Are Immigrant-Origin Candidates Penalized Due to Ingroup Favoritism or Outgroup Hostility?

Online appendix
A Population with a Migration Background

Table 1: Origin of naturalized Swiss citizens, 1991-2015

| Origin                                | n     | %    |
|---------------------------------------|-------|------|
| Former Yugoslavia                     | 204,383 | 26.3 |
| Italy                                 | 117,821 | 15.2 |
| Turkey                                | 57,243  | 7.4  |
| Germany                               | 48,636  | 6.3  |
| Portugal                              | 35,782  | 4.6  |
| France                                | 33,146  | 4.3  |
| Spain                                 | 21,982  | 2.8  |
| Albania                               | 19,404  | 2.5  |
| Other Western European countries      | 27,603  | 3.6  |
| Eastern European countries            | 34,290  | 4.4  |
| Other Southern European countries     | 3,916   | 0.5  |
| Sri Lanka and India                   | 29,788  | 3.8  |
| Other Eastern Asian countries         | 32,779  | 4.2  |
| Maghreb                               | 19,969  | 2.6  |
| Other African countries               | 28,613  | 3.7  |
| Central and Southern American countries | 28,025 | 3.6  |
| USA, Canada, Australia and New Zealand | 10,490 | 1.4  |
| Central Asian countries               | 9,929   | 1.3  |
| Middle Eastern countries              | 9,535   | 1.2  |
| Stateless/others                      | 3,319   | 0.4  |
| All                                   | 776,653 | 100.0 |

Note: Own calculations based on data from the Swiss Federal Statistical Office. Figures capture the nationality of the persons before naturalization.

B Data and Sample

B.1 Description of Data Collection

We collected data on negative and positive preference votes from cantonal and municipal offices in a time consuming procedure. The data on which we rely are of different forms, depending on the canton. We can group cantons in four broad categories according to the data they provided:

(1) Four cantons (Geneva, Neuchatel, Ticino, and Vaud) aggregated from the raw data candidate results about negative preference votes, internal positive preference votes (“cumulation”) and external positive
preference votes ("panachage") in each municipality. For these cantons, we could directly use the data for our analysis. In all the other cantons, we collected raw data that resembled a copy of modified ballots that were cast by the voters. In other words, our data shows for each modified ballot which candidates have been crossed off, cumulated, or "panachaged" by the voter. These data had to be extracted from the electoral software.

(2) In the cantons Basel City, Grisons, and Lucerne raw data on the electoral results are stored at the cantonal offices. These cantons were able to either provide us this data for all municipalities (Basel City and Grisons) or for a 30 percent random sample of municipalities (Lucerne). (Please note that data extraction for the cantonal administrations is time-consuming because they have to extract the data for each municipality separately.)

(3) In the cantons Basel Country, Berne, and Valais we requested data from municipal administrations because municipalities have the authority to provide these data. In these three cantons we requested data in 30 percent of the municipalities (in the canton of Valais we could only request data in German-speaking municipalities due to data availability issues). Hence, depending on the return, in these cantons the final sample is considerably smaller than 30 percent.

(4) In another set of cantons (Schwyz, Solothurn, St. Gallen, Thurgau, and Zurich) data had to be extracted as individual files containing each 50 copies of modified ballots. In the cantons St. Gallen and Thurgau, we extracted the data from 30 percent of (randomly drawn) municipalities at the cantonal offices on the spot. Zurich and Schwyz provided us these data for all the municipalities.\(^1\) Solothurn allowed us to extract data from 50 percent of the municipalities.

Finally, we could obtain the data only from a small number of municipalities from the canton Jura because there were significant differences in data formats between municipalities.

For the data extraction in the cantons Basel City, Basel Country, Berne, Grisons, Lucerne, and Valais we collaborated with the software company SESAM that provided us with written instructions and supported cantons and municipalities in case of data extraction problems.

Furthermore, in most cantons we had to exclude municipalities with a very small number of inhabitants (less than 200) in order to guarantee the secrecy of the ballot. Moreover, we had to exclude the

\(^1\) However, the canton of Schwyz has insisted that they randomly draw every second modified ballot from their software. By consequence, they provided data for all the municipalities, but including only half of the modified ballots for each of them. Since we compare negative and positive preference votes within party lists, this limitation should not bias our results.
cantons of Thurgau in the models that include variables at the municipal level because of missing data for the variable measuring the share of naturalized citizens. This variable is built by aggregating naturalizations in the municipalities between 1991 and 2015. Because municipal boundaries in the canton of Thurgau were redrawn in the 1990s, we were unable to match the data on naturalizations with the municipalities from the year 2015.

Aggregating the number of times a candidate has been crossed off on the modified ballots provides us with the measure to construct the indicator of negative preference votes. Likewise, we aggregated the number of times candidates have been added to build the indicator of positive preference votes.
### B.2 Sample

Table 2: Overview municipalities in our sample by canton

| Canton          | N   | n   | pct  | Remarks                                                                 |
|-----------------|-----|-----|------|-------------------------------------------------------------------------|
| Zurich          | 169 | 160 | 94.67| Full sample of municipalities*                                          |
| Berne           | 356 | 27  | 7.58 | Data request sent to 30% of municipalities                              |
| Lucerne         | 83  | 23  | 27.71| Data received from 30% of municipalities**                              |
| Uri             | 20  | 0   | 0.00 | Excluded, majority voting system                                        |
| Schwyz          | 30  | 27  | 90.00| Full sample of municipalities (but only every second modified ballot)    |
| Obwalden        | 7   | 0   | 0.00 | Excluded, majority voting system                                        |
| Nidwalden       | 11  | 0   | 0.00 | Excluded, majority voting system                                        |
| Glarus          | 3   | 0   | 0.00 | Excluded, majority voting system                                        |
| Zug             | 11  | 11  | 100.00| Full sample of municipalities                                            |
| Fribourg        | 163 | 159 | 97.55| Full sample of municipalities                                            |
| Solothurn       | 109 | 56  | 51.38| Data received from 50% of municipalities                                 |
| Basel City      | 3   | 3   | 100.00| Full sample                                                              |
| Basel Country   | 86  | 6   | 6.98 | Data request sent to 30% of municipalities                               |
| Schaffhausen    | 26  | 26  | 100.00| Full sample                                                              |
| Appenzell AR    | 20  | 0   | 0.00 | Excluded, majority voting system                                        |
| Appenzell IR    | 6   | 0   | 0.00 | Excluded, majority voting system                                        |
| St. Gallen      | 77  | 22  | 28.57| Data received from 30% of municipalities                                 |
| Grisons         | 125 | 106 | 84.80| Full sample of municipalities                                            |
| Aargau          | 213 | 0   | 0.00 | Excluded, data unavailable                                               |
| Thurgau         | 80  | 22  | 27.50| Data received from 30% of municipalities                                 |
| Ticino          | 135 | 127 | 94.07| Full sample of municipalities                                            |
| Vaud            | 318 | 303 | 95.28| Full sample of municipalities                                            |
| Valais          | 134 | 9   | 6.72 | Data request sent to 30% of German-speaking municip.                    |
| Neuchatel       | 37  | 31  | 83.78| Full sample of municipalities                                            |
| Geneva          | 45  | 41  | 91.11| Full sample of municipalities                                            |
| Jura            | 57  | 9   | 15.79| Data received from 9 municipalities                                     |

