The impacts of a child allowance program on the behavior of adults in the labor market. The case of Argentina

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2012

Abstract

In 2009 Argentina implemented a cash transfer program to households with children –the Universal Child Allowance program (UCA)-, which extended the coverage of the already existing contributory family allowance program to families in the informal economy, unemployed and domestic workers. This paper evaluates the effects of the UCA on adult labor participation and income generation, by using the Difference-in-Difference Estimator. The results suggest that no important disincentive to work has been generated by the program given that it did not discourage adults from working or lead to a reduction in the number of hours worked. These findings are highly relevant in the Latin American context where this kind of cash transfers became an important component of the social protection systems.

JEL code: J22, I38, J08

Keywords: child allowance, labor market, impact evaluation, adult work incentives, conditional cash transfer, Argentina.

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1 Introduction¹

In 2009 Argentina implemented a large cash transfer program for children and adolescents called Universal Child Allowance (*Asignación Universal por Hijo*) that extended the coverage of the already existing contributory family allowance program to segments of the population that had no coverage until then.

At present, the UCA covers about 30% of children and 15% of total households in the country. Government expenditures on the program represent approximately 0.8% of GDP, making it one of the largest programs in the region.

The UCA is a cash transfer that is paid on a monthly basis to one of the parents, tutor or relative up to the third degree of consanguinity, for every child under 18 years of age, except for the case of disabled people for which there is no age limit. The UCA is a semiconditional cash transfer given that 80% of its value is paid on a monthly basis to the benefit holders, whereas the remaining 20% is deposited into a savings account on the name of the holder. Then, the latter sum is made available for withdrawal once the holder has certified the fulfillment of school attendance and medical check-ups. Receiving any other type of social benefit of any government level is incompatible with the UCA. Therefore, all previous programs with similar targets were eliminated.

Several studies have conducted *ex-ante* evaluations that simulated the impacts of the UCA on inequality, poverty and extreme poverty indicators.² They all arrive to the conclusion that once the entire target population is reached the implementation of the UCA would result in a significant reduction of indigence and to a lesser extent of poverty, while it would also have a positive effect on inequality. Nevertheless, these studies do not take into account the impacts that these transfers may have on the decision to work and the number of hours worked.

The present study contributes to fill in this gap by carrying out an *ex-post* evaluation of the UCA. Through the application of a non-experimental econometric strategy –based on Differences-in-Differences estimator and propensity score matching techniques- we evaluate the impacts of the UCA on economic participation decisions, employment, unemployment, number of hours worked and income generation of adults. Hence, this study contributes to enrich the still scarce but growing literature about the impacts of cash transfers on the changes in the labor supply behavior of adults in developing countries.

The document follows with a brief description of the main characteristics of the program. Section 3 presents the theoretical framework and the review of the empirical evidence for Latin America. Section 4 details the source of information employed. Section 5 specifies the econometric strategy. Section 6 portrays some descriptive statistics. Section 7 discusses

¹ The valuable comments and suggestions of Fabio Bertranou, Rafael Rofman and Luis Beccaria on a previous version of the document are very much appreciated.

² Some of them are: Roca (2010); Agis *et al.* (2010); Gasparini and Cruces (2010), ILO (2010); Bertranou and Maurizio (2012).

the econometric results on labor market outcomes and section 8 presents the sensitivity analysis. Lastly, section 9 concludes.

2 Brief description of the program

Given the greater incidence of poverty in children and adolescents compared to other age groups, as from the mid-nineties Latin American's countries have been implementing and expanding non-contributory cash transfer programs (conditional cash transfer programs, CCTs) to households with children and adolescents.

Almost all countries in the Latin America currently have some sort of CCT program. They have gradually become important mechanisms within social policies and regional poverty reduction strategies. These programs are being implemented in 17 of the region's countries and reach out to over 22 million families, that is, around 100 million people which account for 17% of the Latin American and Caribbean population (ECLAC, 2010).

There is a first group of countries that has designed specific programs; the most internationally renowned examples given their size are *Progresa* in Mexico and *Bolsa Familia* in Brazil. Then there is a second group of countries in the Southern Cone in which Argentina, together with Chile and Uruguay, is part. They have extended their contributive child allowance schemes to segments of the population that had no coverage until then.³

In particular, in November 2009 the Argentinean government implemented a large cash transfer program for children and adolescents –the Universal Child Allowance- that extended the coverage of the already existing contributory family allowance program to include the children of (1) workers non-registered in the social security system (informal workers) or domestic workers that receive labor incomes below the minimum wage; (2) unemployed without unemployment insurance or (3) economically inactive workers without pensions.

The new configuration of the child allowance system in Argentina is made up of three components. The first one consists of a contributory cash transfer program for children and adolescents (*Asignación Familiar Contributiva*); the second pillar is the non-contributory Universal Child Allowance program (UCA); finally, the third component is the income tax rebates for workers in the highest income group (*Asignación por Crédito Fiscal*).⁴ Both the contributory component and the UCA are administered by the National Social Security Administration (*Administración Nacional de la Seguridad Social - ANSES*), while the third pillar is administered by the Federal Tax Administration (*Administración Federal de Ingresos Públicos - AFIP*).

At present, the UCA covers about 30% of children (3.5 million) and 15% of total households in the country (1.8 million). Government expenditures on the program represent

³ A comprehensive analysis and information of these programs are described and analyzed in ECLAC (2010), the World Bank (2009), ILO/IPEC (2007), Perez Rivas *et al.* (2008), Villatoro (2008), among others.

⁴ For further details about the system and its components, see Bertranou and Maurizio (2012).

approximately 0.8% of GDP, making it one of the largest programs in the region. Receiving any other type of social benefit of any government level is incompatible with the UCA. Therefore, all previous programs with similar targets were gradually eliminated.

The UCA is a cash transfer that is paid on a monthly basis to one of the parents, tutor or relative up to the third degree of consanguinity, for every child under 18 years of age, except for the case of disabled people for which there is no age limit. The children must be native of Argentina or have at least three years of residence in the country. The benefit is a set amount per child and can be claimed for up to 5 children in charge. Its initial value was of \$180 (USD 47) per child and \$720 for disabled (four times the value of the regular benefit). In September 2010 it was raised to \$220 (USD 56) and then again one year later to \$270 (USD 64) in order to limit the erosion of its purchasing power due to inflation.

The UCA is a semi-conditional cash transfer given that 80% of its value is paid on a monthly basis to the benefit holders, whereas the remaining 20% is deposited into a savings account on the name of the holder. Then, the latter sum is made available for withdrawal once the holder has certified the fulfillment of the vaccination plan and other sanitary controls in the case of children under 5 years old, and has additionally presented the certificate of school year completion in the case of children in school age.

The conditionality of the UCA is similar to most of the CCTs implemented in Latin America. However, even though reducing poverty and extreme poverty is one of its objectives, the UCA is not an ad-hoc program designed to alleviate the situation of families with children in social vulnerability, like the cases of *Bolsa Familia* in Brazil or *Oportunidades* in Mexico; rather, as mentioned above, it is an extension of the already existing contributory child allowance program for the children of formal workers, unemployed with unemployment insurance or retirees. As a matter of fact, the amount of the benefit is the same in both systems.

This aspect is important because, unlike the means-tested CCT, the restriction of the UCA is not directly related to family incomes but rather to the labor condition of the adults in charge of the children, as well as to their labor incomes if they are employed (in informal jobs). However, the difficulties in monitoring labor incomes that arise in a context of informality weaken the enforcement of such restriction in the latter case.

3 Theoretical framework and empirical evidence

3.1 Theoretical framework

There is a wide debate around the impacts that cash transfers to households may have on the labor behavior of adults. Such impacts are related to the receipt of non-labor incomes, on the one hand, and to the fulfillment of the program's conditionality, on the other.

The neoclassical theory of individual labor supply establishes that this type of non-labor incomes produces a pure income effect in the household which leads to an increase in the demand for normal goods. If leisure is a normal good then the supply of labor will decrease,

a behavior that could lead to labor market exits –corner solution- or to a reduction in the number of hours worked –interior solution.

Nevertheless, it could be argued that the actual impact of the cash transfer will depend on its magnitude. Also, other factors could affect the decision to remain or leave the labor force in the face of such benefits, such as characteristics of the occupation other than its remuneration (job conditions, commuting distance or number of hours worked) or the needs for home care and other household chores.

On the other hand, it could be pointed out that while transfers might create disincentives for labor participation when their magnitude is high enough to do so, yet the opposite effect might take place as well. That is to say, that receiving this benefit might allow households to overcome entry barriers to certain productive or entrepreneurial activities, to put into action certain economic decisions that would otherwise be impossible to carry out (Medeiros *et al.*, 2008; Martinez, 2004; Teixeira, 2010).

In the more complex family labor supply model (Killingsworth, 1983), the decision of a member regarding his time allocation is linked to the other household members' decisions. Hence, this approach allows introducing the second channel through which the transfers might induce changes in the labor supply behavior of adults, i.e. the impacts associated with the fulfillment of the program conditionalities. It is argued that by being linked to school attendance, the benefit reduces the opportunity cost of study, which might lead to a decline in the demand for study-substitute goods and to an increase in the demand for study-complementary goods. If work is a substitute for study are not perfect substitutes the result on child labor supply could be ambiguous (Ravallion and Wodon, 2000).

This leads to two important aspects regarding the labor supply of adults. On the one hand, it raises the question of how would the labor supply of the other household members react to the reduction in the labor supply of the children. The latter behavior might then partially offset the impact of the transfers on total household incomes, therefore causing the potential disincentive effect to be rather small in the case of adults. On the other hand, the fulfillment of conditionality could by itself alter the allocation of time of adults: if school attendance reduces the time spent on childcare then this could increase the time available for work;⁵ conversely, it could increase the time needed to ensure school attendance and health controls, thus reducing the time spent working (Parker and Skoufias, 2000).

Lastly, the fact that these programs have an exit door associated with the improvement of the household's economic conditions might act as a disincentive to participate in the labor market for it might alter the eligibility of its members to continue in the program. Nevertheless, in the case of the UCA the access and permanence in the program do not depend on family incomes but rather on the individual labor situation of the adults in charge of the children. As mentioned above, in the case of the employed, their incomes must not exceed a maximum income level (set by the minimum wage) to continue to be

⁵ Baker *et al.*, for example, find that introducing the universal and subsidized childcare in Quebec in the 1990s had a very significant effect on the labor supply of women.

eligible. However, monitoring the fulfillment of this restriction is quite difficult in a context of labor informality which might weaken the significance of the type of behaviors tending to reduce the labor supply in order to continue receiving the transfer. In the case of the unemployed or economically inactive individuals, the UCA does not create any explicit disincentives to work. If a formal job is obtained this would give access to a contributory child allowance, whereas if they obtain an informal job they continue to receive the UCA. Moreover, the benefit consists of a fixed amount per child and does not depend on the level of labor incomes.⁶All of these particular characteristics in the design of the UCA might weaken the potential impacts of the transfer on the work decision.

3.2 Empirical evidence for Latin American countries

There is an increasing number of studies that analyze the impacts of CCT on the behavior of adults in the labor market in Latin America. The empirical evidence is not conclusive.

