24	7.43	5.38	2.51	7.60	7.24	0.42
Schooling X Age	0.67	0.03	1.61	4.32	0.85	0.97	3.46	1.45	0.16
Head of Household	7.34	12.88	2.72	7.58	8.53	1.90	8.16	9.21	2.08
Household Size	9.24	6.50	6.70	9.81	3.27	3.92	11.74	4.99	4.95
# Adults 18-65	9.22	5.93	6.89	8.52	1.69	3.50	10.43	3.70	3.86
# Seniors 65+	0.23	2.31	0.46	3.27	4.47	1.21	0.36	1.92	0.00
Married	5.19	2.16	3.89	1.54	0.44	2.29	3.10	0.81	2.50
# Children 0-5	0.24	2.92	2.47	0.73	4.04	0.05	0.20	2.04	0.35
# Children 6-15	4.93	2.07	2.94	5.61	0.38	1.67	4.34	0.22	2.12
Female x # Child 0-5	3.21	1.64	5.15	2.03	6.14	0.77	3.14	4.34	0.21
Extreme Poverty	4.92	5.05	4.15	7.36	4.12	3.69	7.82	3.94	4.53

NOTE: These tables present the value of the standardized bias statistic after the matching. The general rule is that if the value of the statistic is less than 20, the difference between the values of the control group and the treatment group is not significant.

NOTE 2: Different methodologies for the entire population were used for these tables (15-98 years old).

NOTE 3: The control group was selected using the corresponding variables in the database of the survey. To evaluate all programs (last table), families who have benefited from any of the three programs are defined as treatment (CEP, and Bonogas ILAES).

NOTE 4: The Work variable is a dummy that takes the value of 1 if the individual works and 0 if unemployed. The wage is measured as the natural logarithm of monthly labor wage, the desire to work is measured as a variable that assumes 1 if the subject works or is looking for work (unemployed) and 0 if the individual is not working nor looking for work (not in the workforce). For the rest of the analysis Kernel matching is used as selected methodology.

**Table A-2: Normalized bias (standardized) - ILAE Program (Cont.)**

Variables	Kernel Matching			Local linear regression			Mahalanobis		
	Works	Wage	Desire to Work	Works	Wage	Desire to Work	Works	Wage	Desire to Work
<b>Female</b>	8.90	5.73	0.86	0.39	2.35	1.55	1.43	0.83	0.15
<b>Literate</b>	3.58	5.54	0.20	3.73	7.77	1.24	0.36	0.34	0.00
<b>Age</b>	11.25	10.13	0.49	11.17	12.22	1.45	0.19	0.30	1.12
<b>Age^2</b>	11.31	8.82	0.67	10.25	9.73	1.60	0.02	0.55	1.48
<b>Schooling</b>	7.08	7.19	0.59	4.37	6.69	2.08	5.06	3.52	2.75
<b>Schooling^2</b>	6.40	6.45	1.03	2.73	3.60	3.35	4.31	2.64	1.81
<b>Schooling X Age</b>	2.62	1.22	0.49	1.03	0.42	0.86	3.40	1.86	1.47
<b>Head of Household</b>	7.87	9.61	2.07	6.78	11.98	1.97	0.81	0.54	0.00
<b>Household Size</b>	11.27	4.70	4.41	10.75	9.17	8.24	22.69	22.44	18.13
<b># Adults 18-65</b>	9.49	3.25	3.25	10.52	6.96	6.93	7.26	6.97	3.83
<b># Seniors 65+</b>	0.14	2.38	0.12	0.44	2.36	0.90	2.88	4.53	4.64
<b>Married</b>	2.77	0.32	2.51	5.88	0.44	3.73	0.81	0.27	0.30
<b># Children 0-5</b>	0.09	1.89	0.57	0.19	5.81	0.83	8.30	8.06	5.87
<b># Children 6-15</b>	4.76	0.60	2.14	5.46	3.55	4.00	19.84	19.52	16.21
<b>Female x # Child 0-5</b>	2.86	4.35	0.48	2.09	4.54	3.02	2.57	3.54	3.37
<b>Extreme Poverty</b>	8.33	4.43	4.54	5.78	5.63	3.86	4.97	4.26	2.23

NOTE: These tables present the value of the standardized bias statistic after the matching. The general rule is that if the value of the statistic is less than 20, the difference between the values of the control group and the treatment group is not significant.

NOTE 2: Different methodologies for the entire population were used for these tables (15-98 years old).

NOTE 3: The control group was selected using the corresponding variables in the database of the survey. To evaluate all programs (last table), families who have benefited from any of the three programs are defined as treatment (CEP, and Bonogas ILAES).

NOTE 4: The Work variable is a dummy that takes the value of 1 if the individual works and 0 if unemployed. The wage is measured as the natural logarithm of monthly labor wage, the desire to work is measured as a variable that assumes 1 if the subject works or is looking for work (unemployed) and 0 if the individual is not working nor looking for work (not in the workforce). For the rest of the analysis Kernel matching is used as selected methodology.

**Table A-3: Normalized bias (standardized) - Bono Gas Program**

Variables	1-1 matching			K near matching			Radius Matching		
	Works	Wage	Desire to Work	Works	Wage	Desire to Work	Works	Wage	Desire to Work
Female	0.07	2.72	0.90	1.47	1.33	0.02	1.35	0.95	0.02
Literate	2.49	3.74	0.01	0.55	0.70	0.83	0.22	2.23	1.26
Age	0.95	3.74	0.17	0.65	0.04	0.42	2.31	0.88	0.63
Age^2	0.28	4.69	0.09	0.59	1.03	0.06	1.46	0.09	0.82
Schooling	3.12	3.09	1.20	3.04	1.46	2.00	4.39	2.47	2.43
Schooling^2	1.61	3.54	0.42	2.59	0.51	2.07	3.83	1.23	2.38
Schooling X Age	3.22	0.84	3.00	3.46	2.35	2.05	3.77	2.85	2.84
Head of Household	6.68	8.78	4.81	6.38	6.53	3.56	6.67	6.31	2.96
Household Size	3.75	2.07	0.15	1.55	0.16	0.40	1.77	0.53	0.34
# Adults 18-65	7.66	0.28	1.65	4.63	0.99	0.99	5.06	1.55	1.95
# Seniors 65+	0.81	1.79	0.76	0.36	1.28	2.16	0.17	0.87	3.16
Married	1.17	1.81	1.32	3.55	3.62	0.08	3.45	3.93	0.35
# Children 0-5	1.37	1.89	0.71	1.80	2.45	2.22	1.77	1.77	1.61
# Children 6-15	3.73	6.29	2.38	3.89	2.27	0.30	3.74	2.45	0.53
Female x # Child 0-5	0.27	0.83	0.91	1.28	1.43	1.68	1.84	0.29	0.67
Extreme Poverty	3.24	2.27	0.42	2.28	1.72	0.82	2.40	1.48	0.70

NOTE: These tables present the value of the standardized bias statistic after the matching. The general rule is that if the value of the statistic is less than 20, the difference between the values of the control group and the treatment group is not significant.

NOTE 2: Different methodologies for the entire population were used for these tables (15-98 years old).

NOTE 3: The control group was selected using the corresponding variables in the database of the survey. To evaluate all programs (last table), families who have benefited from any of the three programs are defined as treatment (CEP, and Bonogas ILAES).

NOTE 4: The Work variable is a dummy that takes the value of 1 if the individual works and 0 if unemployed. The wage is measured as the natural logarithm of monthly labor wage, the desire to work is measured as a variable that assumes 1 if the subject works or is looking for work (unemployed) and 0 if the individual is not working nor looking for work (not in the workforce). For the rest of the analysis Kernel matching is used as selected methodology.

