Educational Impacts of CCT Programs in Developing Countries: A Meta-Analysis

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Biennial Meeting of the CPC Learning Network
June 21st and 22nd, 2016

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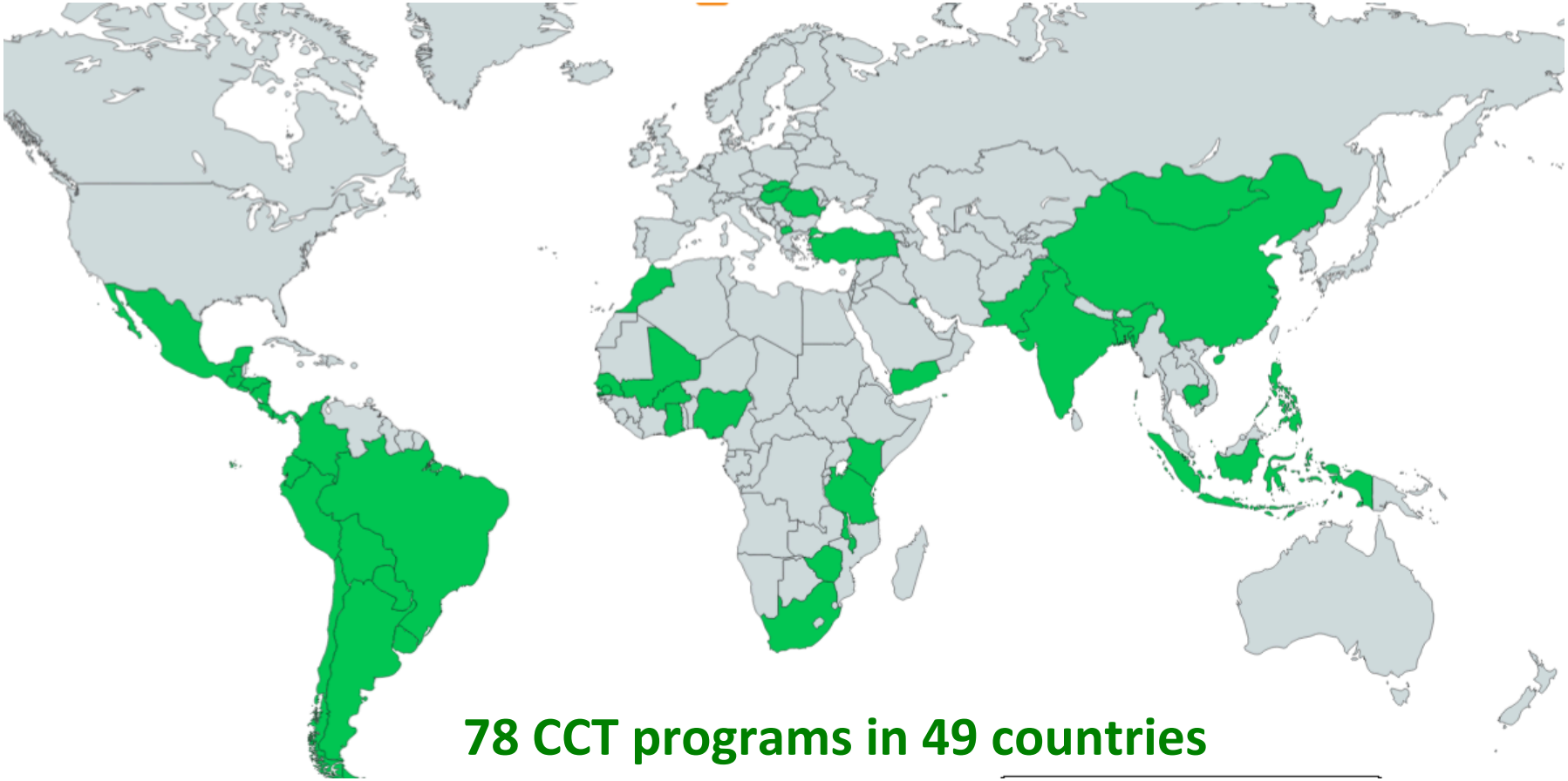
What are CCT Programs?

- Conditional Cash Transfer (CCT) programs provide cash transfers to poor families contingent on children's educational and health investments
  - School enrollment and attendance, and regular medical checkups

- Goal of CCTs is to break intergenerational cycle of poverty by promoting future generations' human capital accumulation

CCT PROGRAMS AROUND THE WORLD

Over 150 million beneficiaries worldwide



78 CCT programs in 49 countries

Prior evidence

- Rigorous impact evaluations have accompanied CCT program implementation in most cases
  - Most suggest positive schooling effects (enrollment and attendance), with considerable heterogeneity
- No study to date integrates quantitatively available evidence of CCT programs on schooling outcomes
- Our paper integrates available evidence in a meta-analytic framework, focusing on three outcomes:

