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*Lost in transition?* Private vs. public internship programme effects on young graduates

Fco. Javier Mato Díaz ([jmato@uniovi.es](mailto:jmato@uniovi.es))  
Israel Escudero Castillo ([UO179414@uniovi.es](mailto:UO179414@uniovi.es))  
Department of Applied Economics  
University of Oviedo

## Abstract

Youth unemployment has been a social and economic problem in Southern Europe and especially in Spain for many years. The Great Recession accentuated the need for policies that would help reducing the risks of a “lost generation” of young people. The use of active labour market policies, backed by the European Union’s Youth Guarantee programme, led the governments to try new activation methods, amongst them internships for graduates of different education levels. These youth, despite being better prepared than the early school leavers, still face problems along their professional insertion processes. Faulty progressions could develop into “lost in transition” situations (Brinton, 2010). This paper analyzes the effects of an internship programme in which nearly 400 young people, most of them aged between 21 and 26 years old, took part. The research is based upon a database formed by candidates to undergo internships either in companies or in public administration offices. A quasiexperimental analysis is done by comparing with *Propensity Score Matching* intern groups with a control group formed by candidates who ended out without an internship. The results from this analysis with registered data were enriched by carrying out a survey to nearly 400 people, half of them interns. Estimated effects are positive and significant for participants in firms’ internships, and negative and significant for interns who worked in public administrations. Additionally, the survey allowed including family legacy variables in the analysis. Results should be very useful for decision making on active measures addressed to young people.

Key words: youth insertion, internships, graduates, *Propensity Score*

## Resumen

En los países del sur de Europa y especialmente en España, el desempleo juvenil, tradicionalmente elevado, se agravó con la crisis económica hasta alcanzar niveles que hicieron saltar las alarmas en cuanto al riesgo de tener una “generación perdida”. La utilización de políticas activas de empleo, impulsada por el programa de Garantía Juvenil de la Unión Europea, llevó a los gobiernos a probar nuevas fórmulas de activación, entre las que figuran las prácticas para titulados de diferentes niveles educativos. Estos jóvenes, aunque mejor situados que quienes experimentaron abandono escolar temprano, no carecen de problemas ante su inserción profesional, que puede malograrse, cayendo en situaciones de “lost in transition” (Brinton, 2010). Este trabajo analiza los efectos sobre la inserción de un programa de este tipo en el que participaron cerca de 400 jóvenes, la mayoría de ellos de edades comprendidas entre los 21 y los 26 años. La investigación parte de un registro de candidatos a participar en el programa, que ofrecía prácticas en empresas y en ayuntamientos. Con ella se realiza un análisis cuasiexperimental, comparando con *Propensity Score Matching* a los jóvenes en prácticas con un grupo de control formado por quienes no accedieron a ellas. Los resultados obtenidos del análisis de registro han sido enriquecidos mediante una encuesta a una muestra de 400 jóvenes. Los efectos estimados son positivos y significativos para la modalidad de prácticas en empresas y negativos y significativos para la modalidad de prácticas en ayuntamientos. En general, estos resultados coinciden con las de investigaciones realizadas en otros países sobre programas similares, si bien cabe destacar la inusual oportunidad de llevar a cabo un análisis empírico de efectos en nuestro entorno. Los resultados pueden ser muy útiles para la toma de decisiones en materia de políticas activas dirigidas al colectivo juvenil.

Palabras clave: inserción juvenil, prácticas, titulados, *Propensity Score*

## 1. Introduction

It is well known that youth unemployment levels have traditionally been very high in Spain, as well as in other southern European countries. The economic crisis aggravated the problem to such an extent that even in developed countries with more moderate rates of youth unemployment, its consequences led to talk about the risk of a "lost generation" (Scarpetta et al., 2010). The consequences of the crisis on the young group acquired an entity that led to its study in countries where the problem was comparatively less serious, like the US and the UK (Bell and Blanchflower, 2011a) or Germany and France (Cahuc et al., 2013). An analysis of the Japanese case graphically reflected the risk that young collective, regardless of their differences in variables that are determinants of career success, such as educational level, suffer processes abortive insertion, calling him "lost in transition", referring to the well-known film (Brinton, 2010). In the context of increasingly liberalized labour markets, the crisis put the problem of youth insertion in front, both from the perspective of public policies and from the perspective of economic and social analysis.