The results obtained by Ferro and Nicollela (2007) for the Brazilian program *Bolsa Familia* suggest that it did not had a disincentive effect on the supply of labor although it did on the number of hours worked, even though the aggregate impact seems to have been rather small. In particular, beneficiary mothers living in urban areas work 1.5 hours per week more than non-beneficiary mothers. Mothers in rural areas and fathers in urban areas show the opposite behavior, while no statistically significant effects are observed for the number of hours worked in the case of fathers living in rural areas. The reduction in the number of hours worked might be a result of having to allocate more time to the fulfillment of the program conditionality or to do the housework that was previously done by the children. The potential income effect of the transfers might have played a part as well. A subsequent study by Ferro *et al.* (2010) finds similar results: the program led to an increase in the economic participation of mothers and fathers in urban areas whilst it had no significant effects on rural areas.

Foguel and Paes de Barros (2010) find that the program had null effects on the economic participation of women and a small impact within men. Regarding the number of hours worked, they find a negative effect of minor magnitude for women and no significant effects for men.

Medeiros *et al.* (2008) find that female household heads who are beneficiaries of this program have a lower probability of participating in the labor market than nonbeneficiaries. For the rest of the groups (non-household head women and both household head and non-household head men) no significant effects were found. The results found by Teixera (2010) also suggest an average null effect of *Bolsa Familia* on the probability to work and a very small reduction in the number of hours worked amongst adults. The elasticity of response is greater among women and informal workers, whilst it grows with the amount of the benefit. Independent women in non-agricultural activities are who respond with the greatest elasticity to this type of benefit.

⁶ This represents a substantial difference with programs such as Aid to Families with Dependent Children (AFDC) in the United States, where the benefit decreases with labor incomes.

On the contrary, Soares *et al.* (2007) find an increase in the participation rates of men and women associated with *Bolsa Familia*, the latter showing a higher variation. In the same line, Tavares (2008) finds that the probability to work grows by around 6% for beneficiary mothers, while the number of hours they work per week increases 2%. The results are statistically significant.

The results found by Maluccio (2007) for the Nicaraguan program *Red de Protección Social* suggest that it led to a small reduction in the total number of hours worked by household members and to small increases in the levels of investment in economic activities within the rural areas where the program was implemented.

In the case of Mexico, Parker and Skoufias (2000) find no disincentive effects of the *Progresa* program on the work decision of adults. A more detailed analysis on women's allocation of time reveals that the program led to an increase in the number of hours spent to fulfill the conditionality. On the other hand, the program has no significant effects on the number of hours spent on leisure, both in the case of men and women. The results obtained by Skoufias and di Maro (2008) confirm that the *Progresa* does not induce disincentive effects, while significant effects are found on the reduction of poverty.

A similar pattern is found in Uruguay, where the introduction of the program *PANES* did not lead to changes in the labor supply or in the number of hours worked (Amarante *et at.*, 2011).

Soares *et al.* (2008) analyze the impact of the Paraguayan *Tekoporã* in several dimensions, including labor participation. They use two definitions of economic participation depending on whether or not temporary laid-off workers are included as part of the labor force. Authors find a negative impact of the program on the labor supply of men, being even stronger in moderately poor and in rural areas. However, when excluding temporary workers, this negative impact only remains for moderately poor areas. Non-significant effects were found for women and for the population as a whole.

Alzúa *et al.* (2010) make a comparative evaluation of transfer programs in Mexico, Nicaragua and Honduras. Again, the authors find that the decisions regarding labor participation and working hours within adults in beneficiary households were not altered as a consequence of receiving these transfers. Nonetheless, they do find a reduction in the number of worked hours at the household level in the case of Nicaragua, especially for those with female household heads. On the other hand, the authors find positive effects of the *Progresa* on hourly wages of men and on total labor incomes in beneficiary households, thus suggesting the presence of indirect impacts on local labor market conditions.

In the same way, the findings of Angelucci and Di Giorgi (2009) also suggest positive indirect effects of the Mexican program on the consumption of non-beneficiary households living in the same regions than beneficiary households.

Finally, Garganta and Gasparini (2012) evaluate the effects of the UCA on formalityinformality transitions. By comparing the group of childbearing informal households with similar households but without children (and therefore, not eligible) they conclude that the program has a significant disincentive effect to the formalization of the beneficiaries, whereas no evidence of incentives to the informality of registered wage earners is found.

It is possible to conclude, therefore, that the assessment of the impact of the UCA is an empirical matter, since from the theoretical perspective the effects of these transfers on the labor market are ambiguous while the empirical evidence for similar programs in the region is not conclusive either. As it was mentioned above, until now there are no studies that evaluate the extent to which the introduction of the UCA has induced behavioral changes on adult work decision. The following sections address this matter.

4 Data

Data employed in this paper come from the regular household survey of Argentina, the Permanent Household Survey (PHS) carried out by the National Statistical Office (INDEC), which covers 31 urban areas and collects information especially on labor market variables. The PHS represents about 70% of urban population and 60% of the country's total population.⁷

Even though the EPH is neither a longitudinal survey nor does it include retrospective questions, its rotating panel sample allows to draw flow data from the survey, i.e. a selected household is interviewed in four moments or waves: two successive quarters, rests in the two following quarters and appears again in the sample in the two successive quarters, one year later. By comparing the situation of an individual in a given wave to that of the same individual in another wave, it is possible to assess if the person has experienced changes in diverse variables, including occupational and demographic ones.

In particular, annual panel data built for the IQ2009-IIIQ2010 period are employed in this study so as to include information from before and after the implementation of the UCA in November 2009.⁸ In order to count on a greater number of observations, a pool with these three annual panels was built.

5 Approach and methodology

5.1 Econometric specification

In order to evaluate the impacts of the UCA, a non-experimental method will be employed. This method is based on the application of matching techniques to define a control group that would allow estimating what the situation of beneficiaries would have been had they not gained access to the program. Then, having accurately defined the control group and by contrasting outcome variables between the beneficiary and non-beneficiary groups it is possible to attribute the observed differences to the particular policy under study.

⁷ For further information, see <u>www.indec.gov.ar</u>

⁸ Data of IVQ 2009 were excluded because it already includes information of the program's beneficiaries.

Following the traditional terminology of this approach, D is defined as a variable that indicates the receipt of the transfer (D = 1 if the household/person receives the transfer; D = 0 on the contrary), and Y is the outcome of interest (being Y^1 the outcome in the presence of the benefit, and Y^0 in its absence). The impact of the transfer is measured by the Average Treatment Effect on the Treated (ATT), which is conditional on a Propensity Score model, P(X), where X represents a vector of observable characteristics:

$$ATT(X) = E[Y^1 - Y^0/P(X), D = 1]$$

where E[.] is the expectation of the difference between the two outcomes, with and without the treatment, over the population receiving the transfer (D = 1).

Since the counterfactual, $E[Y^0/P(X), D = 1]$, is not an observable situation, Propensity Score Matching techniques are employed to estimate it. Given that only the ATT need to be identified, it is sufficient to verify the assumptions suggested in Heckman *et al.* (1997,1998) (1) "Ignorability of Treatment in a Conditional Mean Sense Condition"; and (2) "Matching Condition". The first condition implies that the selection of treated and control groups is made based on the Propensity Score solely, and then, after accounting for it, the assignment to treatment is independent of mean outcomes; the second condition ensures that for every possible value of Propensity Score there exist beneficiary and nonbeneficiary control cases.

To estimate the ATT parameter, a *Difference-in-Difference Matching Estimator* (DD) will be implemented based on the available information from before and after the policy implementation, through comparing the temporal changes of the outcome variable in the beneficiary group with the changes in the same variable in the control group. The advantage of this strategy lies in the possibility to control for biases derived from time invariant unobserved characteristics. Its expression is given by,

$$\widehat{ATT^{DD}} = \frac{1}{n^1} \sum_{\substack{i=1\\\{D_i=1\}}}^{n^1} Y^1_{i,t_1}(X_{i,t_1}) - Y^1_{i,t_0}(X_{i,t_0}) - \widehat{E} \Big[Y^0_{i,t_1}(X_{i,t_1}) - Y^0_{i,t_0}(X_{i,t_0}) / P(X_{i,t_0}), D_i = 0 \Big]$$

where n^1 represents the quantity of cases that receive the benefit, t_0 is the moment prior to the program implementation, and t_1 the moment after the implementation.

Hence, by adapting the assumptions (1) and (2) to the context of this estimator, the following expressions are derived:

$$E[Y_{t_1}^0(X) - Y_{t_0}^0(X)/P(X), D = 1] = E[Y_{t_1}^0(X) - Y_{t_0}^0(X)/P(X), D = 0]$$
$$0 < Pr(D = 1/X) < 1$$

Finally, we restrict our attention to the estimation of the ATT parameter on the support region common to both beneficiaries and the control group. To estimate the counterfactuals,

two alternatives of matching are applied: Nearest Neighbor $(NN)^9$ and Local Linear Regression (LLR).¹⁰

5.2 Strategies for identification of treated group and control group

The base of this study is the correct identification of the UCA's beneficiary households (treated group) and of those which will constitute the control group.

Unfortunately, the PHS does not directly inquire about this matter so the identification has to be addressed in an indirect way. In order to identify the households receiving the UCA in 2010 we resorted to a question that captures the totality of cash transfers received by household members, both from government and private institutions, church, etc.¹¹ Given that the question involves a rather wide group of institutions,¹² it is not possible to assume that the answers refer exclusively to this program. Therefore, the households were initially classified as UCA beneficiaries only when the declared amounts matched the values established by the program, i.e. the amount of the transfer was used as treatment indicator.

Considering the frequency of the cash values appearing in this question it is possible to assume that some households declared the amount that was actually received on a monthly basis as benefit (80% of the sum of the benefit), whereas others declared the full amount. The values of the UCA per number of children in charge in the period under analysis were the following:

	Values of the UCA (\$)				
Number of children	Total	80%			
1	180	144			
2	360	288			
3	540	432			
4	720	576			
5	900	720			

 Table 1

 Values of the UCA (\$) per number of children

However, it was also taken into account that households tend to round off the amounts declared and hence other values close to the amount of the benefit were also considered as being UCA. In order to minimize the potential misclassification, the frequency of each of these values in 2010 was compared to 2009 (before the UCA) so as to verify that those values considered as UCA were not present in the year before the implementation. This

⁹ The alternative of 5 Nearest Neighbors is considered.

¹⁰ Fan (1992) analyzes the properties of this estimator compared to other traditional linear smoothers and concludes that it is the most efficient in asymptotic terms and in finite samples, and at the same time it adapts to different design density of the data.

¹¹ Specifically, the question refers to the amount of money that each household member has received in the reference month as a subsidy or social benefit (in cash) from the government, church, etc.

¹² Cash transfers from other individuals not living in the household are included in a different question.

procedure clearly showed how the values of the UCA transfers started to appear while the payments of other national programs begun to disappear (this is the case, for instance, of the *Plan Jefes y Jefas de Hogares Desocupados, Plan Familias or Seguro de Capacitación y Empleo*) as a result of the incompatibility of the UCA with all other types of social benefits of any government level (Figure 1).¹³



Figure 1 Frequency of public transfers' monetary values before and after the UCA

Source: Author's elaboration based on PHS (INDEC)

In addition, when the values observed suggested that there was more than one person per household receiving the UCA, the total amount of the benefit received by the household was compared to the number of children in the household. Since several cases were found in which by mistake the amount of the benefit was repeated for more than one adult member, we excluded from the analysis the households with more than one recipient member and whose total UCA incomes suggested the presence of more children than the actual number of children living in the household.¹⁴

¹³ Based on the Figure, it seems reasonable to assume that certain values such as \$140 and \$280 also correspond to the UCA, because, on the one hand, they appear in 2010 and, on the other hand, such amounts are very similar to those established by the program (\$144 and \$288, respectively). Thus, the households declaring these values were also considered as UCA beneficiaries.

