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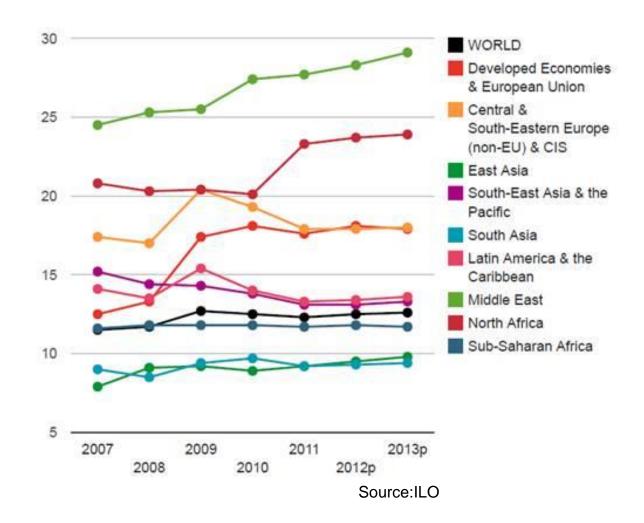
Interventions to Improve the Labor Market Outcomes of Youth

A Systematic Review of Skills Training, Entrepreneurship Promotion, Employment Services, and Subsidized Employment Interventions

Jose Manuel Romero, World Bank

With Jochen Kluve (RWI), Susana Puerto (ILO), David Robalino (World Bank), Friederike Rother(World Bank), Jonathan Stöterau (RWI), Felix Weidenkaff (ILO), Marc Witte (University of Oxford)

Challenge of youth unemployment





How do we address the challenge?

TRAINING AND SKILLS DEVELOPMENT

Lack of formal education in many countries → improve basic skills and employability

ENTREPRENEURSHIP PROMOTION

Provide entrepreneurial skills as well as physical, financial and social capital for self-employment

EMPLOYMENT SERVICES

Job-search assistance, mentoring; often complemented by job placement services

SUBSIDIZED EMPLOYMENT

Wage subsidies, public works

→ provide short-term
employment and on-the-job
experience



New evidence on what works: A systematic review

- 1. Scope
- 2. Search results
- 3. Methods
- 4. Empirical findings
- 5. Conclusion





Inclusion criteria, relevant data, methods

Search	 Youth (18-35) Experimental or quasi-experimental methods Labor Market Outcomes (Employment, Earnings, Business outcomes) Over 93 sources of evaluations & literature (including 23 databases)
Data Extraction	 Coding manual Coding tool: 181variables (publication info, evaluation sample information, intervention & program characteristics, program targeting)
Analysis	 Two unit-less measures: Standardized mean differences (SMD) & positive statistical significance (PSS) Program & population characteristics driving results



Primary and complementary search:

32,117 studies

Search Results: Overview

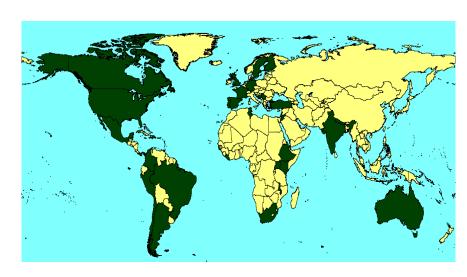
Title/abstract review: 28,375 studies Full text review: **1,141 studies** Selected studies: 93 Final selection: 115 studies

31

countries

87

programs





and citation

tracking; networks and

experts: 5,000+

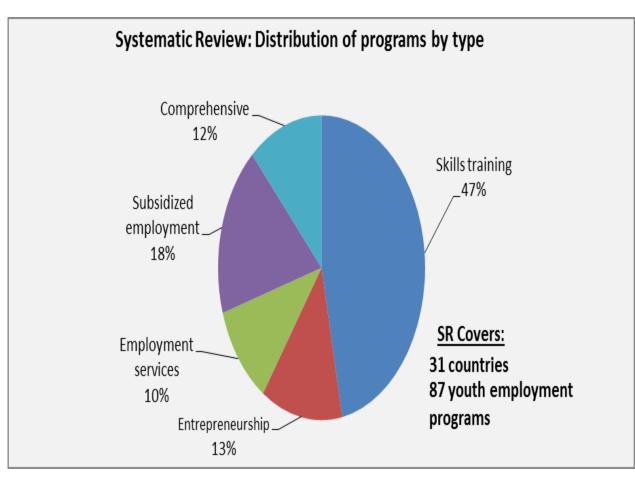
Selected

studies:

