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# How do Female Preferences Influence Political Decisions by Female and Male Representatives?\*

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**Abstract:** Exploiting a natural voting experiment we identify female preferences for real policy issues in the electorate. We then analyze whether female or male politicians in parliament more closely correspond to female preferences. Holding constant revealed constituent preferences, there is generally no difference between male and female politicians with respect to representation of female preferences. However, when focusing only on social and redistribution issues, we find that female politicians correspond in their decisions more closely to female preferences.

**Keywords:** Gender, legislative voting, female preferences

**JEL Classification:** J16, D72, H50

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*But more prosaically, as much as feminists hated her because she had no solidarity with us, or with women for that matter – she was sui generis, for herself and of herself – there is no question that she was a role model.*

(Linda Grant, author and feminist on Margaret Thatcher, The Guardian, January 2012)

*Women aren't better human beings. They only had more time to keep their hands clean.*

(Alice Schwarzer, author and feminist, Frankfurter Allgemeine Zeitung, April 2008,  
translated from German)

## I. INTRODUCTION

Although the share of women holding parliamentary seats has increased over the last decades, in 2012 only approximately 23.4 % of parliamentary representatives in European countries are women, a number which is comparable to 23.8 % for the Americas according to the Inter-Parliamentary Union.<sup>1</sup> Thus, women are clearly underrepresented in numbers in parliaments around the world, i.e., descriptive representation of women is weak. However, this does not necessarily imply that female preferences in the electorate are underrepresented too. Political representation is generally regarded as the activity of making citizens' voices present in the political process (see Pitkin 1967). Female preferences may be represented by male politicians, female politicians face similar electoral or interest group pressure as male politicians, policy decisions, such as energy security, may not involve a gender dimension, etc. Hence, it is theoretically unclear why underrepresentation in numbers should be equivalent to underrepresentation of preferences, i.e., weak descriptive representation need not imply weak substantive representation.

We exploit a natural voting experiment in Switzerland which allows us to directly identify female preferences in the electorate and analyze whether female or male politicians differently represent female preferences, i.e., whether decisions of female representatives more closely correspond to female preferences in the electorate than decisions of male representatives. As almost anywhere in the world female representatives are underrepresented in numbers in the Swiss parliament (29.0 % of members of the lower house of parliament were women in 2012). Differently to constituents in other countries, Swiss constituents

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<sup>1</sup> Nordic countries in Europe form an exception with about 42 % female parliamentary representatives (<http://www.ipu.org/wmn-e/world.htm>).

frequently vote on policy issues in referenda and thereby reveal their preferences (see Schneider et al. 1981; Bohnet and Frey 1994; Frey 1994, 1997). Referenda decisions entail real policy consequences. Importantly for our identification strategy, female and male representatives decide in parliament on precisely the same policies (with even the same wording) that constituents vote on in referenda. Moreover, before referenda take place the leading interest group representing women in Switzerland, Alliance F, regularly issues independent voting recommendations to the electorate after politicians decided in parliament on the very same issue. Thus, we observe what politicians actually do, we know what representatives' constituencies really want and what female preferences for specific policies are, all at the same time. Thereby, we can evaluate directly whether female representatives correspond in their parliamentary decisions more closely to female preferences than male representatives holding constituents overall preferences constant.

We analyze 29 referenda which entail gender specific ramifications, the corresponding legislative decisions to these referenda from 2000 to 2011, and we identify female preferences in the electorate. Results show that, on average, female politicians do not systematically correspond more to female preferences than male politicians do. In fact, female and male politicians do not correspond differentially to female preferences in the electorate, even if we control for preferences of the majority of constituents and a large array of other characteristics, party affiliations and district fixed effects. Thus, over different policy areas where female associations consider female preferences affected, female politicians do not represent female preferences more closely than their male counterparts in parliament. This observation contradicts common perceptions and weakly supported views in the literature that female preferences are substantively underrepresented due to a relatively larger number of male representatives in parliament.

Yet, our setting allows an in depth analysis which provides further insights. When focusing on referenda dealing specifically with social and redistribution policies, we find that female representatives correspond more closely to female preferences in the electorate than their male counterparts in parliament. In particular, for reproductive issues we observe that female politicians tend to mirror female preferences better than male politicians. This refined and focused analysis complements and extends the existing literature as numerous studies have shown that women in politics act more socially minded and provide more public goods (see Croson and Gneezy 2009; Gneezy et al. 2009; Chattopadhyay and Duflo 2004) which is fully consistent with our finding for social and redistribution issues. Concentration on these specific issues may also explain why previous studies might have expected that female

preferences are underrepresented: A lower number of female representatives may indeed lead to weaker representation of female preferences in the electorate when focusing on social and redistribution issues. However, as politics is not only about redistribution but also about efficiency, security, organization of the state, foreign affairs, etc., we may conclude that descriptive underrepresentation does not necessarily imply underrepresentation of preferences because women and men in politics react overall similarly to female preferences in the electorate. Put differently, politicians in general seem to be *sui generis*, of themselves and for themselves, or in economic terms, they maximize *their* utility subject to *common constraints* which are usually not gender specific.

Our findings with respect to representation of female preferences in general and for social and redistribution issues in particular are highly robust to changes in the identification of female preferences in the electorate. Specifically, if we use post referendum surveys which allow us to distinguish between female and male respondents, precisely the same pattern emerges: Female politicians do not tend to represent female preferences revealed in post referendum surveys better than male representatives on average. Only for social and redistribution issues female politicians correspond more closely to the female electorate than male politicians. Finally, using differential subsamples we conclude that the differential representation effects for social and redistribution issues are specific to gender and do not vary over characteristics such as being married, having children or a better education. Only feminist socialization of women during the 1960s and higher education of men seem to play a small additional role, making feminist socialized female politicians and better educated male politicians slightly more prone to correspond to female preferences for social and redistribution issues.

The remainder of this paper is structured as follows: Section II presents our data and the identification method. Empirical results of the natural voting experiment are presented in Section III. Section IV provides robustness tests regarding the identification of female preferences and refinements with respect to social and redistribution policies. Finally, Section V offers some concluding remarks and potential policy consequences.

## II. DATA AND IDENTIFICATION

### *Institutional setting and data*

We analyze the voting behavior of 350 distinct members of the Swiss National Council (lower house of parliament) from 2000 to 2011 (included). During the period of analysis

27.1% of representatives were women. Parliamentary representatives are elected in 26 constituencies, i.e., the Swiss cantons. As common in the literature on legislative voting behavior, we examine roll call votes of politicians during their time in office as final roll call votes are most proximate to the adoption of governmental policies (see Krehbiel 1993).

As everywhere around the world, parliamentarians in Switzerland vote on laws, changes to laws, and constitutional amendments. However, proposals accepted by parliament do not necessarily turn directly 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 also propose constitutional amendments by demanding an initiative by collecting 100000 signatures (for details see Stadelmann et al. 2012 or Portmann et al. 2012 and the discussion by Carey and Hix 2012). Referenda reflect revealed preferences for policies as they permit constituents to rank them against the status quo (see, e.g., Schneider et al. 1981; Brunner et al. 2012) and they entail real policy outcomes. One distinctive feature of our empirical strategy is to match data on referendum results for each constituency with its representatives' final roll call votes in parliament on the very same issues with identical wording. Thereby, we directly observe preferences of the majority of constituents for policies advanced in parliament and can confront these preferences with the behavior of the constituency's representatives.

For any given policy proposal it is unclear whether women in the electorate really support what female and male politicians decide in parliament. While we have the unique opportunity to observe representatives' roll calls as well as preferences of their constituencies directly, we also need a direct measure for female preferences in the electorate. Our primary measure of female preferences in the electorate relies on the major and most important interest group for women in Switzerland, Alliance F.<sup>2</sup> For additional robustness tests we also take recourse to a secondary measure based on post referendum surveys which allow distinguish between female and male respondents, i.e. we take the responses of a representative sample of women surveyed after a referendum as a measure for their preferences.

Alliance F is the umbrella organization of Swiss female interest groups with a tradition of lobbying for female interest for over 112 years since its establishment in 1900. It regroups over 140 associations for women from all over the political spectrum and thereby represents a total of over 400000 women in Switzerland (roughly 15 % of the female voting population)

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<sup>2</sup> Alliance F is derived from "Alliance Femme" (alliance of women).

organized in these associations. As an umbrella organization of diverse female organizations Alliance F does not consider itself a liberal organization.<sup>3</sup> In comparison to American female interest groups such as NOW (National Organization of Women) or AAUW (American Association of University Women), Alliance F does not employ roll call votes on polarizing pieces of legislation during a legislative period to rank politicians ex-post. Instead, Alliance F regularly disseminates voting recommendations for referenda after politicians decided in parliament. Consequently, recommendations by Alliance F are not restricted to the most polarizing political issues which is commonly seen as a problem of research drawing on pieces of legislation chosen by interest groups (see Snyder 1992). Moreover, as the expert specialist on female preferences it issues voting recommendations on all policy proposals where it considers female preferences affected.<sup>4</sup> Thereby, it assures that voters are informed prior to their decision which referenda are important for female preferences. Finally, according to the official registry on interest group affiliations of members of parliament, no parliamentarian is a direct member of Alliance F or present in any of its decision committees. All these reasons make us confident that, firstly, Alliance F broadly reflects female preferences in the electorate, secondly, referenda for which it disseminates voting recommendations affect female preferences, and finally, its choices are not driven by strategic considerations to influence members of the parliament but to influence referendum outcomes. We collected all 29 recommendations issued by Alliance F to either accept or reject referenda during the years 2000 to 2011. Recommendations were issued on diverse policy areas as classified by the Parliamentary Services and included social, redistribution, energy, security, foreign issues as well as governmental affairs, among others. Table 1 presents the list of referenda with a short description of the topic (the original text of each referendum in three official languages in Switzerland are presented in a supplement). Moreover, the table uses the classification by the Parliamentary Services to identify referenda on social and redistribution issues, it stipulates the yes share of the Swiss population as a whole, the percentage of cantons accepting the referendum and the voting recommendation of Alliance F.

**< Table 1 here >**

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<sup>3</sup> For example, members of Alliance F include the conservative Swiss Union of Catholic Women (“Ligue Suisse des femmes catholiques” in French) as well as the socialist.

<sup>4</sup> On a total of 111 referenda, Alliance F considered 29 to affect female preferences and issued a voting recommendation.