In Spain, youth unemployment coexists with the lack of protection policies for the young group that, in practice, lacks the necessary work experience to receive benefits. In this context, the use of active employment policies aimed at young people and encouraged by the European Employment Strategy in the late nineties, received a new impetus to the programme Youth Guarantee of the European Union. This scheme aims to mobilize nearly six billion euros by 2020, of which one-sixth would be spent in Spain. Policy priorities and spending measures are aimed at early activation, and provide guidance, training and professional practices in the short term (less than 4 months), and the promotion of cooperation between administrations. To qualify for the Youth Guarantee program, launched in 2013, the Spanish Government approved a Strategy for Entrepreneurship and Youth Employment 2013-2016 which includes the starting and lines of action of the first four years (MESS, 2014).

Facing such a serious social problem, encouragement of active policies has been accompanied by an increase in evaluation activity also promoted by the European Union. The growing conviction that it is necessary to assess, if not the need for accountability to the European Commission, has led to an increase in evaluations. However, such activity is characterized by both the lack of independent evaluations and the lack of causal analysis.

This research aims to contribute to knowledge about which youth policies work better, and which ones may be worse. This is done through an empirical analysis of internships for young graduates. The programme was carried out in a region and labour practices consisted of about six months in two types of organizations: private companies and municipalities. To analyze their effects a comparison was conducted between youth groups participating in each of these practices and a third group, consisting of shortlisted candidates not finally participated in the program, which is used as a comparison group. The employment status of the three groups between 12 and 18 months after completion of the internship is analyzed, finding that the effects of placements are positive, while practices in municipalities are negative.

One of the features of the current unemployment, which has been investigated for the past fifteen years, is the extent of its long-term effects on those who suffer it, and specifically the risk that unemployment may leave "permanent scars" on individuals (Arulampalam, 2001). Obviously, these effects are potentially greater when unemployment episodes occur in the early stages of transitions into work (Schmillen and Umkehrer, 2013). In addition, the risk that youth unemployment may be particularly high and lasting among young people whose parents have been unemployed during previous crises has been recently noted (Martin, 2012). This has given rise to the idea that a "family legacy" may exist, by which a causal relationship between parents' and children's unemployment appears as a novel feature after the Great Recession (O'Reilly et al., 2015).

In this research, since the data registration of young candidates for the internship program lacked information on family characteristics, and given the interest of knowing family variables, an individual survey was carried out on a sample of nearly 400 individuals, which has allowed to include in the analysis the possible influence of some family-of-origin features, as well as other personal characteristics of participants, and of members of the comparison group. This second analysis confirms the results of the first, indicating a positive impact of business practices and a worrying negative effect of internships which took place in the municipalities.

The rest of the paper is organized as follows: The second section is devoted to explaining the features of the programme, and the results found in the analysis of similar programs available in the literature. The third part presents the data and sources used in this research, along with the method of analysis. The fourth section discusses the results, and the paper ends with a fifth section of conclusions.

## 2. Internship programme for graduates

### 2.1. Programme features

The evaluated program consists of a series of practices specifically designed for young unemployed aged between 18 and 25 years who have just obtained a degree with employment-oriented content. Specifically, university graduates, graduates of vocational training and youth who have recently obtained a professional certificate could participate. In other words, graduates of primary education or compulsory secondary education are excluded from this specific programme, due to the requirement of a minimal preparation with application in the labour market.

