Gender gaps in policy making

SUMMARY

This paper uses a unique data set on individual voting decisions to shed new light on gender gaps in policy making. Our analysis focuses on Switzerland, the world leader in direct democracy, where all citizens directly decide on a broad range of policies at the ballot box. Analysing all federal votes held between 1981 and 2003, we show that there are large gender gaps in the areas of health, environmental protection, defence spending and welfare policy. The gender gaps typically persist even conditional on socio-economic characteristics. We also find that female policy-makers have a substantial effect on the composition of public spending, but a small effect on the overall size of government.

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Gender gaps in policy making: evidence from direct democracy in Switzerland

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1. INTRODUCTION

An old claim states that if women ruled the world, it would be a better place. Apart from rare evidence from certain matrilineal and patriarchal societies (Andersen *et al.*, 2008; Gneezy *et al.*, 2009), the substance of this claim is difficult to assess.

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One reason is that women are under-represented in most legislatures around the world (see e.g. Norris and Krook, 2011 for evidence). On average, only one in five members of national parliaments is a woman. The situation is even more dismal at the top of national governments: only 20 out of 180 of the world's 180 heads of state are women (The Economist, 2012). As a result, women's voices are more likely to go unheard than those of men.

In response, gender quotas have been increasingly debated in the public and among politicians as a means to raise the share of women among policy-makers (for example, Norris and Krook, 2011). A few countries in Europe have indeed implemented gender quotas for candidates in parliamentary elections: Belgium, Ireland, Poland, Slovakia, Greece and France, for examples (see the Global Database of Quotas for Women at http://www.quotaproject.org). And a number of European countries have adopted voluntary quotas for women in selected political parties (for example, the United Kingdom, the Netherlands, Norway, Sweden, Italy, Germany, Hungary or the Czech Republic). While quotas have improved female representation (see De Paola *et al.*, 2010, for Italy; Bagues and Esteve-Volart, 2012, for Spain), little is known today whether quotas have any effects on policy making (one exception being Chattopadhyay and Duflo, 2004).

Taking a step back from the debate about gender quotas and why women are still under-represented in politics, the broader question arises whether and where women and men prefer different policies. The more aligned women and men's preferences in a specific area, the smaller the expected effect from legal intervention. While preferences expressed in surveys such as the Eurobarometer or the International Social Survey Programme (ISSP) are informative to a certain degree, the major drawback is that survey respondents have little incentive to think hard about the questions at hand, as there are no real consequences involved (e.g. Brunner *et al.*, 2011).

This article analyses gender gaps for policies in a setting where every citizen can directly decide on specific issues. The context is Switzerland, one of the oldest democracies in the world. Swiss citizens make political decisions at the ballot on a broad range of policy issues. Citizens decide on a number of ballots up to four times each year, which makes Switzerland the world leader in the use of direct democracy. Over the last 50 years, more than 300 ballots votes have been held at the federal level alone. In this context of direct democracy, every citizen acts as a policy-maker, even though the final impact is arguably much smaller compared to a parliamentary member in a representative democracy.

The participation of Swiss women in policy making is a more recent phenomenon. At the federal level, women have had the right to vote in federal elections and ballots only since 1971. The representation of women in the Swiss federal parliament has grown from 5% in 1971 to 30% since 2011. We start analysing data from 1981 onwards, when women have had the right to vote for at least ten years.

In our setting, citizens vote on specific projects with real political and financial consequences. Citizens have long experience in voting on ballot proposals as there is a long tradition of direct democratic participation at the state and local level as well.

Furthermore, each citizen receives detailed information about each ballot (including the implied fiscal consequences if a ballot is approved) by mail before the vote.

Incentives for strategic behaviour are basically absent as a ballot requires a simple 'yes' or 'no' vote. We can therefore identify gender differences in policy preferences as revealed at the ballot box. Our preference measures have two main advantages over survey questions on desired policies (as asked in the Eurobarometer, for example). First, citizens make a policy-relevant choice, and therefore are more likely to acquire information on the topic. Second, ballot votes (if approved) involve taxpayers' money, and the documents distributed prior to the vote clearly indicate the implied fiscal consequences. Therefore, our data allow us to study whether gender gaps persist even if that involves an increase in federal expenditures.

Many of the ballot proposals we study, like social policies or environmental protection, are currently hotly debated in advanced democracies. Governments in many countries with aging populations, for example, consider an increase in the retirement age. We find that women are much less sympathetic towards such policies.

Further, women show consistently higher approval rates for allocating funds to environmental protection than men. At the same time, women are less supportive of nuclear energy. We also find that women are more in favour of a healthy life style, for equal rights for men and women, for support of the disabled but against the military. In sum, we find that women clearly prefer different policies than men. Since we control for the most important socio-demographic characteristics (such as age, education or income), gender differences in these variables are not driving our results.[1]

The data for our analysis come from surveys which are held shortly after the federal ballots. Starting in 1981, representative samples of roughly 1,000 eligible voters are asked whether, and if so, how they voted. Unlike other surveys, survey accuracy is perfectly measurable in our case, as we observe stated approval in the surveys and actual approval from official ballot statistics. We show that biases in our surveys are unlikely to cause the gender gaps we find. In addition, the survey also collects a broad range of socio-economic characteristics, which allows us to compare women and men with a similar socio-demographic background.

The data also allow us to investigate the financial consequences of women's political choices. To do so, we restrict the analysis to the sample of federal votes that would have raised government spending, taxes or debt–if approved. Overall, we find that women are only modestly more inclined to approve projects that increase the size of government. Compared to men, they were 2.5 percentage points more likely to approve costly policy proposals. More importantly, women prefer a very different composition of

[1] If gender gaps were determined by income differences alone, women and men should vote similarly conditional on financial well-being. If non-economic factors such as values, attitudes and beliefs, matter and differ between men and women, gender gaps persist even when socio-economic characteristics are kept constant (see e.g. Fong, 2001; Alesina and Ferrara, 2005; Luttmer and Singhal, 2011; and Alesina and Giuliano, 2011).

government expenditures than men. Women were 10 percentage points more likely to support spending for protection of the environment and 6 percentage points less likely to support military spending.

The most immediate lesson that we can learn from our analysis is that women acting as voters at the polls, deciding on actual policy proposals with financial consequences, choose different policies than men. Though representatives in parliament are constrained by other considerations like party pressure or log-rolling as well, our evidence on gender gaps absent strategic considerations suggests that gender quotas–by lifting the share of women in politics–could lead to better representation of female preferences in certain policy areas like the environment or spending on the military.

The rest of this article is structured as follows. Section 2 relates our article to the previous literature in economics and political science. Section 3 introduces the Swiss political context and describes our data. Section 4 analyses the gender gaps in voting and Section 5 sheds light on the fiscal consequences of female policy-makers. Conclusions are presented in Section 6.

2. RELATION TO LITERATURE ON WOMEN IN POLICY MAKING

Our article is related to several literatures in economics and political science. First, our study enhances our understanding of gender gaps in preferences. By studying individual voting decisions on all relevant policy areas of an advanced democracy, our study is complementary to experimental evidence (see the survey by Croson and Gneezy, 2009) or studies based on hypothetical questions in surveys (e.g. Bertrand, 2010 for a comprehensive survey of the literature). One advantage of our direct democratic setting is that we can elicit gender gaps as revealed at the ballot box. Some of our evidence is also in line with earlier studies, for example, that women are more supportive of redistributive policies (e.g. for the disabled) than men (e.g. Alesina and Giuliano, 2011; Luttmer and Singhal, 2011).

Second, our article relates to research in political science on the electoral gender gap (see e.g. Edlund and Pande, 2002; Inglehart and Norris, 2003; Inglehart and Norris, 2005). Here, the focus is on party votes and the characterization of gender gaps along a single, right-left dimension. We add to this literature by analysing gender gaps on a variety of issues. Other studies have tried to elicit gender gaps in policy preferences from opinion polls like the General Social Survey, the Gallup or National Election Surveys (see e.g. Shapiro and Mahajan, 1986; Mueller, 1988).[2] While these studies are

[2] A comparable data source for Europe is the Eurobarometer, a public opinion survey in the EU Member States. There are, however, few surveys that directly ask for allocation of governmental resources. Only in the survey of March/April 1984, 17 questions were asked whether government spending is too little/about right/too much in a certain policy area. The questions, however, do not discuss how the money would be actually spent or how the additional spending would be financed.

suggestive, the questions asked are often fairly general and typically do not involve decisions about concrete projects and how they would be financed.

We compare the gender gaps in our ballot propositions to gender gaps in survey questions on public spending in the International Social Survey Programme (ISSP), whose questions are the most comparable to our ballots. There respondents were asked whether they would like to spend much more, more, not more nor less, less or much less on several policy areas (the environment, military, health, etc.). We find few and statistically weak gender gaps in the ISSP data. We conclude from this comparison that it is difficult to elicit actual policy preferences from stated attitudes to very general questions which likely introduce substantial measurement error into the analysis. In addition, survey questions do not specify the specific fiscal costs of a different policy. In our direct democratic setting in Switzerland, however, citizens face very concrete proposals with real consequences, and consider the direct implications for the tax bill as well.

Third, our paper is relevant for the literature on female policy-makers. So far, most causal evidence on the impact of female policy-makers is available for India, where women are found to affect policies according to their preferences (Chattopadhyay and Duflo, 2004; Clots-Figueras, 2011; 2012). Based on imposed mandates for female village leaders in India, Chattopadhyay and Duflo (2004), for example, show that women allocate resources to projects supporting women's needs, e.g. public investments in fresh drinking water.

For the developed world, Rehavi (2007) finds that increasing representation of women in the United States led to a modest increase in health and correction institution spending. In contrast, Gagliarducci and Paserman (2012) and Ferreira and Gyourko (2014) find no consistent effects of female mayors on local spending in Italy and the United States, respectively.

These mixed results on the role of female policy-makers in mature democracies beg for an explanation. One reason could be that politicians are bound by party discipline, or that post-electoral bargaining makes gender gaps disappear.[3] A second explanation could be that policy preferences between men and women do not differ even in the voting population as a whole. This paper casts doubts on the second explanation, as we find sizeable gender differences in preferences for a variety of policy areas. Therefore, the lack of impact of female policy-makers in certain settings is unlikely to be caused by similar preferences in the voting population at large. Rather, it may be related to the competitive selection process of policy-makers, and/or the limited power after election, e.g. due to party pressure.

[3] In theory, electoral competition may also diminish gender differences if politicians simply represent the preferences of the median voter. Recent empirical evidence, however, casts doubt on the Downsian view of the political process (e.g. Levitt, 1996; Lee *et al.*, 2004; Washington, 2008; Svaleryd, 2009). The evidence seems to be more consistent with a framework where candidates cannot fully commit to an electoral platform (Alesina, 1988, Osborne and Slivinski, 1996; Besley and Coate, 1997).

Finally, we shed light on the debate whether political involvement of women increases the size of government. While for the United States, women's suffrage might have increased state level spending (Lott and Kenny, 1999; Miller, 2008, reports an insignificant estimate), results for Europe are mixed (Aidt *et al.*, 2006; Aidt and Dallal, 2008; Bertocchi, 2011). In contrast to these aggregate studies, we rely on individual data on actual policy choices. Our results support the view that inclusion of female preferences in the political decision-making process has small effects on total spending.

3. DATA ON VOTING BEHAVIOUR IN FEDERAL PROPOSITIONS

To analyse differences in policy choices between men and women, we make use of the fact that Switzerland has wide-ranging possibilities for direct democratic participation. We focus in this study on the political decisions of citizens at the federal level. National-level policies span a broad range of political decisions including important decisions on the military and foreign policy which can typically not be studied using state-level data.

In Switzerland, citizens can propose an initiative for a partial or total revision of the federal constitution. If 50,000 signatures are collected, citizens can also request a referendum about each law proposed by the federal government. Furthermore, a referendum is mandatory for any changes to the constitution and all international treaties Switzerland wants to ratify. As a consequence, citizens vote on federal ballots several times each year.

In Switzerland, every person older than 18 years is allowed to vote (before March 1991, the minimum age was 20 years). No registration is necessary, and every eligible person automatically receives the official documents to vote which include detailed information on the ballot to be decided. Specifically, the information package of the federal government contains the arguments for and against the proposition, a printed version of the parliamentary debate (if any) and often outside opinions by interest groups. Most importantly, the distributed documents contain the estimated financial consequences, i.e. whether and by how much expenditures or taxes would increase if the proposition was approved.

Hence, Swiss citizens have easy access to information about the ballots both through the distributed documents and discussions in the media. In our data, 78% of voters report that they were well informed about the ballot prior to the vote. Furthermore, they have practiced their direct democratic participation rights for more than a century at the federal level and even longer in many states (cantons). We therefore believe that the electorate is able to make informed choices about the proposed ballots.

The data we use for our analysis of federal ballots are taken from the VOX surveys, which are conducted by telephone shortly after each vote (for more information on the data source, see http://www.gfsbern.ch). Overall, we have data for 185 of the 202 federal propositions held between 1981 and 2003.

The survey collects data on voting behaviour for a representative sample of 1,000 (before 1987, 700) Swiss citizens. The survey asks about the voting decision in the last federal ballot and whether the respondent was informed about the propositions. It also collects information on general political attitudes and party preferences as well as the respondent's demographic and economic situation.

Since we are interested in comparing choices of female and male voters, we drop all respondents under the age of 20 years, who were not eligible to vote until March of 1991, and under 18 years thereafter. Even though earlier surveys also ask non-voters about their preferred voting outcome, we focus in the main analysis on actual voters. Arguably, the politically active population is the most relevant for understanding the consequences if more women enter politics, especially in countries other than Switzerland. In the Appendix, we show that gender gaps are similar for the broader sample of Swiss citizens.

