

# **Evaluating the impact of Job Training Programs in Latin America: Evidence from the IDB**

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# Content

- Introduction and Context
- Results from previous literature
- Job training Programs in Latin America
- Data and Methods in the Impact Evaluations
- Results
- The employability model
- Additional analysis
- Final remarks

# Introduction and context

- Youth unemployment and non-employment (the *idle*) is a major concern in Latin America.
- Failure of formal education in both coverage and quality has produced a **flow** of unskilled inexperienced youth with dire perspectives on labor market insertion and social inclusion: these are the disadvantaged/at-risk youth.
- This group is different from traditional target of ALMP: long-term unemployed mandated to participate.

# Introduction and context

- Common intervention: short training programs to provide basic job readiness skills and some trade-specific abilities.

- ▶ Separation of the financing and the provision of training
- ▶ Demand driven training
- ▶ Classroom training is followed by on-the-job training
- ▶ These are not school-to-work transition programs

- Two influential experiences: Probecat (Mexico) and Chile Joven

- Variants of these programs have been replicated by many countries (ex. Argentina, Colombia, Peru, Dominican Republic, Honduras, Haiti, Ecuador)

# Introduction and context

■ Based on the findings from:

- ▶ A thematic impact evaluation project launched by the Office of Evaluation and Oversight (OVE) at the IDB in 2005/06

- ▶ Two independent evaluations of IDB funded projects in Chile and Colombia

■ An additional contribution: an operational definition for employability in the context of Latin America.

# Literature Review

- Results for LAC are few, with not very solid designs and a wide variation in results

- ▶ Ex. Nopo and Saavedra (2003), Betcherman (2004, 2007)
- ▶ In general, training programs oriented to youth seem to have bigger positive impacts than in Europe and USA

- Lack of systematic, rigorous impact evaluations of IDB labor training programs in Latin America

- Card et al. (2006), first experimental impact evaluation of a labor training program in DR. In parallel, Kugler et al. did a similar experiment in Colombia.

# Job training Programs in Latin America

- Training has been traditionally important. Many countries have a large public institution (SENAI, SENA, INFOTEP, INADEH, SICATI)

  - ▶ Purpose: to provide with skilled technical workers

  - ▶ Unemployed first time job seekers with low levels of formal education and vulnerable groups are not main objective

- Public training institutions are political strongholds and have proven difficult to reform



# Job training Programs in Latin America (cont.)

- Based on the British Youth Training Scheme, Chile designed a program to deal with what was diagnosed as a **stock** of unskilled, inexperienced, at-risk youth.
- Salient characteristics of **CHILE JOVEN**
  - ▶ It relied on the market to reveal the demand for training
  - ▶ Conceived as a one a one-time intervention
  - ▶ Market of training firms with links to productive sector, and a solid regulatory agency (SENCE) were functioning at time of project design.
  - ▶ Based on expectations of sustained economic growth
- Argentina's **Proyecto Joven** and **PAPEJ** shared view of youth training as a temporary fix.



# Job training Programs in Latin America (cont.)

## ■ ■ Probecat Program (México)

- ▶ Created in 1984 as a response to structural reforms at the end of Import Substitution model to promote sector adjustments.
- ▶ Not restricted to youth or particularly disadvantaged groups
- ▶ Part of a broader set of traditional ALMP: training operates within Employment Services that provides labor market information and intermediation as well as training for active workers in SMEs.
- ▶ After trying out various modalities, settled with dominant scheme in which firms provide on-the-job training
- ▶ Probecat was successfully expanded as a response to the *Tequila Crisis* and maintained large size up to 2000.

# Data and Methods in the Impact Evaluations

Country	Program Name	# of IDB programs	Implementation period	Main Objectives	# of beneficiaries
Argentina	Proyecto Joven	2	1994-1998	Increase employment/employability, wages, productivity, social insertion, the private supply of training	100,000 and 180,000
Chile	Chile Joven	1	1992-1997	Increase employment/employability, social insertion, the private supply of training	100,000
Colombia	Jóvenes en Acción	1	2002-2005	Increase employment/employability, social insertion, the private supply of training	80,000
Dominican Republic	Juventud y Empleo	2	1999-	Increase employment/employability, social insertion, the private supply of training	30,000 up to 2006
Mexico	PROBECAT	3	1984- (with IDB support since 1996)	Increase employment/employability, productivity, labor market efficiency	Around 5 million between 1984-2000
Panama	PROCAJOVEN	1	2002-	Increase employment/employability, productivity, the private supply of training	11,400
Peru	Projovent	1	1996-	Increase employment/employability, wages, social insertion, the private supply of training	160,000. However, during the implementation around 4000 beneficiaries were trained by each call