The duration of such practices ranges from three to nine months. Participants in these practices cannot have more than three months of professional experience, discounting for this computation curriculum practices necessary for obtaining various certificates or educational qualifications. It is a regional program that aims to improve the employability of young recent graduates. So, stay within the company or the municipality is assumed as part of a teaching-learning process, from which all parties would benefit. First, the worker could get some qualifications that would improve their labour market potential. At the same time, companies would benefit from the work of this very person at a low cost. The worker would receive 426 euros (80% of IPREM) as a grant, and the company would only have to take care of reduced social security rates. In addition, after completing the probationary period, a contract with the person may be formalized for a minimum of six months. Would that be the case, the company receives a grant of six euros per hour and worker for mentoring. In the case of municipalities, the cost to the participating local government is funded entirely by the Autonomous Community.

Both young companies and municipalities voluntarily come to this program. The Public Employment Service exercises an initial mediation, providing businesses and municipalities with a shortlist of candidates chosen among young people who have been submitted to the program in accordance with the features demanded by the organization as a whole. Then, businesses and municipalities make the final selection among shortlisted candidates. This paper has used information on all the shortlisted persons, and on whether each of them finally participated in the practices, which allowed the creation of a comparison group.

### 2.2 Results found in previous research

It is not easy to compare the program under analysis with other active measures directed towards youth groups with the same characteristics. Nevertheless, referring the results coming from similar schemes is interesting in order to put in perspective the effects achieved in this programme.

First, in the previous decade several works have appeared that take advantage of the proliferation of evaluations of active labor market policies (hereinafter ALMPs), and use them to develop metaevaluations. Perhaps the best known are those of Kluve (2006) and Card et al. (2020). The first conducted research from 95 different impact assessments of ALMPs in Europe. With respect to the most similar programs to those discussed here, it concluded that direct employment programmes which could resemble practices are ineffective and city councils often have a detrimental effect (negative signal effect). In addition, the author points out that youth programs are related to a negative probability of finding positive effects, so it comes to wonder whether these measures should be abolished. Kluve's conclusion is that perhaps ALMPs are not appropriate for this group, being necessary to prevent young people from falling in unfavourable positions; Card, Kluve and Weber (2010) analyzed a similar number of evaluations, reaching similar conclusions. It should be noted that the research material used in these metaevaluations was performed in its entirety before the crisis.

Within the range of studies on ALMP, it is worth noting research conducted on specific employment programs. For example, Ridder (1986) analyzed with a quasi-experimental design certain programs in the Netherlands. According to the research, employment programs lengthen the working periods of young workers (under 35 years), women, and minority workers (in this order). Furthermore, these programs have greater effects than employment subsidies programs, which in turn have greater effects than training programs.

In France, Bonnal, Fougère and Sérandon (1997) reviewed the impact of active policies implemented in that country during the eighties and concluded that for low-skilled workers, there is no effect of the internships on the transition from unemployment to a regular employment. Moreover, coinciding with Kluve (2006), these results indicate that for young graduates transitions into work worsen after internships. Participation in these programs can act as a negative signal to employers for people with relatively high educational levels.

Brodaty, Crépon and Fougère (2000) analyze the effects of programs carried out also in France between 1986 and 1988 and reach comparable results. Within this package was the Contrat Emploi Solidarite. The employer was the state; the salary was paid entirely by the administration. The objective sought was to increase employability. The group subject to this type of contract was formed by low qualified, long-term unemployed young people. Subsequently it implemented the so-called Travaux D'utilite Collective, with similar characteristics. Ultimately, the authors conclude that preparatory courses for work are the most effective means for getting a job in the long term. Conversely, community work under the previous contracts have the lowest probability of generating positive effects.

In Germany, Caliendo, Hujer and Thomson (2005) analyze the impact of Job Creation Schemes, a program for unemployed young people with little work experience; people would work in areas of public interest (such as infrastructure or social work), in most cases within the public sector. They conclude that, with some exceptions, participation in these programs does not increase the probability of finding employment. Following the same line of work the previous study, Caliendo, Kunn and Schmidl (2011) analyzed the effects of various programs on young people in Germany. These included the aforementioned Job Creation Schemes (JCS) and Further Training (FT), a program of placements aimed at young people with professional qualifications. These two programs are aimed at labour supply and are similar to the object of our study program. According to the

results, while other programs significantly improve the employment prospects of participants, this was not the case with the aforementioned JCS and FT. In fact, having participated in one of these two programs decreases the likelihood that participants find employment in the future.

