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Bello, Piera; Galasso, Vincenzo

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The Politics of Aging and Retirement: Evidence from Swiss Referenda

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Piera Bello, Vincenzo Galasso

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Telephone +49 (0)89 2180-2740, Telefax +49 (0)89 2180-17845, email office@cesifo.de
Editors: Clemens Fuest, Oliver Falck, Jasmin Gröschl
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The Politics of Aging and Retirement: Evidence from Swiss Referenda

Abstract

Aging creates financial troubles for PAYG pension systems, since the share of retirees to workers increases. An often advocated policy response is to increase retirement age. Ironically, however, the political support for this policy may actually be hindered by population aging. Using Swiss administrative voting data at municipal level (and individual survey data) from pension reforms referenda, we show in fact that individuals close to retirement tend to oppose policies that postpone retirement, whereas young and elderly individuals are more favorable. The current process of population aging, and the associated increase in the size of the cohort of individuals close to retirement, may partially explain why a pension reform, which increased retirement age for females, was approved in two referenda in 1995 and 1998, while a reform, which proposed a similar increase in female retirement age, was defeated in a 2017 referendum.

JEL-Codes: H550, D720, J180.

Keywords: social security reforms, voting behavior, retirement age.

Piera Bello
Università della Svizzera italiana
Via Buffi 13
Switzerland – 6942 Lugano
piera.bello@usi.ch

Vincenzo Galasso
Università Bocconi
Via Roentgen 1
Italy – 20136 Milan
vincenzo.galasso@unibocconi.it

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1 Introduction

Aging is recognized to be a major source of financial troubles for PAYG pension systems. As the share of retirees to workers – the so called old age dependency ratio – increases, the financial sustainability of pension systems deteriorates, since contributions from fewer workers need to finance pension benefits to more retirees. Faced with this aging phenomenon, many developed countries have responded by increasing retirement age. In fact, as shown in Figure 1, while the average retirement age had largely decreased from the early 70s to the mid90s, this trend changed in the late 90s. Since then, retirement age has slowly increased.

Reform policies that mandate an increase of the statutory retirement age, or modify pension generosity in order to induce people to postpone retirement, are never popular, since they create clear losers: the individuals close to retirement. Ironically, although postponing retirement is largely advocated as a solution to population aging, the political support for this policy is actually hindered by population aging. Aging increases the relative size of the cohorts of the individuals close to retirement. It is thus crucial for the economic sustainability of the pension system that these large cohorts remain in the labor market – rather than move into retirement. Yet, these cohorts vocally disapprove a policy that forces them to work longer years – and this opposition materializes also in the political arena. As the relative size of these cohorts increases, so does their electoral opposition to postponing retirement.

This paper provides an empirical assessment of the electoral support for (or rather opposition to) postponing retirement age in Switzerland, and quantifies how this support is affected by population aging. Switzerland is an ideal scenario where to evaluate the political effects of aging on postponing retirement, since it has one of the oldest population in the world, its pension system has been subject to several reforms of the retirement age and (some of these) reforms have been voted upon in referenda.[1] The economic effects of aging on the Swiss pension system have been relevant. In 1948, when the federal pension system was introduced, there was one retiree every 6.5 employed individuals. Today, 3.4 workers finance the pension of a retiree and this ratio is expected to become 2 to 1 in twenty years, as the baby-boomer generation will retire. The policy response to these demographic dynamics began in 1995, with the 10-th revision of the pension system (see table 1), which introduced for the first time an increase in the retirement age.[2] This policy reform was subject to two popular referenda, in 1995 and in 1998. These direct votes by the citizens allow us to assess the political support for postponing retirement. The latest proposed reform, in 2017, also envisaged an increase in retirement age, and was also subject to a popular referendum.

To evaluate the importance of the demographic composition of the population for the

[1] Swiss citizens can propose partial or total revisions of the Constitution by popular initiative, or ask for a referendum to be held on any law voted by the federal and cantonal Parliament and/or by the municipal legislative bodies. Moreover, a referendum is mandatory for any emendament to the Federal Constitution, which then comes into force only if is accepted by both a majority of voters and of cantons.

[2] Previous revisions (the 4th in 1957 and 6th in 1964) instead reduced the retirement age.

political support to policies that postpone retirement, we use administrative voting data in referenda at municipal level and survey data on individual voting behavior. Using administrative data, we find that, in all referenda (1995, 1998 and 2017), municipalities with higher shares of individuals in their fifties – and thereby locked into the pension system (Pierson, 1996) and directly affected by the increase in retirement age – were less likely to support the reform policy. Individual survey data provide additional evidence in this direction. Female voters in their fifties were particularly opposed to a policy, such as the 10-th revision or the 2020 reform, that increased retirement age specifically for female workers. As a placebo test, we analyzed whether the demographic composition of the population (using municipal data) or the age of the respondent (using survey data) could explain the voting behavior in a 2017 referendum on a different topic: the corporate tax reform. As expected, neither did. Finally, we use municipal data from all referenda (1995, 1998 and 2017) to find that the electoral support drops more (from 1995 or 1998 to 2017) in municipalities that had a larger increase in the share of people in their fifties. Hence, aging – by increasing the share of individuals close to retirement – had a negative impact on the support to policies that postponed retirement. Taken together, all these evidences confirm the crucial role of aging in reducing the political support for postponing retirement and may help to explain why the 10-th revision of the pension system passed (in 1995 and 1998), while the 2020 reform failed to be approved in 2017.

