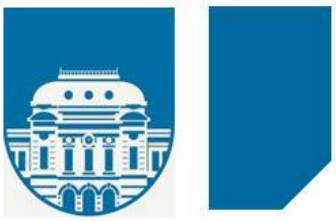

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Impact of a Work-Study Programme for Teenagers: Evidence from a Randomized Controlled Trial

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Impact of a work-study programme for teenagers: evidence from a randomized controlled trial*

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Abstract

We present an impact evaluation of a labour programme oriented to young students called "Yo Estudio y Trabajo" ("I Study and Work") carried out in Uruguay. It is one of the first such evaluations for this country. We estimate the programme's effects on the probability of being formally employed and continuing to study. Impacts on the very short term (about three months after the programme ended), on the short term (15 months after programme finalisation) and on the medium term (27 months after the programme was completed) are analysed. We use administrative records provided by the public social security provider, the public education administration and the state university. We were able to match all candidates for selection into the programme (over 46,000) with their administrative records. Exploiting the programme's random selection process, we apply experimental techniques to evaluate its effects through univariate models. In addition, we allow for interdependence between the decisions of working and studying through a bivariate probit model. Results indicate different effects depending on the characteristics of the individuals and the time span considered. In particular, for socially vulnerable youths we find that the programme increases their probability of being formally employed between 8 and 12 percentage points (depending on the particular model considered) in the medium term. These results are robust to different specifications and provide evidence in favour of increasing the programme's coverage of socially vulnerable youth (a policy that has been under way since 2015).

Keywords: impact evaluation; youth labour programme; randomized controlled trial

JEL classification: D04; I28; J08

Resumen

Este documento presenta una evaluación de impacto de un programa de empleo orientado a estudiantes jóvenes llamado "Yo Estudio y Trabajo". El programa fue llevado adelante en Uruguay. Constituye una de las primeras evaluaciones de este tipo realizadas para este país. Se estiman los efectos del programa sobre la probabilidad de tener un empleo formal y de mantener la vinculación al sistema educativo. Se analizan los efectos en el cortísimo plazo (pocos meses después de que los participantes finalizaran el pasaje por el programa), en el corto plazo (15 meses después) y en el mediano (27 meses después). Para ello se consideran los registros administrativos aportados por el Banco de Previsión Social (BPS) así como los registros de educación brindados por la Administración Nacional de Educación Pública (ANEP) y por la Universidad de la República (UDELAR). Fue posible emparejar los registros administrativos con los datos de todos los jóvenes inscriptos (más de 46.000), lo que destaca la potencialidad de los datos. Dada la asignación aleatoria que utiliza el programa como método de selección, se aplican técnicas experimentales para evaluar el impacto en cada una de las variables de resultado a través de modelos univariantes. Asimismo, debido a que las decisiones de estudio y trabajo en este tramo de edad suelen tomarse de manera simultánea, se considera la especificación de un probit bivariado. Los resultados indican efectos diferenciales según el horizonte temporal considerado y según ciertas características de los individuos. En particular, para aquellos jóvenes que pertenecen a hogares que cobran Asignaciones Familiares (AFAM), el programa incrementa la probabilidad de conseguir un empleo formal en el mediano plazo entre 8 y 12 puntos porcentuales dependiendo de la modelización utilizada. Las estimaciones son robustas para las distintas especificaciones. Estos resultados evidencian la importancia de ampliar la cobertura para los jóvenes en situaciones de mayor vulnerabilidad social (política que se comenzó a implementar a partir de 2015).

Palabras clave: evaluación de impacto; programa de empleo juvenil; experimento aleatorio controlado

Clasificación JEL: D04; I28; J08

1 Introduction

This paper features an impact evaluation of an employment programme called "Yo Estudio y Trabajo" ("I Study and Work") carried out in Uruguay. The programme is directed to students aged from 16 to 20 years old who have not had a formal job before. We assess the effects of the programme's first edition on labour and educational dimensions, exploiting the random selection process and employing data from administrative records (thus complementing earlier research by Araya and Ferrer (2016)).

Works by Bucheli (2006), Cabrera (2010) and Carrasco (2012) among others, underline the obstacles that young people face regarding employment, formality and education. These problems are not distinctive of Uruguay. Quite on the contrary, they are very present at the regional but also at the global level. Almost non-existent relevant work experience coupled with specific difficulties related to entering the labour market for the first time means that youth unemployment rates are almost triple when compared to adult ones. In addition, formality seems to be an exception among young employed people (Cruces, Gasparini, and Tornarolli, 2011).

The governments of several Latin-American countries have implemented different sorts of programmes aimed at young people with the goal of solving these problems, inspired mostly in policies applied in developed countries (Alzúa, Cruces, and López, 2015)[1]. Youth employment programmes are usually justified on the basis that the link between abilities acquired in the educational system and better employment opportunities is not working properly (Card, 1999). Under such hypothesis, youth employment policies are designed to improve practical cognitive skills. Additionally, several governments have recently implemented programmes that focus on non-cognitive skills, also with the goal of bettering the employment opportunities of their young population. These programmes can also facilitate contact of their beneficiaries with the labour market and provide them with experience, contacts or future references. These effects can present themselves even when no evidence of improved skills or productivity of the beneficiaries is detected (Alzúa, Cruces, and López, 2016).

In a comprehensive review about impact evaluations of labour programmes in the United States and Europe, Card, Kluve, and Weber (2010) point out that effects are moderate and generally larger for women and older aged workers. Turning to Latin America, most labour programmes have not yet been evaluated. The few available impact evaluations are generally based in quasi-experimental methods (González-Velosa, Ripani, and Rosas-Shady, 2012). Notwithstanding this, the number of impact evaluations of labour programmes that are based on experimental methods has been increasing in the last decade (Alzúa, Cruces, and López, 2016).

Card et al (2011) analysed the impact of the 2004 cohort of the "Juventud y Empleo" ("Youth and Employment") programme in the Dominican Republic through the difference in means, exploiting the random selection process. The programme's goal was to increase employment of vulnerable people aged 18 to 29. No significant impacts on employment were found, while effects on wages were estimated as fairly moderate. Ibarrarán et al (2015) estimated the impacts for the 2008 cohort using data from a follow-up survey carried out six years after the programme ended. While they found no significant effects in the average level of employment, they did detect an increase in the probability of keeping a formal job. This effect appears to grow larger in time.

Attanasio et al (2015) presented an impact evaluation of a youth employment programme implemented in Colombia in 2005. The evaluation relies on experimental techniques. The plan was called "Jóvenes en Acción" ("Youth in Action") and consisted in providing vocational training to unemployed people aged 18 to 29 who were members of poor households. Through social security's administrative records, the authors were able to confirm that participants in the programme had a larger probability of being formally employed and higher wages that those in the control group. Kugler et al (2015) studied the impacts of this programme in educational attainment and found that treated individuals had a higher probability of finishing secondary education than non-treated subjects.

Alzúa, Cruces, and López (2016) assessed long term effects of the "Entra21" programme in Córdoba, Argentina. The aim of the programme was to improve employment opportunities of vulnerable youth by increasing their technical skills through courses and work experiences in the private sector. Participants were randomly selected into the programme. The authors used data from administrative records to estimate impacts on formal employment and wages. They found that treated individuals's short term probability of having a formal job was 8 percentage points higher when compared to the controls, but these effects faded out in the long term. In addition, they found positive and significant effects on wages.

To date, no impact evaluations based on experimental methods and using data from administrative records have been carried out in Uruguay. This paper constitutes an innovation in this regard and we hope it will be a contribution to the design of better youth employment policies.

It should be noted that "Yo Estudio y Trabajo" could have impacts not only on the youths' employment status, but also on educational variables. In this document we focus on the programme's impact on the probability of contributing to social security (which implies that the person is formally employed) and on the probability of continuing to study.

Entering the labour market through the formal channel can positively affect the probability that the individual's subsequent jobs are also formal Carrasco (2012). In addition, having work experience can increase an individual's probability of getting hired in the future and reduce the duration of her unemployment spells (Heckman and Borjas, 1980). Those would be desirable outcomes of the programme. In contrast, entering the labour market while still studying can harm

[1] For a detailed revision of youth-focused labour programmes in Latin America, see Vezza (2014).

participants' academic performance and/or increase their probability of dropping out early. Those would be undesirable consequences of the programme. By allowing reduced and flexible working hours, the programme intends to enable young students to continue studying while working, something that does not seem an easy feat in the Uruguayan labour market, where less than 20% of young working people declare having time to study according to the National Survey of Youth and Adolescence carried out in 2013 (ENAJ 2013) (Instituto Nacional de Juventud, 2015).

The paper proceeds as follows. Section 2 describes the programme. Section 3 analyses the characteristics of individuals who registered for the first edition. Section 4 describes the data and the models used. Section 5 presents the empirical results. Finally, Section 6 concludes and suggests some lines of future research.

2 About the Programme

"Yo Estudio y Trabajo" provides a first formal work experience of one year in public enterprises to studying youth. Eligible candidates are people aged 16 to 20 who are studying in formal or non-formal institutions[2] and have not contributed to social security for more than 90 days at the time of enrolling in "Yo Estudio y Trabajo". The programme is implemented in several Uruguayan cities and is coordinated by the National Labour Directorate of the Ministry of Labour and Social Security (DINAE-MTSS). The National Institute for Employment and Professional Training (INEFOP) is in charge of the training.

Eligible candidates are randomly ordered at the city level. The resulting lists then determine which candidates are selected into the programme. Candidates whose position number was smaller or equal than the number of openings in their city are selected[3]. Participants then have to take an introductory course and are assigned a "counsellor" with whom they have to formulate an academic and professional plan for the year. In addition, during the induction proceedings programme coordinators gather information regarding participants' aptitudes and interests, which are taken into account when they are assigned to the institutions where they will intern. The introduction courses and the counselling of participants are carried out by INEFOP.

The workload is 4 to 6 hours a day and work schedules are flexible in order to make working and studying compatible. The first edition took place from August 2012 to August 2013 and the number of participants was 589. Participants worked in public institutions that operate in several industries. These include energy, finance, technology, telecommunications, education and public utilities[4].

The programme's objectives are twofold. On the one hand, to provide a formal, high-quality first work experience to young people, since this cohort faces steep challenges both in terms of employment and formality. In fact, according to data from the Permanent Survey of Uruguayan Households (ECH by its Spanish acronym) the unemployment rate for people aged 15 to 24 is three times the average unemployment rate, and this situation remains so despite recent economic and employment growth. Meanwhile, according to ENAJ 2013 (Instituto Nacional de Juventud, 2015), only one in every two persons aged 12 to 29 years old had contributed to social security in their first job. On the other hand, the programme aims to maintain participants in the educational system[5]. In light of the above, in this paper we measure the impacts of the programme on two outcome variables: the probability of contributing to social security (which means that the individual is formally employed) and the probability of being enrolled to educational institutions.

3 Description of the data and baseline statistics

The data used originates from three different sources. First, an inscription form that candidates had to complete when they registered for the programme in 2012. Also, administrative records provided by BPS (the agency that administrates Uruguay's public social security) which contain information regarding the candidates' social security contributions. Finally, ANEP (the National Administration of Public Education) and UDELAR (the state university) also provided administrative records on the candidates' educational activities[6].

The data provided by BPS includes monthly information about social security contributions from January 2010 to December 2015. If the person contributed to social security in any day of the month in question, then a value of 1 is registered for that month and of zero otherwise[7]. Meanwhile, the information contributed by ANEP indicates if individuals were registered in secondary, technical or teaching education in the years 2012, 2013, 2014 and 2015. Finally, UDELAR's data contains records of individuals signing up for university undergraduate study, although there is no information re-

[2] Candidates who are studying at a non-formal institution have to prove that the courses have a total duration of at least 240 hours to be eligible.

[3] For example, if there were five openings in a certain city, only those candidates with position numbers one to five were accepted into the programme.

[4] See the Appendix for a detailed list of participating institutions.

[5] Participants have to provide evidence that they are active students on a quarterly basis to continue with the programme.

[6] In addition, a follow-up survey was carried out between August 2014 and March 2015. It included all individuals admitted into the programme and two controls for every treated person, selected randomly. This survey was used by Araya and Ferrer (2016) to carry out a preliminary estimation of the programme's impact on the probability of being employed, of being formally employed and of continuing to study. Results suggested that the programme did not have an impact in any of the outcome variables considered.

[7] There are no records of how many days in that month the person contributed to social security.

Table 1: Candidates by gender

Gender	Quantity	Percentage
Female	26,677	57.8
Male	19,461	42.2
Transgender	14	-.-
Total	46,152	100

Source: data gathered during registration to the first edition of "Yo Estudio y Trabajo".

Table 2: Candidates by age

Age	Number	Percentage
Less than 18	22,396	48.5
18 or 19	17,159	37.2
20 or more	6,597	14.3
Total	46,152	100

Source: data gathered during registration to the first edition of "Yo Estudio y Trabajo".

garding those students' trajectory once they began studying at UDELAR[8]. The number of candidates for the first edition of the programme was 46,152 and all of them were matched with the administrative records provided by BPS, ANEP and UDELAR.

We now turn to the characteristics of the candidates who signed up for the programme. In Table 1 we report candidates by gender. Women constitute a larger share of candidates than men (58% versus 42% respectively). This is in line with the facts that women have a higher rate of enrolment to education at the secondary and tertiary levels and that their unemployment rate is larger when compared to men's.

In Table 2 we report candidates by age group. Practically half of the candidates were less than 18 years old when they signed up. About 37% were aged 18 or 19 years old, while youths aged 20 or more accounted for almost 15%[9].

Candidates by province of origin[10] are reported in Table 3. Montevideo, the province where the capital city is located (and which is also called "Montevideo") is predominant, since more than half of the candidates are residents of that area[11]. Next is Canelones, where 16% of the candidates reside. The rest of the provinces account for less that 5% of the applicants when considered separately. Notwithstanding this, the fact that over 25% of the candidates live outside the metropolitan area (comprised by Montevideo and neighbouring Canelones) indicates the relevance of extending the programme to regions other than the capital and its surroundings.

In Table 4 we report what level of education were the candidates' studying at the moment of signing up for the programme. Over 75% had not finished secondary school and about 60% were enrolled in its final years. Meanwhile, slightly more than 20% were enrolled in tertiary education (university or otherwise). Finally, youths who were taking courses in non-formal education institutions amounted to less than 3%. It follows then that the programme attracted both youths who were enrolled in secondary school as well as candidates who were going through their first years of tertiary education (plus a small number of people in non-formal education).

It should be noted that this information was provided by the candidates themselves when they signed up for the programme. In order to check its reliability, we compared the candidates self-reported data with administrative records provided by ANEP (presented in Table 5). These indicated that about 70% of the candidates were enrolled in secondary school (either high school or secondary-level technical education). Therefore, we can conclude that self-reported information fairly matches data gathered through administrative records. The slight difference might be due to the fact that we have no data on private educational institutions.

[8] Data about students at private institutions was not available. However, it should be noted that in 2012 about 87% of secondary level students assisted to public centres, while approximately 84% of tertiary level students were enrolled in UDELAR or ANEP, which provides high school education but also offers secondary and tertiary-level technical education and tertiary-level teaching training. The source for this figures is the Ministry of Education and Culture's 2012 yearbook.

