Making the Cut:
Close Elections and Local Welfare Policy

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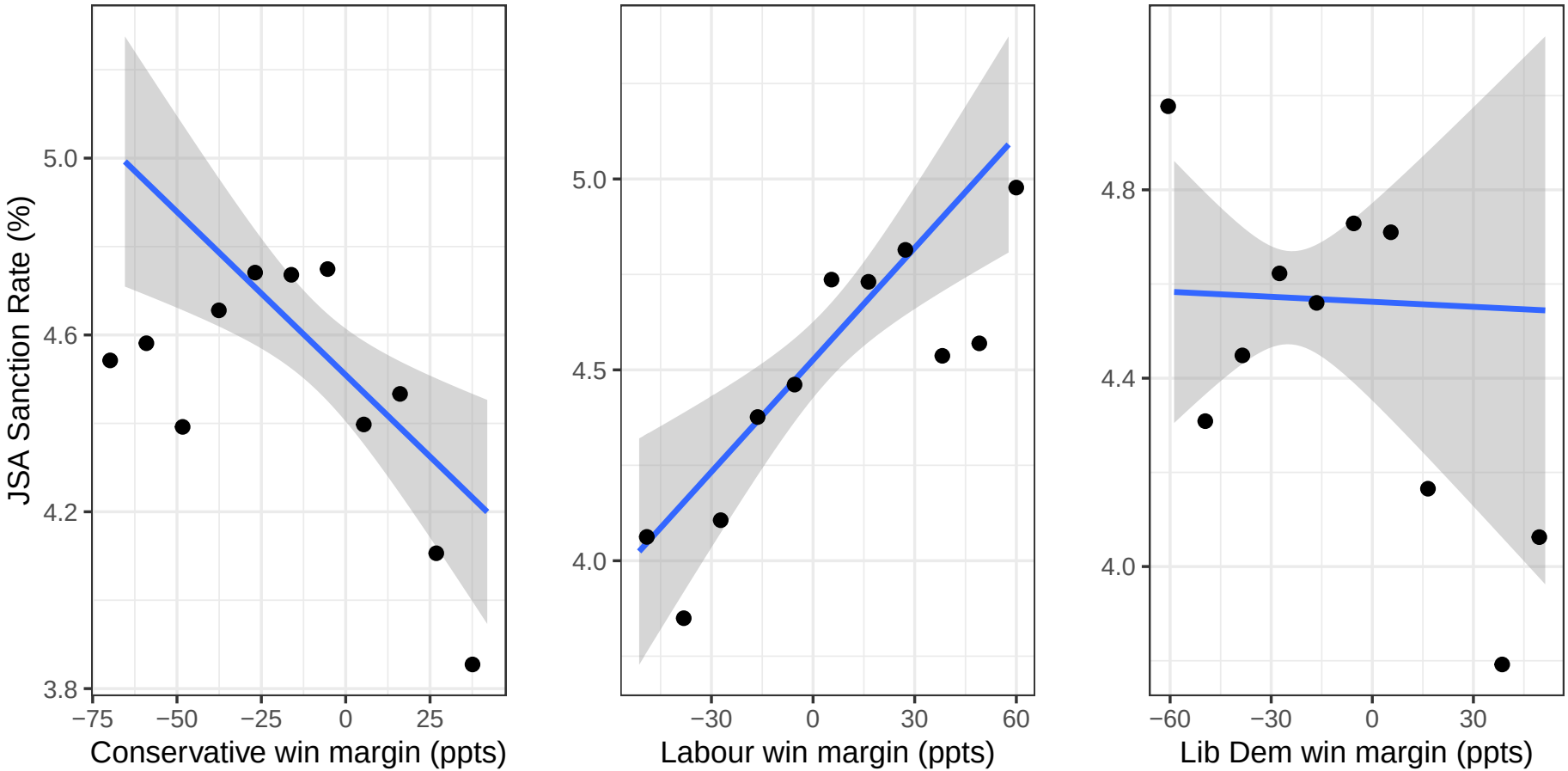
Motivation

- Spatial variation in exposure to welfare reforms in UK in 2010s

- Strong correlations with party voteshares in 2010 elections

$\Rightarrow$ Does who is in charge locally matter **causally** for policy outcomes or is this just heterogeneity across areas?

Sanction rate to Unemployment Benefits (%) and Electoral distance (ppts)



Note: dependent variable average sanctioning rate (sanc/claim) within a constituency, 2012-15

Figure 1: Correlation between 2010 GE win margin and sanction rate

raw voteshares

Research Question

Research Question:

- How does political alignment affect local implementation of welfare policy?

Empirical Setting: **UK 2010 Election**

- Labour government overturned by Conservative-Liberal Democrat coalition
- close elections identification: marginally government-aligned seats vs unaligned

UK 2012 Welfare Reform

- changes to toughness of benefits system
- large increase in sanctioning rate inequality across areas

Outcome: sanctions to unemployment benefits

This Paper

Empirical strategy centers on **RDD** based on close elections

- **RD**: compare the average rate of sanctions across constituencies that are marginally aligned or unaligned with the newly elected central government (Conservative and Liberal Democrats).

- **Diff-in-Disc**: examine discontinuities before and after reforms in 2012

Snapshot

- Government-aligned constituencies have **0.8 ppts (18%) lower sanction rate**
- **Driven by decrease in sanctions**, claimant numbers flat across threshold
- Concentrated in years **after 2012 reform**
- Possible mechanism: **marginal flipped Labour-to-Coalition (L2C) seats** have largest effect
  - solidify new gains

Lit Review - Contribution

Vote buying Gagliarducci et al. (2011); Golden and Min (2013); Lindbeck and Weibull (1987); Dixit and Londregan (1996)

Politician-bureaucrat alignment Christensen et al. (2014); Dahlström and Holmgren (2019); Bach and Veit (2018); Brassiolo et al. (2020); Akhtari et al. (2022); Fiva et al. (2021),

UK partisan bias Fouirnaies and Mutlu-Eren (2015); Hanretty (2021)

$\Rightarrow$ Evidence on partisan allocation of cuts to non-discretionary spending

Sanctions, Spending Cuts, Austerity Fetzer (2019); Brender and Drazen (2008); Alesina et al. (2012)

$\Rightarrow$ Understand hetergeneous implementation of reforms, regional inequality

Roadmap

Introduction

Institutional Setting

Empirical Strategy

Results

Robustness

Appendix

Institutional Setting

UK Electoral System

- First-Past-the-Post (FPTP) system: most votes wins the seat
- Party with most seats has right to form government
- 650 constituencies
  - 533 in England,
  - 40 in Wales,
  - 59 in Scotland
  - 18 in Northern Ireland
- De facto majority can be less than 326/650 due to abstention in Northern Ireland

Coalition Government formed of Conservatives and Liberal Democrats (363)

Party	Vote share	Seats	Runner-up	Candidates
Conservative Party	36.89	306	190	631
Labour Party	29.66	258	159	631
Liberal Democrats	23.56	57	242	631
Scottish National Party	1.69	6	29	59
Plaid Cymru	0.57	3	6	40
Green Party	0.97	1	0	331
Other	6.65	1	6	1093

Note: England, Scotland, and Wales only.