  ENROLLMENT, ATTENDANCE, DROPOUT

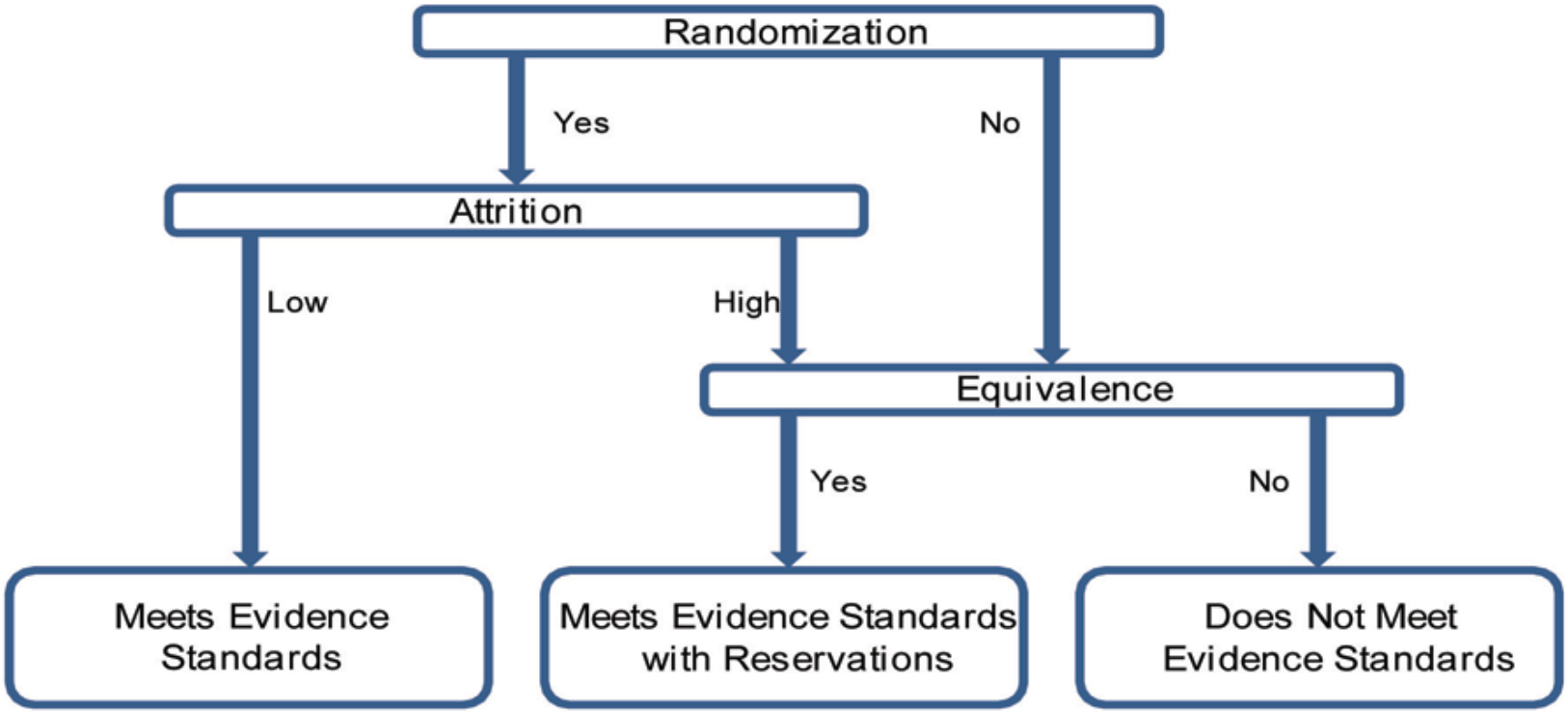
Literature search

- Searched countries with CCTs based on:
  - World Bank data base of CCTs (based on Fiszbein & Schady (2009) review).
  - CEPAL data base of CCTs
  - Africa Cash Dividend
  - Baird et al. (2014) review on CCTs and UCTs
- For all programs, searched for impact evaluations (in databases of scientific journals as well as repositories for unpublished work)