[9] 599 candidates were more than 20 years old because they turned 21 after signing up for the programme but before the deadline for registering.

[10] Called "departamentos" in Uruguay.

[11] Uruguay's total population is 3.3 million people according to the 2011 census. The country is divided into 19 provinces, of which Montevideo is by far the most populous, since 40% of the country's inhabitants live there. The second most populous province is Canelones with 16% of the country's residents.

Table 3: Candidates by residence

Province	Number	Percentage
Montevideo	23,929	51.9
Canelones	7,659	16.6
Paysandú	1,893	4.1
Salto	1,670	3.6
Maldonado	1,409	3.1
San José	1,282	2.8
Rivera	1,084	2.3
Soriano	970	2.1
Tacuarembó	850	1.8
Cerro largo	801	1.7
Florida	737	1.6
Artigas	694	1.5
Colonia	662	1.4
Treinta y Tres	534	1.2
Durazno	497	1.1
Lavalleja	501	1.1
Rocha	399	0.9
Río Negro	337	0.7
Flores	244	0.5
Total	46,152	100

Source: data gathered during registration to the first edition of "Yo Estudio y Trabajo".

Table 4: Candidates by educational level in course

Educational level in course	Number	Percentage
High school - basic	4,811	10.4
Technical[12] - basic	2,454	5.3
High school - final years	20,511	44.4
Technical - final years	7,211	15.6
Non-formal education	1,278	2.8
Teaching training (tertiary)	771	1.7
Non-university tertiary education	1,614	3.5
University	7,502	16.3
Total	46,152	100

Source: data gathered during registration to the first edition of "Yo Estudio y Trabajo".

Table 5: Candidates enrolled in secondary school (high school or secondary-level technical)

Enrolled in secondary school	Number	Percentage
Yes	32,736	70.9
No	13,416	29.1
Total	46,152	100

Source: data gathered during registration to the first edition of "Yo Estudio y Trabajo" and administrative records provided by ANEP.

We were also able to acquire data about whether the candidates came from a household that received a goverment conditional cash transfer aimed at socio-economically vulnerable families called "Asignaciones Familiares" (literally, "Family Allowances") or AFAM for its Spanish acronym. About 22% of the candidates lived in a household that received this transfer in 2012. We report this information in Table 6. It should be noted that the overall share of youths aged 16 to 20 years old who were living in households that received the transfer was about 32% in 2012[13], which means that they were under-represented in the group of candidates for "Yo Estudio y Trabajo".

In Table 7 we report the youths' status regarding the programme, making a distinction between controls, treated and "non-compliers". From the total of 46,152 candidates, 700 were selected at first, according to the random ranking they were given when they signed up (those in the higher positions were called first). If available positions were not covered due to a last-minute refusal by the selected candidate, additional prospects were called up following their randomly assigned order. As a result,757 candidates were selected. However, 589 actually went through the whole treatment, while 168 (22% of selected participants) did not complete the minimum of 9 months, which was the threshold that the programme's authorities designated to distinguish treated individuals from non-compliers.

Table 6: Candidates who live in a household that receives AFAM

Received AFAM	Number	Percentage
Yes	10,236	22.2
No	35,916	77.8
Total	46,152	100

Source: data gathered during registration to the first edition of "Yo Estudio y Trabajo" and administrative records provided by ANEP.

Table 7: Treated, controls and non-compliers

Treatment status	Number	Percentage
Controls	45,395	98.3
Treated	589	1.3
Non-compliers	168	0.4
Total	46,152	100

Source: data gathered during registration to the first edition of "Yo Estudio y Trabajo".

Random selection implies that there should not be substantial differences in observed variables between treatment and control groups. In Table 8 we show the means for the group comprised by treated and controls (we do not include the 168 non-compliers) as well as the means for both treated and controls and a mean difference test. Results indicate that both "Montevideo" and "AFAM" variables do not satisfy the balance test. Regarding residence, 58% of treated youths lived in the capital but only 52% of controls. This was partly expected because in the first edition more positions were offered

[13] according to ECH.

Table 8: Means and mean difference tests for covariates

Variables	Treated + Controls	Treated	Controls	Mean difference test:(3)-(2)=0
Age	17.7450 (0.0064) N= 45984	17.7317 (0.0569) N= 589	17.7452 (0.0065) N= 45395	0.0134 (0.0571)
Gender-Male	0.4217 (0.0023) N= 45984	0.3973 (0.0202) N= 589	0.4220 (0.0023) N= 45395	0.0247 (0.0205)
Region-Montevideo	0.5182 (0.0023) N= 45984	0.5823 (0.0203) N= 589	0.5174 (0.0023) N= 45395	-0.0649*** (0.02072)
Education	3.9513 (0.0100) N= 45984	3.8268 (0.0861) N= 589	3.9529 (0.0101) N= 45395	0.1261 (0.0889)
AFAM	0.2217 (0.0019) N= 45984	0.1494 (0.0147) N= 589	0.2226 (0.0019) N= 45395	0.0732*** (0.0172)

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01

in Montevideo and it was somewhat easier to apply than in the rest of the country. Additionally, only 15% of treated candidates lived in households receiving AFAM, compared with 22% of controls.

4 Methodology

Since selection of beneficiaries was random, we resort to techniques based on experimental methods to analyse the impacts of the programme. Considering that the binary variables "Montevideo" and "AFAM" do not satisfy the balance test, we employ two alternative strategies. The first one is to include them as covariates when estimating the impacts of the programme using the whole sample. Additionally, we estimate the effects of the programme on separate samples: one for youths who lived in Montevideo and another one for candidates who did not reside in the capital. We also estimate the impact of the programme splitting the sample between those candidates who lived in a household that received AFAM and those who did not. Finally, although "Age" satisfies the balance tests, we estimate the models splitting the sample by age intervals to get a better insight of the effects of the programme on different age cohorts.

We consider two parameters of interest:

- The effects of the programme considering all candidates selected into treatment (that is, actually treated individuals as well as non-compliers). This estimator is called the "Intention to Treat" (or ITT).
- The effects of the programme on treated individuals, or "Treatment on Treated" (TOT).

The share of candidates who were selected but did not culminate the treatment is not negligible (22% of all candidates called to participate in the programme), so it seems prudent to conduct estimations that take them into account. Moreover, in most labour programmes people are free to choose if they participate or not once selected (and such is the case with "Yo Estudio y Trabajo"), so the ITT is a relevant parameter for policy makers because it estimates the effect of offering the programme (Alzúa, Cruces, and López, 2016).

We consider two outcome variables. The first one is whether the individual is making contributions to social security (thus indicating that she is formally employed) and the second one is whether she is still studying. In order to estimate the ITT we use linear probability models (LPM) for each outcome variable, according to the following specification:

$$Y_i = \alpha_0 + \alpha_1 D_i + xi'\beta + \varepsilon_i \tag{1}$$

Where Y_i is the outcome variable for each individual i, α_0 is the model's constant, D_i is an indicator of whether the person was selected into the programme (it equals 1 if she was and zero otherwise) and x_i is a vector of the baseline covariates described in the previous section (gender, age, region, self-reported educational level and an indicator of whether or not the individual lived in a household that received AFAM). Lastly, ε_i is the usual error term of the model.

To estimate the TOT we employ two strategies. The first one is to estimate LPMs for both outcome variables. The model is specified as follows:

$$Y_i = \alpha_0 + \alpha_1 T_i + xi'\beta + \varepsilon_i \tag{2}$$

Where Y_i and x_i are the same as above and T_i indicates if the individual received the treatment or not (it equals 1 in the first case and zero in the latter).

It should be noted that this estimation might not be consistent if selection into treatment is not completely random or if not all of those called to participate comply with the programme and this decision is not random. More precisely, the fact that it is the candidates themselves who finally decide whether to complete the treatment once they have been selected makes it more difficult to interpret the estimated TOT since we could be incurring in auto selection bias (Flores et al, 2012; Hirshleifer et al, 2015). Therefore, we also estimate model (2) using the indicator for selection into treatment, D_i as an instrument for the treatment itself T_i. Since selection into the programme is random and selection is correlated with actually receiving treatment, D_i constitutes a good instrument for T_i. It follows then that the instrumental variables approach would capture the causal impact of the programme on treated individuals (Angrist and Pischke, 2008; Gertler et al, 2011).

On another issue, it ought to be kept in mind that we are analysing the decision of participating in the formal labour market and studying at young ages. In this stage of life, those decisions are probably not taken independently of each other. Quite on the contrary, working and studying may appear as mutually exclusive alternatives or at least as decisions to make simultaneously. In this line, those choices are the result of a single decision process that is not determined only by the individual, but it is also influenced by her immediate family circle (Cazulo and González, 2013). Therefore, models that do not take that into account the simultaneity of the decision may lead to inconsistent results (Ganglmair, 2006).

In order to consider the interrelation of decisions, a usual approach is to employ bivariate probit models. These permit the joint estimation of both decisions, as they allow for correlation in the error terms of both equations. The existence of correlation between the error terms indicates that there are unobservable factors influencing both decisions (Wooldridge, 2001; Angrist and Pischke, 2008). Among those factors are characteristics of the household, parents' expectations of larger future income due to their children's better education, cultural traits and social norms (Ganglmair, 2006).

Observable variables Y_1 and Y_2 represent the individual's decision of continuing to study and being formally employed, respectively.

$$\text{Continue studying: } Y_1 \begin{cases} 1 \text{ if } y_1^* > 0 \\ 0 \text{ if } y_1^* \leq 0 \end{cases}$$

$$\text{Formal employment: } Y_2 \begin{cases} 1 \text{ if } y_2^* > 0 \\ 0 \text{ if } y_2^* \leq 0 \end{cases}$$

These variables are indicators of the individual's final decision after a subjective evaluation of her utility. Although the latter is not observable, they can be thought of as latent variables with the following structure:

$$y_1^* = X_1'\beta_1 + \varepsilon_1 \tag{3}$$

$$y_2^* = X_2'\beta_2 + \varepsilon_2 \tag{4}$$

Following Maitra and Ray (2000), y_1^* and y_2^* can be interpreted as the net benefit obtained by the individual as a result of continuing to study and being formally employed. In addition, X_1 and X_2 represent vectors of characteristics that determine y_1^* and y_2^*, while ε_1^* and ε_2^* are the unobservable components.

In order to contrast the correct specification of the model a likelihood-ratio exogeneity test is commonly used. Its null hypothesis is that there exists no correlation between the unobservable components of both equations ($\rho = 0$, where ρ is the correlation coefficient between ε_1^* and ε_2^*). If the null hypothesis is not rejected, then joint estimation of the model is deemed unnecessary and univariate models are appropriate. In contrast if the null is rejected there is evidence that $\rho \neq 0$, which in turn implies that there are unobservable factors affecting both decisions simultaneously.

The administrative records available allow us to consider different temporal horizons for our estimations. The set of outcome variables defined is as follows:

1. Enrolment in the medium term: equals 1 if the individual was registered in secondary school in 2015 or enrolled in UDELAR between 2010 and 2016 and zero otherwise[14].

2. Enrolment in the short term: equals 1 if the individual was registered in secondary school in 2014 or enrolled in UDELAR between 2010 and 2016 and zero otherwise.

3. Formal employment in the medium term: equals 1 if the individual contributed to social security in the last three months of 2015 and zero otherwise.

[14]It should be noted that this variable does not exactly capture all individuals who continue studying, since a candidate who enrolled in UDELAR could have abandoned their studies afterwards. Notwithstanding this, beginning tertiary education indicates persistence through the secondary level and that is extremely relevant given the high drop-out rates prevalent in Uruguayan middle education.

4. Formal employment in the short term: equals 1 if the individual contributed to social security in the last three months of 2014 and zero otherwise.

5. Formal employment in the very short term: equals 1 if the individual contributed to social security in the last three months of 2013 and zero otherwise.

By defining outcome variables in this way we can capture time-heterogeneous effects, since we can estimate the impact of the programme in different time horizons.

5 Results

In this section we present the impacts of the programme on the probability of continuing to study in 2014 (short term) and 2015 (medium term) and on the probability of being formally employed in 2013 (very short term), 2014 and 2015.

Results in the very short term are reported in Table 9, where we show the coefficients associated to the programme variable in the various models outlined in the previous section. We detect a negative and statistically significant impact on the probability of being formally employed immediately after culminating the programme (the first edition of "Yo Estudio y Trabajo" ended in August 2013 and we are considering formal employment in the last three months of that year). The estimation is robust to different specifications, considering both univariate models and biprobit. In addition, there are differential impacts by region and depending on whether the candidates live in a household that receives AFAM. Specifically, the programme has no effect on the very short term for youths who do not live in Montevideo or who live in AFAM-receiving households. In contrast, a negative impact (significant at the 1% confidence level) is detected for residents of Montevideo and for those who live in household that do not receive AFAM.

Table 9: Results in the very short term (formal employment in the last three months of 2013 and enrolment to public secondary or university education in 2014)

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
Models/Variables	Enrolment	Formal empl.	Enrolment	Formal empl.	Enrolment	Formal empl.	Enrolment	Formal empl.
Whole sample	-0.0013	-0.0456***	0.0201	-0.0708***	-0.0017	-0.0586***	0.0585	-0.2443***
Montevideo	-0.0195	-0.0603***	0.0003	-0.0953***	-0.0251	-0.0776***	0.0021	-0.3066***
Rest	0.0250	-0.0250	0.0481	-0.0360	0.0321	-0.0322	0.1320	-0.1355
AFAM	0.0047	-0.0373	0.0623	-0.0433	0.0070	-0.0551	0.1689	-0.1530
No AFAM	-0.0020	-0.0473***	0.0123	-0.0761***	-0.0025	-0.0591***	0.0354	-0.2614***
Under 18	-0.0434*	-0.0192	-0.0287	-0.0401*	-0.0543*	-0.0240	-0.0788	-0.1753*
Aged 18 or 19	0.0613**	-0.0769***	0.0682**	-0.0987***	0.0770**	-0.0966***	0.1968**	-0.2985***
Over 20	-0.0057	-0.0586	0.0758*	-0.1187**	-0.0085	-0.0865	0.2956*	-0.3272**

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: in this table we report coefficients associated to the treatment indicator (T_i) for the TOT (LPM), TOT (IV) and Biprobit models, and the coefficients of the selection into treatment indicator (D_i) for the ITT models. In order to estimate the coefficients listed in the first row, we use the whole sample and include residence, age, age squared, gender and educational level as covariates. In subsequent rows we report the mentioned coefficients sub-dividing the sample as indicated and adding the rest of the variables as covariates. See Tables 14 to 37 in the Appendix for detailed results of all models estimated.

These very short-term results can be associated with search duration or to lock-in effects in the labour market (Fremigacci and Terracol, 2013). Under this first hypothesis, youths who have finished the programme are looking for another job in the months immediately following completion, but are not able to find one right away. This implies that treated individuals are at a disadvantage in the very short term when they are compared to those that did not receive treatment and have been searching for employment for a longer time. Under the second hypothesis, treated youths may modify their conducts and demands when weighing a job offer. More precisely, they might become more exigent and thus take longer to finally accept a position (Fremigacci and Terracol, 2013).