Table 1: 2010 General Election Results by major party

UK Welfare System

UB is search contingent (not contribution or duration dependent)

Features of UB/sanctions:

- UB: $\sim$70 GBP/week (80 EUR) , flat over time in real terms.
- sanction = UB payments stopped, typically for 4 weeks.
- Referral from jobcentre caseworker, imposed or cancelled by separate decision maker

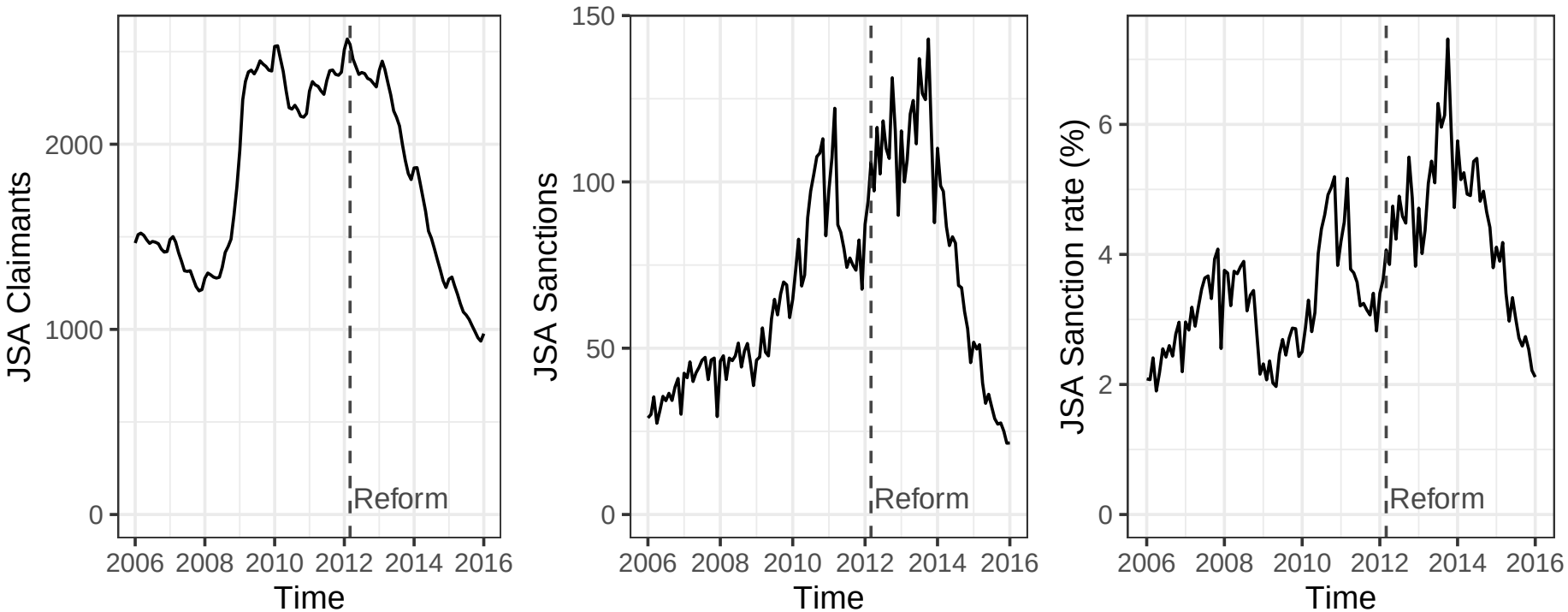
Impact of reforms in 2012

- increase in mean, variance, and skew of $s_{jt} = sanctions_{jt}/claimants_{jt}$
- heterogeneous increases in strictness

Sanction Policy Changes Following 2012 Reform

Infraction Level	Example Reasons	Old Sanction	New Sanction
Lower	Failure to attend advisor meeting Failure to attend work program	1 week	4 weeks, 13 weeks
Intermediate	Unavailable to work Ineligible search effort	No Sanction	4 weeks, 13 weeks
Higher	Refusing, voluntarily leaving work Dismissal for misconduct	1-26 weeks	13 weeks, 26 weeks, 156 weeks

Jobseeker's Allowance claimants and sanctions



Monthly averages across constituencies. The vertical dotted lines indicate the enactment of the Welfare Reform Act in March 2012.

