

Appendix

The appendix provides complementary information on the data used in the paper as well as further robustness tests. In [Table A1](#), I have included information on whether a country used runoffs or not at the beginning of the 20th century and whether PR was adopted.

In [Table A2](#), I have listed the individual parties and the number of entries to runoffs by cleavage. A description of the variables that I have employed in the empirical analysis can be found in [Table A3](#). In addition, summary statistics can be found in [Table A4](#). The summary statistics are divided by treatment, i.e. whether a socialist candidate proceeded to runoffs or not. In the last two columns, I have included point estimates and the p-values ("est" and "pval") to investigate if the running variable is linked to other covariates. As in other parts of the robustness section, p-values are adjusted for multiple comparisons to avoid type II errors. The results show that there is no significant relationship between socialist entry and strategic party or voter behaviour except the formation of alliances and the vote share change of the non-socialist candidate in the runoff.

In [Figure A1](#), I employ a manipulation test to examine whether a disproportional number of observations is located below relative to above the cutoff (or vice versa). The figure as well as the corresponding hypothesis test suggest that there is no sorting around the threshold. The confidence intervals in [Figure A1](#) largely overlap and the p-value for the null hypothesis of no sorting is 0.82. In addition, [Figure A2](#) displays the discontinuities at the cutoff point in the RD plots.

The robustness section is divided into three parts. The first part covers electoral alliances. In the second part, I focus on the sensitivity of the results on vote share changes of non-socialist candidates in runoffs. Third, I conduct the same estimations as in the paper using the entry of candidates of other cleavages as treatment.

Starting with the robustness tests for electoral alliances, [Table A5](#) shows that the

results of the estimations are robust when using second-order polynomials. In [Table A6](#), I use lags (previous election) of electoral alliances and of the running variable as placebo tests. As expected, no specification is significant as the adjusted p-values show. [Table A7](#) presents the estimations using fake cutoff points. For cutoffs with positive values, I use only observations in which socialist candidates entered runoffs. In contrast, only runoffs without socialist candidates are used for cutoffs with negative values.⁵ Again, all placebo tests are not significant. Estimations with observations close to the cutoff are used in [Table A8](#). Here, the results are similar in significance and magnitude to the results presented in the main text. Lastly, the estimations without observations close to the cutoff are presented in [Table A9](#) and [Table A10](#). The results remain essential identical.

I continue with changes in vote share in [Table A11](#) using second-degree polynomials. In model 1 (Runoff Comb.), I use all observations. In contrast, I stratify the sample by excluding all cases in which alliances have been forged against socialist candidates (Cross-Cleavage/Right Margin: No) or in which no alliances have been forged against socialist candidates (Cross-Cleavage/Right Margin: Yes). The estimations are similar in magnitude and significance to those presented in [Figure 2](#). Furthermore, I repeat the same placebo tests as before by lagging the outcome ([Table A12](#)), the running variable ([Table A13](#)) and by using fake cutoffs ([Table A14](#), [Table A15](#), [Table A16](#), [Table A17](#)). The adjusted p-values demonstrate that all placebo test are not significant. In [Table A18](#), I employ the local randomization approach by exploiting only observations close to the cutoff. The magnitude of the point estimates is, again, similar to the results in the main text ([Figure 2](#)). In addition, I exclude observations close to the cutoff in [Table A19](#), [Table A20](#) and [Table A21](#). The estimations return the same results as presented in the main text.

In the last set of robustness tests, I use the entry of candidates of other cleavages to detect biases against other parties. For instance, I use the entry of Catholic candidates

⁵District FEs were not included in the specifications because estimations failed in most instances given that too few observations were available.

to investigate whether socialists, conservatives, liberals and minorities forged systematically alliances against the Catholics. However, [Figure A3](#) and [Figure A4](#) show that there is no systematic bias in alliance formation against specific non-socialist parties.⁶

The same is true for non-socialist party entry and vote share changes. As [Figure A5](#) demonstrates, there is no systematic bias for front-running candidates. Instead, front-running candidates appear to suffer electorally if a conservative candidate enters the runoff.⁷

Moreover, I examine another mechanism that links socialist entry to electoral support of non-socialist candidates by using turnout as the dependent variable. The results in [Figure A6](#) show that there is no evidence that the entry of socialist candidates to the runoffs increases turnout.

In the last subsection, I provide information on the adoption of PR in Imperial Germany to show that the evidence on electoral alliances is consistent with the preferences of parties towards PR.

Runoffs and PR Adoption

⁶Point estimates and confidence intervals diverge for minority parties. This can be explained by the low number of observations.

⁷A similar pattern exists for liberal candidates. However, estimates close to the cutoff are not significant.

Table A1: Pre-PR electoral systems in the first half of the 20th century
(PR adoption year in parenthesis)

Majoritarian system with runoffs	Plurality system without runoffs
Austrian Empire (1920)	Australia (STV 1918)
Belgium (1899)	Canada (-)
France (Mixed 1919)	Denmark (1915/1920)
Imperial Germany (1918)	Greece (1926)
Italy (1919)	Ireland (STV 1922)
Netherlands (1917)	Japan (SNTV 1925)
Norway (1919)	New Zealand (-)
Switzerland (1919)	Sweden (1908)
	United Kingdom (-)
	United States of America (-)

Source: Mackie and Rose (1982), Cusack et al. (2007) for the year of PR adoption in Sweden. STV: Single transferable vote. SNTV: Single nontransferable vote.

German Political Parties, 1890-1912

Conservatives		Liberals		Catholics		Minorities	
Party	Entry	Party	Entry	Party	Entry	Party	Entry
German Conservatives	219	National Liberal Party	337	Centre Party	120	Minorities ^a	70
Free Conservatives	103	Free-minded People's Party	82	State Party of Alsace-Lorraine	2		
German Reform Party	30	Progressive People's Party	41	Centre Party of Alsace-Lorraine	1		
German Agrarian League	20	German Free-minded Party	39				
German Social Party	18	Free-minded Union	32				
German Social Reform Party	12	German People's Party	21				
Christian Social Party	5	Bavarian Peasants' League	2				
Economic Union	3	German Peasants' League	1				
Anti-Semits	1	Democratic Union	1				
Middle Class Party	1						

Table A2: Individual Parties and Runoff Entry

^aPoles, Danes, Alsace-Lorraines, and Hanoverian Federalists.

Variable Description

Table A3: Variable Description

Variable	Description
Number of Parties Competition	Continuous variable; captures the number of parties that compete in the first round. Continuous variable; captures the vote margin of the two front-running candidates in the first round.
Percent Alliances I. Round	Continuous variable; calculates as $\frac{a_i}{a_i+c_i}$, where a_i is the number of parties without running candidates that support candidates of other parties and c_i is the number of parties with candidates that stand for election in the first round.
Vote Fractionalization	Continuous variable; captures the vote share of the front-running non-socialist candidate.
Catholic Candidate	Dummy variable; captures whether the front-running candidate's party belongs to the catholic camp (see Table A2) or not.
Conservative Candidate	Dummy variable; captures whether the front-running candidate's party belongs to the conservative camp (see Table A2) or not.
Liberal Candidate	Dummy variable; captures whether the front-running candidate's party belongs to the liberal camp (see Table A2) or not.
Minority Candidate	Dummy variable; captures whether the front-running candidate's party belongs to the minority camp (see Table A2) or not.
Cross-Cleavage Alliance	Dummy variable; captures whether a cross-cleavage alliance was formed in the runoff that did not exist in the first round.
Right Margin	Dummy variable; captures whether the front-running non-socialist candidate was supported by the party of the electorally strongest non-socialist candidate that did not enter the runoff.
Vote Share Difference Non-Socialist	Continuous variable, captures the change of second and first round vote share of the front-running non-socialist candidate.

All data come from Reibel (2007).

