

# Political Economy of Third Party Interventions

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# Motivation

- Policy interventions by both national and international organizations are common in developing countries.
- A lot of studies evaluate impact of such policy interventions.
- They however ignore the political economy concerns.
- If government's objective misaligns with organization's interest then it may alter effect of the program.

# This Paper

- This paper evaluates a World Bank intervention in West Bengal, India.
- Intervention provided training and incentivized grants to incumbents in village governments.
- We show the intervention had null effects on reelection rates of incumbents.
- We then investigate how political economy concerns of state government may have undermined the intervention.

# Institutional Details

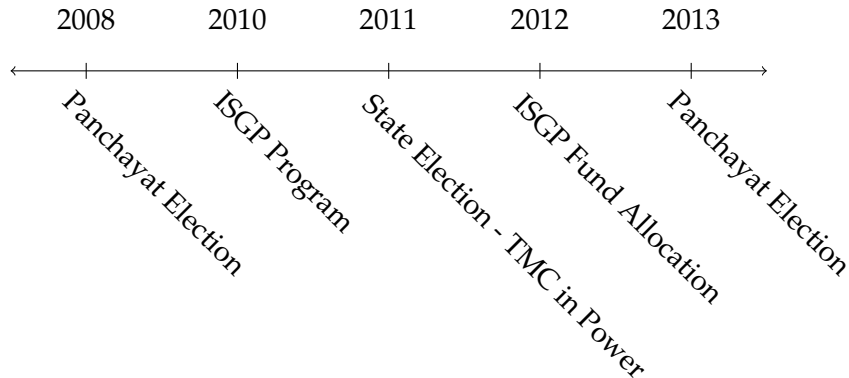
## Gram Panchayats and Local Elections

- Gram Panchayat (GP) is lowest tier of governance in rural India.
- Responsible for provision of local public goods: roads, wells, primary schools, health centers etc.
- GP council members elected from individual wards.
- GP head indirectly elected amongst elected council members.

# ISGP Program

- World Bank in collaboration with Govt. of WB initiated ISGP program in 2010.
  - ▶ ISGP: Institutional Strengthening of Gram Panchayats
- 1000 GPs were selected from nine districts (1684 GPs).
  - ▶ Bankura, Birbhum, Bardhaman, Coochbehar, Dakshin Dinajpur, Howrah, Nadia, Paschim Midnapur and Purba Midnapur.
- GP selection within each district: top 60% of GPs with highest **self evaluation scores** in 2007-08.
- Project provided a performance linked block grants.
  - ▶ For 2012-'13, fund utilization is primary performance metric.
  - ▶ ISGP Grant 30% of total untied fund allocation.

# Timeline of Events



# Data Sources

- **Self Evaluation Score:** Selection Criteria for ISGP Program, Source: P&RD, Govt. of West Bengal.
- **ISGP Internal Records:** Contains detailed audit reports and expenditure details of ISGP villages.
- **SFC Survey:** Contains detailed revenue and expenditures by GP-year for period 2009-2013.
- **Election Results:** Available (incomplete) from SEC West Bengal.