Figure 2: JSA Claimaints, Sanctions, and Sanction-Claimant Ratio

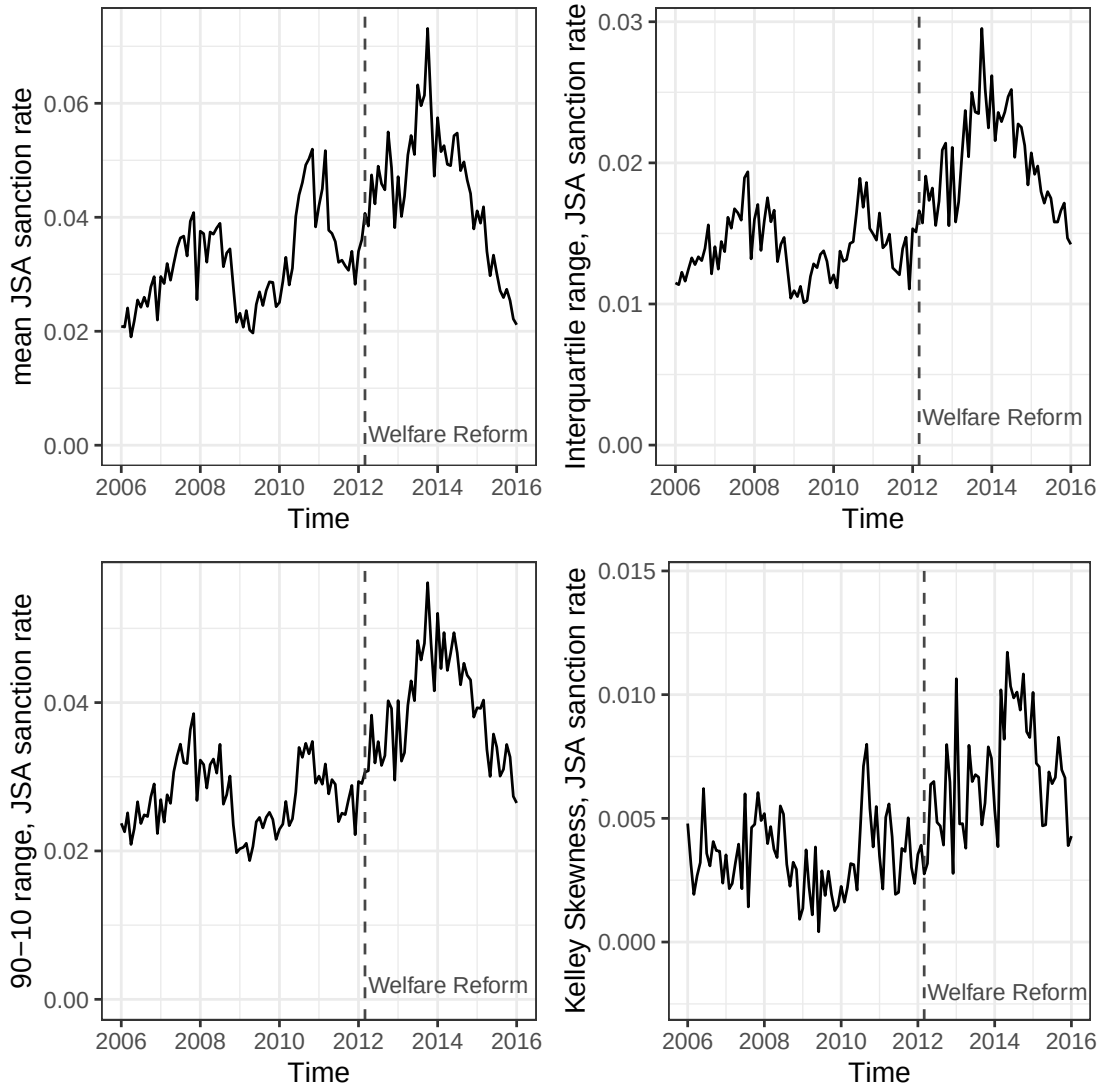


Figure 3: Effect of Reform on Sanction Rate Moments

▶ diff-in-disc

Empirical Strategy

Identification

Sharp RDD. Treatment (government alignment):

$$D_i = 1(m_i \geq 0) \tag{1}$$

$$\tag{2}$$

Potential outcomes:

$$E[Y_i(0); m] = \alpha + f(m_i) \tag{3}$$

$$Y_i(1) = Y_i(0) + \beta \tag{4}$$

Parameter of interest:

$$\beta^{RD} = \lim_{m \to c^+} E\big[Y_i(1); m\big] - \lim_{m \to c^-} E\big[Y_i(0); m\big] \tag{5}$$

Requirements:

1. no manipulation around cutoff
   - check: test density of forcing variable
2. smoothness of potential outcome functions at cutoff
   - indirect check: no other jumps in relevant socioeconomic covariates

Density of Running Variable

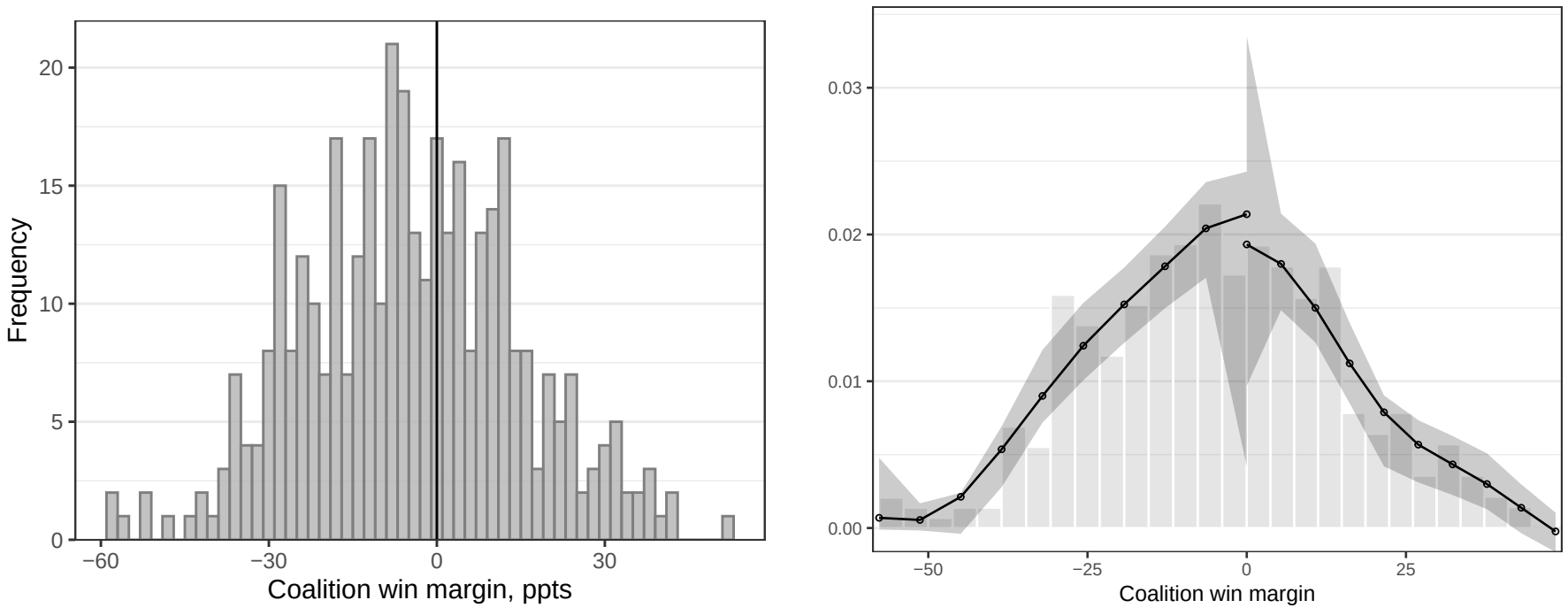


Figure 4: Density and Manipulation test of coalition win margin

Data

- 2010 Westminster general elections in England, Scotland and Wales
  - 632 single member constituencies