22 studies

Search Results: Types of programs

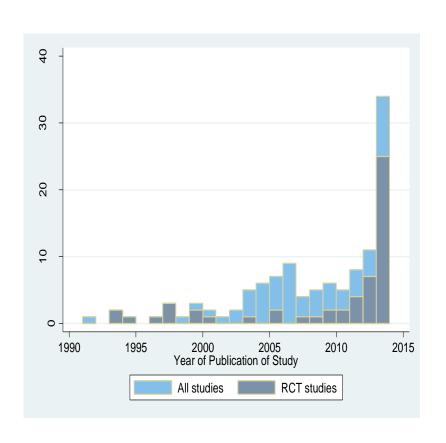
	Middle & Lower income	High income	Total	
Skills training	22	22	44	
Entrepreneurship	10	2	12	
Employment services	3	7	10	
Subsidized employment	3	14	17	
Comprehensive	3	8	11	

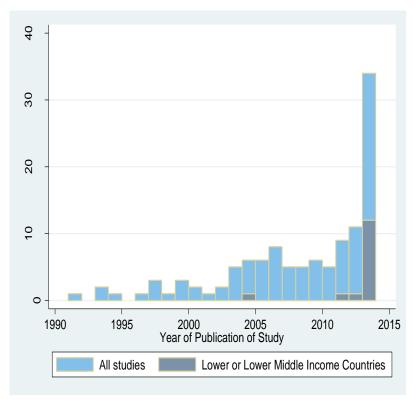




New contribution regarding evaluation design & coverage

Search Results: Evaluation coverage







Two measures, two dimensions

Methods: Effect sizes

(I) PSS: Indicator of Positive Statistically Significant Treatment Effect Estimates

Treatment effect significant at the 5% level.

(II.a) Standardized Mean Differences (SMD) Effect Size

$$Y_i = \frac{\beta_i}{\eta_i}$$

 β_i : Treatment effect estimate

 η_i : Standard deviation of the outcome variable

(II.b) Standard Error of SMD

$$\sigma_i = \frac{Y_i}{t_i}$$

 t_i : t-statistic associated with the treatment effect β_i



SMD & PSS summary measures

- Multiple studies per program and impact estimates per study (Multiple outcomes, subgroup analysis, specifications)
- -Aggregation: Select only relevant estimates (if overall programs only pooled estimates) and create summary effect size (unweighted mean).

$$Y_j = \frac{1}{m} \sum_{i=1}^{m} Y_{ij}$$

-For SMDs we estimate a standard error:

$$\sigma_{j} = \sqrt{\left(\frac{1}{m}\right)^{2} \left(\sum_{i=1}^{m} \sigma_{i}^{2} + \sum_{i \neq k} \rho_{ik} \sigma_{ij} \sigma_{kj}\right)}$$

Methods: Aggregation

Empirical Findings: Means

Mean effect sizes

	% Positive Significant		Effect Sizes		% Positive Significant	Mean #	Effect Sizes
(a) Type of outcome:				(b) Main Intervention C	<u>ategory</u>		
Employment	0.355	0.111	2378	Skills training	0.348	0.081	2359
Earnings	0.337	0.086	1027	Entrepreneurship Prom	0.319	0.077	249
Business Performance	0.248	-0.038	170	Employment Services	0.204	0.025	203
(b) Follow-up Timing:	<u>-</u>			Subsidized Employment	0.366	0.084	574
Within one year	0.301	0.059	1108				
				Comprehensive	0.313	0.134	175
Over one year	0.372	0.124	1607				
-				Total	0.335	0.078	3560



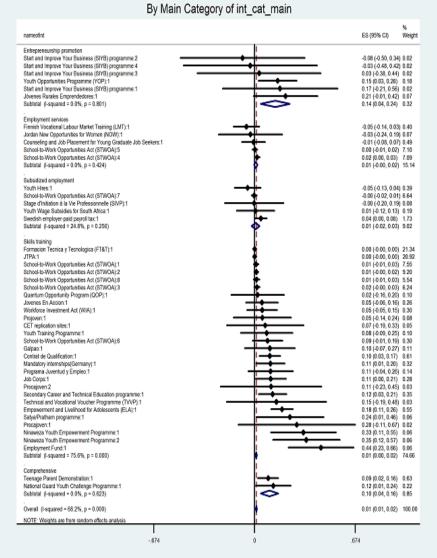
Employment Outcomes (All)