¹⁴ These households represented approximately 3% of the total number of households initially classified as UCA beneficiaries. Even though this would mean that some households are excluded from the analysis in spite of having correctly declared more than one beneficiary per household (generally these are extended households), the comparison between the actual number of children living in the household and the number derived from the total sum of the benefit per household suggests that the error of including these cases would be higher than the error of excluding them.

In addition, the group of households classified as beneficiaries was further cut down by excluding those ones without children. This responded to the need to reduce the heterogeneity of this group in relation to the control group which is comprised of UCA eligible households, and therefore have children living in them.¹⁵ In effect, these eligible households (control group) are those that fulfill all the requirements to obtain a UCA and yet do not receive it. As it was already mentioned, the potential beneficiaries are households with children under 18 years old whose heads or spouses are non-registered wage earners or domestic workers receiving incomes below a minimum wage; unemployed without unemployment insurance; or economically inactive workers without pensions. Therefore, the analysis will be limited to the households (and its members) with children that were eligible for the UCA in 2009, differentiating them according to whether they gained access to the benefit in 2010 (treated group) or not (control group). Thus, whereas the eligibility condition corresponds to 2009, the recipient condition corresponds to 2010.

Households with incomplete information or with imputed values for individual or family incomes have been excluded from the sample. In addition, outlier values of total family incomes and their components (labor and non-labor incomes) were detected and dropped from the analysis, using a robust data standardization method.

Finally, since we are interested in evaluating the effects of the UCA on adult labor market behavior, the sample in the analysis of individuals is comprised of people in economically active ages: men between 18 and 64 years old, and women between 18 and 59 years old. In both cases, the maximum age limits are set by the legal retirement age.

6 Descriptive statistics

The implementation of the UCA took place very fast. By November 2009, the first operative month, the program had already covered 3.3 million children. Then throughout the first months of 2010 its coverage expanded progressively up to a maximum level of 3.7 million in May of that same year, after which the number of children covered has remained relatively stable at about 3.5 million. As mentioned above, this figure represents 30% of total children in the country.

This section presents some relevant characteristics of UCA beneficiaries and their households (treatment group), which are then compared to the non-beneficiary eligible households (control group) before the implementation of the program. Since the program launch was not based on random criteria, significant previous differences are to be expected between the observable variables of both groups. In this case, matching techniques will be needed in order to control for these prior differences when evaluating the impacts of the program.

6.1 Characteristics of the beneficiaries

¹⁵ In any case, it is possible that a household without children is receiving the UCA if a father or a mother is receiving the benefit for children not living with them.

Table A1 shows the demographic and labor characteristics of UCA beneficiaries and their families in 2010. Approximately 58% of the benefit holders are spouses and 34% are household heads. As expected, these figures differ significantly by gender since almost 90% of men are household heads, while 64% of women are spouses. Women represent the vast majority of the holders (89%), which could be at least in part explained by a reassignment of beneficiaries from previous public transfer programs, which had a high presence of women among their beneficiaries.¹⁶

The average age of beneficiaries is 35 years old, with female beneficiaries being younger than men. With respect to the educational level, it is quite low in both cases: around 9.4/9.6 schooling years.

With regards to the employment status of beneficiaries, a similar proportion of employed and inactive workers is observed. However, these figures average different situations according to gender. In the case of women, 52% are inactive and 42% are employed, whereas in the case of men these figures are 5% and 90%, respectively. On average, female holders work 27 hours per week, whereas men work 43 hours. Hence, the labor market participation is lower for female beneficiaries, both in terms of activity rates and hour intensity. The high participation of women among beneficiaries brings the average number of hours worked by the holders to 30 per week.

The average number of members living in beneficiary households is 4.7, while the average quantity of children is 2.5. In spite of receiving the benefit, the incidence of poverty across these households was still high in 2010: approximately 64% of beneficiary households were poor, while 18% were extremely poor. Lastly, in that year, the UCA covered approximately 2 children per beneficiary household,¹⁷ which represented a monthly transfer of about \$300 (USD 75).

6.2 Comparison between beneficiary households and eligible non-beneficiary households in 2009(baseline)

As it can be observed in Table A2, the households that became UCA beneficiaries in 2010 had a larger family size and had more children than non-beneficiary households in 2009. Moreover, the former group had significantly lower family incomes: per capita family incomes of beneficiary households represented on average approximately 86% of the other group's incomes in 2009, as a result of lower labor incomes.

The Kernel density functions of per capita family incomes clearly show that the distribution of eligible households that accessed the UCA is shifted to the left in relation to the rest of the households, followed by eligible non-beneficiary households and then by non-eligible non-beneficiary households with children (Figure 2). On the other hand, adult-only households are located in the right extreme, as expected. Therefore, it suggests that the

¹⁶ Unlike other programs of the region, the UCA does not impose the condition of being a woman to be eligible for the program.

¹⁷ The discrepancy between the average number of children covered by the UCA and the average number of children living in beneficiary households owes to, at least in part, the maximum limit of 5 children per household for which it is possible to get the benefit.

coverage extension of family benefits has been mainly focused on households at the lower end of the income distribution.



Figure 2

Source: Author's elaboration based on PHS (INDEC)

As a result of their lower family income levels, beneficiary households exhibited higher rates of poverty and extreme poverty. Whereas 74% of beneficiary households were poor in 2009, 65% of non-beneficiary households were in such condition. In the case of extreme poverty, the figures are 31% and 26% for beneficiary and non-beneficiary households, respectively (Table A2).

Since about 92% of the benefit holders are heads or spouses, in Table A2 we also compare the characteristics of these individuals to those of their counterparts in non-beneficiary households. No statistically significant differences are found in the percentage of women among spouses in both groups of households. Likewise, the differences in the percentage of women among heads in the treated and control groups are not significant either.

Both household heads and spouses in households that got access to the UCA in 2010 had lower average ages than those of the other group of households in 2009. Also, the educational level of household heads and spouses in beneficiary households was significantly lower, on average, than in the other households.

Lastly, with regard to the supply of labor, no significant differences were found between the spouses of both groups when it comes to labor participation rates and its composition. Likewise, the heads of both types of households did not show a different behavior regarding these variables during 2009 either. However, the opposite is observed for the hour intensity of spouses: those living in beneficiary households worked, on average, fewer hours (-5.8 per week) than spouses in non-beneficiary households in 2009.

To sum up, the two groups of households exhibited significant differences in several observable variables before the program was launched. In general terms, the households that gained access to the program seem to have been facing a greater degree of social vulnerability at the time of the implementation compared to those eligible households which did not. Such pre-existing differences should be taken into account in the econometric analysis in order to identify and accurately estimate the impacts of the UCA on labor market outcomes. In the following section we address this issue.

7 Econometric results

This section analyzes the econometric results derived from the Difference-in-Difference Estimator (DD) calculated using pooled panels of micro-data from the three first quarters of 2009 and 2010. As it was mentioned above, this estimator is applied to all households with children that were eligible in 2009, some of which became UCA beneficiaries in 2010 and some of which did not access the program.

The analysis is carried out at three levels of comparison: (1) beneficiary households vs. non-beneficiary eligible households; (2) members of each of those households, differentiating them by gender and by whether they are heads or spouses; and (3) holders of the benefit vs. comparable individuals living in households of the control group.

Table B1 presents the results of the Logit models used to calibrate scores at the first level of comparison, whereas Table B2 and Table B3 show the results corresponding to the subgroups analyzed at levels 2 and 3, respectively. In order to avoid being affected by the participation in the program, the explanatory variables considered in each case correspond to 2009, a time prior to the UCA implementation. At the second and third level of analysis demographic and labor characteristics of the member in the household under study are also incorporated in addition to the attributes of the house, the household and of its head and spouse.

The scores estimated using these models constitute the input to identify the appropriate control group for each unit in the treated group. Then, the ATT^{DD} associated with each outcome variable considered is estimated. These results are discussed in detail below.¹⁸

7.1 Beneficiary households *vs.* eligible non-beneficiary households

Table A3 presents the results of the estimations at the household level. It shows for each outcome variable, the mean change for the treatment and control groups, the ATT, the bootstrap standard errors¹⁹, the p-values and the number of observations included in each group.

¹⁸ The balance tests tables have not been included in the document due to space reasons, but they are available upon request.

¹⁹ The theoretical standard errors were also computed but they are not presented because they showed no significant differences with the bootstrap standard errors.

Even though the sign of the ATT parameters related to labor market variables suggest that there is a negative impact of the UCA on the economic participation decision –measured as the proportion of active members to total adult members- and on the household employment rate, these changes are not statistically significant under any of the two matching alternatives employed (NN and LLR). Likewise, no significant impact is observed on the incidence of unemployment or on the average number of hours worked by the employed members of the household.

In the same manner, the differences regarding the behavior of total and per capita family incomes between beneficiary households and those in the control group turn out to be not statistically different from zero. However, this common pattern observed in the dynamics of total incomes of both groups of households is in fact the result of greater increases in non-labor incomes that compensated a somewhat weaker dynamism of labor incomes in beneficiary households *vis-à-vis* the control group. Yet, the negative ATT coefficient of labor incomes turns out to be significant only at the 10 percent level of significance under LLR. On the other hand, the results concerning non-labor incomes are significant at 1 percent in both matching alternatives, mainly as a result of the UCA.

To sum up, the lack of statistical significance in the labor market results seem to be suggesting that the implementation of the UCA has not created any important disincentive to work among adult people. However, at the household level, this situation could be a net result of different effects of the UCA among its members. In order to analyze these findings in greater detail, below are presented the results of the estimations conducted separately for different adult members of the households.

7.2 Beneficiary household members vs. members of eligible non-beneficiary households

Table 2 presents the composition of beneficiary households by gender and household position of the adult members. As it can be observed, the most important groups are: (1) total heads and spouses; (2) women; (3) female spouses; (4) heads; (5) female heads; (6) male heads. For this reason, at the level of individuals the analysis will be limited to these groups, which will be compared to their counterparts in the households of the control group.

	Men	Women	TOTAL
Head	31%	14%	45%
Spouses	3%	30%	33%
Sub-total	34%	45%	79%
Children	8%	10%	18%
Other members	2%	2%	4%
TOTAL	44%	56%	100%

 Table 2

 Composition of members in beneficiary households, by gender and household position

Table A4 presents the econometric estimates for these six groups. The results at this level of analysis are consistent to those obtained at the household level in that the majority of beneficiary household members do not show a significantly different behavior to that of household members in the control group. In particular, the ATTs corresponding to the activity and employment conditions turn out to be not statistically significant for all household members and under the two matching techniques employed. However, the relative increase observed in the unemployment rate among female spouses in beneficiary households is statistically significant, although at a 5% or 10% level, depending on the matching technique employed.

With regard to the average hours worked (calculated only for those individuals that are employed in both observations), it is notable that even though the number of hours worked by women in beneficiary households decrease while the contrary takes place in nonbeneficiary households, the average differences between the two groups are not statistically significant, and neither they are for the rest of the members considered.

With regard to family income variations and their sources, the greater increase in non-labor incomes registered among UCA beneficiary households is a result of what happened among women in general and among female spouses in particular. This is consistent with the fact that women represent about 90% of total UCA beneficiaries. The very low or null significance found for the differences in labor incomes at the household level is ratified at the individual level. As a result of this, the differences observed in non-labor incomes translate into the dynamics of total income gaps. In fact, women in general and female spouses in particular (in the case of NN) experience significant increases in total individual incomes as a consequence of receiving the UCA.

