

Bank Presence and Health

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Overview

This paper studies how **bank presence** affects **health** of households

- Nationwide natural experiment
- Policy of the Reserve Bank of India (RBI) from 2005 that introduces exogenous variation in bank presence
- Policy incentivizes banks to enter underbanked districts, which have a population-to-branch ratio above the national average
- I compare households in districts just above and just below the national average
- I find a strong and positive effect on: morbidity rates, vaccination rates, pregnancy risks in two data sets
- I highlight two novel aspects of banking contributing to the effect: banks offer health insurance to households and credit to health care providers

Policy

- Introduced in 2005 by RBI, intact until today
- Objective: Incentivize banks to open branches in underserved locations
- Policy: Banks increase their **chance to obtain license** for favored location by **strengthening presence** in **underbanked districts**

Underbanked Districts

$$\frac{\text{Population}_{\text{District}}}{\# \text{ Bank Branches}_{\text{District}}} > \frac{\text{Population}_{\text{National}}}{\# \text{ Bank Branches}_{\text{National}}}$$

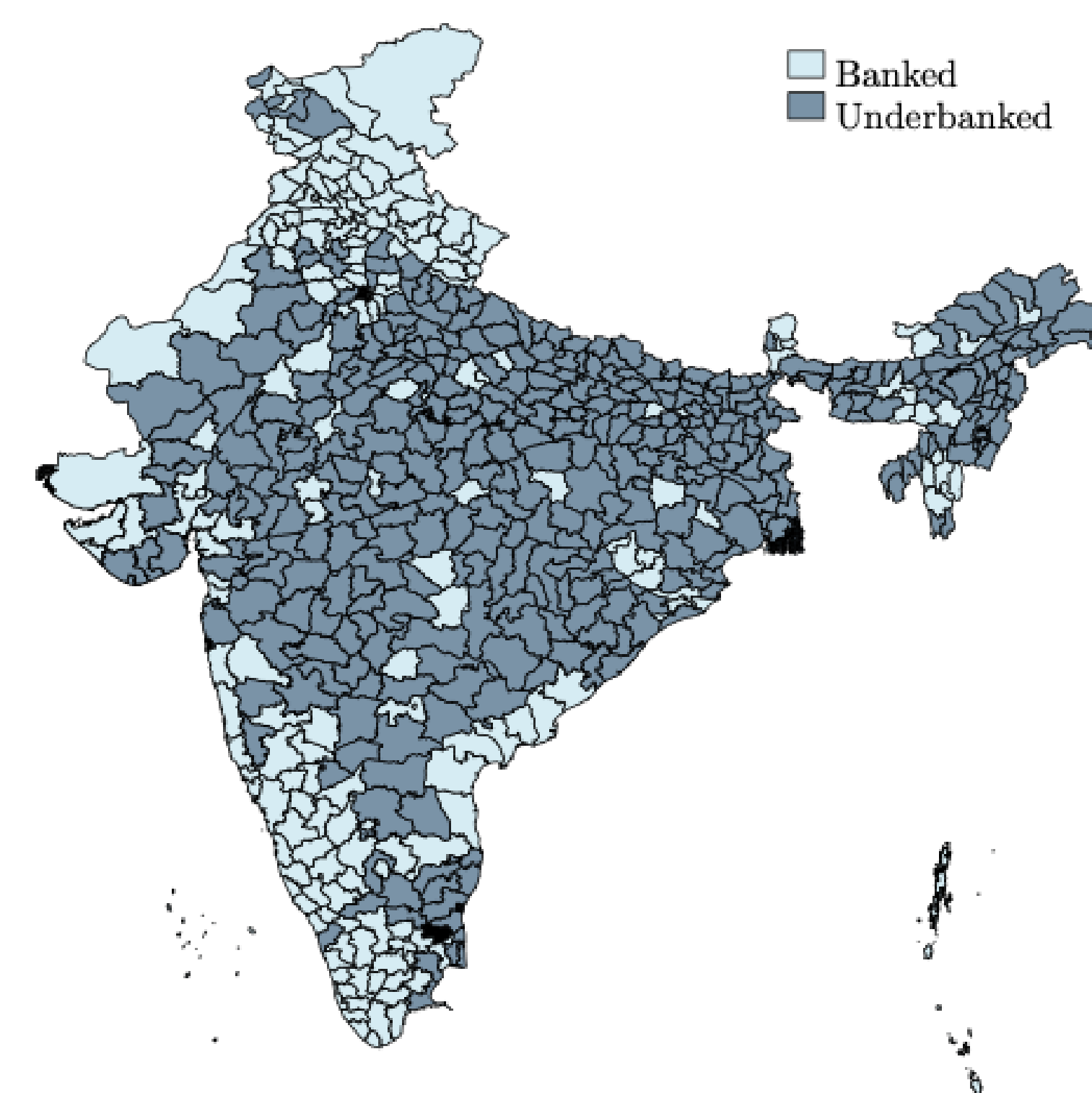
Underbanked/Treated

- List of underbanked districts published 2006
- Only names, I reconstruct ratio

Regression Discontinuity Design

- **Forcing variable:** District-level ratio
- **Cutoff:** National-level ratio
- **Fuzzy**

