Online Appendix for the paper "Saving Lives: Evidence from a Conditional Food Supplementation Program"

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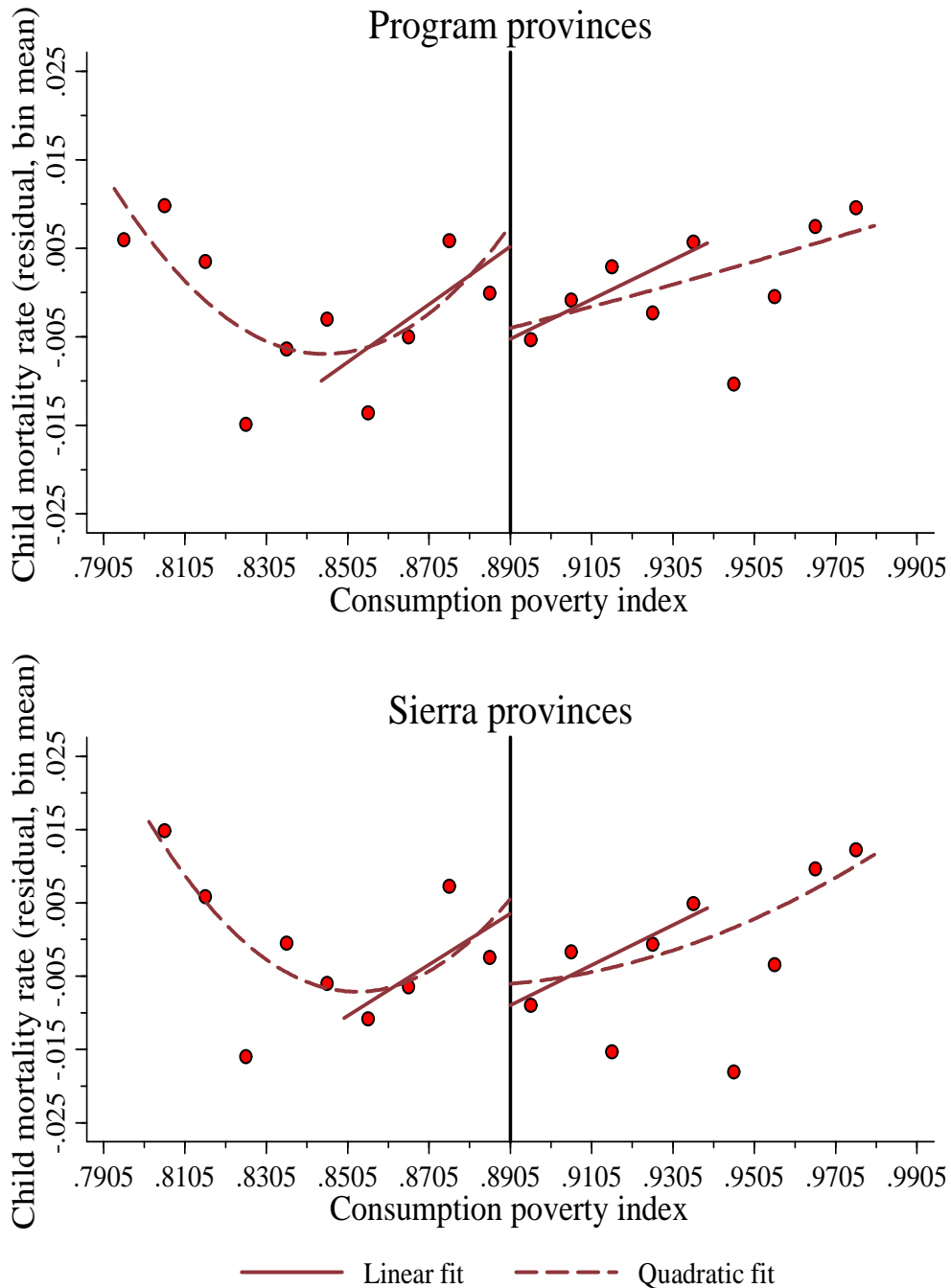November 26, 2013

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Figure 1: Impact on child mortality, maximum differential exposure cohorts, h=10

Program provinces

Sierra provinces

Linear fit — — — Quadratic fit

Notes: The unit of observation is the rural *parroquia*. The sample is restricted to *parroquias* within 10 percentage point distance to the cutoff. The residuals are computed from regressions with the control variables listed in Table 6. Program provinces are Bolívar, Chimborazo, Imbabura, and Manabí. Sierra provinces are Bolívar, Chimborazo, and Imbabura.