Turning to the programme's effects on enrolment in 2014, there are no statistically significant impacts except for youths aged 18 and 19 years old (and some weak negative effects for those aged less than 18). For the 18-19 cohort the effects of the programme on enrolment are statistically significant and positive in all specifications. It follows then, that for these individuals the programme increased their likelihood of continuing to study. This is an important result especially when taking into account the high levels of educational detachment for cohorts over 17 years old.

For univariate linear models, coefficients reported in Table 9 are also the marginal effects. That is, those coefficients indicate the impact of the programme on the probability of being formally employed in the very short term and on the probability of being enrolled in secondary school or university in 2014. For example, when analysing results for the model with the whole sample, we can conclude that the programme lowers the probability of being formally employed

in the very short term between 4.6 (according to the ITT) and 7.1 (according to the model for TOT without instruments) percentage points. In contrast, the coefficients listed do not represent the marginal effects in the biprobit model since it is a non-linear specification.

Table 10: Estimates of marginal effects in biprobit models for the very short term

	Model for whole sample		Model for Montevideo		Model for no AFAM	
Marginal Effects	Women	Men	Women	Men	Women	Men
$P11$	-0.0475***	-0.0483***	-0.0704***	-0.0701***	-0.0537***	-0.0542***
$P10$	0.0680***	0.0697***	0.0711***	0.0708***	0.0660***	0.0671***
$P01$	-0.0319***	-0.0379***	-0.0324***	-0.0384***	-0.0309***	-0.0366***

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: education is set at the last years of secondary school and age in the whole sample average (17.7 years). Additionally, AFAM is set to "no" when estimating marginal effects for the model using the whole sample and for the model estimated using only residents of Montevideo. Lastly, residence is set to "Montevideo" when estimating marginal effects for the model using the whole sample and for the model estimated using only non-AFAM candidates.
$P11$ = probability of being enrolled in public secondary or university education and formally employed.
$P10$ = probability of being enrolled in public secondary or university education and not formally employed.
$P01$ = probability of not being enrolled in public secondary or university education not formally employed.

Table 10 shows the estimates of marginal effects for the biprobit models that had a statistically significant coefficient for the treatment indicator. We select as benchmark the case of a person living in Montevideo, who is enrolled in the final years of secondary education at the time of treatment and is aged exactly the average of our sample (17.7 years old, see Table 8). The first two columns intersected with the top row show the impact of the programme on the probability of being formally employed in the very short term and enrolled in public education (secondary or university) in 2014, using the coefficients estimated in the model for the whole sample. The programme lowers this probability in 4.8 percentage points for both males and females.

The second row shows the change induced by the programme in the probability of continuing to study in 2014 while not being formally employed in the very short term. We can see that the programme increases this probability by 6.8 percentage points for women and 7.0 for men. The third row shows the variation in the probability of being formally employed in the very short term and not enrolled in the public educational system in the short term.

The two central columns present the marginal effects mentioned but using the model estimated for youths living in Montevideo instead of the whole sample. Finally, the last two columns show the marginal effects estimated with the model for individuals who lived in households that did not receive AFAM.

Table 11: Results in the short term (formal employment in the last three months of 2014 and enrolment to public secondary or university education in 2015)

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
Models/Variables	Enrolment	Formal empl.	Enrolment	Formal empl.	Enrolment	Formal empl.	Enrolment	Formal empl.
Whole sample	-0.0077	0.0092	0.0047	0.0151	-0.0099	0.0118	0.0170	0.0441
Montevideo	-0.0100	0.0055	0.0048	0.0148	-0.0128	0.0071	0.0206	0.0385
Rest	-0.0030	0.0144	0.0052	0.0163	0.0423	0.0185	0.0157	0.0565
AFAM	0.0553	0.0154	0.0812*	0.0192	0.0818	0.0228	0.2352*	0.0598
No AFAM	-0.0207	0.0083	-0.0095	0.0142	-0.0247	0.0103	-0.0266	0.0414
Under 18	-0.0194	0.0423*	-0.0250	0.0578**	-0.0243	0.0530*	-0.0616	0.1677**
Aged 18 or 19	0.0160	-0.0142	0.0296	-0.0111	0.0201	-0.0179	0.0814	-0.0298
Over 20	-0.0167	-0.0407	0.0492	-0.0747	-0.0247	-0.0601	0.1919	-0.1874

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: in this table we report coefficients associated to the treatment indicator (T_i) for the TOT (LPM), TOT (IV) and Biprobit models, and the coefficients of the selection into treatment indicator (D_i) for the ITT models. In order to estimate the coefficients listed in the first row, we use the whole sample and include residence, age, age squared, gender and educational level as covariates. In subsequent rows we report the mentioned coefficients sub-dividing the sample as indicated and adding the rest of the variables as covariates. See Tables 14 to 37 in the Appendix for detailed results of all models estimated.

When considering formal employment in the short term (15 months after the programme ended) we detect no statistically significant impacts. Therefore, we can assert that the negative impacts observed in the very short term fade

over time. These estimates are reported in Table 11. When we split the sample as above we still do not find statistically significant impacts. That is, when analysing the models for youths living in households that did not receive AFAM, as for those living in Montevideo, the negative effects disappeared over time and 15 months after programme completion we find no impacts. These results are fairly robust to different specifications.

In Table 12 we report the estimates of the coefficients associated with the programme indicator in the different models for the medium term. When we consider the effects of the programme on the probability of being formally employed in the last three months of 2015 (27 months after the programme finished) and using the whole sample to perform the estimations, we do not find statistically significant impacts. However, we do detect positive and significant effects of the programme when we estimate the models using the sample of youths who lived in households that received AFAM. For them, the programme increases their likelihood of having a formal job in the medium term between 8.3 to 12.2 percentage points according to the linear models.

In addition, when separating the sample by age cohort we observe positive and significant impacts on the probability of formal employment in the medium term for youths aged 18 and 19 years old. This result is robust to different specifications. The coefficients of the linear models indicate that the programme increases these youths probability of being formally employed in the medium term between 6.9 to 9.9 percentage points.

When modelling the outcomes jointly through the biprobit specification we find that there are significant and positive impacts of the programme on both outcome variables for youths who lived in AFAM-receiving households. The impacts on the probability of these individuals being enrolled to public education in the medium term are not detected through the ITT and TOT(IV) models. At this point, it is worth pointing out that in all biprobit models estimated the null of $\rho = 0$ is rejected (see Tables 14 to 38 in the Appendix), thus supporting the hypothesis of interdependence in the decision-making process.

Table 12: Results in the medium term (formal employment in the last three months of 2015 and enrolment to public secondary or university education in 2015)

	ITT		TOT (MPL)		TOT (IV)		Biprobit	
Models/Variables	Enrolment	Formal empl.	Enrolment	Formal empl.	empl.	Formal empl.	Enrolment	Formal empl.
Whole sample	-0.0077	0.0099	0.0047	0.0231	-0.0099	0.0127	0.0160	0.0607
Montevideo	-0.0100	-0.0068	0.0048	0.0080	-0.0128	-0.0087	0.0204	0.0203
Rest	-0.0030	0.0330	0.0052	0.0452	0.0423	-0.0039	0.0129	0.1218
AFAM	0.0553	0.0828**	0.0812*	0.1084**	0.0818	0.1223**	0.2329*	0.2873**
No AFAM	-0.0207	-0.0049	-0.0095	0.0076	-0.0247	-0.0069	-0.0272	0.0198
Under 18	-0.0194	-0.0161	-0.0250	-0.0105	-0.0243	-0.0201	-0.0623	-0.0265
Aged 18 or 19	0.0160	0.0694**	0.0296	0.0993***	0.0201	0.0873**	0.0820	0.2567***
Over 20	-0.0167	-0.0562	0.0492	-0.0753	-0.0247	-0.0830	0.1862	-0.1916

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: in this table we report coefficients associated to the treatment indicator (T_i) for the TOT (LPM), TOT (IV) and Biprobit models, and the coefficients of the selection into treatment indicator (D_i) for the ITT models. In order to estimate the coefficients listed in the first row, we use the whole sample and include residence, age, age squared, gender and educational level as covariates. In subsequent rows we report the mentioned coefficients sub-dividing the sample as indicated and adding the rest of the variables as covariates. See Tables 14 to 37 in the Appendix for detailed results of all models estimated.

To sum up, we do not detect any statistically significant impacts of the programme in the medium term when using the whole sample to estimate the models described above, nor do we find heterogeneous effects by region. However, when the analysis is performed for different age cohorts, we find positive and significant impacts on the probability of formal employment for youths aged 18 and 19. Furthermore, estimations performed on the sample of individuals who lived in households that received AFAM yield positive and significant effects on both outcome variables. Impacts are significant at the 5% confidence level for formal employment and at the 10% for enrolment. This result contrasts with the findings of Autor and Houseman (2010), who conclude that providing temporary jobs is not effective to improve lower-skilled workers' conditions. However, it is in line with results of labour programme evaluations for other countries in the region, where researchers found that the programmes increased the likelihood of vulnerable youths finding formal employment and that these impacts seemed to grow with time (Attanasio et al, 2015; Ibarrarán et al, 2015).

In Table 13 we present the estimates of marginal effects based on the biprobit models for the medium term. In order to estimate marginal effects for youths who resided in AFAM-receiving households, we set age at the sample average of 17.7 years and educational level at the time of signing up for the programme at the final years of secondary school. For women of those characteristics living in Montevideo, the probability of being enrolled in public education while formally employed increased by 9.5 percentage points. The increase is even larger for men living in Montevideo, at 10.2 percentage points. Meanwhile, for youths living in cities other than the capital, the impacts were estimated at 7.4 percentage points

for women and 8.4 percentage points for men. The remaining marginal effects are not statistically significant. Among youths living in households who receive the AFAM subsidy, the increase in the probability of continuing to study in the public education system while having a formal job in the medium term is higher for younger individuals. In addition, the impacts are also larger for youths who had higher education levels at the time of signing up for the programme. There are no significant differences across region of residence or gender (see Figures 1 to 4 in the Appendix).

Table 13: Estimates of marginal effects in biprobit models for the medium term

	Montevideo		Rest of the country	
Marginal effects	Women	Men	Women	Men
P11	0.0955***	0.1021***	0.0741***	0.0843***
P10	-0.0027	0.0097	0.0186	0.0081
P01	0.0182	0.0120	0.0259	0.0252

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: education is set at the last years of secondary school and age in the whole sample average (17.7 years).
$P11$ = probability of being enrolled in public secondary or university education and formally employed.
$P10$ = probability of being enrolled in public secondary or university education and not formally employed.
$P01$ = probability of not being enrolled in public secondary or university education not formally employed.

6 Conclusions

In this paper we analyse the impacts of the first edition of the labour programme "Yo Estudio y Trabajo" (carried out between August 2012 and August 2013) using administrative records from the national social security system and the national public education providers. We exploit the programme's random selection process to apply experimental methods. This is one of the first such evaluations for labour programmes oriented towards the young in Uruguay.

It is worth pointing out that we were able to match all of the 46,152 candidates who entered the selection lottery with their administrative records, which highlights the potentiality of our data to generate precise estimates of the programme's effects.

Our outcome variables are contributions to social security in different points in time and being enrolled to the public educational system in 2014 and 2015. We start by using linear univariate models to estimate the "intention to treat" effect (ITT) and the "treatment on the treated" effect (TOT) on each of the outcome variables. Furthermore, we employ biprobit models to take into account the simultaneity of the decision of continuing to study and being formally employed.

We find evidence of time-heterogeneous effects, as well as differential impacts depending on individuals' characteristics, which is in line with existing evidence on the effects of labour programmes (Card et al, 2011). Our results are fairly robust to the different specifications used.

For the very short term we find a negative impact on the likelihood of being formally employed, which could be linked to the effects of frictional short-term unemployment or to lock-in effect in the labour market. In order to avoid these negative impacts, the programme could be modified to prepare youths for a more successful re-insertion in the labour market. Nevertheless, these negative effects fade out in the short term. In the medium term we find positive and statistically significant impacts on the probability of being formally employed and being enrolled in the public education system (through the biprobit specification) for those youths who live in households that receive AFAM, a government subsidy aimed to socially vulnerable families. In particular, the programme increases the probability of being formally employed between 8 to 12 percentage points (depending on the specification used) for socially vulnerable youths. This result emphasizes the importance of the programme for this sub-population. Our findings are in line with those obtained by Attanasio et al (2015) for Colombia and Ibarrarán et al (2015) for the Dominican Republic.

The evidence presented in this paper gives support to the policy of establishing a social-vulnerability quota that was first implemented in the fourth edition of "Yo Estudio y Trabajo". In addition, it is quite important for candidates to complete treatment once selected. This implies that better monitoring procedures should be put in place, especially for socially vulnerable youths, since they are the ones who usually face larger obstacles when trying to balance studying, home chores and working outside the household. That could prove successful in bolstering the positive medium term results documented in this research.

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A Appendix

List of public institutions who hired the programme's beneficiaries:

- ANCAP: the state oil company
- ANTEL: the state telecommunications company
- BPS: the public social security administrator
- BROU: the state commercial bank
- BSE: the state insurance company
- INC: the public organization in charge of colonization
- LATU: a public entity in charge of high-tech research
- OSE: the state water company
- UTE: the state electricity company

Table 14: Estimates for the whole sample. Very short term (formal employment in the last three months of 2013 and enrolment to public education in 2014).

	ITT		TOT (LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal empl.	Enrolment	Formal empl.	Enrolment	Formal empl.	Enrolment	Formal empl.
Programme	-0.001	-0.046***	0.020	-0.071***	-0.002	-0.059***	0.059	-0.244***
	(0.016)	(0.015)	(0.019)	(0.017)	(0.021)	(0.020)	(0.056)	(0.062)
Male	-0.031***	0.041***	-0.031***	0.042***	-0.031***	0.041***	-0.095***	0.144***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.013)	(0.014)
Montevideo	0.028***	0.092***	0.028***	0.092***	0.028***	0.092***	0.084***	0.321***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.013)	(0.014)
Age	-0.653***	0.954***	-0.660***	0.954***	-0.653***	0.954***	-1.840***	4.216***
	(0.041)	(0.038)	(0.041)	(0.038)	(0.041)	(0.038)	(0.126)	(0.138)
Age squared	0.017***	-0.024***	0.017***	-0.024***	0.017***	-0.024***	0.048***	-0.109***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)
AFAM	-0.086***	-0.018***	-0.086***	-0.018***	-0.086***	-0.018***	-0.238***	-0.068***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.015)	(0.018)
First years technical education	-0.067***	-0.000	-0.068***	0.001	-0.067***	-0.000	-0.182***	0.006
	(0.011)	(0.010)	(0.011)	(0.010)	(0.011)	(0.010)	(0.032)	(0.038)
Final years high school	0.250***	0.012*	0.250***	0.013*	0.250***	0.012*	0.653***	0.040
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.021)	(0.025)
Final years technical education	0.188***	0.057***	0.187***	0.057***	0.188***	0.057***	0.485***	0.193***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.024)	(0.028)
Non formal education	-0.105***	0.039***	-0.104***	0.039***	-0.105***	0.038***	-0.285***	0.131***
	(0.014)	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)	(0.042)	(0.045)
Teaching training	-0.025	-0.051***	-0.026	-0.050***	-0.025	-0.051***	-0.062	-0.137**
	(0.018)	(0.016)	(0.018)	(0.016)	(0.018)	(0.016)	(0.052)	(0.055)
Non university tertiary education	0.227***	0.077***	0.227***	0.078***	0.227***	0.077***	0.588***	0.200***
	(0.013)	(0.012)	(0.013)	(0.012)	(0.013)	(0.012)	(0.038)	(0.040)
University	0.567***	-0.038***	0.567***	-0.037***	0.567***	-0.038***	1.826***	-0.126***
	(0.009)	(0.008)	(0.009)	(0.008)	(0.009)	(0.008)	(0.031)	(0.029)
Constant	6.619***	-9.041***	6.675***	-9.046***	6.619***	-9.042***	17.232***	-41.268***
	(0.368)	(0.342)	(0.369)	(0.342)	(0.368)	(0.342)	(1.131)	(1.247)
Athrho							-0.116***	
							(0.009)	
Observations	46,152	46,152	45,984	45,984	46,152	46,152	45,984	45,984
R-squared	0.149	0.089	0.149	0.090	0.149	0.090		

[15]Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 15: Estimates for youths residing in Montevideo. Very short term (formal employment in the last three months of 2013 and enrolment to public education in 2014).