In summary, like with previous results, the findings related to household members do not allow us to conclude that receiving a monetary transfer like the UCA creates disincentives to participate in the labor market or reduces the hour intensity of those that continue to be employed.

7.3 Female UCA holders (heads or spouses) vs. women in eligible non-beneficiary households

Lastly, we evaluate the UCA by comparing the behavior of the holders with that of household members of the control group. Given that, as it was shown above, almost all the holders are women, the analysis will be restricted to this subgroup of individuals. In particular, work decisions and income generation are evaluated for the totality of female holders (which are compared to those of adult women in eligible non-beneficiary households) and then for heads and spouses separately. In the latter two cases the comparison is carried out with respect to female heads and spouses of households in the control group, respectively.

The results are presented in Table A5. Once again they confirm that the UCA does not have significant effects on work decisions. In particular, this program does not seem to have encouraged net exits towards inactivity or caused a reduction in the hourly work intensity of women, and thus it did not lead to a decrease in the labor supply of the latter (both of

heads and spouses). It is important to point out that the relative increase observed in the unemployment rate of women in beneficiary households (although the difference between both groups was significant only at the 5%/10% levels) becomes negligible when the analysis is restricted to female benefit holders. In this case, the ATT is significant only at the 10% level in the case of LLR.

The absence of significant effects of the UCA on work decisions is consistent with the null impact of the program on labor incomes of female benefit holders. On the contrary, a significant double-difference estimated average effect is found in the case of non-labor incomes of the holders (in particular, of the holders who are spouses) as a result of receiving the benefit which, in the absence of changes in the opposite direction of other income sources, results in net increases of total incomes received by the holders of the benefit.

8 Sensitivity analysis

Up to this point the estimates have been based on the comparison of those groups of households and individuals that remain in the sample after the exclusions mentioned in section 4. However, there are some beneficiaries inside the common support region whose probabilities of being treated are close to zero.

Following the recommendation of Heckman *et al.* (1997) we use the trimming method to avoid the biases that might arise in the estimates when including the cases mentioned in the previous paragraph. In particular, once the minimum values of the score estimated for households and members in the treated group with different trimming alternatives were analyzed, it seemed appropriate to evaluate the sensitivity of the results presented in the previous sections with those resulting from two alternative scenarios: trimming levels of 2% and 5%.²⁰ The results obtained in each case support previous conclusions.²¹

9 Conclusions

The introduction of the UCA represents a major step forward towards meeting the challenges involved in closing the child coverage gap in Argentina. This program has a direct built-in connection with the contributory social security system in that it extends the existing system of family allowances for children and adolescents of formal-economy workers.

At present, the UCA covers approximately 30% of total children. Since the design of the transfers includes a conditional component that depends on school attendance and medical

 $^{^{20}}$ Due to space reasons these results have not been included in this document, but they are available upon request.

²¹ One difference with respect to previous results is that the negative coefficient of the ATT associated with the employment of women is significant, although only at the 10% level and only under the LLR alternative. On the contrary, the differences in unemployment and activity level changes continue to be non-significant.

check-ups, it is in line with trends in transfer programs implemented successfully in many countries in Latin America.

One relevant aspect of this allowance is that not only it involves an increase in family incomes of low-income households but it also assures a sum of money that is not dependent on macroeconomic or employment fluctuations. This is very important because it is the poorer households who experience greater income instability. In fact, the results suggest that it was the households at the lower tail of the income distribution who gained access to the UCA. Hence, this extension of rights has focused on the most vulnerable groups of the population.

This study is the first attempt to measure the impacts of the UCA on adult labor participation, employment, unemployment, hours worked, and labor and non-labor income generation, by using the Difference-in-Difference estimator and Propensity Score Matching techniques. Hence, this study contributes to enrich the still scarce yet growing literature about the impacts of cash transfers on the changes in the labor supply behavior of adults in developing countries.

The analysis is carried out at three levels of comparison: (1) beneficiary households vs. non-beneficiary eligible households; (2) members of each of those households, differentiating them by gender and by whether they are heads or spouses; and (3) female benefit holders vs. women in the control group, differentiated by whether they are spouses or heads.

The results obtained do not allow us to conclude that this program has generated disincentives to work among the adult members of beneficiary households, neither through exiting the labor force nor through a reduction in the number of hours worked. The sensitivity analysis conducted at each level of comparison provides robustness to these conclusions. They are consistent with an important part of the empirical evidence for similar transfer programs in other Latin American countries.

These findings are highly relevant in the discussion about the design of the social public policies in Latin America taking into account, on the one hand, that it is essential to minimize any potential negative side effect of these programs on the labor market and, on the other hand, that this sort of cash transfers has gained increasing relevance as a constitutive part of the social protection system in this region.

References

Agis, E., C. Cañete and D. Panigo (2010) "El impacto de la asignación universal por hijo en Argentina". CENDA/PROFPE/CEIL-PIETTE.

Alzúa, M., G. Cruces and L. Ripani (2010) "Welfare Programs and Labor Supply in Developing Countries. Experimental Evidence from Latin America", CEDLAS Working Paper No. 95, La Plata.

- Amarante V., M. Ferrando and A. Vigorito (2011) "School Attendance, Child Labour and Cash Transfers: An Impact Evaluation of PANES", Working Paper 22/11, Poverty and Economic Policy Network-PIERI.
- Angelucci, M. and G. De Giorgi (2009) "Indirect Effects of an Aid Program: How Do Cash Transfers Affect Ineligibles' Consumption?", American Economic Review 99:1, 486– 508.
- Baker, M., J. Gruber and K. Milligan (2005) "Universal childcare, maternal labor supply and family well-being", NBER Working Paper Series No. 11832.
- Bertranou, F. and R. Maurizio (2012) "Semi-conditional cash transfers in the form of family allowances for children and adolescents in the informal economy in Argentina", **International Social Security Review**, Vol. 65, 1/2012, ISSN: 0020-871X.
- ECLAC (2010) Time for equality: closing gaps, opening trails. Report of the thirtieth session of ECLAC.
- Fan, J. (1992) "Design-adaptive Nonparametric Regression", Journal of the American Statistical Association, American Statistical Association, vol. 87(420), pp. 998-1004, december.
- Ferro, A. and A. Nicollela (2007) "The Impact of Conditional Cash Transfers Programs on
HouseholdWorkDecisionInBrazil",
Brazil",
http://www.iza.org/conference_files/worldb2007/ferro_a3468.pdf
- Ferro, A., A. Kassouf and D. Levison (2010) "The impact of conditional cash transfer programs on household work decisions in Brazil", in R. Akee, E. Edmonds and K. Tatsiramos (ed.) Child Labor and the Transition between School and Work, Research in Labor Economics, vol. 31, Emerald Group Publishing Limited, pp.193-218
- Foguel, M. and R. Paes de Barros (2010) "The Effects of Conditional Cash Transfer Programmes on Adult Labour Supply: An Empirical Analysis Using a Time-Series-Cross-Section Sample of Brazilian Municipalities", Estudos Econômicos, São Paulo, vol. 40, No. 2, pp. 259-293.
- Gasparini, L. and G. Cruces (2010) "Las Asignaciones Universales por Hijo: Impacto, Discusión y Alternativas". CEDLAS Working Paper No. 102.
- Garganta, S. and L. Gasparini (2012) "El Impacto de un Programa Social sobre la Informalidad Laboral: El Caso de la AUH en Argentina". CEDLAS Working Paper No. 133.
- Heckman, J., H. Ichimura and P. Todd (1997) "Matching as an Econometric Evaluation Estimator: Evidence from Evaluating a Job Training Programme", The Review of Economic Studies, Vol. 64, No. 4, Special Issue: Evaluation of Training and Other Social Programmes, pp. 605-654.
- Heckman, J., H. Ichimura and P. Todd (1998) "Matching as an Econometric Evaluation Estimator", **The Review of Economic Studies**, Oxford University Press, vol. 65(2), pp. 261-294, april.
- ILO / IPEC (2007) Trabajo Infantil y los programas de transferencias en efectivo condicionadas en América Latina, International Labour Organization, Costa Rica.
- ILO (2010) "Aportes para la construcción de un piso de protección social en Argentina: el caso de las asignaciones familiares", Buenos Aires.
- Killingsworth, M. (1983) Labor supply, Cambridge University Press.

- Maluccio, J. (2007) "The Impact of Conditional Cash Transfers in Nicaragua on Consumption, Productive Investments, and Labor Allocation", ESA Working Paper No. 07-11, Agricultural and Development Economics Division, FAO.
- Martinez, S. (2004) "Pensions, Poverty and Household Investments in Bolivia", University of California at Berkeley.
- Medeiros, M., T. Britto and F. Veras Soares (2008) "Targeted cash transfer programmes in Brazil: BPC and The Bolsa Familia", Working Paper No. 46, International Poverty Centre, Brasilia.
- Parker, S. and E. Skoufias (2000) "The impact of PROGRESA on work, leisure, and time allocation". Working Paper, International Food Policy Research Institute, Washington D.C.
- Perez Ribas, R., F. V. Soares & G. Hirata (2008) "The Impact of CCTs. What we know and what we are not sure about", Poverty in Focus "Cash Transfers. Lesson from Africa and Latin America", International Poverty Centre, Brazil.
- Ravallion, M. and Q. Wodon (2000) "Does child labor displace schooling?. Evidence on behavioral responses to an enrollment subsidy", **The Economic Journal**, vol.110, pp. C158-C175.
- Roca, E. (2010) "Ingreso Universal por Hijo para protección social. Presented at International Workshop "Compartiendo experiencias innovadoras sobre el piso de protección social". International Training Center, Turin, ILO.
- Skoufias, E. and V. di Maro (2008) "Conditional Cash Transfers, Adult Work Incentives, and Poverty", **Journal of Development Studies**, vol. 44, issue 7.
- Soares, F., R. Ribas and R. Osório (2007) "Evaluating the Impact of Brazil's Bolsa Família: Cash Transfer Programmes in Comparative Perspective", IPC Evaluation Note, No.1, International Poverty Centre, Brazil.
- Soares, F., R. Ribas and G. Hirata (2008) "Achievements and Shortfalls of Conditional Cash Transfers: Impact Evaluation of Paraguay's Tekoporã Programme", IPC Evaluation Note, No.3, International Poverty Centre, Brazil.
- Tavares, P. (2008) "Efeito do Programa Bolsa Família sobre a oferta de Trabalho das Mães", Anais do XXXVI Encontro Nacional de Economia, ANPEC - Associação Nacional dos Centros de Pósgraduação em Economia
- Teixeira, C. (2010) "A heterogeneity analysis of the Bolsa Família Programme effect on men and women's work supply", IPC Working Paper No. 61, International Poverty Centre, Brazil.
- The World Bank (2009) **Transferencias monetarias condicionadas. Reducción de la pobreza actual y futura**, Mayol Ediciones, Bogota.
- Villatoro, P. (2008) "CCTs in Latin America: Human Capital Accumulation and Poverty Reduction", in Poverty in Focus "Cash Transfers. Lesson from Africa and Latin America", International Poverty Centre, Brazil.

