

# How can Job Opportunities for Young People in Latin America be improved?

## Abstract

Job training programs for vulnerable youth are the main response of Latin American governments to address the problem of inadequate employment opportunities for young people. Despite its importance, knowledge about these programs is scarce. This study contributes to filling this gap in the literature by presenting new evidence on the effectiveness of six of these programs operating or that were implemented in Colombia, Honduras, Mexico, Panama, Peru and Dominican Republic. This analysis uses the results of impact evaluations of these programs and the results of qualitative surveys of young participants and employers, and in-depth interviews to training centers, employers and policy makers. The main results confirm the limited evidence available, namely, that these programs have little impact on the probability of getting a job (although there is a high heterogeneity in these impacts), but a significant impact on job quality. From this analysis, we propose a research agenda to improve knowledge on the functioning and impact of these programs, and provide a series of recommendations to improve the design and increase the effectiveness of youth training programs.

## I. INTRODUCTION

As in other regions of the world, young people in Latin America and the Caribbean (LAC) face greater difficulties than adults in the labor market. However, this problem is especially prominent in LAC. In this region, the unemployment rate among young people is up to three times higher than the adult rate. Whereas one in three employed adults have an informal job employment, the informality rate for young people reaches 50%.

Unsatisfactory job placement for young people constitutes a major problem for governments in LAC, due to three main reasons. In first place, given the current demographic trends, it is a problem on a grand scale because it can only continue to grow. There are currently more than ten million jobless youngsters in LAC and, among those who do find employment, nearly 30 million are working in the informal labor market. In addition to the high levels of informality and unemployment, there is a problem of widespread inactivity, given that approximately 22% of young people in the region neither work nor study. In the absence of corrective measures, the scale of these problems will rise in the coming years. Young people at present make up 40% of the

working-age population and, given the ongoing demographic changes, this share will increase.<sup>1</sup>

In second place, inadequate labor insertion does not only have an immediate impact on the quality of life of young people, but also brings important long- and medium-term consequences. For example, there is evidence suggesting that youth unemployment has negative and persistent effects on the individuals' career trajectories and on their future earnings.<sup>2</sup>

In third place, unemployment and inactivity among young people in urban areas can give rise to other kinds of social risks. Faced with a lack of alternatives in the labor market, young people can adopt risky behavior, such as the consumption of drugs and alcohol, or engage in criminal activity.<sup>3</sup>

Tackling this problem calls for structural reforms that, on the one hand, stimulate the creation of formal employment and, on the other, guarantee that the education system endows young people with the kinds of skills that the market demands. The implementation of reforms aimed at improving job market efficiency is also crucial, as well as those that reduce the cost of both job seeking and employee hiring (Inter-American Development Bank, 2004).

However, in search for short-term results, governments in the region have implemented palliative, non-structural policies that attempt to bring about an immediate improvement in young peoples' labor outcomes.<sup>4</sup> Even though these measures do not tackle the labor market's most structural problems, they can transform the beneficiaries' labor market conditions in the short term. Among these measures, the most frequently implemented intervention is the implementation of programs that offer short-term job training services to urban youth. These programs, which are mainly directed towards vulnerable youth, are characterized by combining services designed to enhance the beneficiaries' human capital (for example, their cognitive and socio-emotional capacities and their work experience) and reduce the costs of job search. They are also

---

<sup>1</sup> The indicators on the job market conditions of young people that are presented in this technical note were built using data from household surveys of several countries in the region. See Massari (2011) for more details.

<sup>2</sup> See, for example, Gregg (2001) and Mroz and Savage (2001).

<sup>3</sup> See, for example, the World Health Organization (2002).

<sup>4</sup> Some examples are the creation of subsidies for employing young people in Chile, the implementation of programs aimed at encouraging young entrepreneurs in Costa Rica and the creation of contractual models that regulate access to the labor market through the use of apprenticeship contracts in Colombia (International Labor Organization, 2010).

characterized by incorporating tools that offer demand-oriented training or, in other words, training that responds to the skill needs of the productive sector.

In spite of the importance of these programs in the region, information regarding their results is still insufficient. The impact evaluations are scarce and frequently evince grave methodological deficiencies. Furthermore, they rarely offer information about the mechanisms underlying the observed impacts. The principal objective of this technical note is to help fill this gap in the literature by making a critical examination of the existing evidence from program evaluations and an institutional and qualitative analysis of the programs' design and operation. The analysis focuses mainly on six job training programs that operated in Colombia, Honduras, Mexico, Panama, Peru and the Dominican Republic. The inputs used to make this analysis are the following: i) the results from the impact evaluations of some of these programs; ii) a statistical analysis of surveys conducted to training centers, beneficiaries and participating firms; and iii) the results from a field study in which in-depth interviews with participating firms and policy makers were conducted.

This study makes two main contributions. First, it critically examines the available evidence on the impact of these programs and proposes an agenda for future research that may fill the most important knowledge gaps. Second, based on an analysis of the factors that contribute to the success of the programs, a series of policy recommendations is made.<sup>5</sup>

## **II. THE DIFFICULTIES FACED BY YOUNG PEOPLE IN LAC'S LABOR MARKET <sup>6</sup>**

In LAC, young people<sup>7</sup> represent one out of every four inhabitants (26% of the population, or 145 million out of 556 million individuals) and also make up an important proportion of the labor force (40%). Given the region's demographic trends, this proportion will grow in the coming years (United Nations, 2011). Unfortunately, many youngsters who enter the labor market do not have the skills demanded by

---

<sup>5</sup> An extended version of this technical note, containing greater detail regarding the qualitative analysis, is available on demand.

<sup>6</sup> See Massari (2011) for more detailed reading on the labor market conditions of young people in LAC. Also, see Massari (2011) for information regarding the way in which data from household surveys was used to build the figures presented in this section.

<sup>7</sup> In this note "young people" are defined as persons between the ages of 15 and 29.

productive sector (Bassi et al, 2012, World Bank, 2011). Among other causes, one can identify two major reasons. First, in many countries in the region the education system has major deficiencies and, consequently, fails to provide all youngsters with the basic skills required in the labor market.<sup>8</sup> Second, young people face high job-search costs and are likely to have very limited information on employment opportunities. In LAC's labor market, most job seekers use informal methods, such as personal contacts, to gather information during the job search process (Mazza, 2012). Such informal methods might be particularly ineffective for young people from disadvantaged backgrounds, whose social networks are likely to have very limited ties with the business sector.

Thus, human capital deficiencies and a limited labor market information reduce the opportunities of many young Latin Americans to access good-quality jobs. On the one hand, there is an excess supply of young, low skilled labor while; on the other hand, many companies in the region are unable to satisfy their demands of skilled workers. As a result, in LAC, youth unemployment reaches 13%; a figure that represents 2.7 times the adult unemployment rate. In countries such as Belize, Colombia, Chile, Jamaica and the Dominican Republic, this rate is close to or greater than 20%.

Young people not only face difficulties getting employed; those who are employed often access jobs of very poor quality. Around half of young wage-earners in the region work in the informal sector, whereas among the adult population only a third of wage-earners have an informal job.<sup>9</sup>

Finally, in addition to the phenomena of unemployment and informality, there is the problem of inactivity. Approximately 22% of young people in LAC (around 32 million youngsters) neither work nor study and, within this group, 24 million don't work, study or are actively searching for work. Although a high proportion of these individuals are made up of young women engaged in household labor, for the rest of the young people, inactivity can be associated with risky, or even criminal, behavior.

The difficulties faced by young people in obtaining good-quality employment not only have an immediate impact on their wellbeing, but also entail long-term costs.

---

<sup>8</sup> Nearly 50% of young Latin Americans do not have the basic reading skills needed for everyday real life activities. In the case of mathematic skills, this figure rises to 65% of young people (Inter-American Development Bank, 2011).

<sup>9</sup> Young people also achieve poor results in other indicators of employment quality such as, for example, wages (they are often paid a salary below the minimum legal wage) and high job rotation, which is prevalent in both the formal and informal labor markets. See International Labor Organization (2010), Cunningham (2009) and Cunningham and Bustos Salvagno (2011).

Evidence shows that the conditions experienced at the very outset of one's working life can have persistent consequences over time.<sup>10</sup> These consequences, described in the literature as *scarring effects*, increase the importance of policies aimed at improving youth employment opportunities in LAC.

In order to improve the labor market conditions of young people in LAC, the governments in the region have implemented a wide range of policies and programs that can be classified into six categories: i) job training services; ii) career counseling, information on job vacancies and employment services; iii) support for self-employment; iv) incentives to private firms for hiring young workers, such as tax rebates, apprenticeship contracts and a minimum juvenile wage; v) provision of temporary public sector jobs for the young; and vi) subsidies and financial transfers to unemployed youngsters. In general, these initiatives take place after the formal education process has ended, and they seek, in the short term, to increase employment among beneficiaries, improve their working conditions and facilitate the school-to-work transition. These measures are usually isolated; this is, they are not implemented as part of a broad, coherent and structural youth employment policy. In fact, these measures can have conflicting outcomes such as disincentives to job search that result from unemployment benefits or the increase in informality that results from subsidized credits to the self-employed. Now, among these isolated policies, the most common is the implementation of job training programs for the young, which are described below in more detail.<sup>11</sup>

---

<sup>10</sup> See, for example, Ellwood, 1982, and Nordström Skans, 2011.

<sup>11</sup> This is according to the Youth Employment Inventory (YEI), a database that compiles information regarding interventions aimed at promoting youth employment all around the world. The YEI currently provides information on 400 interventions in 90 countries. According to this inventory, the most common programs are those which, either on their own or in combination with other services, provide training for young people in the classroom or in the workplace. The popularity of these programs is especially high in LAC where they represent over 80% of all interventions (Betcherman and others, 2007). Information provided by the YEI is available to the public at: <http://www.youth-employment-inventory.org>.

### III. JOB TRAINING PROGRAMS FOR YOUTH

#### 1. Program Characteristics

In the 1980s, many LAC countries implemented vocational training programs to increase the labor market conditions of the young. The implementation of these programs represented in many cases a break with an old system in which vocational training was offered exclusively by the state through its National Institutes of Vocational Training (henceforth, INFP due to the Spanish acronym of *Institutos Nacionales de Formación Profesional*). The INFPs were largely responsible for the provision of technical training whose contents were determined centrally (Ibarrarán and Rosas-Shady, 2009). In contrast, the new programs aimed to offer demand-oriented training by incorporating tools whereby course contents were not centrally determined but, instead, tailored to fit the firms' skill demands. Moreover, they delegated the provision of services to many private operators, in the hope that competition would enhance the quality of the services. The programs *Probecat* in Mexico and *Chile Joven* in Chile, launched in 1984 and 1991 respectively, established the basis for this new kind of intervention. The design of these programs became a model to be imitated throughout the region in subsequent decades.<sup>12</sup>

Although job training programs for youth in LAC largely differ in their design, it is possible to identify various elements in common: i) their *goal* is to increase the probability that beneficiaries find a formal job and to improve the quality of employment; ii) their *coverage* is mainly urban and is relatively limited, since programs provide services to a low number of beneficiaries compared to the overall target population;<sup>13</sup> iii) their *target population* is usually composed of young people with few years of education, either unemployed or under-employed, who come from middle or low socioeconomic strata;<sup>14</sup> iv) they are *financed with public funds*, although training

---

<sup>12</sup> *Chile Joven*, for example, influenced program design in Venezuela (1993), Argentina (1994), Paraguay (1994), Peru (1996), the Dominican Republic (1999), Colombia (2000), Panama (2002) and Haiti (2005). Similarly, variations on the *Probecat* program were implemented in Panama (2002) and Honduras (2006).

<sup>13</sup> For example, in Peru, where the number of unemployed urban young people is approximately 540,000, the *Projoven* program has reached just over 73,000 of them during its fifteen years of activity.

<sup>14</sup> However, it seems clear that these programs are not directed towards extremely poor young people, who lack the resources to retire from the labor market in order to participate in a training program.

itself is delegated to firms or to private sector vocational training centers;<sup>15</sup> v) the *cost per participant* is relatively low, fluctuating between USD400 and USD750;<sup>16</sup> vi) they introduce elements that aim at a *demand-oriented training*; meaning training on skills demanded by employers in the labor market ; vi) usually *their operation* does not make part of the regular activity of labor ministries; instead, they are administered by adjunct executive units of consultants;<sup>17</sup> viii) they provide *training services*, which include one-to-three months long classroom technical training courses in lower-skilled trades, and/or one-to-three months long classroom- training in “soft” (socio-emotional) skills, and/or one-to-three months long on-the-job training ; ix) they provide *labor intermediation services* through which program beneficiaries are matched to firms that have vacancies or provide internships.

These are, therefore, low-coverage and low-cost programs that, with the exception of Mexico’s *Bécate*, are administered by executive units of consultants who are overseen by the ministries but do not make part of the ministries’ permanent staff. These units are commonly financed with resources from multilateral organisms such as the IDB, and their budget is usually greater than the budgets of other programs within the ministries. Although the greater resources and flexibility implied by this administrative format improves the executive quality of the programs’ administration, the isolation from the regular activities of the labor ministries affects the long-term sustainability of the programs.

Insofar as these are low-intensity interventions that usually involve small sums of *per capita* investment, the results expected from these programs should be modest. The evaluations of similar programs in developed countries suggests that the expected

---

<sup>15</sup> It is worth mentioning that, on top of the programs implemented by national and, occasionally, sub-national governments, there are sporadic initiatives undertaken by NGOs that aim at improving the employability of young people in Latin America, which often put into practice similar strategies. A good example is provided by the *Entra 21* programs, promoted by the International Youth Foundation (IYF) and the Multilateral Investment Fund (FOMIN).

