

Who is Afraid of School Choice?

Andrea Diem
Stefan C. Wolter

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Abstract

This study uses survey data to investigate attitudes among Swiss voters to different models offering more freedom of choice in the educational system. The findings indicate clear opposition to the use of taxpayer money to fund private schools, while free choice between public schools seems to appeal to a majority. The analyses show that the approval-opposition heterogeneity is mainly based on an explicable, rational calculation of personal utility. Approval rates are much higher among groups or individuals who see a personal advantage in more school choice, such as parents of school-age children, urban/metropolitan area residents and those on a low income. In contrast, residents of small to medium-sized centers of population, high-income groups, and individuals with a teaching qualification oppose more school choice. The analyses also indicate differences between the country's language regions, attributable to intercultural differences in what people consider the state's role to be.

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Andrea Diem
Swiss Coordination Centre for Research in
Education (SKBF)
Aarau / Switzerland
andrea.diem@skbf-csre.ch

Stefan C. Wolter
University of Bern
Department of Economics
Bern / Switzerland
stefan.wolter@vwi.unibe.ch

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1. Introduction

Free choice of school and hence competition between schools in Switzerland is an interesting theme also for international comparative research, for at least two reasons: On the one hand, Switzerland is an OECD country with an extremely low percentage of private schools (just 4%, compared with the OECD average of 11%, OECD, 2010), and there is little or no option to choose one public school in preference to another due to the fact that the public schools children attend are determined by their place of residence. On the other hand, free school choice is an ongoing political issue which features regularly in cantonal referendums. Hence, voters have expressed their views now and again – in some regions more than others – on proposed changes in policy with respect to school choice options.

This paper is motivated by three underlying research questions: Firstly, school choice options for parents can differ in content and presentation, and it is not clear whether all conceivable models would attract equal support, or opposition, from the voting public (see Bearse et al., 2009). School choice options can consist in a) creating private schools (a prohibition on private schools was in force in some Swiss cantons right into the 20th century), b) providing state subsidies or funding for private schools for one and all or, alternatively, for low-income groups (with “selective” or needs-based education vouchers), or c) allowing people to choose freely between public or state schools. Since actual political propositions have often put just a single model to the vote, it is difficult to judge, even with the existing expressions of the will of the voters, whether all the models for expansion of choice would be judged in the same way. Since no school-choice proposals have ever been put to the vote in a national referendum, we do not have the option of taking an exit poll for the whole of the country.² Instead, the method we have chosen for this study is a poll eliciting responses to hypothetical political propositions. This enables us at least to compare two very different models, i.e., state funding for private schools and freedom to choose between public schools. Our analysis of the will of the voters in respect of hypothetical models follows the examples set by Swiss and foreign precedents in similar issues or cases (see Belfield, 2003, Brunner and Sonstelie, 2003 and Sandy, 1992).

Secondly, this study looks to analyze heterogeneities in respect of support for and opposition to both models. Even in the presence of significant opposition or support, it is reasonable to assume that not all individuals and groups will express the same preferences. It is therefore a matter of interest to establish whether the differences reside in purely individual preferences or whether in fact specific characteristics may serve to predict differences in preference. Although an analysis of two referenda on school choice in Switzerland by Merzyn and Ursprung (2005) is available which seeks to explain the different proportions of yes-votes in individual local government areas for two different cantonal bills on the basis of differences in sociodemographic composition and political affiliations between the areas, such investigations are subject to a potential risk of ecological fallacy. That is why we have chosen to base our own analysis on individual data.

² Examples for relevant exit poll analyses are Bonoli and Häusermann (2009), analyzing Swiss referendum results on the basis of VOX data (VOX analyses are polls conducted after every referendum) or Catterall and Chapleau (2003) investigating the main reasons for and against the introduction of education vouchers in the USA.

Thirdly, it is of interest to compare our study results with foreign studies on similar or identical issues, since it cannot be assumed that sociodemographic differences in preferences are expressed in the same way in all countries. Likely reasons include different educational traditions, very different prevalences of private schooling, as well as differences in the relative quality of public versus private schools.

The study uses data generated by gfs.bern research institute on behalf of the Centre for Research in Economics of Education at the University of Bern in 2007. The respondent population comprises members of the Swiss electorate aged 25 or over. The poll elicited answers to a variety of educational policy issues.³ It also generated detailed sociodemographic information about the respondent population that enables us to test our hypotheses.

The paper is structured as follows: Section 2 presents an outline of school choice and the current school choice debate in Switzerland. Section 3 presents research hypotheses. Section 4 describes the data acquisition process and the database. Section 5 presents the empirical data and the final section gives the conclusions drawn from that data.

2. Background and rationale: school choice and the school choice debate in Switzerland

In Switzerland, each canton determines its own educational policy. The cantons set forth public school curricula, determine which teaching materials are to be used, stipulate the procedure according to which students are allocated to particular public schools, decide upon the establishment of private schools, and rule on whether private schools can receive funding from the public purse.