**Table:** Summary statistics

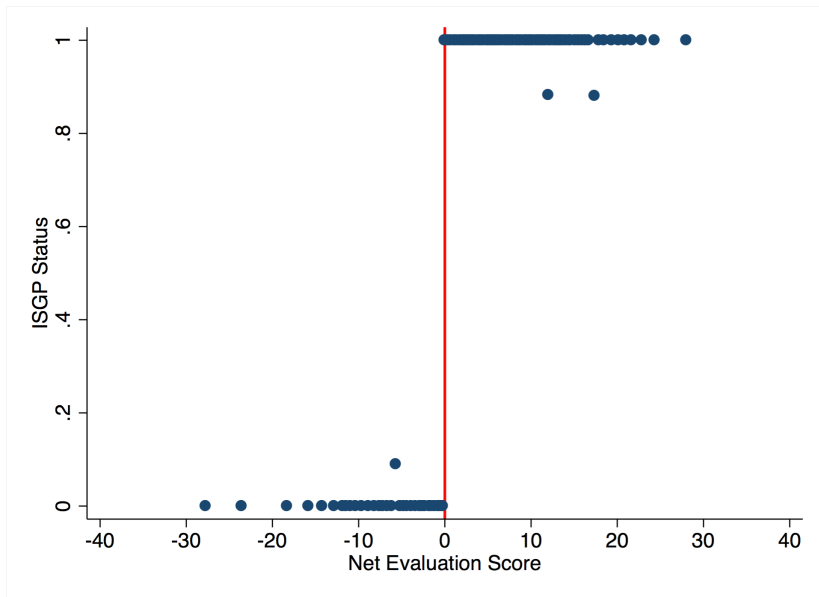
<b>Variable</b>	<b>Mean</b>	<b>Standard Deviation</b>
<i>Panel A: Demographics</i>		
Total Population	20261.69	5995.10
Scheduled Caste (SC) Population	5863.42	4131.369
Scheduled Tribe (ST) Population	1400.80	1955.68
Literacy (in percentage)	76.53	10.12
<i>Panel B: Local Election</i>		
Rerun rate in 2013 elections	0.17	0.38
Reelection rate in 2013 elections	0.08	0.27
<i>Panel C: GP Revenue in 2012-'13</i>		
NREGS (Rs. lakhs)	106	101
Untied Grant (excluding ISGP Grant) (Rs. lakhs)	95.2	2610
Proportion of ISGP Grant in Untied Grant	0.33	0.26



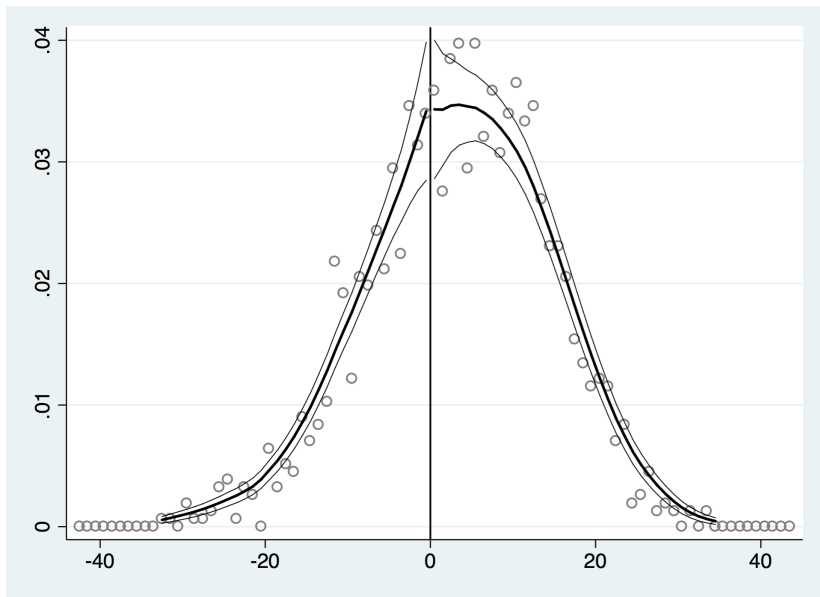
# Regression Discontinuity Design

- The self evaluation score was assigned based on a 2007-'08 survey by the ministry.
- There was no information about ISGP program at the time of survey.
- ISGP officials used the score to decide the selection of GPs into the program.
- We calculate the net evaluation score for each GP in the nine program districts.
  - ▶  $\text{Net Eval Score}_{gd} = \text{Eval Score}_{gd} - \text{Cut-off Score}_d$
- Provides a strict discontinuity at net score = 0.

