The Price of Gold
Dowry and Son Preference in India*

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Preliminary – Comments are welcome

Abstract

While dowry is regularly adduced as a motivation for son-preference in India, there is no available evidence on how son preferring behaviours respond to changes in the cost of providing dowry. Dowry is not widely measured and, where it is, the size of dowry payments is likely to be endogenous, varying with family preferences in micro-data and with population sex ratios in time series data. This paper exploits exogenous variation in the burden of dowry created by a sharp rise in the price of gold in 1980 of unprecedented magnitude. We use a regression discontinuity design on birth month, investigating whether girls born in the months before the price shock are more likely to survive the neonatal (first month of life) and infant (first year) periods compared with girls born in the months following the price shock, with boys acting as a control group. On the premise that Muslim households are much less likely to give dowry, we estimate a difference in discontinuities to investigate birth (month) cohort differences in girl relative to boy outcomes in Hindu relative to Muslims families. We find an increase in excess girl mortality in Hindu and not Muslim households. Hindu Girls born just after the gold price hike were between 4 and 11 percentage points more likely than boys to die before the age of one. The increase in excess girl mortality is larger in Hindu households in which the first born child is a girl consistent with such families having a greater incentive to exercise son preference in the allocation of early life nutrition and care. Our findings indicate son preference and they undermine the alternative hypothesis that the birth of a girl, on account of dowry, acts as a negative wealth shock that hurts boys and girls equally.

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1 Introduction

2 Context

3 Data and Empirical Design

3.1 Data

3.2 Identification

We will use an RD specification of the form:

$$\begin{aligned} y_i &= \alpha + \beta t_i + f(x_i) + \varepsilon_i \\ \forall x_i &\in (c-h, c+h) \end{aligned} \tag{1}$$

where y_i is the outcome in question, t_i is the treatment, x_i is the forcing variable, and h is a neighborhood around c, hereby referred to as the bandwidth. The control function $f(x_i)$ is some continuous function, usually an n-order polynomial in the forcing variable on each side of c. Previous research has used different approaches to RD estimation, but are predominantly variations of equation 1 by choosing different bandwidths and control functions. We use local linear regressions (Hahn *et al.* [3], Imbens and Lemieux [5]). In order to determine the correct bandwidth we use the Optimal bandwidth routine from Imbens and Kalyanaraman [4], which in our case is in the order of 2 months. Alternative specifications are also reported, and do not have meaningful bearings on the results. All standard errors are clustered by month-year of birth to accommodate for specification error in the forcing variable following Card and Lee [2].

3.3 Preliminary Checks

4 Results

5 Conclusion

References

[1] Anderson, Siwan, 2007, "The Economics of Dowry and Brideprice", *Journal of Economic Perspectives*, 21(4): 151-174.

[2] Card, David and David S. Lee, 2008, "Regression Discontinuity Inference with Specification Error", *Journal of Econometrics*, 142(2): 655-674.

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[4] Imbens, Guido, and Karthik Kalyanaraman, 2009, "Optimal bandwidth choice for the regression discontinuity estimator", mimeo.

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Table 1: Summary Statistics

Panel A: Entire Sample			
	Mean	SD	Obs
Infant (0-12 months) mortality	0.099	0.298	8967
Neonatal (0-1 month) mortality	0.062	0.242	8967
Girl	0.480	0.500	8967
Hindu	0.780	0.414	8967
first-born male	0.509	0.500	8967
high caste	0.504	0.500	8956
Panel B: Hindu, Girls			
	Mean	SD	Obs
Infant (0-12 months) mortality	0.101	0.302	3354
Neonatal (0-1 month) mortality	0.059	0.236	3354
first-born male	0.271	0.444	3354
high caste	0.654	0.476	3352
Panel C: Hindu, Boys			
	Mean	SD	Obs
Infant (0-12 months) mortality	0.109	0.312	3640
Neonatal (0-1 month) mortality	0.072	0.258	3640
first-born male	0.721	0.449	3640
high caste	0.639	0.480	3631
Panel D: Non-Hindu, Girls			
	Mean	SD	Obs
Infant (0-12 months) mortality	0.074	0.261	950
Neonatal (0-1 month) mortality	0.044	0.206	950
first-born male	0.287	0.453	950
Panel E: Non-Hindu, Boys			
	Mean	SD	Obs
Infant (0-12 months) mortality	0.076	0.266	1023
Neonatal (0-1 month) mortality	0.056	0.229	1023
first-born male	0.741	0.438	1023

Notes: The table shows the mean, standard deviation, and number of observations of key variables. The sample includes children born 4 months before and 4 months after March 1980.

Table 2: Infant Mortality, 4-Month Bandwidth

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	0.015*	-0.009	0.020**	-0.011	-0.005	-0.002
	(0.007)	(0.013)	(0.008)	(0.017)	(0.008)	(0.014)
Girl		-0.038**		-0.057**		0.028
		(0.014)		(0.020)		(0.022)
Treatment × Girl		0.051***		0.066**		-0.006
		(0.015)		(0.022)		(0.027)
Obs	8967	8967	6994	6994	1973	1973
Panel B: With Covariates						
Treatment	0.010	-0.015	0.016**	-0.020	-0.002	0.008
	(0.006)	(0.012)	(0.005)	(0.012)	(0.010)	(0.016)
Girl		-0.024		-0.042*		0.036
		(0.014)		(0.019)		(0.024)
Treatment × Girl		0.052***		0.076***		-0.020
		(0.015)		(0.019)		(0.030)
high caste	-0.011**	-0.011**	-0.023***	-0.023***		
	(0.004)	(0.004)	(0.006)	(0.006)		
first-born male	0.019***	0.021***	0.026***	0.029***	-0.001	-0.003
	(0.005)	(0.005)	(0.005)	(0.004)	(0.016)	(0.014)
Obs	8668	8668	6748	6748	1920	1920