In line with current legislation, public schools are fully funded by the state and school-age students are allocated to schools according to a strict principle, i.e.: children must attend the school in their particular catchment area. The result is a socio-geographic separation effect which is reflected in de facto school segregation (see Coradi Vellacott, 2007): privileged individuals choose an attractive, prosperous residential area in the expectation of high-quality schooling (“good” peers, good teachers, good infrastructure, etc.). Higher rents and real estate prices mean that the less well-off are unlikely to be able to settle in those areas (Schmidheiny, 2006).

Unlike state schools, most private schools are required to obtain all of their funding from parents. In a very few cantons (BL, JU, LU, ZG, BE), however, parents sending their child to a private school are reimbursed for some of the tuition. Precise figures on the cost of private school attendance are not available, but it is possible to estimate the approximate level of school tuition by looking at the sums spent by the state, since it is reasonable to assume that the costs a private school incurs in Switzerland will not be any lower. The mean cost per child per year in secondary school level I is CHF 16,100 (Swiss Federal Statistical Office [SFSO], 2010), which corresponds to about one-fifth of the annual disposable income of an average household.

The size of the private school sector during the compulsory schooling period varies greatly between different cantons. In eight cantons (AI, GL, NW, UR, JU, VD, FR, AG), the percentage of school-age

³ Published research on other educational policy issues from the same dataset are Cattaneo and Wolter (2009) and Busemeyer et al. (2011).

children attending non-public schools is less than 1 percent. In another 12 cantons, the figure ranges from 1 to 4 percent (LU, SZ, NE, SO, BE, SH, GR, OW, TG, BL, SG, ZG). At about 4 to 6 percent, the percentage in cantons AR, VS, ZH and TI is slightly above the Swiss average. The cantons of Basel City (10%) and Geneva (16%) have a relatively high proportion of private school students.

The Swiss private school scene is dominated by faith-based schools (mainly Catholic), so-called alternative schools, (Steiner, Montessori, etc.) and international schools. The proportions made up by the various non-public school types for Switzerland as a whole are unknown, but clearly the private school scene is fairly heterogeneous. Whereas faith schools prioritize teaching religious values and principles, alternative schools use methods/teaching approaches that deviate from those employed in public schools and may differ in content as well. The hallmark of international schools is their international curriculum. These schools are designed in the first instance to cater to the needs of expatriates in a globalized world. In comparison with faith schools and alternative schools, international schools tend to be more achievement-oriented.

Five Swiss cantons have voted on “popular initiatives” concerning free school choice during the last 12 years. The new Middle School Act for the Canton of Zurich (1999), calling for freedom to choose between public middle schools and a state funding option for private schools, was accepted with a “yes” vote of 60%. The other four proposals, all of which concerned private school choice, were resoundingly rejected. The proposal in the canton of Ticino (2001) for means-tested education vouchers of CHF 2400 to CHF 6000 was rejected by a three-quarters majority (74.1%). The counter-proposal – to restrict government handouts to the compulsory schooling period – was rejected by an equally large majority of the voters (72.3%). Initiatives in the canton of Basel-Country (2008) and Thurgau (2010) calling for private schools to receive funding equivalent to the average cost for state schools were opposed by 79.2 percent and 83.2 of voters, respectively. A counter-proposal calling for an increase in government reimbursement of the cost of private school attendance during the compulsory schooling period from the previous CHF 2000 to CHF 2500 was accepted, however (56.9% “yes” votes, canton of Basel-Country). And finally a referendum in St. Gallen (2011) which called for free school choice (incl. private school choice) has been rejected just recently by 82.5 percent.

3. Free school choice: Research hypotheses

Efficiency-equity conflict

Free school choice has been a political issue ever since the introduction of public schools and compulsory education laws in the 19th century. While the first conflicts were mainly fueled by ideological dispute between advocators of public lay schools and private faith-based schools, other ideologies and differences entered the debate in the 20th century, to be joined in the post-war years by the theory that introducing market forces in this realm of the public sector might bring benefits in terms of effectiveness (school quality) and efficiency (cost of education). The hoped-for benefits of a pluralist educational system with a variety of providers and freedom of choice for customers of education, i.e., utility benefits due to freedom of choice and more effectiveness and efficiency as a result of competitive forces, are balanced on the other side by fears that competition and freedom of choice might detract from equality of opportunity and social cohesion (see e.g. Levin, 2002).

The aim of this study is neither to summarize the arguments for/against free school choice, nor to re-evaluate the now numerous empirical studies on the subject, but rather to investigate the reasons behind political support of and opposition to more freedom of school choice.

Research hypotheses

Our research hypotheses in this study are based on rational choice theory, which postulates that individuals primarily act in a purposeful/rational manner so as to maximize utility; this extends to include their political preferences. When making decisions, individuals weigh up the (likely) costs and benefits of various alternatives and finally choose the option that promises the highest personal advantage to themselves. The fitness of this model is supported by the observation that analyses of voting behavior have indicated that voters act so as to maximize benefit (Bonoli and Häusermann, 2009, Tedin et al., 2001); moreover, similar hypotheses have been confirmed in polls investigating preferences with regard to competition-based educational reform (Belfield, 2003).