# ISGP Selection: Discontinuity



# McCrary Test



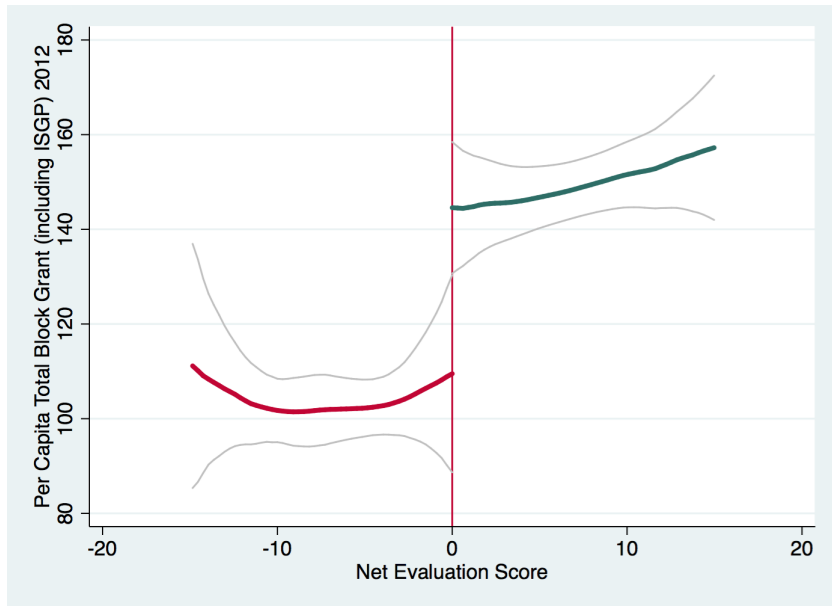
# Effect on Fund Allocation

- We first look at how ISGP program affected allocation of funds to GPs.

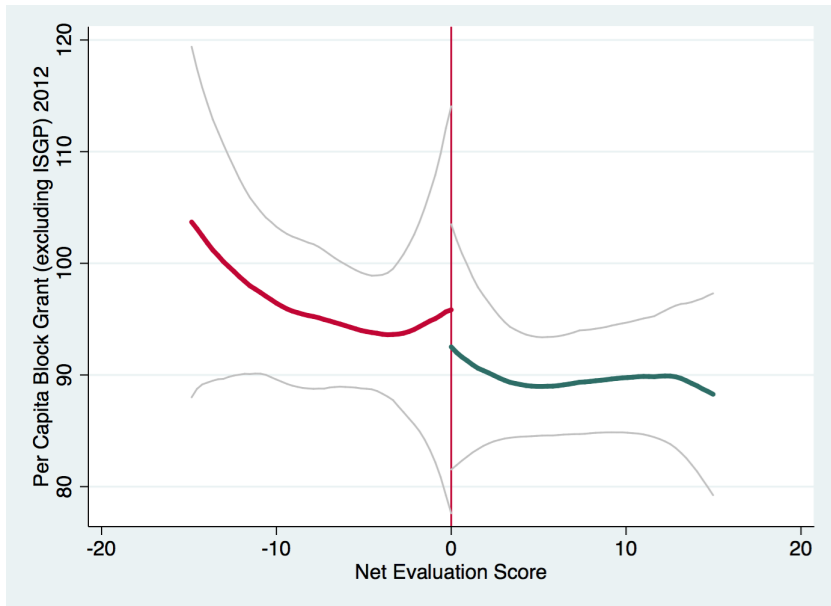
$$F_{gd} = \gamma \mathcal{I}[\text{EvalScore}_{gd} > 0] + f(\text{EvalScore}_{gd}) + \epsilon_{gd}$$

- ▶  $F_{gd}$ : ISGP Grant, Total grant, Block grant from state government.

