

Hidden Majoritarianism and Women's Career Progression in Proportional Representation Systems*

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Online Appendix

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Appendix A

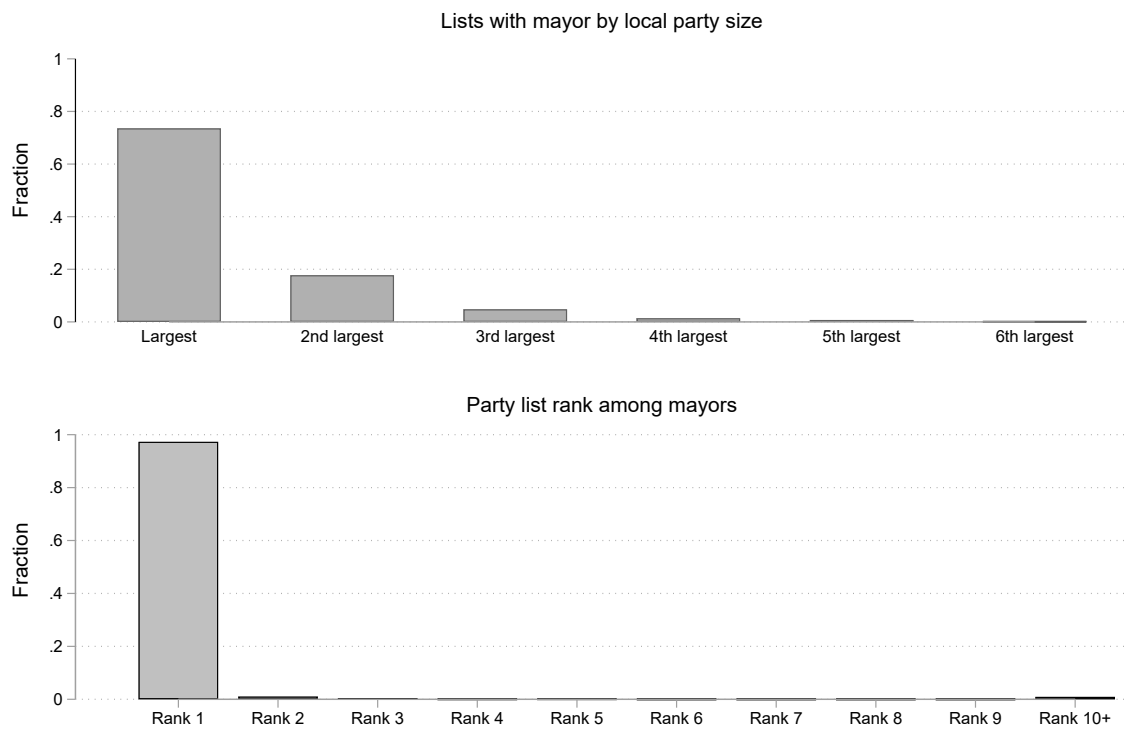


Figure A.1: Mayors tend to come from the largest party and top rank

Note: The top panel plots the fraction of mayors who come from the largest party, second largest party, etc., following municipal assembly elections from 2003-2023. The bottom panel plots the fraction of each party list rank among those selected to serve as mayor.