To analyze preferences in our study, we will distinguish between two models proposing greater freedom of school choice: 1) state funding of private schools with public moneys (also known as “private school choice” in the following), and 2) the option to choose between public schools (also called “public school choice” in the rest of this paper).

In a comparison of these two school choice options, approval rates for public school choice are likely to be higher than for private school choice: while the first reform option is cost-neutral, the introduction of private school choice would mean that school tuition now paid by the users of private school services themselves would then have to be funded by taxpayers. Across the whole of society, the costs would remain more or less constant; however, the majority of taxpayers would be looking at additional expenses compared with the current situation, which would be to their disadvantage. Since the proportion of private school users in Switzerland is very small at present, only a commensurately small proportion of the voters would be likely to benefit overall from the private school choice scheme (as the “small” rise in taxes would be exceeded by large savings in terms of spending on private education). This hypothesis is based on the conjecture that the currently low proportion of private schools is not because large sections of the population – in particularly those with school-age children – would prefer to go private but remain in the state school system because they cannot afford private schooling.

Private school choice

In the present situation, with no public subsidies for private schools, the decision-making scenario as regards choosing private schooling is as follows: before an individual opts for private schooling, the additional benefit of private schooling versus public schooling must be larger than the additional individual expense (school tuition) of private school attendance. In a scenario where private school choice is publicly funded, all those who would stand to benefit more from private schooling than public school attendance would switch to private schools.

Most of the theoretical and empirical studies in existence analyze the impact of disposable household income as a key predictor of preference for or opposition to greater freedom of school choice. The results are very mixed, however. The positive correlation between income and support for greater freedom of choice postulated in earlier theoretical studies (see e.g. Epple and Romano,

1998) is backed up in some empirical studies, while others find the opposite. British survey results (Belfield, 2003) suggest that high-income individuals are more likely than lower-income individuals to support privatizing the educational system. Results of a United States exit poll (Catterall et al., 2003) indicate that individuals of low socioeconomic status are more likely to oppose education vouchers than those on a high income. Similarly, a Japanese study (Oshio et al., 2010) shows that income has a positive impact on approval of greater school choice and Merzyn and Ursprung (2005) found the lowest approval rates for freedom of choice in middle-income communities. On the other side, empirical evidence of a negative correlation between income and support for free school choice is available in slightly older United States studies (Lee and Croninger, 1994 and Sandy, 1992), and in Brunner and Sonstelie's paper (2003). All of the studies differed significantly in time and geography, however, and most of them also differed in respect of the specific research question and respondent population.

A crucial determinant of voting behavior (in a static model) is that public funding of private schooling would raise taxes. Hence, all those citizens would vote against the new "private school choice" model who rate the utility of state school attendance higher than that of private schooling, as would citizens whose utility gain from private schooling would be less than the utility lost from the tax hike. Voters who are currently sending their children to a private school or expect to do so in future would opt for the new model if the savings on private school fees were to be higher than the higher tax burden arising from the change of model. In the longer run (dynamic model), one factor to consider is that more freedom of school choice might result in more heterogeneity at private schools, because an increasing number of low-income individuals would be able to afford them. A possible consequence of the likely change in composition of the student population is that some people would oppose more school choice even if it were to benefit them financially; they are prepared to pay the price of limited access to private schools because they see additional benefits in the current composition of the student population at private schools that offset the additional costs.

Applying these predictions to the various socioeconomic groups, the hypothesis we set up for Switzerland is that members of lower-income groups would be more likely to opt for private school choice than respondents from the higher income classes. Middle and higher income groups not intending to send their children to private schools (and those with no children) will be wary of a loss of utility as a result of the higher tax burden. Some members of middle and higher income groups intending to send their children to a private school will be apprehensive about a change in the composition of the student population that would reduce their benefit more than the monetary advantage of this solution would raise their benefit.

With respect to the other sociodemographic criteria, we would expect individuals without children or with children who are no longer of school age to vote for the new model only if they rate the quality of public schooling to be so poor that expansion of the private school sector would be to the benefit of the whole of society, in fact to the extent of justifying the increased taxes. The latter is unlikely given the general belief in the quality of public schooling in Switzerland.

It is also reasonable to expect that groups who are strong advocators of "service public" would be likely to oppose the proposed reform. We would therefore expect to see differences by language/cultural region (Italian and French linguistic areas have demonstrated a stronger preference for the public sector than the German-speaking area in previous political proposals) and based on personal political convictions (left-right).

Public school choice

The decision-making scenario as regards choosing between public schools differs slightly, but not radically, from the private school scenario. In respect of expectations per income group, opposition to the proposed model would again be expected from higher income groups who can afford free school choice among public schools even now by moving to the desired residential area. Since quality education tends to correlate with higher rents and housing prices (see e.g. Brasington and Haurin, 2006, Dougherty et al., 2009, Fack et al., 2010, Machin and Salvanes, 2010), low-income individuals are restricted in their options. Following on from the arguments already outlined, another reason for higher-income individuals to oppose more choice is the expectation that a more socioeconomically mixed student population (whether in state schools or private schools) would reduce their utility or in fact reduce the quality of education, which in turn would impact negatively on real estate prices (see Brunner and Sonstelie, 2003).