Apart from focusing on recommendations by Alliance F, we draw on representative post referendum surveys based on the sample of approximately 1000 citizens after each referendum.<sup>5</sup> Survey respondents were asked to report their choice in the referendum analyzed. In each survey we can identify female and male respondents, i.e., distinguish their responses with respect to different policy proposals. Instead of solely relying on the expert specialist Alliance F to identify female preferences, we can directly use the share of female respondents who reported to have voted yes in the respective referendum as an identification for female preferences in the electorate.

Our data setting features important advantages compared to previous literature. As we consider referenda, we know what constituents' revealed preferences for policies are. Representatives are supposed to act according to the preferences of their respective constituents. As politicians decided in parliament before constituents (men or women) voted in referenda, they have to predict what their constituents' preferences are, thus, they act as they would have to do for any other policy decision in parliament when trying to represent constituents' preferences (see Garrett 1999). We obtain external validity of our setting as politicians cannot simply follow revealed behavior of their constituents and, similar to countries without referenda, they may not know fully in advance what their constituency wants, i.e., when making their decision in parliament politicians cannot use information from a potential referendum but have to rely on standard ways (experience, surveys, contact with constituents etc.) to obtain information about the preferences of the constituency they are supposed to represent (see Brunner et al. 2012 and Stadelmann et al. 2012). We measure female preferences in the electorate for policy proposals which passed parliament. Revealed female preferences identified by voting recommendation of Alliance F or by post referendum surveys are – similar to constituents' preferences – not available to politicians at the time they decide in parliament.<sup>6</sup> Again, politicians in our setting cannot obtain information about potential female preferences in any other way than in countries without referenda. However, in comparison to other settings we know ex-post what female and a constituency's preferences are and whether female and male politicians really represented them. As referenda are held on average 90 days after legislative decisions have been made, we do not expect individual parliamentarians to have been able to influence the preferences of either their

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<sup>5</sup> Such post referendum surveys are carried frequently, are commonly known by the name of vox analyses and are used by newspapers when reporting on referendum outcomes.

<sup>6</sup> Note that literature using interest group rankings to analyze on legislative voting necessarily uses data ex-post rankings to explain parliamentary decisions (see Washington 2008).



constituents or female voters. If parliamentarians were indeed able to influence preferences for policies of their constituents or female voters, such an influence would not depend on the existence of referenda and, thus, our results regarding representation of revealed preferences should again not be specific to our natural voting experiment. Nevertheless, we recognize that we cannot provide direct evidence that our results also generalize to settings where preferences of women and constituents cannot be observed ex-post, i.e. after representatives already decided (see Brunner et al. 2013 for similar arguments).

### *Empirical identification strategy*

Given the data structure, the voting experiment we analyze is the following: Preferences of constituents for specific policies are given and can be observed. Preferences of women in the electorate for specific policies are given and can be identified. A parliamentary representative is either female or male by nature.<sup>7</sup> Now, we compare whether female or male politicians correspond more closely to female preferences to identify whether and how female preferences in the electorate affect policy choices of representatives. To translate this experiment into an estimation strategy, we run

$$(1) \quad MPYes_{ir} = \alpha + \beta_1 Female_i + \beta_2 Female_i * FemalePreferencesYes_r + \beta_3 FemalePreferencesYes_r + \varepsilon_{ir}$$

where  $MPYes_{ir}$  is a dummy for whether a representative  $i$  votes yes (dummy is 1) or no (dummy is 0) in parliament for roll call vote on referendum  $r$ .  $IsFemale_i$  is a dummy for whether a representative  $i$  is a woman or a man and  $FemalePreferencesYes_r$  stands for identified female preferences in the electorate in referendum  $r$ . Our empirical strategy relies on a typical difference-in-difference setting. The  $\beta_2$  coefficient gives the effect of whether female representatives correspond more (or less) closely to female preferences than male representatives, i.e., whether female politicians represent female preferences differently than their male counterparts. The effect identified by  $\beta_2$  is causal in the sense that if gender of politicians is exogenous and female preferences changed from no to yes we identify whether male or female representatives vote yes in parliament more often.

Assuming that female preferences in the electorate may not only reflect female preferences but also constituents preferences in general, conditioning on observed preferences of a constituency would be necessary for identifying how politicians represent

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<sup>7</sup> All members of parliament clearly indicate a unique sex on their individual homepages.

female preferences and whether female politicians correspond differently to female preferences than male politicians. Failure to include preferences of a constituency might yield an estimate of  $\beta_2$  in equation (1) which does not only include the impact of female preferences on female representatives but also the impact of the constituency's preferences represented by the politician.<sup>8</sup> Conditioning on preferences of constituencies which are made up of female and male voters, female preferences and preferences of constituencies are likely to be linearly dependent. As a consequence, when controlling for preferences of constituencies, the coefficient  $\beta_2$  should be interpreted directly as the relative difference between how female politicians and male politician represent female preferences. While the literature recognizes the need to control for a constituency's preferences, there is no other study which uses a direct measure for revealed preferences on the very same policy proposals that politicians voted on and where female preferences can be identified. Moreover, according to the previous literature, we may speculate that other controls such as personal characteristics, party affiliations, and constituency fixed effects may be associated with legislative voting. Finally, as our dependent variable is binary by nature, a logistic link function is preferable to a linear probability model estimated with OLS. Thus, we expand (1) to include additional controls, in particular the control for a constituency's preferences as well as other controls and run the specification

$$(2) \quad P(MPY_{es_{ir}}) = \Lambda(\alpha + \beta_1 Female_i + \beta_2 Female_i * FemalePreferencesYes_r + \beta_3 FemalePreferencesYes_r + \beta_4 ConstituencyPreferencesYes_{ir} + \mathbf{X}_{ir}\boldsymbol{\gamma} + \phi_i + \eta_i + \varepsilon_{ir})$$

where *ConstituencyPreferencesYes<sub>ir</sub>* stands for the constituency's preferences represented by parliamentarian *i* for roll call vote on referendum *r*.  $\mathbf{X}_{it}$  represents a number of characteristics (age, service length, children, marital status, education), which are squared where appropriate, of representative *i* at time *r* when the roll call vote is held.  $\phi_i$  denote party affiliation fixed effects of the representative *i* and  $\eta_i$  denote constituency fixed effects.  $\Lambda$  denotes the logistic function  $\Lambda(X) = e^Z / (1 + e^Z)$  with *Z* a design matrix.

Table A1 in the appendix provides descriptive statistics on all variables. Due to the data structure and our identification setting, all variables are actually observed (no imputed values imputed) and available from the sources given in the description of Table A1.

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<sup>8</sup> Footnote with Stadelmann et al. Women Paper...

### III. EMPIRICAL RESULTS OF THE NATURAL VOTING EXPERIMENT

#### *Descriptive evidence*

Female representatives in parliament do not correspond relatively more closely to female preferences in the electorate than male representatives, on average over all policy proposals. However, when focusing only on social and redistribution policies we observe that female representatives tend to correspond more closely to female preferences. These two relationships can be seen in Figure 1 and the accompanying tables in panel (a) for all policy areas and in panel (b) for social and redistribution policies, and they present the main motivation for this paper.

**< Figure 1 here >**

We generally observe that, independent of the political issue at stake, if Alliance F recommends accepting instead of rejecting a policy proposal, female as well as male representatives tend to vote yes more often. In panel (a) with all policy areas, if Alliance F recommends voting yes, female politicians tend to have voted yes with a probability, which is 39.4 percentage points higher than if Alliance F recommends voting no. A very similar effect with 41.7 percentage points holds for men in parliament. The difference between these two differences amounts to approximately -2.3 percentage points which is not a significant difference-in-differences.<sup>9</sup> Thus, analyzing a wide spectrum of different policies where female preferences are known, female and male politicians do not correspond differently to the female electorate. This can also be seen from the first two bars of the figure above panel (a) which depicts first differences in yes to no decisions for female and male representatives and the respective 90%-confidence intervals. There is no significant difference between female and male representatives with respect to all policy proposals where female preferences can be identified.

However, the picture is entirely different when analyzing specifically social and redistribution policies. Focusing only on these policies in panel (b) and the two rightmost bars in Figure 1, the first difference between parliamentary decisions by female and male representatives when women in the electorate prefer to accept instead of reject the policy proposal is significantly larger for female politicians than for male politicians. While the first difference is 41.9 percentage points for male politicians, and thus similar to the sample with

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<sup>9</sup> In fact, if the effects were significant we might conclude that female politicians tend to correspond slightly less to female preferences, which is entirely possible (see Swers 2005 and Sawyer 2000 for a differentiated discussion on women, representation and identity).

all referenda (panel a), the first difference is 56.6 percentage points for female politicians. The difference-in-difference is 14.8 percentage points and significant at the 1%-level. Thus, results show that only for social and redistribution issues, we observe that female politicians correspond more closely to female preferences. For the whole spectrum of policies, however, female and male politicians do not correspond differently to female preferences in the electorate on average.

In the remainder of the paper we show that these first descriptive results are robust to a wide range of additional controls, in particular controlling for the preferences of politicians' constituencies, personal characteristics, party affiliations and district fixed effects. We also highlight that this pattern is not due to the identification of female preferences using voting recommendations by interest groups such as Alliance F. Finally, we provide a number of further refinements and new insights regarding the differential effects of other characteristics of female and male politicians, specifically focusing on exogenous characteristics such as age and socialization as well as potential choice variables such as having children, being married and having a higher education.

### *Results for all policy areas*

Table 2 gives the baseline results of our natural voting experiment including all policy areas in which gender specific interests are at stake as identified by Alliance F's recommendations. For each of the specifications, we report robust standard errors clustered by constituencies.<sup>10</sup>

#### **< Table 2 here >**

In column (1) we estimate the logistic form of equation (1) which essentially reproduces the results of Figure 1, panel (a).<sup>11</sup> We observe that the interaction term between being a female representative and the yes voting recommendation of Alliance F which identifies female preferences in the electorate is not significant. Thus, contrary to common perceptions, we cannot confirm that female representatives tend to vote more according to female preferences in parliamentary policy decisions with direct consequences on constituents' preferences, i.e., female representative do not substantively represent female preferences better than male representatives. We also calculate a discrete effect of the interaction term,

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<sup>10</sup> Standard errors are clustered by constituency in recognition of the likelihood that observations in the same constituency are not independent.

<sup>11</sup> Estimating a linear probability model instead of a logit model would result in exactly the same quantitative effects with a small difference only regarding the standard errors which are clustered.

i.e., the change in the probability to observe that a representative voting yes, when the interaction term is equal to unity instead of zero while all other variables are held at their median values (see Ai and Norton 2003 and Puhani 2012). The discrete effect is approximately 1.4 percentage points and insignificant.