Notes: Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 4 months before and 4 months after March 1980. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 3: Infant Mortality, 4-Month Bandwidth, Controlling for Past Rainfall

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.001	-0.034**	0.008	-0.043**	-0.015	-0.003
	(0.008)	(0.013)	(0.013)	(0.018)	(0.010)	(0.019)
Girl		-0.046**		-0.078***		0.046*
		(0.017)		(0.021)		(0.024)
Treatment × Girl		0.071***		0.105***		-0.026
		(0.017)		(0.022)		(0.032)
high caste	-0.012**	-0.012**	-0.023***	-0.024***		
	(0.004)	(0.004)	(0.006)	(0.006)		
first-born male	0.021***	0.022***	0.028***	0.029***	-0.002	-0.005
	(0.005)	(0.004)	(0.005)	(0.004)	(0.016)	(0.014)
Obs	8668	8668	6748	6748	1920	1920

Notes: Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 4 months before and 4 months after March 1980. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 4: Infant Mortality, 2-Month Bandwidth

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	0.026***	0.019***	0.031***	0.020***	0.005***	0.002
	(0.001)	(0.002)	(0.002)	(0.003)	(0.000)	(0.001)
Girl		-0.001***		-0.005***		-0.001***
		(0.000)		(0.000)		(0.000)
Treatment × Girl		0.015*		0.021		0.003
		(0.007)		(0.010)		(0.003)
Obs	4985	4985	3834	3834	1151	1151
Panel B: With Covariates						
Treatment	0.021***	0.014***	0.024***	0.004	-0.002	0.017
	(0.003)	(0.003)	(0.003)	(0.005)	(0.004)	(0.016)
Girl		0.011*		-0.002		0.025
		(0.005)		(0.009)		(0.025)
Treatment × Girl		0.015		0.040**		-0.042
		(0.009)		(0.014)		(0.027)
high caste	-0.013*	-0.014*	-0.030**	-0.030**		
	(0.005)	(0.005)	(0.009)	(0.009)		
first-born male	0.019**	0.020**	0.034***	0.035***	-0.027*	-0.027
	(0.005)	(0.006)	(0.005)	(0.005)	(0.011)	(0.013)
Obs	4826	4826	3709	3709	1117	1117

Notes: Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 2 months before and 2 months after March 1980. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 5: Infant Mortality, 6-Month Bandwidth

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	0.014	-0.005	0.020*	-0.002	-0.009	-0.013
	(0.009)	(0.014)	(0.010)	(0.017)	(0.012)	(0.024)
Girl		-0.033**		-0.042**		-0.002
		(0.011)		(0.019)		(0.035)
Treatment × Girl		0.039**		0.047*		0.009
		(0.014)		(0.022)		(0.037)
Obs	13218	13218	10349	10349	2869	2869
Panel B: With Covariates						
Treatment	0.007	-0.011	0.011	-0.014	-0.003	-0.002
	(0.009)	(0.013)	(0.009)	(0.014)	(0.012)	(0.024)
Girl		-0.026**		-0.035*		-0.003
		(0.011)		(0.017)		(0.036)
Treatment × Girl		0.039**		0.054**		-0.003
		(0.014)		(0.020)		(0.038)
high caste	-0.012**	-0.012**	-0.024***	-0.024***		
	(0.005)	(0.005)	(0.006)	(0.006)		
first-born male	0.014**	0.015***	0.020***	0.021***	-0.002	-0.005
	(0.005)	(0.004)	(0.004)	(0.005)	(0.013)	(0.011)
Obs	12743	12743	9948	9948	2795	2795

Notes: Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 6 months before and 6 months after March 1980. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 6: Infant Mortality, 6-Month Bandwidth, Quadratic Control Function

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	0.021**	-0.003	0.023**	-0.018	0.010	0.053*
	(0.007)	(0.012)	(0.009)	(0.020)	(0.006)	(0.026)
Girl		-0.031**		-0.072**		0.108*
		(0.014)		(0.027)		(0.051)
Treatment × Girl		0.048**		0.087***		-0.091
		(0.016)		(0.028)		(0.053)
Obs	13218	13218	10349	10349	2869	2869
Panel B: With Covariates						
Treatment	0.017**	-0.004	0.021	-0.027	0.015	0.070**
	(0.007)	(0.010)	(0.043)	(0.018)	(0.009)	(0.028)
Girl		-0.021		-0.069**		0.125**
		(0.013)		(0.025)		(0.054)
Treatment × Girl		0.043**		0.095***		-0.117*
		(0.016)		(0.025)		(0.057)
high caste	-0.012**	-0.012**	-0.024***	-0.024***		
	(0.005)	(0.005)	(0.006)	(0.006)		
first-born male	0.015***	0.015***	0.021***	0.021***	-0.002	-0.005
	(0.004)	(0.005)	(0.004)	(0.005)	(0.013)	(0.011)
Obs	12743	12743	9948	9948	2795	2795

Notes: Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 6 months before and 6 months after March 1980. All regressions control for the quadratic trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 7: Infant Mortality, 6-Month Bandwidth, Cubic Control Function

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	0.034***	0.024	0.039***	0.030	0.010	-0.012
	(0.009)	(0.026)	(0.012)	(0.041)	(0.010)	(0.047)
Girl		-0.018		-0.017		-0.053
		(0.038)		(0.062)		(0.080)
Treatment × Girl		0.025		0.024		0.048
		(0.038)		(0.062)		(0.081)
Obs	13218	13218	10349	10349	2869	2869
Panel B: With Covariates						
Treatment	0.026**	0.012	0.029*	0.010	0.022	0.005
	(0.010)	(0.026)	(0.014)	(0.036)	(0.013)	(0.049)
Girl		-0.019		-0.025		-0.050
		(0.041)		(0.055)		(0.079)
Treatment × Girl		0.032		0.045		0.033
		(0.040)		(0.054)		(0.077)
high caste	-0.012**	-0.012**	-0.024***	-0.024***		
	(0.005)	(0.005)	(0.006)	(0.006)		
first-born male	0.015***	0.015***	0.020***	0.021***	-0.002	-0.006
	(0.004)	(0.005)	(0.004)	(0.005)	(0.013)	(0.011)
Obs	12743	12743	9948	9948	2795	2795