Another expectation is that votes for free school choice between public schools will be low among inhabitants of rural areas where free school choice between public schools would be purely theoretical simply because the distance to the next school is too far.

We would expect significantly higher opposition to both proposals among teachers, more than 95% of whom work in state schools and as such are not exposed to any appreciable competition. This would also tally with the outcomes of the study of Sandy (1992).

In both proposals, voters' ratings of current school quality in the state school system are expected to display a negative correlation with approval of more school choice, i.e., the less satisfied citizens are with current school quality, the more likely they will be to vote in favor of the proposals to increase freedom of choice.

4. Data acquisition and database

Data acquisition

The data evaluated in this paper were generated by an opinion poll conducted by the gfs.bern research institute on behalf of the Centre for Research in Economics of Education at the University of Bern. The poll took place in 2007 using a webcat system. The study population comprised members of the Swiss voters aged 25 or over. Sample selection was by stratified randomization.⁴ 2,025 valid interviews were conducted in total, corresponding to a response rate of 28 percent.⁵

⁴ The sample was stratified by language region, i.e. German-speaking, French-speaking and Italian-speaking Switzerland. Households and target person in the household were selected by randomization. To obtain a representative picture of the total study population, randomization was restricted through the use of upper limits for gender, age (25-39, 40-64, 65 and over), level of education (no lower-secondary qualifications, lower-secondary education, upper-secondary vocational education, upper-secondary general education, tertiary-level B professional education and training, tertiary-level A education) and marital status (single, married, widowed, divorced). The background population for the sample was the Swiss telephone directory.

⁵ The gross sample contained 10,233 original addresses. Deduction of sample-neutral omissions (mistakes in original addresses and overrepresentation problems) resulted in a net sample of 7,214 people.

The poll elicited information on preferences for free school choice on the basis of two questions, thereby enabling nuanced analysis of two key dimensions of free school choice: freedom to choose between different state schools (public school choice), and public subsidies for private schools (private school choice).

The questions were worded thus:

- “What is your stance on calls for private schools to receive public funding?”
- “What is your stance on calls for parents to be able to choose freely between different public schools for their children?”

The questions were designed to resemble existing initiative texts in ongoing or past referenda on the issue of private school choice. At the same time, the amount of funding or type of individual funding (e.g., only selective, i.e. means-based funding) was left relatively open in order to incorporate the broadest possible spectrum of potential extension of options between private and public schools. The question about choice between state schools did not restrict choice to specific stages of education, as was done in some of the real-life political proposals, again in order to embrace a wide range of increased options.

Reply options per question were “very much in favor”, “somewhat in favor”, “somewhat against” and “very much against.” The primary dependent variables were drawn from the two questions. The binomial variables used here have a value of 1 if the reply categories “very much” or “somewhat in favor” were chosen.

Descriptive results

Figure 1 shows the proportion of respondents in favor of/opposed to free school choice. Freedom to choose between public and private schools, i.e. the call for state subsidies for private schools, is rejected by almost three-quarters of respondents. Only 27 percent said they were in favor of having the state subsidize private education.⁶ The approval rates for private school choice are highly congruent with the results of past referenda, which confirms the validity of this poll. In the canton of Ticino, 26 percent of participants voted for a similar proposal (2001), while the yes vote in the canton of Basel-Country (2008) was 21 percent.

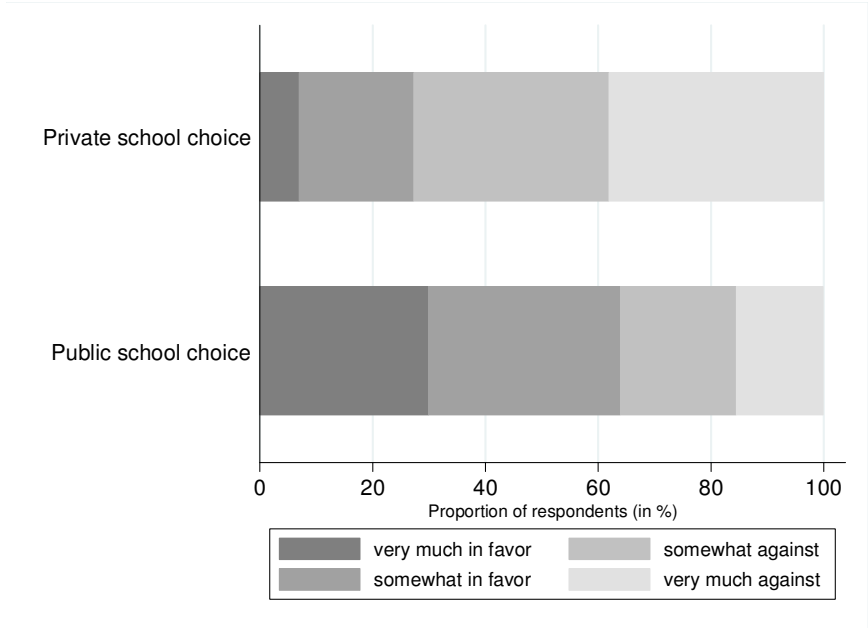
The situation presents itself very differently as regards whether there should be freedom to choose between state schools. This option attracted a large majority, with 64 percent saying they were “somewhat” or “very much” in favor.⁷

These results serve to back up the conjecture that members of the voters have a nuanced view of different forms of free school choice

⁶ Non-response analyses for the two questions analyzed here show no significant over- or underrepresentation for observable respondent characteristics.

