

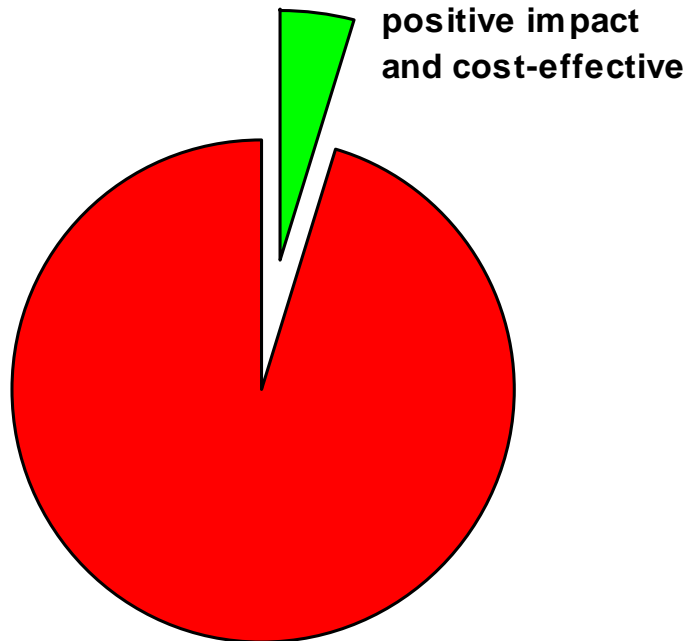


Active Labor Market Policies for Youth

Issues and experience

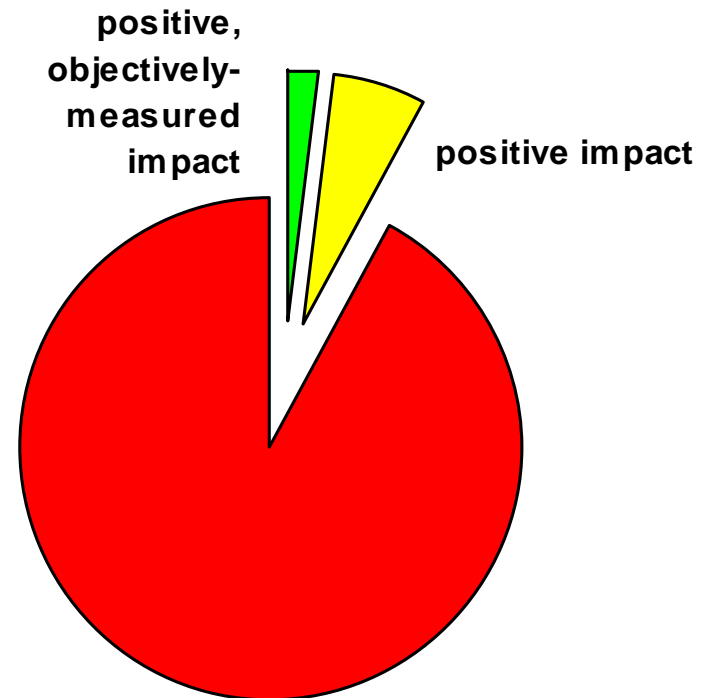
Mattias Lundberg
Sarajevo, September 2009

Why evaluate?



From Betcherman's youth labour review (2007)

(14 of 289)



From WDR review of youth HIV evaluations (2007)

(6 of 300+)

IADB Review (Ibarrarán and Rosas 2009)

Country	Program	Years active	Evaluation method	Comparison group	Baseline
Argentina	Proyecto Joven	1994-2001	Non-Experimental	Defined ex ante from registered applicants who did not start course	Yes
Chile	Chile Joven	1991-2001	Non-Experimental	Defined ex ante from eligible nonapplicants	Yes
Colombia	Jóvenes en Acción	2002-2005	Experimental	Defined ex ante by random design	Yes
Dominican Republic	Juventud y Empleo	1999 -	Experimental	Defined ex ante by random design	Yes
Mexico	Probeca	1984 -	Non-Experimental	Defined ex post from similar individuals from labour market survey	No
Panama	ProCaJoven	2002 -	Natural Experiment	Defined ex post from eligible applicants excluded by natural experiment	No baseline; comparison to retrospective data
Peru	PROJoven	1996-	Non-Experimental	Defined ex ante from eligible nonapplicants	Yes