<sup>16</sup> The approximate costs of the program per beneficiary (including operating costs and a grant or stipend) are the following: i) *Jóvenes en Acción* in Colombia: USD 750; ii) *Proempleo* in Honduras: USD 560; iii) *Juventud y Empleo* in the Dominican Republic: USD 660, and iv) *Proempleo* in Peru: USD 420. It is important to point out that that these calculations do not include the cost of the lost opportunity that young people assume when they retire from the labor market in order to join a training course. Such a cost, however, could not be very high, given the low income levels and limited opportunities that these youngsters face. Furthermore, it should be noted that the decision to extend a program or not will be determined by the marginal costs of taking on additional young people, about which there is, unfortunately, no available information.

<sup>17</sup> In this sense, the program *Bécate*, in Mexico, which is totally integrated within the *Servicio Nacional de Empleo* (National Employment Service) constitutes an exception. The *Projoven* Program in Peru is another exception, as it recently came under the auspices of the *Ministerio de Trabajo* (Ministry of Employment) under the new name of *Jóvenes a la Obra*.

impact on the probability of finding a job ranges between five and ten percentage points (Card, Kluve and Weber, 2009).

In principle, these programs can affect the working conditions of young people by two mechanisms. First, the vocational training services provided in the classroom or the workplace can enhance the human capital and productive skills of the beneficiaries. Through this mechanism, the programs can improve employability for young people in the medium and short term, even in situations in which the beneficiaries do not access a job immediately. Second, by providing a labor intermediation service, the programs can reduce the costs of job-seeking for the youngsters and the costs of recruitment for employers. Moreover, they can also reduce the costs for firms of gathering information about potential employees if participation in the program is a signal of quality. This signal might be particularly relevant in situations in which young people are faced with barriers to labor insertion based on stigma or observable aspects, such as their neighborhood or criminal records. In this way, through a labor intermediation channel, these programs can, in theory, improve the labor conditions of the beneficiaries even in situations in which there are no significant increases in human capital.

## **2. Classification of Job Training Programs for Youth**

Even though the job training programs for youth implemented in LAC have differences in their design, it is possible to classify them into two main categories according to their most fundamental characteristics. The first category consists of programs whose design most resembles *Chile Joven*, which, for reasons of simplicity, will be defined in this study as Type 1. In the second category, Type 2 Programs, the programs that resemble Mexico's *Probecat* will be included.

### **2.1.Type 1 Programs (influenced by *Chile Joven*)**

This category includes programs such as the Dominican Republic's *Juventud y Empleo*, *Jóvenes en Acción* in Colombia, Peru's *Projovent* in Peru, Argentina's *Proyecto Joven* in Argentina and Panama's *Procajoven*. These programs share the following characteristics:



- a. They provide classroom and on-the-job training.** These programs offer, in an initial stage, vocational training courses in the classroom that usually last two or three months and which are financed by the government but provided at private training centers. The courses usually offer professional formation in low skill occupations, such as waiters, auxiliary accountants, beauty stylists or make-up artists. In the majority of cases, the classroom training also includes one-to-three month courses in the so-called “soft” skills (also known as socioemotional skills) such as teamwork, leadership and task planning.<sup>18</sup> Once the classroom stage has been completed, the young participants continue their training by making an internship at a firm that has been previously located and contacted by the training center. The internships usually last one to three months, and during that period the training centers are contractually obliged to provide supervision and assistance to the trainees. In the majority of cases, the firms do not have the contractual obligation to pay salaries to the interns or give them a job once the training is over. The program administrators, however, do provide the trainees with a stipend to cover the costs of travel, food, medical insurance and insurance against accidents in the workplace.<sup>19</sup>
- b. Private training centers are in charge of fundamental aspects of the program operation.** Although in the majority of cases the labor ministries are responsible for program implementation, fundamental aspects of the operation are delegated to the private vocational training centers. The centers are responsible for attracting the beneficiaries, designing and administering the training courses, and identifying the firms in which the trainees will do the internships. The number of participating centers is generally high and the quality of service provision is heterogeneous.<sup>20</sup> Thus, the managerial role of government agencies is limited to providing technical support and supervision.<sup>21</sup>

---

<sup>18</sup> Throughout the rest of this paper, these skills are referred to as “soft skills”.

<sup>19</sup> One exception is Peru’s *Projoven* program, which shares the characteristics of the Type 1 Programs in all major aspects, but differs in the introduction of a requirement in which firms have to pay a wage to the interns.

<sup>20</sup> In the case of the Dominican Republic’s *Juventud y Empleo* program, about 80 centers participate in each cycle; in *Jóvenes en Acción* in Colombia, there were 120 centers per cycle and in Peru’s *Projoven* program, there were on average 170.

<sup>21</sup> For example, in Dominican Republic’s *Juventud y Empleo*, the *Instituto Nacional de Formación Técnico Profesional* (INFOTEP) (National Institute of Professional Technical Training) is the agency responsible for accrediting the quality of the training centers and for providing support during the course design process.

**c. Letters of intent are introduced in an attempt to make training demand-driven.**

These programs introduce tools to guarantee that the contents of the course are demanded by the productive sector (Ibarrarán and Rosas-Shady, 2009). Specifically, program administrators require the training centers to submit the course proposals together with a proof that, in the determination of the course content, they have consulted firms about their skill demands. This proof usually consists of a “letter of intent” in which the firms express their will to receive interns and state that the course contents respond to their skill requirements.<sup>22</sup>

**d. They are targeted to young people from lower socioeconomic strata.** In the majority of cases, the programs introduce targeting tools or eligibility criteria that limit service provision to the more disadvantaged youth.<sup>23</sup>

**e. They operate via competitive public bids.** The programs function by public bidding processes (tenders) in which the training institutions submit course proposals. Given that the timing of these bidding processes depends on the availability of budgetary resources, there are frequent coordination problems in which the moment when the beneficiaries complete their traineeship does not coincide with the moment in which the vacancies are open.

## **2.2.Type 2 Programs (influenced by *Probecat*)**

Variants of this program have been implemented in Mexico, Honduras and El Salvador. They are characterized by the following elements:

**a. They only offer on-the-job training at firms with vacancies.** These programs do not contain a preliminary phase of training in the classroom. The beneficiaries only receive training at the firm for a period lasting one to three months. In contrast to Type 1 programs, only firms with vacancies can participate.

---

<sup>22</sup> In some programs, such as the Dominican Republic’s *Juventud y Empleo* and Peru’s *Projovent*, studies to identify the most demanded professions or sectors of the economy are carried out. This information is used to guide selection of the courses that the private training centers present during the public bidding phase.

<sup>23</sup> In the case of the Dominican Republic’s *Juventud y Empleo*, *Projovent* in Peru and Colombia’s *Jóvenes en Acción*, programs were targeted young people who were of low economic status according to the stratification indices developed in each country. In this sense, Panama’s *Procajovent* program constitutes an exception.

- b. They are entirely run by governmental agencies.** The operation of these programs, including the identification of firms with vacancies and the selection of participants, is the sole responsibility of the governmental agency in charge of the program. In the case of *Bécate* (Mexico), this is the *Servicio Nacional de Empleo* (National Employment Service) and in the case of *Proempleo* (Honduras), this is the Employment Secretariat.
- c. They introduce commitments to hire.** Firms that participate in these programs are required to hire a given fraction of the trainees, which usually ranges between 50%-80%.<sup>24</sup> In exchange, the firm is not required to pay a salary to the youngsters during the traineeship. During the internship, young trainees receive a grant from the program to cover the costs of travel, food, and insurance for accidents in the workplace.
- d. Participants must undergo a highly selective process.** Given the relatively low stipends offered to the interns and the low skill level of the occupations in which they are trained, most beneficiaries from Type 2 programs have a low socioeconomic status. However, given that the firms are committed to hiring a high proportion of the trainees, only those youngsters who have undergone a prior selection process can join the program. In order to ensure that trainees have the skills demanded by the firms, the program operators are very actively involved in the firms' selection processes, investing large resources to identify potential beneficiaries that have the profile demanded by the firm. The involvement of program administrators in these selection processes can be quite thorough; they may perform not only the revision of the resumes but also psycho-technical tests and personal interviews.<sup>25</sup> Thus, in contrast to Type 1 programs, youngsters participating in Type 2 programs can only

---

<sup>24</sup> Specifically, the firms that want to participate in the programs *Proempleo* (Honduras) and *Bécate* (Mexico) in their "Mixta" modality, must agree beforehand to hire a proportion of the trainees at the end of the program. In the case of Mexico's *Bécate*, in its *Capacitación para la Práctica Laboral* (Training for Practical Work) modality, the regulations do not stipulate that the firms are obliged to make such a hiring commitment. However, the regional operators of this modality usually incorporate this kind of requirement and only admit businesses that have vacancies and will hire a proportion of the trainees that is usually of 50% or more.

<sup>25</sup> In both *Proempleo* (Honduras) and Mexico's *Bécate*, the program operators revise the profiles of potential beneficiaries and select only those with the adequate profile to fill the vacancies. This process often implies making a pre-selection on the basis of education, work experience or gender. Sometimes, human resources experts are hired by the program, and conduct interviews with beneficiaries, either personally or by phone. The youngsters that fulfill the requirements are invited to participate in the program and do an internship at the firm that is seeking employees with their profile.

join the program after a process that can be highly selective and will enjoy a higher probability of being hired at the end of the traineeship.

- e. **The programs run continuously throughout the year.** These programs are not executed via public bidding processes but, rather, offer their services continuously throughout the year.

### **3. Evidence regarding the effectiveness of youth training programs**

Vocational training programs in developed countries have been extensively evaluated, using diverse methodologies and considering different contexts (Heckman, LaLonde and Smith, 1999). For the most part, the evidence indicates that the effects of training programs are small in magnitude or non-existent (LaLonde, 1995; Heckman and others, 1999; Dar and Tzannatos, 1999; Puentes and Urzúa, 2010; Kluve, 2006). As previously mentioned, this result is to a certain extent predictable, given that *per capita* investment in these programs is quite modest compared to the magnitude of the beneficiaries' skill deficiencies. In the case of programs that are focalized on the youth, the estimated impacts are even lower than the impacts of programs that target the general population (Dar and Tzannatos, 1999; Betcherman, Olivás and Dar, 2004; Kluve, 2006; Card and others, 2010). However, as stated in Card and others (2010), the reasons underlying the poorer results of youth programs should be put into consideration. On the one hand, this result might be due to a scenario in which the net returns increase with age. On the other hand, programs for young people and programs for the general population may have systematic differences in their design.

In contrast to developed countries, there are few rigorous evaluations of job training programs for young people in LAC, in spite of the importance that these programs have had in the region since the 1990s. Such is the conclusion reached in recent meta-analyses studies by Ibararán and Rosas-Shady (2010), Puentes and Urzúa (2010) and Betcherman and others (2007). These authors find that the effects of youth training programs in LAC are positive, in contrast with the poor results registered in developed countries. However, given that the evidence is scarce, the programs differ according to their design, and their impact evaluations often have methodological

deficiencies, definitive conclusions cannot be drawn. Moreover, the evaluations usually report heterogeneous effects depending on the beneficiaries.

In addition to the scarcity of impact evaluations, there are other limitations in the literature. First, studies rarely isolate the impact of each of the services offered by the programs, which is an important limitation from the policy perspective. Given that all programs offer a combination of services, policy-makers need be able to establish which components are effective. Second, the studies do not provide information about the context in which the programs are most effective. For example, the literature does not indicate what features of the local market or what characteristics of the population favor the results. Finally, since studies rarely incorporate cost-effectiveness analysis, policy makers cannot be informed of the existence of alternative interventions with a greater impact.

#### **IV. ANALYSIS OF JOB TRAINING PROGRAMS FOR YOUTH: EVIDENCE FROM SIX COUNTRIES**

##### **1. Characteristics of the study**

The remainder of this technical note attempts to contribute to the literature of job training programs for youth in LAC by making a critical examination of the evidence from impact evaluations and an institutional and qualitative analysis of the programs' operations. The analysis focuses on six programs in different countries in the region. Four of these are of Type 1: *Juventud y Empleo* in the Dominican Republic, *Projovent* in Peru, *Procajovent* in Panama and *Jóvenes en Acción* in Colombia. The remaining two, *Proempleo* in Honduras and *Bécate* in Mexico, are of Type 2. Table 1 summarizes their main characteristics.<sup>26</sup>

The selection of these six programs is based on two criteria. The first is the availability of rigorous and recent impact evaluations, as is the case of *Juventud y Empleo* in the Dominican Republic, *Procajovent* in Panama and *Jóvenes en Acción* in Colombia. The second criterion is the availability of qualitative evidence about the

---

<sup>26</sup> It is important to point out that, after the financial support provided by IDB expired in 2010, Peru's *Projovent* program underwent a transformation in its basic design. The program is currently called *Jóvenes a la Obra*. In this technical note we generally refer to the *Projovent* program in its original version, unless otherwise stated.

programs, which led to the inclusion of *Proempleo* in Honduras, *Bécate* en Mexico and Peru's *Projovent* program. Thus, a combination of both qualitative and quantitative information sources is used in the analysis. Specifically, these sources are: i) impact evaluation results; ii) surveys of beneficiaries; iii) surveys of the participating firms; vi) surveys of the vocational training centers; and v) in-depth interviews with program administrators and participating firms.<sup>27</sup> The availability and sources of these data are summarized in Appendix 1.