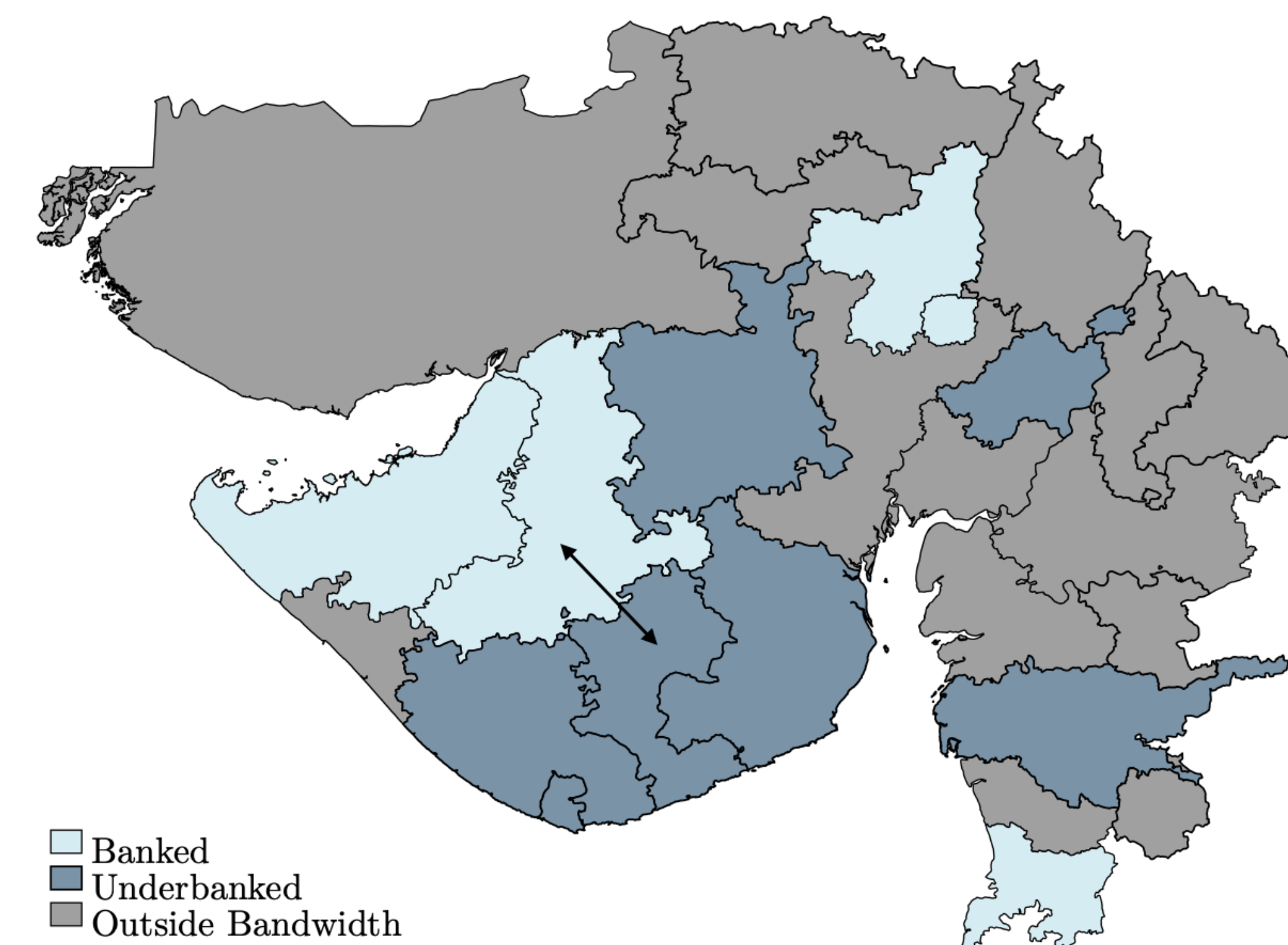
375 Underbanked Districts



Regression Specification

$$\text{Underbanked}_{d,s} = \alpha_0 + \alpha_1 \text{Above}_{d,s} + \alpha_2 \text{DistRatio}_{d,s} + \alpha_3 \text{DistRatio}_{d,s} \text{Above}_{d,s} + \lambda X_{d,s} + \mu_s + v_{d,s}$$