⁷ The estimated approval rates may show some bias as, in real life, not all of those eligible to vote are equally likely to take part in referenda. To take this into account, weighted approval rates were calculated. The weightings were calculated on the basis of average election participation (VOX analyses, 2005-2007), with gender, age, education and language region factored in. The approval rates “corrected” for selectivity barely differ from their unweighted counterparts, with “yes” proportions of 28% and 64%, respectively. In other words, there are practically no differences between weighted and unweighted responses.

Figure 1: Approval rates for free school choice



5. Empirical calculations

Three different analyses are conducted in the following. A probit analysis is used to test affirmative responses (0/1) to each of the two questions, i.e. private school choice and public school choice. A multinomial probit is then used to include both questions in an analysis to test who rejected both proposals, who approved both and who approved one of the two proposals.⁸

Private school choice (public funding for private schools)

Table 1 gives the results of regression analysis on private school choice. Model 1 is the basic model. Model 2 has attitude variables added and Model 3 includes characteristics from external data.

The findings show that income has a significant impact on school choice preferences. Individuals with high and medium household incomes are less likely to be in favor of private school choice than low-

⁸ Our presentation of empirical results leaves out a number of independent variables in the models that have shown no significance in any specification. Rather surprisingly, one of those was subjective opinion of current school quality. This aspect is relevant only in particular specifications if it is analyzed in interaction with family status. Parents of school-age children (and people with no children) tend to be stronger in their support of public school choice if they are unhappy with public schools. Other variables such as size of household (number of adults and children) or cantonal differences in terms of female paid employment, percentage of baccalaureate school graduates and cantonal income are insignificant in all models. The percentage of Catholics in the residential population in 1900 (see hypothesis by West and Wössmann, 2010) correlates negatively in some models with support for state school choice (the authors wish to thank Mr. Silvan Müggler for processing these data).

income individuals.⁹ Rational choice also comes into play with respect to other individual characteristics. Parents who do not have school-age children (any longer) have a much more negative attitude toward private school choice than parents of school-age children. One explanation is that the former no longer stand to benefit from the proposed reform but do expect to be confronted with additional costs (higher taxes). The likely additional costs associated with state subsidies for private schooling are probably also why cantons with an already fairly high proportion of private school attendance tend to be negative in their response to a proposal of this kind. Conversely, people who seemed willing to spend more on education in respect of another question (whether they would be willing to agree to a cantonal proposal to raise spending on education in order to improve educational standards) tended to have a positive attitude toward subsidies for private schools.

The quality of the educational system can explain the higher approval rates among homeowners and residents of communities with a high proportion of non-Swiss inhabitants. The former probably expect housing prices to rise in their area as a result of more private schools, and the latter welcome the enhanced range of options in the hope of sidestepping public schools with a high proportion of foreign students (similar results and theories are expressed in Andersen, 2008 and Li, 2009). The higher disapproval rates in smaller centers of population may be attributable to the fact that voters in these communities do not expect options in their geographical vicinity to improve, but would still have to share in covering the increased cantonal spending on education.

Another observation is that qualified teachers have a distinctly higher aversion to private school choice. Their oppositional attitude is explained by the fact that these professions are affected in a very immediate way by changes in the school system. The fact that those employed in education tend to be disinclined to vote for competition-enhancing reforms has been observed in past studies (see Sandy, 1992 or Belfield, 2003).

Finally, evidence of the postulated correlation with language region is manifest in that inhabitants of Francophone Switzerland, with its different understanding of the role of the state ("service public") as compared with the German-speaking region (and, in this instance, Ticino as well), are very negative in their response to the proposal.

In contrast, political conviction seems to have no influence on support or opposition, i.e. there is no evidence of a classical left-right divide reflecting more or less competition.

⁹ The reference category is individuals with a monthly household income of CHF 3000-5000. The reason for not choosing the subset with a household income below CHF 3000 as the reference category is that very few families have that low an income: among people with school-age children, just 3.5 percent (14 respondents) had a household income below CHF 3000. The estimates for this category are therefore associated with greater measurement uncertainty.