In specification (2) we control for preferences of a representative's constituency, i.e., for what the constituency made up of women and men really wanted. Thereby, we assure that the effect captured by the interaction term is not due to observed preferences of a constituency. If the preferences of a constituency are to accept a policy proposal, politicians generally are more likely to vote yes, i.e., they also represent their constituency's preferences. However, female representatives will not vote more according to female preferences than male representatives as evidenced by the non-significant interaction term. Thus, controlling for a constituency's preferences, we again do not find any differential gender effect regarding representation of female preferences in the electorate by female and male politicians in parliament.

Given that we identify female preferences, that a representative's gender is given, that we control for the constituency's preferences of each politician, including additional characteristics, party affiliations or district fixed effects should not have any impact on the differences in representation of female preferences by female and male politicians, i.e., the interaction term in our estimation should not be affected by including additional controls and it should remain insignificant. This is precisely what we observe in specifications (3) and (4). Controlling for age, age squared, service length, service length squared, having children, being married, having a master degree or a doctorate, being affiliated to either left or right parties has no influence on the significance of the interaction term which remains insignificant as shown in specification (3). Similarly, there is no effect on the interaction term when controlling for district fixed effects (specification 4). The interaction term always remains insignificant, i.e., female and male politicians do not represent female preferences differently when analyzing a large array of different policy areas decided on in parliament.

In specifications (5) and (6) we estimate an OLS version (a linear probability model) of specifications (2) and (4) of Table 3. The interaction term which identifies differential behavior with respect to representation of female preferences by female and male politicians is again never significant.

### *Results for social and redistribution issues*

The above results imply that differences between female and male politicians in the way they represent female preferences do not exist, on average. Thus, women in parliament do not represent women in the electorate differently than men in parliament which indicates that female preferences in the electorate are not necessarily underrepresented, i.e., descriptive underrepresentation does not imply substantive underrepresentation. In general regarding different policy areas, underrepresentation in numbers is not equivalent to underrepresentation of preferences and increasing the number of female politicians need not change potential underrepresentation of female preferences.

However, focusing closely on the literature's results, this general conclusion needs to be qualified and refined. The literature provides evidence that female politicians tend to be socially minded which potentially leads to different provision of public goods when the number of female politician increases (see Dollar et. al 2001; Chattopadhyay and Duflo 2004; Childs and Withey 2004; Aidt and Dallal 2008; Gagliarducci and Paserman 2012). While important elements in political decisions include choices on social and redistribution issues, many decisions made by parliament do not affect such policies. Politicians decide also on topics like the organization of government in general, on foreign policy, security issues, and many more. Assuming the literature's results hold, we should mainly expect differences between female and male politicians in areas where female politicians may indeed act more socially minded, hence, on social policies and on policies affecting redistribution. Thus, in Table 3 we focus specifically on social and redistribution policies.

#### **< Table 3 here >**

A different picture emerges compared to Table 2 when the analysis is restricted to social and redistribution policies as shown in the first five columns of Table 3. In specification (1) we estimate the basic setting for social and redistribution issues only including the dummy for female representatives, identified female preferences in the electorate, and the interaction term between the two in a logistic model, i.e., we estimate a logistic form of equation (1). We observe that the interaction term is positive and highly significant. The discrete effect of the interaction term is approximately 15.0 percentage points and also significant at the 1%-level. This provides direct evidence that female politicians correspond more closely to female preferences in the electorate for social and redistribution issues which is fully consistent with the results of the received literature which suggests that women in general tend to be more socially minded.

In specification (2) we control for the preferences of representatives' constituencies. If a constituency prefers to vote yes, representatives are more likely to vote yes too. The interaction term identifying a differential effect regarding representation of female preferences by female and male representatives remains almost unchanged. The discrete effect is approximately 16.2 percentage points and significant, indicating again that female representatives correspond more closely to female preferences in electorate for social and redistribution policies than male politicians do.

We control for a large array of personal characteristics, party affiliations and district fixed effects in column (3) where we estimate the full model suggested in equation (2). The interaction term remains positive, significant and quantitatively important regarding the discrete effect which slightly increases to 17.0 percentage points.

In specifications (4) and (5) we estimate an OLS version of specifications (2) and (3) of Table 3. The interaction term identifying differential behavior with respect to representation of female preferences by female and male politicians is always positive and significant. Thus, for social and redistribution of issues, female politicians correspond more closely to female preferences in the electorate than male politicians do.

Supposing that female politicians correspond to female preferences mainly when social and redistribution issues are at stake, we should observe that for other policy issues female politicians should not correspond more to female preferences in the electorate than male politicians. This is precisely what we observe in specifications (6) and (7) for policies on the organization of the state and in specifications (8) and (9) on foreign policy and security issues.<sup>12</sup> There is no significant interaction effect between being a female politician and identified female preferences for referenda on the organization of the state and the corresponding roll call votes. Similarly, we do not find a differential representation effect between female and male representatives when focusing on foreign policy issues and security (specification 8). In specification (9) the interaction term is even negative and marginally significant at the 10%-level pointing to the possibility that for these specific policy areas female politicians tend to correspond slightly less to female preferences in the electorate than their male counterparts.<sup>13</sup>

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<sup>12</sup> Such issues include, for example, the referendum on "Additional protection from gun violence by putting army weapons in the arsenal" which had nothing to do with social policies but with security. As family members tend to be victims of misuse of army weapons, women in the electorate had strong preferences to vote yes as was suggested by Alliance F.

<sup>13</sup> This is entirely possible if the relevant policy dimension is not gender specific from a viewpoint of parliamentary representatives. In the referendum on Additional protection from gun violence by putting

**< Table 4 here >**

In Table 4 we analyze differences in representation of female preferences by female and male representatives regarding specific social and redistribution policies. We split up our sample of social and redistribution policies into three main categories: referenda on health and social care, referenda on reproductive issues, and referenda on economic security and equality. We report the interaction term between female representatives and female preferences, controlling for a constituency's preferences in all specifications, and we include other controls and district fixed effects as indicated in the rows with an even number.

For all subcategories of social and redistribution issues we observe that female politicians correspond more closely to female preferences in the electorate than their male counterparts in parliament. The interaction effect for referenda on health and social care is positive and significant in specification (1), where we only control for a constituency's preferences and in specification (2) where we estimate the full model implied by equation (2) using all available controls and district fixed effects. The interaction effect points to an even stronger differential representation effect of female preferences in the electorate by women in parliament for referenda on reproductive policies as evidenced in specifications (3) and (4). Finally, we also observe positive and significant results of the interaction term when focusing on policies with respect on economic security and equality in specifications (5) and (6), where we again first estimate a model with only a constituency's preferences as an additional control and then the full model including all characteristics, party affiliations, and district fixed effects.

Thus, results show that while increasing the number of female politicians in parliament is unlikely to change overall representation of female preferences because there is generally no large difference between how female and male politicians correspond to female preferences in the electorate, the situation is different with respect to social and redistribution policies. There is a significant and large differential effect between female and male politicians with respect to representation of female preferences on social and redistribution policies. We observe that female politicians correspond more closely to female preferences than their male counterparts in parliament. Nevertheless, this also means that for non-social

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army weapons in the arsenal", for example, all male and female representatives from the right parties in parliament voted no while all male and female representatives from left parties voted yes such that the difference tends to be specific to party, which we do not include in specification (8) but in specification (9) making the interaction term negative and marginally significant (the discrete effect is still insignificant).



and non-redistribution policies affecting female preferences, we should not expect that women in parliament represent female preferences better than men.

#### IV. ROBUSTNESS AND REFINEMENTS

##### *Robustness regarding identification of female preferences*

Our setting offers the unique possibility to follow a complementary strategy of identifying female preferences in the electorate. We draw on representative post referendum surveys which allow us to distinguish between female and male respondents. Thus, we can directly identify preferences of women by their survey responses on the very same issues that women and men in parliament decided on in their roll calls. Table 5 summarizes all results using the share of women accepting a policy proposal according to post referendum surveys as an identification of female preferences instead of employing the voting recommendation of Alliance F. Our previous insights in the way female politicians represent female preferences in the electorate remain highly robust using this new way of identifying female preferences.

##### **< Table 5 here >**

In panel (a) we focus on all different policy areas. There is no significant interaction term between being a female representative and the share of women accepting a policy proposal according to post referendum surveys. In particular, the interaction effect is not significant when controlling for a constituency's preferences and even turns negative but still insignificant when controlling for personal characteristics, party affiliations and district fixed effects. This is fully consistent with the results presented in Table 2, i.e., using this different form of identification of female preferences, we find precisely the same results as using the voting recommendation of Alliance F to identify female preferences. Thus, on average when analyzing different policy areas as presented in real parliaments, we do not find that female politicians represent female preferences differently than male politicians do.

Focusing on social and redistribution policies in panel (b) of Table 5, we also observe that this different way of identifying female preference in the electorate leads to the same pattern of positive and significant interaction effects as in Table 3 and Table 4. For social and redistribution issues female politicians correspond more closely to female preferences in the electorate than their male counterparts in parliament. The interaction effect between the share of women voting yes and being a female representative is positive and highly significant as indicated in specification (3), controlling only for a constituency's preferences, and

specification (4), including the full set of controls and district fixed effects.<sup>14</sup> Similarly, a fully consistent and equal pattern as in Table 4 also emerges when spitting up social and redistribution issues into different subcategories in specifications (5) to (10) of Table 5. We always observe positive and significant interaction terms between being a female representative and the share of women in the electorate voting yes for policy issues on health and social care, reproductive issues, and policies affecting economic security and equality.

Finally, panel (c) reports results for other referenda, i.e., when the issues at stake concern the organization of the state (specifications 11 and 12), or foreign policy and security issues (specifications 13 and 14). Indeed, the results are also consistent with Table 3, i.e. the interaction term is mostly insignificant with the exception of specification (11) where it is negative and marginally significant. Thus, for non-social and non-redistribution issues female politicians do not correspond more closely to female preferences identified by the share of female voting yes as reported in post referendum surveys.

General female suffrage at the Swiss national level was introduced only in 1971 through a referendum. Thereby, male principals/voters decided themselves to share their voting rights as principals. Not all male voters in all constituencies agreed with a clear majority. In fact, in 9 constituencies a majority of male voters rejected the right to grant women suffrage at the national level.<sup>15</sup> However, a national majority of voters and for cantons was reached granting suffrage to women. In Table 6 we spilt the sample of representatives into constituencies which accepted the referendum in 1971 and those which rejected it.

