

Do Electoral Politics Matter in MGNREGA Implementation?  
Evidence from Village Council Elections in West Bengal

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# Outline

- Motivation
- Research Objectives & question(s)
- The specific context
- Data
- Empirical Methodology
- Results
- Conclusion

# Motivation

- Political economy of redistributive politics  
(Bardhan and Mookherjee 2010a, 2010b; Benhabib and Przeworski 2006; Dixit 1996; Dixit and Londregan 1996)
- Feedback effect of politics of redistribution on electoral outcome.  
(Finan and Schechter 2012; Litschig and Morrison 2012; Werker et al. 2012)

# Research Objectives & questions

Objective:

- 1) Whether *political nepotism* exists in provisioning of Public work
- 2) Whether *political nepotism* is electorally rewarding.

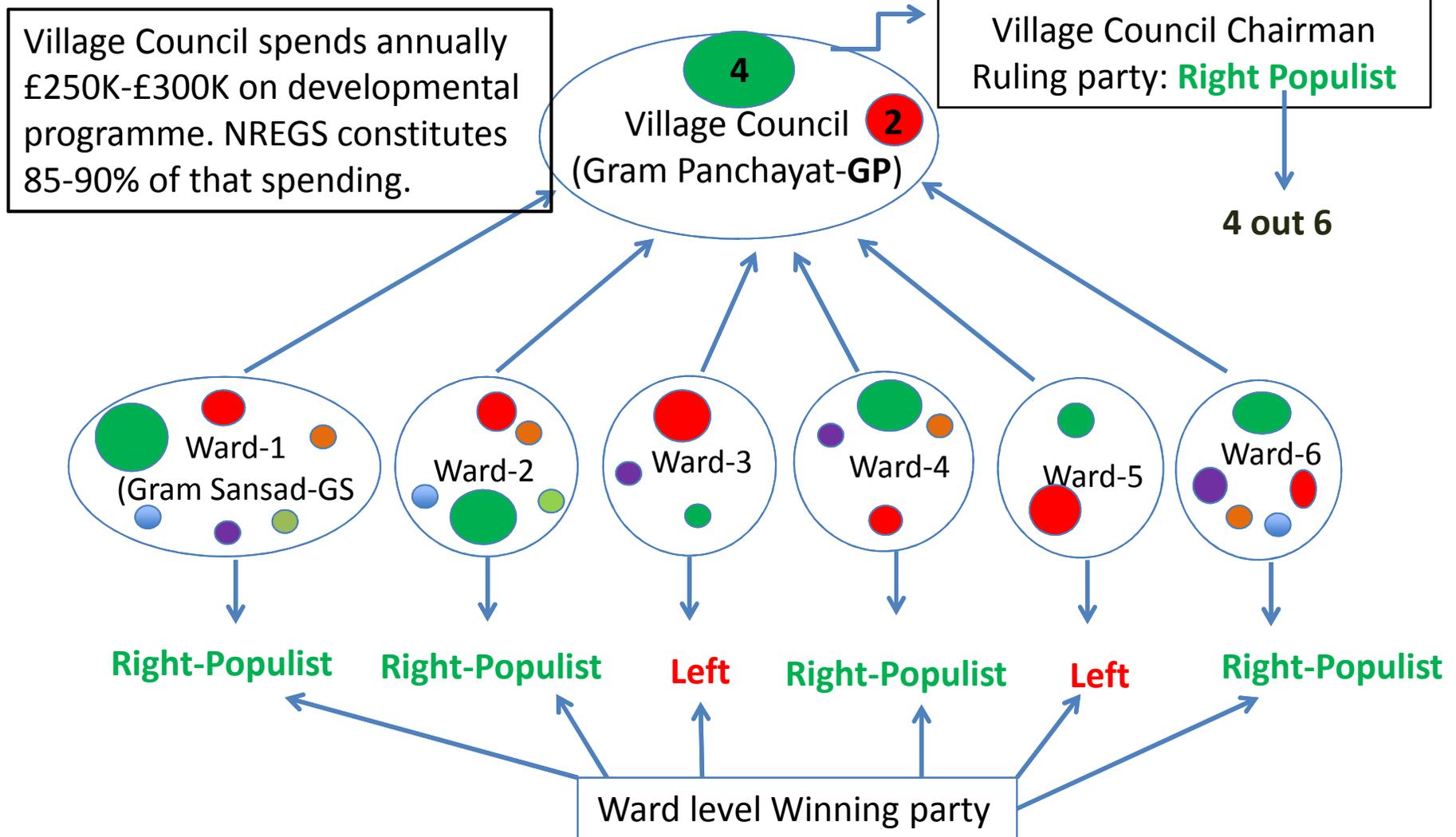
**“Political Nepotism”** as a situation when existing ruling party in a democratic govt. positively discriminates its own party constituencies from other party constituencies in allocating public fund

Main Research Question

- 1) Does Village Council (Gram Panchayat) ruling party discriminate between constituencies in delivering public fund(NREGS)?
- 2) If yes (or not), what are the political feedback effect in the next election outcome of the previous ruling party?

# The specific context

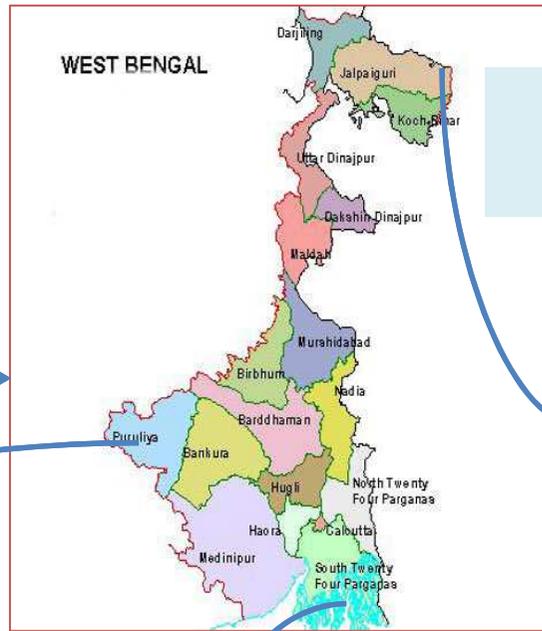
- Village Council Election (Gram Panchayat election) in India



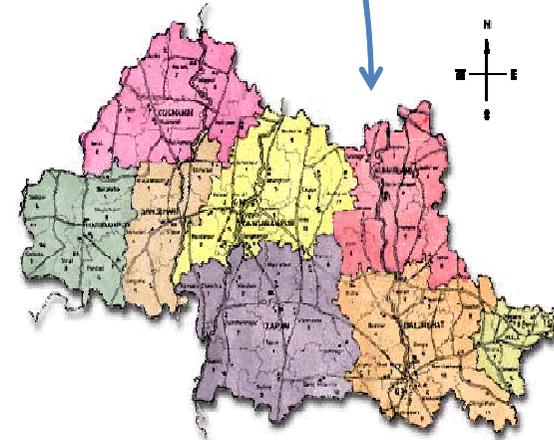
# What is MG-NREGS?