Notes: Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 6 months before and 6 months after March 1980. All regressions control for the cubic trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 8: Neonatal Mortality, 4-Month Bandwidth

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	-0.001	-0.017	0.001	-0.025	-0.011	0.009
	(0.007)	(0.012)	(0.007)	(0.016)	(0.010)	(0.005)
Girl		-0.028**		-0.046**		0.031
		(0.010)		(0.019)		(0.020)
Treatment × Girl		0.033**		0.054**		-0.040
		(0.011)		(0.019)		(0.022)
Obs	8967	8967	6994	6994	1973	1973
Panel B: With Covariates						
Treatment	-0.003	-0.019	-0.001	-0.029**	-0.008	0.016*
	(0.006)	(0.011)	(0.005)	(0.012)	(0.013)	(0.008)
Girl		-0.016		-0.034		0.042*
		(0.011)		(0.020)		(0.021)
Treatment × Girl		0.033**		0.059***		-0.050*
		(0.011)		(0.016)		(0.022)
high caste	-0.007	-0.007	-0.014***	-0.014***		
	(0.005)	(0.005)	(0.004)	(0.004)		
first-born male	0.024***	0.024***	0.027***	0.027***	0.016	0.014
	(0.004)	(0.004)	(0.004)	(0.004)	(0.012)	(0.011)
Obs	8668	8668	6748	6748	1920	1920

Notes: The dependent variable is a dummy variable equal to one if the child did not survive the neonatal (first month of life) period. Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 4 months before and 4 months after March 1980. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 9: Neonatal Mortality, 4-Month Bandwidth, Controlling for Past Rainfall

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	-0.010	-0.033***	-0.006	-0.040**	-0.023	0.003
	(0.008)	(0.009)	(0.011)	(0.015)	(0.013)	(0.010)
Girl		-0.032***		-0.056***		0.066**
		(0.006)		(0.012)		(0.024)
Treatment × Girl		0.047***		0.072***		-0.054*
		(0.006)		(0.013)		(0.024)
high caste	-0.007	-0.007	-0.014***	-0.014***		
	(0.005)	(0.005)	(0.004)	(0.004)		
first-born male	0.024***	0.024***	0.026***	0.027***	0.013	0.013
	(0.003)	(0.003)	(0.004)	(0.004)	(0.011)	(0.012)
Obs	8668	8668	6748	6748	1920	1920

Notes: The dependent variable is a dummy variable equal to one if the child did not survive the neonatal (first month of life) period. Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 4 months before and 4 months after March 1980. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 10: Neonatal Mortality, 2-Month Bandwidth

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	0.013**	0.011*	0.014*	0.011	0.008	0.002
	(0.004)	(0.005)	(0.006)	(0.008)	(0.004)	(0.004)
Girl		-0.001***		0.002***		-0.023***
		(0.000)		(0.000)		(0.000)
Treatment × Girl		0.005		0.007		0.006***
		(0.003)		(0.005)		(0.001)
Obs	4985	4985	3834	3834	1151	1151
Panel B: With Covariates						
Treatment	0.009**	0.006	0.009	-0.000	0.008	0.017
	(0.002)	(0.005)	(0.004)	(0.008)	(0.009)	(0.015)
Girl		0.005		0.003		0.001
		(0.003)		(0.006)		(0.021)
Treatment × Girl		0.007		0.018*		-0.023
		(0.006)		(0.007)		(0.018)
high caste	-0.004	-0.004	-0.013	-0.013		
	(0.004)	(0.004)	(0.006)	(0.006)		
first-born male	0.023***	0.022***	0.030***	0.029***	0.001	-0.001
	(0.004)	(0.004)	(0.005)	(0.006)	(0.016)	(0.016)
Obs	4826	4826	3709	3709	1117	1117

Notes: The dependent variable is a dummy variable equal to one if the child did not survive the neonatal (first month of life) period. Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 2 months before and 2 months after March 1980. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 11: neonatal Mortality, 6-Month Bandwidth

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	0.001	-0.009	0.001	-0.014	-0.003	0.008
	(0.009)	(0.013)	(0.009)	(0.016)	(0.011)	(0.014)
Girl		-0.026**		-0.035*		0.004
		(0.009)		(0.017)		(0.023)
Treatment × Girl		0.021*		0.033*		-0.022
		(0.012)		(0.018)		(0.025)
Obs	13218	13218	10349	10349	2869	2869
Panel B: With Covariates						
Treatment	-0.003	-0.012	-0.004	-0.020	0.000	0.016
	(0.008)	(0.013)	(0.009)	(0.014)	(0.013)	(0.016)
Girl		-0.017		-0.027		0.010
		(0.010)		(0.016)		(0.023)
Treatment × Girl		0.018		0.034*		-0.033
		(0.012)		(0.017)		(0.025)
high caste	-0.006	-0.007	-0.011**	-0.011**		
	(0.004)	(0.004)	(0.004)	(0.004)		
first-born male	0.020***	0.018***	0.022***	0.021***	0.014	0.011
	(0.003)	(0.003)	(0.003)	(0.004)	(0.011)	(0.009)
Obs	12743	12743	9948	9948	2795	2795

Notes: The dependent variable is a dummy variable equal to one if the child did not survive the neonatal (first month of life) period. Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 6 months before and 6 months after March 1980. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