Our data have a number of advantages over previously employed surveys: first, we use information on voting behaviour with *real* political and financial consequences. Since every eligible voter receives detailed information about these consequences before each vote, we consider the voting decisions as a more reliable indicator of policy preferences than hypothetical questions from opinion polls. In addition, the policy choices are representative for the electorate as a whole since individuals in all cantons vote on the same proposition. Second, the votes cover a wide range of political issues, such as health policy, changes in unemployment insurance, new environmental policies, subsidies for agriculture or membership in international organizations. While the set of issues decided at the ballot box does not coincide with the set of decisions taken by members of parliament, the political choices are often very similar.

Table 1 reports summary statistics of our full sample separately for men and women over the period from 1981 to 2003. With the exception of household income and number of children, all variables are available for the full 185 votes.

Table 1 reflects the more traditional position of women in Swiss society: women are on average less educated than men and have lower income available to them. The female labour force participation rate is low compared to the United States as is the fraction of divorced people. Women in the sample are also more likely to live in urban areas and in the French- and Italian-speaking cantons of Switzerland.

Finally, female turnout at the ballot box is also slightly lower than for men. Over the whole sample, male turnout is 63%, and female turnout is 55%. The gender gap in turnout seems to be slightly decreasing over time.

To gauge the representativeness of the survey, we also compare demographic characteristics of survey participants to the general population in the Swiss Population Census between 1980 and 2000 (shown on the right-hand side of Table 1). Male survey respondents are slightly more skilled and less likely to be employed than in the Census data. Among women, survey respondents are somewhat younger, more high-skilled and more likely to be employed than in the general population. Since we control for demographic characteristics in all our estimations, this overrepresentation of certain socio-economic groups should not be a major concern.

Table 1. Summary statistics

	VOX data				Population census			
	Women		Men		Women		Men	
	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev	Mean	Std. Dev
Demographics								
Age 20–39 years	0.38	0.49	0.38	0.49	0.36	0.48	0.40	0.49
Age 40–59 years	0.37	0.48	0.34	0.47	0.33	0.47	0.35	0.48
Age 60+ years	0.23	0.42	0.26	0.44	0.31	0.46	0.25	0.44
Protestant	0.45	0.50	0.45	0.50	0.47	0.50	0.47	0.50
Have kids	0.40	0.49	0.32	0.46				
Single	0.20	0.40	0.28	0.45	0.21	0.41	0.28	0.45
Married	0.63	0.48	0.66	0.47	0.58	0.49	0.64	0.48
Divorced	0.06	0.23	0.03	0.18	0.07	0.26	0.05	0.22
Education, work and income								
Compulsory education	0.24	0.43	0.11	0.32	0.36	0.48	0.19	0.39
Apprentice/spec schools	0.70	0.46	0.77	0.42	0.55	0.50	0.68	0.47
University education	0.06	0.23	0.11	0.32	0.03	0.17	0.08	0.28
Employed	0.52	0.50	0.72	0.45	0.44	0.50	0.75	0.43
Income	1.90	1.40	2.40	1.49				
House ownership	0.40	0.49	0.43	0.50	0.40	0.49	0.44	0.50
Region of residence								
Urban	0.65	0.48	0.64	0.48	0.71	0.45	0.69	0.46
French-/Italian-speaking canton	0.29	0.45	0.28	0.45	0.27	0.44	0.25	0.44
Knowledge vote								
Well-informed about vote	0.74	0.44	0.82	0.38				
Political participation								
Turnout: 1981–2003	0.55	0.50	0.63	0.48				
Turnout 80s (1984–1993)	0.55	0.50	0.65	0.48				
Turnout 90s (1994–2003)	0.55	0.50	0.61	0.49				
Observations	88,289		85,479		342,466		298,149	

Notes: The left-hand side of the table reports summary statistics of the VOX survey data for all adults aged 20 years and above between 1981 and 2003. Protestant and whether the respondent has children are both binary indicators. Single, married and divorced are binary indicators describing the civil status of the respondent. Educational attainment is measured as binary outcomes whether a respondent has compulsory schooling degree, some vocational training or a tertiary degree. Employment is a binary indicator equal to one if the person is employed and zero if she is non- or unemployed. Income measures household income in five income classes. House ownership is a binary variable equal to one if the household owns a house and zero otherwise. Well informed is equal to 1 if the respondent could correctly answer questions about the respective ballot. Both urban residence and the dominant language in the canton of residence are binary indicators. The right-hand side shows the characteristics of the Census population in 1980, 1990 and 2000. Variables are defined as closely to the definition in the VOX data but some discrepancies might result because the definitions do not coincide (for example, for employment status).
Source: VOX surveys, 1981–2003.

4. GENDER GAPS AT THE BALLOT BOX

We first show the votes with the *largest* gender differences in approval in the 185 votes held between 1981 and 2003 in Table 2. The Appendix briefly describes the main goals and fiscal implications of the ten votes.

Table 2. Federal propositions with the largest gender gap

Title of proposition	Vote number	Year of vote	Gender gap (%)
Reduction of tobacco consumption	404	1993	17.7
Equal representation of women in federal government	461	2000	17.5
Change in marital law	336	1985	17.0
Against racial discrimination	414	1994	16.8
Against subsidies for corn production	413	1994	15.6
Reduction of alcohol consumption	403	1993	15.5
For protection of rivers and lakes	381	1992	15.3
For a car-free Sunday per quarter	498	2003	14.9
For abandoning nuclear energy	365	1990	14.7
For equal rights of the disabled	500	2003	14.6

Notes: The second column reports the official number of the vote and the third column the year the vote was held. The last column shows the gender gap, the percentage of women approving the proposition minus the percentage of men. Positive numbers imply that women were more supportive of the proposition than men.
Source: VOX Surveys, 1981–2003, sample of voters.

Women were 18 percentage points more likely to support an initiative for a reduction in tobacco consumption. More generally, women are much more supportive of votes to promote a healthy lifestyle. Not surprisingly, women were also more likely to support votes for the equal representation of women in the federal government and a reform of marital law that stresses equal rights and responsibilities of husband and wife. In addition, women were more supportive of anti-discrimination policies, the protection of the environment and government subsidies for the disabled. On the other hand, they oppose the use of nuclear energy.

On specific policies then, women voted quite differently than men. Is this result real or just the consequence of non-response or reporting bias in the VOX surveys? If untruthful reporting or selective response (on the part of men, women, or both) was a problem, one should see a discrepancy between survey and real approval rates.[4] In contrast to other surveys, we can directly measure non-response or reporting bias by comparing the average approval of voters in the survey with the official result of the ballot.

For seven votes shown in Table 2, the difference between stated approval in the survey and the official result is only 1.7 percentage points on average and statistically insignificant. Three votes have a statistically different approval in the survey compared to the ballot box. Citizen support in the survey is significantly higher compared to approval rates at the ballot box in the two policy areas environmental protection and gender equality (the difference is 7 percentage points for the vote 'Protection of Rivers and Lakes', 10 percentage point for the vote 'For a car free Sunday' and 12 percentage point for the vote 'Change in marital law'). However, the gender gaps in preferences are

[4] Funk (2012) analyses in detail the survey bias of the VOX data. As it turns out, consistent survey biases are concentrated in a few policy areas (immigration, international integration, rights for homosexual couples).

much larger than the survey bias, which strongly suggests that women indeed prefer different policies than men.

Table 2 is restricted to voters who have made actual choices at the ballot and are therefore well informed about the subject at hand. Yet, we find very similar gender gaps if we add non-voters to our sample (the VOX surveys also ask non-voters how they would have voted in the ballot). There are two exceptions: for the votes directly related to gender (change in marital law; equal rights of men and women), the gender gaps among the voters are larger than for the average population (17% versus 7% and 14.5% versus 7%). The reason is a higher representation of more extreme preferences among female voters who voted in large enough numbers to generate a large gender gap.

While suggestive, our summary statistics also show that women in the sample differ along other observable dimensions from men, for example, they are more likely to live in urban areas and have less income. To control for such possible confounding factors, we now turn to a more systematic analysis of political gender gaps.

In what follows, we focus on 11 main policy areas: two areas are state affairs (international relations and legal provisions on direct democracy and gender), four areas cover public goods (environment, transportation, defence and culture), two cover the public provision of a private good (education, health), and three areas are about transfers and redistribution (agricultural subsidies, social security provisions and subsidies for housing). To classify the federal ballot propositions into the 11 policy areas, we use the title and description of the vote. We focus on policy areas that seemed interesting beyond the Swiss setting and classified 87 (out of 185) votes. To make this selection as transparent as possible, Appendix Table A1 lists all the 185 votes (title, gender gap and year of the vote), together with information on whether the vote was falling into one of the eleven policy areas or not. If classified, the table also shows the policy area it belongs to. As can be seen from this Appendix table, there are nine votes on environmental protection ranging from the introduction of car-free Sundays to subsidizing solar energy with governmental funds.

Our statistical analysis then relates the support for more (or less) of a policy in a ballot to the respondent's gender, controlling for age, education, marital status, house ownership, employment, religion and residential type (urban versus non-urban). Furthermore, we include canton fixed effects (to control for the region of residence) and (ballot fixed effects (to adjust for differences in the overall voter support for a ballot).

Table 3 reports the effects of gender on the voting decision in each policy area. As can be seen from Table 3 first page, women are more immigration friendly than men, are more likely to support projects protecting the environment, but are against nuclear energy or the military. Women also have a 22 percentage point higher probability than men to approve measures towards gender equality. From Table 3 second page, we can see that there are gender differences in supporting a healthy life style (women are 16.3 percentage points more likely to approve measures targeting at reducing tobacco and alcohol consumption) and the use of gen-technology and animal testing. In the area of

Table 3. Voting behaviour of men and women

	International affairs			**Military**	**Environment**		**Transport**					**Agriculture**		**Legal**	
	Pro joining International Organizations	Against foreign immigration	Pro foreign immigration	Less military	Protection of the environment	Against nuclear energy	Against further road construction	Pro speed limits	Against speed limits	Against subsidies parking	Pro public transport	Against subsidies agriculture	Pro liberalizing agriculture	Equal rights women and men	More direct democracy
Female dummy	0.0120	−0.0905***	0.0875**	0.0494**	0.0769***	0.107***	0.0294	0.0550*	−0.0670	0.0863	0.00169	0.114***	−0.0112	0.220***	0.0337
	(0.0211)	(0.0309)	(0.0420)	(0.0248)	(0.0158)	(0.0219)	(0.0240)	(0.0325)	(0.0495)	(0.0804)	(0.0276)	(0.0378)	(0.0274)	(0.0385)	(0.0295)
University education	0.209***	−0.218***	0.361***	0.125***	0.129***	0.0627*	0.0726*	0.0905*	−0.0635	0.174	0.153***	0.185***	−0.0272	0.114*	−0.0334
	(0.0336)	(0.0357)	(0.0257)	(0.0399)	(0.0243)	(0.0362)	(0.0401)	(0.0590)	(0.0797)	(0.115)	(0.0389)	(0.0628)	(0.0437)	(0.0638)	(0.0424)
Married	0.0214	−0.0128	−0.0671	−0.0211	−0.0104	−0.0164	−0.152***	0.00943	0.0235	−0.154*	0.0223	−0.0230	0.0834***	−0.0247	−0.0239
	(0.0224)	(0.0346)	(0.0458)	(0.0268)	(0.0172)	(0.0238)	(0.0263)	(0.0333)	(0.0533)	(0.0928)	(0.0301)	(0.0431)	(0.0305)	(0.0425)	(0.0321)
Houseowner	−0.00725	0.0404	−0.00545	−0.0867***	−0.0784***	−0.0742***	−0.0399*	−0.0306	0.0813	0.0197	−0.0622**	0.0294	0.117***	−0.162***	0.0481
	(0.0221)	(0.0327)	(0.0453)	(0.0255)	(0.0163)	(0.0238)	(0.0235)	(0.0310)	(0.0542)	(0.0782)	(0.0284)	(0.0418)	(0.0282)	(0.0389)	(0.0302)
Employed	0.0638***	0.00801	−0.0918**	0.0519*	−0.0371**	0.0244	−0.0281	0.0230	0.0205	0.0749	−0.0524	−0.0540	0.0306	0.0152	−0.0513
	(0.0245)	(0.0373)	(0.0451)	(0.0302)	(0.0181)	(0.0252)	(0.0261)	(0.0337)	(0.0565)	(0.0967)	(0.0329)	(0.0422)	(0.0306)	(0.0448)	(0.0349)
Age	−0.00133*	0.00222**	−0.00461***	−0.00517***	−0.00389***	−0.00366***	−0.00181**	−0.000842	0.00105	0.00302	0.00136	0.00121	−0.00231**	−0.000607	−0.00299***
	(0.000710)	(0.00113)	(0.00142)	(0.000889)	(0.000534)	(0.000745)	(0.000762)	(0.00102)	(0.00170)	(0.00274)	(0.000950)	(0.00130)	(0.000926)	(0.00126)	(0.00101)
Protestant	0.00499	−0.000855	0.0360	−0.0522**	−0.00356	−0.0471*	−0.00679	−0.0274	0.00938	0.144*	−0.0543*	0.0233	0.0832***	−0.0863**	−0.0496
	(0.0223)	(0.0332)	(0.0465)	(0.0261)	(0.0167)	(0.0241)	(0.0258)	(0.0331)	(0.0540)	(0.0827)	(0.0301)	(0.0446)	(0.0293)	(0.0396)	(0.0304)
Number of ballots	5	3	1	5	9	5	4	1	1	1	3	2	4	3	4
Ballot fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Canton fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,833	1,038	569	2,089	4,838	2,377	1,969	670	505	204	1,472	688	1,770	941	1,548
Log-likelihood	−1617.96	−625.60	−309.71	−1182.49	−2880.52	−1501.85	−1154.24	−309.60	−319.56	−123.23	−899.35	−412.33	−1020.10	−460.26	−804.66

Notes: The table reports marginal effects from a probit model. The dependent variable is the voting decision, which is equal to one if the respondent supported the proposition and zero otherwise for the respective propositions shown in the column header. The table reports the coefficient on the female dummy. All specifications include canton and ballot fixed effects and control for living in urban regions (>10,000 inhabitants) and speaking German as a native language (all controls except age are binary variables). Robust standard errors are reported in parentheses. Coefficients with *** are significant at the 1% level, while those with ** (*) are significant at the 5% (10%) level. The last row reports the value of the log-likelihood function.