In the UK, Dorsett (2004) analyzed the effects of the New Deal, plan introduced in 1998 that was aimed at the employment of the population between 18 and 24 years. This program consisted of three phases: the first participants to a period of intensive job search undergoing; in the second, those who had not been employed in the first phase four alternatives were submitted: Subsidised employment (the employer receives 60 pounds a week by hiring one of these workers), full-time education or training (FTET, training ) employment voluntary sector (VS, participants work in companies, normally the service sector, to gain experience) and employment in the Environmental Task Force (ETF, similar to the previous but aimed at different types of population). Thus, the last two involve employment programs. Finally, the third phase would be used to track the evolution of the participants. As for the results of insertion, the conclusion follows the pattern set by previous work analyzed: ETF participants are the least likely to leave unemployment. The difference between the program of volunteer work and training is diffuse. Subsidized employment program would be most effective.

In Switzerland, Gerfin and Lechner (2000) found positive effects for subsidized employment programs. However the direct employment programs, both public and private institutions, perform poorly, reaching negative effects on the probability of finding a job.

Within this panorama in which the negative effects predominate, it should be noted that relatively more recent studies have produced other results. First are two of them from Latin American countries. In Colombia, Attanasio, Kluger and Meghir (2011) evaluated the effect of a program aimed at young people between 18 and 25 years. Participants are chosen at random, with which the treatment is experimental design. According to this work, significant positive effects on wages and the likelihood of working women and men more modest effects were found. The training program evaluated combined with internships. In Argentina, Alzúa et al (2013) evaluated the impact of a program carried out in Córdoba that targeted the employment of young people between 18 and 30 years old. This program, called Entra21, has a large number of hours of practical training in companies. The results of this research found positive impacts on employment and wages recorded.

Secondly, there are investigations that are not necessarily linked to public policy, analyze the effects of placements on subsequent employment. For example, an experiment conducted in the US through random assignment of practice experience in fictitious jobseekers found that practices increase the likelihood of getting job interviews at about 14%. The curricula that were sent to firms correspond to university graduates and highlight the positive effects for the “graduates” of non-business branches (Nunley et al., 2014). In another study conducted with German university graduates, those who went through placements show, in relative terms, a greater propensity to work full time and less likely to experience unemployment during the five years following their degree (Saniter, 2014).

In short, most of the studies analyzed in this section show disappointing results of practices, especially those developed in the realm of the public sector. Exceptions are given by research done in Latin America and cited recent work, corresponding to university graduates. No studies were found that assess the effects of internships for graduates from other educational levels, which control potential self-selection bias.

### 3. Data sources and methods

The original data used to carry out this work have been obtained from the records of the Public Employment Service. Thanks to the existence of a greater number of young candidates in relation to the participants, it was possible to register people who, having met the formal requirements to participate in internships, and having been shortlisted by the SPE, in the end were not selected or by municipalities or by companies. This way of designing the comparison group significantly reduces selection bias. Following Bell (1995), people seeking to participate in an employment programme are essentially different from those who do not appear voluntarily. Should members of the comparison group have been selected from people who did not volunteer to participate in a program, a risk of self-selection bias would appear. People who self-select for a program could present a motivation of that, a priori, may lack the people who have not applied. Such reasoning may also be correlated with the achievement of a position of a job after having completed the NLP program. Ultimately, this bias could make as a result of treatment were to conclude what actually is due to the formation of groups.