ANNEX

Table A1Characterization of UCA beneficiaries - 2010 Average

Characteristics	UCA beneficiaries						
	Total	Women	Men				
Relationship							
Head	33.6%	26.8%	88.5%				
Spouse / Partner	57.9%	64.3%	6.2%				
Other members	8.5%	8.9%	5.3%				
Age	35.1	34.6	38.8				
Years of education	9.6	9.6	9.4				
Employment status							
Employed	47.1%	41.8%	89.6%				
Unemployed	6.6%	6.7%	5.6%				
Inactive	46.4%	51.6%	4.8%				
Hours worked	30.0	26.6	43.0				
Gender							
Women	88.9%						
Household Members (average)							
Members 0-5	1.4						
Members 6-12	1.6						
Members 13-17	1.4						
Members 18-59/64	2.2						
N. of children	2.5						
Total	4.7						
Poor Household	63.7%						
Extreme Poor Household	17.9%						
Children covered by UCA	2.1						
Amount of UCA benefit	305.1						

Table A2Characteristics of UCA beneficiaries and non beneficiaries - 2009

	Differences in means / proportions									
Characteristics	Non beneficiaries	Beneficiaries	Difference	t / z (*)	P-value					
Household										
Members	4.6	4.8	-0.13	-1.54	0.124					
Children	2.3	2.6	-0.31 ***	-4.75	0.000					
Total Income	1253.5	1130.7	122.9 ***	3.37	0.001					
Per capita income	290.3	251.6	38.7 ***	4.56	0.000					
Labor income	1112.2	979.9	132.2 ***	3.58	0.000					
Non labor income	141.4	150.7	-9.4	-1.05	0.296					
Poor	0.65	0.74	-0.09 ***	-4.24	0.000					
Extreme poor	0.26	0.31	-0.04 **	-2.05	0.041					
Head										
Women	0.65	0.68	-0.04	-1.58	0.114					
Age	39.9	37.5	2.3 ***	4.89	0.000					
Years of education	9.3	9.0	0.3 **	2.33	0.020					
Employment status										
Employed	0.81	0.79	0.01	0.60	0.545					
Unemployed	0.06	0.09	-0.02 *	-1.66	0.097					
Inactive	0.13	0.12	0.01	0.57	0.571					
Hours worked	42.0	42.2	-0.2	-0.21	0.832					
Spouse										
Women	0.08	0.08	0.00	0.26	0.792					
Age	36.1	34.1	1.9 ***	3.95	0.000					
Years of education	10.0	9.4	0.6 ***	3.24	0.001					
Employment status										
Employed	0.41	0.41	0.00	-0.04	0.971					
Unemployed	0.06	0.05	0.01	0.83	0.409					
Inactive	0.53	0.54	-0.01	-0.35	0.729					
Hours worked	33.6	27.8	5.8 ***	3.42	0.001					

(*) t statistics for tests of equality of means and z statistics for two-tailed proportions tests, as appropriate.

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

Table A3 UCA effects on household level indicators and income generation

	Matching		Differences in Differences								
Outcome Variable	Technique	Mean Change	Mean Change	A T T	S.E.	D Value	Obs. C	Common Su	pport		
	(†)	Treatment Group	Control Group	A.1.1.	(‡)	P-Vulue	Treated	Control	Total		
	nn(5)	-0.024	-0.005	-0.019	0.018	0.279	749	1,291	2,040		
Activity	llr	-0.024	-0.006	-0.018	0.017	0.283	749	1,291	2,040		
	nn(5)	-0.011	0.002	-0.013	0.020	0.512	749	1,291	2,040		
Employment	llr	-0.011	0.008	-0.019	0.021	0.366	749	1,291	2,040		
Unemployed / Total	nn(5)	-0.013	-0.007	-0.006	0.013	0.619	749	1 291	2 040		
household members	llr	-0.013	-0.014	0.000	0.013	0.013	749	1 291	2,040		
		01010	0.011	0.001	01012	01020	7.15	1)231	2,010		
	nn(5)	-0.007	-0.026	0.019	0.017	0.266	687	1,200	1,887		
Unemployment	llr	-0.007	-0.014	0.008	0.131	0.953	687	1,200	1,887		
	nn(5)	1.0	0.0	1.1	1.2	0.388	626	1,111	1,737		
Hours Worked	llr	1.0	0.4	0.6	1.2	0.631	626	1,111	1,737		
	nn(5)	543.5	510.9	32.6	53.1	0.540	749	1,291	2,040		
Total Family Income	llr	543.5	526.0	17.5	60.5	0.773	749	1,291	2,040		
	nn(5)	104.2	111.1	-6.9	13.0	0.596	749	1.291	2.040		
Per Capita Family Income	llr	104.2	111.6	-7.4	12.3	0.549	749	1,291	2,040		
	nn(5)	302.6	389.5	-86.8	54.4	0.111	749	1.291	2.040		
Labor Income	llr	302.6	404.5	-101.9 *	55.3	0.066	749	1,291	2,040		
	nn(5)	240.9	121.5	119.4 ***	19.0	0.000	749	1,291	2,040		
Non Labor Income	llr	240.9	121.5	119.4 ***	18.2	0.000	749	1,291	2,040		

(†) Local Linear Regression weights were computed using Epanechnicov Kernel Function with Silverman's plug-in estimate of the bandwidth.

(‡) Bootstrapped Standard Errors with 300 replicates.

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

Table A4 UCA effects on adult labor decisions and income generation

	Matching		Differences in Differences							
Outcome Variable	Technique	Group	Mean Change	Mean Change		S.E.	0	Obs.	Common :	Support
	(†)		Treatment Group	Control Group	A.1.1.	(‡)	P-value	Treated	Control	Total Obs.
		Heads and Spouses	-0.019	-0.002	-0.017	0.018	0.341	1,231	2,061	3,292
		Heads	-0.013	-0.007	-0.006	0.019	0.759	689	1,170	1,859
		Male Heads	0.004	-0.009	0.014	0.016	0.412	473	767	1,240
	nn(5)	Women	-0.024	0.004	-0.027	0.027	0.315	886	1,635	2,521
		Female Heads	-0.051	-0.021	-0.030	0.056	0.592	215	394	609
A		Female Spouses	-0.022	-0.013	-0.009	0.038	0.810	502	820	1,322
Activity		Heads and Spouses	-0.019	-0.006	-0.013	0.042	0.758	1,231	2,061	3,292
		Heads	-0.013	-0.011	-0.002	0.017	0.902	689	1,170	1,859
	11-	Male Heads	0.004	-0.007	0.011	0.015	0.430	472	767	1,239
		Women	-0.024	0.001	-0.025	0.025	0.326	886	1,635	2,521
		Female Heads	-0.051	-0.048	-0.003	0.218	0.989	215	394	609
		Female Spouses	-0.022	-0.006	-0.016	0.034	0.644	502	820	1,322
		Heads and Spouses	-0.004	0.018	-0.022	0.019	0.261	1,231	2,061	3,292
		Heads	0.015	0.020	-0.006	0.024	0.811	689	1,170	1,859
	nn(E)	Male Heads	0.030	0.019	0.011	0.027	0.692	473	767	1,240
	111(5)	Women	-0.017	0.024	-0.041	0.028	0.140	886	1,635	2,521
		Female Heads	-0.019	0.010	-0.029	0.058	0.620	215	394	609
Employment		Female Spouses	-0.022	0.015	-0.037	0.035	0.293	502	820	1,322
Employment		Heads and Spouses	-0.004	0.016	-0.020	0.018	0.261	1,231	2,061	3,292
		Heads	0.015	0.010	0.005	0.024	0.844	689	1,170	1,859
	llr	Male Heads	0.030	0.021	0.008	0.052	0.874	472	767	1,239
		Women	-0.017	0.022	-0.039	0.026	0.143	886	1,635	2,521
		Female Heads	-0.019	-0.022	0.003	0.122	0.979	215	394	609
		Female Spouses	-0.022	0.019	-0.041	0.039	0.299	502	820	1,322
		Heads and Spouses	-0.015	-0.019	0.005	0.013	0.707	1,231	2,061	3,292
		Heads	-0.028	-0.028	0.000	0.018	1.000	689	1,170	1,859
	nn(5)	Male Heads	-0.025	-0.028	0.003	0.025	0.905	473	767	1,240
		Women	-0.007	-0.020	0.014	0.014	0.320	886	1,635	2,521
		Female Heads	-0.033	-0.032	-0.001	0.032	0.977	215	394	609
Unemployment		Female Spouses	0.000	-0.028	0.028 *	0.016	0.074	502	820	1,322
		Heads and Spouses	-0.015	-0.022	0.007	0.010	0.475	1,231	2,061	3,292
		Heads	-0.028	-0.021	-0.007	0.015	0.644	689	1,170	1,859
	llr	Male Heads	-0.025	-0.029	0.003	0.031	0.918	472	767	1,239
		Women	-0.007	-0.021	0.014	0.010	0.188	886	1,635	2,521
		Female Heads	-0.033	-0.026	-0.006	0.162	0.970	215	394	609
		Female Spouses	0.000	-0.025	0.025 **	0.012	0.041	502	820	1,322
		Heads and Spouses	-0.4	-0.8	0.4	1.1	0.740	623	1,104	1,/2/
		Heads	-0.5	0.0	-0.4	1.4	0.750	475	838	1,313
	nn(5)	Iviale Heads	-0.3	-2.1	1.8	1.6	0.251	367	623	990
		women	-0.8	0.1	-0.9	2.2	0.678	255	531	786
		remaie Heads	-1.3	4.1	-5.5	3.9	0.161	106	198	304
Hours Worked		remaie Spouses	-1.1	-U./	-0.4	2.9	0.8//	116	195	311
		neuas ana spouses	-0.4	0.0	-0.4	1.5	0.749	023	1,104	1,727
		Heaas Mala Hoad-	-0.5	-U.8	0.4	1./	0.827	4/5	838	1,313
	llr	iviale Heads	-0.3	0.7	-1.0	2.3	0.059	367	023 521	990
		women	-U.8	0.7	-1.5	2.9	0.604	255	109	786
		remaie Heads	-1.3	4.1	-5.5	13.1	0.676	106	198	304
		Female Spouses	-1.3	-0.2	-1.1	4.9	0.828	115	195	310

Table A4 (Cont.)

