Nov 9th, 1:00 PM - 1:20 PM

Conditional Cash Transfer and Girl Child Survival in India

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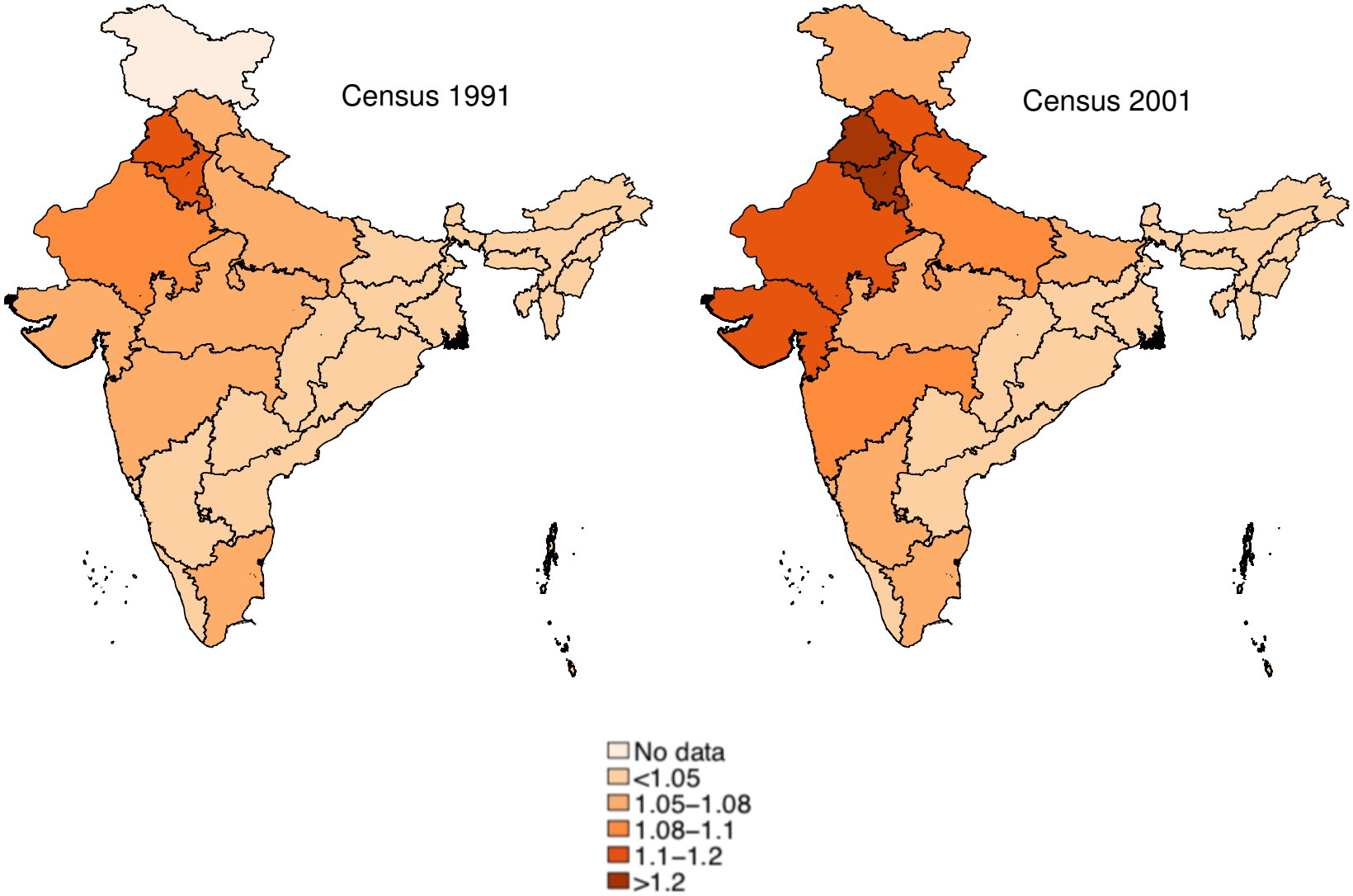
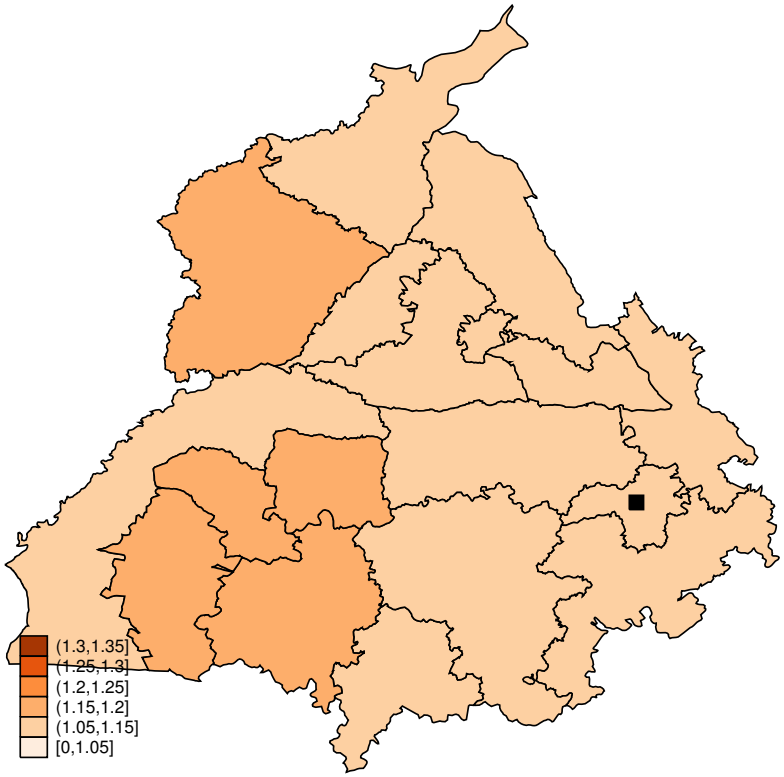
The Context