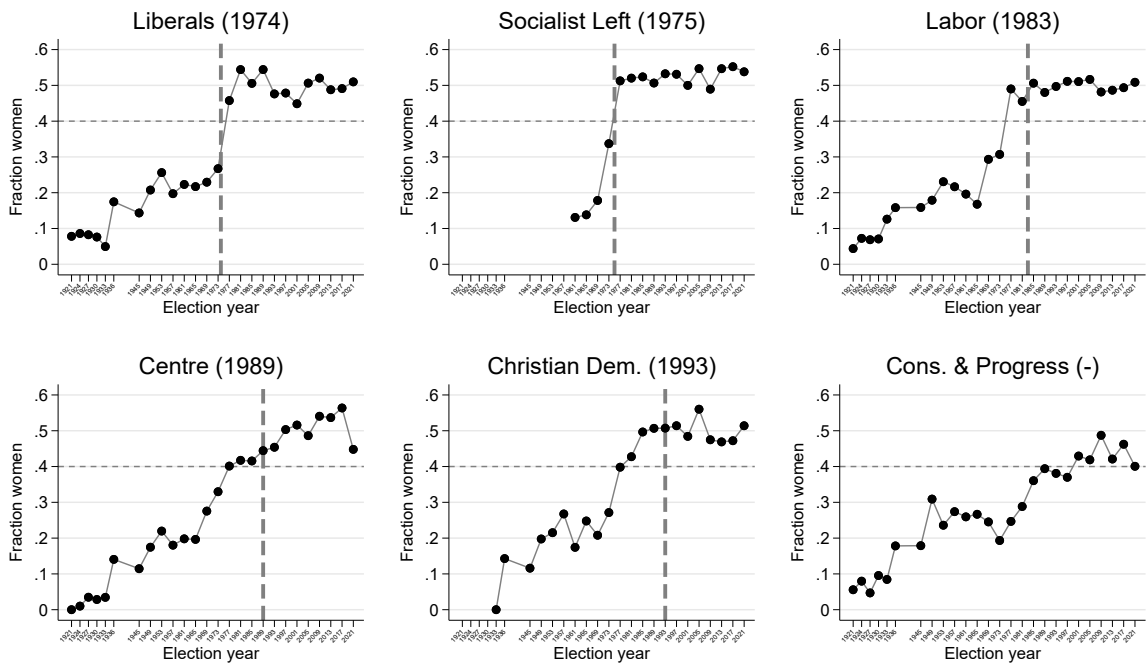


Figure A.2: Women’s representation was trending upwards before the adoption of quotas in most parties

Note: This figure plots the fraction of women among each entering cohort, by party. The gray vertical lines indicate the year the relevant party adopted a 40% gender quota, if ever. We pool the Conservative and Progressive Party which never adopted any gender quota.

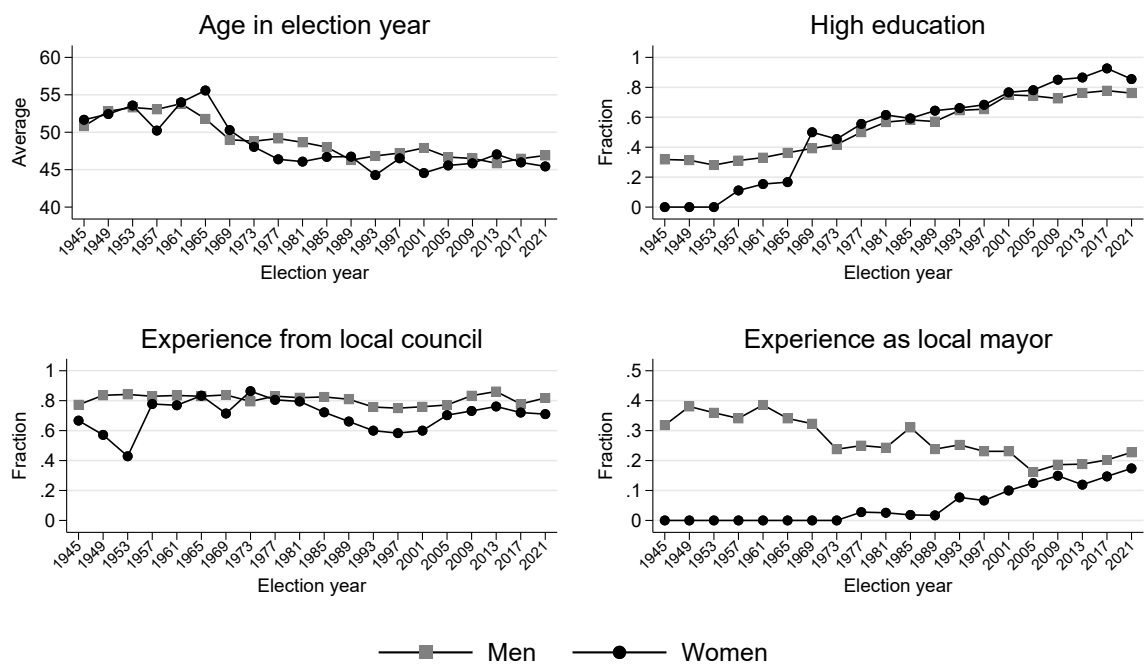


Figure A.3: In many domains men and women candidates had similar characteristics, except mayoral experience

Note: The top panels plot the average age and the fraction of parliamentarians with higher education, by gender and election year. The bottom panels plot the fraction of candidates with experience as local councilor or local mayor, by gender and election year. The sample is restricted to candidates winning a seat in parliament for the first time during the 1945–2021 period for one of the main parties.