This paper contributes to a literature on the political determinants of policy reforms. Changes in welfare programs and structural reforms are difficult to implement, as they require policy-makers to promote policies that may create winners and losers, and may thus have negative electoral consequences (Buti et al., 2009; Galasso, 2014; Leroux et al., 2011). Many empirical evidence in this literature use survey data to identify the socio-economic determinants of the individual preferences (age, income, gender, occupation, working history or degree of information about the issues at stake) that may affect the political support for a policy or a reform (Boeri et al., 2002; Boeri and Tabellini, 2012; Rehm et al., 2012; Margalit, 2013; Gingrich, 2014; Parlevliet, 2017). Yet, this evidence on the political support is self-reported and is at most indirect, since individuals typically vote for parties and not over policies. Alternative empirical evidence on the effect of country characteristics, such as the share of elderly, religion, political institutions or GDP, is produced using cross country data on welfare spending (Brooks and Manza, 2006). This paper contributes to the literature, by providing direct evidence with the use of administrative voting data in referenda on specific policies, as well as by exploiting survey data. To tease out the importance of the voters' characteristics, such as age or income, we exploit demographic and economic variations at municipal level.

The paper contributes also to the research on the impact of aging on the political support for welfare states[3] (Razin et al., 2002; Sinn and Uebelmesser, 2003; Tepe and Vanhuysse, 2009).

[3]Regardless of the underlying source of support for the welfare state – whether redistribution towards the working class (Esping-Andersen, 2013; Huber et al., 2001) or a demand for insurance by many (Baldwin, 1990;

Some contributions have argued that demographic dynamics may have opposite economic and political effects (Galasso and Profeta, 2004; Galasso, 2008). For instance, aging makes PAYG pension systems economically less efficient, but it also increases their political support since the voting population becomes older. Our paper provides a quantitative assessment of the effect of population aging on the support – or rather opposition – for postponing retirement, by measuring the impact of the change in the share of elderly workers on the electoral support for postponing retirement in two Swiss referenda held twenty years apart.

Other studies used Swiss ballot data to investigate the relevance of socioeconomic factors for voting behaviour. Funk and Gathmann (2014) analyzed gender gap in policy making by exploiting survey data on voting for a representative sample of Swiss citizens. Eugster et al. (2011) used municipal data on voting in referenda to study the role of culture in the demand for social insurance. A more closely related paper is Bütler (2002), who explored the political feasibility of pension reforms using voting data at municipal level from the 1998 referendum on the 10th revision of the pension system. Her results show that municipalities with younger agents support a higher female retirement age, while those with higher share of middle-aged voters strongly oppose it. Our results confirm these findings in other, related referenda, and suggest a role for aging in explaining the different electoral result that occurred in 2017. Finally, Bütler and Maréchal (2007) study two – effectivelly identical – Swiss popular initiatives (#469 and #470) proposed in opposition to postponing retirement age that were voted – and rejected – in November 2000. They suggest that the difference in the approval rate between the initiatives depends on framing in the title of the initiative.

The paper is organized as follows. Section 2 describes the Swiss institutional background. Section 3 provides our theoretical predictions and then describes the data and the identification strategy. Finally, Section 4 presents the results and concludes.

2 Institutional Background

The old-age pension system was introduced in 1948 with the Federal Old-Age and Survivors' Insurance Act (LAVS). The new federal system absorbed the pre-existing cantonal schemes and provided basic pension to individuals aged 65 and above, who had contributed with 4 per cent of their earnings. This Act gained an overwhelming majority (80% of the voting population, which, at the time, did not include women) in a referendum. In 1960, the Old-Age and Survivors' Insurance (AVS) was complemented by the Invalidity Insurance Scheme (AI), and in 1966 by the AVS-AI Benefits Act (LPC).

Revisions to the pension system were introduced already in 1951 (see Table 1 for a summary of all revisions) in order to expand eligibility and to increase pension generosity. Retirement age was reduced for women from 65 to 63 years old in 1957 (4th revision) and from 63 to 62

Iversen and Soskice, 2001; Moene and Wallerstein, 2001) – aging may modify the intensity of the pre-existing support.

in 1964 (6th revision). No referendum took place on any revision until 1978, when a popular initiative tried to block the 9th revision, which reintroduced AVS contributions for individuals receiving an AVS pension, who were still working, and increased the requirements for joint pensions. In that referendum, the revision was accepted with a 60% majority. In 1995, the 10th revision proposed to increase the official retirement age for women from 62 to 64 and to allow individuals to claim benefits up to one year earlier (and two years since 2001). As a compensatory measure, the reform introduced also a splitting of contributions and pensions between spouses and education pension credits.[4] This 10th revision was approved with 60% of the votes in a referendum by the Swiss population. Three years later, the reform was challenged by a popular initiative that promoted a new referendum.[5] In 1998, 60% of voters supported again the revision (see Butler, 2002). A more comprehensive reform was proposed in 2003. This 11th revision aimed at guaranteeing the solvency of the scheme by increasing the use of sales tax (VAT) to finance pension spending. This reform included also a further increase in retirement age for women from 64 to 65, a change in the timing of pension indexation, the abolition of widow's pension and the access to early retirement three years before standard retirement. This reform was opposed by 68% of Swiss voters in a referendum and thus did not pass. Finally, the 2020 reform package was designed to address the financial sustainability of the system in a low interest rate environment under population aging. The main measures included postponing normal retirement age for women from 64 to 65 and increasing the earliest possible retirement age from 58 to 62, while allowing more flexibility in retirement between the 62 and 70 years old. This reform also included, among other things, a gradual reduction of the minimum conversion rate from 6.8% to 6.0% over 4 years.[6] On 24 September 2017, this 2020 reform was rejected by 53% of the voters in a referendum. The history of the approval rate in Swiss referenda on pension issues is shown in Figure 2.