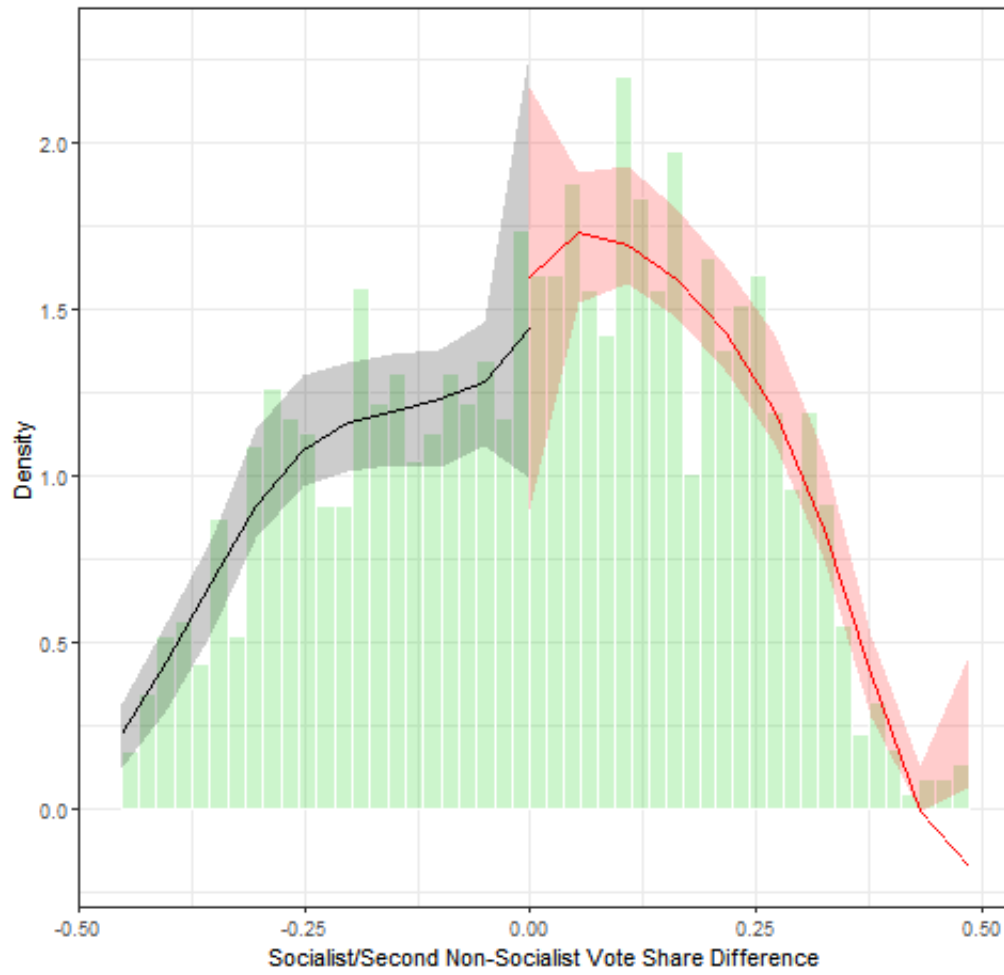
Summary Statistics and RD Assumptions of Running Variable

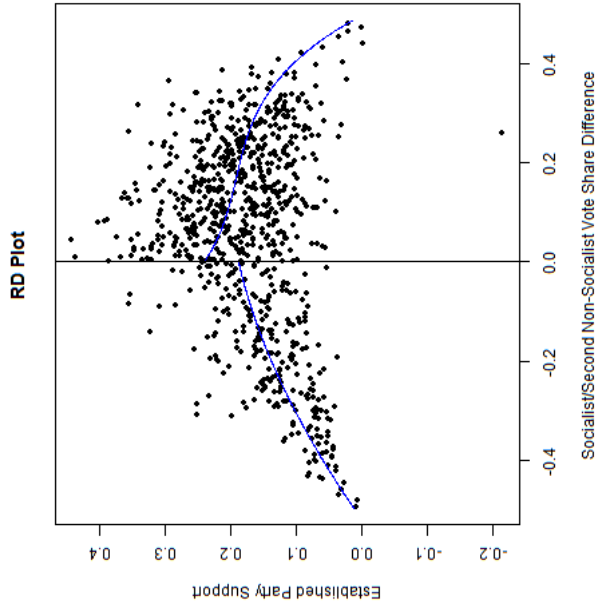
Table A4: Summary Statistics

	Socialist in Runoff									
	No					Yes				
	mean	sd	min	max	mean	sd	min	max	est	pval
Number of Parties	3.97765	0.85271	2.000000	7.0000	4.05751	0.91208	3.000000	7.0000	0.4077926	0.153056
Competition	0.08977	0.06565	0.000118	0.2984	0.10301	0.06960	0.0003912	0.3185	0.0010099	0.955327
Percent Alliances I. Round	0.14542	0.17044	0.000000	0.6667	0.20491	0.18371	0.000000	0.7500	-0.0061421	0.955327
Vote Fractionalization	0.42113	0.05487	0.2541486	0.4987	0.35245	0.07440	0.1680197	0.4970	-0.0002775	0.955327
Catholic Candidate	0.13408	0.34105	0.000000	1.0000	0.07827	0.26882	0.000000	1.0000	0.0264747	0.955327
Conservative Candidate	0.37616	0.48487	0.000000	1.0000	0.34185	0.47471	0.000000	1.0000	0.0186273	0.955327
Liberal Candidate	0.38175	0.48627	0.000000	1.0000	0.56070	0.49670	0.000000	1.0000	0.0247147	0.955327
Minority Candidate	0.10801	0.31068	0.000000	1.0000	0.01917	0.13723	0.000000	1.0000	-0.0528386	0.709019
Cross-Cleavage Alliance	0.16574	0.37219	0.000000	1.0000	0.48243	0.50009	0.000000	1.0000	0.3645492	0.001827
Right Margin	0.15456	0.36182	0.000000	1.0000	0.36102	0.48068	0.000000	1.0000	0.2422350	0.018795
Vote Share Difference Non-Socialist	0.13594	0.08362	-0.0022938	0.5678	0.19020	0.07867	-0.2143742	0.5281	0.0496766	0.021799

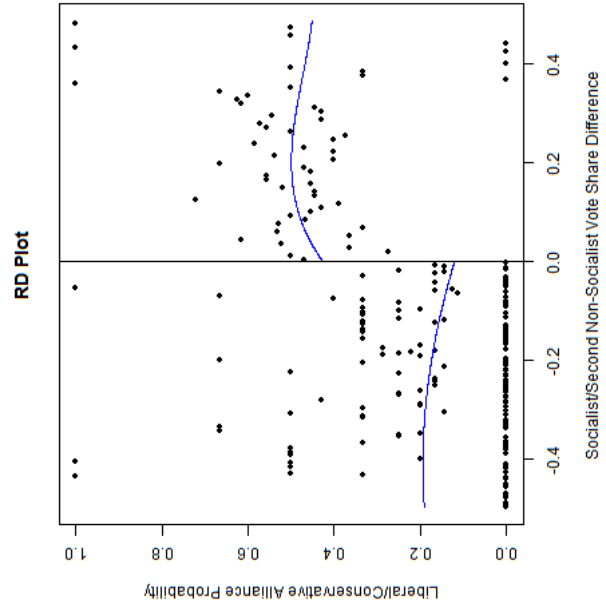
Sorting Around the Threshold

Figure A1: Manipulation Test Plot

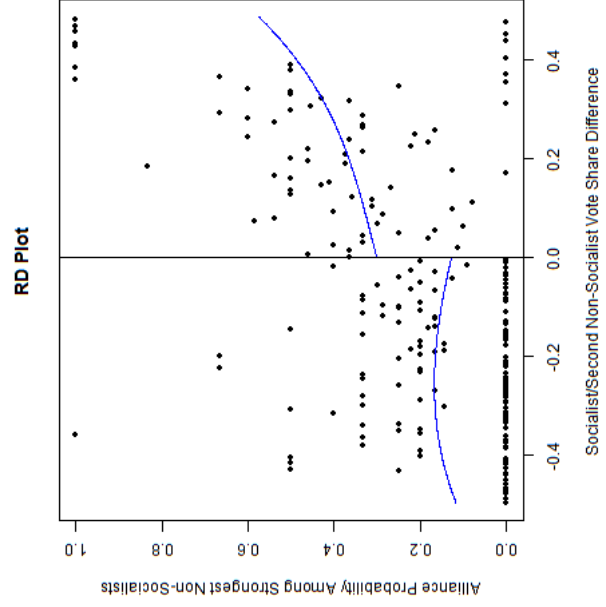




(a) Established Party Support (Vote Share Changes)



(b) Liberal-Conservative Alliances



(c) Alliances of Front-running Non-Socialist Parties

Figure A2: RD Plots for Socialist Entry, Non-Socialist Alliance Formation, and Established Party Support

Robustness Tests - Electoral Alliances

	Cleavage	Right Margin
	Model 1	Model 2
Socialist in Run-Off	0.35* [0.15;0.59]	0.29* [0.07;0.55]
Adjust. p-value	0.01	0.08
Bandwidth	0.17	0.14
Obs. below cutoff	257	220
Obs. above cutoff	348	283
Total Obs.	1163	1163
Controls	✓	✓
District FE	✓	✓
Year FE	✓	✓
Party FE	✓	✓

95% Cluster-Robust Confidence Intervals reported.