Studies coding

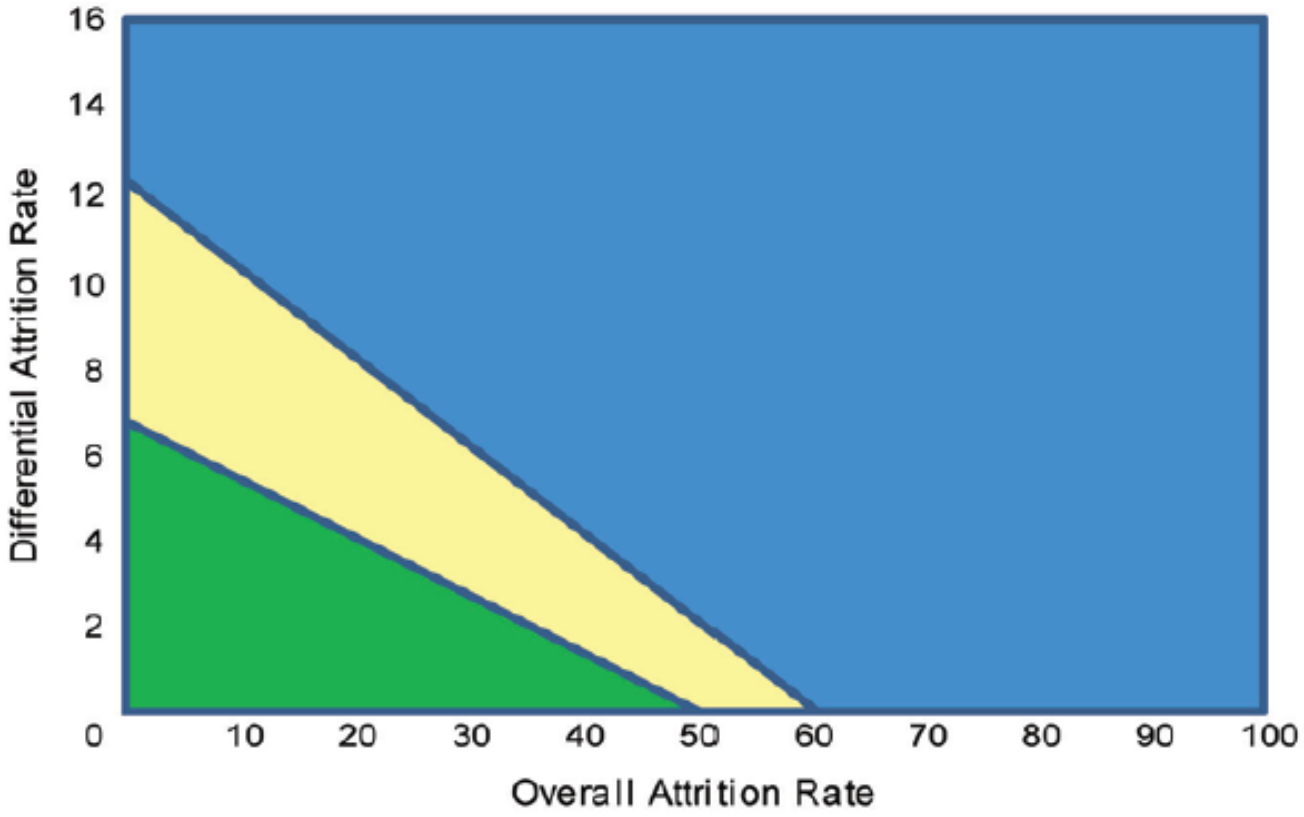
- For each study reasearchers coded the most robust overall effect size
- Context and program characteristics were coded for every study
- References where also rated according to their quality (using What Works Clearing House protocol)