---

<sup>27</sup> In contrast to the surveys, the in-depth interviews are aimed at providing anecdotic and qualitative information. They are based on lengthy, semi-structured questionnaires and, owing to this latter characteristic, tend to be conducted in a smaller scale.

**Table 1. Program Components**

	Type 1 Programs				Type 2 Programs		
	<i>Juventud y Empleo</i> (D. Republic)	<i>Projoven</i> (Peru)	<i>Jóvenes en Acción</i> (Colombia)	<i>Procajoven</i> (Panamá)	<i>Bécate Práctica Laboral</i> (Mexico)	<i>Bécate Mixta</i> (Mexico)	<i>Proempleo</i> (Honduras)
<b>Period of Execution</b>	2001 to date	1996 to date	2002-2005	2003-2009 <sup>I</sup>	2001 to date <sup>II</sup>	2001 to date <sup>II</sup>	2006 to 2009 and 2011
<b>Classroom Technical Training -</b>	Yes (150 hours, approx. 1 ½ months)	Yes (approx. three months)	Yes (360 hours, approx. 3 months in total for technical training and soft skills)	Only in one modality of the program (120 hours)	No	No	No
<b>Classroom “Soft Skills” Training</b>	Yes (75 hours, approx. ½ month)	No		Yes (150 hours, approx. in both modes)	No	No	No
<b>On-the-Job Training or Internship</b>	Yes (240 hours, approx. 2 months)	Yes (approx. 3 months)	Yes (approx. 3 months)	Yes (between 172 and 344 hours according to mode)	Yes	Yes	Yes (full time, from 1 to 3 months)
<b>Firms must have Vacancies</b>	Partially	No	No	No	No	Yes	Yes
<b>Firms must hire % of trainees</b>	No	No	No	No	No	Yes 70%	Yes 70%
<b>Eligible population</b>	Youngsters aged 16 to 29 from lower socioeconomic strata who have not completed secondary education and do not attend an educational center	Youngsters aged 16 to 24 from lower socioeconomic strata without higher education or university studies	Unemployed youngsters aged 18 to 25 from lower socioeconomic strata	Youngsters aged 18 to 29 who are neither studying nor actively seeking employment	Unemployed or under-employed youngsters aged 16 or over who have the skills demanded by the participating firms		Youngsters from 18 to 29, seeking employment, with three or more years of education who have the skills demanded by the participating firms
<b>Participants must meet the firms’ skill demands</b>	No	No	No	Partially (participants must pass tests of mental and mechanical capabilities)	Yes	Yes	Yes
<b>The firms must finance the internship, partially or totally</b>	No	Yes. The company pays a wage.	No	No	No	They must pay health insurance and insurance for accidents in the workplace	Wage payment is not compulsory, but usually occurs, since the youngsters join the firms under the same conditions as the rest of the workforce

Source: Authors’ own elaboration.

Notes: I. Several administrative difficulties during the operation of this program account for execution rates that were much lower than those projected. The problems were especially acute during the period 2006-2008, when the program execution rate fell dramatically. II. Different versions of the *Bécate* program have existed since 1984, when the PROBECAT program was implemented. The indicators presented in this table correspond to the execution during 2001-2011, as information could only be accessed for this time period.

The results of the impact evaluations are examined in Section 2. These results are complemented by the analyses presented in Section 3. In this section, based on statistical analysis of the surveys and the results of the in-depth interviews, the channels or mechanisms whereby the programs might have affected the labor market conditions of the beneficiaries are explored. The question of whether the program effects are mainly explained by the provision of training services, or by the provision of labor intermediation and recruitment services, is discussed. Section 4 discusses the reasons why some programs have a greater impact in certain demographic groups, regions or countries. In order to analyze the heterogeneity observed in the effects, different aspects of the context in which the programs were developed are examined, such as beneficiary composition, institutionality and the economic environment. Finally, Sections 5 and 6 respectively deal with the evidence arising from cost-benefit analyses and the possible displacement or “crowding out” effects that the programs might have on non-beneficiaries.

## **2. Evidence of the impact of the programs in LAC**

### **2.1. Evidence of the impact of the Type 1 programs**

This section presents the impact evaluation results of three programs: *Jóvenes en Acción* in Colombia, *Juventud y Empleo* in the Dominican Republic and Panama’s *Procajoven* program. With regard to Peru’s *Projoven*, an experimental impact evaluation is currently underway and the results were unavailable when this paper was written. In the case of the programs *Bécate* (Mexico) and *Proempleo* (Honduras), several non-experimental impact evaluations have been carried out. Unfortunately, their results are not reliable due to the limited quality of the data and have therefore been excluded from this paper. As will be discussed below, the use of non-experimental techniques poses major data requirements that, for administrative reasons, were not satisfied during the execution of these evaluations.

The results of the impact evaluations of *Jóvenes en Acción* in Colombia, *Juventud y Empleo* in the Dominican Republic and Panama’s *Procajoven* program are presented in Table 2. In the case of *Jóvenes en Acción* and *Juventud y Empleo*, the



evaluations are experimental. The evaluation of *Procajoven* has a quasi-experimental design in which the authors exploited the fact that, due to an administrative failure, training courses in which the participants had already been registered were cancelled. To the extent that the reason for course cancellations was exogenously determined, the individuals who registered for the program and were unable to participate constitute a reasonable control group.

With regard to the results of these three evaluations, several points are worth mentioning. In the first place, they provide evidence that Type 1 programs can generate positive impacts on the labor insertion conditions of their participants. However, such impacts are often limited to certain sub-groups of the population, or to specific regions, something that coincides with previous evaluations of similar programs (Ibarrarán and Rosas-Shady, 2009; Puentes and Urzúa, 2010). The evidence from Panama and Colombia shows impacts on employment, working hours and labor income for women. There is evidence from the Dominican Republic and Colombia of an increase in formality for men. There is also evidence of variation in impacts across regions, as is the case in Panama.

## **2.2. Lack of evidence regarding the impact of Type 2 programs**

Unfortunately, there is no available evidence regarding the impacts of the Type 2 programs *Bécate* (Mexico) and *Proempleo* (Honduras). Although various efforts have been made to measure the impact of these two programs using matching techniques, poor data quality have led to unreliable results. According to a conclusion that is well established in the academic literature, matching techniques can generate credible results only if: i) the evaluation incorporates a rich set of variables related to program participation, especially employment history and income levels; ii) the members of the control and treatment groups participate in the same labor market; and iii) the relevant dependent variables (such as, for example, employment, formality, income from employment) are measured in the same manner for both participants and non-participants (see, for example, LaLonde, 1986; Heckman, Ichimura and Todd, 1997; Heckman and others, 1999; Smith and Todd, 2003; Todd, 2011). Unfortunately, due to administrative reasons, the data collected for the impact evaluations of *Bécate* (Mexico) and *Proempleo* (Honduras) does not comply with these quality requirements, in spite of the best efforts from program evaluators and administrators.

Thus, major data requirements are necessary for a credible identification strategy using matching techniques. One way to illustrate this point more directly is by comparing the estimates from the experimental evaluation of *Juventud y Empleo* (Dominican Republic) with the estimates that one would get from a nonexperimental matching evaluation of the same program. Different authors have conducted similar analyses in order to illustrate in what conditions non-experimental impact evaluations of training programs are reliable (Smith and Todd, 2003; Heckman and others, 1997; Dehejia and Wahba, 2002, among others). The rationale behind these analyses is very simple: if non-experimental methodologies are reliable, the magnitude of the estimates should be similar to those obtained using experimental techniques.

Specifically, in this technical note, the impact of the Dominican Republic's *Juventud y Empleo* program was measured using a propensity score matching technique. Data on the treatment group is obtained from the experimental evaluation by Ibararán and others (2012). Information regarding the control group is obtained from October 2010 *Encuesta Nacional de Fuerza de Trabajo* (ENFT) (the Dominican Republic's National Labor Survey). Using the same approach from previous evaluations of the *Bécate* program in Mexico, a comparison group was constructed on the basis of gender, age, education level province, urban status, and education level of family members. The exercise used fewer covariates to increase the number of observations with common support. The estimates of the effect on employment obtained with this method range between 15.3 and 17.5 percentage points, depending on the set of covariates.<sup>28</sup> These results largely differ from the estimates from the experimental evaluation by Ibararán and others (2012), who find that the effects on employment is not significantly different from zero.

---

<sup>28</sup> In the most parsimonious specification, the estimate was 17.5 percentage points, and when the entire combination of variables was included, the estimate was 15.3 percentage points.

**Table2. Impact Evaluations of Type 1 Programs**

	<i>Juventud y Empleo</i> (Dominican Republic)	<i>Procajoven</i> (Panama)		<i>Jovenes en Acción</i> (Colombia)
<b>Authors</b>	Ibarrarán and others (2012)	Ibarrarán and Rosas-Shady (2007)		Attanasio, Kugler and Meghir (2011)
<b>Program components</b>	Training in technical and “soft” skills, plus internship	“Insertion” modality: Classroom training in technical and soft skills, plus internship	“Transition” Modality: Classroom training in soft skills” and extended internship	Classroom training in technical and soft skills, plus internship
<b>Labor Market Participation</b>	Not significant	...		...
<b>Probability of Employment</b>	Not significant	National level: Not significant In Panama City: 12 percentage points Women: 12 percentage points	National level: Not significant Women: 16 percentage points	Women: 7 percentage points. Men: Not significant points
<b>Weekly Hours Worked</b>	...	National level: Not significant In Panama City: 5 hours Women: 6 hours	National level: Not significant Outside Panama City: 5.8 hours Women: 7 hours	Women: 3 hours Men: Not significant
<b>Labor Income</b>	(Monthly earnings) Employees: 7 percent increase	Not significant	Not significant	Women: 22% increase Men: Not significant
<b>Formality</b>	(Employment with health coverage) Men: 17 percent increase	...		(Health insurance, pension or family benefits) Women: 7 percentage points Men: 5 percentage points
<b>Evaluation Date</b>	18 to 24 months after the program	9 to 20 months after the program		13 a 15 months after the program
<b>Control/ Comparison Group</b>	Youngsters who applied but were not accepted due to oversubscription Random assignment	Youngsters who applied but did not join the program due to course cancellations that were exogenously determined		Youngsters who applied but were not accepted due to oversubscription Random assignment

Source: Authors’ own elaboration, based on data drawn from Ibarrarán and others (2012), Ibarrarán and Rosas-Shady (2007) and Attanasio and others (2011).

Now, if an experimental evaluation of Type 2 programs were considered, there are challenges in the implementation that should be taken into account. Experimental evaluations are more challenging when applied to programs that, as a fundamental ingredient, select participants on the basis of characteristics that are correlated with the programs' outcomes. By substituting this selection process for a randomized assignment, the experimental evaluation disrupts an essential aspect of the program under scrutiny. This is precisely the case of Type 2 programs, in which the process of selection of beneficiaries is a fundamental ingredient. Therefore, in the implementation of an experimental evaluation of Type 2 programs, the level at which the of random assignment is done should be chosen with extreme caution. Alternatively, a rigorous non-experimental evaluation using a rich dataset must be implemented.

### **2.3.The lack of evidence concerning long-term impacts**

The time period between the baseline survey and the moment of the evaluation can greatly influence the estimated effects of these programs. Some training services will only increase the youngster's employability in the long run, in which case no employment effects will be found if the evaluation is conducted too soon. Moreover, training may have a negative effect on employment in the short-term since course attendance limits the time that youngsters can invest in job-seeking. This negative impact is known in the literature as a *locking-in effect* (see, for example, Card and others, 2010; Kluve, 2006). Finally, even if these programs do improve job placement in the short run, they may have no medium-term effects if beneficiaries can only access short-term jobs.

In the case of the programs implemented in LAC, there is little information about their medium and long-term effects. As shown in Table 2, there are no evaluations of the effects for any period exceeding two years. This is partly due to the costs of obtaining data in the long run. Young people from disadvantaged backgrounds are usually very mobile, making their location after program participation quite costly. Attrition can have severe effects on the validity of the estimations, given that mobility is likely to be correlated with labor market outcomes. In spite of these challenges, it is important to make efforts in this direction, given that program effects likely vary over

time and estimations of long-term impacts are required for rigorous cost-effectiveness analyses.

### **3. Strengths and weaknesses in the provision of training and labor intermediation services**

This section discusses the causal mechanisms through which these programs may affect labor market outcomes. A discussion on whether the program effects are mainly explained by the provision of training services or by the provision of intermediation and recruitment services is presented.

#### **3.1. Training services**

All the programs analyzed in this paper seek to improve labor market conditions for the youth through training, whether on-the-job or in the classroom. This strategy assumes that, first, the youngsters' employment prospects are limited by their lack of technical or "soft" skills and, second, that the services provided by these programs can help reduce such skill deficiencies.

There is evidence in favor of the first of these assumptions. The evidence from the in-depth interviews with firms conducted in this study suggests that many youngsters simply lack the skills demanded by the productive sector.<sup>29</sup> This is consistent with findings from large firm surveys in LAC that consistently show that a scarcity of skills, both technical and "soft", is an important drawback for employers in the region.<sup>30</sup>

With regard to the second assumption, the evidence is less compelling. As will be discussed below, there are many ways to provide vocational training and no robust

---

<sup>29</sup> Diverse representatives from the business sector from Mexico, Peru, Honduras and the Dominican Republic (e.g., directors of trade association or Human Resources managers) highlighted the severe difficulties they face to find qualified personnel, especially in industries in which direct contact with the costumers is required, such as commerce and tourism.

