

# Political devaluation? Lessons from emancipating women in politics

Stephanie Fürer\*, Anna Koukal<sup>††</sup> and Jonathan Massonnet<sup>‡‡</sup>

February 15, 2021

## Abstract

In the last century, women conquered both many professions and the political sphere. However, research on the effects of feminization has mainly focused on labor market outcomes. According to the devaluation hypothesis, professions experiencing an inflow of female workers are devalued in pay and status because of the lower value attributed to women's work. Analyzing the staggered introduction of female enfranchisement in Switzerland, we find a similar pattern for the political sphere. Our results provides evidence that men attach less value to politics after women enter the political sphere, resulting in a drop of male voter turnout by around 2 percentage points in elections and around 4 percentage point in referendums. This effect is more pronounced under direct democracy and in an environment initially opposing female enfranchisement.

JEL-Codes: B54, H80, N44.

Keywords: female enfranchisement, turnout, value of politics, devaluation hypothesis

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\*Stephanie.Fuerer@unifr.ch, University of Fribourg

†annamaria.koukal@unifr.ch, University of Fribourg & Swiss Distant University

‡jonathan.massonnet@hesge.ch, Swiss Distant University & University of Applied Sciences and Art Western Switzerland

# 1 Introduction

During the last century, women conquered the public sphere by entering both the professional and political realm in many countries. Both developments represent major (and still ongoing) changes in the social order of societies. While the effects of women's entrance into the labor market have been studied extensively, less is known about the broader effects of women entering politics.<sup>1</sup> This paper adds a new perspective by analyzing the consequences of women entering the political domain. In contrast to the literature on the conditions for female enfranchisement (e.g. Bertocchi, 2011, Braun and Kvasnicka, 2013 or Koukal and Eichenberger, 2019) and consequences of female enfranchisement for political outcomes (e.g. Lott and Kenny, 1999, Stutzer and Kienast, 2004), we are interested in whether and how the appearance of women in the political sphere impacts the perceived value of politics for men. To investigate whether and how women entering the political sphere affect the valuation of politics for men, we apply a scheme similar to Busch (2018). We analyze whether men value politics less once women can participate. We approximate the value of politics by voter turnout. Turnout is a well established proxy for the value assigned to politics and often used as a yardstick of political (de-)valuation.<sup>2</sup> We follow this approach and approximate the value that men attribute to politics by turnout at the municipality level over the 1947 – 1970 period. We find evidence of a negative and robust correlation of female enfranchisement on the local level and male turnout on the national level. The negative correlation is more pronounced under strong direct democracy and for municipalities with a low acceptance rate to enfranchise women at the national level.

Like many professional occupations, politics was traditionally an all-male sphere. This was fundamentally changed by the enfranchisement of women: Electoral politics went from a 0% female "occupation" to (potentially) 50% female overnight.<sup>3</sup> Political debates and campaigns on female enfranchisement were shaped by persistent conservative and traditional gender roles, which emphasized the masculinity of politics (e.g. Altermatt, 1991 or Hediger, 2004). This

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<sup>1</sup> For a broad literature reviews on the gender wage gap see e.g. Weichselbauer and Winter-Ebemer, 2005 or Blau and Kahn, 2017a. For a gender gap with respect to prestige see e.g. Magnusson, 2010 or Bertrand and Hallock, 2001

<sup>2</sup> See Valgardsson (2019) for a recent and thorough discussion of the influence of political apathy and alienation on turnout and of the literature on this subject.

<sup>3</sup> Note that in the first years after the enfranchisement of women, women's participation was lower than men's, such that de facto, the electorate was less than 50% female.

paper analyses whether and how the entrance of women into the political sphere might have devalued politics for men, because — analogously to the labor market — after the enfranchisement of women, politics was no longer seen as a purely masculine domain.

While the literature on changes in the political sphere is still vague in economics, for the labor market many authors provide evidence that on average men earn higher wages in more prestigious jobs than women (see e.g. Fuchs, 1971, Blinder, 1973, Oaxaca, 1973 and Sawhill, 1973 in economics or Strober, 1984 and England, 2017 in sociology). These studies provide robust evidence that the gender wage gap persists, even if conventional human capital variables (such as education and skills) and demographic characteristics are controlled for. A number of explanations — which according to Blau and Kahn (2017b) continue to have salience — have been proposed in this respect: 1) discrepancies in labor-force participation; 2) wage penalty for motherhood and wage premium for fatherhood (see for example Yu and Kuo, 2017, as well as Glauber, 2018; 3) gaps in labor-force experience and working hours (Goldin, 2014,);and 4) differences in psychological attributes and personality (c.f. Heckman and Kautz, 2012).

According to Blau and Kahn (2017b) the wage differences between typical male and female occupations also provide evidence for a lower appreciation and prestige of women’s work: ”occupation and industry differences account over one-half of the gender wage gap” (Blau and Kahn, 2017b, p. 827). Similar to this argument the *devaluation hypothesis* states that the inflow of women to an occupation lowers wages in that occupation (Magnusson, 2013, p. 229). The hypothesis that feminization (of an occupation) lowers pay is also ”consistent with the devaluation perspective in gender studies, which interprets the cultural devaluation of women as a driver of [the] stigmatization of all things associated with women, including styles of clothing, names, leisure activities, fields of study, and jobs” (c.f. England et al., 2007 or Williams, 1993).<sup>4</sup> Authors researching the devaluation hypothesis exploit the fact that woman entered the labor market in an unequal fashion: only a few occupations opened to women, while many remained markedly male. Longitudinal studies, as for example Levanon et al. (2009), allow to establish the sequences of events: oftentimes, an occupation feminizes, and about a decade later the wages in this occupation decrease relatively to the wages in other occupations. This suggests that at least a part of the gap in wages between occupations can be explained by the fact that employers — or the society at large — assign a lower value to typically female tasks.

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<sup>4</sup> See Williams (1993) for further developments in this respect.

Busch (2018) offers an explanation on the conditions needed in order for such a devaluation to occur in a professional sphere: First, the occupation feminizes in the sense that the (relative) number of women employed in an occupation increases. Second, this leads to the gender stereotyping of this occupation, which is now perceived as a (more) female occupation. If there is, third, cultural bias with respect to the value of female labor, devaluation occurs. It is reflected in lower prestige and lower pay.