**Table A-3: Normalized bias (standardized) - Bono Gas Program (Cont.)**

Variables	Kernel Matching			Local linear regression			Mahalanobis		
	Works	Wage	Desire to Work	Works	Wage	Desire to Work	Works	Wage	Desire to Work
<b>Female</b>	0.89	0.78	0.16	1.15	3.14	0.21	1.54	0.26	0.44
<b>Literate</b>	0.09	1.80	0.94	1.49	3.60	0.58	0.09	0.25	0.25
<b>Age</b>	1.29	0.14	0.42	0.08	4.62	0.40	2.55	1.68	1.63
<b>Age^2</b>	0.27	1.04	0.58	1.35	5.67	0.24	3.08	2.20	2.13
<b>Schooling</b>	3.18	1.46	1.62	4.45	2.96	1.82	1.79	1.39	1.43
<b>Schooling^2</b>	2.50	0.19	1.36	3.07	3.17	0.34	0.27	0.66	0.17
<b>Schooling X Age</b>	3.06	2.34	2.20	4.82	0.22	2.89	0.60	0.11	0.17
<b>Head of Household</b>	6.29	6.39	2.95	5.50	8.14	4.72	2.12	2.83	0.92
<b>Household Size</b>	0.98	0.33	0.05	4.65	1.37	0.64	20.92	18.83	16.82
<b># Adults 18-65</b>	4.65	1.20	1.69	8.43	0.84	2.13	10.17	9.77	9.02
<b># Seniors 65+</b>	0.04	1.03	3.17	0.78	2.28	1.06	10.41	8.95	7.73
<b>Married</b>	3.62	3.57	0.50	0.23	1.30	0.70	1.02	0.88	0.30
<b># Children 0-5</b>	2.33	2.26	1.91	0.88	1.82	0.74	3.97	4.89	4.70
<b># Children 6-15</b>	4.34	3.28	0.45	3.42	3.79	1.88	13.00	10.89	7.99
<b>Female x # Child 0-5</b>	1.38	0.05	0.84	1.08	0.56	0.69	2.20	2.96	3.14
<b>Extreme Poverty</b>	2.34	1.62	0.73	3.61	2.25	0.56	7.31	7.23	5.69

NOTE: These tables present the value of the standardized bias statistic after the matching. The general rule is that if the value of the statistic is less than 20, the difference between the values of the control group and the treatment group is not significant.

NOTE 2: Different methodologies for the entire population were used for these tables (15-98 years old).

NOTE 3: The control group was selected using the corresponding variables in the database of the survey. To evaluate all programs (last table), families who have benefited from any of the three programs are defined as treatment (CEP, and Bonogas ILAES).

NOTE 4: The Work variable is a dummy that takes the value of 1 if the individual works and 0 if unemployed. The wage is measured as the natural logarithm of monthly labor wage, the desire to work is measured as a variable that assumes 1 if the subject works or is looking for work (unemployed) and 0 if the individual is not working nor looking for work (not in the workforce). For the rest of the analysis Kernel matching is used as selected methodology.

**Table A-4: Normalized bias (standardized) - All Programs**

Variables	1-1 matching			K near matching			Radius Matching		
	Works	Wage	Desire to Work	Works	Wage	Desire to Work	Works	Wage	Desire to Work
<b>Female</b>	0.07	2.72	0.90	1.47	1.33	0.02	1.35	0.95	0.02
<b>Literate</b>	2.49	3.74	0.01	0.55	0.70	0.83	0.22	2.23	1.26
<b>Age</b>	0.95	3.74	0.17	0.65	0.04	0.42	2.31	0.88	0.63
<b>Age^2</b>	0.28	4.69	0.09	0.59	1.03	0.06	1.46	0.09	0.82
<b>Schooling</b>	3.12	3.09	1.20	3.04	1.46	2.00	4.39	2.47	2.43
<b>Schooling^2</b>	1.61	3.54	0.42	2.59	0.51	2.07	3.83	1.23	2.38
<b>Schooling X Age</b>	3.22	0.84	3.00	3.46	2.35	2.05	3.77	2.85	2.84
<b>Head of Household</b>	6.68	8.78	4.81	6.38	6.53	3.56	6.67	6.31	2.96
<b>Household Size</b>	3.75	2.07	0.15	1.55	0.16	0.40	1.77	0.53	0.34
<b># Adults 18-65</b>	7.66	0.28	1.65	4.63	0.99	0.99	5.06	1.55	1.95
<b># Seniors 65+</b>	0.81	1.79	0.76	0.36	1.28	2.16	0.17	0.87	3.16
<b>Married</b>	1.17	1.81	1.32	3.55	3.62	0.08	3.45	3.93	0.35
<b># Children 0-5</b>	1.37	1.89	0.71	1.80	2.45	2.22	1.77	1.77	1.61
<b># Children 6-15</b>	3.73	6.29	2.38	3.89	2.27	0.30	3.74	2.45	0.53
<b>Female x # Child 0-5</b>	0.27	0.83	0.91	1.28	1.43	1.68	1.84	0.29	0.67
<b>Extreme Poverty</b>	3.24	2.27	0.42	2.28	1.72	0.82	2.40	1.48	0.70

NOTE: These tables present the value of the standardized bias statistic after the matching. The general rule is that if the value of the statistic is less than 20, the difference between the values of the control group and the treatment group is not significant.

NOTE 2: Different methodologies for the entire population were used for these tables (15-98 years old).

NOTE 3: The control group was selected using the corresponding variables in the database of the survey. To evaluate all programs (last table), families who have benefited from any of the three programs are defined as treatment (CEP, and Bonogas ILAES).

NOTE 4: The Work variable is a dummy that takes the value of 1 if the individual works and 0 if unemployed. The wage is measured as the natural logarithm of monthly labor wage, the desire to work is measured as a variable that assumes 1 if the subject works or is looking for work (unemployed) and 0 if the individual is not working nor looking for work (not in the workforce). For the rest of the analysis Kernel matching is used as selected methodology.

**Table A-4: Normalized bias (standardized) - All Programs (Cont.)**

Variables	Kernel Matching			Local linear regression			Mahalanobis		
	Works	Wage	Desire to Work	Works	Wage	Desire to Work	Works	Wage	Desire to Work
<b>Female</b>	0.89	0.78	0.16	1.15	3.14	0.21	1.54	0.26	0.44
<b>Literate</b>	0.09	1.80	0.94	1.49	3.60	0.58	0.09	0.25	0.25
<b>Age</b>	1.29	0.14	0.42	0.08	4.62	0.40	2.55	1.68	1.63
<b>Age^2</b>	0.27	1.04	0.58	1.35	5.67	0.24	3.08	2.20	2.13
<b>Schooling</b>	3.18	1.46	1.62	4.45	2.96	1.82	1.79	1.39	1.43
<b>Schooling^2</b>	2.50	0.19	1.36	3.07	3.17	0.34	0.27	0.66	0.17
<b>Schooling X Age</b>	3.06	2.34	2.20	4.82	0.22	2.89	0.60	0.11	0.17
<b>Head of Household</b>	6.29	6.39	2.95	5.50	8.14	4.72	2.12	2.83	0.92
<b>Household Size</b>	0.98	0.33	0.05	4.65	1.37	0.64	20.92	18.83	16.82
<b># Adults 18-65</b>	4.65	1.20	1.69	8.43	0.84	2.13	10.17	9.77	9.02
<b># Seniors 65+</b>	0.04	1.03	3.17	0.78	2.28	1.06	10.41	8.95	7.73
<b>Married</b>	3.62	3.57	0.50	0.23	1.30	0.70	1.02	0.88	0.30
<b># Children 0-5</b>	2.33	2.26	1.91	0.88	1.82	0.74	3.97	4.89	4.70
<b># Children 6-15</b>	4.34	3.28	0.45	3.42	3.79	1.88	13.00	10.89	7.99
<b>Female x # Child 0-5</b>	1.38	0.05	0.84	1.08	0.56	0.69	2.20	2.96	3.14
<b>Extreme Poverty</b>	2.34	1.62	0.73	3.61	2.25	0.56	7.31	7.23	5.69

NOTE: These tables present the value of the standardized bias statistic after the matching. The general rule is that if the value of the statistic is less than 20, the difference between the values of the control group and the treatment group is not significant.

NOTE 2: Different methodologies for the entire population were used for these tables (15-98 years old).

NOTE 3: The control group was selected using the corresponding variables in the database of the survey. To evaluate all programs (last table), families who have benefited from any of the three programs are defined as treatment (CEP, and Bonogas ILAES).