3 Data and Empirical Strategy

3.1 Theoretical Predictions

The existing theoretical literature suggests that the support for the welfare state may stem from a demand for redistribution by the working class (Esping-Andersen, 2013; Huber et al., 2001) and/or from a demand for insurance by different individuals (Baldwin, 1990; Iversen and Soskice, 2001; Moene and Wallerstein, 2001). In both cases, once a welfare system is in place, any possible reform of its programs will create some additional redistributive effects.

[4]The statement on the ballot was "Do you accept the changes made on October 7th 1994 to the Federal law on the old age and survival pensions (10th revision)?"

[5]The statement on the ballot was "Do you accept the popular initiative for the 10th revision of the pension system without the increase in the retirement age?"

[6]The statement on the ballot was "Do you accept the Federal law of March 17th 2017 on the reform of the pension system 2020?"

This redistributive element will contribute to shape the individual preferences over the reform policy.

Since aging modifies the population structure, a crucial question is how preferences over the retirement age depend on the individual voter's age. We discuss the economic incentives faced by voters of different age. Younger individuals may benefit from a low retirement age, which allows them to retire early. In this case, however, they would receive a smaller pension at retirement. Furthermore, an immediate reduction of the retirement age may lead to a current increase in the contribution rate in order to finance the increase in the number of current pensions. This cost would fall on the current workers. Hence, as discussed in Galasso (2008), young workers will indeed tend to favor higher retirement ages. Middle aged individuals will instead prefer to reduce (or at least not to increase) retirement age, since they are close to retirement. And their opposition to postponing retirement age will become stronger as they get closer to the current retirement age. Finally, individuals, who have already retired, may have less pronounced preferences. Typically, they will not be called back into the labor market and their pension benefits, which have been defined at retirement, are not subject to renegotiation. Nevertheless, if the elderly have any doubt that a reduction in retirement age (or the absence of its increase) may lead to a situation of financial instability for the pension system, they would favor a higher retirement age.

To summarize, our theoretical predictions are the following. We expect young individuals to favor an increase in the retirement age. Yet, this support decreases with the age of the individual and reaches its minimum (or the maximum opposition) close to the current retirement age. Among retired individuals, instead, we expect again to find support for postponing retirement. In our empirical analysis, we will thus operationalize these differences in preferences by age by considering different age groups at the time of each referendum: young (18-29), adults (30-49), close to retirement and thus certainly affected by the policy (50-61), likely to be retired and thus unaffected (62-67) and retired (68+). Notice that all reform policies were enacted (or were planned to be enacted) after the referendum. In particular, the increase in the retirement age for females featured in the 10-th revision was designed to happen in two steps, reaching 63 years by 2001 and 64 by 2005. The 2020 reform envisaged an increase in the retirement age for females from 64 to 65 years to be reached over a four year transition path, starting in 2018.

3.2 The Data

Our analysis focuses on three of the referenda on pension reforms mentioned above. Two referenda concern the 10th pension revision and took place in 1995 and in 1998. The third referendum was in 2017 on the 2020 pension reform. We selected these two reforms (the 10th revision and the 2020 reform) because both of them included as a salient aspect a specific measure aimed at increasing retirement age for women. Table 1 provides a list of the measures included in all pension reforms. Interestingly, our two reforms represent respectively the last to

be approved and the last to be rejected in a referendum. Additionally, as a placebo, we examine the referendum on the corporate tax reform, which was rejected on the 12th of February 2017. This reform aimed at aligning the Swiss corporate tax system with international standards.[7] Hence, unlike in the two referenda on pension reforms, individuals' preferences should not be related to their age and the result of the referendum should not be affected by the age structure of the population.

We use publicly available voting data with information on the number of eligible voters, of valid votes, and of votes in favour or against the initiative. Data are available for about 2100 Swiss municipalities. Moreover, for each municipality we collect data on the structure of the population from the Federal Statistical Office. Specifically, population data are taken from the Swiss Census, which was conducted every ten years from 1850 to 2010. From 2010, the Census has been updated on annual basis using information from the population registers and from a sample survey. We use the 1990 Census for the 1995 and 1998 referenda and the 2016 Census for the 2017 referenda (on the 2020 pension reform and on the corporate tax reform).[8] We focus only on Swiss citizens, since foreigners have no right to vote. Changes in the age structure of the Swiss population can be appreciated in Figure 3. Between 1995 to 2017 there was a 41 percentage point increase in the number of middle-aged individuals. We also collect information on municipal income from the Federal Tax Office.[9] Table 2 provides summary statistics for our main variables.

