UNIVERSITÄT MANNHEIM

Can Microinsurance Help Prevent Child Labour?
An Impact Evaluation from Pakistan

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Research question

- Poor households vulnerable to shocks

  → Reduce consumption, sell assets, **children out of school, child labor**

- Insurance for the poor increasingly advertised as instrument against vulnerability

→ **Can microinsurance prevent child labor?**

The insurance product

- Health / accident insurance provided for microfinance clients
  - Hospital stay (room charges, drugs, operations,…)
  - Accidents (disability, death)
- Covers nuclear family
  - Client
  - Spouse
  - minor children
- Mandatory, costs built in the credit product

The innovation

1) Allow coverage of other household members (100 rupees / year)
2) Help clients with insurance product
   - Ask for medical costs on a monthly basis
   - Help with claims

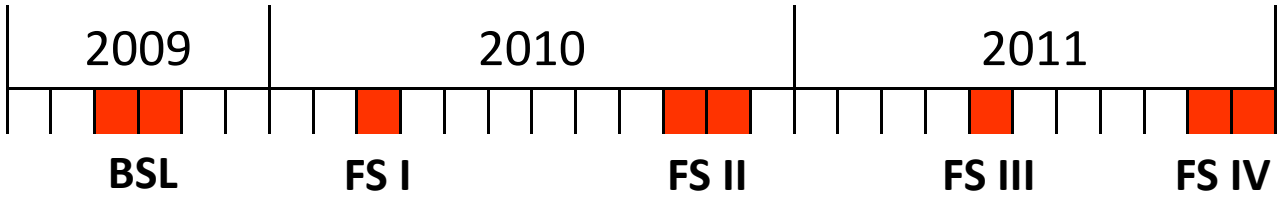
→ Rolled out as a randomized control trial

→ 9 treatment and 4 control branches

→ Baseline + 4 follow-up surveys

The Sample (1)

- 2097 clients
- Very low attrition (0.4-3.8% p.a.)
- Drop-outs similar in control vs. treatment



The Sample (2): Baseline child characteristics (mean)

Children 5 – 17

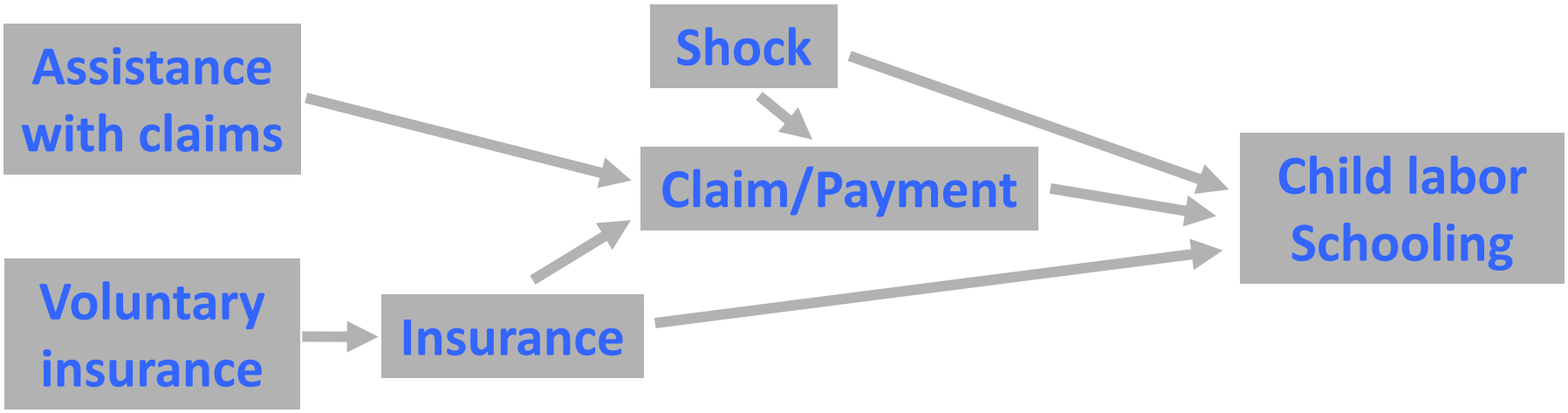
Child labor?	20%
Monthly earning through CL	322 (3-4 USD)
Hours of work (weekly)	13
Hazardous occupation?	9%
Observations	4621