Table 1: Private school choice

	M1	M2	M3
Female	0.034 (0.023)	0.031 (0.022)	0.03 (0.022)
Age 40-64	0.043 (0.025)	0.047 (0.025)	0.047 (0.025)
Age 65+	0.079 (0.047)	0.081 (0.046)	0.078 (0.046)
Household income below CHF 3000	-0.033 (0.037)	-0.031 (0.037)	-0.03 (0.038)
Household income of CHF 5000-7000	-0.075** (0.026)	-0.075** (0.026)	-0.076** (0.026)
Household income of CHF 7000-9000	-0.054 (0.039)	-0.057 (0.039)	-0.056 (0.038)
Household income above CHF 9000	-0.096** (0.034)	-0.099** (0.034)	-0.098** (0.033)
Teacher training qualification	-0.132** (0.049)	-0.135** (0.046)	-0.131** (0.046)
Upper-secondary education	-0.046 (0.030)	-0.045 (0.028)	-0.043 (0.027)
Lower-secondary education	-0.041 (0.028)	-0.038 (0.028)	-0.039 (0.027)
Children, school-age	0.079** (0.025)	0.075** (0.026)	0.076** (0.027)
No children	0.018 (0.028)	0.022 (0.029)	0.02 (0.030)
Homeowner	0.046+ (0.025)	0.049* (0.025)	0.048* (0.025)
Rural community	-0.047 (0.035)	-0.045 (0.036)	-0.051 (0.036)
Small/medium center of population	-0.032 (0.029)	-0.031 (0.029)	-0.055* (0.024)
French-speaking region	-0.120** (0.024)	-0.122** (0.023)	-0.123** (0.021)
Italian-speaking region	-0.035 (0.038)	-0.031 (0.039)	-0.013 (0.050)
Political center		0.013 (0.026)	0.015 (0.026)
Political right		0.026 (0.030)	0.032 (0.029)
For increased spending on education		0.055* (0.023)	0.057* (0.023)
Proportion of foreigners in place of residence			0.003* (0.001)
Proportion of (non-subsidized) private schools			-0.010** (0.003)
Pseudo R-squared	0.029	0.031	0.035
Model chi-square	406.191	637.541	1322.005
N	1637	1637	1637

Probit regression: marginal effects. Robust standard errors in parentheses. Cluster analysis for cantons. * p<0.05, ** p<0.01; Reference person is male, aged 25-39, has a household income of 3000-5000 CHF, tertiary education, children but not at school age, lives in a large city centre in German speaking Switzerland and is politically left oriented.

Public school choice (free choice between public schools)

The results for the factors modeling preferences for free school choice between public schools are presented in Table 2. Again, the findings show that household income is negatively correlated with support for the freedom to choose between public schools. People with a monthly income above CHF 7,000 tend to be against the proposed reform.¹⁰ The theoretical expectations are supported by the fact that high-income groups worry that freedom to choose between public schools would result in more heterogeneous student populations and hence contribute to a lowering of educational quality in their local school. Conversely, for disadvantaged sectors of the population with low incomes who have to contend with poorer-quality schools now, the prospective benefit of being able to attend high-quality schools in future is the overriding factor.

Structural conditions are another key predictor of school choice preferences. Approval rates in rural areas and small and medium-sized centers of population are much lower than in larger centers of population. This result confirms our expectations: since the freedom to choose between public schools would increase options no more than minimally, it is associated with a lesser practical benefit than in larger urban communities with multiple schools within short distances of each other. The higher preference for free school choice in large centers of population might additionally be reinforced by the fact that segregation is greater here than in small communities, with a correspondingly greater need for free school choice.

As with private school choice, individuals with a teaching qualification are much less likely to approve more choice than individuals with a different professional background.

People with/without school-age children do not differ significantly. This is not surprising given the cost-neutrality of this political decision (unlike the proposal for subsidies for private schools). The results do show, however, that respondents with non-school-age children are more likely to be opposed to school choice than people who have no children at all. This opposition can be interpreted as conservatism toward educational reform, in that individuals whose children have completed their schooling consider the system they know to be the right one for future generations as well.

Men are more inclined to oppose free school choice than are women. Language area-related differences are in evidence too: approval rates for free public school choice are significantly lower in the French- and German-speaking parts of Switzerland than in the Italian-speaking region.

As with the private school choice proposal, political convictions again play no role in predicting voting preferences on this issue.

¹⁰ The fact that people with household incomes below CHF 3000 do not vote for the free choice of public school model significantly more frequently than people in the CHF 3000 – 5000 income bracket is probably due to the small sample size of families in this lowest income category.

Table 2: Public school choice

	M1	M2	M3
Female	0.119** (0.029)	0.117** (0.028)	0.116** (0.028)
Age 40-64	-0.062* (0.029)	-0.059* (0.028)	-0.059* (0.028)
Age 65+	-0.052 (0.030)	-0.045 (0.030)	-0.047 (0.030)
Household income below CHF 3000	-0.077 (0.080)	-0.075 (0.079)	-0.074 (0.079)
Household income of CHF 5000-7000	-0.031 (0.034)	-0.028 (0.033)	-0.029 (0.033)
Household income of CHF 7000-9000	-0.059* (0.026)	-0.056* (0.026)	-0.056* (0.026)
Household income above CHF 9000	-0.063* (0.026)	-0.064* (0.025)	-0.064* (0.026)
Teacher training qualification	-0.206** (0.069)	-0.211** (0.070)	-0.207** (0.072)
Upper-secondary education	0.013 (0.034)	0.018 (0.034)	0.019 (0.034)
Lower-secondary education	-0.034 (0.040)	-0.028 (0.040)	-0.029 (0.041)
Children, school-age	0.040 (0.023)	0.037 (0.025)	0.037 (0.025)
No children	0.071** (0.027)	0.071** (0.026)	0.070** (0.026)
Homeowner	0.002 (0.025)	0.007 (0.028)	0.007 (0.027)
Rural community	-0.065** (0.024)	-0.060* (0.024)	-0.059 (0.032)
Small/medium center of population	-0.071** (0.025)	-0.068** (0.024)	-0.078** (0.028)
French-speaking region	-0.033 (0.023)	-0.038 (0.024)	-0.041 (0.024)
Italian-speaking region	0.142** (0.024)	0.139** (0.023)	0.144** (0.024)
Political center		-0.04 (0.035)	-0.039 (0.035)
Political right		0.000 (0.047)	0.003 (0.048)
For increased spending on education		0.045 (0.027)	0.046 (0.027)
Proportion of foreigners in place of residence			0.002 (0.002)
Proportion of (non-subsidized) private schools			-0.004 (0.003)
Pseudo R-squared	0.030	0.032	0.033
Model chi-square	514.363	1439.711	1771.575
N	1612	1612	1612