We use also survey data on voting behaviour for a representative sample of Swiss citizens. The VOX/VOTO surveys[10] include responses to questions on all federal propositions held between 1981 and 2017. Among many other variables, VOX/VOTO data include the voting decision, the party preference and the demographic characteristics of the respondents. We use data for our four federal ballots of interest: 1995 and 1998 for the 10th pension revision, 2017 for the 2020 pension reform and for the corporate tax reform. Table 3 provides summary statistics for our main variables.

3.3 Empirical Strategy

In our empirical analysis, we use these two datasets to test the role of age in determining individual preferences over pension policies and to assess the effect of aging on the voting

[7] In particular, the goal was to abolish existing and preferential tax regimes for holdings or mixed companies and to replace them with a new set of internationally accepted measures.

[8] Age x in 1995 (1998) corresponds to age x-5 (x-8) in 1990. Age x in 2017 corresponds to age x-1 in 2016. We use this information to create demographic variables at municipal level measuring the fraction of voters in our five age groups: 18-29, 30-49, 50-61, 62-67, 68+.

[9] The federal tax authority reports the average taxable income per municipality. We use 1995/1996 data for the 1995 Referendum, 1997/1998 datas for the 1998 Referendum, and 2014 data (the most recent available data) for the 2017 Referendum.

[10] Until 2016, these surveys were carried out under the name of VOX. Then, the VOX survey was replaced by the VOTO survey. However, the two surveys were standardized and made comparable.

results.

First, we exploit administrative data to investigate whether the approving vote share in a municipality is correlated with its demographic structure and socioeconomic characteristics. We estimate the following OLS regression for each of the four referenda (1995, 1998 and 2017 on pensions and 2017 on corporate taxes):

$$Y_{ik} = \alpha + \beta_1 D_{ik} + \beta_2 X_{ik} + Z_k + \varepsilon_{ik} \tag{1}$$

where Y_{ik} indicates the share of votes supporting the reform in municipality i and canton k, the demographic variables D_{ik} represents the share of population in the different age groups (18-29, 30-49, 50-61, 62-67, 68+), X_{ik} is a vector of control variables (turnout and municipal income) and Z_k is a vector of canton dummies that capture important structural differences across Swiss cantons. Finally, ε_{ik} is the error term.

To confirm the role of individual age in shaping preferences over pension policies, we exploit also VOX/VOTO survey data. We estimate the following OLS regression, separately for males and females, using self-reporting voting data, for each of the four referenda (1995, 1998 and 2017 on pensions and 2017 on corporate taxes):

$$Y_{jk} = \alpha + \beta_1 D_{jk} + \beta_2 X_{jk} + Z_k + \varepsilon_{jk} \tag{2}$$

where Y_{jk} indicates the vote on the reform of individual j in canton k, the individual demographic variable D_{jk} defines which age group (18-29, 30-49, 50-61, 62-67, 68+) the individual belongs to, X_{ik} is a vector of individual control variables, such as education level (tertiary education), political ideology (left, center, right) and language (German versus non-German), marital status and Z_k is a vector of canton dummies that capture any important differences across Swiss cantons. Finally, ε_{Jk} is the error term.

To analyze the effects of aging – and of the associated change in the population structure – on the voting outcomes, we use a third regression model. In particular, we test whether differences across municipalities in the changes of the population share in any given age group between 1995 (or 1998) and 2017 predict the changes in the approving vote share in the 1995 (or 1998) and 2017 pension referendum. We are interested in the predictive power of the share of voters in the 50-61 age group. We hence run the following regression:

$$\Delta Y_{ik} = \alpha + \beta_1 \Delta D_{ik} + \beta_2 \Delta X_{ik} + Z_k + \varepsilon_{ik} \tag{3}$$

where all variables were defined as in the equation 1 above, but we use their variations between 1995 (or 1998) and 2017, except for canton dummies.

4 Results and Conclusions

Table 4 reports the estimates of our first specification in equation 1, using municipal data from the two referenda (1995 and 1998) related to the 10th pension revision (columns 1 and

2) and from the 2017 referenda on the 2020 pension reform and on the corporate tax reform (columns 3 and 4). The excluded demographic group is adults aged 30-49. In line with our theoretical predictions, municipalities with a larger fraction of voters in the 50-61 age group, who are thus most affected by the three pension reforms, are less supportive of these reforms. Whereas larger shares of young (18-29 years old) or old (68+) voters are associated with more support. This age pattern does not instead emerge in our placebo test, the corporate tax reform (column 4), where the demographic structure should not matter.

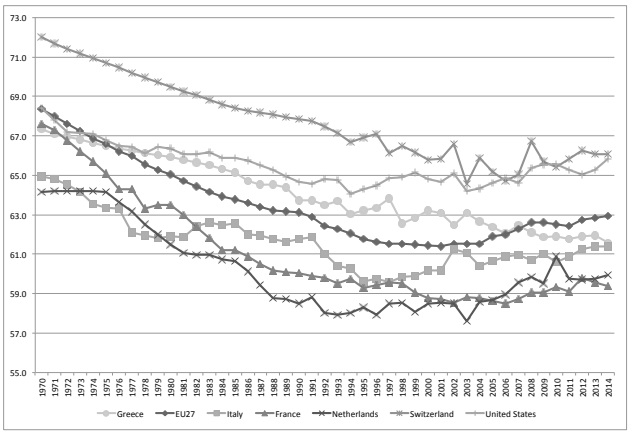
Similar findings emerge from the evidence using individual survey data in table 5. Among the females, who were directly affected by the increase in the retirement age, those aged 50 to 61 years oppose the 10th pension revision both in 1995 and in 1998. Moreover, females in this age group were also more likely to vote against the 2020 pension reform in 2017. Yet, they did not oppose the corporate tax reform, which constitutes our placebo test. Among the males, who were not affected by the increase in the retirement age, no effect emerge in the relevant age group (50-61).