	ITT		TOT (LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.020	-0.060***	0.000	-0.095***	-0.025	-0.078***	0.002	-0.307***
	(0.021)	(0.021)	(0.023)	(0.024)	(0.026)	(0.027)	(0.074)	(0.079)
Male	-0.035***	0.032***	-0.035***	0.032***	-0.035***	0.032***	-0.114***	0.100***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.019)	(0.018)
Age	-0.579***	1.150***	-0.585***	1.146***	-0.579***	1.150***	-1.669***	4.190***
	(0.054)	(0.056)	(0.055)	(0.057)	(0.054)	(0.056)	(0.180)	(0.182)
Age squared	0.015***	-0.029***	0.015***	-0.029***	0.015***	-0.029***	0.044***	-0.108***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.005)	(0.005)
AFAM	-0.101***	-0.011	-0.101***	-0.011	-0.101***	-0.011	-0.287***	-0.037
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.023)	(0.025)
First years technical education	-0.072***	0.014	-0.072***	0.015	-0.072***	0.014	-0.195***	0.065
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.045)	(0.050)
Final years high school	0.273***	0.022**	0.274***	0.022**	0.273***	0.022**	0.714***	0.082**
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.029)	(0.032)
Final years technical education	0.228***	0.059***	0.228***	0.060***	0.228***	0.059***	0.592***	0.195***
	(0.011)	(0.012)	(0.011)	(0.012)	(0.011)	(0.012)	(0.034)	(0.037)
Non formal education	-0.096***	0.026	-0.094***	0.026	-0.096***	0.026	-0.260***	0.092
	(0.017)	(0.018)	(0.017)	(0.018)	(0.017)	(0.018)	(0.054)	(0.057)
Teaching training	0.058**	-0.028	0.055*	-0.025	0.058**	-0.028	0.149*	-0.060
	(0.029)	(0.031)	(0.030)	(0.031)	(0.029)	(0.030)	(0.087)	(0.089)
Non university tertiary education	0.273***	0.038**	0.275***	0.040**	0.273***	0.038**	0.712***	0.110**
	(0.017)	(0.018)	(0.018)	(0.018)	(0.017)	(0.018)	(0.053)	(0.054)
University	0.574***	-0.067***	0.574***	-0.066***	0.574***	-0.067***	1.868***	-0.170***
	(0.011)	(0.012)	(0.011)	(0.012)	(0.011)	(0.012)	(0.039)	(0.036)
Constant	5.923***	-10.802***	5.971***	-10.765***	5.922***	-10.805***	15.636***	-40.727***
	(0.490)	(0.507)	(0.491)	(0.508)	(0.490)	(0.507)	(1.611)	(1.648)
Athrho							-0.087***	
							(0.012)	
Observations	23,929	23,929	23,831	23,831	23,929	23,929	23,831	23,831
R-squared	0.183	0.075	0.182	0.075	0.183	0.075		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 16: Estimates for youths not residing in Montevideo. Very short term (formal employment in the last three months of 2013 and enrolment to public education in 2014).

	ITT		TOT(LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	0.025	-0.025	0.048	-0.036	0.032	-0.032	0.132	-0.136
	(0.026)	(0.022)	(0.030)	(0.024)	(0.034)	(0.028)	(0.085)	(0.101)
Male	-0.028***	0.052***	-0.027***	0.052***	-0.028***	0.052***	-0.078***	0.206***
	(0.006)	(0.005)	(0.006)	(0.005)	(0.006)	(0.005)	(0.018)	(0.021)
Age	-0.714***	0.774***	-0.721***	0.780***	-0.714***	0.774***	-1.979***	4.253***
	(0.062)	(0.051)	(0.062)	(0.051)	(0.062)	(0.051)	(0.179)	(0.212)
Age squared	0.019***	-0.020***	0.019***	-0.020***	0.019***	-0.020***	0.051***	-0.110***
	(0.002)	(0.001)	(0.002)	(0.001)	(0.002)	(0.001)	(0.005)	(0.006)
AFAM	-0.073***	-0.022***	-0.073***	-0.021***	-0.073***	-0.022***	-0.198***	-0.091***
	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)	(0.020)	(0.025)
First years technical education	-0.073***	-0.017	-0.075***	-0.017	-0.073***	-0.017	-0.199***	-0.067
	(0.017)	(0.014)	(0.017)	(0.014)	(0.017)	(0.014)	(0.046)	(0.059)
Final years high school	0.217***	-0.001	0.216***	-0.000	0.217***	-0.001	0.562***	-0.001
	(0.011)	(0.009)	(0.011)	(0.009)	(0.011)	(0.009)	(0.031)	(0.038)
Final years technical education	0.142***	0.050***	0.140***	0.050***	0.142***	0.050***	0.361***	0.190***
	(0.013)	(0.010)	(0.013)	(0.010)	(0.013)	(0.010)	(0.034)	(0.042)
Non formal education	-0.112***	0.054***	-0.113***	0.055***	-0.112***	0.054***	-0.309***	0.197***
	(0.023)	(0.019)	(0.023)	(0.019)	(0.023)	(0.019)	(0.066)	(0.072)
Teaching training	-0.077***	-0.055***	-0.077***	-0.054***	-0.077***	-0.055***	-0.209***	-0.169**
	(0.023)	(0.019)	(0.023)	(0.019)	(0.023)	(0.019)	(0.066)	(0.071)
Non university tertiary education	0.167***	0.116***	0.165***	0.114***	0.167***	0.115***	0.429***	0.310***
	(0.020)	(0.017)	(0.020)	(0.017)	(0.020)	(0.017)	(0.055)	(0.060)
University	0.557***	0.012	0.557***	0.013	0.558***	0.012	1.740***	0.030
	(0.016)	(0.013)	(0.016)	(0.013)	(0.016)	(0.013)	(0.053)	(0.049)
Constant	7.238***	-7.341***	7.300***	-7.399***	7.238***	-7.341***	18.664***	-41.614***
	(0.557)	(0.456)	(0.558)	(0.456)	(0.557)	(0.456)	(1.595)	(1.915)
Athrho							-0.150***	
							(0.013)	
Observations	22,223	22,223	22,153	22,153	22,223	22,223	22,153	22,153
R-squared	0.109	0.081	0.109	0.081	0.109	0.081		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 17: Estimates for youths whose households received AFAM. Very short term (formal employment in the last three months of 2013 and enrolment to public education in 2014).

	ITT		TOT (LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	0.005	-0.037	0.062	-0.043	0.007	-0.055	0.169	-0.153
	(0.041)	(0.033)	(0.050)	(0.040)	(0.061)	(0.048)	(0.138)	(0.166)
Male	-0.023**	0.062***	-0.022**	0.062***	-0.023**	0.062***	-0.061**	0.258***
	(0.010)	(0.008)	(0.010)	(0.008)	(0.010)	(0.008)	(0.027)	(0.032)
Age	-0.913***	1.313***	-0.924***	1.312***	-0.913***	1.313***	-2.526***	6.217***
	(0.097)	(0.076)	(0.097)	(0.077)	(0.097)	(0.076)	(0.273)	(0.330)
Age squared	0.024***	-0.035***	0.025***	-0.035***	0.024***	-0.035***	0.068***	-0.165***
	(0.003)	(0.002)	(0.003)	(0.002)	(0.003)	(0.002)	(0.008)	(0.009)
Montevideo	-0.006	0.101***	-0.007	0.101***	-0.006	0.101***	-0.019	0.417***
	(0.010)	(0.008)	(0.010)	(0.008)	(0.010)	(0.008)	(0.027)	(0.031)
First years technical education	-0.053***	0.002	-0.053***	0.003	-0.053***	0.002	-0.148***	0.021
	(0.018)	(0.014)	(0.018)	(0.014)	(0.018)	(0.014)	(0.049)	(0.061)
Final years high school	0.253***	0.039***	0.253***	0.040***	0.253***	0.039***	0.656***	0.159***
	(0.013)	(0.010)	(0.013)	(0.010)	(0.013)	(0.010)	(0.036)	(0.045)
Final years technical education	0.173***	0.054***	0.173***	0.055***	0.173***	0.054***	0.449***	0.214***
	(0.016)	(0.012)	(0.016)	(0.012)	(0.016)	(0.012)	(0.043)	(0.052)
Non formal education	-0.197***	-0.013	-0.194***	-0.012	-0.196***	-0.013	-0.630***	-0.044
	(0.025)	(0.020)	(0.025)	(0.020)	(0.025)	(0.020)	(0.079)	(0.085)
Teaching training	-0.037	-0.039	-0.038	-0.038	-0.037	-0.039	-0.119	-0.068
	(0.042)	(0.033)	(0.042)	(0.033)	(0.042)	(0.033)	(0.121)	(0.128)
Non university tertiary education	0.199***	0.089***	0.203***	0.094***	0.199***	0.088***	0.532***	0.290**
	(0.039)	(0.031)	(0.040)	(0.031)	(0.039)	(0.031)	(0.107)	(0.113)
University	0.679***	0.033	0.678***	0.035*	0.679***	0.033	2.376***	0.084
	(0.027)	(0.021)	(0.027)	(0.021)	(0.027)	(0.021)	(0.125)	(0.079)
Constant	8.784***	-12.166***	8.880***	-12.160***	8.785***	-12.167***	22.899***	-59.257***
	(0.857)	(0.677)	(0.859)	(0.678)	(0.857)	(0.677)	(2.421)	(2.957)
Athrho							-0.101***	
							(0.020)	
Observations	10,236	10,236	10,194	10,194	10,236	10,236	10,194	10,194
R-squared	0.125	0.106	0.124	0.106	0.125	0.106		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 18: Estimates for youths whose households did not receive AFAM. Very short term (formal employment in the last three months of 2013 and enrolment to public education in 2014).

	ITT		TOT(LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal empl.	Enrolment	Formal empl.	Enrolment	Formal empl.	Enrolment	Formal empl.
Programme	-0.002	-0.047***	0.012	-0.076***	-0.003	-0.059***	0.035	-0.261***
	(0.018)	(0.017)	(0.020)	(0.019)	(0.022)	(0.021)	(0.061)	(0.067)
Male	-0.033***	0.036***	-0.033***	0.036***	-0.033***	0.036***	-0.104***	0.121***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.015)	(0.015)
Age	-0.616***	0.886***	-0.622***	0.886***	-0.616***	0.886***	-1.739***	3.793***
	(0.046)	(0.044)	(0.046)	(0.044)	(0.046)	(0.044)	(0.144)	(0.154)
Age squared	0.016***	-0.022***	0.016***	-0.022***	0.016***	-0.022***	0.045***	-0.097***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)
Montevideo	0.039***	0.090***	0.039***	0.090***	0.039***	0.090***	0.118***	0.301***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.015)	(0.015)
First years technical education	-0.081***	-0.003	-0.082***	-0.002	-0.081***	-0.003	-0.215***	-0.004
	(0.015)	(0.014)	(0.015)	(0.014)	(0.015)	(0.014)	(0.043)	(0.049)
Final years high school	0.247***	0.002	0.247***	0.002	0.247***	0.002	0.649***	-0.000
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.026)	(0.030)
Final years technical education	0.191***	0.054***	0.190***	0.054***	0.191***	0.054***	0.496***	0.174***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.029)	(0.033)
Non formal education	-0.056***	0.063***	-0.056***	0.064***	-0.056***	0.063***	-0.139***	0.188***
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.051)	(0.053)
Teaching training	-0.023	-0.057***	-0.024	-0.055***	-0.023	-0.057***	-0.049	-0.160***
	(0.020)	(0.019)	(0.020)	(0.019)	(0.020)	(0.019)	(0.058)	(0.061)
Non university tertiary education	0.230***	0.069***	0.230***	0.068***	0.230***	0.068***	0.600***	0.169***
	(0.014)	(0.014)	(0.015)	(0.014)	(0.014)	(0.014)	(0.042)	(0.044)
University	0.560***	-0.051***	0.560***	-0.051***	0.560***	-0.051***	1.804***	-0.163***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.034)	(0.033)
Constant	6.309***	-8.444***	6.362***	-8.447***	6.308***	-8.445***	16.394***	-37.415***
	(0.411)	(0.399)	(0.412)	(0.399)	(0.411)	(0.398)	(1.294)	(1.397)
Athrho							-0.121***	
							(0.010)	
Observations	35,916	35,916	35,790	35,790	35,916	35,916	35,790	35,790
R-squared	0.137	0.081	0.137	0.081	0.137	0.081		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 19: Estimates for individuals less than 18 years old. Very short term (formal employment in the last three months of 2013 and enrolment to public education in 2014).