Probit regression: marginal effects. Robust standard errors in parentheses. Cluster analysis for cantons.
 * p<0.05, ** p<0.01; Reference person is male, aged 25-39, has a household income of 3000-5000 CHF, tertiary education, children but not at school age, lives in a large city centre in German speaking Switzerland and is politically left oriented.

Multinomial logistic model: Private school choice versus public school choice

In the final empirical analysis, we combine responses to the two voting proposals and analyze which factors are predictive of whether people will welcome neither proposal, both proposals, or only one of the two.

The following multinomial logistic model is estimated for the purpose. The probability of approval P_i of a voter i is described as:

$$P_i (Y_i = j | X_i = x_i) = \frac{\exp (x_i' \beta_j)}{\sum_{r=0}^3 \exp (x_i' \beta_r)} \quad j = 0, \dots, 3$$

Voters who would oppose both proposals are the reference group. The results of multinomial regression are presented in Table 3 and consolidate the existing findings to a large extent.

The results show that individuals with a high household income are significantly more likely to oppose any form of school choice than individuals with a low income. There is no evidence of a specific preference for either proposal. Similarly, respondents with a background in teaching were significantly more likely to oppose both school choice models than non-teachers. Respondents living in French-speaking Switzerland or in small centers of population were equally firmly in the opposition camp, without differentiating between the two proposals. In contrast, people with no children (yet) were in favor, in particular compared with the reference population of individuals whose children are no longer of school age. Women tend to favor reform more than men, but differentiate between public school choice (which they strongly support) and private school choice.

6. Conclusions

On the basis of survey data, differentiated data have been obtained for the first time on attitudes among the voters to two different models for more freedom to choose between schools. The results show, firstly, that voters differentiate clearly between different forms of school choice. While the majority (74%) opposes greater state funding of private schools (similarly to education vouchers), the aim of which would be to enable more freedom of choice between state and private schools, a clear majority (64%) said they were in favor of freedom to choose between public schools.

Secondly, the results show that individuals form their preferences in a rational manner to maximize their own personal advantage. People who see greater personal benefit in more school choice will be more likely to support both proposals and vice versa. Hence, high-income individuals who can avail of free school choice now by means of private school attendance or relocation to another area are overwhelmingly opposed, while low-income individuals are more likely to support the proposals. Benefit-maximizing behavior also applies with regard to family situation (school-age children) and place of residence. Rural inhabitants unlikely to benefit meaningfully from either proposal are more negative in their attitude to both proposals. Individuals with a teaching qualification significantly more frequently oppose any increase in freedom of choice.

Table 3: Private school choice versus public school choice

	For private school choice only	For public school choice only	For both
Female	-0.107 (0.204)	0.447** (0.149)	0.543** (0.162)
Age 40-64	0.614** (0.234)	-0.245 (0.157)	-0.004 (0.165)
Age 65+	0.993** (0.260)	-0.199 (0.154)	0.043 (0.203)
Household income below CHF 3000	-0.411 (0.556)	-0.444 (0.333)	-0.363 (0.283)
Household income of CHF 5000-7000	-0.655* (0.319)	-0.131 (0.178)	-0.407* (0.203)
Household income of CHF 7000-9000	-0.423 (0.480)	-0.253 (0.173)	-0.425* (0.204)
Household income above CHF 9000	-0.638 (0.393)	-0.225 (0.149)	-0.651** (0.165)
Teacher training qualification	-0.927 (0.779)	-1.001** (0.369)	-1.331** (0.391)
Upper-secondary education	0.198 (0.268)	0.256 (0.189)	-0.13 (0.154)
Lower-secondary education	-0.469 (0.360)	-0.134 (0.241)	-0.249 (0.183)
Children, school-age	0.614 (0.327)	0.187 (0.143)	0.335* (0.153)
No children	0.753* (0.332)	0.451** (0.161)	0.304* (0.147)
Homeowner	0.181 (0.362)	-0.026 (0.141)	0.333* (0.150)
Rural community	-0.07 (0.312)	-0.176 (0.172)	-0.442 (0.228)
Small/medium center of population	-0.069 (0.263)	-0.303 (0.159)	-0.521** (0.156)
French-speaking region	-0.136 (0.297)	0.085 (0.140)	-0.825** (0.163)
Italian-speaking region	0.71 (0.510)	0.909** (0.158)	0.461 (0.314)
Political center	0.486 (0.338)	-0.098 (0.159)	-0.081 (0.199)
Political right	0.207 (0.338)	-0.002 (0.235)	0.11 (0.203)
For increased spending on education	0.401 (0.218)	0.165 (0.131)	0.351 (0.193)
Proportion of foreigners in place of residence	0.025* (0.012)	0.009 (0.008)	0.017* (0.007)
Proportion of (non-subsidized) private schools	-0.06 (0.056)	-0.022 (0.020)	-0.056* (0.025)
Constant	-3.157** (0.602)	0.103 (0.403)	-0.313 (0.391)
Pseudo R-squared		0.040	
N		1554	