Perhaps even more interesting are the results in Table 6 that analyzes the variations in approval rate at referenda from 1995 (or 1998) to 2017. Using administrative voting data, we show that municipalities, in which the share of people close to retirement (50-61) increased more, experienced a larger reduction in the share of votes supporting the pension reform. The reverse is true for those municipalities with a larger increase in the share of young (18-29) and of old (68+) people.

Our empirical evidence thus suggest that individual age is a crucial determinant in the voters' preferences over retirement policies. In a country with direct democracies, such as Switzerland, in which voters can take direct electoral decisions over policies, we provide clear evidence that the demographic distribution of the voters matters for the political support to retirement policies. In countries with no direct democracy, we expect this demographic distribution still to matter, as parties internalize the electoral preferences of the voters in their electoral programs. Since Switzerland hold referenda on similar retirement policies twenty years apart, we can also assess the effect of population aging on the political support – or opposition – to these policies. Among experts and policy advisors, postponing retirement age is considered a crucial policy measure to counteract the negative effect of aging on the financial sustainability of public pension systems. Yet, our empirical evidence suggests that – ironically, aging contributes to reduce the political support for postponing retirement, by increasing the share of voters who are close to retirement and thus oppose the policy. This effect is sizable: the increase in the share of Swiss people aged 50-61 can explain between 7.2% and 10% of the drop in the approving vote share. Our empirical evidence thus contributes to explain the large opposition to these retirement policies in almost all OECD countries. Once again, economically sensible policies have hard time finding the necessary political support.

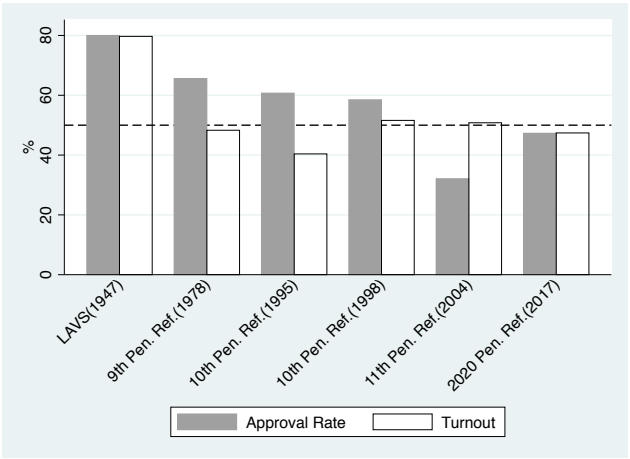
Figures and Tables

Figure 1: Average effective age of retirement, 1970-2014



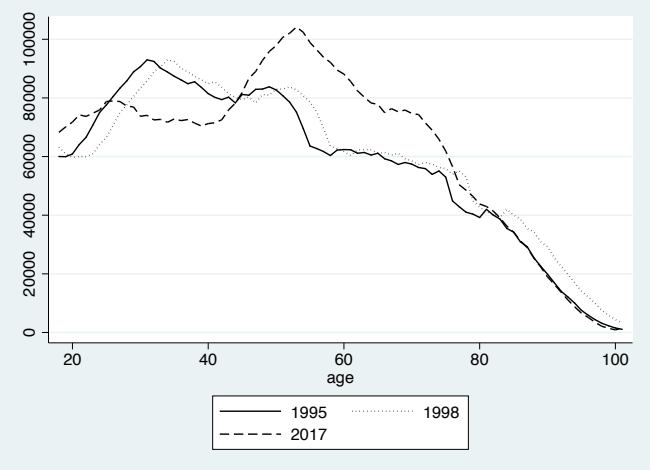
Note: OECD estimates based on the results of national labour force surveys, the European Union Labour Force Survey, and national censuses.

Figure 2: Approval Rate of LAVS and of its Reforms



Note: Outcomes of the referenda on the Federal Old-Age and Survivors' Insurance Act (LAVS), the four pension reforms that have been voted upon in a referendum (the 9th, 10th, 11th, 2020 Pension Reform) and the popular initiative against the 10th Pension Reform. For the 1998 referendum the approval rate corresponds to the vote share supporting a higher female retirement age. Municipal data are from the Swiss Federal Office of Statistics.

Figure 3: Population Distribution by age



Note: Number of Swiss citizens by age. Data are from the 1990 and the 2016 Swiss Business Census. Age X in 1995 (1998) corresponds to age x-5 (x-8) in 1990. Age X in 2017 corresponds to age x-1 in 2016.