<sup>30</sup> In a survey conducted among 1,200 establishments in Argentina, Chile and the State of Sao Paulo in Brazil, Bassi and others (2012) found that only 12% of businesses do not have difficulties to find workers endowed with the skills that they need. Similarly, in a survey of 802 micro-enterprises in Peru, half of the firms identified the lack of skilled labor as the main recruitment difficulty (World Bank, 2011). Finally, the Manpower recruitment agency interviewed in 2010 nearly 12,300 employers in different countries throughout the Americas. The share of entrepreneurs that are unable to find qualified personnel to fill job vacancies is 56% in Peru, 48% in Costa Rica, 44% in Mexico, 40% in Argentina and 39% in Colombia (Manpower, 2010).

evidence indicating what combination of services will be the most effective to address the skill deficiencies of the youth.

### **3.1.1. Training in the Classroom**

As previously mentioned, only Type 1 programs offer classroom courses in technical skills. Given their short duration, these courses are usually oriented towards non-professional occupations, such as knitting, baking or sales assistant courses provided by Peru's *Projoven*, and courses for waiters, hairdressers, pharmacy technicians and auxiliary accountants provided by the Dominican Republic's *Juventud y Empleo*.

Furthermore, the majority of Type 1 programs offer courses to enhance the development of soft skills for work, which include social abilities (e.g., conflict resolution and team work), personal growth (e.g. self esteem, persistence and self-control) and communication skills.<sup>31</sup> The importance of this kind of interventions is being increasingly acknowledged by the academic literature. First, there is abundant evidence in the literature showing that some non-cognitive abilities, such as persistence and self-control, are important determinants of success in the labor market.<sup>32</sup> Second, it has been demonstrated that, in contrast to cognitive abilities which are established at an early age, non-cognitive skills (e.g., patience, self-control, temperament) are malleable even in more advanced years, suggesting potential benefits from investing in the promotion of non-cognitive skills among of the youth (see Cuhna and Heckman, 2010; Carneiro and Heckman, 2003; Heckman, 2000). There is also evidence indicating that soft skills are in high demand by firms in the region, and are often more valued than general or industry-specific knowledge. These suggests that the absence of soft skills

---

<sup>31</sup> The *Projoven* program in Peru is in this sense an exception because classroom training is limited to technical courses. However, all of the training center administrators who were interviewed in Peru stated that they incorporate soft skill training modules as part of their training program. Even though this intervention is not officially required, the training center administrators consider that the provision of soft skills is indispensable for a proper technical formation and to reduce the levels of drop-out.

<sup>32</sup> Diverse studies have found that the non-cognitive skills associated with self-esteem and self-control have an important impact on employment, education and social outcomes. In many cases, such impact is even greater than the effects of cognitive abilities (see, for example, Heckman, Stixrud and Urzúa, 2006).

can represent a greater handicap in the job market than the lack of technical knowledge.<sup>33</sup>

According to the surveys of *Procajoven* (Panama), *Jóvenes en Acción* (Colombia) and *Juventud y Empleo* (Dominican Republic), the majority of youngsters and firms participating in these programs find the technical courses to be useful and of high quality.<sup>34</sup> However, such perceptions should be interpreted with caution since they may not reflect real effects. Like econometricians who conduct the impact evaluations, program participants may be unable to construct the counterfactual labor market outcomes that would have taken place if they had not participated in the program. There is, in fact, evidence of a low correlation between real program effects and the effects perceived by beneficiaries of vocational training programs (Smith, Whalley and Wilcox, 2011).

Thus, the identification of the specific impact of classroom training in technical and soft skills requires a rigorous methodology. This poses an important challenge since the effect of the courses should be isolated from the effects of the other services provided by the programs.

Ibarrarán and Rosas-Shady (2007) made an effort to isolate the effect of *technical training in the classroom* in their evaluation of Panama's *Procajoven* program. They compared the effects of a modality of the program that offered classroom training in technical and soft skills plus an internship, with the effects of a modality that only offered training in soft skills and an internship of longer duration. They found that the modality that excluded technical training had greater effects on

---

<sup>33</sup> Two recent studies carried out by the IDB (Bassi et al, 2012) and the World Bank (World Bank, 2011) highlight the growing importance that non-cognitive skills, such as motivation, work ethic, responsibility and commitment, have among employers in LAC. Using information gathered from 1,200 firms in the region, Bassi et al (2012) find that firms value social-emotional skills more than general or industry-specific knowledge. This result is robust for all countries, sectors and occupations. In qualitative interviews, they find that, for many employers, the lack of training in technical skills is a deficiency that can be rectified through on-the-job training, whereas the lack of non-cognitive skills is a definitive barrier that prevents a person being hired. Similarly, the results of a study conducted by the World Bank (2011) in Peru, indicate that during the recruitment process, small and micro-enterprise employers give the same or sometimes greater importance to non-cognitive skills than to technical and professional knowledge.

<sup>34</sup> In the case of the Dominican Republic's *Juventud y Empleo*, 81% of the firms consider that the technical training received by young people is good or excellent, and 90% of the beneficiaries consider that the quality of the technical training imparted is good, and can be applied in the workplace. In the case of *Procajoven* in Panama, 94% of beneficiaries state that the technical training received in the classroom was useful or very useful. Eighty-four percent of the businesses that participated in Colombia's *Jóvenes en Acción* stated that the training received by youngsters in the training centers was adequate. Likewise, 97% of the youngsters involved in *Juventud y Empleo* have a positive opinion of the soft skills training module, while 99% of the *Procajoven* beneficiaries considered that the training received in soft skills was useful or very useful.

youth employment. Martínez (2011) makes a similar effort using data from Dominican Republic's *Juventud y Empleo*. His results indicate that beneficiaries randomly assigned to a modality that offers training in soft and technical skills plus an internship, had equal or inferior results to those receiving only training in soft skills plus an internship.<sup>35</sup> The results from Martínez (2011) and Ibararán and Rosas-Shady (2007) suggest that technical training in the classroom does not generate positive impacts. The benefits from technical training do not seem to exceed the negative *locking-in effect* that takes place when youngsters are withdrawn from the labor market to attend the training courses.

With regard to the impact of *soft skills training in the classroom*, direct evidence seems to be lacking. The authors of this study are unaware of evaluations that estimate the effect of this service in isolation.<sup>36</sup> However, there is suggestive evidence on the impact of soft skills training on non-employment variables. In their evaluation of the Dominican Republic's *Juventud y Empleo* program, Ibararán and others (2012) identified significant impacts on behavioral outcomes, such as perseverance and ambition, as well as in the incidence of teenage pregnancy. Insofar as the strengthening of these outcomes is an explicit objective of the soft skills courses, these results suggest such courses have a positive effect. However, they do not seem to improve labor outcomes at least in the short term, given that, as Table 2 shows, the overall effects of the program on employment and employment quality are limited.

Thus, recent program evaluations report that classroom training in technical and soft skills has a null or even negative impact on labor market outcomes. On the one hand, this may indicate that, given the modest per capita costs of these interventions and their short duration, they are insufficient to rectify the major skill deficiencies of the participants. On the other hand, it is possible that the impacts of these interventions are only visible in the long term. To examine these possibilities, a research agenda is suggested at the end of this note that specifically aims at four objectives: i) to evaluate if more intensive interventions yield greater short-term results; ii) to estimate the long-term effects of these interventions, particularly of those providing courses that develop soft skills for which there is fewer evidence.; iii) to evaluate whether these interventions

---

<sup>35</sup> The results of this evaluation are not presented in Table 2 because, at the time this technical note was written, the study was still being developed.

<sup>36</sup> There is no further evidence at the international level, either. In general, international studies of the effectiveness of interventions explicitly aimed at developing non-cognitive capacities are scarce, and the available results are inconclusive (Brunello and Shlotter, 2011).



have heterogeneous impacts across different occupations or industries; and iv) to analyze the cost-effectiveness of classroom training, which will require estimates of their medium and long-term impact.

What can explain the apparent lack of classroom training effects? One possible answer is a divergence between the content of classroom training and the skill demands of employers. If training centers don't have the incentives and/or capacity to identify the skill requirements of firms in the local labor market, they may teach training in technical skills that have little relevance.

This lack of incentives and/or capacity might arise from the decentralized scheme that characterizes these programs. As previously mentioned, in Type 1 programs key management functions are delegated to numerous training centers. One benefit from this delegation is that it reduces the costs of provision in isolated regions. Moreover, training centers that are closer to local industries should have, in theory, better information about the skill demands of firms in the local labor market. However, decentralization seems to have an important cost in terms of the quality of the services provided. The interviews to firms point at wide variations in the quality of training received by youngsters depending on the center they attend.<sup>37</sup> These deficiencies are likely the result of two factors: lack of capacity and lack of incentives. On the one hand, qualitative evidence indicates that many training centers lack the capacity and resources required to investigate the needs of local firms and/or to tailor their courses according to such needs.<sup>38</sup> On the other hand, the large number of training centers increases the costs of monitoring and oversight thereby reducing the incentives for centers to improve their service provision quality. The instruments for supporting management in the training centers, either via the national training institute as in the case of the Dominican Republic, or a monitoring and supervisory scheme, as in the case of Peru, Colombia and

---

<sup>37</sup> During the in-depth interviews conducted in the Dominican Republic and Peru, both businesses and civil servants referred to the great differences noticed in the training of interns according to the institution where they received instruction. A survey carried out among 170 firms participating in the program *Projoventes* in Peru also offered evidence about the divergence in quality of these training institutions. Whereas 62% of the businesses held a positive opinion of the training institutions (they considered, for example, that they "offered adequate training" or "they helped young people in need"), 28% expressed dissatisfaction (arguing that "they do not offer decent training" or "the training is very basic").

<sup>38</sup> For example, while some of the centers in the Dominican Republic have run for more than 40 years and have 5,000 graduates per year, some other centers are small academies with only one year of experience. In Colombia's *Jóvenes en Acción*, there is a large variation in the type of training centers which include non-governmental organization primary objective is not formal training as well as formal institutes of higher education (*Departamento Nacional de Planeación*, 2008). In the first public bidding of Peru's *Projoventes* program, 76% of the selected training centers had only 20 employees and were either private centers or NGOs.

Panama, appear to be ineffective. Indeed, in contrast to developed countries, in the majority of LAC countries the mechanisms for monitoring the quality of vocational training are still in their infancy. The evidence from in-depth interviews to program administrators conducted in this study indicates that the program oversight is in many cases limited to an assessment of the state of physical infrastructure.

The lack of relevant training also reveals the weakness of the so-called letters of intent, which are the tools used in Type 1 programs to link course contents with local business needs. Through these letters, training centers must demonstrate that local firms have an interest in the skills in which beneficiaries are trained. However, the evidence from surveys and in-depth interviews points at a weak link between training centers and firms, which are rarely asked to participate in the design of the training courses.<sup>39</sup> Moreover, the evidence indicates that the letter does not necessarily reflect the employer's real interest in hiring, or even a real interest in benefiting during the internship phase from the new technical skills acquired by the youngster. In fact, evidence from surveys and interviews indicate that many employers in Type 1 programs do not see their participation in the program as an opportunity to fill existing vacancies but, rather, as an opportunity to receive unpaid trainees that alleviate temporary staff shortages or as a form of social responsibility.<sup>40</sup>

The evidence from interviews and surveys also indicates that administrative aspects can limit the relevance of the letter of intent as an instrument that links the training content with the firms' labor demands. This is the case in Peru, where the letters of intent are signed months before the public bidding of the training courses is initiated. According to program administrators, this delay often means that many of the firms that did have vacancies when they signed the letter, had already filled these

---

<sup>39</sup> According to the business surveys, only 37% of the firms participating in Peru's Projoven informed the training centers of their skill requirements during the course design. Only 39% of the firms in the Dominican Republic's Juventud y Empleo were contacted by the training centers to identify their productive development plans. In the case of Jóvenes en Acción in Colombia, a third of the 533 businesses surveyed stated that their relationship with the training center was "distant" or "inexistent".

<sup>40</sup> In a survey of the 270 businesses that participated in Colombia's Jóvenes en Acción, respondents were asked about the primary motive for taking on trainees. The majority responded "to provide a social service", 18% responded "to have temporary, free manpower" and only 5% said that the main motive was to save costs by hiring semi-skilled staff. These results coincide with the interviews conducted by the authors of this paper with employers participating in the Dominican Republic's Juventud y Empleo. In these interviews, the majority of employers stated that the main advantage of the program was to help their firm cover temporary staff shortages at no cost. In the periods in which there is a sudden increase in workload they can receive interns, who are already trained and perceive no salary. The field study carried out by Fazio (2011) in the Dominican Republic offers further evidence to support this view.

vacancies at the time the youngsters had finished their training and were therefore available.

This suggests that, if an expansion of these programs is sought, more vigorous and integral investments are required to increase the quality of vocational training and the participation of the business sector in the design of the training contents. One alternative is to integrate these training centers to a national continuous training system, in which skills requirements are defined by the productive sector, the pertinence of course contents is verified and training methods are standardized, evaluated and certified.

### **3.1.2. On-the-Job Training and Internships**

Both Type 1 and Type 2 programs include an on-the-job training component whose most obvious advantage is to offer beneficiaries practical and active instruction in occupational skills. In spite of the importance of the on-the-job training component, very few studies in LAC measure the returns from these services in isolation, and in the international context the evidence is also scarce. Attanasio and others (2008) provide indirect evidence of the returns to on-the-job training services in Colombia's *Jóvenes en Acción*. The authors find that, while increasing the duration of classroom training does not affect the program's returns, an increasing in the hours of on-the-job training does have an impact. This result suggests that on-the-job training is of greater importance than classroom-based training, an observation that coincides with some available results from the United States and Europe (Betcherman and others, 2004; Heckman and others, 1999; Sianesi, 2003). However, as stated in Card and others (2010) these findings must be interpreted with caution, as there are probably other factors associated with the type and duration of training that simultaneously influence job market outcomes.