Table A5: Electoral Alliances - Second-Degree Polynomials

	Lagged Outcome		Lagged Treatment	
	Cleavage	Right Margin	Cleavage	Right Margin
	Model 1	Model 2	Model 3	Model 4
Socialist in Run-Off	-0.08 [-0.34;0.14]	0.00 [-0.18;0.20]	-0.16 [-0.43;0.06]	0.15 [-0.05;0.39]
Adjust. p-value	0.76	0.93	0.49	0.49
Bandwidth	0.13	0.16	0.11	0.13
Obs. below cutoff	146	170	141	162
Obs. above cutoff	224	275	180	216
Total Obs.	886	886	886	886
Controls	✓	✓	✓	✓
District FE	✓	✓	✓	✓
Year FE	✓	✓	✓	✓
Party FE	✓	✓	✓	✓

95% Cluster-Robust Confidence Intervals reported.

Table A6: Placebo Test Lagged Outcome/Running Variable

	Cleavage				Right Margin			
	6%	12%	-6%	-12%	6%	12%	-6%	-12%
Socialist in Run-Off	0.26 [-0.23; 0.83]	0.17 [-0.17; 0.56]	0.01 [-0.25; 0.35]	-0.12 [-0.51; 0.22]	-0.00 [-0.44; 0.35]	0.12 [-0.29; 0.47]	-0.01 [-0.37; 0.27]	-0.06 [-0.44; 0.32]
Adjust. p-value	0.68	0.68	0.87	0.76	0.88	0.87	0.87	0.87
Bandwidth	0.03	0.04	0.03	0.04	0.03	0.03	0.03	0.04
Obs. below cutoff	57	85	46	55	63	69	44	56
Obs. above cutoff	49	82	42	57	55	65	41	58
Total Obs.	626	626	537	537	626	626	537	537
Controls	✓	✓	✓	✓	✓	✓	✓	✓
District FE	X	X	X	X	X	X	X	X
Year FE	✓	✓	✓	✓	✓	✓	✓	✓
Party FE	✓	✓	✓	✓	✓	✓	✓	✓

95% Cluster-Robust Confidence Intervals reported.

Table A7: Placebo Test Fake Cutoff

	Cross-Cleavage	Right Margin
Socialist in Runoff	0.35	0.26
p-value	0.00	0.01
Bandwidth	0.02	0.02
Obs. above cutoff	42.00	42.00
Obs. below cutoff	40.00	40.00
Total obs.	1163.00	1163.00

Table A8: Electoral Alliances: Randomized Inference

RDD Est.	Lower CI	Upper CI	Donut-Hole Radius	Num. Obs.	Excl. Obs. Right	Excl. Obs. Right
0.33	0.15	0.55	0.000	381	0	0
0.34	0.15	0.57	0.001	388	1	3
0.33	0.15	0.57	0.002	389	1	4
0.36	0.17	0.61	0.003	413	4	6
0.39	0.21	0.64	0.004	412	6	8
0.40	0.19	0.68	0.005	347	8	12

Table A9: Donut regression (Cleavages)

RDD Est.	Lower CI	Upper CI	Donut-Hole Radius	Num. Obs.	Excl. Obs. Right	Excl. Obs. Right
0.22	0.07	0.43	0.000	409	0	0
0.22	0.07	0.42	0.001	455	1	3
0.21	0.06	0.41	0.002	469	1	4
0.24	0.08	0.45	0.003	439	4	6
0.20	0.05	0.39	0.004	544	6	8
0.22	0.05	0.44	0.005	348	8	12

Table A10: Donut regression (Right Margin)

Robustness Tests - Established Party Support

	Runoff	Cross-Cleavage		Right Margin	
	Yes	No	Yes	No	Yes
Socialist in Run-Off	0.06* [0.02; 0.09]	0.04 [-0.00; 0.08]	0.08* [0.04; 0.13]	0.03 [-0.01; 0.07]	0.09* [0.06; 0.13]
Adjust. p-value	0.02	0.57	0.00	0.78	0.00
Bandwidth	0.13	0.15	0.13	0.14	0.14
Obs. below cutoff	200	226	197	220	219
Obs. above cutoff	270	156	123	195	87
Total Obs.	1163	861	839	937	763
Controls	✓	✓	✓	✓	✓
District FE	✓	✓	✓	✓	✓
Year FE	✓	✓	✓	✓	✓
Party FE	✓	✓	✓	✓	✓

95% Cluster-Robust Confidence Intervals reported.

Table A11: Established Party Support - Second-Degree Polynomials

	Runoff		Cross-Cleavage		Right Margin	
	Yes	No	Yes	No	Yes	No
Socialist in Run-Off	-0.00 [-0.05;0.03]	-0.01 [-0.06;0.03]	0.00 [-0.05;0.05]	-0.01 [-0.06;0.03]	0.00 [-0.05;0.05]	
Adjust. p-value	0.98	0.90	0.98	0.90	0.98	
Bandwidth	0.12	0.10	0.15	0.10	0.15	
Obs. below cutoff	139	124	162	121	165	
Obs. above cutoff	198	88	122	101	87	
Total Obs.	886	614	624	681	557	
Controls	✓	✓	✓	✓	✓	
District FE	✓	✓	✓	✓	✓	
Year FE	✓	✓	✓	✓	✓	
Party FE	✓	✓	✓	✓	✓	

95% Cluster-Robust Confidence Intervals reported.

Table A12: Established Party Support - Placebo Lagged Outcome

	Runoff		Cross-Cleavage		Right Margin	
	Yes	No	Yes	No	Yes	No
Socialist in Run-Off	0.01 [-0.03;0.04]	0.01 [-0.03;0.06]	0.01 [-0.03;0.05]	0.01 [-0.04;0.04]	0.01 [-0.03;0.05]	
Adjust. p-value	0.90	0.90	0.90	0.98	0.90	
Bandwidth	0.09	0.10	0.09	0.08	0.12	
Obs. below cutoff	120	84	79	86	88	
Obs. above cutoff	143	101	82	85	98	
Total Obs.	886	614	624	681	557	
Controls	✓	✓	✓	✓	✓	
District FE	✓	✓	✓	✓	✓	
Year FE	✓	✓	✓	✓	✓	
Party FE	✓	✓	✓	✓	✓	

95% Cluster-Robust Confidence Intervals reported.

Table A13: Established Party Support - Lagged Running Variable

	Runoff		Cross-Cleavage		Right Margin	
	Yes	No	Yes	No	Yes	No
Socialist in Run-Off	0.01 [-0.04;0.07]	-0.04 [-0.11;0.04]	0.01 [-0.05;0.06]	0.02 [-0.04;0.08]	-0.02 [-0.16;0.09]	
Adjust. p-value	0.90	0.90	0.98	0.90	0.90	
Bandwidth	0.02	0.02	0.03	0.02	0.02	
Obs. below cutoff	40	29	29	37	14	
Obs. above cutoff	36	21	27	27	19	
Total Obs.	626	324	302	400	226	
Controls	✓	✓	✓	✓	✓	
District FE	X	X	X	X	X	
Year FE	✓	✓	✓	✓	✓	
Party FE	✓	✓	✓	✓	✓	

95% Cluster-Robust Confidence Intervals reported.