Children 5 – 14

School attendance	69%
Observations	3280

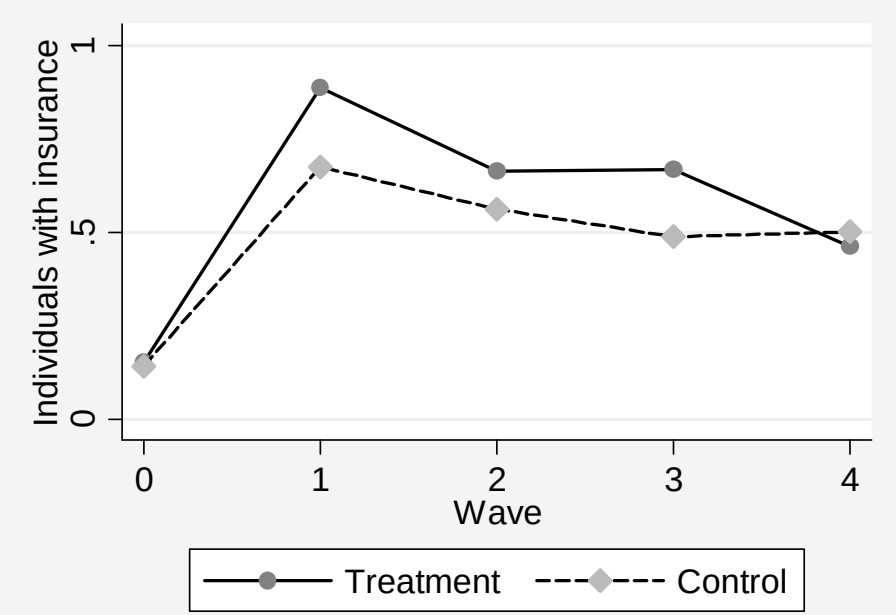
School days missed/month	1.1
Observations	2054