Note: Number of municipalities in canton overall (N), number of municipalities from canton in sample (n), percentage of included municipalities (pct) and remarks on the sample. *Municipalities with less than 200 inhabitants are excluded in most of the cantons for reasons of election secrecy. Therefore, even when indicated as a canton that provided a “full sample,” these municipalities are usually excluded. **Again, we generally excluded municipalities where less than 200 persons live. This is why the sample is slightly smaller than 30 percent in cantons where we received data from 30 percent of the municipalities.
Figure 1: Conservative voting in direct democratic ballots, municipalities included/excluded in analysis

Note: The index of conservative voting is built based on the voter support for a series of direct democratic votes on the topic of migration and by using factor analysis. The variable ranges from -2.76 (most liberal) to 3.51 (most conservative). The box plot displays the median, the first and third quartiles (the 25th and 75th percentiles), and the dots correspond to the scores of individual municipalities. More description on the index is provided in Section B.3.3 of the online appendix

Table 3: Modified and unmodified ballots, by ideological position of party

| Party ideology | Modified ballots (n) | Unmodified ballots (n) | Percentage modified ballots (%) |
|----------------|----------------------|------------------------|--------------------------------|
| Right          | 331349               | 327571                 | 50.3                           |
| Center         | 155064               | 113256                 | 57.8                           |
| Left           | 193297               | 200883                 | 49.0                           |
| Other          | 7554                 | 10202                  | 42.5                           |

Note: Valid cast modified and unmodified ballots in our data (1,168 municipalities).
Table 4: Modified and unmodified ballots, by party

| Party          | Modified ballots (n) | Unmodified ballots (n) | Percentage modified ballots (%) |
|----------------|----------------------|------------------------|-------------------------------|
| FDP/PLR (PRD)  | 133881               | 105828                 | 55.9                          |
| CVP/PDC        | 84471                | 47069                  | 64.2                          |
| SP/PS          | 143350               | 142046                 | 50.2                          |
| SVP/UDC        | 179505               | 193845                 | 48.1                          |
| EVP/PEV        | 10587                | 11197                  | 48.6                          |
| CSP/PCS        | 840                  | 1027                   | 45.0                          |
| PdA/PST        | 2269                 | 3630                   | 38.5                          |
| GPS/PES        | 42541                | 46000                  | 48.0                          |
| SD/DS          | 461                  | 780                    | 37.1                          |
| EDU/UDF        | 6205                 | 8710                   | 41.6                          |
| Lega           | 10042                | 14290                  | 41.3                          |
| Sol.           | 1524                 | 4058                   | 27.3                          |
| GLP/PVL        | 34368                | 34685                  | 49.8                          |
| BDP/PBD        | 24798                | 19278                  | 56.3                          |
| MCR            | 574                  | 2760                   | 17.2                          |
| Other          | 11848                | 16709                  | 41.5                          |

Note: Valid cast modified and unmodified ballots in our data (1,168 municipalities). The party abbreviations stand for the following Swiss parties. FDP: FDP. The Liberals; CVP: Christian Democrats; SP: Social Democratic Party; EVP: Evangelical People’s Party; CSP: Christian Social Party; PdA: Swiss Party of Labour; GPS: Green Party; SD: Swiss Democrats; EDU: Federal Democratic Union; Lega: The Ticino League; Sol.: solidaritéS; GLP: Green Liberal Party; BDP: Conservative Democratic Party; MCR: Mouvement citoyens genevois.

B.3 Descriptive Statistics

Table 5: Descriptive statistics of the dependent variables

|                      | Min  | Max  | Mean | SD   |
|----------------------|------|------|------|------|
| Negative preference votes | 0.00 | 2.33 | 1.01 | 0.27 |
| Positive preference votes  | 0.00 | 11.79| 0.98 | 1.08 |
| Cumulation             | 0.00 | 13.04| 0.99 | 1.18 |
| Panachage              | 0.00 | 12.64| 0.98 | 1.12 |
Table 6: Descriptive statistics of the variables at the level of candidates and party lists

| Variable                        | Min   | Max   | Mean  | SD   |
|---------------------------------|-------|-------|-------|------|
| Relative list ranking           | 0.03  | 1.00  | 0.55  | 0.29 |
| Age                             | 1.00  | 3.00  | 1.93  | 0.82 |
| Number of list positions        | 1.00  | 35.00 | 19.42 | 11.87|
| Non-Swiss name                  | 0.00  | 1.00  | 0.12  | 0.33 |
| Incumbent                       | 0.00  | 1.00  | 0.04  | 0.20 |
| Pre-cumulated                   | 0.00  | 1.00  | 0.08  | 0.26 |
| Male                            | 0.00  | 1.00  | 0.65  | 0.48 |
| Party position                  | 1.00  | 4.00  | 2.08  | 0.91 |

Table 7: Descriptive statistics of the municipal-level variables

| Variable                        | Min   | Max   | Mean  | SD   |
|---------------------------------|-------|-------|-------|------|
| Proportion of naturalized pop    | 0.00  | 0.23  | 0.07  | 0.04 |
| Conservative attitudes          | -2.76 | 3.51  | -0.01 | 0.98 |

B.3.1 Dependent Variables

Negative preference votes The variable measures how many times a candidate is crossed off in relation to the average number of times candidates on the party list are crossed off. The variable is measured as follows:

\[
\text{Negative preference votes} = \frac{\text{Number of cross-offs of candidate}_{ij} \text{ on party list}_{j}}{\text{Mean number of cross-offs of candidates on party list}_{j}}
\]

Source: Own data collection upon cantonal and municipal offices.

Positive preference votes This is a relative measure of the number of positive preference votes (i.e. the sum of cumulation and panachage). To calculate the positive preference votes, we proceed as follows:

\[
\text{Positive preference votes} = \frac{\text{Number of times candidate}_{ij} \text{ on party list}_{j} \text{ is added}}{\text{Mean number of times candidates from party list}_{j} \text{ are added}}
\]

Source: Own data collection upon cantonal and municipal offices.