TABLE 12: NEONATAL MORTALITY, 6-MONTH BANDWIDTH, QUADRATIC CONTROL FUNCTION

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	0.003	-0.013	0.005	-0.027	-0.006	0.031*
	(0.007)	(0.013)	(0.009)	(0.019)	(0.008)	(0.015)
Girl		-0.027**		-0.056**		0.068*
		(0.011)		(0.023)		(0.034)
Treatment × Girl		0.035**		0.068**		-0.079**
		(0.013)		(0.024)		(0.036)
Obs	13218	13218	10349	10349	2869	2869
Panel B: With Covariates						
Treatment	0.001	-0.014	0.005	-0.030	-0.003	0.042**
	(0.007)	(0.012)	(0.028)	(0.017)	(0.010)	(0.017)
Girl		-0.016		-0.050**		0.086**
		(0.011)		(0.023)		(0.038)
Treatment × Girl		0.030*		0.070***		-0.096**
		(0.014)		(0.022)		(0.038)
high caste	-0.006	-0.007	-0.011**	-0.011**		
	(0.004)	(0.004)	(0.004)	(0.004)		
first-born male	0.020***	0.018***	0.022***	0.021***	0.014	0.011
	(0.003)	(0.003)	(0.003)	(0.004)	(0.011)	(0.009)
Obs	12743	12743	9948	9948	2795	2795

Notes: The dependent variable is a dummy variable equal to one if the child did not survive the neonatal (first month of life) period. Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 6 months before and 6 months after March 1980. All regressions control for the quadratic trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 13: neonatal Mortality, 6-Month Bandwidth, Cubic Control Function

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	0.023**	0.017	0.033***	0.028	-0.013	-0.030
	(0.010)	(0.025)	(0.008)	(0.032)	(0.023)	(0.019)
Girl		-0.016		-0.010		-0.062
		(0.033)		(0.055)		(0.050)
Treatment × Girl		0.014		0.013		0.035
		(0.033)		(0.055)		(0.051)
Obs	13218	13218	10349	10349	2869	2869
Panel B: With Covariates						
Treatment	0.019**	0.006	0.027***	0.009	-0.006	-0.017
	(0.008)	(0.025)	(0.008)	(0.030)	(0.023)	(0.023)
Girl		-0.025		-0.028		-0.051
		(0.038)		(0.056)		(0.037)
Treatment × Girl		0.029		0.039		0.022
		(0.037)		(0.056)		(0.035)
high caste	-0.006	-0.007	-0.011**	-0.011**		
	(0.004)	(0.004)	(0.004)	(0.004)		
first-born male	0.020***	0.018***	0.022***	0.021***	0.014	0.010
	(0.003)	(0.003)	(0.003)	(0.004)	(0.011)	(0.009)
Obs	12743	12743	9948	9948	2795	2795

Notes: The dependent variable is a dummy variable equal to one if the child did not survive the neonatal (first month of life) period. Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 4 months before and 4 months after March 1980. All regressions control for the cubic trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 14: Placebo Test: Infant Mortality, 4-Month Bandwidth

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	-0.000	0.017	-0.007	0.000	0.014	0.059
	(0.029)	(0.032)	(0.032)	(0.038)	(0.032)	(0.035)
Girl		-0.006		-0.014		0.024**
		(0.013)		(0.022)		(0.008)
Treatment × Girl		-0.036**		-0.015		-0.101***
		(0.014)		(0.023)		(0.020)
Obs	6797	6797	5153	5153	1644	1644
Panel B: With Covariates						
Treatment	-0.000	0.025	0.008	0.030	0.000	0.047
	(0.023)	(0.027)	(0.028)	(0.037)	(0.019)	(0.026)
Girl		0.005		0.006		0.037
		(0.016)		(0.031)		(0.029)
Treatment × Girl		-0.054***		-0.046		-0.107**
		(0.016)		(0.028)		(0.033)
high caste	-0.001	-0.001	-0.008	-0.008		
	(0.013)	(0.013)	(0.015)	(0.015)		
first-born male	0.014*	0.009	0.017*	0.012	0.014	0.006
	(0.007)	(0.009)	(0.009)	(0.009)	(0.015)	(0.016)
Obs	6601	6601	4983	4983	1618	1618

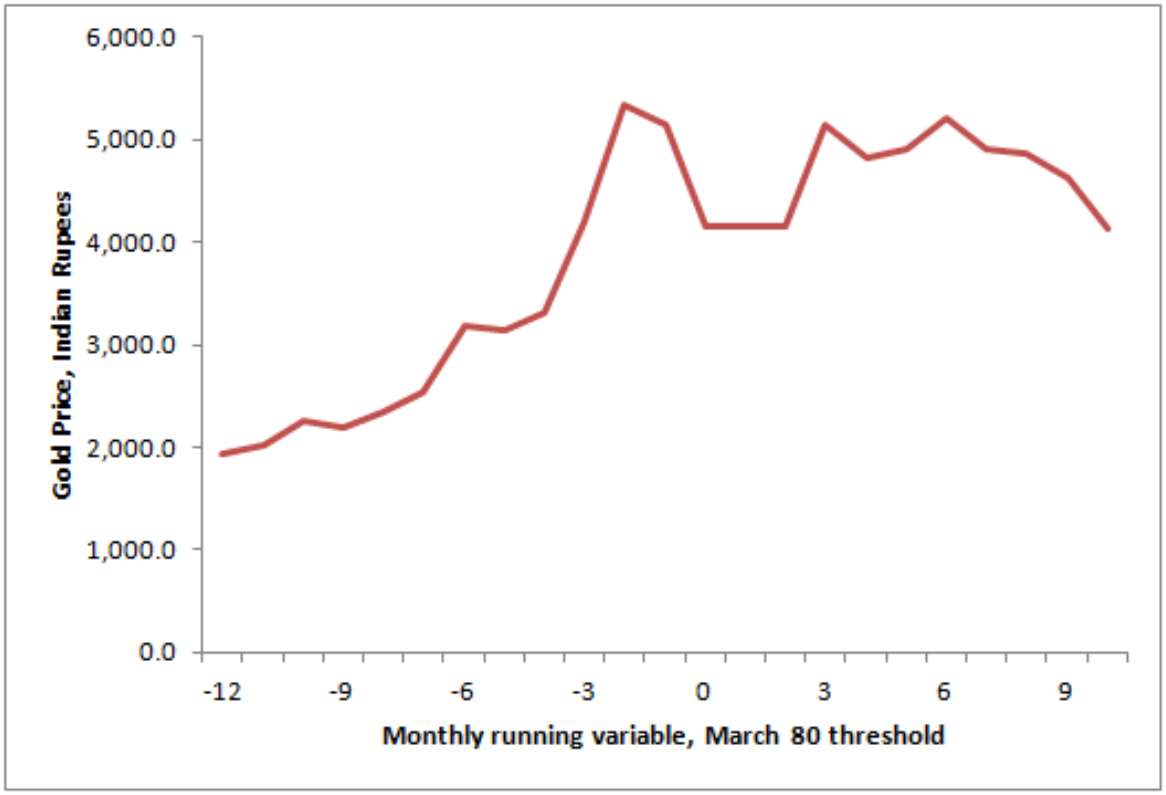
Notes: The dependent variable is a dummy variable equal to one if the child did not survive the infant (first year of life) period. Treatment is a dummy variable =1 if the child was born after March 1st 1979, 0 otherwise. Sample includes children born 4 months before and 4 months after March 1979. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