Figure 2: Impact on child mortality, seasonally matched non-exposed cohorts
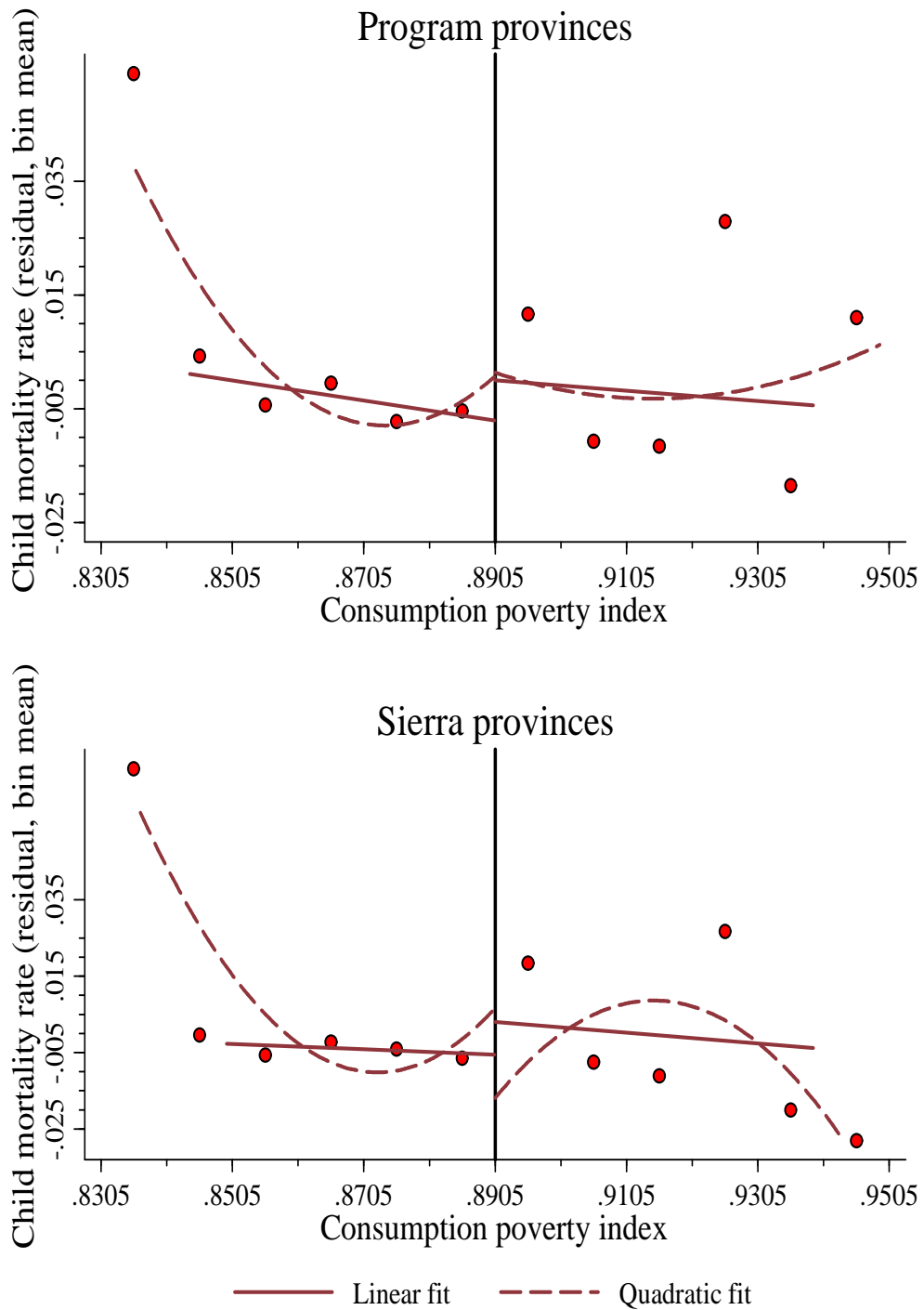
Notes: The unit of observation is the rural *parroquia*. The sample is restricted to *parroquias* within 6 percentage point distance to the cutoff. The residuals are computed from regressions with the control variables listed in Table 8.1 of the Appendix. Program provinces are Bolívar, Chimborazo, Imbabura, and Manabí. Sierra provinces are Bolívar, Chimborazo, and Imbabura.

Figure 3: Impact on child mortality, between 1 and 8 months differential exposure cohorts

Notes: The unit of observation is the rural *parroquia*. The sample is restricted to *parroquias* within 6 percentage point distance to the cutoff. The residuals are computed from regressions with the control variables listed in Table 8.2 of the Appendix. Program provinces are Bolívar, Chimborazo, Imbabura, and Manabí. Sierra provinces are Bolívar, Chimborazo, and Imbabura.