Table 1: Pension Reforms

1, 2, 3th Pension Reform
- improvement in conditions for the entry generation
4th Pension Reform
- decrease in the NRA for women from 65 to 63
5th Pension Reform
- increase in the standard pension amount
6th Pension Reform
- decrease in the NRA for women from 63 to 62 years
- increase in the standard pension amount
- introduction of two new in kind benefits (the supplementary pension for wives and for dependent children)
7th Pension Reform
- introduction of the possibility of deferring pension benefits
- increase in contribution
- pension indexing
8th Pension Reform
- raise in the pensions for couples
- improvement in the position of divorced women
9th Pension Reform
- reintroduction of AVS contributions for those who are still working while receiving a pension
- higher requirements for joint pensions for couples and supplementary pensions for wives
10th Pension Reform
- increase in the NRA for women from 62 to 64
- early retirement allowed at 63 and the possibility of delaying pension up to age of 70
- splitting of contributions and pensions between spouses
- education pension credits
11th Pension Reform
- increase in contribution rates for those who are still working while receiving a pension
- shifting of the indexing of pension from a two years to three years circle
- increase in the NRA for women from 64 to 65
- introduction of additional flexible retirement options
- introduction of united pensions for widows and widowers
- reduction in survivors' pensions
- progressive increase in VAT rates
2020 Pension Reform
- increase in the NRA for women from 64 to 65
- introduction of additional flexible retirement options
- gradual reduction of the minimum conversion rate
- increase in VAT rates

Note: Key elements of the twelve pension reforms (Greber, 1988). Only 4 of them were subject to a referendum (the 9th, 10th, 11th, 2020 Pension reform). While the Swiss population has accepted the first two reforms, the 11th and the 2020 Pension Reform failed in the ballot.

Table 2: Summary statistics: Municipal voting data

variable	mean	sd	N
10th Pension Reform (1995)			
Approval Rate	0.59	0.11	2101
Turnout	0.39	0.09	2101
Share_18_29	0.20	0.03	2101
Share_30_49	0.37	0.05	2101
Share_50_61	0.17	0.03	2101
Share_62_67	0.07	0.02	2101
Share_68plus	0.20	0.05	2101
Income	53600.01	15440.5	2101
10th Pension Reform (1998)			
Approval Rate	0.60	0.12	2100
Turnout	0.56	0.09	2164
Share_18_29	0.18	0.03	2100
Share_30_49	0.35	0.04	2100
Share_50_61	0.18	0.03	2100
Share_62_67	0.07	0.02	2100
Share_68plus	0.22	0.06	2100
Income	53957.78	15828.81	2100
2020 Pension Reform (2017)			
Approval Rate	0.44	0.09	2213
Turnout	0.48	0.07	2213
Share_18_29	0.17	0.03	2213
Share_30_49	0.28	0.04	2213
Share_50_61	0.23	0.03	2213
Share_62_67	0.09	0.02	2213
Share_68plus	0.22	0.05	2213
Income	73718.03	56870.54	2213
Corporate Tax Reform (2017)			
Approval Rate	0.42	0.10	2213
Turnout	0.47	0.08	2213
Share_18_29	0.17	0.03	2213
Share_30_49	0.29	0.04	2213
Share_50_61	0.23	0.02	2213
Share_62_67	0.09	0.02	2213
Share_68plus	0.22	0.05	2213
Income	73718.03	56870.54	2213

Note. The table reports OLS estimation results. Voting data are from the Swiss Federal Office of Statistics. Population data are from the Swiss Censuses (1990, 2017). For the 1998 referendum the approval rate corresponds to the vote share supporting a higher female retirement age.

Table 3: Summary Statistics: Individual voting data

variable	mean	sd	N
10th Pension Reform (1995)			
Approval Rate	0.51	0.50	897
Share_18_29	0.18	0.38	897
Share_30_49	0.39	0.49	897
Share_50_61	0.18	0.38	897
Share_62_67	0.09	0.28	897
Share_68plus	0.18	0.38	897
Female	0.55	0.50	897
Left	0.18	0.39	897
Right	0.22	0.41	897
Latin	0.30	0.46	897
Tertiary Ed	0.34	0.47	897
Married	0.57	0.50	897
Voter Share	0.60	0.49	897
10th Pension Reform (1998)			
Approval Rate	0.60	0.49	847
Share_18_29	0.11	0.31	847
Share_30_49	0.43	0.49	847
Share_50_61	0.18	0.38	847
Share_62_67	0.12	0.32	847
Share_68plus	0.17	0.37	847
Female	0.52	0.50	847
Left	0.23	0.42	847
Right	0.22	0.41	847
Latin	0.31	0.46	847
Tertiary Ed	0.30	0.46	847
Married	0.63	0.48	847
Voter Share	0.74	0.44	847
2020 Pension Reform (2017)			
Approval Rate	0.48	0.50	1077
Share_18_29	0.11	0.32	1077
Share_30_49	0.19	0.39	1077
Share_50_61	0.25	0.43	1077
Share_62_67	0.14	0.34	1077
Share_68plus	0.32	0.47	1077
Female	0.51	0.50	1077
Left	0.26	0.44	1077
Right	0.36	0.48	1077
Latin	0.46	0.50	1077
Tertiary Ed	0.90	0.29	1077
Married	0.62	0.49	1077
Corporate Tax Reform (2017)			
Approval Rate	0.32	0.47	1045
Share_18_29	0.10	0.30	1045
Share_30_49	0.23	0.42	1045
Share_50_61	0.24	0.43	1045
Share_62_67	0.13	0.33	1045
Share_68plus	0.30	0.46	1045
Female	0.50	0.50	1045
Left	0.28	0.45	1045
Right	0.32	0.47	1045
Latin	0.49	0.50	1045
Tertiary Ed	0.91	0.29	1045
Married	0.67	0.47	1045

Note. The table reports OLS estimation results. Individual data from the VOX/VOTO surveys. Only for the 1995-1998 referenda the sample include also non-voters. For the 1998 referendum the approval rate corresponds to the vote share supporting a higher female retirement age.

