

Extended Abstract for the PAA 2015 Annual Meetings

THE IMPACT OF ARGENTINA'S UNIVERSAL CHILD ALLOWANCE CASH TRANSFER PROGRAM ON
CHILDREN'S EDUCATIONAL OUTCOMES.

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Abstract:

This paper studies the impact of the *Asignación Universal por Hijo* (AUH) Argentina's cash transfer program on the educational outcomes of children of recipient households. Particularly it focuses on the whether the educational conditionality of the transfers has had effects on reducing drop out from school and increasing the rates of grade advancement among students who remain in school. To assess impact, the paper utilize propensity score matching methods on data from the *Encuesta Permanente de Hogares*, a household survey that cover 60% of the Argentina population. The paper finds that the receipt of cash transfers has not significant effect on either drop out or grade advancement for the population as whole, but that a small negative effect on drop out and a positive effect on grade advancement can be detected for the northwestern and northeastern regions, two regions that are generally poorer and have worse education outcomes.

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1. Introduction.

The conditions of poverty and exclusion that affect a great part of Latin America's population have led governments to create various social protection programs, directed primarily at the most vulnerable families and communities. Several governments in Latin America have established conditional cash transfer (CCT) programs for families in need, as well as scholarships and other types of assistance for students in the national education system.

In November 2009, the Argentine Government, through Decree 1602/09, implemented the Universal Child Allowance Program known in Spanish as *Asignación Universal por Hijo* (AUH). Unlike other programs in Latin America, the original purpose of this program was not poverty elimination but rather ensuring that children and adolescents from unemployed families or families working in the informal economy received the same benefits as the children of formal employees.

Therefore, the government amended the Family Allowance law 24.714 to incorporate a non-contributory subsystem intended to provide monthly cash transfers for informal or unemployed workers with children under 18 years of age. This new conditional cash transfer program reaches an important population segment mostly belonging to the lower income socio-economic strata. Their current coverage amounts to 3.5 million children and 1.9 million households, figures that represent 29% of all children and 15% of the total households in the country.¹

The expansion of social programs and non-contributory schemes and cash transfer programs has generated greater dedication and commitment to studying these programs' socioeconomic impact. With regard to the specific effects on education access, there is a growing amount of literature that investigates education incentives caused by specific policies or social programs in the region. This paper studies the impact of the cash transfer program on the educational outcomes of children of recipient households. Particularly it focuses on the whether the educational conditionality of the transfers has had effects on reducing drop out from school and increasing the rates of grade advancement among students who remain in school.

To assess impact, we utilize propensity score matching methods on data from the *Encuesta Permanente de Hogares*, a household survey carried out regularly in Argentina, to examine whether children in recipient households have lower rates of drop out and higher rates of grade advancement. The preliminary research find that the receipt of cash transfers has not significant effect on either drop out or grade advancement for the population as whole, but that a small negative effect on drop

¹ ANSES 2012. (sf). Asignación Universal por Hijo (AUH) en perspectiva. Retrieved 3 August 2014 from ANSES (2011), from "La Asignación Universal por Hijo para Protección Social". Documento "La inclusión social como transformación: políticas públicas para todos"

out and a positive effect on grade advancement can be detected for the northwestern and northeastern regions, two regions that are generally poorer and have worse education outcomes to start with.

2. Research Problem

The tremendous surge in the popularity of CCTs as a key policy tool in the pursuit of poverty reduction raises several largely unanswered questions regarding their design, implementation and impact.

CCTs have been introduced as one of the most important political tools for addressing poverty issues through demand-side interventions (Rawlings & Rubio 2005). With a CCT, the beneficiary receives a monetary sum in exchange for complying with a set of determined criteria and conditions, which are generally related to investments in human capital (Rawling & Rubio 2003). This paper focuses on CCTs for education, which implies that the family must invest in their children's education in order to receive the transfer.

In this context, this paper seeks to evaluate the Argentine CCT, *Asignación Universal por Hijo* (AUH) or Universal Child Allowance, and its impact on children's education outcomes such as the prevalence of drop out and the probability of grade advancement.

