Congruence of female and male legislators with the preferences of women and men☆

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ABSTRACT

We leverage the institutional framework in Switzerland to discern the revealed preferences of female and male voters for various legislative proposals. We examine whether female or male legislators' votes in parliament are more congruent with women's or men's revealed preferences for identical legislative proposals. Our analysis of 47,527 matches between legislators and their voters reveals no significant difference in how closely female and male legislators match the preferences of women and men, particularly, when accounting for party affiliations. We conclude that female legislators do not demonstrate higher congruence with women's preferences than their male counterparts in parliament.

1. Introduction

The gender of legislators is widely believed to affect their political decisions and to align them with the preferences of constituents with the same gender (see, e.g., Hessami and Lopes da Fonseca, 2020, for an overview). We challenge this belief by examining a direct measure of political congruence between legislators and citizens. We provide evidence that female legislators' parliamentary decisions are no more congruent with the preferences of women and men in the electorate than male legislators' decisions.

We leverage an informative institutional setting and a unique dataset encompassing all 777 members of the Swiss Houses of Parliament from 1996 to 2022. The setting enables us to match individual legislators' decisions in parliament with the revealed preferences of women and men in the electorate. In Switzerland, voters frequently reveal their policy preferences in referenda. Representative postreferendum surveys provide insights into gender-specific voting behavior of the electorate.

Our empirical findings show that female legislators' congruence with women in the electorate amounts to 65.4%, closely reflecting their congruence with men, which is 1.0%-points lower. Male legislators show identical congruence with women (also 65.4%), but an

approximately 3.3%-points higher congruence with men in the electorate. Gender-related differences in congruence become non-significant and quantitatively negligible when controlling for legislators' party affiliations. We interpret this as evidence that the legislators' gender does not influence their congruence with women or men's preferences.

2. Measuring political congruence

Examining the role of legislators' gender for political representation requires investigating legislators' policy decisions in parliament and their alignment with the preferences of women and men in the electorate. In most countries, the revealed preferences of voters for legislative proposals are hard to identify.

In Switzerland, as in other democracies, legislators cast votes on policy proposals. However, a distinctive characteristic of the Swiss system is that it allows voters to demand a referendum on most parliamentary decisions and to propose constitutional amendments, commonly referred to as initiatives. The prerequisites for initiating obtaining are straightforward, and they provide voters with a final choice between the new legislation proposed and the status quo. This system allows a direct comparison between the decisions of voters in referenda and
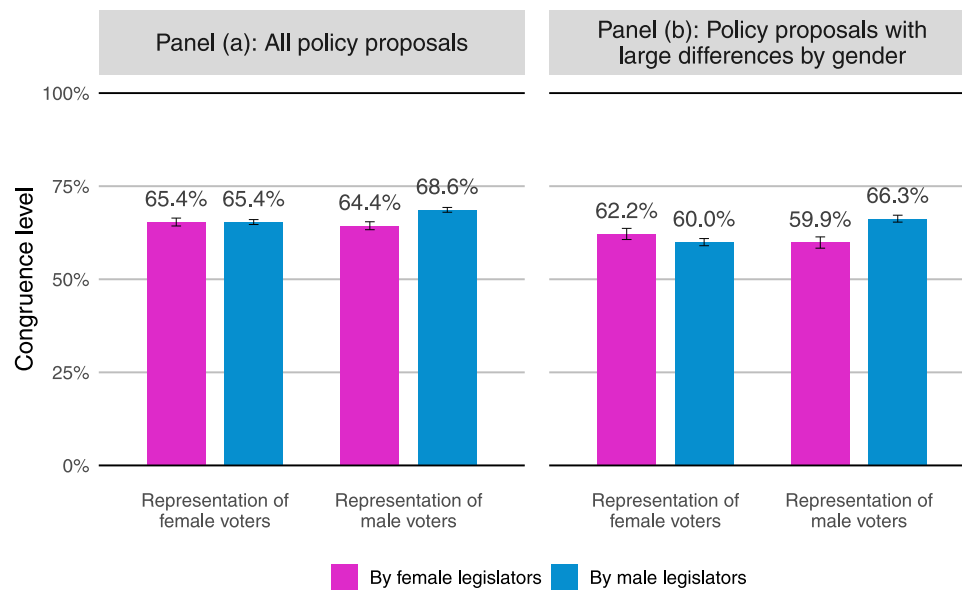
Fig. 1. Congruence of female and male legislators' decisions with preferences of female and male voters.
Note: Panel (a) shows female and male legislators' congruence with the preferences of women and men in the electorate for all 234 policy proposals. Panel (b) concentrates on legislative proposals for which the preference differences between men and women in the electorate exceed 5%-points. 99% confidence intervals are shown.