- Self-Selected Programme
- Budget \$ 7 billion (0.6% of GDP, India) per year
- Covering 50 million households per year
- Village council/GP is the PIA
- Village Chairman is the key person in implementation
- Social Audit





Where I did my survey



Year

Purulia

South 24 Parganas

Jalpaiguri

2008

Left

Right Populist

Left

2013

Right Populist

Right Populist

Marginal Left

## Data

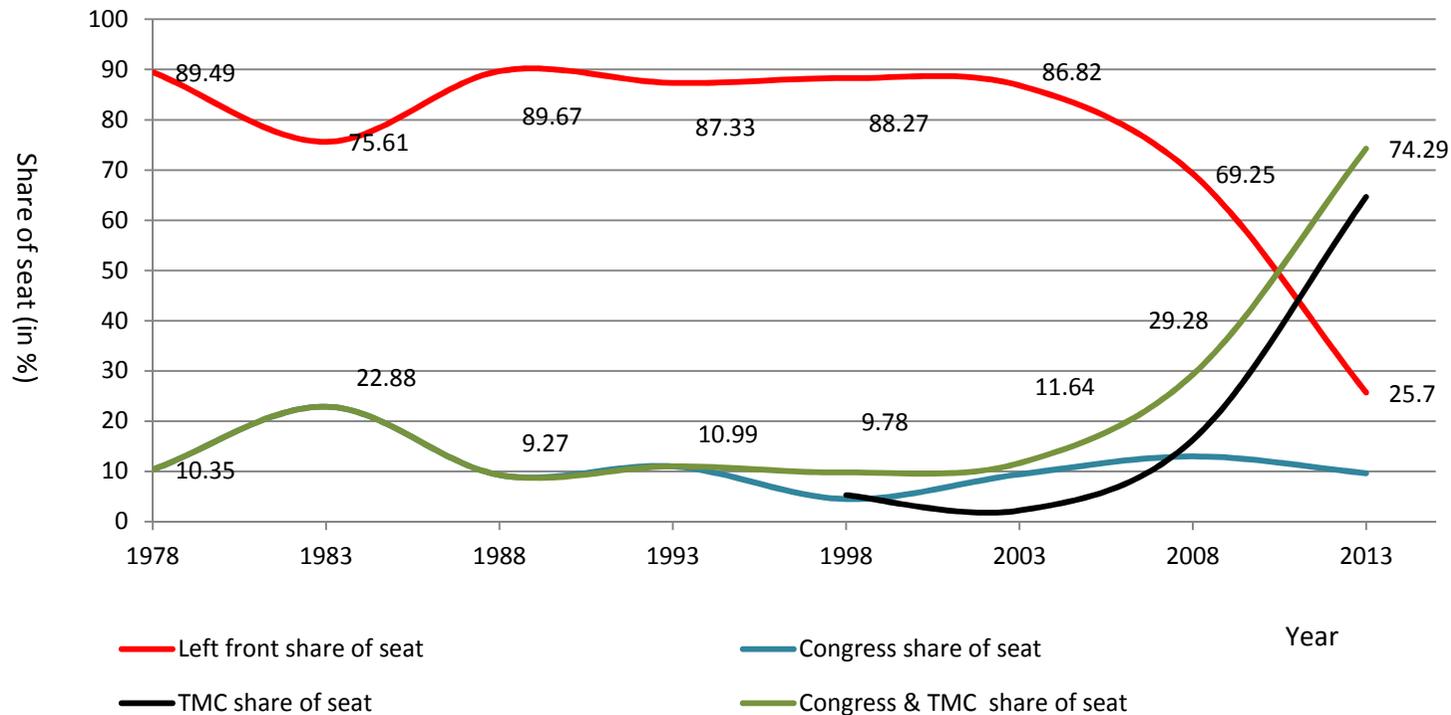
- Detailed Village Council election results:2008 and 2013
- Total 569 wards (or village/gram sansad) over 49 Village councils from 24 Blocks under 3 districts in West Bengal, India.
- Ward level NREGS info (expenditure, no. of schemes, no. of household participated) and other detail info on other developmental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

### Source:

- Election Results from West Bengal State Election Commission.
- Primary survey of 569 wards/villages & 49 GPs to get 2010-2012 panel data.
- Census 2011, Govt. of India and Rural Household Survey 2012, Govt. of WB.
- Latitude-Longitude wise monthly rain fall data from Centre for Climate Research at the University of Delaware and National Climatic data centre.

