

# Do Political Parties Practise Partisan Alignment in Social Welfare Spending? Evidence from Village Council Elections in India

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## Motivation

- An influential literature has highlighted the role of political incentives in the allocation of public resources from upper tier to lower tier governments.
- A common finding in this literature is the presence of partisan alignment – upper tier government allocate more funds to lower tier governments or to constituencies which they control than to constituencies which are in the control of opposition parties.
- The empirical evidence so far on the presence of partisan alignment has been mostly to do with intergovernmental transfers or grants.
- A final unresolved issue in the literature is whether political parties differ in their practice of partisan alignment, depending on their ideology or policy preferences.

# Theoretical Literature on the Practice of Partisan Alignment

- Theoretically, it is ambiguous whether political parties will target constituencies where voters clearly attached to the incumbent party or constituencies which are held by the opposition party in an effort to wrest control of these constituencies from the opposition party.
- Electoral competition models suggest that governments should allocate more resources to unaligned constituencies (Lindbeck and Weibull 1987, Dixit and Londregan 1996).
- On the other hand, if politicians are risk averse or are motivated by clientelist concerns they will allocate more funds to their core constituencies (Cox and McCubbins 1986).
- Arulampalam et al. (2009) develop a model of redistributive politics where the upper tier government allocates more funds to lower tier governments that are both aligned and relatively more swing (that is, lower tier governments where the ruling party in the upper tier faces stronger political competition).

# Our Contribution

- We examine whether ruling parties in local governments in the state of West Bengal in India discriminate in favour of their own constituencies in allocating funds for a large national social protection programme called the National Rural Employment Guarantee Scheme (NREGS).
- To test for the presence of partisan alignment, we use a rich primary data set from 569 villages (or village council wards) over 49 Village Councils or Gram Panchayats (GP) from 3 districts of West Bengal.
- This village level panel data has 3 waves (2010, 2011 and 2012) preceded and followed by one Panchayat election year i.e. 2008 and 2013 respectively.

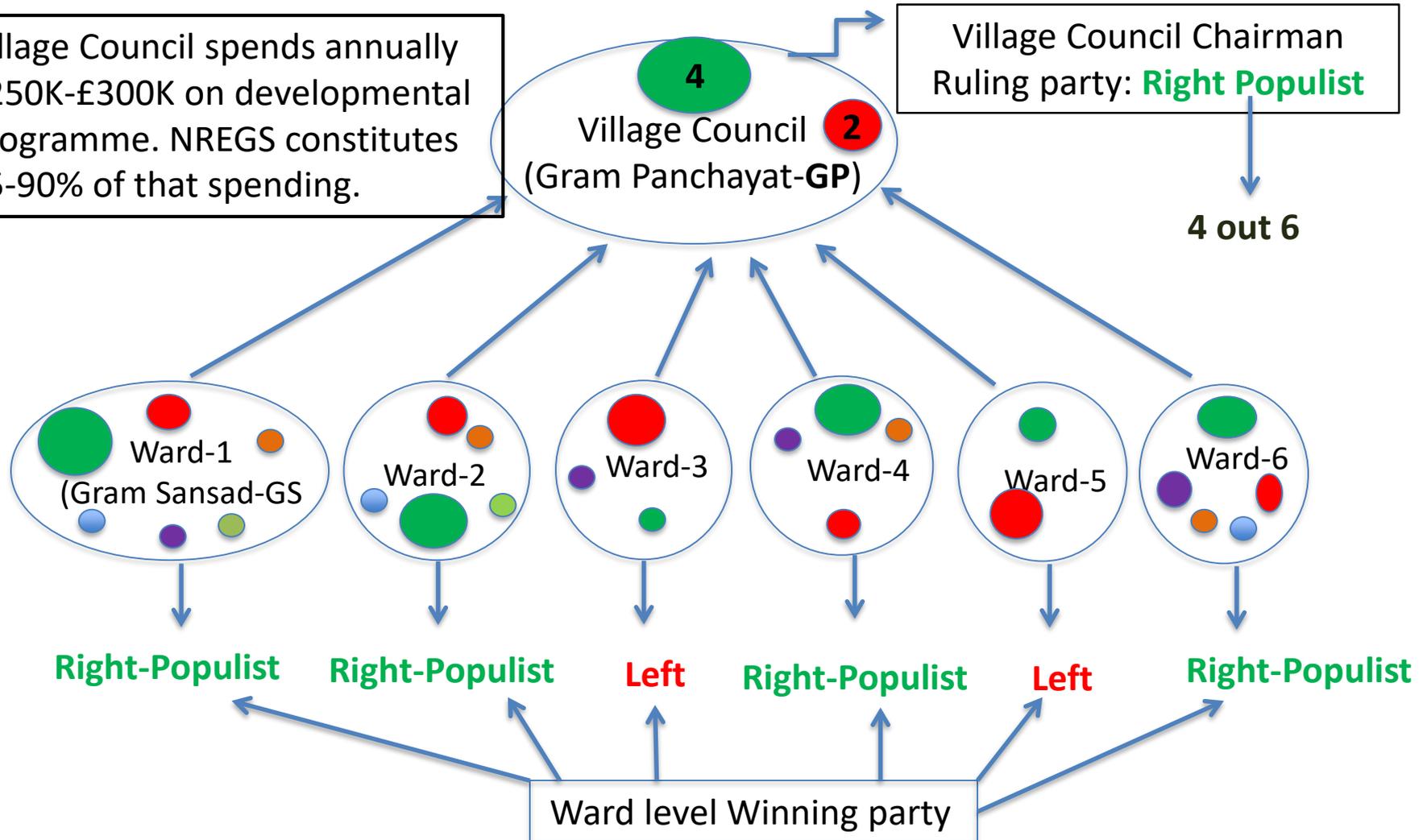
## The Research Context

- During our study period (2008 to 2013), there were two principal contesting parties in West Bengal with dissimilar political ideologies: a coalition of Leftist parties – the Left Front (LF) -led by the Communist Party of India (Marxist) (CPIM) with an apparently stated commitment of democratic decentralisation and pro-worker policies and a right-of-centre Trinamool Congress (TMC) with an apparently populist agenda of giving direct benefits to its supporters.
- The fact that there were two political parties in different parts of the state running the village councils allows us to assess whether there was any heterogeneous policy preferences of these two parties in respect of delivering NREGS funds.

# Village Council (Gram Panchayat) Election in India

Village Council spends annually £250K-£300K on developmental programme. NREGS constitutes 85-90% of that spending.

Village Council Chairman  
Ruling party: **Right Populist**



## What is MG-NREGS?

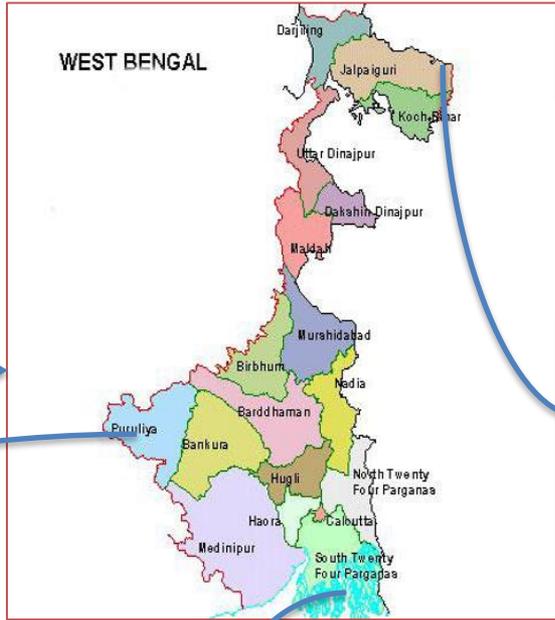
- World's largest workfare programme, and India's main welfare programme for the poor.
- Budget \$ 7 billion (0.6% of GDP, India) per year
- Covering 50 million households per year
- Village council/GP is the implementing agency
- Village elected Chairman (*pradhan*) is the key person in implementation



