Supplemental Figures & Tables

Table S1: Surveys included in the analysis by country

Country	Surveys	Sample
Angola	AO7	18400
Bangladesh	BD5, BD6, BD7, BD8	104029
Burkina Faso	BF6, BF8	42578
Benin	BJ6, BJ7	38660
Burundi	BU6, BU7	29194
Congo - Kinshasa	CD5, CD6	24854
Côte d'Ivoire	CI6, CI8	31403
Cameroon	CM6, CM7	30286
Ethiopia	ET4, ET6, ET7	50416
Ghana	GH5, GH6, GH8	38010
Gambia	GM7	18051
Guinea	GN4, GN6, GN7	25002
Haiti	HT5, HT6, HT7	30826
India	IA6, IA7	1469182
Kenya	KE5, KE6, KE8	103550
Cambodia	KH5, KH6, KH8	53008
Liberia	LB5, LB6, LB7	25675
Madagascar	MD5, MD7	44965
Mali	ML5, ML6, ML7	31483
Myanmar (Burma)	MM7	11849
Mauritania	MR7	24192
Mozambique	MZ6, MZ8	36600
Nigeria	NG5, NG6, NG7	102076
Niger	NI6	12507
Namibia	NM5, NM6	10956
Nepal	NP5, NP6, NP7, NP8	43111
Pakistan	PK5, PK7	29309
Sierra Leone	SL5, SL6, SL7	43233
Senegal	SN4, SN6, SN7, SN8	121845
Chad	TD6	25669
Togo	TG6	10253
Tanzania	TZ5, TZ7, TZ8	50416
Uganda	UG5, UG6, UG7	36726
Zambia	ZM5, ZM6, ZM7	44536

Table S2: Characteristics of exposed and unexposed samples

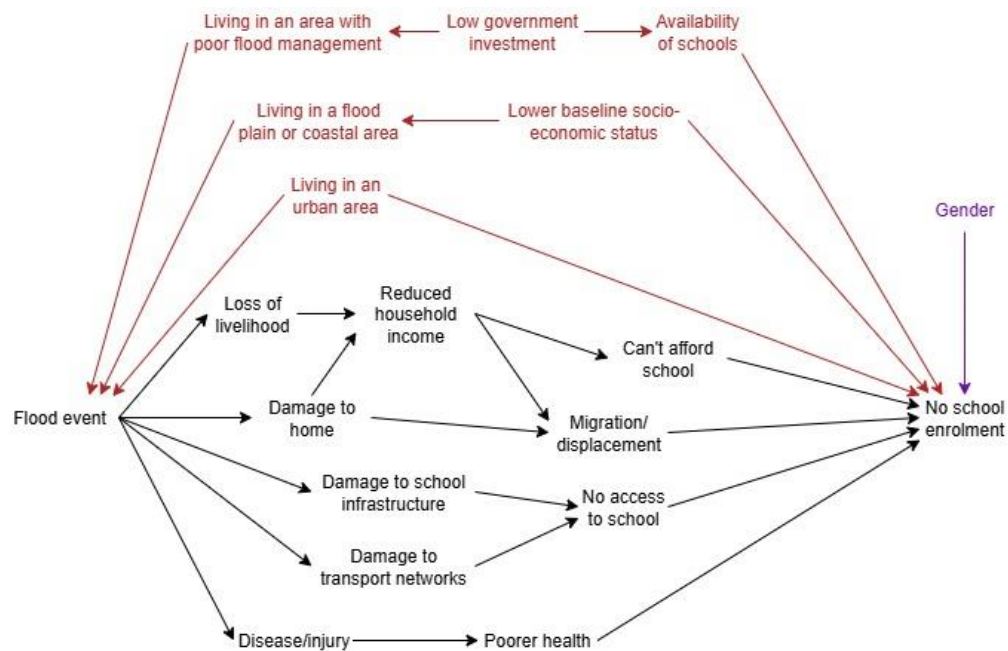| Characteristic	Not Flooded	Flooded
Sample Size	1794182	1018668
