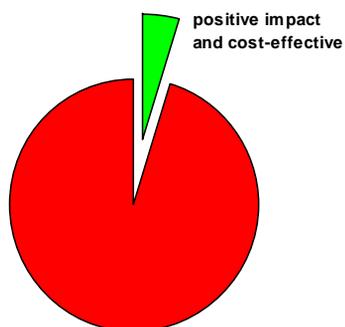




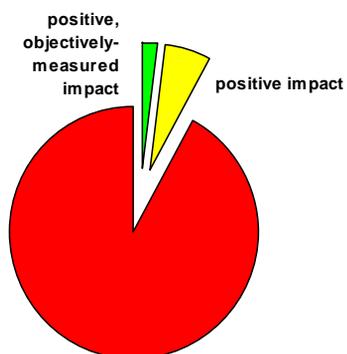
Active Labor Market Policies for Youth

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Accra, May 2010

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

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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)**
- } ex-ante
- } ex-post

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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).

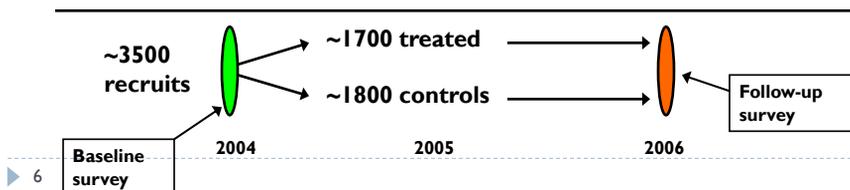
Make sure that the assignment method is fair and transparent.

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Randomized controls

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

- ▶ **Random assignment of 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)

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(Attanasio, Kugler and Meghir 2007)

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

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(Attanasio, Kugler and Meghir 2007)

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.

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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’s the impact of these alternative interventions on employment and wages?

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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*

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(Galasso, Ravallion, Salvia 2001)

Propensity-score matching

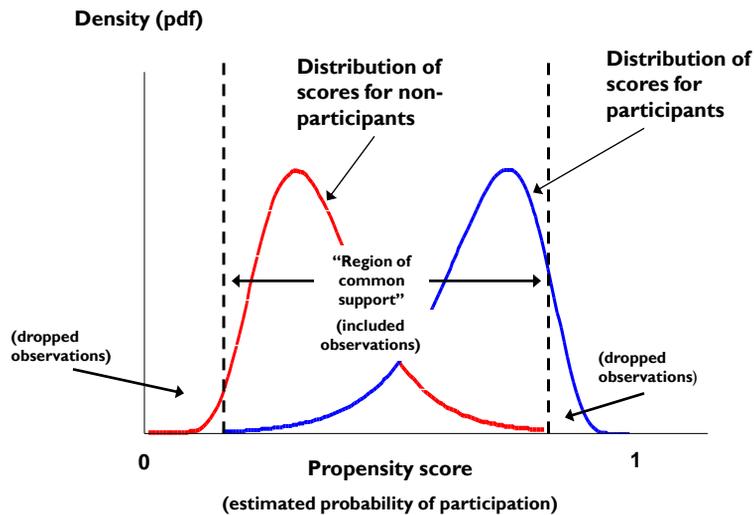
- ▶ Control group of non-participants (may be from a different survey) with same characteristics as participants
 - ▶ But which characteristics? The entire set of observed characteristics is enormous.
- ▶ From Rosenbaum and Rubin (1983): match on the basis of the propensity score

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

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

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Propensity-score matching



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Propensity-score matching

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

- ▶ 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 Projoven program.

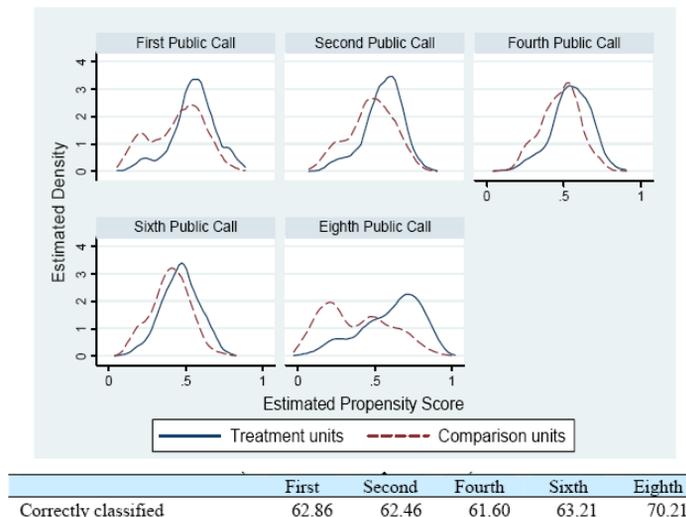
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Propensity-score matching

- ▶ **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.

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Propensity-score matching



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(Diaz and Jaramillo 2006)

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.

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(Diaz and Jaramillo 2006)

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)?

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A few references

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