Quality rating criteria



Tomado de What Works Clearinghouse Versión 2.1

High attrition criteria



Tomado de What Works Clearinghouse Versión 2.1

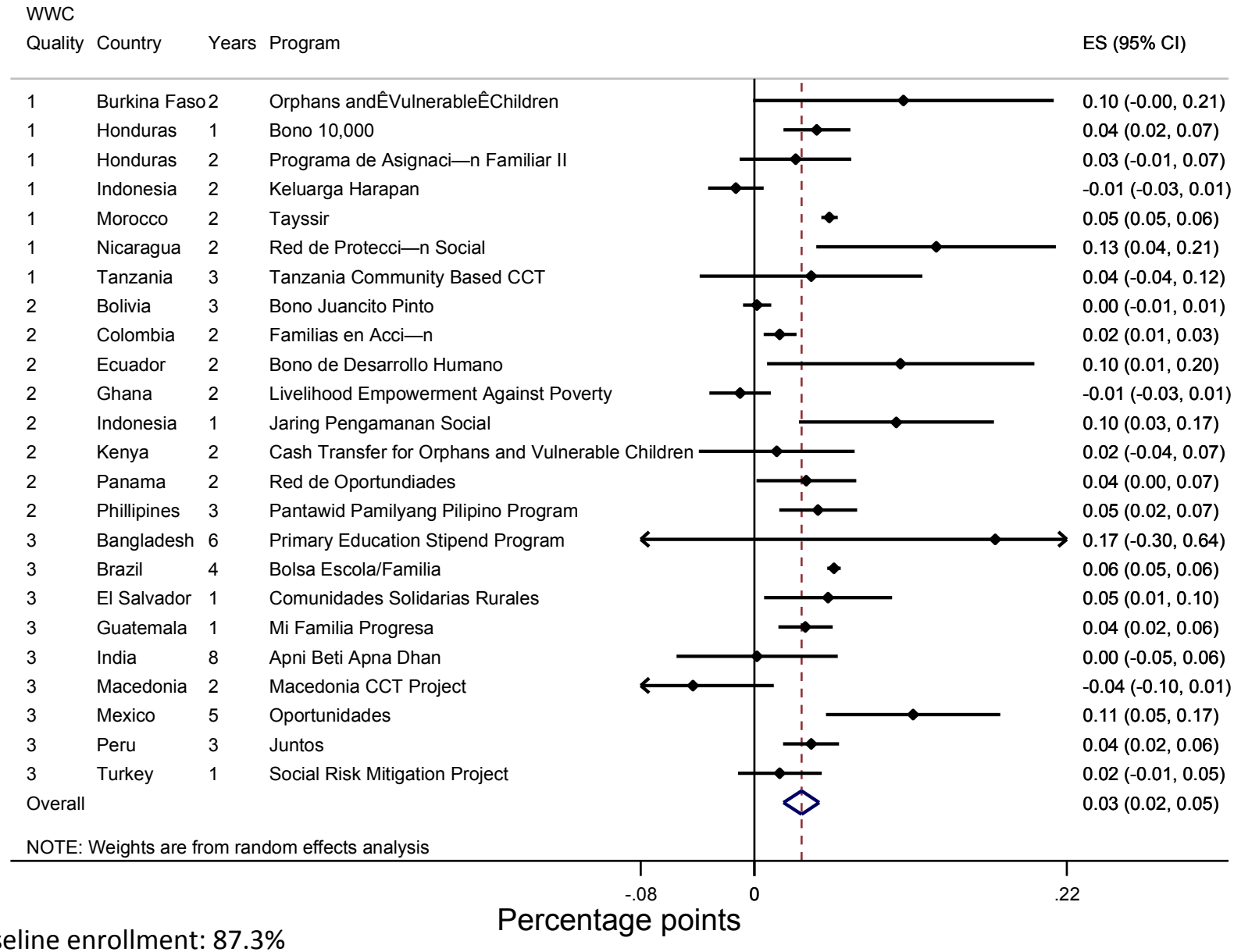
Program characteristics

	Freq	%	N	Min
Total number of programs	46	100		
Region				
Sub-Saharan Africa	6	13.0		
East Asia and Pacific	7	15.2		
Eastern Europe and Central Asia	2	4.4		
Latin America and the Caribbean	26	56.5		
Middle East and North Africa	1	2.1		
South Asia	4	8.7		
Education conditionality requirements				
School attendance	12	26.1		
School enrollment and attendance	20	43.5		
Grade promotion or achievement	14	30.4		
Minimum school attendance level required				
Yes	6	13.0		
No	40	86.7		
Minimum % school attendance for transfer receipt (mean, SD)	82.9	4.4	40	75
Payment frequency				
Monthly	10	21.7		
Bimonthly	20	43.5		
Quarterly/trimesterly	10	21.7		
Other	16	13.0		

Program characteristics (cont.)

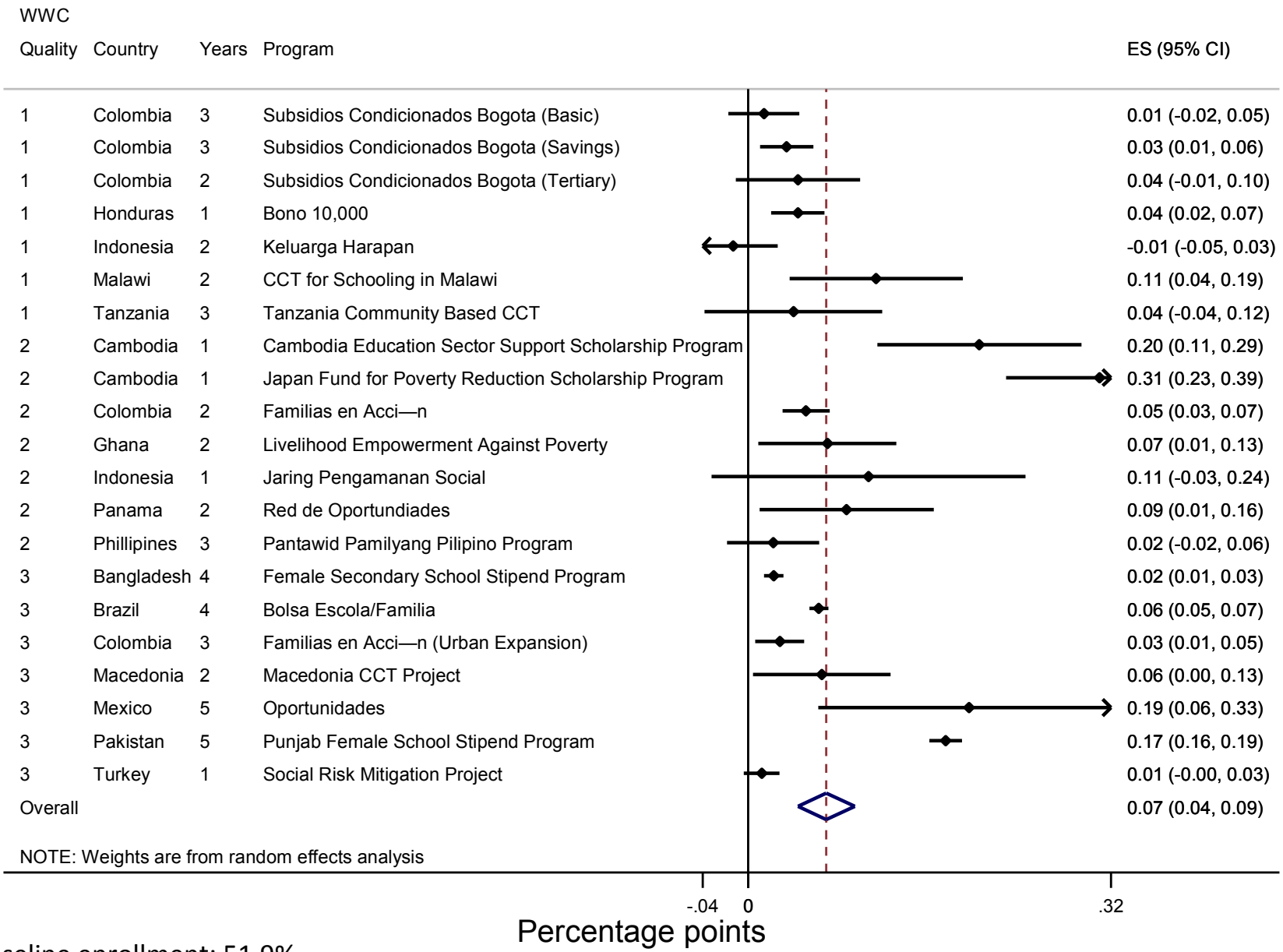
	Freq	%	N	Min
Monthly average subsidy amount per person – 2015 dollars (mean, SD)				
Primary	21.2	30.9	35	1.23
Secondary	24.3	29.5	39	2.38
School subsidy amount varies by				
Grade or age	8	17.4		
Family composition/family size	4	8.7		
Gender and grade	3	6.5		
None (flat transfer)	31	67.4		
Who receives the transfer				
Guardian, parent or head of household	20	43.5		
Mother or female head of household	17	37.0		
Student (or student and guardian)	8	17.4		
Information not reported	1	2.2		
Savings component				
Yes	5	10.9		
No	41	89.1		
Supply incentives for education				
Yes	4	8.7		
No	42	91.3		
School enrollment at baseline (mean, SD)				
Primary	87.3	14.8	46	10.0
Secondary	51.9	19.2	44	12.0