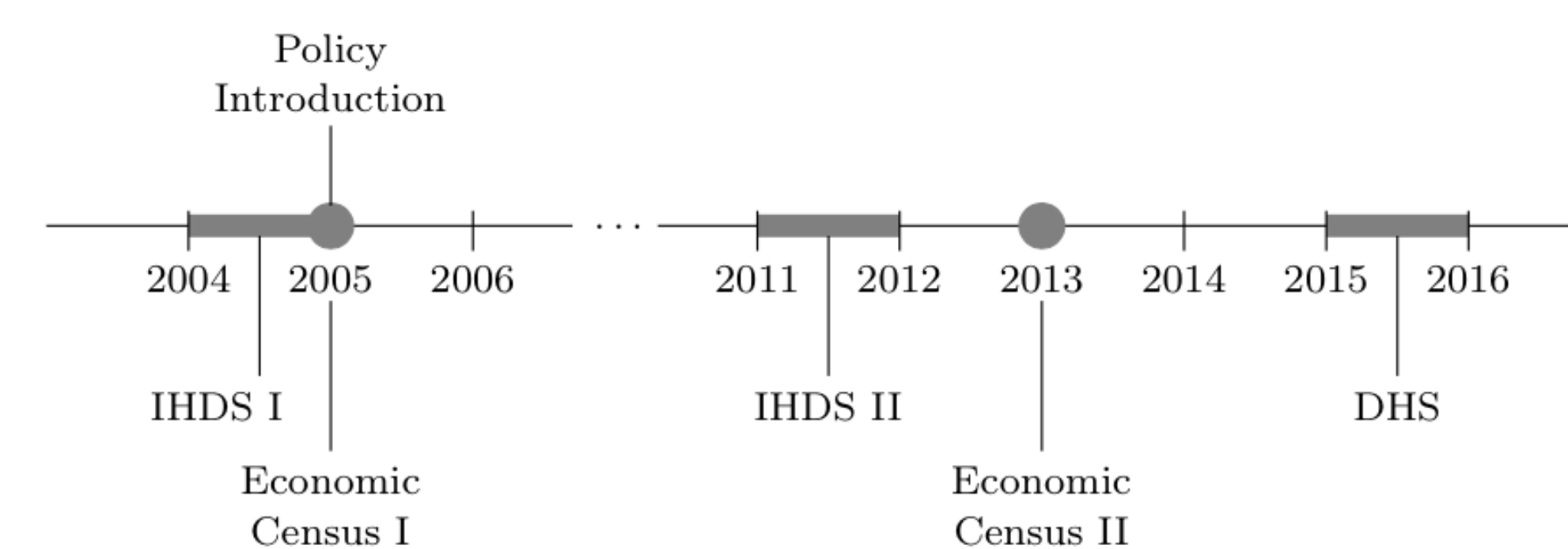
$$y_{h,d,s} = \beta_0 + \beta_1 \text{Underbanked}_{d,s} + \beta_2 \text{DistRatio}_{d,s} + \beta_3 \text{DistRatio}_{d,s} \text{Above}_{d,s} + \gamma X_{d,s} + \eta_s + \epsilon_{h,d,s}$$