Mean Age	15.5	15.9
Mean Years of Education	6	7
Sex		
Male	892763 (49.8%)	504013 (49.5%)
Female	901389 (50.2%)	514631 (50.5%)
Place of Residence		
Urban	521337 (29.1%)	312812 (30.7%)
Rural	1272845 (70.9%)	705856 (69.3%)
Educational Attainment		
No Education	223890 (12.5%)	66639 (6.5%)
Incomplete primary	576715 (32.2%)	224206 (22%)
Completed Primary	146493 (8.2%)	91676 (9%)
Incomplete secondary	645536 (36%)	488613 (48%)
Completed Secondary	104338 (5.8%)	72437 (7.1%)
Higher Education	94019 (5.2%)	73922 (7.3%)
Wealth Quintile		
Poorest Quintile	405580 (22.6%)	234460 (23%)
Poorer Quintile	388661 (21.7%)	230241 (22.6%)
Middle Quintile	379614 (21.2%)	199132 (19.5%)
Richer Quintile	338526 (18.9%)	179877 (17.7%)
Richest Quintile	281801 (15.7%)	174958 (17.2%)

Figure S1: DAG showing hypothesised causal pathways from flood events to no school enrolment (black), as well as potential sources of bias (red), and effect measure modifiers (purple)
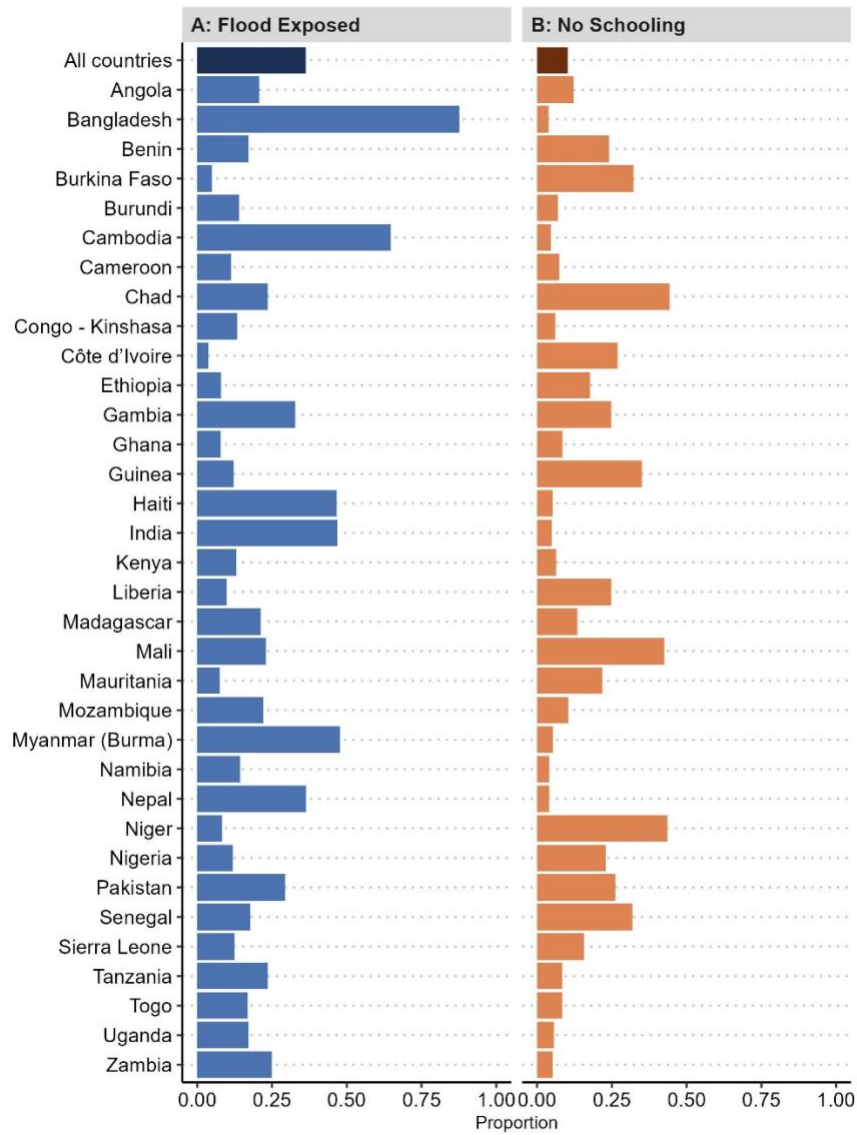
Figure S2: (A) Proportion of sample exposed to flooding at ages 5 and 6. (B) Proportion of sample with no formal education, by country.