**Notes:** The sample only considers IDB programs that started before 2004.

# Data and Methods in the Impact Evaluations

Country	Evaluation Method	Comparison Group	Baseline/Pre-Program Data?	Dynamic/ Employability Analysis	Papers
Dominican Republic	Experimental	Defined ex ante by random design	Yes	10-14 months and 22-24	Card et al. (2006)
Colombia	Experimental	Defined ex ante by random design	Yes	19 – 21 months	Atanasio et al. (2007)
Panama	Natural Experiment	Defined ex post from eligible applicants excluded by natural experiment	No baseline, pre-program data from retrospective questions in follow-up	9 – 20 months	Ibarraran and Rosas Shady (2007)
Peru	Non-Experimental	Defined ex ante from eligible non-applicants	Yes	6, 12 and 18 months	Diaz and Jaramillo (2006)
Chile	Non-Experimental	Defined ex post from eligible non-applicants	No	12 months	Aedo and Pizarro (2004)
Argentina	Non-Experimental	Defined ex ante from registered applicants that did not start course	Yes	11 and 19 months in 2 <sup>nd</sup> and 3 <sup>rd</sup> calls, 12 months in 5 <sup>th</sup> call	Alzua and Brassolio (2006)
Mexico	Non-Experimental	Defined ex post from similar individuals from labor market survey	No, baseline reconstructed from ex post data.	3 and 6 months	Delajara and al. (2006)



# Results

	Employment Rate	Formality	Wages
<b>Argentina</b>	0% - 11%, 10-30% for youngest (<21)	0% - 3%, 6% - 9% for youngest in one cohort	No significant pattern
<b>Chile</b>	18-22% larger for youngest groups	15-23% larger for youngest groups	22-25%, imprecisely estimated
<b>Colombia</b>	5% for women, none for men	6-7% for women; 5-9% for men	22% for women, 10% for men
<b>Dominican Republic</b>	None, higher (5-6%) but not significant in the East & Santo Domingo	Health-insurance 9% higher for men (43% vs 34%)	17% (marginally significant), larger for males under 19
<b>Mexico</b>	Overall, no clear pattern; on-the-job training robust positive effects (12-30%)	Positive effects (10-20%) since 2002	No consistent patterns, at best small and mostly not significant
<b>Panama</b>	Overall not significant 10-12% for women and in Panama City	Overall not significant, probably higher outside Panama City	Overall negligible, large for women (38%) and in Panama (25%)
<b>Peru</b>	Large, 13% (much higher for women -20% than for men -negligible)	Large: overall 11% , 14% women, 5% men.	12 - 30%

# The employability model

- Training programs have as a specific objective to increase the "*Employability*" of participants, but most programs do not define the concept.

- "*Employability*" is interpreted in a dynamic setting as the probability that an individual finds a job if unemployed, or the probability that he or she retains a job, if employed.

- Following Card and Hyslop (2005), Card et al. (2006) develop a dynamic logit model with random effects of monthly employment outcomes to determine whether participating in a training program had an impact on these probabilities

- The model consists of two parts: a model for the employment status in month 1 –period just after the training- and another for the rate of employment transitions over the next months.

# Employability in the Dominican Republic

	Employment	Employed with Health Insurance
<i>Model Parameters</i>		
1. Constant ( $\beta_0$ )	-1.99 (3.43)	-2.43 (4.36)
2. Trend ( $\beta_1$ )	0.06 (0.02)	-0.03 (0.03)
3. State-dependence ( $\lambda$ )	4.67 (0.15)	7.00 (0.31)
4. Treatment Effect if Not Employed in Previous Period ( $\varphi_0$ )	0.03 (0.10)	0.24 (0.20)
5. Treatment Effect if Employed in Previous Period ( $\varphi_1$ )	0.13 (0.14)	0.18 (0.27)
6. Treatment Effect in Probability of Employment in August 2004 ( $\delta$ )	0.07 (0.15)	0.18 (0.27)
7. Male Dummy in Employment Model	0.73 (0.11)	0.71 (0.27)
8. Dummy for Age 20-24 in Employment Model	0.37 (0.11)	0.41 (0.20)
9. Dummy for Age 25+ in Employment Model	0.60 (0.13)	0.57 (0.25)
10. Loading Factor For Covariates in Model for Employment in August 2004 ( $\square$ )	1.33 (0.26)	1.89 (0.66)
11. Log Likelihood	- 3630.7	- 1536.3
12. Total Number of Parameters	17	17