Primary Enrollment-All Studies



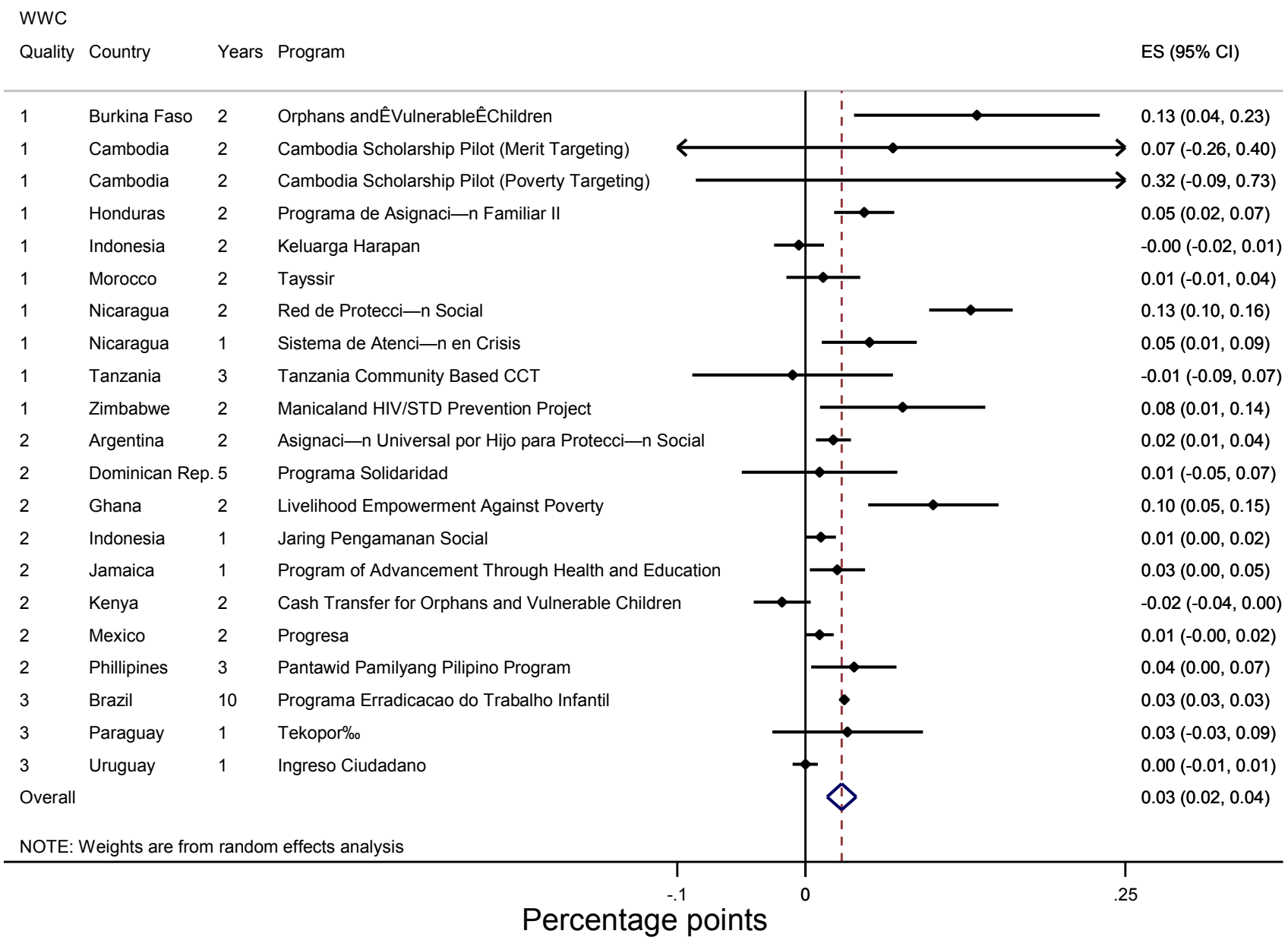
Baseline enrollment: 87.3%

Secondary Enrollment-All Studies

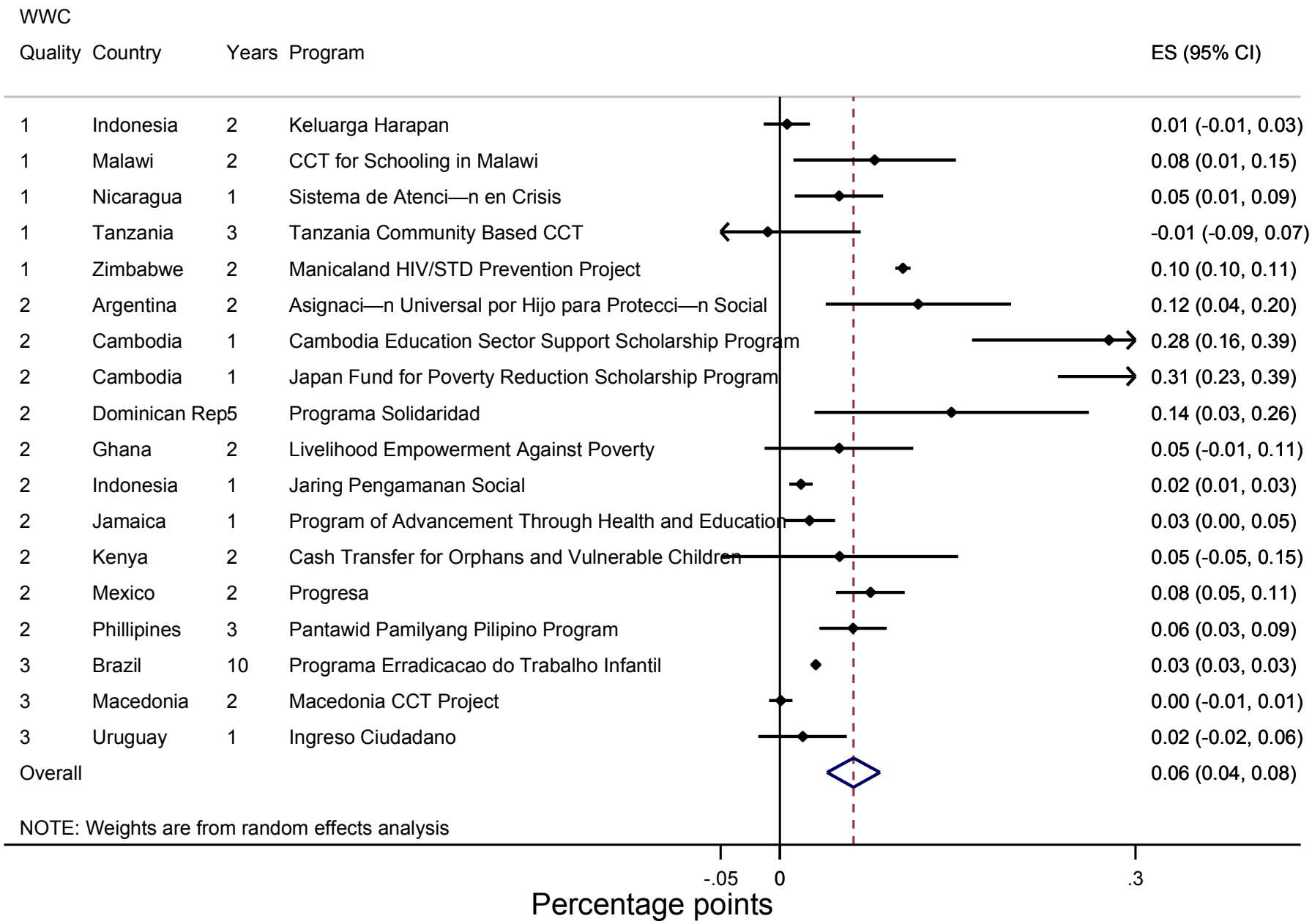


Baseline enrollment: 51.9%

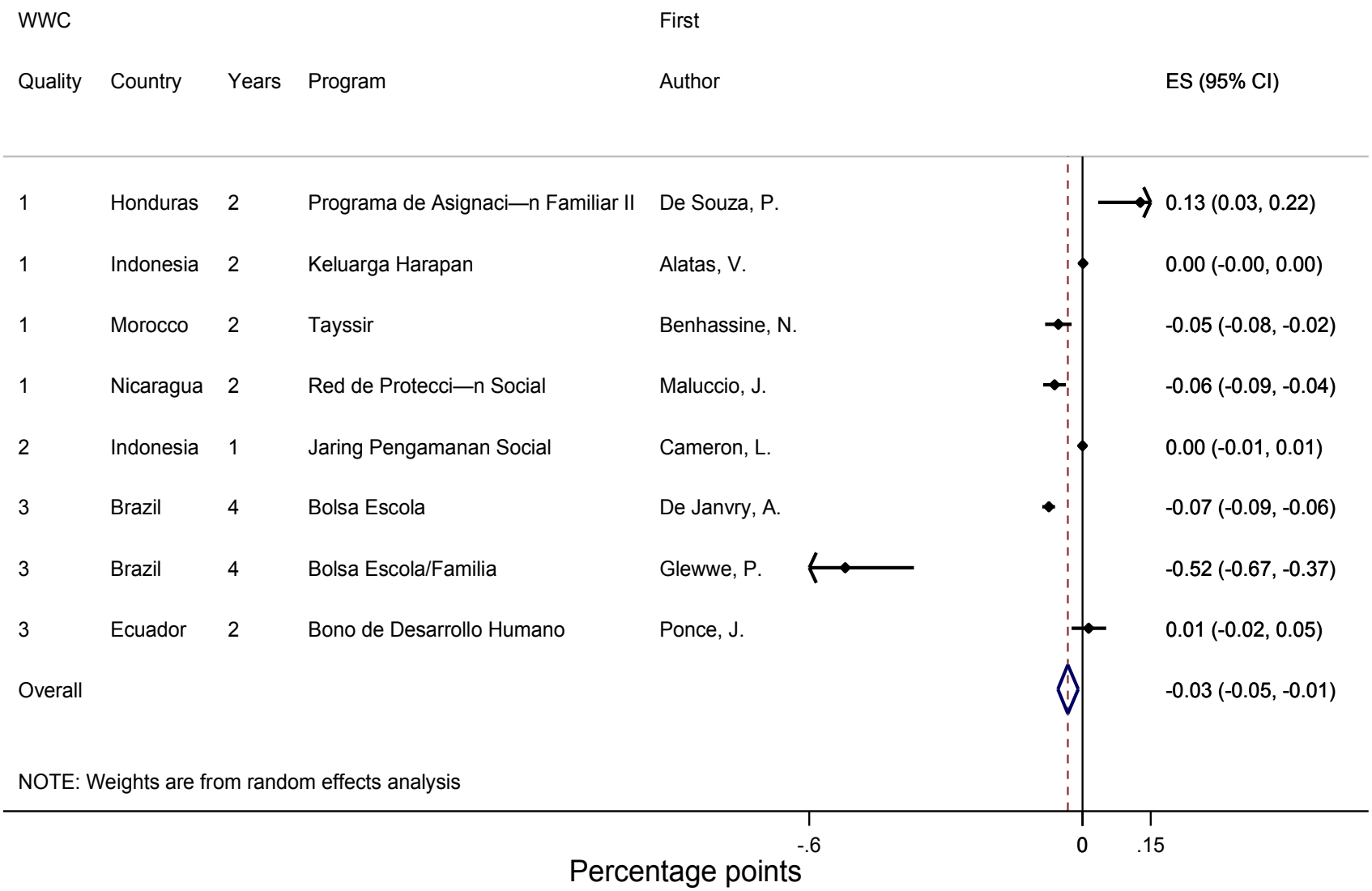
Primary Attendance-All Studies



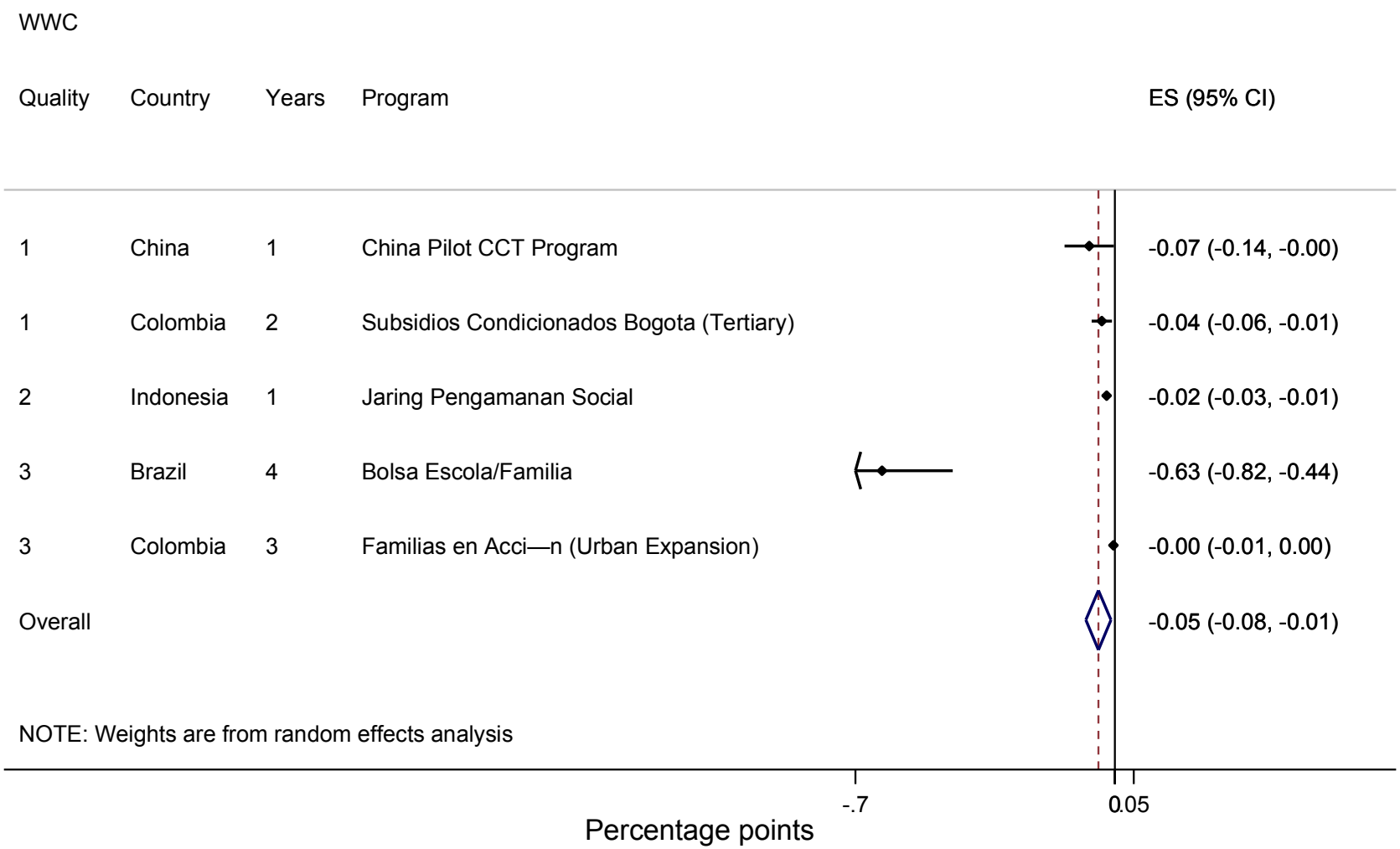
Secondary Attendance-All Studies



Primary Dropout-All Studies



Secondary Dropout-All Studies



Meta-regression of effect size and moderators

	Primary enrollment		Secondary enrollment		Primary attendance		Secondary attendance	
Program characteristics								
Subsidy amount/child (USD)	0.001*	0.001**	-0.000	-0.001	0.000	0.000	0.001	0.001
	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)
Payment frequency	-0.010**	-0.012**	-0.003	0.019	0.000	0.005	0.021	0.053
	(0.005)	(0.005)	(0.023)	(0.015)	(0.011)	(0.008)	(0.026)	(0.043)
Conditioned on achievement	-0.002	-0.007	0.002	0.033	0.002	-0.008	0.017	0.018
	(0.011)	(0.014)	(0.031)	(0.029)	(0.012)	(0.019)	(0.031)	(0.054)
Latin America	-0.000	0.002	-0.013	-0.007	0.028	0.021	0.017	0.042
	(0.011)	(0.013)	(0.033)	(0.039)	(0.019)	(0.016)	(0.036)	(0.045)