Votes from “panachage” This relative measure is calculated as follows:

\[
\text{Panachage} = \frac{\text{Number of times candidate}_{ij} \text{ is added on other lists than party list}_{j}}{\text{Mean number of times candidates from party list}_{j} \text{ are added on other lists than party list}_{j}}
\]
Votes from “cumulation” This is a relative measure that is built via the following calculation:

\[
\text{Cumulation} = \frac{\text{Number of times candidate}_{ij} \text{ is added on party list}_{j}}{\text{Mean number of times candidates from party list}_{j} \text{ are added on party list}_{j}}
\]

Source: Own data collection upon cantonal and municipal offices.

B.3.2 Independent Variables: Level of Candidates and Party Lists

Non-Swiss name This variable measures the origin of a candidate’s name. It is a dummy variable that splits names into either (0) Swiss or (1) non-Swiss. We have coded candidate names using the online Register of Swiss Surnames (RSS). In the RSS, all citizens of a Swiss municipality are registered, from before 1800 until 1962. We classify candidates with a name that was registered before 1940 as “Swiss,” and names registered after (or in) the year 1940 and those that are not listed in the RSS (i.e. the name has not been registered before 1962) as “non-Swiss.” Source: Own coding based on RSS.

Non-Swiss name: Western and non-Western This refined variable of candidate names captures (0) Swiss names, (1) non-Swiss names from a Western country, and (2) non-Swiss names from a non-Western country. Source: Own coding based on the online databases RSS, “forebears” and “worldnames.”

Non-Swiss name: language region This is a categorical variable distinguishing between: (0) Swiss name, (1) non-Swiss name from a German-speaking country (mainly names from Germany, Austria, Lichtenstein, and Luxembourg), (2) non-Swiss name from a French-speaking country (mainly names from France), (3) non-Swiss name from Italy, (4) non-Swiss name from other language regions. Source: Own coding based on the online databases RSS, “forebears” and “worldnames.”

Relative list ranking This variable is a proportion measuring the list ranking of the candidate relative to the number of candidates on the party list. Formula used:

\[
\text{Relative list ranking} = \frac{\text{List ranking candidate}_{ij} \text{ on party list}_{j}}{\text{Total number of candidates on party list}_{j}}
\]

For pre-cumulated candidates calculations are based on the mean of the candidate’s two list rankings. Source: Swiss Federal Statistical Office, own calculations.
**Incumbent** Status of candidate at the time of election as either (0) non-incumbent if the candidate does not have a seat in the Swiss National Council or (1) incumbent if the candidate has a seat in the Swiss National Council. *Source:* Swiss Federal Statistical Office.

**Pre-cumulated** indicates whether a candidate is listed only one time (0) or twice on the pre-printed party list (1). *Source:* Swiss Federal Statistical Office.

**Male** The variable is coded as (0) for female and (1) for male candidates. *Source:* Swiss Federal Statistical Office.

**Age** Measures the age of the candidate at the time of the election. The variable splits candidates into three categories based on their age: (1) 18-30 years, (2) 31-50 years, and (3) older than 50 years. *Source:* Swiss Federal Statistical Office, own calculations based on year of birth.

**Ideological position of party ("Party position")** The variable indicates the positions of the candidate’s party on the left-right axis. Parties are coded as follows: (1) Right: Swiss People’s Party, FDP, The Liberals, Swiss Democrats, Federal Democratic Union of Switzerland; (2) Center: Green Liberal Party, Conservative Democratic Party, Christian Democrats, Evangelical People’s Party; (3) Left: Social Democratic Party, Green Party, Swiss Party of Labour; (4) other parties that are not classifiable along the left-right ideological dimension (e.g., Pirate Party Switzerland). We have also assigned smaller parties based on the literature as far as possible. *Source:* Own coding based on the literature.

**Number of candidates on party list** This variable indicates how many candidates ran on the candidate’s party list. *Source:* Swiss Federal Statistical Office, own calculations.

**Profession** The variable classifies candidates’ professions into three categories: (0) high-skilled (e.g., managers, doctors), (1) medium-skilled (e.g., teachers, social workers, journalists), and (2) low-skilled (e.g., construction workers, bakers). *Source:* Own coding of data from the Swiss Federal Statistical Office.

### B.3.3 Independent Variables: Level of Municipalities and Cantons

**Conservative attitudes** An indicator generated via factor analysis on the basis of several variables measuring the voting behavior in direct-democratic votes. We consider five direct democratic ballots: (1) federal popular initiative “against mass immigration” (accepted 9.2.2014), (2) federal popular initiative “against the construction of minarets” (accepted 29.11.2009), (3) federal popular initiative “on the expulsion of foreign criminals” (accepted 28.11.2010), (4) federal popular initiative “for demo-
cratic naturalizations” (rejected 1.6.2008), and (5) federal popular initiative “for the regulation of im-
migration” (rejected 24.9.2000). *Source:* Swiss Federal Statistical Office.

**Proportion of naturalized population** This is the share of naturalizations in relation to the population size of a municipality. It is calculated as follows:

\[
\frac{\text{Number of naturalized citizens in the municipality from 1991 until 2015}}{\text{Permanent residents in municipality 1.1.2015}}
\]

*Source:* Swiss Federal Statistical Office.

**Catholic** This is a dummy variable measuring whether a majority of the population in a municipality is (0) protestant or (1) catholic. *Source:* Swiss Federal Statistical Office.

**Language region of municipality** The variable indicates the main language spoken in the municipality in the Swiss multi-lingual context. It is coded as follows: (1) German, (2) French, (3) Italian, (4) Romantsch. The classification is based on the census of the year 2000. *Source:* Swiss Federal Statistical Office.

**Urbanization** The measure for urbanization is based on the degree of urbanization (DEGURBA), which classifies municipalities into three categories: (1) densely populated area, (2) intermediate density area, and (3) thinly populated area. For the classification see: [http://ec.europa.eu/eurostat/ramon/miscellaneous/index.cfm?TargetUrl=DSP_DEGURBA](http://ec.europa.eu/eurostat/ramon/miscellaneous/index.cfm?TargetUrl=DSP_DEGURBA). *Source:* Swiss Federal Statistical Office.

