Do Public Employment Services Improve Employment Outcomes? Evidence from Colombia

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From stagnation to growth (and return)

- Considerable economic and social progress since 2000s
    - With a little help from my friends (i.e. China)
    - Accompanied by innovative policy interventions (e.g. CCTs)

- But progress has recently come to a halt
    - Increase in unemployment figure 1
    - Inequality (again) on the rise

- And this interplays with structural economic challenges
    - Anemic productivity growth
    - Not looking good on informality figure 2

A call for new policy strategies

What's next for the region? A policy shift to face both short-term and structural challenges

The PES in Colombia

- National Learning Service (SENA) in charge of both vocational training (since 1957) and PES (since 1989)

- Great potential for labour market intermediation in Colombia

    - High levels of informal employment

    - A segmented labour market figure 5

    - With high turnover rates

- Yet, a largely missed opportunity (1% of job matches)

- Traditional system of labour intermediation

    - Jobseekers and employers can choose among different services figure 6

    - No eligibility/entry requirements

    - And no connection with unemployment benefits

    - Accessible online or via PES centres

Literature Review

A. Impact evaluation of labour market services

- Lack of impact evaluations of the PES in Colombia

- This reflects a broader gap in developing economies

  - ▸ Possibly due to the limited PES coverage

  - ▸ But also reflecting problems of econometric identification

- Results from developed economies cannot be easily extended

  - ▸ Differences in nature of ALMPs and functioning of labour markets

  - ▸ Wrong outcomes of interest?

B. Public vs Private systems of services provision

- Few recent studies in advanced economies

- Question is of particular importance for developing countries

Identification Strategy

- The challenges of identification
  - ▶ Services available to everybody and free of charge
  - ▶ PES likely to attract a non-random subgroup of the workforce

- Some help from the institutional context: the 2013 reform
  - ▶ Private agencies need to operate as public providers
  - ▶ Employers need to post all vacancies in the system

- And some help from econometric theory
  - ▶ Know which variables are "needed"
  - ▶ Can control for robustness of specifications

Conditional independence assumption

Exploit the institutional setting and results from previous studies to identify the effectiveness of public vs private employment services

Data and Summary Statistics

- Data from the Colombian Household Survey (GEIH) – 2013 to 2016
    - Main survey in the country (250,000 households per year)
    - Comprehensive coverage of social and demographic aspects

- Obtaining the final sample
    - Only public vs private employment agencies
    - Individuals with previous job experience

- Question on job-search method is asked only to employed individuals
    - Limits the analysis to measures of employment quality
    - But reduces risk of contamination or "false" treatment

- Descriptive statistics confirm expectations on selection into PES table 1

PSM: Handle with Care

- Different steps to be followed (Caliendo and Kopeinig, 2008)

- Estimation of the propensity score

  ▸ Choice of the model (i.e. probit or logit)

  ▸ Inclusion of the variables `table 2`

- Choice of the matching algorithm

  ▸ Assessing the reduction in bias `table 3`

  ▸ A graphical representation of balance of characteristics `figure 7`

- Checking the area of common support

  ▸ Number of observations dropped should be small

 ▸ Probability of participation should be higher among the treated `figure 8`

Results

- Mixed results on standard measures of job-quality

  - ▸ Small positive effects on informality table 4

  - ▸ Effects on wages vary by skills group (and gender) table 5

  - ▸ Negative effects on working hours table 6

  - ▸ Which result from higher compliance with the legislation table 7

- Positive results on self-reported measures of compliance

  - ▸ Higher probability of being consistent with employment contract table 8

  - ▸ More likely to report work-life balance table 9

  - ▸ To be satisfied with the job table 10

  - ▸ And consequently less willing to change job table 11

Conclusions: Was it Worth the Journey?