the decisions made by legislators in parliament on the corresponding legislative proposals. Hence, matching decisions in parliament with those in referenda provides a precise measure of congruence between legislators and voters (see Carey and Hix, 2013).

After each referendum, a representative sample of 1,000 to 3,000 eligible voters is surveyed. These surveys, which are typically referred to as VOX analyses, contain data on respondents' voting behavior in referenda and sociodemographic characteristics such as gender. VOX analyses are highly regarded due to their reliability in reflecting official voting results. They are prominently discussed in newspapers, and they have been used in academic literature (see, e.g, Stutzer et al., 2019; Stadelmann et al., 2015). We use the voting records of the majority of women and the majority of men in VOX analyses as measures of the preferences of women and men in the electorate for each referendum.

To assess the congruence between female and male legislators and women and men in the electorate, we employ a binary measure. Congruence is attained when a legislator's decision in parliament corresponds to the majority decision of women or men in the electorate. As voters reveal their preferences only some months after the parliamentary decision, legislators who decide on the respective issue do not perfectly know citizens' preferences, but they must anticipate them (like in representative democracies). Similar to the literature, we, therefore, presume that the findings from our congruence measure are relevant beyond our setting (see Garrett, 1999; Barceló, 2019).

We analyze a total of 47,527 decisions on all 234 legislative proposals that were subject to referenda made by all 777 legislators who were members of the Swiss Houses of Parliament at some point between 1996 and 2023 and match them with the majority decisions of women and men in the electorate.[1] During this period, descriptive (i.e. numerical) representation of women increased from 21.9% in 1996 to 39.4% in 2022, a trend similar to that observed in other democracies (Inter-Parliamentary Union, 2024).

3. Politicians' congruence with preferences of women and men

Fig. 1 illustrates female and male legislators' congruence with women in the electorate (first two bars) and with men (third and fourth bars).

When looking at all 234 policy proposals in Panel (a), female legislators' congruence with women's preferences amounts to 65.4%, which is closely comparable to their congruence of 64.4% with men's preferences. Male legislators' congruence with women in the electorate is also 65.4%, meaning that there is no difference from female legislators' congruence with women in the electorate. Notably, the probability of a male legislator's decision matching the preferences of men, as revealed in referendum decisions, is with a value of 68.6% statistically significantly different from both female legislators' congruence with women and men in the electorate as well as male legislators' congruence with women in the electorate. Thus, while male legislators seem to represent the preferences of men most effectively, female legislators show no notable discrepancy in their representation of the preferences of women and men in the electorate.

Differences in congruence can only occur if preferences differ significantly by gender. In Panel (b) of Fig. 1 we focus on issues with large differences in preferences (i.e., at least a 5%-point difference in the yes-share) between male and female voters.[2] For issues with such a strong gender dimension, the differences in congruence are more pronounced. Female legislators are 2.2%-points more congruent with women in the electorate than male legislators, and male legislators are 6.4%-points more congruent with men in the electorate than female legislators.

So far, our estimates have not incorporated any control variable. Although there is no enforced party discipline in the Swiss Houses of Parliament, a pertinent variable to consider is party affiliation as parties differ in their share of female legislators, and they mirror legislators' ideologies, thus, potentially affecting congruence.