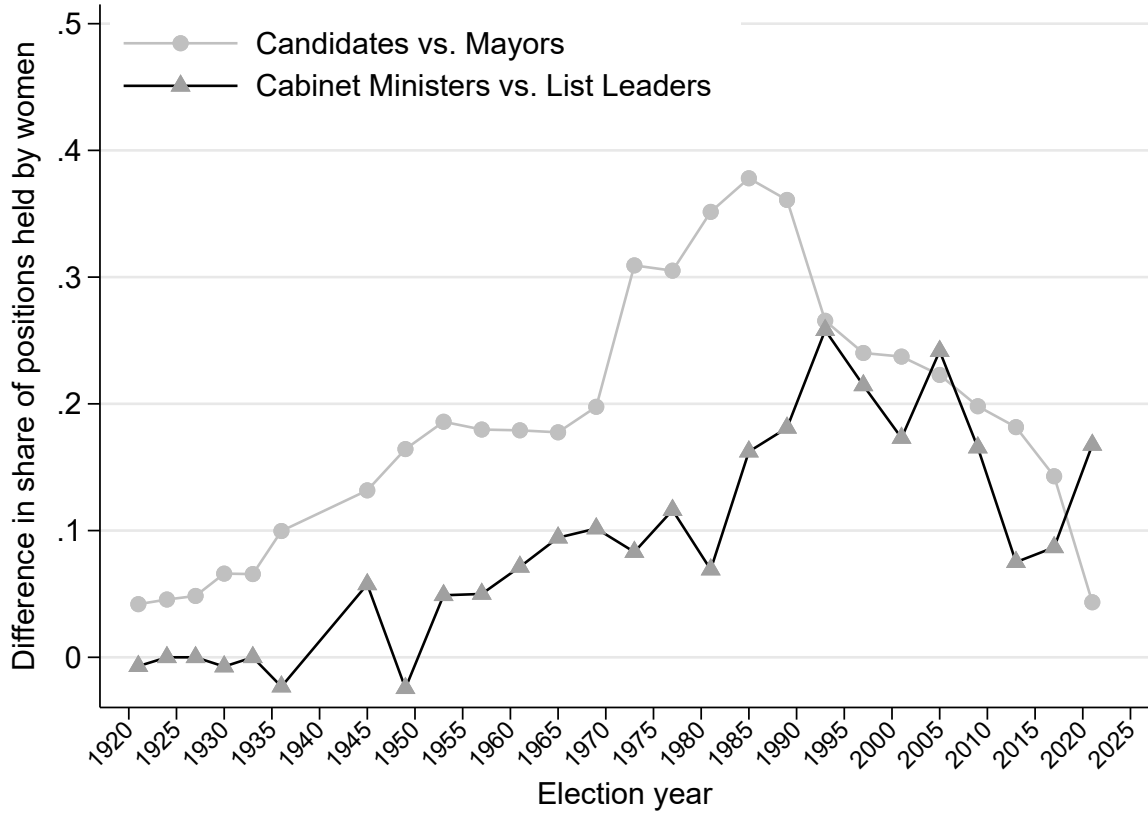


Figure A.4: Difference in share of women in proportional positions compared to the preceding majoritarian stepping stone

Note: This figure illustrates the representation of women in proportional positions—national candidates and cabinet ministers—compared to their representation in the corresponding majoritarian stepping stone positions—local mayors and national list leaders—that precede them in the hierarchy, over the period 1919 to 2023. Each line represents the difference between the share of women in the higher-level multiple-occupant (proportional) positions and the share of women in the corresponding lower-level single-occupant (majoritarian) positions. All parties are included.