To the best of our knowledge, we are the first to investigate the effects of female enfranchisement on the value of politics (approximated by the political participation of men).<sup>5</sup> As this paper analyzes political participation of men, it also contributes to the literature that investigates reactions of turnout after the enlargement of the franchise. Similar to this paper, Kleppner (1982) studies the effects on overall turnout once women are enfranchised in the US. However, as Kleppner (1982) cannot disentangle turnout by gender, he does not explicitly study the influence of female enfranchisement on male turnout. To overcome this challenge, Corder and Wolbrecht (2006) use ecological inference to obtain the participation rates of men and women for the years following women’s enfranchisement. They are mostly interested in the turnout of women and the determinants thereof. In contrast to Corder and Wolbrecht (2006) our setting allows a clean dissection of purely male turnout after the enfranchisement of women.

Switzerland provides an ideal laboratory to study the research question at hand for at least three reasons. First, the Swiss enfranchisement process, offers a unique setting. Swiss women’s suffrage came late (in 1971) at the national level, but different cantons introduced it earlier.<sup>6</sup> The canton of Vaud was the first to introduce female suffrage in 1959. In total, 11 cantons (out of 25) introduced female suffrage at the cantonal level before it was introduced at the national level in 1971. The staggered introduction of women’s suffrage is exploitable in our econometric strategy. Second, our new data set allows to focus on (male) voter turnout for elections to the lower house of the national assembly and for national referenda — thus

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<sup>5</sup> There is, however, a substantial literature on the effects of female enfranchisement on voting decisions (and consequences thereof). See for example Meltzer and Richard (1981) and Bertocchi (2011) for a theoretical perspective on the subject. Hofer (2017) provides a literature overview on how female enfranchisement affects policy decisions. In another project we analyze a similar question by studying whether and how voting behavior of men changes with the enfranchisement of women.

<sup>6</sup> The Swiss cantons are the sub-national units of government comparable to US states, which enjoy a great deal of autonomy in the Swiss federal union.

participation in national level politics — before 1971, when women were not yet enfranchised. This setting ensures that changes in turnout cannot be due to changes in the probability of being the pivotal voter as the size and composition of the national electorate did not change before 1971. Third, our newly collected panel data set allows to control for a variety of time invariant factors in our fixed effects.

We apply a difference-in-differences approach and explain male turnout at the federal level by staggered female enfranchisement at the cantonal level. Therefore, we compare male turnout in municipalities where women were already enfranchised to municipalities where they were not within the following setting: before and after women’s cantonal enfranchisement. Our results provide robust evidence for a negative treatment effect that is robust to different estimation strategies and a range of specifications. The main empirical challenge we need to overcome is that treatment might not occur fully randomly, as cantons introduced it by a cantonal referendum. However, as our unit of observation is at the municipality level, and not the cantonal level, the decision to enfranchise women is not endogenous to the municipality, as the majority of cantonal voters decides whether or not to accept the vote.

This paper is organized as follows. The next provides an overview of the institutional setting and our data. Section 3 presents our empirical results and section 4 provides a summary of our main preliminary results and an outlook.

## 2 Setting and Data

### Historical Setting

When compared to other European and Non-European countries, Switzerland was late to enfranchise its women. On the federal level, Swiss women were enfranchised in 1971. For cantonal and municipal matters, the timing of enfranchising women in Switzerland substantially differs between cantons and municipalities.<sup>7</sup> While the first cantons enfranchised women for cantonal and municipal matters in 1959, the last canton was forced to enfranchise its women by the Supreme Court in 1990. Compared to other European countries such as Germany (1918), Austria (1919) or France (1944), Swiss women were enfranchised with substantial delay. In contrast to most other countries, Swiss women's suffrage was not granted by the national parliament or the executive, but by the existing electorate — Swiss men.

Due to the Swiss federal system, women's suffrage was separately instituted at different levels of government (municipal, cantonal and federal). Between 1919 and 1990 this resulted in a total of approximately 100 referenda on the enfranchisement of women on the cantonal and (or) municipal level. Concerning women's suffrage on the federal level, two referenda were held. The first of them was rejected with an acceptance rate of only 33,1% in 1959. The second federal vote in 1971 was accepted with 65,7% of the votes. A detailed overview of the staggered introduction dates in Swiss cantons is provided in Table A.1 in the appendix. In the run-up to the acceptance of women's suffrage on the federal level in 1971, 11 (out of 25) cantons already enfranchised women for cantonal and or municipal matters between 1959 and 1970.

### Data

Our empirical analysis is based on four municipality-level datasets covering the period between 1947 and 1970. Firstly we collected and digitalized turnout rates for six national elections.<sup>8</sup> Secondly, we use the turnout rates for 60 national-level referenda between 1945 and 1970.<sup>9</sup> Thirdly, we combine these data with socio-demographic information stemming from decennial census data and fourthly we combine it with data on the enfranchisement of Swiss women.

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<sup>7</sup> For a general overview see Ruckstuhl (1986).

<sup>8</sup> The national elections of 1947, 1951, 1955, 1959, 1963 and 1967.

<sup>9</sup> As our period of observation consists of the period before 1970, we had to collect and digitize our data from a variety of sources as national election outcomes have not yet been centrally collected.

Both data sets — turnout in elections vs. turnout in referenda as dependent variables — have different advantages. In elections, the question at hand is always comparable: Who do you want to have a seat in the national assembly? Despite this fact, the political context can change starkly from election year to election year as national elections only take place every four years. Given that random effects, as for example the weather, can significantly affect turnout,<sup>10</sup> the data can be noisy. This is the big advantage of referenda, which take place more often (60 referenda in the studied time period 1945-1971). Moreover, because of the timing of the introduction of female suffrage in different cantons we have more treated municipalities and more variety in the timing of introduction for referenda compared to elections.<sup>11</sup> On the other hand, the questions asked in referenda vary strongly. Some referenda generate more debate, attention, interest and also turnout because of the question at hand. We try to mitigate this problem by consistently using referendum fixed effects.

Data relative to voter turnout in federal elections are drawn from official notices, or releases, published by cantons in the aftermath of an election to the National Council.<sup>12</sup> For each municipality, we divide the number of received ballots by the number of registered voters. The turnout rate for the municipalities of the canton of Bern, Basel City and Thurgovia is not included in the dataset due to missing data or processing problems. Furthermore, in certain small cantons,<sup>13</sup> some elections were held tacitly owing to an exact match between the number of candidates and the number of seats to be filled.

We also use a dataset on national referenda provided by Swissvotes,<sup>14</sup> an online platform hosted by the University of Bern. Covering all national referenda since 1948, these data include the number of received ballots, the number of voters, the quantity of votes in favor/against a question on the ballot as well as additional information concerning each referendum.<sup>15</sup> This

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<sup>10</sup> Fujiwara et al. (2016) show for the U.S. that even the weather in past elections can influence voter turnout. Meier et al. (2019) show for Switzerland that rain can influence the outcome of a referendum.