- Two main empirical contributions to the literature

  - First impact evaluations of the PES in Colombia

  - One of the first studies looking at the system of services provision

- Results reveal how private and public providers can complement

  - Mixed effects on wages by skills group

  - PES more successful on self-reported measures of job quality

- Some key policy messages

  - Labour intermediation can improve employment outcomes

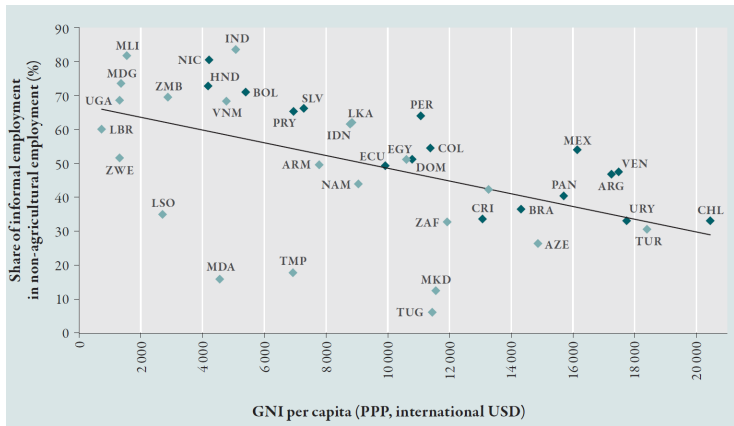 - Well defined contracts are key to ensure sucess of privatisation

Figure 1: Unemployment in Latin America and the Caribbean
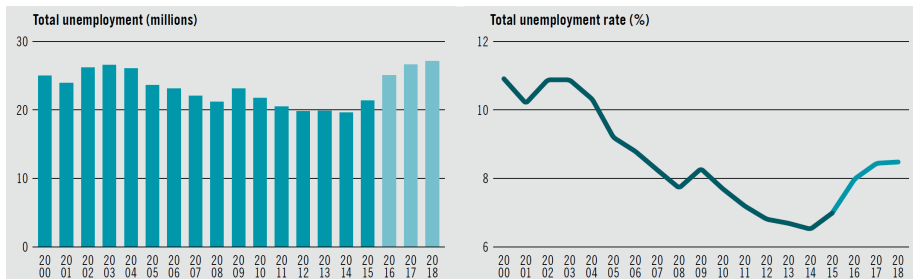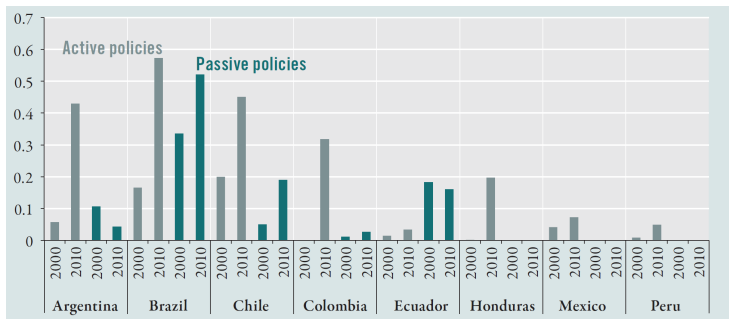

Source: ILO (2017)

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Figure 2: Informality and GNI per capita
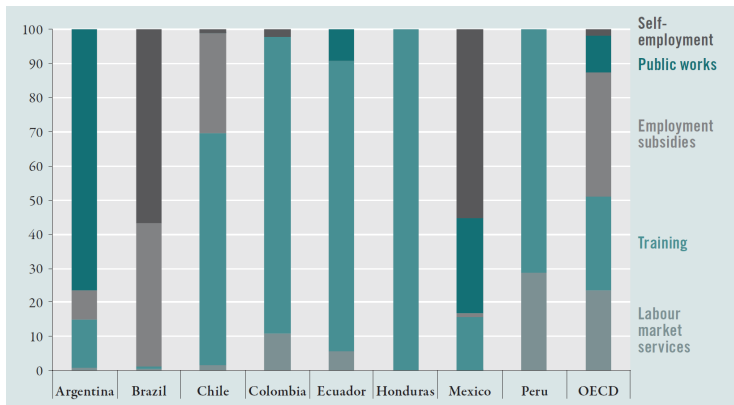
Source: ILO (2016)

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Figure 3: Public expenditure in active and passive policies as a percentage of GDP

Source: ILO (2016) based on Cerutti et al (2014)