One indirect way of assessing the benefits of on-the-job training is by identifying the frequency with which the youngsters find a job in the occupation for which they have been trained. Given the design of the questionnaires, this indicator can only be built for Type 2 programs which, unlike Type 1 programs, contain information regarding the occupation of the youngsters in the first job they get after completing the program. The percentage of beneficiaries who performed during their first post-

internship jobs the same tasks they learned during their on-the-job training was 65%, 72% and 51% respectively for Mexico's *Bécate-Práctica Laboral* and *Bécate Mixta*, and *Proempleo* in Honduras. It should be mentioned, however, that this is an inexact measurement of the value of on-the-job training, as the skills acquired in training can undoubtedly be transferred between different occupations.

What, then, determines the quality of on-the-job training? The first element to consider has to do with the incentives an employer has to invest in the trainees, which are largely determined by the probability that the firms will hire them permanently once the training is over. In principle, the greater the probability of permanent hiring, the greater the incentives for employers to provide good-quality training and to invest in the development of skills whose impact is apparent only in the long term.

In this sense, Type 2 programs have an advantage over Type 1 programs, because they incorporate a commitment in which firms are required to hire a share of 50% - 70% of the youngsters at the end of the training phase. Type 1 programs do not impose this requirement, and set instead modest immediate labor insertion goals. For example, Dominican Republic's *Juventud y Empleo* established a job placement goal at the outset of the program in which firms had to hire at least 30% of the youngsters at the end of an internship and, in practice, this goal was not systematically monitored. On some occasions, Type 1 programs have introduced mechanisms to stimulate labor placement, but most often these seem to be weak or ineffective. For example, although firms participating in Dominican Republic's *Juventud y Empleo*, must signal their intention to hire a certain number of youngsters in the letter of intent, this commitment is not binding.<sup>41</sup> In the case of Peru's *Projovent*, participating firms were committed to paying the interns a fraction of the minimum wage, which could have encouraged more investment in training quality and hires.<sup>42</sup> However, according to the administrators of the program, this salary did not translate into a greater hiring rate and, on the contrary, limited the number of participating firms suggesting that, for many employers, the internships are merely a way of accessing a cheap source of temporary labor.

---

<sup>41</sup> Specifically, each training center in the Dominican Republic's *Juventud y Empleo* must demonstrate, through the letters of intent, that employers are willing to hire permanently at least four of the twenty youngsters in each training course. However, this is not a binding commitment as employers are allowed to change their minds when the internship is over.

<sup>42</sup> Until 2010, firms were given the option of either paying a minimum wage or adhering to a vocational training agreement laid down in the Peruvian employment legislation. According to this agreement, the firms could pay a fraction of the minimum wage as long as the trainees worked less than a full working day. The option of adhering to this agreement was discontinued in 2010 and, since then, employers must hire the youngsters via traditional contracts.

It is therefore not surprising to find large variations across Type 1 and Type 2 programs in the investment that firms make during the training phase. One illustrative example is that, even though the firms participating in Honduras's *Proempleo* are not obligated to pay a salary to the trainees during the on-the-job training phase, most of them do, since the youngsters enter the firm under identical contractual conditions as any other employee beginning a work probation period.<sup>43</sup> This contrasts with evidence gathered from in-depth interviews with employers in the Dominican Republic where, very often, the young interns not only did not receive a wage, but were called on to perform tasks during their internship phase that were not particularly instructive.<sup>44</sup>

In addition to the incentives that firms have to invest in the training process, a second element that also affects the quality of on-the-job training is the size of the firm. Larger firms certainly have more capacity and resources to perform better-quality training. They usually have their own Human Resource departments, which design clearly-structured training programs. For example, the in-bond textile factories in Peru, Honduras and Mexico have their own "training schools" for new operators, in which significant time and production materials are invested. Large hotels in the Dominican Republic also have their training programs with clearly established modules. In this sense, *Proempleo* in Honduras and Mexico's *Bécate Mixta* have an advantage, given their orientation towards the larger-sized firms. In the case of the Type 1 programs, the participation of larger firms is not favored.<sup>45</sup>

Therefore, the quality of on-the-job training received by participants will be affected, in the first place, by the incentives that employers have to invest in youth training and, second, by the existing capacity of firms to teach a good-quality instruction. In this sense, introducing mechanisms to attract firms with a real interest to invest in training and with the capacity to do so, is fundamental. This relates to the

---

<sup>43</sup> Of the 14 firms interviewed in Honduras, only one of them did not paid salaries to its interns. This was a rare exception according to the administrators of the program.

<sup>44</sup> In some of the firms interviewed during the field work, the tasks assigned to the interns had a questionable value in terms of human capital formation, such as making photocopies. In other cases, the trainees were not involved in the firm's productive process. For instance, when asked about the responsibilities of a trainee, an employer stated that "we make him run the errands that come along over the day". The results of the field study carried out by Fazio (2011) provides further evidence in this direction.

<sup>45</sup> For example, in the Dominican Republic's *Juventud y Empleo* program, the training centers are linked to firms in all industries and of all sizes. There are family businesses of less than five employees as well as hotels with hundreds of workers. In the case of *Projoven* in Peru, there is a clear orientation towards the smaller-size firms: 75% of the firms are small or micro-enterprises.

importance of the labor intermediation services offered by the programs, a topic that is examined in more detail below.

## **3.2. Labor intermediation services**

### **3.2.1. Establishing links with firms with vacancies**

By matching participants with firms during the on-the-job training, the programs can reduce the job-search costs for the youngsters and the recruitment costs for the employers. In principle, this service can increase the job opportunities of the beneficiaries even in the extreme case in which the programs have no impact on human capital. Unfortunately, there is no evidence supporting the validity of this hypothesis, given that the effects of the intermediation services offered by these programs have not been estimated in isolation. The research agenda set out at the end of this paper puts forward some proposals in this direction.

Although there are no impact evaluations that assess the effectiveness of these services, evidence from surveys and in-depth interviews do provide some descriptive and qualitative evidence in this regard. Such evidence is analyzed in this section.

As previously mentioned, a clear distinction between Type 1 and Type 2 programs is that in the latter type, firms are committed to hire a share of the beneficiaries after the on-the-job training phase. This implies that the administrators of Type 2 programs invest greater resources in the labor intermediation process given that, first, they have to identify firms with vacancies and, second, they have to locate beneficiaries with the skills required by such firms.

In order to identify the firms' hiring requirements, the operators of *Bécate* make use of the National Employment Service (SNE), which in Mexico is largely developed. In fact, the staff members of *Bécate* are also part of the SNE and use this service to identify vacancies and find beneficiaries with the required skills. In the *Bécate Mixta* model, the programs' operators focus on identifying the staff selection process within big businesses. In the modality called *Capacitación para la Práctica Laboral* (Training for Practical Work), the operators of *Bécate* locate vacancies in smaller enterprises and,

for this purpose, they hire the services of professionals with a career in the local industries known as *instructores monitores* (trainer-monitors).<sup>46</sup>

The task of finding firms with vacancies is much harder in Honduras, where the SNE is still a young service. Even though an effort is being made to develop the SNE, this service is still used by very few employers and job seekers.<sup>47</sup> Therefore, the program administrators of *Proempleo* have sought the support of trade associations, such as the association of in-bond-factories and the the chamber of commerce, which provide information about recruitment processes among their affiliates. These trade associations have brought an additional benefit to the operation of *Proempleo*. Specifically, their participation has increased the confidence the employers have on the program and stimulated their participation. This is a very valuable contribution given that the inspection and regulation responsibilities of the *Secretaría de Trabajo* (Employment Secretariat) often clog up the communication channels with the firms. However, in spite of the support received from the trade associations, civil servants responsible for *Proempleo* in Honduras frequently encounter difficulties in identifying staff vacancies, and often have to resort to informal information channels, such as personal contacts, to learn about job openings.

In the case of Type 1 programs, identifying firms with vacancies is even more difficult. The evidence from surveys and in-depth interviews suggests that training centers lack the capacity to identify vacancies in the local labor markets. Although the training centers have the advantage of being located in local labor markets, it is unclear whether they have the systematic information channels to learn about firms that are hiring.

Moreover, in most Type 1 programs, training centers do not have strong incentives to invest in the identification of firms that are seeking for personnel. Unlike Type 2 programs, in Type 1 programs the existence of staff vacancies is not a

---

<sup>46</sup> However, according to some of the interviews with training-monitores conducted by the authors of this paper, in remote regions the SNE labor exchange is insufficiently developed, so small and micro-enterprises do not advertise their staff vacancies. This means they have to use other sources of information to look for vacancies, such as the press or personal contacts.

<sup>47</sup> In effect, none of the 15 businesses in Honduras that participated in the in-depth interviews conducted by the authors for this study use the SNE for recruitment purposes. Instead, they recruit staff on the basis of personal recommendations, or by simply reading the *Curricula Vitae* that job seekers voluntarily bring to the firms. The industrial trade associations' labor exchange services are also used with some frequency. Something similar happens in Peru and the Dominican Republic where, again, the majority of the employers interviewed stated that they recruited on the basis of personal references or via private employment agencies.

prerequisite of participation. For example, of the 383 firms surveyed in the Dominican Republic in 2010, 80% did not have any vacancies when they took on trainees.

Nonetheless, the administrators of Type 1 programs have implemented various strategies to increase the participation of firms with vacancies. In the case of *Juventud y Empleo* in the Dominican Republic, the operators introduced financial incentives whereby the training centers received a *placement bonus* based on the number of beneficiaries that were permanently hired at the end of an internship. Whereas this, in principle, should have stimulated the training centers to search for vacancies, very few of them actually claimed the bonuses.<sup>48</sup> A financial incentive scheme was also implemented in Peru's *Projoven* which gave bonuses to training centers for each youngster inserted in an internship. However, as was the case in the Dominican Republic, the introduction of this scheme did not alter placement levels. The experiences from Peru and the Dominican Republic suggest that the introduction of economic incentives is in itself insufficient to increase placement levels if training centers have a limited capacity to find vacancies in the local labor markets.

As a consequence of the effort that the administrators of Type 2 programs put on the labor intermediation services, most firms join these programs seeking support in the recruitment process. In both the in-depth interviews and the surveys, the majority of employers participating in Type 2 programs stated that the prime benefit from program participation is the support they receive from program staff during the hiring process. In the case of *Proempleo* in Honduras, the majority of the employers interviewed stated that, given the support they receive from program administrators during the recruitment process, they would participate in the program even if they did not receive a wage subsidy from the government. Such was the opinion of the managers of small firms, with little infrastructure to manage the recruitment process, as well as the view of the managers of large in-bond assembly plants, which could speed up their massive staff recruitment thanks to the support received from the program's administrators. This establishes a stark contrast with firms in the Type 1 programs which, as previously mentioned, most of the time participate in the programs to fulfill a social responsibility or to fill temporary staff requirements at a low cost.

---

<sup>48</sup> Recently, the Dominican Republic has decided to integrate its *Juventud y Empleo* program with the SNE, which will be in charge of identifying vacancies and placing interns.



### 3.2.2. Job-Search Methods

Even if these programs don't increase employment rates in the short run, they may improve the employability of the beneficiaries in the long term by changing their job-search methods and widening their network. For example, program participants may increase their probability to be employed if they are able to use professional references from the firms in which they do the internships. The survey of beneficiaries of Dominican Republic's *Juventud y Empleo* can be used to examine the importance of this particular mechanism. Specifically, one can compare the methods to find a job used by the members of the treatment and control group who were employed at the time of the survey. Since participation was randomly assigned, treatment and control groups are similar in all characteristics associated with labor market outcomes, except for their participation in the program. The results of this comparison suggest that participating in the program does not have an impact on the mechanisms typically used to find a job. Only 4% of the beneficiaries who were employed at the time of the survey found that job using references from the firm where they did the internship or were employed at that same firm. Most members of the control and the treated groups found their job using information from personal contacts, such as relatives, neighbors and friends. This method was used by 73% of the beneficiaries and by 77% of the control group, and the difference between these shares is not statistically significant.<sup>49</sup>

### 3.3. Variation in placement rates

There are stark differences in the placement rates between Type 1 and Type 2 programs. As can be seen in Table 3, the percentage of youngsters who are hired at the end of the program internship is much higher in Type 2 programs. This may be partly the result of the commitment to hiring that firms have to make when they participate in these programs. Variations in placement rates may also result from the rigidities in the timing of most Type 1 programs that are introduced by the bidding processes. As discussed earlier, the fact that the timing of the program is determined by the bidding process reduces the chance that the availability of the trainees coincides with the moment in

---

<sup>49</sup> These surveys also show the lack of awareness among the majority of youngsters regarding the public employment service. In a survey of 107 young people who did or were doing an internship through *Juventud y Empleo*, 60% of them had never heard of the National Employment Service.

which vacancies are available. Finally, variations in placement rate may also be explained by differences in the characteristics of the beneficiaries. Compared to Type 2 programs, participants in Type 1 programs are less -skilled, younger and therefore less-employable. This point is discussed in more detail in the following section.