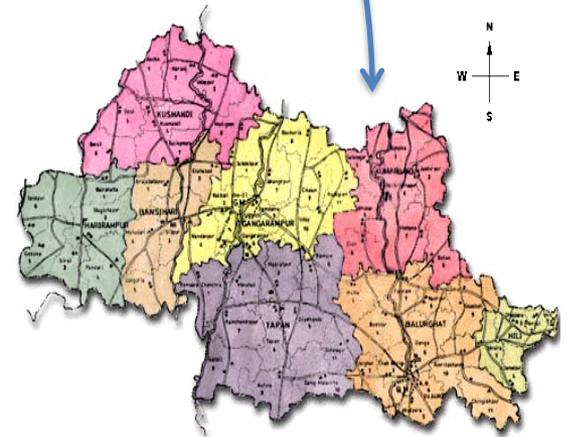
# INDIA



# WEST BENGAL



**Where the survey was done**



**Year**      **Purulia**

**South 24 Parganas**

**Jalpaiguri**

2008      **Left**

**Right Populist**

**Left**

2013      **Right Populist**

**Right Populist**

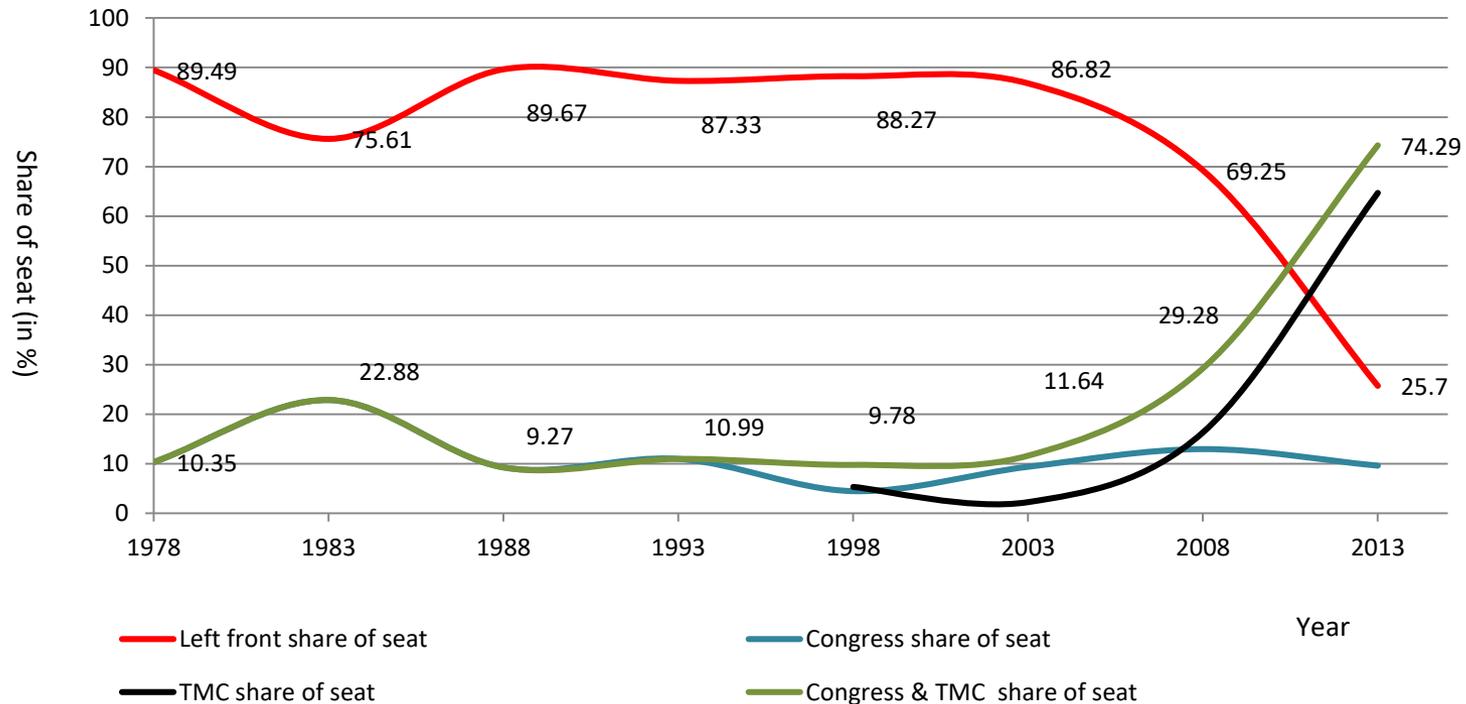
**Marginal Left**

## Data

- Detailed Village Council election results:2008 and 2013
- Total 569 wards (or village/gram sansad) over 49 Village councils from 24 Blocks under 3 districts in West Bengal, India.
- Ward level NREGS info (expenditure, no. of schemes, no. of household participated) and other detail info on other developmental schemes for 2010, 2011, 2012
- ward level rain fall data
- Ward level socio-economic-demographic info.

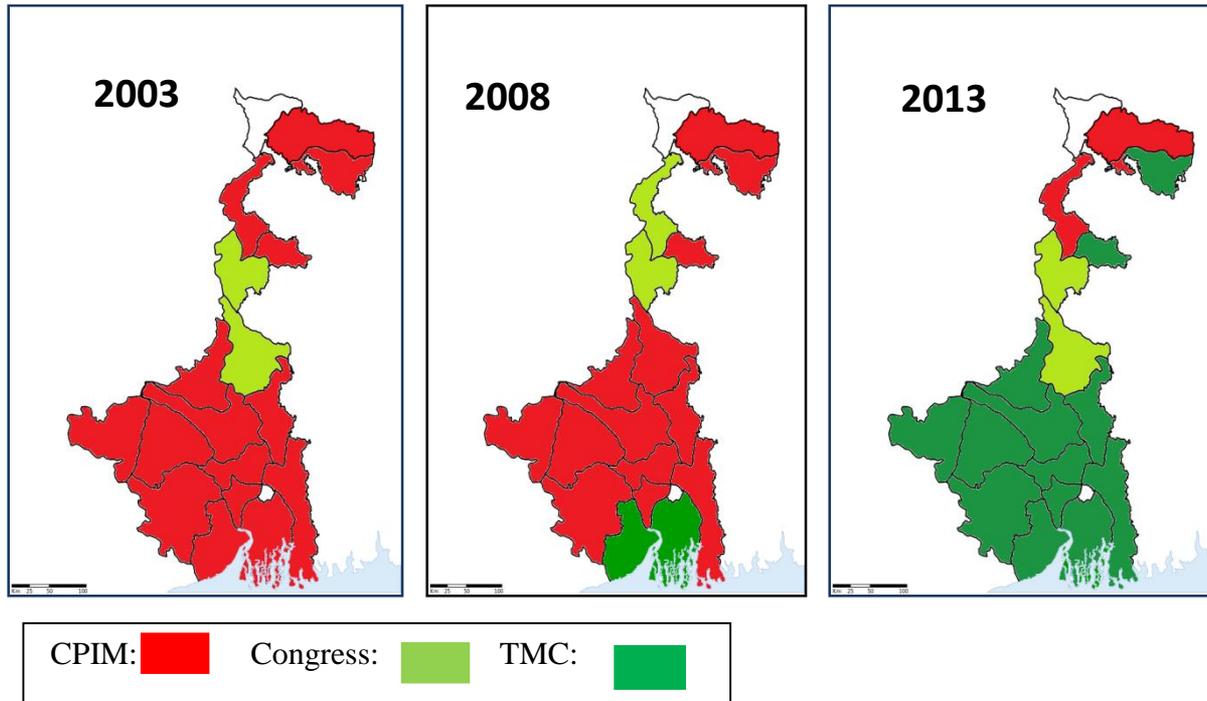
Village level panel data 2010-2012, with election year 2008 and 2013

# Political Scenario in West Bengal-1



Seat share of major political parties in Zilla Parishad (i.e. the district level tier of the local government) Election over the years

# Political Scenario in West Bengal-2



District wise ruling party position after the Local Government Elections

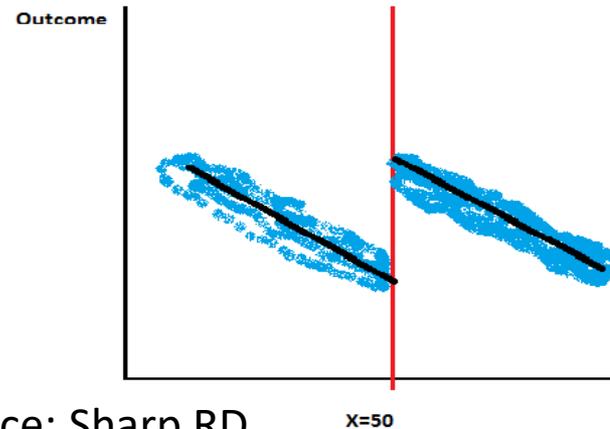
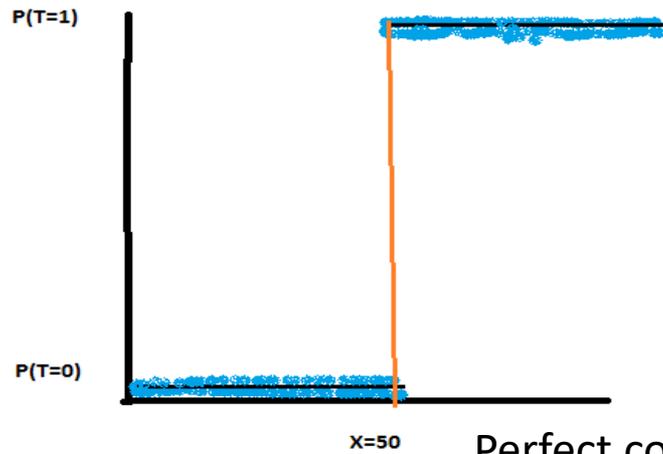
## NREGS Expenditure and village level winning party