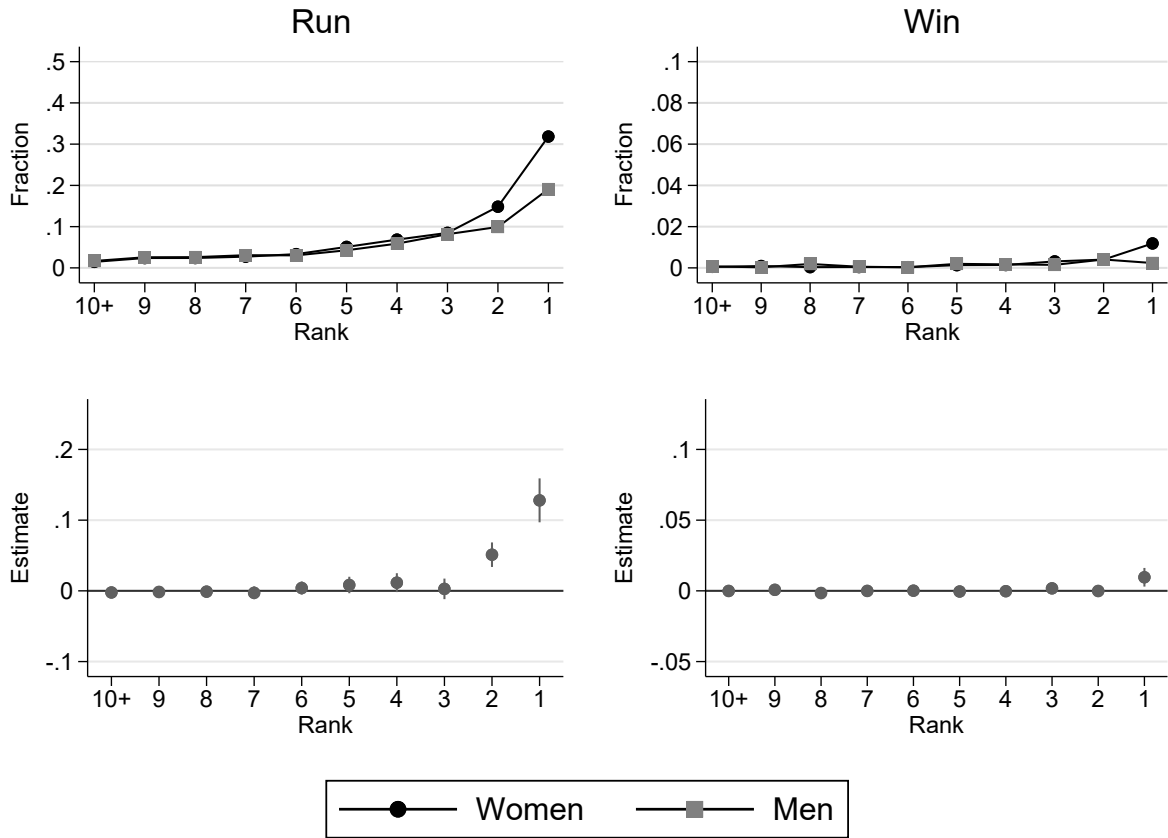


Figure A.5: The differential effect of local rank on running and winning in future national elections for lists without mayors

Note: The top-row displays averages of Run and Win for women and men, by list rank of the candidate. The second row provides estimates of $\lambda_1, \dots, \lambda_{10}$ based on Equation (1) in the main text. The sample is restricted to candidates ranked in position 1 – 10 for one of the seven main parties in the 2003-2011 period where none of candidates on the relevant list ultimately became mayor. We exclude candidates that previously ran for national office and municipalities with directly elected mayors. Standard errors are clustered at the party-parliamentary district-year level.

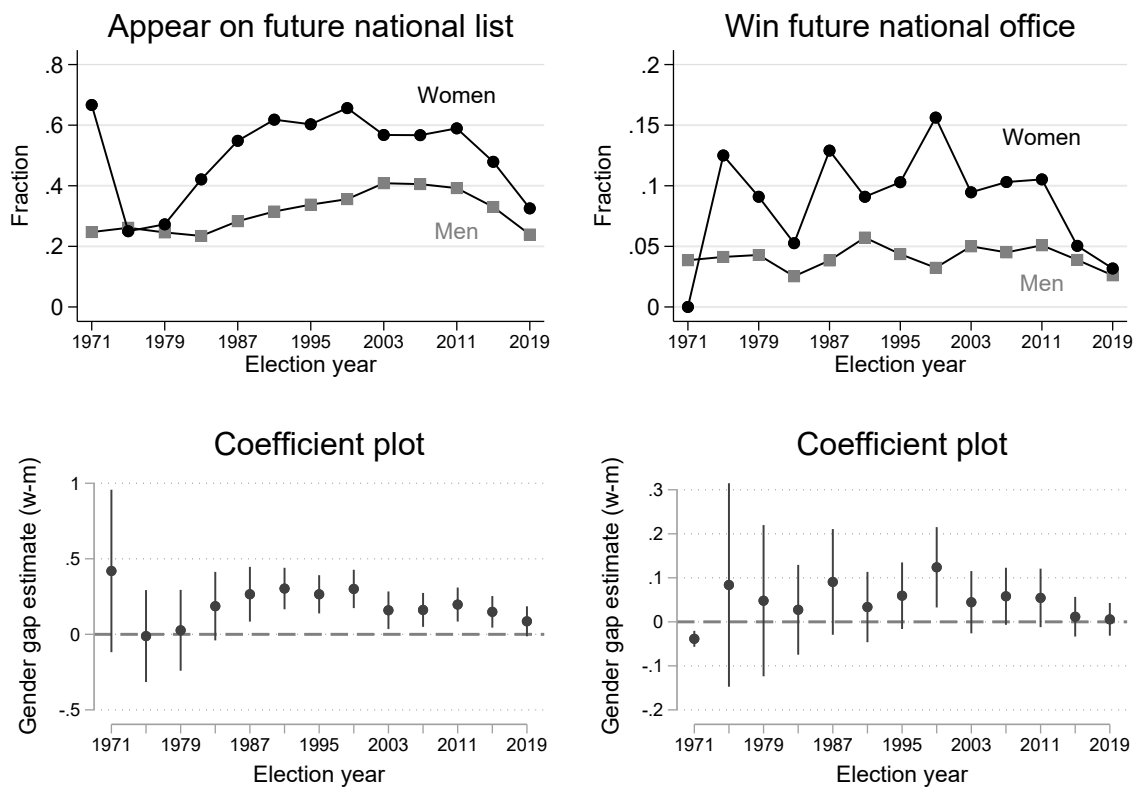


Figure A.6: Women mayors are more likely to get national list positions, and as likely to win, as men.