- **Outcome**: rate of sanctions to unemployment benefits
  - source: Department of Work and Pensions
  - monthly number of claimants and sanctions

- **Population characteristics**:
  - 2009 mid-year parliamentary constituency population estimates
  - 2009 Annual Population Survey
  - 2009 Annual Survey of Hours and Earnings

	Coalition			Labour			
	N	Mean	SD	N	Mean	SD	Difference
Sanctions							
JSA saction rate, %, post-refrom	363	4.36	1.00	258	4.73	0.99	-0.36
JSA sanctions	363	59.65	31.33	258	122.88	47.20	-63.23
JSA claimants	363	1438.84	669.32	258	2760.60	984.05	-1321.77
Election							
Conservative vote share	363	45.15	9.89	258	22.86	9.03	22.29
Libdem vote share	363	26.69	11.10	258	18.67	7.11	8.02
Labour vote share	363	20.17	10.30	258	46.47	7.73	-26.30
Flipped seats	363	0.26	0.44	258	0.02	0.14	0.24
MPs standing down	363	0.20	0.40	258	0.21	0.41	-0.01
Number of parties	363	5.42	0.69	258	5.40	0.68	0.02
Socioeconomic							
Population	363	96053.43	10837.25	258	95860.94	13233.66	192.49
Female population, %	363	51.01	0.71	258	50.96	0.89	0.06
Working age population, %	363	63.89	3.23	258	66.04	3.43	-2.15
Economic activity rate, %	363	79.01	4.27	258	73.56	5.23	5.45
Employment rate, %	363	74.02	4.94	258	66.31	6.09	7.71
Unemployment rate, %	187	7.90	2.23	240	10.27	3.10	-2.37
Median earnings	324	22451.23	3889.92	244	20699.91	3321.38	1751.32

Regression Framework

For constituency, i, estimating equation:

$$y_i = \alpha + \beta^{RD} D_i + f_0(m_i) + f_1(m_i) + \mathbf{x}_i'\delta + e_i \tag{6}$$

$$m_i = \begin{cases} \text{Cons}_i - \text{Labour}_i & \text{if } 1^{st}/2^{nd} \text{ contested by Cons and Labour} \\ \text{Lib Dem}_i - \text{Labour}_i & \text{if } 1^{st}/2^{nd} \text{ contested by Lib Dems and Labour} \end{cases} \tag{7}$$

- y_i outcome of interest at constituency level
- f_0, f_1 polynomial below, above cutoff
- m_i running variable, coalition distance to victory*
- x_i vector of socioeconomic controls, constituency level
  - log population,% women, % working age, median earnings, % employment rate
- β^{RD} causal parameter of interest

Estimated with bias-corrected local linear regression; CCT'14 optimal bandwidth choice.

*Robust to alternative measures of distance (Con-Lab, Coalition-Opposition)

Results

Baseline

	Linear			Quadratic		
	(1)	(2)	(3)	(4)	(5)	(6)
Conventional	-0.659	-0.800**	-0.913**	-0.765*	-0.849**	-0.955**
	(0.408)	(0.345)	(0.443)	(0.462)	(0.378)	(0.486)
Robust bias-corrected	-0.783*	**-0.898****	-0.963*	-0.863*	**-0.918****	-0.952*
	(0.475)	**(0.400)**	(0.496)	(0.523)	**(0.423)**	(0.538)
N	171	171	81	253	263	159
Bandwidth	12.2	12.8	6.4	20.4	24.12	12.06
	h^*	h^*	$h^*/2$	h^*	h^*	$h^*/2$
Controls	×	✓	✓	×	✓	✓

In all regressions a triangular kernel is used. Robust standard errors in parentheses. Controls include log population, share of women, share of working age, median earnings, and employment rate.

Table 2: Outcome: mean JSA sanctioning rate (%) post-reform (2012-2015)