Treatment effects

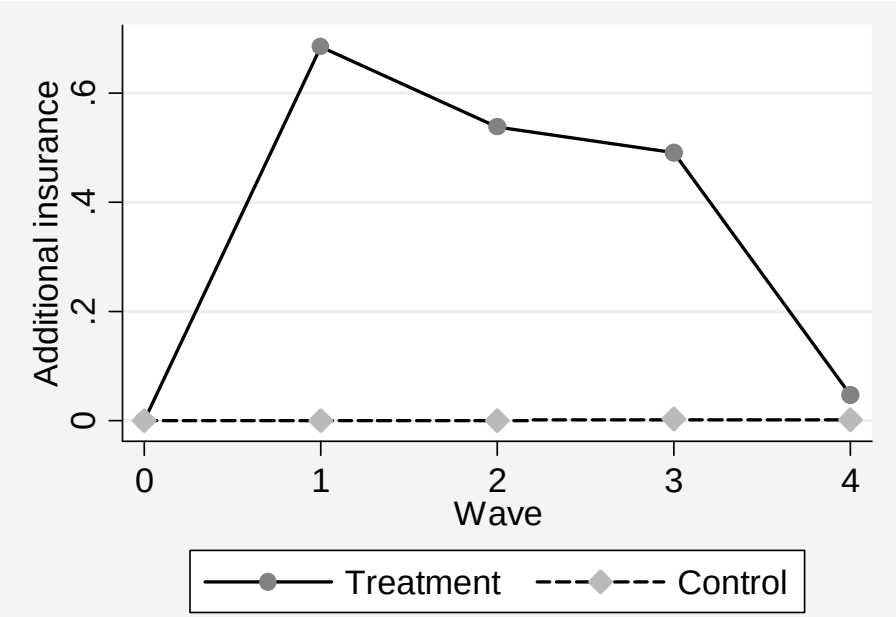


Insurance at individual level

Individuals with insurance



Additionally insured

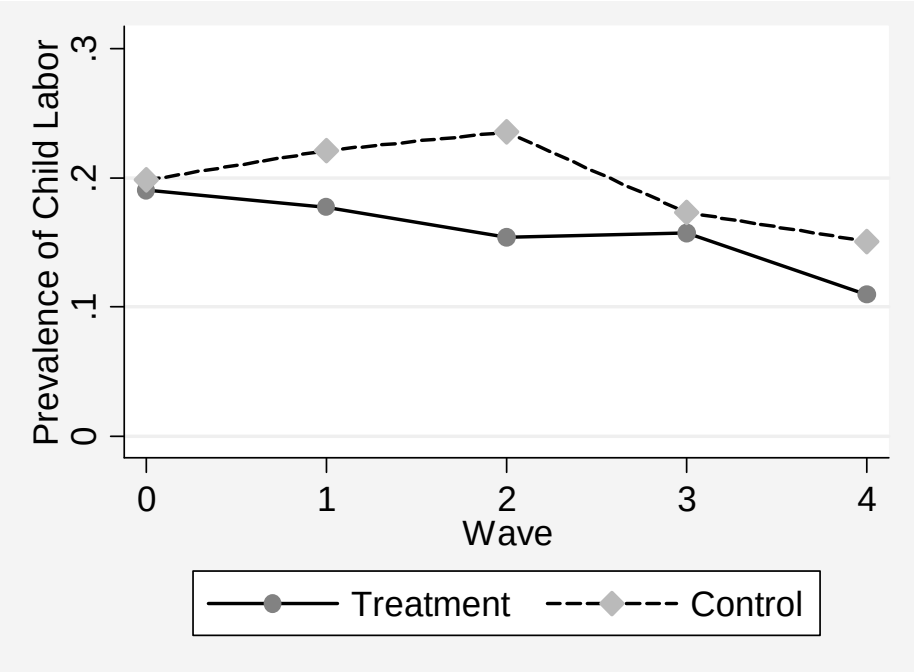


Estimation

- Difference in difference strategy
- Account for baseline differences
- Control for covariates
- Allow for time-varying treatment effects

Results: Child Labor (5 – 17)

	All	Boys	Girls
TE 1	-0.023	-0.067	0.019
TE 2	**-0.067***	**-0.098****	-0.039
TE 3	0.015	-0.037	0.062
TE 4	-0.029	**-0.10****	0.038
N	20491	10432	10059



*** p<0.01 ** p<0.05 * p<0.1, all specifications control for wave effects / pre-treatment differences T vs. C, all specifications use household / child controls, standard errors include random effects at wave-branch level

Results: Overall

	Child labor	Hours worked	CL earnings	Hazardous occupation	School attendance	Days missed
TE 1	-0.023	-1.28	**-162***	**-0.053****	0.014	-0.044
TE 2	**-0.067***	-2.78	**-190****	**-0.061*****	0.023	-0.14
TE 3	0.015	0.67	44.9	-0.024	0.007	-0.27
TE 4	-0.029	-1.53	**-191****	-0.033	0.026	-0.18
N	20491	20487	20491	20491	14930	10,212

*** p<0.01 ** p<0.05 * p<0.1, all specifications control for wave effects / pre-treatment differences T vs. C, all specifications use household / child controls, standard errors include random effects at wave-branch level