**< Table 6 here >**

There is no difference in the general pattern and all results presented so far are fully consistent with the analysis of these different subsamples. For all policy areas, female representatives from constituencies where female suffrage was directly accepted in 1972 do not represent female preferences in general more closely than their male counterparts in parliament (specification 1). Only for social issues we observe that female representatives more closely correspond to female preferences (specification 2). While one might have expected that female representatives from constituencies where men rejected female suffrage

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<sup>14</sup> We also collected information on the share of women accepting a policy proposal according to post referendum surveys on all 91 referenda taking place from 2000 to 2011. Using this extended set, we find essentially the same pattern of results as shown in Table A2 in the appendix, i.e. on average for all policy proposals female representative do not correspond more closely to female preferences than male representatives. Only for social and redistribution policies female representatives correspond consistently and significantly correspond more closely to female preferences.

<sup>15</sup> In the canton of Appenzell Innerrhoden female suffrage at the cantonal level was introduced in 1990.

in 1972 might be more prone to represent female preferences, our results provide no evidence for such a more female friendly reaction in general (specification 3) as the interaction term is insignificant. Again, female representatives from these cantons only tend to correspond more to female preferences for social and redistribution issues (specification 4).<sup>16</sup> Only the point estimates of the interaction terms in specifications (3) and (4) are higher compared to specifications (1) and (2). Testing for a difference in the coefficients by employing a Welch test does result in a p-value of 0.168 when comparing the interaction term in specification (1) and (2) and a p-value of also 0.168 when comparing specifications (3) and (4). Thus, these results suggest again that women and men in politics generally act equally under given constraints independent of past behavior of men against women. Only for social and redistribution policies female representatives more closely represent female preferences which is consistent with evidence that women in general are more socially minded than men.

#### *Refinements regarding personal characteristics*

In Table 7 we explore exogenous personal characteristics of female and male politician with respect to how they represent female preferences in the electorate for social and redistribution policies.

#### **< Table 7 here >**

In specifications (1) to (3) we focus on differential effects of age for female and male representatives. We first concentrate on the subsample of female representatives in column (1). Female representatives over the age of 60 tend to correspond more closely to female preferences in the electorate than younger female representatives as evidenced by the marginally positive interaction term. Female representatives over the age of 60 correspond more closely to female preferences than male representatives over the age of 60 (specification 2), while male representatives over the age of 60 do not represent female preferences differently than younger male representatives (specification 3). Thus, the effects identified so far are mainly due to gender per se, as only elderly female representatives tend to correspond slightly more closely to female preferences in the electorate while there are no other differences with respect to age.

We analyze this relationship more carefully by focusing on potential effects of socialization. We identify a dummy variable which indicates whether politicians were already

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<sup>16</sup> All these results also hold when using post referendum surveys to identify female preferences in the electorate instead of using voting recommendations by Alliance F.

18 years of age in 1968. 1968 was seen in many countries, among others in Switzerland, as the high of liberal student and citizen movements.<sup>17</sup> Thus, the dummy variable captures whether politicians currently in parliament may have actively experienced this period. Again, we analyze different subsamples in specifications (4) to (6). We observe that female politicians potentially socialized during the 1960s, correspond significantly more to female preferences than female representatives who were not socialized during that period (specification 4). Female representatives socialized during the 1960s correspond more to female preferences than male politicians socialized during that period (specification 5). However, also male politicians socialized during the 1960 tend to correspond slightly more to female preferences today than other male politicians as identified by the interaction term in specification (6).

Finally, we combine age and socialization in specifications (7) and (8). For the subsample of female representatives, our results indicate that the higher correspondence with female preferences tends to be driven by socialization and not by age. For the subsample for male politicians we do not observe any significant effect when controlling for age and socialization at the same time. Testing for joint significance of both interaction terms shows that the interaction terms are jointly significant for the sample of female politicians, but no joint significance is reached at the 10%-level for the interaction terms for male politician.

In the appendix, Table A3, we reproduce the same estimates as in Table 7 but using the share of women accepting a policy proposal according post referendum surveys to identify female preferences. The results using the share of women voting yes are fully consistent with using the voting recommendation of Alliance F. We observe that older women in parliament tend to correspond more with female preferences than younger women in parliament, older women correspond more with female preferences than older men, but there is no difference between older men and younger men in parliament with respect to representation of female preferences. A very similar pattern holds for potential socialization during the 1968 period. Combining the age and the socialization effects, we would argue that the socialization effect is dominant for female politician while there is no effect for male politicians.

In Table 8 we explore interactions with a number of different characteristics which represent choice variables for politicians.<sup>18</sup>

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<sup>17</sup> In fact, certain roots of the introduction of female suffrage in 1971 may be traced back to movements in the 1960s.

<sup>18</sup> As the variables analyzed partly represent by choices the results serve as descriptive results to understand where intra sample differences in representation between gender may potentially stem from.

**< Table 8 here >**

First, we focus on the effect of having children in specifications (1) to (3). Female politicians with children do not represent female preferences differently than female politicians without children (specification 1). However, female politicians with children correspond more closely to female preferences in electorate than male politicians with children, as evidenced by the positive and significant interaction term in specification (2). There is no significant interaction term when focusing on the subsample of male representatives which indicates that male representatives with children do not represent female preferences differently than male politicians without children (specification 3).

Next, we analyze the effects of being married. The main pattern of the results is identical to the differential effect of having children on women and men regarding representation of female preferences. Married female representatives are not different to unmarried female representatives in the way they represent female preferences (specification 4). Married female representatives correspond more closely to female preferences than married male representatives (specification 5) but there is no difference between married male representatives and unmarried men regarding representation of female preferences (specification 6).

In specifications (7) to (9) we focus on education. Female representatives holding a master degree or doctorate do not represent female preferences differently to female politicians without such an education as shown by the insignificant interaction term in specification (7). There also seems to be no difference between female representatives with a higher education and male representatives with a higher education because the interaction term in specification (8) focusing on the subsample of master or doctoral degree holders is insignificant. However, there is a significant difference in the way educated male politicians represent female preferences in the electorate compared to male politicians without higher education represent them (specification 9). Higher education is linked with a significantly higher probability of representing female preferences in the sample focusing on male representatives only.

We interact all three additional characteristics with the identifier for female preferences in a subsample for female politicians (specification 10) and for male politicians (specification 11). Specification (10) shows that, as expected, none of the interaction terms turns out to be significant. Moreover, testing the joint significance of all interaction terms does not permit us to reject the null hypothesis that any of them is significant. Consequently, having children, being married, or having higher education does not change the way female politicians

represent female preferences in comparison to female politicians without these characteristics. For male representatives we only observe that having a higher education leads to a significantly higher probability to correspond to female preferences than being male and having no higher education.

Again, in Table A4 in the appendix, we reproduce the same estimates as in Table 8 using the share of women voting yes according post referendum surveys to identify female preferences. The results using this different way of identifying preferences lead to essentially the same insights as using Alliance F's voting recommendation for identification. Thus, the above described effects are highly robust to changes in the identification of female preferences in the electorate.

## V. CONCLUSIONS

Women are underrepresented in numbers in parliaments around the world compared to their share in the population. Quotas for women in assemblies as well as in political parties are often discussed to address this potential problem of descriptive underrepresentation. Although there is evidence that women and men in the electorate have different policy preferences (Lott and Kenny 1999 or Edlund and Pande 2002), underrepresentation in numbers does not necessarily imply underrepresentation of preferences, i.e. descriptive underrepresentation is not equivalent to substantive underrepresentation.

We exploit a natural voting experiment in Switzerland which allows us to identify preferences of female voters in the electorate for different policy proposals, to observe the behavior of female and male representatives in parliament with respect to the very same policy proposals, and to hold constant the revealed preferences of representatives' constituencies for these policy proposals, at the same time. Thus, we identify whether female politicians correspond more closely to female preferences than their male counterparts.

Results show that there is no significant difference, on average over all policy issues, regarding the way female politicians represent female preferences and the way male politicians represent female preferences. This non-existing difference between female and male representatives regarding female preferences is highly robust, in particular, when conditioning on preferences of representatives' constituencies, other personal characteristics, party affiliations and district fixed effects. Thus, increasing the number of female politicians does not necessarily lead to a higher correspondence between parliamentary decisions and female preferences in the electorate, on average. However, when focusing specifically on

social and redistribution issues, we find that female politicians tend to correspond more closely to female preferences, a result which is also highly robust. We show that all these differential effects do not depend on the way we identify female preferences. In particular, using post referendum surveys to distinguish between female and male respondents, leads to precisely the same results as using female interest groups to capture female preferences. Finally, using differential subsamples we conclude that these effects for social and redistribution policies are specific to gender and do not vary over female characteristics such as being married, having children or a better education. Only feminist socialization during the 1968 period seems to play a small additional role, making feminist socialized female politicians slightly more prone to closely match female preferences for social and redistribution issues.

Our natural voting experiment leads us to the conclusion that increasing the number of female politicians could potentially lead to a better representation of female preferences in the electorate for social and redistribution policies. However, we also stress that out of the domain of social and redistribution policies improvements in descriptive representation are less likely to result in large improvements in substantive representation, at least as long as marginal increases in the number of female representatives are concerned.

We analyze differences in representation of female preferences by female and male representatives for a country with a significantly lower number of female representatives than male representatives, as commonly observed in the world. This implies that our results apply to representation of female preferences given the current underrepresentation of women in numbers and marginal improvements of descriptive representation. Out of equilibrium shifts, i.e. equating the number of female representatives with the number of male representatives, might lead to differences in the behavior of female and male representatives in a new equilibrium (see Bratton 2005 for a discussion and counterarguments).