Party Affiliation of winning member	Percentage of seat after 2008 election (In study villages)	Case-1		Case-2		Case-3	
		NREGS Outcome (in Pooled GP)		NREGS Outcome (TMC as GP level ruling party)		NREGS Outcome (Left as GP level ruling party)	
		NREGS Expenditure (in INR)	Average days per hh worked	NREGS Expenditure (in INR)	Average days per hh worked	NREGS Expenditure (in INR)	Average days per hh worked
TMC	32.98	461269.4	39.98	595593.7	50.75	257253.8	25.54
Left	52.37	403762 (1.87)**	25.59 (3.89)***	316900.8 (2.20)**	32.75 (1.52)	419145.9 (2.91)**	27.72 (0.55)
Congress	9.92	659454.3 (0.98)	38.76 (0.58)	924633.7 (0.67)	106.16 (0.82)	601747.4 (0.76)	20.48 (0.88)
Others	4.73	331942.5 (0.37)	21.99 (0.38)	-	-	358006.3 (0.48)	22.92 (0.77)
Overall	100	444701.2	31.47	567248.7	51.93	398873.6 (3.49)**	25.39 (6.57)***

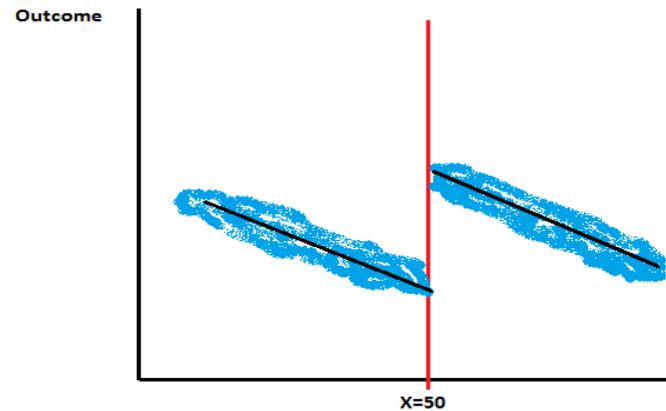
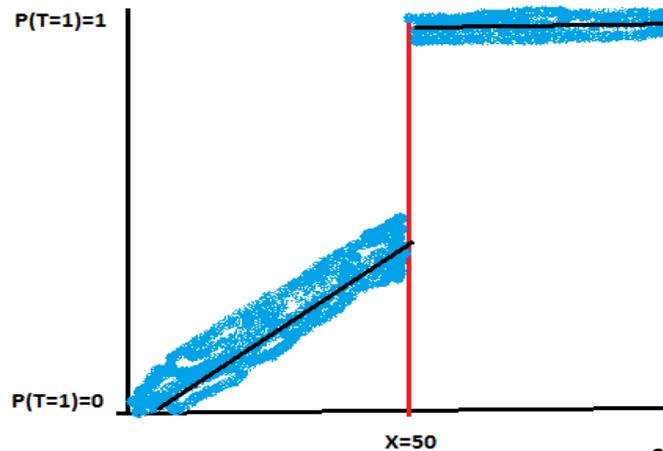
# Identification Strategy

- If we see a positive association between the allocation of public funds to a constituency and whether the constituency is under the control of the incumbent party, this may be due to certain characteristics of the politician or the constituency that may lead the incumbent politician to allocate more resources to that constituency.
- To address this concern, we use **a quasi-experimental design** as our principal estimation method – comparing villages where the ruling party narrowly won with villages where the ruling party narrowly lost .
- We explore both Fuzzy and Sharpe RDD as part of our quasi-experimental design.

# Sharp and Fuzzy Regression Discontinuity (FRD) Design



Perfect compliance: Sharp RD



Imperfect compliance: Fuzzy RD

X(forcing variable)

## Trying to find the Causal Effect of *Treatment on Outcome*.

- Treatment: A dummy (T): either '0' or '1'
- T=1: when a village council/GP ward (or simply village) is a ruling party ward.
- T=0: Otherwise.

Outcome (Y): Ward/Village level NREGS outcome (namely NREGS Expenditure and NREGS days availed by a household)

Assignment/forcing variable(X): Village wise GP level ruling party's vote share after 2008 Panchayat Election.

# Empirical Methodology for Testing for Partisan Alignment

$$Y = f(X) + \sigma T + e$$

- We used Fuzzy Regression Discontinuity Design (FRDD).

- Our base line specification  
Where

$\sigma$  = Local average treatment effect (LATE) on outcome variable Y  
(shows the effect of being ruling-party winning-member on  
sansad wise NREGS expenditure)

e = other unobserved error

We are concerned to find sign, magnitude and statistical significance of T.  
But 'T' is endogenous. Unobserved local factors explaining T can explain Y  
directly i.e.  $E(T,e) \neq 0$  and hence  $\sigma$  is not identified.

## Empirical Methodology (contd.)

Alternatively, we can run IV or 2SLS regression:

$$Y = f_0(X) + \sigma E(T|X) + e \quad (7)$$

Where the coefficient at  $E(T|X)$ ,  $\sigma$ , is the local average treatment effect of compliers, and  $E(T|X)$  comes from equation (5), which can be treated as the first stage regression of IV(or 2SLS).

We would like to see whether there is any discontinuity in outcome variable following the discontinuity in probability of Treatment.

If  $\sigma > 0 \Rightarrow$  there will be a upward jump in the  $E(Y|X)$  at the  $X=50$ , implying that Village Council ruling party wards systematically have higher NREGS expenditure compare to opponent party wards.

We use both local linear and polynomial regressions (Lee and Lemieux 2009)

## Control variables

Since NREGS is a demand driven programme, we control for demand side factors and we also control for ward level winning member's characteristics.

**Controls on demand side factors** at the ward/village:

average monsoon rain fall, total voters in ward, total number of households, number of BPL households, worker-to non-worker ratio, no. of minority households.

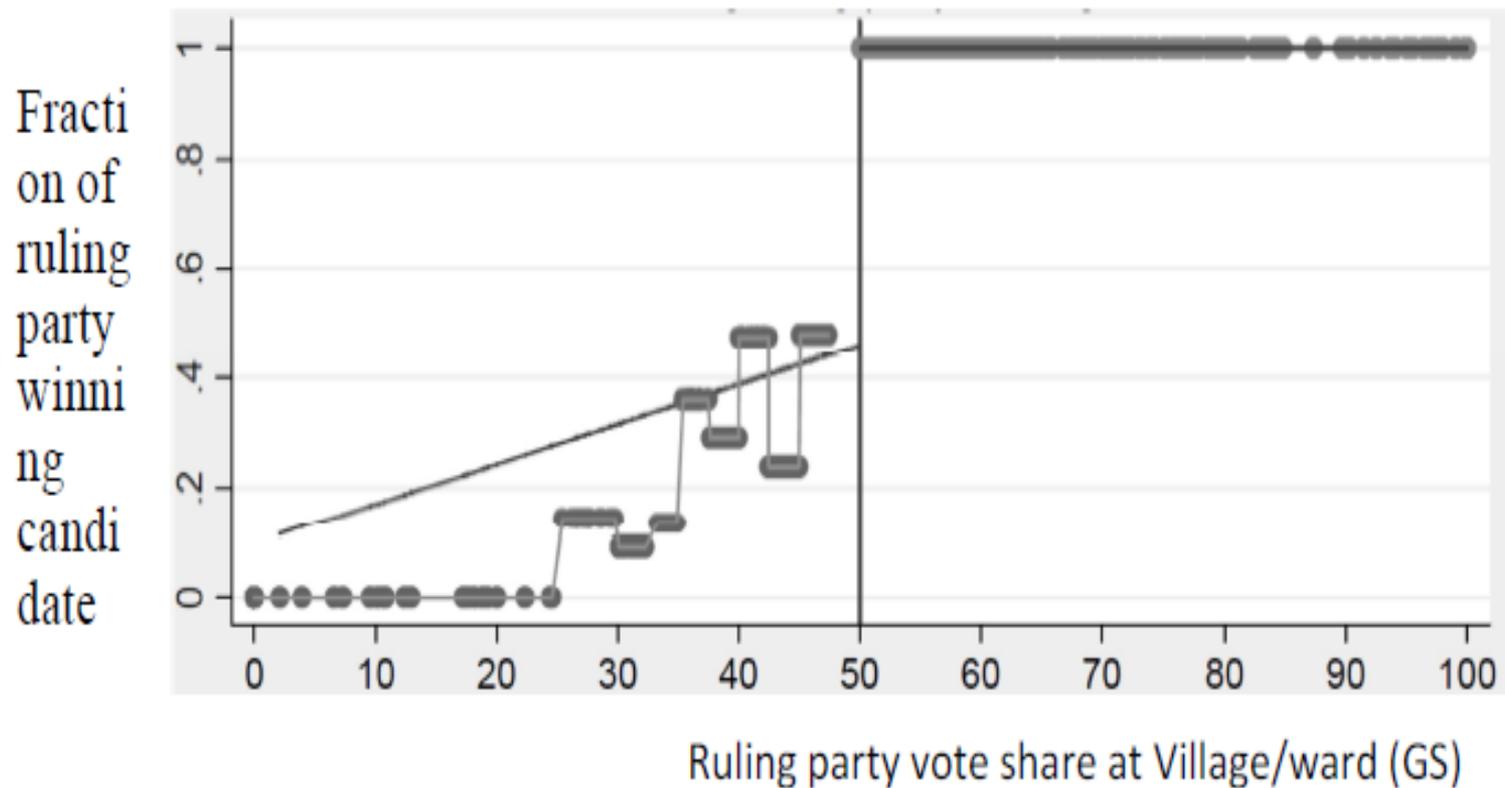
**Controls on ward level winning member character:**