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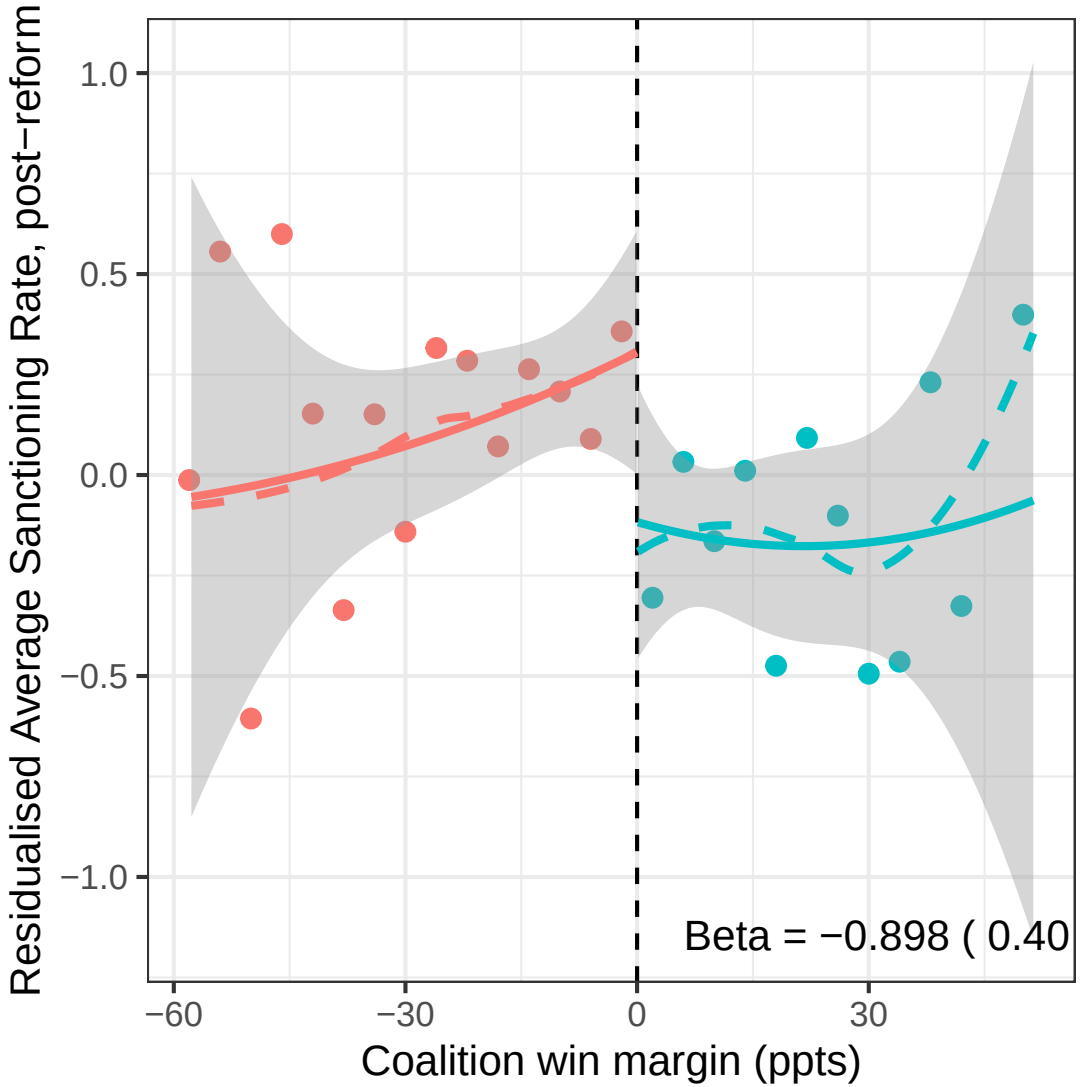
- **Effect size**: -0.898 / 4.757 = -18.9%

▸ alternative running variables

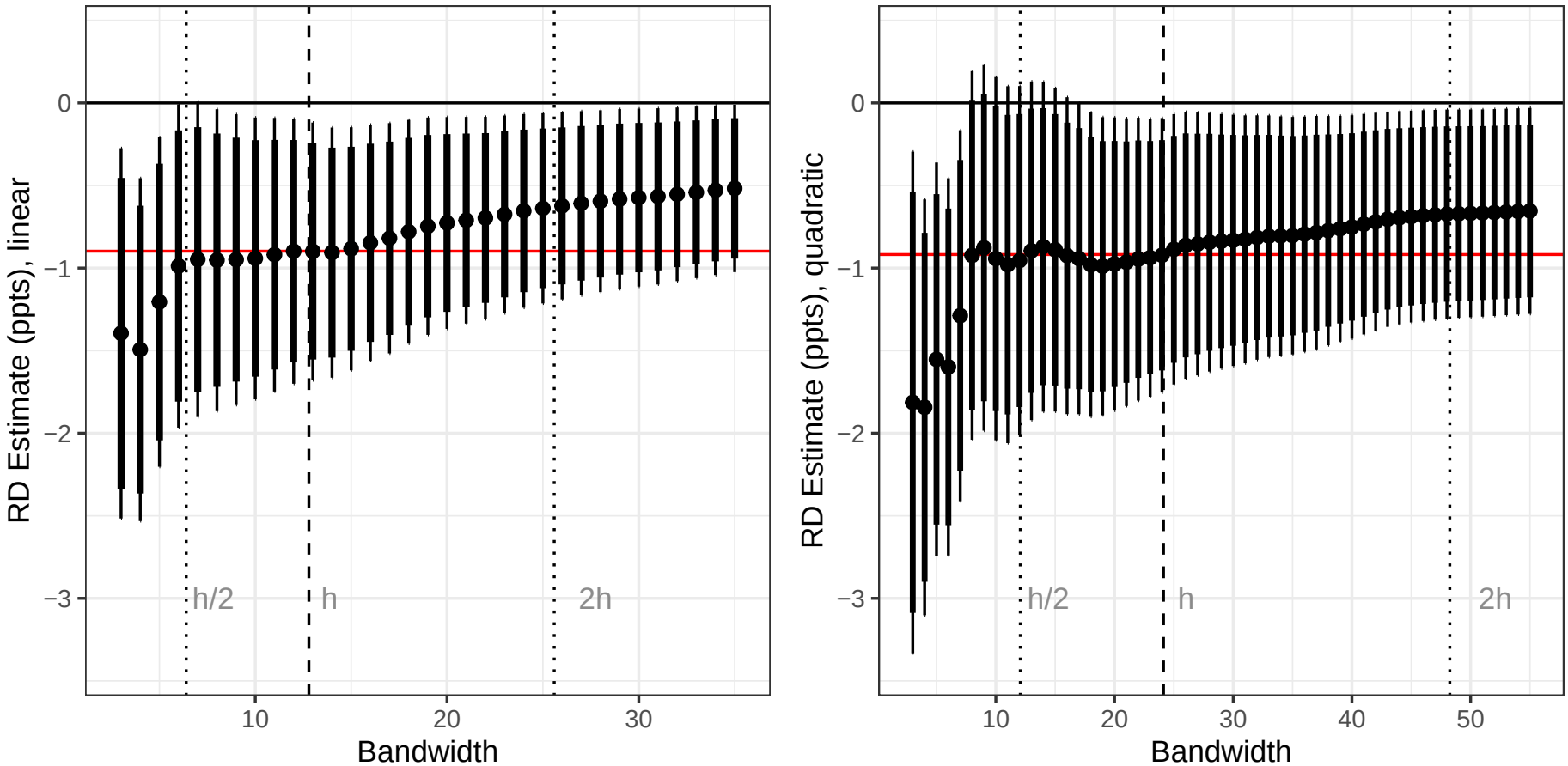


Note. Dependent variable is the residuals from a regression of average sanctioining rate on socioeconomic controls: log population, share of women, share of working age, median earnings, and employment rate. Solid line is quadratic fit, dashed line is lpoly fit. Shaded area represents 95% CI.