Table A14: Established Party Support - Fake Cutoff 6%

	Runoff		Cross-Cleavage		Right Margin	
	Yes	No	Yes	No	Yes	No
Socialist in Run-Off	-0.00 [-0.07; 0.07]	-0.01 [-0.12; 0.08]	0.01 [-0.05; 0.06]	-0.00 [-0.09; 0.08]	0.01 [-0.02; 0.05]	
Adjust. p-value	0.98	0.98	0.98	0.98	0.90	
Bandwidth	0.03	0.03	0.04	0.03	0.04	
Obs. below cutoff	68	39	33	56	27	
Obs. above cutoff	63	27	42	45	36	
Total Obs.	626	324	302	400	226	
Controls	✓	✓	✓	✓	✓	
District FE	X	X	X	X	X	
Year FE	✓	✓	✓	✓	✓	
Party FE	✓	✓	✓	✓	✓	

95% Cluster-Robust Confidence Intervals reported.

Table A15: Established Party Support - Fake Cutoff 12%

	Runoff		Cross-Cleavage		Right Margin	
	Yes	No	Yes	No	Yes	No
Socialist in Run-Off	-0.03 [-0.10; 0.05]	-0.05 [-0.13; 0.03]	0.06* [0.01; 0.15]	-0.05 [-0.12; 0.04]	0.02 [-0.05; 0.04]	
Adjust. p-value	0.90	0.90	0.18	0.90	0.98	
Bandwidth	0.03	0.05	0.05	0.04	0.05	
Obs. below cutoff	51	57	12	51	13	
Obs. above cutoff	48	69	9	52	12	
Total Obs.	537	448	89	454	83	
Controls	✓	✓	✓	✓	✓	
District FE	X	X	X	X	X	
Year FE	✓	✓	✓	✓	✓	
Party FE	✓	✓	✓	✓	✓	

95% Cluster-Robust Confidence Intervals reported.

Table A16: Established Party Support - Fake Cutoff -6%

	Runoff		Cross-Cleavage		Right Margin	
	Yes	No	Yes	No	Yes	No
Socialist in Run-Off	0.02 [-0.02; 0.08]	-0.01 [-0.05; 0.02]	0.01 [-0.06; 0.06]	-0.01 [-0.05; 0.02]	0.02 [-0.04; 0.09]	
Adjust. p-value	0.90	0.90	0.98	0.90	0.90	
Bandwidth	0.03	0.14	0.09	0.12	0.08	
Obs. below cutoff	38	162	23	136	21	
Obs. above cutoff	38	180	20	158	19	
Total Obs.	537	772	391	854	309	
Controls	✓	✓	✓	✓	✓	
District FE	X	X	X	X	X	
Year FE	✓	✓	✓	✓	✓	
Party FE	✓	✓	✓	✓	✓	

95% Cluster-Robust Confidence Intervals reported.

Table A17: Established Party Support - Fake Cutoff -12%

	Runoff Comb.	Cross-Cleavage		Right Margin	
	Yes	No	Yes	No	Yes
Socialist in Runoff	0.05	0.01	0.08	0.04	0.10
p-value	0.01	0.64	0.01	0.14	0.00
Bandwidth	0.02	0.01	0.01	0.02	0.02
Obs. above cutoff	42.00	20.00	20.00	36.00	50.00
Obs. below cutoff	40.00	10.00	10.00	20.00	15.00
Total obs.	1163.00	861.00	839.00	937.00	763.00

Table A18: Established Party Support: Randomized Inference

RDD Est.	Lower CI	Upper CI	Donut-Hole Radius	Num. Obs.	Excl. Obs.	Obs. Right	Excl. Obs.	Obs. Right	Excl. Obs.
0.06	0.03	0.09	0.002	400		1		4	
0.06	0.04	0.09	0.003	386		4		6	
0.06	0.04	0.09	0.004	412		6		8	
0.06	0.03	0.08	0.005	401		8		12	

Table A19: Donut regression

RDD Est.	Lower CI	Upper CI	Donut-Hole Radius	Num. Obs.	Excl. Obs. Right	Excl. Obs. Right
0.07	0.04	0.10	0.002	366	1	4
0.07	0.04	0.10	0.003	336	4	6
0.06	0.04	0.10	0.004	363	6	8
0.06	0.03	0.09	0.005	313	8	12

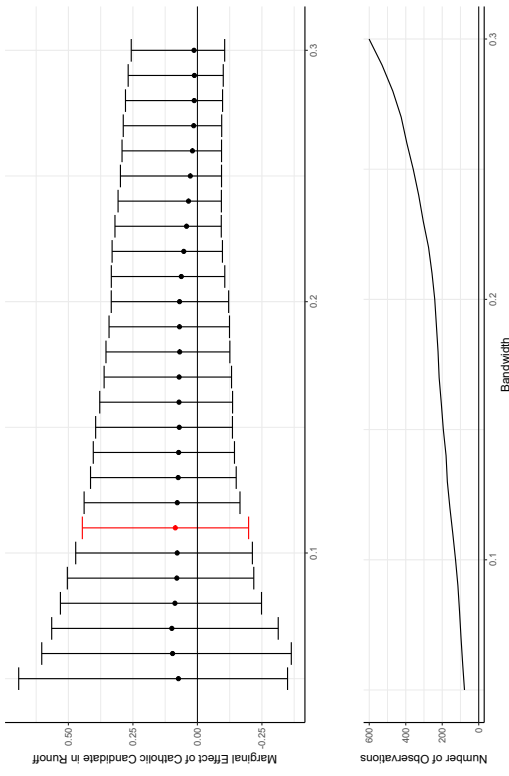
Table A20: Donut regression (Cleavage)

RDD Est.	Lower CI	Upper CI	Donut-Hole Radius	Num. Obs.	Excl. Obs.	Obs. Right	Excl. Obs.	Obs. Right
0.09	0.06	0.12	0.002	251		1		4
0.09	0.06	0.13	0.003	236		4		6
0.09	0.06	0.13	0.004	250		6		8
0.09	0.06	0.12	0.005	242		8		12

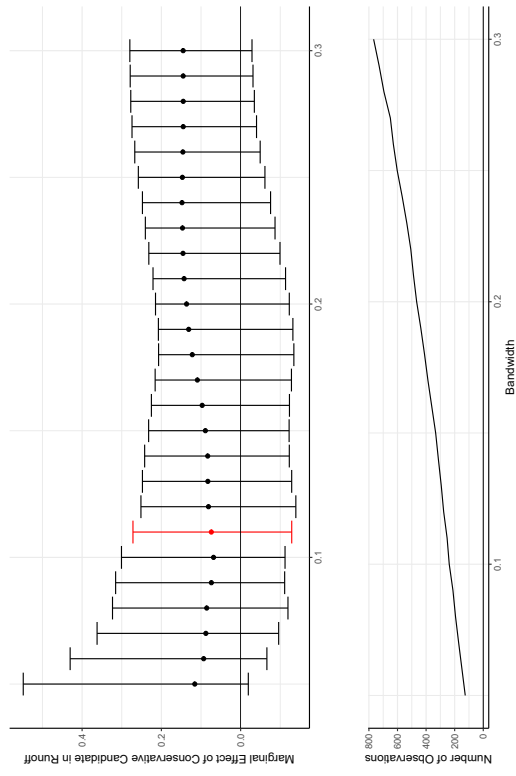
Table A21: Donut regression (Right Margin)