Source: Authors' calculations.

Table 3 (continued). Voting behaviour of men and women

	Health						***Education***	***Welfare***					***Culture and Leisure***		***Living***
	Subsidies health insurance	Pro liberalizing drugs	Against tobacco/ alcohol	Against gen-tech/ animal test.	Pro legalize abortion	Cheaper hospitals/ pharma-prod.	Freeeducation	Reduce unempl. benefits	Decrease retirement age	Increase retirement age	Support for the disabled	Longer maternity leave	More culture	More leisure	Pro cheap housing
Female dummy	0.038	−0.0164	0.163***	0.0825***	−0.0299	−0.0388*	0.0085	−0.0488	0.0529 ***	−0.0431	0.137***	0.0513*	0.0868*	0.0102	0.0109
	(0.032)	(0.0323)	(0.0263)	(0.0236)	(0.0409)	(0.0226)	(0.068)	(0.0350)	(0.0206)	(0.0482)	(0.0474)	(0.0283)	(0.0445)	(0.0332)	(0.0458)
University education	0.031	0.119**	0.140***	−0.0150	0.128**	0.0354		0.0571	−0.00703	0.137**	0.0208	0.208***	0.337***	−0.0243	−0.0388
	(0.053)	(0.0494)	(0.0505)	(0.0352)	(0.0544)	(0.0381)		(0.0462)	(0.0320)	(0.0627)	(0.0691)	(0.0541)	(0.0428)	(0.0554)	(0.0651)
Married	−0.007	−0.0578	−0.00558	−0.0321	−0.0161	0.00808	−0.0329	−0.0564	−0.0106	−0.0611	−0.0447	−0.0430	−0.149***	0.0122	−0.0674
	(0.034)	(0.0374)	(0.0276)	(0.0259)	(0.0446)	(0.0234)	(0.066)	(0.0369)	(0.0226)	(0.0518)	(0.0531)	(0.0305)	(0.0470)	(0.0362)	(0.0506)
Houseowner	−0.084**	0.00828	−0.0256	−0.0335	0.0576	−0.0345	−0.145**	0.0730**	−0.0735***	0.165***	−0.0968*	−0.0393	0.0739	−0.102***	−0.293***
	(0.033)	(0.0346)	(0.0271)	(0.0246)	(0.0428)	(0.0221)	(0.065)	(0.0347)	(0.0211)	(0.0487)	(0.0516)	(0.0290)	(0.0469)	(0.0344)	(0.0465)
Employed	−0.016	0.0956**	0.000851	0.0197	0.166***	0.0243	−0.168**	0.0236	0.0237	−0.128**	−0.0405	−0.0176	−0.00716	0.0917**	0.0697
	(0.036)	(0.0380)	(0.0281)	(0.0265)	(0.0473)	(0.0242)	(0.076)	(0.0389)	(0.0241)	(0.0579)	(0.0557)	(0.0315)	(0.0493)	(0.0375)	(0.0509)
Age	−0.0002	−0.00385***	0.00258***	−0.00117	−0.000874	9.02e-05	−0.0003	0.00394***	−0.00224***	0.00131	−0.000918	−0.00516***	−0.00334**	−0.00401***	0.00136
	(0.001)	(0.00120)	(0.000770)	(0.000785)	(0.00135)	(0.000740)	(0.002)	(0.00112)	(0.000744)	(0.00171)	(0.00169)	(0.000965)	(0.00149)	(0.00109)	(0.00154)
Protestant	0.006	0.0263	−0.0248	−0.0223	0.169***	−1.74e-05	0.006	0.0613*	−0.0531**	0.0286	−0.0848*	−0.0730**	−0.0516	−0.0253	−0.0352
	(0.033)	(0.0353)	(0.0275)	(0.0251)	(0.0424)	(0.0229)	(0.072)	(0.0365)	(0.0219)	(0.0506)	(0.0508)	(0.0291)	(0.0493)	(0.0354)	(0.0490)
Number of ballots	2	2	2	4	1	2	1	2	5	1	1	3	2	4	1
Ballot fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Canton fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	949	1,127	1,112	2,144	517	1,107	251	952	2,500	491	508	1,450	556	1,334	522
Log-likelihood	−525.80	−668.00	−539.11	−1302.15	−267.49	−449.83	−137.43	−507.46	−1491.13	−298.05	−322.91	−847.63	−326.30	−612.76	−297.16

Notes: The table reports marginal effects from a probit model. The dependent variable is the voting decision, which is equal to one if the respondent supported the proposition and zero otherwise for the respective propositions shown in the column header. The table reports the coefficient on the female dummy. All specifications include canton and ballot fixed effects and control for living in urban regions (>10,000 inhabitants) and speaking German as a native language (all controls except age are binary variables). Controls for socio-demographics are included as well (all controls except age are binary variables). Robust standard errors are reported in parentheses. Coefficients with *** are significant at the 1% level, while those with ** (*) are significant at the 5% (10%) level. The last row reports the value of the log-likelihood function.

Source: Authors' calculations.

social security, women support a decrease in the retirement age more than men. Last, women are relatively more supportive of the disabled and in favour of a longer maternity leave. After listing the policies where women and men's preferences differ, we also would like to mention that no gender differences exist in policy areas such as transportation, direct democracy, education or the regulation of leisure.[5]

To what extent could these gender differences be driven by reporting bias? As shown in Funk (2012), surveys are inaccurate especially in policy areas with a predominant politically correct view (race and gender). For the votes on gender equality, it could therefore be that reporting and non-response bias potentially differ between women and men and partly account for the observed gender differences in the survey. However, as can be seen from Appendix Table A2, gender differences persist when restricting the sample to the votes with no survey bias.[6] Therefore, the gender gaps discovered in the areas of environment, the military, healthy lifestyle or regarding the age of retirement seem to be genuine preference differences between women and men. For the policies in the area of immigration and support for the disabled, such a statement is more difficult as there are no votes without survey bias. Nevertheless, there is no strong *a priori* reason as for why biases in the area of immigration should differ across gender. Concerning the disabled, it may be that women feel more pressured to appear caring due to underlying social norms, and this may partly explain the gender gap in this vote.

We further explore whether women differ in their voting decisions along observable characteristics. Do policy preferences of high-skilled women or women in the labour force differ from the average woman? The results in Appendix Table A3 indeed suggest some heterogeneity in policy preferences across education and labour force participation. In 10 out of the 26 votes, high-skilled women have different policy preferences than the average woman. High-skilled women, for example, are more likely to oppose restrictions against foreign immigration, more likely to support abortion and less likely to support the liberalization of drugs. Policy preferences among women in the labour force are different from the average woman for less than a quarter of the 26 votes. Employed women, for example, are less in favour of increasing the retirement age, but also more likely to oppose additional road construction or road subsidies than the average woman.

We then ask whether gender gaps are higher or lower among the high-skilled or those employed. High-skilled women are more opposed to immigration restrictions and more likely to support abortion than high-skilled men, whereas employed women are more likely to vote against further road construction and parking subsidies than employed

[5] One might also wonder whether gender gaps are influenced by women's representation in the legislature. Interacting the female dummy with the share of female representatives in the parliament of the canton of residence, we find few significant interaction effects.

[6] A vote is not subject to survey bias if the null hypothesis 'share yes' among self-declared voters in the survey equal to official 'share yes' in the respective ballot cannot be rejected at the 5% level.

men. Overall, the results suggest that employment and university education does reduce some of the gender gaps but does by no means eliminate them.

So far, we have used house ownership as a proxy for income (as income is only available in the later votes). However, since women have lower income on average, this may affect their preferences for redistribution (Meltzer and Richard, 1981; Lott and Kenny, 1999), or potentially also their demand for environmental protection. Table 4 re-investigates the estimated gender gaps, while controlling more rigorously for potential income differences between women and men.

Table 4 first row re-restimates previous baseline regressions (underlying Table 3) for the sample of votes where household income had been asked for in the surveys. Gender gaps that are statistically significant (at the 5% level) in the baseline remain so when controlling for income (with little change in the coefficient estimate). As such, income differences are certainly not the cause behind the observed gender gaps. Also, controlling more rigorously for education (see third row) tends to increase the gender gaps we observe. The next specification includes a variable whether the voter felt well informed about the ballot. The fourth row shows the baseline for the subset of votes for which the variable is available, while the fifth row adds the variable as an additional control. As before, the results remain qualitatively unchanged.

As a last check, we analyse gender gaps for a subgroup of the population, where income is comparable for women and men: the married respondents. Again, the largest gender gaps discovered earlier prevail.

While we focus on the voters in the main analysis, it would be interesting to know whether the gender gaps are also present for the non-voters. Unfortunately, non-voters are asked how they would have voted only in the earlier votes (before 2000). A comparison of women's and men's approval for these early votes – separately for voters and non-voters – shows that gender gaps in the policy areas environment, nuclear energy, healthy lifestyle, gen-technology and the military exist for both subgroups (see Appendix Table A4). One important difference between voters and non-voters concerns the policy area 'equal rights for women and men': there, large gender differences are found in the voting population, but not in the non-voting population. Plausibly, turnout among citizens with more extreme preferences in this area must have been higher.

5. THE FISCAL CONSEQUENCES OF WOMEN AS POLICY-MAKERS

So far, we analysed gender gaps in approval rates for proposed policies independently of their fiscal consequences. Suppose, however, that women are fiscally more conservative than men. Then, they may not favour costly projects for environmental protection even though they may care more about it than men.[7]

[7] We could have added a category culture, but the votes are the same as the ones already analysed in Table 3.

Table 4. Robustness to income, education and information about the ballot

	International affairs			*Military*	*Environment*		*Transport*			*Agriculture*		*Legal*	
	Pro joining International Organizations	Against foreign immigration	Pro foreign immigration	Less military	Protection of the environment	Against nuclear energy	Pro speed limits	Against subsidies parking	Pro public transport	Against subsidies agriculture	Pro liberalizing agriculture	Equal rights women and men	More direct democracy
Baseline estimates for votes with household income													
Female dummy	0.0339	−0.117***	0.170***	0.0400	0.0662***	0.0958***	0.0445	0.0910	0.0561	0.183***	−0.0205	0.192***	0.0302
	(0.0280)	(0.0330)	(0.0464)	(0.0330)	(0.0206)	(0.0353)	(0.0376)	(0.0919)	(0.0477)	(0.0533)	(0.0329)	(0.0448)	(0.0363)
Observations	1,680	901	397	1,231	2,369	933	547	160	431	332	1,252	365	971
Control for household income													
Female dummy	0.0424	−0.119***	0.182***	0.0404	0.0635***	0.0967***	0.0475	0.0924	0.0551	0.183***	−0.0261	0.192***	0.0294
	(0.0282)	(0.0331)	(0.0469)	(0.0330)	(0.0207)	(0.0353)	(0.0374)	(0.0951)	(0.0476)	(0.0536)	(0.0330)	(0.0446)	(0.0363)
Observations	1,680	901	397	1,231	2,369	933	547	160	431	332	1,252	365	971
Control for detailed educational attainment dummies													
Female dummy	0.0429**	−0.101***	0.126***	0.0478*	0.0907***	0.108***	0.0562*	0.118	0.0065	0.136***	−0.0142	0.229***	0.0251
	(0.0217)	(0.0317)	(0.0434)	(0.0253)	(0.0161)	(0.0222)	(0.0331)	(0.0856)	(0.0279)	(0.0392)	(0.0275)	(0.0389)	(0.0304)
Observations	2,833	1,038	569	2,089	4,838	2,377	670	204	1,472	688	1,770	941	1,548
Baseline estimates for votes with information on variable 'know the details of the vote'													
Female dummy	0.0141	−0.0861***	0.0863**	0.0505**	0.0784***	0.107***	0.0580*	0.0863	0.0031	0.128***	−0.0082	0.216***	0.0345
	(0.0214)	(0.0312)	(0.0428)	(0.0252)	(0.0161)	(0.0220)	(0.0329)	(0.0804)	(0.0279)	(0.0387)	(0.0290)	(0.0388)	(0.0300)
Observations	2,769	1,022	538	2,035	4,635	2,331	662	204	1,433	621	1,604	932	1,492
Control for how well-informed voter is about the ballot													
Female dummy	0.0188	−0.0871***	0.0876**	0.0522**	0.0797***	0.116***	0.0589*	0.0832	0.0029	0.128***	−0.0061	0.215***	0.0337
	(0.0214)	(0.0312)	(0.0429)	(0.0254)	(0.0161)	(0.0222)	(0.0328)	(0.0811)	(0.0279)	(0.0387)	(0.0290)	(0.0388)	(0.0302)
Observations	2,769	1,022	538	2,035	4,635	2,331	662	204	1,433	621	1,604	932	1,492
Married couples only (all votes)													
Female dummy	0.0195	−0.0743*	0.0461	0.0481	0.0653***	0.103***	0.0175	0.0746	−0.0182	0.197***	−0.0354	0.216***	0.0495
	(0.0272)	(0.0388)	(0.0614)	(0.0317)	(0.0198)	(0.0281)	(0.0418)	(0.103)	(0.0351)	(0.0505)	(0.0334)	(0.0487)	(0.0371)
Observations	1.915	720	367	1.435	3.413	1.594	436	144	1.017	453	1.296	653	1.086

Notes: The table reports marginal effects from a probit model. The dependent variable is the voting decision, which is equal to one if the respondent supported the proposition and zero otherwise for the respective propositions shown in the column header. The table reports the coefficient on the female dummy. All specifications include canton and ballot fixed effects and all the controls included in Table 3. The first row reports the baseline estimates underlying Table 3 for the restricted sample of votes where household income is available (i.e. votes after 1993). The second row adds a measure for household income. The third row controls for a set of dummies for the educational attainment of the respondent. The fourth specification reruns the baseline specification for the subset of ballots for which voters report knowing the details of the vote. The fifth row adds whether the voter reports knowing the details of the vote. The last row restricts the sample to married survey respondents (for the whole sample of votes). Robust standard errors are reported in parentheses. Coefficients with *** are significant at the 1% level, while those with ** (*) are significant at the 5% (10%) level.