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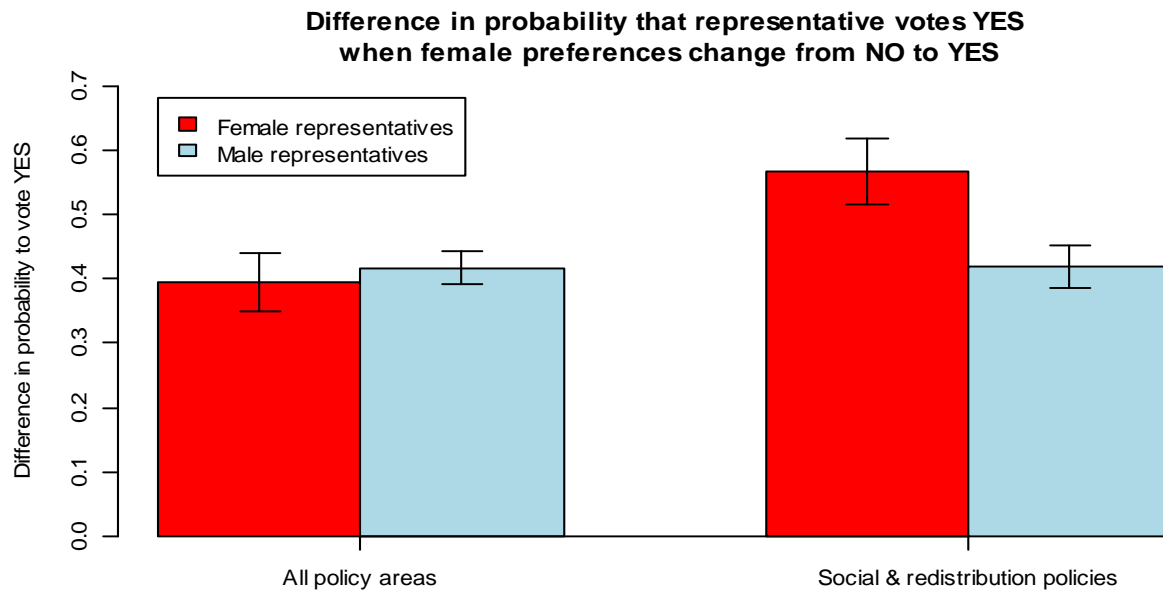
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**Table 1: List of referenda, classification and national results**

<i>Topic</i>	<i>Social &amp; redistribution policies</i>	<i>% yes in population</i>	<i>% yes of full cantons</i>	<i>Preference of women (Alliance F)</i>
Joining the United Nations Organization (UNO) [Ref #485]	no	0.546	52.2	yes
Restricting maximum yearly hours worked and the maximum number of hours worked overtime [Ref #486]	yes	0.254	0.0	no
Changing the penal code for longer and more flexible rules on abortion [Ref #487]	yes	0.722	93.5	yes
Increasing protection for mother and children, in particular for unborn children (restricting abortion) [Ref #488]	yes	0.182	0.0	no
Regulated third party access to the electric market to avoid discrimination [Ref #490]	no	0.474	39.1	yes
Financing the old age insurance through gold reserves [Ref #489.1]	yes	0.476	26.1	no
Using gold reserves for old age insurance, district finances and foundations (counter proposal) [Ref #489.2]	yes	0.482	28.3	yes
Stricter asylum laws and measures against overuse of political asylum rights [Ref #491]	yes	0.499	54.4	no
Federal law on improving people's rights for participation [Ref #493]	no	0.704	100.0	yes
Federal law regarding the adaptation of constituencies' (cantonal) contributions to hospitals [Ref #494]	yes	0.774	100.0	yes
Changes regarding the organization of the federal army and increasing its flexibility (reform of army XXI) [Ref #495]	no	0.760	100.0	yes
Federal law regarding the protection of the population in the case of catastrophes [Ref #496]	no	0.806	100.0	yes
Initiative for stricter ties of rents to mortgage interest rates [Ref #497]	no	0.327	4.4	no
No driving on one Sunday per season - a trial for four years ("Car free Sunday") [Ref #498]	no	0.376	0.0	no
Increasing value added taxes for financing health services [Ref #499]	yes	0.271	0.0	no
Adapting all buildings and infrastructure for the full use of people with disabilities [Ref #500]	yes	0.377	13.0	no
For a stepwise decrease in the number of atomic powerplants [Ref #501]	no	0.337	2.2	no
For a prolonged moratorium of the construction of atomic powerplants [Ref #502]	no	0.416	4.4	no
Increasing mandatory compensation for firms which do not employ a sufficient number of apprentices [Ref #503]	yes	0.316	0.0	no
Federal law on facilitating the admission of citizenship for fairer processes [Ref #510]	yes	0.432	23.9	yes
Federal law regarding foreigners of the third generation for easier integration [Ref #511]	yes	0.484	28.3	yes
Federal law on the payment of compensation for services for the army and the civil protection service [Ref #513]	yes	0.555	41.3	yes
Federal law on the new financial equalisation system between the federation and the constituencies (cantons) [Ref #514]	no	0.644	89.1	yes
Federal law regarding research on embryonic stem cells [Ref #516]	yes	0.664	100.0	yes
Implementation of the bilateral treaty between the EU and Switzerland (Schengen/Dublin) [Ref #517]	yes	0.546	47.8	yes
Applying the principle of free circulation on the new EU member states [Ref #519]	yes	0.560	76.1	yes
Federal law on the active collaboration between governments in eastern Europe for greater flexibility [Ref #526]	no	0.534	60.9	yes
Federal law on family income supplements [Ref #527]	yes	0.680	97.8	yes
Additional protection from gun violence by putting army weapons in the arsenal [Ref #554]	no	0.437	23.9	yes

**Notes:** The original text all referenda, their identifiers, and the referendum date can be found in the supplement.

Figure 1: Decisions by female and male representatives and female preferences



Panel (a) - All policy areas

	<i>Female preferences ~ Vote NO</i>	<i>Female preferences ~ Vote YES</i>	<i>Difference</i>
Probability to vote YES of female representatives	0.448*** (0.023)	0.842*** (0.013)	0.394*** (0.026)
Probability to vote YES of male representatives	0.272*** (0.012)	0.689*** (0.009)	0.417*** (0.015)
			<b>-0.023</b> <b>(0.030)</b>

Panel (b) - Social & redistribution policies

	<i>Female preferences ~ Vote NO</i>	<i>Female preferences ~ Vote YES</i>	<i>Difference</i>
Probability to vote YES of female representatives	0.342*** (0.028)	0.909*** (0.014)	0.566*** (0.031)
Probability to vote YES of male representatives	0.256*** (0.014)	0.675*** (0.013)	0.419*** (0.019)
			<b>0.148***</b> <b>(0.0360)</b>

Notes: \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

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

	<i>All policy areas</i>					
	<i>Logit</i>				<i>OLS</i>	
	(1)	(2)	(3)	(4)	(5)	(6)
Female	0.774*** (0.184)	0.773*** (0.187)	0.241 (0.149)	0.245 (0.153)	0.174*** (0.043)	0.055* (0.033)
(Female) * (Female preferences YES)	0.103 (0.241)	0.113 (0.236)	-0.040 (0.267)	-0.069 (0.266)	-0.021 (0.047)	-0.033 (0.046)
Female preferences YES	1.778*** (0.143)	1.305*** (0.166)	1.723*** (0.222)	1.683*** (0.229)	0.318*** (0.037)	0.333*** (0.041)
Constituency preferences YES		2.052*** (0.302)	2.069*** (0.294)	2.309*** (0.342)	0.406*** (0.061)	0.398*** (0.062)
Age			0.012 (0.032)	4.3e-03 (0.037)		2.4e-03 (6.4e-03)
Age squared			-1.8e-04 (3.4e-04)	-9.0e-05 (4.0e-04)		-3.3e-05 (7.0e-05)
Service length			0.013 (0.021)	-4.7e-03 (0.023)		-9.4e-04 (4.0e-03)
Service length squared			-7.1e-04 (1.0e-03)	1.9e-04 (1.1e-03)		2.1e-05 (2.0e-04)
Has children			0.146** (0.060)	0.149** (0.066)		0.024* (0.013)
Is married			-0.065 (0.091)	-0.077 (0.097)		-0.013 (0.018)
Has master or doctoral degree			0.123*** (0.042)	0.123*** (0.057)		0.022** (9.8e-03)
Left party affiliation			1.197*** (0.080)	1.238*** (0.082)		0.202*** (9.6e-03)
Right party affiliation			-1.235*** (0.107)	-1.275*** (0.106)		-0.243*** (0.019)
Intercept	-0.985*** (0.092)	-1.716*** (0.159)	-2.104*** (0.786)	-1.907** (0.879)	0.130*** (0.031)	0.121 (0.150)
District fixed effects	NO	NO	NO	YES	NO	YES
R2	0.230	0.245	0.385	0.390	0.192	0.302
Log-Likelihood	952.685	1024.145	1715.257	1740.757	-	-
Brier score	0.200	0.197	0.162	0.161	-	-
n. Obs.	5077	5077	5077	5077	5077	5077
DE of interaction term	0.014 (0.034)	0.017 (0.037)	-7.0e-03 (0.047)	-0.012 (0.045)	-	-

**Notes:** The dependent variable for all estimations is "Representative votes YES". Robust clustered standard errors for constituencies are reported throughout the table. DE stands for discrete effect of the interaction term, i.e., the change in the probability to vote yes if "(Female) \* (Female preferences YES)" is equal to 1 when all other variables are evaluated at their median values (see Ai and Norton 2003; Puhani 2012). \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

**Table 3: Effects of female preferences on decisions by parliamentary representatives depending on policy areas**

	Social & redistribution policies					Policies on organization of the state		Foreign policy & security issues	
	Logit		(3)	OLS		Logit		Logit	
	(1)	(2)		(4)	(5)	(6)	(7)	(8)	(9)
Female	0.415*** (0.149)	0.418*** (0.150)	-0.216 (0.154)	0.087*** (0.032)	-0.034 (0.029)	0.818*** (0.184)	0.732*** (0.264)	1.489*** (0.304)	0.908*** (0.287)
(Female) * (Female preferences YES)	1.154*** (0.296)	1.149*** (0.294)	1.019*** (0.349)	0.146*** (0.054)	0.120** (0.054)	-0.050 (0.223)	-0.466 (0.344)	-0.228 (0.364)	-0.798* (0.456)
Female preferences YES	1.797*** (0.244)	1.487*** (0.281)	2.063*** (0.415)	0.357*** (0.061)	0.387*** (0.066)	2.016*** (0.233)	2.476*** (0.260)	0.930*** (0.166)	1.540*** (0.275)
Constituency preferences YES		1.346*** (0.452)	1.243** (0.510)	0.257*** (0.087)	0.188** (0.087)	0.556 (0.481)	0.669 (0.626)	4.415*** (0.685)	7.860*** (0.922)
Age			-0.026 (0.029)		-2.6e-03 (5.2e-03)		-7.2e-03 (0.041)		1.3e-03 (0.077)
Age squared			1.9e-04 (3.1e-04)		1.6e-05 (5.5e-05)		7.4e-05 (4.1e-04)		-1.3e-05 (7.9e-04)
Service length			0.062* (0.033)		8.9e-03* (5.1e-03)		0.066* (0.036)		-0.140*** (0.040)
Service length squared			-2.6e-03 (1.6e-03)		-3.9e-04 (2.5e-04)		-2.9e-03 (1.8e-03)		5.8e-03*** (1.9e-03)
Has children			0.067 (0.082)		0.014 (0.013)		0.151 (0.133)		0.339* (0.202)
Is married			-0.012 (0.093)		-6.7e-03 (0.016)		-0.179 (0.125)		-0.185 (0.292)
Has master or doctoral degree			0.072 (0.078)		0.016 (0.013)		0.174 (0.111)		0.369** (0.153)
Left party affiliation			1.506*** (0.104)		0.226*** (9.6e-03)		-0.317*** (0.110)		1.947*** (0.360)
Right party affiliation			-1.307*** (0.135)		-0.238*** (0.018)		-2.131*** (0.160)		-2.773*** (0.256)
Intercept	-1.068*** (0.079)	-1.538*** (0.183)	-1.152 (0.719)	0.167*** (0.033)	0.258** (0.121)	-1.616*** (0.194)	-1.434 (1.004)	-2.598*** (0.284)	-3.505* (2.105)
District fixed effects	NO	NO	YES	NO	YES	NO	YES	NO	YES
R2	0.293	0.299	0.459	0.234	0.355	0.224	0.386	0.242	0.594
Log-Likelihood	743.528	762.221	1266.139	-	-	291.141	538.971	337.135	984.843
Brier score	0.191	0.190	0.149	-	-	0.197	0.163	0.182	0.103
n. Obs.	3010	3010	3010	3010	3010	1607	1607	1762	1762
DE of interaction term	0.150*** (0.047)	0.162*** (0.050)	0.170** (0.067)	-	-	-7.6e-03 (0.034)	-0.045 (0.031)	-0.024 (0.038)	-0.051 (0.031)