<sup>11</sup> This last point is mainly due to the fact that the last national election in which women could not participate took place in 1967. In the same time, 7 of 11 cantons that introduce female suffrage before it is introduced on the national level introduce it after 1967.

<sup>12</sup> Note that we collect data for the elections to the National Council (Nationalrat), because in the period considered, only men could vote for this chamber of parliament. In the elections for the other chamber of the national parliament, which are held at the same time as elections to the National Council, women could vote in cantons in which they were already enfranchised.

<sup>13</sup> This is particularly the case for the cantons of Appenzell Outer Rhodes (national elections of 1947, 1959, 1963, 1967), Glarus (all the national elections between 1947 and 1967), Schaffhausen (1951, 1955), Schwyz (1967), and Zug (1963).

<sup>14</sup> See [www.swissvotes.ch](http://www.swissvotes.ch) for further information.

<sup>15</sup> This information includes the subject upon which was voted, whether the bigger national parties recom-

allows us to calculate the municipality-level turnout rate for each national referendum between 1945 and 1970.

The socio-demographic variables stemming from decennial census (1950, 1960 and 1970) data included in the dataset are: total population, foreign population, gender, civil status, place of birth, religious denomination, language and age.<sup>16</sup> Since election years are different from census years, we calculate a temporally weighted average to derive the values of the control variables for each election year. We harmonize the census data and the election data with the list of municipalities published by the Swiss Federal Statistical Office for the year 2000. More specifically, the census data of 1950 and 1960, as well as the data of the six national elections considered, are adjusted in order to take into account the mergers of municipalities that occurred between 1950 and 2000.<sup>17</sup> In this respect, 2256 municipalities remain in our dataset, which leads to more than 550000 data points.

Detailed municipal information about the enfranchisement process of women allows us not only to exploit staggered introduction of women's suffrage in Switzerland, but also to measure revealed preferences of the electorate to enfranchise women in their municipality, as we have the outcome of the referendum on female enfranchisement of 1959 for every municipality.

## Empirical Setting

Our endogenous variable  $T_{mt}$  denotes the (male) turnout in municipality  $m$  at national elections or referenda at time  $t$ . To look at national elections and referenda has two main advantages. Firstly, our data contains male turnout only, as women were not allowed to vote on this level before 1971. Second, elections and referenda votes on the national level should not be subject to a loss in political influence for men, as the size and composition of the respective electorate is not affected.<sup>18</sup> To allow an analysis of pre-trends, we include the results of the national elections of 1947, 1951, 1955, 1959, 1963 and 1967 in our sample and look at all national referenda between from 1945 to 1970.

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mended a yes or a no vote, as well as the vote recommendation given by the Swiss government.

<sup>16</sup> Data on annual taxable income and wealth have been obtained from the federal administration and digitized, but not yet used in the empirical results presented here. They will, however, be included in the analysis presented at the conference.

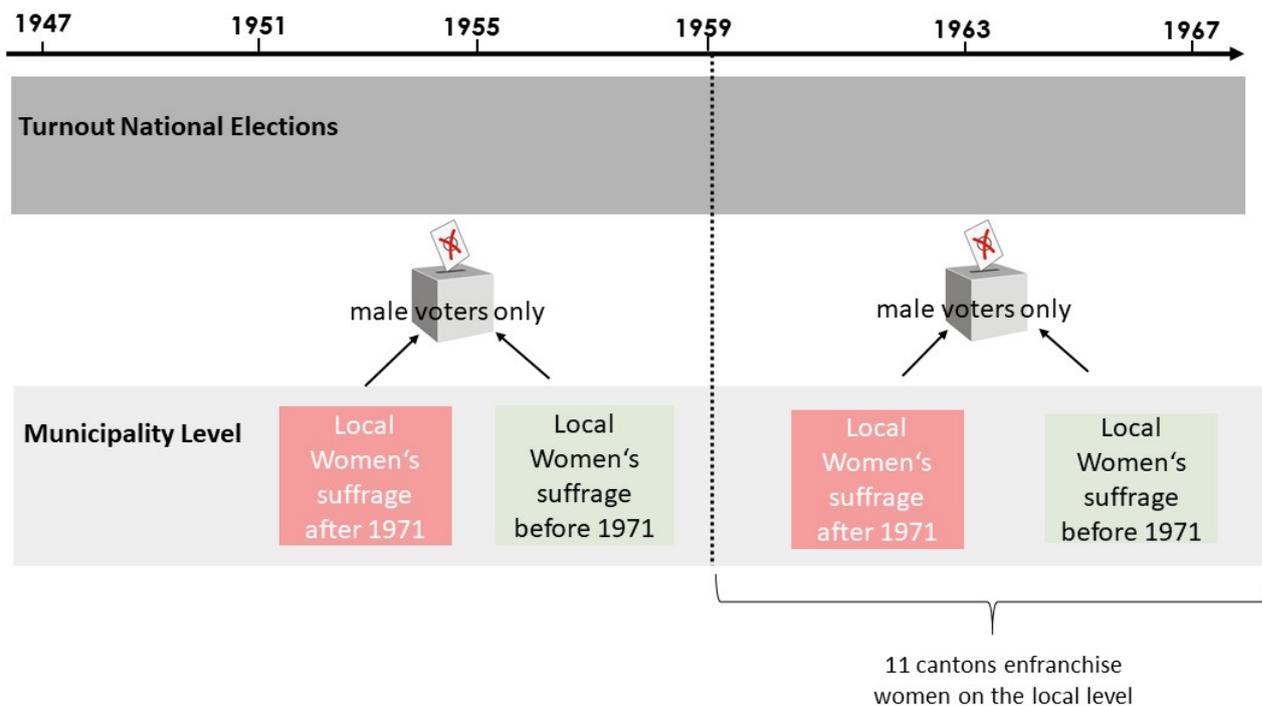
<sup>17</sup> We have taken into account 87 mergers of municipalities between 1950 and 2000.

<sup>18</sup> Note the caveat that elections to the second chamber of parliament, where women could vote in enfranchised cantons, took place on the same day as the elections to the National Council. In the same vein, many cantons hold cantonal referenda in the same time as a national referendum takes place. In the case of the referenda we are able to control for the fact whether a cantonal referendum took place in the same time.

## Empirical framework

Our main empirical setting is characterized in Figure 1. Our endogenous variable  $T_{mt}$  varies on the municipality level and captures exclusively male turnout, as women were only enfranchised on the national level in 1971.