Source: Authors' calculations.

Table 4 (continued). Robustness to income, education and information about the ballot

	Health						*Welfare*					*Culture and leisure*		*Living*
	Subsidies health insurance	Pro liberalizing drugs	Against tobacco/ alcohol	Against gen-tech/ animal test.	Pro legalize abortion	Cheaper hospitals/ pharma-prod.	Reduce unempl. benefits	Decrease retirement age	Increase retirement age	Support for the disabled	Longer maternity leave	More culture	More leisure	Pro cheap housing
Baseline estimates for votes with household income														
Female dummy	0.0489	−0.00645	0.153***	0.173***	−0.0448	−0.0323	−0.137***	0.0624***	−0.0976	0.143***	0.0347	0.179***	−0.0431	0.0599
	(0.0417)	(0.0359)	(0.0281)	(0.0454)	(0.0437)	(0.0248)	(0.0523)	(0.0232)	(0.0607)	(0.0521)	(0.0494)	(0.0519)	(0.0342)	(0.0500)
Observations	350	957	1,002	487	434	962	478	2,051	348	428	542	386	575	455
Control for household income														
Female dummy	0.0481	−0.00900	0.149***	0.169***	−0.0462	−0.0312	−0.138***	0.0625***	−0.0965	0.144***	0.0358	0.190***	−0.0458	0.0576
	(0.0417)	(0.0360)	(0.0284)	(0.0456)	(0.0438)	(0.0247)	(0.0523)	(0.0232)	(0.0607)	(0.0524)	(0.0494)	(0.0525)	(0.0344)	(0.0501)
Observations	350	957	1,002	487	434	962	478	2,051	348	428	542	386	575	455
Control for detailed educational attainment dummies														
Female dummy	0.0301	−0.0017	0.173***	0.0786***	−0.0243	−0.0351	−0.0381	0.0450**	−0.0368	0.122**	0.0587**	0.120***	0.0162	0.0141
	(0.0319)	(0.0334)	(0.0269)	(0.0239)	(0.0417)	(0.0235)	(0.0358)	(0.0210)	(0.0492)	(0.0490)	(0.0290)	(0.0462)	(0.0346)	(0.0466)
Observations	949	1,127	1,112	2,144	517	1,107	952	2500	491	508	1,450	556	1,334	522
Baseline estimates for votes with information on variable 'know the details of the vote'														
Female dummy	0.0326	−0.0169	0.168***	0.0815***	−0.0331	−0.0342	−0.0575	0.0527**	−0.0311	0.142***	0.0514*	0.118**	0.0076	0.0111
	(0.0337)	(0.0324)	(0.0278)	(0.0255)	(0.0412)	(0.0231)	(0.0367)	(0.0221)	(0.0499)	(0.0478)	(0.0283)	(0.0469)	(0.0337)	(0.0464)
Observations	873	1,120	1,051	1,883	504	1,071	906	2,186	453	499	1,445	492	1,298	508
Control for how well informed voter is about the ballot														
Female dummy	0.0332	−0.0174	0.163***	0.0810***	−0.0331	−0.0339	−0.0601	0.0557**	−0.0400	0.140***	0.0515*	0.119**	0.0071	0.0151
	(0.0337)	(0.0324)	(0.0278)	(0.0255)	(0.0412)	(0.0231)	(0.0368)	(0.0221)	(0.0501)	(0.0478)	(0.0283)	(0.0471)	(0.0338)	(0.0469)
Observations	873	1,120	1,048	1,883	504	1,071	906	2,186	453	499	1,445	492	1,298	508
Married couples only (all votes)														
Female dummy	0.0412	0.0120	0.213***	0.0885***	−0.0784	−0.00779	−0.0509	0.0605**	0.0543	0.182***	0.0240	0.119*	0.0172	−0.0533
	(0.0411)	(0.0394)	(0.0404)	(0.0304)	(0.0477)	(0.0289)	(0.0444)	(0.0256)	(0.0604)	(0.0607)	(0.0347)	(0.0617)	(0.0431)	(0.0564)
Observations	645	818	666	1.484	365	748	651	1.765	335	350	1.044	356	912	342

Notes: The table reports marginal effects from a probit model. The dependent variable is the voting decision, which is equal to one if the respondent supported the proposition and zero otherwise for the respective propositions shown in the column header. The table reports the coefficient on the female dummy. All specifications include canton and ballot fixed effects and all the controls included in Table 3. The first row reports the baseline estimates underlying Table 3 for the restricted sample of votes where household income is available (i.e. votes after 1993). The second row adds a measure for household income. The third row controls for a set of dummies for the educational attainment of the respondent. The fourth specification reruns the baseline specification for the subset of ballots for which voters report knowing the details of the vote. The fifth row adds whether the voter reports knowing the details of the vote. The last row restricts the sample to married survey respondents (for the whole sample of votes). Robust standard errors are reported in parentheses. Coefficients with *** are significant at the 1% level, while those with ** (*) are significant at the 5% (10%) level.

Source: Authors' calculations.

We next analyse whether women and men differ in how they like to allocate government resources. To analyse the fiscal preferences of men and women, we select a subset of ballots that would have unambiguously increased or decreased government spending.

In order to assess the fiscal impact of each proposition, we use the official documents prepared by the government which outline the estimated financial consequences, i.e. whether and by how much spending would increase if the proposition was approved by the electorate. After careful study, we identified 71 (of the 202) propositions between 1981 and 2003 where the documents showed unambiguous financial consequences.

Appendix Table A5 contains a detailed list of these votes. Note that the set of propositions we analyse contains both ballots that were approved and therefore affected actual government spending as well as ballots that were not approved. As a consequence, we have a representative set of actual political decisions and their financial consequences, which is not affected by the ballot's actual success.

The model we estimate is the same as in the last section except that we now use only the subset of votes with predictable financial consequences. Our dependent variable is whether a voter supports a ballot that would increase government spending if approved. If the ballot proposed a reduction of spending, taxes, subsidies or debt, we rescaled the voting choice as one if the respondent voted against the ballot and zero if the voter approved a reduction in government spending in that area.

Table 5 displays the results for overall government spending as well as spending in seven different policy areas (education, health, welfare, environment and nuclear policy, defence spending, transportation and agricultural policy). The first column shows that women are 2.5 percentage points more likely to support projects that would increase overall government spending. They are also 3.1 percentage points less likely to support a reduction of government debt though the coefficient is not significantly different from zero. Therefore, men and women do not differ much overall in their support for costly projects.

However, the picture is different if we look at individual policy areas. Here, we find that women are 10 percentage points more likely to favour spending for environmental protection. At the same time, they are also 6 percentage points less likely to support agricultural or military spending. In addition, they are also more supportive of health and welfare spending than men. As such, women and men have very different preferences for the composition of government spending.

An interesting exercise would be to compare our estimates with results obtained from the most similar survey using hypothetical questions.

As it turns out, the International Social Survey Programme (ISSP) wave six ('Role of Government', 1996) asks the following question, which is in the spirit of our last analysis on government spending: 'There are various areas of government spending. Please tell me for each of them whether you would like to see more or less government spending in each area. Remember that if you say "much more", it might require a tax increase to pay for it.' Surveyed subjects are all older than 18 years, which correspond precisely to

Table 5. Support for higher expenditures in federal propositions

	Size of government		*Scope of government*						
	More government	Less debt	More environment	More transport	More defence	More agriculture	More education	More health	More welfare
Female dummy	0.025***	−0.031	0.1***	0.016	−0.064***	−0.073***	0.117**	0.062**	0.064***
	(0.008)	(0.019)	(0.028)	(0.016)	(0.023)	(0.026)	(0.058)	(0.025)	(0.016)
University education	0.145***	−0.006	−0.053	0.187***	−0.094**	−0.101**	0.154	0.109**	−0.024
	(0.012)	(0.033)	(0.045)	(0.021)	(0.037)	(0.043)	(0.103)	(0.044)	(0.025)
Married	−0.025***	0.014	−0.037	−0.026	−0.001	−0.011	−0.037	−0.008	−0.002
	(0.008)	(0.021)	(0.031)	(0.017)	(0.024)	(0.029)	(0.062)	(0.026)	(0.017)
Houseowner	−0.035***	0.03	−0.099***	−0.016	0.066***	0.008	−0.182***	−0.068***	−0.087***
	(0.008)	(0.02)	(0.029)	(0.016)	(0.023)	(0.028)	(0.060)	(0.025)	(0.016)
Employed	−0.035***	−0.058***	−0.069**	−0.054***	0.022	0.026	0.126**	−0.021	0.013
	(0.009)	(0.021)	(0.031)	(0.018)	(0.027)	(0.029)	(0.061)	(0.027)	(0.019)
Age	−0.00039	0.001	−0.005***	0.002***	0.006***	0.001	0.002	−0.001	−0.003***
	(0.00026)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)
Protestant	−0.02**	0.028	−0.008	−0.062***	0.088***	0.003	0.08	−0.011	−0.04**
	(0.008)	(0.021)	(0.03)	(0.017)	(0.024)	(0.029)	(0.057)	(0.026)	(0.017)
Number of ballots	49	5	3	7	6	5	3	4	9
Ballot fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Canton fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	20,448	2,150	1,529	4,087	2,150	1,531	387	1,720	4,427
Log-likelihood	−12725.0	−1101.3	−855.4	−2408.2	−1273.9	−877.4	−238.1	−1009.0	−2793.7

Notes: The table reports the marginal effects from a probit model whether the respondent supported a proposition which would have increased government spending in the respective policy area or opposed it. The classification of the financial consequences of the propositions is based on the official documents distributed by the Swiss government before the vote (see main text). Appendix Table 4 shows a list of the federal propositions underlying each column. The table reports the coefficient on the female dummy variable in each column. The controls are the same as in Table 3. Robust standard errors are reported in parentheses.
Source: Authors' calculations.

Table 6. Support for higher expenditures in the ISSP survey

	Scope of government				
	More environment	More defence	More education	More health	More redistribution
Female dummy	−0.0047	−0.0406**	−0.0139	0.0516	0.0202
	(0.0476)	(0.0181)	(0.0432)	(0.0478)	(0.0404)
Region fixed effects	Yes	Yes	Yes	Yes	Yes
Observations	484	485	484	485	483
Log-likelihood	−313.2	−84.8	−290.5	−310.5	−267.1

Notes: The sample consists of survey respondents who indicate to have voted in the last federal election. The table reports the marginal effects from a probit model where the dependent variable is a dummy variable indicating whether the respondent supports more government spending in the specific policy area (1 if yes, 0 if not). The table reports the coefficient on the female dummy variable in each column. The controls are dummy variables for marital and employment status, religion (1 if protestant, 0 otherwise), age and a dummy for living in an urban area as well as controls for 7 NUTS2-regions in Switzerland. Robust standard errors are reported in parentheses. *Source*: International Social Survey Programme (ISSP), Wave 6 ('Role of Government').

the surveyed individuals in the VOX-samples. We match the following policy areas: the environment, health, education, the military and defence and unemployment benefits. We then run regressions using as dependent variable an indicator equal to one if a person says: much more or more spending; the variable is zero otherwise. As independent variables, we include the gender dummy and the same control variables we use in our analysis of the ballot data.

Table 6 reveals few gender gaps in the ISSP survey; apart from the policy areas defence and health, the sizes of the estimated coefficients are small (note e.g. the stark contrast to the VOX results on environmental spending). As such, hypothetical survey questions may not be well suited to identify gender gaps in policy preferences, either because survey respondents have little incentives to think seriously about the subject, or because the survey questions remain too vague on how the additional spending would be actually financed.

Given that we do not find large gender gaps for total spending, can we conclude that women are then only marginally more inclined to accept costly projects than men? Since Lott and Kenny's (1999) influential article on women suffrage and the size of government, there has been a vivid debate on whether political involvement of women increases government spending or not. Other evidence suggests, in contrast, that women are more in favour of a balanced budget than men (Shapiro and Mahajan, 1986; see also Krogstrup and Wälti, 2011).

Our data allow us to analyse directly whether women, at the ballot box, say more frequently yes than men to projects that increase government spending.[8] As mentioned

[8] It is possible, however, that women might have influence on spending through at least two other channels: first, the composition of the parliament by electing different representatives or different parties. Second, women can also affect policies directly by proposing initiatives that support their policies.

Table 7. Propositions where men and women had accepted different outcomes

Title of proposition	Year of vote	Women Yes	Men Yes	Outcome
Ecological and modern agriculture	1995	44.4	50.2	No
Easier access to Swiss real estate for non-residents	1995	43.3	55.4	No
Abolish subsidies for parking spaces at train stations	1996	51.8	41.2	Yes
For a sustainable unemployment insurance	1997	38.9	52.1	No
New regulation fuel tariffs	1983	48.1	57.0	Yes
Introduction of civil service	1984	51.8	44.6	No
Reduce property sales, especially to non-residents	1984	50.9	48.4	No
Stop construction of nuclear power plants	1984	53.9	47.7	No
Stop use of nuclear energy	1990	58.0	43.3	No
Reducing animal testing	1992	55.4	41.7	No
For an ecological military	1993	51.3	42.9	No
Against fighter planes	1993	52.1	43.4	No
Flexible retirement age 62 years for men and women	2000	50.4	43.6	No
For equal rights of the disabled	2003	55.1	40.5	No
Stop construction of nuclear power plants	2003	50.4	44.0	No

Notes: The third and fourth columns show the percentage of women and men voting in favour of the proposition respectively. The last column shows the official outcome of the federal proposition. The first four rows show the votes where women changed the result. The other rows report the votes, in which men were decisive.
Source: VOX Surveys, 1981–2003.

before, the gender gap in approval of costly projects at the ballot box is a mere 2.5 percentage point. Note further that actual spending is only affected by women's political participation if the proposition is approved by the voters and women changed the final outcome, i.e. they proved to be pivotal. Among all federal ballots between 1981 and 2003, women and men had approved different outcomes in 15 votes (see Table 7). Women changed the result in their favour in only four cases or about 2% of the 202 propositions over that period. From these four pivotal votes, only two had clear-cut fiscal implications.