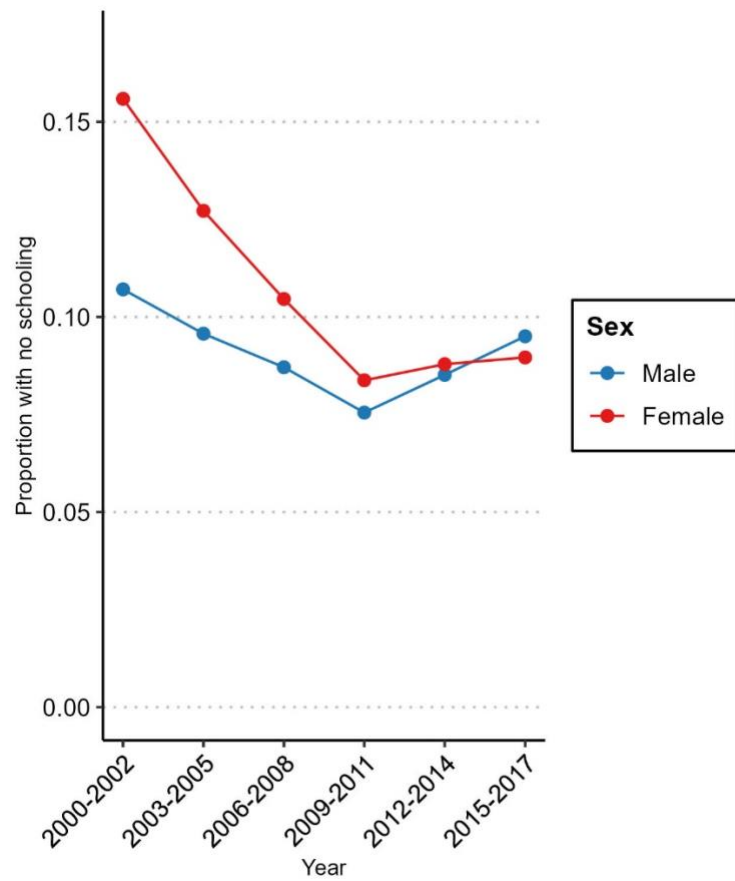
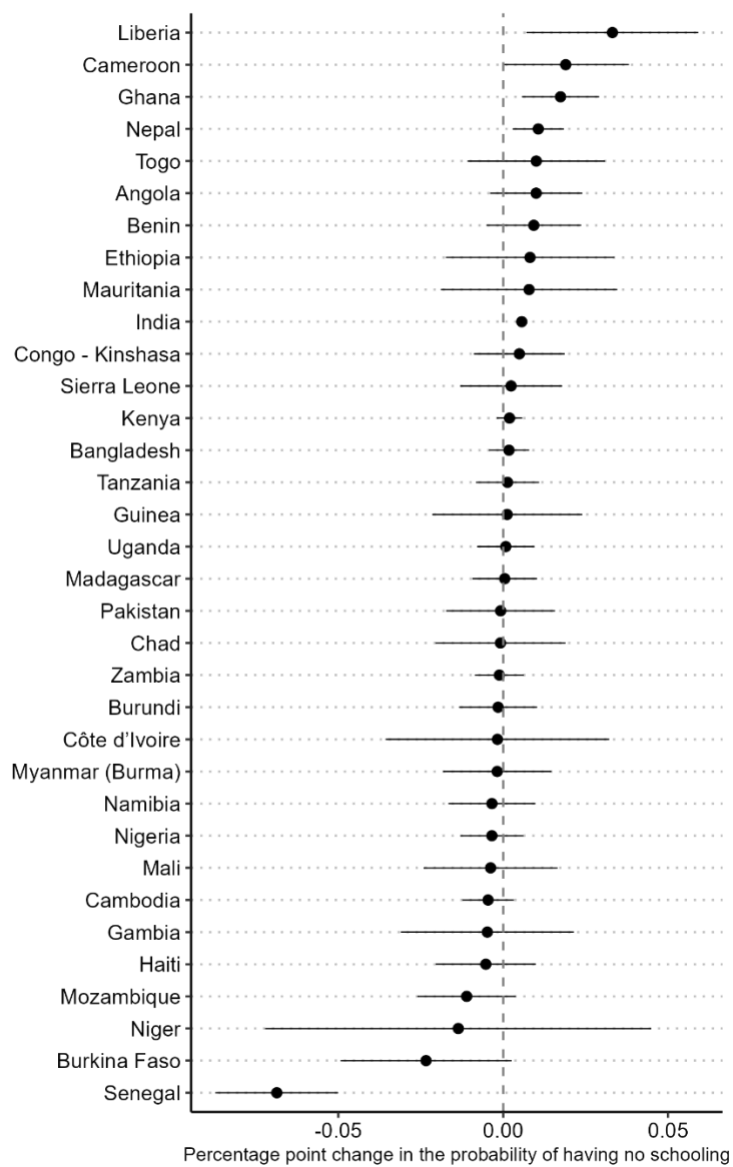**Figure S3**: Proportion of sample with no formal education over time, by sex.