In the AUH, the beneficiaries receive 80% of their eligible amount every month and the remaining 20% is deposited in a savings account in the name of the beneficiary upon certification that the conditions have been met. This paper is particularly interested in how this unique design affects education outcomes, an aspect of the program that has not yet been evaluated as of the present date.

Unlike other cases in Latin America, there have been few studies that have evaluated the impact of the Universal Child Allowance program due to the difficulty of accessing administrative information relating to the program and the high costs of collecting data throughout the national territory. In this regard, the evaluation strategy implemented in this paper, which uses data from a standard household survey carried out regularly by Argentina's National Statistical Office as well as a number of other national statistical organizations in Latin, creates the opportunity of replicating this analysis not only within Argentina but also in other countries.

3. Literature Review: Conceptual and Theoretical Framework

A review of the literature on CCTs and their targeting mechanism and conditionality reveals contrasting claims about their operations and effects. Most of these may be traced to classic debates in the fields of economics, political science, law and social policy about the appropriateness, possibilities, and risks associated with the payment of public transfers to the poor in contrast with in-kind or other types of redistribution tools or about the reliance on targeting as opposed to universal

solutions and about the inclusion of redistributive requirements for beneficiaries as opposed to unconditional interventions.

Recent reviews of studies that assess the impact of CCT programs in developing countries focus on impact evaluation. Maluccio and Flores (2004) estimate that Nicaragua's *Red de Protección Social* raised school enrollment by 18 percentage points, retention rates by 7 percentage points and daily attendance by 11 percentage points among Nicaraguan children in the first through the fourth grades. Honduras's *Programa de Asignación Familiar* had positive, but smaller, effects on enrollment and daily attendance and a small negative effect on drop out rates among children aged 6 to 13 (Glewwe and Olinto, 2004). As for *Bolsa Familia* in Brazil, Glewwe and Kassouf (2011) estimate that the *Bolsa* program has increased enrollment in Brazil by about 5.5 percent in grades 1-4 and about 6.5 percent in grades 5-8. The program has lowered drop out rates by about 0.5 percentage points and raised grade promotion rates by about 0.9 percentage points for children in grades 1-4, and has reduced drop out rates by about 0.4 percentage points and increased grade promotion rates by about 0.3 percentage points for children in grades 5-8.

In rural Ecuador, with the *Bono de Desarrollo Humano*, Norbert Schady and Maria Caridad Araujo (2006) estimate a 3.5 percentage point increase among students aged 6–17 for a monthly transfer of US\$15. In the case of Mexico's, *Progresar/Oportunidades* program, T. Paul Schultz (2004) reports a 2.5 percentage point increase in enrollment among boys and a 3.5 increase among girls in grades 1–9 for monthly transfers ranging from US\$17–US\$32 per month per student. Finally, in an assessment including propensity score matching, Attanasio et al. (2010) find a 4.8 percentage point increase in self-reported enrollment among urban children aged 14–17. However, recent statistics show no significant impact in these areas in the case of Colombia's *Familias en Acción* program.

Lastly, several studies have conducted *ex-ante* evaluations that simulated the impacts of the UCA on inequality, poverty and extreme poverty indicators². Also, when D'Elia, Vanesa Valeria, and Ana Ines Navarro (2013) evaluated the effects of the AUH on education delay, they found evidence that the government subsidy affected primary and secondary outcomes differently.

4. Brief Description of Argentina's *Asignación Universal por Hijo* Cash Transfer Program.

The *Asignación Universal por Hijo* is focused on children and adolescents younger than 18 years of age. It seeks to help families whose head of household works in the informal economy or is unemployed. It is a non-contributory program that complements the Allocation per Child Program for formal workers. This program falls under the umbrella of the National Social Security Administration (ANSES), which also acts as the executing agency. In order to become a beneficiary, an individual must meet the following requirements: he or she must be an informal worker, a domestic worker

² Roca (2010); Agis et al. (2010); Gasparini and Cruces (2010), ILO (2010); Bertranou and Maurizio (2012a).

earning below the minimum wage, unemployed without unemployment insurance, or an inactive person without a pension and with at least one dependent under the age of 18. The children must be under 18 years of age and be Argentine citizens or have resided in the country for at least 3 years. Transfers are made to one of the parents, legal guardians or relatives (up to third degree of consanguinity) for every dependent child up to 5 children.