NOTE 4: The Work variable is a dummy that takes the value of 1 if the individual works and 0 if unemployed. The wage is measured as the natural logarithm of monthly labor wage, the desire to work is measured as a variable that assumes 1 if the subject works or is looking for work (unemployed) and 0 if the individual is not working nor looking for work (not in the workforce). For the rest of the analysis Kernel matching is used as selected methodology.



**Table B-1: Matching Results - Comer es Primero Program**

Methodology	Evaluated Variable	Sample	Treatment	Control	Difference	Std. Dev.	t-test
1-1 matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.845	0.035	0.017	2.129
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.265	-0.056	0.052	-1.074
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.575	-0.005	0.017	-0.299
K near	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.859	0.021	0.014	1.550
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.264	-0.055	0.045	-1.246
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.593	-0.023	0.015	-1.557
Radius Matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.855	0.025	0.014	1.833
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.267	-0.058	0.044	-1.313
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.595	-0.026	0.015	-1.780
Kernel matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.855	0.026	0.014	1.868
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.268	-0.059	0.044	-1.335
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.594	-0.024	0.015	-1.651
Local linear regression	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.878	.	.	.	.
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.199	.	.	.	.
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.567	0.576	-0.009	.	.
Mahalanobis	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.878	0.860	0.018	0.016	1.156
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.201	8.330	-0.129	0.052	-2.463
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.567	0.575	-0.008	0.017	-0.469

**Table B-2: Matching Program Results - ILAES Program**

Methodology	Evaluated Variable	Sample	Treatment	Control	Difference	Std. Dev.	t-test
1-1 matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.845	0.035	0.017	2.129
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.265	-0.056	0.052	-1.074
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.575	-0.005	0.017	-0.299
K near	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.859	0.021	0.014	1.550
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.264	-0.055	0.045	-1.246
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.593	-0.023	0.015	-1.557
Radius Matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.855	0.025	0.014	1.833
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.267	-0.058	0.044	-1.313
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.595	-0.026	0.015	-1.780
Kernel matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.855	0.026	0.014	1.868
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.268	-0.059	0.044	-1.335
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.594	-0.024	0.015	-1.651
Local linear regression	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.878	.	.	.	.
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.199	.	.	.	.
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.567	0.576	-0.009	.	.
Mahalanobis	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.878	0.860	0.018	0.016	1.156
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.201	8.330	-0.129	0.052	-2.463
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.567	0.575	-0.008	0.017	-0.469

**Table B-3: Matching Results - Bono Gas Program**

Methodology	Evaluated Variable	Sample	Treatment	Control	Difference	Std. Dev.	t-test
1-1 matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.845	0.035	0.017	2.129
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.265	-0.056	0.052	-1.074
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.575	-0.005	0.017	-0.299
K near	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.859	0.021	0.014	1.550
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.264	-0.055	0.045	-1.246
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.593	-0.023	0.015	-1.557
Radius Matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.855	0.025	0.014	1.833
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.267	-0.058	0.044	-1.313
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.595	-0.026	0.015	-1.780
Kernel matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.855	0.026	0.014	1.868
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.268	-0.059	0.044	-1.335
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.594	-0.024	0.015	-1.651
Local linear regression	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.878	.	.	.	.
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.199	.	.	.	.
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.567	0.576	-0.009	.	.
Mahalanobis	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.878	0.860	0.018	0.016	1.156
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.201	8.330	-0.129	0.052	-2.463
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.567	0.575	-0.008	0.017	-0.469

**Table B-4: Matching Results - All Programs**

Methodology	Evaluated Variable	Sample	Treatment	Control	Difference	Std. Dev.	t-test
1-1 matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.845	0.035	0.017	2.129
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.265	-0.056	0.052	-1.074
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.575	-0.005	0.017	-0.299
K near	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.859	0.021	0.014	1.550
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.264	-0.055	0.045	-1.246
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.593	-0.023	0.015	-1.557
Radius Matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.855	0.025	0.014	1.833
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.267	-0.058	0.044	-1.313
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.595	-0.026	0.015	-1.780
Kernel matching	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.880	0.855	0.026	0.014	1.868
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.209	8.268	-0.059	0.044	-1.335
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.569	0.594	-0.024	0.015	-1.651
Local linear regression	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.878	.	.	.	.
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.199	.	.	.	.
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.567	0.576	-0.009	.	.
Mahalanobis	Works	Unmatch	0.878	0.845	0.033	0.010	3.205
		Match	0.878	0.860	0.018	0.016	1.156
	Wage	Unmatch	8.201	8.404	-0.203	0.035	-5.856
		Match	8.201	8.330	-0.129	0.052	-2.463
	Desire to Work	Unmatch	0.567	0.617	-0.050	0.011	-4.424
		Match	0.567	0.575	-0.008	0.017	-0.469

**Table C-1: Results by Age Group - Comer es Primero Program**

Variables	Young adults:15-24			Adults: 25-64			Seniors: 65+		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	1.864	9.658	0.387	3.230	5.911	0.286	13.541	8.688	1.914
Literate	12.165	1.121	6.963	6.002	4.169	3.211	3.767	0.442	1.265
Age	13.190	6.170	0.612	1.412	2.975	0.662	31.219	9.732	3.447
Age^2	11.950	5.541	0.565	0.939	3.038	0.684	30.822	9.455	2.971
Schooling	5.872	4.213	3.423	1.577	0.867	1.527	1.088	2.390	5.505
Schooling^2	7.380	6.108	3.831	1.051	0.457	0.953	0.412	2.516	4.946
Schooling X Age	8.327	5.006	3.292	1.715	0.780	1.202	1.771	2.646	5.501
Head of Household	5.338	10.113	4.605	2.426	1.883	2.621	0.618	2.804	4.582
Household Size	4.879	1.230	1.688	1.655	5.605	2.826	2.811	17.472	6.407
# Adults 18-65	16.123	0.969	3.263	1.658	4.417	4.074	8.327	3.970	2.726
# Seniors 65+	5.684	8.290	2.857	2.992	1.771	0.845	5.664	5.435	0.076
Married	8.202	11.324	0.201	1.321	0.627	0.351	9.879	3.575	3.995
# Children 0-5	4.967	5.507	7.033	2.965	1.476	2.488	9.514	14.339	7.108
# Children 6-15	1.471	3.662	1.579	2.811	4.369	0.213	1.943	22.749	5.088
Female x # Child 0-5	1.719	0.608	6.195	4.593	0.592	1.505	6.735	9.453	10.945
Extreme Poverty	2.181	2.895	1.523	0.031	0.217	0.343	4.670	2.188	1.838

NOTE: These exercises are performed using Kernel Matching. The values presented correspond to the standardized bias. For the younger group the variable related to being head of household is not used. Instead, the variable gender of the household head is used.

**Table C-2: Results by Age Group - ILAE Program**

Variables	Young adults:15-24			Adults: 25-64			Seniors: 65+		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	11.903	2.928	0.291	1.688	1.874	0.829	17.162	9.025	7.646
Literate	10.054	5.807	0.598	5.471	2.080	1.950	21.645	7.203	2.585
Age	8.380	6.668	1.488	6.521	3.338	0.610	5.393	4.014	9.807
Age^2	6.767	4.559	1.036	6.183	3.272	0.534	4.792	4.418	9.310
Schooling	2.106	5.982	0.337	2.462	3.538	1.096	35.737	8.321	8.191
Schooling^2	3.124	8.561	1.410	1.745	3.778	1.353	46.738	21.193	11.622
Schooling X Age	5.074	8.219	0.286	3.193	4.433	0.792	37.176	7.396	7.353
Head of Household	11.953	17.236	5.867	8.826	6.089	1.723	18.061	3.070	4.649
Household Size	3.254	8.536	6.519	5.862	3.368	2.539	19.078	10.450	6.900
# Adults 18-65	13.052	13.533	2.137	0.477	1.294	2.229	24.371	4.886	4.413
# Seniors 65+	3.784	4.418	3.956	6.519	0.668	0.259	7.919	4.811	2.536
Married	5.920	10.161	2.094	2.533	0.230	1.928	3.479	6.574	5.259
# Children 0-5	5.332	6.610	4.896	1.291	0.952	2.136	21.085	15.328	0.206
# Children 6-15	19.452	27.564	0.104	4.406	5.483	2.190	2.139	10.682	11.063
Female x # Child 0-5	1.120	5.959	0.052	5.965	4.359	2.201	4.631	14.862	1.119
Extreme Poverty	2.358	0.715	5.763	6.892	6.900	4.115	12.552	11.821	10.189

NOTE: These exercises are performed using Kernel Matching. The values presented correspond to the standardized bias. For the younger group the variable related to being head of household is not used. Instead, the variable gender of the household head is used.