Figure 1: Empirical Setting



As Figure 1 illustrates, we exploit two types of variation. First we compare two types of municipalities. The treated municipalities are those municipalities that enfranchise women on the local level before 1971. Our control group consists of municipalities that do not enfranchise women before 1971. After 1959, we exploit the staggered introduction of women's suffrage. Note that we cannot extend our period of observation as women started to participate in national elections in 1971. Therefore, after 1971 it is no longer possible to disentangle male and female turnout, as election data is anonymous.

We estimate the following model:

$$\text{Turnout}_{mt} = \alpha + \beta_1 \text{enfranchisement}_{mt} \tag{1}$$

$$+ \theta X_{mt} + \delta \text{year} + \gamma \text{municipality} + \varepsilon_{mt} \tag{2}$$

The coefficient  $\beta_1$  captures the differential effect of enfranchising women on the local level for treated municipalities. Following the existing literature on the devaluation hypothesis, we expect  $\beta_1$  to be negative. Once women are enfranchised at the municipal level, politics no longer strengthen male identity and status.

To control for year-specific and municipality-specific variations, we estimate a linear regression model with municipality-fixed and year-fixed effects. For our estimates with national referenda votes we also include vote fixed effects. This allows us to further address omitted variable bias stemming from time-invariant municipality characteristics such as municipal political culture, industrial structure or geographical location.

We control for several socioeconomic factors  $X_{mt}$  that have been mentioned in the economic literature on voter turnout, or that we believe are important for the Swiss case<sup>19</sup> and that are available on the municipality level. Due to a lack of data, we are not able to control for educational attainment on the municipality level.<sup>20</sup>

Following Kaniovski and Mueller (2006), we assume turnout to be lower in larger municipalities due to higher preference heterogeneity, and control for population size (in logs) as well as the share of foreigners. The share of foreigners in a municipality should proxy the degree of municipal heterogeneity and thus also the intensity of political competition. Finally, we control for the proportion of the labor force working in the agricultural sector (in the following referred to as the agriculture share). Besides the rural character of a municipality this variable should also proxy for a prevalence of traditional role models.

We control for the sex ratio in a municipality by adding the share of women in a municipality to our list of regressors. By considering female empowerment on the labor market, we account for the share of working women in the respective municipalities.<sup>21</sup> Lastly, we also add the share of married people to the list of our regressors. The share of married persons proxies the

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<sup>19</sup> For a broad overview on determinants of voter turnout see Geys (2006).

<sup>20</sup> We were, however, able to obtain data on the income- and wealth-distributions within municipalities. This information will be introduced to the analysis.

<sup>21</sup> The Swiss Federal Statistical Office has changed the definition of a working women in 1970. Before 1970 a woman is considered as employed if she holds a full-time job. After 1970 the threshold drops to an employment for at least 6 hours per week.

information men have about female political preferences. It could also proxy for the prevalence of a traditional family model.

Switzerland is a multilingual country with four official languages (German, French, Italian and Rhaeto-Romanic). The largest groups are the German speaking (approximately 60 percent) and the French speaking (approximately 25 percent) populations. The French cantons were pioneers in the enfranchisement process, whereas the German speaking cantons lagged behind. As the language borders are not fully congruent with cantonal borders, we control for the share of the German speaking population on the municipality level. The decennial census also offers information about the religious composition of Swiss municipalities.

### **Compulsory Voting**

According to Bechtel et al. (2016), 15 out of 25 cantons in our data-set apply some form of compulsory voting in our period of observation, whereof 7 cantons even enforce compulsory voting by financial sanctions. As our dependent variable is turnout of municipality  $m$  at time  $t$ , compulsory voting rules will impact turnout. Therefore, we estimate our OLS model for different samples. In our most restricted sample we exclude all cantons with a form of compulsory voting in our period of observation (indicated by "no compulsory voting").<sup>22</sup> Second, we only exclude the cantons that experienced a change in compulsory voting rules in our period of observation (indicated by "no change in compulsory voting").<sup>23</sup>

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<sup>22</sup> The following cantons are excluded in this specification: AG, AI, BE, GL, GR, LU, OW, SH, SO, SG, TG, ZG, ZH, UR, VD.

<sup>23</sup> The following cantons are excluded in this specification: GL, GR, ZH, SG.

### 3 Empirical Results

#### 3.1 Descriptive Evidence

To provide a first flavour for our data, Figure 2 plots the turnout of male voters in federal referenda for the period from 1945 to 1970. When compared to the turnout in national elections, a useful feature of the national referenda data is that national votes can be observed multiple times a year, while national elections are only observed every four years. Figure 2 maps the time trend of male turnout for the control group (indicated as female suffrage = 0) and the treatment group (indicated by female suffrage=1). As women in our treatment group got enfranchised in a staggered manner starting in 1959 up to 1970, we split the sample for both groups in 1959.

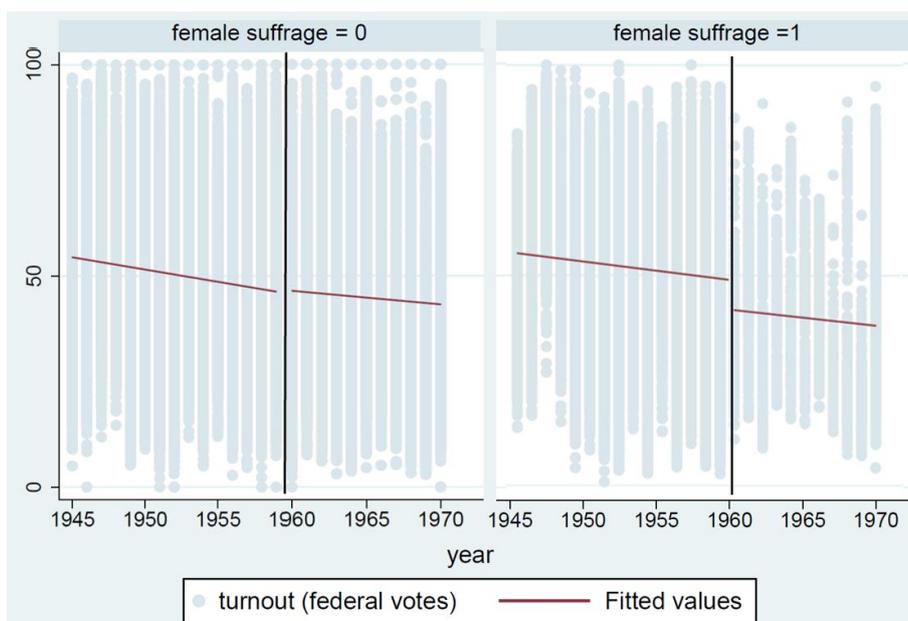


Figure 2: Time Trends: Control and Treatment Group

Starting from 1959, 11 cantons in our treatment group enfranchise women for cantonal and municipal matters. For the treatment group, Figure 2 is constructed in such a way that after 1959 the graph only depicts cantons that already enfranchised women.