Return to ALMPs in LAC

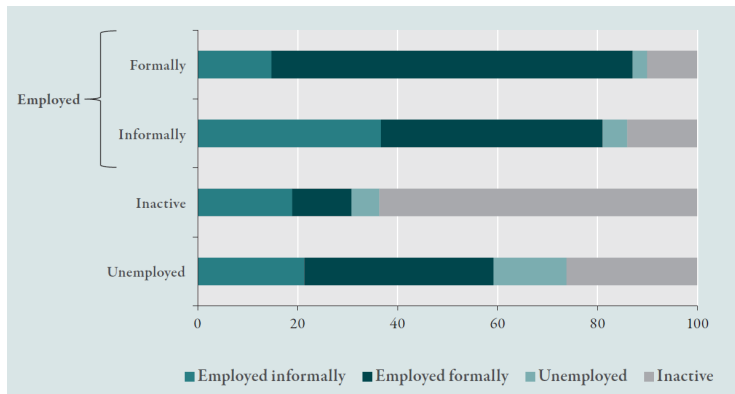## Figure 4: Share of expenditure in ALMPs by type of programme

Source: ILO (2016) based on Cerutti et al (2014)
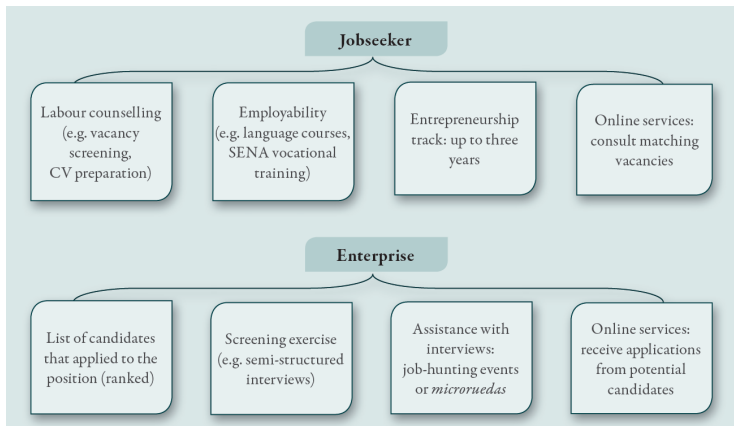
Return to ALMPs in LAC

Figure 5: Transition rates across employment status in Colombia between 2010 and 2013

Source: ILO (2016) based on ELCA

Return to **The PES in Colombia**

Figure 6: Overview of PES services for jobseekers and enterprises

Source: ILO (2016)

Return to The PES in Colombia

Table 1: Descriptive statistics

	PES		Private Agencies	
	Mean	**SD**	**Mean**	**SD**
Peronal characteristics				
Male	0.47	0.49	0.53	0.49
Age	29.25	8.92	32.96	9.37
Years of education	13.07	2.07	12.2	2.91
Vocational training	0.51	0.49	0.27	0.44
Household characteristics				
Number of children	1.02	1.02	1.07	1.05
Number of unemploy	0.17	0.43	0.17	0.43
Number of rooms	3.65	1.24	3.59	1.24
Floor tile	0.73	0.44	0.76	0.42
N	4222		17402	

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Table 2: Hit-Rates and Pseudo R2 for different PS specifications

		Specification				
Personal	Education	Household	Career	Geographical	Hit Rate	R2
X					0.449	0.069
	X				0.458	0.100
		X			0.405	0.067
			X		0.379	0.053
				X	0.394	0.143
X	X				0.411	0.118
X	X	X			0.418	0.140
X	X	X	X		0.389	0.138
X	X	X	X	X	0.363	0.206

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Table 3: Quality indicators of the matching algorithm

	Unmatch	Neighbour	Caliper	Kernel
Pseudo R2	0.206	0.006	0.005	0.012
Mean standardised bias	13.6	2	1.8	2.5
T-test of equality of means	46	6	3	3