# Total Grant Higher in ISGP Villages



# State Grant Did not Change on Average



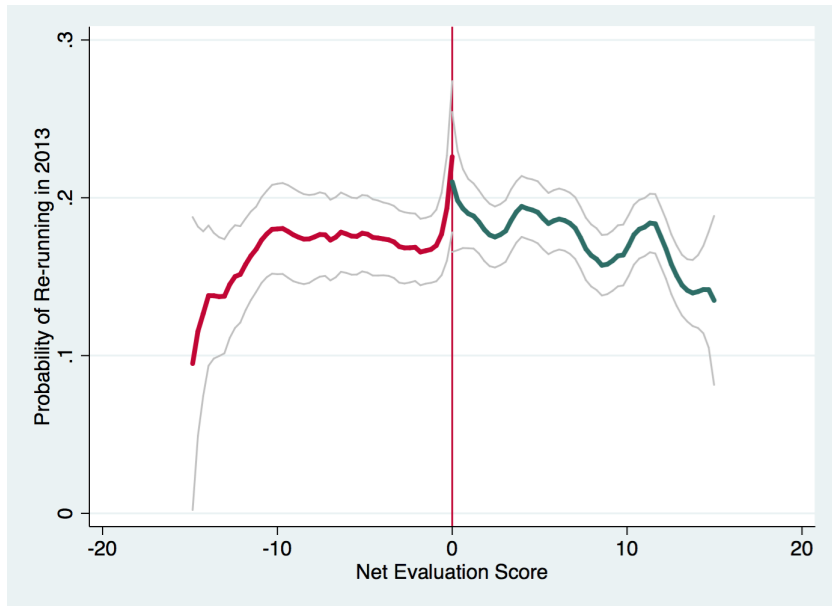
# Impact on Local Politicians' Behavior

- How did local politicians react to such changes in fund allocation?
- We look at whether ward councilors rerun and rewin in 2013 elections among ISGP and non-ISGP villages.

$$\mathbb{P}[R_{wgd} = 1] = \gamma \mathcal{I}[\text{EvalScore}_{gd} > 0] + f(\text{EvalScore}_{gd}) + \epsilon_{wgd}$$

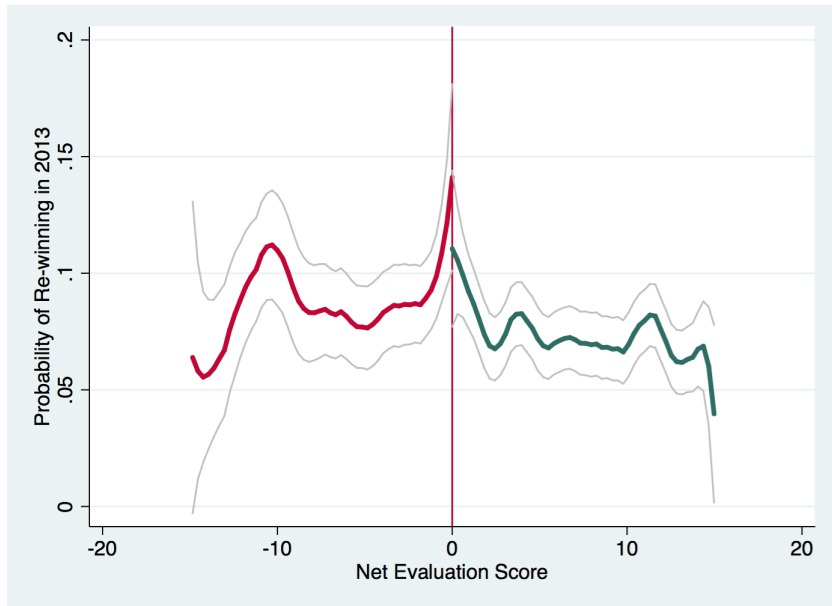
where  $R_{wgd} = 1$  when ward councilor reruns in 2013.

# Rerunning Was Not Affected





# Reelection Was Not Affected



# Party Switching

- Reelection could be affected by party switching.
  - Anecdotal evidence that local politicians switched parties to TMC prior to the local election.
- We know party switching only for those who rerun.
- We look at:

$$\mathbb{P}[S_{wgd} = 1 \mid R_{wgd} = 1] = \gamma \mathcal{I}[EvalScore_{gd} > 0] + f(EvalScore_{gd}) + \epsilon_{wgd}$$

where  $R$  = Rerunning and  $S$  = Party Switching.

**Table:** Party Switching and Reelection Behavior Among ISGP Politicians

	Party Switch	Rewin	
	(1)	w switch	w/o switch
ISGP	0.28** (0.11)	0.45*** (0.14)	0.18** (0.08)
Observations	262	116	225
Bandwidth	IK	IK	IK
Control Function	linear	linear	linear
Control Included	yes	yes	yes
District FE	yes	yes	yes

*Notes:* All the dependent variables are dummies in this table. For column (1) it is an indicator for the incumbent switching party affiliation conditional on rerunning, and for columns (2) and (3) the incumbent getting reelected conditional on rerunning and switching and not switching parties, respectively. Each observation is a ward within a GP. Standard errors are clustered at GP level. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table:** Effect of ISGP on Resource Allocation among Switchers and Non-switchers