Figure 5: Residualised Average Sanction Rate and Vote Margin

Robustness

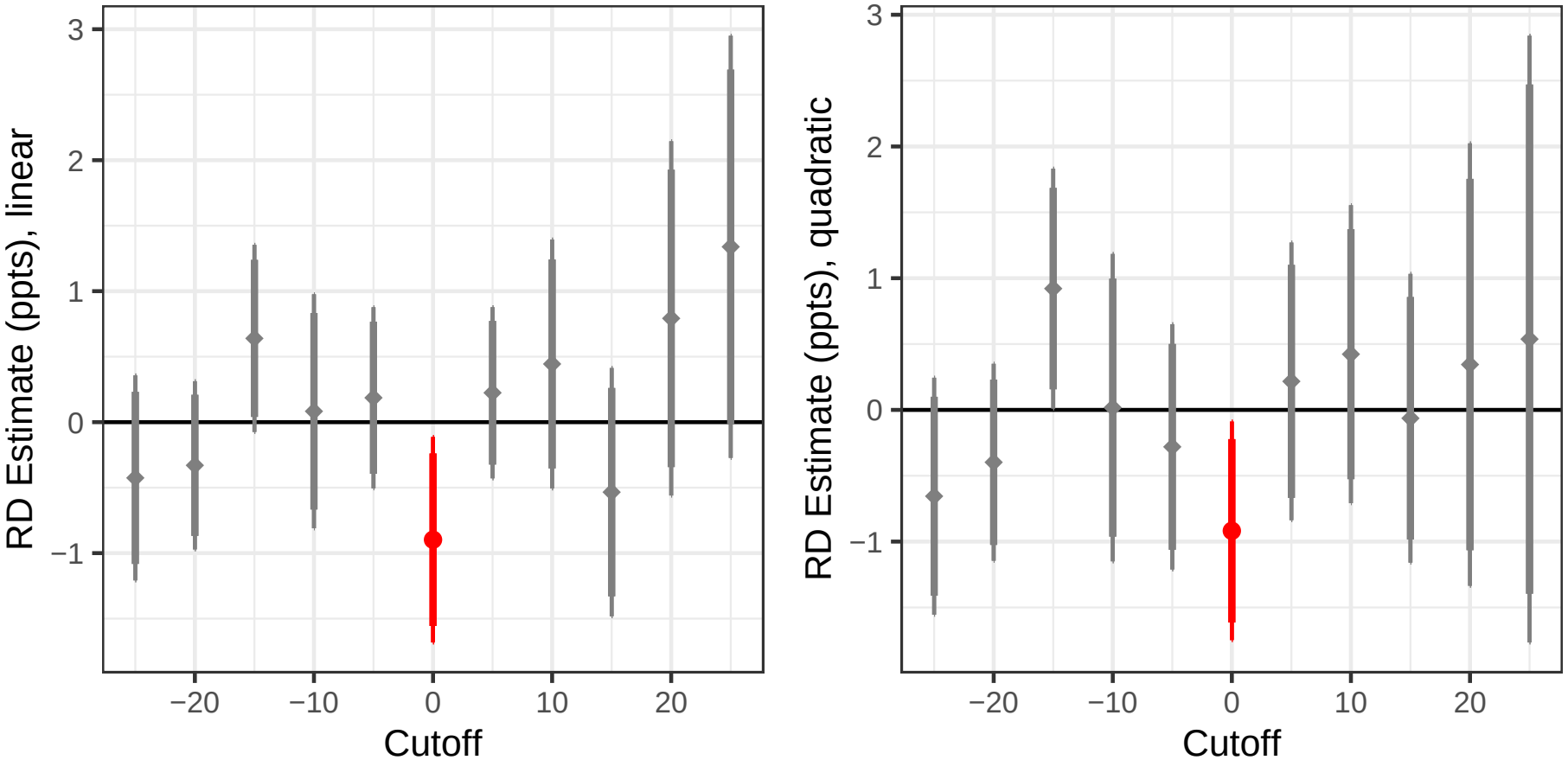
Bandwidth Choice



Note: each point represents a separate RD regression. Socioeconomic controls: log population, share of women, share of working age, median earnings, and employment rate. Heavy and thin lines represent 90% and 95% CIs respectively. Bias-correction preserves (h/b) ratio

Figure 6: The effect of altering bandwidth choice

Placebo Cutoffs



Note: each point represents a separate RD regression. Socioeconomic controls: log population, share of women, share of working age, median earnings, and employment rate. Heavy and thin lines represent 90% and 95% CIs respectively.

Figure 7: RD coefficients estimated at placebo cutoffs ($\neq 0$)

Predetermined Covariates

	Popn. (1)	Women (2)	Working age (3)	Elderly (4)	Earnings (5)	Emp. (6)	Activity (7)	Unem. (8)
Con.	0.032	0.161	-1.204	0.679	-833.252	3.493*	2.677	-0.967
	(0.040)	(0.285)	(1.248)	(1.000)	(1005.603)	(1.959)	(1.901)	(0.852)
RBC	0.024	0.168	-1.334	0.764	-911.550	3.887*	2.720	-1.111
	(0.047)	(0.344)	(1.492)	(1.199)	(1189.551)	(2.318)	(2.298)	(0.987)
N	170	162	170	146	188	178	169	117
Bw	11.88	11.52	11.91	10.26	14.62	12.51	11.83	9.74
Mean(Y)	11.46	50.99	64.77	16.5	21660.14	70.86	76.76	9.16

Table 3: RD estimates for Predetermined Covariates

Potential Mechanism: preferential leniency to **solidfy new gains** in flipped L2C seats?

	Full Sample	Only seats held by Labour in 2005
RD estimate in ppts	-0.898**	-1.374***
	(0.400)	(0.475)
RD estimate in %	[-0.189]	[-0.289]
$\bar{y}(m \in [-h, 0])$	4.757	4.760
N	171	106
Bandwidth	12.8	9.45
Controls	✓	✓

Note: *p<0.1; **p<0.05; ***p<0.01. The dependent variable is average JSA sanction rate, post-reform. In both regressions a triangular kernel is used. Robust standard errors in parentheses. Controls include log population, share of women, share of working age, median earnings, and employment rate.