**Table 3. Job Placement Indicators**

Indicator	Type 1 Programs			Type 2 Programs		
	<i>Juventud y Empleo</i> (Dominican Republic)	<i>Procajoven</i> (Panama)	<i>Jóvenes en Acción</i> (Colombia)	<i>Proempleo</i> (Honduras)	<i>Bécate Mixta</i> (Mexico)	<i>Bécate Capacitación Práctica Laboral</i> (Mexico)
<b>Share of beneficiaries that were hired or received an offer in the firms where they did the internship</b>	33% received a job offer from the firm at the end of the internship.	22% were hired by the firm at the end of the internship	32% were hired by the firm at the end of the internship	94% were hired by the firm at the end of the internship	72% got were hired by the firm at the end of the intersnship	50% to 70% were hired by the firm at the end of the internship

Source: Authors' own elaboration.

#### 4. What can explain the variation in program effects?

As previously mentioned, most impact evaluations of youth training programs find heterogenous effects according to variables such as region or gender. In this section, the information from surveys and the in-depth interviews is used to analyze the diverse factors that may explain variations in program effects.

##### 4.1 Participants' characteristics and locations

Job training programs for young people often have differential impacts according to the demographic characteristic of their beneficiaries. A common result is heterogenous effects by gender. As seen in Table 2, in the evaluations of *Procajoven* in Panama and *Jóvenes en Acción* in Colombia, greater impacts were found for women in outcomes such as the probability of finding a job, working hours and income levels. In the case of *Juventud y Empleo* in the Dominican Republic, there were greater effects for men in the probability of finding a formal job. It is likely that other characteristics, such as level of education, age and previous work experience have an influence on the effects of the

program. It is therefore important to analyze the characteristics in which the beneficiaries of the programs differ.

Table 4 compares program beneficiaries according to characteristics that are correlated to labor market outcomes, such as age, level of education, geographical location and previous work experience. First, differences in the distribution of participants according to gender are worth highlighting. With the exception of the *Mixta* modality of Mexico's *Bécate*, the beneficiaries of these programs are mainly women. *Jóvenes en Acción* in Colombia stands out in this sense, as approximately three-quarters of the beneficiaries are women.

Participants in Mexico's *Bécate* program have the highest age on average, something that results from the fact that, even though a majority of participants are under age 30, this program is not exclusively open to the young. Consistent with having a greater average age, participants of *Bécate* were more likely to have employment experience and to be searching for a job at the outset of the program. Such features certainly increase their employability. This contrasts with the case of Peru's *Projoven*, whose participants have the lowest average age, reflecting the fact that underage minors can participate in the program. This, in turn, brings its own challenges in terms of subsequent job placement. Although Peru's labor legislation allows minors to take up full-time employment, hiring them involves special regulations and high bureaucratic costs for the firms.

Large variations in the participant's average education may also explain differences in the employment rates across programs. In this sense, Dominican Republic's *Juventud y Empleo* stands out, as this program explicitly excludes young people who completed secondary education and, therefore, has the lowest average education level of all programs. The programs *Procajoven* in Panama and *Bécate Práctica Laboral* in Mexico have a better-educated beneficiary group, with 20% of the participants having university degrees. *Proempleo Honduras* y *Bécate Mixta* in México, also have a relatively high share of participants with university degrees, of approximately 10%.

**Table 4. Demographic Characteristics of Beneficiaries at the beginning of the program**

	Type 1 Programs				Type 2 Programs		
	<i>Juventud y Empleo</i> (Dominican Republic)	<i>Projoven</i> (Peru)	<i>Jóvenes en Acción</i> (Colombia)	<i>Procajoven</i> (Panama)	<i>Proempleo</i> (Honduras)	<i>Bécate Mixta</i> (Mexico)	<i>Bécate Capacitación para la Práctica Laboral</i> (Mexico)
<b>Average age</b>	21.3	19.1	21.0	22.5	21.9	27.5	26.6
<b>Men</b>	37	43	26	35	44	51	33
<b>Married or cohabiting</b>	24	12	...	...	36	31	27
<b>Lives in the Nation's capital</b>	33	29	32	...	31	...	...
<b>Incomplete secondary education or below</b>	95	16	26	31	45	53	31
<b>Completed secondary or vocational education</b>	4	82	72	47	45	36	49
<b>University or higher education program</b>	1	2	3	20	9	11	20
<b>Searching for work</b>	...	13.5	...	60	...	77	80
<b>Had at least one job (either salaried or self-employed)</b>	21 (At least one previous job, paid or unpaid, in the last two years)	...	...	27 (At least one previous paid job)	60 (At least one previous job, paid or unpaid)	81 (At least one previous paid job)	64 (At least one previous paid job)
<b>Was studying at the time</b>	23	...	...	21	18	11	17

Source: Authors' own elaboration.

This variation in the characteristics of the beneficiaries reflects the differences in the program selection processes. Table 5 illustrates this point, by showing the distribution of beneficiaries according to the channel through which they learned about the existence of the program. In the case of *Bécate Mixta* (Mexico) and *Proempleo* (Honduras), the majority of participants learned about the existence of the program from firms where they were seeking employment. Therefore, most of the participants were youngsters who are actively searching for jobs and, given the participation requirements in these programs, had to go through selection processes that included an assessment of their profiles and, occasionally, personal interviews and psycho-technical tests. In contrast, most beneficiaries of Type 1 programs found out about the programs

through informal channels, such as personal recommendations from neighbors, friends or relatives. Insofar as these differences in the selection process reveal aspects such as the willingness to work and the access the employment networks, they are also associated with the participants' employability.

**Table 5. Channel through which the beneficiaries find out about the program (% of participants)**

	Type 1 Programs				Type 2 Programs		
	<i>Juventud y Empleo</i> (Dominican Republic)	<i>Projovent</i> (Peru)	<i>Jóvenes en Acción</i> (Colombia)	<i>Procajovent</i> (Panama)	<i>Proempleo</i> (Honduras)	<i>Bécate Mixta</i> (Mexico)	<i>Bécate Capacitación para la Práctica Laboral</i> (Mexico)
Neighbors, family, friends	64.6	51.5	55.2	53.9	22.7	21.2	54.9
Firm where youngster searched for employment	0	0	0	0	58.1	54.2	2.7
National Employment Service (SNE), employment agency, labor exchange, employment website, Ministry of Employment	3.6	2.7	0	1.2	10.0	12.3	21.3
Training center, center for Human Resources, school, national training institute	10.9	0.6	8.3	14.7	3.7	...	...
Radio, television, press, other media	13.6	16.9	18.5	21.2	5.4	6.1	8.4
Neighborhood organizations, church, municipaliyt	7.3	0.1	3.5	7.3	0	...	...
Street broadcast, megaphone, posters and flyers, promoters	...	28,2	14,6	1,6	...	6,3	12,7

Source: Author's own elaboration.

These variations in the characteristics of the beneficiaries and, consequently, in their employability, highlight the need to tailor the provision of services accordingly. For instance, as stated in Cooper and others (2011) in the case of programs with a high share of women, such as *Jóvenes en Acción* in Colombia, the provision of childcare facilities might be essential. Job placement for minors under the age of 18, which is one of the objectives of Peru's *Projovent* program, also requires for special measures, given that the employment of under-18s is governed by a special legislation. It is worth mentioning that, for this particular demographic group, efforts towards reinsertion into the education system might be more beneficial than those aimed at labor market insertion. Finally, the training of beneficiaries with no secondary education, as in the

Dominican Republic's *Juventud y Empleo* program, requires for more vigorous interventions in terms of training. The statistical and qualitative evidence indicates that the absence of a secondary degree is a major handicap in the labor market.<sup>50</sup>

It is, therefore, clear that trade-offs are involved in the selection of the target population. On the one hand, targeting a population with major skill deficiencies and economic disadvantages may prove ineffective to improve labor market outcomes, given the low intensity of the interventions that these programs provide. On the other hand, if a more educated population is targeted, there is an opposite risk: the intervention might be redundant since the beneficiaries do not require these type of services to improve their labor market conditions.

An adequate selection of the target population can benefit from information on the reasons why certain demographic characteristics impact the results of the program. Unfortunately, there are major knowledge gaps in this regard. For example, even though several evaluations have shown that the effects on employment and labor income are greater for women than for men, the causes of these gender differentials are still not clear. On the one hand, such differentials could be explained by systematic differences in skills or job market preferences between men and women. Alternatively, these heterogeneous gender effects could be the result of differentials in labor demand. Thus, the greater program impact for women could be explained by firms being more likely to hire female workers. Given that these alternative explanations support different policy prescriptions, research into this area is a vital part of the agenda suggested at the end of this paper.

#### **4.2. Context in which the programs are developed**

Like the characteristics of the participants, the institutional and economic context may also explain variations in the results across programs.<sup>51</sup> In this regard, there are five aspects that are worth highlighting.

---

<sup>50</sup> In the in-depth interviews in Honduras, Dominican Republic, Mexico and Peru, many employers stated that the possibilities of offering a job to individuals who have not completed their secondary education are minimal. Furthermore, in a survey of 170 employers participating in Peru's *Projovent*, 42% of them stated that a complete secondary education is a minimum requirement.

<sup>51</sup> Very few studies have been carried out that analyze the way in which the legal and economic context affects the programs. Kluve (2006) takes steps in this direction when he conducts a meta-analysis of vocational training programs in Europe, many of which are targeted on young people. He finds that, the higher the costs of laying off workers, the smaller the probability that the programs have a positive

The first has to do with features of the *employment legislation* that influence the incentives to hire young workers, such as the minimum wage, the costs of dismissal and regulations for temporary work. For example, according to in-depth interviews conducted with officials of Honduras's *Proempleo*, an increase in the minimum wage had a stark, negative impact on the performance program. Many firms reconsidered their recruitment plans after the salary hike, reducing the availability of vacancies that could be filled by the program participants. A second example is the existence of vocational training agreements in Peru's labor legislation that allow employers to hire trainees under alternative salaries and flexible regimes. The existence of these agreements facilitated the hiring of young interns in Peru's *Projovent*.

The second point relates to *the quality and coverage of the education system* in the country where the program operates. The value-added of a job training program depends on the skill deficiencies it tries to address. For example, the provision of remedial language courses is of greater importance in a country where a high share of the young population is functionally illiterate. Even within the same country, there can be large differences in the quality of formal education, which implies there will be regional variation in the pertinence and relevance of different training interventions.

In third place is the *development of the job training system*. The relevance and quality of the training provided by private centers will clearly be greater in a country that has a good system of continuing training based on labor competencies determined by the productive sector.

The fourth point refers to the *institutional framework* in which the programs operate. Clearly, the financial sources and the level of political commitment will influence the programs' long-term sustainability. In the case of most programs analyzed in this technical note, their continuity largely depended on the timing of the credit provided by the IDB and on changes in the national government. Thus, the decision to end or expand a program is often unrelated to the results from technical studies. For example, the decision to cancel Colombia's *Jóvenes en Acción* was taken in spite of robust evidence showing its benefits and cost-effectiveness and was, instead, affected by changes in the national government.<sup>52</sup>

---

employment effect. This result is consistent with evidence for LAC that shows the negative impact of the costs of laying off workers on youth employment rates (Montenegro and Pagés, 2003).

<sup>52</sup>The exception is Mexico's *Bécate* program, which has operated uninterruptedly since it's the original program, *Probecat*, was instituted in 1984. This means that this program has continued its operations in

The final aspect relates to the *economic environment* and, in particular, the existence of *a demand for the skills developed by the beneficiaries*. Several impact evaluations, including the study by Ibararán and Rosas-Shady (2007) whose results are shown in Table 2, have found that these programs have greater effects in the capital cities, a finding that could be explained by a higher demand for formal employment in those cities. This issue highlights the difficulties that arise when these programs are operated in rural areas, where there are very few opportunities of formal employment. To tackle this problem, the administrators of the Dominican Republic's *Juventud y Empleo* and Peru's *Projoven* introduced special modalities in rural areas that provide training and support for self-employment and micro-enterprise development. In this regard, it is worth mentioning that training for self-employment can require more intensive interventions than job training and success often depends on personal skills that are not always present (Cooper and others, 2011).

This discussion highlights the importance of identifying the context in which job training programs for the youth are successful. This issue is especially relevant in the decision to extend a program's coverage. Research studies that could guide program administrators when they face this kind of decision are suggested at the end of this document.

## **5. Cost-benefit analysis of youth training programs**

Although the evidence on the impact of these programs is growing, there are still very few efforts to conduct cost-effectiveness or cost-benefit analyses of these programs (Puentes and Urzúa, 2010). The evidence from the few cost-benefit analyses of youth training programs in LAC leads to mixed conclusions. On the one hand, the cost-benefit analysis of Colombia's *Jóvenes en Acción* indicates that the program had greater net benefits than those estimated in other developing countries, even in the less optimistic scenarios (Attanasio and others, 2011). In contrast, Aedo and Núñez (2011) found that, depending on the assumptions regarding indirect costs and the duration of benefits, the *Chile Joven* program may have had a negative return.

---

spite of five changes of government. This is due, in part, to the fact that the program is an integral element of the Nation Employment System (SNE), which is very well developed in the country.



## 6. Crowding out effects

One cost that is rarely considered in these analyses is the “displacement” or “crowding out” effect of non-participants, which may occur in an environment in which wages are inflexible. If wages are flexible, the arrival of newly-trained workers reduces salaries, but does not cause a displacement of non-participants from jobs. However, given that the minimum wage is a relevant price of reference in the labor markets that beneficiaries of these programs typically access, the crowding-out of non participants may take place. It is therefore important to justify the targeting of youth programs on this particular sector of the population. At the beginning of this paper, several reasons that justify targeted interventions for the youth were discussed, such as the barriers faced by youngsters in the labor market due to their lack of experience and contacts and the long-term “scarring” consequences that a negative first labor market experience can have in long-run labor market outcomes. However, if these interventions lead to the the loss of employment of workers in a different age group, it is important to assess the net benefits from the point of view of society as whole.