Note: This figure shows the fraction of mayors elected in a given year who eventually appear on a future national lists (left-most panel) and win a seat in parliament (right-most panel). The data are right censored, insofar as some mayors elected in later years have not completed their political lives and may still run for higher office.

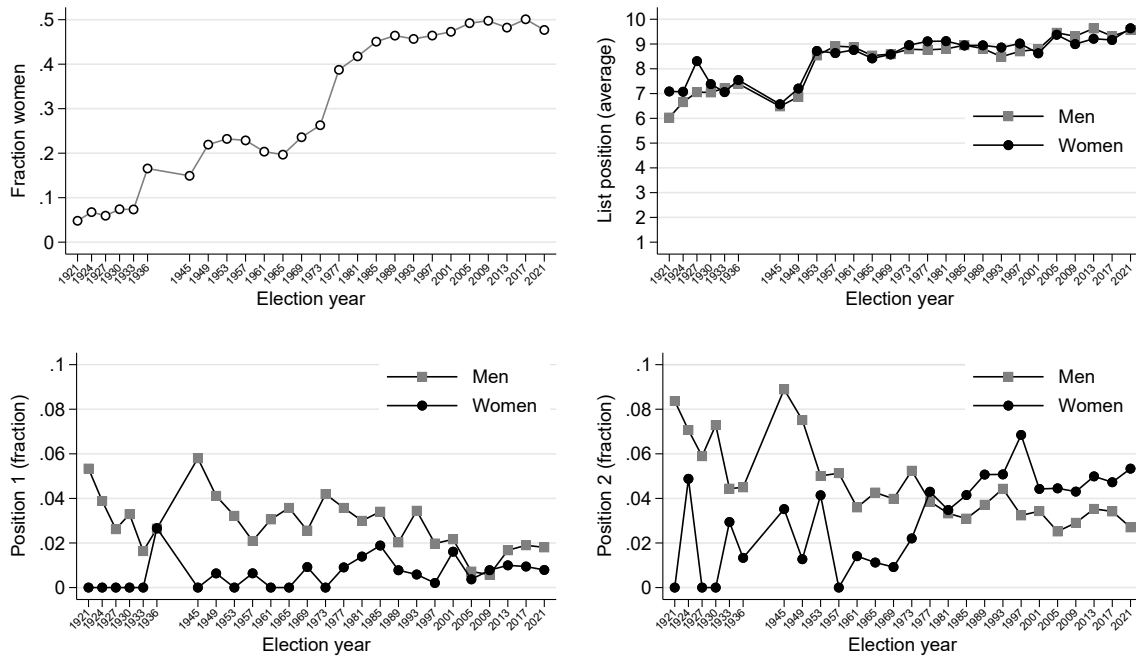


Figure A.7: Do women debut in national politics at the same rate and rank positions as men?

Note: This figure demonstrates the average list position for women and men is similar after 1940, but women are less likely to emerge as the first spot for most of this time, and they do not enter at the second spot until after 1973. The top-left panel displays the fraction of women in entering cohorts over the 1921–2021 period. The top-right panel displays the average list position of entering cohorts, separately for men and women. The bottom-left (bottom-right) panel displays the fraction of men and women making their debut in list position 1 (2). The sample is limited to candidates from the main parties.