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Figure 7: Box and density plots of propensity score
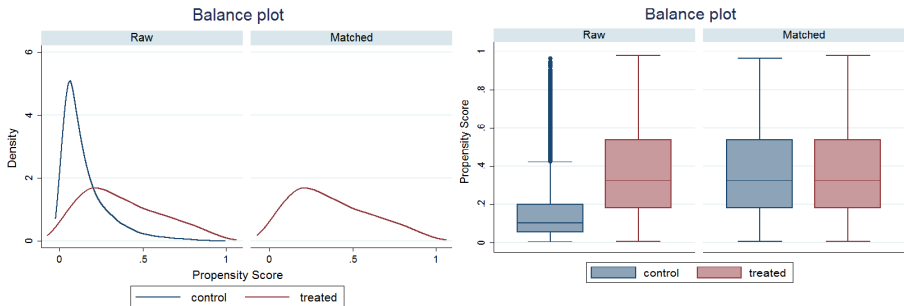
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Figure 8: Propensity score distribution of treated and untreaed
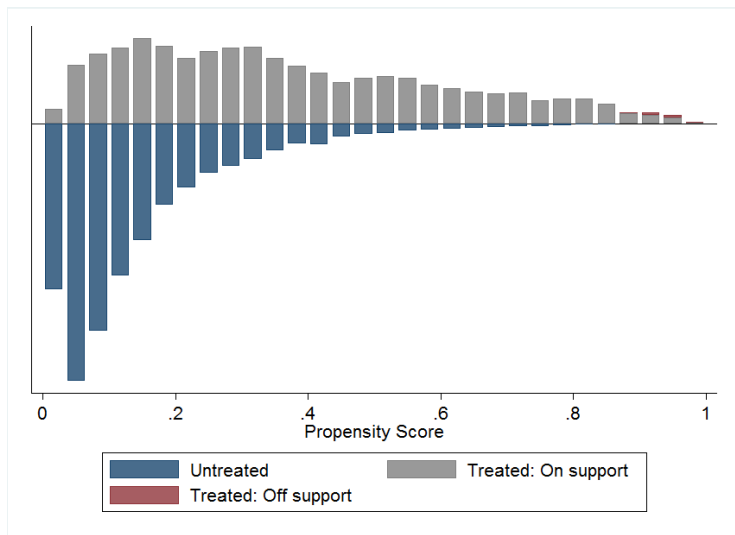
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Table 4: Treatment effects on the probability of being in formal employment

	Overall	Male	Female	Low-educated	High-Educated
Formal employment	0.03***	0.01	0.03*	0.02	0.01
	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)

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Table 5: Treatment effects on wages

	Overall	Male	Female	Low-educated	High-Educated
Hourly earnings (log)	0.01	0.07***	-0.03***	0.06***	-0.02
	(0.01)	(0.02)	(0.01)	(0.02)	(0.02)

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Table 6: Treatment effects on working hours

	Overall	Male	Female	Low-educated	High-Educated
Hours per week	-1.29***	-1.71***	-0.83*	-2.44***	-0.89**
	(0.38)	(0.58)	(0.50)	(0.79)	(0.42)

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Table 7: Treatment effects on the probablity of working excessive hours

	Overall	Male	Female	Low-educated	High-Educated
Excessive working hours	-0.03***	-0.03***	-0.04***	-0.07***	0.01
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)

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Table 8: Treatment effects on the probability of being consistent with the contract

	Overall	Male	Female	Low-educated	High-Educated
Consistent	0.08***	0.07***	0.07***	0.06***	0.09***
	(0.02)	(0.02)	(0.01)	(0.02)	(0.01)

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Table 9: Treatment effects on the probability of reporting work-life balance

	Overall	Male	Female	Low-educated	High-Educated
Work-life balance	0.04***	0.02*	0.04***	0.01	0.04***
	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)

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Table 10: Treatment effects on the probability of being satisfied with the job

	Overall	Male	Female	Low-educated	High-Educated
Satisfied	0.04***	0.06***	0.07***	0.01	0.07***
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)

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Table 11: Treatment effects on the probability of being willing to change job

	Overall	Male	Female	Low-educated	High-Educated
Want change job	-0.08***	-0.09***	-0.08***	-0.032	-0.09***
	(0.01)	(0.02)	(0.02)	(0.02)	(0.01)

Return to Results