Figure 4: Impact on child mortality, maximum differential exposure cohorts, before PANN 2000

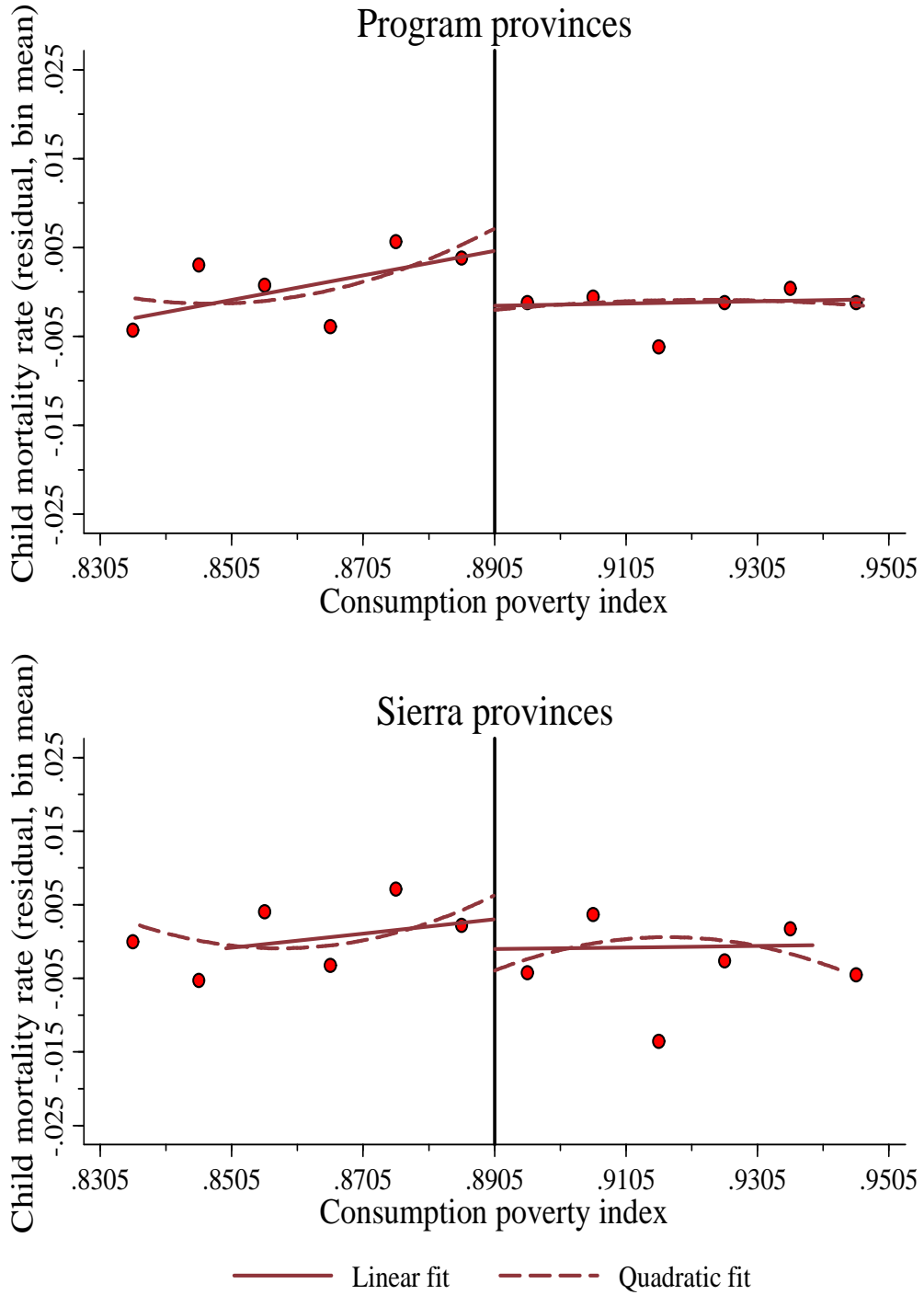*Notes:* The unit of observation is the rural *parroquia*. The sample is restricted to *parroquias* within 6 percentage point distance to the cutoff. The residuals are computed from regressions with the control variables listed in Table 3 of the Appendix. Program provinces are Bolívar, Chimborazo, Imbabura, and Manabí. Sierra provinces are Bolívar, Chimborazo, and Imbabura.