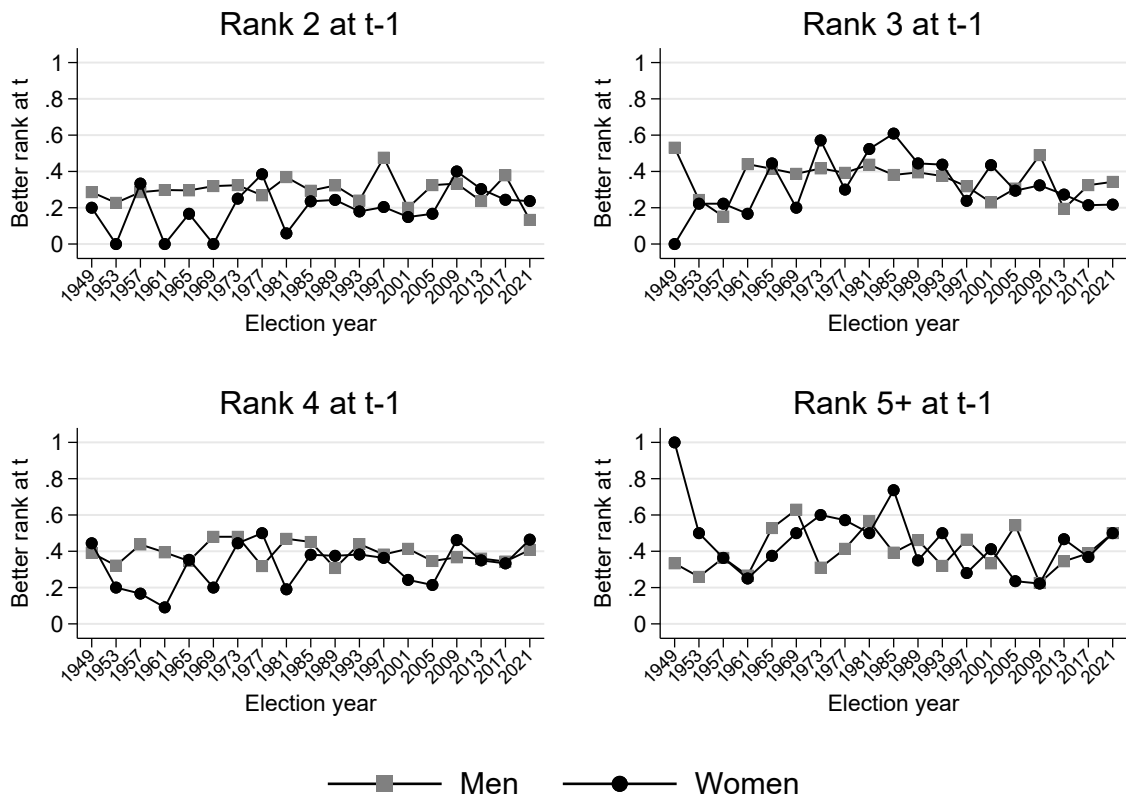


Figure A.8: Do women and men progress equally in party list rankings?

Note: This figure displays the fraction of candidates in election year $t - 1$ who obtain a better rank in election year t (unconditional on running in t), by gender, election year (t), and position in $t - 1$. The sample is restricted to candidates from the main parties winning a seat in parliament for the first time during the 1945–2021 period. This demonstrates that for most of our time period, men in spot 2 get a better rank in the subsequent election; while there is more variation in the rank placement of women.

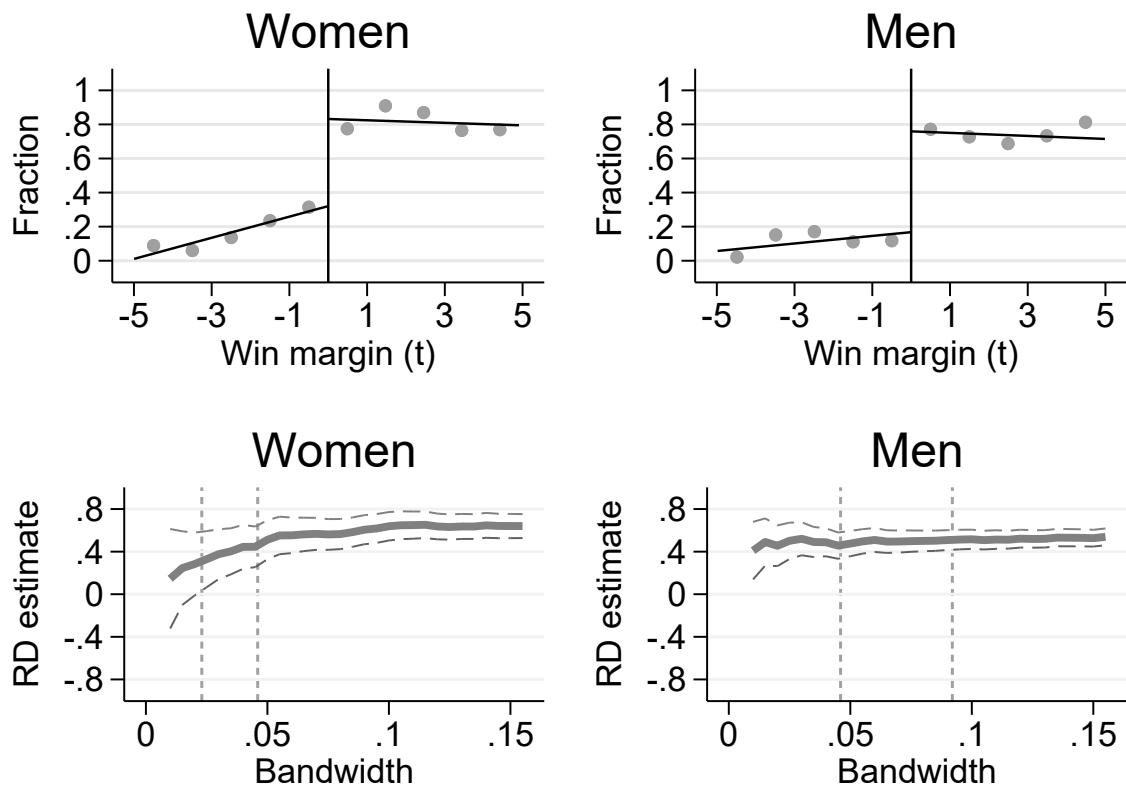


Figure A.9: Is there equal renomination of women and men MPs in winnable spots?