In Table 1, we estimate a linear probability model in which legislators' congruence with either women (odd-numbered columns) or men (even-numbered columns) in the electorate is the dependent variable. To discern differences in congruence between female and male legislators, we include a dummy variable, assigned a value of one for female legislators. We introduce party fixed effects to account for ideological differences between legislators of different parties and the differences in the gender composition between parties.

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[1] The Swiss Federal Assembly consists of 46 members of the Council of States and 200 members of the National Council.

[2] For instance, an observation used in panel (b) would be a referendum in which 47.5% of women reported voting 'yes', while over 52.5% of men reported voting 'yes'.

Table 1
Female and male legislators' congruence with preferences of women and men in the electorate: Estimation results accounting for party affiliation.

	Panel (a) All policy proposals		Panel (b) Policy proposals with large gender differences	
	Congruence with women (1)	Congruence with men (2)	Congruence with women (3)	Congruence with men (4)
Female Legislator (=1)	−0.0002	0.0001	−0.004	−0.004
	(0.005)	(0.004)	(0.007)	(0.006)
Party fixed effects	✓	✓	✓	✓
Pseudo R^2	0.025	0.052	0.019	0.056
Observations	47,527	47,527	24,144	24,144

Note: The dependent variable is either a legislator's congruence with the majority preferences of women (models 1, 3) or with the preferences of men (models 2, 4). OLS linear probability models are estimated. Standard error estimates in parentheses are clustered at the MP level.
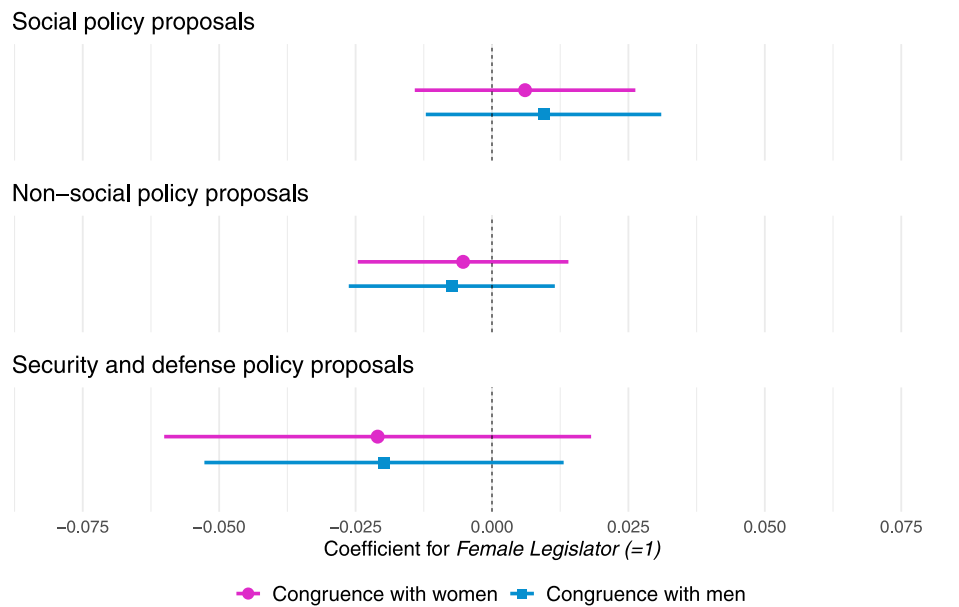
Fig. 2. Female and male legislators' congruence with preferences of women and men in the electorate: Exploring different policy areas.
Note: The figure displays coefficient estimates for the variable *Female Legislator* from a linear probability model, identical to that in Table 1, Panel (a), but analyzes different policy areas. 99% confidence intervals are shown. Policy areas are defined according to Année Politique Suisse.

The estimation results reveal a highly consistent pattern: the coefficient for the variable *Female Legislator* is never statistically significant, and quantitatively almost nil.[3] Using an electoral district-specific measure of congruence, defined as a female or male legislator's decision matching the preferences of women or men in their electoral district, bears identical results (see Table A.1). Therefore, once party affiliation has been controlled for, there is no evidence to suggest that female and male legislators represent the revealed preferences of women or men in the electorate differently.