Results: by gender

	Child labor	Hours worked	CL earnings	Hazardous occupation	School attendance	Days missed
TE 1– boys	-0.067	**-3.61***	-231	-0.036	0.035	0.033
TE 2 – boys	**-0.098****	**-4.91****	**-272***	**-0.061*****	0.037	0.020
TE 3 – boys	-0.037	-1.78	87.0	-0.018	0.019	-0.29
TE 4 – boys	**-0.10****	**-5.32*****	**-377*****	**-0.046****	0.025	-0.12
N	10432	10431	10432	10432	7717	5,149
TE 1– girls	0.019	0.99	**-107***	**-0.065***	**-0.008**	-0.12
TE 2 – girls	-0.039	-0.67	**-110****	**-0.058***	0.010	-0.30
TE 3 – girls	0.062	2.97	-8.78	-0.030	-0.009	-0.25
TE 4 – girls	0.038	2.06	-21.0	-0.021	0.027	-0.25
N	10059	10056	10059	10059	7213	5,063

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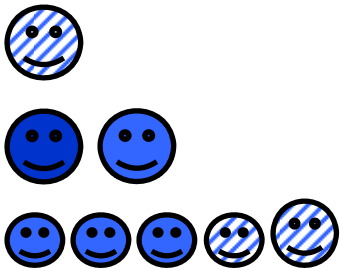
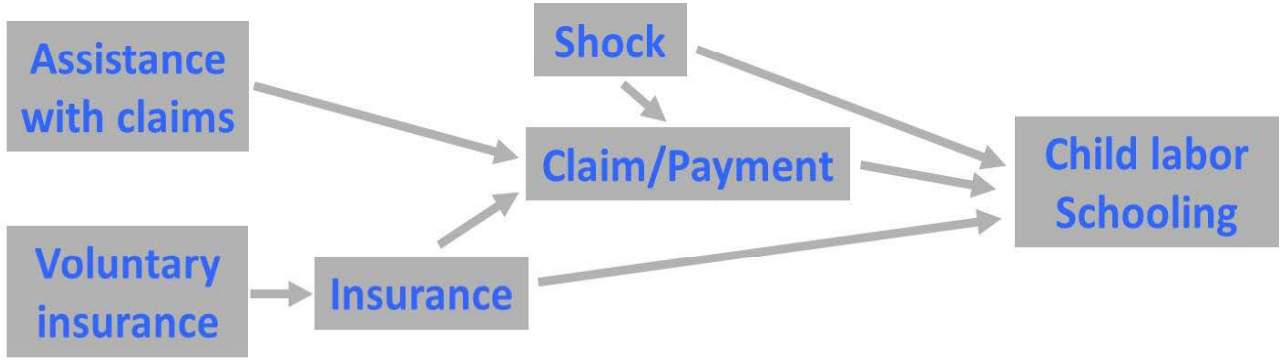
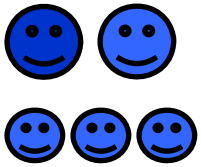
Disentangling treatment effects