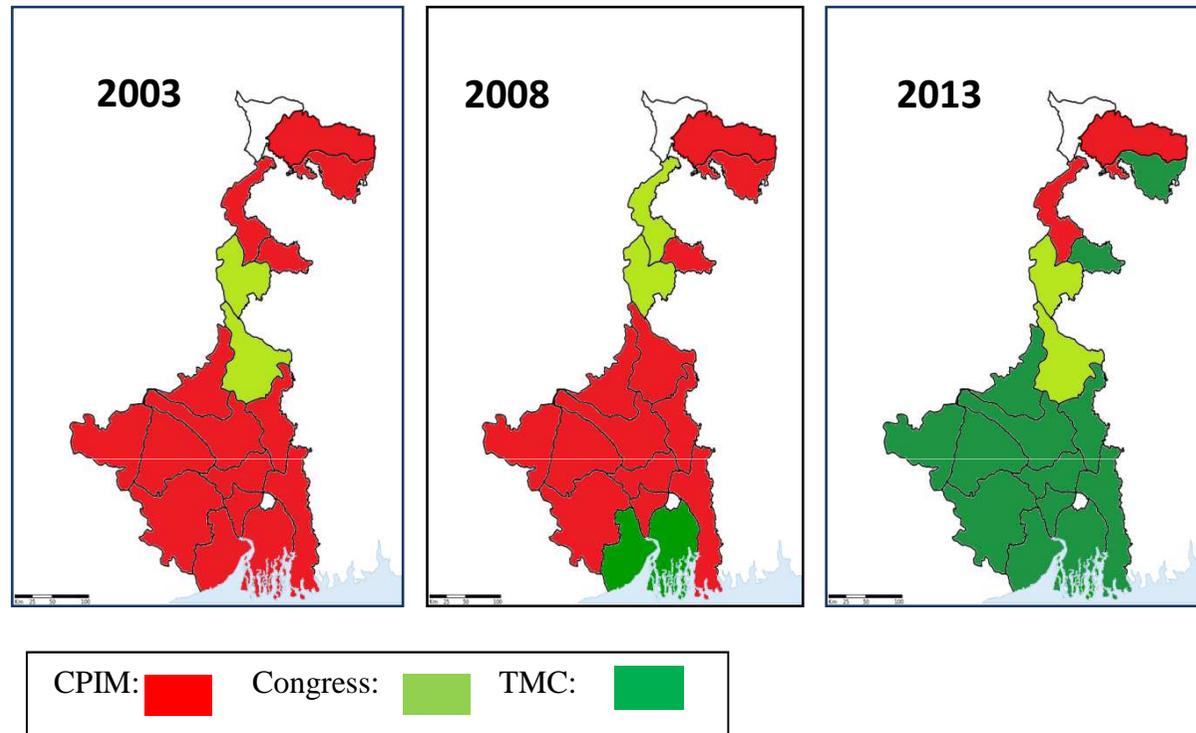
3 years village level panel data, 2010-2012, correspondingly to election year 2008 and 2013

# Some Trend: Political Scenario in West Bengal



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

## Some Trend: Political Scenario in West Bengal



District wise ruling party position after the Local Government Elections

## Descriptive results

### 2010-2012 NREGS Expenditure and ward level winning party after 2008 election

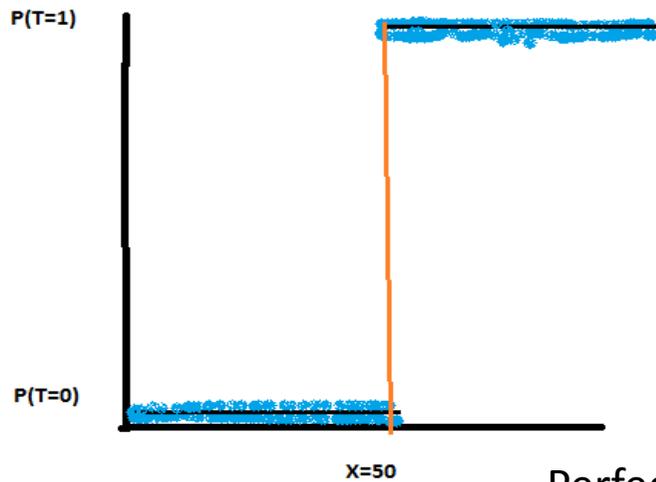
Party Affiliation of winning member	Percentage of seat after 2008 election (In study villages)	Case-1		Case-2		Case-3	
		NREGS Outcome (in Pooled GP)		NREGS Outcome (TMC as GP level ruling party)		NREGS Outcome (Left as GP level ruling party)	
		NREGS Expenditure (in INR)	Average days per hh worked	NREGS 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)***

Party wise winning seat allocation

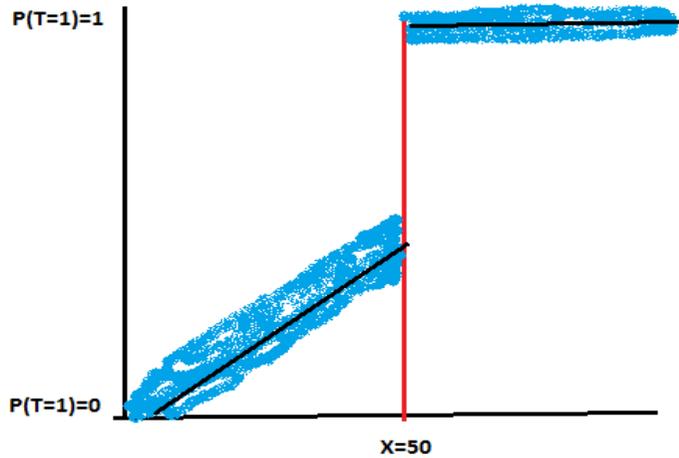
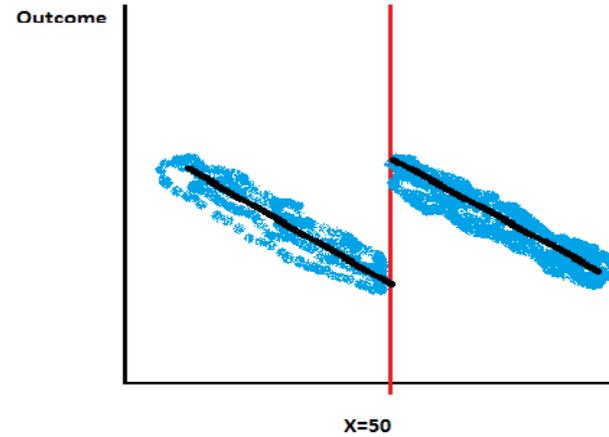


Party		% of seat won in 2008		% of seat won in 2013	
TMC (Right Populist)		27.89		48.68	
CPIM	Left	48.51	56.13	29.88	34.8
CPIM Ally		7.62		4.92	
Congress		11.42		6.50	
SUCI		1.58		2.64	
Independent		2.69		3.69	
Other (like JMM, BJP, etc)		0.29		3.69	
Total		100		100	