**Notes:** The dependent variable for all estimations is "Representative votes YES". Robust clustered standard errors for constituencies are reported throughout the table. DE stands for discrete effect of the interaction term, i.e., the change in the probability to vote yes if "(Female) \* (Female preferences YES)" is equal to 1 when all other variables are evaluated at their median values (Ai and Norton 2003; Puhani 2012). \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

**Table 4: Representation of female preferences by female representatives regarding specific social & redistribution issues**

<i>Topic</i>	<i>(Female) * (Female preferences YES)</i>	<i>Constituency preferences YES</i>	<i>Other controls</i>	<i>District fixed effects</i>	<i>R2</i>	<i>n. Obs.</i>
(1) Policies on health & social care	2.367*** (0.528)	YES	NO	NO	0.300	863
(2) Policies on health & social care	2.709*** (0.558)	YES	YES	YES	0.450	863
(3) Policies on reproductive issues	7.383*** (0.744)	YES	NO	NO	0.431	500
(4) Policies on reproductive issues	7.220*** (0.799)	YES	YES	YES	0.485	500
(5) Policies on economic security & equality	2.685*** (0.981)	YES	NO	NO	0.398	1095
(6) Policies on economic security & equality	3.772*** (1.402)	YES	YES	YES	0.911	1095

**Notes:** The dependent variable for all estimations is "Representative votes YES" and all specification represent logit models. Robust clustered standard errors for constituencies are reported throughout the table. All estimates include an intercept and the variables "Female" and "Female preferences YES". Other controls are "Age", "Age squared", "Service length", "Service length squared", "Has children", "Is married", "Has master or doctoral degree", "Left party affiliation", "Right party affiliation". \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

**Table 5: Robustness - Identifying female preferences with post referendum surveys (Identification: Share of women voting yes)**

<i>Topic</i>	<i>(Female) * (Female YES share)</i>	<i>Constituency preferences YES</i>	<i>Other controls</i>	<i>District fixed effects</i>	<i>R2</i>	<i>n. Obs.</i>
<b>Panel (a) - All referenda</b>						
(1) All policy areas	0.254 (0.476)	YES	NO	NO	0.191	5077
(2) All policy areas	-0.210 (0.483)	YES	YES	YES	0.331	5077
<b>Panel (b) - Referenda on social &amp; redistribution issues</b>						
(3) Social & redistribution policies	2.462*** (0.632)	YES	NO	NO	0.230	3010
(4) Social & redistribution policies	1.959*** (0.702)	YES	YES	YES	0.386	3010
(5) Policies on health & social care	3.249*** (0.882)	YES	NO	NO	0.183	863
(6) Policies on health & social care	3.425*** (0.864)	YES	YES	YES	0.326	863
(7) Policies on reproductive issues	44.078*** (12.460)	YES	NO	NO	0.447	500
(8) Policies on reproductive issues	54.109*** (12.792)	YES	YES	YES	0.506	500
(9) Policies on economic security & equality	1.425*** (0.519)	YES	NO	NO	0.332	1095
(10) Policies on economic security & equality	5.898* (3.406)	YES	YES	YES	0.842	1095
<b>Panel (c) - Control groups (other referenda)</b>						
(11) Policies on organization of the state	-0.790 (0.749)	YES	NO	NO	0.134	1607
(12) Policies on organization of the state	-1.708* (0.917)	YES	YES	YES	0.300	1607
(13) Foreign policy & security issues	1.602 (1.545)	YES	NO	NO	0.229	1762
(14) Foreign policy & security issues	0.954 (2.257)	YES	YES	YES	0.599	1762

**Notes:** The dependent variable for all estimations is "Representative votes YES" and all specification represent logit models. Robust clustered standard errors for constituencies are reported throughout the table. All estimates include an intercept and the variables "Female" and "Female YES share". Other controls are "Age", "Age squared", "Service length", "Service length squared", "Has children", "Is married", "Has master or doctoral degree", "Left party affiliation", "Right party affiliation". \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

**Table 6: Robustness - Constituencies voting for and against female suffrage in 1971**

<i>Topic</i>	<i>(Female) * (Female preferences YES)</i>	<i>Constituency preferences YES</i>	<i>Other controls</i>	<i>District fixed effects</i>	<i>R2</i>	<i>n. Obs.</i>
<b>Panel (a) - Constituencies which accepted female suffrage in 1971</b>						
(1) All policy areas	-0.150 (0.309)	YES	YES	YES	0.381	4373
(2) Social & redistribution policies	0.928** (0.407)	YES	YES	YES	0.464	2597
<b>Panel (b) - Constituencies which rejected female suffrage in 1971</b>						
(3) All policy areas	0.566 (0.678)	YES	YES	YES	0.443	704
(4) Social & redistribution policies	1.784** (0.794)	YES	YES	YES	0.428	413

**Notes:** The dependent variable for all estimations is "Representative votes YES" and all specification represent logit models. Robust clustered standard errors for constituencies are reported throughout the table. All estimates include an intercept and the variables "Female" and "Female preferences YES". Other controls are "Age", "Age squared", "Service length", "Service length squared", "Has children", "Is married", "Has master or doctoral degree", "Left party affiliation", "Right party affiliation". \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.



**Table 7: Refinement - Effects of age and socialization on representation of female preferences by representatives regarding social & redistribution policies**

	<i>Age over 60</i>			<i>In 1968 already 18 years old</i>			<i>Combined</i>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female over 60	-0.6484*	-0.1024					-0.0037	
	(0.3516)	(0.4356)					(0.2538)	
Male over 60			-0.4927*					-0.3273
			(0.2811)					(0.2981)
Female 1968				-0.4087	-0.3436		-0.1454	
				(0.4988)	(0.3102)		(0.3025)	
Male 1968						-0.2163		-0.2985
						(0.2314)		(0.2673)
(Female over 60) * (Female preferences YES)	1.2456*	2.1463***					0.3551	
	(0.6564)	(0.8264)					(0.7936)	
(Male over 60) * (Female preferences YES)			0.5157					0.2409
			(0.3854)					(0.4832)
(Female 1968) * (Female preferences YES)				1.6805***	1.8141***		1.6519**	
				(0.5585)	(0.6655)		(0.6993)	
(Male 1968) * (Female preferences YES)						0.5869*		0.5171
						(0.3182)		(0.4029)
Female preferences YES	4.6140***	2.3500***	1.6819***	4.2381***	2.3688***	1.4565***	4.1495***	1.4404***
	(0.3767)	(0.6137)	(0.4897)	(0.3510)	(0.5285)	(0.4954)	(0.3757)	(0.4992)
Constituency preferences YES	-4.6647***	2.7451***	2.5663***	-4.7208***	1.4378*	2.5500***	-4.6352***	2.5485***
	(0.8537)	(0.9685)	(0.7000)	(0.8802)	(0.7589)	(0.6959)	(0.8780)	(0.7058)
Other controls	YES	YES	YES	YES	YES	YES	YES	YES
District fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Subset	Only females	Only over 60	Only males	Only females	Only over 60	Only males	Only females	Only males
Joint significance of interaction terms (p-value)	-	-	-	-	-	-	0.0125	0.116
R2	0.589	0.546	0.429	0.598	0.507	0.430	0.583	0.430
Log-Likelihood	407.127	328.317	877.489	415.229	768.117	881.201	401.189	881.028
Brier	0.106	0.124	0.157	0.105	0.137	0.157	0.106	0.157
n. Obs.	747	624	2263	747	1605	2263	747	2263

**Notes:** The dependent variable for all estimations is "Representative votes YES" and all specification represent logit models. Robust clustered standard errors for constituencies are reported throughout the table. All estimates include an intercept and the variables "Female" and "Female preferences YES". Other controls are "Age", "Age squared", "Service length", "Service length squared", "Has children", "Is married", "Has master or doctoral degree", "Left party affiliation", "Right party affiliation". \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

**Table 8: Refinement - Effects of other characteristics on representation of female preferences by representatives regarding social & redistribution policies**

	<i>Has children</i>			<i>Is married</i>			<i>Has master/doctorate</i>			<i>Combined</i>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Female with children	-0.342 (0.215)	-0.250 (0.183)								-0.311 (0.299)	
Male with children			-0.308 (0.303)								-0.281 (0.274)
Female married				-0.132 (0.156)	-0.181 (0.181)					0.048 (0.261)	
Male married						-0.260 (0.244)					-0.145 (0.176)
Female with master/doctorate							-0.141 (0.191)	0.015 (0.212)		-0.230 (0.246)	
Male with master/doctorate									-1.025*** (0.262)		-1.032*** (0.242)
(Female with children) * (Female preferences YES)	0.921 (0.727)	1.160*** (0.315)								1.057 (0.901)	
(Male with children) * (Female preferences YES)			0.751 (0.521)								0.781 (0.557)
(Female married) * (Female preferences YES)				0.585 (0.455)	1.239*** (0.358)					0.375 (0.475)	
(Female with master/doctorate) * (Female preferences YES)						0.316 (0.404)					0.070 (0.311)
(Male with master/doctorate) * (Female preferences YES)							0.411 (0.749)	0.418 (0.636)		0.846 (0.956)	
(Male 1968) * (Female preferences YES)									1.609*** (0.454)		1.636*** (0.432)
Female preferences YES	4.360*** (0.393)	2.152*** (0.448)	1.187** (0.512)	4.512*** (0.431)	2.146*** (0.470)	1.547*** (0.496)	4.599*** (0.543)	3.540*** (0.508)	0.919 (0.562)	3.707*** (0.745)	0.213 (0.583)
Constituency preferences YES	-4.657*** (0.845)	1.540** (0.640)	2.577*** (0.674)	-4.650*** (0.827)	1.408* (0.722)	2.552*** (0.681)	-4.588*** (0.849)	-1.245 (0.867)	2.556*** (0.687)	-4.647*** (0.827)	2.595*** (0.681)
Other controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
District fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Subset	Only females	Only with children	Only males	Only females	Only married	Only males	Only females	Only master / doctorate	Only males	Only females	Only males
Joint significance of interaction terms (p-value)	-	-	-	-	-	-				0.3314	0.0000
R2	0.590	0.465	0.430	0.588	0.468	0.428	0.587	0.541	0.447	0.593	0.450
Log-Likelihood	408.125	937.573	880.991	406.194	920.950	874.931	405.494	846.334	923.980	410.774	932.805
Brier	0.106	0.148	0.157	0.107	0.147	0.158	0.107	0.125	0.156	0.105	0.155
n. Obs.	747	2193	2263	747	2137	2263	747	1662	2263	747	2263

