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Female Preferences in the Electorate and Political Representation by Female and Male Legislators

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Abstract

Exploiting an informative institutional setting, we identify Female preferences for legislative proposals in the electorate. We then analyze whether female or male politicians in parliament respond more closely to revealed female preferences using data on 41549 individual decisions made by 768 distinct politicians. Holding constant constituent preferences, female politicians tend to not respond more closely to female preferences in the electorate than their male counterparts. Substantive differences in representation are only present in legislative proposals related to social and redistribution policies. For other policies, we find that the legislative decisions of female politicians do not respond more closely to female preferences in the electorate than legislative decisions of male politicians. We also observe relevant heterogeneity with respect to the age of politicians and the vote margin in the final vote.

1 Introduction

Women are underrepresented in numbers in most parliaments around the world (Inter-Parliamentary Union, 2022), that is, descriptive representation of women is weaker than for men. For example, in 2022 approximately 31 % of parliamentary representatives in European countries are women. Women in parliament may shape policies and opinions (see Dutta and Maus (2021) or O’Brien and Piscopo (2019) and Hessami and Da Fonseca (2020) for recent literature surveys).

Female preferences in the electorate can be represented by both female and male politicians. Moreover, political decisions need not involve an immanent gender dimension. Hence, it is possible that underrepresentation in numbers does not imply underrepresentation of preferences, i.e., weak descriptive representation need not imply weak substantive representation. This paper aims to explore differences in substantive representation between female and male politicians.

We exploit an informative institutional setting to analyze how female and male politicians represent female preferences. Swiss constituents frequently vote on policy issues in referenda and thereby reveal their preferences (e.g., Frey (1994); Portmann and Stadelmann (2017)). Referendum decisions entail real policy consequences. Female and male political representatives decide in parliament on the same legislative proposals (with identical wording) that constituents vote on in referenda. To identify female preferences in the electorate, we draw on representative post referendum surveys, where surveyed female respondents state what they have voted for in each referendum. Thus, our setting allows us to observe what politicians do, what their constituencies want and what female preferences for specific legislative proposals are, all at the same time. We investigate all 208 referenda from 1996 to 2020 for 768 distinct political representatives who took 41549 legislative decisions.

Results show that, on average, female politicians do not respond more to female preferences in the electorate than male politicians do. This holds if we control for preferences of the majority of constituents, party recommendation, an array of characteristics of politicians, their party affiliations as well as a large set of fixed-effects (w.r.t. districts,

legislature period, referendum type etc.). Thus, there are no differences in substantive representation between female and male politicians on average.

Focusing only on legislative proposals dealing with social and redistribution policies, we find that female representatives respond to female preferences in the electorate stronger than their male counterparts in parliament. Quantitatively, these differences in substantive references are small: A 10 percentage point increase in female preferences in the electorate translates into an about 0.56% percentage point increase in female politicians supporting a legislative proposal. However, we do not observe any differences in representation of female preferences between female and male politicians for issues unrelated to social and redistribution policies. We therefore conclude, that substantive differences are present for this subfield. Exploring the heterogeneity of our results, we observe that particularly young and old female politicians respond more closely to female preferences in the electorate. Substantive representation of female preferences by female politicians also increases the more contested the final popular vote is. Overall, our findings complement but also qualify the literature which has suggested that women in politics act more socially minded and provide more public goods (e.g., Dollar, Fisman, and Gatti (2001) or Croson and Gneezy (2009), Baskaran and Hessami (2019), Güvercin (2020), Hornset and de Soysa (2022)).

The remainder of this paper is structured as follows: Section 2 presents our data and the identification strategy. Empirical results are presented in Section 3. Section 4 explores the heterogeneity with respect to substantive representation of female preferences by female politicians. Finally, Section 5 offers some concluding remarks.

2 Institutional Setting, Data, and Empirical Strategy

2.1 Institutional setting and data

We analyze the voting behavior of 692 distinct members of the Swiss National Council (lower house of parliament) and 122 distinct members of the Swiss Council of States (upper house parliament) from 1996 to 2020. During the period of analysis 28.3% of representatives were women, increasing from 24.2% in 1996 to 38,5% in 2020, a similar trend as in other democracies. The parliamentary representatives are elected in 26 constituencies (Swiss cantons), with the National Council being elected according to proportional representation and the Council of States according to majority voting.

We examine final votes of politicians on legislative proposal during their time in office. Parliamentarians in Switzerland vote on laws, changes to laws, and constitutional amendments. Legislative proposals accepted by parliament do not necessarily turn into law. Citizens may demand a popular referendum on parliamentary decisions before laws are enacted by collecting 50000 signatures. A referendum is mandatory for any constitutional change and citizens may propose constitutional amendments themselves through an initiative by collecting 100000 signatures. Referenda reflect revealed preferences for policies as they permit constituents to rank them against the status quo (e.g. Brunner, Ross, and Washington (2013); Carey and Hix (2013); Stadelmann, Portmann, and Eichenberger (2014)). We match data on referendum results for each constituency with its representatives' final votes in parliament on the same legislative proposal with identical wording. Thus, we observe representatives' final votes as well as preferences of their constituencies directly.

As a measure for female preferences in the electorate, we rely on representative post-referendum surveys. These surveys, commonly known as VOX analyses, are based on a sample of approximately 1000 citizens and are conducted after each referendum.¹ They

¹Until June 2016, these VOX analyses were supervised by the gfs.bern and the political science institutes of the Universities of Geneva, Bern and Zurich. From 2016 to 2020, the project was carried out under the name VOTO by the FORS (Swiss Centre of Expertise in the Social Sciences), the ZDA

are highly respected, and their results are frequently and prominently discussed in the newspapers. Survey respondents report socioeconomic characteristics, including gender, as well as their voting record. We use the share of female respondents who reported to have voted yes in a referendum as an identification for female preferences in the electorate. Thus, we can directly identify stated preferences of women after referenda by their survey responses on the same legislative proposals that women and men in parliament decided on in their final votes. As we know the preferences of the constituency that elects the politicians in parliament, we can explore whether male and female politicians represent females in the electorate more, beyond their incentive to represent their electoral district.