Child Sex Ratio: Ratio of boys to girls among children aged 0-6 years

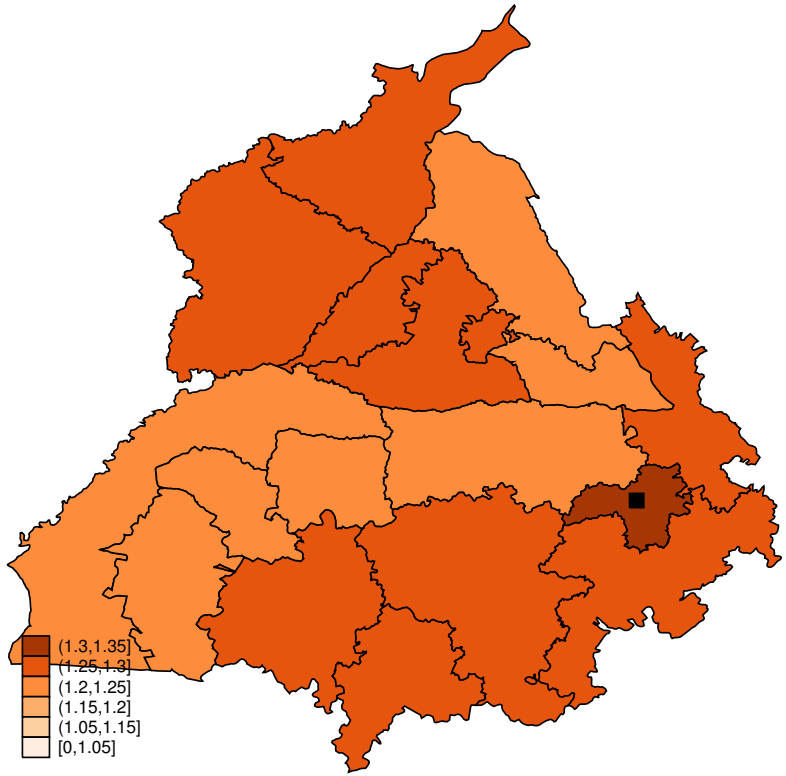


The Context: Punjab

Child Sex Ratio 1991



Child Sex Ratio 2001



Dhanlakshmi girl child scheme

- Federally sponsored financial incentive program, 2008
- Introduced in select blocks of 7 states
- Cash benefits for couples with daughters, residents only
- Enhance wellbeing of girls
  - promote the birth of girls
  - increase years of schooling among girls
  - deter under-age marriage
- Staggered disbursement of funds, conditional on proof of girl's wellbeing
  - birth, immunization
  - school and marriage
- Funds are modest but sufficient for covering the stipulated costs

Contributions

- limited literature on girl child CCTs
- first of its kind CCT
  - broad eligibility, no income or fertility control clause
    Anukriti (2017), Sinha & Yoong (2009)
  - focus on human capital development in girls: health and education
  - awareness campaign

Data and variables

Census rounds of 2001 and 2011

- proportion of girls in the under-six population
- data from 25,000 villages and towns across 73 blocks of Punjab
- covariates
  - population composition by caste and gender
  - proportion of urban population
  - gender composition of working population
  - gender composition of literates

- pretreatment mean share of girls is 0.44
- negligible difference between treated and control villages

Table: Summary statistics for treated and control blocks before and after the CCT

Variables	Treated		Control		
	Pre	Post	Pre	Post	DD
	(1)	(2)	(3)	(4)	(5)
Share of girls under six	0.442	0.462	0.444	0.458	0.006***
			(0.001)	(0.001)	(0.001)
Share of low caste pop	0.216	0.220	0.288	0.317	-0.025***
			(0.008)	(0.097)	(0.005)
Share of literate women	0.752	0.793	0.648	0.712	-0.024***
			(0.113)	(0.091)	(0.003)
Share of literate men	0.839	0.873	0.765	0.808	-0.010***
			(0.006)	(0.075)	(0.003)
Share of working women	0.127	0.134	0.178	0.134	-0.051***
			(0.088)	(0.043)	(0.006)
Share of working men	0.525	0.549	0.530	0.548	-0.006***
			(0.024)	(0.024)	(0.002)
Observations	1		72		

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$
SD reported for controls
SE clustered at the block level for the DD

Empirical Strategy

Basic empirical model:

$$sharegirls06_{ibt} = \beta treatpost_{ibt} + X_{ibt}\omega + \alpha_b + \pi_t + \varepsilon_{ibt}$$

- *sharegirls06*: proportion of girls in the under-six population
- *treatpost*: difference between treated and control blocks before and after treatment
- X: covariates
- α_b,π_t: Block FE, Year FE

Difference-in-difference (DID) strategy

- spatial variation
- time variation

Results

Table: Estimated effect of the program on the share of girls (0-6 years)

	(1)	(2)
treatpost	0.019***	0.022***
	(0.001)	(0.001)
Year FE	x	x
Block FE	x	x
Covariates		x
Observations	*24,705*	*24,705*

SE clustered at the block-level in parentheses

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Effect size: 5-6 more girl per 100 boys in the 0-6 age group

Robustness

Validity of DID

- assumption of parallel trends
- ideal control groups
- covariates not an exhaustive list

Synthetic Control Method (SCM)

- data driven technique
- hypothetical counterfactual based on pretreatment trends
- simulate outcome path of treated region in the absence of treatment

Robustness

SCM using data from two rounds of the District-Level Household Survey