	Total Grant		State Grant	
	switchers	non-switchers	switchers	non-switchers
	(1)	(2)	(3)	(4)
ISGP	57.97** (22.64)	33.23** (13.74)	14.33 (13.31)	-9.65 (12.36)
Observations	106	291	82	198
Bandwidth	IK	IK	IK	IK
Control Function	linear	linear	linear	linear
Control Included	yes	yes	yes	yes
District FE	yes	yes	yes	yes

*Notes:* The dependent variables are total discretionary grant (column (1) and (2)) and discretionary grant from state government (column (3) and (4)) for the financial year 2012-'13. Columns (1) and (3) are for the sample of GPs where at least one incumbent switched parties conditional on rerunning. Columns (2) and (4) are for the sample where no incumbent switched parties while rerunning. \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

# Important Takeaways

- Party switching and aligning to the state government increased among the ISGP villages.
- They received a higher state grant as compared to party switchers among non-ISGP villages.
- The total grant for party switchers among ISGP villages on average is higher than party switchers among non-ISGP villages.

# The Model

- There is a continuum of villages of mass 1 denoted by  $i \in [0, 1]$ .
- Each village has an incumbent politician of ability  $\theta_i \sim U[1, \bar{\theta}]$ , where  $\bar{\theta} > 1$ .
- Each politician  $i$  also has an initial party identity,  $\tilde{p}_i \in \{S, D\}$ .
- There are two kind of villages - ISGP villages ( $I_i = 1$ ) and non-ISGP villages ( $I_i = 0$ ).
- Total public expenditure carried out by the incumbent from village  $i$ ,

$$G_i = \begin{cases} B_i & \text{if } I_i = 0, \\ \frac{\theta_i}{\bar{\theta}}E + B_i & \text{if } I_i = 1. \end{cases}$$

- An incumbent's reelection probability,  $q_i$  is given by,

$$q_i = \left[ \frac{\theta_i}{\bar{\theta}} \times \frac{(1 + I_i)G_i}{2(E + B)} \right]^\alpha \quad \text{where } I_i \in \{0, 1\}, \quad \alpha < 1$$

# Timeline of Events

- Each incumbent  $i$  simultaneously decides whether to switch her party identity or not, i.e.,  $W_i \in \{0, 1\}$ .
- The new or final party identity of the incumbent  $i$ , is  $p_i \in \{S, D\}$ .
- The state government observes the final party identity of all incumbents and their ability type and allocates state grants.
- Then the incumbents carry out public expenditure in their respective villages.

# State Government's Problem

- The state government has a total budget of  $B$ .
- Villages where the incumbent's final party identity is  $D$  will not receive any state grant, i.e.,  $B_i = 0$  so that  $q_i = 0$ .
- The maximization problem of the state government can be restated as

$$\max_{(B_i)} \int_{i, I=0, p_i=S} \left[ \frac{\theta_i B_i}{2\bar{\theta}(E+B)} \right]^\alpha di + \int_{j, I=1, p_j=S} \left[ \frac{\theta_j}{\bar{\theta}} \frac{\frac{\theta_j}{\bar{\theta}} E + B_j}{E+B} \right]^\alpha dj$$

subject to  $\int_i B_i di = B$

## Lemma

*An ISGP village receives a higher total grant as compared to a non-ISGP village on average.*



# Rerunning of Incumbent Politicians

- Rerunning cost is  $c_L > 0$  if the incumbent doesn't switch her party and it is  $c_H > c_L$  if she switches her party.

## Proposition

*There exists a  $\hat{\theta}$  such that  $\forall \theta \in [\hat{\theta}, \bar{\theta}]$ , an incumbent politician in a non-ISGP village will switch party identity. On the other hand, there exists a  $\hat{\theta}$  such that  $\forall \theta \in [1, \hat{\theta}]$ , an incumbent politician in an ISGP village will switch party identity*

## Implication:

- The intervention induces relatively bad quality politicians in program villages to switch parties.
- The switchers in program villages also get larger state grant.
- Two effects may cancel each other with no overall effect of intervention.

# Conclusion

- We study the political economy effect of a World Bank intervention in India.
- We find that new state government in power changed allocation of funds to villages in response to intervention.
- We suggest that this is because of change in state government's political objectives.
- This changed the party switching behavior of local politicians.
- We argue that this undermined the effect of the intervention.
- Provides a cautionary tale for encouraging third party interventions in policymaking without taking into account local political concerns.