Eyeballing the time trends in Figure 2 suggests that turnout for both control and treatment group follows a negative timetrend. However, we do not observe a jump for the control group around 1959. Regarding our treatment group this picture is different: After the enfranchisement of women turnout in the treatment group seems to jump to a lower level.

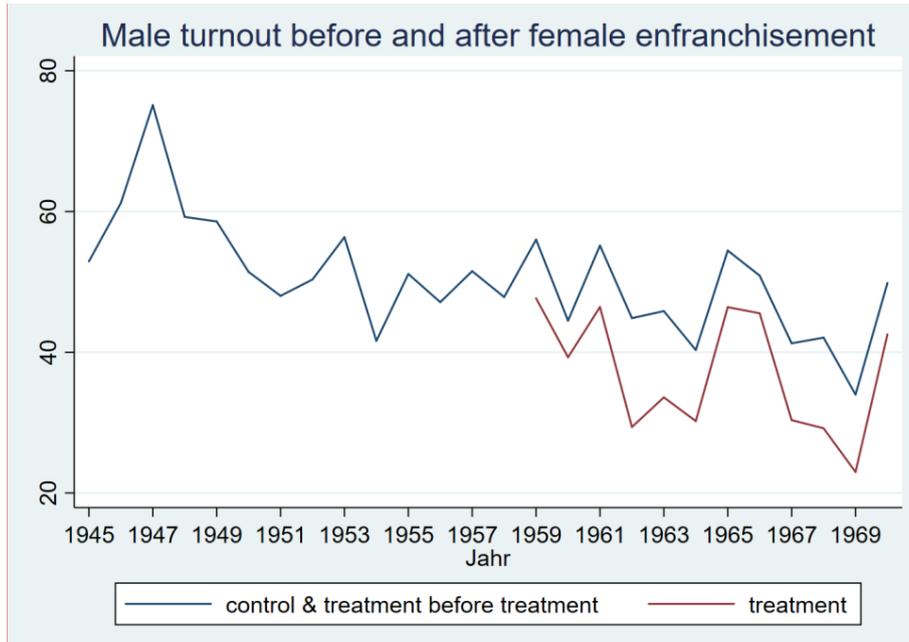


Figure 3: Participation in treated and untreated municipalities

Figure 3 shows the average participation in national referenda over time, with two small differences compared to figure 2. Firstly, these are raw data, and not estimated time-trends. Secondly, in figure 2 we only distinguish between treated and untreated municipalities. In other words, a municipality switches to the treatment group (represented by the red line) as soon as women are enfranchised in the respective municipality. Regarding figure 2 a similar pattern can be observed. In this purely descriptive analysis male turnout on the national level seems to be lower in municipalities where women are allowed to vote on the cantonal level, when compared to municipalities without cantonal suffrage for women.

In a similar spirit, Table 1 depicts turnout for national elections for the two subsamples described in Section 2. Again, we compare turnout before and after 1959 for our treatment and control group.

Table 1: Mean comparison – different samples

turnout (mean)	treatment		control	
	no comp. voting	no comp. voting	no change comp. voting	no change comp. voting
before	60.99 (N=1518)	71.83 (N=3361)	60.99 (N=1518)	75.72 (N=3852)
after	56.21 (N=1428)	71.02 (N=1474)	56.21 (N=1428)	75.25 (N=2547)
$\Delta$ before-after	4.78 (***)	0.81 (*)	4.78 (***)	0.47

Table 1 provides two interesting insights. First, turnout is consistently lower in our treatment group, when compared to our control group (which enfranchised women after 1971).

Moreover Table 1 clearly suggests that turnout in the treatment group drops significantly after the enfranchisement of women.<sup>24</sup> Therefore, the descriptive picture suggests that turnout drops after the enfranchisement of women, which is not the case for the control group.

## 3.2 Regression Results

### National Elections

Table 2 depicts our estimation results for the national elections data-set excluding cantons with sanctioned compulsory voting. The main variable of interest is enfranchisement. Its coefficient stays significantly negative in all specifications and varies around minus 2 percentage points. Table 2 displays the results of four different specifications. Specifications (2) and (4) include our control variables capturing socioeconomic factors such as municipality size, the share of pensioners or the share of unemployed. Specifications (3) and (4) display the results for a sample of first mover cantons which enfranchised women before 1971.

	(1)	(2)	(3)	(4)
<i>Dependent variable</i>				
<i>turnout elections</i>	full sample	full sample	firstmover sample	firstmover sample
enfranchisement	-1.473*** (0.404)	-1.170** (0.487)	-2.769*** (0.461)	-1.669*** (0.518)
Control variables		✓		✓
Municipal FE	✓	✓	✓	✓
Vote FE	✓	✓	✓	✓
Observations	7,744	6,281	5,223	5,166
R-squared	0.827	0.852	0.835	0.839

*Robust standard errors in parentheses clustered at municipal level.*  
*Control variables include population size, pensioner share, female share, married share, agriculture share, divorce share, French speaking share, Catholic share, unemployment share.*  
*Cantons with compulsory voting are excluded from the sample*  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 2: Male Turnout in National Elections

<sup>24</sup>Note that we look at the data twice. In the first two columns, we only look at cantons that do not have compulsory voting during our observation period. In the third and the fourth column, we look at all cantons that do not have a change in compulsory voting during our observation period.

## National referendum votes

	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable</i>						
<i>turnout (male)</i>	full sample	full sample	full sample	full sample	firstmover sample	firstmover sample
enfranchisement	-5.530*** (0.248)	-5.158*** (0.255)	-3.947*** (0.360)	-3.932*** (0.360)	-4.168*** (0.420)	-4.171*** (0.420)
Control variables		✓		✓		✓
Municipal FE	✓	✓	✓	✓	✓	✓
Vote FE	✓	✓	✓	✓	✓	✓
Cantonal Time Trends			✓	✓	✓	✓
Observations	101,818	101,818	101,818	101,818	82,292	82,292
R-squared	0.701	0.702	0.705	0.706	0.680	0.681

*Robust standard errors in parentheses clustered at municipal level.*  
*Control variables include population size, pensioner share, female share, married share, agriculture share, divorce share, French speaking share, Catholic share, unemployment share*  
*Cantons with compulsory voting are excluded from the sample*  
 \*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 3: Male Turnout in National Referendums

The referendum data allow to observe multiple referendums per year, which offers considerably more observations compared to elections hold every four years. Again, we only consider cantons without sanctioned compulsory voting in our sample. Regression results for male turnout in national referendums as the dependent variable are presented in table 3. Table 3 displays different specifications. Specification (1) to (4) present the coefficient of enfranchisement for the full sample of cantons, while specification (5) and (6) only consider the first mover sample of cantons that enfranchised women early. Our set of control variables is included in specification (2) and (4). To account for time invariant factors at the municipality level we include municipality fixed effects in all specifications. Moreover, vote fixed effects account for referendum specific factors. Table 3 displays similar results for male turnout in national referendums when compared to national elections. To further ensure that we do not pick up a general negative time-trend in turnout, we further include cantonal time trends to account for differences in time trends across cantons in specification (3) to (6).