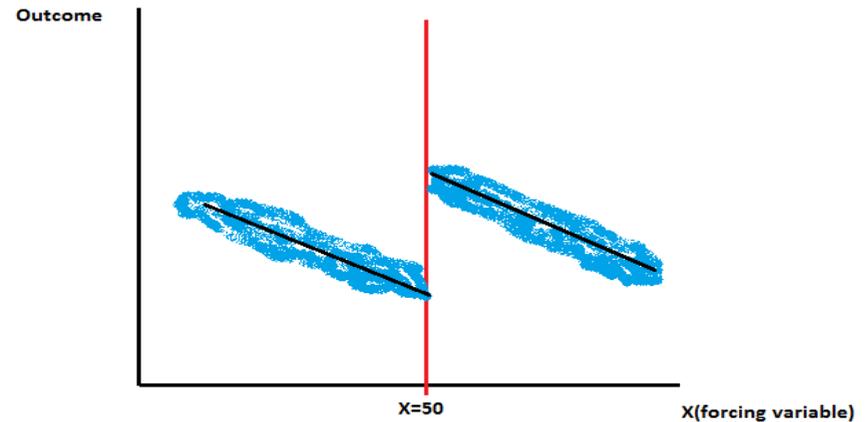
# Expecting Jump in $P(T=1)$ and the on the outcome