Table 15: Placebo Test: Neonatal Mortality, 4-Month Bandwidth

	Everyone		Hindus		Non-Hindus	
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A: No Covariates						
Treatment	-0.015	-0.009	-0.017	-0.015	-0.016	0.005
	(0.019)	(0.020)	(0.021)	(0.023)	(0.019)	(0.025)
Girl		-0.018**		-0.019		-0.006
		(0.006)		(0.011)		(0.009)
Treatment × Girl		-0.014		-0.003		-0.049**
		(0.010)		(0.013)		(0.016)
Obs	6797	6797	5153	5153	1644	1644
Panel B: With Covariates						
Treatment	-0.016	-0.005	-0.016	-0.007	-0.021	-0.002
	(0.020)	(0.022)	(0.022)	(0.024)	(0.019)	(0.022)
Girl		-0.008		-0.004		-0.014
		(0.009)		(0.016)		(0.013)
Treatment × Girl		-0.025*		-0.019		-0.046**
		(0.011)		(0.014)		(0.014)
high caste	0.001	0.001	-0.004	-0.004		
	(0.010)	(0.010)	(0.013)	(0.013)		
first-born male	0.015**	0.006	0.014**	0.009	0.019**	-0.001
	(0.005)	(0.007)	(0.006)	(0.007)	(0.008)	(0.011)
Obs	6601	6601	4983	4983	1618	1618

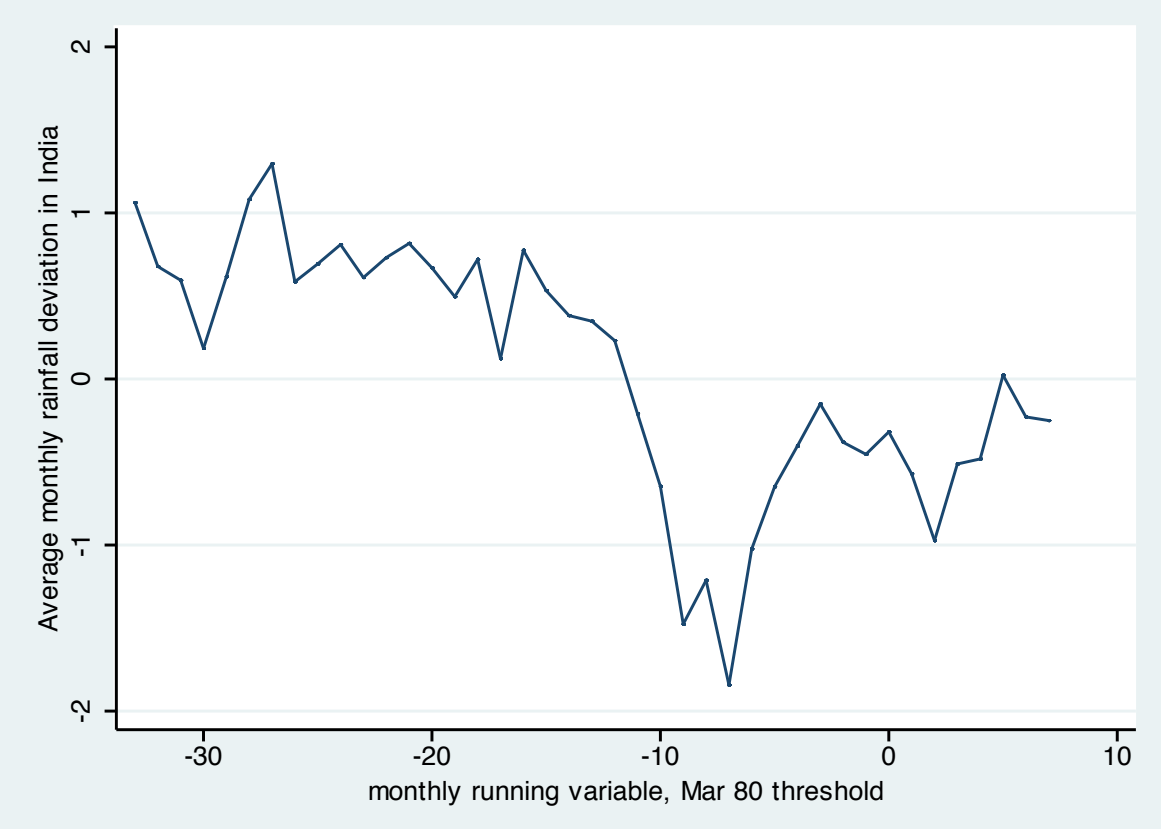
Notes: The dependent variable is a dummy variable equal to one if the child did not survive the neonatal (first month of life) period. Treatment is a dummy variable =1 if the child was born after March 1st 1979, 0 otherwise. Sample includes children born 4 months before and 4 months after March 1979. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. In addition, all regressions in Panel B control for birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.