By Main Category of int cat main

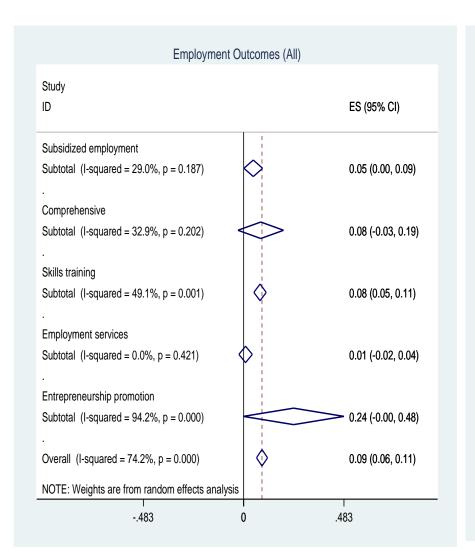
namecărit	ES (86% CI)	١
Skills training	. 1	
Lebour Market Training:1	0.14 (-0.37, 0.09)	- (
Jovenes En Accion: 1	4.06 (-0.17, 0.04)	2
Technical and Vocational Vocatier Programme (TVVP):1	-0.06(-0.23, 0.11)	1
Quantum Opportunity Program (QOP):1	4.05 (-0.23, 0.13)	1
JobStat:1	0.01 (-0.09, 0.10)	2
Mandatory internships (Germany): 1	0.01 (4.10, 0.12)	1
CET regication sites:1	0.01 (-0.25, 0.27)	(
Ulveckingsgarentin (UVS):1	0.02 (4.01, 0.04)	ź
Lei do Agrendiz:1	0.03 (-0.03, 0.09)	3
Job Corps:1	0.03 (0.04, 0.11)	3
Programa Juventud y Empleo:1	0.05 (-0.09, 0.10)	i
Galgac 1	0.05 (0.40, 0.50)	i
Jordan New Opportunities for Women (NOW):1	0.05 (4.09, 0.21)	1
Ohio Transitions To Independence Demonstration:	0.05 (0.00, 0.21)	3
ITPA-1		
	0.07 (0.00, 0.14)	3
Youth Training Programme:1	0.00 (4.01, 0.17)	
Workforce Investment Act (WIA):1	0.10 (-0.01, 0.20)	1
Senal Vocational Training:1	0.11 (4.05, 0.29)	1
Contrat de Qualification: 1	0.12 (0.04, 0.21)	1
Arbeit Sofort :1	0.12 (-0.12, 0.37)	(
Empowerment and Livelihood for Adolescents (ELA): 1	0.13 (0.00, 0.20)	4
Secondary Career and Technical Education programme: 1	0.13 (0.03, 0.24)	2
Formación en Oficios para Jóvenes de Escasos Recursos: 1	0.14 (-0.06, 0.36)	1
Projoverc1	0.14 (0.00, 0.37)	(
Ninaweza Youth Empowerment Programme 2	0.16 (0.16, 0.47)	(
Procejoven 2	0.10 (0.22, 0.54)	(
Formacion Tecnica y Tecnologica (FT&T):1	0.17 (0.02, 0.31)	ì
Procajoves:1	0,17 (0,17, 0,51)	i
Ninaveza Youth Empowerment Programme:1	0.18 (-0.13, 0.49)	ì
Economic Empowement of Adolescent Girls (EPAG):2	0.10 (0.13, 0.40)	ì
Evis 21:1	028 (0.10, 0.89)	ì
	0.27 (0.05, 0.49)	1
Programa de capacitación Jóvenes con Futuro (JCF): 1		
SatyalPhatham programme:1	0.29 (0.06, 0.52)	- (
Employment Fund:1	0.32 (0.12, 0.62)	1
Chile-Joven:1	0,45 (0.21, 0.70)	9
Subtotal (I-squared = 48.1%, p = 0.001)	0.09 (0.06, 0.11)	
Subsidized employment	.11	