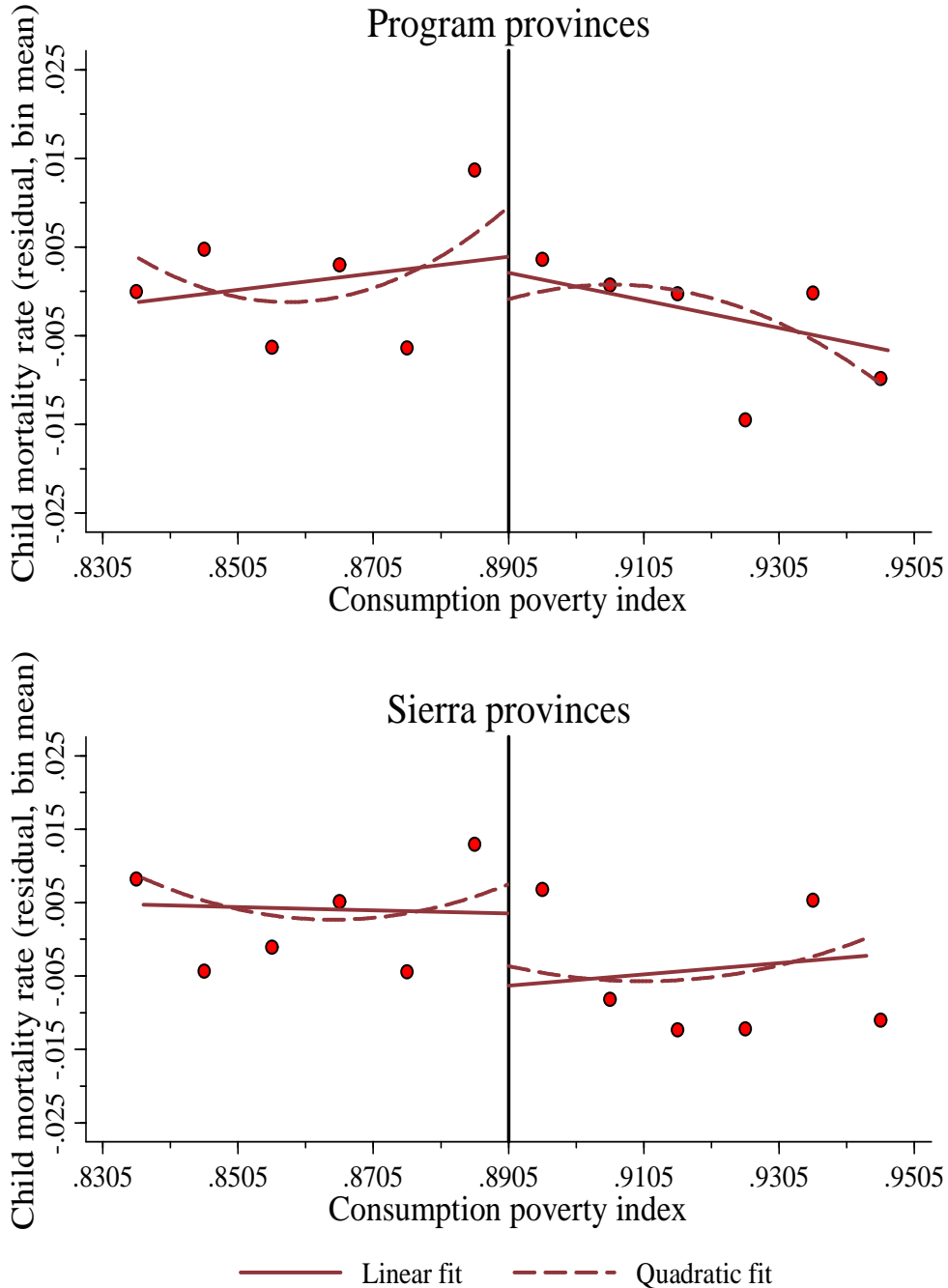Figure 5: Impact on child mortality, maxium differential exposure cohorts, post scaling up of PANN 2000
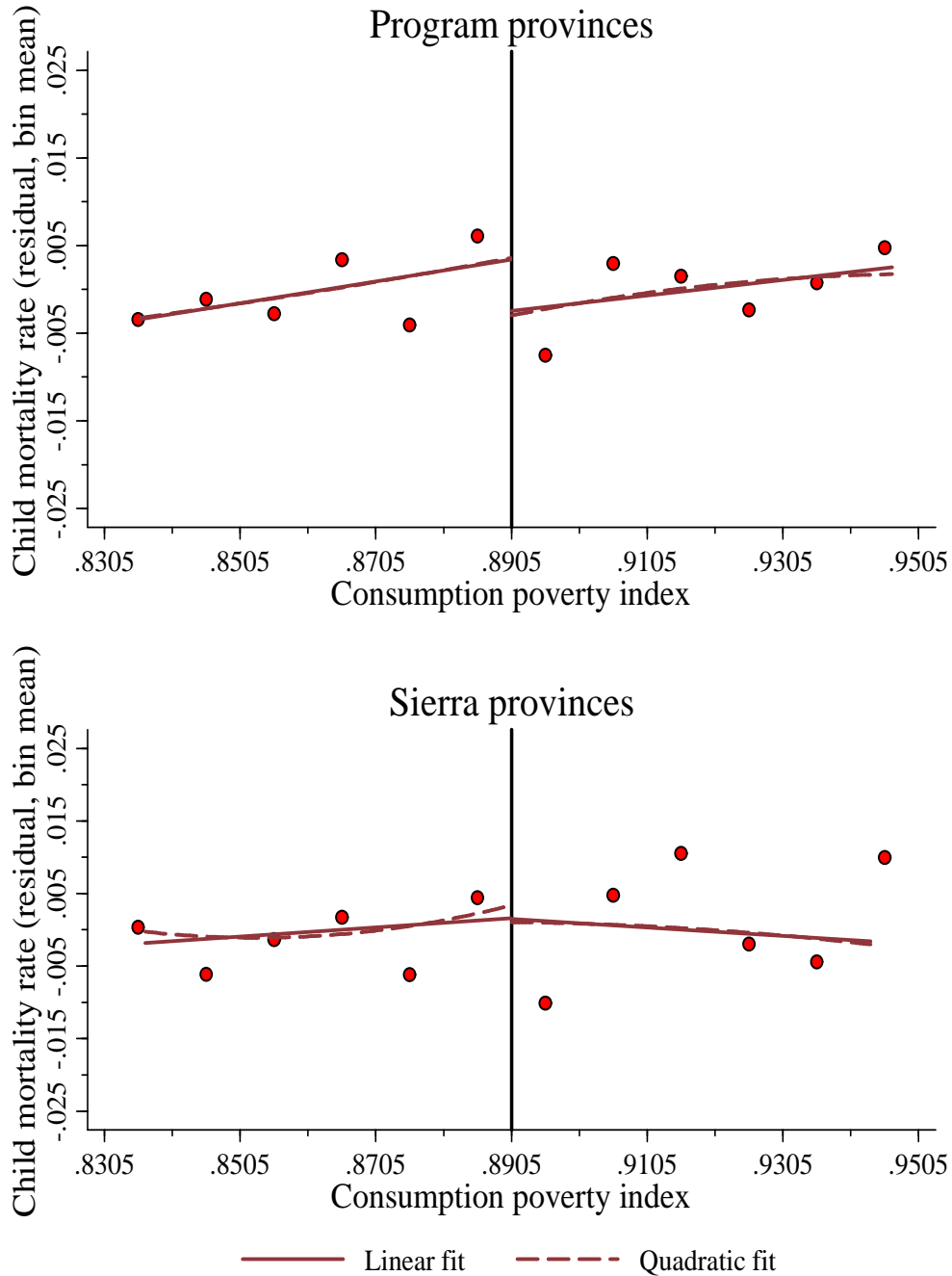