Note: The top panels display standard RD plots using a bandwidth of five percentage points, separately by gender. Separate linear lines are estimated below and above the discontinuity using the underlying data, not the binned scatter points. The solid vertical line represents a zero win margin, indicating the transition from barely missing out on a (first-tier) seat to barely winning in election year t . The bottom panels display RD estimates and 95% confidence intervals as a function of the bandwidth chosen, separately by gender. The left vertical line in each of the bottom panels marks the optimal bandwidth chosen by the [Calonico et al. \(2017\)](#) method, as obtained by the `rdrobust` module in Stata. The right vertical line marks twice the optimal bandwidth. The full sample covers national candidates from the main parties during the 1953–2017 period. We define a winnable spot as a position on the ballot that would secure a seat in parliament if the election outcome was the same as in the previous election. For a more detailed explanation of the methodology, see [Cirone, Cox and Fiva \(2021\)](#).

Table A.1: Table format results for Figure 3, bottom panel

	(1)	(2)
	Run	Win
Rank 1	0.122*** (0.047)	0.049* (0.025)
Rank 2	0.017 (0.024)	-0.003 (0.006)
Rank 3	0.032 (0.021)	-0.003 (0.006)
Rank 4	-0.007 (0.015)	0.003 (0.003)
Rank 5	-0.014 (0.014)	-0.003 (0.002)
Rank 6	-0.011 (0.015)	0.003 (0.003)
Rank 7	-0.026** (0.011)	0.000 (0.000)
Rank 8	0.013 (0.013)	-0.001 (0.004)
Rank 9	0.035** (0.016)	0.005 (0.004)
Rank 10+	-0.000 (0.002)	0.001 (0.001)
N	16512	16512

Note: Results for Figure 3, bottom panel, in table format. * denotes 10% statistical significance, ** 5% and *** 1%.

Table A.2: Table format results for Figure 4, bottom panel

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Rank 6	Rank 7	Rank 8	Rank 9	Rank 10+
Women	0.086*** (0.032)	0.028* (0.014)	-0.006 (0.009)	-0.007 (0.006)	-0.010** (0.005)	0.002 (0.004)	-0.004* (0.002)	0.011* (0.006)	-0.002 (0.003)	-0.001 (0.001)
R ²	0.007	0.003	0.000	0.001	0.002	0.000	0.001	0.004	0.000	0.000
N	1194	1194	1194	1194	1194	1194	1186	1186	1177	5875

Note: Results for Figure 4, bottom panel, in table format. * denotes 10% statistical significance, ** 5% and *** 1%.

Table A.3: Effects of gender, seniority, and rank position on cabinet appointment (expanded rank dummies)

	(1)	(2)	(3)	(4)	(5)
	All	All	MPs	MPs	MPs
Female	0.006* (0.003)	0.003 (0.002)	0.041 (0.028)	0.016 (0.163)	0.005 (0.162)
Seniority	0.014*** (0.002)	0.016*** (0.003)	0.026*** (0.008)	0.028*** (0.008)	0.032*** (0.008)
List Position 1	0.190*** (0.016)	0.169*** (0.018)	0.074 (0.088)	0.051 (0.110)	0.061 (0.099)
List Position 2	0.037*** (0.008)	0.022** (0.010)	-0.096 (0.084)	-0.117 (0.107)	-0.092 (0.096)
List Position 3	0.011** (0.005)	0.009 (0.006)	-0.142* (0.083)	-0.152 (0.106)	-0.128 (0.096)
List Position 4	0.003 (0.004)	0.007 (0.006)	-0.123 (0.085)	-0.093 (0.110)	-0.078 (0.100)
List Position 5	0.003 (0.003)	0.005 (0.005)	-0.076 (0.079)	-0.052 (0.097)	-0.059 (0.092)
Seniority X Female		-0.005 (0.004)		-0.007 (0.017)	-0.007 (0.017)
List Position 1 X Female		0.091** (0.042)		0.087 (0.168)	0.110 (0.166)
List Position 2 X Female		0.037** (0.017)		0.057 (0.165)	0.071 (0.162)
List Position 3 X Female		0.001 (0.009)		0.024 (0.164)	0.044 (0.161)
List Position 4 X Female		-0.007 (0.008)		-0.074 (0.167)	-0.046 (0.164)
List Position 5 X Female		-0.007 (0.006)		-0.119 (0.166)	-0.089 (0.167)
High Education					0.143*** (0.030)
High Education X Female					-0.028 (0.049)
Mean of outcome var.	0.026	0.026	0.168	0.168	0.168
R-squared	0.15	0.15	0.11	0.12	0.14
Observations	16090	16090	2069	2069	2069