FIGURE 1: GOLD PRICES



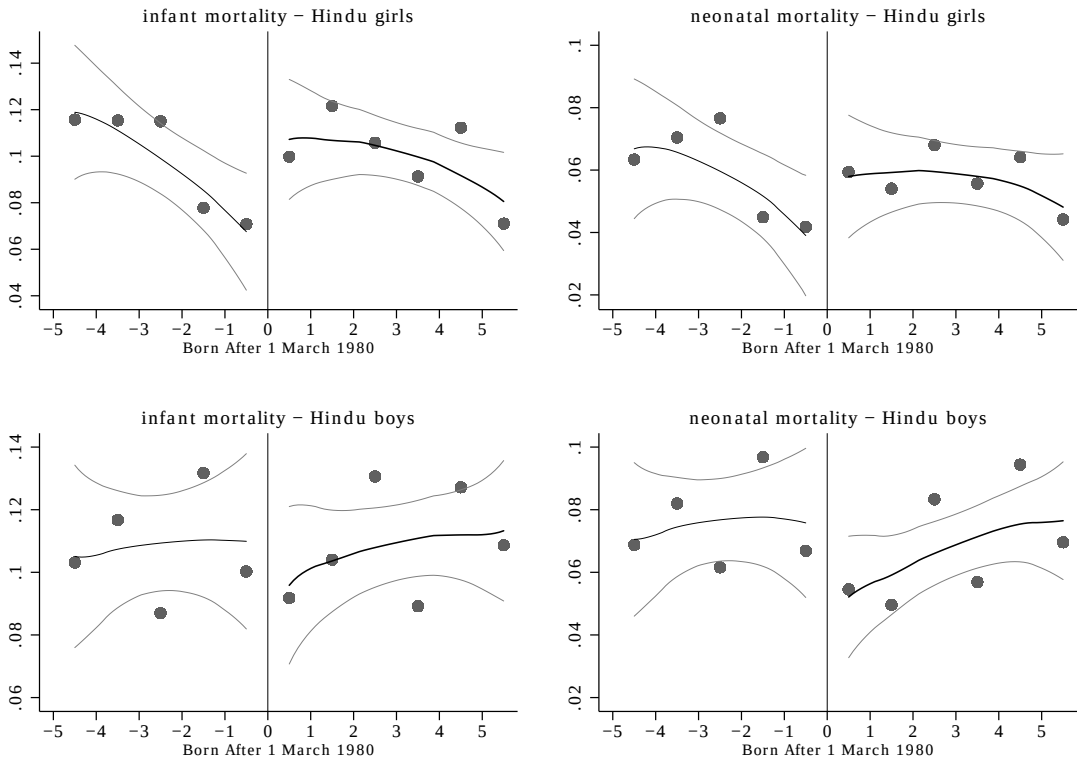
Notes: Figure shows monthly gold price index in Rupees for the Indian market around the March 1980 threshold.

FIGURE 2: RAINFALL



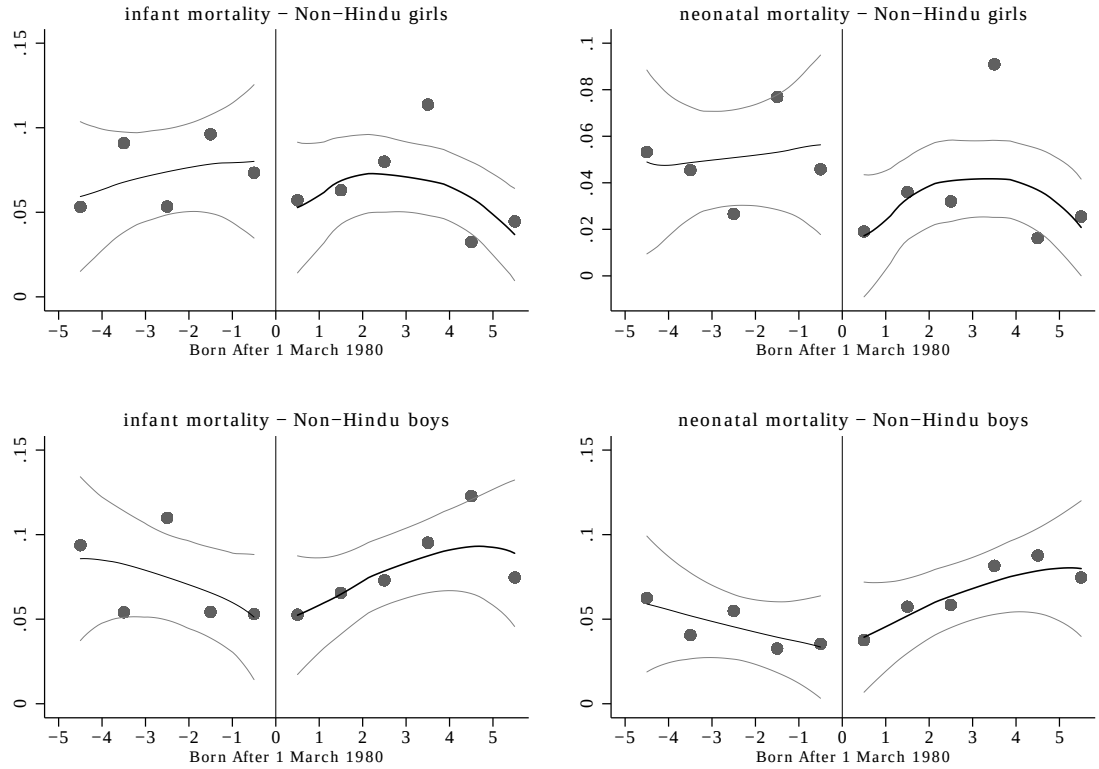
Notes: Figure shows the average difference between rainfall in a given month and past 20 years average rainfall during the same month, calculated for every state and hen averaged over the country.

