

# Impact evaluation of a job-training programme for disadvantaged youths : the case of projoven

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## Summary

# Impact evaluation of a job-training programme for disadvantaged youths: the case of Projoven

By

Henry Espinoza Peña

Latin American countries face serious barriers to improving employment prospects for younger workers, particularly those from disadvantaged backgrounds. The growing number of young people in intermittent, insecure and low-paid jobs is putting pressure for reform on decision-makers. A policy measure targeted at economically disadvantaged youths in Latin America has been the introduction of youth job-training programmes (YJTP). The objective of these programmes is to improve the labour market prospects of economically disadvantaged youths by providing them with basic job readiness skills as well as some trade-specific abilities. Since the early 1990s, such training programmes have been carried out throughout Latin America. YJTPs were implemented in countries including Venezuela (1993), Argentina (1994), Paraguay (1994), Peru (1996), the Dominican Republic (1999), Colombia (2000), Panama (2002) and Haiti (2005). YJTPs are based on the dual system of classroom instruction and on-the-job internship. They follow a market-oriented approach, in which governments consign the training activities to private parties. Latin American governments fund training providers to train youths at their own premises and to subsequently place them in internships. The government confines its role to the selection of the best bids from private organisations, through public tenders, and control of the quality of the training offered.

Latin American YJTPs have been extensively evaluated and the general conclusion is that training programmes are effective policy interventions. It has been suggested that these programmes increase youths' chances of being employed and their potential earnings, particularly for young women. Nevertheless, the presence of trainees who do not complete the programme, either because they are not placed in internships or because they drop out voluntarily from the programme, has been ignored in most evaluations. This is crucial because the presence of an important proportion of trainees who do not complete the training (partial treatment) is a characteristic of virtually all training programmes. Taking into account the low completion phenomenon, its causes and implications could challenge the current view of YJTPs' effectiveness. Additionally, it could provide information about how to enhance the effectiveness of these programmes.

Low completion rates in YJTPs provide evidence that i) training providers do not place all trainees in internships; ii) internships are carried out under precarious conditions; or iii) the programme works better for some types of individuals than for others. Consequently, in order to estimate and understand the programme's effectiveness, it is important to distinguish the effects of the different phases of the programme, to take into account the institutional arrangements of the training (regulations, incentives and enforcement mechanisms) and individual heterogeneity (individual characteristics). In addition, if internships are carried out under precarious conditions, trainees may drop out for better opportunities. These aspects have been neglected in previous evaluations. Therefore, the relationship between training completion, trainees' heterogeneity and the institutional arrangements of YJTPs on the one hand, and trainees' labour market outcomes on the other hand, remains ambiguous. This thesis aims at filling this gap in the treatment effects literature.

Specifically, this thesis evaluates the effectiveness of the Peruvian YJTP Projoven in terms of both overall and formal employment and in terms of monthly wages. The case chosen for this study is representative of similar training measures in Latin America and has an average dropout rate. Projoven is an ongoing training programme initiated in 1996 and is conducted at least once a year in successive waves or 'public calls'. In thirteen years of operation it has trained around 60,000 individuals. The programme is run by the Peruvian Ministry of Labour. Projoven finances training courses for youths, but the services are provided by training institutions which compete to obtain funding for their course offering. The official goal of the programme is to facilitate the insertion of economically disadvantaged youths (16-24 years old) into the formal labour market by funding basic training in low-skilled occupations. Projoven training is based on two sequential phases: i) three months of classroom instruction which almost all trainees complete, followed by ii) three months of on-the-job training internship which is offered to a majority but not to all trainees.

This dissertation integrates the analysis of the institutional framework, individual heterogeneity and the participants' dropout behaviour into the evaluation of Projoven's effectiveness and it follows a three-step approach to do so. First, Chapter 2 provides background information about the programme and discusses its institutional framework. This discussion proposes a number of elements which should be taken into account in a training programme evaluation. Second, Chapters 3 and 4 are devoted to Projoven's treatment effect evaluation. Chapter 3 describes and discusses the Projoven dataset, and the sixth public call for which detailed data are available. In Chapter 4 a methodology to evaluate Projoven is proposed and applied. This methodology takes into account the non-experimental nature of the data, the heterogeneity of individuals, selection into work and the presence of trainees with partial treatment. The evaluation is conducted in terms of both overall and formal employment and in terms of monthly wages. Third, Chapter 5 identifies and discusses the factors affecting trainees' dropout behaviour. This study tests whether individual characteristics, regional features or training characteristics influence trainees' decisions to drop out. Finally, in Chapter 6 some general conclusions are drawn.

Chapter 2 studies the extent to which the institutional arrangements should be taken into account in the evaluation of the programme's effectiveness given the context in which the programme is carried out. By presenting how Projoven is designed to work and how it actually does, this chapter suggests three elements which should be accounted for when evaluating the effectiveness of a training programme such as Projoven. First, it should be considered that not all the trainees are placed in internships after the classroom instruction phase. Therefore, Projoven's impact evaluation should distinguish between the effects of the two phases of the programme. Second, as 30% of the trainees placed in internships drop out, Projoven's impact evaluation should account for the presence of trainees with partial treatment. Third, it should be taken into account that both trainees and their employment prospects are heterogeneous. The fact that half of the trainees are working prior to the programme, most likely in the informal sector, has implications for the treatment effect estimations in terms of employment indicators and individual heterogeneity. Evaluating the effect on overall employment may overlook the real potential of the programme, because disadvantaged youths are frequently employed in precarious jobs with low pay and no social rights (informal labour market). Taking the presence of an informal labour market into account, assessing trainees' formal employment condition could provide additional evidence of Projoven's effects in terms of employment. In addition, the programme may affect trainees differently depending on their work experience. For instance, training returns could be relatively lower for youths with work experience as they already possess some skills.