# Employability in Panama

Model Parameters	Pooled Models		Models for Men		Models for Women	
	Employment	Insurance	Employment	Insurance	Employment	Insurance
1. Trend	0.04 (0.02)	0.00 (0.02)	0.05 (0.02)	0.01 (0.03)	0.03 (0.02)	-0.01 (0.03)
2. State- dependence	4.29 (0.22)	6.12 (0.31)	3.98 (0.32)	6.24 (0.39)	4.50 (0.32)	5.82 (0.49)
3. Treatment Effect if Not Employed in Previous Period	0.44 (0.17)	0.41 (0.23)	0.20 (0.26)	0.35 (0.32)	0.52 (0.23)	0.51 (0.31)
4. Treatment Effect if Employed in Previous Period	0.29 (0.21)	-0.33 (0.32)	-0.11 (0.30)	-0.56 (0.43)	0.44 (0.29)	0.14 (0.45)
5. Treatment Effect in Probability of Employment in Month 1	0.31 (0.29)	-0.10 (0.35)	-0.26 (0.44)	-0.26 (0.43)	0.55 (0.38)	0.38 (0.55)
6. Dummy for Panama City Region	0.61 (0.14)	0.88 (0.22)	0.69 (0.19)	0.82 (0.43)	0.51 (0.18)	0.49 (0.24)
7. Age (in Years)	0.08 (0.02)	0.04 (0.02)	0.06 (0.03)	0.03 (0.03)	0.08 (0.03)	0.05 (0.03)
8. Dummy for Post Secondary Schooling	-0.20 (0.12)	0.24 (0.13)	-0.63 (0.18)	0.03 (0.12)	0.06 (0.14)	0.43 (0.23)
9. Dummy for Female	-0.41 (0.13)	-0.38 (0.15)	--	--	--	--
10. Loading Factor For Covariates in Model for Employment in Month 9 (?)	1.98 (0.41)	3.00 (1.06)	2.37 (0.67)	3.62 (2.00)	2.26 (0.72)	3.57 (1.98)

Note: Pooled models fit to sample of 766 observations. Models for men fit to sample of 299 observations. Models for women fit to subsample of 467 observations. Models include point mass random effects, with three points of support (see text). Standard errors in parentheses.