Table 4: Approving vote share, Municipal data

	(1)	(2)	(3)	(4)
	1995	1998	2017	2017
	10th Pension Reform	10th Pension Reform	2020 Pension Reform	CorporateTaxReform
Turnout	0.087***	0.234***	0.084**	-0.006
	(0.033)	(0.028)	(0.035)	(0.033)
logIncome	0.139***	0.057***	0.060***	0.117***
	(0.012)	(0.014)	(0.009)	(0.012)
Share_18_29	0.409***	0.494***	0.373***	0.048
	(0.091)	(0.086)	(0.101)	(0.079)
Share_50_61	-0.276***	-0.339***	-0.209***	-0.043
	(0.086)	(0.110)	(0.078)	(0.067)
Share_62_67	0.221	-0.058	-0.007	-0.073
	(0.141)	(0.141)	(0.123)	(0.110)
Share_68piu	0.229***	0.160***	0.293***	0.182***
	(0.060)	(0.050)	(0.068)	(0.056)
Observations	2,101	2,100	2,213	2,213
R-squared	0.539	0.608	0.395	0.586
Canton FE	YES	YES	YES	YES

Note. The table reports OLS estimation results. Data at municipal level: voting data are from the Swiss Federal Office of Statistics, population data are from the Swiss Censuses (1990, 2016), income data from the Federal Tax Office. Age x in 1995 (1998) corresponds to age x-5 (x-8) in 1990. Age x in 2017 corresponds to age x-1 in 2016. For the 1998 referendum a positive sign corresponds to a support for a higher female retirement age. We control for the turnout and taxable income. Robust standard errors in parentheses.*** p<0.01, ** p<0.05, * p<0.1

Table 5: Voting behavior, Individual data

	(1) 1995 10th Pension Ref. M	(2) 1995 10th Pension Ref. F	(3) 1998 10th Pension Ref. M	(4) 1998 10th Pension Ref. F	(5) 2017 2020 Pension Ref. M	(6) 2017 2020 Pension Ref. F	(7) 2017 Corpo.Tax Ref. M	(8) 2017 Corpo.Tax Ref. F
Left	0.190***	-0.005	-0.190***	-0.236***	0.227***	0.229***	-0.275***	-0.187***
	(0.066)	(0.061)	(0.061)	(0.061)	(0.058)	(0.053)	(0.049)	(0.043)
Right	0.102*	0.080	0.101*	0.130**	-0.097*	-0.038	0.128**	0.137**
	(0.060)	(0.060)	(0.056)	(0.062)	(0.051)	(0.052)	(0.051)	(0.053)
Tertiary Ed	0.138**	-0.001	0.101**	0.170***	0.121***	0.145***	0.086**	0.084**
	(0.054)	(0.053)	(0.047)	(0.062)	(0.045)	(0.045)	(0.042)	(0.042)
Married	-0.004	0.125***	-0.033	0.061	0.055	0.081*	0.030	0.125***
	(0.058)	(0.047)	(0.058)	(0.053)	(0.053)	(0.047)	(0.054)	(0.043)
Latin	0.078	-0.249*	0.000	-0.112	-0.039	0.014	-0.061	0.134
	(0.183)	(0.137)	(0.223)	(0.151)	(0.138)	(0.150)	(0.116)	(0.124)
Voter	0.165***	0.122**	0.075	0.052				
	(0.058)	(0.048)	(0.064)	(0.055)				
Share_18_29	0.058	-0.045	0.024	0.089	-0.030	-0.059	0.163*	0.169**
	(0.078)	(0.068)	(0.086)	(0.085)	(0.089)	(0.090)	(0.088)	(0.072)
Share_50_61	0.012	-0.101*	-0.091	-0.115*	-0.016	-0.134**	0.052	-0.063
	(0.074)	(0.060)	(0.071)	(0.069)	(0.065)	(0.063)	(0.064)	(0.055)
Share_62_67	-0.105	0.185**	-0.091	-0.036	0.012	-0.107	0.039	-0.014
	(0.097)	(0.090)	(0.076)	(0.078)	(0.077)	(0.074)	(0.071)	(0.069)
Share_68plus	0.213***	0.128**	0.094	0.066	-0.033	-0.016	0.096*	0.014
	(0.079)	(0.061)	(0.065)	(0.073)	(0.062)	(0.067)	(0.056)	(0.058)
Observations	403	494	408	439	530	547	520	525
R-squared	0.155	0.185	0.166	0.162	0.137	0.150	0.188	0.134
Canton FE	YES	YES	YES	YES	YES	YES	YES	YES
Control FE	YES	YES	YES	YES	YES	YES	YES	YES

Note. The table reports OLS estimation results. Individual data from the VOX/VOTO Survey. The dependent variable is the voting decision, which is equal to one if the respondent supported the proposition and zero otherwise. For the 1998 referendum a positive sign corresponds to a support for a higher female retirement age. Only for the 1995-1998 referenda the sample include also non-voters. Robust standard errors in parentheses.*** p<0.01, ** p<0.05, * p<0.1