Sex, Caste,

District dummy, year dummy

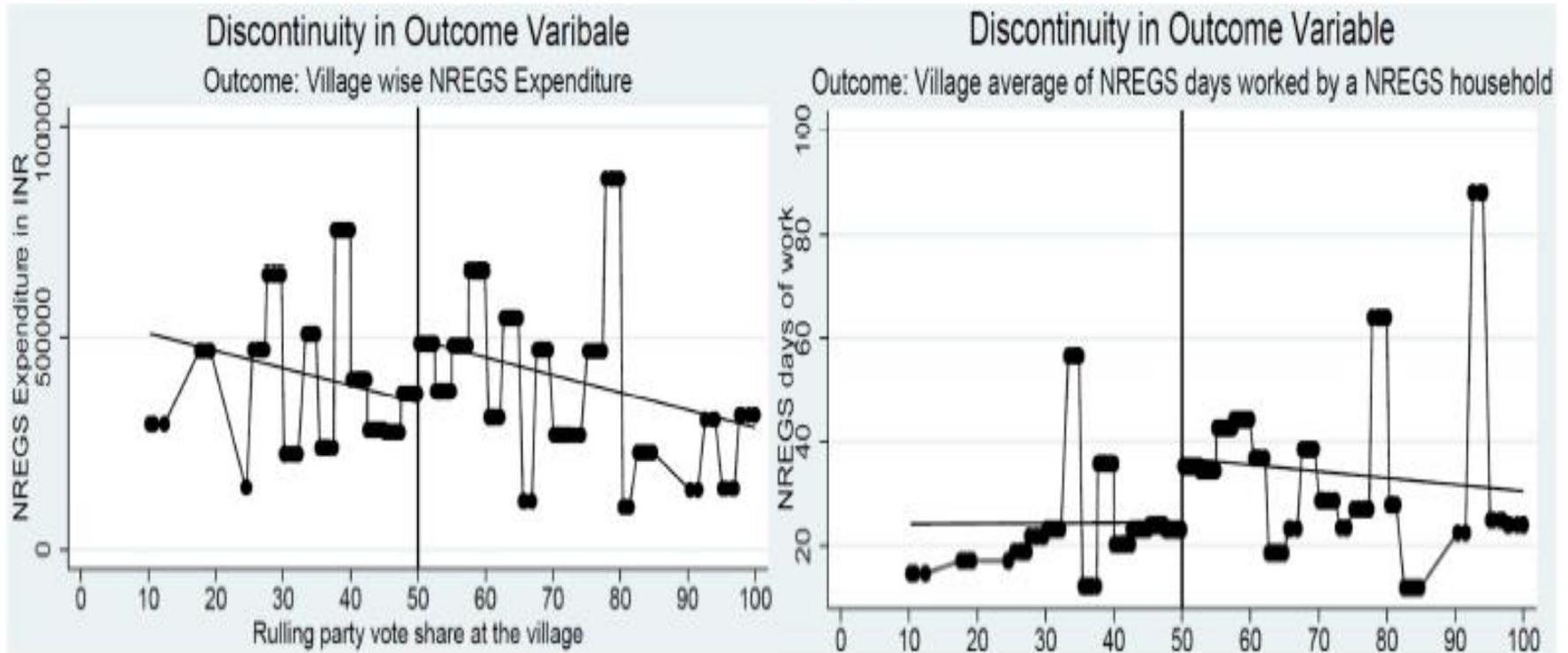
# Graphical analysis: Jump in % of ruling-party winning candidate

Figure-3: Ruling party vote share and fraction of ruling party winning candidate at village

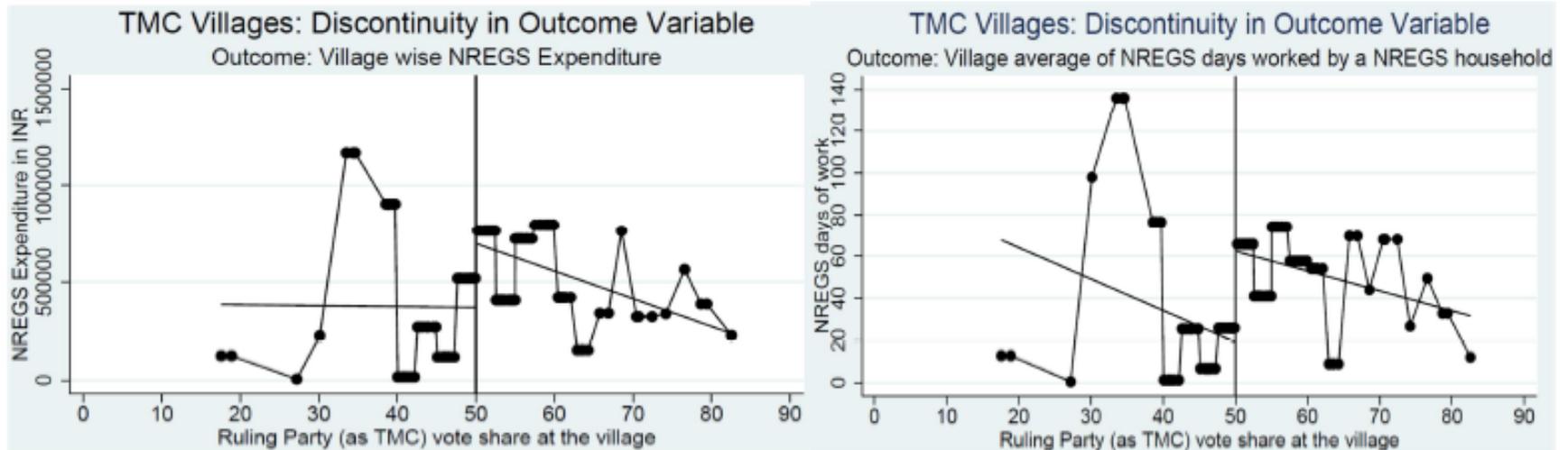


# Graphical analysis: Jump in value in outcome variable

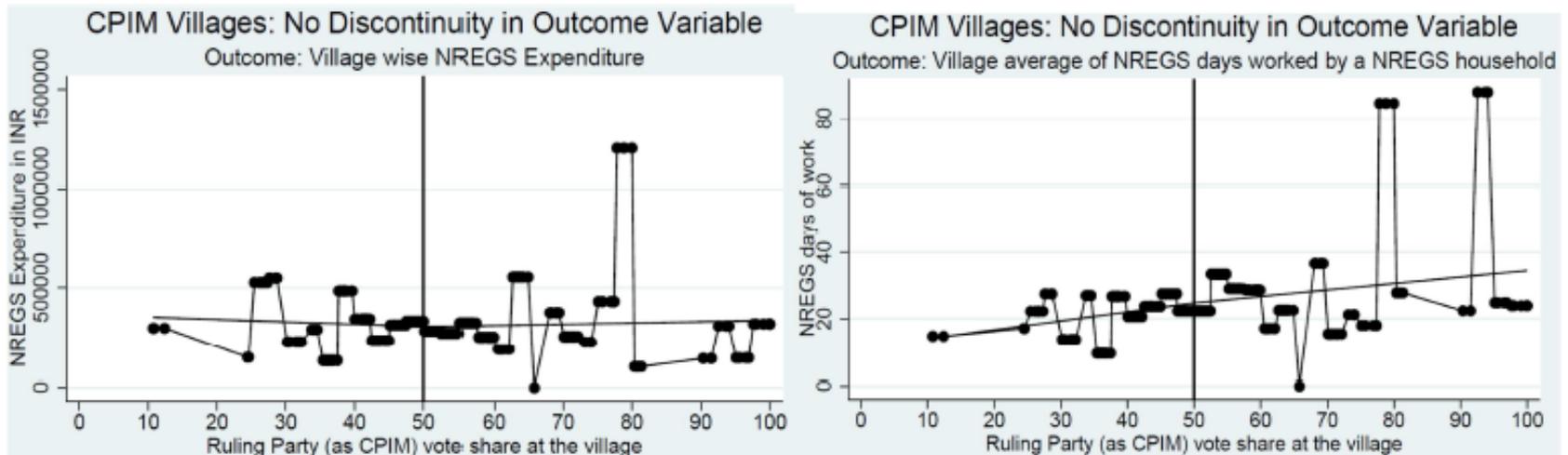
Figure-4: Effect of any party being GP level ruling party on village/GS level NREGS outcome