Figure S4: Effect of flooding on the likelihood of having no formal education, by country.
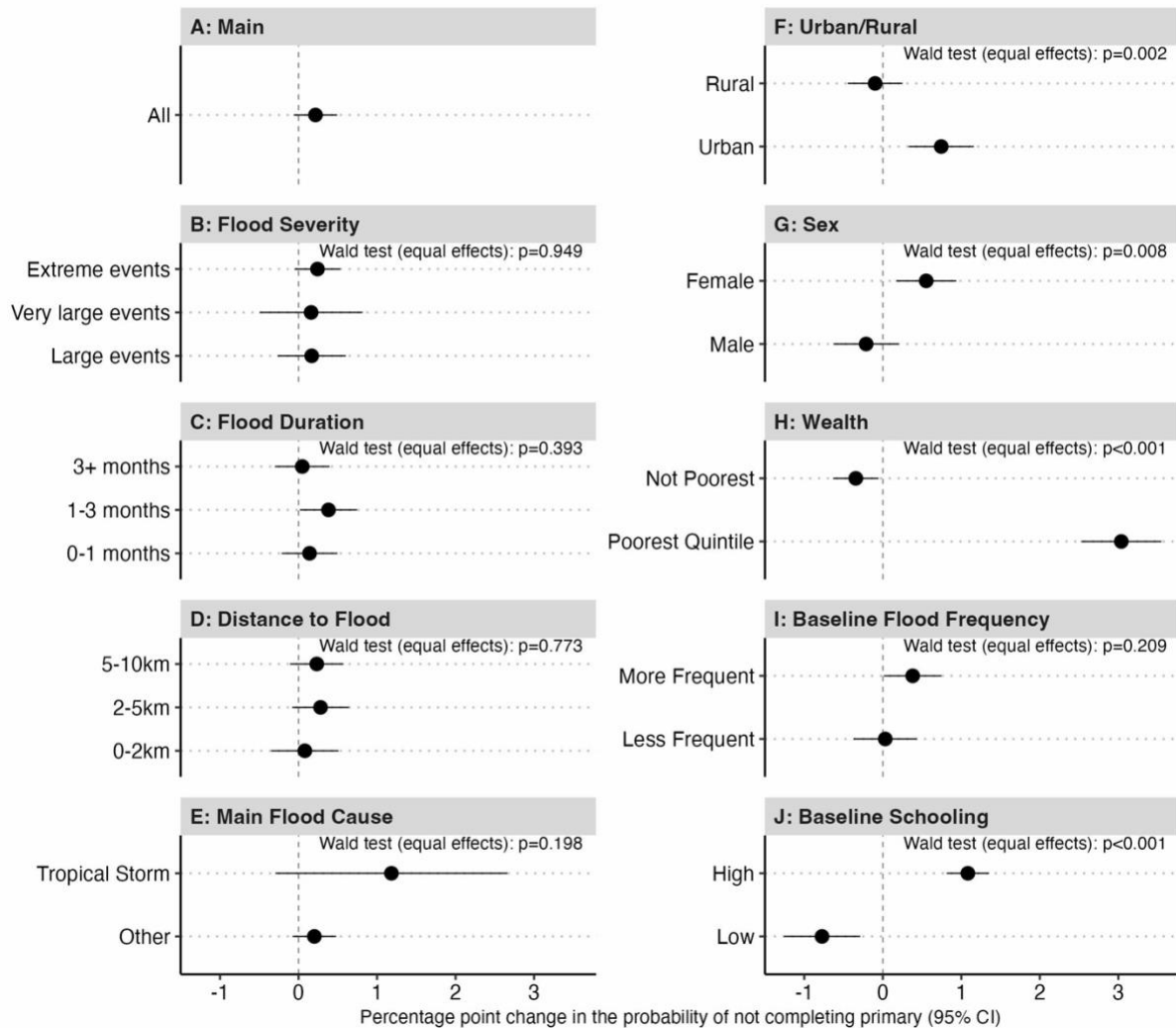
Figure S5: Effect of exposure to flooding at ages 5-6 on the likelihood of not completing primary education across flood- and vulnerability-related factors. (A) Average effect across the entire sample. (B) Effect of floods classified as "large" (5–15-year recurrence interval), "very large" (15–100-year recurrence), and "extreme" (>100-year recurrence). (C) and (D) show the effects by flood duration and by distance from the cluster to the flood boundary, respectively. (E) Effect of floods associated with tropical storms versus other causes (e.g., monsoonal rain, snowmelt). (F) and (G) show the effects by rural/urban status and sex, respectively. (H) Effect among those living in the poorest wealth quintile (as defined in the DHS, by country). (I) Effect among clusters experiencing more than the median number of floods (median=5) versus fewer over the study period. (J) Effect among clusters with above- versus below-median rates of any formal education (median=0.96). Panels B–J report p-values from Wald tests assessing equality of effects across subgroups.