Based on the information provided by the federal government before the vote, we can get a rough estimate of the consequences of these two fiscally relevant votes. Women's opposition to a reduction in unemployment benefits increased federal spending by about 70 million Swiss Francs per year. Women, however, were also in favour of abolishing subsidies for parking spaces, which saved the federal government about 20 million Swiss Francs per year. Relative to the 46 billion federal expenditures in 1999, the change in voting outcomes by women adds up to a mere 0.1% increase in federal spending.

6. POLICY IMPLICATIONS AND CONCLUSION

This paper identifies gender gaps in policy preferences as revealed at the ballot box. We focus on Switzerland, where citizens regularly decide on all relevant issues due to extensive direct democratic rights. We find strong evidence that women and men support a different allocation of government resources. In particular, we show that female voters

care more about the environment, public health, social welfare and are more sceptical towards nuclear energy or the military. If we focus on the fiscal consequences of women expressing their preferences in ballots, we find that gender gaps in approval of costly projects are quite large in specific policy areas (10 percentage point difference in approval of environmental projects), but comparatively small (2.5 percentage points) when it comes to the overall size of government.

While these data allow us to uncover genuine gender differences in preferences, the magnitudes of these gender gaps may not one-to-one carry over to a context of representative democracies, where women and men act as legislators. To take an extreme example, the canonical model of the median voter would predict that candidates implement the preferences of the median voter irrespective of their gender. It is only the more recent research that stresses a role for legislators' identity in policy making (e.g. Washington, 2008), and here, a legislator's gender may matter. This result then raises the issue on how many female legislators are needed to get an adequate representation of women's preferences. Traditionally, the number of female legislators has been low; as mentioned in the introduction, only one out of five representatives in national parliaments is a woman.

Would this call for legal intervention in the form of a gender quota? If a low share offemale legislators reflects voter preferences (e.g. a preference for male legislators) orifwomen have a high disutility from running as candidates, it is not obvious why a gender quota is needed. Yet, latest research on the reasons for the low share of femalelegislators in Spain reaches a very different conclusion. The study finds that womenare willing to run as candidates; furthermore, voters are no more likely to prefer male over female legislators. The empirical evidence suggests instead that male party members discriminate against women by either not putting them on the lists, or by putting them in disadvantaged positions on those lists–even if this is suboptimal for the party's electoral outcome (Casas-Arce and Saiz, 2014). If such discriminatory practices by male party members also prevail in other countries and settings, a well-designed gender quota could improve the representation of women's preferences in the political arena.

Discussion

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Assessing whether men and women have different preferences for policies is undoubtedly an interesting topic. The value added of this paper is that differences in preferences are measured over a wide range of policies and by using actual decisions that have real consequences rather than answers to vague questions concerning hypothetical situations. The paper shows in a convincing way that a difference exists on specific policies: women care more about the environment, public health and social welfare while they are more skeptical towards nuclear energy and military expenditures.

However, having different preferences does not automatically translate into the fact that men and women in power would *choose* different policies. Men and women elected as representatives might choose similar policies – despite differences in preferences – because they respond to their electorate and are constrained by the programme of the party they belong to. In this respect, women's preferences do not need female representatives to be voiced. Moreover, men and women elected as representatives might choose similar policies because they are constrained by the specific circumstances in which their choices materialize. For instance, women may be in favour of increasing expenditures in social welfare, but in a country with a high and increasing public debt such policies may be simply unfeasible. Finally, the preferences of women who are elected in parliament or who become members of a government are likely to be quite different from the preferences of the population of female voters. In sum, the paper does not show and does not argue in a convincing way why the existence of differences in preferences justifies policy intervention to facilitate women's participation in the political life.

At the same time, the existence of differences in preferences is *not even necessary* for such a policy intervention. The primary reason why women's participation in the political life should be facilitated is to guarantee equal opportunities and to avoid that prejudices regarding women's capabilities and leadership may result in discrimination within political organizations and exclusion from the political arena. Moreover, a more intense women's participation would also make the selection process of politicians more competitive and more efficient, thereby benefitting society also through this channel. These arguments do not need the existence of differences in preferences to be put forward.

For the above reasons, I believe that the value of this paper lies in the new and interesting questions that it stimulates rather than in the policy implications that can be drawn from the paper's results. What is the origin of the differences in preferences that the paper documents? Is it the fact that in Switzerland women were denied the right to vote until 1971? Do the documented differences decrease overtime, as women gain familiarity with voting? The paper shows that differences in preferences between men and women exist even if one controls for income, working status, education, etc. However, it would be interesting to understand whether such differences exist even if one controls for the *type* of education and the type of occupation. Do men and women having a scientific degree exhibit differences in preferences? Do men and women acting as top managers in large companies exhibit different preferences? To what extent are the differences that we observe the result of the different way men and women are grown up and trained, or of the different activities they develop in their life? The paper cannot explore these questions for data limitations but it would be worth exploring them in future research.

Josep Pijoan-Mas

CEMFI

The article by Patricia Funk and Christina Gathmann investigates whether men and women differ in political preferences. To do so, they look at policy ballots by the Swiss

Federal Government. In particular, they use survey data – collected shortly after the referenda took place – that ask about the vote, as well as about some socio-economic information of the respondent. In contrast, the standard approach to explore gender differences in political preferences is based on hypothetical questions. The data used in this article are more interesting because they reflect actual choices, which means that people were well informed about the policies and their consequences. For this reason, I think this article adds a very important piece of evidence to the literature.

The results are aligned with the idea that women are *more progressive* than men: women tend to be more in favour of foreign immigration, environment protection, more culture and less military spending, as well as issues related to women rights. The results show a much larger importance of the gender bias in terms of composition of public spending than in the size of the government budget. Finally, the article concludes by arguing that these gender differences hint at the idea that gender quotas in politics may be desirable to ensure the correct representation of women preferences in policy making.

In what follows I would like to discuss briefly on three issues: the representativeness of the sample of survey respondents, the estimation of the gender effect and the policy implications.

Sample representativeness

In order to extrapolate the results of the paper to the Swiss population, we would like to be sure that the VOX sample is representative of the overall Swiss population. There are two ways to look into this: first, by comparing the observable characteristics of the individuals in the sample (by gender) to the ones in the overall population. Second, by checking whether the actual election results coincide with the ones measured in the survey.

Regarding the observable characteristics of individuals in the sample, Table 1 presents a comparison by gender to the overall Swiss population. My reading of this table is that the VOX sample is not truly representative of the overall Swiss population, and that the problem is more severe for women. In particular, women in the VOX sample are younger, less educated, more likely to be employed and more likely to be married than women in the overall population. Men are also less educated and more likely to be married, but to a lesser degree. These differences are not dramatic and, to the extent that all these demographic characteristics are included in the regressions, we should not be too worried about them. However, these differences reflect some problems with the sampling or with the response rates of the survey, which might generate differences in relevant unobserved characteristics of individuals.

Regarding the election results in the sample, the authors show that they align well with some of the ballots, but they do not with some others. Looking at Appendix Table 1, we see that the average (absolute value) difference among the ballots used for

the study is 6.8%, with differences ranging from only 0.8% at the lowest 10th percentile to 14.6% at the 90th percentile. These differences may be problematic. If they are just the result of the differences in observable individual characteristics mentioned in the previous paragraph, then we should not be too worried about them given the controls in the regressions. However, there are reasons to worry if these differences reflect either differences in unobserved individual characteristics or biases in responses about the vote. The authors perform a very informative exercise to discard the second reason for concern: they focus on ballots for which response biases are likely to be lower (those ballots referred to questions that do not have a clear politically correct view), and they find gender biases in this subsample that are comparable to the ones found on the whole sample. This is very good news. Perhaps, a final robustness exercise to wipe out all potential concerns would be to work also with the subsample of ballots for which the survey results coincide with the actual election.

Identification of the gender coefficient

In their regressions, the authors add several controls to capture potential demographic or socio-economic differences between men and women: age, education, labour market status, home ownership, religion and canton. Therefore, the gender coefficients can be interpreted as differences between men and women that are not related to their difference in socio-economic status. A potential concern would be how well the differences in socio-economic status are captured. In particular, for most of the regressions there is no information about income, while house ownership is a very coarse measure of socio-economic status. Yet, the authors get around this problem quite nicely by showing that for the subset of ballots where income is available, the gender coefficients hardly change. One way to understand this result is that education, which is present in all regressions, is a better measure of socio-economic status than the income flow in a given period. This is consistent with the evidence that the socio-economic gradient of longevity is much stronger in education than in income or wealth, see for instance Pijoan-Mas and Ríos-Rull (2014).

Policy implications

The article hints at the idea that the existence of a gender bias in political preferences may be an argument for establishing gender quotas in politics. The argument runs somewhat like this: 'to guarantee that individual preferences are correctly aggregated into policy making, as long as women and men have different political preferences, it would be good to achieve gender equality in politics.' I am worried about this interpretation: does it mean that we do not believe in representative democracy any more? Do females in office legislate differently than men? As the authors argue in the article, in the end this is an empirical matter. The existing evidence is mixed. Women and men seem

Table 8. People who think that men are better political leaders than women

Country	Agree	Gender bias
Sweden	0.08 (0.000)	+0.017 (0.858)
Norway	0.14 (0.000)	−0.018 (0.418)
Canada	0.15 (0.000)	−0.054 (0.001)
Switzerland	0.15 (0.000)	+0.028 (0.159)
Netherlands	0.17 (0.000)	−0.049 (0.033)
Germany	0.18 (0.000)	−0.131 (0.000)
Britain	0.18 (0.000)	−0.097 (0.000)
Italy	0.18 (0.000)	−0.126 (0.000)
Spain	0.20 (0.000)	−0.079 (0.001)
France	0.21 (0.000)	−0.052 (0.045)
USA	0.26 (0.000)	−0.081 (0.001)
Mexico	0.27 (0.000)	−0.098 (0.002)
Japan	0.30 (0.000)	−0.092 (0.002)
Brazil	0.31 (0.000)	−0.142 (0.000)
Cyprus	0.36 (0.000)	−0.203 (0.000)
Thailand	0.51 (0.000)	−0.108 (0.000)
India	0.53 (0.000)	−0.204 (0.000)
Turkey	0.58 (0.000)	−0.148 (0.000)
Egypt	0.92 (0.000)	−0.052 (0.000)

Data: World Values Survey 2005–2009. The first column reports the fraction of people who endorse the statement *In general, men are better political leaders than women.* The second column reports the difference between men and women, controlling for age and education. A minus sign means that women agree less with the statement. For both columns, in parenthesis, *p*-value of the Null to the corresponding coefficient is zero.

to legislate differently in developing economies (see Chattopadhyay and Duflo (2004) or Clots-Figueras (2012)). However, in developed economies there is very little evidence of a gender gap in policy making: Ferreira and Gyourko (2011) and Gagliarducci and Paserman (2012) find no effect for American and Italian mayors. Furthermore, there are strong reasons to think that gender gaps in political preferences do not translate into policy making: from the median-voter theorem, to the evidence that men love women – or at least their daughters (see Warner (1991), Warner and Steel (1999), and Washington (2008)). Finally, to put this argument in perspective, the results in the paper show even larger gaps in political preferences according to age. Shall we conclude that we need age quotas in policy making? I do not think so.

To sum up, the results in this paper should not be taken as an argument in favour of gender quotas in politics. Does this mean that gender quotas in politics are not necessary? No, it just means that if they are necessary it is for different reasons. My take is that gender quotas in politics are necessary in order to change the type of attitudes in society that prevent women from occupying better jobs. For instance, the World still thinks that women are less capable political leaders than men. In particular, the World Value Survey 2005–2009 presents the following statement to the interviewees: *In general, men are better political leaders than women*, and people are asked to decide whether they strongly agree, agree, disagree or strongly disagree. In Table 8 I report, for a selection

of countries, the proportion of people that either agree or strongly agree with the statement. What we find is that this proportion is statistically different from zero in ALL countries, even in Sweden – the country with the smallest proportion of people subscribing to the statement – where 8% of people agree or strongly agree. There is also a large heterogeneity across countries, with European countries ranging from 15% to 20% of people endorsing the statement, and several countries scoring 50% or more.

An interesting feature is that one can also look at the gender bias on this question. I have regressed the dummy variable that takes one if the respondent agrees or strongly agrees with the statement, against education, age, and a gender dummy, which takes one for females. In Table 8, I report the gender bias measured with the coefficient of the gender dummy. What we observe is that women agree less with the statement, the sign being negative in all countries where it is statistically different from zero. Interestingly, there seems to be no gender bias in Switzerland.