Multinomial logistic regression: cluster analysis for cantons. Robust standard errors in parentheses.

* $p < 0.05$, ** $p < 0.01$;

Distribution (n=1554): only supports private school choice (n=83; 5%), only supports public school choice (n=630; 41%), supports both (n=347; 22%), opposes both (n=494; 32%).

Reference person is male, aged 25-39, has a household income of 3000-5000 CHF, tertiary education, children but not at school age, lives in a large city centre in German speaking Switzerland and is politically left oriented.

Thirdly, the findings suggest that historical and cultural factors co-determine support for or opposition to more school choice. There are marked differences between the language regions which can be attributed to differences in the perceived role of the state. However, individual political convictions (left-right divide), level of education, and perceived quality of the public school system have no major impact on preference.

It is worth highlighting that the results need to be interpreted against the background of the current Swiss educational system, in which the prevalence of private schools is extremely low, the majority of the population is satisfied with the quality of the public educational system, but there is no freedom to choose between state schools in almost any canton (at least as far as the compulsory stage of schooling is concerned). Hence, the empirical data are not directly generalizable to other countries (or periods in time) but at the same time are interesting as they add evidence from a country that differs greatly in respect to the educational system (state and private schools and their relative status and quality), population socio-demographics, and cultural preferences from the countries of which evidence was available so far. Conflicting empirical results about the factors influencing the support for or the opposition to school choice should therefore be interpreted as evidence that the starting position matters at least as much as generalisable differences in preferences between different socio-demographic groups.

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Appendix

Table I: Descriptive representation of variables (frequencies)

Variable	mean	Sd
Preference for private school choice	0.27	0.45
Preference for public school choice	0.64	0.48
Gender (female)	0.50	0.50
Age		
Age 25-39	0.26	0.44
Age 40-64	0.49	0.50
Age 65+	0.25	0.43
Household income		
Below CHF 3000	0.12	0.33
CHF 3000-5000	0.26	0.44
CHF 5000-7000	0.27	0.44
CHF 7000-9000	0.19	0.40
Above CHF 9000	0.16	0.37
Educational attainment		
Lower-secondary education	0.24	0.43
Upper-secondary education	0.51	0.50
Tertiary education (but not teacher training)	0.22	0.41
Teacher training qualification	0.03	0.18
Children		
No children	0.27	0.44
Child(ren) at school	0.24	0.43
Child(ren), but not at school	0.48	0.50
Homeowner	0.53	0.50
Size of center of population		
Rural community	0.33	0.47
Small/medium center of population	0.34	0.47
Large center of population	0.33	0.47
Language region		
German	0.69	0.46
French	0.25	0.43
Italian	0.06	0.24
Political affiliation		
Left	0.17	0.38
Center	0.49	0.50
Right	0.15	0.35
Supports higher spending on education	0.65	0.48
Proportion of foreigners in place of residence	19.70	10.63
Proportion of (non-subsidized) private schools	3.55	3.41

Table II: Bivariate statistics: support for free school choice (in %)

	For private school choice	For public school choice
<i>Gender</i>		
Male	25.26	59.37
Female	29.53	68.66
<i>Age</i>		
Age 25-39	23.69	71.06
Age 40-64	27.74	61.05
Age 65+	30.46	62.39
<i>Household income</i>		
Below CHF 3000	28.50	62.31
CHF 3000-5000	30.93	67.93
CHF 5000-7000	25.93	63.27
CHF 7000-9000	28.40	61.75
Above CHF 9000	24.91	61.37
<i>Educational attainment</i>		
Lower-secondary education	26.08	60.67
Upper-secondary education	27.53	65.98
Tertiary education (but not teacher training)	29.93	65.24
Teaching training qualification	16.67	49.23
<i>Children</i>		
No children	25.29	67.65
Child(ren) at school	31.04	66.82
Child(ren), but not at school	26.23	60.39
<i>House ownership</i>		
Homeowner	28.89	62.27
Tenant	25.31	65.94
<i>Size of center of population</i>		
Rural community	27.04	61.64
Small/medium center of population	26.64	62.79
Large center of population	28.44	67.62
<i>Language region</i>		
German-speaking region	30.32	64.37
French-speaking region	18.63	60.76
Italian-speaking region	29.73	73.45