The formation of research groups was conducted in three distinct phases. In a first phase, the administration sent us the data of all persons who participated in the program PNL, both for those who had been selected (treatment groups) and for which no (comparison group). Before introducing the interview in the company or municipality, subjects are shortlisted by the administration. The selection criteria are, in this order, age, qualifications and geographical area. Ultimately the test of time registered as job seeker could be used. When forming the comparison group, it has arranged all subjects were submitted to a call but had not been selected. These subjects were divided according to the employment office who had managed the call. Initially data from 25 PES offices throughout Asturias were received. All these data were organized in a single file that, once removed and repeated invalid subject, would shape our comparison group. As for the two treatment groups, we arranged a file for each of them. As expected, the greatest difficulty in this first phase was to form the comparison group. In these files the subject ID, your name, phone number and the result of the interview (selected / deselected) included. From these data began to build the three groups involved in the research, each in a separate database.

In a second phase, and once the three groups were constructed, the SPE provided information on these people. The administration sent us information about sex, age, municipality, educational level, qualifications, language, disability and information about their employment status once completed practices. With the employment situation dependent variable was constructed and the rest of the independent variables. As for the dependent variable, it was considered appropriate to differentiate between those who are currently registered as unemployed and those who either are not registered or who are registered while holding a job. Note that when talking about job seekers are unified in the same group for people who are unemployed and are therefore registered with people who do have jobs but are searching an improvement in employment. In our sample there are 48 subjects listed as unemployed, even if they are working. To make the database manageable and to facilitate analysis, and since it was considered that the jobseekers who are occupied more closely resemble non-applicants that the unemployed applicants, we have merged these two categories into one.

Finally, in the third phase a survey was conducted on a sample of nearly four hundred young people who participated in internships, half of them randomly selected among program participants, and the other half coming from the comparison group. In the survey questions concerning the education and work experience of young people prior to the application of the practices were posed, as well as questions on various family characteristics that might influence career paths. These include educational and occupational positions of their parents, referred to when respondents were 16 years old.

Table 1 shows the descriptive statistics of the registration database. In general there is a similarity in the distributions of the variables of sex, education, disability and language. As for the differences in

distributions, some discrepancy is observed among people aged 21 to 23 years within the company group than the comparison group, and the distribution of some districts, although other distributions are relatively balanced.

As for the method, and because of the inability to randomly form groups, it has opted for the use of quasi-experimental methodology. Following Cook and Campbell (1986), a quasi-experiment is an experiment randomization in all respects but the initial assumption of equivalence between groups. Because of this lack of equivalence between the groups to analyze, we cannot ensure that hypothetical intergroup differences post-treatment are caused by these differences and not by the effect of treatment, in this case, the fact of having participated in a PNL.

Within the cuasiexperiential methodology, Propensity Score Matching was used, i.e. one of the most appropriate evaluation techniques of public programmes and policies (Rodriguez, 2012). Since the ultimate goal of an evaluation tries to know how effective a program or intervention is in meeting the objectives for which it was designed, the main difficulty of evaluating is to hypothesize what would have happened to subjects to which the program has been applied in the absence of treatment. Note that, by definition, it is impossible to observe a subject as participant and at the same time as participant. What they do is try different methods to estimate this counterfactual from statistical techniques. Under the assumption of the experimental methodology, when the assignment of subjects to treatment is random, participants and non-participants are comparable to effects result, both their observable characteristics and unobservable. Thus, the comparison of these participants subjects with non-participants could make an assessment of the outcome of a hypothetical program. It is just in this field that would act the PSM. To avoid differences between participants and nonparticipants, which invalidate any comparison between them, matching techniques try to link an untreated unit with a treated one that is statistically similar. Once the matching is done, it proceeds to compare the group mean treaty in a variable result, with the average untreated in the same variable (Average Treatment on the Treated, TTA). The problem when comparing subjects who were treated with untreated ones arises when you know what variables are used for the comparison. In other words, many variables to use when considering two similar subjects and thus comparable. To solve this problem, Rosembaun and Rubin (1983) proposed calculating the probability of participating in the program (propensity score) from a regression using a logic or probit model. Thus, the probability of participation summarizes all the observable characteristics of the subject and allows calculating this propensity score, which will be used to compare subjects.