Panel discussion

Lutz Kilian was concerned about the interpretation of the gender effects. He gave an example on smoking regulations: if women are less likely to smoke than men, then women are more likely to vote for smoking regulation, but this expresses different preferences of smokers and non-smokers, not of men and women. He suggested putting an additional control for the fraction of smokers in the female population, and similarly for other cases, e.g. fraction of men and women with military service. Michalis Haliassos asked whether more information could be included in terms of how specific policy issues end up in a referendum. Who decides on the inclusion in a referendum, how long is the discussion process beforehand, and how informed are the individual respondents about the issues at hand? He also wondered whether voting at the poll is a good predictor of decisions when in power, since policy-makers face many more constraints than voters. Martin Ellison was skeptical about surveys on peoples' opinions in general. He was not necessarily convinced by the aggregate consistency between survey responses and actual referendum results, since it could still be the case that men are more likely to report more masculine positions and women are more likely to report more feminine positions. Banu Demir mentioned existing evidence that women are more risk averse than men. This could potentially explain the gender bias for speed limits or related issues. She suggested restricting the issues to those for which aggregate data can be found to control for biases. Martin Brown raised the point that there might be other patterns in the voting data than the gender pattern, e.g. cohort patterns or different voting behaviour of naturalized foreigners. Therefore, it would be an interesting exercise to see how the magnitude of the gender effect compares to the magnitude of cohort effects or country of origin effects. Sascha Becker raised the issue of heterogeneity and wondered whether there existed differences across the French, Italian and German speaking parts of

Switzerland. Moreover, Swiss cantons introduced women's suffrage at different points in time: is there any pattern relating to this in the data? He also asked whether the authors interact the female effect with other explanatory variables, e.g. gender. Replying to the comments, Patricia Funk said that they would not like to control for smoking since the choice of smoking is endogenous. Moreover, for some possible controls the data simply do not exist. On the issue of how well-informed people are, she stressed that in Switzerland political discussion is very widespread, so that most people are well informed and aware of the consequences of their votes. On the survey biases, she considered it very unlikely that they would exactly cancel each other out for men and women. She agreed that accounting for heterogeneous treatment effects is a valuable exercise.

APPENDIX: DESCRIPTION OF THE VOTES WITH THE LARGEST GENDER GAPS

(1) *Reduction Tobacco Consumption (Initiative)*
Vote held 28 November 1993; Vote Nr. 404; Turnout: 45.5%; Share-Yes: 25.5%
Goal Initiative: To prohibit advertisement for tobacco. To use 1% of the revenues from taxing tobacco to educate about the health consequences of tobacco consumption.

(2) *Equal Representation of Women in Federal Government (Initiative)*
Vote held 12 March 2000; Vote Nr. 461; Turnout: 42.2%; Share-Yes: 18%
Goal Initiative: Adjust the stuffing policy of the federal government to guarantee equal chances for men and women. No direct financial consequences indicated.

(3) *Change in Marital Law (Referendum)*
Vote held 22 September 1985; Vote Nr. 336; Turnout: 41.1%; Share-Yes: 54.7%
Goal Law: Change the marital law to explicitly state that husbands and wives have equal rights and obligations. Housework and childcare are considered as a fulltime contribution to the family maintenance.
No financial consequences indicated.

(4) *Against Racial Discrimination (Referendum)*
Vote held 25 September 1994; Vote Nr. 414; Turnout: 45.9%; Share-Yes: 54.6%
Goal Law: Change of the Law (Civil law and Military law) to prosecute persons who engage actively in promoting discrimination based on race, ethnicity or religion. No financial consequences indicated.

(5) *Against Subsidies for Corn Production (Referendum)*
Vote held 25 September 1994; Vote Nr. 413; Turnout: 45.5%; Share-Yes: 64.6%

Table A1. Votes, gender gaps and survey accuracy

Year	Title of the proposition	Vote Nr.	Gender gaps	*P*-values	Pol. area
1993	Initiative for Reducing Problems with Tobacco	404	17.71	0.65	PRO HEALTH
2000	Initiative for a fair Representation of Women in the Government	461	17.49	0.53	EQUAL
1985	Marriage and Inheritance Law	336	17.04	0.00	EQUAL
1994	Swiss Criminal Code on Military Law	414	16.86	0.05	
1994	Against Subsidies for Corn Production	413	15.58	0.98	AGRI SUB
1993	Initiative for Reducing Problems with Alcohol	403	15.55	0.47	PRO HEALTH
1992	Initiative for Saving the Waters	381	15.26	0.46	ENV
2003	For a car-free Sunday per Quarter	498	14.92	0.22	ENV
1990	Initiative against Nuclear Energy	365	14.72	0.19	CONTRA NUC
2003	Initiative Equal Rights for Disables	500	14.62	0.00	PRO DISABLED
1981	Equal Rights for Women and Men	306	14.55	0.00	EQUAL
1987	For Protection of the Swiss Moors	349	14.23	0.00	ENV
1992	Initiative for Restricting Animal Testing	374	13.65	0.04	CONTRA GEN
1997	Federal Resolution on Financing the Unemployment Insurance	437	−13.23	0.13	UNEMPL
1990	Initiative against Nuclear Power Plants	366	13.20	0.00	CONTRA NUC
1999	Initiative Proprietary for Everybody	451	13.19	0.99	
1986	For joining the United Nations Organizations	338	12.22	0.06	INT
1995	Law on Acquisition of Property through Foreigners	424	−12.05	0.26	
2003	Federal Resolution on Changes of Citizens' Rights	493	11.66	0.06	DD
1985	Against the Use of Animals for Scientific Purposes	337	11.49	0.04	
1987	Law on Health Insurance	350	11.11	0.01	PRO MOTHER
1994	Federal Resolution on the Promotion of Culture	410	10.92	0.00	MORE CULT
1998	Initiative for Protection against Gen-Manipulation	440	10.91	0.80	CONTRA GEN
2000	Initiative for Restricting Immigration	467	−10.86	0.00	LESS FOR
1985	For a Coordinated Start of Schools	334	10.74	0.01	
1998	Initiative 10th Revision Age Insurance without increasing the Retirement Age	444	10.69	0.51	CONTRA RET
1989.5	For higher Speed Limits 130/100	358	−10.57	0.00	PRO SPEED
1996	Against Federal Subsidies for Parking Spaces	429	10.54	0.01	SUB PARKING
2002	Law on the Electricity Market	490	−10.51	0.00	
1991	Initiative for Promoting Public Transportation	370	10.36	0.12	PUB TRANS
1996	Federal Resolution on the Revision of the Language Article	425	10.29	0.10	
1992	Law on Protection of the Waters	377	9.55	0.00	ENV
1994	For easier Naturalization of Immigrants	411	9.47	0.00	PRO FOR
1991	Federal Resolution on the Coordination on Traffic Policy	371	−9.43	0.45	
2001	Initiative for Low Pharmaceutical Prices	475	−9.37	0.00	CHEAP PHARMA

(*Continued*)

Table A1. (continued)

Year	Title of the proposition	Vote Nr.	Gender gaps	*P*-values	Pol. area
1993	Federal Resolution on the Union of the community Laufen with the Canton BS	395	9.36	0.00	
1985	Abolish Charges for Primary School	326	−9.18	0.55	
1996	Initiative against Illegal Immigration	432	−9.02	0.00	
1987	Initiative for Direct Democracy in Military Expenses	346	9.00	0.27	
1983	Regulation of Custom's Duty of Fuel	312	−8.92	0.85	
2000	Initiative Saving in the Military	471	8.91	0.59	LESS MILITARY
1992	Law on Stamp Duties	384	−8.88	0.12	
1993	Initiative For a Switzerland without new Fighter Jets	393	8.76	0.02	LESS MILITARY
1992	Initiative for a cheap Health Insurance	373	8.75	0.33	SUB HEALTH-INS.
1993	Pro Environmental Protection in the Army	392	8.37	0.32	
1994	Law on mandatory measures in Immigration Law	417	−8.19	0.85	
1993	Federal Resolution on Misuse of Arms	394	8.14	0.00	
1985	Right to Live	330	7.78	0.01	
1993	Initiative against Animal Experiments	391	7.57	0.23	CONTRA GEN
1994	Law on the Health Insurance	415	−7.54	0.00	
1990	Federal Resolution on Building Vines	363	−7.50	0.01	
1987	Law on Residence of Foreigners	345	−7.35	0.41	
1990	Initiative for Restricting Road Making	359	7.18	0.51	LESS ROAD
1984	Civil Service	318	7.14	0.00	
1992	Federal Resolution on Building the Swiss Railway	382	−7.01	0.10	PUB TRANS
1994	Initiative for Protection of the Alps	408	6.98	0.09	ENV
2000	Initiative against Manipulations in the Technology of Reproduction	462	6.89	0.64	
1985	Venture Capital for Small and Middle-Sized Enterprises	335	6.89	0.93	
2000	Initiative for a flexible Retirement Age	470	6.87	0.73	CONTRA RET
1998	Federal Law regulating working conditions	448	−6.85	0.46	
1986	For secured Education	340	6.83	0.00	EDU
1998	Law on user-dependent heavy Traffic Charge	442	−6.67	0.02	
1993	Initiative 'For a Federal Holiday on August 1'	396	6.45	0.03	MORE LEIS
1997	Initiative Against Exporting Arms	435	6.42	0.05	
2002	Law Regulating Abortion	487	−6.41	0.81	ABORTION
2003	Initiative For Restricting Nuclear Risks	502	6.38	0.01	CONTRA NUC
2000	Initiative for a flexible Age Insurance	469	6.33	0.04	CONTRA RET
1998	Initiative S.o.S.–Schweiz ohne Schnüffelpolizei	441	6.31	0.06	
2000	Initiative for cutting motorized Road Traffic into Half	463	6.29	0.78	ENV
1984	Nuclear Power Plants	321	6.21	0.10	CONTRA NUC
2000	Initiative More rights for the people	468	−6.03	0.19	DD
1992	Law on Business Transactions	383	−5.86	0.00	
1992	Salaries Parliamentary Members	386	−5.86	0.00	

(*Continued*)

Table A1. (continued)

Year	Title of the proposition	Vote Nr.	Gender gaps	*P*-values	Pol. area
1992	Compensations Parliamentary Members	387	−5.86	0.06	
1985	Abolish Cantonal Share on Stamp Duties	331	−5.85	0.00	
2002	Initiative Protection of Mother and Baby	488	5.79	0.60	
1995	Counterproposal to the Initiative for an ecological and effective agriculture	418	−5.73	0.54	AGRI LIB
2001	Federal Resolution promoting a Debt Break	480	−5.71	0.51	LESS DEBT
1981	For Protecting Consumers' Rights	307	5.66	0.00	
1985	Regulating Contributions for Education	328	−5.63	0.01	
1995	Initiative for better Age Insurance	423	5.60	0.85	CONTRA RET
2001	Federal Resolution on Abolishing Permissions to build Dioceses	479	−5.54	0.00	
2003	Federal Law on the Military	495	−5.44	0.02	LESS MILITARY
1996	Counterproposal to the Initiative for a natural agriculture	430	5.38	0.82	
1998	Initiative for cheap aliments and ecological agriculture	443	5.24	0.20	
2003	Initiative Against Nuclear Power Plants	501	5.16	0.17	CONTRA NUC
1987	Train 2000	348	5.13	0.00	
1985	For Longer Paid Vacations	329	5.10	0.08	MORE LEIS
1996	Federal Resolution on the Cantonal Authority on Personal Military Equipment	427	5.05	0.00	
2003	Federal Law on Civil Protection	496	−4.89	0.92	
1990	For Free Aare-Region	362	4.83	0.32	LESS ROAD
1999	Law on the Insurance of Disabled	457	−4.77	0.00	
1987	Asylum Law	344	−4.76	0.27	
2003	Federal Law on Cantonal Contributions to Treatments in Hospitals	494	4.75	0.09	
1992	Federal Resolution for a Civilian Service for Military Deniars	379	4.73	0.00	
1984	Against the Abuse of the Banking Secrecy	319	4.69	0.80	
2000	For a Pigouvian Tax on Energy	466	4.67	0.00	ENV
1994	Federal Resolution on Charges on National Strees	405	4.64	0.00	
1999	Asylum Law	454	−4.64	0.83	
1992	Swiss Military Code	380	4.63	0.00	
1997	Initiative 'Youth Without Drugs'	438	−4.57	0.48	
1981	For improving the Federal Finances	308	−4.56	0.00	LESS DEBT
1999	Federal Resolution on Medical Prescription for Heroine	456	−4.54	0.41	DRUG
1991	For Reducing the Voting Age from 21 to 18	369	4.45	0.00	DD
1983	Energy Article	313	−4.45	0.01	
1995	Law on Age Insurance	422	−4.35	0.99	PRO RET AGE
2002	Initiative for Lower Working Hours	486	−4.33	0.00	MORE LEIS
1994	Initiative for a healthy Health Insurance	416	4.28	0.02	SUB HEALTH-INS.
2000	Federal Law on the Employees of the Government	473	−4.23	0.02	

(*Continued*)

Table A1. (continued)