Perfect compliance: Sharp RD

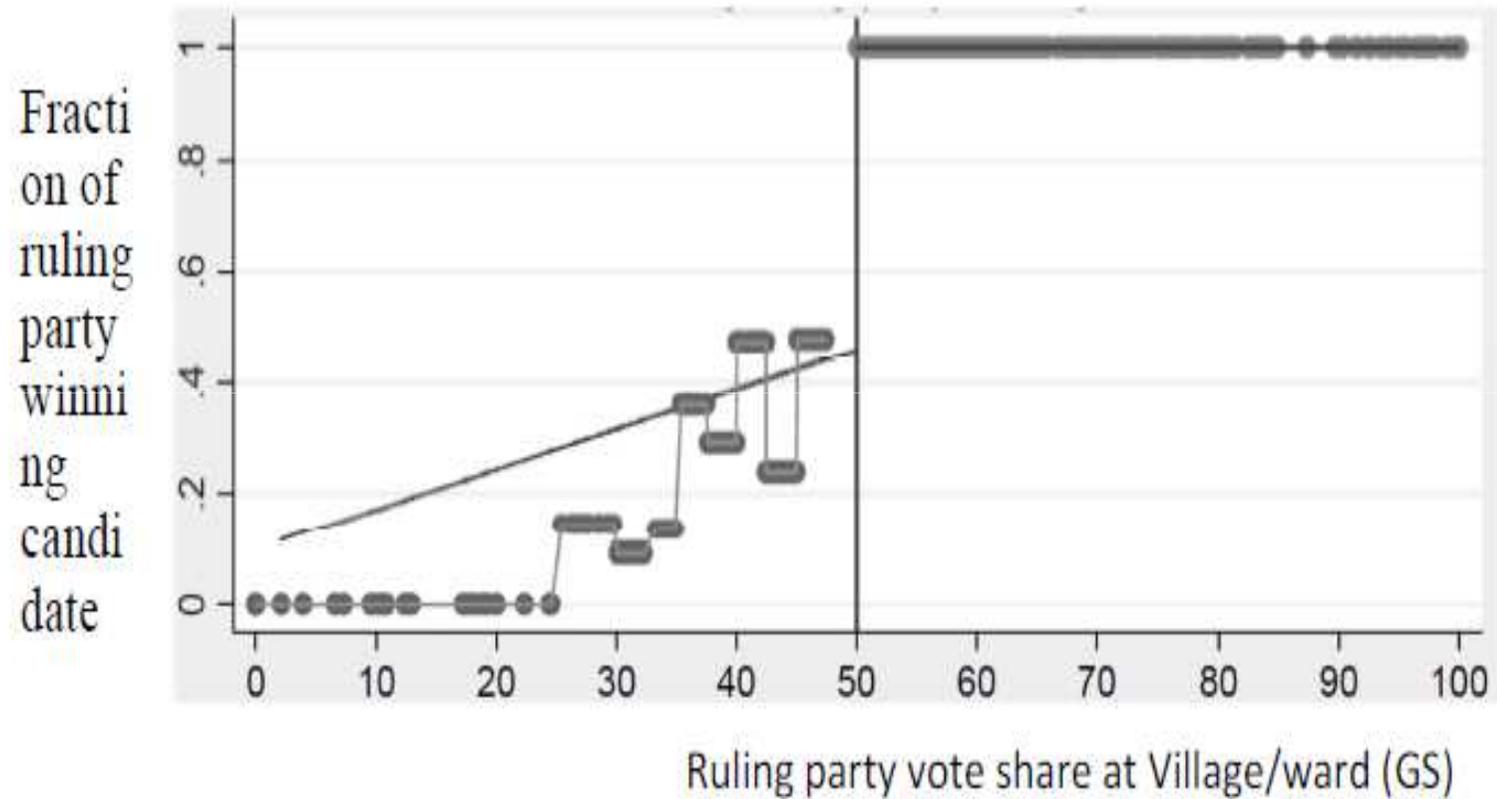


Imperfect compliance: Fuzzy RD



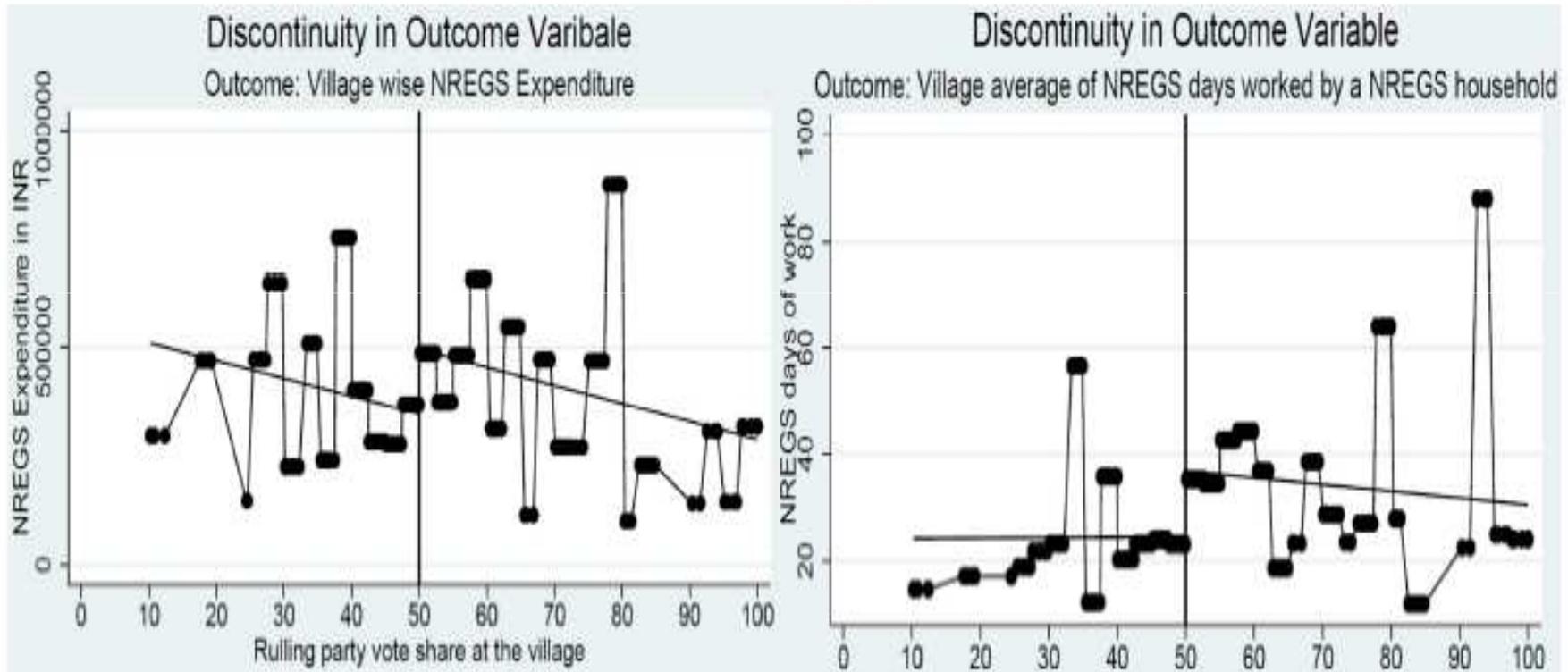
# Graphical analysis: Jump in % of ruling-party winning candidate