**Figure-5: Effect of TMC being GP level ruling party on village/GS level NREGS outcome**

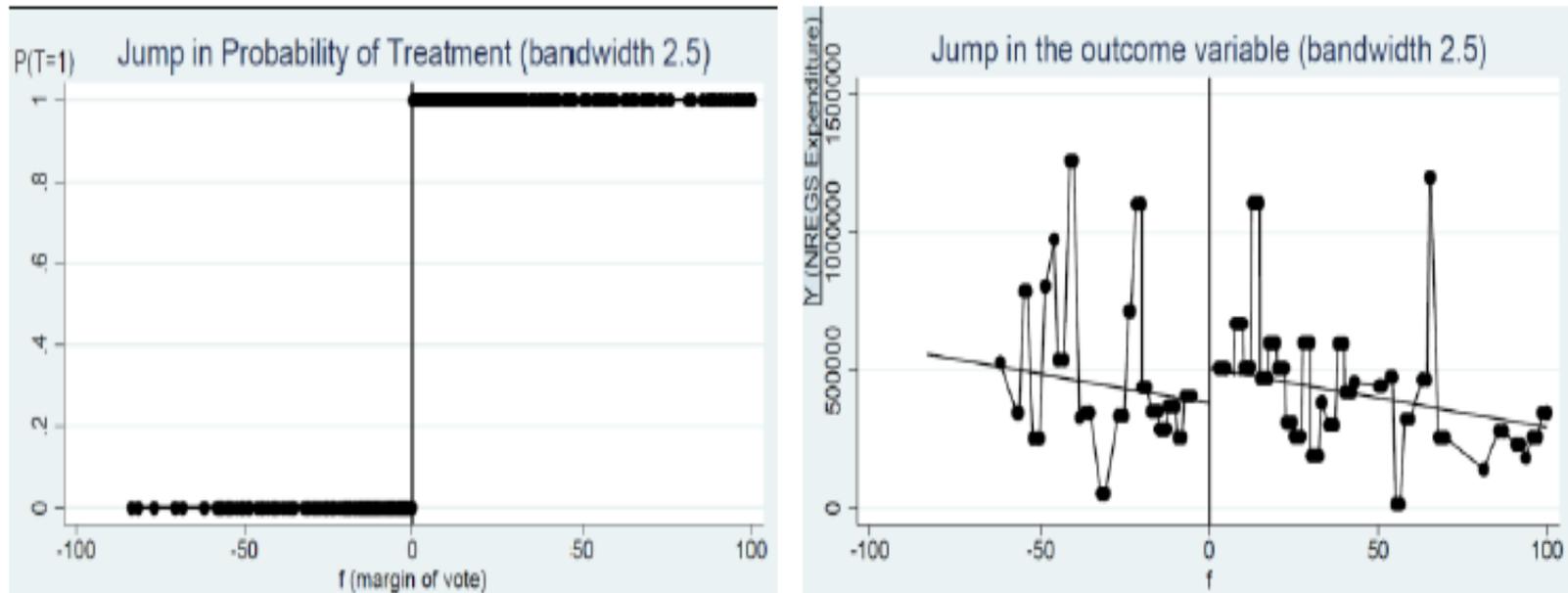


**Figure-6: Effect of CPIM being GP level ruling party on village/GS level NREGS outcome**



# Data Plot using sharp RDD (All GPs)

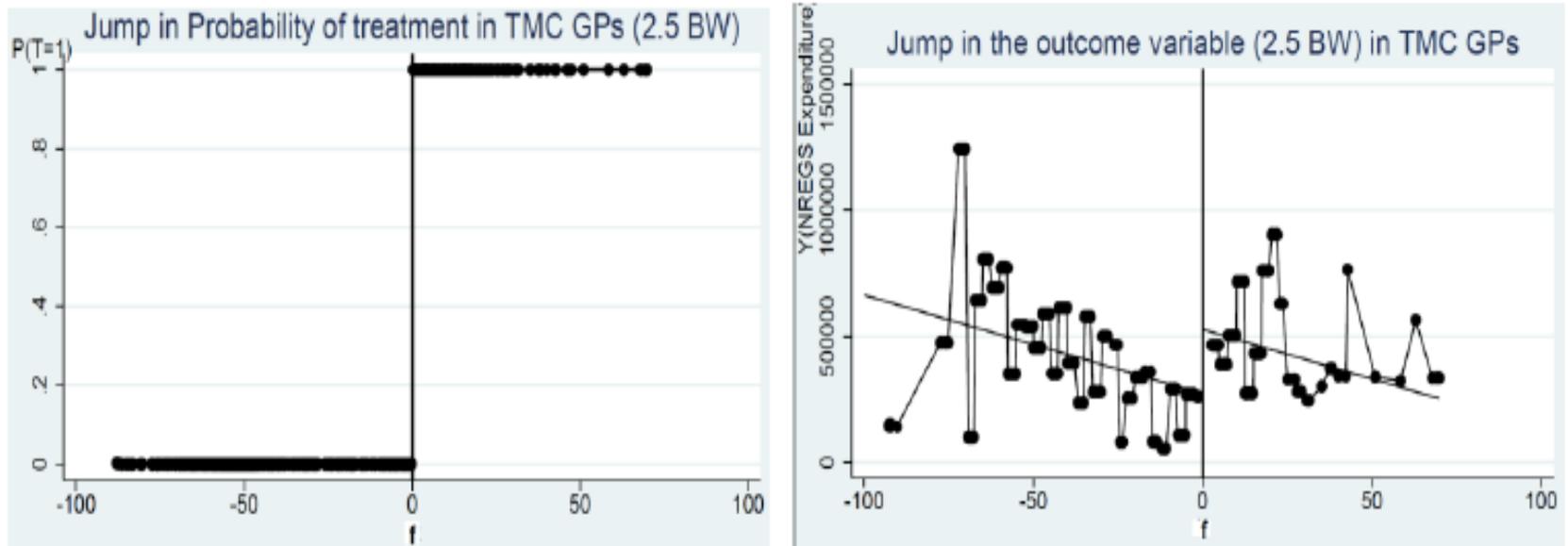
Figure 5: Ruling Party Treatment Effect using Margin of Victory as Forcing Variable, All GPs



Forcing variable: Margin of Vote (margin (or difference) of vote share (at the GS/ward level) between 'the GP level ruling party's candidate at the GS level' and 'the party candidate who received highest vote among all the other contesting candidates at the GS level other than the GP level ruling party's candidate'.

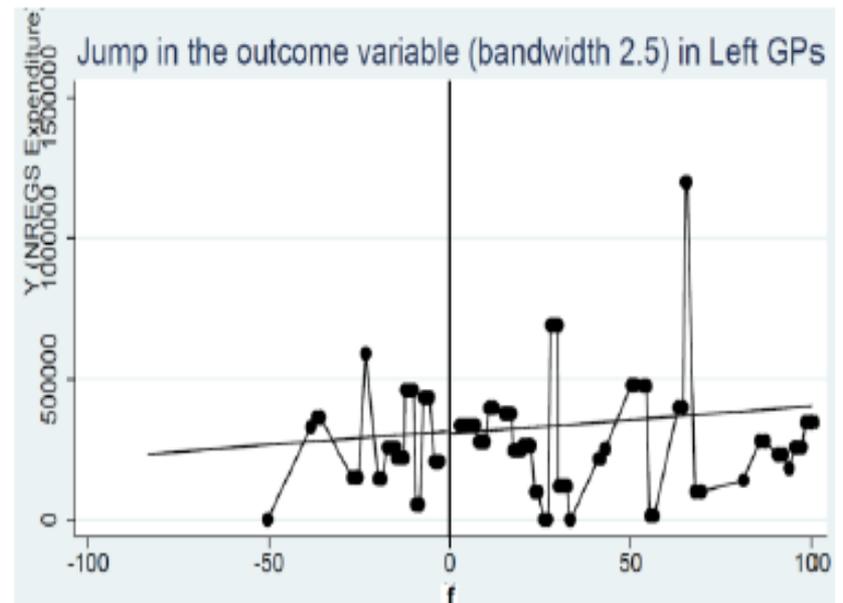
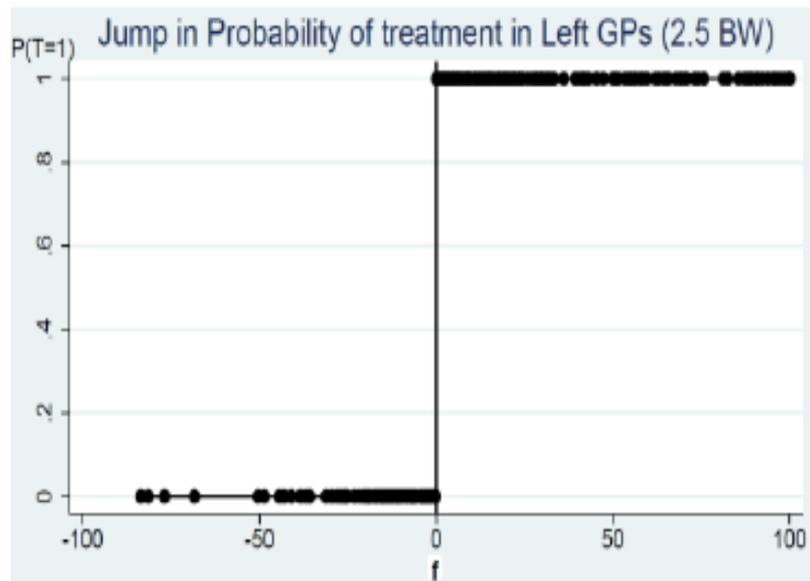
# Data Plot using sharp RDD (TMC GPs)