Table 6: Differences in approving vote share

	(1)	(2)
	1995 / 2017	1998 / 2017
	X Pension Ref. vs 2020 Pension Ref.	X Pension Ref. vs 2020 Pension Ref.
logD.Income	0.002	-0.009*
	(0.005)	(0.005)
D.Turnout	-0.110***	0.003***
	(0.042)	(0.000)
D.Share_18_29	0.362***	0.581***
	(0.088)	(0.093)
D.Share_50_61	-0.176**	-0.451***
	(0.073)	(0.077)
D.Share_62_67	0.128	-0.087
	(0.113)	(0.129)
D.Share_68piu	0.194***	0.132*
	(0.066)	(0.072)
Observations	2,083	2,087
R-squared	0.618	0.638
Canton FE	YES	YES

Note. The table reports OLS estimation results. Data at municipal level. Voting data are from the Swiss Federal Office of Statistics. Population data are from the Swiss Censuses (1990, 2016). Income data from the Federal Tax Office. Age x in 1995 (1998) corresponds to age x-5 (x-8) in 1990. Age x in 2017 corresponds to age x-1 in 2016. For the 1998 referendum a positive sign corresponds to a support for a higher female retirement age. Robust standard errors in parentheses.*** p<0.01, ** p<0.05, * p<0.1

References

Baldwin, P. (1990). *The politics of social solidarity: class bases of the European welfare state, 1875-1975*. Cambridge University Press.

Boeri, T., Börsch-Supan, A., and Tabellini, G. (2002). Pension reforms and the opinions of european citizens. *American Economic Review*, 92(2):396–401.

Boeri, T. and Tabellini, G. (2012). Does information increase political support for pension reform? *Public choice*, 150(1-2):327–362.

Brooks, C. and Manza, J. (2006). Why do welfare states persist? *Journal of Politics*, 68(4):816–827.

Buti, M., Turrini, A., Van den Noord, P., and Biroli, P. (2009). Defying the "juncker curse": can reformist governments be re-elected? *Empirica*, 36(1):65–100.

Bütler, M. (2002). The political feasibility of increasing the retirement age: lessons from a ballot on the female retirement age. *International Tax and Public Finance*, 9(4):349–365.

Bütler, M. and Maréchal, M. A. (2007). Framing effects in political decision making: Evidence from a natural voting experiment. *CESifo Working Paper Series 1940*.

Esping-Andersen, G. (2013). *The three worlds of welfare capitalism*. John Wiley & Sons.

Eugster, B., Lalive, R., Steinhauer, A., and Zweimüller, J. (2011). The demand for social insurance: does culture matter? *The Economic Journal*, 121(556).

Funk, P. and Gathmann, C. (2014). Gender gaps in policy making: evidence from direct democracy in switzerland. *Economic Policy*, 30(81):141–181.

Galasso, V. (2008). *The political future of social security in aging societies*. Mit press.

Galasso, V. (2014). The role of political partisanship during economic crises. *Public Choice*, 158(1-2):143–165.

Galasso, V. and Profeta, P. (2004). Lessons for an ageing society: the political sustainability of social security systems. *Economic Policy*, 19(38):64–115.

Gingrich, J. (2014). Visibility, values, and voters: The informational role of the welfare state. *The Journal of Politics*, 76(2):565–580.

Greber, P.-Y. (1988). The swiss basic pensions scheme is forty years' old: Criteria for its evaluation. *International Social Security Review*, 41(2):176–197.

Huber, M. E., Huber, E., and Stephens, J. D. (2001). *Development and crisis of the welfare state: Parties and policies in global markets*. University of Chicago press.

Iversen, T. and Soskice, D. (2001). An asset theory of social policy preferences. *American Political Science Review*, 95(4):875–893.

Leroux, M.-L., Pestieau, P., and Racionero, M. (2011). Voting on pensions: sex and marriage. *European Journal of Political Economy*, 27(2):281–296.

Margalit, Y. (2013). Explaining social policy preferences: Evidence from the great recession. *American Political Science Review*, 107(1):80–103.

Moene, K. O. and Wallerstein, M. (2001). Inequality, social insurance, and redistribution. *American Political Science Review*, 95(4):859–874.

Parlevliet, J. (2017). What drives public acceptance of reforms? longitudinal evidence from a dutch pension reform. *Public Choice*, 173(1-2):1–23.

Pierson, P. (1996). The new politics of the welfare state. *World politics*, 48(2):143–179.

Razin, A., Sadka, E., and Swagel, P. (2002). The aging population and the size of the welfare state. *Journal of Political Economy*, 110(4):900–918.

Rehm, P., Hacker, J. S., and Schlesinger, M. (2012). Insecure alliances: Risk, inequality, and support for the welfare state. *American Political Science Review*, 106(2):386–406.

Sinn, H.-W. and Uebelmesser, S. (2003). Pensions and the path to gerontocracy in germany. *European Journal of Political Economy*, 19(1):153–158.

Tepe, M. and Vanhuysse, P. (2009). Are aging oecd welfare states on the path to gerontocracy?: Evidence from 18 democracies, 1980–2002. *Journal of Public Policy*, 29(1):1–28.