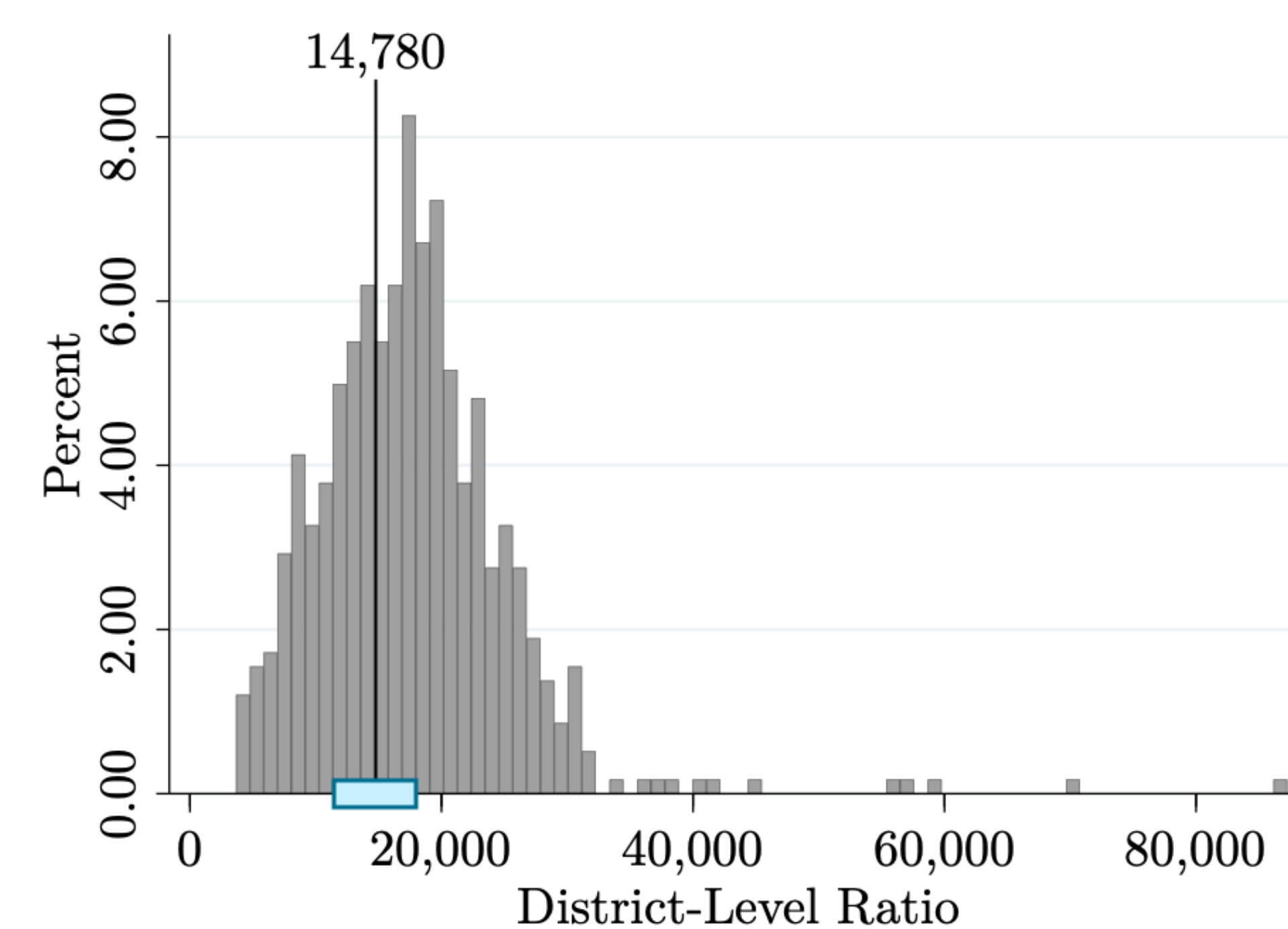
Data

- Indian Human Development Survey IHDS I (2004/2005) & II (2011/2012)
- Demographics and Health Survey DHS (2015/2016)
- Economic Census I (2005) & II (2013)