Robustness Tests - Alternative Cleavages

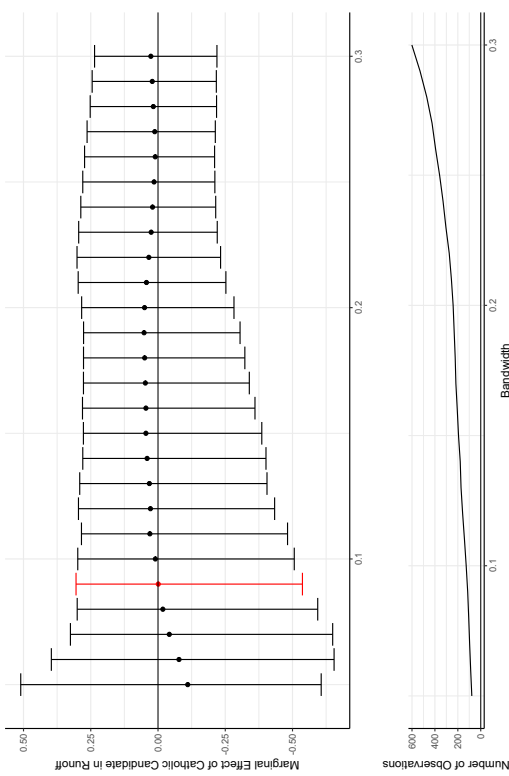
Electoral Alliances



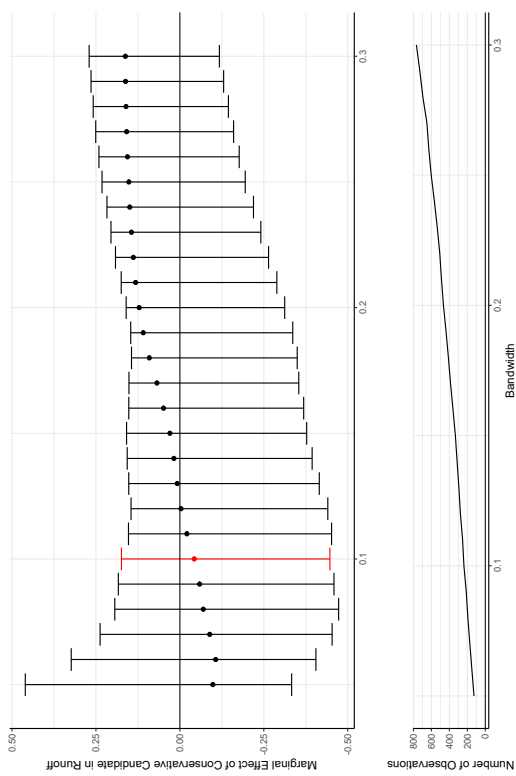
(b) Catholic (Right Margin)



(d) Conservative (Right Margin)

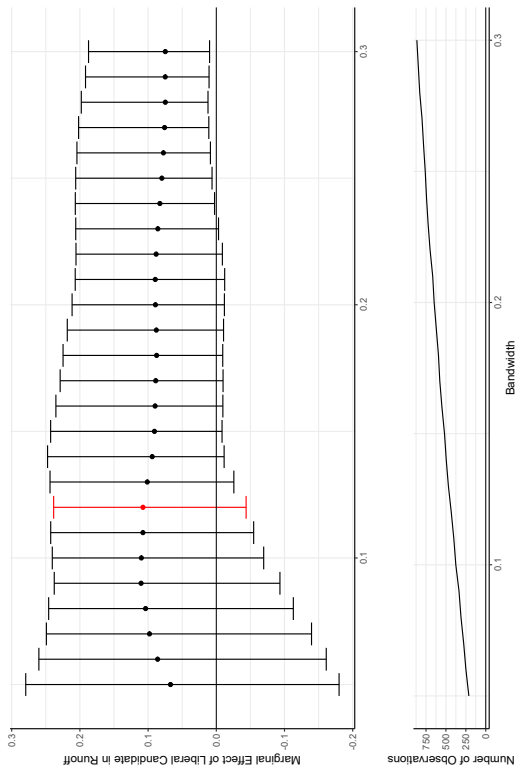


(a) Catholic (Cross-Cleavage)

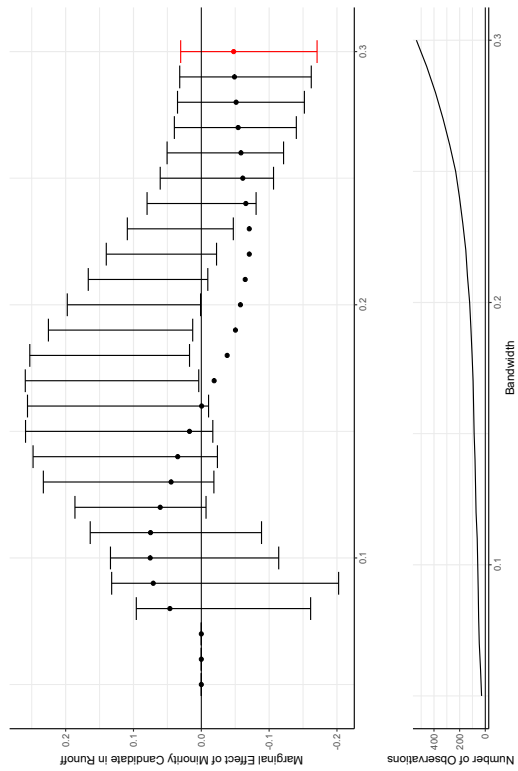


(c) Conservative (Cross-Cleavage)

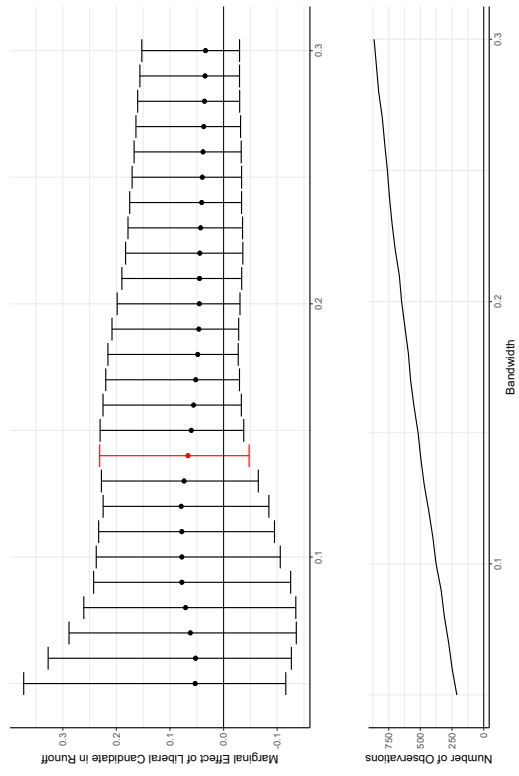
Figure A3: Party Entry and Electoral Alliances Part I. Optimal Bandwidth displayed in red.



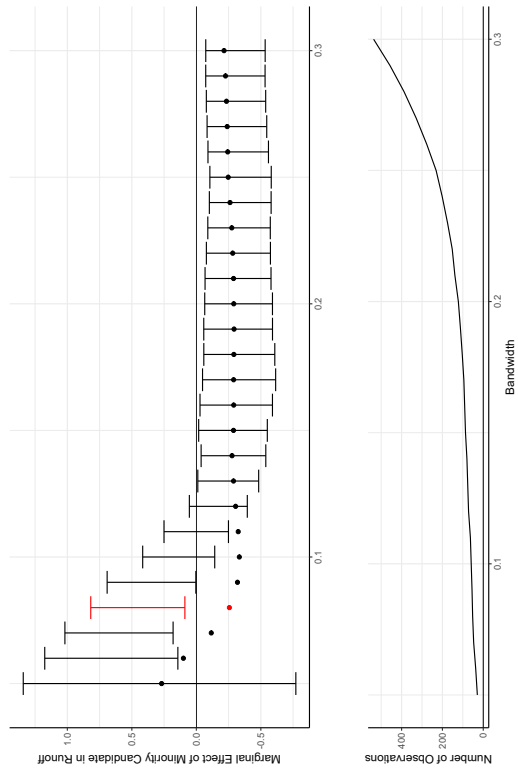
(a) Liberal (Cross-Cleavage)



(c) Minority (Cross-Cleavage)



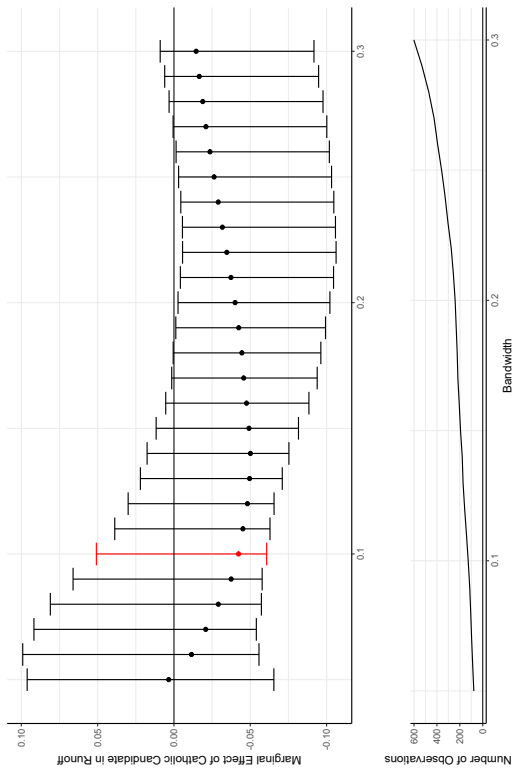
(b) Liberal (Right Margin)