	ITT		TOT(LPM)		TOT(IV)		Biprobit	
	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.043*	-0.019	-0.029	-0.040*	-0.054*	-0.024	-0.079	-0.175*
	(0.025)	(0.019)	(0.028)	(0.021)	(0.031)	(0.024)	(0.077)	(0.097)
Male	-0.036***	0.041***	-0.035***	0.042***	-0.036***	0.041***	-0.099***	0.180***
	(0.006)	(0.005)	(0.006)	(0.005)	(0.006)	(0.005)	(0.018)	(0.021)
Montevideo	0.017***	0.080***	0.017***	0.080***	0.017***	0.080***	0.048***	0.347***
	(0.006)	(0.005)	(0.006)	(0.005)	(0.006)	(0.005)	(0.018)	(0.021)
AFAM	-0.084***	-0.030***	-0.083***	-0.030***	-0.084***	-0.030***	-0.231***	-0.136***
	(0.007)	(0.005)	(0.007)	(0.005)	(0.007)	(0.005)	(0.019)	(0.024)
First years technical education	-0.070***	0.007	-0.071***	0.008	-0.070***	0.007	-0.186***	0.035
	(0.014)	(0.010)	(0.014)	(0.010)	(0.014)	(0.010)	(0.038)	(0.046)
Final years high school	0.275***	0.017**	0.275***	0.017**	0.275***	0.017**	0.721***	0.078**
	(0.009)	(0.007)	(0.009)	(0.007)	(0.009)	(0.007)	(0.026)	(0.032)
Final years technical education	0.180***	0.062***	0.179***	0.063***	0.180***	0.062***	0.456***	0.262***
	(0.011)	(0.009)	(0.011)	(0.009)	(0.011)	(0.009)	(0.031)	(0.037)
Non formal education	-0.230***	0.015	-0.229***	0.015	-0.230***	0.015	-0.678***	0.072
	(0.021)	(0.016)	(0.021)	(0.016)	(0.021)	(0.016)	(0.064)	(0.069)
Teaching training	-0.294*	0.186	-0.294*	0.187	-0.294*	0.186	-0.927	0.721
	(0.175)	(0.135)	(0.175)	(0.135)	(0.175)	(0.135)	(0.591)	(0.498)
Non university tertiary education	-0.076	0.144***	-0.068	0.152***	-0.077	0.144***	-0.185	0.545***
	(0.055)	(0.042)	(0.055)	(0.043)	(0.055)	(0.042)	(0.155)	(0.160)
University	0.414***	0.032	0.415***	0.033	0.415***	0.032	1.226***	0.154
	(0.074)	(0.057)	(0.074)	(0.057)	(0.074)	(0.057)	(0.254)	(0.236)
Constant	0.469***	0.085***	0.468***	0.084***	0.469***	0.085***	-0.070**	-1.345***
	(0.010)	(0.008)	(0.010)	(0.008)	(0.010)	(0.008)	(0.028)	(0.035)
Athrho							-0.184***	
							(0.014)	
Observations	22,396	22,396	22,325	22,325	22,396	22,396	22,325	22,325
R-squared	0.102	0.021	0.102	0.021	0.102	0.021		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 20: Estimates for youths aged 18 and 19. Very short term (formal employment in the last three months of 2013 and enrolment to public education in 2014).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	0.061**	-0.077***	0.068**	-0.099***	0.077**	-0.097***	0.197**	-0.299***
	(0.027)	(0.028)	(0.030)	(0.031)	(0.033)	(0.035)	(0.093)	(0.094)
Male	-0.022***	0.041***	-0.021***	0.041***	-0.022***	0.041***	-0.071***	0.115***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.022)	(0.021)
Montevideo	0.043***	0.114***	0.044***	0.113***	0.043***	0.114***	0.133***	0.318***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.021)	(0.021)
AFAM	-0.076***	-0.006	-0.075***	-0.006	-0.076***	-0.006	-0.205***	-0.017
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.028)	(0.029)
First years technical education	-0.064***	-0.007	-0.064***	-0.007	-0.064***	-0.008	-0.175**	-0.023
	(0.023)	(0.025)	(0.023)	(0.025)	(0.023)	(0.025)	(0.070)	(0.071)
Final years high school	0.192***	0.025*	0.192***	0.024	0.193***	0.025*	0.490***	0.068
	(0.014)	(0.015)	(0.014)	(0.015)	(0.014)	(0.015)	(0.041)	(0.042)
First years technical education	0.169***	0.074***	0.168***	0.073***	0.169***	0.074***	0.433***	0.203***
	(0.015)	(0.016)	(0.016)	(0.016)	(0.015)	(0.016)	(0.045)	(0.046)
Non formal education	-0.034	0.083***	-0.031	0.084***	-0.033	0.082***	-0.085	0.232***
	(0.023)	(0.025)	(0.023)	(0.025)	(0.023)	(0.025)	(0.068)	(0.068)
Teaching training	-0.066***	-0.044*	-0.066***	-0.044*	-0.066***	-0.044*	-0.179***	-0.142*
	(0.023)	(0.025)	(0.023)	(0.025)	(0.023)	(0.025)	(0.069)	(0.073)
Terciario No Universitario	0.204***	0.099***	0.203***	0.098***	0.204***	0.098***	0.517***	0.271***
	(0.019)	(0.020)	(0.019)	(0.020)	(0.019)	(0.020)	(0.055)	(0.056)
Non university tertiary education	0.528***	-0.031**	0.527***	-0.030*	0.528***	-0.031**	1.707***	-0.081*
	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.016)	(0.047)	(0.044)
Constant	0.378***	0.235***	0.377***	0.235***	0.378***	0.235***	-0.315***	-0.715***
	(0.014)	(0.015)	(0.014)	(0.015)	(0.014)	(0.015)	(0.042)	(0.043)
Athrho							-0.108***	
							(0.014)	
Observations	17,159	17,159	17,102	17,102	17,159	17,159	17,102	17,102
R-squared	0.175	0.022	0.175	0.022	0.175	0.023		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 21: Estimates for youths over 19 years old. Very short term (formal employment in the last three months of 2013 and enrolment to public education in 2014).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.006	-0.059	0.076*	-0.119**	-0.008	-0.086	0.296*	-0.327**
	(0.037)	(0.044)	(0.044)	(0.053)	(0.054)	(0.065)	(0.166)	(0.147)
Male	-0.006	0.029**	-0.006	0.029**	-0.006	0.029**	-0.032	0.077**
	(0.010)	(0.012)	(0.010)	(0.012)	(0.010)	(0.012)	(0.037)	(0.033)
Montevideo	0.047***	0.081***	0.047***	0.082***	0.047***	0.081***	0.152***	0.220***
	(0.011)	(0.013)	(0.011)	(0.013)	(0.011)	(0.013)	(0.038)	(0.034)
AFAM	-0.034**	-0.076***	-0.032*	-0.076***	-0.034**	-0.076***	-0.085	-0.213***
	(0.016)	(0.019)	(0.016)	(0.019)	(0.016)	(0.019)	(0.054)	(0.053)
First years technical education	-0.020	-0.059	-0.024	-0.055	-0.020	-0.058	-0.066	-0.175
	(0.042)	(0.050)	(0.042)	(0.050)	(0.042)	(0.050)	(0.134)	(0.143)
Final years high school	0.145***	0.060**	0.144***	0.064**	0.145***	0.061**	0.363***	0.180**
	(0.023)	(0.027)	(0.023)	(0.027)	(0.023)	(0.027)	(0.072)	(0.074)
Final years technical education	0.160***	0.105***	0.157***	0.108***	0.160***	0.105***	0.401***	0.297***
	(0.025)	(0.030)	(0.025)	(0.030)	(0.025)	(0.030)	(0.078)	(0.081)
Non formal education	-0.018	0.109**	-0.021	0.112**	-0.018	0.109**	-0.061	0.305***
	(0.036)	(0.043)	(0.036)	(0.043)	(0.036)	(0.043)	(0.115)	(0.116)
Teaching training	-0.029	0.047	-0.035	0.053	-0.029	0.047	-0.094	0.154
	(0.033)	(0.039)	(0.033)	(0.040)	(0.033)	(0.039)	(0.105)	(0.107)
Non university tertiary education	0.204***	0.141***	0.201***	0.142***	0.204***	0.141***	0.507***	0.382***
	(0.027)	(0.032)	(0.027)	(0.032)	(0.027)	(0.032)	(0.085)	(0.087)
University	0.528***	0.044*	0.526***	0.047*	0.528***	0.045*	1.718***	0.137*
	(0.022)	(0.026)	(0.022)	(0.026)	(0.022)	(0.026)	(0.074)	(0.071)
Constant	0.369***	0.271***	0.372***	0.268***	0.369***	0.271***	-0.336***	-0.618***
	(0.022)	(0.026)	(0.022)	(0.026)	(0.022)	(0.026)	(0.071)	(0.072)
Athrho							-0.070***	
							(0.023)	
Observations	6,597	6,597	6,557	6,557	6,597	6,597	6,557	6,557
R-squared	0.234	0.016	0.234	0.017	0.234	0.017		

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 22: Estimates for the whole sample. Short term (formal employment in the last three months of 2013 and enrolment to public education in 2014).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.008	0.009	0.005	0.015	-0.010	0.012	0.017	0.044
	(0.017)	(0.017)	(0.019)	(0.019)	(0.021)	(0.022)	(0.055)	(0.053)
Male	-0.032***	0.060***	-0.032***	0.060***	-0.032***	0.060***	-0.097***	0.167***
	(0.004)	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)	(0.013)	(0.013)
Montevideo	0.028***	0.118***	0.028***	0.118***	0.028***	0.118***	0.081***	0.329***
	(0.004)	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)	(0.013)	(0.013)
Age	-0.431***	0.526***	-0.431***	0.527***	-0.431***	0.526***	-1.142***	1.611***
	(0.042)	(0.043)	(0.042)	(0.043)	(0.042)	(0.043)	(0.125)	(0.120)
Age squared	0.011***	-0.013***	0.011***	-0.013***	0.011***	-0.013***	0.029***	-0.040***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)
AFAM	-0.106***	-0.020***	-0.106***	-0.020***	-0.106***	-0.020***	-0.294***	-0.057***
	(0.005)	(0.006)	(0.005)	(0.006)	(0.005)	(0.006)	(0.015)	(0.016)
First years technical education	-0.102***	0.004	-0.102***	0.005	-0.102***	0.004	-0.321***	0.013
	(0.011)	(0.012)	(0.011)	(0.012)	(0.011)	(0.012)	(0.035)	(0.033)
Final years high school	0.241***	0.028***	0.241***	0.028***	0.241***	0.028***	0.629***	0.075***
	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.021)	(0.022)
Final years technical education	0.146***	0.106***	0.145***	0.106***	0.146***	0.106***	0.386***	0.289***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.024)	(0.025)
Non formal education	-0.053***	0.027*	-0.053***	0.027*	-0.053***	0.027*	-0.163***	0.077*
	(0.014)	(0.015)	(0.014)	(0.015)	(0.014)	(0.015)	(0.043)	(0.041)
Teaching training	0.034*	0.035*	0.033*	0.036*	0.034*	0.035*	0.087*	0.105**
	(0.018)	(0.019)	(0.018)	(0.019)	(0.018)	(0.019)	(0.052)	(0.051)
Non university tertiary education	0.257***	0.128***	0.257***	0.127***	0.257***	0.128***	0.670***	0.330***
	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)	(0.014)	(0.038)	(0.038)
University	0.631***	0.026***	0.630***	0.026***	0.631***	0.026***	1.981***	0.067**
	(0.009)	(0.010)	(0.009)	(0.010)	(0.009)	(0.010)	(0.031)	(0.026)
Constant	4.482***	-4.950***	4.479***	-4.952***	4.481***	-4.950***	10.561***	-16.462***
	(0.372)	(0.387)	(0.373)	(0.388)	(0.372)	(0.387)	(1.120)	(1.082)
Athrho							-0.112***	
							(0.008)	
Observations	46,152	46,152	45,984	45,984	46,152	46,152	45,984	45,984
R-squared	0.177	0.060	0.177	0.060	0.177	0.060		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 23: Estimates for youths residing in Montevideo. Short term (formal employment in the last three months of 2014 and enrolment to public education in 2015).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.010	0.005	0.005	0.015	-0.013	0.007	0.021	0.039
	(0.021)	(0.023)	(0.024)	(0.027)	(0.027)	(0.030)	(0.074)	(0.069)
Male	-0.036***	0.043***	-0.037***	0.043***	-0.036***	0.043***	-0.117***	0.113***
	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)	(0.018)	(0.017)
Age	-0.383***	0.544***	-0.380***	0.544***	-0.383***	0.544***	-1.007***	1.471***
	(0.055)	(0.062)	(0.055)	(0.062)	(0.055)	(0.062)	(0.178)	(0.163)
Age squared	0.010***	-0.013***	0.010***	-0.014***	0.010***	-0.013***	0.026***	-0.037***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.005)	(0.004)
AFAM	-0.112***	-0.008	-0.112***	-0.009	-0.112***	-0.008	-0.322***	-0.024
	(0.008)	(0.009)	(0.008)	(0.009)	(0.008)	(0.009)	(0.024)	(0.023)
First years technical education	-0.099***	0.014	-0.098***	0.016	-0.099***	0.014	-0.318***	0.045
	(0.015)	(0.017)	(0.015)	(0.017)	(0.015)	(0.017)	(0.049)	(0.045)
Final years high school	0.269***	0.042***	0.269***	0.043***	0.269***	0.042***	0.702***	0.116***
	(0.010)	(0.011)	(0.010)	(0.011)	(0.010)	(0.011)	(0.029)	(0.029)
Final years technical education	0.206***	0.114***	0.206***	0.115***	0.206***	0.114***	0.546***	0.301***
	(0.012)	(0.013)	(0.012)	(0.013)	(0.012)	(0.013)	(0.034)	(0.034)
Non formal education	-0.045**	0.015	-0.044**	0.015	-0.045**	0.015	-0.142**	0.045
	(0.018)	(0.020)	(0.018)	(0.020)	(0.018)	(0.020)	(0.056)	(0.053)
Teaching training	0.111***	0.023	0.108***	0.027	0.111***	0.023	0.289***	0.075
	(0.030)	(0.034)	(0.030)	(0.034)	(0.030)	(0.034)	(0.088)	(0.087)
Non university tertiary education	0.331***	0.100***	0.332***	0.101***	0.331***	0.100***	0.864***	0.260***
	(0.018)	(0.020)	(0.018)	(0.020)	(0.018)	(0.020)	(0.053)	(0.052)
University	0.651***	0.015	0.651***	0.017	0.651***	0.015	2.068***	0.049
	(0.011)	(0.013)	(0.011)	(0.013)	(0.011)	(0.013)	(0.040)	(0.034)
Constant	4.026***	-4.999***	3.996***	-4.997***	4.025***	-4.999***	9.299***	-14.819***
	(0.496)	(0.559)	(0.497)	(0.560)	(0.496)	(0.559)	(1.594)	(1.467)
Athrho							-0.080***	
							(0.011)	
Observations	23,929	23,929	23,831	23,831	23,929	23,929	23,831	23,831
R-squared	0.223	0.034	0.223	0.034	0.223	0.034		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 24: Estimates for youths not residing in Montevideo. Short term (formal employment in the last three months of 2014 and enrolment to public education in 2015).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.003	0.014	0.005	0.016	-0.004	0.019	0.016	0.057
	(0.027)	(0.025)	(0.030)	(0.029)	(0.034)	(0.033)	(0.083)	(0.085)
Male	-0.029***	0.078***	-0.028***	0.078***	-0.029***	0.078***	-0.079***	0.234***
	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)	(0.018)	(0.019)
Age	-0.468***	0.503***	-0.471***	0.502***	-0.468***	0.503***	-1.242***	1.746***
	(0.063)	(0.060)	(0.063)	(0.060)	(0.063)	(0.060)	(0.177)	(0.180)
Age squared	0.012***	-0.012***	0.012***	-0.012***	0.012***	-0.012***	0.032***	-0.044***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.005)	(0.005)
AFAM	-0.101***	-0.028***	-0.101***	-0.028***	-0.101***	-0.028***	-0.271***	-0.083***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.020)	(0.022)
First years technical education	-0.116***	-0.007	-0.117***	-0.007	-0.116***	-0.007	-0.357***	-0.021
	(0.017)	(0.016)	(0.017)	(0.016)	(0.017)	(0.016)	(0.049)	(0.050)
Final years high school	0.203***	0.015	0.202***	0.014	0.203***	0.015	0.524***	0.042
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.031)	(0.033)
Final years technical education	0.081***	0.098***	0.079***	0.097***	0.081***	0.098***	0.212***	0.280***
	(0.013)	(0.012)	(0.013)	(0.012)	(0.013)	(0.012)	(0.035)	(0.037)
Non formal education	-0.059**	0.045**	-0.060**	0.045**	-0.059**	0.045**	-0.173***	0.135**
	(0.023)	(0.022)	(0.023)	(0.022)	(0.023)	(0.022)	(0.067)	(0.066)
Teaching training	-0.022	0.042*	-0.022	0.041*	-0.022	0.042*	-0.070	0.124*
	(0.023)	(0.022)	(0.023)	(0.022)	(0.023)	(0.022)	(0.066)	(0.065)
Non university tertiary education	0.168***	0.161***	0.166***	0.159***	0.168***	0.161***	0.436***	0.420***
	(0.020)	(0.020)	(0.021)	(0.020)	(0.020)	(0.020)	(0.056)	(0.056)
University	0.603***	0.065***	0.602***	0.063***	0.603***	0.066***	1.828***	0.174***
	(0.016)	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.052)	(0.045)
Constant	4.887***	-4.730***	4.912***	-4.724***	4.887***	-4.730***	11.653***	-17.758***
	(0.563)	(0.537)	(0.564)	(0.538)	(0.563)	(0.537)	(1.582)	(1.612)
Athrho							-0.145***	
							(0.012)	
Observations	22,223	22,223	22,153	22,153	22,223	22,223	22,153	22,153
R-squared	0.119	0.054	0.119	0.054	0.119	0.054		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 25: Estimates for youths whose households received AFAM. Short term (formal employment in the last three months of 2014 and enrolment to public education in 2015).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	0.055	0.015	0.081*	0.019	0.082	0.023	0.235*	0.060
	(0.040)	(0.040)	(0.049)	(0.048)	(0.060)	(0.058)	(0.138)	(0.141)
Male	-0.015	0.100***	-0.015	0.101***	-0.015	0.100***	-0.045	0.298***
	(0.010)	(0.009)	(0.010)	(0.009)	(0.010)	(0.009)	(0.028)	(0.028)
Age	-0.440***	0.733***	-0.445***	0.729***	-0.440***	0.733***	-1.225***	2.249***
	(0.094)	(0.093)	(0.094)	(0.093)	(0.094)	(0.093)	(0.279)	(0.276)
Age squared	0.012***	-0.019***	0.012***	-0.019***	0.012***	-0.019***	0.033***	-0.059***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.008)	(0.008)
Montevideo	0.002	0.142***	0.002	0.141***	0.002	0.142***	0.004	0.416***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.027)	(0.027)
First years technical education	-0.093***	0.014	-0.092***	0.015	-0.093***	0.014	-0.315***	0.046
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.054)	(0.052)
Final years high school	0.222***	0.073***	0.222***	0.073***	0.222***	0.073***	0.596***	0.218***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.037)	(0.038)
Final years technical education	0.119***	0.110***	0.118***	0.110***	0.118***	0.110***	0.330***	0.321***
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.044)	(0.045)
Non formal education	-0.162***	-0.012	-0.162***	-0.014	-0.162***	-0.011	-0.644***	-0.040
	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)	(0.024)	(0.088)	(0.073)
Teaching training	0.015	0.033	0.014	0.034	0.015	0.033	0.027	0.115
	(0.041)	(0.040)	(0.041)	(0.040)	(0.041)	(0.040)	(0.122)	(0.119)
Non university tertiary education	0.219***	0.168***	0.222***	0.177***	0.220***	0.169***	0.604***	0.485***
	(0.038)	(0.038)	(0.039)	(0.038)	(0.038)	(0.038)	(0.108)	(0.109)
University	0.741***	0.103***	0.740***	0.103***	0.741***	0.103***	2.549***	0.281***
	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.026)	(0.125)	(0.074)
Constant	4.368***	-6.747***	4.406***	-6.714***	4.370***	-6.747***	10.764***	-22.138***
	(0.835)	(0.820)	(0.837)	(0.822)	(0.835)	(0.820)	(2.472)	(2.448)
Athrho							-0.086***	
							(0.018)	
Observations	10,236	10,236	10,194	10,194	10,236	10,236	10,194	10,194
R-squared	0.126	0.063	0.126	0.063	0.126	0.063		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 26: Estimates for youths whose households did not receive AFAM. Short term (formal employment in the last three months of 2014 and enrolment to public education in 2015).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.021	0.008	-0.010	0.014	-0.026	0.010	-0.027	0.041
	(0.018)	(0.019)	(0.020)	(0.021)	(0.023)	(0.024)	(0.060)	(0.058)
Male	-0.036***	0.049***	-0.036***	0.049***	-0.036***	0.049***	-0.109***	0.134***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.015)	(0.014)
Age	-0.471***	0.501***	-0.471***	0.502***	-0.471***	0.501***	-1.222***	1.519***
	(0.047)	(0.049)	(0.047)	(0.050)	(0.047)	(0.049)	(0.142)	(0.136)
Age squared	0.012***	-0.012***	0.012***	-0.012***	0.012***	-0.012***	0.031***	-0.038***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)
Montevideo	0.037***	0.112***	0.037***	0.112***	0.037***	0.112***	0.107***	0.307***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.015)	(0.014)
First years technical education	-0.113***	-0.003	-0.114***	-0.003	-0.113***	-0.003	-0.336***	-0.009
	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.016)	(0.045)	(0.044)
Final years high school	0.250***	0.009	0.249***	0.009	0.250***	0.009	0.644***	0.021
	(0.009)	(0.010)	(0.009)	(0.010)	(0.009)	(0.010)	(0.026)	(0.027)
Final years technical education	0.157***	0.099***	0.156***	0.099***	0.157***	0.099***	0.409***	0.264***
	(0.010)	(0.011)	(0.010)	(0.011)	(0.010)	(0.011)	(0.030)	(0.030)
Non formal education	0.007	0.042**	0.007	0.043**	0.007	0.042**	0.019	0.115**
	(0.018)	(0.019)	(0.018)	(0.019)	(0.018)	(0.019)	(0.051)	(0.050)
Teaching training	0.044**	0.028	0.042**	0.029	0.044**	0.028	0.112*	0.081
	(0.020)	(0.021)	(0.020)	(0.021)	(0.020)	(0.021)	(0.058)	(0.057)
Non university tertiary education	0.270***	0.110***	0.270***	0.109***	0.270***	0.110***	0.698***	0.277***
	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.016)	(0.042)	(0.042)
University	0.634***	0.007	0.633***	0.007	0.634***	0.007	1.974***	0.014
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.035)	(0.031)
Constant	4.876***	-4.729***	4.867***	-4.739***	4.875***	-4.729***	11.359***	-15.637***
	(0.421)	(0.444)	(0.422)	(0.445)	(0.421)	(0.444)	(1.271)	(1.225)
Athrho							-0.120***	
							(0.009)	
Observations	35,916	35,916	35,790	35,790	35,916	35,916	35,790	35,790
R-squared	0.163	0.055	0.162	0.055	0.163	0.055		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 27: Estimates for individuals less than 18 years old. Short term (formal employment in the last three months of 2014 and enrolment to public education in 2015).