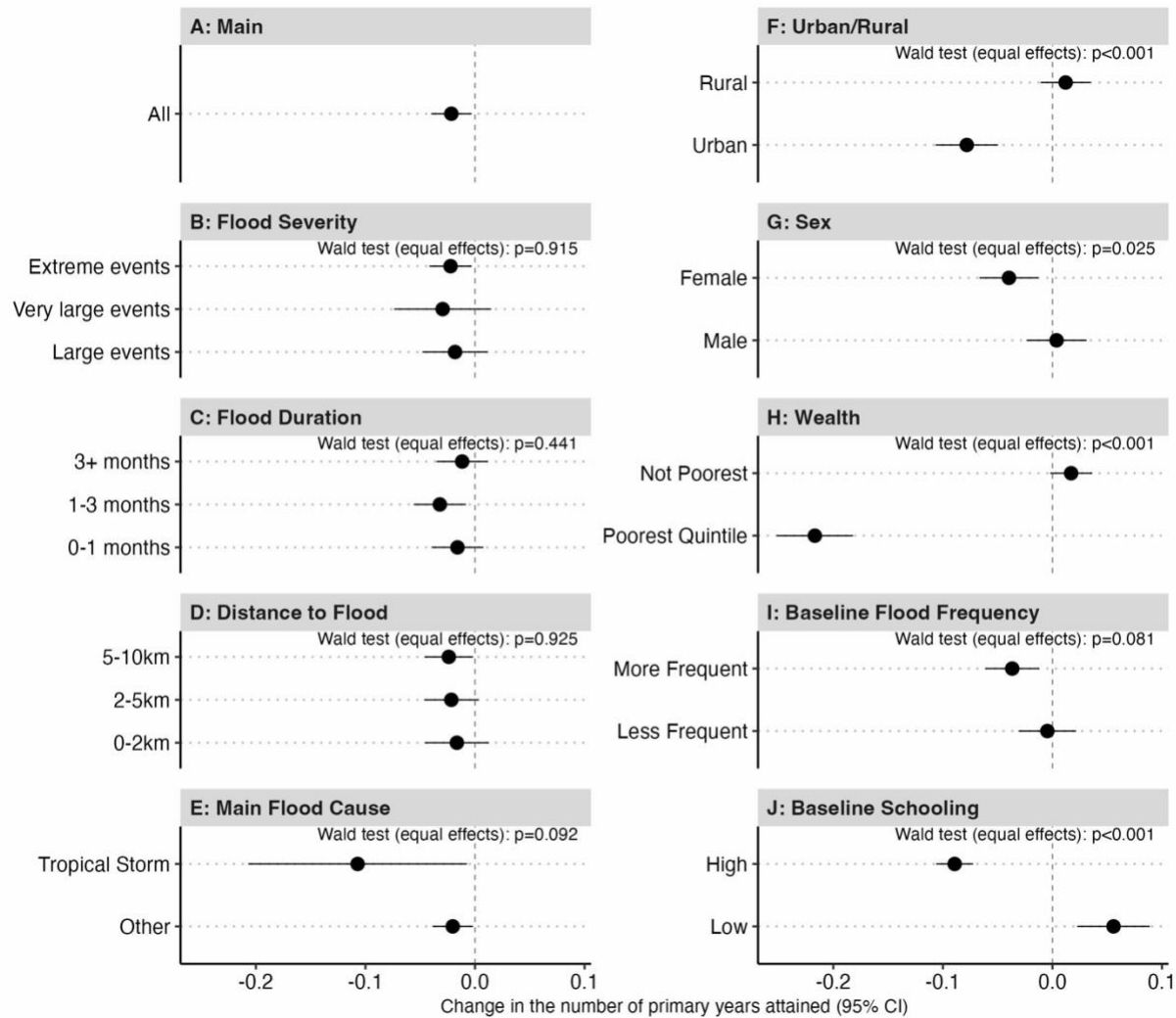
Figure S6: Effect of exposure to flooding at ages 5-6 on the number of years of primary schooling attained (max = 7 if primary school was reported as complete) across flood- and vulnerability-related factors. (A) Average effect across the entire sample. (B) Effect of floods classified as "large" (5–15-year recurrence interval), "very large" (15–100-year recurrence), and "extreme" (>100-year recurrence). (C) and (D) show the effects by flood duration and by distance from the cluster to the flood boundary, respectively. (E) Effect of floods associated with tropical storms versus other causes (e.g., monsoonal rain, snowmelt). (F) and (G) show the effects by rural/urban status and sex, respectively. (H) Effect among those living in the poorest wealth quintile (as defined in the DHS, by country). (I) Effect among clusters experiencing more than the median number of floods (median=5) versus fewer over the study period. (J) Effect among clusters with above- versus below-median rates of any formal education (median=0.96). Panels B–J report p-values from Wald tests assessing equality of effects across subgroups.