The beneficiary does not lose the transfer if their family income increases, but does lose it when his or her labor status changes from informal to formal worker. Beneficiaries also lose their transfers if they do not fulfill the conditions after being warned by program authorities.

With regard to the conditions prescribed by this non-contributory benefit, 20% of the agreed monthly amount will be subject to compliance, and the accumulated money is paid at the end of each school year. This payment will be issued once the beneficiary presents documentation certifying vaccination and health checks for children under the age of four and certifying school attendance at any public educational institution for children over the age of five. In practice, however, the type of school attended has been ignored. This benefit is incompatible with the collection of any other benefit from social plans or other non-contributory or contributory benefits, whether national, provincial or municipal (ANSES 2010).

5. Available Data

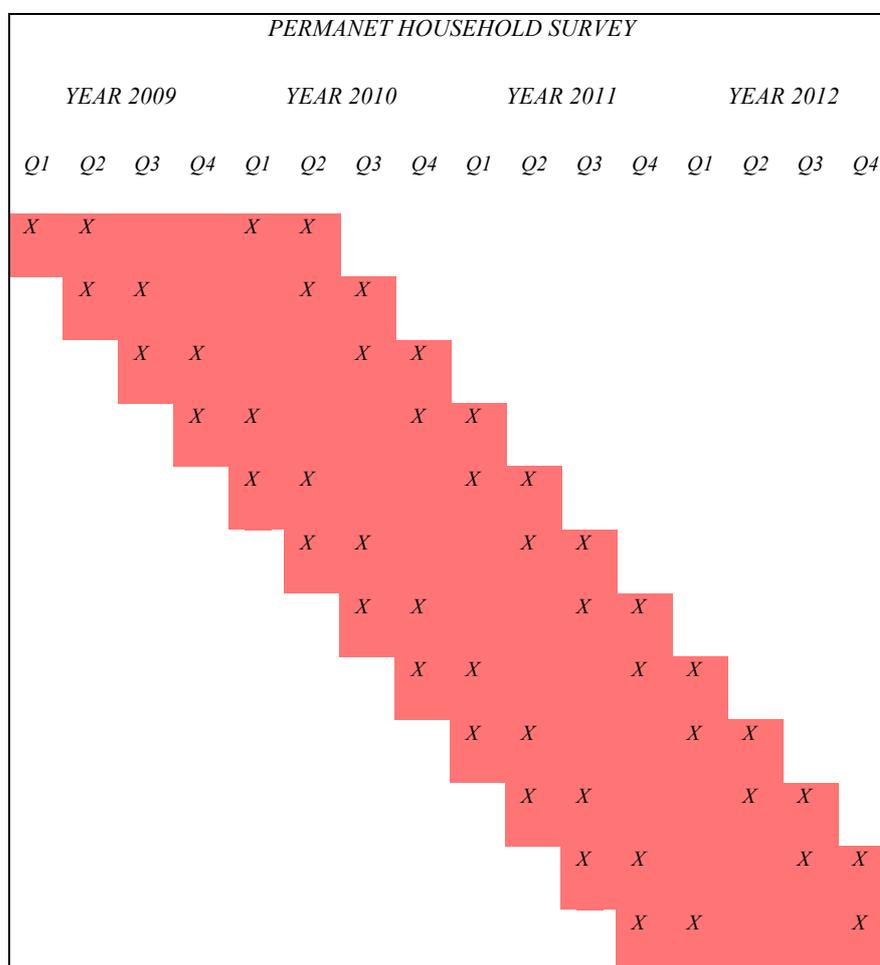
This research paper describes the evolution of education outcomes over time and examines the impact of the AUH program on children's progress in school in Argentina. The analysis uses data from the National Statistical Office's (INDEC) Permanent Household Survey (*Encuesta Permanente de Hogares*, EPH). The EPH is limited to urban areas with populations of 100,000 or more. Thus it covers about 70% of Argentina's urban population and 60% of the country's total population. The EPH is a longitudinal survey that includes retrospective questions.