2.2 Empirical Strategy

The institutional setting allows us to analyze the following setting: Preferences of constituents for legislative proposals are revealed in referenda. Preferences of women in the electorate can be identified through post referendum surveys. A parliamentary representative is either female or male. We compare whether female or male politicians respond more closely to female preferences to investigate whether and how female preferences in the electorate affect legislative choices of politicians.

We run the following empirical specification:

$$\begin{aligned}
 MPYES_{ir} = & \Lambda(\alpha + \beta_1 Female_i + \beta_2 Female_i * FemalePreferences_r + \\
 & \beta_3 FemalePreferences_r + \beta_4 ConstituencyPreferences_{ir} + \\
 & \beta_5 PartyYES_{ir} + X_{ir}\gamma + \phi_i + \eta_i)
 \end{aligned} \tag{1}$$

where $MPYES_{ir}$ is an indicator for whether a politician i votes yes (indicator is 1) or no in parliament on the legislative proposal of referendum r . $Female_i$ is a indicator for whether a politician i is a woman (indicator is 1) or a man. $FemalePreferences_r$ stands for female preferences in the electorate in referendum r , that is, stated preference of women in the post referendum survey measured as the share of female respondents who reported to have voted yes in a referendum. β_2 captures the effect of whether

(Centre for Democracy Aarau) and the survey institute LINK.

female representatives respond more (or less) closely to female preferences than male representatives, that is, whether female politicians represent female preferences differently than their male counterparts. β_2 could be interpreted as causal in the sense that if the sex of politicians is exogenous and female preferences changed from no to yes, the coefficient β_2 would identify whether male or female representatives vote yes in parliament more often (see Nizalova and Murtazashvili (2016) for the theoretical econometric argument). Note that being a female politician may be correlated with other personal characteristics (apart from sex) or with a higher likelihood of being in a left-wing party, serving a shorter time in parliament, having a higher level of education etc. which we control for in X_{ir} . While the sex of politicians may be reasonable seen as external to legislative proposals, it is not necessarily exogenous in an econometric sense. Thus, β_2 should be interpreted as an indicator for differences in substantive representation that are associated to the sex of a politician. If such differences in representation do not exist, that is, if $\beta_2 = 0$ sex is no relevant indicator for differences in substantive representation. If $\beta_2 \neq 0$, differences in substantive representation of female and male preferences in the electorate exist. Whether they are due to the sex of the politician, correlates of his/her sex, his/her party or political competition is a matter of further exploration regarding the heterogeneity of β_2 .

Assuming that female preferences in the electorate do not only reflect female preferences but also constituents' preferences in general, conditioning equation 1 on observed preferences of a constituency is necessary. *ConstituencyPreferences_{ir}* reflects the share of citizens in politician i 's constituency who have voted yes in the referendum r . β_4 can be interpreted as an indicator of how well a politician i represented his constituency's preferences in the referendum r . Failure to include *ConstituencyPreferences_{ir}* would yield an estimate of β_2 which does not only include the impact of female preferences on female representatives but also the impact of the constituency's preferences made up of female and male constituents. Furthermore, *PartyYES_{ir}* is an indicator for whether a politician i 's party recommended voting yes (indicator is 1) or no in parliament on the legislative proposal of referendum r . β_5 can be interpreted as an indicator of how strongly a politician i corresponds to his or her party. When controlling for *ConstituencyPreferences_{ir}* and

$PartyYES_{ir}$, the coefficient β_2 should be interpreted as the relative difference between how female politicians and male politician represent female preferences.

Other covariates such as personal characteristics, party affiliations, and constituency, referendum type and time fixed effects may be associated with legislative voting. X_{it} captures individual characteristics (age, service length, party affiliation, education) of the representative i at time t when the parliamentary vote is held. ϕ_i denote constituency fixed effects, η_i denote legislative period fixed effects, and ψ_r denote referendum type fixed effects. Table A1 in the appendix provides descriptive statistics on relevant variables.

3 Results

3.1 Exploring all policy areas

Table 1 provides support for the notion female representatives do not vote more according to female preferences in parliamentary decisions than male politicians, that is, there are no differences regarding substantive representation by female and male politicians on average.

Column (1) provides logit estimates and does not contain any controls. The key parameter of interest $Female * FemalePreferences$ is positive and statistically different from zero. This would imply that female politicians represent female preferences more closely than their male counterparts. However, as soon as we control for the party recommendation of a politician’s party for the corresponding legislative proposal, we do not observe any statistically significant effect anymore. Column (3) accounts for the party recommendation and for the preferences of a representative’s constituency. In column (4) we account for individual covariates and party affiliation. In column (5), district fixed effects, referendum type fixed effects and legislative period fixed effects capture potential differences in attitudes across districts, between different types of referenda and between legislative periods. Similar results are obtained when using OLS models (see, A2).

Table 1: Effect of female preferences on decisions by parliamentary representatives

	MPYES				
	(1)	(2)	(3)	(4)	(5)
Female	-0.169 (0.137)	-0.033 (0.143)	-0.022 (0.143)	-0.011 (0.145)	-0.022 (0.140)
FemalePreferences	3.51*** (0.150)	2.20*** (0.153)	-0.951*** (0.260)	-0.961*** (0.260)	-1.63*** (0.283)
Female*FemalePreferences	0.727** (0.288)	0.190 (0.322)	0.084 (0.325)	0.077 (0.327)	0.196 (0.316)
PartyYes		4.66*** (0.060)	4.63*** (0.065)	4.64*** (0.065)	4.68*** (0.073)
ConstituencyPreferences			4.35*** (0.303)	4.36*** (0.304)	2.98*** (0.352)
<i>Controls</i>				✓	✓
<i>Canton fixed effects</i>					✓
<i>Period fixed effects</i>					✓
<i>Ref. type fixed effects</i>					✓
Pseudo R ²	0.100	0.591	0.600	0.601	0.617
Observations	41,549	41,549	41,549	41,549	41,549

Notes: ***, **, and * indicate a mean significance level of $< 1\%$, $1 - 5\%$, and $5 - 10\%$, respectively. Robust standard errors in parentheses are clustered at the cantonal level. Logistic models are estimated. OLS models are reported in the appendix.