**Social assistance rate** The share among the municipal population that relies on social assistance.

**Crime rate** The share of crime offenses in relation to the total population.
## Supplementary Tables and Figures for Main Analyses

Table 8: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and negative preference votes

|                     | Model 1      | Model 2      | Model 3      |
|---------------------|--------------|--------------|--------------|
| Intercept           | 1.00***      | 1.17***      | 1.17***      |
|                     | (0.05)       | (0.04)       | (0.04)       |
| Non-Swiss name      | 0.06***      | 0.05***      | 0.11***      |
|                     | (0.02)       | (0.01)       | (0.03)       |
| Relative list ranking| 0.40***    | 0.40***      | 0.40***      |
|                     | (0.02)       | (0.02)       | (0.02)       |
| Incumbent           | -0.46***     | -0.46***     |              |
|                     | (0.02)       | (0.02)       |              |
| Pre-cumulated       | 0.64***      | 0.64***      |              |
|                     | (0.04)       | (0.04)       |              |
| Male                | -0.01        | -0.00        |              |
|                     | (0.01)       | (0.01)       |              |
| Age: 30-50 years    | -0.05**      | -0.05**      |              |
|                     | (0.02)       | (0.02)       |              |
| Age: 50+ years      | -0.01        | -0.01        |              |
|                     | (0.02)       | (0.02)       |              |
| Party position = center | -0.01      | -0.00        |              |
|                     | (0.23)       | (0.23)       |              |
| Party position = left | 0.02        | 0.02         |              |
|                     | (0.23)       | (0.23)       |              |
| Non-Swiss name*Party position = center |              | -0.07*       |              |
|                     |              | (0.04)       |              |
| Non-Swiss name*Party position = left |              | -0.09*       |              |
|                     |              | (0.03)       |              |
| R²                  | 0.00         | 0.39         | 0.39         |
| Adj. R²             | -0.12        | 0.32         | 0.32         |
| N candidates        | 3236         | 3236         | 3236         |
| RMSE                | 0.29         | 0.23         | 0.23         |

Note: Coefficients and standard errors (in parentheses) from linear models. Fixed effects for cantons and party lists are included.
Table 9: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and positive preference votes

|                              | Model 1  | Model 2  | Model 3  |
|------------------------------|----------|----------|----------|
| Intercept                    | 1.00***  | 0.17     | 0.17     |
|                              | (0.19)   | (0.17)   | (0.17)   |
| Non-Swiss name               | -0.17*   | -0.13*   | -0.31**  |
|                              | (0.07)   | (0.05)   | (0.11)   |
| Relative list ranking        | -1.16*** | -1.16*** |          |
|                              | (0.06)   | (0.06)   |          |
| Incumbent                    | 2.41***  | 2.41***  |          |
|                              | (0.09)   | (0.09)   |          |
| Pre-cumulated                | 0.62***  | 0.63***  |          |
|                              | (0.14)   | (0.14)   |          |
| Male                         | -0.03    | -0.03    |          |
|                              | (0.04)   | (0.04)   |          |
| Age: 30-50 years             | 0.21***  | 0.21***  |          |
|                              | (0.06)   | (0.06)   |          |
| Age: 50+ years               | 0.17*    | 0.17*    |          |
|                              | (0.07)   | (0.07)   |          |
| Party position = center      | -0.03    | -0.03    |          |
|                              | (0.91)   | (0.91)   |          |
| Party position = left        | -0.12    | -0.12    |          |
|                              | (0.91)   | (0.91)   |          |
| Non-Swiss name*Party position = center | 0.16 |          |
|                              | (0.14)   |          |          |
| Non-Swiss name*Party position = left | 0.29* |          |
|                              | (0.14)   |          |          |

|               | Model 1 | Model 2 | Model 3 |
|---------------|---------|---------|---------|
| R²            | 0.00    | 0.38    | 0.38    |
| Adj. R²       | -0.12   | 0.30    | 0.30    |
| Num. obs.     | 3283    | 3283    | 3283    |
| RMSE          | 1.14    | 0.91    | 0.91    |

Note: Coefficients and standard errors (in parentheses) from linear models. Fixed effects for cantons and party lists are included.
Table 10: Predicted negative preference votes by candidate name (Swiss, non-Swiss)

| Candidate name | Mean  | SE    | lower 95% CI | upper 95% CI |
|----------------|-------|-------|--------------|--------------|
| Swiss name     | 0.995 | 0.004 | 0.987        | 1.004        |
| Non-Swiss name | 1.031 | 0.012 | 1.009        | 1.054        |

Note: Predicted values are derived from a linear random intercept model. Control variables and fixed effects for cantons are included.

Figure 2: Predicted values of negative and positive preference votes by candidate name (Swiss, non-Swiss)

Note: Mean predicted values surrounded by 95% confidence intervals. Predicted values are derived from linear random intercept models. Control variables and fixed effects for cantons are included.
Table 11: Estimating the relationship between candidate name (different outgroups) and negative preference votes

|                                | Model 1 | Model 2 |
|--------------------------------|---------|---------|
| Intercept                      | 0.89*** | 0.89*** |
|                                | (0.06)  | (0.06)  |
| Non-Swiss name, Western        | 0.03*   |         |
|                                | (0.01)  |         |
| Non-Swiss name, Non-Western    | 0.05*   |         |
|                                | (0.02)  |         |
| Relative list ranking          | 0.39*** | 0.39*** |
|                                | (0.02)  | (0.02)  |
| Incumbent                      | −0.38***| −0.38***|
|                                | (0.02)  | (0.02)  |
| Pre-cumulated                  | 0.11*** | 0.11*** |
|                                | (0.02)  | (0.02)  |
| Male                           | −0.00   | −0.00   |
|                                | (0.01)  | (0.01)  |
| Age: 31-50 years               | −0.00   | −0.00   |
|                                | (0.01)  | (0.01)  |
| Age 50+ years                  | 0.02    | 0.02    |
|                                | (0.01)  | (0.01)  |
| Party position = center        | −0.00   | −0.00   |
|                                | (0.01)  | (0.01)  |
| Party position = left          | 0.00    | 0.00    |
|                                | (0.01)  | (0.01)  |
| Number of candidates on party list | 0.08* | 0.08* |
|                                | (0.04)  | (0.04)  |
| Non-Swiss name from German-speaking country | 0.05 |        |
|                                | (0.03)  |         |
| Non-Swiss name, from French-speaking country | 0.01 |        |
|                                | (0.04)  |         |
| Non-Swiss name, from Italian-speaking country | 0.02 |        |
|                                | (0.03)  |         |
| Non-Swiss name, from other country | 0.04** |        |
|                                | (0.01)  |         |
| AIC                            | -115.12 | -102.83 |
| Log Likelihood                 | 89.56   | 85.42   |
| N candidates                   | 3236    | 3236    |
| N party lists                  | 352     | 352     |