In order to carry out these pairings, apart from having an adequate number of variables, two assumptions must be met, the conditional independence assumption and the assumption of common support. The first one assumes that participation in the program will be independent of the results in the target variable; if the characteristics of a subject are related to both its status as a participant / non-participant as a result, this assumption is not fulfilled. The second criterion means that there must be an overlap between the distribution of observable characteristics of the subjects in the treatment group and comparison. The application requires PSM approach as close as possible to fulfill these two assumptions, which is considered to have been achieved in this research.



Table 1  
COMPOSITION OF PNL GROUPS AND CMPARISON GROUP

	Comparison	City Halls	Firm	All
Population.....	595	299	86	980
<i>Distribution by sex (%)</i>				
Men.....	46,6	38,5	43,0	43,8
Women.....	53,4	61,5	57,0	56,2
<i>Distribution by education level (%)</i>				
Intermediate Professional training and prof. certif..	22,5	16,7	22,1	20,7
Superior Prof. Training.....	29,1	37,1	34,9	32,0
3 yrs. Univ. Degree.....	24,9	29,1	17,4	25,5
4-5yrs Univ. Degree.....	23,5	17,1	25,6	21,7
<i>Distribution by age (%)</i>				
(18-20).....	7,1	4,3	12,8	6,7
(21-23).....	40,0	39,5	24,4	38,5
(24-26).....	50,4	53,5	55,8	51,8
(27-30).....	2,5	2,7	7,0	3,0
<i>Distribution by foreign language fluency (%)</i>				
No second language.....	28,7	26,8	25,6	27,9
Second language .....	49,7	51,2	50,0	50,2
Additional lang.....	21,5	22,1	22,4	21,9
<i>Distribution by districts (%)</i>				
A.....	9,1	18,7	8,1	11,9
B.....	33,9	17,1	30,2	28,5
C.....	1,3	5	3,5	2,7
D.....	35,1	34,8	43,0	35,7
E.....	6,4	4,7	7,0	5,9
F.....	1,8	6,4	0,0	3,1
G.....	11,4	11,7	5,8	11,0
H.....	0,8	1,7	2,3	1,2

#### 4. Results

The hypothesis is that participating in the NLP programme contributes to increasing the subsequent employment, both for those who carry out their internship in a company and for the ones who do it in a town hall. That is the objective of the program. In the analysis with registration data, the improvement in the labour market should lead to fewer people registered as job seekers. This lower registration could be explained either by increasing the career or qualifications for a positive signal effect perceived by employers (Mato and Cueto, 2008).

Table 2 shows the raw results of the employment status of individuals around twelve months after the completion of the PNL, distinguishing between the council group, the company group and the comparison group shown. As can be seen, among people who have made a PNL in a company, the percentage of non-employed applicants or applicants is greater than among people who have

completed an internship in a municipality. The differences are statistically significant at 99%. In the comparison group no significant differences are observed.

Table 2  
DIFFERENCES IN UNEMPLOYMENT STATUS BETWEEN GROUPS OF PARTICIPANTS  
AND THE COMPARISON GROUP

	Registered unemployed (%)	No registered and registered who are working (%)
Comparison	48,2	51,8
City Halls	73,6	26,4
Companies	20,9	79,1

Note: differences are statistically significant at the 99% (Chi-square).

Table 3  
ESTIMATION OF PROPENSITY SCORE COMPANIES (PROBIT)