	ITT		TOT(LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.019	0.042*	-0.025	0.058**	-0.024	0.053*	-0.062	0.168**
	(0.025)	(0.024)	(0.028)	(0.027)	(0.032)	(0.030)	(0.077)	(0.077)
Male	-0.041***	0.073***	-0.041***	0.073***	-0.041***	0.073***	-0.114***	0.218***
	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)	(0.018)	(0.018)
Montevideo	0.019***	0.123***	0.019***	0.124***	0.019***	0.123***	0.049***	0.367***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.018)	(0.018)
AFAM	-0.116***	-0.022***	-0.116***	-0.022***	-0.116***	-0.022***	-0.317***	-0.067***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.019)	(0.020)
First years technical education	-0.106***	0.014	-0.106***	0.015	-0.106***	0.014	-0.333***	0.045
	(0.014)	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)	(0.041)	(0.040)
Final years high school	0.266***	0.031***	0.266***	0.031***	0.266***	0.031***	0.689***	0.093***
	(0.010)	(0.009)	(0.010)	(0.009)	(0.010)	(0.009)	(0.026)	(0.027)
Final years technical education	0.140***	0.116***	0.139***	0.116***	0.140***	0.116***	0.366***	0.334***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.031)	(0.032)
Non formal education	-0.181***	-0.001	-0.182***	-0.001	-0.181***	-0.001	-0.633***	-0.001
	(0.021)	(0.020)	(0.021)	(0.020)	(0.021)	(0.020)	(0.070)	(0.061)
Teaching training	-0.059	0.227	-0.060	0.227	-0.059	0.227	-0.187	0.645
	(0.179)	(0.169)	(0.179)	(0.169)	(0.179)	(0.169)	(0.513)	(0.475)
Non university tertiary education	-0.039	0.138***	-0.032	0.136**	-0.040	0.139***	-0.096	0.380**
	(0.056)	(0.053)	(0.057)	(0.054)	(0.056)	(0.053)	(0.159)	(0.154)
University	0.373***	0.036	0.372***	0.036	0.373***	0.036	0.990***	0.110
	(0.076)	(0.072)	(0.076)	(0.072)	(0.076)	(0.072)	(0.219)	(0.212)
Constant	0.387***	0.169***	0.388***	0.169***	0.387***	0.169***	-0.286***	-0.927***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.028)	(0.030)
Athrho							-0.160***	
							(0.012)	
Observations	22,396	22,396	22,325	22,325	22,396	22,396	22,325	22,325
R-squared	0.106	0.032	0.105	0.033	0.106	0.033		

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 28: Estimates for individuals aged 18 and 19. Short term (formal employment in the last three months of 2014 and enrolment to public education in 2015).

	ITT		TOT(LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	0.016	-0.014	0.030	-0.011	0.020	-0.018	0.081	-0.030
	(0.026)	(0.030)	(0.030)	(0.033)	(0.033)	(0.037)	(0.092)	(0.086)
Male	-0.018**	0.049***	-0.017**	0.049***	-0.018**	0.049***	-0.058***	0.127***
	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.022)	(0.020)
Montevideo	0.043***	0.124***	0.043***	0.124***	0.043***	0.124***	0.131***	0.321***
	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.022)	(0.020)
AFAM	-0.077***	-0.015	-0.077***	-0.015	-0.077***	-0.015	-0.216***	-0.041
	(0.009)	(0.011)	(0.009)	(0.011)	(0.009)	(0.011)	(0.029)	(0.028)
First years technical education	-0.100***	-0.016	-0.100***	-0.017	-0.100***	-0.016	-0.322***	-0.048
	(0.023)	(0.026)	(0.023)	(0.026)	(0.023)	(0.026)	(0.075)	(0.069)
Final years high school	0.175***	0.046***	0.175***	0.046***	0.175***	0.046***	0.459***	0.121***
	(0.014)	(0.016)	(0.014)	(0.016)	(0.014)	(0.016)	(0.042)	(0.041)
Final years technical education	0.115***	0.115***	0.114***	0.114***	0.115***	0.115***	0.307***	0.297***
	(0.015)	(0.017)	(0.015)	(0.017)	(0.015)	(0.017)	(0.046)	(0.045)
Non formal education	0.031	0.067***	0.034	0.067**	0.032	0.067***	0.092	0.176***
	(0.023)	(0.026)	(0.023)	(0.026)	(0.023)	(0.026)	(0.069)	(0.067)
Teaching training	-0.018	0.015	-0.018	0.014	-0.018	0.015	-0.051	0.036
	(0.023)	(0.026)	(0.023)	(0.026)	(0.023)	(0.026)	(0.070)	(0.069)
Non university tertiary education	0.225***	0.136***	0.225***	0.137***	0.225***	0.136***	0.582***	0.354***
	(0.019)	(0.021)	(0.019)	(0.021)	(0.019)	(0.021)	(0.055)	(0.055)
University	0.589***	0.036**	0.589***	0.036**	0.589***	0.036**	1.868***	0.096**
	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.016)	(0.048)	(0.043)
Constant	0.315***	0.296***	0.314***	0.296***	0.315***	0.296***	-0.488***	-0.528***
	(0.014)	(0.016)	(0.014)	(0.016)	(0.014)	(0.016)	(0.042)	(0.041)
Athrho							-0.068***	
							(0.013)	
Observations	17,159	17,159	17,102	17,102	17,159	17,159	17,102	17,102
R-squared	0.217	0.024	0.217	0.024	0.217	0.024		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 29: Estimates for youths over 19 years old. Short term (formal employment in the last three months of 2014 and enrolment to public education in 2015).

	ITT		TOT(LPM)		TOT(IV)		Biprobit	
	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.017	-0.041	0.049	-0.075	-0.025	-0.060	0.192	-0.187
	(0.036)	(0.045)	(0.044)	(0.054)	(0.054)	(0.066)	(0.162)	(0.139)
Male	-0.007	0.030**	-0.007	0.029**	-0.007	0.030**	-0.034	0.075**
	(0.010)	(0.013)	(0.010)	(0.013)	(0.010)	(0.013)	(0.037)	(0.032)
Montevideo	0.044***	0.081***	0.043***	0.080***	0.044***	0.081***	0.143***	0.205***
	(0.011)	(0.013)	(0.011)	(0.013)	(0.011)	(0.013)	(0.038)	(0.034)
AFAM	-0.048***	-0.087***	-0.047***	-0.088***	-0.048***	-0.087***	-0.137**	-0.227***
	(0.016)	(0.020)	(0.016)	(0.020)	(0.016)	(0.020)	(0.055)	(0.052)
First years technical education	-0.026	-0.068	-0.029	-0.065	-0.026	-0.067	-0.090	-0.174
	(0.042)	(0.051)	(0.042)	(0.052)	(0.042)	(0.051)	(0.143)	(0.135)
Final years high school	0.182***	0.041	0.181***	0.044	0.182***	0.041	0.489***	0.114
	(0.023)	(0.028)	(0.023)	(0.028)	(0.023)	(0.028)	(0.075)	(0.072)
Final years technical education	0.173***	0.117***	0.170***	0.119***	0.173***	0.117***	0.463***	0.305***
	(0.025)	(0.030)	(0.025)	(0.031)	(0.025)	(0.030)	(0.081)	(0.078)
Non formal education	0.037	0.071	0.035	0.073*	0.037	0.071	0.099	0.189*
	(0.036)	(0.044)	(0.036)	(0.044)	(0.036)	(0.044)	(0.119)	(0.114)
Teaching training	0.086***	0.129***	0.082**	0.136***	0.086***	0.129***	0.230**	0.348***
	(0.033)	(0.040)	(0.033)	(0.041)	(0.033)	(0.040)	(0.108)	(0.104)
Non university tertiary education	0.294***	0.178***	0.294***	0.179***	0.294***	0.178***	0.768***	0.457***
	(0.027)	(0.033)	(0.027)	(0.033)	(0.027)	(0.033)	(0.088)	(0.085)
University	0.641***	0.075***	0.640***	0.076***	0.641***	0.075***	2.022***	0.196***
	(0.022)	(0.027)	(0.022)	(0.027)	(0.022)	(0.027)	(0.077)	(0.069)
Constant	0.258***	0.367***	0.259***	0.365***	0.258***	0.367***	-0.646***	-0.345***
	(0.022)	(0.027)	(0.022)	(0.027)	(0.022)	(0.027)	(0.074)	(0.070)
Athrho							-0.102***	
							(0.023)	
Observations	6,597	6,597	6,557	6,557	6,597	6,597	6,557	6,557
R-squared	0.298	0.021	0.298	0.021	0.298	0.021		