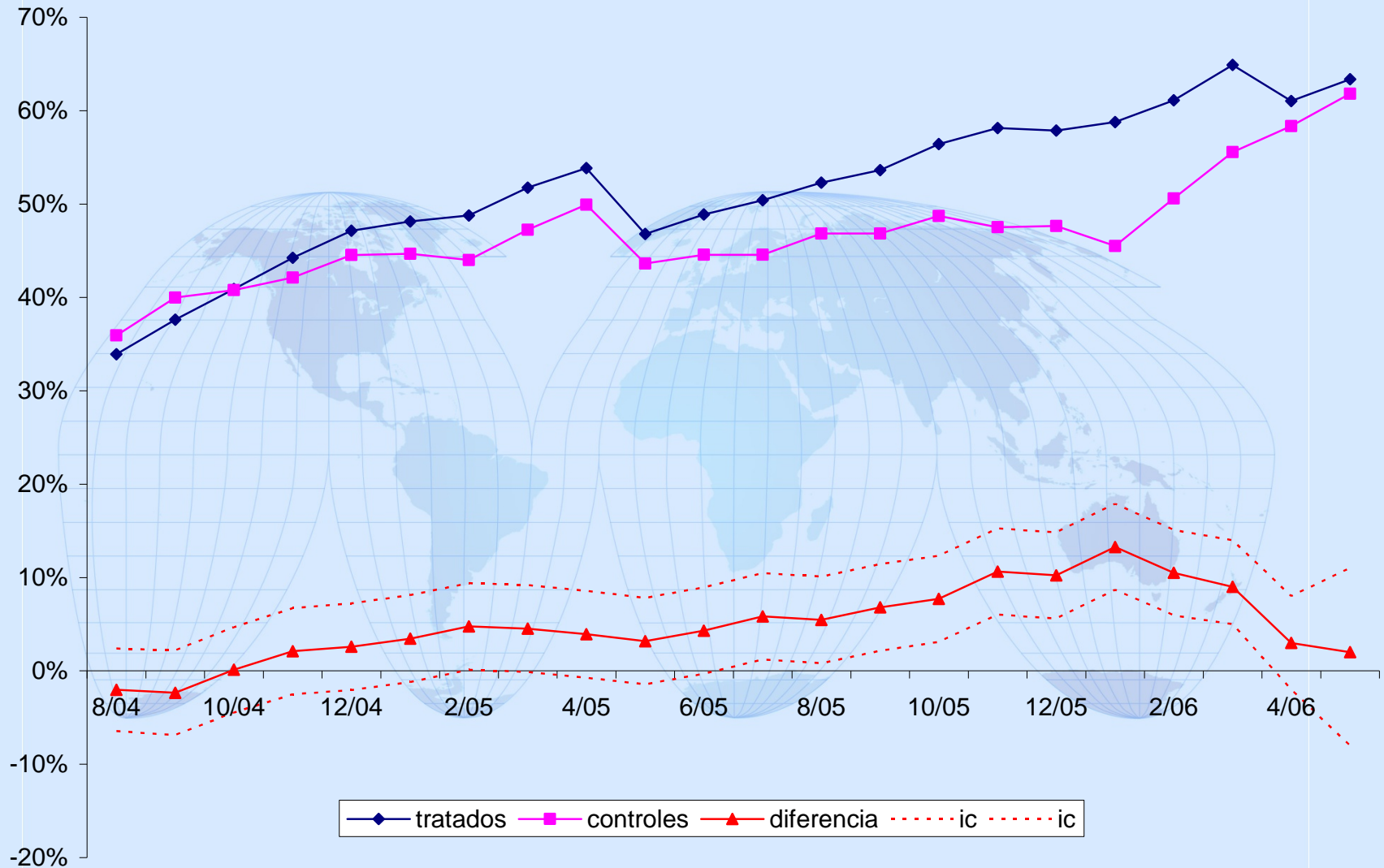


# Further Analysis: Training vs Income Support

Mexico has a modality of cash-transfer to unemployed workers coming from the formal sector. Preliminary analysis shows that this short/term IU/type support is more effective. Further analysis should be done given current debate of training as income-support mechanism.

Project	METODO	Any Job		Formal Job	
		OLS	ATT Matching	OLS	ATT Matching
Training	Binary	-3.2	1.7	9.3 (***)	19.3 (**)
	Multi-treat	-8.1(**)	Na	8.0 (***)	Na
Only stipend	Binary	8.6 (**)	0.4	17.7 (***)	24.8 (***)
	Multi-treat	9.0 (**)	Na	18.3 (***)	Na
SAEBE-SICAT	N.a.	23.4 (***)	14.5 (***)	13.4 (***)	2.6

# Further Analysis: Need to look at Long Term Impacts



# Final remarks: what have we learned ?

- These programs can contribute to improve the labor situation of specific groups

- ▶ Modest heterogeneous effects on employment

- ▶ Positive impacts on the quality of employment and salaries.

- The relatively small investments done with these programs cannot be expected to have large returns.

- They seem to be cost-effective and do help to increase employability of participants: *modest success at a modest cost*

# Final Remarks: what do we still do not know?

- We know if a particular program worked (more precisely, if a particular set of courses worked).

- We do not know *why*.

  - ▶ What design features are more relevant? Internship/Life Skills/ Specific Training

  - ▶ Under which circumstances do these programs work better? Characteristic of participants, training providers, internship firms, local labor markets, economic context...

  - ▶ Are these programs viable in economic downturns?

  - ▶ What are the general equilibrium effects?

- We do not know if the training increased human capital, social capital and/or worked as signal to labor market.



## Final Remarks: where do we go now?

- Second round of evaluations is on the way: Dominican Republic (with WB), Panama, Peru, Honduras, Mexico
- More thought needs to be invested in formulating the relevant questions before the evaluation and the project start. What parts of the black box do we want to open?
- Long-term tracer studies should be done.
- The New Deal for Young People in the UK should be studied as a comprehensive ALMP to deal with youth unemployment. Is competency-based training a viable alternative?
- What has been the impact of the impact evaluations ?
- **Need to integrate evaluations with research and policy agenda.**