The coefficient of the interaction term between being a female representative and female preferences is only statistically significant and positive in the first two specifications, i.e., when not controlling for the party recommendation. **Note: Add a discussion why this is interesting and relevant.** Thus, female politicians do not represent female preferences more closely than their male counterparts.

3.2 Focusing on social and redistribution policies

The literature suggests that female politicians tend to be more socially minded than their male counterparts, which potentially leads to a different provision of public goods when the number of female politicians increases (see Cunial (2021) or Dutta and Maus (2021), for surveys see O’Brien and Piscopo (2019) or Hessami and Da Fonseca (2020)). In Table 2, column (1) we restrict our sample of legislative proposals to social policies.² In column (2), we focus on all other legislative proposals, that is, we exclude social and redistribution policies. We always analyze the most conservative specification including constituency

²Each individual referendum belongs to one or more of 12 topic areas defined by the Federal Statistical Office, with “Social Policy” being one of them.

preferences, all controls, and all fixed effects. In column (3) we use a further interaction of $Female_i * FemalePreferences_r$ with an indicator for whenever a referendum r belongs to the area of social policies (indicator is 1). The corresponding results reveal that substantive representation of female preferences in the electorate differs depending on the topic of the legislative proposal.

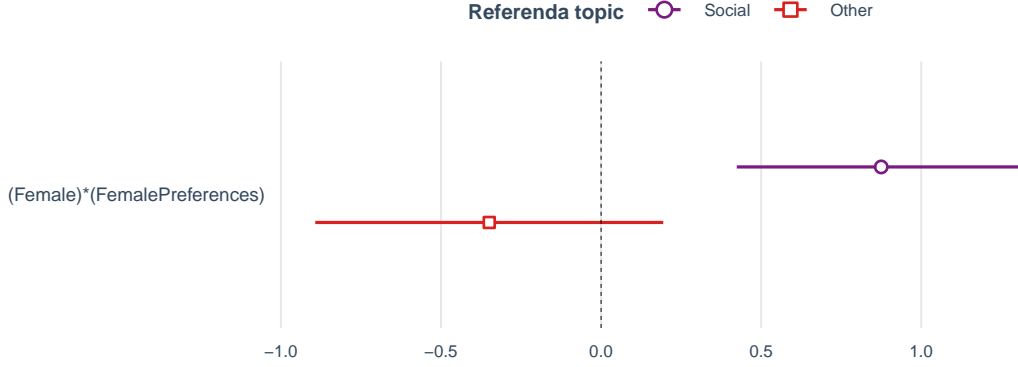
Female politicians in parliament respond relatively more closely to female preferences in the electorate than male representatives, when focusing on social policies in column (1). A 10 percentage point increase in the support of a referendum within the female electorate increases the probability that a female politician votes yes by 0.56 percentage points.

Table 2: Effect of female preferences on decisions by parliamentary representatives by policy area

	MPYES		
	Sub-Samples		Interaction
	Social Topic (1)	Other Topic (2)	Triple Interaction (3)
Female	-0.290** (0.118)	0.203 (0.149)	0.156 (0.144)
FemalePreferences	-2.71*** (0.407)	-1.06*** (0.399)	-1.17*** (0.404)
ConstituencyPreferences	2.94*** (0.711)	4.19*** (0.521)	2.95*** (0.516)
PartyYes	4.78*** (0.139)	4.73*** (0.070)	4.68*** (0.071)
Female*FemalePreferences	0.875*** (0.274)	-0.349 (0.330)	-0.314 (0.329)
Social topic			0.323** (0.133)
Female*SocialTopic			-0.384*** (0.141)
FemalePreferences*SocialTopic			-0.912*** (0.306)
Female*FemalePreferences*SocialTopic			1.13*** (0.281)
<i>Controls</i>	✓	✓	✓
<i>Canton fixed effects</i>	✓	✓	✓
<i>Ref. type fixed effects</i>	✓	✓	✓
<i>Period fixed effects</i>	✓	✓	✓
Pseudo R ²	0.614	0.629	0.618
Observations	18,006	23,543	41,549

Notes: ***, **, and * indicate a mean significance level of < 1%, 1 – 5%, and 5 – 10%, respectively. Robust standard errors in parentheses are clustered at the cantonal level. Logistic models are estimated. OLS models are reported in the appendix.

Figure 1: Effect of female preferences on decisions by parliamentary representatives by policy area



Notes: Coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ and 90% confidence intervals for referred subsets are displayed. Robust standard errors are clustered at the cantonal level. Logistic models are estimated.

However, we do not observe any statistically significant differences in substantive representation between female and male politicians when looking at issues not related to social policies in column (2). The coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ is even negative, however not significant. In column (3) we report a triple interaction term between $Female_i * FemalePreferences_r * SocialTopic_r$. The results reveal a positive and statistically significant triple interaction, suggesting that female politicians represent female preferences more closely for social topics. Outside of this policy area there are no differences between female and male politicians, i.e., the coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ is close to zero or even negative and no longer statistically significant. Figure 1 displays the coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ for the two subsets.

These findings qualify common perceptions in the literature that female preferences are substantively underrepresented due to a relatively larger number of male representatives in parliament. In fact, our results suggest that substantive differences in representation are limited to social policies and tend to be small.

4 Exploring Heterogeneity

Our results so far have shown that there are no substantive differences in representation between female and male politicians on average. Differences only emerge in the domain of social and redistribution policies. We further propose two possible channels of heterogeneity with respect to substantive representation of female preferences: "socialization" and "political constraints". We examine the channel socialization to capture possible differences in substantive representation arising from differential individual norms and ideologies about society. We capture differences in socialization by focusing on age, education, and the role of women in the politics of the representative's canton. Since representatives do not base their decisions exclusively on their ideology, we further capture heterogeneity in terms of the political incentives to which they are exposed. In this exercise we focus on the closeness of referendum results, legislative chamber, and party affiliation.