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 30: Estimates for the whole sample. Medium term (formal employment in the last three months of 2015 and enrolment to public education in 2015).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.008	0.010	0.005	0.023	-0.010	0.013	0.016	0.061
	(0.017)	(0.018)	(0.019)	(0.020)	(0.021)	(0.023)	(0.055)	(0.053)
Male	-0.032***	0.049***	-0.032***	0.049***	-0.032***	0.049***	-0.097***	0.130***
	(0.004)	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)	(0.013)	(0.012)
Montevideo	0.028***	0.120***	0.028***	0.120***	0.028***	0.120***	0.082***	0.315***
	(0.004)	(0.005)	(0.004)	(0.005)	(0.004)	(0.005)	(0.013)	(0.012)
Age	-0.431***	0.364***	-0.431***	0.363***	-0.431***	0.364***	-1.143***	0.995***
	(0.042)	(0.045)	(0.042)	(0.045)	(0.042)	(0.045)	(0.125)	(0.118)
Age squared	0.011***	-0.009***	0.011***	-0.009***	0.011***	-0.009***	0.029***	-0.025***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)
AFAM	-0.106***	-0.030***	-0.106***	-0.030***	-0.106***	-0.030***	-0.294***	-0.080***
	(0.005)	(0.006)	(0.005)	(0.006)	(0.005)	(0.006)	(0.015)	(0.015)
First years technical education	-0.102***	-0.015	-0.102***	-0.015	-0.102***	-0.015	-0.321***	-0.042
	(0.011)	(0.012)	(0.011)	(0.012)	(0.011)	(0.012)	(0.035)	(0.032)
Final years high school	0.241***	0.047***	0.241***	0.047***	0.241***	0.047***	0.629***	0.123***
	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.021)	(0.021)
Final years technical education	0.146***	0.128***	0.145***	0.128***	0.146***	0.128***	0.386***	0.335***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.024)	(0.024)
Non formal education	-0.053***	0.039**	-0.053***	0.040***	-0.053***	0.039**	-0.162***	0.106***
	(0.014)	(0.015)	(0.014)	(0.015)	(0.014)	(0.015)	(0.043)	(0.040)
Teaching training	0.034*	0.122***	0.033*	0.121***	0.034*	0.122***	0.087*	0.315***
	(0.018)	(0.019)	(0.018)	(0.019)	(0.018)	(0.019)	(0.052)	(0.050)
Non university tertiary education	0.257***	0.157***	0.257***	0.156***	0.257***	0.157***	0.671***	0.401***
	(0.013)	(0.014)	(0.013)	(0.014)	(0.013)	(0.014)	(0.038)	(0.038)
University	0.631***	0.085***	0.630***	0.085***	0.631***	0.085***	1.983***	0.217***
	(0.009)	(0.010)	(0.009)	(0.010)	(0.009)	(0.010)	(0.031)	(0.026)
Constant	4.482***	-3.290***	4.479***	-3.280***	4.481***	-3.290***	10.573***	-10.303***
	(0.372)	(0.399)	(0.373)	(0.400)	(0.372)	(0.399)	(1.120)	(1.057)
Athrho							-0.107***	
							(0.008)	
Observations	46,152	46,152	45,984	45,984	46,152	46,152	45,984	45,984
R-squared	0.177	0.049	0.177	0.049	0.177	0.049		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 31: Estimates for youths residing in Montevideo. Medium term (formal employment in the last three months of 2015 and enrolment to public education in 2015).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.010	-0.007	0.005	0.008	-0.013	-0.009	0.020	0.020
	(0.021)	(0.024)	(0.024)	(0.027)	(0.027)	(0.031)	(0.074)	(0.069)
Male	-0.036***	0.033***	-0.037***	0.033***	-0.036***	0.033***	-0.117***	0.085***
	(0.006)	(0.007)	(0.006)	(0.007)	(0.006)	(0.007)	(0.018)	(0.017)
Age	-0.383***	0.333***	-0.380***	0.335***	-0.383***	0.334***	-1.011***	0.855***
	(0.055)	(0.063)	(0.055)	(0.063)	(0.055)	(0.063)	(0.178)	(0.161)
Age squared	0.010***	-0.008***	0.010***	-0.008***	0.010***	-0.008***	0.026***	-0.021***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.005)	(0.004)
AFAM	-0.112***	-0.018**	-0.112***	-0.018**	-0.112***	-0.018**	-0.322***	-0.048**
	(0.008)	(0.009)	(0.008)	(0.009)	(0.008)	(0.009)	(0.024)	(0.022)
First years technical education	-0.099***	-0.015	-0.098***	-0.013	-0.099***	-0.015	-0.317***	-0.033
	(0.015)	(0.017)	(0.015)	(0.017)	(0.015)	(0.017)	(0.049)	(0.044)
Final years high school	0.269***	0.067***	0.269***	0.068***	0.269***	0.067***	0.702***	0.173***
	(0.010)	(0.011)	(0.010)	(0.011)	(0.010)	(0.011)	(0.029)	(0.028)
Final years technical education	0.206***	0.144***	0.206***	0.145***	0.206***	0.144***	0.546***	0.369***
	(0.012)	(0.013)	(0.012)	(0.013)	(0.012)	(0.013)	(0.034)	(0.034)
Non formal education	-0.045**	0.024	-0.044**	0.024	-0.045**	0.024	-0.142**	0.063
	(0.018)	(0.020)	(0.018)	(0.020)	(0.018)	(0.020)	(0.056)	(0.052)
Teaching training	0.111***	0.107***	0.108***	0.106***	0.111***	0.107***	0.290***	0.269***
	(0.030)	(0.034)	(0.030)	(0.034)	(0.030)	(0.034)	(0.088)	(0.087)
Non university tertiary education	0.331***	0.114***	0.332***	0.115***	0.331***	0.114***	0.865***	0.292***
	(0.018)	(0.020)	(0.018)	(0.020)	(0.018)	(0.020)	(0.053)	(0.052)
University	0.651***	0.074***	0.651***	0.075***	0.651***	0.074***	2.070***	0.189***
	(0.011)	(0.013)	(0.011)	(0.013)	(0.011)	(0.013)	(0.040)	(0.033)
Constant	4.026***	-2.901***	3.996***	-2.916***	4.025***	-2.901***	9.329***	-8.719***
	(0.496)	(0.566)	(0.497)	(0.567)	(0.496)	(0.566)	(1.595)	(1.451)
Athrho							-0.076***	
							(0.011)	
Observations	23,929	23,929	23,831	23,831	23,929	23,929	23,831	23,831
R-squared	0.223	0.025	0.223	0.025	0.223	0.025		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 32: Estimates for youths not residing in Montevideo. Medium term (formal employment in the last three months of 2015 and enrolment to public education in 2015).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.003	0.033	0.005	0.045	-0.004	0.042	0.013	0.122
	(0.027)	(0.027)	(0.030)	(0.030)	(0.034)	(0.034)	(0.083)	(0.082)
Male	-0.029***	0.067***	-0.028***	0.067***	-0.029***	0.067***	-0.079***	0.184***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.018)	(0.018)
Age	-0.468***	0.385***	-0.471***	0.381***	-0.468***	0.385***	-1.241***	1.120***
	(0.063)	(0.063)	(0.063)	(0.064)	(0.063)	(0.063)	(0.177)	(0.174)
Age squared	0.012***	-0.010***	0.012***	-0.010***	0.012***	-0.010***	0.032***	-0.028***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.005)	(0.005)
AFAM	-0.101***	-0.038***	-0.101***	-0.038***	-0.101***	-0.037***	-0.271***	-0.103***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.020)	(0.021)
First years technical education	-0.116***	-0.017	-0.117***	-0.018	-0.116***	-0.017	-0.358***	-0.055
	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.017)	(0.049)	(0.048)
Final years high school	0.203***	0.029**	0.202***	0.029**	0.203***	0.029**	0.524***	0.080**
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.031)	(0.032)
Final years technical education	0.081***	0.114***	0.079***	0.113***	0.081***	0.114***	0.212***	0.306***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.035)	(0.035)
Non formal education	-0.059**	0.065***	-0.060**	0.065***	-0.059**	0.065***	-0.173***	0.180***
	(0.023)	(0.024)	(0.023)	(0.024)	(0.023)	(0.024)	(0.067)	(0.064)
Teaching training	-0.022	0.130***	-0.022	0.128***	-0.022	0.130***	-0.072	0.338***
	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.023)	(0.066)	(0.063)
Non university tertiary education	0.168***	0.208***	0.166***	0.206***	0.168***	0.209***	0.436***	0.532***
	(0.020)	(0.021)	(0.021)	(0.021)	(0.020)	(0.021)	(0.056)	(0.056)
University	0.603***	0.132***	0.602***	0.131***	0.603***	0.132***	1.830***	0.343***
	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.016)	(0.052)	(0.044)
Constant	4.887***	-3.463***	4.912***	-3.428***	4.887***	-3.463***	11.637***	-11.434***
	(0.563)	(0.566)	(0.564)	(0.568)	(0.563)	(0.566)	(1.582)	(1.556)
Athrho							-0.137***	
							(0.011)	
Observations	22,223	22,223	22,153	22,153	22,223	22,223	22,153	22,153
R-squared	0.119	0.041	0.119	0.041	0.119	0.041		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 33: Estimates for youths whose households received AFAM. Medium term (formal employment in the last three months of 2015 and enrolment to public education in 2015).

	ITT		TOT (LPM)		TOT (IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	0.055	0.083**	0.081*	0.108**	0.082	0.122**	0.233*	0.287**
	(0.040)	(0.042)	(0.049)	(0.050)	(0.060)	(0.061)	(0.138)	(0.136)
Male	-0.015	0.080***	-0.015	0.080***	-0.015	0.080***	-0.045	0.220***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.028)	(0.027)
Age	-0.440***	0.595***	-0.445***	0.583***	-0.440***	0.595***	-1.231***	1.620***
	(0.094)	(0.097)	(0.094)	(0.097)	(0.094)	(0.097)	(0.279)	(0.269)
Age squared	0.012***	-0.016***	0.012***	-0.016***	0.012***	-0.016***	0.033***	-0.043***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.008)	(0.008)
Montevideo	0.002	0.145***	0.002	0.145***	0.002	0.145***	0.003	0.394***
	(0.009)	(0.010)	(0.009)	(0.010)	(0.009)	(0.010)	(0.027)	(0.027)
First years technical education	-0.093***	-0.012	-0.092***	-0.011	-0.093***	-0.011	-0.315***	-0.034
	(0.017)	(0.018)	(0.017)	(0.018)	(0.017)	(0.018)	(0.054)	(0.050)
Final years high school	0.222***	0.082***	0.222***	0.082***	0.222***	0.082***	0.596***	0.226***
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.037)	(0.037)
Final years technical education	0.119***	0.138***	0.118***	0.137***	0.118***	0.138***	0.330***	0.371***
	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.016)	(0.044)	(0.044)
Non formal education	-0.162***	-0.024	-0.162***	-0.025	-0.162***	-0.023	-0.645***	-0.072
	(0.024)	(0.025)	(0.024)	(0.025)	(0.024)	(0.025)	(0.088)	(0.071)
Teaching training	0.015	0.149***	0.014	0.149***	0.015	0.149***	0.025	0.406***
	(0.041)	(0.042)	(0.041)	(0.042)	(0.041)	(0.042)	(0.122)	(0.113)
Non university tertiary education	0.219***	0.199***	0.222***	0.210***	0.220***	0.201***	0.604***	0.554***
	(0.038)	(0.040)	(0.039)	(0.040)	(0.038)	(0.040)	(0.108)	(0.108)
University	0.741***	0.165***	0.740***	0.168***	0.741***	0.165***	2.550***	0.439***
	(0.026)	(0.027)	(0.026)	(0.027)	(0.026)	(0.027)	(0.125)	(0.074)
Constant	4.368***	-5.299***	4.406***	-5.195***	4.370***	-5.296***	10.820***	-15.793***
	(0.835)	(0.861)	(0.837)	(0.862)	(0.835)	(0.861)	(2.472)	(2.388)
Athrho							-0.064***	
							(0.017)	
Observations	10,236	10,236	10,194	10,194	10,236	10,236	10,194	10,194
R-squared	0.126	0.051	0.126	0.051	0.126	0.051		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 34: Estimates for youths whose households did not receive AFAM. Medium term (formal employment in the last three months of 2015 and enrolment to public education in 2015).

	ITT		TOT (LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.021	-0.005	-0.010	0.008	-0.026	-0.006	-0.027	0.020
	(0.018)	(0.020)	(0.020)	(0.022)	(0.023)	(0.025)	(0.060)	(0.057)
Male	-0.036***	0.041***	-0.036***	0.041***	-0.036***	0.041***	-0.109***	0.108***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.015)	(0.014)
Age	-0.471***	0.330***	-0.471***	0.331***	-0.471***	0.330***	-1.222***	0.901***
	(0.047)	(0.051)	(0.047)	(0.051)	(0.047)	(0.051)	(0.142)	(0.133)
Age squared	0.012***	-0.008***	0.012***	-0.008***	0.012***	-0.008***	0.031***	-0.022***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.004)	(0.004)
Montevideo	0.037***	0.113***	0.037***	0.113***	0.037***	0.113***	0.108***	0.295***
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.015)	(0.014)
First years technical education	-0.113***	-0.018	-0.114***	-0.017	-0.113***	-0.018	-0.336***	-0.047
	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.016)	(0.045)	(0.043)
Final years high school	0.250***	0.033***	0.249***	0.033***	0.250***	0.033***	0.644***	0.085***
	(0.009)	(0.010)	(0.009)	(0.010)	(0.009)	(0.010)	(0.026)	(0.026)
Final years technical education	0.157***	0.121***	0.156***	0.121***	0.157***	0.121***	0.409***	0.313***
	(0.010)	(0.011)	(0.010)	(0.011)	(0.010)	(0.011)	(0.030)	(0.029)
Non formal education	0.007	0.068***	0.007	0.069***	0.007	0.068***	0.020	0.179***
	(0.018)	(0.019)	(0.018)	(0.019)	(0.018)	(0.019)	(0.051)	(0.050)
Teaching training	0.044**	0.111***	0.042**	0.110***	0.044**	0.111***	0.112*	0.282***
	(0.020)	(0.022)	(0.020)	(0.022)	(0.020)	(0.022)	(0.058)	(0.057)
Non university tertiary education	0.270***	0.142***	0.270***	0.140***	0.270***	0.142***	0.699***	0.358***
	(0.015)	(0.016)	(0.015)	(0.016)	(0.015)	(0.016)	(0.042)	(0.042)
University	0.634***	0.068***	0.633***	0.068***	0.634***	0.068***	1.976***	0.172***
	(0.011)	(0.012)	(0.011)	(0.012)	(0.011)	(0.012)	(0.035)	(0.030)
Constant	4.876***	-2.999***	4.867***	-3.006***	4.875***	-2.999***	11.363***	-9.472***
	(0.421)	(0.456)	(0.422)	(0.457)	(0.421)	(0.456)	(1.271)	(1.197)
Athrho							-0.120***	
							(0.009)	
Observations	35,916	35,916	35,790	35,790	35,916	35,916	35,790	35,790
R-squared	0.163	0.043	0.162	0.043	0.163	0.043		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 35: Estimates for youths under 18 years old. Medium term (formal employment in the last three months of 2015 and enrolment to public education in 2015).