Basic tools

- ▶ **Solving the identification problem, defining a *plausible counterfactual*, permitting *causal inference*:**
 - ▶ **Randomized controls**
 - ▶ **Randomized promotion (IV)**
 - ▶ **Discontinuity design**
 - ▶ **Difference-in-difference**
 - ▶ **Matching (propensity-score)**

Randomized controls

When the eligible population exceeds the number of places:

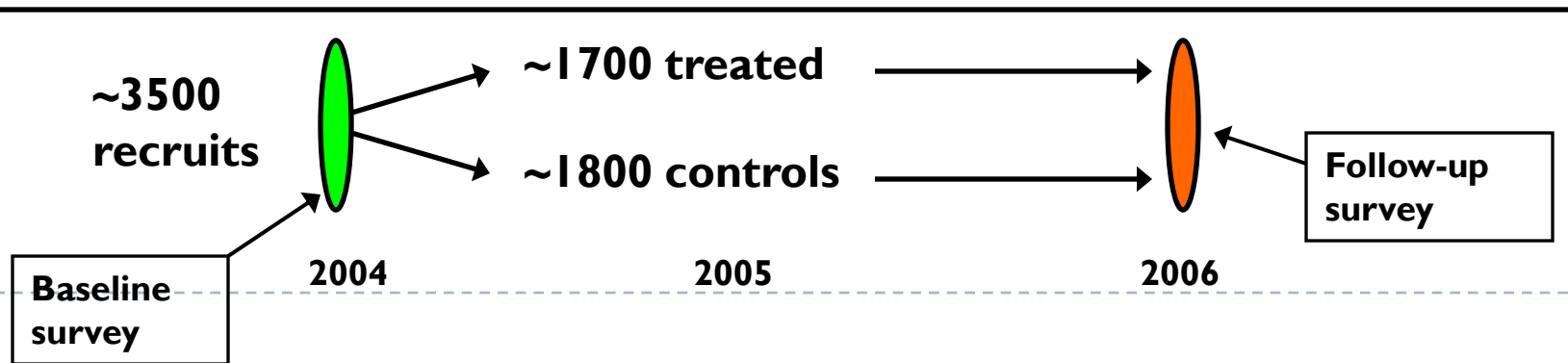
- ▶ **Random assignment (eg lottery)**
 - ▶ Give each eligible unit the same chance of receiving treatment.
 - ▶ Compare those offered treatment with those not offered treatment (controls).
- ▶ **Randomized phase-in (“pipeline”)**
 - ▶ Give each eligible unit the same chance of receiving treatment first, second, third....
 - ▶ Compare those offered treatment first with those offered treatment later (controls).

Make sure that the assignment method is fair and transparent.

Randomized controls

Case study: Attanasio, Kugler and Meghir (2007) Jóvenes en Acción, Colombia

- ▶ Randomized training program to enhance labor market outcomes
- ▶ Individual randomization:
 - ▶ Training providers recruit 50% more candidates than they have room for
 - ▶ Participants selected randomly from recruited candidates



Randomized controls

- ▶ Check that the sample is balanced at baseline

Baseline differences between treatment and control groups

	Men	Women
In paid employment	-0.002 (0.008)	-0.004 (0.005)
Education	0.004 (0.031)	-0.043 (0.044)
Age	-0.028 (0.042)	0.121 * (0.073)
Married	-0.001 (0.002)	0.038 * (0.022)

Randomized controls

► Results

Impact of training on labor market outcomes

	Men	Women
In paid employment	0.035 (0.023)	0.052 ** (0.022)
With contract	0.070 *** (0.024)	0.054 *** (0.020)
Salary	22,603 ** (11,309)	30,401 *** (9,111)
Tenure	-2.538 *** (0.753)	-1.604 *** (0.559)
Days per week	0.064 -0.546	1.149 ** (0.557)