In Fig. 2, we present additional analyses examining congruence across different policy areas, including those related to gender, such as social policy proposals. The figure shows results from estimations identical to those in Table 1, for separate policy areas. Our findings indicate no statistically significant association between legislators' gender and congruence with either women or men in the electorate.

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[3] Controlling for additional covariates and splitting the sample by the Houses of Parliament yield similar results.

4. Conclusions

We examine female and male legislators' congruence with the preferences of women and men in the electorate. Through an analysis of 47,527 matches between legislators and female and male voters stemming from 234 legislative proposals with subsequent referenda from 1996 to 2022, we derive a direct measure of political congruence.

Our analysis reveals that legislators' gender does not seem to impact their alignment with the preferences of women or men in the electorate. Notably, female legislators' congruence with women's preferences closely mirrors their congruence with men's preferences. Although descriptive analysis suggests small differences in female and male legislators' congruence on policy issues for which women and men in the electorate have divergent preferences, these differences become statistically negligible and close to nil when party affiliations are considered. As a result, female and male legislators' congruence with the preferences of women and men in the electorate are essentially identical.

Our findings provide a critical perspective on the prevailing prior that female legislators represent women's preferences more accurately

Table A.1
Female and male legislators' congruence with imputed preferences of women and men at the district level.

	Panel (a) All policy proposals		Panel (b) Policy proposals with large gender differences	
	Congruence with women (1)	Congruence with men (2)	Congruence with women (3)	Congruence with men (4)
Female Legislator (=1)	−0.007 (0.005)	−0.006 (0.005)	−0.008 (0.007)	−0.009 (0.007)
Party fixed effects	✓	✓	✓	✓
Pseudo R^2	0.016	0.038	0.011	0.042
Observations	47,527	47,527	23,032	23,032

Note: The dependent variable is either a legislator's congruence with the imputed district-level majority preferences of women (models 1, 3) or with the imputed district-level majority preferences of men (models 2, 4). OLS linear probability models are estimated. Standard error estimates in parentheses are clustered at the MP level.

than their male counterparts. The effectiveness of legislators in representing the preferences of women and men in the electorate need not depend on the legislators' gender. Our result can also be seen as consistent with theories of electoral competition, suggesting that there are generally no clear a priori reasons to assume that female or male legislators elected in competitive environments would represent women less effectively than they represent men. Future research might go beyond mere congruence and explore the responsiveness of female politicians towards female and male voters (e.g., Kläy et al., 2024).

Data availability

The replication script and replication data will be made available on request. Raw data are available from *Der Parlameter* (https://www.parlameter.ch) on reasonable request.

Appendix. District-specific congruence with female and male preferences

We impute the preferences of gender g (women or men) in district d for referendum r by applying the relative difference between female (male) preferences and the overall preferences at the national level, as measured by VOX, to the official referendum result of the district. We derive the ratio of the 'yes' vote share of voters of one gender in a referendum to the total 'yes' vote share from the VOX analyses. We then multiply this value by the official referendum result of the district. Thus, the imputed preferences of gender g (women or men) in district d for referendum r are obtained by

$$Preference_{d,g,r} = ReferendumYes\%_{d,r} * \frac{Yes\%VOX_{g,r}}{Yes\%VOX_r}. \tag{A.1}$$

Assuming that the relative difference in preferences between women and men at the national and district levels is constant, this procedure allows us to impute district-level gender preferences.

Congruence is then attained when a legislator's decision in parliament corresponds to the imputed majority decision of women or men in their respective district. We estimate the models of Table 1 using this alternative measure of congruence. The estimation results in Table A.1 are fully consistent with our interpretations and mirror the results of Table 1: the coefficient for the variable *Female Legislator* is never statistically significant and is quantitatively negligible. Female legislators are not more congruent with the preferences of women or men at the district level compared to their male counterparts.

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