All specifications display a negative and significant coefficient of enfranchisement. However, in terms of size the effects appears somewhat larger when compared to national elections and varies around five percentage points. We interpret the results presented in table 2 and 3 as robust correlation for a negative relationship of the enfranchisement of women on the local level and male turnout at the national level.

### 3.3 Further Analysis

To explore potential channels that might drive the observed correlation we exploit two features of our data set: first, we make use our data structure by exploring revealed preferences of men to enfranchise women and second we use a variation of direct democracy by concentrating on the canton of Vaud.

A feature of our empirical setting is, that the enfranchisement decision is to some extent exogenous to the individual municipality (as the majority of voters in the canton decides whether suffrage is granted or not). In 1959 and 1971 all Swiss men voted twice on the same question: whether or not to enfranchise women at the national level. This allows to observed revealed preferences of men in the entire sample of Swiss municipalities. If devaluation of politics explains the negative association between the enfranchisement of women at the local level and male turnout ob the national level, we would expect the effect to be stronger for municipalities that initially opposed female enfranchisement. To proxy male preferences to enfranchise women we use the results of the 1959 national referendum as a proxy.

<i>Dependent variable</i> <i>turnout (male)</i>	(1) <b>Elections</b> full sample	(2) <b>Referendums</b> full sample
enfranchisement	-3.944*** (1.311)	-5.530*** (0.248)
enfranchisement*acceptance 1959	0.074** (0.031)	0.017 (0.013)
Municipal FE	✓	✓
Vote FE	✓	✓
Control Variables	✓	✓
Observations	6,281	82,779
R-squared	0.852	0.712

*Robust standard errors in parentheses clustered at municipal level.*

*Control variables include population size, pensioner share, female share, married share, divorce share, French speaking share, Catholic share, unemployment share, agriculture share*  
*Cantons with compulsory voting are excluded from the sample*

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

Table 4: Revealed Preferences to enfranchise women and male turnout

Table 4 displays an interaction term of enfranchisement and acceptance to enfranchise women in 1959. Specification (1) displays the results for the elections sample, while specification (2) shows the results for the referendum sample. As expected with an increasing share of

acceptance to enfranchise women in 1959 turnout of men in national elections and referendums is increasing. However, the coefficient is only significant for the elections sample. This is in line with Busch (2018): The devaluation of politics occurs where the fact that politics is feminized (and perceived as such) concurs with a cultural bias with respect to the value of women participating in politics. The rejection of politics is stronger in municipalities that voted (strongly) against the introduction of female suffrage.

### **Direct and Representative Democracy at the Local Level**

To further evaluate potential drivers of the obtained correlation, we explore data for the canton de Vaud, the first Swiss canton to introduce female suffrage in 1959. From a data perspective the canton of Vaud has three major advantages: first, we have detailed information on the legislative institution on the municipality level. While some part of the municipalities organize municipal politics with a local town meeting (strong direct democracy) other municipalities delegate part of their legislative power to a local parliament (weaker direct democracy). Second, the canton of Vaud was the first to enfranchise women on the cantonal level in 1959, which allows to observe the canton for a sufficient period up to 1971. Third, we were able to digitize gender specific turnout for cantonal elections and referendums for the canton of Vaud, which enables us to disentangle male and female turnout on the cantonal level after 1959. For the estimates in table 5, we only include municipalities that do not change their legislative institution in our observation period. To account for differences between local direct and representative democracy, we estimate institution specific time-trends for the period without and women's suffrage on the cantonal level. Note that for specifications in table 5 we include municipality fixed effects, date fixed effects and socioeconomic control variables. As the institutional type is time invariant we can only observe the institution specific time trend. Interestingly, specification (1) displays no significantly different time trend for municipalities with a local town meeting for the period before the enfranchisement of women. However, when looking at specification (2) after the enfranchisement of women we observe a negative time trend of male turnout in municipalities with a town meeting (strong direct democracy), when compared to municipalities with a parliament.<sup>25</sup>

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<sup>25</sup>Note that we can not control for a general time-trend because we have date fixed-effects.

Table 5: Exploit cantonal data

	(1)	(2)
Variables	turnout before 1959	turnout after 1959
town meeting*year	-0.081	-0.455***
	(0.091)	(0.091)
Population	✓	✓
Foreign population	✓	✓
Agriculture share	✓	✓
Working share female	✓	✓
Retirees share	✓	✓
Protestant share	✓	✓
Municipal FE	✓	✓
Date FE	✓	✓
Observations	6,144	4,224
R-squared	0.799	0.815

Robust standard errors in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

In line with the results of Koukal and Eichenberger (2019), this provides first evidence that the decrease of male turnout is more pronounced in a setting with strong direct democracy, when compared to weaker direct democracy. One explanation for this result is the visibility of women in a local town meeting, where local politics is discussed directly by voters. Moreover, if women can freely participate in town meetings, it might be more difficult to interact socially such as meeting in a pub after the local town meeting. Again, the results in table 5 are consistent with the devaluation theory of Busch (2018), as in municipalities with town meetings women are more visible in politics than in municipalities without such meetings.

## 4 Conclusion

Like many professional occupations, politics was traditionally an all-male sphere. Although franchise for women is now a matter of fact across Europe and the Western world, women are still underrepresented in the political sphere. However, regarding discussion about gender quotas and a slight increase of female activity in politics — there is still a need to uncover

potential impacts of women conquering the political sphere. When compared to the effects of feminization in the labour market, there are still a lot of blind spots in this area. The so-called devaluation hypothesis states that professions experiencing an inflow of female workers react with a decrease of pay and status. To the best of our knowledge, we are the first to investigate if a similar devaluation also occurred in the political sphere.