Jordan New Opportunities for Women (NOW):4	4.06 (4.29, 0.16)	1
Youth Practice:1	0.04 (0.18, 0.10)	
Swedish employer-paid payroll tax:1	0.02 (0.00, 0.03)	2
Youth Hires:1	0.04 (0.07, 0.14)	4
Contrat Jeune en Entreprise:1	0.05 (0.23, 0.39)	- (
2006 Employment Package:1	0.00 (-0.07, 0.23)	1
Youth Wage Subsidies for South Africa: 1	0.19 (0.01, 0.29)	1
Stage d'initiation à la Vie Professionnelle (SIVP); 1	0.10 (-0.00, 0.34)	1
Jordan New Opportunities for Women (NOW); 3	0.16 (0.02, 0.31)	
Subtotal (I-equared = 29.0%, p = 0.187)	0.05 (0.00, 0.09)	-
Employment services	1 !	
Finnish Vocational Labour Market Training (LMT):1	404(0.10,000)	3
BPO recruiting services:1	0.01 (0.04, 0.09)	1
Jordan New Opportunities for Women (NOW) 2	003 (0.12, 0.10)	1
Counseling and Job Placement for Young Graduate Job Seekers: 1	0.05 (0.02, 0.10)	1
	0.05 (-0.10, 0.30)	ì
Mandatory visits to job info. centers(Germany): 1 Franklin Subsidized Transport Experiment 1	0.05 (-0.14, 0.00)	1
Subtotel (I-squared = 0.0%, p = 0.421)	0.01 (4.02, 0.04)	
	Li	
Comprehensive	J !	
New Chance:1	4.02 (-0.11, 0.07)	3
National Guard Youth Challenge Programme:1	0.09 (0.14, 0.33)	(
New Deal For The Young Unemployed:1	0.15 (0.23, 0.54)	0
Teenage Parent Demonstration: 1	0.17 (-0.00, 0.34)	1
ALMP for disadvantaged youth in Germany: 1	0.29 (4.09, 0.67)	(
Subtotal (Hequared = 32.9%, p = 0.202)	0.08 (4.00, 0.19)	
Entrepreneurship promotion		
CréaJeures 1	0.02+0.17, 0.140	,
Turning Theses into Enterprises: 1	0.05 (-0.06, 0.19)	i
Jévenes Rurales Emprendedores:1	0.07 (0.18, 0.39)	i
Youth Opportunities Programme (YOP):1	0.13 (0.04, 0.23)	3
Foonomic Empowement of Adolescent Girls (EPAG):1	0.13 (0.04, 0.23)	1
	0.33 (3.14, 0.47)	1
Women's Income Ceneration Support (WINOS):1		1
Subtotal (I-equared = 94.2%, p = 0.000)	0.24 (-0.00, 0.40)	1
Overall ()-squared = 74.2%, p = 0.000)	0.09 (3.06. 0.11)	
	V 000 0.00 0.01	
IOTE: Weights are from random effects analysis		