**Table C-3: Results by Age Group - Bono Gas Program**

Variables	Young adults:15-24			Adults: 25-64			Seniors: 65+		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	10.643	1.840	3.559	0.055	0.358	0.872	5.879	5.177	11.479
Literate	8.980	1.277	4.526	6.399	4.430	2.122	16.197	5.959	5.248
Age	0.486	1.821	0.747	1.722	3.081	0.695	15.421	17.784	6.621
Age^2	0.112	2.896	0.662	2.279	3.718	0.667	14.876	17.530	6.782
Schooling	13.535	11.739	1.284	0.403	0.203	2.269	2.167	7.164	1.781
Schooling^2	12.862	13.532	0.369	0.585	0.336	2.570	2.735	3.295	0.767
Schooling X Age	12.634	10.422	1.588	0.299	0.344	2.244	1.897	6.813	0.987
Head of Household	10.474	20.310	1.023	5.114	5.786	3.400	13.945	8.119	6.858
Household Size	5.655	2.108	5.570	0.319	1.935	1.463	6.558	5.570	1.522
# Adults 18-65	3.742	8.957	2.719	0.566	1.751	2.720	3.302	1.157	2.297
# Seniors 65+	5.384	21.015	2.083	1.406	2.259	0.102	26.562	2.238	3.674
Married	7.500	5.144	0.840	4.112	0.958	1.673	6.786	2.250	5.493
# Children 0-5	10.321	10.944	1.110	2.416	1.942	0.959	1.392	8.964	0.023
# Children 6-15	2.815	6.341	2.842	3.436	3.968	1.037	3.927	6.890	0.147
Female x # Child 0-5	16.171	10.232	1.936	3.183	0.096	0.447	24.163	8.924	3.536
Extreme Poverty	0.332	6.411	1.269	0.432	0.164	2.006	7.623	1.447	0.194

NOTE: These exercises are performed using Kernel Matching. The values presented correspond to the standardized bias. For the younger group the variable related to being head of household is not used. Instead, the variable gender of the household head is used.

**Table C-4: Results by Age Group - All Programs**

Variables	Young adults:15-24			Adults: 25-64			Seniors: 65+		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	10.643	1.840	3.559	0.055	0.358	0.872	5.879	5.177	11.479
Literate	8.980	1.277	4.526	6.399	4.430	2.122	16.197	5.959	5.248
Age	0.486	1.821	0.747	1.722	3.081	0.695	15.421	17.784	6.621
Age^2	0.112	2.896	0.662	2.279	3.718	0.667	14.876	17.530	6.782
Schooling	13.535	11.739	1.284	0.403	0.203	2.269	2.167	7.164	1.781
Schooling^2	12.862	13.532	0.369	0.585	0.336	2.570	2.735	3.295	0.767
Schooling X Age	12.634	10.422	1.588	0.299	0.344	2.244	1.897	6.813	0.987
Head of Household	10.474	20.310	1.023	5.114	5.786	3.400	13.945	8.119	6.858
Household Size	5.655	2.108	5.570	0.319	1.935	1.463	6.558	5.570	1.522
# Adults 18-65	3.742	8.957	2.719	0.566	1.751	2.720	3.302	1.157	2.297
# Seniors 65+	5.384	21.015	2.083	1.406	2.259	0.102	26.562	2.238	3.674
Married	7.500	5.144	0.840	4.112	0.958	1.673	6.786	2.250	5.493
# Children 0-5	10.321	10.944	1.110	2.416	1.942	0.959	1.392	8.964	0.023
# Children 6-15	2.815	6.341	2.842	3.436	3.968	1.037	3.927	6.890	0.147
Female x # Child 0-5	16.171	10.232	1.936	3.183	0.096	0.447	24.163	8.924	3.536
Extreme Poverty	0.332	6.411	1.269	0.432	0.164	2.006	7.623	1.447	0.194

NOTE: These exercises are performed using Kernel Matching. The values presented correspond to the standardized bias. For the younger group the variable related to being head of household is not used. Instead, the variable gender of the household head is used.

**Table C-5: Results by Gender - Comer es Primero Program**

Variables	Male			Female		
	Works	Wage	Desire to work	Works	Wage	Desire to work
Literate	1.714	1.643	0.374	3.073	8.035	6.093
Age	1.518	1.555	0.390	3.782	0.098	3.386
Age^2	0.969	1.968	0.195	3.158	0.554	3.333
Schooling	0.287	1.013	1.027	1.743	3.953	4.196
Schooling^2	2.046	0.810	1.140	3.505	1.521	3.896
Schooling X Age	0.318	0.371	0.140	5.449	2.529	3.539
Head of Household	2.292	0.434	0.974	0.800	1.127	0.457
Household Size	2.565	0.354	2.254	0.323	7.684	0.039
# Adults 18-65	1.606	3.348	1.156	1.826	8.986	2.211
# Seniors 65+	2.451	3.145	6.447	1.229	3.321	4.229
Married	2.007	3.552	4.226	4.979	7.535	2.019
# Children 0-5	2.817	3.056	3.103	2.669	5.915	0.700
# Children 6-15	5.096	3.158	5.135	1.345	2.443	0.170
Extreme Poverty	0.985	1.039	0.894	0.290	0.620	0.945

NOTE: These exercises are performed using Kernel Matching. The values presented correspond to the standardized bias. For the younger group the variable related to being head of household is not used. Instead, the variable gender of the household head is used.

**Table C-6: Results by Gender - ILAE Program**

Variables	Male			Female		
	Works	Wage	Desire to work	Works	Wage	Desire to work
Literate	4.254	1.757	1.851	11.860	12.652	4.050
Age	3.642	4.985	6.010	1.679	3.517	8.936
Age^2	4.094	5.321	6.111	0.889	3.040	8.764
Schooling	5.667	2.841	2.649	6.425	14.069	6.475
Schooling^2	6.023	2.227	2.402	7.910	12.503	6.388
Schooling X Age	6.254	3.649	4.556	6.516	12.460	2.503
Head of Household	3.092	3.129	0.217	3.533	1.228	0.971
Household Size	5.699	0.540	3.081	1.925	0.547	3.515
# Adults 18-65	11.666	11.050	9.115	0.193	8.074	1.822
# Seniors 65+	4.153	0.795	0.583	5.486	3.935	0.064
Married	1.253	1.250	2.253	1.841	3.518	0.727
# Children 0-5	0.944	2.334	1.123	4.244	14.904	0.868
# Children 6-15	7.106	11.551	7.214	4.634	0.636	7.970
Extreme Poverty	2.940	8.622	3.120	0.830	7.996	0.051

NOTE: These exercises are performed using Kernel Matching. The values presented correspond to the standardized bias. For the younger group the variable related to being head of household is not used. Instead, the variable gender of the household head is used.

**Table C-7: Results by Gender - Bono Gas Program**

Variables	Male			Female		
	Works	Wage	Desire to work	Works	Wage	Desire to work
Literate	5.137	10.313	5.386	7.159	5.607	0.645
Age	6.628	3.084	4.492	0.399	2.963	1.223
Age^2	6.885	2.811	4.668	0.049	3.650	1.113
Schooling	2.243	0.102	1.277	6.829	2.290	0.707
Schooling^2	1.546	0.984	1.009	7.949	4.413	0.152
Schooling X Age	1.248	1.124	2.602	4.573	0.497	1.183
Head of Household	2.209	0.152	3.396	0.769	1.797	0.050
Household Size	1.261	0.555	1.256	0.583	0.000	1.939
# Adults 18-65	3.363	1.153	5.360	6.194	2.452	0.931
# Seniors 65+	4.033	1.272	4.726	5.512	11.043	1.131
Married	3.277	2.490	3.203	0.544	6.647	0.974
# Children 0-5	0.444	1.201	1.475	3.938	5.231	1.574
# Children 6-15	3.074	0.265	1.837	1.675	8.088	0.818
Extreme Poverty	5.577	7.075	3.455	5.539	7.321	0.012

NOTE: These exercises are performed using Kernel Matching. The values presented correspond to the standardized bias. For the younger group the variable related to being head of household is not used. Instead, the variable gender of the household head is used.