Enrollment at baseline	-0.031	-0.064	-0.141	-0.119*	-0.305**	-0.238*	-0.229**	-0.350***
	(0.093)	(0.074)	(0.086)	(0.069)	(0.148)	(0.136)	(0.107)	(0.135)
Supply-side component	0.067*	0.066*	-0.043	-0.149*	0.038	0.025	-0.039***	-0.039***
	(0.034)	(0.040)	(0.054)	(0.080)	(0.027)	(0.017)	(0.012)[a]	(0.012)[a]
Study characteristics								
ITT estimate		0.009		-0.051		0.051*		-0.022
		(0.014)		(0.041)		(0.031)		(0.053)
Does not meet evidence stand		0.011		-0.018		0.020		0.040
		(0.010)		(0.026)		(0.017)		(0.041)
New reference (post 2012)		0.010		-0.059**		-0.032		-0.034
		(0.013)		(0.028)		(0.022)		(0.038)
Constant	0.066	0.086	0.155**	0.165**	0.275*	0.196	0.105	0.107
	(0.084)	(0.065)	(0.078)	(0.065)	(0.150)	(0.144)	(0.067)	(0.087)
Observations	33	33	37	37	27	27	24	24

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

[a] Coefficient from bivariate regression

Meta-regression of effect size and moderators

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Program characteristics								
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Conditioned on achievement	-0.002	-0.007	0.002	0.033	0.002	-0.008	0.017	0.018