UCA effects on adult labor decisions and income generation

	Matching		Differences in Differences								
Outcome Variable	Technique	e Group	Mean Change	Mean Change		S.E.		Obs. Common Support			
	(†)		Treatment Group	Control Group	A.T.T.	(‡)	P-value	Treated	Control	Total Obs.	
		Heads and Spouses	246.1	214.2	31.9	27.7	0.250	1,231	2,061	3,292	
		Heads	227.5	281.1	-53.7	43.6	0.218	689	1,170	1,859	
	nn(5)	Male Heads	234.6	273.3	-38.7	57.4	0.500	473	767	1,240	
	111(3)	Women	242.9	176.5	66.4 ***	24.7	0.007	886	1,635	2,521	
		Female Heads	212.2	243.0	-30.8	62.9	0.625	215	394	609	
Total Income		Female Spouses	280.1	172.1	108.0 ***	34.7	0.002	502	820	1,322	
Total income		Heads and Spouses	246.1	222.3	23.8	28.0	0.395	1,231	2,061	3,292	
		Heads	227.5	98.2	129.3	2,972.0	0.965	689	1,170	1,859	
	llr	Male Heads	234.3	263.7	-29.4	71.8	0.682	472	767	1,239	
		Women	242.9	169.9	73.0 ***	22.8	0.001	886	1,635	2,521	
		Female Heads	212.2	225.6	-13.4	104.5	0.898	215	394	609	
		Female Spouses	280.1	173.0	107.2	107.2	0.318	502	820	1,322	
	nn(5)	Heads and Spouses	114.2	148.0	-33.7	25.0	0.177	1,231	2,061	3,292	
		Heads	158.0	223.4	-65.4	39.8	0.100	689	1,170	1,859	
		Male Heads	202.1	251.6	-49.6	56.2	0.378	473	767	1,240	
		Women	62.2	89.3	-27.2	21.9	0.214	886	1,635	2,521	
		Female Heads	61.2	118.2	-57.1	58.9	0.333	215	394	609	
Labor Income		Female Spouses	54.0	79.4	-25.4	30.2	0.400	502	820	1,322	
		Heads and Spouses	114.2	158.9	-44.7 *	23.9	0.062	1,231	2,061	3,292	
		Heads	158.0	46.1	111.9	628.1	0.859	689	1,170	1,859	
	llr	Male Heads	201.7	243.5	-41.8	129.6	0.747	472	767	1,239	
		Women	62.2	83.5	-21.3	17.6	0.225	886	1,635	2,521	
		Female Heads	61.2	104.1	-43.0	110.0	0.696	215	394	609	
		Female Spouses	54.0	88.2	-34.2	26.8	0.203	502	820	1,322	
		Heads and Spouses	131.9	66.2	65.6 ***	10.3	0.000	1,231	2,061	3,292	
		Heads	69.5	57.7	11.7	12.3	0.341	689	1,170	1,859	
	nn(5)	Male Heads	32.5	21.7	10.8	10.8	0.315	473	767	1,240	
		Women	180.8	87.2	93.6 ***	13.2	0.000	886	1,635	2,521	
		Female Heads	151.1	124.8	26.3	34.4	0.445	215	394	609	
Non Labor Income		Female Spouses	226.1	92.7	133.4 ***	17.6	0.000	502	820	1,322	
		Heads and Spouses	131.9	63.4	68.5 ***	10.0	0.000	1,231	2,061	3,292	
		Heads	69.5	52.1	17.3	11.1	0.118	689	1,170	1,859	
	llr	Male Heads	32.6	20.2	12.4	9.8	0.208	472	767	1,239	
		Women	180.8	86.5	94.3 *	54.5	0.084	886	1,635	2,521	
		Female Heads	151.1	121.5	29.6	250.8	0.906	215	394	609	
		Female Spouses	226.1	84.8	141.3 ***	31.5	0.000	502	820	1,322	

 (†) Local Linear Regression weights were computed using Epanechnicov Kernel Function with Silverman's plug-in estimate of the bandwidth.

 (†) Bootstrapped Standard Errors with 300 replicates.

 *** p<0.01, ** p<0.05, * p<0.1</td>

 Source: Author's elaboration based on PHS (INDEC).

Table A5 UCA effects on adult labor decisions and income generation

Matching Differences in Diffe					in Differenc	Differences					
Outcome Variable	Technique	Group	Mean Change	Mean Change	A T T	S.E.	P-value	Obs.	Obs. Common Support		
	(†)		Treatment Group	Control Group	A.1.1.	(‡)		Treated	Control	Total Obs.	
		Women	-0.030	-0.003	-0.027	0.027	0.314	701	1,695	2,396	
	nn(5)	Female Heads	-0.056	-0.034	-0.021	0.060	0.727	180	404	584	
Activity		Female Spouses	-0.009	0.008	-0.017	0.040	0.670	448	838	1,286	
Activity		Women	-0.030	-0.002	-0.028	0.025	0.260	701	1,695	2,396	
	llr	Female Heads	-0.056	-0.041	-0.014	0.188	0.940	180	404	584	
		Female Spouses	-0.009	0.002	-0.011	0.216	0.961	448	838	1,286	
		Women	-0.020	0.014	-0.034	0.031	0.271	701	1,695	2,396	
	nn(5)	Female Heads	-0.006	0.003	-0.009	0.071	0.900	180	404	584	
Employment		Female Spouses	-0.013	0.022	-0.035	0.036	0.327	448	838	1,286	
Linployment		Women	-0.020	0.021	-0.041	0.058	0.482	701	1,695	2,396	
	llr	Female Heads	-0.006	-0.004	-0.001	0.121	0.991	180	404	584	
		Female Spouses	-0.013	0.020	-0.033	0.034	0.326	448	838	1,286	
		Women	-0.010	-0.017	0.007	0.015	0.655	701	1,695	2,396	
	nn(5)	Female Heads	-0.050	-0.038	-0.012	0.033	0.712	180	404	584	
Unemployment		Female Spouses	0.004	-0.014	0.018	0.017	0.291	448	838	1,286	
onempioyment		Women	-0.010	-0.023	0.013	0.012	0.300	701	1,695	2,396	
	llr	Female Heads	-0.050	-0.037	-0.013	0.050	0.798	180	404	584	
		Female Spouses	0.004	-0.018	0.023 *	0.013	0.084	448	838	1,286	
		Women	-1.3	0.6	-2.0	2.3	0.383	208	541	749	
	nn(5)	Female Heads	-1.5	1.7	-3.2	4.2	0.444	90	199	289	
Hours Worked		Female Spouses	-1.9	0.9	-2.8	3.3	0.399	105	200	305	
nours worked		Women	-1.3	0.9	-2.2	5.7	0.694	208	541	749	
	llr	Female Heads	-1.5	7.4	-8.9	15.2	0.559	90	199	289	
		Female Spouses	-1.9	0.2	-2.1	11.9	0.860	104	200	304	
		Women	281.7	173.7	108.0 ***	27.7	0.000	701	1,695	2,396	
	nn(5)	Female Heads	251.2	218.6	32.6	66.0	0.622	180	404	584	
Total Income		Female Spouses	304.1	167.0	137.0 ***	33.4	0.000	448	838	1,286	
		Women	281.7	178.6	103.1 ***	33.2	0.002	701	1,695	2,396	
	llr	Female Heads	251.2	242.2	9.0	167.6	0.957	180	404	584	
		Female Spouses	304.1	136.2	167.8 ***	32.9	0.000	448	838	1,286	
		Women	57.1	83.2	-26.1	24.4	0.286	701	1,695	2,396	
	nn(5)	Female Heads	76.9	108.1	-31.1	57.8	0.590	180	404	584	
Labor Income		Female Spouses	52.9	80.0	-27.1	29.9	0.364	448	838	1,286	
		Women	57.1	89.8	-32.7	23.8	0.170	701	1,695	2,396	
	llr	Female Heads	76.9	116.3	-39.4	330.4	0.905	180	404	584	
		Female Spouses	52.9	92.9	-40.1	29.2	0.171	448	838	1,286	
		Women	224.6	90.5	134.1 ***	15.5	0.000	701	1,695	2,396	
	nn(5)	Female Heads	174.3	110.6	63.7	42.2	0.131	180	404	584	
Non Labor Income		Female Spouses	251.2	87.0	164.2 ***	17.4	0.000	448	838	1,286	
		Women	224.6	88.8	135.9 ***	15.7	0.000	701	1,695	2,396	
	llr	Female Heads	174.3	125.9	48.4	6,644.7	0.994	180	404	584	
		Female Spouses	251.2	43.3	207.9 ***	16.9	0.000	448	838	1,286	

(†) Local Linear Regression weights were computed using Epanechnicov Kernel Function with Silverman's plug-in estimate of the bandwidth.

(*) Expression weights were computed asin (*) Bootstropped Standard Errors with 300 replicates. *** p<0.01, ** p<0.05, * p<0.1 Source: Author's elaboration based on PHS (INDEC).

Table B1 Logit for calibrating the propensity score for household level estimations

Variable	Coeff.
2nd. Quarter	0.262**
	[0.119]
3rd. Quarter	0.518***
	[0.122]
Parent educational level - Complete primary	-0.0117
	[0.187]
Parent educational level - Incomplete secondary	-0.284
	[0.196]
Parent educational level - Complete secondary	-0.149
	[0.207]
Parent educational level - Incomplete tertiary	-0.470*
	[0.281]
Parent educational level - Complete tertiary	-0.789**
	[0.356]
Members 0-5	0.183***
	[0.0682]
Members 6-12	0.194***
	[0.0516]
Members 13-17	-0.0148
	[0.0640]
Members 18-64	-0.0666
Mambars > C4	[0.0766]
Members > 64	-0.764
Total working hours per employed member	[0.055]
iotal working hours per emproyed member	[0 00201]
Total family income	-5 72e-05
	[8,21e-05]
Floor - Soil	0.441*
	[0.245]
Walls - Sheet metal, wooden panel, cane or straw	-0.131
	[0.208]
Rooms	-0.0526
	[0.0816]
Water - Network connection	-0.199
	[0.267]
Bathroom	-0.515*
	[0.312]
Owner	-0.298***
	[0.112]
Free renter	-0.0556
	[0.178]
Gas network connection	-0.0798
Desite a New set	[0.138]
Region Nordeste	0.158
Pagion Norosta	[0.204]
Region Noteste	[0 219]
Region Cuvo	_0 100
hebron cuyo	[0 220]
Region Pampeana	-0.00554
	[0.202]
Region Patagónica	0.228
-	[0.250]

Table B1 (Cont.)

Variable	Coeff.
Head	
Sex	-0.0501
	[0.273]
Age	-0.00876
	[0.00773]
Unemployed	-0.0265
	[0.276]
Inactive	-0.244
	[0.270]
Registered wage earner	0.237
	[0.492]
Self-employed	0.150
	[0.142]
Employer	0.106
	[0.257]
Construction	-0.191
	[0.206]
Commerce	-0.124
	[0.209]
Transport	-0.0229
	[0.255]
Finance	-0.411
	[0.346]
Personal Services	-0.711
	[0.605]
Domestic Service	0.137
	[0.277]
Public Sector	-0.577
	[0.359]
Other Sector	0.0982
	[0.290]
Size of establishment 6-40	-0.0373
	[0.185]
Size of establishment >40	0.00813
	[0.291]

Table B1 (Cont.)

Variable	Coeff.
Spouse	
Presence of spouse	1.025*
	[0.580]
Sex	-0.280
	[0.379]
Age	-0.000429
	[0.00900]
Unemployed	-1.158**
	[0.469]
Inactive	-0.809**
	[0.403]
Family worker without remuneration	-0.892
	[0.641]
Registered wage earner	-0.859
	[0.582]
Self-employed	-0.225
	[0.314]
Employer	-0.210
	[0.757]
Construction	-0.284
	[0.530]
Commerce	-0.518
	[0.367]
Transport	-0.699
	[0.588]
Finance	-0.265
	[0.725]
Personal Services	-0.502
	[0.931]
Domestic Service	-0.238
	[0.423]
Public Sector	-0.462
	[0.568]
Other Sector	-0.514
	[0.538]
Size of establishment 6-40	-0.539
	[0.431]
Size of establishment >40	-0.491
	[0.539]
Constant	0.479
	[0.563]
Obs.	2,040
Pseudo R2	0.0651

Standard errors in brackets.