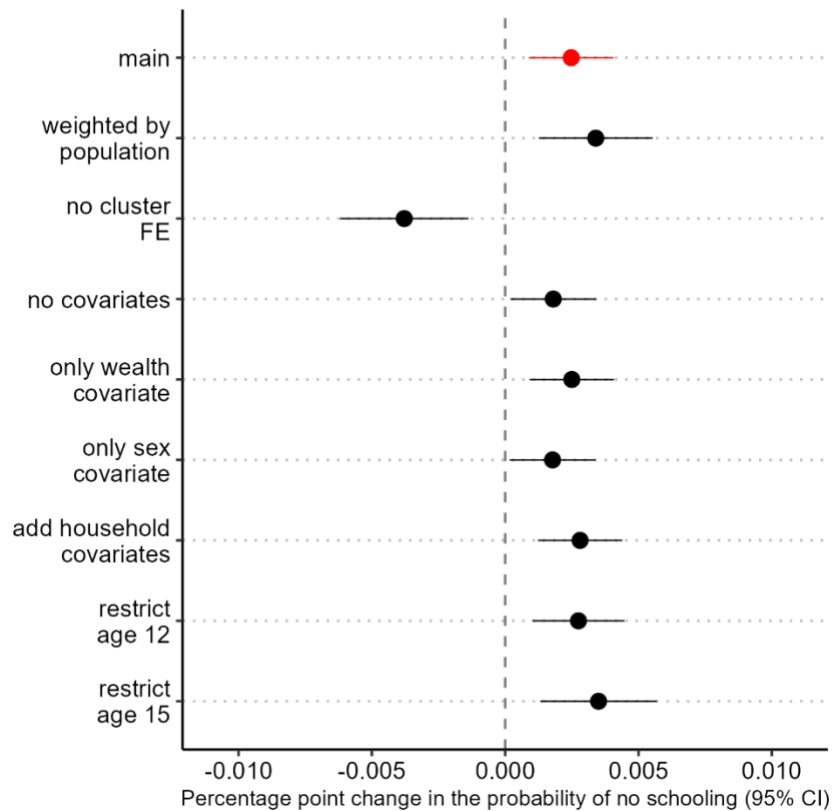
Figure S7: Results by model specification: "main" show the results from the primary analysis where each country is weighted by its sample size; "weighted by population" shows the results when each country is weighted in proportion to its population size, "no cluster FE" shows the effect when no cluster fixed effects are included in the model, "no covariates" show the effect when only cluster and time fixed effects are included in the model; "only wealth covariate" shows the effect when cluster fixed effects, time fixed effects and wealth quintile are in the model, "only sex covariate" shows the effect when cluster fixed effects, time fixed effects and sex are in the model, "add household covariates" shows the effect when cluster fixed effects, time fixed effects, wealth, sex, educational attainment of the household head, and sex of the household head are in the model, "restrict age 12" shows the results when the sample is restricted to those aged 12 and older, and "restrict age 15" shows the results when the sample is restricted to those aged 15 and older.