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Meta-regression of effect size and moderators

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Program characteristics								
Subsidy amount/child (USD)	0.001*	0.001**	-0.000	-0.001	0.000	0.000	0.001	0.001
Payment frequency	-0.010**	-0.012**	-0.003	0.019	0.000	0.005	0.021	0.053
Conditioned on achievement	-0.002	-0.007	0.002	0.033	0.002	-0.008	0.017	0.018
Latin America	-0.000	0.002	-0.013	-0.007	0.028	0.021	0.017	0.042
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Study characteristics								
ITT estimate		0.009		-0.051		0.051*		-0.022
Does not meet evidence stand		0.011		-0.018		0.020		0.040
New reference (post 2012)		0.010		-0.059**		-0.032		-0.034
Observations	33	33	37	37	27	27	24	24

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1
[a] Coefficient from bivariate regression

Meta-regression of cost-effectiveness and moderators

VARIABLES	Primary enrollment CEF		Secondary enrollment CEI		Primary attendance CEF		econdary attendance CE	
Program characteristics								
Subsidy amount/child (USD)	-0.0000	-0.0000	-0.0001	-0.0003*	-0.0000	-0.0000	0.0000	0.0000
Payment frequency	-0.0007	-0.0010	0.0028	0.0061**	0.0007	0.0005	0.0011	0.0014
Conditioned on achievement	-0.0005	-0.0008	-0.0009	0.0076	-0.0005	-0.0017	-0.0010	0.0002
Latin America	-0.0004	-0.0005	-0.0028	0.0012	0.0018	0.0021	0.0003	-0.0007
Enrollment at baseline	0.0037	0.0005	-0.0195	-0.0245**	-0.0069	-0.0125	-0.0154**	-0.0172*
Supply-side component	0.0072**	0.0070**	-0.0144	-0.0365**	0.0059**	0.0038		
Study characteristics								
ITT estimate		0.0002		-0.0060		0.0019		-0.0023
Does not meet evidence standa		-0.0001		0.0036		0.0001		-0.0002
New reference (post 2012)		0.0012		-0.0111**		-0.0004		-0.0010
Observations	33	33	37	37	27	27	24	24

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Conclusions

- CCT programs are particularly effective at improving schooling outcomes in contexts with low baseline secondary schooling levels.
- CCTs with supply-side component have larger effects in primary schooling level (not so in secondary).
- Transfer amount and payment frequency are associated with larger effects in primary (not in secondary).
- No association with condition on achievement.
- Policy implications: design of CCTs.