In our analysis, we restrict our sample to legislative decisions on social and redistribution policies as in specification (1) of Table 2. Within these observations, we will look at specific subsets regarding the above-mentioned variables. More specifically, we implement our empirical strategy as outlined above and apply it to different subsets of our dataset. For this exercise, we again use the most conservative logit specification including constituency preferences, all controls, and all fixed effects.

4.1 Evidence for socialization channel

Since socialization, i.e., the way how individuals learn and internalize the values, beliefs, norms, and behaviors of their society or culture, is a lifelong process, we expect differences in substantive representation depending on a politician's age. **Note: We will explore the theoretical background underlying this as well as the following hypothesis in more depth in a future version.**

A further institution that plays a crucial role in shaping an individual's values, beliefs, and attitudes towards society is education. Through education, individuals are exposed to a range of social experiences, perspectives, and ideas. Therefore, we may observe

further differences in substantive representation of female preferences depending on the representative's level of education.

Female preferences may be represented differentially depending on the status of women in the representative constituency...

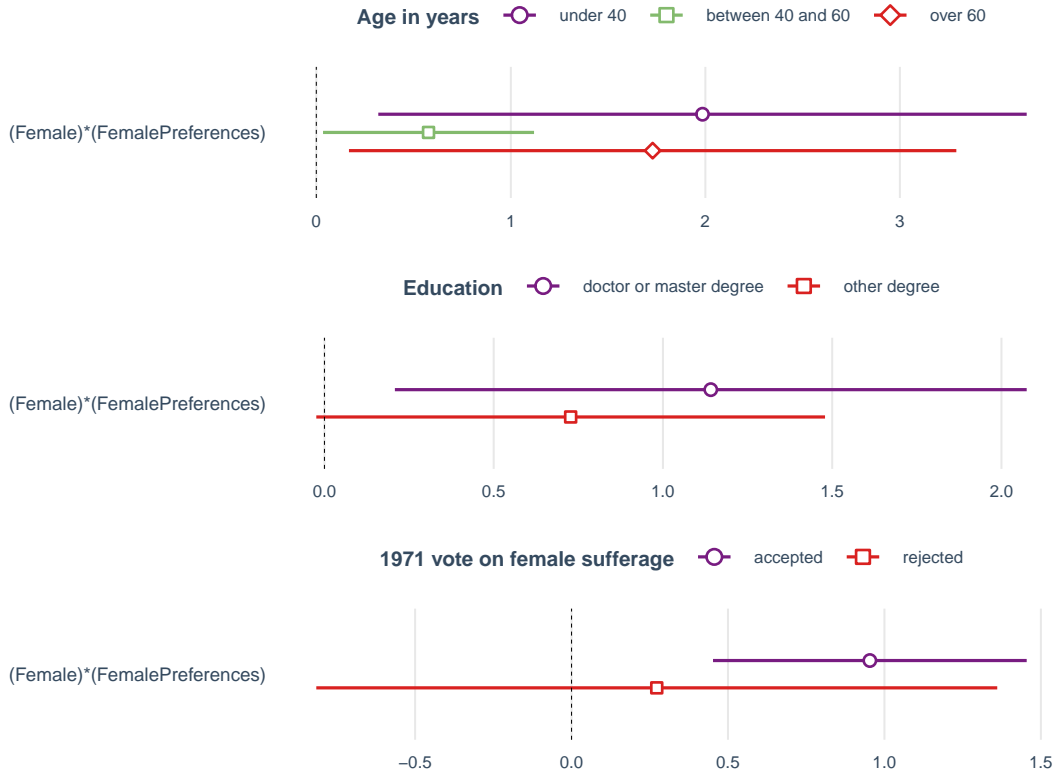
Hypothesis 1.1. Substantive representation of female preferences differs with regard to the age of the representative.

Hypothesis 1.2. Substantive representation of female preferences differs with regard to the level of education of the representative.

Hypothesis 1.3. Substantive representation of female preferences differs with regard to ...

Figure 2 displays the coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ and the 90% confidence intervals for different subsets. The corresponding regression tables can be found in the appendix. The uppermost graph shows that female politicians aged between 40 and 60 do not represent female preferences in the electorate any different than their male counterparts of the same age. However, female politicians under 40 and over 60 represent the preferences of women in the electorate substantially more closely than their male counterparts in parliament. Thus, our results support Hypothesis 1.1, meaning that the effects observed before are mainly due to differences between elderly women and elderly men. For discussants: We would be interested in knowing what you think about the observed heterogeneities

Figure 2: Evidence for heterogeneity through socialization channel



Notes: Coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ and 90% confidence intervals for referred subsets are displayed. Robust standard errors are clustered at the cantonal level. Logistic models are estimated.

The second graph reveals female politicians do not represent female preferences differentially depending on their level of education, implying that Hypothesis 1.2 must be rejected. For politicians with or without a master's or a doctor's degree, female representatives represent the preferences of women in the electorate more closely than their male counterparts in parliament.

Looking at subsets depending on the cantonal result in the vote on female suffrage in 1971 shows similar point estimates for the coefficient β_2 for both subsets, implying that female politicians from cantons that accepted female suffrage in 1971 do not represent female preferences differentially than female politicians from cantons which rejected said referendum.

Finally, we explore the share of women in the cantonal parliament as another measure for the role of women in a politician's constituency. The results which can be found in the Appendix suggests that especially female politicians from cantons with a relatively

high share of women in their cantonal parliament at the time of the vote represent the preferences of women in the electorate more closely than their male counterparts.

4.2 Evidence for political constraints

Since the National Council (lower house) is excepted to represent the total population of Switzerland and is elected by proportional voting rule, the Council of States (lower house) represents the cantons and its members are elected in majority voting, we may observe differences regarding substantive representation when focusing on each chamber individually.