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

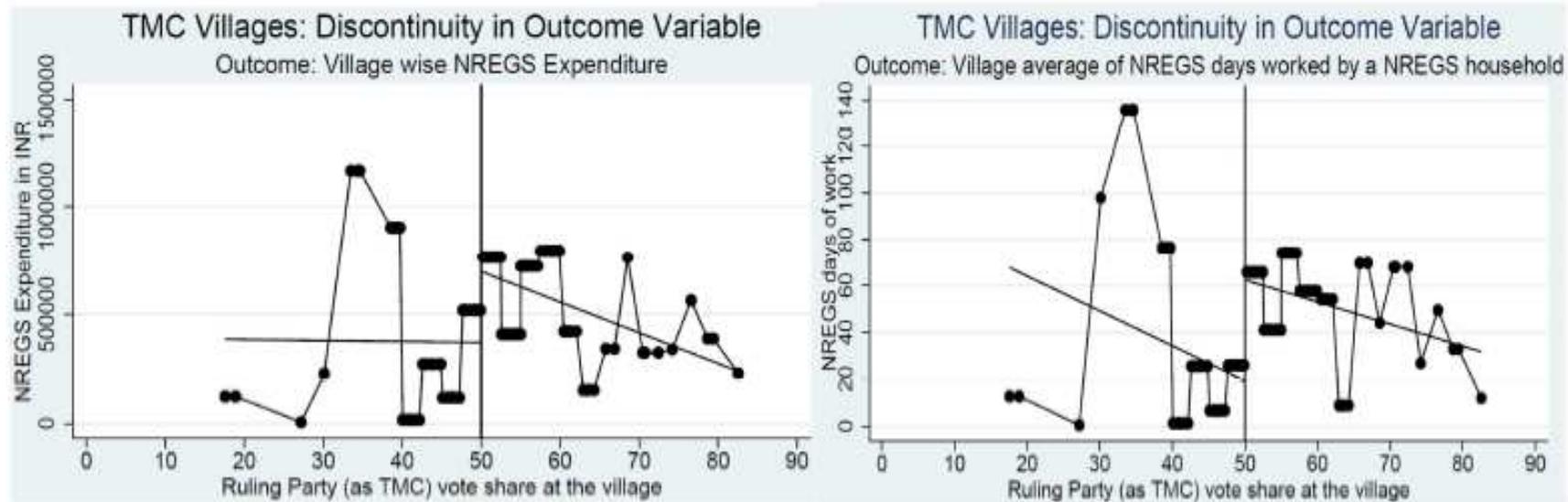


# Graphical analysis: Jump in value in outcome variable

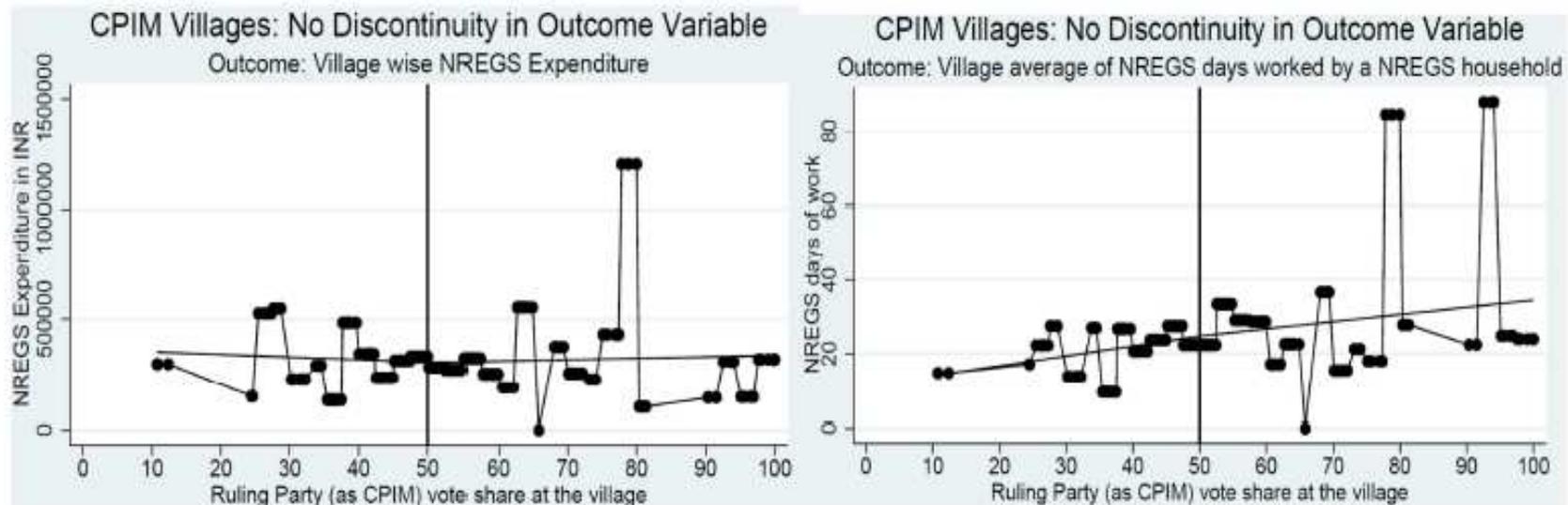
Figure-4: Effect of any party being GP level ruling party on village/GS level NREGS outcome



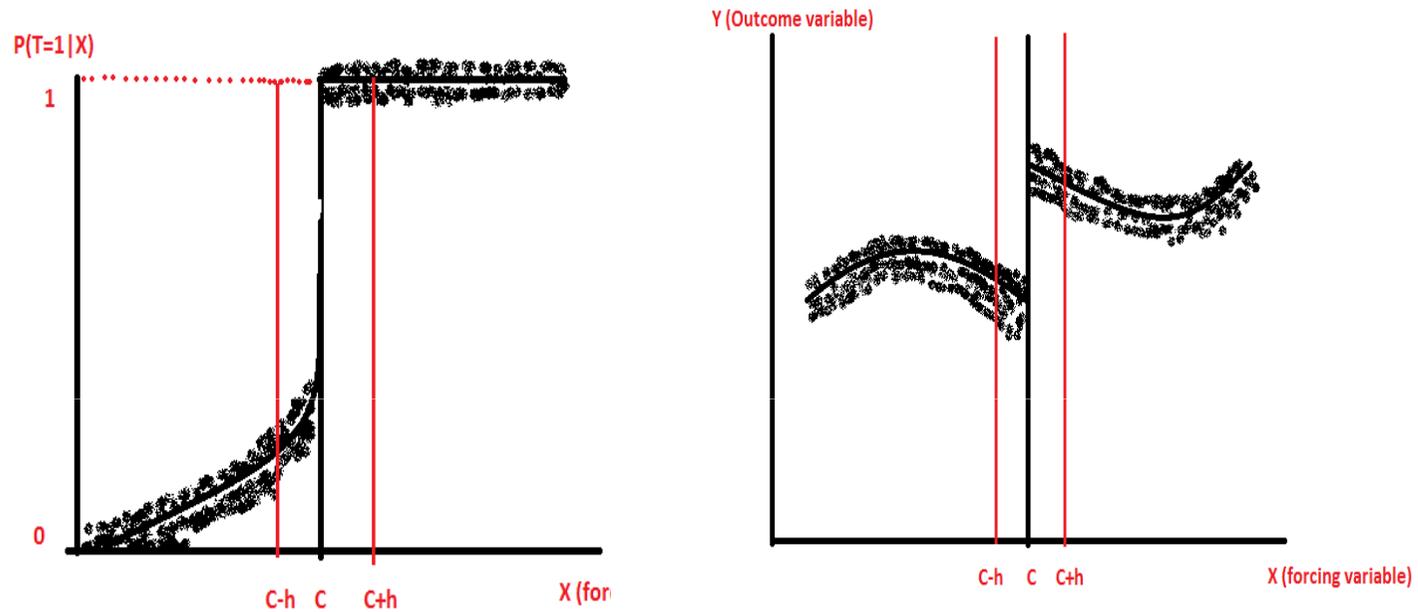
**Figure-5: Effect of TMC being GP level ruling party on village/GS level NREGS outcome**



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



# Local Average Treatment Effect (LATE): Wald Estimator



$$\sigma_{FRD} = \frac{\lim_{\varepsilon \downarrow 0} E[Y | X = c + \varepsilon] - \lim_{\varepsilon \uparrow 0} E[Y | X = c + \varepsilon]}{\lim_{\varepsilon \downarrow 0} E[T | X = c + \varepsilon] - \lim_{\varepsilon \uparrow 0} E[T | X = c + \varepsilon]}$$

Trying to find the causal effect of *Treatment on Outcome*. Some terminology before FRDD

- 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

- We used Fuzzy Regression Discontinuity Design (FRDD).
- Our base line specification

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

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

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  $X=50$  meaning Village Council Ruling party wards systematically have higher NREGS expenditure compare to opponent party wards.