Figure 6: Ruling Party Treatment Effect using Margin of Victory as Forcing Variable, TMC GPs



# Data Plot using sharp RDD (LF GPs)

Figure 7: Ruling Party Treatment Effect using Margin of Victory as Forcing Variable, LF GPs



## Estimation Results

**Table-9:**

**Treatment effect on Village wise Expenditure. (Local Linear Regression)**

From whole sample						
	h=10	h=9	h=8	h=7	h=6	h=5
Treatment Effect	26394.42 (1.01)	32139.11 (1.35)	37265.5 (2.09)**	32605.9 (1.77)*	32989.57 (1.90)*	38749.8 (2.65)***
N	573	553	517	490	474	457
F-test	4.80	4.27	2.94	3.08	3.04	3.55
From sub sample with only TMC GPs (i.e. TMC is the ruling Party)						
Treatment Effect	61935 (2.23)**	70328.21 (2.33)**	83093.85 (2.21)**	103427.3 (2.29)**	108499.1 (2.88)***	125253.6 (2.66)***
N	156	150	144	138	132	121
F-test	2.62	2.67	2.54	2.59	2.64	3.01
From sub sample with only Left GPs (i.e. Left is the ruling Party)						
Treatment Effect	-16113.87 (1.38)	-27902.66 (0.05)	-17439.02 (1.28)	-20343.15 (1.34)	-21287.08 (0.19)	-21108.5 (0.98)
N	356	342	320	300	264	246
F-test	1.33	0.13	0.94	0.91	0.65	0.48

# Estimation Results

**Table-10:**

**Treatment effect on days of NREGS work availed by per household. (Local Linear Regression)**

From whole sample						
	h=10	h=9	h=8	h=7	h=6	h=5
Treatment Effect	2.506801 (2.30)**	3.328229 (2.84)***	4.017379 (2.75)***	3.65656 (2.49)**	3.636281 (2.21)**	3.596163 (2.04)**
N	573	553	517	490	474	457
F-test	6.38	5.49	5.27	5.52	5.70	5.65
From sub sample with only TMC GPs (i.e. TMC is the ruling Party)						
Treatment Effect	7.142116 (2.88)***	7.988581 (2.94)***	9.708789 (2.76)***	12.37074 (2.81)***	11.57289 (2.58)**	13.702615 (1.93)**
N	156	150	144	138	132	121
F-test	4.06	4.23	3.80	3.87	3.69	4.16
From sub sample with only Left GPs (i.e. Left is the ruling Party)						
Treatment Effect	-4.833532 (0.51)	-2.974933 (0.32)	-0.0896552 (0.01)	-1.984952 (0.17)	-1.182715 (0.44)	-0.5383194 (0.03)
N	356	342	320	300	264	246
F-test	1.85	0.40	0.76	0.41	0.14	0.58

**Table-11**  
**Treatment Effect on Village wise NREGS Expenditure (Local Polynomial Regression)**

Polynomial order	From Whole Sample				
	h=20	h=15	h=12	h=10	h=8
k=2	27174.02 (2.09)**	28497.09 (2.20)**	26782.81 (2.00)**	41887.13 (2.77)***	38061.74 (2.07)**
k=3	39481.71 (2.33)**	41730.7 (2.24)**	55100.38 (2.38)**	42007.1 (1.77)*	48353.41 (1.90)*
<b>k=4</b>	<b>45245.73</b> <b>(2.26)**</b>	<b>44256.06</b> <b>(2.24)**</b>	<b>49451.3</b> <b>(2.24)**</b>	<b>42600.68</b> <b>(1.76)*</b>	<b>48791.39</b> <b>(1.84)*</b>
k=5	44686.13 (1.99)**	49664.68 (1.89)*	37750.12 (1.29)	49297.84 (1.58)	55937.02 (1.11)
k=6	52883.07 (1.98)**	48989.59 (1.89)*	40935.45 (1.46)	49980.32 (1.54)	56569.54 (1.11)
N	593	587	573	553	517
From sub sample with only TMC GPs (i.e. TMC is the ruling Party)					
k=2	58720.78 (2.06)**	58720.78 (2.06)**	73735.03 (2.00)**	87102.38 (2.16)**	123324.4 (2.33)**
k=3	118929 (2.06)**	118929 (2.06)**	163917.2 (2.08)**	165843.9 (1.99)**	167175.2 (1.66)*
<b>k=4</b>	<b>121185.4</b> <b>(2.10)**</b>	<b>121185.4</b> <b>(2.10)**</b>	<b>154574.6</b> <b>(2.10)**</b>	<b>157143.9</b> <b>(2.10)**</b>	<b>154655.3</b> <b>(1.79)*</b>
k=5	180641.4 (1.84)*	180641.4 (1.84)*	199279.5 (1.49)	191242.4 (1.07)	180221.8 (0.34)
k=6	162184.7 (1.93)*	162184.7 (1.93)*	144266.7 (1.03)	136617.4 (1.05)	151527 (0.38)
N	156	156	150	144	138
From sub sample with only Left GPs (i.e. Left is the ruling Party)					
k=2	-15738.1 (1.37)	-10059.08 (0.97)	-14300.93 (1.35)	-5351.552 (0.48)	-18022.71 (1.28)
k=3	-6372.97 (0.52)	-16142.07 (0.96)	-8381.28 (0.49)	-27180.64 (1.51)	-19426.89 (1.03)
<b>k=4</b>	<b>-12576.41</b> <b>(0.80)</b>	<b>-15969.35</b> <b>(1.01)</b>	<b>-12534</b> <b>(0.78)</b>	<b>-28076.39</b> <b>(1.49)</b>	<b>-21378.16</b> <b>(1.07)</b>
k=5	-19099.23 (1.04)	-21420.79 (0.93)	-38306.62 (1.62)	-17802.25 (0.77)	-13852.45 (0.38)
k=6	-18464.43 (0.89)	-28369.41 (1.29)	-31372.82 (1.40)	-19347.71 (0.80)	-11562.85 (0.31)
N	365	359	356	342	320

**Table-12****Treatment effect on days of NREGS work availed by per household (Local Polynomial Regression)**

From Whole Sample					
Polynomial order	h=20	h=15	h=12	h=10	h=8
k=2	2.531 (2.41)**	2.568 (2.47)**	2.601 (2.41)**	3.751 (3.01)***	4.380 (2.82)***
k=3	3.616 (2.64)***	4.074 (2.66)***	5.194 (2.68)***	4.498 (2.26)**	3.905 (1.86)*
<b>k=4</b>	<b>4.505</b> <b>(2.70)***</b>	<b>4.4107</b> <b>(2.69)***</b>	<b>4.655</b> <b>(2.54)***</b>	<b>4.6166</b> <b>(2.27)**</b>	<b>4.1136</b> <b>(1.87)*</b>
k=5	4.379 (2.35)**	4.799 (2.16)**	4.0302 (1.63)	3.705 (1.46)	3.308 (0.83)
k=6	5.215 (2.29)**	4.721 (2.17)**	3.644 (1.60)	3.9078 (1.46)	3.343 (0.83)
N	593	587	573	553	517
From sub sample with only TMC GPs (i.e. TMC is the ruling Party)					
k=2	7.21 (2.83)***	7.21 (2.83)***	9.46 (2.70)***	10.9 (2.87)***	15.9 (3.06)***
k=3	15.106 (2.64)***	15.106 (2.64)***	20.062 (2.39)**	20.44 (2.29)**	19.25 (1.83)*
<b>k=4</b>	<b>15.33</b> <b>(2.67)***</b>	<b>15.33</b> <b>(2.67)***</b>	<b>19.19</b> <b>(2.46)**</b>	<b>19.52</b> <b>(2.45)**</b>	<b>17.69</b> <b>(2.06)**</b>
k=5	22.206 (2.09)**	22.206 (2.09)**	25.03 (1.70)*	26 (1.30)	53.56 (0.56)
k=6	20.32 (2.24)**	20.32 (2.24)**	18.93 (1.31)	17.59 (1.38)	41.87 (0.68)
N	156	156	150	144	138
From sub sample with only Left GPs (i.e. Left is the ruling Party)					
k=2	-5.54 (0.59)	-2.25 (0.26)	-3.64 (0.40)	-4.14 (0.42)	-1.29 (0.11)
k=3	-4.63 (0.45)	-7.18 (0.50)	-10.59 (0.71)	-1.31 (0.09)	-3.25 (0.20)
<b>k=4</b>	<b>-8.38</b> <b>-(0.61)</b>	<b>-4.16</b> <b>-(0.31)</b>	<b>-6.13</b> <b>-(0.45)</b>	<b>-2.06</b> <b>-(0.13)</b>	<b>-4.23</b> <b>-0.24)</b>
k=5	2.83 -(0.18)	5.07 -(0.25)	-3.88 -(0.20)	-0.83 -(0.00)	-2.003 -(0.06)
k=6	-5.67 (0.32)	-2.68 (.014)	-3.98 (0.21)	-1.3 (0.06)	-1.85 (0.06)
N	365	359	356	342	320