Figure 3: Hindu Sample: Girls vs Boys Mortality Rates



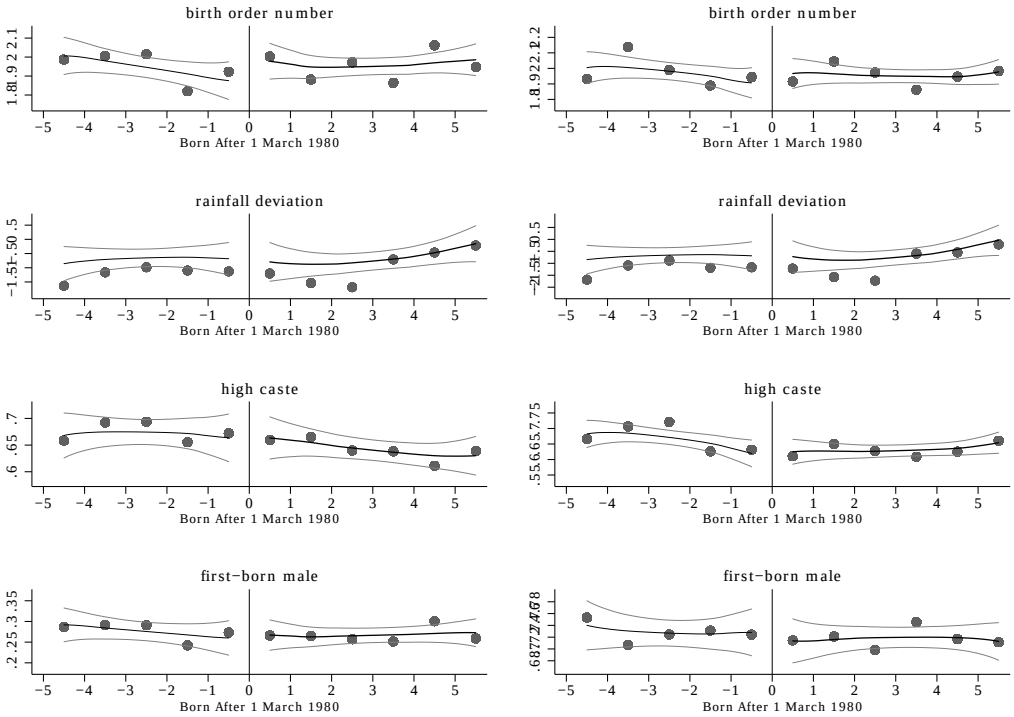
Notes: Figures show infant and neonatal mortality rates for Hindu girls vs boys samples in monthly average means against the month of birth forcing variable 5 months within the threshold of being born on 1 January 1980.

Figure 4: Non-Hindu Sample: Girls vs Boys Mortality Rates



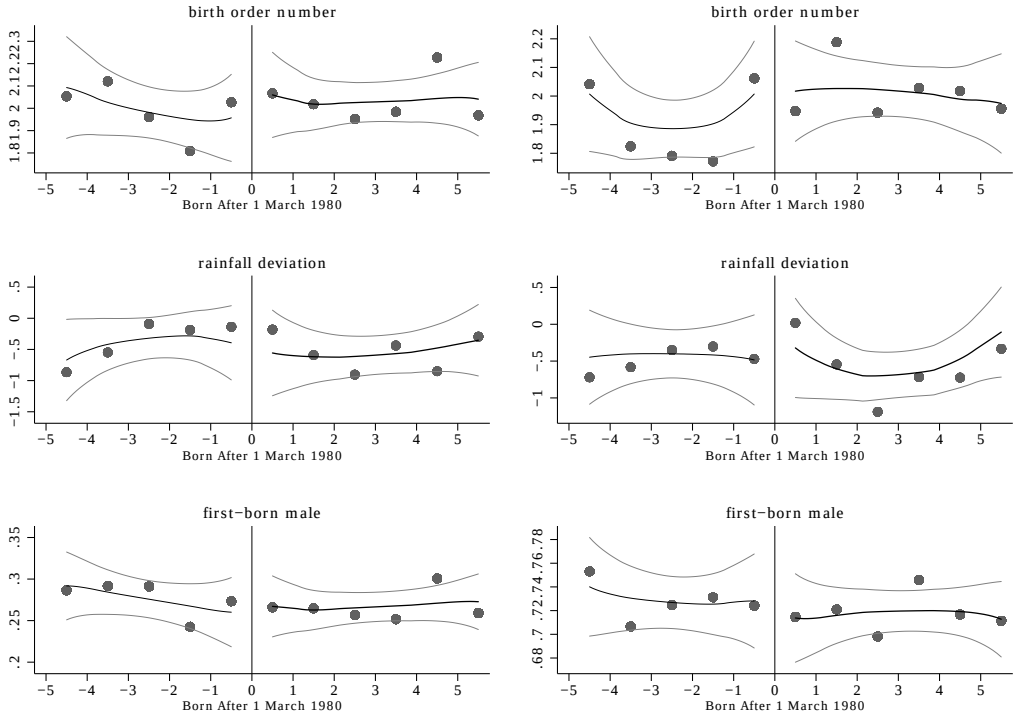
Notes: Figures show infant and neonatal mortality rates for Non-Hindu girls vs boys samples in monthly average means against the month of birth forcing variable 5 months within the threshold of being born on 1 January 1980.

Figure 5: Covariates – Hindu Girls (Left) vs Boys (Right)



Notes: Figures show covariates in monthly average means against the monthly forcing variable 5 months within the threshold of being born on 1 January 1980.