**Notes:** The dependent variable for all estimations is "Representative votes YES" and all specification represent logit models. Robust clustered standard errors for constituencies are reported throughout the table. All estimates include an intercept and the variables "Female" and "Female preferences YES". Other controls are "Age", "Age squared", "Service length", "Service length squared", "Has children", "Is married", "Has master or doctoral degree", "Left party affiliation", "Right party affiliation". \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

**Table A1: Data description and sources**

<i>Variable</i>	<i>Description and sources</i>	<i>Mean</i>	<i>SD</i>
Representative votes YES	Indicator variable: If member of parliament voted "yes" in roll call value is 1. Swiss Parliamentary Services.	0.574	0.495
Female preferences YES	Indicator variable: If allianceF issued "yes" recommendation value is 1. Swiss Parliamentary Services.	0.629	0.483
Female YES share	Share of "yes" by female voters. Vox referenda exit surveys.	0.542	0.173
Constituency preferences YES	District majority voted "yes" in referendum. Annee politique suisse.	0.505	0.175
Female	Indicator variable: If member of parliament is female value is 1. Swiss Parliamentary Services.	0.246	0.431
Age	Member of parliament's age in years. Swiss Parliamentary Services.	53.050	7.944
Service length	Member of parliament's days in service. Swiss Parliamentary Services.	6.230	4.515
over 60	Indicator variable: If member of parliament is over 60 value is 1. Swiss Parliamentary Services.	0.210	0.407
Female over 60	Indicator variable: If member of parliament is female and over 60 value is 1. Swiss Parliamentary Services.	0.038	0.192
Male over 60	Indicator variable: If member of parliament is male and over 60 value is 1. Swiss Parliamentary Services.	0.172	0.377
In 1968 already 18 years old	Indicator variable: If member of parliament was over 18 in 1968 value is 1. Swiss Parliamentary Services.	0.533	0.499
Female 1968	Indicator variable: If member of parliament is female and was over 18 in 1968 value is 1. Swiss Parliamentary Services.	0.095	0.293
Male 1968	Indicator variable: If member of parliament is male was over 18 in 1968 value is 1. Swiss Parliamentary Services.	0.438	0.496
Is married	Indicator variable: If member of parliament is married value is 1. Swiss Parliamentary Services.	0.714	0.452
Female married	Indicator variable: If member of parliament is female and married value is 1. Swiss Parliamentary Services.	0.128	0.334
Male married	Indicator variable: If member of parliament is male and married value is 1. Swiss Parliamentary Services.	0.586	0.493
Has children	Indicator variable: If member of parliament is has children value is 1. Swiss Parliamentary Services.	0.733	0.442
Female with children	Indicator variable: If member of parliament is female and has children value is 1. Swiss Parliamentary Services.	0.132	0.338
Male with children	Indicator variable: If member of parliament is male and has children value is 1. Swiss Parliamentary Services.	0.602	0.490
Has master or doctral degree	Indicator variable: If member of parliament has master or doctoral degree value is 1. Swiss Parliamentary Services.	0.549	0.498
Female with master/doctorate	Indicator variable: If member of parliament is female and has master or doctoral degree value is 1. Swiss Parliamentary Services.	0.123	0.329
Male with master/doctorate	Indicator variable: If member of parliament is male and has master or doctoral degree value is 1. Swiss Parliamentary Services.	0.425	0.494
Left party affiliation	Indicator variable: If member of parliament belongs to the SP, PdAS, GPS, FGA, Sol value is 1. Swiss Parliamentary Services.	0.317	0.465
Right party affiliation	Indicator variable: If member of parliament belongs to the CVP, GLP, LPS, FDP, CSP, BDP, EVP value is 1. Swiss Parliamentary Services.	0.261	0.439

**Notes:** Unweighted descriptive statistics. Data sources indicated next to variable descriptions.

**Table A2: Refinement - Identifying female preferences with post referendum surveys for all decisions since 1996  
(Identification: Share of women voting yes)**

<i>Topic</i>	<i>(Female) * (Female YES share)</i>	<i>Constituency preferences YES</i>	<i>Other controls</i>	<i>District fixed effects</i>	<i>R<sup>2</sup></i>	<i>n. Obs.</i>
<b>Panel (a) - All referenda</b>						
(1) All policy areas (Logit)	0.467* (0.238)	YES	NO	NO	0.182	16133
(2) All policy areas (Logit)	0.447* (0.240)	YES	YES	YES	0.213	16133
(3) All policy areas (OLS)	0.054 (0.042)	YES	YES	YES	0.161	16133
<b>Panel (b) - Referenda on social &amp; redistributive issues</b>						
(4) Social & redistribution policies (Logit)	1.271*** (0.299)	YES	NO	NO	0.139	8083
(5) Social & redistribution policies (Logit)	1.252*** (0.299)	YES	YES	YES	0.174	8083
(6) Social & redistribution policies (OLS)	0.244*** (0.059)	YES	YES	YES	0.132	8083

**Notes:** The dependent variable for all estimations is "Representative votes YES". Robust clustered standard errors for constituencies are reported throughout the table. All estimates include an intercept and the variables "Female" and "Female YES share". Other controls are "Age", "Age squared", "Service length", "Service length squared", "Has children", "Is married", "Has master or doctoral degree", "Left party affiliation", "Right party affiliation". \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

**Table A3: Identifying female preferences with post referendum surveys (Identification: Share of women voting yes) - Effects of age and socialization on representation of female preferences by representatives regarding social & redistribution policies**

	<i>Age over 60</i>			<i>In 1968 already 18 years old</i>			<i>Combined</i>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Female over 60	-2.847** (1.166)	-2.924* (1.740)					-1.609 (1.239)	
Male over 60			-0.484 (0.388)					-0.248 (0.492)
Female 1968				-2.060*** (0.770)	-1.949** (0.971)		-1.342** (0.670)	
Male 1968						-0.422 (0.324)		-0.493 (0.425)
(Female over 60) * (Female YES share)	5.233** (2.329)	7.239** (3.555)					3.214 (2.580)	
(Male over 60) * (Female YES share)			0.739 (0.775)					0.269 (1.041)
(Female 1968) * (Female YES share)				4.322*** (1.385)	4.704** (2.049)		3.409** (1.512)	
(Male 1968) * (Female YES share)						0.950 (0.585)		0.887 (0.815)
Female YES share	11.288*** (0.980)	3.443** (1.495)	2.716** (1.117)	10.395*** (0.947)	4.173*** (1.124)	2.357** (1.028)	10.746*** (0.978)	2.315** (1.040)
Constituency preferences YES	-5.614*** (1.192)	3.870*** (1.351)	3.401*** (1.033)	-5.542*** (1.219)	2.227** (1.061)	3.377*** (1.033)	-5.873*** (1.182)	3.380*** (1.036)
Other controls	YES	YES	YES	YES	YES	YES	YES	YES
District fixed effects	YES	YES	YES	YES	YES	YES	YES	YES
Subset	Only females	Only over 60	Only males	Only females	Only over 60	Only males	Only females	Only males
Joint significance of interaction terms (p-value)	-	-	-	-	-	-	0.0045	0.1768
R2	0.465	0.452	0.373	0.469	0.411	0.373	0.460	0.373
Log-Likelihood	300.678	258.477	741.796	304.396	591.177	743.282	296.752	742.513
Brier	0.138	0.158	0.176	0.137	0.167	0.176	0.139	0.176
n. Obs.	747	624	2263	747	1605	2263	747	2263

**Notes:** The dependent variable for all estimations is "Representative votes YES" and all specification represent logit models. Robust clustered standard errors for constituencies are reported throughout the table. All estimates include an intercept and the variables "Female" and "Female YES share". Other controls are "Age", "Age squared", "Service length", "Service length squared", "Has children", "Is married", "Has master or doctoral degree", "Left party affiliation", "Right party affiliation". \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

**Table A4: Identifying female preferences with post referendum surveys (Identification: Share of women voting yes) - Effects of other characteristics on representation of female preferences by representatives regarding social & redistribution policies**