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

Table B2 Logits for calibrating the propensity scores for household member level estimations

Variables	Coeff.								
Variables	Heads and Spouses	Heads	Male Heads	Women	Female Heads	Female Spouses			
2nd. Quarter	0.244***	0.274**	0.327**	0.160	0.0930	0.213			
	[0.0929]	[0.124]	[0.153]	[0.109]	[0.230]	[0.148]			
3rd. Quarter	0.493***	0.555***	0.577***	0.487***	0.578**	0.454***			
	[0.0963]	[0.129]	[0.159]	[0.112]	[0.238]	[0.153]			
Parent educational level - Complete primary	0.0849	-0.0226	0.237	-0.0525	-0.420	0.390			
· · · · · · · · · · · · · · · · · · ·	[0.157]	[0.194]	[0.270]	[0.166]	[0.304]	[0.287]			
Parent educational level - Incomplete secondary	-0 104	-0 303	-0.0148	-0.318*	-1.032***	0.243			
	[0 163]	[0 204]	[0 280]	[0 178]	[0 344]	[0 292]			
Parent educational level - Complete secondary	-0.0861	-0 141	-0.106	-0 217	-0.0455	0 155			
further complete secondary	[0 172]	[0 216]	[0 294]	[0 188]	[0 356]	[0 307]			
Parent educational level - Incomplete tertian	-0.444*	-0.498*	-0.422	-0 582**	-0.821	-0.210			
Falent educational level - incomplete tertiary	-0.444	-0.498 [0.301]	[0.422	[0.262]	[0 508]	[0 387]			
Parent educational level Complete tertian	0.401*	0.556	_0 112	-0.837**	_1 792**	_0.187			
	-0.431	[0.330	[0.112	10 2 2 0 1	[0 874]	[0 425]			
Mombars 0 F	[0.272]	[0.379]	0.226***	[0.529]	[0.874]	[0.423]			
Members 0-5	0.197	0.212	0.230	0.244	0.191	0.195			
Manshava C 12	[0.0527]	[0.0/02]	[0.0876]	[0.0601]	[0.133]	[0.0862]			
Wembers 6-12	0.157***	0.1/5***	0.160**	0.193****	0.152	0.150**			
	[0.0401]	[0.0537]	[0.0646]	[0.0483]	[0.109]	[0.0640]			
Members 13-17	-0.0206	0.00691	0.0113	0.0244	0.00567	-0.0106			
	[0.0519]	[0.0666]	[0.0862]	[0.0592]	[0.116]	[0.0885]			
Members 18-64	-0.0928	-0.0953	-0.131	-0.0794	0.104	-0.0870			
	[0.0573]	[0.0746]	[0.0946]	[0.0619]	[0.140]	[0.0958]			
Members > 64	-0.762	-0.867	-0.495	-0.686		-0.698			
	[0.467]	[0.652]	[0.704]	[0.428]		[0.683]			
Floor - Soil	0.430**	0.474*	0.193	0.232	0.955**	0.168			
	[0.196]	[0.253]	[0.338]	[0.242]	[0.446]	[0.338]			
Walls - Sheet metal, wooden panel, cane or straw	-0.120	-0.0495	-0.0969	0.0472	0.327	-0.214			
	[0.165]	[0.215]	[0.269]	[0.197]	[0.391]	[0.274]			
Rooms	-0.0612	-0.0242	-0.0791	-0.0403	0.00290	-0.134			
	[0.0656]	[0.0856]	[0.109]	[0.0736]	[0.157]	[0.109]			
Water - Network connection	-0.225	-0.106	-0.256	-0.168	0.405	-0.490			
	[0.203]	[0.280]	[0.333]	[0.255]	[0.619]	[0.322]			
Bathroom	-0.640**	-0.564*	-0.310	-0.870***	-0.867	-0.938**			
	[0.249]	[0.319]	[0.425]	[0.304]	[0.541]	[0.423]			
Owner	-0.293***	-0.278**	-0.283*	-0.244**	-0.213	-0.317**			
	[0.0886]	[0.118]	[0.147]	[0.106]	[0.227]	[0.141]			
Free renter	-0.0553	0.0630	-0.171	-0.0862	0.423	-0.364			
	[0.141]	[0.189]	[0.238]	[0.171]	[0.346]	[0.224]			
Gas network connection	-0.0794	-0.0876	0.0172	0.0299	-0.194	0.0292			
	[0.109]	[0.146]	[0.183]	[0.124]	[0.269]	[0.176]			
Region Noroeste	0.215	0.0570	0.00652	0.224	0.318	0.432*			
	[0,162]	[0.217]	[0.263]	[0.193]	[0.425]	[0.259]			
Region Noreste	0.337*	0.231	0.219	0.472**	0.403	0.611**			
	[0,173]	[0.231]	[0.282]	[0.208]	[0.451]	[0.279]			
Region Cuvo	-0.201	-0.310	-0.405	-0.138	0.0599	0.00442			
	[0,190]	[0.254]	[0.310]	[0.223]	[0.492]	[0.302]			
Region Pampeana	-0.0343	-0.0855	-0.246	0.0507	0.245	0.102			
Region i unipedita	[0 161]	[0 216]	[0 267]	[0 192]	[0.413]	[0 258]			
Region Patagónica	0 189	0 101	0 178	0 131	-0 173	0 302			
Region i atagonica	[0 202]	[0.275]	[0 240]	[0 225]	[0 514]	[0 216]			
Total Family Income	0.000111*	0.275	[0.340] 9.170.05	0.000161**	0.000228	0.000111			
Total Family income	-0.000111 [E 070 0E]	-9.54E-05	-0.176-03	-0.000101	[0.000228	-0.000111 [9 710 05]			
Ago.	[5.978-05]	0.00627	0.00119	[0.002-05]	[0.000179]	[8.710-05]			
ARC .	-0.000291	-0.00037	0.00110	-0.0143	-0.0237	0.00337			
	[0.0125]	[0.00810]	[0.0112]	[0.00895]	[0.0140]	[0.0137]			
SEX	0.106	-0.126							
Use d	[0.201]	[0.282]		0.200					
неао	-0.0609			0.360					
	[0.148]			[0.273]					
Spouse	1.068	1.310*	15.41	0.0841	-14.16				
	[0.701]	[0.765]	[582.2]	[0.694]	[710.0]				
Marital status	0.121	0.150	-13.43	0.127	0.719				
	[0.501]	10.506]	1582.2]	10.232]	10.579]				

Table B2 (Cont.)

Variables		Coeff.						
	Heads and Spouses	Heads	Male Heads	Women	Female Heads	Female Spouses		
Unemployed	0.0961	0.0950	0.0648	-0.418	0.0799	-1.349**		
. ,	[0.367]	[0.311]	[0.361]	[0.490]	[0.778]	[0.545]		
Inactive	-0.122	-0.115	0.0654	-0.551	-0.655	-1.322***		
	[0.323]	[0.303]	[0.413]	[0.448]	[0.724]	[0.487]		
Family worker without remuneration Registered wage earner	-0.291			0.987		-1.500**		
	[0.946]			[0.759]		[0.745]		
	0.360	0.545		-0.126	0.726	-1.071*		
	[0.783]	[0.527]		[0.378]	[0.565]	[0.611]		
Self-employed	0.0443	0.137	0.0800	0.0233	0.319	-0.370		
	[0.192]	[0.149]	[0.162]	[0.299]	[0.468]	[0.407]		
Employer	0.181	0.169	0.212	-0.482	-0.667	-0.115		
	[0.368]	[0.290]	[0.308]	[0.763]	[1.472]	[0.838]		
Construction	-0.156	-0.302	-0.286	-0.294	0.143	0.669		
	[0.281]	[0.219]	[0.236]	[0.906]	[1.629]	[1.816]		
Commerce	-0.0528	-0.254	-0.252	-0.443	-0.416	-0.461		
	[0.279]	[0.222]	[0.248]	[0.412]	[0.592]	[0.403]		
Transport	-0.0824	-0.118	-0.0588	-1.102	-2.245*	-1.335		
	[0 349]	[0 277]	[0 302]	[0 676]	[1 307]	[1 238]		
Finance	-0.166	-0.585	-0.728*	-0.309	-0.478	-1.065		
- manace	[0 488]	[0 377]	[0 428]	[0.652]	[1 005]	[0 915]		
Personal Services	0.00418	-0 321	0 938	-0.506	-1 222	-0.418		
	[0 790]	[0 581]	[0.980]	[0.667]	10 9681	[0.851]		
Domestic Service	_0.150j	0 1 / /	0 4 2 4	-0 202	-0 275	-0 / 492		
Domestic Service	-0.115	[0 202]	[0.920]	-0.203	-0.273	-0.495		
Public Sector	[0.302]	0.232]	0.196	0.060*	[0.088]	0.480		
Fubile Sector	-0.0371	-0.317	-0.180	-0.500	-1.410	-0.513		
Other Sector	[0.439]	[0.380]	0.176	[0.300] 1 111*	0.755	[0.051]		
Other Sector	-0.379	0.0104	0.170	-1.111	-0.755	-0.038		
Size of establishment 6.40	[0.388]	[0.309]	0.165	0.000	[0.837]	[0.558]		
Size of establishment 6-40	-0.0668	-0.159	-0.165	-0.482	0.119	-0.992		
	[0.247]	[0.196]	[0.211]	[0.389]	[0.668]	[0.617]		
Size of establishment >40	-0.0291	-0.0464	-0.0535	0.389	0.115	-0.694		
	[0.389]	[0.310]	[0.369]	[0.476]	[0.786]	[0.625]		
Hours Worked	-0.00177	0.000973	0.00237	-0.00593	-0.00344	-0.0110*		
	[0.00276]	[0.00329]	[0.00404]	[0.00397]	[0.00644]	[0.00613]		
Head								
Sex	-0.181			0.318		0.898		
	[0.323]			[0.322]		[1.592]		
Age	-0.00422			0.00164		-0.00595		
	[0.0103]			[0.00770]		[0.0115]		
Unemployed	-0.0639			0.309		0.156		
	[0.284]			[0.267]		[0.321]		
Inactive	-0.0495			-0.132		0.0414		
	[0.278]			[0.263]		[0.399]		
Registered wage earner	0.182			0.372				
	[0.857]			[0.472]				
Self-employed	0.0920			0.188		0.136		
	[0.146]			[0.138]		[0.159]		
Employer	0.00654			0.164		0.0532		
	[0.250]			[0.232]		[0.266]		
Construction	-0.132			0.177		-0.0572		
	[0.211]			[0.200]		[0.226]		
Commerce	-0.150			0.101		-0.0722		
	[0.215]			[0.203]		[0.235]		
Transport	0.0545			0.263		0.134		
	[0.254]			[0.242]		[0.272]		
Finance	-0.395			-0.135		-0.318		
	[0.360]			[0.335]		[0.392]		
Personal Services	-0.285			-0.250		0.396		
Domestic Service Public Sector	[0.734]			[0.633]		[0.941]		
	0.357			-0.00556		-0.642		
	[0.348]			[0.314]		[1.290]		
	-0.450			-0.579		-0.344		
	[0.392]			[0.365]		[0.480]		
Other Sector	0.458			0.461		0.664*		
	[0.308]			[0.298]		[0.341]		
Size of establishment 6-40	-0.0514			0.0989		0.0757		
	[0.183]			[0.175]		[0.198]		
Size of establishment >40	-0.000868			-0.0858		0.0426		
	[0.305]			[0.290]		[0.345]		

Table B2 (Cont.)