The rotation scheme present in the EPH's sample design allows for the construction of panels that enable the tracking of the same household for a period of up to a year and half. Specifically, households included in the survey are included for two consecutive quarters, then temporarily dropped from the sample in the next two quarters and eventually re-incorporated into the sample for two additional successive quarters. Each quarter the survey comprises of a group of new households surveyed for the first or second time and those who are in their second stage of survey, having already responded in the same quarter of the previous year.

Thus, the overlap between the tri-monthly panels between quarters corresponding to identical and immediately consecutive years is 50% of the selected sample in each period. This sample design can be seen in Graphic 1, which also shows that between one quarter and another, separated by an

intermediate one, there are no common samples whereas if they are separated by two quarters the overlap reaches 25%.

Graphic 1: Panel data build: Quarter I2009-Quarter IV2012 includes information before and after the implementation of the AUH in November 2009.



Source: Authors’ elaboration based on PHS (INDEC)

The paper will make use of this short panel design and rotation scheme to measure change over time at the level of the same individual more accurately than if we were using a pooled cross-section sample design. The paper limits the analysis to individuals and households that were observed for all four quarters. Thus the paper is summing that attrition from the sample is essentially random and that dropping observations that are observed fewer than 4 times does not introduce any bias.³

6. Methodology

Because there was no randomization in the deployment of the cash transfer as was the case in *Oportunidades* in Mexico, the paper is limited to non-experimental impact evaluation methods.

³ A probit model predicting which households are observed four times using the same explanatory variables to predict treatment revealed that 34.2% of children are observed four times.

Moreover, since the program was deployed gradually over a period of time, it is not possible to determine a baseline and an end line to implement a classic difference-in-difference methodology such as the one used in Glewwe and Kassouf 2011 to evaluate the *Bolsa Familia* program in Brazil. However we make use of rich household level data that provides information on the incidence and timing of the receipt of cash transfers and on the educational pathways of children to implement a propensity score matching (PSM) analysis of the impact of the programs. Although PSM makes the assumption of conditional exogeneity of placement, or in other words the receipt of the transfer is exogenous to the outcome, conditional on observables, as a non-parametric method it avoids some of the functional form assumptions of regression-based methods. As such it has been shown to come much closer to replicating the results of experimental methods than other non-experimental methods such as regression or control function approaches (Dehejia and Wahba 1999).

6.1 Propensity Score Matching

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 and $D=0$ otherwise), and Y is the outcome of interest, say whether the child drops out or whether s/he advances a grade. The subscript 1 indicates that Y is observed under treatment and the subscript 0 indicates the counterfactual of no treatment. The impact of the treatment is measured by the Average Treatment Effect on the Treated (ATT), which is conditional on a Propensity Score, $P(X)$, where X represents a vector of observable characteristics:

$$ATT(X) = E[Y_1 - Y_0 / P(X), D = 1]$$

Where $E[\cdot]$ 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 observable, PSM will estimate it from a closely matched group of controls. Given that only the ATT needs 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”; and (2) “Matching Condition”. The first condition implies that the selection of treated and control groups is made based solely on the Propensity Score, 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 the Propensity Score, treated and control cases exist. This is referred to as the common support.

The PSM method consists of matching each treatment observation on the common support with a group of control observations that are closely matched based on observables. Due to the practical difficulties involved in matching observations when there are a large number of covariates, Rosenbaum and Rubin (1983) showed that summarizing the observed characteristics of each observation into a single index (the propensity score, i.e., the predicted probability of

participation in the treatment) makes matching feasible. The probability of receiving the treatment, conditional on a vector of pre-treatment characteristics X is estimated first:

$$P(D_i = 1) = F(X)$$

where $F(\cdot)$ is usually the cumulative standard normal distribution function (i.e., a probit model). Propensity score matching entails modelling the probability of participation, calculating the predicted probability of participation for each individual (the propensity score) and matching individuals with similar propensity scores.