Timeline

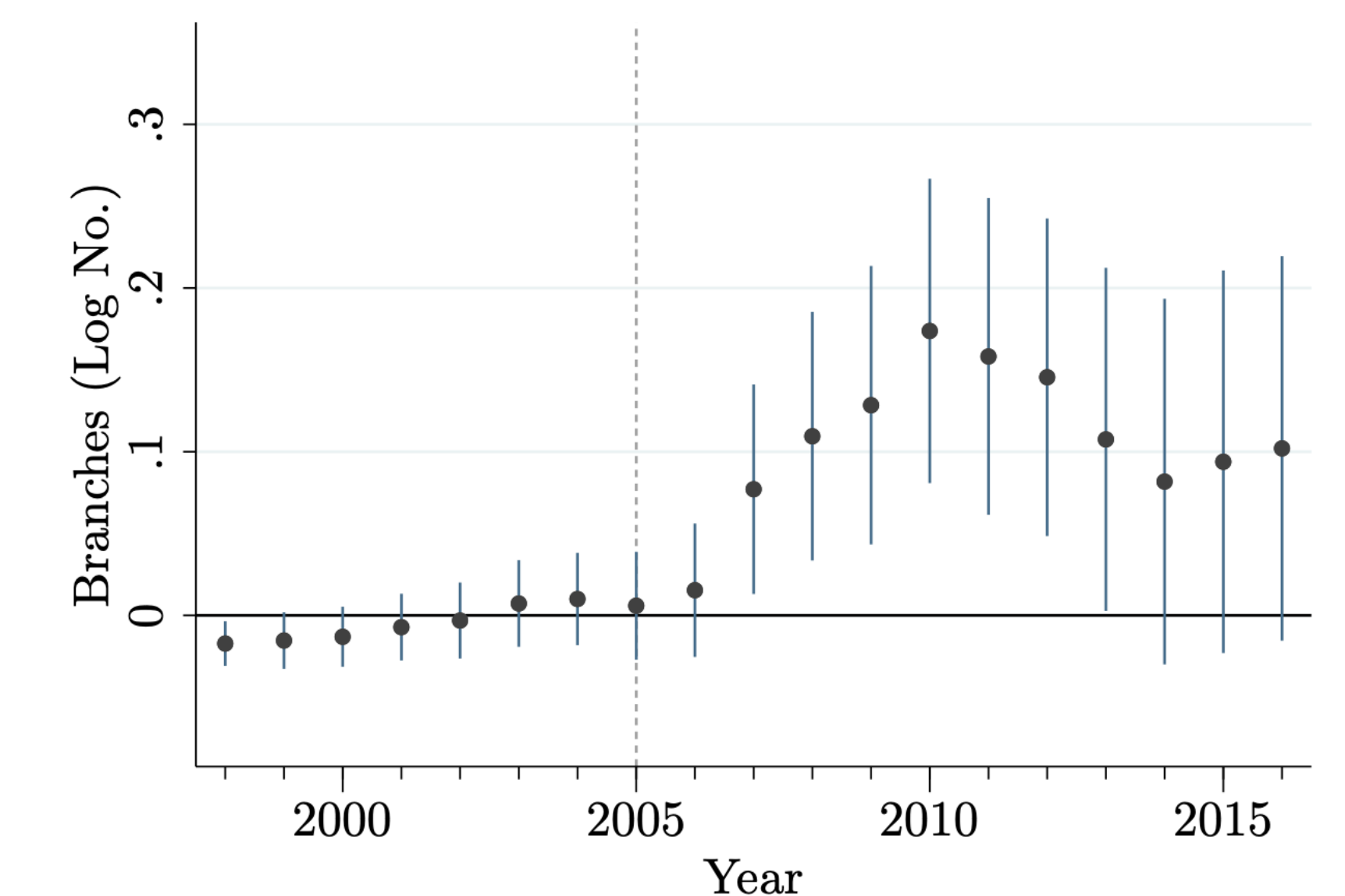


No Manipulation of Ratio



Results

1. Banks Open Branches

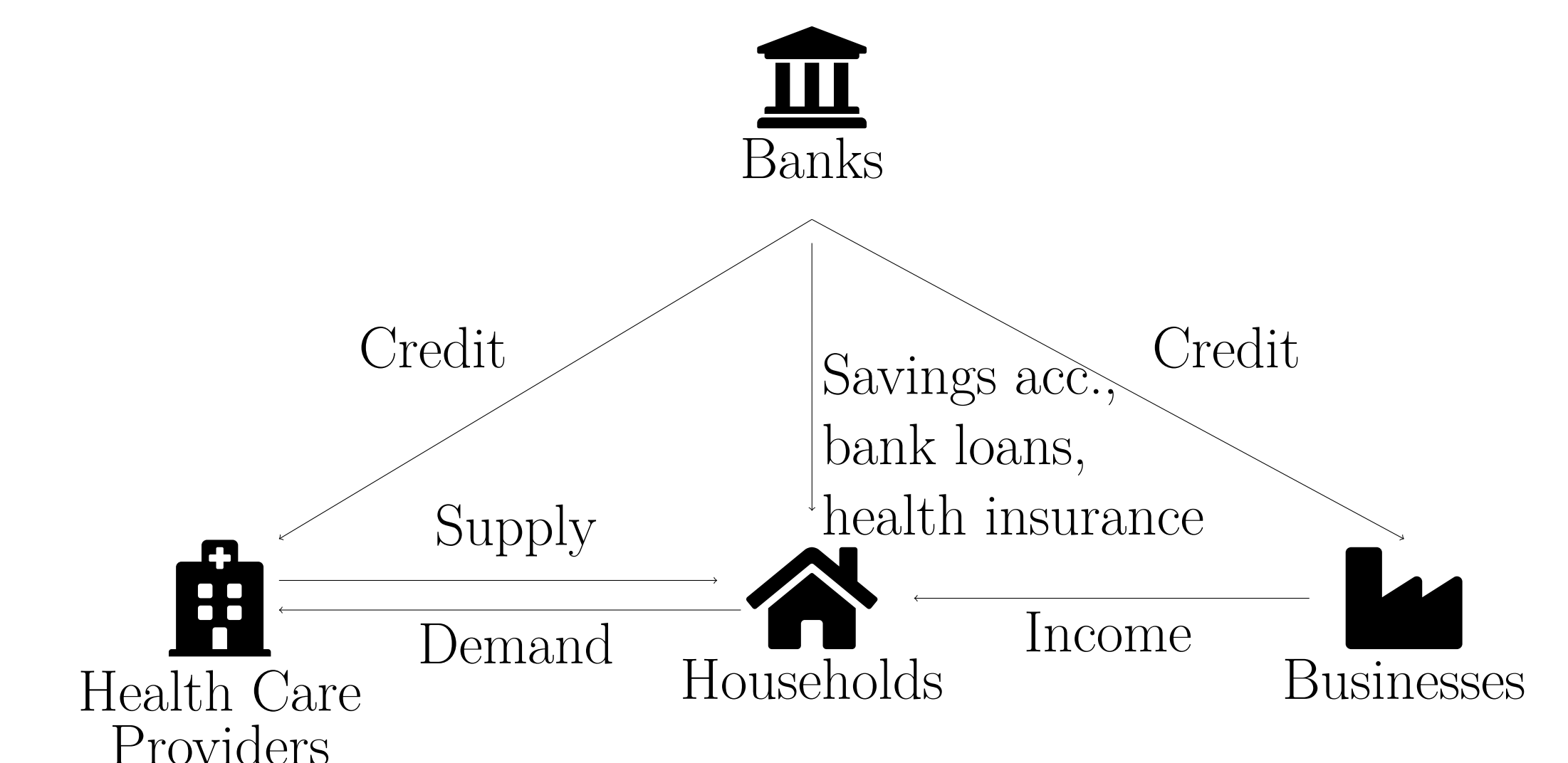


2. Health Improves

	Days ill (non-chronic) (log no.) (1)	Days missed due to illness (log no.) (2)	Medical expenses (log Rs) (3)
Treated	-0.29** (0.12)	-0.44*** (0.13)	-0.88** (0.35)
Control Mean	0.82	0.58	2.12
Mean Change (%)	-25.21	-35.40	-58.56
Bandwidth	2,658	2,513	2,948
Efficient Obs.	12,968	12,421	14,576
Observations	32,280	33,346	32,983

(SE), * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$. IHDS (2011/2012). Household level.

3. Mechanisms



I highlight **two novel aspects** of banking

- Banks offer health insurance
- Banks offer credit to health care providers