Veriables	Coeff.					
Variables	Heads and Spouses	Heads	Male Heads	Women	Female Heads	Female Spouses
<u>spouse</u>						
Presence of spouse				0.216		
				[0.332]		
Sex	-0.519	-0.601		-0.123	14.13	
	[0.363]	[0.393]		[0.456]	[710.0]	
Age	-0.00392	-0.00638	-0.00885	0.00133	-0.0155	
	[0.00841]	[0.00941]	[0.0126]	[0.00930]	[0.0238]	
Unemployed	-1.030***	-1.275***	-1.619***	-0.813	-1.703	
	[0.379]	[0.483]	[0.589]	[0.546]	[1.282]	
Inactive	-0.665**	-0.835**	-1.272**	-0.572	-0.964	
	[0.326]	[0.410]	[0.518]	[0.474]	[1.269]	
Family worker without remuneration	-1.040	-1.241*	-1.630**	-2.409**		
	[0.707]	[0.734]	[0.797]	[0.971]		
Registered wage earner	-1.441**	-1.410**	-1.379**	-1.406**		
	[0.633]	[0.678]	[0.683]	[0.652]		
Self-employed	-0.208	-0.320	-0.777*	-0.195	-0.0348	
	[0.245]	[0.323]	[0.444]	[0.326]	[0.566]	
Employer	-0.126	-0.139	-0.590	0.106	-0.137	
	[0.555]	[0.794]	[1.065]	[0.687]	[1.300]	
Construction	-0.0452	0.0327	0.395	0.212	0.194	
	[0.400]	[0.534]	[1.713]	[0.540]	[0.964]	
Commerce	-0.318	-0.370	-0.434	-0.180	0.0752	
	[0.296]	[0.376]	[0.428]	[0.449]	[0.961]	
Transport	-0.523	-0.435	-0.358	-0.285	-0.0716	
	[0.459]	[0.604]	[1.318]	[0.629]	[1.035]	
Finance	-0.171	-0.0515	-0.734	0.0622	1.088	
	[0.577]	[0.764]	[1.015]	[0.732]	[1.460]	
Personal Services	-0.302	-0.397	-0.109	0.00194		
	[0.770]	[0.957]	[1.054]	[0.958]		
Domestic Service	-0.0798	-0.299	-0.752	-0.0642		
	[0.353]	[0.433]	[0.532]	[0.509]		
Public Sector	-0.557	-0.624	-0.595	0.409	0.673	
	[0.470]	[0.596]	[0.702]	[0.650]	[1.873]	
Other Sector	-0.311	-0.588	-0.446	0.292	-0.376	
	[0.427]	[0.559]	[0.633]	[0.685]	[1.577]	
Size of establishment 6-40	-0.489	-0.728*	-1.614**	-0.204	-0.312	
	[0.330]	[0.440]	[0.693]	[0.429]	[0.687]	
Size of establishment >40	-0.320	-0.447	-0.882	-0.958	-0.736	
	[0.436]	[0.567]	[0.708]	[0.599]	[1.423]	
nstant	0.493	0.306	-0.266	1.028	1.078	1.085
	[0.518]	[0.589]	[0.822]	[0.684]	[1.223]	[1.757]
Obs.	3,294	1,859	1,240	2,521	609	1,322
Pseudo R2	0.0686	0.0691	0.0765	0.0848	0.117	0.0793

Standard errors in brackets.

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

Table B3 Logits for calibrating the propensity scores for benefit holder level estimations

Variables		Coeff.				
variables	Women	Female Heads	Female Spouses			
2nd. Quarter	0.263**	0.213	0.304*			
	[0.123]	[0.252]	[0.157]			
3rd. Quarter	0.595***	0.596**	0.529***			
	[0.126]	[0.263]	[0.162]			
Parent educational level - Complete primary	-0.0708	-0.437	0.399			
	[0.189]	[0.336]	[0.305]			
Parent educational level - Incomplete secondary	-0.247	-0.816**	0.253			
	[0.199]	[0.370]	[0.310]			
Parent educational level - Complete secondary	-0.282	0.00166	0.0868			
· · · · · ·	[0.212]	[0.384]	[0.325]			
Parent educational level - Incomplete tertiary	-0.709**	-0.792	-0.287			
· · · · · · · · · · · · · · · · · · ·	[0.293]	[0.553]	[0.408]			
Parent educational level - Complete tertiary	-0.807**	-2.356**	-0.164			
	[0.350]	[1,144]	[0.440]			
Members 0-5	0.254***	0.0163	0.158*			
	[0.0676]	[0 151]	[0.0902]			
Members 6-12	0.223***	0.223*	0.196***			
	[0 0532]	[0 120]	[0.0670]			
Members 13-17	-0.00798	0.0995	0 0491			
	[0 0666]	[0 124]	[0 0033]			
Members 18-64	-0 161**	0.0475	-0 212**			
	[0 072/]	[0 158]	[0 108]			
Members > 64	-0 555	[0.138]	-0.506			
Weinbers > 04	-0.333		-0.500			
Floor Soil	[0.400]	0.745	0.144			
	[0.247	0.745	0.144			
Walls Shoet metal wooden papel cape or straw	0.201	0.460	0 1 2 7			
wans - Sheet metar, wooden paner, cane of straw	-0.155	0.100	-0.127			
Roome	[0.222]	[0.424]	[0.281]			
ROOTIS	-0.0949	-0.12	-0.177			
Mater Network connection	[0.0849]	[0.1/9]	[0.115]			
Water - Network connection	-0.128	0.18	-0.373			
Dathroom	[0.279]	[0.641]	[0.337]			
Bathroom	-0.733	-0.85	-0.806			
Ourser	[0.328]	[0.585]	[0.438]			
Owner	-0.189	-0.132	-0.244			
Free reader	[0.117]	[0.248]	[0.149]			
Free renter	-0.19	0.456	-0.495***			
	[0.189]	[0.367]	[0.240]			
Gas network connection	0.0952	-0.237	0.2			
Danian Navanta	[0.141]	[0.297]	[0.187]			
region Nordeste	0.459**	0.335	U.5/5 ^{**}			
Decien Neverte	[U.21/]	[U.469]	[U.2//]			
Region Noreste	0.721***	0.609	0.796***			
Design Cours	[0.232]	[U.484]	[0.296]			
Region Cuyo	0.0938	0.602	0.0967			
Design Democratic	[0.253]	[0.532]	[0.323]			
Region Pampeana	0.227	0.195	0.264			
	[0.216]	[0.449]	[0.276]			
Region Patagónica	-0.00311	-0.134	0.104			
	[0.273]	[0.570]	[0.348]			
Iotal Family Income	-0.000157**	-0.000380*	-9.48E-05			
	[7.51e-05]	[0.000211]	[9.17e-05]			
Age	-0.0365***	-0.0328**	-0.00445			
	[0.0125]	[0.0162]	[0.0144]			
Head	1.238***					
	[0.363]					
Spouse	1.252***					
	[0.462]					
Marital status	0.532*	0.563				
	[0.280]	[0.702]				

Table B3 (Cont.)

	Coeff.					
Variables	Women	Female Heads	leads Female Spouses			
Unemployed	-0.457	0.395	-1.221**			
	[0.581]	[0,866]	[0.570]			
Inactive	-0.907*	-0.467	-1 092**			
	[0 538]	[0 824]	[0 503]			
Family worker without remuneration	-0 586	[0.024]	-1 435*			
	[1 520]		[0 752]			
Pagistored wage earper	[1.323]	0.957	1 250**			
Registered wage earlier	-0.54	0.657	-1.550			
Calferrateural	[0.558]	[0.625]	[0.686]			
Self-employed	0.0361	0.317	-0.485			
- I	[0.349]	[0.497]	[0.425]			
Employer	-0.949		-0.312			
	[0.961]		[0.863]			
Construction	-0.574	0.797	0.986			
	[1.073]	[1.741]	[1.934]			
Commerce	-0.512	-0.0978	-0.321			
	[0.493]	[0.699]	[0.431]			
Transport	-1.059	-1.51	-1.191			
	[0.782]	[1.391]	[1.262]			
Finance	-0.00606	0.57	-1.542			
	[0.801]	[1.103]	[1.153]			
Personal Services	-1.366	-0.551	0.0233			
	[0.960]	[1.046]	[0.869]			
Domestic Service	0 0227	-0.00134	-0.283			
	[0 583]	[0 786]	[0 501]			
Public Sector	_1 // 7/*	-1 667	-0 507			
	[0 721]	[1 147]	[0 704]			
Other Sector	1 024	0.267	0.26			
Other Sector	-1.034	-0.307	-0.50			
	[0.699]	[0.972]	[0.576]			
Size of establishment 6-40	-1.061**	-0.672	-1.1/2*			
	[0.513]	[0.831]	[0.664]			
Size of establishment >40	0.248	-0.169	-0.757			
	[0.580]	[0.925]	[0.677]			
Hours Worked	-0.00584	-0.00417	-0.00786			
	[0.00444]	[0.00701]	[0.00646]			
Head						
Sex	0.934**		0.774			
	[0.383]		[1.628]			
Age	0.00868		-0.00968			
	[0.00916]		[0.0121]			
Unemployed	0.172		0.147			
	[0.288]		[0.330]			
Inactive	-0.231		-0.0267			
	[0.297]		[0.421]			
Registered wage earner	0.479					
	[0.657]					
Self-employed	0.165		0.139			
	[0.152]		[0,168]			
Employer	0 172		0.169			
······	[0 257]		[0.277]			
Construction	_0 178		-0 200			
construction	[0 216]		[0 233]			
Commerce	_0 105		_0.233]			
commerce	-0.103		[0 240]			
Transport	0.160		0.240			
πατιγροιτ	0.102		0820.0			
Financo	[0.259]		[0.280]			
Finance	-0.14		-0.246			
	[0.359]		[0.395]			
Personal Services	0.284		0.518			
	[0.761]		[0.940]			
Domestic Service	-0.405		-0.678			
	[0.394]		[1.295]			
Public Sector	-0.780*		-0.588			
	[0.428]		[0.501]			
Other Sector	0.446		0.617*			
	[0.316]		[0.344]			
Size of establishment 6-40	-0.0077		-0.0225			
	[0.191]		[0.206]			
Size of establishment >40	0.0458		0.201			
	[0.320]		[0.352]			

Table B3 (Cont.)

Variables	Coeff.				
variables	Women	Female Heads	Female Spouses		
<u>Spouse</u>					
Presence of spouse	-1.700**	-14.19			
	[0.867]	[573.9]			
Sex	0.59	13.29			
	[0.560]	[573.9]			
Age	0.0186	0.00185			
	[0.0115]	[0.0260]			
Unemployed	-0.807	-0.92			
	[0.655]	[1.552]			
Inactive	-0.196	-0.243			
	[0.577]	[1.535]			
Family worker without remuneration	-0.827				
	[1.539]				
Registered wage earner	-1.194				
	[0.842]				
Self-employed	-0.464	-0.421			
	[0.377]	[0.632]			
Employer	0.322	0.358			
	[0.821]	[1.319]			
Construction	0.458	1.003			
	[0.641]	[1.302]			
Commerce	0.0505	0.624			
	[0.546]	[1.294]			
Transport	-0.399	0.232			
	[0.757]	[1.385]			
Finance	-0.731	0.758			
	[0.960]	[1.873]			
Personal Services	1.169				
	[1.154]				
Domestic Service	-0.18				
	[0.638]				
Public Sector	0.573	1.416			
	[0.810]	[2.090]			
Other Sector	0.523	0.639			
	[0.786]	[1.830]			
Size of establishment 6-40	0.128	-0.266			
	[0.482]	[0.722]			
Size of establishment >40	-0.895	-0.437			
	[0.700]	[1.502]			
onstant	0.535	1.388	1.22		
	[0.786]	[1.320]	[1.807]		
Obs.	2,360	571	1,274		
Pseudo R2	0.132	0.144	0.0971		

Standard errors in brackets.

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