## Control variables

Since NREGS is a demand driven programme, we control for demand side factors and we also control 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

# 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

# Estimation Results

**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

# Estimation Results

Table-12

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

Polynomial order	From Whole Sample				
	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 (0.14)	-3.98 (0.21)	-1.3 (0.06)	-1.85 (0.06)
N	365	359	356	342	320

## Test 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.

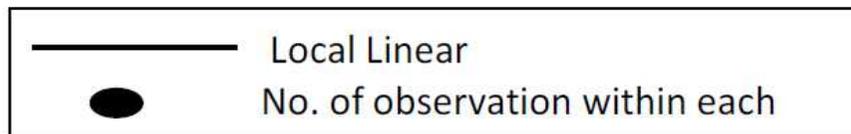
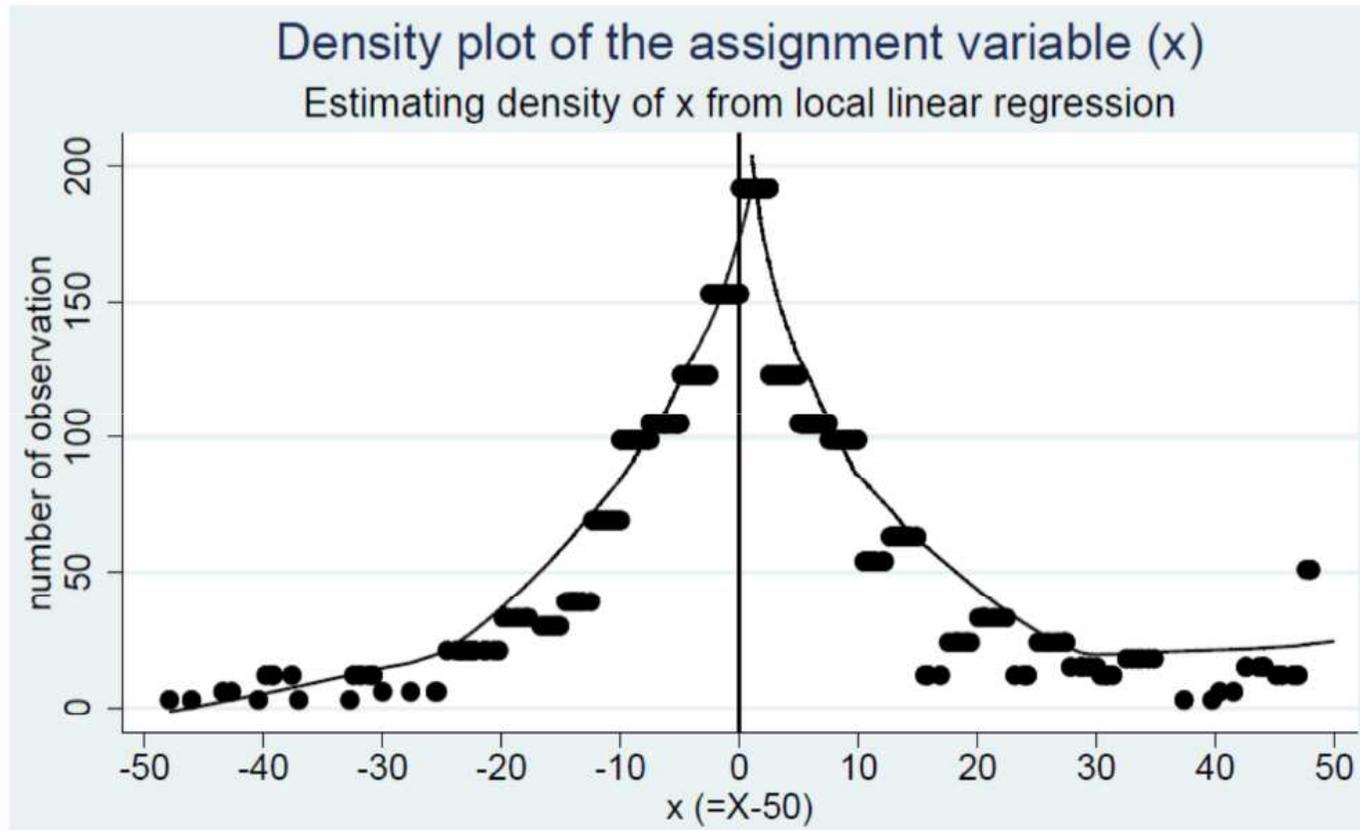
# Discontinuity of covariates at cut-off point

**Table-13: 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	266.137 (0.38)	287.1328 (0.33)	8931.428 (0.06)	3685.22 (0.28)	1967.7 (0.43)	105.041 (0.09)
Pct_VoteCaste_2008	39.96 (1.02)	39.86 (0.84)	386.5 (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 (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)
Monsoon Rain	2312.004 (0.95)	4960.662 (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)	-308.514 (-0.54)	-8509.92 (-0.06)	-1088.535 (-0.26)	210.73 (0.16)	657.561 (0.58)
Pct_BPL_hh	86.64 (0.91)	111.186 (0.83)	3070.15 (0.06)	610.58 (0.28)	320.93 (0.47)	297.77 (0.75)
Percentage of Minority HH	-2.849 (-0.06)	23.219 (0.32)	2334.463 (0.06)	282.034 (0.25)	175.36 (0.41)	45.09 (0.36)
Worker to Non-worker Ratio	-0.8319 (-1.00)	-1.154 (-0.92)	-18.286 (-0.06)	-2.1128 (-0.26)	-0.6408 (-0.31)	0.0042 (0.00)
Member_sex_dummy_2	1.899 (1.01)	3.4008 (1.01)	72.62 (0.06)	19.63 (0.29)	12.45 (0.50)	8.45 (0.81)
Member_caste_dummy2	0.65990 (0.50)	0.4556 (0.29)	-10.64 (-0.05)	-9.027 (-0.27)	-4.311 (-0.44)	-3.75 (-0.69)
Member_caste_dummy3	-1.091 (-0.85)	-0.3499 (-0.28)	-39.049 (-0.06)	-3.627 (-0.27)	-4.305 (-0.47)	-1.1305 (-0.50)
Member_caste_dummy4	0.4289 (0.49)	-0.0213 (-0.02)	2.266 (0.05)	5.63 (0.28)	1.88 (0.44)	1.55 (0.63)
Member_caste_dummy5	-2.7128 (-1.31)	-3.394 (-1.12)	-43.21 (-0.06)	-7.9008 (-0.29)	-4.7238 (-0.51)	-3.79 (-0.84)
Year_dummy2	-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_dummy3	-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_dummy2	-1.732 (-0.89)	-2.58 (-0.86)	-22.39 (-0.05)	-0.179 (-0.03)	-1.42 (-0.28)	-0.39 (-0.17)
District_dummy3	0.876 (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

# Density of plot of forcing Variable

Figure-7: Density Plot of assignment variable following McCary (2008) test



## Placebo test or falsification test: Checking discontinuity in non-discontinuity point

Table-14: 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 CPIM 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 (-01.29)
N	340	340	65	65	210	210

## Findings on Causal effect of Treatment on Outcome

- Ruling party spends around INR 40K-50K more NREGS funds in their own village compare to opponents village.
- 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 CPIM is the ruling party they spends around 20K less NREGS funds in their own party village but these results are statistically insignificant.
- When CPIM 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.