	ITT		TOT(LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.019	-0.016	-0.025	-0.011	-0.024	-0.020	-0.062	-0.026
	(0.025)	(0.025)	(0.028)	(0.028)	(0.032)	(0.032)	(0.077)	(0.077)
Male	-0.041***	0.061***	-0.041***	0.062***	-0.041***	0.061***	-0.113***	0.167***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.018)	(0.018)
Montevideo	0.019***	0.130***	0.019***	0.130***	0.019***	0.130***	0.049***	0.350***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.018)	(0.018)
AFAM	-0.116***	-0.029***	-0.116***	-0.030***	-0.116***	-0.029***	-0.317***	-0.082***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.019)	(0.019)
First years technical education	-0.106***	-0.009	-0.106***	-0.008	-0.106***	-0.009	-0.333***	-0.023
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.041)	(0.039)
Final years high school	0.266***	0.052***	0.266***	0.052***	0.266***	0.052***	0.689***	0.141***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.026)	(0.026)
Final years technical education	0.140***	0.139***	0.139***	0.139***	0.140***	0.139***	0.366***	0.370***
	(0.011)	(0.011)	(0.011)	(0.012)	(0.011)	(0.011)	(0.031)	(0.031)
Non formal education	-0.181***	-0.014	-0.182***	-0.014	-0.181***	-0.014	-0.633***	-0.036
	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.021)	(0.070)	(0.059)
Teaching training	-0.059	0.307*	-0.060	0.307*	-0.059	0.307*	-0.174	0.794*
	(0.179)	(0.180)	(0.179)	(0.180)	(0.179)	(0.180)	(0.507)	(0.473)
Non university tertiary education	-0.039	0.214***	-0.032	0.214***	-0.040	0.213***	-0.095	0.563***
	(0.056)	(0.056)	(0.057)	(0.057)	(0.056)	(0.056)	(0.159)	(0.154)
University	0.373***	0.122	0.372***	0.122	0.373***	0.122	0.996***	0.323
	(0.076)	(0.077)	(0.076)	(0.077)	(0.076)	(0.077)	(0.220)	(0.203)
Constant	0.387***	0.237***	0.388***	0.237***	0.387***	0.237***	-0.286***	-0.698***
	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.010)	(0.028)	(0.029)
Athrho							-0.126***	
							(0.011)	
Observations	22,396		22,325	22,325	22,396	22,396	22,325	22,325
R-squared	0.106		0.105	0.031	0.106	0.032		

Standard errors in parentheses

*p<0.1; **p<0.05; ***p<0.01

Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 36: Estimates for individuals aged 18 and 19. Medium term (formal employment in the last three months of 2015 and enrolment to public education in 2015).

	ITT		TOT(LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	0.016	0.069**	0.030	0.099***	0.020	0.087**	0.082	0.257***
	(0.026)	(0.030)	(0.030)	(0.033)	(0.033)	(0.037)	(0.091)	(0.086)
Male	-0.018**	0.035***	-0.017**	0.036***	-0.018**	0.035***	-0.058***	0.091***
	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.022)	(0.020)
Montevideo	0.043***	0.121***	0.043***	0.121***	0.043***	0.121***	0.132***	0.307***
	(0.007)	(0.008)	(0.007)	(0.008)	(0.007)	(0.008)	(0.022)	(0.020)
AFAM	-0.077***	-0.020*	-0.077***	-0.020*	-0.077***	-0.020*	-0.216***	-0.052*
	(0.009)	(0.011)	(0.009)	(0.011)	(0.009)	(0.011)	(0.029)	(0.027)
First years technical education	-0.100***	-0.027	-0.100***	-0.025	-0.100***	-0.027	-0.322***	-0.069
	(0.023)	(0.026)	(0.023)	(0.026)	(0.023)	(0.026)	(0.075)	(0.068)
Final years high school	0.175***	0.057***	0.175***	0.058***	0.175***	0.058***	0.459***	0.150***
	(0.014)	(0.016)	(0.014)	(0.016)	(0.014)	(0.016)	(0.042)	(0.041)
Final years technical education	0.115***	0.135***	0.114***	0.136***	0.115***	0.135***	0.307***	0.350***
	(0.015)	(0.017)	(0.015)	(0.017)	(0.015)	(0.017)	(0.046)	(0.045)
Non formal education	0.031	0.105***	0.034	0.107***	0.032	0.106***	0.092	0.273***
	(0.023)	(0.026)	(0.023)	(0.026)	(0.023)	(0.026)	(0.069)	(0.067)
Teaching training	-0.018	0.091***	-0.018	0.092***	-0.018	0.091***	-0.051	0.238***
	(0.023)	(0.026)	(0.023)	(0.026)	(0.023)	(0.026)	(0.070)	(0.067)
Non university tertiary education	0.225***	0.161***	0.225***	0.161***	0.225***	0.162***	0.582***	0.412***
	(0.019)	(0.021)	(0.019)	(0.021)	(0.019)	(0.021)	(0.055)	(0.055)
University	0.589***	0.089***	0.589***	0.091***	0.589***	0.089***	1.869***	0.233***
	(0.015)	(0.017)	(0.015)	(0.017)	(0.015)	(0.017)	(0.048)	(0.042)
Constant	0.315***	0.332***	0.314***	0.330***	0.315***	0.331***	-0.488***	-0.434***
	(0.014)	(0.016)	(0.014)	(0.016)	(0.014)	(0.016)	(0.043)	(0.041)
Athrho							-0.090***	
							(0.013)	
Observations	17,159		17,102	17,102	17,159	17,159	17,102	17,102
R-squared	0.217		0.217	0.025	0.217	0.025		

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Table 37: Estimates for youths over 19 years old. Medium term (formal employment in the last three months of 2015 and enrolment to public education in 2015).

	ITT		TOT(LPM)		TOT(IV)		Biprobit	
VARIABLES	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.	Enrolment	Formal emp.
Programme	-0.017	-0.056	0.049	-0.075	-0.025	-0.083	0.186	-0.192
	(0.036)	(0.045)	(0.044)	(0.054)	(0.054)	(0.066)	(0.161)	(0.139)
Male	-0.007	0.038***	-0.007	0.037***	-0.007	0.038***	-0.034	0.094***
	(0.010)	(0.013)	(0.010)	(0.013)	(0.010)	(0.013)	(0.037)	(0.033)
Montevideo	0.044***	0.082***	0.043***	0.082***	0.044***	0.082***	0.144***	0.210***
	(0.011)	(0.013)	(0.011)	(0.013)	(0.011)	(0.013)	(0.038)	(0.034)
AFAM	-0.048***	-0.106***	-0.047***	-0.104***	-0.048***	-0.106***	-0.136**	-0.268***
	(0.016)	(0.020)	(0.016)	(0.020)	(0.016)	(0.020)	(0.055)	(0.051)
First years technical education	-0.026	-0.071	-0.029	-0.074	-0.026	-0.071	-0.090	-0.199
	(0.042)	(0.051)	(0.042)	(0.051)	(0.042)	(0.051)	(0.143)	(0.135)
Final years high school	0.182***	0.055**	0.181***	0.053*	0.182***	0.055**	0.488***	0.136*
	(0.023)	(0.028)	(0.023)	(0.028)	(0.023)	(0.028)	(0.075)	(0.072)
Final years technical education	0.173***	0.113***	0.170***	0.112***	0.173***	0.113***	0.463***	0.286***
	(0.025)	(0.030)	(0.025)	(0.030)	(0.025)	(0.030)	(0.081)	(0.078)
Non formal education	0.037	0.066	0.035	0.063	0.037	0.066	0.099	0.162
	(0.036)	(0.044)	(0.036)	(0.044)	(0.036)	(0.044)	(0.119)	(0.114)
Teaching training	0.086***	0.210***	0.082**	0.205***	0.086***	0.211***	0.231**	0.525***
	(0.033)	(0.040)	(0.033)	(0.040)	(0.033)	(0.040)	(0.108)	(0.104)
Non university tertiary education	0.294***	0.180***	0.294***	0.176***	0.294***	0.180***	0.769***	0.452***
	(0.027)	(0.033)	(0.027)	(0.033)	(0.027)	(0.033)	(0.088)	(0.085)
University	0.641***	0.115***	0.640***	0.112***	0.641***	0.115***	2.022***	0.285***
	(0.022)	(0.027)	(0.022)	(0.027)	(0.022)	(0.027)	(0.077)	(0.069)
Constant	0.258***	0.390***	0.259***	0.392***	0.258***	0.390***	-0.647***	-0.276***
	(0.022)	(0.027)	(0.022)	(0.027)	(0.022)	(0.027)	(0.074)	(0.069)
Athrho							-0.115***	
							(0.023)	
Observations	6,597	6,597	6,557	6,557	6,597	6,597	6,557	
R-squared	0.298	0.028	0.298	0.027	0.298	0.028		

Standard errors in parentheses
*p<0.1; **p<0.05; ***p<0.01
Note: the variable associated to the programme coefficient is the indicator of selection into treatment (D_i) for the ITT model. For the TOT (LPM), TOT (IV) and Biprobit models, the variable associated to the programme is the treatment indicator (T_i). For educational categories, omitted variable is "First years high school".

Figure 1: Marginal effects of Treatment on enrolment and formal employment by gender and age for AFAM

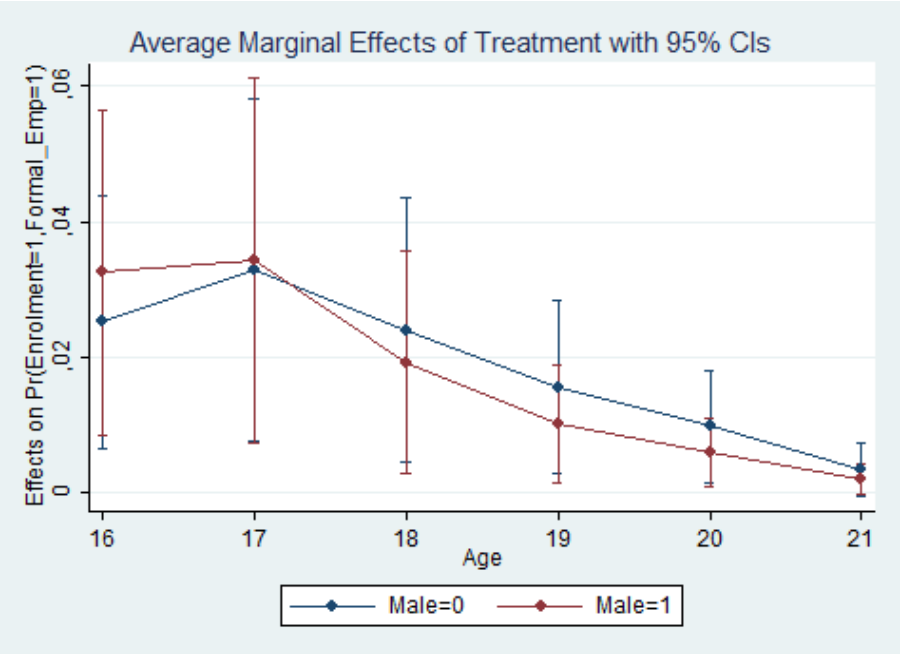

Figure 2: Marginal effects of Treatment on enrolment and formal employment by region and age for AFAM

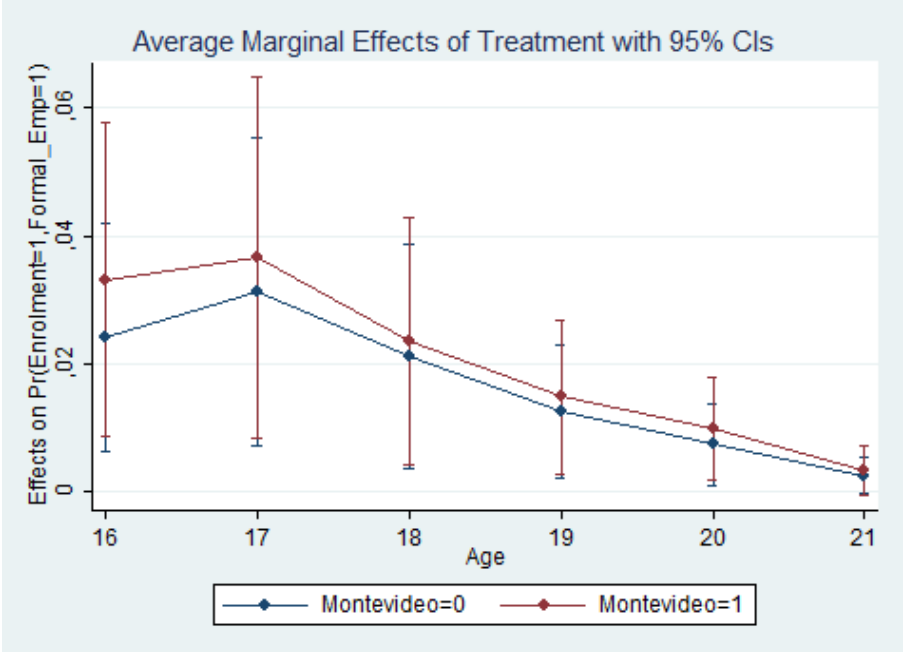

Figure 3: Marginal effects of Treatment on enrolment and formal employment by gender and education for AFAM

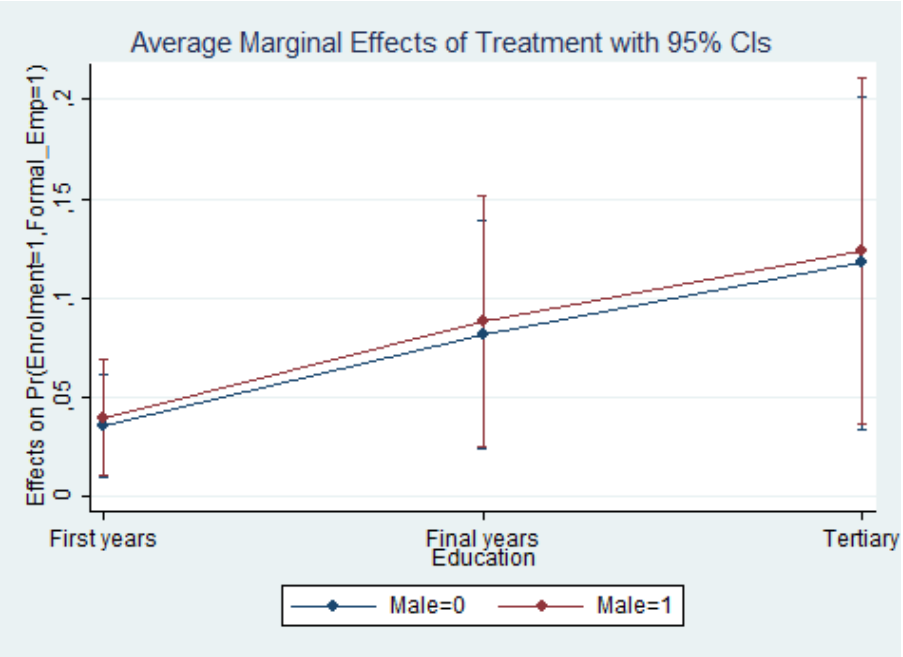

Figure 4: Marginal effects of Treatment on enrolment and formal employment by region and education for AFAM