The closeness of referendum results may be seen as a potential measure of competition between different views in the electorate regarding a specific legislative proposal. As this circumstance leads to different incentives for politicians, we may see heterogeneity depending on the scarcity of the vote. **Note: We will discuss the underlying mechanism in more detail and provide evidence.**

Hypothesis 2.1. Substantive representation varies according to the electoral system used to elect a politician.

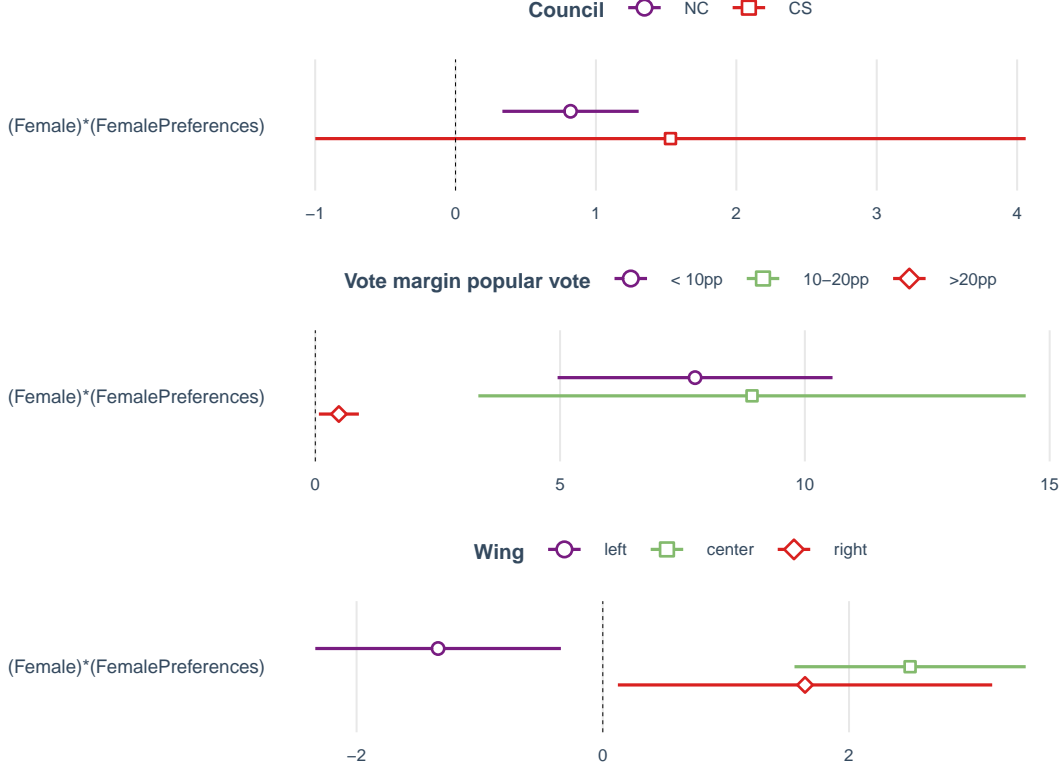
Hypothesis 2.2. Substantive representation varies according to how close the final vote of referendum r was.

The uppermost graph in Figure 3 suggests that female politicians, regardless of the chamber they belong to, represent female preferences more closely than their male counterparts, with the regression coefficient within members of the Council of States being slightly larger than the same coefficient in the subset of the National Council.

The second graph in Figure 3 reveals that the closeness of a referendum result matters for substantive representation of female preferences. For referenda that are decided relatively clearly, that is with majorities above 60%, we do not observe a statistically significant interaction term for $Female_i * FemalePreferences_r$. For more narrowly decided referenda, we observe that female politicians respond more to female preferences in the electorate. This suggests that when competition is more pronounced, substantive differences in representation tend to emerge.

The bottom graph in figure 3 suggests heterogeneity with respect to party affiliation. Statistically significant differences regarding the representation of female preferences emerge between female and male politicians of center and right wing parties only.

Figure 3: Heterogeneity through political incentives



Notes: Coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ and 90% confidence intervals for referred subsets are displayed. Robust standard errors are clustered at the cantonal level. Logistic models are estimated.

5 Conclusions

Women are underrepresented in numbers in parliaments around the world compared to their share in the population. We explore an informative setting in Switzerland and show that there is no statistically significant difference regarding the way female politicians represent female preferences and the way male politicians represent female preferences on average. Overall differences in substantive representation are only present for social issues and quantitatively small. For other legislative proposals such differences in substantive representation do not emerge. Moreover, there is a substantial heterogeneity regarding

substantive representation of female preferences. For example, exceptionally young and old female politicians more closely respond to female preferences in the electorate. Similarly, for more narrowly decided referenda we observe differences in how female and male politicians represent female preferences in the electorate.

We conclude that increasing the number of female politicians may only induce minor changes regarding representation of female preferences in the electorate. Outside of the domain of social and redistribution policies improvements in descriptive representation are unlikely to result in improvements in substantive representation. Finally, relatively young female politicians, that is between 40 and 60 years of age, do not seem to consider female preferences any more than relatively young male politicians.