Controlling for training institutions and pre-training characteristics

Difference-in-difference

- ▶ If you know or suspect that the treatment group are systematically different at the beginning,
- ▶ compare changes in outcomes among treatment group to changes among control group:

$$(Y_{t1} - Y_{t0}) - (Y_{c1} - Y_{c0})$$

- ▶ Assumes that the trends (slopes) would be the same in treatment and control groups, if treatment group were untreated.
- ▶ You should have at least three observations – two before, one after the intervention, to verify trends.

Difference-in-difference

**Case study: Galasso, Ravallion, Salvia (2001)
Assisting the Transition from Workfare to Work**

- ▶ **“Proempleo” program for low-income unemployed in Argentina:**
 - ▶ **Voucher for wage subsidy**
 - ▶ **Training**
- ▶ **What is the impact of these alternative interventions on employment and wages?**

Difference-in-difference

Findings:

- ▶ **The wage-subsidy voucher increased the likelihood of wage employment, but did not affect other outcomes (after 18 months).**
- ▶ **The training program had no significant additional effect on any outcome.**

Impact of treatment on change in probability of wage employment

$$[(\Delta Y | t = 1) - (\Delta Y | t = 0)]$$

	Change among treated group	Change among control group	Difference in differences
Any treatment	0.123	0.075	0.049*
Voucher only	0.124	0.075	0.050*
Voucher and training	0.122	0.084	0.039*