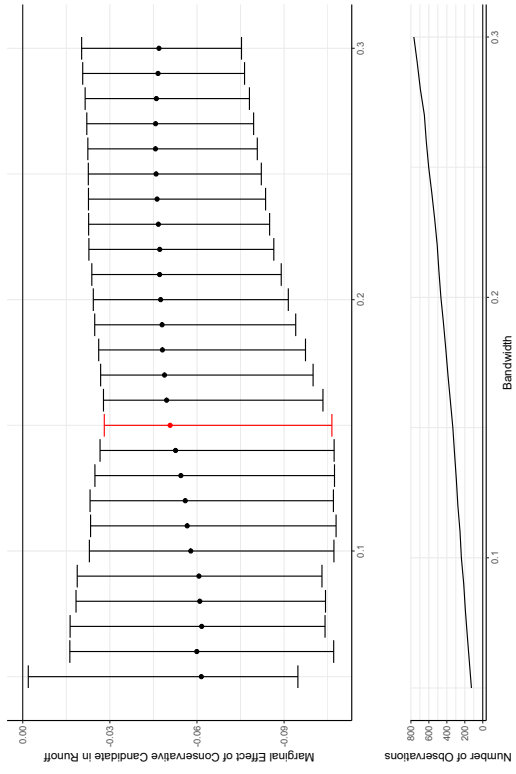
(d) Minority (Right Margin)

Figure A4: Party Entry and Electoral Alliances Part II. Optimal Bandwidth displayed in red.

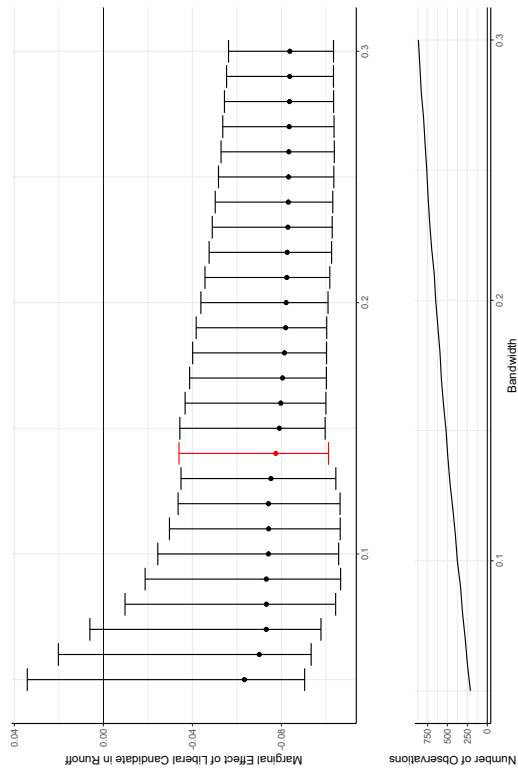
Party Support



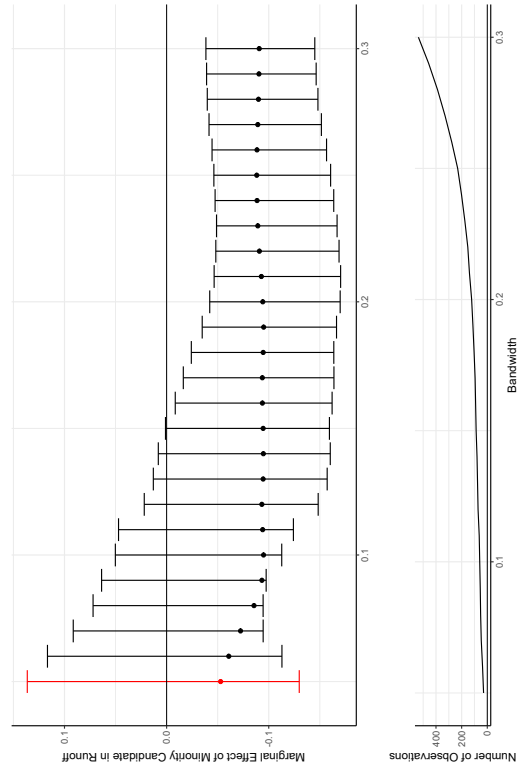
(a) Catholic Party Entry



(b) Conservative Party Entry



(c) Liberal Party Entry



(d) Minority Party Entry

Figure A5: Party Entry and Support. Optimal Bandwidth displayed in red.

Turnout as an alternative mechanism

The Introduction of PR in Imperial Germany

In the paper, I have shown that the camp of non-socialist parties was successful in solving coordination problems against the SPD by forging electoral alliances. In the following, I provide evidence that only the SPD favored PR while the other parties opposed PR fiercely.

There is some confusion about the timing of the introduction of PR in Imperial Germany. Most widely known is the analysis by Leemann and Mares (2014). However, they analyzed a proposal that did not introduce PR but a mixed system. Before the mixed system was adopted in 1918, Germany's MR system consisted of 397 single member districts (SMDs). The mixed system increased the number of seats to 441 but maintained 361 SMDs. Put differently, about 82% of all parliamentary seats were contested in SMDs under the new system. The other districts became multi member districts (MMD) because they were either merged or had experienced considerable population growth. In the MMDs, seats were distributed using the d'Hondt formula. The average district magnitude of the MMDs was 3.1 with a median of 2 and thus rather small (Schröder and Manow 2014).

Importantly, the motivation for the introduction of the mixed system was unrelated to coordination issues. The new system was the first successful attempt of the non-socialist urban parties (National Liberals, Left Liberals) to account for population growth since the founding of Imperial Germany. Malapportionment was considerable because electoral districts were not adjusted in the period 1871-1918 (Boix 2010, 406).

In contrast, the social democrats were the only party that pushed for the introduction of PR with MMDs across the country in 1918. However, the social democratic proposal was rejected by all other parties in parliament, even both liberal parties (Huber 1978, 473). The Left Liberals forwarded an alternative proposal (the mixed system) that would have created MMDs in some cities but maintain most SMDs. Only the con-