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Appendices

A Tables

Table A1: Summary Statistics

Variable	Description	N	Mean	Sd	Min	Max
decision	indicator = 1 whenever politician votes yes	41549	0.52	0.5	0	1
female	indicator = 1 whenever politician is a woman	41549	0.266	0.442	0	1
age	age in years	41549	52.95	8.881	21.331	84.11
doctor_master	indicator =1 whenever a politician has a master or a doctors degree	41549	0.544	0.498	0	1
years_in_parliament		41549	6.752	5.318	0	34.261
council_id	indicator = 1 whenever a politician belongs the coucil of states	41549	0.101	0.301	0	1
left	left party affiliation	41549	0.308	0.462	0	1
center	center party affiliation	41549	0.427	0.495	0	1
right	right party affiliation	41549	0.261	0.439	0	1
party_yes	indicator = 1 whenever an MP's party recommends voting yes in referenda r	41549	0.487	0.5	0	1
vox_female_vote	Yes share of females in vox surveys	41549	0.486	0.216	0.067	0.942
vox_male_vote	Yes share of males in vox surveys	41549	0.487	0.207	0.067	0.918
yes_share_ch	Yes share in popular vote at the national level	41549	0.477	0.178	0.08	0.916
yes_share_canton	Yes share in popular vote at the cantonal level	41549	0.477	0.192	0.039	0.953
female_share_cantonal_parl	Share of women in cantonal parliament	41549	0.269	0.062	0.075	0.42
female_suffrage_accepted	indicator = 1 whenever the canton accepted the vote on female sufferage in 1971	41549	0.835	0.371	0	1

Table A2: Effect of female preferences on decisions by parliamentary representatives - OLS

	(1)	(2)	MPYES (3)	(4)	(5)
Female	-0.021 (0.018)	0.0008 (0.009)	-0.0007 (0.008)	-0.001 (0.008)	0.0003 (0.008)
FemalePreferences	0.803*** (0.037)	0.175*** (0.019)	-0.077*** (0.022)	-0.077*** (0.022)	-0.124*** (0.028)
Female*FemalePreferences	0.120** (0.046)	0.006 (0.018)	0.008 (0.017)	0.008 (0.017)	0.011 (0.018)
PartyYes		0.799*** (0.008)	0.786*** (0.009)	0.786*** (0.008)	0.767*** (0.010)
ConstituencyPreferences			0.341*** (0.025)	0.341*** (0.025)	0.217*** (0.040)
<i>Controls</i>				✓	✓
<i>Canton fixed effects</i>					✓
<i>Period fixed effects</i>					✓
<i>Ref. type fixed effects</i>					✓
R ²	0.132	0.688	0.692	0.692	0.701
Observations	41,549	41,549	41,549	41,549	41,549

Notes: ***, **, and * indicate a mean significance level of < 1%, 1 – 5%, and 5 – 10%, respectively. Robust standard errors in parentheses are clustered at the cantonal level. OLS models are estimated.

Table A3: Effect of female preferences on decisions by parliamentary representatives by policy area - OLS

	MPYES		
	Sub-Samples		Interaction
	Social Topic (1)	Other Topic (2)	triple interaction (3)
Female	-0.018* (0.010)	0.012 (0.009)	0.009 (0.010)
FemalePreferences	-0.221*** (0.033)	-0.071** (0.030)	-0.102*** (0.031)
ConstituencyPreferences	0.220*** (0.058)	0.289*** (0.038)	0.215*** (0.041)
PartyYes	0.755*** (0.014)	0.777*** (0.009)	0.767*** (0.010)
Female*FemalePreferences	0.056** (0.021)	-0.018 (0.019)	-0.015 (0.019)
SocialTopic			0.017* (0.009)
Female*SocialTopic			-0.023* (0.011)
FemalePreferences*SocialTopic			-0.049** (0.021)
Female*FemalePreferences*SocialTopic			0.068*** (0.020)
<i>Controls</i>	✓	✓	✓
<i>Canton fixed effects</i>	✓	✓	✓
<i>Ref. type fixed effects</i>	✓	✓	✓
<i>Period fixed effects</i>	✓	✓	✓
R ²	0.689	0.714	0.701
Observations	18,006	23,543	41,549

Notes: ***, **, and * indicate a mean significance level of < 1%, 1 – 5%, and 5 – 10%, respectively. Robust standard errors in parentheses are clustered at the cantonal level. OLS models are estimated.

Table A4: Evidence for socialization channel - Logit

	MPYES						
	age			education		vote female suffrage	
	age < 40 (1)	age 40-60 (2)	age > 60 (3)	master/doctor (4)	other degree (5)	accepted (6)	rejected (7)
Female	-1.22*** (0.459)	-0.179 (0.128)	-0.481 (0.405)	-0.435* (0.245)	-0.192 (0.234)	-0.341*** (0.126)	0.239 (0.326)
FemalePreferences	-4.05*** (0.850)	-2.42*** (0.591)	-3.49*** (0.641)	-1.82*** (0.612)	-3.94*** (0.525)	-2.57*** (0.535)	-3.13*** (0.526)
ConstituencyPreferences	4.53*** (1.60)	2.43*** (0.824)	4.13*** (0.682)	1.84* (1.02)	4.37*** (0.677)	2.84*** (0.917)	2.97*** (0.796)
PartyYes	4.93*** (0.278)	4.91*** (0.170)	4.53*** (0.146)	5.05*** (0.227)	4.51*** (0.122)	4.79*** (0.165)	4.86*** (0.314)
Female*FemalePreferences	1.99* (1.01)	0.577* (0.330)	1.73* (0.949)	1.14** (0.567)	0.727 (0.457)	0.953*** (0.305)	0.272 (0.662)
Controls	✓	✓	✓	✓	✓	✓	✓
Canton fixed effects	✓	✓	✓	✓	✓	✓	✓
Period fixed effects	✓	✓	✓	✓	✓	✓	✓
Ref. type fixed effects	✓	✓	✓	✓	✓	✓	✓
Pseudo R ²	0.611	0.624	0.603	0.636	0.595	0.611	0.641
Observations	1,692	12,386	3,925	9,765	8,240	15,051	2,955

Notes: ***, **, and * indicate a mean significance level of < 1%, 1 – 5%, and 5 – 10%, respectively. Robust standard errors in parentheses are clustered at the cantonal level. Logistic models are estimated.