Of course, the estimation of displacement effects is only relevant in programs that have a statistically and economically significant impact on the employment level of the participants. Even in the case of these programs, efforts to study displacement effects have been rare. One of the few studies was conducted by Crépon and others (2011), who examine a randomized intervention to investigate if vocational training services for young unemployed people in France generated displacement effects. The results suggest there is no displacement even in areas with a high concentration of young beneficiaries. The evaluation of Colombia’s *Jóvenes en Acción* by Attanasio and others (2011) points in the same direction. The authors find no evidence of displacement, although they acknowledge that the results should be interpreted with caution because the experimental design wasn’t aimed at the identification of this type of effect.

The in-depth interviews conducted with program participants provide indirect and anecdotal information regarding this issue. The majority of employers stated that their participation on the program did not modify their recruitment plans. Instead of creating new positions, the employers filled existing vacancies with young program beneficiaries. Some employers in the Dominican Republic even refrained from hiring permanent staff due to the availability of temporary trainees. This does not imply, of

course, that the displacement effects are permanent. If an improved quality of the matches or the skills brought by program participants lead to an increase in the firms' productivity, new jobs may be created over the medium term. However, in the absence of these productivity gains, these programs might instead lead to a redistribution of employment in which beneficiaries displace non-participants and subsidized labor costs translate into greater profits for the firm. At the end of this paper, a research agenda to further investigate this kind of impact is suggested.

## **V. CONCLUSIONS AND RECOMMENDATIONS**

Millions of youngsters in LAC are unemployed, inactive or working in unstable and informal jobs. For many of them, the precariousness of their labor conditions leads to marginalization and the adoption of risky behavior, such as violence and criminality. To address this issue, governments in the region have implemented a wide range of policies, of which job training programs is the most common response. However, in spite of the importance of these programs, the literature that rigorously identifies their effects is still in its infancy and in-depth qualitative analyses of the factors that influence the success of these programs are rare.

This paper aims at contributing to this literature by an in-depth analysis of six job training programs for youth in LAC. The main inputs for this analysis are the results of impact evaluations, statistical analysis from surveys and in-depth interviews with program participants and administrators. As a result of this analysis, a series of factors related to the design of the programs that may influence their odds of success were identified. Fundamental knowledge gaps related to the programs' impacts and operation were also determined. These findings are summarized in the two products presented below: i) a series of policy recommendations and ii) a proposal for a research agenda in this area.

## 1. Policy recommendations

### 1.1. Targeting the relevant population

1. A clear definition of the target population is crucial, so services can be tailored accordingly. Type 2 programs that involve a highly selective process of beneficiaries have the virtue of achieving high labor insertion rates. However, due to this selectivity, these programs have the risk of supporting youngsters who might have had access to formal employment even in the absence of the interventions. Therefore, it is essential to do rigorous impact evaluations of Type 2 programs. In contrast, to the extent that programs like the Dominican Republic's *Juventud y Empleo* and Peru's *Projovent* are mostly directed to young people from disadvantaged backgrounds, they may provide interventions that are too modest to rectify the skill deficiencies of the participants. This underscores the importance of adjusting the interventions so they suit the characteristics of the beneficiaries.<sup>53</sup>

2. It is also important to identify the sub-groups of the population for whom these interventions are ineffective or insufficient. Obviously, there will be efficiency gains if these sub-groups are removed from the target population, and resources are reallocated towards those who can really benefit from the programs. For example, it is likely that, due to their short duration and low per capita investments, these programs are inadequate for youngsters with severe training and educational deficiencies. The experience of Peru's *Projovent* also suggests that these programs are unsuitable for disadvantaged minors, who may require interventions that aim at goals beyond labor market outcomes. The best approach for this population may be the introduction of measures that bring them back to school.

3. It is important to acknowledge that, given these programs' low *per capita* costs, modest impacts should be expected. It is not reasonable to expect a drastic improvement in labor income or employment, especially in the case of the more disadvantaged youth, since this would imply an extraordinarily high rate of return.

---

<sup>53</sup> This point has prompted the administrators of the Dominican Republic's *Juventud y Empleo* program to consider design modifications in which they plan to introduce different models according to the target youngsters' characteristics.

## **1.2. Increasing the relevance of training and the opportunities of job placement**

4. It should be clear that the main objective of these programs is to improve labor market outcomes, and that training is a means of reaching this goal, rather than an end in itself. Therefore, programs that delegate training service provision to private centers should verify the capacity that training provide demand-driven training and to identify job opportunities in the local labor markets. Although delegating the training function may increase the geographic coverage of the program, it will also imply relinquishing the operation to training centers that have inferior management capacities, or that lack the resources needed to establish communication channels with local businesses. Some educational institutes, such as public universities, may have the capacity to offer good quality courses but may also have weak links with potential employers in the private sector.

5. In the medium term, these programs should operate as part of more integral systems of continuous training that are based on competencies demanded by the productive sector and provide retraining services, so workers can constantly upgrade their skills.

6. Even though the literature hasn't reached definitive conclusions, the available evidence suggests that, in many cases, on-the-job training in technical skills is more effective than classroom instruction. It is important to identify for which occupations or industries this happens to be the case. An additional benefit of a program based on on-the-job training is that its coverage won't be restricted by a limited market of training centers.

7. A vast theoretical and empirical literature justifies interventions aimed at to fostering and developing "soft" skills among disadvantaged youth in LAC . However, the most effective way in which such skills can be developed is still to be determined. Therefore, it is important to explore alternative ways to provide instruction in soft skills, within a scheme that enables impact evaluation.

8. The letters of intent utilized by the Type 1 programs do not seem to guarantee the provision of demand-driven training nor signal the employers' intention to hire. Progress should be made towards a scheme in which firms are given incentives to hire trainees or, at least, to invest in their training. In this sense, the commitments to hiring introduced by the Type 2 programs, or the co-financed internships in Peru's *Projoven* program, are interesting alternatives.

9. In order to increase job placement opportunities, a strategy that provides program operators with systematic information about labor demand is essential. In countries where a public employment service is not developed, program operators should try to establish agreements with alternative sources of information on job vacancies, such as trade associations, private employment agencies or employment websites. In the long run, these programs should develop as part of a national employment service, as is the case of Mexico's Bécate. This would not only increase job placement opportunities but also facilitate the provision of services on a wider scale and increment the sustainability of the program over time.

10. The labor insertion levels of most Type 1 programs are negatively affected by the inflexibilities of the competitive bidding processes in which training centers are required to participate. To the extent that the timing of the training depends on the bidding, it is often the case that the training ends when firms have already filled their vacancies. It is therefore important to move towards schemes in which the provision of training is flexible and continuous, so that the timing of the training can be adjusted to the staffing demands of the local businesses.

### **1.3. Training programs as part of an integral employment policy**

11. Generally, the coverage of these programs does not extend to the entire target population and their possibilities of expansion are limited by the availability of vacancies. This points to the fact that these programs are not designed to create employment. Although they may generate new jobs due to the subsidized salaries offered by programs such as Honduras's *Proempleo*, or due to the increased productivity that might result from training and a better match between the firm and the worker, the quantity of new jobs generated by these channels is likely to be minimal. It is therefore important to complement these programs with policies that promote job creation, such as a reduction in the costs of hiring young people. Moreover, these programs may only be adequate in regions with a minimal level of economic development. In very depressed regions with saturated labor markets, more ambitious employment-creating strategies are needed.

## **2. Suggestions for a Research Agenda**

### **2.1. The need for better and more frequent evaluations**

12. Although in recent years important efforts have been made to conduct impact evaluations of youth training programs, these studies are still scarce and often have methodological weaknesses. A future research agenda in this area is therefore necessary and relevant, especially in the case of Type 2 programs, which have only been subject to impact evaluations with grave methodological limitations.

13. In principle, experimental evaluations can offer the most robust evidence because, due to its random assignment, the control group constitutes an ideal counterfactual. Moreover, if there is oversubscription, an experimental evaluation can increase the transparency and impartiality of the program assignment. However, the adequate implementation of an experimental evaluation poses great administrative challenges. A common problem is that program operators may not be willing to deny the provision of training to eligible individuals. Contamination is, therefore, a common risk, since operators may provide services to individuals who were originally assigned to the control group (see, for example, Card, Ibararán and Villa, 2011). Another limitation of the experimental design takes place when the program to be evaluated has, as a fundamental ingredient, a selection process based on characteristics of the participants that are correlated to labor market outcomes. By substituting this selection process for a random assignment, the experimental evaluation alters an essential aspect of the program. In this sense, the evaluated program differs in a fundamental way from the ongoing program that is the object of the evaluation. This point should be taken into account if experimental evaluations of Type 2 programs are conducted, since in these programs the selection process of youngsters constitutes an essential ingredient.

14. Much care should be exercised in the implementation of evaluations that use matching techniques since, in these cases, a credible identification strategy imposes major requirements in terms of data. This point should be stressed with vigour, given the many efforts made in recent years to evaluate training programs using matching techniques that have, unfortunately, yielded unreliable results due to inferior data quality.

## 2.2. Evaluations that inform policy makers

15. Program evaluations are not only scarce; they are also rarely used to guide policy decisions. The decisions to end a program or to redesign it are frequently taken regardless of the evaluation results, as was the case in Colombia's *Jóvenes en Acción*, Honduras's *Proempleo* and Peru's *Projovent*. A notable exception is the Dominican Republic's *Juventud y Empleo*, whose evaluation and monitoring process is integrated with the program's administration. Consequently, the evaluation results of this program systematically provide feedback to the decisions made by program administrators in a scheme that is strongly recommendable for other countries in the region.

16. The inclusion of cost-benefit analyses as part of program evaluations is highly recommendable. This will enable policy-makers to contrast the effectiveness of these programs with other alternative strategies. However, these analyses will require the estimation of long-term effects, which in turn poses important challenges given the major difficulties that evaluators may face in an attempt to locate the beneficiaries and the control group in the long run. The introduction of incentives that stimulate the members of the treated and the control group to keep contact with the evaluators is, therefore, of paramount importance.

17. The majority of evaluations carried out in LAC are designed to measure the overall impact of the program, but not to identify which of the several services provided yields the highest returns. In this regard, it is worth considering the strategy used by Martínez (2011) in the evaluation of the Dominican Republic's *Juventud y Empleo* program, in which treated beneficiaries are randomly assigned into two different types of modalities: both include on-the-job training but differ in the provision of classroom courses. The author can therefore isolate the impact of the classroom instruction component from the other services provided by the program. The new design of the Dominican Republic's *Juventud y Empleo* program, which will offer a diverse combination of services, provides an opportunity to make similar research efforts. These are some suggestions: i) Introduce a random assignment of the soft skills training component to investigate its impact in isolation. This is especially important, given the relevance that this kind of intervention has in theory, and the lack of available empirical evidence about its effectiveness; ii) Isolate the impact of labor intermediation services, as these may be the only service that can be effectively

provided in remote regions with non-dynamic labor markets; and iii) Identify whether the returns to vocational and technical training in classroom varies according to occupations and skills.

18. The fact that the evaluations systematically report heterogeneous effects in terms of the characteristics of the beneficiaries raises questions that are particularly relevant to policy makers. One of them has to do with the reason behind the differential effects by gender, since different explanations support different policy prescriptions. If, for example, there is gender differential in the returns to training because the courses are better suited to the learning processes of women, then it might be necessary to modify the training services provided to men. However, such adjustments would be unnecessary if the greater impacts perceived by women are due to a gender differential in the demand of labor, with the most dynamic industries being more likely to recruit female workers.

19. An analysis of how the programs are affected by the institutional and economic background is also essential to inform policy decisions. The evaluations must, therefore, be complemented with analyses of the economic, legal and institutional factors that have a bearing on the programs' success.

20. In order to contribute to policy design, impact evaluations must also consider the possible effects that these programs have on non-labor-market outcomes, such as, for example, the teenage pregnancy rate. Incorporating this kind of analysis into the Dominican Republic's *Juventud y Empleo* evaluation raised awareness of new dimensions that these programs can have. However, these analyses should be made without losing sight of the main objective of these programs, which is to improve the labor market conditions of the youth.

21. In programs that yield an economically and statistically significant effect on the employment level of beneficiaries, an investigation of possible "displacement" or "crowding out" effects on non-participants should be made. Attanasio and others (2011) suggest to investigate this subject by implementing an experimental design in which the treatment intensity is randomized. This is precisely the approach used by Crépon and others (2011), who find no evidence of displacement effects in France. This type of study is quite ambitious and its cost will be justified in a scenario in which a significant increase in the coverage of the program is under consideration.