# Estimation results with Sharp RDD

**Table 8: Treatment Effect on GS NREGS Expenditure (Local Linear Regression): Sharp RD design**

From whole sample of GPs			
	h=10	h=5	h=2.5
Treatment Effect	18791.56 (1.35)	26457.65** (1.96)	24864.63** (2.01)
N	513	471	460
F-test	2.96	2.70	2.62
From sub sample with only TMC GPs (i.e. TMC is the ruling Party)			
Treatment Effect	113843.4** (2.91)	83714.35** (2.01)	75180.15** (1.98)
N	127	108	106
F-test	6.48	6.93	10.68
From sub sample with only Left GPs (i.e. Left is the ruling Party)			
Treatment Effect	-11510.56 (0.82)	-1350.85 (0.10)	-3399.54 (0.25)
N	320	303	294
F-test	0.64	0.15	0.44

**Note:** |t| stats in the bracket. Significance: \*-at 10%, \*\*- at 5%, \*\*\*- at 1%. 'h' is the band-width. Standard errors clustered at GP level.

# Estimation results with Sharp RDD

**Table 9: Treatment Effect on NREGS days worked per NREGS-household (Local Linear Regression) under Sharp RD design**

From whole sample			
	h=10	h=5	h=2.5
Treatment Effect	5.26** (2.69)	6.25*** (3.14)	6.01** (2.97)
N	513	471	460
F-test	4.65	5.56	5.34
From sub sample with only TMC GPs (i.e. TMC is the ruling Party)			
Treatment Effect	22.61*** (3.88)	20.62*** (3.37)	19.13*** (3.14)
N	127	108	106
F-test	9.56	9.67	18.69
From sub sample with only Left GPs (i.e. Left is the ruling Party)			
Treatment Effect	-0.31 (0.16)	1.24 (0.68)	1.50 (0.81)
N	320	303	294
F-test	0.46	0.23	0.36

**Note:** |t| stats in the bracket. \*-significance at 10%, \*\*-significance at 5%, \*\*\*-significance at 1%. 'h' is the band-width. Standard errors clustered at GP level.

## Tests for Validity of FRD

- Sensitivity analysis with different bandwidth and different order of Polynomial.
- Sensitivity of Treatment effect with the inclusion of all covariates
- Checking discontinuity of covariates at cut-off point.
- Density plot of forcing Variable
- Placebo test or falsification test: Checking discontinuity in non-discontinuity point.

a) *Continuity of other covariates at the threshold:*

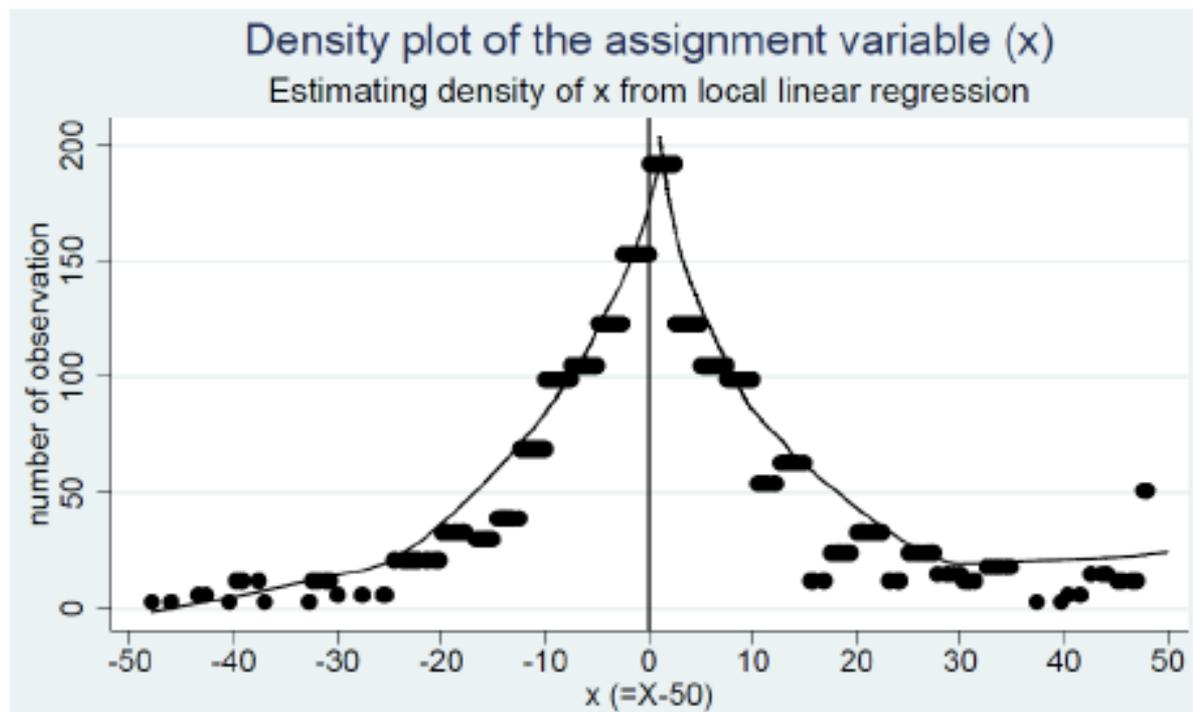
**Table B3: Checking Discontinuity of Covariates (or predetermined characteristics):  
Estimating Treatment Effect on Covariates  
(Local linear regression at different bandwidth with optimal polynomial order)**

	From whole sample					
	h=10	h=9	h=8	h=7	h=6	h=5
Total Voter_2008	266.14 (0.38)	287.13 (0.33)	8931.43 (0.06)	3685.22 (0.28)	1967.70 (0.43)	105.041 (0.09)
Pct_VoteCaste_2008	39.96 (1.02)	39.86 (0.84)	386.50 (0.06)	32.22 (0.19)	32.47 (0.33)	38.76 (0.58)
Pct_margin_win_2008	31.49 (1.20)	32.64 (1.01)	626.35 (0.06)	149.74 (0.29)	88.00 (0.50)	39.33 (0.77)
Pct_vote_othersdefeated_2008	11.65 (0.79)	20.31 (0.96)	142.30 (0.06)	93.52 (0.30)	36.43 (0.49)	26.61 (0.76)
Average Rainfall	2312.0 (0.95)	4960.66 (1.01)	59764.09 (0.06)	12021.91 (0.28)	7673.474 (0.47)	4914.31 (0.72)
Average HH size	-736.53 (-1.09)	-308.51 (-0.54)	-8509.92 (-0.06)	-1088.54 (-0.26)	210.73 (0.16)	657.561 (0.58)
Pct_BPL_hh	86.64 (0.91)	111.19 (0.83)	3070.15 (0.06)	610.58 (0.28)	320.93 (0.47)	297.77 (0.75)
Percentage of Minority hh	-2.85 (-0.06)	23.22 (0.32)	2334.46 (0.06)	282.03 (0.25)	175.36 (0.41)	45.09 (0.36)
Worker to Non-worker Ratio	-0.83 (-1.00)	-1.15 (-0.92)	-18.29 (-0.06)	-2.11 (-0.26)	-0.64 (-0.31)	0.00 (0.00)
Sex_member_2008==Male	1.90 (1.01)	3.40 (1.01)	72.62 (0.06)	19.63 (0.29)	12.45 (0.50)	8.45 (0.81)
Caste_member_2008==SC	0.66 (0.50)	0.46 (0.29)	-10.64 (-0.05)	-9.03 (-0.27)	-4.311 (-0.44)	-3.75 (-0.69)
Caste_member_2008==ST	-1.09 (-0.85)	-0.35 (-0.28)	-39.05 (-0.06)	-3.63 (-0.27)	-4.31 (-0.47)	-1.13 (-0.50)
Caste_member_2008== OBC	0.43 (0.49)	-0.02 (-0.02)	2.27 (0.05)	5.63 (0.28)	1.88 (0.44)	1.55 (0.63)
Caste_member_2008== Muslim	-2.71 (-1.31)	-3.39 (-1.12)	-43.21 (-0.06)	-7.90 (-0.29)	-4.72 (-0.51)	-3.79 (-0.84)
Year==2011	-1.85 (0.00)	-5.83 (0.00)	4.66 (0.00)	2.92 (0.00)	4.69 (0.00)	-6.25 (-0.00)
Year== 2012	-1.85 (0.00)	-5.83 (0.00)	4.66 (0.00)	2.92 (0.00)	4.69 (0.00)	-6.25 (-0.00)
District==Purulia	-1.73 (-0.89)	-2.58 (-0.86)	-22.39 (-0.05)	-0.179 (-0.03)	-1.42 (-0.28)	-0.39 (-0.17)
District==South 24 Parganas	0.88 (0.55)	0.29 (0.17)	-2.77 (-0.05)	-5.82 (-0.29)	-2.73 (-0.45)	-2.46 (-0.69)
N	573	553	517	490	474	457