**Table C-8: Results by Gender - All Programs**

Variables	Male			Female		
	Works	Wage	Desire to work	Works	Wage	Desire to work
Literate	5.137	10.313	5.386	7.159	5.607	0.645
Age	6.628	3.084	4.492	0.399	2.963	1.223
Age^2	6.885	2.811	4.668	0.049	3.650	1.113
Schooling	2.243	0.102	1.277	6.829	2.290	0.707
Schooling^2	1.546	0.984	1.009	7.949	4.413	0.152
Schooling X Age	1.248	1.124	2.602	4.573	0.497	1.183
Head of Household	2.209	0.152	3.396	0.769	1.797	0.050
Household Size	1.261	0.555	1.256	0.583	0.000	1.939
# Adults 18-65	3.363	1.153	5.360	6.194	2.452	0.931
# Seniors 65+	4.033	1.272	4.726	5.512	11.043	1.131
Married	3.277	2.490	3.203	0.544	6.647	0.974
# Children 0-5	0.444	1.201	1.475	3.938	5.231	1.574
# Children 6-15	3.074	0.265	1.837	1.675	8.088	0.818
Extreme Poverty	5.577	7.075	3.455	5.539	7.321	0.012

NOTE: These exercises are performed using Kernel Matching. The values presented correspond to the standardized bias. For the younger group the variable related to being head of household is not used. Instead, the variable gender of the household head is used.



**Table C-9: Results by Level of Income - Comer es Primero Program**

Variables	Low Income			Middel Income			High Income		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	5.791	4.841	2.098	5.641	7.493	3.069	8.391	7.804	5.034
Literate	4.081	0.926	11.366	13.701	12.357	6.715	7.102	6.105	5.760
Age	0.435	10.373	5.753	1.784	0.748	2.564	2.012	2.445	0.801
Age^2	1.777	10.266	5.820	0.909	0.356	2.607	2.231	2.686	0.897
Schooling	2.631	0.026	3.535	7.568	8.415	7.532	4.121	4.542	4.083
Schooling^2	4.347	2.392	1.756	4.972	7.611	6.262	2.059	2.234	2.220
Schooling X Age	0.856	1.833	4.162	8.277	7.484	8.246	6.690	5.518	5.050
Head of Household	4.305	8.680	3.599	3.461	3.688	1.549	3.578	7.049	3.883
Household Size	3.555	1.723	8.150	3.631	9.744	2.380	11.484	10.788	4.013
# Adults 18-65	0.913	4.724	3.174	2.885	9.407	4.297	5.662	5.571	1.002
# Seniors 65+	7.137	4.656	8.560	7.051	8.799	7.200	0.026	1.992	1.677
Married	6.563	0.910	3.802	0.792	1.791	0.028	2.048	2.312	0.152
# Children 0-5	7.256	7.188	1.441	5.996	1.664	1.268	8.294	7.926	0.202
# Children 6-15	1.134	6.059	4.371	1.929	0.025	4.384	8.813	5.331	3.755
Female x # Child 0-5	3.911	6.251	1.616	11.791	5.070	4.125	1.922	0.778	5.418
Extreme Poverty	1.164	1.170	1.675	0.000	0.000	0.000	0.873	0.346	0.543

NOTE: income groups were calculated by dividing households into three equal groups according to household percapita income.

**Table C-10: Results by Level of Income - ILAE Program**

Variables	Low Income			Middel Income			High Income		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	10.950	0.901	1.237	11.786	13.015	3.591	15.209	10.543	2.923
Literate	15.380	21.593	1.767	8.758	1.447	9.207	10.392	8.182	0.161
Age	0.553	4.914	4.513	15.014	8.027	5.302	5.759	6.893	3.729
Age^2	1.200	2.972	4.466	13.941	7.789	5.355	5.369	6.295	3.705
Schooling	8.377	9.919	4.895	6.095	5.661	0.583	4.492	8.976	1.698
Schooling^2	5.100	4.408	3.642	8.466	3.216	0.167	4.239	8.318	2.221
Schooling X Age	7.030	8.817	4.582	3.039	7.825	0.173	2.121	5.636	5.556
Head of Household	4.605	3.375	5.606	18.030	18.755	10.552	1.968	3.949	0.043
Household Size	5.694	2.532	1.099	11.986	6.365	4.956	12.943	11.661	7.730
# Adults 18-65	9.533	7.591	0.334	13.028	6.538	4.433	14.335	14.422	12.591
# Seniors 65+	9.285	9.609	1.604	2.582	3.881	1.654	1.849	0.638	5.045
Married	9.004	5.202	7.896	6.270	2.816	1.097	4.136	2.570	1.346
# Children 0-5	16.598	9.464	1.857	7.075	8.904	7.218	0.216	4.334	3.279
# Children 6-15	4.595	2.595	2.284	2.611	1.403	0.654	1.594	3.260	5.318
Female x # Child 0-5	10.930	1.825	2.091	10.893	10.753	5.853	8.593	11.736	3.776
Extreme Poverty	6.507	5.898	5.732	3.877	5.750	1.071	2.798	4.819	0.500

NOTE: income groups were calculated by dividing households into three equal groups according to household percapita income.

**Table C-11: Results by Level of Income - Bono Gas Program**

Variables	Low Income			Middel Income			High Income		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	5.611	0.826	0.829	4.026	4.156	0.301	3.377	5.918	3.446
Literate	1.318	1.731	5.299	4.701	3.100	0.189	5.990	0.533	1.429
Age	14.139	15.084	7.811	3.103	2.515	0.225	1.216	1.989	1.960
Age^2	14.792	14.665	8.495	2.077	2.204	0.235	0.700	2.101	1.059
Schooling	7.677	2.534	0.938	8.552	5.884	5.574	5.064	1.028	1.455
Schooling^2	6.299	5.304	0.353	7.455	5.545	6.360	4.212	1.640	1.124
Schooling X Age	5.736	2.158	3.522	7.477	6.326	5.058	3.589	0.002	4.734
Head of Household	8.938	11.082	10.095	6.470	6.655	1.179	1.676	1.379	0.451
Household Size	7.250	13.823	6.795	1.231	6.042	3.250	5.488	4.066	1.712
# Adults 18-65	3.829	7.686	0.102	0.354	10.811	2.642	4.798	4.338	2.595
# Seniors 65+	11.655	14.116	4.246	8.055	12.230	3.279	2.217	2.259	1.621
Married	6.901	4.363	3.520	6.064	6.799	1.202	0.617	2.733	1.768
# Children 0-5	2.104	3.004	5.082	0.164	0.522	2.491	3.582	3.675	2.969
# Children 6-15	16.447	18.518	8.392	0.433	2.109	0.831	5.381	3.265	0.230
Female x # Child 0-5	2.502	5.271	5.487	1.455	5.049	1.124	4.522	4.832	2.391
Extreme Poverty	7.442	0.113	3.782	0.484	0.488	0.258	4.032	0.611	4.619

NOTE: income groups were calculated by dividing households into three equal groups according to household percapita income.