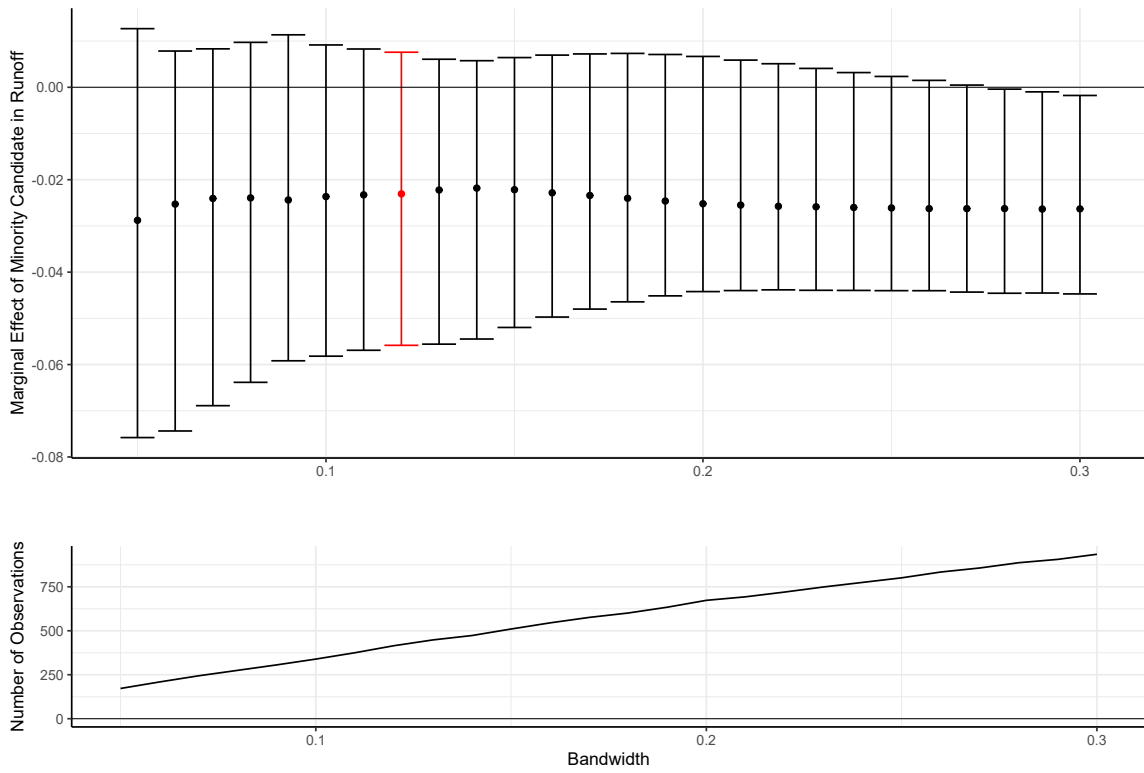


Figure A6: Socialist Entry and Changes in Turnout Rates

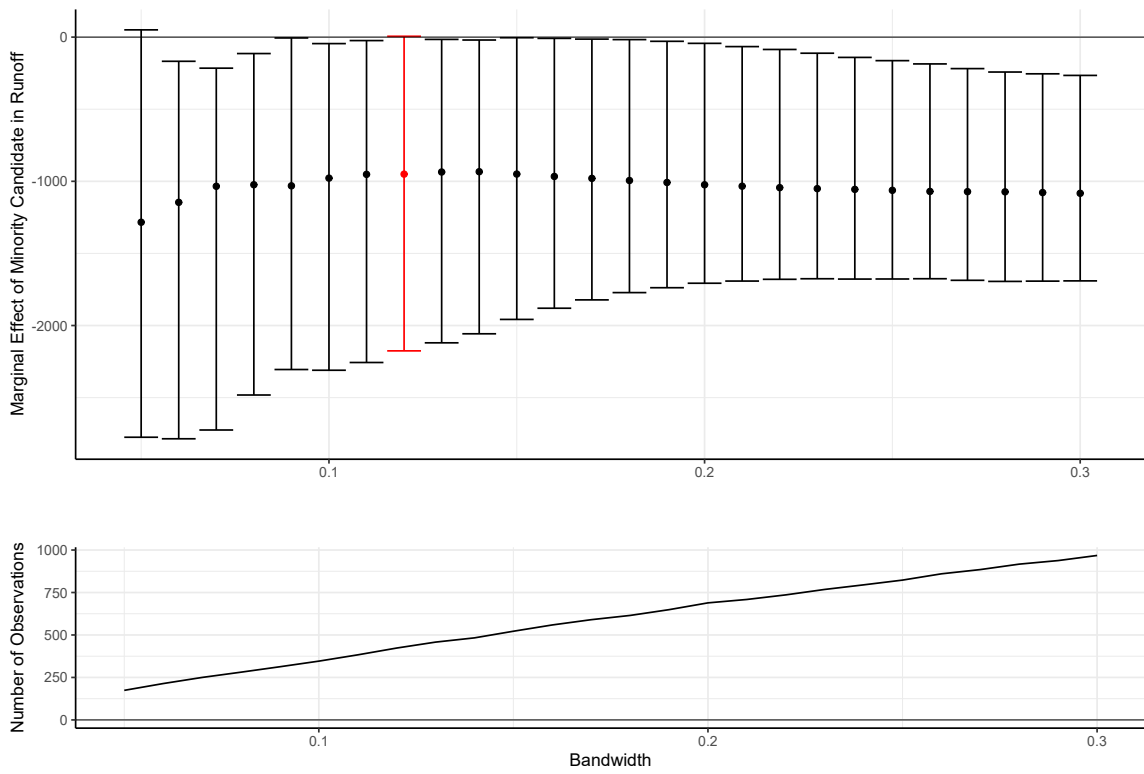


Figure A7: Socialist Entry and Changes in Raw Turnout Numbers

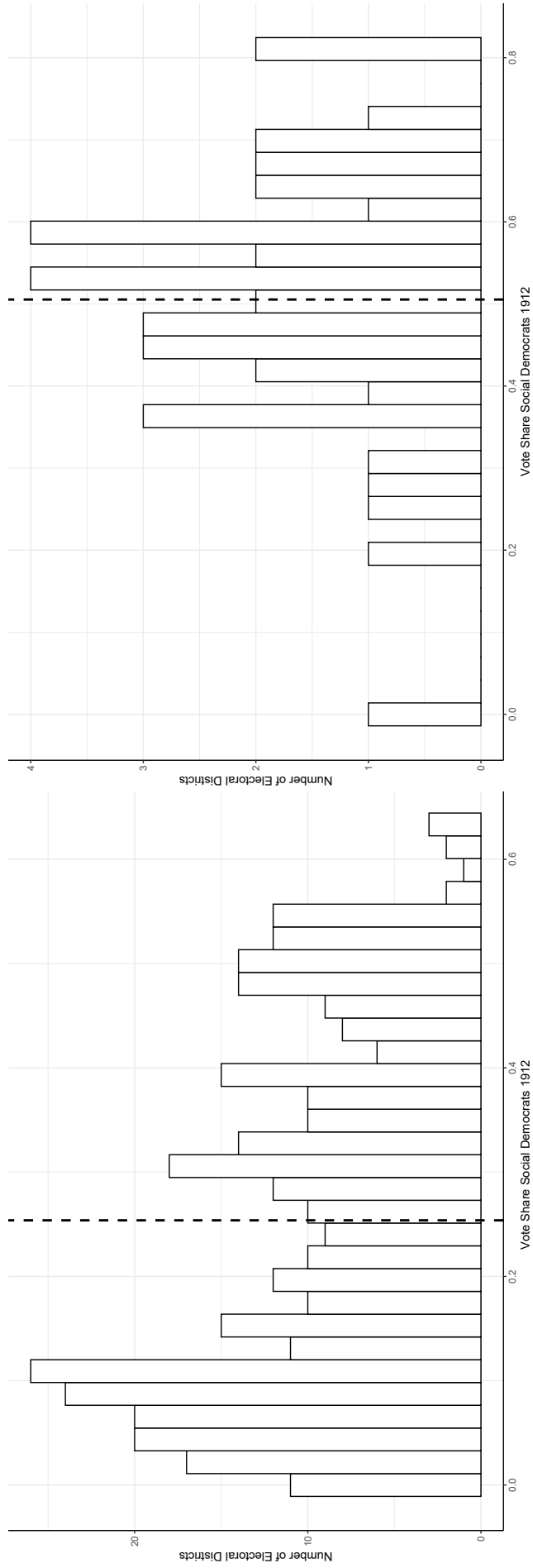
servatives opposed the mixed system because reapportionment would weaken their parliamentary position by increasing the number of seats in urban districts (Schröder and Manow 2014, 539). Given that all non-socialist parties opposed PR with MMDs across the country, the social democrats endorsed the mixed system. With the support of all parties except the conservatives, the mixed system was adopted.⁸

The social democrats supported the proposal because it would increase their parliamentary presence by increasing the assembly size via reapportionment (Schröder and Manow 2014). However, the reform was unrelated to coordination problems. As I show below, the decision to allocate seats to some districts while maintaining SMDs in others cases was even tailored to the needs of the non-socialist parties.

In [Figure A8](#), I have provided the distribution of first round vote shares of the social democrats in 1912 based on whether the districts became MMDs or remained SMDs. In addition, the median of the distribution is displayed as a dashed line. The right plot shows that in the majority of MMDs, the social democrats obtained an absolute majority in the first round (median 53%). In these cases, coordination among non-socialist parties was not an issue because even a unified right bloc would have not been able to snatch a seat from the social democrats. In contrast, a considerable number of SMDs were maintained in which social democrats won more than 30% of the vote but did not receive an absolute majority. Put differently, socialist candidates had the electoral support to benefit from coordination failures if the latter had existed. However, the decision of non-socialist parties to maintain these districts provides additional evidence that coordination was not a significant issue.