Notes: Seniority is measured as the number of previous candidacies. We include cases where a cabinet appointment occurs after the election as well as when it continues over from the previous term (i.e., reappointment). The samples are limited to candidates running for parties that are part of any cabinet following the election. Standard errors are clustered at the individual level and reported in parentheses. All specifications include party-year fixed effects. * denotes 10% statistical significance, ** 5% and *** 1%. See Table 1 in the main text for results using only a top-rank dummy variable.

Appendix B

Table B.1 describes features of local elections in 36 European countries, documenting the electoral rules, method of electing the local executive, whether there are gender quotas, and the share of women among politicians at the local level in 2023. Please note that the types of local bodies, executives, and electoral rules can vary within country, so this table reflects general patterns. Gendźwiłł, Kjaer and Steyvers (2022) estimate that 70% of European cases have uniform electoral systems, while 30% feature variation (often based on population thresholds). The category “both” in the *Electoral Rules* column indicates that the country uses a combination of proportional (e.g., open or closed-list PR, single transferable vote (STV)) and semi-proportional or plurality (e.g., first-past-the-post (FPTP), block vote (BV), limited vote (LV), single non-transferable vote (STNV), majority bonus (MB)) rules at the local level.

Data on local governance procedures comes from the United Nations “Women in Local Government Database” (<https://localgov.unwomen.org/country>), and Gendźwiłł, Kjaer and Steyvers (2022). *% Women Local Council* is defined as the share of women among “municipal council (or equivalent) members for the year 2023,” and *% Women Local Exec.* is defined as the share of women among “mayors or other leaders of the municipal council (or equivalent)” for the year 2023. Both are taken from the *Gender Statistics Database* at the European Institute for Gender Equality (<https://eige.europa.eu>).

Table B.1: Cross-national European patterns in women’s representation in local offices, 2023

Country	Electoral Rules	Local Exec. Directly Elected?	Legislated Quotas?	% Women Local Exec.	% Women Local Council
Albania	CLPR	Yes	Yes	13.1	43.6
Austria	OLPR	Both	No	10.5	26.3
Belgium	OLPR	No	Yes	18.8	38.6
Bosnia & Herz.	OLPR	Yes	Yes	3.5	18.9
Bulgaria	OLPR	Yes	No	14	27.2
Croatia	CLPR	Yes	Yes	11	31.2
Cyprus	OLPR	Yes	No	7.6	15.3
Czechia	OLPR	No	No	18.5	29
Denmark	OLPR	No	No	21.4	35.4
Estonia	OLPR	No	No	26.6	28.9
Finland	OLPR	No	No	39	40.1
France	Both	No	Yes	20.4	42.1
Germany	OLPR; CLPR	Yes	No	11.3	23.8
Greece	OLPR	No	Yes	6.7	18.4
Hungary	Both	Yes	No	20	30.5
Iceland	Both	No	No	39.1	49
Ireland	STV	No	No	22.6	26
Italy	Both	Both	Yes	15.4	32.5
Latvia	OLPR	No	No	11.6	29.8
Liechtenstein	OLPR	No	No	18.2	34.8
Lithuania	OLPR	Yes	No	6.7	31.3
Luxembourg	Both	No	No	18.6	30.1
Malta	STV	No	No	16.2	25.9
Montenegro	CLPR	No	Yes	12	32.1
Netherlands	OLPR	Both	No	31	34.8
North Macedonia	CLPR	Yes	Yes	2.5	36.7
Norway	OLPR	No	Yes	35.4	40.5
Poland	Both	Yes	Yes	12	29.5
Portugal	CLPR	Both	Yes	11	33.5
Romania	CLPR	Yes	No	5.4	13.3
Serbia	CLPR	No	Yes	12.1	37.2
Slovakia	FPTP, BV	Yes	Yes	26.5	27.1
Slovenia	Both	Yes	Yes	13.7	33.8
Spain	Both	Yes	Yes	24.5	40.9
Sweden	OLPR	No	No	36.6	43.1
United Kingdom	Both	Both	No	22.3	36.8

Note: Please see the prior page for information about this table.

References

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