	Coef.	St. error	z	P> z	Conf. interval 95%	
Sex (ref: woman)	.1200385	.1329607	0.90	0.367	-.1405596	.3806367
Languages (ref: add. Lang.)						
No	-.1385356	.2030853	-0.68	0.495	-.5365754	.2595042
Second lang.	-.0275774	.1658543	-0.17	0.868	-.3526459	.2974912
Education (ref: degree and master)						
Intermediate Prof. training & prof. certif.	.0575109	.2213802	0.26	0.795	-.3763863	.4914081
Superior prof. trg.	.1963337	.1817894	1.08	0.280	-.1599669	.5526344
3-yr. Univ. degree	-.0770171	.1955309	-0.39	0.694	-.4602505	.3062163
Age (ref: 27-30)						
18-20	-.2023373	.3670714	-0.55	0.581	-.9217839	.5171094
21-23	-.8121534*	.319741	-2.54	0.011	-1.438834	-.1854726
24-26	-.4990105	.3083701	-1.62	0.106	-1.103405	.1053838
District (ref: B)						
A	.0450072	.2445741	0.18	0.854	-.4343493	.5243637
C	.6487789	.4227423	1.53	0.125	-.1797808	1.477339
D	.1360827	.1526694	0.89	0.373	-.1631438	.4353093
E	.1010528	.2659917	0.38	0.704	-.4202815	.622387
F	-.2335613	.25713	-0.91	0.364	-.7375269	.2704042
G	.6522768	.5326661	1.22	0.221	-.3917296	1.696283
Constant	-.8393669*	.397869	-2.11	0.035	-1.619176	-.059558

\*\* : signif. 99%; \* : signif. 95%.

However, from these records a causal effect of the internships is not be demonstrated, as the differences that may exist between participants in both treatment groups and the comparison group could be explained, at least in part, because of differences in the registers. To calculate the effect derived exclusively from the PNL a matching method has been used, as stated above, which is

based on propensity score or probability of assignment. The programme that has been used for pairing is the nearest neighbour method (nearest neighbour matching developed by Becker and Ichino). This method sorts the records from the PS value and once cases are ordered, cases are matched whose PS come closer to each other. The result of the equations of participation in internships with registration data are shown in Tables 3 and 4.

Table 4  
ESTIMATION OF PROPENSITY SCORE CITY HALLS (PROBIT)

	Coef.	St. Error	z	P> z	Confidence Interval 95%	
Sex (ref: woman)	.2479087**	.0939499	2.64	0.008	.0637702	.4320471
Languages (ref: additional lang.)						
No	-.1216425	.1401781	-0.87	0.386	-.3963865	.1531015
Second lang.	-.0806727	.1173614	-0.69	0.492	-.3106967	.1493513
Education (ref: Univ. Degree and Master)						
Intermediate Prof. training & prof. certif.	.1841783	.162839	1.13	0.258	-.1349804	.5033369
Superior prof. trg.	.430452**	.1346116	3.20	0.001	.1666182	.6942858
Diplomatura	.3381411*	.1352551	2.50	0.012	.0730459	.6032363
Age (ref: 27-30)						
18-20	-.4802823	.3431943	-1.40	0.162	-1.152931	.1923661
21-23	-.2008405	.2845327	-0.71	0.480	-.7585143	.3568334
24-26	-.0885431	.2825424	-0.31	0.754	-.642316	.4652299
District (ref: B)						
A	.8511523**	.1532974	5.55	0.000	.5506949	1.15161
C	1.345441**	.2927778	4.60	0.000	.7716075	1.919275
D	.4356289**	.118837	3.67	0.000	.2027126	.6685453
E	.2048824	.2110457	0.97	0.332	-.2087595	.6185244
F	.4049254**	.1581209	2.56	0.010	.0950142	.7148366
G	.9311158*	.4101168	2.27	0.023	.1273016	1.73493
H	1.260561**	.254898	4.95	0.000	.7609706	1.760152
Constant	-1.28473**	.347334	-3.70	0.000	-1.965492	-.6039674

\*\* : signif. 99%; \* : signif. 95%.

Once the probabilities of assignment or scores are calculated, and after checking for compliance with the condition of balance between groups, the following tables show results of the regressions that address the effects of treatment means of internships participants. Table 5 shows, first, estimates from data registration purposes. As expected from descriptive unemployment status after 12 months, the coefficient reflecting the effect of company internships is positive and significant, while the one covering the effect of internships in municipalities is negative and also significant at 99 percent.