**Table C-12: Results by Level of Income - All Programs Program**

Variables	Low Income			Middel Income			High Income		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	5.611	0.826	0.829	4.026	4.156	0.301	3.377	5.918	3.446
Literate	1.318	1.731	5.299	4.701	3.100	0.189	5.990	0.533	1.429
Age	14.139	15.084	7.811	3.103	2.515	0.225	1.216	1.989	1.960
Age^2	14.792	14.665	8.495	2.077	2.204	0.235	0.700	2.101	1.059
Schooling	7.677	2.534	0.938	8.552	5.884	5.574	5.064	1.028	1.455
Schooling^2	6.299	5.304	0.353	7.455	5.545	6.360	4.212	1.640	1.124
Schooling X Age	5.736	2.158	3.522	7.477	6.326	5.058	3.589	0.002	4.734
Head of Household	8.938	11.082	10.095	6.470	6.655	1.179	1.676	1.379	0.451
Household Size	7.250	13.823	6.795	1.231	6.042	3.250	5.488	4.066	1.712
# Adults 18-65	3.829	7.686	0.102	0.354	10.811	2.642	4.798	4.338	2.595
# Seniors 65+	11.655	14.116	4.246	8.055	12.230	3.279	2.217	2.259	1.621
Married	6.901	4.363	3.520	6.064	6.799	1.202	0.617	2.733	1.768
# Children 0-5	2.104	3.004	5.082	0.164	0.522	2.491	3.582	3.675	2.969
# Children 6-15	16.447	18.518	8.392	0.433	2.109	0.831	5.381	3.265	0.230
Female x # Child 0-5	2.502	5.271	5.487	1.455	5.049	1.124	4.522	4.832	2.391
Extreme Poverty	7.442	0.113	3.782	0.484	0.488	0.258	4.032	0.611	4.619

NOTE: income groups were calculated by dividing households into three equal groups according to household percapita income.

**Table C-13: Matching Kernel Results with 4 Bands - Comer es Primero Program**

Variables	Band=0.1			Band=0.01			Band=0.001			Band=0.0001		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to Work
Female	6.122	7.696	1.903	4.572	5.902	0.266	3.230	5.911	0.286	3.561	3.202	4.578
Literate	0.139	3.052	4.256	9.446	7.308	4.221	6.002	4.169	3.211	5.503	2.667	4.350
Age	2.586	3.203	1.309	2.352	3.510	0.992	1.412	2.975	0.662	0.116	0.183	1.648
Age^2	1.694	2.965	1.201	1.275	3.099	0.712	0.939	3.038	0.684	0.032	0.498	1.422
Schooling	5.903	6.402	5.497	1.841	1.008	1.734	1.577	0.867	1.527	1.281	0.392	2.770
Schooling^2	5.047	5.022	3.950	0.251	0.357	0.565	1.051	0.457	0.953	1.183	0.347	2.342
Schooling X Age	4.663	5.562	5.903	3.221	1.848	1.497	1.715	0.780	1.202	1.871	0.197	2.654
Head of Household	1.800	1.126	3.301	3.121	4.070	0.815	2.426	1.883	2.621	10.470	3.328	1.078
Household Size	8.773	7.914	4.381	7.660	7.085	3.552	1.655	5.605	2.826	4.543	1.925	1.330
# Adults 18-65	7.778	7.399	4.609	7.203	6.625	4.893	1.658	4.417	4.074	6.410	1.473	4.351
# Seniors 65+	4.860	4.756	6.416	3.248	2.890	3.922	2.992	1.771	0.845	5.352	2.233	0.025
Married	1.321	1.057	0.893	1.035	0.949	0.567	1.321	0.627	0.351	0.403	2.878	1.467
# Children 0-5	1.163	0.491	1.199	1.892	0.199	0.844	2.965	1.476	2.488	9.767	3.074	6.856
# Children 6-15	3.375	2.777	1.108	3.661	3.758	1.690	2.811	4.369	0.213	6.543	6.835	5.047
Female x # Child 0-5	3.829	1.006	0.626	3.634	1.521	0.329	4.593	0.592	1.505	8.700	1.447	1.997
Extreme Poverty	0.803	0.850	0.876	0.425	0.058	0.007	0.031	0.217	0.343	0.000	0.000	0.000

NOTE: To test the sensitivity, kernel matching was performed on 4 different bands.

**Table C-14: Matching Kernel Results with 4 Bands - ILAE Program**

Variables	Band=0.1			Band=0.01			Band=0.001			Band=0.0001		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to Work
Female	4.071	3.545	0.302	4.914	5.174	2.530	1.688	1.874	0.829	7.340	3.844	0.914
Literate	1.175	2.767	1.964	1.647	0.208	0.539	5.471	2.080	1.950	0.016	0.792	2.651
Age	2.779	2.115	0.614	3.997	1.065	1.065	6.521	3.338	0.610	2.837	3.514	6.380
Age^2	2.122	1.660	0.959	3.294	0.762	1.035	6.183	3.272	0.534	2.962	3.377	6.766
Schooling	6.435	4.842	4.267	0.909	2.123	0.548	2.462	3.538	1.096	0.898	2.356	1.961
Schooling^2	5.962	3.679	3.701	0.981	2.921	1.180	1.745	3.778	1.353	0.870	2.251	0.985
Schooling X Age	5.686	3.869	4.276	1.134	1.949	0.092	3.193	4.433	0.792	0.667	1.726	3.696
Head of Household	3.543	3.153	0.820	6.370	4.061	1.679	8.826	6.089	1.723	0.672	3.564	4.775
Household Size	0.084	2.386	3.568	6.978	3.226	2.079	5.862	3.368	2.539	0.662	0.765	0.754
# Adults 18-65	1.092	0.699	1.724	1.452	0.621	0.090	0.477	1.294	2.229	0.833	5.634	0.719
# Seniors 65+	4.031	0.696	3.504	5.685	0.870	2.519	6.519	0.668	0.259	2.347	5.672	3.460
Married	4.815	5.124	3.375	0.713	0.259	2.064	2.533	0.230	1.928	5.779	6.502	7.135
# Children 0-5	2.422	3.808	2.175	6.232	3.085	1.578	1.291	0.952	2.136	0.396	4.260	3.951
# Children 6-15	3.696	4.844	6.569	3.563	3.967	2.656	4.406	5.483	2.190	0.920	5.051	2.433
Female x # Child 0-5	7.713	10.446	1.618	8.392	10.890	1.077	5.965	4.359	2.201	7.366	8.932	2.637
Extreme Poverty	10.161	9.383	8.480	5.047	4.616	3.610	6.892	6.900	4.115	1.958	1.662	2.279

NOTE: To test the sensitivity, kernel matching was performed on 4 different bands.

**Table C-15: Matching Kernel Results with 4 Bands - Bono Gas Program**

Variables	Band=0.1			Band=0.01			Band=0.001			Band=0.0001		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to Work
Female	0.867	1.263	1.162	0.167	2.399	0.367	0.055	0.358	0.872	3.996	2.277	3.120
Literate	0.154	2.484	3.612	2.326	0.058	2.007	6.399	4.430	2.122	1.871	2.404	0.118
Age	1.030	1.072	1.067	2.199	2.500	0.445	1.722	3.081	0.695	4.146	0.093	2.664
Age^2	0.521	0.847	1.149	2.773	2.696	0.388	2.279	3.718	0.667	3.660	0.672	2.773
Schooling	6.420	5.947	5.427	5.249	3.433	3.930	0.403	0.203	2.269	0.273	4.178	0.259
Schooling^2	5.876	4.464	4.691	5.945	2.715	3.539	0.585	0.336	2.570	0.047	4.351	0.229
Schooling X Age	5.786	5.483	5.303	6.302	4.075	4.730	0.299	0.344	2.244	2.852	4.410	0.014
Head of Household	2.440	1.907	1.214	3.901	4.715	1.749	5.114	5.786	3.400	7.239	8.706	3.825
Household Size	2.996	4.472	0.798	1.160	1.449	1.277	0.319	1.935	1.463	3.814	3.978	6.017
# Adults 18-65	0.554	2.892	0.553	0.181	2.472	1.015	0.566	1.751	2.720	0.852	0.779	0.226
# Seniors 65+	2.526	1.919	3.199	2.172	0.879	0.986	1.406	2.259	0.102	7.763	12.313	3.316
Married	0.558	0.580	0.459	2.886	1.247	1.645	4.112	0.958	1.673	9.153	11.515	3.976
# Children 0-5	0.340	0.331	0.085	0.888	0.087	0.778	2.416	1.942	0.959	1.106	1.624	0.179
# Children 6-15	3.912	4.170	0.611	2.328	1.075	1.667	3.436	3.968	1.037	10.671	11.217	9.744
Female x # Child 0-5	1.255	1.296	1.230	1.818	0.673	1.466	3.183	0.096	0.447	0.539	1.010	2.142
Extreme Poverty	13.594	12.420	13.723	0.223	0.349	1.679	0.432	0.164	2.006	2.265	1.002	0.188

NOTE: To test the sensitivity, kernel matching was performed on 4 different bands.