**Note:** Coefficients and standard errors (in parentheses) from linear random intercept models. Fixed effects for cantons are included.
Note: The negative preference votes compared to a Normal Distribution (mean=1, sd=0.25) and the positive preference votes compared to an Inverse Gaussian Distribution (mean=3, shape=0.8, dispersion=1).
Table 12: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and positive preference votes

|                                | Model 1   | Model 2   | Model 3   |
|--------------------------------|-----------|-----------|-----------|
| Non-Swiss name                 | -0.15**   | -0.16***  | -0.27**   |
|                                | (0.06)    | (0.05)    | (0.09)    |
| Relative list ranking          | -1.24***  | -1.24***  |           |
|                                | (0.05)    | (0.05)    |           |
| Incumbent                      | 1.31***   | 1.31***   |           |
|                                | (0.16)    | (0.16)    |           |
| Pre-cumulated                  | 0.37***   | 0.36***   |           |
|                                | (0.08)    | (0.08)    |           |
| Male                           | -0.01     | -0.01     |           |
|                                | (0.03)    | (0.03)    |           |
| Age: 30-50 years               | -0.15***  | -0.16***  |           |
|                                | (0.04)    | (0.04)    |           |
| Age: 50+ years                 | -0.19***  | -0.19***  |           |
|                                | (0.05)    | (0.05)    |           |
| Party position = center        | -0.08     | -0.08     |           |
|                                | (0.05)    | (0.05)    |           |
| Party position = left          | -0.03     | -0.06     |           |
|                                | (0.05)    | (0.05)    |           |
| Number of candidates on party list | -0.53*   | -0.53*   |           |
|                                | (0.23)    | (0.23)    |           |
| Non-Swiss name x party position = center | 0.07 | 0.07 | 0.07 |
|                                |           |           |           |
| Non-Swiss name x party position = left  | 0.19     | 0.19     | 0.19     |
|                                |           |           |           |
| Intercept                      | 0.02      | 0.44      | 0.44      |
|                                |           | (0.04)    | (0.33)    | (0.33)    |
| AIC                            | 6221.15   | 5431.66   | 5432.78   |
| Log Likelihood                 | -3088.58  | -2684.83  | -2683.39  |
| N candidates                   | 3263      | 3263      | 3263      |
| N party lists                  | 362       | 362       | 362       |

Note: Coefficient and standard errors (in parentheses) from random intercept models with an inverse Gaussian distribution and log-link. Fixed effects for cantons are included.
Table 13: Predicted positive preference votes by candidate name (Swiss, non-Swiss)

| Candidate name    | Mean | SE  | lower 95% CI | upper 95% CI |
|-------------------|------|-----|--------------|--------------|
| Swiss name        | 1.012| 0.017| 0.980        | 1.044        |
| Non-Swiss name    | 0.919| 0.044| 0.832        | 1.005        |

Note: Predicted values are derived from a linear random intercept model. Control variables and fixed effects for cantons are included.

Table 14: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and votes from “cumulation” and “panachage”

|                     | DV: cumulation | DV: panachage |
|---------------------|----------------|---------------|
| Non-Swiss name      | −0.12**        | −0.19***      |
|                     | (0.05)         | (0.04)        |
| Relative list ranking| −1.49***      | −1.29***      |
|                     | (0.06)         | (0.05)        |
| Incumbent           | 1.32***        | 1.42***       |
|                     | (0.16)         | (0.17)        |
| Pre-cumulated       | −0.76***       | 0.40***       |
|                     | (0.17)         | (0.08)        |
| Male                | −0.00          | −0.00         |
|                     | (0.04)         | (0.03)        |
| Age: 31-50 years    | 0.09**         | −0.14***      |
|                     | (0.04)         | (0.04)        |
| Age: 50+ years      | 0.07*          | −0.19***      |
|                     | (0.04)         | (0.04)        |
| Party position = center | −0.17***    | −0.10***      |
|                     | (0.04)         | (0.04)        |
| Party position = left | −0.07*        | −0.02         |
|                     | (0.04)         | (0.04)        |
| Number of candidates on party list | −0.39*   | −0.56***      |
|                     | (0.21)         | (0.20)        |
| Intercept           | 1.24***        | 1.16***       |
|                     | (0.30)         | (0.29)        |

Num. obs. 2831 3170
Nagelkerke R² 0.28 0.26
Generalized AIC 6360.39 5565.64

Note: Coefficients and standard errors (in parentheses) from random intercept models with a zero-inflated inverse Gaussian distribution and log-link. Fixed effects for cantons are included.
Table 15: Estimating the relationship between candidate name (different outgroups) and positive preference votes

|                               | Model 1       | Model 2       |
|-------------------------------|---------------|---------------|
| Intercept                     | 1.12***       | 0.63***       |
|                               | (0.34)        | (0.06)        |
| Non-Swiss name, Western       | −0.19***      |               |
|                               | (0.05)        |               |
| Non-Swiss name, Non-Western   | −0.12          |               |
|                               | (0.07)        |               |
| Relative list ranking         | −1.24***      | −1.22***      |
|                               | (0.05)        | (0.05)        |
| Incumbent                     | 1.31***       | 1.32***       |
|                               | (0.16)        | (0.16)        |
| Pre-cumulated                 | 0.37***       | 0.36***       |
|                               | (0.08)        | (0.09)        |
| Male                          | −0.01         | 0.00          |
|                               | (0.03)        | (0.03)        |
| Age: 30-50 years              | −0.15***      | −0.16***      |
|                               | (0.04)        | (0.04)        |
| Age 50+ years                 | −0.19***      | −0.20***      |
|                               | (0.05)        | (0.05)        |
| Party position = center       | −0.08         | −0.08         |
|                               | (0.05)        | (0.05)        |
| Party position = left         | −0.03         | −0.02         |
|                               | (0.05)        | (0.05)        |
| Number of candidates on party list | −0.53*       | −0.18***      |
|                               | (0.23)        | (0.02)        |
| Non-Swiss name from German-speaking country | −0.30**      |               |
|                               | (0.10)        |               |
| Non-Swiss name, from French-speaking country | 0.03          |               |
|                               | (0.17)        |               |
| Non-Swiss name, from Italian-speaking country | −0.21         |               |
|                               | (0.11)        |               |
| Non-Swiss name, from other country | −0.16**      |               |
|                               | (0.05)        |               |
| AIC                           | 5433.14       | 5429.17       |
| Log Likelihood                | -2684.57      | -2698.58      |
| N candidates                  | 3263          | 3263          |
| N party lists                 | 362           | 362           |

Coefficient and standard errors (in parentheses) from random intercept models with an inverse Gaussian distribution and log-link. Fixed effects for cantons are included.
## D Robustness Checks

Table 16: Candidates with a migration background and with roots abroad, results from candidate survey

| Name       | Migration background (definition BFS) | n  | Share |
|------------|--------------------------------------|----|-------|
| Swiss      | With migration background            | 9  | 0.08  |
| Swiss      | Without migration background, him/her or one parent born abroad | 18 | 0.17  |
| Swiss      | Without migration background, no origins abroad indicated | 80 | 0.75  |
| Non-Swiss  | With migration background            | 61 | 0.59  |
| Non-Swiss  | Without migration background, naturalized | 1  | 0.01  |
| Non-Swiss  | Without migration background, him/her or one parent born abroad | 27 | 0.26  |
| Non-Swiss  | Without migration background, no origins abroad indicated | 15 | 0.14  |