## VI. REFERENCES

- Aedo, Cristian and Sergio Núñez. 2001. "The Impact of Training Policies in Latin America and the Caribbean: The Case of Programa Joven". *IDB Research Network Paper*. Washington, D.C.: Inter American Development Bank.
- Attanasio, O., A. Kugler and C. Meghir. 2008. "Training Disadvantaged Youth in Latin America: Evidence from a Randomized Trial". NBER Working Paper No 13931. Cambridge, Mass.: The National Bureau of Economic Research.
- . 2011. "Subsidizing Vocational Training for Disadvantaged Youth in Colombia: Evidence from a Randomized Trial". *American Economic Journal: Applied Economics*. 3 (3): 188-220.
- Bassanini, A., A. Booth, G. Brunello and others. 2005. "Workplace Training in Europe". IZA Discussion Paper No 1640. Institute for the Study of Labor.
- Bassi, M., M. Busso, S. Urzúa and J. Vargas. 2012. "Desconectados: habilidades, educación y empleo en América Latina". Washington, D.C: Inter American Development Bank.
- Betcherman, G., K. Olivas and A. Dar. 2004. "Impacts of Active Labor Market Programs: New Evidence from Evaluations with Particular Attention to Developing and Transition Countries". Social Protection Discussion Paper Series No 0402. World Bank.
- Betcherman, G., M. Godfrey, S. Puerto and others. 2007. "A Review of Interventions to Support Young Workers: Findings of the Youth Employment Inventory". Social Protection Discussion Paper No 0715. World Bank.
- Bourguignon, F. 2010. "Toward an Evaluation of Evaluation Methods: A Commentary on the Experimental Approach in the Fields of Employment, Work, and Professional Training". *Journal of Development Effectiveness*. 2 (3).
- Brunello, G. and M. Schlotter. 2011. "Non-Cognitive Skills and Personality Traits: Labour Market Relevance and their Development in Education & Training Systems". IZA Discussion Paper No 5743. Institute for the Study of Labor.
- Card, D., J. Kluve and A. Weber. 2009. "Active Labor Market Policy Evaluations: A Meta-analysis". Working Paper No 0902. Labor and Welfare Analysis, The Austrian Center for Labor Economics and the Analysis of the Welfare State.

- Card, D., J. Kluve and A. Weber. 2010. "Active Labour Market Policy Evaluations: A Meta-Analysis". *Economic Journal*. 120 (548): 452-477.
- Card, D., P. Ibararán and J.M. Villa. 2011. "Building in an Evaluation Component for Active Labor Market Programs: A Practitioners Guide". IDB Technical Notes No 311. Washington, D.C.: Inter American Development Bank.
- Card, D., P. Ibararán, F. Regalía and others. 2011. "The Labor Market Impacts of Youth Training in the Dominican Republic". *Journal of Labor Economics*. 29 (2): 267-300.
- Carneiro, P. and J. Heckman. 2003. "Human Capital Policy". In: James J. Heckman and Alan B. Krueger, (Eds.). *Inequality in America: What Role for Human Capital Policies?* Cambridge, Mass./London: The MIT Press.
- Chong, A and J. Galdo. 2006. "Does the Quality of Training Programs Matter? Evidence from Bidding Processes Data". IDB Working Paper No 555. Washington, D.C.: Inter American Development Bank.
- Cooper, R., A. Dawes, P. Gertler and others. 2011. "Expertise on Evidence of Good Practices of Life Skills and Employability: Programs for High Risk Youth in Latin America". Study commissioned by the Jacobs Foundation. The Abdul Latif Jameel Poverty Action Lab.
- Crépon, B., E. Duflo, M. Gurgand and others. 2011. "Do Labor Market Policies Have a Displacement Effect? Evidence from a Clustered Random Experiment". Working Paper. The Abdul Latif Jameel Poverty Action Lab.
- Cunha, F. and J. Heckman. 2010. "Investing in Our Young People". NBER Working Paper No 16201. Cambridge, Mass.: The National Bureau of Economic Research.
- Cunningham, W. 2009. "Unpacking Youth Unemployment in Latin America". Policy Research Working Paper No 5022. World Bank.
- Cunningham, W. and J. Bustos Salvagno. 2011. "Youth Employment Transitions in Latin America". Policy Research Working Paper No 5521. World Bank.
- Dar, Amit and P.Z. Tzannatos. 1999. "Active Labor Market Programs: A Review of the Evidence from Evaluations". Social Protection Discussion Paper No 9901. World Bank.

- Dehejia, R. and S. Wahba. 2002. "Propensity Score Matching Methods for Nonexperimental Causal Studies". *The Review of Economics and Statistics*. 84 (1): 151-161.
- Departamento Nacional de Planeación. 2008. "Consultoría para la evaluación de impacto del Subprograma Jóvenes en Acción". Serie de Evaluación de Políticas Públicas No 9. Bogotá: *Departamento Nacional de Planeación*, DNP.
- Díaz, J.J. and M. Jaramillo. 2006. "An Evaluation of the Peruvian 'Youth Labor Training Program' PROJOVEN". Working Paper OVE/WP-10/06. Office of Evaluation and Oversight, OVE. Washington, D.C.: Inter American Development Bank.
- Duflo, E., R. Glennerster and M. Kremer. 2006. "Using Randomization in Development Economics Research: A Toolkit". NBER Technical Working Paper No 333. Cambridge, Mass.: The National Bureau of Economic Research.
- Ellwood, D.T. 1982. "Teenage Unemployment: Permanent Scars or Temporary Blemishes?" In: R.B. Freeman and D.A. Wise, (Eds.). *The Youth Labor Market Problem: Its Nature Causes and Consequences*. Chicago: The University of Chicago Press.
- Fazio, Maria Victoria. 2011. "Programa Juventud y Empleo en República Dominicana. Análisis de la percepción de los empleadores acerca de las pasantías y de las perspectivas de inserción laboral en esas empresas". Technical Note No 240. Labor Markets and Social Security Unit. Washington, D.C.: Inter American Development Bank.
- Gallart, María Antonia. 2008. *Competencias, productividad y crecimiento del empleo: el caso de América Latina*. Montevideo: International Labor Organization ILO/The Inter-American Center for Knowledge Development in Vocational Training, Cinterfor.
- Gregg, P. 2001. "The Impact of Youth Unemployment on Adult Employment in the NCDS". *Economic Journal*. 111 (475).
- Heckman, J. 2000. "Policies to Foster Human Capital". *Research in Economics*. 54 (1): 3-56.
- Heckman, J., H. Ichimura and P. Todd. 1997. "Matching as an Econometric Evaluation Estimator: Evidence from Evaluating a Job Training Programme". *Review of Economic Studies*. 64 (4): 605-654.

- Heckman, J., R. LaLonde and J. Smith. 1999. "The Economics and Econometrics of Active Labor Market Programs". *Handbook of Labor Economics*. 3 (Chapter 31): 1865-2097.
- Heckman, J., J. Stixrud and S. Urzúa. 2006. "The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior". *Journal of Labor Economics*. 24 (3): 411-482.
- Huneus, C., C. De Mendoza and G. Rucci. 2012a. "Una visión crítica sobre el financiamiento y la asignación de recursos públicos para la capacitación de trabajadores en América Latina y el Caribe". Technical Note No 347. Labor Markets and Social Security Unit. Washington, D.C.: Inter American Development Bank.
- . 2012b. "El estado del arte de la capacitación de los trabajadores en América Latina y el Caribe". Technical Note No 346. Labor Markets and Social Security Unit. Washington, D.C.: Inter American Development Bank.
- Ibarrarán, P. and D. Rosas-Shady. 2007. "Impact Evaluation of a Labor Training Program in Panama". Washington, D.C.: Inter American Development Bank. Unpublished document.
- . 2009. "Evaluating the Impact of Job Training Programmes in Latin America: Evidence from IDB Funded Operations". *Journal of Development Effectiveness*. 1 (2): 195-216.
- Ibarrarán, P., L. Ripani, B. Taboada and J.M. Villa 2012. "Life Skills, Employability and Training for Disadvantaged Youth: Evidence from a Randomized Evaluation Design". Unpublished document.
- International Labor Organization. 2010. *Trabajo decente y juventud en América Latina 2010*. Lima: International Labor Organization, ILO/Promoting Youth Employment in Latin America, Prejal.
- Inter American Development Bank. 2004. *Good Jobs Wanted. Labor Markets in Latin America*. Economic and Social Progress Report. Washington, D.C.: Inter American Development Bank.
- Kluve, J. 2006. "The Effectiveness of European Labor Market Policy". IZA Discussion Paper No 2018. Institute for the Study of Labor.
- Kuhn, P. and C. Weinberger. 2002. "Leadership Skills and Wages". IZA Discussion Paper No 482. Institute for the Study of Labor.

- LaLonde, R. 1986. "Evaluating the Econometric Evaluations of Training Programs with Experimental Data". *The American Economic Review*. 76 (4): 604-620.
- . 1995. "The Promise of Public Sector-Sponsored Training Programs". *Journal of Economic Perspectives*. 9 (2): 149-168.
- Manpower. 2010. "Talent Shortage Survey Results". Manpower Group.
- Martínez, S. 2011. "Impact Evaluation of *Juventud y Empleo*". World Bank. Unpublished document.
- Massari, R. 2012. "La problemática laboral de los jóvenes en América Latina". Labor Markets and Social Security Unit. Washington, D.C.: Inter American Development Bank. Unpublished document.
- Mazza, J. 2012. "Fast Tracking Jobs: Advances and Next Steps for Labor Intermediation Services in Latin America and the Caribbean". Technical Note No 344. Labor Markets and Social Security Unit. Washington, D.C.: Inter American Development Bank.
- Montenegro, C. and C. Pagés. 2003. "Who Benefits from Labor Market Regulations? Chile 1960-1998". NBER Working Paper No 9850. Cambridge, Mass.: The National Bureau of Economic Research.
- Moura, C., K. Schaack and R. Tippet, (Eds.). 2002. *Formación profesional en el cambio de siglo*. Montevideo: International Labor Organization ILO/The Inter-American Center for Knowledge Development in Vocational Training, Cinterfor.
- Mroz, T. and T. Savage. 2001. "The Long Term Effects of Youth Unemployment". *Journal of Human Resources*. 41 (2).
- Nordström Skans, O. 2011. "Scarring Effects of the First Labor Market Experience". IZA Discussion Paper No 5565. Institute for the Study of Labor.
- Organization for Economic Cooperation and Development. 2009. *Pisa 2009 Assessment Framework. Key Competencies in Reading, Mathematics and Science*. OECD Publishing. Available at: <http://www.oecd.org/dataoecd/11/40/44455820.pdf>.
- Organization for Economic Cooperation and Development. 2011. *OECD Employment Outlook 2011*. OECD Publishing.
- Puentes, E. and S. Urzúa. 2010. "Un análisis del impacto de la capacitación sobre el desempeño en el mercado laboral". IDB Technical Notes No 36498. Washington, D.C.: Inter American Development Bank.

- Sianesi, B. 2003. "Swedish Active Labor Market Programmes in the 1990s: Overall Effectiveness and Differential Performance". *Swedish Economic Policy Review*. 8 (2): 133-169.
- Smith, J. and P. Todd. 2003. "Does Matching Overcome LaLonde's Critique of Nonexperimental Estimators?" *Journal of Econometrics*. (125): 305-353.
- Smith, J., A. Whalley and N. Wilcox. 2011. "Are Program Participants Good Evaluators?". University of Michigan. Unpublished document.
- Todd, P. 2011. "The Effectiveness of Interventions Aimed at Improving Women's Employability and Quality of Work: A Critical Review of Impact Evaluation Results". World Bank Working Paper.
- United Nations. 2011. "World Population Prospects: The 2010 Revision". Population Division, Department of Economic and Social Affairs. United Nations. CD-ROM Edition.
- World Bank. 2011. "Strengthening Skills and Employability in Peru". Labor Skills Programmatic AAA Final Report No 61699-PE. World Bank.
- World Health Organization. 2002. "World Report on Violence and Health". Geneva: World Health Organization, WHO. Available at: [http://whqlibdoc.who.int/publications/2002/9241545615\\_eng.pdf](http://whqlibdoc.who.int/publications/2002/9241545615_eng.pdf).

## VII. APPENDIX 1. Data inputs

	<b>Impact Evaluation</b>	<b>Surveys of program beneficiaries</b>	<b>Firm surveys</b>	<b>Training center surveys</b>	<b>In-depth interviews with program operators and firms</b>
<b><i>Juventud y Empleo</i> (Dominican Republic)</b>	Experimental (Ibarrarán and others, 2011)	Baseline, post-program and survey for qualitative study	Available (394 firms)	Available (66 centers)	Available (16 employers and 5 civil servants)
<b><i>Projovent</i> (Peru)</b>	Unavailable	Baseline only	Available (170 firms)	Available	Available (4 employers and 7 civil servants)
<b><i>Jóvenes en Acción</i> (Colombia)</b>	Experimental (Attanasio, Kugler y Meghir, 2011)	Baseline and post-program	Available (686 firms)	Available	Unavailable
<b><i>Procajovent</i> (Panama)</b>	Experimento natural (Ibarrarán y Rosas-Shady, 2007)	Post-program with retrospective information	Unavailable	Unavailable	Unavailable
<b><i>Bécate</i> (Mexico)</b>	Unavailable	Post-program with retrospective information	Unavailable	Non-applicable	Available (by telephone) (6 employers 3 civil servants and 3 trainer-monitors)
<b><i>Proempleo</i> (Honduras)</b>	Unavailable	Post-program with retrospective information	Unavailable	Non-applicable	Available (14 employers, 4 civil servants and 3 trade association representatives)

Source: Authors' own elaboration.

Note: The interviews with firms and training centers, and the survey of beneficiaries of *Juventud y Empleo* (Dominican Republic) were carried out by the *Gestión Moderna* group and financed by the Ministry of Employment in that country. Interviews with firms and training centers surveys regarding Peru's *Projovent* program were conducted by the *Escuela de Administración de Negocios para Graduados* (ESAN) (Business Administration Graduate School) and financed by the Peruvian *Ministerio de Trabajo y Promoción del Empleo* (Ministry of Work and Employment Promotion). The interviews with firms and training centers, and the survey of beneficiaries of Colombia's *Jóvenes en Acción* were carried out by *Unión Temporal IFS-Econometría-SEI*, with financing provided by Colombia's *Departamento Nacional de Planeación* (National Planning Department). The in-depth interviews were conducted by the authors of this paper.