Since the probability of two observations having exactly the same propensity score is zero (as the propensity score variable is continuous), the comparison observation or group of observations for each treated observation is chosen according to various alternative measures of proximity. The simplest is one-to-one matching, where the closest control observation in terms of propensity score is selected. However, a disadvantage of the nearest neighbor method is that while some matches may be poor (i.e., dissimilar propensity scores), they still contribute to the calculation of the average treatment effect. An alternative is to average the outcome over the nearest 5 neighbors among the controls, so long as they fall within a certain bandwidth and to use those as the match observations. A variation, called caliper or radius matching, consists of averaging over all control observations within a certain distance around the treatment observation. The smaller the dimension of the radius, the stronger the possibility that some treated observations will not be matched but the better is the quality of the matches. With kernel matching, treated observations are matched with a weighted average of all controls with weights that are inversely proportional to the distance between propensity scores of treated and controls. This means that exact matches are assigned a large weight and poorer matches a smaller weight (Becker & Ichino, 2002). A common kernel function is the Epanechnikov kernel.⁴ This study Epanechnikov kernel matching with a bandwidth of 0.05 as our baseline estimator, but also present results using radius matching with a caliper of 0.005 and nearest five neighbors with a bandwidth of 0,05.

6.2 Identifying the Treatment and Control Groups

The base of this study is the correct identification of the AUH's beneficiary households (treatment group) and of those that constitute the control group. Unfortunately, the PHS does not directly inquire about whether the household receives an AUH transfer, so the identification must be addressed indirectly. In order to identify the households receiving the AUH in 2010, this analysis resorts to the variable V5 in the EPH survey that captures whether the household receives any cash transfer, be it from government and other institutions. However, in accordance with statements by ANSES, the vast majority of transfers are government transfers (ANSES 2012). Also, the variable V5 clearly shows how the values of the AUH transfers started to appear while the payments of other national programs

started disappearing (this is the case, for instance, of the *Plan Jefes y Jefas de Hogares Desocupados*, *Plan Familias*, and *Seguro de Capacitación y Empleo*) as a result of the incompatibility of the AUH with all other types of social benefits of any government level (Bertranou and Maurizio (2012b).

Officially, the potential beneficiaries of the AUH cash transfers program are households with children under 18 years of age whose heads or spouses of the head are non-registered wage earners or domestic workers receiving incomes below a minimum wage; unemployed persons 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 AUH in 2009, differentiating them according to whether they gained access to the benefit in 2010, 2011 and 2012 (treated group) or not (control group). Thus, whereas the eligibility condition corresponds to 2009, the recipient condition corresponds to 2010, 2011 and 2012.

Finally, since this analysis seeks to evaluate the effects of the AUH on education outcomes, the sample in the analysis of individuals is comprised of people in economically active ages: children between the ages of 6 and 17 years old.

The paper use two alternative indicators of treatment in this study. The first, which we call “ongoing treatment” identifies households that report a transfer in the very first quarter they are observed. These households could have been receiving transfers for some undefined period of time. The second indicator that we refer to as “start of treatment” requires that households not be receiving a transfer in the first quarter they are observed, but that they receive one in either the second, third or fourth quarters they are observed.

7. Initial Results

A financial incentive is supposed to solve this problem and to increase school enrolment, attendance and continuation, therefore reducing repetition and drop out and thus increasing education outcomes. In the long run, the improved levels of education and health of the children should increase human capital and therefore help to “break the intergenerational transmission of poverty”. (Reimers et al. 2006).