	<i>Has children</i>			<i>Is married</i>			<i>Has master/doctorate</i>			<i>Combined</i>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Female with children	-1.076*	-1.011***								-0.991	
	(0.645)	(0.366)								(0.840)	
Male with children			-0.395								-0.531
			(0.454)								(0.502)
Female married				-0.874**	-1.059***					-0.489	
				(0.387)	(0.356)					(0.524)	
Male married						-0.095					0.150
						(0.329)					(0.318)
Female with master/doctorate							-0.296	-0.375		-0.664	
							(0.589)	(0.550)		(0.829)	
Male with master/doctorate									-1.322***		-1.329***
									(0.422)		(0.414)
(Female with children) * (Female YES share)	2.276	2.591***								2.192	
	(1.421)	(0.749)								(1.831)	
(Male with children) * (Female YES share)			0.986								1.289
			(0.908)								(1.056)
(Female married) * (Female YES share)				1.798*	2.777***					1.088	
				(0.957)	(0.807)					(1.078)	
(Female with master/doctorate) * (Female YES share)						0.091					-0.399
						(0.638)					(0.612)
(Male with master/doctorate) * (Female YES share)							0.679	0.985		1.514	
							(1.429)	(1.246)		(1.929)	
(Male 1968) * (Female YES share)									2.548***		2.566***
									(0.858)		(0.849)
Female YES share	10.701***	3.877***	2.085**	10.907***	3.927***	2.805***	11.388***	7.259***	1.453	9.445***	0.724
	(1.190)	(0.898)	(0.995)	(1.212)	(1.053)	(0.930)	(1.133)	(1.311)	(1.138)	(1.809)	(1.068)
Constituency preferences YES	-5.533***	2.190**	3.401***	-5.486***	2.013*	3.392***	-5.390***	-0.762	3.427***	-5.506***	3.432***
	(1.190)	(1.007)	(1.020)	(1.203)	(1.092)	(1.026)	(1.231)	(1.452)	(1.010)	(1.201)	(0.999)
Other controls	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
District fixed effects	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Subset	Only females	Only with children	Only males	Only females	Only married	Only males	Only females	Only master / doctorate	Only males	Only females	Only males
Joint significance of interaction terms (p-value)	-	-	-	-	-	-	-	-	-	0.173	0.020
R2	0.460	0.382	0.373	0.459	0.387	0.372	0.457	0.414	0.379	0.463	0.380
Log-Likelihood	297.397	738.431	742.396	296.184	730.893	740.692	294.432	604.843	757.553	299.151	759.804
Brier	0.139	0.173	0.176	0.139	0.172	0.176	0.139	0.160	0.175	0.138	0.175
n. Obs.	747	2193	2263	747	2137	2263	747	1662	2263	747	2263

**Notes:** The dependent variable for all estimations is "Representative votes YES" and all specification represent logit models. Robust clustered standard errors for constituencies are reported throughout the table. All estimates include an intercept and the variables "Female" and "Female YES share". Other controls are "Age", "Age squared", "Service length", "Service length squared", "Has children", "Is married", "Has master or doctoral degree", "Left party affiliation", "Right party affiliation". \*\*\*, \*\*, and \* indicate a mean significance level of below 1 %, between 1 and 5 %, and between 5 and 10 %, respectively.

**Supplement S1 (not intended for publication): Referenda in Switzerland with recommendation female interest groups**

<i>Ref#</i>	<i>Original titel of referendum</i>	<i>Date</i>
554	Arrêté fédéral relatif à l'initiative populaire «Pour la protection face à la violence des armes» du 1er octobre 2010 Volksinitiative «Für den Schutz vor Waffengewalt» Initiative populaire «Pour la protection face à la violence des armes»	13.02.11
526	Legge federale del 24.03.2006 sulla cooperazione con gli Stati dell'Europa dell'Est Bundesgesetz über die Zusammenarbeit mit den Staaten Osteuropas Loi fédérale du 24.03.2006 sur la coopération avec les Etats d'Europe de l'Est	26.11.06
527	Legge federale del 24.03.2006 sugli assegni familiari (legge sugli assegni familiari, LAFam) Bundesgesetz über die Familienzulagen Loi fédérale du 24.03.2006 sur les allocations familiales (loi sur les allocations familiales, LAFam)	26.11.06
519	Decreto federale che approva e traspone nel diritto svizzero, mediante revisione delle misure collaterali, il Protocollo concluso con la Comunità europea e i suoi Stati membri relativo all'estensione dell'Accordo sulla libera circolazione delle persone ai Bundesbeschluss über die Ausdehnung des Personenfreizügigkeitsabkommens auf die neuen EU-Staaten und	25.09.05
517	Decreto federale del 17.12.2004 che approva e traspone nel diritto svizzero gli accordi bilaterali con l'UE per l'associazione della Svizzera alla normativa di Schengen e Dublino Bundesbeschluss über die Genehmigung und die Umsetzung der bilateralen Abkommen zwischen der Schweiz und der EU über die Assoziierung an Schengen und Dublin	05.06.05
514	Decreto federale del 03.10.2003 concernente la nuova impostazione della perequazione finanziaria e della ripartizione dei compiti tra Confederazione e Cantoni (NPC) Bundesbeschluss zur Neugestaltung des Finanzausgleichs und der Aufgabenteilung zwischen Bund und Kantonen (NFA)	28.11.04
516	Legge federale del 19.12.2003 concernente la ricerca sugli embrioni soprannumerari e le cellule staminali embrionali (Legge sulla ricerca embrionale, LRE) Bundesgesetz über die Forschung an embryonalen Stammzellen Loi fédérale du 19.12.2003 relative à la recherche sur les cellules souches embryonnaires (Loi relative à la	28.11.04
510	Decreto federale del 03.10.2003 sulla naturalizzazione ordinaria e la naturalizzazione agevolata dei giovani stranieri della seconda generazione Bundesbeschluss über die ordentliche Einbürgerung sowie über die erleichterte Einbürgerung junger Ausländerinnen und Ausländer der zweiten Generation	26.09.04
511	Decreto federale del 03.10.2003 sull'acquisto della cittadinanza degli stranieri della terza generazione Bundesbeschluss über den Bürgerrechtserwerb von Ausländerinnen und Ausländern der dritten Generation Arrêté fédéral du 03.10.2003 sur l'acquisition de la nationalité par les étrangers de la troisième génération	26.09.04
513	Modifica del 03.10.2003 della legge federale sulle indennità di perdita di guadagno in caso di servizio militare, servizio civile o servizio di protezione civile (Legge sulle indennità di perdita di guadagno, LIPG) Bundesgesetz über die Erwerbsersatzordnung für Dienstleistende in Armee, Zivildienst und Zivilschutz (Erwerbsersatzgesetz, EOG)	26.09.04
495	Legge federale sull'esercito e sull'amministrazione militare (Legge militare, LM), Modifica Bundesgesetz über die Armee und die Militärverwaltung (Armee XXI) Loi fédérale sur l'armée et l'administration militaire (Loi sur l'armée, LAAM), Modification	18.05.03
496	Legge federale sulla protezione della popolazione e sulla protezione civile (LPPC) Bundesgesetz über den Bevölkerungsschutz und den Zivilschutz Loi fédérale sur la protection de la population et sur la protection civile (LPPCi)	18.05.03
497	Iniziativa popolare «Per delle pigioni corrette» Volksinitiative «Ja zu fairen Mieten» Initiative populaire «Pour des loyers loyaux»	18.05.03
498	Iniziativa popolare «Per una domenica senz'auto ogni stagione - una prova per quattro anni (iniziativa per le domeniche)» Volksinitiative «Für einen autofreien Sonntag pro Jahreszeit - ein Versuch für vier Jahre» Initiative populaire «Pour un dimanche sans voitures par saison - un essai limité à quatre ans (Initiative des	18.05.03
499	Iniziativa popolare «La salute a prezzi accessibili (iniziativa sulla salute)» Volksinitiative «Gesundheit muss bezahlbar bleiben» Initiative populaire «La santé à un prix abordable (Initiative-santé)»	18.05.03
500	Iniziativa popolare «Parità di diritti per i disabili» Volksinitiative «Gleiche Rechte für Behinderte» Initiative populaire «Droits égaux pour les personnes handicapées»	18.05.03

501	Iniziativa popolare «Corrente senza nucleare - Per una svolta energetica e la disattivazione progressiva delle centrali nucleari (Corrente senza nucleare)» Volksinitiative «Strom ohne Atom - Für eine Energiewende und die schrittweise Stilllegung der Atomkraftwerke» Initiative populaire «Sortir du nucléaire - Pour un tournant dans le domaine de l'énergie et pour la	18.05.03
502	Iniziativa popolare «Moratoria più - Per la proroga del blocco della costruzione di centrali nucleari e il contenimento del rischio nucleare (Moratoria più)» Volksinitiative «MoratoriumPlus - Für die Verlängerung des Atomkraftwerk-Baustopps und die Begrenzung des Atomrisikos»	18.05.03
503	Iniziativa popolare federale «Per un'offerta appropriata di posti di tirocinio (Iniziativa sui posti di tirocinio)» Volksinitiative «für ein ausreichendes Berufsbildungsangebot» Initiative populaire «Pour une offre appropriée en matière de formation professionnelle (Initiative pour des places d'apprentissage)»	18.05.03
493	Decreto federale concernente la revisione dei diritti popolari Bundesbeschluss über die Änderung der Volksrechte Arrêté fédéral relatif à la révision des droits populaires	09.02.03
494	Legge federale sull'adeguamento dei contributi cantonali per le cure stazionarie all'interno dei Cantoni in base alla legge federale sull'assicurazione malattie Bundesgesetz über die Anpassung der kantonalen Beiträge an Spitalbehandlungen Loi fédérale sur l'adaptation des participations cantonales aux coûts des traitements hospitaliers dispensés dans	09.02.03
491	Iniziativa popolare «contro gli abusi in materia di asilo» Volksinitiative «Gegen Asylrechtsmissbrauch» Initiative populaire «contre les abus dans le droit d'asile»	24.11.02
490	Legge sul mercato dell'energia elettrica (LMEE) Elektrizitätsmarktgesetz Loi sur le marché de l'électricité (LME)	22.09.02
489.1	Iniziativa popolare «Per destinare le riserve d'oro eccedentarie della Banca nazionale svizzera al Fondo AVS» (Iniziativa sull'oro) Volksinitiative «Überschüssige Goldreserven in den AHV-Fonds» Initiative populaire «pour le versement au fonds AVS des réserves d'or excédentaires de la Banque nationale	22.09.02
489.2	Controprogetto: «L'oro all'AVS, ai Cantoni e alla Fondazione» Gegenvorschlag: Gold für AHV, Kantone und Stiftung (Gegenvorschlag zur Goldinitiative) Contre-projet: «L'or à l'AVS, aux cantons et à la Fondation»	22.09.02
487	Modifica del Codice penale svizzero (Interruzione della gravidanza) Schweizerisches Strafgesetzbuch (Schwangerschaftsabbruch, Fristenregelung) Modification du code pénal suisse (Interruption de grossesse)	02.06.02
488	Iniziativa popolare «per madre e bambino» Volksinitiative «Für Mutter und Kind - für den Schutz des ungeborenen Kindes und für die Hilfe an seine Mutter in Not» Initiative populaire «Pour la mère et l'enfant»	02.06.02
485	Iniziativa popolare federale «per l'adesione della Svizzera all'Organizzazione delle Nazioni Unite (ONU)» Volksinitiative «Für den Beitritt der Schweiz zur Organisation der Vereinten Nationen (UNO)» Initiative populaire fédérale «Pour l'adhésion de la Suisse à l'Organisation des Nations Unies (ONU)»	03.03.02
486	Iniziativa popolare federale «per una durata ridotta del lavoro» Volksinitiative «Für eine kürzere Arbeitszeit» Initiative populaire fédérale «Pour une durée du travail réduite»	03.03.02