Figure 6: Covariates – Non-Hindu Girls (Left) vs Boys (Right)



Notes: Figures show covariates in monthly average means against the monthly forcing Variable, 5 months within the threshold of being born on 1 January 1980.

6 Additional Tables and Figures

Appendix Table 1: Infant Mortality, Optimal Bandwidth

	Everyone			Hindus			Non-Hindus		
	all	girls	boys	all	girls	boys	all	girls	boys
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: No Covariates									
Treatment	0.026	0.035	0.019	0.031	0.042	0.020	0.005	0.005	0.002
	(0.024)	(0.033)	(0.033)	(0.028)	(0.039)	(0.040)	(0.041)	(0.061)	(0.055)
Obs	4985	2387	2598	3834	1833	2001	1151	554	597
Panel B: With Covariates									
Treatment	-0.011	-0.025	-0.012	-0.027	0.038***	-0.031	-0.004	-0.069*	0.033
	(0.009)	(0.023)	(0.012)	(0.022)	(0.008)	(0.019)	(0.018)	(0.030)	(0.044)
rainfall deviation	0.017**	0.015*	0.022*	0.026**	-0.003	0.032	0.000	0.005	0.008
	(0.006)	(0.006)	(0.010)	(0.008)	(0.022)	(0.020)	(0.010)	(0.015)	(0.012)
first-born male	0.019**	-0.007	0.031*	0.033***	0.013	0.041***	-0.027*	-0.062	0.004
	(0.005)	(0.012)	(0.011)	(0.007)	(0.008)	(0.008)	(0.011)	(0.037)	(0.026)
Obs	4826	2307	2519	3709	1772	1937	1117	535	582

Notes: Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. The optimal bandwidth is determined using the Imbens and Kalyanaraman [4] algorithm. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. Standard errors are clustered by month-year-cohort.

Appendix Table 2: Neonatal Mortality, Optimal Bandwidth

	Everyone			Hindus			Non-Hindus		
	all	girls	boys	all	girls	boys	all	girls	boys
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Panel A: No Covariates									
Treatment	0.013	0.016	0.011	0.014	0.018	0.011	0.008	0.008	0.002
	(0.019)	(0.026)	(0.027)	(0.022)	(0.030)	(0.032)	(0.033)	(0.046)	(0.048)
Obs	4985	2387	2598	3834	1833	2001	1151	554	597
Panel B: With Covariates									
Treatment	-0.006	0.003	-0.024	-0.002	0.015***	-0.020	-0.007	-0.057	0.004
	(0.012)	(0.018)	(0.018)	(0.031)	(0.002)	(0.036)	(0.016)	(0.054)	(0.035)
rainfall deviation	0.010	-0.001	0.023	0.012	-0.002	0.030	-0.001	0.010	-0.004
	(0.008)	(0.007)	(0.012)	(0.010)	(0.009)	(0.018)	(0.005)	(0.017)	(0.010)
first-born male	0.023***	0.017	0.025*	0.029**	0.024	0.023*	0.001	-0.003	0.029
	(0.004)	(0.014)	(0.009)	(0.007)	(0.016)	(0.009)	(0.016)	(0.021)	(0.033)
Obs	4826	2307	2519	3709	1772	1937	1117	535	582

Notes: Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. The optimal bandwidth is determined using the Imbens and Kalyanaraman [4] algorithm. All regressions control for the linear trend in month of birth and its interaction with the dummy variable for Treatment. Standard errors are clustered by month-year-cohort.

Appendix Table 3: Infant Mortality, 4-Month Bandwidth, Differential Effects by Son-Preference)

	Everyone			Hindus			Non-Hindus		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Treatment	0.001	-0.034**	-0.054***	0.008	-0.043**	-0.057**	-0.015	-0.003	-0.057*
	(0.008)	(0.013)	(0.013)	(0.013)	(0.018)	(0.021)	(0.010)	(0.019)	(0.028)
first-born male	0.021***	0.022***	0.010	0.028***	0.029***	0.035***	-0.002	-0.005	-0.075*
	(0.005)	(0.004)	(0.009)	(0.005)	(0.004)	(0.008)	(0.016)	(0.014)	(0.038)
Girl		-0.046**	-0.049***		-0.078***	-0.072***		0.046*	0.009
		(0.017)	(0.013)		(0.021)	(0.020)		(0.024)	(0.014)
Girl × first-born male			-0.008			-0.012			0.003
			(0.013)			(0.015)			(0.037)
Treatment × Girl		0.071***	0.092***		0.105***	0.119***		-0.026	0.028
		(0.017)	(0.014)		(0.022)	(0.018)		(0.032)	(0.041)
Treatment × first-born male			0.030*			0.020			0.066
			(0.016)			(0.012)			(0.043)
Treatment × Girl × first-born male			-0.031*			-0.029			-0.054
			(0.016)			(0.021)			(0.061)
rainfall deviation	-0.014*	-0.014	-0.013	-0.020*	-0.018*	-0.017	0.001	-0.003	-0.002
	(0.007)	(0.008)	(0.008)	(0.009)	(0.009)	(0.009)	(0.011)	(0.010)	(0.010)
rainfall deviation × Girl	0.016	0.016	0.015	0.024	0.021	0.020	0.003	0.010	0.009
	(0.013)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.018)	(0.015)	(0.014)
Obs	8668	8668	8679	6748	6748	6759	1920	1920	1920

Notes: Treatment is a dummy variable =1 if the child was born after March 1st 1980, 0 otherwise. Sample includes children born 4 months before and 4 months after March 1980. All regressions control for the linear trend in month of birth, its interaction with the dummy variable for Treatment, birth order fixed effects, a dummy variable for whether the eldest (first-born) sibling was a boy, high-caste dummy (for Hindu sample), state fixed effects, the difference between rainfall in the month of birth and past 20 years average rainfall in that state-month along its lags for the past 12 months and their interactions with the Girl dummy, state fixed effects. Standard errors are clustered by month-year-cohort.