Table 4: RD Estimates in Full Sample and 2005 Labour Seats Subsample

Behavioural Change at the threshold

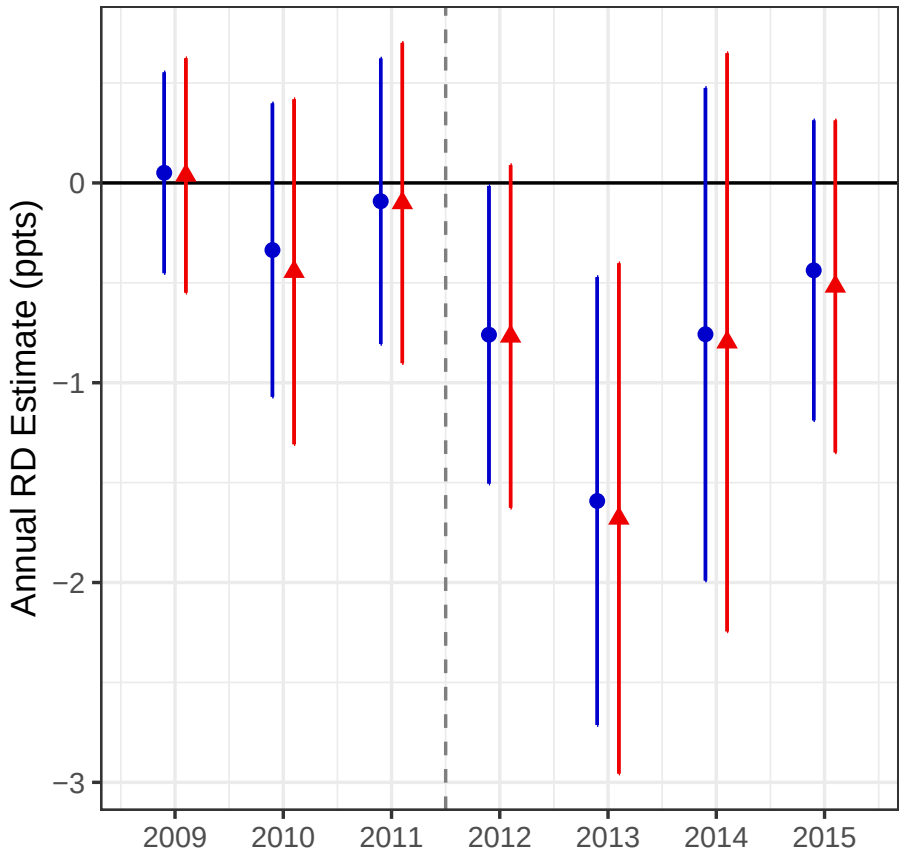
Jobseeker/Firm behaviour might internalise partisan effects at $c = 0$

- Could create a discontinuity in search effort, unemployment duration (etc)
- Doesn't seem consistent with continuity in economic variables

Constituency control is fixed 2010-2015

- Time variation in discontinuities lines up with reform (diff-in-disc)
- differences out? pre:2010/11, post: 2012-15

"Diff-in-Disc": RD estimates by year



Note: Blue = linear, Red = Quadratic. Each point represents a separate RD regression. Socioeconomic controls: log population, share of women, share of working age, median earnings, and employment rate. Heavy and thin lines represent 90% and 95% CIs respectively.

Figure 8: Dynamic RD Estimates

second moments

Next steps

If close-election creates problematic discontinuities

- Could take search, unemployment spell information from UKHLS panel

Mechanism/Further evidence: constituencies nested in council districts

- (MP, District Council) $\rightarrow$ Employment Offices

Council alignment switches

- 300 councils, examine effect of council alignment switches on sanction rates?
- Staggered DiD, Fouirnaies and Mutlu-Eren (2015) identification: council and national elections in different years creates alignment switches

Model?

- principal-agent set up

Conclusion

- Partisan bias at play in non-discretionary spending cuts
- **Alignment between MP and central government matters** for UB sanctions
  $\sim$ 20 percent drop in sanctioning rate at cutoff
- **Effect is strongest in marginal L2C seats** (solidifying new gains)
  $\sim$50 percent larger effect size in Labour-to-Coalition seats

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Thanks!

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Voteshares and Sanction Rates