Part of the research reports that enrolment and attendance rates for schools in Mexico, Brazil, Colombia and Nicaragua have gone up since the implementation of a CCT and child labor was reduced (Rawlings 2003). In the case of Argentina, there is not any research to confirm that. measure the impact of the *Asignación Universal por Hijo* (AUH) program on education outcomes because of the difficulties in access to administrative data of the program. To resolve this problem this paper will utilize propensity score matching methods on data from the *Encuesta Permanente de Hogares*, a household survey carried out regularly in Argentina to examine whether children in recipient households have lower rates of drop out and higher rates of grade advancement.

This section presents the household-level results of the AUH program's impact on drop out, and grade promotion rates in Argentina. The research finds that the receipt of cash transfers has no significant effect on either drop out or grade advancement for the population as whole, but that a small negative effect on drop out and a positive effect on grade advancement can be detected for the northwestern and northeastern regions, two regions that are generally poorer and have worse education outcomes to start with.

The most significant results were in a reduction in drop out rates in Northern Argentina at 1.94% using Epanechnikov Kernel Matching methodology and the increase in enrollment among students aged 14 to 17, which was 2.12% statistically significant to 1%. The estimated impacts are slightly lower, but there is still significant effect on drop out rates in Buenos Aires and on a national level. The results for grade promotion are not solid due to difficulties related to the variable representing school year and the high percentage of errors in survey responses.

The complete results are shown in three different tables; Table 1: "Effect of the Cash Transfer on Education Outcomes at the National Level, Ages 6-17" offers several results on the impact of education outcomes for students ages 6-17 years old whose parents are beneficiaries of the AUH throughout Argentina. The table shows results in three different matching methodologies; Epanechnikov Kernel, Radius Matching (caliper=0.005), and Nearest 5 neighbors. The table also compares the treatment in children whose parents have received the transfer prior to the observation period and the ones whose parents are treated after the observation period. There are no significant results in this table, other than children whose treatment starts prior that have significant results with both Kernel at -1.94% and Radius at -1.79% techniques.

Table 2: "Effect of Cash Transfer on Education Outcomes at National Level, Ages 14-17" presents results related to enrollment, drop out and promotion of teenagers ages 14-17. The focus on this age group is important since this is the age when students are more likely to drop out of school and go into the job market. The table offers results in the same three matching techniques as Table 2 and compares the treatment in children whose parents have received the transfer prior to the observation period and the ones whose parents are treated after the observation period. Surprisingly, there were no significant results in drop out rates. Also, there is a strong negative impact in grade advancement for these children. This shows that the impact is not strong enough to reduce drop out rates and help children advance to the next grade.

Table 3: "Effect of Cash Transfer on Education Outcomes in Northern" offers results focused on the northern region of the country, which is the poorest area of Argentina. This is important since this region was one of the areas with the largest groups of participants in the *Asignación Universal por Hijo*⁵. In this table the most significant results were a reduction in drop out rates in Northern

⁵ For more information please consult ANSES 2012 and D'Elia, 2013

Argentina at 1.94% using Epanechnikov Kernel Matching methodology. Finally, Table 4: “Effect of Cash Transfer on Education Outcomes -Buenos Aires Province”, there is not a significant impact in the state of Buenos Aires or at the national level. One of the reasons for these differences is because the AUH program gives the same transfer amount everywhere and cost of living is lower in the north of the country than other regions of the country like Buenos Aires⁶.

8. Preliminary Conclusion

The preliminary results suggest that the Argentine CCT program creates small incentives for individuals to change their behaviors. The program has had a mostly very small positive impact with increased school attendance of primary and secondary students and a reduction in the drop out rate, but there appears to be a negative impact in grade promotion outcomes. Part of the problem is that the increase in the number of students has not been followed with an increase in resources and contracts for more teachers. The same teacher with same resources is now teaching more students; in that sense, the CCT has been making education more accessible but it has reduced the quality of delivery.

9. Future Analyses

The future work will presents an idea of the more complete demographic characteristics of the participants of this program using the data supplied by EPH, cross referencing it with other national surveys. Similarly, it will explore the probability of treatment of the participants using the first stage in the matching exercise analysis, that includes a prediction of the probability of treatment (the propensity score) as a function of covariates. To do that the paper will regress on the two treatment variables (ongoing treatment and start of treatment) on a large number of variables that connect the eligibility for transfers.