Table A5: Evidence for socialization channel - OLS

	age			MPYES education		vote female suffrage	
	age < 40 (1)	age 40-60 (2)	age > 60 (3)	master/doctor (4)	other degree (5)	accepted (6)	rejected (7)
Female	-0.090** (0.041)	-0.008 (0.011)	-0.034 (0.027)	-0.082** (0.030)	-0.144*** (0.044)	-0.022* (0.011)	0.015 (0.026)
FemalePreferences	-0.321*** (0.067)	-0.194*** (0.046)	-0.286*** (0.050)	0.170 (0.120)	-0.716*** (0.060)	-0.214*** (0.043)	-0.238*** (0.043)
ConstituencyPreferences	0.354** (0.133)	0.174** (0.065)	0.322*** (0.057)	0.194 (0.176)	1.03*** (0.094)	0.217** (0.075)	0.199** (0.065)
PartyYes	0.758*** (0.021)	0.766*** (0.017)	0.715*** (0.013)			0.754*** (0.015)	0.758*** (0.035)
Female*FemalePreferences	0.150* (0.085)	0.031 (0.024)	0.112* (0.061)	0.210*** (0.059)	0.324*** (0.090)	0.063** (0.024)	0.012 (0.051)
<i>Controls</i>	✓	✓	✓	✓	✓	✓	✓
<i>Canton fixed effects</i>	✓	✓	✓	✓	✓	✓	✓
<i>Period fixed effects</i>	✓	✓	✓	✓	✓	✓	✓
<i>Ref. type fixed effects</i>	✓	✓	✓	✓	✓	✓	✓
Pseudo R ²	0.787	0.826	0.766	0.181	0.181	0.796	0.859
Observations	1,695	12,386	3,925	9,765	8,241	15,051	2,955

Notes: ***, **, and * indicate a mean significance level of < 1%, 1 – 5%, and 5 – 10%, respectively. Robust standard errors in parentheses are clustered at the cantonal level. OLS models are estimated.

Table A6: Evidence for political constraints - Logit

	Electoral System		MPYES Difference Yes-No Votes			Party		
	NC (1)	CS (2)	< 5 % (3)	5-20 % (4)	> 20% (5)	Left (6)	Center (7)	Right (8)
Female	-0.262** (0.129)	-0.800 (0.666)	-3.68*** (0.793)	-3.52*** (1.37)	-0.123 (0.116)	0.543*** (0.198)	-1.03*** (0.264)	-0.748 (0.589)
FemalePreferences	-2.63*** (0.479)	-4.29*** (1.06)	-13.4*** (1.80)	9.26** (3.65)	-1.81*** (0.694)	1.21 (1.41)	-5.25*** (0.494)	-5.82*** (0.356)
ConstituencyPreferences	2.59*** (0.795)	7.12*** (1.11)	4.66*** (1.60)	7.86*** (2.27)	2.30** (0.972)	-1.21 (2.06)	5.62*** (0.375)	6.28*** (0.598)
PartyYes	4.93*** (0.133)	3.84*** (0.335)	7.15*** (0.396)	7.59*** (0.680)	4.30*** (0.136)	6.23*** (0.201)	3.43*** (0.191)	4.81*** (0.254)
Female*FemalePreferences	0.819*** (0.295)	1.53 (1.54)	7.76*** (1.71)	8.92*** (3.40)	0.482* (0.248)	-1.34** (0.606)	2.50*** (0.571)	1.64* (0.924)
<i>Controls</i>	✓	✓	✓	✓	✓	✓	✓	✓
<i>Canton fixed effects</i>	✓	✓	✓	✓	✓	✓	✓	✓
<i>Period fixed effects</i>	✓	✓	✓	✓	✓	✓	✓	✓
<i>Ref. type fixed effects</i>	✓	✓	✓	✓	✓	✓	✓	✓
Pseudo R ²	0.623	0.593	0.747	0.796	0.570	0.725	0.655	0.576
Observations	16,287	1,719	4,086	2,171	11,749	5,494	7,563	4,668

Notes: ***, **, and * indicate a mean significance level of < 1%, 1 – 5%, and 5 – 10%, respectively. Robust standard errors in parentheses are clustered at the cantonal level. Logistic models are estimated.

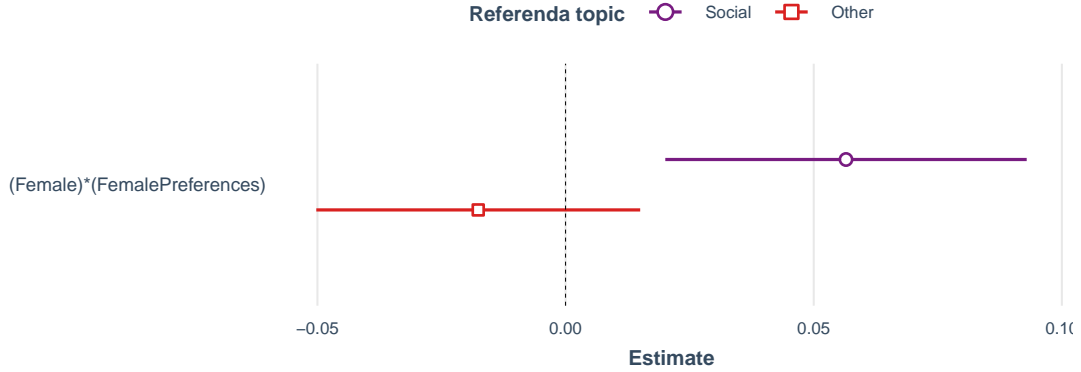
Table A7: Evidence for political constraints - OLS