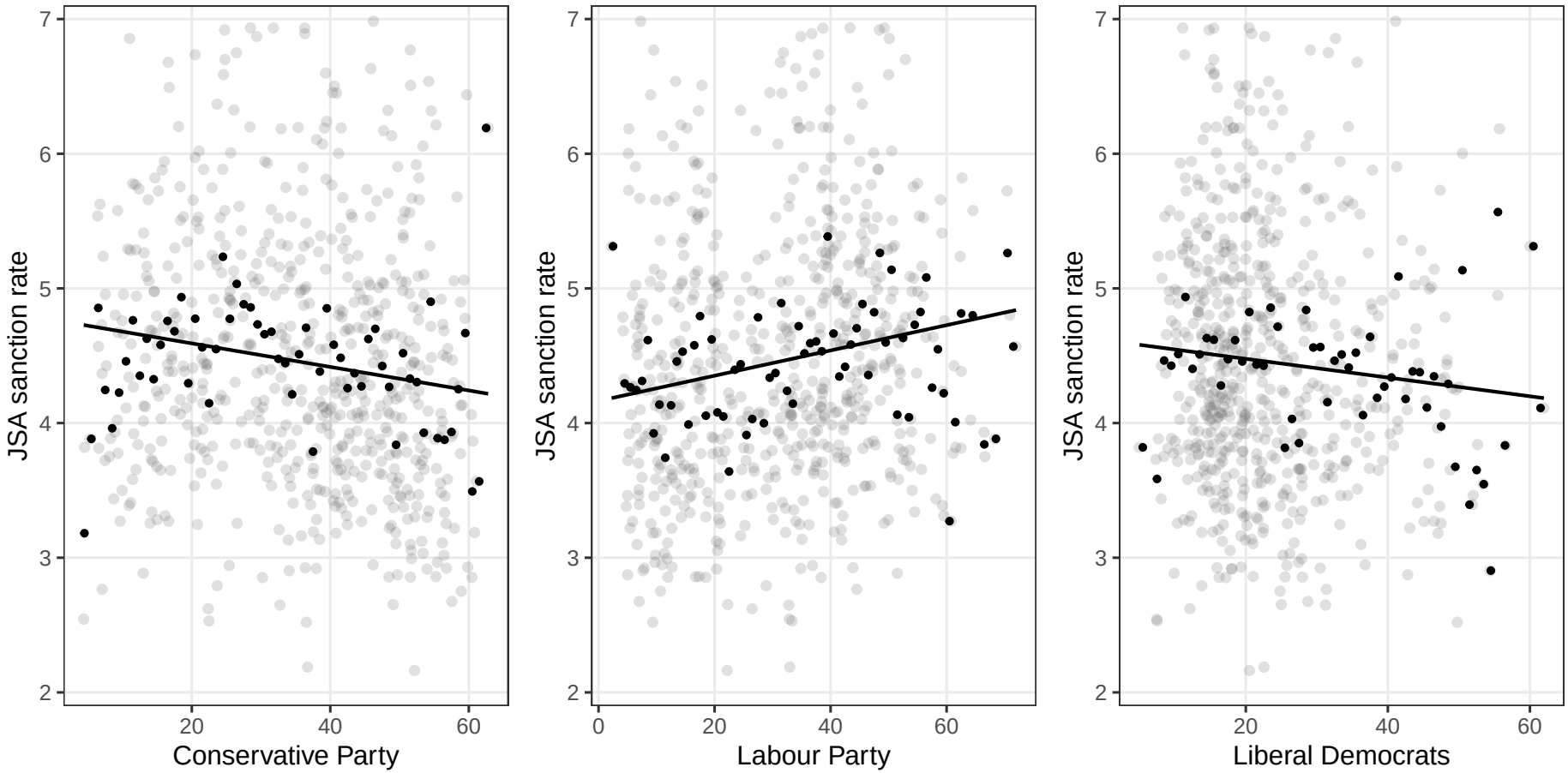

Figure 9: Voteshares and Sanction Rates

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Appendix: Year

	2010 (1)	2011 (2)	2012 (3)	2013 (4)	2014 (5)	2015 (6)
RD estimate	-0.336	-0.092	-0.760**	-1.592***	-0.757	-0.438
(se)	(0.374)	(0.364)	(0.380)	(0.572)	(0.629)	(0.383)
RD in %	[-0.087]	[-0.025]	[-0.175]	[-0.293]	[-0.153]	[-0.140]
N	130	152	186	151	178	162
Bandwidth	9.58	11.55	14.35	11.41	13.54	12.39
Controls	✓	✓	✓	✓	✓	✓
$\bar{y}(m \in [-h, 0])$	3.88	3.65	4.34	5.43	4.96	3.14

Note: *p<0.1; **p<0.05; ***p<0.01. The dependent variable is average JSA sanction rate in a given year. In all regressions a triangular kernel is used. Robust standard errors in parentheses. Controls include log population, share of women, share of working age, median earnings, and employment rate.

Table 5: Baseline RD Estimates by Year

Appendix: Alternative Distance

	Coalition-Labour (1)	Coalition-Opposition (2)	Conservative-Labour (3)	Lib Dem-Labour (4)
Conventional	-0.800**	-0.780**	-1.089**	-0.681
	(0.345)	(0.338)	(0.440)	(0.684)
Robust bias-corrected	-0.898**	-0.865**	-1.224**	-0.829
	(0.400)	(0.393)	(0.520)	(0.927)
N	171	181	114	16
Bandwidth	12.8	13.3	10.69	5.57
Controls	✓	✓	✓	✓

Note: $^{*}p<0.1$; $^{**}p<0.05$; $^{***}p<0.01$. The dependent variable is average JSA sanction rate in the post-reform period. In all regressions a triangular kernel is used. Robust standard errors in parentheses. Controls include log population, share of women, share of working age, median earnings, and employment rate.

Table 6: RD estimates of alternative races on JSA sanction rate

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Akhtari, M., D. Moreira, and L. Trucco (2022). Political Turnover, Bureaucratic Turnover, and the Quality of Public Services. *American Economic Review 112*(2), 442–493.

Alesina, A., D. Carloni, and G. Lecce (2012). The Electoral Consequences of Large Fiscal Adjustments. In *Fiscal policy after the financial crisis*, pp. 531–570. University of Chicago Press.

Bach, T. and S. Veit (2018). The Determinants of Promotion to High Public Office in Germany: Partisan Loyalty, Political Craft, or Managerial Competencies? *Journal of Public Administration Research and Theory 28*(2), 254–269.

Brassiolo, P., R. Estrada, and G. Fajardo (2020). My (Running) Mate, the Mayor: Political Ties and Access to Public Sector Jobs in Ecuador. *Journal of Public Economics 191*, 104286.

Brender, A. and A. Drazen (2008). How Do Budget Deficits and Economic Growth Affect Reelection Prospects? Evidence from a Large Panel of Countries. *American Economic Review 98*(5), 2203–2220.

Christensen, J. G., R. Klemmensen, and N. Opstrup (2014). Politicization and the Replacement of Top Civil Servants in Denmark. *Governance 27*(2), 215–241.

Dahlström, C. and M. Holmgren (2019). The Political Dynamics of Bureaucratic Turnover. *British Journal of Political Science 49*(3), 823–836.

Dixit, A. and J. Londregan (1996). The Determinants of Success of Special Interests in Redistributive Politics. *the Journal of Politics 58*(4), 1132–1155.

Fetzer, T. (2019). Did Austerity Cause Brexit? *American Economic Review 109*(11), 3849–86.

Fiva, J. H., B. Geys, T.-R. Heggedal, and R. Sørensen (2021). Political Alignment and Bureaucratic Pay. *Journal of Public Administration Research and Theory 31*(3), 596–615.

Fouirnaies, A. and H. Mutlu-Eren (2015). English Bacon: Copartisan Bias in Intergovernmental Grant Allocation in England. *The Journal of Politics 77*(3), 805–817.

Gagliarducci, S., T. Nannicini, and P. Naticchioni (2011). Electoral Rules and Politicians' Behavior: A Micro Test. *American Economic Journal: Economic Policy 3*(3), 144–174.

Golden, M. and B. Min (2013). Distributive Politics Around the World. *Annual Review of Political Science 16*, 73–99.

Hanretty, C. (2021). The Pork Barrel Politics of the Towns Fund. *The Political Quarterly 92*(1), 7–13.

Lindbeck, A. and J. W. Weibull (1987). Balanced-Budget Redistribution as the Outcome of Political Competition. *Public choice 52*, 273–297.