We take advantage of a drastic case of feminization in politics — the enfranchisement of women. Due to its federal and direct democratic system, Switzerland offers an ideal laboratory to investigate if and how male voters change their evaluation of politics. The staggered introduction of women's suffrage allows to observe male turnout and revealed preferences on the national level to proxy the value men attach to politics. Our preliminary results suggest that the devaluation hypothesis seems also to be at play for the political market. Considering national elections the drop in male turnout amounts for approximately two percentage points for national referendums for around four percentage points. One non-exclusive explanation for this drop of male turnout is devaluation in the political sphere. This explanation is supported by different findings. First, difference-in-differences analyses show that municipalities where female suffrage is introduced have a higher drop in male turnout between the 1950s and the 1960s compared to municipalities where female suffrage is not introduced. Second, this effect is stronger for municipalities where men initially stronger opposed female enfranchisement. Third, the effect also seems to be stronger in municipalities with strong direct democracy, where women in politics are more visible.

Going on with the project we will include digitized income and capital data on the municipal level. Additionally we plan to conduct an event study design, exploiting the staggered introduction of female suffrage further. We also plan to exploit newly collected data on cantonal referendums, where women could participate after their cantonal enfranchisement. This allows to gain a better understanding if men change their behavior on vote days where women also turn out (however only on the cantonal level).

## References

- Altermatt, U. (1991). *Katholizismus und Moderne: Zur Sozial- und Mentalitätsgeschichte der Schweizer Katholiken im 19. und 20. Jahrhundert*. Benziger, Zürich, 2. Aufl. edition.
- Bechtel, M. M., Hangartner, D., and Schmid, L. (2016). Does compulsory voting increase support for leftist policy? *American Journal of Political Science*, 60(3):752–767.
- Bertocchi, G. (2011). The enfranchisement of women and the welfare state. *European Economic Review*, 55(4):535–553.
- Bertrand, M. and Hallock, K. (2001). The gender gap in top corporate jobs? *Industrial and Labor Relations Review*, 55(1):3–21.
- Blau, F. D. and Kahn, L. M. (2017a). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, 55(3):789–865.
- Blau, F. D. and Kahn, L. M. (2017b). The gender wage gap: Extent, trends, and explanations. *Journal of Economic Literature*, 55(3):789–865.
- Blinder, A. S. (1973). Wage discrimination: reduced form and structural estimates. *Journal of Human Resources*, pages 436–455.
- Braun, S. and Kvasnicka, M. (2013). Men, women, and the ballot: Gender imbalances and suffrage extensions in the United States. *Explorations in Economic History*, 50(3):405–426.
- Busch, F. (2018). Occupational devaluation due to feminization? causal mechanics, effect heterogeneity, and evidence from the United States, 1960 to 2010. *Social Forces*, 96(3):1351–1376.
- Corder, J. K. and Wolbrecht, C. (2006). Political context and the turnout of new women voters after suffrage. *The Journal of Politics*, 68(1):34–49.
- England, P. (2017). *Comparable worth: Theories and evidence*. Routledge.
- England, P., Allison, P., Li, S., Mark, N., Thompson, J., Budig, M. J., and Sun, H. (2007). Why are some academic fields tipping toward female? the sex composition of US fields of doctoral degree receipt, 1971–2002. *Sociology of Education*, 80(1):23–42.
- Fuchs, V. R. (1971). Differences in hourly earnings between men and women. *Monthly Labor Review*, 94:9.
- Fujiwara, T., Meng, K., and Vogl, T. (2016). Habit formation in voting: Evidence from rainy elections. *American Economic Journal: Applied Economics*, 8(4):160–88.
- Geys, B. (2006). Explaining voter turnout: A review of aggregate-level research. *Electoral Studies*, 25(4):637–663.
- Glauber, R. (2018). Trends in the motherhood wage penalty and fatherhood wage premium for low, middle, and high earners. *Demography*, 55(5):1663–1680.
- Goldin, C. (2014). A grand gender convergence: Its last chapter. *American Economic Review*, 104(4):1091–1119.
- Heckman, J. J. and Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics*, 19(4):451–464.

- Hediger, M. (2004). *Das Bild der Schweizer Frau in Schweizer Zeitschriften: Studien zu "Annabelle", "Schweizer Illustrierte" und "Sonntag" von 1966 bis 1976*, volume 35 of *Religion - Politik - Gesellschaft in der Schweiz*. Academic Press, Fribourg.
- Hofer, K. (2017). Does female suffrage increase public support for government spending? evidence from swiss ballots.
- Kaniovski, S. and Mueller, D. C. (2006). Community size, heterogeneity and voter turnouts. *Public Choice*, 129(3):399–415.
- Kleppner, P. (1982). Were women to blame? female suffrage and voter turnout. *The Journal of Interdisciplinary History*, 12(4):621–643.
- Koukal, A. M. and Eichenberger, R. (2019). Direct Democracy and Discrimination: Lessons from Swiss female enfranchisement. *mimeo*.
- Levanon, A., England, P., and Allison, P. (2009). Occupational feminization and pay: Assessing causal dynamics using 1950–2000 us census data. *Social Forces*, 88(2):865–891.
- Lott, Jr, J. R. and Kenny, L. W. (1999). Did women’s suffrage change the size and scope of government? *Journal of political Economy*, 107(6):1163–1198.
- Magnusson, C. (2010). Why is there a gender wage gap according to occupational prestige? *Acta Sociologica*, 53(2):99–116.
- Magnusson, C. (2013). More women, lower pay? occupational sex composition, wages and wage growth. *Acta Sociologica*, 56(3):227–245.
- Meier, A. N., Schmid, L., and Stutzer, A. (2019). Rain, emotions and voting for the status quo. *European Economic Review*, 119:434–451.
- Meltzer, A. H. and Richard, S. F. (1981). A rational theory of the size of government. *Journal of political Economy*, 89(5):914–927.
- Oaxaca, R. (1973). Male-female wage differentials in urban labor markets. *International economic review*, pages 693–709.
- Ruckstuhl, L. (1986). *Frauen sprengen Fesseln: Hindernislauf zum Frauenstimmrecht in der Schweiz*. Interfeminas, Bonstetten.
- Sawhill, I. V. (1973). The economics of discrimination against women: some new findings. *The Journal of Human Resources*, 8(3):383–396.
- Strober, M. H. (1984). Toward a general theory of occupational sex segregation: The case of public school teaching. *Sex segregation in the workplace: Trends, explanations, remedies*, pages 144–56.
- Stutzer, A. and Kienast, L. (2004). Demokratische beteiligung und staatsausgaben: Die auswirkungen des frauenstimmrechts. *Working paper series/Institute for Empirical Research in Economics*, (210).
- Valgardsson, V. O. (2019). Differential turnout decline in norway and sweden: a generation of apathy or alienation? *Scandinavian Political Studies*, 42(3-4):270–295.
- Weichselbauer, D. and Winter-Ebemer, R. (2005). A meta-analysis of the international gender wage gap. *Journal of Economic Surveys*, 19(3):479–511.