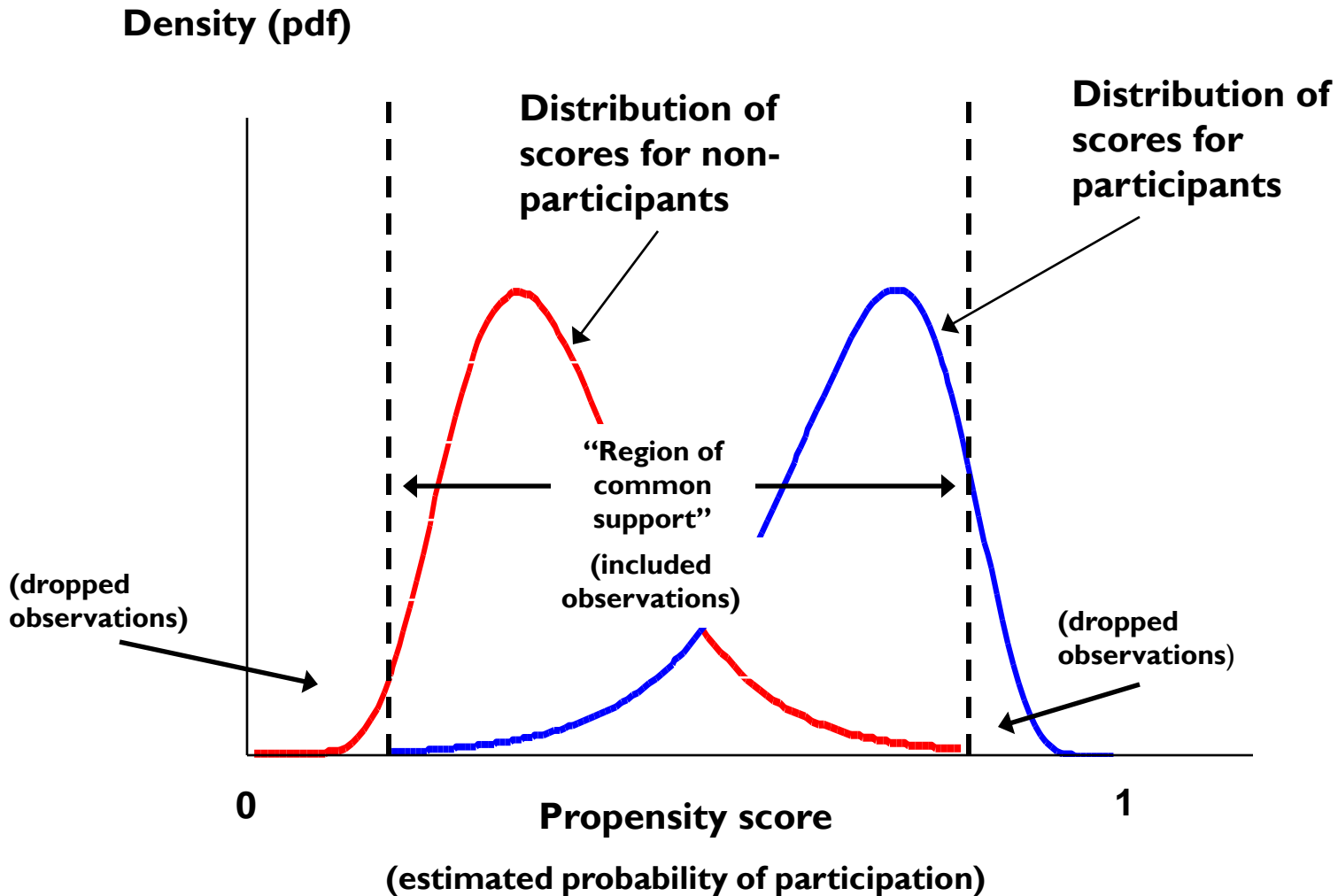
Propensity-score matching

- ▶ **Control group of non-participants (may be from a different survey) with same characteristics as participants**
 - ▶ **But which characteristics? The entire set of observed characteristics is enormous.**
- ▶ **Rosenbaum and Rubin (1983) match on the basis of the propensity score:**

$$P(X_i) = Pr (D_i=1|X)$$

- ▶ **Match on the probability of participation, given a set of characteristics.**

Propensity-score matching



Propensity-score matching

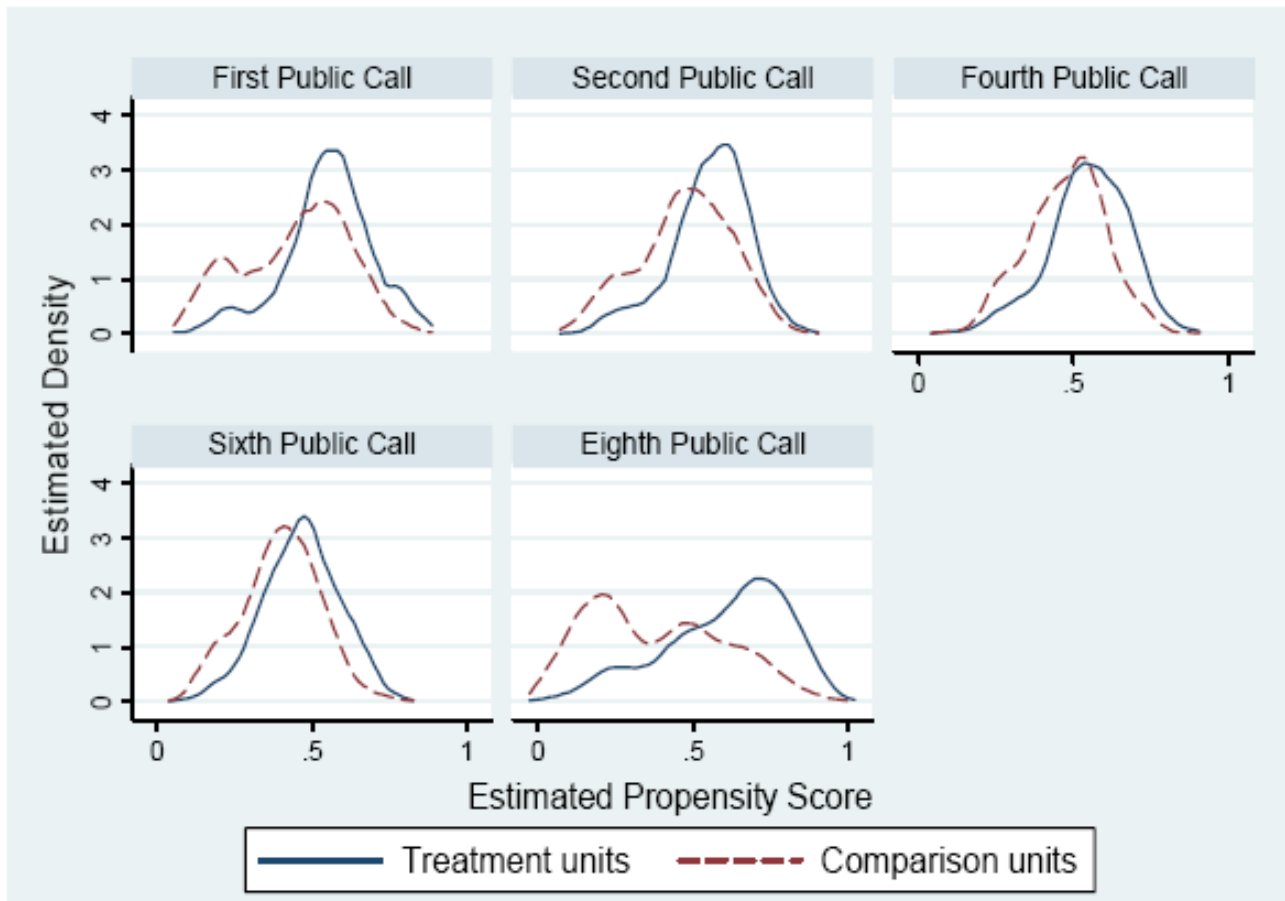
Case study: Diaz and Jaramillo (2006) “An Evaluation of the Peruvian ‘Youth Labor Training Program’ – Projovent”