Note: In this table “people with a migration background” are defined according to the official definition of the Swiss Federal Statistical Office (BFS). They use a relatively narrow definition. According to this definition, persons with a migration background living in Switzerland can be both Swiss nationals and foreigners, and they can be first and second generation immigrants. Our focus being on Swiss nationals only (as only they can vote and run for office in national elections), the definition of a first-generation person with a migration background includes individuals born outside of Switzerland who have either become Swiss by naturalization or were Swiss at birth with both parents foreign-born. A second-generation person with a migration background is born in Switzerland: she/he was either Swiss at birth with both parents foreign-born or she/he became Swiss by naturalization having a foreign-born mother or father (or both). We specify in the table the elements that show the roots abroad in more detail (e.g., born abroad, parents born abroad, naturalized).
Table 17: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and negative / positive preference votes, local level variation

|                               | DV: negative preference votes | DV: positive preference votes |
|-------------------------------|------------------------------|------------------------------|
| Intercept                     | 0.93***                      | 1.17***                      |
|                               | (0.04)                       | (0.03)                       |
| Relative list ranking         | 0.63***                      | -1.55***                     |
|                               | (0.01)                       | (0.01)                       |
| Incumbent                     | -0.27***                     | 2.26***                      |
|                               | (0.01)                       | (0.02)                       |
| Pre-cumulated                 | 0.15***                      | 0.27***                      |
|                               | (0.01)                       | (0.01)                       |
| Male                          | -0.00                        | -0.03***                     |
|                               | (0.01)                       | (0.01)                       |
| Age: 30-50 years              | -0.00                        | -0.14***                     |
|                               | (0.01)                       | (0.01)                       |
| Age: 50+ years                | 0.02***                      | -0.07***                     |
|                               | (0.01)                       | (0.01)                       |
| Party position = center       | -0.00                        | 0.08***                      |
|                               | (0.01)                       | (0.01)                       |
| Party position = left         | 0.02**                       | 0.01                         |
|                               | (0.01)                       | (0.01)                       |
| Non-Swiss name                | 0.19***                      | -0.29***                     |
|                               | (0.02)                       | (0.02)                       |
| Number of candidates on party list | 0.01*              | -0.02**                      |
|                               | (0.00)                       | (0.00)                       |
| Degree of urbanization:       | -0.00                        | 0.00                         |
| intermediate density          | (0.01)                       | (0.01)                       |
| Degree of urbanization:       | 0.00                         | -0.00                        |
| thinly populated              | (0.01)                       | (0.02)                       |
| Language region municipality: | 0.01                         | -0.01                        |
| French                        | (0.03)                       | (0.03)                       |
| Language region municipality: | 0.00                         | -0.01                        |
| Italian                       | (0.05)                       | (0.07)                       |
| Language region municipality: | 0.00                         | -0.00                        |
| Romantsch                     | (0.04)                       | (0.06)                       |
| Religion = Catholic           | 0.00                         | -0.00                        |
|                               | (0.01)                       | (0.01)                       |
| Social assistance rate        | -0.00                        | 0.00                         |
|                               | (0.00)                       | (0.00)                       |
| Crime rate                    | -0.00                        | -0.00                        |
|                               | (0.00)                       | (0.00)                       |
| Conservative attitudes        | 0.00                         | -0.00                        |
|                               | (0.00)                       | (0.01)                       |
Table continued

|                                | DV: Negative preference votes | DV: Positive preference votes |
|--------------------------------|-------------------------------|-----------------------------|
| Share of naturalized citizens (centered) | 0.05 (0.11)                  | −0.10 (0.14)                |
| Non-Swiss name x party position = center | −0.13*** (0.02)              | 0.11*** (0.03)              |
| Non-Swiss name x party position = left | −0.17*** (0.02)              | 0.16*** (0.02)              |
| Non-Swiss name x share of naturalized citizens (cent.) | −0.56** (0.19)               | 0.82*** (0.23)              |
| AIC                             | 607694.30                     | 1148608.21                  |
| Log Likelihood                  | -303803.15                    | -574260.10                  |
| N candidate-municipality observations | 196303                      | 286332                      |
| N municipalities                | 1145                         | 1146                        |
| N party lists                   | 330                          | 340                         |

Note: Coefficients and standard errors (in parentheses) from linear random intercept models (with cross-classified random effects). Fixed effects for cantons are included. 196,303 candidate-municipality observations are included in the model with negative preference votes as the dependent variable (party lists that have not received any negative preference votes by voters in a municipality are not considered); and 286,332 candidate-municipality observations are included in the model with the dependent variable positive preference votes (party lists that have not received any positive preference votes by voters in a municipality are not considered).
Figure 4: Interaction effect of candidate name (Swiss, non-Swiss) and the share of naturalized citizens in the municipality on negative and positive preference votes

Note: Mean predicted values surrounded by 95% confidence intervals.
Table 18: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and negative / positive preference votes, with district magnitude

|                                | DV: Negative preference votes | DV: Positive preference votes |
|--------------------------------|-------------------------------|------------------------------|
| Intercept                      | 1.00***                       | −0.04                        |
|                                | (0.01)                        | (0.05)                       |
| Non-Swiss name                 | 0.03**                        | −0.17***                     |
|                                | (0.01)                        | (0.05)                       |
| Relative list ranking          | 0.39***                       | −1.21***                     |
|                                | (0.01)                        | (0.05)                       |
| Incumbent                      | −0.37***                      | 1.33***                      |
|                                | (0.02)                        | (0.16)                       |
| Pre-cumulated                  | 0.12***                       | 0.36***                      |
|                                | (0.02)                        | (0.09)                       |
| Male                           | −0.00                         | −0.00                        |
|                                | (0.01)                        | (0.03)                       |
| Age: 30-50 years               | 0.00                          | −0.16***                     |
|                                | (0.01)                        | (0.04)                       |
| Age: 50+ years                 | 0.02*                         | −0.20***                     |
|                                | (0.01)                        | (0.05)                       |
| Party position = center        | −0.00                         | −0.09*                       |
|                                | (0.01)                        | (0.05)                       |
| Party position = left          | 0.00                          | −0.02                        |
|                                | (0.01)                        | (0.05)                       |
| District magnitude             | 0.00**                        | −0.03***                     |
|                                | (0.00)                        | (0.00)                       |
| Non-Swiss name x district magnitude | −0.00*                    | −0.00                        |
|                                | (0.00)                        | (0.00)                       |
| AIC                            | -230.94                       | 5435.76                      |
| Log Likelihood                 | 129.47                        | -2703.88                     |
| N candidates                   | 3236                          | 3263                         |
| N party lists                  | 352                           | 362                          |

\*\*\*p < 0.001, \*\*p < 0.01, \*p < 0.05, \ p < 0.1

Note: Coefficients and standard errors (in parentheses) from a linear random intercept models (negative preference votes) and a random intercept model with an inverse Gaussian distribution and log-link (positive preference votes).
Figure 5: Interaction effect of candidate name (Swiss, non-Swiss) and district magnitude on negative and positive preference votes