Chapter 3 describes Projoven's sixth public call dataset. This data set combines not only demographic information about trainees and an official control group, but also administrative records on level of training completion. It comprises a baseline survey and three follow-up interviews: at six, twelve and eighteen months after the end of the training. This chapter explains how a new control group was created using propensity score matching with replacement. The objective is to tackle the pre-programme earnings dip in the trainee group which is not observed in the official control group and which may be evidence of systematic differences between the groups, undermining their comparability. The new control group is a subsample of the individuals in the official control group. The tests performed on this new control group suggest that in terms of employment, treatment effects estimations are free of bias; whereas in terms of monthly wages, treatment effects estimations could be upward biased.

In Chapter 4, this study estimates the effectiveness of Projoven's sixth public call, in terms of both overall and formal employment and in terms of monthly wage. It accounts for the presence of trainees with partial treatment using fixed effects methods with sample selection correction. Controlling for sample selection allows the estimated effects on formal employment and wages to not be influenced by the fact that Projoven may increase trainees' likelihood of being employed. Four groups are compared pair-wise: the control group, the dropout group with only classroom training, the dropout group with classroom training and internship placement, and the group completing the full programme. The estimations also account for the potential endogeneity of training completion by using pooled two stages least squares methods with sample selection correction.

Decomposing the programme's effects by level of completion suggests that the programme is more effective conditionally upon completion. It is found that in terms of overall employment, the programme yields returns only in the short term (six months after the end of the programme) and conditionally on internship completion. In terms of formal employment, no significant effects were found. The programme seems to increase trainees' wages, but these effects diminish over time. The programme's positive effects on monthly wages and null effects on formal employment suggest that trainees are working more hours in the same type of precarious jobs that they would be working in the absence of the programme. In addition, when differentiating the programme's effects based on individual characteristics, it seems that Projoven yields additional returns, which are constant over time, for individuals with no work experience prior to enrolment. It should be noticed that general equilibrium effects of Projoven on the Peruvian labour market are negligible given the limited coverage of Projoven.

The estimates of Projoven's treatment effects begs the question of why trainees drop out if it is apparently worth the effort to complete the training. To investigate the determinants of trainees' dropout behaviour, this study develops two empirical models in chapter 5. While the first one, a probit model with a sample selection correction, accounts for selection into internship, the second one, a multinomial model, accounts for two different exit-routes (dropping out for another job or going into unemployment/inactivity). These models test whether trainees' characteristics, regional differences and/or training characteristics affect their dropout behaviour. The results of the models suggest no evidence of selection into internship as having influence on the dropout rate, and that trainees stay in the programme as long as they perceive that it is worthwhile continuing the training. Three general conclusions are reached based on the analysis of trainees' dropout behaviour. First, since women and individuals with no work experience are most likely to benefit from the training, they are also less likely to drop out. This is related to the fact that trainees who are male and have prior work experience are less likely to drop out into unemployment, but are more likely to drop out for another job. Second, in cities where fewer job opportunities are available (in comparison with Lima), trainees are also less likely to drop out. Finally, under the presence of a written contract, which indicates more favourable working conditions, trainees are less likely to drop out.

Finally, Chapter 6 draws conclusions from the study. The conclusions of this study imply that training could be an effective policy intervention to improve labour market prospects of economically disadvantaged youths. However, to enhance training potential it should be taken into account that the programme works differently for different people; that not all the trainees receive the same doses of treatment; and that precarious treatment conditions could lead them to drop out of the programme. As the behaviour of trainees, training providers and training firms are affected by the set of rules and incentives under which the programme is carried out, the analysis of the institutional framework must be also taken into consideration when evaluating Projoven effectiveness.

This thesis shows that policy measures targeting disadvantaged youths need to combine an appropriate and integrated mix of occupational skills and internships and that an adequate supply of employment opportunities and a more developed market for vocational education is needed. Evidence presented in this study suggests that YJTPs in developing countries may improve labour market outcomes among disadvantaged youths. Nevertheless, if no internship opportunities are available, or the internships are carried out in precarious conditions, YJTPs such as Projoven may be ineffective. Consequently, these services need to be carried out in such a way that the institutional arrangements generate the right incentives to enhance their effectiveness: i) incentives for trainees to take up and complete the training; ii) incentives for training providers to offer high-quality courses and to find internship places for all participants; and iii) incentives for training firms to include training as an investment policy and offer proper conditions (written contracts). Encouraging shorter, more flexible training if trainees do not complete it is useless as well if graduates from YJTPs remain insufficiently prepared for the jobs available in the labour market. Eventually, YJTPs should be complemented with an integral reform of the market for vocational training. If training providers are not regulated, it would be expected that trainees continue dropping out and that internships are not proper.