Therefore, a first analysis with unemployment registry data leads to the conclusion that the type of organization can be a determining factor in explaining the first steps in the employment of young graduates. Of particular concern is that if these effects are confirmed, practices in local entities may be subtracting subsequent employment opportunities to young people that the star. One possible explanation for this negative effect could be that the effect of working for a few months at a town hall was increasing opposition among participants interest in preparing an exam to become public

officials, an issue that the database does not allow to assess.

Table 5  
TREATMENT EFFECT ON THE TREATED (REGISTRY DATA)

	ATT	St. Error	T
Internships in companies	0,244***	0,068	3,566
Internships in city halls	-0,262***	0,050	-5,280

As already noted, the third phase of the research involved the completion of a survey, in short, has four goals. First, the survey allows young people to ask ends of their family, education and work history that generate a number of variables observed far superior to those available in the records of the Public Employment Service. This is already an advantage because the reliability of the propensity score increases with the number of variables in the selection equation. Second, the survey to confirm or reject the hypothesis of increased interest in public jobs among participants in internships of municipalities. Finally, thirdly, information on family history can control the potential impact of family circumstances, in line with what has been pointed out in the introduction of this research. Finally, the survey was conducted six months after obtaining registration data and should serve to confirm, in general, the employment situation of young people obtained from the registration SPE data.

Tables A-1 and A-2, Annex, collect the results of the selection equations made with each of the modes of practice. In the same are, besides sex, introduced the age and educational level of young people, variables that refer specifically to social origin, such as educational level and occupational level, both father and mother when the young was 16 years old; a variable on the educational performance as the approximate average grade (and self-reported) during the study period; and two variables related to the trajectory of the young person, such as if she had moved away from her family home prior to applying the practices and, finally, if the person had work experience prior to that moment. The tables show that levels of parental education are the only variables that contribute significantly to explain the participation in practices and that this is so in the two existing modalities.

Finally, Table 6 shows the average estimated effects with survey data, using the aforementioned method of the nearest neighbour matching. The signs of the coefficients do not change, but their values are reduced, indicating that part of the explanatory power ascribed to each of the modalities of the program in the analysis of registered data could be due to differences in family and individual trajectory origin variables. In any case, the survey confirms that, after taking into account several additional variables, internships in companies produce positive effects, while those held in municipalities show the reverse: a reduction in the probability of employment after 18 months. Therefore, patterns of work situations observed with Public Employment Service data are confirmed.

Moreover, the hypothesis that the cause of negative effects on employment practices in municipalities due to the preparation of public official exams is rejected, as the number of young people who report that they are preparing them, although higher than in the other groups, is insufficient to draw meaningful conclusions.

Table 6  
TREATMENT EFFECT ON THE TREATED (SURVEY DATA)

	ATT	St. Error	T
Internships in companies	0,232**	0,084	2,772
Internships in city halls	-0,327*	0,096	-3,421

## 5. Conclusions

The scarcity of empirical assessments of public policy and, specifically, employment policies, is in contrast to the seriousness of the economic and social problems that the crisis has only accentuated. It also contrasts with the significant public resources devoted to specific issues such as those addressed in this paper. As has happened before with other types of active policies such as hiring subsidies, governments could be devoting significant efforts to measures that have proven unfavorable for subsequent employment.

This research has been able to carry out an empirical analysis of active policies for youth thanks to data from the Public Employment Service, the programme promoter. The findings on the effects of the practices in the early employment of young graduates of various levels of studies are very clear: internships in companies significantly contribute to the inclusion in the medium term (between 12 and 18 months), while for those held in municipalities the opposite is true.

If registration data were not sufficiently representative or if the lack of variables of family, education and work history of youth could lead to grant internships an explanatory capacity lacking, a survey was conducted on 400 young people. Survey analysis confirms previous results. In addition, the survey has allowed us to analyze the influence of these additional variables, including the educational level of parents seems to influence the probability of selection practices.

This research started out mentioning three types of risk: the family legacy of unemployment of parents to children, the scars of unemployment on individuals in the long term, and that young people may “get lost” in the transition into work. The analysis did not focus on these risks, but the results can and should help improve decision making active youth policies and, in doing so, they can also help to reduce them.

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