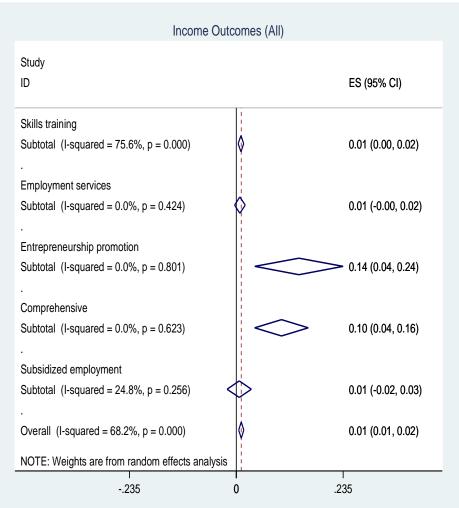


Income Outcomes (All)



Empirical Findings: Aggregates



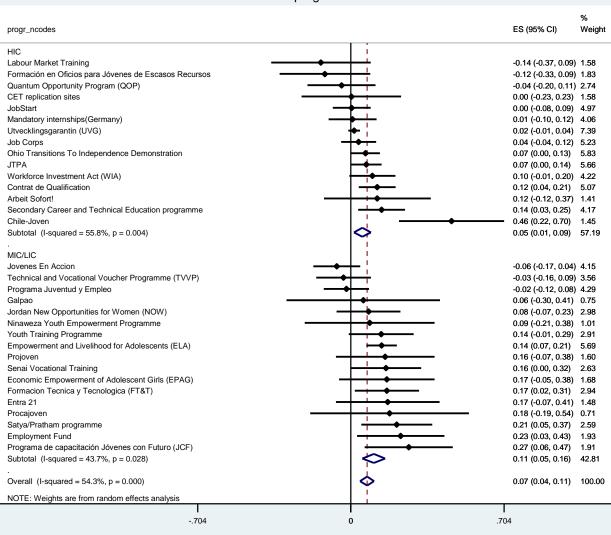




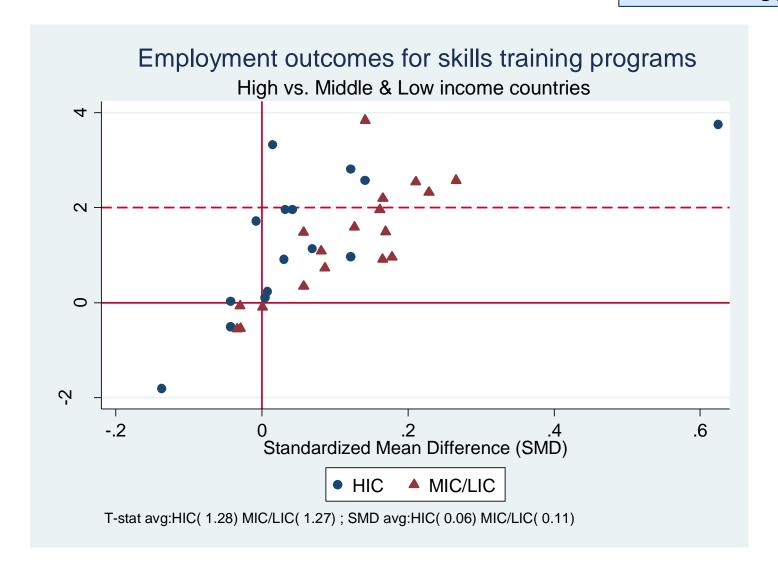
Empirical Findings: Contrast of skills training programs

Effect Size for Employment Outcomes

Skills programs









Employment outcomes for High Income Countries

	PSS				SMD			
Base main category: Skill training								
Main Category:comprehensive	-0.01	-0.003	-0.035	-0.014	0.036	0.066	0.086	0.047
	[0.09]	[0.02]	[0.32]	[0.13]	[0.59]	[1.05]	[1.21]	[0.51]
Main Category:entr. prom.	-0.08	0	0	0	-0.110**	-0.100**	-0.092*	-0.131*
	[0.40]				[2.29]	[2.46]	[1.85]	[1.96]
Main Category:empl. serv.	-0.263*	-0.332*	-0.430**	-0.473***	0.005	0.017	0.052	0.064
	[1.82]	[1.76]	[2.26]	[2.60]	[0.14]	[0.22]	[0.57]	[0.69]
Main Category:subs. empl.	-0.221*	-0.526***	-0.559***	-0.590***	0.112	0.139	0.182	0.192
	[1.82]	[3.72]	[2.88]	[3.01]	[0.97]	[0.85]	[1.18]	[1.15]
Log Evaluation Sample Size	0.038*	0.024	-0.003	-0.006	-0.027*	-0.034**	-0.035	-0.032
	[1.76]	[0.86]	[0.07]	[0.13]	[1.76]	[2.16]	[1.64]	[1.48]
Eval. design:RCT		-0.13	-0.017	-0.01		-0.111**	-0.116	-0.102
		[1.12]	[0.13]	[0.08]		[2.18]	[1.52]	[1.35]
Publication Peer-Reviewed		-0.095	-0.117	-0.083		-0.076	-0.109	-0.082
		[0.79]	[0.95]	[0.58]		[1.24]	[1.47]	[0.77]
Follow-up over one year later		0.082	0.016	0.02		0.105*	0.106	0.120**
		[0.78]	[0.16]	[0.20]		[1.75]	[1.63]	[2.16]
Male participant			-0.044	0.023			0.056	0.025
			[0.53]	[0.26]			[1.20]	[0.49]
Female participant			-0.072	-0.021			-0.003	-0.023
			[0.71]	[0.18]			[0.06]	[0.42]
Group for which effect is estimated: Low			-0.191	-0.237			0.024	0.07
Income / Disadvantaged populations			-0.191	-0.237			0.024	0.07
			[1.19]	[1.42]			[0.26]	[0.65]
Program in Local or Pilot Scale				0.063				-0.037
				[0.38]				[0.34]
Constant					0.274*	0.318*	0.296	0.246
					[1.98]	[1.96]	[1.39]	[1.10]
R2	0.04	0.12	0.15	0.16			•	
N	818	405	396	363	494	313	308	275