Note: : t statistics in brackets; \* p<0.10, \*\* p<0.05, \*\*\* p<0.01. Standard errors clustered at the GP level

# Imprecise control over assignment variables

Figure B1: Density Plot of assignment variable following McCarty (2008) test



# Falsification or Placebo test

Table B4: Test of discontinuity at the non-discontinuity point

	Sample from below cut-off point ( $x \leq 0$ )					
	Whole sample		Sample with TMC GP		Sample with LF GP	
	NREGS Expenditure	NREGS Days	NREGS Expenditure	NREGS Days	NREGS Expenditure	NREGS Days
Treatment Effect at non- discontinuity point	17640.54 (0.70)	17.433 (-0.72)	43156.42 (0.19)	11.469 (0.44)	10959.97 (0.17)	-7.1993 (-0.129)
N	340	340	65	65	210	210

## Extension: Alignment in higher tier (ZP to GP)

$$NREGS_{idt} = \alpha_0 + alignment_i \beta_1 + X_{it} \beta + u_t + v_d + \epsilon_{idt}$$

Table A3: Alignment Effect for NREGS Days worked per NREGS-household at ZP to GP level.

	(1) Whole ZP	(2) TMC ZP	(3) Left
Alignment	20.35* [1.87]	28.26** [2.49]	-31.16 [-0.99]
percentage_votecast ed_2008	-0.908 [-1.00]	-0.706 [-0.58]	-1.412 [-1.55]
percentage_margin _win2008	-0.163 [-0.43]	-0.764 [-1.41]	0.342 [1.19]
Average rain fall	-0.094 [-0.40]	5.923 [2.99]***	-0.142 [-1.33]
No. of HH	0.27 [2.07]**	0.29 [1.45]	0.25 [2.67]**
No. BPL HH	-0.13 [-1.59]	-0.08 [-0.81]	-0.12 [-1.58]
No of Landless HH	-0.18 [-2.34]**	-0.15 [-1.42]	-0.20 [-3.82]***
District fixed effect	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes
Observations	147	66	81
R <sup>2</sup>	0.215	0.450	0.800
F	1.243	2.725	4.410

Note: *t* statistics in brackets; \* p<0.10, \*\* p<0.05, \*\*\* p<0.01. Standard errors clustered at the ZP level All regressions include district and year fixed effects. Glossary of all variables used in regressions provided in Appendix C.

## Summary of Findings on Partisan Alignment

- Ruling party spends around INR 40K-50K more NREGS funds in their own village compare to opponents' villages.
- Household in the ruling party's village gets 4 to 4.5 days more NREGS work compare to non-ruling party village.
- When TMC is the ruling party they spends 125K to 150K more NREGS funds in their own village compare to opponents village
- When TMC is the ruling party, household in the ruling party village gets 13 to 17 days more NREGS work compare to household in a non-ruling party's village.
- When LF is the ruling party they spends around 20K less NREGS funds in their own party village but these results are statistically insignificant.
- When LF is the ruling party, household in the ruling party village gets 2 to 3 days less NREGS work compare to household in a non-ruling party's village.

But why do the Left parties and TMC behave differently in practicing partisan alignment? Two possible explanations

### **Explanation 1: Regime Change**

- The different behavior of the LF as compared to the TMC may be related to an impending change in the political regime that the LF could foresee.
- During a period of regime transition, the incumbent may behave differently compared to a normal time, especially when the incumbent can foresee that regime change (Peng, 2003; Vergne, 2006; Snyder and Mahoney, 1999; Kitschelt, 1992; Gandhi, 2014).
- Regime transitions have an important impact on the capacities and functioning of the incumbents who try to defend them and similarly regime institutions also influence the strategies of the challengers or *entrants* who seek to transform them.

# Explanation 2: Ideological Differences between LF and TMC

- The class interests and core ideology of the LF, and the social base of their support in the years that they formed the local and state governments in West Bengal, is different from the TMC.
- The LF, and the CPIM in particular, is historically a political party based on middle and small peasantry class in West Bengal.
- During its years in government, the CPIM's main focus was placed on land reform and tenancy reform whereby it protected the interest of the small and marginal farmers, and secured their votes for regime survival (Bardhan and Mookherjee 2006, 2012).
- On the other hand, the NREGS is a programme which primarily targets agricultural labourers who are mostly landless and who have historically not been the support base of CPIM.
- The lack of partisan alignment practised by the LF when it came to the NREGS may be seen as being more in line with ideology based theories of political behavior, where incumbent parties do not directly use public programmes under their control for clientelist purposes, even when it is in their short-term electoral interests (Lipset 1960, Besley and Coate 1997).

Village Level attribute	TMC Village	Left Village	t-stat
NREGS Expenditure	461269	342302.8	1.27
Occupational structure of the NREGS Beneficiary HH at the Village level			
% of agriculture lab households among NREGS beneficiary households	47.48	27.25	2.71
% of small farming households among NREGS beneficiary households	13.19	23.4	6.82
% of marginal farming households among NREGS beneficiary households	15.12	33.18	4.60
% of other type of HH among NREGS beneficiary households (mainly non-farm labour)	24.21	16.17	1.47
Incidence of land reform beneficiary hh among NREGS beneficiary			
% of land reform beneficiary hh among NREGS beneficiary households	24.08	21.70	0.76
From West Bengal Rural Household Survey (2005 and 2011)			
% of land less household (as per WBRHS-2011)	59.99	51.23	2.76

Nature of main occupation of the winning candidate	After 2003 Panchayat Election				After 2008 Panchayat Election			
	When winning candidate is from TMC	When winning candidate is from Left	When losing candidate is from TMC	When Losing candidate is from Left	When winning candidate is from TMC	When winning candidate is from Left	When losing candidate is from TMC	When Losing candidate is from Left
House Wife	33.33	23.21	35.44	37.21	40.60	28.90	34.28	30.04
Unemployed	2.69	5.36	6.33	0	1.50	5.75	2.99	1.29
Full time party member / social activist	2.15	0	0	0	3.01	3.84	0	0
Small and marginal Farmer	31.72	44.64	32.91	58.14	25.31	30.18	33.23	45.49
Wage labourer (agi+non-agri)	4.84	3.57	2.53	0	1.50	8.70	5.69	6.87
Non-Farm Self-employed	3.76	0	2.53	0	2.26	3.58	3.29	4.29
Teacher	2.15	3.57	5.06	2.33	2.26	4.22	6.14	2.15
Health worker / ASHA / Nurse / ICDS worker	3.23	1.79	3.80	0	0.75	2.69	1.35	0
Other white collar jobs	3.76	10.71	5.06	2.33	8.27	3.45	3.59	2.58
Business	11.29	7.14	6.33	0	13.03	8.70	8.98	6.01
Retired	1.08	0	0	0	1.50	0	0.45	1.29

District	Average expenditure in Left winning villages	Average expenditure in TMC winning villages	Average expenditure in Left winning villages (within the Left GPs)
South 24 PGS	245329.1	444829.7	234519
Purulia	475757.7	617312.7	487718
Jalpaiguri	716454.5	644691.5	792431.8
Over all	403762	461269.4	419145.9

$$H_1: LF_{NREGS}S24Pgs < LF_{NREGS}Purulia < LF_{NREGS}Jalpaiguri$$

District	TMC-LF
South 24 PGS	199500.6
Purulia	141555
Jalpaiguri	-71763

$$H_1: (TMC_{NREGS} - Left_{NREGS})S24Pgs > (TMC_{NREGS} - Left_{NREGS})Purulia > (TMC_{NREGS} - Left_{NREGS})Jalpaiguri$$

## Conclusions

- We tested for the presence of partisan alignment as well as the effect of such alignment on future election success of the incumbent party in the context of Village Council elections in distributing the NREGS funds using a quasi-experimental research design.
- We found that after the 2008 Panchayat elections, the ruling party at the GP level significantly spent more NREGS funds in the following years in their own party constituencies i.e. their own party villages compared to opponent party's villages, which was rewarded in terms of better election outcomes in the 2013 elections.
- However, we find differences in the practice of partisan alignment and subsequent electoral rewards across the two main parties.
- Our findings seem to contradict the prediction of standard voting models which suggests political leaders concerned with re-election would focus on delivering benefits to 'swing voters' and not the loyalists.
- But in accordance with models of clientelist behaviour.