- ▶ **Training and internship program for unemployed youth, with little education, from poor households.**
- ▶ **Does the program increase the probability of being employed, weekly hours of work, and earnings?**
- ▶ **Samples drawn from different waves of Projovent program.**

Propensity-score matching

- ▶ **Two potential sources of bias:**
 - ▶ those who apply for the program may differ systematically from non-applicants;
 - ▶ program administrators may choose the “best” applicants to receive training.
- ▶ **Solution: compute propensity scores to select treatment and control groups:**
 - ▶ treatment sample drawn from program participants;
 - ▶ comparison sample survey fielded in the same neighborhoods where individuals from the treatment sample reside.

Propensity-score matching



	First	Second	Fourth	Sixth	Eighth
Correctly classified	62.86	62.46	61.60	63.21	70.21

Propensity-score matching

Results:

- ▶ ***Employment:*** for young men, employment is actually lower among participants (in some waves); for young women, employment is higher.
- ▶ ***Paid employment:*** positive for young women, insignificant for young men.
- ▶ ***Formal sector employment:*** positive for both men and women.
- ▶ ***Earnings:*** positive for both men and women, higher for men.

Take-way messages

- ▶ **Evidence is getting better:**
 - ▶ we know that supply-side interventions can work.
- ▶ **But we still don't really know...**
 - ▶ what type of training is most effective (job skills, “life skills,” ...)?
 - ▶ what combinations of training are most effective?
 - ▶ for whom training is most effective?
 - ▶ in which environment or circumstances?
 - ▶ whether training is cost-effective.
- ▶ **More importantly, what constrains employment?**
 - ▶ The work force has the “wrong” training, or is badly trained?
 - ▶ There simply aren't enough jobs?
 - ▶ The constraints are elsewhere (eg credit markets)?

A few references

Betcherman, G., M. Godfrey, S. Puerto, F. Rother, and A. Stavreska, 2007. *A Review of Interventions to Support Young Workers: Findings of the Youth Employment Inventory*. SP Discussion Paper No. 0715. Washington, DC:World Bank.

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