	Electoral System		MPYES Difference Yes-No Votes			Party		
	NC	CS	< 5 %	5-20 %	> 20%	Left	Center	Right
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female	-0.016 (0.011)	-0.048 (0.051)	-0.196*** (0.042)	-0.092** (0.035)	-0.003 (0.011)	0.025** (0.011)	-0.053*** (0.016)	-0.072 (0.056)
FemalePreferences	-0.213*** (0.038)	-0.351*** (0.100)	-0.703*** (0.118)	0.331* (0.161)	-0.174** (0.063)	0.037 (0.078)	-0.363*** (0.035)	-0.544*** (0.063)
ConstituencyPref.	0.191*** (0.063)	0.566*** (0.115)	0.197** (0.085)	0.250*** (0.055)	0.199** (0.092)	-0.049 (0.118)	0.352*** (0.033)	0.603*** (0.077)
PartyYes	0.767*** (0.013)	0.597*** (0.032)	0.850*** (0.016)	0.899*** (0.015)	0.695*** (0.014)	0.852*** (0.008)	0.493*** (0.031)	0.664*** (0.033)
Female*FemalePref.	0.054** (0.023)	0.089 (0.107)	0.395*** (0.089)	0.226** (0.088)	0.025 (0.022)	-0.050* (0.026)	0.130*** (0.029)	0.173 (0.104)
Controls	✓	✓	✓	✓	✓	✓	✓	✓
Canton fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Period fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Ref. type fixed effects	✓	✓	✓	✓	✓	✓	✓	✓
Pseudo R ²	0.823	0.717	1.08	1.29	0.708	1.05	0.892	0.680
Observations	16,287	1,719	4,086	2,171	11,749	5,575	7,661	4,725

Notes: ***, **, and * indicate a mean significance level of < 1%, 1 – 5%, and 5 – 10%, respectively. Robust standard errors in parentheses are clustered at the cantonal level. OLS models are estimated.

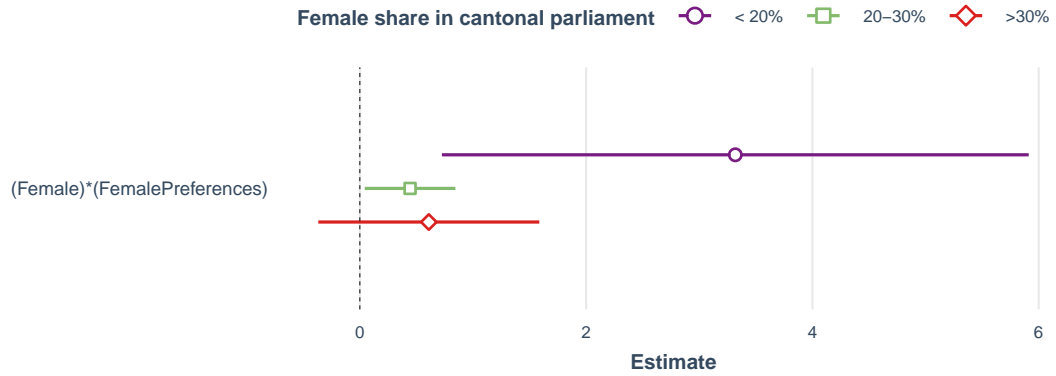
B Figures

Figure B1: Heterogeneity by vote topic - OLS



Notes: Coefficient β_2 of the interaction term $Female_i * FemalePreferences_i$, and 90% confidence intervals for referred subsets are displayed. Robust standard errors are clustered at the cantonal level. OLS models are estimated.

Figure B2: Heterogeneity through socialization—share of woman in representative's cantonal parliament - Logit



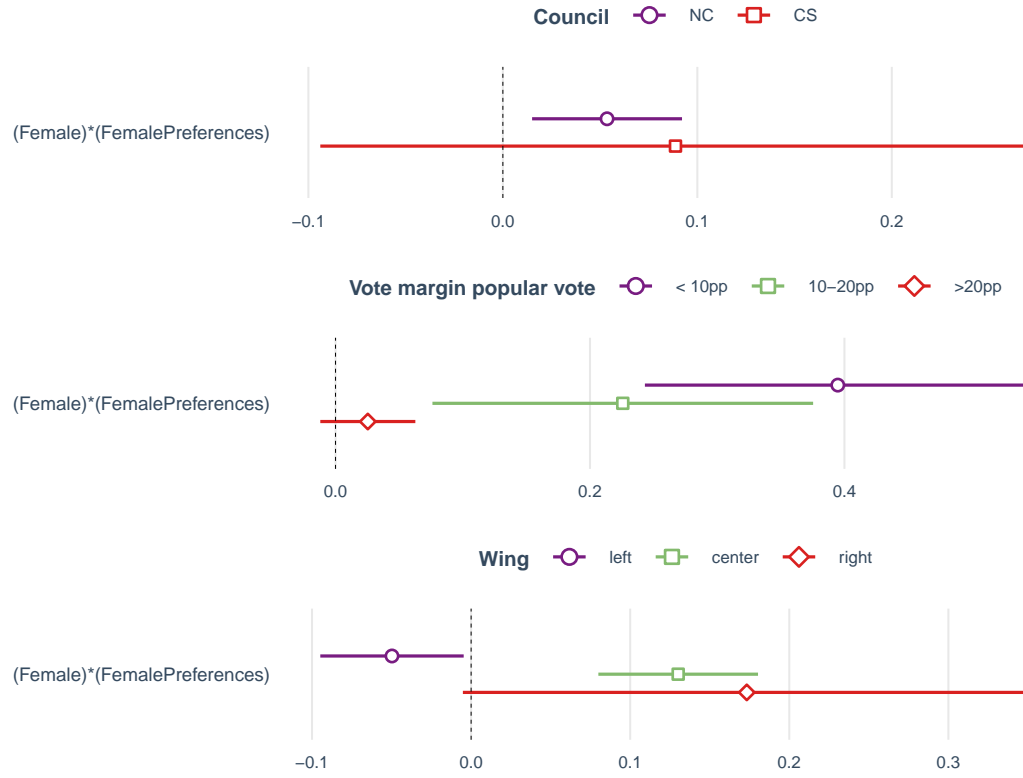
Notes: Coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ and 90% confidence intervals for referred subsets are displayed. Robust standard errors are clustered at the cantonal level. Logistic models are estimated.

Figure B3: Heterogeneity through socialization - OLS



Notes: Coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ and 90% confidence intervals for referred subsets are displayed. Robust standard errors are clustered at the cantonal level. OLS models are estimated.

Figure B4: Heterogeneity through political incentives - OLS



Notes: Coefficient β_2 of the interaction term $Female_i * FemalePreferences_r$ and 90% confidence intervals for referred subsets are displayed. Robust standard errors are clustered at the cantonal level. OLS models are estimated.