Empirical Findings: Multivariate results, High income countries

Employment outcomes for Middle and Low Income Countries

	PSS				SMD			
Base main category: Skill training								
Main Category:entr. prom.	0.169	0.151	0.202**	0.198**	0.167	0.175	0.231**	0.221**
	[1.44]	[1.37]	[2.35]	[2.24]	[1.09]	[1.32]	[2.12]	[2.17]
Main Category:empl. serv.	0.046	0.013	0.046	0.049	-0.048	0.031	0.117	0.12
	[0.52]	[0.11]	[0.42]	[0.45]	[0.95]	[0.47]	[1.51]	[1.44]
Main Category:subs. empl.	0.207**	0.154	0.11	0.111	0.003	-0.023	0.084	0.079
	[2.05]	[1.16]	[0.70]	[0.71]	[0.10]	[0.43]	[1.34]	[1.27]
Log Evaluation Sample Size	0.037	0.042	0.058	0.055	-0.013	-0.001	0.017	0.013
	[0.88]	[0.93]	[1.48]	[1.41]	[1.59]	[0.05]	[1.05]	[0.98]
Eval. design:RCT		0.047	0.074	0.077		0.091	0.114	0.125
		[0.38]	[0.76]	[0.78]		[1.33]	[1.47]	[1.45]
Publication Peer-Reviewed		0.05	0.009	0.004		-0.209**	-0.263***	-0.272*
		[0.41]	[0.08]	[0.04]		[2.64]	[3.12]	[2.88]
Follow-up over one year later		0.018	0.047	0.049		0.079	0.104	0.105
. ,		[0.16]	[0.51]	[0.56]		[1.09]	[1.65]	[1.66]
Male participant			0.141*	0.141*			0.059	0.067
-			[1.78]	[1.80]			[0.88]	[0.99]
Female participant			0.199**	0.202**			0.073	0.08
-			[2.16]	[2.27]			[1.54]	[1.60]
Group for which effect is estimated: Low Income / Disadvantaged populations			-0.056	-0.057			0.157**	0.155*
			[0.45]	[0.45]			[2.42]	[2.45]
Program in Local or Pilot Scale				-0.019				-0.038
				[0.23]				[0.63]
Constant					0.209***	0.054	-0.262	-0.227
					[2.96]	[0.40]	[1.29]	[1.29]
R2_P	0.03	0.03	0.08	0.08				
N	483	470	468	468	312	300	299	299



Women's Income Generation Support (WINGS) Entrepreneurship Promotion, Uganda

Evaluation: Blattman and Green, 2014

Empirical Findings: Highlight of strong evaluation results

Program Description

- 15 most marginalized people X
 120 Villages
- Business advisory / mentoring
- Visits ~5 over 6 months
- Business skills 25 hours
- Grants (\$150)
- Post-conflict region

Results

- % in non-farm business doubles(49-80%)
- Weekly hours from 14-24 hours
- Income increases by .6 standard deviations

Potential keys to success

- Highly specific target (S. Uganda, at local level/scale)
- Nudge away from farm activity related investment (petty trade)
- Visits and sequenced payments strongly encouragement investment & continued engagement in program



Satya/Pratham programme

Skills training with entrepreneurship component, India

Evaluation: Matria and Mani, 2014

Empirical Findings: Highlight of strong evaluation results

Program Description

- 6 months of training in stitching and tailoring
- Women 18-29, 5+ years in school in poor slums in New Delhi
- Designed & Implemented with NGO involvement
- Payments required by participants (Rs 50), reimbursed in the end

Results

- 6% more likely to work (both self and wage employment)
- Increased labor supply.
- Earnings increase of 150%

Potential keys to success

- Highly specific target (New Delhi Slums, at local level/scale)
- Commitment mechanism



Conclusions

Some initial findings:

- Overall youth employment programs have a positive detectable effect on labor market outcomes
- 2. All categories of intervention save for employment services show a positive effect on employment
- 3. Youth employment programs make a greater difference for employment outcomes than income outcomes
- 4. Outcomes are overall greater for low and middle income countries jointly than high income countries (including skills program)
- 5. More rigorous evaluations (RCTs) do not necessarily detect larger or more significant effects
- 6. Indication that short term evaluations are likely to fail to capture the effect of program, specifically in terms of magnitude
- 7. Indication that entrepreneurship promotion programs are more effective than skill training programs for employment outcomes for the of lower and middle income countries jointly. Needs further testing.

Thank you

jromero1@worldbank.org