In contrast, the creation of MMDs can be, at least, partly seen as an attempt of the non-socialist parties to make inroads into social democratic strongholds. In [Figure A9](#), I have provided a scatter plot with a regression line that displays the relationship

⁸In the vote analyzed by Leemann and Mares (2014), parties voted only on a specific feature of the mixed system. More specifically, the controversial paragraph contained an "automatic" reapportionment mechanism, meaning that the district magnitude ought to be adjusted to population growth in the future. Both rural parties, the conservatives and the Center party, opposed the part of the proposal while the social democrats and the liberal parties supported it.



(b) MMDs

(a) SMDs

Figure A8: Distribution of Vote Shares (First Round) of Social Democrats in 1912 by SMDs and MMDs of 1918 Proposal (Mixed System)

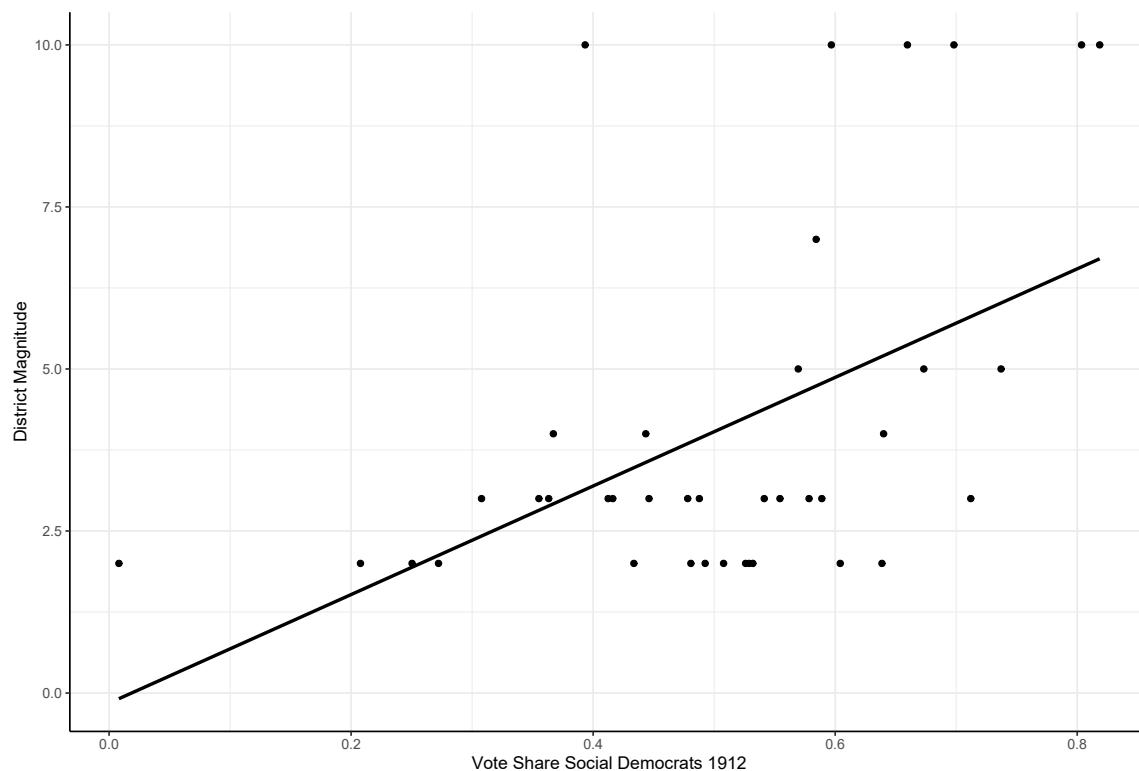


Figure A9: Relationship between District Magnitude and Social Democratic Vote Share in MMDs in the 1918 Proposal (Mixed System)

between district magnitude and the social democratic vote share in 1912 in the newly formed MMDs. It shows that district magnitude increases with social democratic vote share which suggests that the decision to merge SMDs and allocate seats was to the disadvantage of the social democrats. Put differently, the creation of MMDs in urban areas would have reduced vote-seat distortions that favored the social democrats.

The social democrats were well aware of the distributional implications of the mixed system. In the parliamentary debates, the social democratic MP Herzfeld argued: "[The statement of the government] increases my confidence that the law is an exceptional law against the workers [...] It is a fact that the concentration of workers in the large electoral districts [the newly founded MMDs] prevented the minorities from gaining representation. We do not complain that they can gain representation under proportional representation but we complain that workers, where they are a significant minority, do not have the same right because proportional representation is not applied in those electoral districts" (parliamentary protocols, session 186, 08.07.1918,

p. 5921-5922).

However, the mixed system was never implemented. Only few months later, after the defeat in the First World War, the Social Democratic Party as well as the newly formed Independent Social Democratic Party assumed power in the Council of the People's Deputies (Rat der Volksbeauftragten). The Council of the People's Deputies discussed and decided on the new electoral law, including the question of electoral districts, within two weeks (Schanbacher 1982, 49-52). As a result, the body consisting exclusively of social democrats decreed the electoral system with district magnitudes ranging from 6 to 17 seats.

In conclusion, there is no evidence that PR was introduced because non-socialist parties failed to coordinate on a larger scale. In fact, all non-socialist parties opposed PR to the very end which is in line with the evidence presented in the paper. A more consistent interpretation is that the mixed system with few MMDs was introduced to minimize vote-seat distortions that favored the social democrats while leaving all other seat-vote distortions untouched. PR with MMDs across the country was only introduced after the social democrats were able to overcome the opposition of the non-socialist parties in a revolutionary situation.

Balance Statistics for Electoral Alliances

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Table A22: Balance Statistics Cross-Cleavage

	Cross-Cleavage Alliance									
	No					Yes				
	mean	sd	min	max	mean	sd	min	max	est	pval
Number of Parties	3.92746	0.85220	2.000000	7.0000	4.20460	0.92214	2.000000	7.0000	0.277	0.000
Competition	0.09625	0.06716	0.0001118	0.3185	0.09817	0.06999	0.0003912	0.2995	0.002	0.738
Percent Alliances I. Round	0.18532	0.18616	0.000000	0.7500	0.16187	0.16660	0.000000	0.6667	-0.023	0.053
Vote Fractionalization	0.39847	0.06897	0.1842767	0.4987	0.35590	0.07678	0.1680197	0.4985	-0.043	0.000
Catholic Candidate	0.09326	0.29099	0.000000	1.0000	0.12532	0.33151	0.000000	1.0000	0.032	0.158
Conservative Candidate	0.35881	0.47996	0.000000	1.0000	0.35550	0.47928	0.000000	1.0000	-0.003	0.911
Liberal Candidate	0.46632	0.49919	0.000000	1.0000	0.50128	0.50064	0.000000	1.0000	0.035	0.335
Minority Candidate	0.08161	0.27394	0.000000	1.0000	0.01790	0.13277	0.000000	1.0000	-0.064	0.000
Socialist Candidate	0.41969	0.49383	0.000000	1.0000	0.77238	0.41983	0.000000	1.0000	0.353	0.000

Table A23: Balance Statistics Right Margin

	No						Yes					
	mean	sd	min	max	mean	sd	min	max	est	pval		
Number of Parties	3.96838	0.87972	2.000000	7.0000	4.16505	0.88747	3.000000	7.0000	0.197	0.002		
Competition	0.09614	0.06743	0.0001118	0.3185	0.09898	0.06997	0.0003912	0.3087	0.003	0.634		
Percent Alliances I. Round	0.17590	0.18012	0.000000	0.7500	0.18170	0.18023	0.000000	0.6667	0.006	0.634		
Vote Fractionalization	0.39397	0.07127	0.1680197	0.4987	0.35704	0.07633	0.1842767	0.4985	-0.037	0.000		
Catholic Candidate	0.10656	0.30873	0.000000	1.0000	0.09709	0.29656	0.000000	1.0000	-0.009	0.634		
Conservative Candidate	0.36417	0.48148	0.000000	1.0000	0.33981	0.47441	0.000000	1.0000	-0.024	0.634		
Liberal Candidate	0.45316	0.49809	0.000000	1.0000	0.54693	0.49860	0.000000	1.0000	0.094	0.009		
Minority Candidate	0.07611	0.26533	0.000000	1.0000	0.01618	0.12638	0.000000	1.0000	-0.060	0.000		
Socialist Candidate	0.46838	0.49929	0.000000	1.0000	0.73139	0.44395	0.000000	1.0000	0.263	0.000		

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