Year	Title of the proposition	Vote Nr.	Gender gaps	*P*-values	Pol. area
1993	Measures on Unemployment Insurance	398	4.15	0.00	UNEMPL
1988	Initiative against Speculation with Properties	353	4.15	0.64	
2002	Initiative against Misuse in Asylum Matters	491	−4.05	0.00	LESS FOR
1993	Federal Resolution on Gambling Houses	390	−3.99	0.34	
2001	Initiative for a better security on the strees with speed limit 30	476	3.99	0.39	SAFE STREET
1984	Taxation of Heavy Traffic	316	−3.89	0.54	
1990	Initiative against Freeway between Murten and Yverdon	360	3.71	0.09	LESS ROAD
1988	For Restricting Immigration	355	−3.70	0.00	LESS FOR
1986	Culture Initiative	339	3.67	0.66	MORE CULT
2003	Initiative for sufficient Occupational Training	503	3.64	0.00	
2001	Initiative For a voluntary civil service	483	3.63	0.13	
1996	Law on the Organization of the Executive and Administration	431	−3.47	0.41	
1994	Federal Resolution on Traffic Road Charges	406	3.41	0.98	
1994	Federal Resolution on usage-dependent Traffic Road Charges	407	3.40	0.22	
1992	Against Misuse in Gene-Technology	378	−3.35	0.57	CONTRA GEN
1994	Law on Military forces with Peaceful Missions	412	3.34	0.01	
2001	Initiative for Taxation of Capital Gains	484	3.28	0.90	
1990	Initiative against Freeway in the Knonauer Amt	361	3.27	0.24	LESS ROAD
2001	Federal Law on the Army	477	−3.25	0.05	
1993	Federal Resolution on Federal Finances	399	−3.16	0.40	
1987	Law on Procedures on Initiatives with Alternative Drafts	347	3.08	0.00	
1999	Law on the Insurance of Mothers	458	3.07	0.08	PRO MOTHER
1989	Initiative for a Switzerland without Army	357	3.07	0.41	LESS MILITARY
1985	New Distribution Revenues Alcohol	332	−3.05	0.02	
2002	Federal Law on the Unemployment Insurance	492	2.94	0.29	
1995	Law on Reducing Federal Expenses	421	−2.68	0.74	LESS DEBT
1982	Against abusive Prices	311	2.65	1.00	
2001	Initiative for a secure Age Insurance	481	2.62	0.18	ENV
1998	Federal Resolution on a new Corn Article	446	−2.55	0.11	AGRI LIB
1984	Against the Sale of Homeland	320	2.48	0.83	
1992	Federal Resolution on the European Economic Area	388	−2.40	0.34	INT
1984	Radio and TV-Article	324	2.31	0.00	
2003	Initiative For reasonable Health Costs	499	2.21	0.80	
1993	Measures for Protecting the Social Insurances	401	2.21	0.08	
2000	Federal Resolution on Bilateral Agreements between Switzerland and the EU	464	−2.15	0.00	INT
1990	Law on the organization of the federal judicature	364	−2.15	0.00	

(*Continued*)

Table A1. (continued)

Year	Title of the proposition	Vote Nr.	Gender gaps	*P*-values	Pol. area
1999	Federal Resolution on a new Federal Constitution	453	2.15	0.00	
1999	Federal Resolution on Regulating Transplantation Medicine	450	2.13	0.11	
2000	Solar Initiative	465	2.09	0.17	ENV
1985	Abolishing Contributions for Corn with the Purpose of Self-Sufficiency	333	−2.07	0.08	AGRI SUB
1985	Abolish Federal Duty to Pay for Health	327	−2.07	0.63	
1999	Federal Resolution on the Eligibility in the Federal Council	449	2.04	0.08	
1995	Resolution on Dairy Farming	419	−1.95	0.74	AGRI LIB
1990	Federal Resolution on the Energy Article	367	1.94	0.72	
1999	Federal Resolution on Urgent Matters in the Area of Asylum	455	−1.88	0.86	
1996	Against the Federal Duty to buy Spirits	428	1.75	0.95	
1997	Against Federal Regulations on Gun Powder	436	−1.70	0.11	
1993	Federal Resolution against further Increases in Health Insurance Premias	397	−1.59	0.00	
2001	Initiative for a Switzerland without Army	482	1.49	0.14	LESS MILITARY
1993	Law on Customs on Fuel	389	1.46	0.02	
1986	Federal Solution on Domestic Sugar Industry	341	1.43	0.53	
1992	Law on Paysants' Land Rights	385	1.40	0.00	
1999	Federal Law on City and Regional Planning	452	1.25	0.01	
1998	Federal Resolution on Funds for the Infrastructure on Public Traffic	445	1.22	0.00	PUB TRANS
1993	Federal Resolution for Healthy Federal Finances	400	−1.14	0.02	LESS DEBT
1994	Law on Aviation	409	1.05	0.00	
2002	Initiative 'Excessive Gold Reserves for the Age Insurance'	489	1.00	0.01	
1997	Initiative Direct Democracy for Negotiations with the EU	434	0.83	0.10	
1998	Federal Resolution on Measures for Budget Balancing	439	0.82	0.01	LESS DEBT
1996	Federal Resolution on the union of the community Vellerat with the Canton JU	426	0.80	0.70	
1984	Charges for the Use of National Roads	317	−0.76	0.91	
2001	Initiative Yes to Europe!	474	−0.71	0.44	INT
2002	Initiative for joining the United Nations	485	−0.68	0.00	INT
2000	Initiative for faster Direct Democracy	460	0.66	0.00	DD
1984	On the Compensation of Criminal Victims	325	0.61	0.00	
1988	Initiative for Shorter Working Hours	354	−0.56	0.08	MORE LEIS
1984	Protection of Motherhood	323	−0.39	0.00	PRO MOTHER
2003	Initiative Yes to Fair Rental Prices	497	0.39	0.19	CHEAP RENT
2001	Federal Law on the Army (Cooperation in Education)	478	−0.37	0.06	
1996	Federal Law regulating working conditions	433	−0.30	0.31	

(*Continued*)

Table A1. (continued)

Year	Title of the proposition	Vote Nr.	Gender gaps	*P*-values	Pol. area
2000	Federal Resolution on the Reform of the Judiciary	459	−0.29	0.43	
1991	Initiative for Decreasing the Retirement Age	372	−0.26	0.06	
1998	Initiative for a reasonable drug policy	447	0.12	0.88	DRUG
2000	For lower Costs of Hospitals	472	−0.05	0.00	CHEAP HOSP.
1993	Federal Resolution on Consumption Taxes	402	0.05	0.15	
1995	Law on Farming	420	0.00	0.50	AGRI LIB

Notes: The table reports for all the votes held between 1981 and 2003: the year of the vote, the title of the vote, the vote number, the gender gap, the *P*-value of a hypothesis test 'Approval Survey= Approval Ballot-Box' and the Policy Area (if classified). Grey votes have been assigned to one of the 30 policy areas studied. ENV: environmental protection; EQUAL: equal rights for women and men; INT: joining International Organizations; DD: more direct democracy; AGRI LIB: liberalizing agriculture; AGRI SUB: against subsidies in the agricultural sector; DRUG: pro liberalizing drugs; PUB TRANS: pro public transport; SUB PARKING: subsidies parking spaces; PRO HEALTH: against alcohol and tobacco; LESS FOR: pro restricting immigration; PRO FOR: for facilitating integration of foreigners; MORE CULT: for promoting culture; MORE LEIS: more leisure; ABORTION: pro legalize abortion; CHEAP HOSP./PHARMA: subsidize in the health sector; PRO RET AGE: pro increasing the retirement age; SAFE STREET: pro speed limits; CHEAP RENT: pro cheaper rental prices; PRO SPEED: relax speed limits; CONTRA NUC: against nuclear energy; LESS MILITARY: against the army; LESS ROAD: against further road construction; UNEMPL: reduce unemployment benefits; PRO DISABLED: support the disabled; EDU: pro free education; SUB HEALTH-INS.: subsidies premia for health insurance; CONTRA RET: against increase retirement age; PRO MOTHER: protection motherhood.

Goal Federal Resolution: To reduce the subsidies for corn production. Initially, the government bought corn from the Swiss corn produces at higher (than market) prices to maintain a high level of domestic production for situations of crises like wars. To the mills, the government sold at (cheaper) foreign prices, which involved substantial costs.

(6) *Reduction of Alcohol Consumption (Initiative)*

Vote held 28 November 1993; Vote Nr. 403; Turnout: 45.5%; Share-Yes: 25.3%

Goal Initiative: Prohibit Advertisement for Alcohol. Fiscal Consequences: Higher taxes on alcohol.

(7) *Protection of Rivers and Lakes (Initiative)*

Vote held 17 May 1992; Vote Nr. 381; Turnout: 39.2%; Share-Yes: 37.1%

Goal Initiative: Protection of rivers and lakes, major objectives are the following: to protect human beings and animals, to secure the portable water supply, to protect the living space for flora and fauna, and to secure the water supply for agricultural purposes.

Financial consequences, as indicated in the election documents: Once the law comes into effect (1992), the average costs for the government will be around 100 million Swiss Francs per year (170 million Swiss Francs in the beginning, 40 million Swiss Francs after that).

Table A2. Votes with and without survey bias

	International affairs			*Military*	*Environment*		*Transport*					*Agriculture*		*Legal*	
	Pro joining International Organizations	Against foreign immigration	Pro foreign immigration	Less military	Protection of the environment	Against nuclear energy	Against further road construction	Pro speed limits	Against speed limits	Against subsidies parking	Pro public transport	Against subsidies agriculture	Pro liberalizing agriculture	Equal rights women and men	More direct democracy
Female dummy	0.0120	−0.0905***	0.0875**	0.0494**	0.0769***	0.107***	0.0294	0.0550*	−0.0670	0.0863	0.00169	0.114***	−0.0112	0.220***	0.0337
	(0.0211)	(0.0309)	(0.0420)	(0.0248)	(0.0158)	(0.0219)	(0.0240)	(0.0325)	(0.0495)	(0.0804)	(0.0276)	(0.0378)	(0.0274)	(0.0385)	(0.0295)
Number of ballots	5	3	1	5	9	5	4	1	1	1	3	2	4	3	4
Observations	2,833	1,038	569	2,089	4,838	2,377	1,969	670	505	204	1,472	688	1,770	941	1,548
Female dummy	0.00343			0.0547*	0.0686***	0.0999***	0.0294	0.0550*			−0.0237	0.114***	−0.0112	0.206***	0.0355
	(0.0281)			(0.0327)	(0.0179)	(0.0288)	(0.0240)	(0.0325)			(0.0356)	(0.0378)	(0.0274)	(0.0392)	(0.0428)
Number of ballots	3			3	6	3	4	1			2	2	4	1	2
Observations	1,517			916	3,344	1,342	1,969	670			962	688	1,770	450	682
	Health						*Education*	*Welfare*					*Culture and Leisure*		*Living*
	Subsidies Health Insurance	Pro Liberalizing Drugs	Against Tobacco/ Alcohol	Against Gen-Tech/ Animal Test.	Pro Legalize Abortion	Cheaper Hospitals/ Pharma-Prod.	Free Education	Reduce Unempl. Benefits	Decrease Retirement Age	Increase Retirement Age	Support for the Disabled	Longer Maternity Leave	More Culture	More Leisure	Pro Cheap Housing
Female dummy	0.038	−0.0164	0.163***	0.0825***	−0.0299	−0.0388*	0.0085	−0.0488	0.0529 ***	−0.0431	0.137***	0.0513*	0.0868*	0.0102	0.0109
	(0.032)	(0.0323)	(0.0263)	(0.0236)	(0.0409)	(0.0226)	(0.068)	(0.0350)	(0.0206)	(0.0482)	(0.0474)	(0.0283)	(0.0445)	(0.0332)	(0.0458)
Number of ballots	2	2	2	4	1	2	1	2	5	1	1	3	2	4	1
Observations	949	1,127	1,112	2,144	517	1,107	251	952	2,500	491	508	1,450	556	1,334	522
Female dummy	0.0744	−0.0164	0.163***	0.0657**	−0.0299			−0.121**	0.0692**	−0.0431		0.0563	0.0235	−0.0145	0.0109
	(0.0517)	(0.0323)	(0.0263)	(0.0268)	(0.0409)			(0.0497)	(0.0269)	(0.0482)		(0.0450)	(0.0448)	(0.0828)	(0.0458)
Number of ballots	1	2	2	3	1			1	3	1		1	1	2	1
Observations	444	1,127	1,112	1,685	517			515	1,509	491		635	553	209	522

Notes: The table reports marginal effects from a probit model. The dependent variable is the voting decision, which is equal to one if the respondent supported the proposition and zero otherwise for the respective propositions shown in the column header. The table reports the coefficient on the female dummy. All specifications include canton and ballot fixed effects and controls as in Table 3. The first row repeats the baseline for the full sample of votes and the second row shows results for the restricted sample of votes with no survey bias. Robust standard errors are reported in parentheses. Coefficients with *** are significant at the 1% level, while those with ** (*) are significant at the 5% (10%) level.

Table A3. Heterogeneity of gender gaps with respect to education and employment

	International affairs			*Military*	*Environment*		*Transport*					*Agriculture*		*Legal*	
	Pro joining International Organizations	Against foreign immigration	Pro foreign immigration	Less military	Protection of the environment	Against nuclear energy	Against further road construction	Pro speed limits	Against speed limits	Against subsidies parking	Pro public transport	Against subsidies agriculture	Pro Liberalizing agriculture	Equal rights women and men	More direct democracy
Female	0.0053	−0.0779**	0.0889**	0.0465*	0.0729***	0.106***	0.0548**	0.0446	−0.0482	0.132	0.0001	0.103***	0.0203	0.250***	0.0587*
	(0.0217)	(0.0322)	(0.0439)	(0.0261)	(0.0166)	(0.0230)	(0.0255)	(0.0337)	(0.0524)	(0.0860)	(0.0289)	(0.0390)	(0.0290)	(0.0408)	(0.0315)
University education	0.184***	−0.188***	0.363***	0.114**	0.117***	0.0576	0.153***	0.0567	−0.0059	0.280**	0.148***	0.123	0.0914*	0.249***	0.0358
	(0.0397)	(0.0438)	(0.0281)	(0.0479)	(0.0295)	(0.0429)	(0.0473)	(0.0654)	(0.0952)	(0.125)	(0.0482)	(0.0883)	(0.0543)	(0.0736)	(0.0534)
Female*University	0.102	−0.190**		0.0310	0.0367	0.0170	−0.214***	0.123	−0.191	−0.302**	0.0161	0.247***	−0.301***	−0.262***	−0.198**
Education	(0.0877)	(0.0929)		(0.0865)	(0.0511)	(0.0776)	(0.0495)	(0.141)	(0.164)	(0.146)	(0.0927)	(0.0823)	(0.0661)	(0.0868)	(0.0795)
Observations	2,833	1,038	549	2,089	4,838	2,377	1,969	670	505	204	1,472	688	1,770	941	1,548
Female	−0.0151	−0.102**	0.0364	0.0574	0.0806***	0.0848**	−0.0294	0.0429	−0.235***	−0.0698	−0.0391	0.101	0.157***	0.179***	−0.0267
	(0.0340)	(0.0476)	(0.0670)	(0.0405)	(0.0257)	(0.0347)	(0.0369)	(0.0518)	(0.0785)	(0.117)	(0.0457)	(0.0662)	(0.0466)	(0.0632)	(0.0448)
Employed	0.0384	−0.00248	−0.135**	0.0588	−0.0341	0.0059	−0.0803**	0.0122	−0.111	−0.0342	−0.0873*	−0.0640	0.171***	−0.0241	−0.103**
	(0.0346)	(0.0496)	(0.0617)	(0.0407)	(0.0249)	(0.0339)	(0.0359)	(0.0496)	(0.0748)	(0.119)	(0.0449)	(0.0595)	(0.0429)	(0.0637)	(0.0462)
Female*	0.0441	0.0210	0.0797	−0.0128	−0.0059	0.0369	0.102**	0.0186	0.256***	0.255*	0.0633	0.0195	−0.247***	0.0655	0.103*
Employed	(0.0424)	(0.0635)	(0.0806)	(0.0509)	(0.0322)	(0.0444)	(0.0505)	(0.0643)	(0.0919)	(0.151)	(0.0556)	(0.0820)	(0.0525)	(0.0811)	(0.0570)
Observations	2,833	1,038	569	2,089	4,838	2,377	1,969	670	505	204	1,472	688	1,770	941	1,548