Notes: The unit of observation is the rural *parroquia*. The sample is restricted to *parroquias* within 6 percentage point distance to the cutoff. The residuals are computed from regressions with the control variables listed in Table 4 of the Appendix. Program provinces are Bolívar, Chimborazo, Imbabura, and Manabí. Sierra provinces are Bolívar, Chimborazo, and Imbabura.

Table 1: Impact on fertility, kids born between April and November 2001

Dependent variable: number of live-births between April and November 2001 per woman aged 15-44 years in November 2001

	3		4		5		6	
Neighborhood h (percentage points)								
Pre-program controls	N	Y	N	Y	N	Y	N	Y
Panel A: Bolívar, Chimborazo, Imbabura, Manabí								
Comparison mean	0.13							
Treatment parroquia (yes = 1)	-0.009 (0.015)	0.004 (0.013)	-0.004 (0.015)	-0.001 (0.015)	0.001 (0.011)	-0.001 (0.011)	0.003 (0.011)	0.001 (0.010)
Observations	48	48	58	58	70	70	75	75
R^2	0.110	0.490	0.086	0.350	0.062	0.294	0.059	0.273
Panel B: Bolívar, Chimborazo, Imbabura								
Comparison mean	0.15							
Treatment parroquia (yes = 1)	-0.024 (0.021)	-0.020 (0.028)	-0.008 (0.022)	0.002 (0.024)	-0.006 (0.017)	-0.010 (0.019)	0.002 (0.017)	0.000 (0.018)
Observations	30	30	39	39	46	46	49	49
R^2	0.219	0.620	0.152	0.402	0.112	0.335	0.077	0.277

Notes: OLS estimates. The unit of observation is the rural *parroquia*. h is the percentage point distance from the eligibility cutoff 0.8905. Pre-program controls include the number of live-births between April and November 1990 per woman aged 15-44 years in November 1990, number of check-ups at health posts per 0 to 4 year-old during year 1999 (1999 health census), proportion of last-born children born between April 1988 and February 1989 who had died by November 1990 (1990 census), proportion of stunted children under 5 years old in 1990 (1990 census and 1988 nutrition survey), an indicator for the presence of a health center in the parroquia in 2000 (2000 health census), proportion of women aged 18 or older who completed primary schooling (2001 census), proportion of dwellings with access to piped water (2001 census), proportion of households with toilet (2001 census), average number of persons per room (2001 census), number of last-born children born between April 1988 and February 1989 living in the *parroquia* in 1990 (1990 census). Comparison means are the estimated constant terms in $h = 3$ without controls. Robust standard errors in parentheses.

*, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

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Table 2: Impact on fertility, kids born between September 2000 and November 2001

Dependent variable: number of live-births between September 2000 and November 2001 per woman aged 15-44 years in November 2001

	3		4		5		6	
Neighborhood h (percentage points)								
Pre-program controls	N	Y	N	Y	N	Y	N	Y
Panel A: Bolívar, Chimborazo, Imbabura, Manabí								
Comparison mean	0.22							
Treatment parroquia (yes = 1)	0.010	0.015	0.007	0.001	0.006	-0.003	0.005	-0.002
	(0.021)	(0.018)	(0.021)	(0.017)	(0.016)	(0.014)	(0.015)	(0.013)
Observations	48	48	58	58	70	70	75	75
R^2	0.044	0.437	0.041	0.459	0.045	0.388	0.058	0.414
Panel B: Bolívar, Chimborazo, Imbabura								
Comparison mean	0.23							
Treatment parroquia (yes = 1)	0.009	-0.026	0.009	-0.015	0.014	-0.015	0.013	-0.008
	(0.036)	(0.037)	(0.033)	(0.032)	(0.026)	(0.023)	(0.024)	(0.020)
Observations	30	30	39	39	46	46	49	49
R^2	0.062	0.650	0.060	0.550	0.041	0.491	0.053	0.494

Notes: OLS estimates. The unit of observation is the rural *parroquia*. h is the percentage point distance from the eligibility cutoff 0.8905. Pre-program controls include the number of live-births between September 1989 and November 1990 per woman aged 15-44 years in November 1990, number of check-ups at health posts per 0 to 4 year-old during year 1999 (1999 health census), proportion of last-born children born between April 1988 and February 1989 who had died by November 1990 (1990 census), proportion of stunted children under 5 years old in 1990 (1990 census and 1988 nutrition survey), an indicator for the presence of a health center in the *parroquia* in 2000 (2000 health census), proportion of women aged 18 or older who completed primary schooling (2001 census), proportion of dwellings with access to piped water (2001 census), proportion of households with toilet (2001 census), average number of persons per room (2001 census), number of last-born children born between April 1988 and February 1989 living in the *parroquia* in 1990 (1990 census). Comparison means are the estimated constant terms in h = 3 without controls. Robust standard errors in parentheses.

*, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 7.1: Impact on health check-ups, quadratic specification

Dependent variable: Number of check-ups at health posts per 0 to 4 year-old during year 2000

Neighborhood h (percentage points)	3		4		5		6	
Pre-program controls	N	Y	N	Y	N	Y	N	Y
	Panel A: Bolívar, Chimborazo, Imbabura, Manabí							
Comparison mean 0.869								
Treatment parroquia (yes = 1)	0.001 (0.436)	0.377 (0.411)	0.119 (0.373)	0.312 (0.313)	0.072 (0.356)	0.172 (0.256)	0.144 (0.333)	0.235 (0.268)
F-test (quadratic terms) [p-value]	1.159 [0.324]	0.116 [0.891]	1.461 [0.241]	0.311 [0.734]	0.211 [0.810]	0.065 [0.937]	0.666 [0.517]	0.861 [0.428]
Observations	48	48	58	58	70	70	75	75
R^2	0.045	0.581	0.110	0.612	0.024	0.580	0.022	0.574
	Panel B: Bolívar, Chimborazo, Imbabura							
Comparison mean 0.783								
Treatment parroquia (yes = 1)	0.460 (0.339)	1.122 (0.640)	0.920** (0.439)	1.504** (0.663)	1.165** (0.495)	1.340** (0.557)	0.986* (0.499)	1.180** (0.467)
F-test (quadratic terms) [p-value]	1.949 [0.164]	0.519 [0.606]	0.569 [0.572]	1.252 [0.305]	1.069 [0.353]	0.995 [0.382]	1.284 [0.287]	3.275 [0.050]
Observations	30	30	39	39	46	46	49	49
R^2	0.196	0.770	0.220	0.741	0.188	0.747	0.159	0.728

Notes: OLS estimates. The unit of observation is the rural *parroquia*. h is the percentage point distance from the eligibility cutoff 0.8905. The total number of check-ups of 0 to 4 year-olds is normalized by the estimated population of 0 to 4 year-olds in 2000 based on Flores (2001). Pre-program controls include number of check-ups at health posts per 0 to 4 year-old during year 1999 (1999 health census), proportion of last-born children born between April 1988 and February 1989 who had died by November 1990 (1990 census), proportion of stunted children under 5 years old in 1990 (1990 census and 1988 nutrition survey), an indicator for the presence of a health center in the *parroquia* in 2000 (2000 health census), proportion of women aged 18 or older who completed primary schooling (2001 census), proportion of dwellings with access to piped water (2001 census), proportion of households with toilet (2001 census), average number of persons per room (2001 census), number of last-born children born between April 1999 and February 2000 living in the *parroquia* in 2001 (2001 census), number of last-born children born between April 1988 and February 1989 living in the *parroquia* in 1990 (1990 census). Comparison means are the estimated constant terms in $h = 6$ without controls. Robust standard errors in parentheses.

*, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 8.1: Impact on child mortality, seasonally matched non-exposed cohorts

Dependent variable: Proportion of last-born children born between April 1997 and February 1998 who had died by November 2001

Neighborhood h (percentage points)		3		4		5		6	
Pre-program controls		N	Y	N	Y	N	Y	N	Y
Panel A: Bolívar, Chimborazo, Imbabura, Manabí									
Comparison mean	0.014								
Treatment parroquia (yes = 1)		0.010 (0.013)	0.030* (0.016)	-0.005 (0.013)	0.000 (0.016)	0.003 (0.011)	0.007 (0.012)	0.011 (0.015)	0.014 (0.016)
Observations		48	48	58	58	70	70	75	75
R^2		0.028	0.320	0.060	0.195	0.003	0.139	0.037	0.154
Panel B: Bolívar, Chimborazo, Imbabura									
Comparison mean	0.020								
Treatment parroquia (yes = 1)		-0.004 (0.023)	0.041* (0.023)	-0.021 (0.019)	-0.011 (0.030)	-0.004 (0.016)	0.011 (0.011)	0.020 (0.023)	0.030 (0.026)
Observations		30	30	39	39	46	46	49	49
R^2		0.003	0.623	0.135	0.345	0.008	0.189	0.080	0.274

Notes: OLS estimates. The unit of observation is the rural *parroquia*. Child mortality is the proportion of last-born children born between October April 1997 and February 1998 who had died by November 2001 (2001 census). Pre-program controls include number of check-ups at health posts per 0 to 4 year-old during year 1999 (1999 health census), proportion of last-born children born between October 1986 and August 1987 who had died by November 1990 (1990 census), proportion of stunted children under 5 years old in 1990 (1990 census and 1988 nutrition survey), an indicator for the presence of a health center in the *parroquia* in 2000 (2000 health census), proportion of women aged 18 or older who completed primary schooling (2001 census), proportion of dwellings with access to piped water (2001 census), proportion of households with toilet (2001 census), average number of persons per room (2001 census), number of last-born children born between October 1997 and August 1998 living in the *parroquia* in 2001 (2001 census), number of last-born children born between October 1986 and August 1987 living in the *parroquia* in 1990 (1990 census). Comparison means are the estimated constant terms in $h = 3$ without controls. Robust standard errors in parentheses.

*, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 8.2: Impact on child mortality, between 1 and 8 months differential exposure cohorts

Dependent variable: Proportion of last-born children born between September 1998 and August 2000 who had died by November 2001

Neighborhood h (percentage points)	3		4		5		6	
Pre-program controls	N	Y	N	Y	N	Y	N	Y
Panel A: Bolívar, Chimborazo, Imbabura, Manabí								
Comparison mean	0.022							
Treatment parroquia (yes = 1)	-0.006 (0.007)	-0.009 (0.007)	-0.005 (0.007)	-0.008 (0.006)	-0.004 (0.006)	-0.007 (0.006)	-0.004 (0.005)	-0.007 (0.006)
Observations	48	48	58	58	70	70	75	75
R^2	0.030	0.329	0.008	0.407	0.007	0.340	0.010	0.338
Panel B: Bolívar, Chimborazo, Imbabura								
Comparison mean	0.024							
Treatment parroquia (yes = 1)	-0.008 (0.010)	-0.009 (0.016)	-0.007 (0.010)	-0.005 (0.011)	-0.005 (0.009)	-0.005 (0.009)	-0.004 (0.008)	-0.004 (0.008)
Observations	30	30	39	39	46	46	49	49
R^2	0.044	0.385	0.018	0.452	0.015	0.432	0.016	0.438

Notes: OLS estimates. The unit of observation is the rural *parroquia*. h is the percentage point distance from the eligibility cutoff 0.8905. Child mortality is the proportion of last-born children born between September 1998 and August 2000 who had died by November 2001 (2001 census). Pre-program controls include number of check-ups at health posts per 0 to 4 year-old during year 1999 (1999 health census), proportion of last-born children born between September 1987 and August 1989 who had died by November 1990 (1990 census), proportion of stunted children under 5 years old in 1990 (1990 census and 1988 nutrition survey), an indicator for the presence of a health center in the parroquia in 2000 (2000 health census), proportion of women aged 18 or older who completed primary schooling (2001 census), proportion of dwellings with access to piped water (2001 census), proportion of households with toilet (2001 census), average number of persons per room (2001 census), number of last-born children born between September 1998 and August 2000 living in the *parroquia* in 2001 (2001 census), number of last-born children born between September 1987 and August 1989 living in the *parroquia* in 1990 (1990 census). Comparison means are the estimated constant terms in $h = 3$ without controls. Robust standard errors in parentheses.

*, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 3: Impact on child mortality, maximum differential exposure cohorts, before PANN 2000

Dependent variable: Proportion of last-born children born between April 1988 and February 1989 who had died by November 1990

Neighborhood h (percentage points)	3		4		5		6	
Pre-program controls	N	Y	N	Y	N	Y	N	Y
Panel A: Bolívar, Chimborazo, Imbabura, Manabí								
Comparison mean	0.031							
Treatment parroquia (yes = 1)	-0.008 (0.011)	-0.007 (0.011)	-0.005 (0.010)	-0.002 (0.010)	-0.004 (0.009)	-0.003 (0.009)	-0.003 (0.008)	-0.002 (0.008)
Observations	48	48	58	58	70	70	75	75
R^2	0.009	0.066	0.051	0.137	0.023	0.070	0.022	0.069
Panel B: Bolívar, Chimborazo, Imbabura								
Comparison mean	0.032							
Treatment parroquia (yes = 1)	-0.002 (0.021)	0.000 (0.021)	-0.011 (0.014)	-0.004 (0.014)	-0.019 (0.013)	-0.013 (0.014)	-0.014 (0.011)	-0.010 (0.011)
Observations	30	30	39	39	46	46	49	49
R^2	0.099	0.171	0.121	0.237	0.056	0.159	0.051	0.162

Notes: OLS estimates. The unit of observation is the rural *parroquia*. h is the percentage point distance from the eligibility cutoff 0.8905. Child mortality is the proportion of last-born children born between April 1988 and February 1989 who had died by November 1990 (1990 census). Pre-program controls include number of last-born children born between April 1988 and February 1989 living in the *parroquia* in 1990 (1990 census) and the average age of the children in that cohort. Comparison means are the estimated constant terms in $h = 6$ without controls. Robust standard errors in parentheses.

*, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

Table 4: Impact on child mortality, maximum differential exposure cohorts, post scaling-up of PANN 2000

Dependent variable: Proportion of last-born children born between April 2008 and February 2009 who had died by November 2010

	Comparison mean	3		4		5		6	
Neighborhood h (percentage points)									
Pre-program controls		N	Y	N	Y	N	Y	N	Y
Panel A: Bolívar, Chimborazo, Imbabura, Manabí									
Comparison mean	0.014								
Treatment parroquia (yes = 1)		-0.007 (0.008)	-0.013 (0.011)	-0.006 (0.007)	-0.004 (0.009)	-0.005 (0.007)	-0.006 (0.008)	-0.005 (0.006)	-0.006 (0.008)
Observations		48	48	58	58	70	70	75	75
R^2		0.015	0.149	0.015	0.118	0.010	0.112	0.012	0.120
Panel B: Bolívar, Chimborazo, Imbabura									
Comparison mean	0.014								
Treatment parroquia (yes = 1)		-0.012 (0.015)	-0.011 (0.029)	-0.003 (0.012)	0.004 (0.019)	-0.002 (0.012)	0.001 (0.016)	-0.002 (0.010)	0.001 (0.013)
Observations		30	30	39	39	46	46	49	49
R^2		0.035	0.248	0.021	0.165	0.018	0.153	0.016	0.147

Notes: OLS estimates. The unit of observation is the rural *parroquia*. h is the percentage point distance from the eligibility cutoff 0.8905. Child mortality is the proportion of last-born children born between April 2008 and February 2009 who had died by November 2010 (2010 census). Pre-program controls include number of check-ups at health posts per 0 to 4 year-old during year 1999 (1999 health census), proportion of last-born children born between April 1988 and February 1989 who had died by November 1990 (1990 census), proportion of stunted children under 5 years old in 1990 (1990 census and 1988 nutrition survey), an indicator for the presence of a health center in the parroquia in 2000 (2000 health census), proportion of women aged 18 or older who completed primary schooling (2001 census), proportion of dwellings with access to piped water (2001 census), proportion of households with toilet (2001 census), average number of persons per room (2001 census), number of last-born children born between April 1999 and February 2000 living in the *parroquia* in 2001 (2001 census), number of last-born children born between April 1988 and February 1989 living in the *parroquia* in 1990 (1990 census). Comparison means are the estimated constant terms in h = 3 without controls. Robust standard errors in parentheses.

*, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.