Note: Mean predicted values surrounded by 95% confidence intervals.
Table 19: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and negative / positive preference votes, with profession

|                        | DV: negative preference votes | DV: positive preference votes |
|------------------------|------------------------------|------------------------------|
| Intercept              | 0.88***                      | 0.66*                        |
|                        | (0.06)                       | (0.29)                       |
| Non-Swiss name         | 0.04**                       | -0.18***                     |
|                        | (0.01)                       | (0.04)                       |
| Relative list ranking  | 0.37***                      | -1.25***                     |
|                        | (0.02)                       | (0.06)                       |
| Incumbent              | -0.37***                     | 1.37***                      |
|                        | (0.02)                       | (0.17)                       |
| Pre-cumulated          | 0.11***                      | 0.36***                      |
|                        | (0.02)                       | (0.08)                       |
| Male                   | -0.01                        | -0.02                        |
|                        | (0.01)                       | (0.03)                       |
| Age: 31-50 years       | 0.01                         | -0.18***                     |
|                        | (0.01)                       | (0.04)                       |
| Age: 50+ years         | 0.04**                       | -0.22***                     |
|                        | (0.01)                       | (0.04)                       |
| Profession = medium-skilled | 0.02                      | -0.14***                     |
|                        | (0.01)                       | (0.04)                       |
| Profession = low-skilled | 0.04***                  | -0.15**                      |
|                        | (0.01)                       | (0.05)                       |
| Party position = center | -0.01                       | -0.06                        |
|                        | (0.01)                       | (0.05)                       |
| Party position = left  | -0.00                        | -0.01                        |
|                        | (0.01)                       | (0.05)                       |
| Number of candidates on party list | 0.07                     | -0.61**                      |
|                        | (0.04)                       | (0.19)                       |

AIC  -131.60          4654.03  
Log Likelihood  98.80      -2294.01  
N candidates    2839       2865  
N party lists   348         358

**p < 0.001,  *p < 0.01,  *p < 0.05,  p < 0.1

Note: Coefficients and standard errors (in parentheses) from a linear random intercept model (DV negative preference votes) and from a random intercept model with an inverse Gaussian distribution and log-link (DV positive preference votes). Fixed effects for cantons are included.
### Table 20: Origin of candidate names, by ideological position of party

| Origin                        | Right | Center | Left  |
|-------------------------------|-------|--------|-------|
| Swiss                         | 1056  | 1011   | 796   |
|                               | (91.90) | (88.20) | (80.60) |
| Hispanic                      | 11    | 15     | 31    |
|                               | (1.00) | (1.30)  | (3.10) |
| Eastern European              | 11    | 4      | 15    |
|                               | (1.00) | (0.30)  | (1.50) |
| Southern European             | 18    | 19     | 23    |
|                               | (1.60) | (1.70)  | (2.30) |
| Yugoslavian                   | 5     | 6      | 6     |
|                               | (0.40) | (0.50)  | (0.60) |
| Albanian                      | 5     | 13     | 12    |
|                               | (0.40) | (1.10)  | (1.20) |
| Western European/Nordic/Anglo | 30    | 54     | 44    |
|                               | (2.60) | (4.70)  | (4.50) |
| Indian                        | 2     | 4      | 8     |
|                               | (0.20) | (0.30)  | (0.80) |
| Eastern Asian                 | 1     | 1      | 7     |
|                               | (0.10) | (0.10)  | (0.70) |
| Arabic                        | 4     | 9      | 14    |
|                               | (0.30) | (0.80)  | (1.40) |
| Central Asian                 | 0.00  | 1      | 0.00  |
|                               | (0.00) | (0.10)  | (0.00) |
| Turkish/Kurdish               | 4     | 3      | 20    |
|                               | (0.30) | (0.30)  | (2.00) |
| (Other) African               | 0.00  | 2      | 7     |
|                               | (0.00) | (0.20)  | (0.70) |
| Unknown                       | 2     | 4      | 5     |
|                               | (0.20) | (0.30)  | (0.50) |

Source: Own coding based on the online databases RSS, “forebears” and “worldnames.” Number of candidates with name of that origin and their share (in parentheses).
Table 21: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and relative list ranking

|                                | Model 1     | Model 2     | Model 3     |
|--------------------------------|-------------|-------------|-------------|
| Intercept                      | 0.51***     | 0.56***     | 0.56***     |
|                                | (0.01)      | (0.07)      | (0.07)      |
| Non-Swiss name                 | 0.03*       | 0.03*       | 0.03*       |
|                                | (0.02)      | (0.02)      | (0.03)      |
| Incumbent                      | -0.38***    | -0.38***    | -0.38***    |
|                                | (0.03)      | (0.03)      | (0.03)      |
| Pre-cumulated                  | -0.07***    | -0.07***    |             |
|                                | (0.02)      | (0.02)      |             |
| Male                           | 0.06***     | 0.06***     |             |
|                                | (0.01)      | (0.01)      |             |
| Age: 30-50 years               | 0.05***     | 0.05***     |             |
|                                | (0.01)      | (0.01)      |             |
| Age: 50+ years                 | 0.05***     | 0.05***     |             |
|                                | (0.01)      | (0.01)      |             |
| Profession = medium-skilled    | 0.02        | 0.02        |             |
|                                | (0.01)      | (0.01)      |             |
| Profession = low-skilled       | 0.03*       | 0.03*       |             |
|                                | (0.01)      | (0.01)      |             |
| Party position = center        | -0.01       | -0.02       |             |
|                                | (0.01)      | (0.01)      |             |
| Party position = left          | -0.01       | -0.00       |             |
|                                | (0.01)      | (0.01)      |             |
| Number of candidates on party list | -0.08      | -0.08      |             |
|                                | (0.05)      | (0.05)      |             |
| Non-Swiss name*Party position = center | 0.06      |             |             |
|                                | (0.04)      |             |             |
| Non-Swiss name*Party position = left | -0.05    |             |             |
|                                | (0.04)      |             |             |

|                                | Model 1     | Model 2     | Model 3     |
|--------------------------------|-------------|-------------|-------------|
| AIC                            | 1035.88     | 842.04      | 846.91      |
| Log Likelihood                 | -495.94     | -389.02     | -389.45     |
| N candidates                   | 2884        | 2884        | 2884        |
| N party lists                  | 358         | 358         | 358         |