	Health						*Education*	*Welfare*					*Culture and Leisure*		*Living*
	Subsidies health insurance	Pro liberalizing drugs	Against tobacco/ alcohol	Against gen-tech/ animal test.	Pro legalize abortion	Cheaper hospitals/ pharma-prod.	Free education	Reduce unempl. benefits	Decrease retirement age	Increase retirement age	Support for the disabled	Longer maternity leave	More culture	More leisure	Pro cheap housing
Female	0.0498	0.0083	0.172***	0.0968***	−0.0472	−0.0367	0.0085	−0.0483	0.0518**	−0.0367	0.118**	0.0467	0.0911**	−0.0008	0.0052
	(0.0334)	(0.0345)	(0.0277)	(0.0250)	(0.0432)	(0.0235)	(0.0678)	(0.0373)	(0.0218)	(0.0513)	(0.0507)	(0.0292)	(0.0455)	(0.0350)	(0.0487)
University education	0.0815	0.203***	0.178***	0.0297	0.0690	0.0425		0.0580	−0.0110	0.157**	−0.0421	0.185***	0.350***	−0.0596	−0.0533
	(0.0669)	(0.0603)	(0.0622)	(0.0423)	(0.0794)	(0.0447)		(0.0555)	(0.0401)	(0.0759)	(0.0905)	(0.0663)	(0.0494)	(0.0694)	(0.0790)
Female*University	−0.118	−0.205***	−0.0671	−0.128*	0.159*	−0.0229		−0.00348	0.0110	−0.0525	0.166	0.0654	−0.0896	0.101	0.0427
Education	(0.0793)	(0.0760)	(0.0635)	(0.0680)	(0.0897)	(0.0711)		(0.105)	(0.0659)	(0.143)	(0.131)	(0.111)	(0.200)	(0.108)	(0.142)
Observations	949	1,127	1,112	2,144	517	1,107	251	952	2,500	491	508	1,450	556	1,334	522
Female	0.0215	−0.0591	0.230***	0.0646	−0.0863	−0.0592*	−0.0860	−0.0601	0.0591*	0.0749	0.128*	0.0116	0.125*	−0.0205	0.0756
	(0.0528)	(0.0496)	(0.0453)	(0.0398)	(0.0622)	(0.0348)	(0.0990)	(0.0570)	(0.0327)	(0.0747)	(0.0751)	(0.0459)	(0.0708)	(0.0518)	(0.0728)
Employed	−0.0301	0.0533	0.0609	0.00444	0.101	0.00751	−0.262**	0.0134	0.0295	−0.0089	−0.0496	−0.0568	0.0259	0.0647	0.124*
	(0.0509)	(0.0530)	(0.0420)	(0.0373)	(0.0732)	(0.0331)	(0.109)	(0.0572)	(0.0342)	(0.0834)	(0.0782)	(0.0478)	(0.0709)	(0.0536)	(0.0690)
Female*	0.0247	0.0733	−0.0947**	0.0270	0.0997	0.0338	0.183	0.0180	−0.0101	−0.199**	0.0160	0.0651	−0.0638	0.0494	−0.102
Employed	(0.0657)	(0.0670)	(0.0458)	(0.0490)	(0.0754)	(0.0464)	(0.150)	(0.0709)	(0.0415)	(0.0996)	(0.0977)	(0.0595)	(0.0948)	(0.0676)	(0.0872)
Observations	949	1,127	1,112	2,144	517	1,107	251	952	2,500	491	508	1,450	556	1,334	522

Notes: The table reports marginal effects from a probit model. The dependent variable is the voting decision, which is equal to one if the respondent supported the proposition and zero otherwise for the respective propositions shown in the column header. All specifications include canton and ballot fixed effects and all the controls included in Table 3. The first specification explores whether high-skilled women vote differentially than low- or medium-skilled women. The second specifications explores wherher women in the labour force have different policy preferences than non-employed women. Robust standard errors are reported in parentheses. Coefficients with *** are significant at the 1% level, while those with ** (*) are significant at the 5% (10%) level.

Source: Authors' calculations.

Table A4. Voting behaviour, voters versus non-voters

	International affairs		***Military***	***Environment***		***Transport***				***Agriculture***		***Legal (1)***
	Pro joining International Organizations	Pro foreign immigration	Less military	Protection of the environment	Against nuclear energy	Against further road construction	Against speed limits	Against subsidies parking	Pro public transport	Against subsidies agriculture	Pro liberalizing agriculture	Equal rights women and men
						Sample of non-voters						
Female dummy	0.103	0.00601	0.0794	0.0611**	0.144***	0.109***	−0.231***	0.158	0.0517	−0.107	0.0973**	−0.0120
	(0.08581)	(0.0673)	(0.0804)	(0.0310)	(0.0386)	(0.0287)	(0.0717)	(0.156)	(0.0378)	(0.0705)	(0.0436)	(0.0475)
Observations	58	238	204	1,049	761	1,145	253	60	826	233	588	389
						Sample of voters						
Female dummy	−0.0132	0.0875**	0.0835*	0.0907***	0.122***	0.0294	−0.0670	0.0863	0.00169	0.114***	−0.0112	0.136***
	(0.0391)	(0.0420)	(0.0427)	(0.0242)	(0.0297)	(0.0240)	(0.0495)	(0.0804)	(0.0276)	(0.0378)	(0.0274)	(0.0430)
Observations	829	569	659	2,032	1,311	1,969	505	204	1,472	688	1,770	491
	Legal (2)	***Health***				***Welfare***				***Culture and leisure***		
	More direct democracy	Subsidies health insurance	Pro liberalizing drugs	Against tobacco/ alcohol	Against gen-tech/animal test.	Reduce unempl. benefits	Decrease retirement age	Increase retirement age	Longer maternity leave	More culture	More leisure	
						Sample of non-voters						
Female dummy	−0.0236	0.0625	−0.00562	0.0701*	0.0809**	0.0161	0.0247	−0.134*	0.0518	−0.0586	0.0700*	
	(0.0382)	(0.0507)	(0.0511)	(0.0382)	(0.0348)	(0.0530)	(0.0518)	(0.0750)	(0.0429)	(0.0807)	(0.0386)	
Observations	479	404	514	568	990	482	461	248	678	194	482	
						Sample of voters						
Female dummy	0.0281	0.0378	−0.0164	0.163***	0.0825***	−0.0488	0.0580**	−0.0431	0.0513*	0.0868*	0.0284	
	(0.0371)	(0.0318)	(0.0323)	(0.0263)	(0.0236)	(0.0350)	(0.0247)	(0.0482)	(0.0283)	(0.0445)	(0.0369)	
Observations	384	949	1,127	1,112	2,144	952	1,521	491	1,450	556	643	

Notes: The table reports marginal effects from a probit model. The dependent variable is the voting decision, which is equal to one if the respondent supported the proposition and zero otherwise for the respective propositions shown in the column header. The table reports the coefficient on the female dummy. All specifications include canton and ballot fixed effects and controls as in Table 3. Robust standard errors are reported in parentheses. Coefficients with *** are significant at the 1% level, while those with ** (*) are significant at the 5% (10%) level.
Source: Authors' calculations.

Table A5. List of propositions with predictable financial consequences

More expenditures, subsidies or taxes						*Less expenditures, subsidies, taxes or debt*		
No.	***Increase expenditures***	Result	No.	***Increase subsidies***	Result	No.	***Decrease federal debt***	Result
313	Energy Article	No	333	Self-Supply with Corn (A)	Yes	400	For sound Federal Finances	Yes
323	Protection Motherhood (W)	No	335	Risk Guarantee for Small/Medium Enterprises	No	421	For Expenditures Controls	Yes
339	Culture Initiative	No	341	For Domestic Sugar Production (A)	No	439	For Balanced Budget	Yes
340	Guarantee Vocational Retraining (Edu)	No	425	Revision Language Article	Yes	480	For Debt Control	Yes
348	Railway 2000 (T)	Yes						
349	Protection Moor (Env)	Yes		***Increase taxes***			***Decrease subsidies***	
350	Change Health Insurance (H)	No	308	Improving Federal Budget	Yes	326	Against Fees for Primary School (Edu)	Yes
363	Vine Cultivation (A)	No	312	New Regulation Fuel Taxes	Yes	327	Against Federal Contributions for Health (H)	Yes
367	Energy Article	Yes	316	For Taxing Heavy Traffic	Yes	328	Resolutions on Contributions on Education (Edu)	No
370	Promoting Public Transport (T)	No	317	Fees for Road Use	Yes	413	Against Corn Subsidies (A)	Yes
373	For sound Finances of Health Insurance (H)	No	324	Law on Radio and TV	Yes	428	Against Duty on Liquor Purchases	Yes
377	Protection of Rivers and Lages (Env)	Yes	331	Against Canton Share in Federal Stamp Duty	Yes	429	Against Federal Contributions for Parking Space	Yes
381	Saving the Rivers and Lakes (Env)	No	332	Distribution of Revenues from Alcohol	Yes	436	Against "Pulverregal"	Yes
382	Construction of Railway through the Alps (T)	Yes	371	For Reorganizing Federal Finances	No	437	Financing Unemployment Insurance (W)	No
386	Salary Parliamentary Members	No	389	For Increasing Fuel Charges	Yes	446	New Corn Article (A)	Yes
387	Improve Infrastructure for Parliament	No	399	Resolution on Federal Finances	Yes			
410	Promoting Cultural Activities	No	400	For sound Federal Finances	Yes		***Decrease taxes***	
416	For a new Health Insurance (H)	No	401	For sound Social Insurance	Yes	384	Change Law on Stamp Duty	Yes
423	Securing Invalidity/Age Insurance (W)	No	405	For Fee on Road Use	Yes			
430	Counter-Initiative: For Ecological Agriculture	Yes	406	For Fees on Heavy Traffic	Yes		***Decrease expenditures***	
431	Re-Organization Administration	No	407	Introduction of Fees for Heavy Traffic	Yes	346	Vote on Military Expenditures (Def)	No
444	Revision Age Insurance (W)	No	442	Law on Fees for Heavy Traffic	Yes	393	Against Fighter Planes (Def)	No
445	Infrastructure for Public Transportation (T)	Yes	465	For a Solar Energy Tax	No	421	Reduce Growth of Expenditures	Yes
458	Law on Motherhood Insurance (W)	No	484	For a Capital Gains Tax	No	422	Change Pension and Disability Laws (W)	Yes
469	For a flexible Age Insurance (W)	No				427	Canton Responsibility for Military Equipment (Def)	No
470	For flexible Retirement Age (W)	No				357	For Switzerland without Army (Def)	No
500	Equal Rights for the Disabled (W)	No				471	Reduction of Military Expenditures (Def)	No
						482	For Switzerland without Army (Def)	No

Notes: The table lists all federal propositions between 1981 and 2003, which either led to an increase in federal expenditures, taxes, subsidies or a decrease in expenditures, taxes, subsidies or public debt. The information is taken from publications of the federal government, which publishes the fiscal consequences for each new law and executive order. Expenditures in individual policy areas are constructed from the respective votes. These are marked after the title using the following abbreviations: (A) for agriculture, (T) for public transport, (Env) for environment, (Def) for Defence, (W) for welfare, (H) for health and (Edu) for education.
Source: Federal Archives of Switzerland; available online at http://www.ads.bar.admin.ch/ADS.

(8) *For a Car-free Sunday per Quarter (Initiative)*
Vote held 18 May 2003; Vote Nr. 498; Turnout: 49.8%; Share-Yes: 37.6%
Goal Initiative: For the next four years, there should be one Sunday per season where private motorized vehicles are only permitted in exceptional circumstances (e.g. ambulances).

(9) *For Abandoning Nuclear Energy (Initiative)*
Vote held 23 September 1990; Vote Nr. 365; Turnout: 40.4%; Share-Yes: 47.1%
Goal Initiative: No further implementation of nuclear plants. No major fiscal implications, potentially an increase in unemployment in the nuclear sector.

(10) *For Equal Rights of the Disabled (Initiative)*
Vote held 18 May, 2003; Vote Nr. 500; Turnout: 49.7%; Share-Yes: 37.7%
Goal Initiative: Equal rights for disabled people and abolishment of any sort of existing discrimination. Furthermore, where financially feasible, the entrances of public buildings and facilities should be made accessible to handicapped people.
Fiscal consequences in case of acceptance: CostTables for reconstruction and renovation (2–4 million Swiss Francs, 10 million Swiss Francs for the reconstruction of universities; further costs for other infrastructure possible).

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