# Results on Reciprocity or feedback effect

Comparison of village level vote share of TMC and CPIM in 2008 and 2009 Election: by GP level ruling party and by treatment village

		TMC GP				CPIM GP				Any GP		Any GP			
		T=1		T=0		T=1		T=0		T=1		T=0		Any T	
Election Year	Ward level vote share	TMC	CPIM	TMC	CPIM	TMC	CPIM	TMC	CPIM	TMC	CPIM	TMC	CPIM	TMC	CPIM
	2008		55.01	35.05	31.01	43.72	12.46	61.82	39.92	36.88	22.59	49.2	23.23	38.2	22.79
2013		62.98	29.15	33.18	34.18	34.04	34.90	41.54	32.97	39.80	29.9	37.95	29.8	39.22	29.89
t-test of mean difference		(2.14)**	(1.72)*	(0.77)	(1.08)	(3.82)** *	(2.88)** *	(1.46)	(0.79)	(2.1)**	(2.2)**	(1.49)	(1.1)	(1.66)*	(1.72)*
N		329	329	121	121	673	673	296	296	1174	1174	533	533	1707	1707

Note: T=1 implies the ward is a ruling party ward and T=0 implies the ward is not a ruling party ward.

# Results on Reciprocity or feedback effect

Table-B: Re-election scenario by Treatment and by Party.

	sample where T=1 i.e. only in treated village		Sample with any T i.e. any village	
	TMC Village/ward in 2008	CPIM Village/ward in 2008	TMC Village/ward in 2008	CPIM Village/ward in 2008
Share of constituencies where party gets re-elected in 2013	63.83	22.10	44.30	26.15
N	329	673	474	826

## Empirical strategy for the feedback effect on 2013 election

### Outcome:

$$Y = f_0(x) + \sigma E(T|x) + e \dots\dots(8)$$

- This was our treatment effect Equation. We use predicted value of Y for T=1 from the above equation as our main explanatory variable to get causal effect of discrimination on following election outcome.
- Then we run following regression with OLS.

$$V_{i\_2013} = \alpha_0 + \alpha_1 Y\_hat + \gamma K + \varepsilon_i$$

- Where  $V_{i\_2013}$  is the 2008 ruling party's vote share in 2013 panchayat election at village i,
- $Y\_hat$  is the predicted value of Y from equation 8 above
- K is vector of other village level controls including margin of win in the 2008 election .
- Essentially this is also a IV estimation where treatment (T) is the instrument

## Results on Feedback Effect

**Table-15: Feedback effect on ruling party's vote share in 2013 election.**

	Vote share of TMC	Vote share of CPIM
(Y_hat)*100000	1.01 [1.92]**	-1.33 [-2.78]***
Margin of win as percentage of total vote caste in 2008	0.578	-0.091
Percentage of total vote others defeated candidates got in 2008	[5.68]***	[-2.10]**
HH_RHS	0.023	-0.283
Percentage of BPL HH	[0.08]	[-2.21]**
Percentage of Min. HH	-0.022	0.001
Worker to Non-Worker ratio	[-1.87]*	[0.22]
	0.371	0.024
	[3.62]***	[0.55]
	-0.251	-0.106
	[-1.25]	[-1.23]
	-5.7935	3.108
	[-1.91]*	[0.35]
Observations	329	673
R <sup>2</sup>	0.433	0.471
F	12.221	2.641

# Results on Feedback Effect

**Table-16: Marginal effect on ruling party's probability of getting re-elected in 2013 election**

Xs (explanatory variables)	dY/dX (marginal effect on probability of re-election in 2013 in TMC villages when T=1)	X-bar (Average value of Xs in TMC Villages when T=1)	dY/dX (marginal effect on probability of re-election in 2013 in CPIM villages when T=1)	X-bar (Average value of Xs in CPIM villages when T=1)
(Y_hat)*100000	0.113959 [2.37]***	(512345.33)* 100000	-0.08001 [-2.50]***	(411326.78)* 100000
Percentage_margin_win2008	0.176337 [2.33]**	22.25 -	-0.040399 [-2.65]***	24.78 -
Percentage_vote_of_hers_defeatedcandidate2008	-0.164855 [-2.05]**	6.65 -	-0.007345 [-1.66]*	6.33 -
HH_RHS	-0.0003211 [-0.95]	350.55 -	.0003172 [1.75]*	375.132 -
pct_BPLhh_rhs	-0.0005659 [-0.19]	42.97 -	-0.0015378 [-1.06]	40.09 -
pct_MINhh_rhs	.0008952 [0.16]	3.97 -	.0015921 [0.57]	5.42 -
WtoNW_Raio	.1992362 [0.24]	0.625 -	-.3784496 [-1.21]	0.666 -
Observations	329		673	
Pseudo R <sup>2</sup>	0.1657		0.0705	
Prob>Chi2	0.0018		0.0000	

## Conclusion

- We tried to look whether Political Nepotism operates at the local govt. level and if so then what is its feedback effect on the following election outcome.
- We find overall evidence of discrimination in village wise expenditure on Public Good (NREGS).
- Village Council level Ruling party spends more in own party constituency. However, results differ between specific parties
- Right Populist Party reaping out significant benefit in 2013 election through this behaviour of Political Nepotism .
- Left does not come to behave in this way for which they pay in losing vote share and lower probability of re-elected 2013

Contribution to the literature:

“.....this study tries contribute an alternative explanation of re-election motive of the incumbent ruling party and this explanation is certainly a deviation from the existing theory that given the predictions of standard voting models, which says political leaders who are concerned with re-election would focus on delivering benefits to ‘swing voters’ and not the loyalists..”

**But why do ‘Left’ and ‘TMC’ behave differently in allocating NREGS?? Future work**

**Thank You**