Note: Coefficients and standard errors (in parentheses) from linear random intercept models. Fixed effects for cantons are included. Dependent variable is the relative list ranking of candidates (higher values indicate being placed lower on the ballot).
Table 22: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and negative preference votes, with proportion of candidates with non-Swiss names on party list

|                           | Model 1     | Model 2     | Model 3     |
|---------------------------|-------------|-------------|-------------|
| Intercept                 | 0.90***     | 0.90***     | 0.90***     |
|                           | (0.06)      | (0.06)      | (0.06)      |
| Non-Swiss name            | 0.05***     | 0.06***     | 0.12***     |
|                           | (0.01)      | (0.02)      | (0.03)      |
| Relative list ranking     | 0.39***     | 0.39***     | 0.39***     |
|                           | (0.02)      | (0.02)      | (0.02)      |
| Incumbent                 | −0.38***    | −0.38***    | −0.38***    |
|                           | (0.02)      | (0.02)      | (0.02)      |
| Pre-cumulated             | 0.12***     | 0.12***     | 0.13***     |
|                           | (0.02)      | (0.02)      | (0.02)      |
| Male                      | −0.00       | −0.00       | −0.00       |
|                           | (0.01)      | (0.01)      | (0.01)      |
| Age: 30-50 years          | −0.00       | −0.00       | −0.00       |
|                           | (0.01)      | (0.01)      | (0.01)      |
| Age: 50+ years            | 0.02        | 0.02        | 0.02        |
|                           | (0.01)      | (0.01)      | (0.01)      |
| Party position = center   | 0.00        | −0.00       | 0.01        |
|                           | (0.01)      | (0.01)      | (0.01)      |
| Party position = left     | 0.01        | 0.01        | 0.02        |
|                           | (0.01)      | (0.01)      | (0.01)      |
| Number of candidates on ballot | 0.07   | 0.07        | 0.07        |
|                           | (0.04)      | (0.04)      | (0.04)      |
| Proportion non-Swiss names on party list | −0.12** | −0.08*     | −0.09*     |
|                           | (0.04)      | (0.04)      | (0.04)      |
| Non-Swiss name*Proportion non-Swiss | −0.09 | −0.07     |           |
|                           | (0.07)      | (0.07)      | (0.07)      |
| Non-Swiss name*Party position = center |           |           | −0.08*     |
|                           |             |             | (0.03)      |
| Non-Swiss name*Party position = left |           |           | −0.08**    |
|                           |             |             | (0.03)      |

AIC: -126.22, -122.42, -116.29
Log Likelihood: 95.11, 94.21, 93.15
N candidates: 3236, 3236, 3236
N party lists: 352, 352, 352

Note: Coefficients and standard errors (in parentheses) from linear random intercept models. Fixed effects for cantons are included.

***p < 0.001, **p < 0.01, *p < 0.05, p < 0.1
Table 23: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and positive preference votes, with proportion of candidates with non-Swiss names on party list

|                       | Model 1       | Model 2       | Model 3       |
|-----------------------|---------------|---------------|---------------|
| Intercept             | 1.36***       | 1.36***       | 1.36***       |
|                       | (0.22)        | (0.22)        | (0.22)        |
| Non-Swiss name        | −0.13**       | −0.15*        | −0.24*        |
|                       | (0.05)        | (0.06)        | (0.10)        |
| Relative list ranking | −1.25***      | −1.25***      | −1.25***      |
|                       | (0.06)        | (0.06)        | (0.06)        |
| Incumbent             | 2.04***       | 2.04***       | 2.04***       |
|                       | (0.08)        | (0.08)        | (0.08)        |
| Pre-cumulated         | 0.24***       | 0.24***       | 0.24***       |
|                       | (0.07)        | (0.07)        | (0.07)        |
| Male                  | −0.02         | −0.02         | −0.02         |
|                       | (0.03)        | (0.03)        | (0.03)        |
| Age: 30-50 years      | −0.06         | −0.06         | −0.06         |
|                       | (0.04)        | (0.04)        | (0.04)        |
| Age: 50+ years        | −0.08*        | −0.08*        | −0.08*        |
|                       | (0.04)        | (0.04)        | (0.04)        |
| Party position = center | 0.05         | 0.05         | 0.05         |
|                       | (0.04)        | (0.04)        | (0.04)        |
| Party position = left | 0.01          | 0.01          | −0.01         |
|                       | (0.04)        | (0.04)        | (0.05)        |
| Number of candidates on ballot | −0.31*       | −0.31*       | −0.31*       |
|                       | (0.15)        | (0.15)        | (0.15)        |
| Proportion non-Swiss names on party list | 0.28*       | 0.24        | 0.26         |
|                       | (0.13)        | (0.17)        | (0.17)        |
| Non-Swiss name*Proportion non-Swiss | 0.12          | 0.04        |             |
|                       | (0.26)        | (0.27)        | (0.27)        |
| Non-Swiss name*Party position = center |              |              | 0.10         |
|                       |               |               | (0.13)        |
| Non-Swiss name*Party position = left |              |              | 0.17         |
|                       |               |               | (0.12)        |

AIC 8609.82 8612.44 8619.60
Log Likelihood -4272.91 -4273.22 -4274.80
N candidates 3283 3283 3283
N party lists 362 362 362

***p < 0.001, **p < 0.01, *p < 0.05, p < 0.1

Note: Coefficients and standard errors (in parentheses) from linear random intercept models. Fixed effects for cantons are included.
Figure 6: Interaction effect of candidate name (Swiss, non-Swiss) and share of candidates with non-Swiss names on the party list on negative and positive preference votes.

Note: Mean predicted values surrounded by 95% confidence intervals.
Table 24: Estimating the relationship between candidate name (Swiss vs. non-Swiss) and negative / positive preference votes, only lists gaining at least one seat in parliament

| DV: negative preference votes | DV: positive preference votes |
|------------------------------|------------------------------|
| Intercept                    | 1.13**                       | -0.62                        |
|                              | (0.36)                       | (1.35)                       |
| Non-Swiss name               | 0.08**                       | -0.28***                     |
|                              | (0.03)                       | (0.08)                       |
| Relative list ranking        | 0.52***                      | -1.47***                     |
|                              | (0.03)                       | (0.10)                       |
| Incumbent                    | -0.36***                     | 1.29***                      |
|                              | (0.02)                       | (0.18)                       |
| Pre-cumulated                | 0.26***                      | 0.13                         |
|                              | (0.08)                       | (0.36)                       |
| Male                         | 0.01                         | -0.01                        |
|                              | (0.02)                       | (0.05)                       |
| Age: 31-50 years             | -0.12***                     | -0.01                        |
|                              | (0.03)                       | (0.11)                       |
| Age: 50+ years               | -0.10**                      | 0.07                         |
|                              | (0.03)                       | (0.11)                       |
| Party position = center      | -0.03                        | -0.12                        |
|                              | (0.02)                       | (0.07)                       |
| Party position = left        | -0.01                        | -0.12                        |
|                              | (0.02)                       | (0.07)                       |
| Number of candidates on party list | 0.02               | -0.13                        |
|                              | (0.24)                       | (0.90)                       |

AIC 90.51 1309.82
Log Likelihood -14.25 -623.91
N candidates 1024 1023
N party lists 90 90

Note: Coefficients and standard errors (in parentheses) from a linear and an inverse Gaussian random intercept model. Fixed effects for cantons are included.