Williams, C. L. (1993). Psychoanalytic theory and the sociology of gender. *Theory on gender/feminism on theory*, pages 131–149.

Yu, W.-h. and Kuo, J. C.-L. (2017). The motherhood wage penalty by work conditions: How do occupational characteristics hinder or empower mothers? *American Sociological Review*, 82(4):744–769.

## A Appendix

Table A.1: First implementation of female suffrage at the municipal level

Acceptance date	canton	level
February 1, 1959	Vaud	integral
September 27, 1959	Neuchatel	integral
March 6, 1960	Geneva	integral
June 26, 1966	Basel City	integral
May 19, 1968	Obwalden	municipal
October 19, 1969	Ticino	integral
April 12, 1970	Valais	integral
April 26, 1970	Nidwalden	municipal
September 9, 1970	Basel County	municipal
October 25, 1970	Lucerne	integral
November 15, 1970	Zurich	integral
February 7, 1971	all cantons	federal
February 7, 1971	Fribourg	integral
February 7, 1971	Zug	integral
February 7, 1971	Schaffhausen	integral
February 7, 1971	Aargau	integral
May 5, 1971	Glarus	integral
December 12, 1971	Bern/ Jura	integral
December 12, 1971	Thurgau	integral
January 23, 1972	St. Gallen	integral
April 30, 1972	Appenzell A.Rh.	municipal
March 5, 1972	Schwyz	integral
March 5, 1973	Uri	integral
March 2, 1980	Solothurn	municipal
February 27, 1983	Grisson	municipal
November 27, 1990	Appenzell I.Rh.	integral

Notes: Excluded are votes about facultative suffrage introduction at the municipal level and suffrage introduction for specific topics. The chronology is based on Ruckstuhl (1986).

Table A.2: Overview enfranchisement referendums entire sample 1919 – 1983

vote ID	year	date	canton	level	optional	yes share	vote ID	year	date	canton	level	optional	yes share
2	1919	29.06.1919	NE	integral	0	30,8	52	1968	18.02.1968	SO	cantonal	0	42,5
3	1920	08.02.1920	BS	integral	0	35,0	53	1968	18.02.1968	SO	municipal	0	47,3
5	1920	08.02.1920	ZH	integral	0	19,6	54	1968	19.05.1968	OW	municipal	1	78,7
4	1921	06.09.1921	SG	integral	0	31,6	55	1968	23.06.1968	BL	cantonal	0	68,1
7	1921	16.10.1921	GE	integral	0	31,9	56	1968	20.10.1968	GR	integral	0	39,0
9	1926	11.07.1926	BL	school issues	0	48,7	57	1969	26.01.1969	TG	school issues	0	50,8
10	1927	15.05.1927	BS	integral	0	29,2	59	1969	14.09.1969	SH	integral	0	47,2
13	1946	16.06.1946	BS	integral	0	37,1	60	1969	14.09.1969	ZH	municipal	1	57,9
14	1946	07.07.1946	BL	integral	0	26,5	61	1969	19.10.1969	TI	integral	0	63,0
15	1946	29.09.1946	GE	integral	0	43,7	62	1969	16.11.1969	FR	fundamental approval	1	71,1
16	1946	08.11.1946	TI	integral	0	22,8	63	1970	12.04.1970	VS	integral	0	72,6
17	1947	30.11.1947	ZH	integral	0	22,5	68	1970	27.09.1970	BL	municipal	0	81,1
19	1948	14.03.1948	NE	municipal	0	32,8	69	1970	27.09.1970	SG	municipal	1	47,3
20	1948	14.11.1948	SO	municipal	0	49,5	70	1970	25.10.1970	LU	integral	0	63,0
21	1951	25.02.1951	VD	municipal	1	39,2	71	1970	15.11.1970	SO	municipal	1	65,9
23	1953	07.06.1953	GE	integral	0	42,8	72	1970	15.11.1970	ZH	integral	0	67,0
25	1954	05.12.1954	BS	integral	0	45,1	73	1971	07.02.1971	all cantons	federal	0	65,7
26	1954	05.12.1954	ZH	integral	0	28,7	74	1971	07.02.1971	FR	integral	0	73,8
27	1955	15.05.1955	BL	stepwise introduction	1	43,7	75	1971	07.02.1971	ZG	integral	0	62,5
33	1956	04.03.1956	BE	municipal	1	45,6	76	1971	07.02.1971	SH	integral	0	57,1
34	1957	03.11.1957	BS	municipal	1	59,7	77	1971	07.02.1971	AG	integral	0	51,7
35	1959	01.02.1959	all cantons	federal	0	33,1	78	1971	07.02.1971	SZ	integral	1	47,0
36	1959	01.02.1959	VD	integral	0	52,6	81	1971	06.06.1971	SO	cantonal	0	79,5
37	1959	27.09.1959	NE	integral	0	53,6	82	1971	12.12.1971	BE	cantonal	0	82,8
38	1960	06.03.1960	GE	integral	0	55,4	84	1971	12.12.1971	TG	integral	0	62,7
39	1960	04.12.1960	LU	municipal	1	24,5	85	1972	23.01.1972	SG	integral	0	65,3
42	1962	07.10.1962	GR	municipal	1	59,0	86	1972	30.01.1972	UR	integral	1	57,1
44	1966	13.03.1966	BL	stepwise introduction	1	57,3	87	1972	05.03.1972	SZ	integral	0	68,2
45	1966	24.04.1966	TI	integral	0	48,3	88	1972	05.03.1972	UR	integral	0	62,9
46	1966	26.06.1966	BS	integral	0	60,0	89	1972	05.03.1972	GR	cantonal	0	72,2
47	1966	20.11.1966	ZH	integral	0	46,4	94	1972	24.09.1972	OW	cantonal	0	58,7
49	1967	28.05.1967	SH	integral	0	45,0	99	1980	02.03.1980	SO	municipal	0	65,4
50	1967	04.06.1967	BL	stepwise introduction	1	63,9	101	1983	27.02.1983	GR	municipal	0	62,9
51	1968	18.02.1968	BE	municipal	1	52,1							

Notes: Listed are only those votes which are part of the dataset. Gaps in the data can be explained either by lack of data in general or lack of municipality information. Missing are votes held in cantons with cantonal assemblies for cantonal and municipal matters. In those cantons municipal voting data is only available for the two federal votes. Main source of this list is Ruckstuhl (1986).