**Table C-16: Matching Kernel Results with 4 Bands - ALL Programs**

Variables	Band=0.1			Band=0.01			Band=0.001			Band=0.0001		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to Work
Female	0.867	1.263	1.162	0.167	2.399	0.367	0.055	0.358	0.872	3.996	2.277	3.120
Literate	0.154	2.484	3.612	2.326	0.058	2.007	6.399	4.430	2.122	1.871	2.404	0.118
Age	1.030	1.072	1.067	2.199	2.500	0.445	1.722	3.081	0.695	4.146	0.093	2.664
Age^2	0.521	0.847	1.149	2.773	2.696	0.388	2.279	3.718	0.667	3.660	0.672	2.773
Schooling	6.420	5.947	5.427	5.249	3.433	3.930	0.403	0.203	2.269	0.273	4.178	0.259
Schooling^2	5.876	4.464	4.691	5.945	2.715	3.539	0.585	0.336	2.570	0.047	4.351	0.229
Schooling X Age	5.786	5.483	5.303	6.302	4.075	4.730	0.299	0.344	2.244	2.852	4.410	0.014
Head of Household	2.440	1.907	1.214	3.901	4.715	1.749	5.114	5.786	3.400	7.239	8.706	3.825
Household Size	2.996	4.472	0.798	1.160	1.449	1.277	0.319	1.935	1.463	3.814	3.978	6.017
# Adults 18-65	0.554	2.892	0.553	0.181	2.472	1.015	0.566	1.751	2.720	0.852	0.779	0.226
# Seniors 65+	2.526	1.919	3.199	2.172	0.879	0.986	1.406	2.259	0.102	7.763	12.313	3.316
Married	0.558	0.580	0.459	2.886	1.247	1.645	4.112	0.958	1.673	9.153	11.515	3.976
# Children 0-5	0.340	0.331	0.085	0.888	0.087	0.778	2.416	1.942	0.959	1.106	1.624	0.179
# Children 6-15	3.912	4.170	0.611	2.328	1.075	1.667	3.436	3.968	1.037	10.671	11.217	9.744
Female x # Child 0-5	1.255	1.296	1.230	1.818	0.673	1.466	3.183	0.096	0.447	0.539	1.010	2.142
Extreme Poverty	13.594	12.420	13.723	0.223	0.349	1.679	0.432	0.164	2.006	2.265	1.002	0.188

NOTE: To test the sensitivity, kernel matching was performed on 4 different bands.

**Table C-17: Comparative Results of Treatments and Controls - Comer es Primero Program**

Variables	Treatment vs control1			Treatment vs control2			Control1 vs Control 2		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	4.053	4.992	0.839	11.333	6.925	1.968	2.910	4.896	0.428
Literate	5.978	2.893	0.892	14.011	10.570	8.521	1.062	0.728	1.470
Age	0.412	0.562	0.164	0.326	1.958	1.212	1.617	5.664	1.278
Age^2	0.189	0.996	0.219	1.113	1.016	1.665	1.640	5.667	1.314
Schooling	1.516	2.350	0.086	2.341	1.383	1.114	2.935	2.814	0.700
Schooling^2	2.092	2.548	0.212	0.586	0.117	0.033	4.017	4.608	1.174
Schooling X Age	0.481	1.817	0.103	3.885	3.828	1.433	2.822	0.161	0.639
Head of Household	6.230	6.211	0.175	6.193	4.386	1.001	1.147	4.651	0.219
Household Size	1.732	1.962	2.124	4.335	6.097	6.419	6.503	8.779	4.996
# Adults 18-65	3.798	5.494	0.002	1.478	2.540	3.206	4.518	7.498	2.855
# Seniors 65+	6.851	8.125	3.394	5.215	4.193	2.348	1.351	0.992	2.368
Married	4.934	3.976	2.444	0.235	0.698	1.671	2.811	0.155	0.110
# Children 0-5	1.877	4.178	0.852	5.904	6.147	6.321	3.131	5.463	2.816
# Children 6-15	1.369	0.184	1.435	2.470	0.012	0.146	4.211	3.317	2.712
Female x # Child 0-5	4.940	2.542	2.805	2.875	0.236	3.478	2.892	5.061	2.434
Extreme Poverty	0.640	0.222	0.472	0.443	0.223	0.440	4.905	1.191	1.749

Note: To test the sensitivity, a Placebo test was conducted as follows: the control sample is divided into two random groups. An estimation is then performed as indicated in the table header.

**Table C-18: Comparative Results of Treatments and Controls - ILAE Program**

Variables	RND1			RND2			RND3		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	1.009	2.654	2.451	6.313	6.239	0.137	7.153	8.448	1.396
Literate	3.555	4.491	3.376	4.312	6.624	2.915	1.382	0.546	1.350
Age	6.554	3.318	0.675	3.854	1.589	2.580	1.119	3.280	0.875
Age^2	6.583	3.512	0.905	4.353	1.534	2.562	1.627	3.166	0.914
Schooling	5.322	0.630	0.405	2.280	7.607	1.217	0.217	2.403	0.605
Schooling^2	2.455	2.462	0.464	0.575	5.699	0.763	0.441	3.302	0.413
Schooling X Age	3.693	0.079	0.214	2.045	8.948	1.028	0.501	1.019	0.990
Head of Household	1.158	0.747	2.469	5.510	10.506	2.003	1.194	0.636	0.335
Household Size	6.939	6.485	2.553	5.775	6.455	6.739	3.840	3.010	1.301
# Adults 18-65	0.213	2.242	0.272	5.196	3.483	5.946	1.257	1.309	0.827
# Seniors 65+	7.934	4.850	4.021	0.667	3.739	1.308	2.569	1.666	1.084
Married	0.268	1.069	0.125	6.053	2.369	4.901	2.289	1.029	0.116
# Children 0-5	5.801	7.675	0.249	1.461	6.430	2.467	0.010	0.646	0.047
# Children 6-15	3.270	2.668	1.394	1.733	1.761	1.947	3.410	2.252	1.493
Female x # Child 0-5	5.293	5.701	4.140	7.919	12.206	0.189	2.298	2.901	0.098
Extreme Poverty	1.273	3.665	2.029	1.579	5.219	4.634	0.617	0.889	0.301

Note: To test the sensitivity, a Placebo test was conducted as follows: the control sample is divided into two random groups. An estimation is then performed as indicated in the table header.

**Table C-19: Comparative Results of Treatments and Controls - Bono Gas Program**

Variables	RND1			RND2			RND3		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	0.200	0.297	0.016	2.336	2.382	2.197	8.216	6.864	2.966
Literate	2.064	5.340	5.144	3.088	1.220	0.361	2.051	2.812	0.470
Age	5.292	9.158	4.023	5.001	8.677	0.895	3.086	4.848	0.701
Age^2	5.530	9.147	3.847	4.236	8.134	0.953	3.209	4.812	0.785
Schooling	3.420	3.296	3.925	5.460	3.802	3.010	2.244	1.829	1.168
Schooling^2	2.917	0.375	3.406	5.942	4.058	3.291	4.256	5.447	2.466
Schooling X Age	4.530	6.799	5.635	3.720	0.941	4.008	0.588	1.811	1.209
Head of Household	0.511	0.388	0.348	8.075	9.397	0.870	0.959	2.728	0.434
Household Size	2.714	0.720	2.013	0.499	1.829	1.032	2.267	1.837	4.483
# Adults 18-65	0.530	5.651	1.551	2.250	0.139	0.135	7.761	11.973	3.681
# Seniors 65+	4.558	7.195	1.400	1.987	0.053	0.928	4.252	6.683	1.577
Married	3.253	0.894	0.622	0.703	1.049	1.547	4.625	1.450	1.412
# Children 0-5	2.331	1.526	0.626	0.836	1.866	1.218	0.199	4.157	6.028
# Children 6-15	1.141	0.510	0.308	2.725	3.792	0.525	3.214	9.264	0.695
Female x # Child 0-5	5.879	1.818	0.761	0.094	0.662	2.508	1.474	5.138	7.320
Extreme Poverty	3.054	2.058	3.872	0.247	0.345	0.323	4.575	2.361	0.568

Note: To test the sensitivity, a Placebo test was conducted as follows: the control sample is divided into two random groups. An estimation is then performed as indicated in the table header.