Also, It will evaluate changes in the decisions made by households regarding education, such as incentives to send children to private or public schools and the decrease in the time spent helping with household chores as a result of more time spent at school.

Finally, the paper will provide information regarding other outcomes relating to education such as enrollment, which can be seen to counteract the dropout rates, although that information has not been explicitly developed at this stage. It also includes data relating to students who previously had a higher probability of not continuing their education after finishing primary school and the effects of attaining and achieving further education, particularly in secondary school.

⁶ Compared to Familias in Accion in Colombia, where the transfer amount varies depending of the location of the beneficiaries, this is one of the adaptations the AUH should have to ensure more fair distributions

Table 1. Effect of the Cash Transfer on Education Outcomes at the National Level, Ages 6-17

	Ongoing Treatment		Start of Treatment		Ongoing Treatment		Start of Treatment	
Unmatched	0.0101		0.01016		-0.02153		-0.02507	
	(0.00226)	***	0.00287	***	0.00559	***	0.00737	***
Epanechnikov kernel	-0.00593		-0.00482		-0.00256		-0.00455	
	(0.00306)	*	(0.00366)		(0.00781)		(0.00915)	
	(0.00395)		(0.00420)		(0.00813)		(0.00979)	
Radius Matching (caliper=0.005)	-0.00561		-0.00378		-0.00275		-0.00579	
	(0.00314)	*	(0.00384)		(0.00817)		(0.00933)	
	(0.00416)		(0.00456)		(0.00702)		(0.01077)	
Nearest 5 neighbors	-0.00546		0.00102		-0.01166		0.00743	
	(0.00391)		(0.00462)		(0.00917)		(0.01068)	
	(0.00502)		(0.00533)		(0.01138)		(0.01295)	

Table 2. Effect of Cash Transfer on Education Outcomes at National Level, Ages 14-17

	Dropout		Grade Advancement			
	Ongoing Treatment	Start of Treatment	Ongoing Treatment	Start of Treatment		
Unmatched	0.02788 (0.00604)	*** (0.00740)	*** (0.01267)	*** (0.01606)	***	***
Epanechnikov kernel	-0.01111 (0.00797) (0.00900)	-0.00870 (0.00926) (0.01161)	-0.04832 (0.01726) (0.01939)	-0.01310 (0.01979) (0.0204)	***	**
Radius Matching (caliper=0.005)	-0.00773 (0.00835) (0.00832)	-0.00699 (0.00947) (0.01224)	-0.05275 (0.01789) (0.01870)	-0.01599 (0.02084) (0.02184)	***	*
Nearest 5 neighbors	-0.00511 (0.00956) (0.01244)	-0.00455 (0.01065) (0.01301)	-0.04505 (0.01916) (0.02047)	-0.01863 (0.02043) (0.02508)	**	**

Table 3: Effect of Cash Transfer on Education Outcomes in Northern Region

	Dropout		Grade Advancement		
	Ongoing Treatment	Start of Treatment	Ongoing Treatment	Start of Treatment	
Unmatched	0.00491 (0.00355)	0.00703 (0.00465)	-0.03515 (0.00869)	*** (0.01149)	***
Epanechnikov kernel	-0.01214 (0.00466) (0.00648)	*** * -0.00891 (0.00581) (0.00724)	-0.00558 (0.01182) (0.01179)	-0.00682 (0.01458) (0.01564)	

Table 4: Effect of Cash Transfer on Education Outcomes at Buenos Aires Province Region:

	Dropout		Grade Advancement	
	Ongoing Treatment	Start of Treatment	Ongoing Treatment	Start of Treatment
Unmatched	0.01658 (0.00677)	** 0.01076 (0.00830)	-0.03455 (0.01702)	** -0.02507 (0.02150)
Epanechnikov kernel	0.00580 (0.00935) (0.01113)	-0.00244 (0.01248) (0.01733)	-0.01554 (0.02536) (0.02754)	0.02306 (0.03143) (0.03471)

Reference:

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