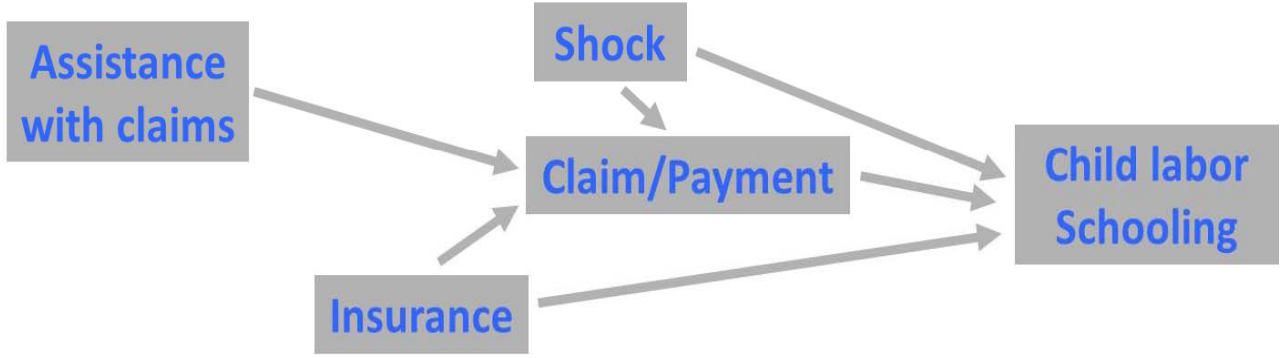
voluntary





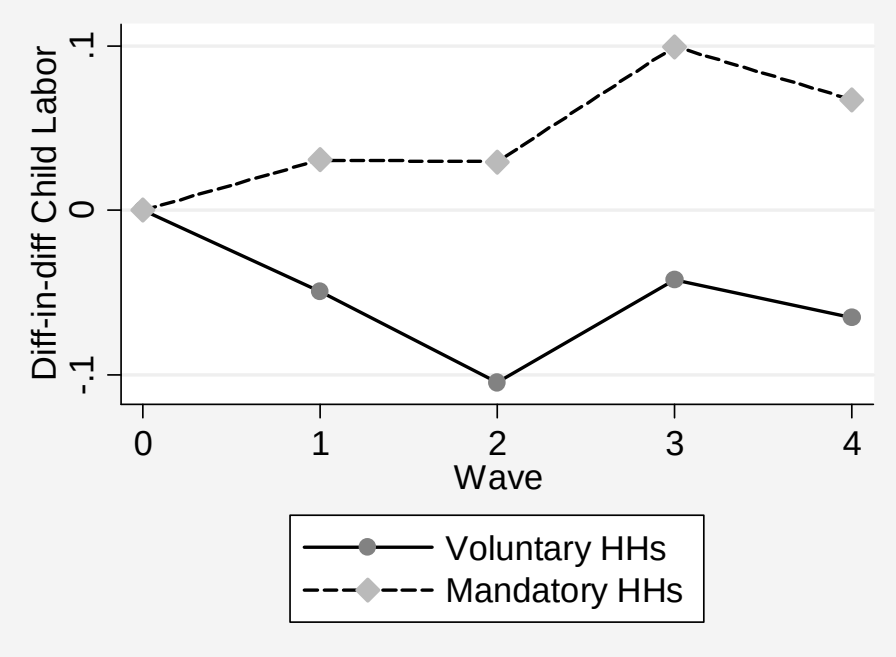
100% mandatory





Disentangling treatment effects (2)

	Child labor
TE 1– mandatory	0.046
TE 2 – mandatory	0.019
TE 3 – mandatory	**0.10****
TE 4 – mandatory	0.069
ΔTE 1 – voluntary	**-0.088****
ΔTE 2 – voluntary	**-0.12*****
ΔTE 3 – voluntary	**-0.12*****
ΔTE 4 – voluntary	**-0.13*****
N	20,491



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Disentangling treatment effects (3)

	Child labor	Hours worked	CL earnings	Hazardous occupation	School attendance	Days missed
TE 1– mandatory	0.046	1.69	-58.2	-0.029	-0.011	0.61
TE 2 – mandatory	0.019	1.02	-59.5	-0.030	0.012	0.49
TE 3 – mandatory	**0.10****	**3.24****	132	-0.0063	-0.014	0.62
TE 4 – mandatory	0.069	1.57	-52.9	0.0066	0.025	0.64
ΔTE 1 – voluntary	**-0.088****	**-3.87****	-137	-0.029	0.035	**-0.95*****
ΔTE 2 – voluntary	**-0.12*****	**-5.13*****	-170	-0.043	0.019	**-0.93*****
ΔTE 3 – voluntary	**-0.12*****	**-3.33****	-112	-0.024	0.030	**-1.33*****
ΔTE 4 – voluntary	**-0.13*****	**-4.27*****	**-188***	**-0.057****	0.0049	**-1.24*****
N	20,491	20,487	20,491	20,491	14,930	10,212

*** p<0.01 ** p<0.05 * p<0.1, all specifications control for wave effects / pre-treatment differences T vs. C, all specifications use household / child controls, standard errors include random effects at wave-branch level

Conclusion

- Demand for additional health insurance exists
- Less child labor with insurance + claim assistance
- Effect through insurance coverage, not claim assistance