**Table C-20: Comparative Results of Treatments and Controls - All Programs**

Variables	RND1			RND2			RND3		
	Works	Wage	Desire to work	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	0.200	0.297	0.016	2.336	2.382	2.197	8.216	6.864	2.966
Literate	2.064	5.340	5.144	3.088	1.220	0.361	2.051	2.812	0.470
Age	5.292	9.158	4.023	5.001	8.677	0.895	3.086	4.848	0.701
Age^2	5.530	9.147	3.847	4.236	8.134	0.953	3.209	4.812	0.785
Schooling	3.420	3.296	3.925	5.460	3.802	3.010	2.244	1.829	1.168
Schooling^2	2.917	0.375	3.406	5.942	4.058	3.291	4.256	5.447	2.466
Schooling X Age	4.530	6.799	5.635	3.720	0.941	4.008	0.588	1.811	1.209
Head of Household	0.511	0.388	0.348	8.075	9.397	0.870	0.959	2.728	0.434
Household Size	2.714	0.720	2.013	0.499	1.829	1.032	2.267	1.837	4.483
# Adults 18-65	0.530	5.651	1.551	2.250	0.139	0.135	7.761	11.973	3.681
# Seniors 65+	4.558	7.195	1.400	1.987	0.053	0.928	4.252	6.683	1.577
Married	3.253	0.894	0.622	0.703	1.049	1.547	4.625	1.450	1.412
# Children 0-5	2.331	1.526	0.626	0.836	1.866	1.218	0.199	4.157	6.028
# Children 6-15	1.141	0.510	0.308	2.725	3.792	0.525	3.214	9.264	0.695
Female x # Child 0-5	5.879	1.818	0.761	0.094	0.662	2.508	1.474	5.138	7.320
Extreme Poverty	3.054	2.058	3.872	0.247	0.345	0.323	4.575	2.361	0.568

Note: To test the sensitivity, a Placebo test was conducted as follows: the control sample is divided into two random groups. An estimation is then performed as indicated in the table header.

**Table C-21: Comparative Results by Location - Comer es Primero Program**

Variables	Urban Area			Rural Area		
	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	7.453	1.105	1.253	0.561	4.907	1.500
Literate	5.018	7.456	5.793	5.599	11.581	1.693
Age	6.066	2.553	2.424	7.621	9.582	2.922
Age^2	4.073	1.730	1.961	6.919	9.065	2.380
Schooling	2.833	2.505	7.262	5.255	8.064	1.225
Schooling^2	4.355	4.181	8.891	7.833	7.700	0.422
Schooling X Age	8.577	6.620	8.633	2.965	5.875	2.342
Head of Household	6.563	4.236	6.569	0.851	2.279	4.993
Household Size	4.742	2.981	1.364	19.943	18.244	7.606
# Adults 18-65	7.111	8.460	0.693	12.956	9.289	0.515
# Seniors 65+	4.784	2.282	4.996	2.098	4.409	1.516
Married	6.355	7.749	1.159	9.883	3.781	4.547
# Children 0-5	6.494	6.579	0.422	17.438	19.106	12.983
# Children 6-15	10.596	1.324	3.090	13.969	16.413	5.894
Female x # Child 0-5	0.104	2.491	2.401	10.048	12.817	9.049
Extreme Poverty	0.000	0.000	0.000	2.945	2.085	2.069

Note: To test the sensitivity, a Placebo test was conducted as follows: the sample is divided randomly into two control groups. An estimation is then performed as indicated in the table header.

**Table C-22: Comparative Results by Location - ILAE Program**

Variables	Urban Area			Rural Area		
	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	1.476	1.862	9.373	7.756	11.972	10.675
Literate	6.954	5.369	7.675	17.596	17.563	8.340
Age	10.666	14.681	16.131	22.943	19.949	0.817
Age^2	11.148	16.400	16.294	23.872	19.454	0.984
Schooling	21.563	7.692	3.458	15.541	18.124	5.917
Schooling^2	15.294	3.499	3.341	18.801	21.884	6.991
Schooling X Age	21.267	5.578	2.778	11.087	11.864	4.222
Head of Household	1.384	1.006	10.665	17.030	10.766	15.457
Household Size	8.155	8.290	10.378	6.794	0.761	3.279
# Adults 18-65	27.449	1.626	19.012	1.291	13.921	4.156
# Seniors 65+	15.402	14.207	14.009	12.763	10.116	15.832
Married	11.406	4.609	2.914	0.719	7.619	6.218
# Children 0-5	4.225	1.801	12.183	22.688	24.751	1.001
# Children 6-15	8.918	5.765	4.702	0.500	5.204	0.042
Female x # Child 0-5	4.613	0.703	9.010	15.219	21.874	11.804
Extreme Poverty	3.177	3.262	2.074	6.501	5.846	4.613

Note: To test the sensitivity, a Placebo test was conducted as follows: the sample is divided randomly into two control groups. An estimation is then performed as indicated in the table header.

**Table C-23: Comparative Results by Location - Bono Gas Program**

Variables	Urban Area			Rural Area		
	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	9.123	6.382	2.087	3.203	1.519	0.176
Literate	5.139	3.506	1.476	3.438	0.802	3.811
Age	2.533	2.598	0.850	3.114	1.009	2.204
Age^2	2.946	3.246	1.167	4.125	3.105	2.468
Schooling	2.988	7.170	0.623	4.806	0.440	8.523
Schooling^2	2.780	6.450	0.368	6.998	0.439	7.750
Schooling X Age	2.239	8.515	2.533	2.953	0.529	7.257
Head of Household	1.370	4.370	0.384	1.002	10.130	7.086
Household Size	4.361	7.433	2.124	2.544	2.129	7.151
# Adults 18-65	0.405	4.138	0.868	9.921	4.737	4.374
# Seniors 65+	6.440	5.655	4.684	12.619	12.132	1.764
Married	3.659	0.781	2.868	4.096	5.151	8.235
# Children 0-5	5.226	7.218	3.118	2.697	1.965	2.572
# Children 6-15	4.043	2.784	0.849	1.655	0.316	4.030
Female x # Child 0-5	2.071	1.630	1.517	5.588	6.167	0.842
Extreme Poverty	3.734	1.166	1.801	1.929	2.968	1.773

Note: To test the sensitivity, a Placebo test was conducted as follows: the sample is divided randomly into two control groups. An estimation is then performed as indicated in the table header.

**Table C-24: Comparative Results by Location - All Programs**

Variables	Urban Area			Rural Area		
	Works	Wage	Desire to work	Works	Wage	Desire to work
Female	9.123	6.382	2.087	3.203	1.519	0.176
Literate	5.139	3.506	1.476	3.438	0.802	3.811
Age	2.533	2.598	0.850	3.114	1.009	2.204
Age^2	2.946	3.246	1.167	4.125	3.105	2.468
Schooling	2.988	7.170	0.623	4.806	0.440	8.523
Schooling^2	2.780	6.450	0.368	6.998	0.439	7.750
Schooling X Age	2.239	8.515	2.533	2.953	0.529	7.257
Head of Household	1.370	4.370	0.384	1.002	10.130	7.086
Household Size	4.361	7.433	2.124	2.544	2.129	7.151
# Adults 18-65	0.405	4.138	0.868	9.921	4.737	4.374
# Seniors 65+	6.440	5.655	4.684	12.619	12.132	1.764
Married	3.659	0.781	2.868	4.096	5.151	8.235
# Children 0-5	5.226	7.218	3.118	2.697	1.965	2.572
# Children 6-15	4.043	2.784	0.849	1.655	0.316	4.030
Female x # Child 0-5	2.071	1.630	1.517	5.588	6.167	0.842
Extreme Poverty	3.734	1.166	1.801	1.929	2.968	1.773

Note: To test the sensitivity, a Placebo test was conducted as follows: the sample is divided randomly into two control groups. An estimation is then performed as indicated in the table header.