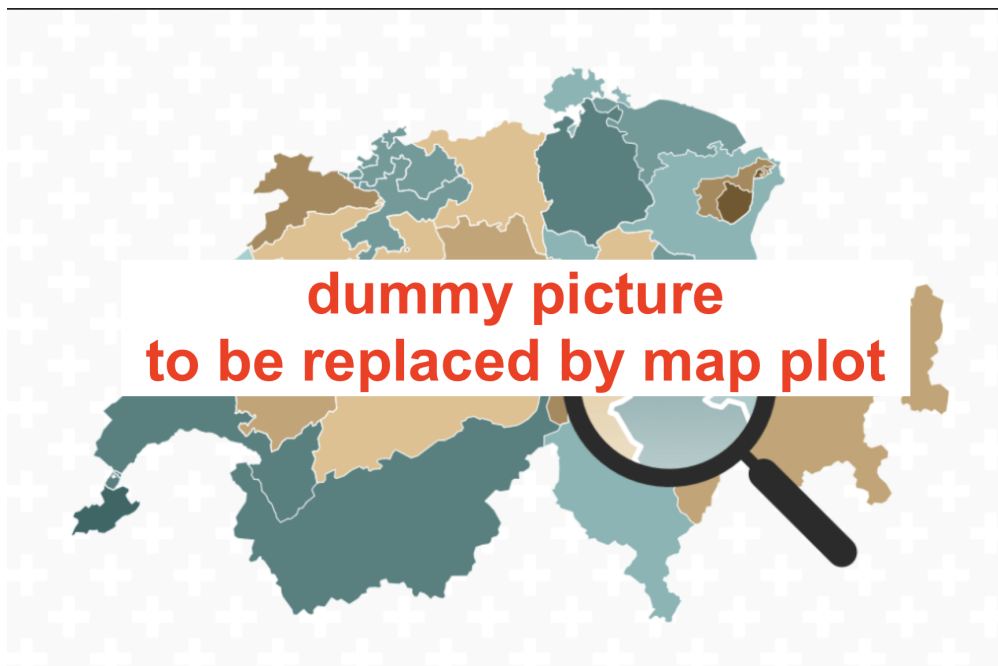


# Mapping Demographic Composition as a Predictor of Far-Right Success in the 2023 Swiss Federal Election

Exploring Interactions between Anti-Migration Sentiment and Ethnocultural Diversity

Bavibidila, R., Jevdenic, R.



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## **Abstract**

Lorem Ipsum. . .

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# 1 Introduction

Rade: TBD.

## 2 Background

### 2.1 Switzerland, Democracy and Migration

Switzerland has a long tradition of democracy, with its modern political system rooted in the 1848 Federal Constitution. The modern Swiss State, along with its constitution and the bicameral legislative system has been established in 1848 (Church, 2013, Chapter 6). Swiss elections take place every four years, with the federal government following a system of direct democracy that allows citizens not only to elect representatives but also to participate in referendums and initiatives. As mentioned before, Switzerland’s Federal Parliament consists of two chambers: the National Council (200 members) and the Council of States (46 members). The National Council represents the population proportionally, while the Council of States represents the cantons, with each full canton electing two representatives and six half-cantons electing one. This bicameral system aims at balancing demographic and regional in legislative decisions.

According to the annual overview of the federal office for statistics (Statistik, 2023), Switzerland has a population of 8.8 million people (p. 132), of which around 74% hold Swiss citizenship. The remaining 26% are non-Swiss residents, including permanent residents, cross-border workers, and asylum seekers (p. 142). Swiss nationality is acquired for most citizens through descent and for migrants by naturalization, which is known to be a decentralised process mostly relying on cantonal and municipal approval. Only a fraction of foreign nationals applies for naturalisation. In the last decade, between 30’000 to 45’000 people a year, which corresponds to around 2% of the population eligible for naturalisation (p. 142).

Non-Swiss residents, despite their significant share of the population, have limited political rights at the federal level. Some cantons and municipalities allow foreigners to vote in local elections or even run for office, but they are largely excluded from national decision-making (jura.ch, 2025; ne.ch, 2025). Politics of Switzerland are described as relatively polarized compared to international standards (Jansen & Stutzer, 2024, p. 3)

### 2.2 2023 Swiss Federal Elections

The most recent parliamentary elections in Switzerland took place on October 22, 2023. Switzerland’s bicameral parliament comprises the National Council, which proportionally represents the Swiss population with seats allocated to each canton based on its population, and the Council of States, where all cantons have equal representation. As the National Council reflects the population proportionally, its election results are often regarded as an indicator of trends in public opinion regarding politics and policy.

Over the past several decades, the distribution of dominant political parties in Swiss national

elections has remained relatively stable. The primary parties represented in the federal parliament, along with their respective campaign focuses in the most recent elections, are detailed below (bpb.de, 2023) . For improved readability, this paper will rely on german-language party names.

Table 1: Overview of Parties and Campaign Focus

| Party     | 2023 Campaign Focus   |
|-----------|---|
| SVP       | Right-wing, anti-immigration, anti-welfare, free market policies                |
| SP        | Left-wing, pro-welfare, pro-worker policies, reducing cost of living            |
| FDP       | Center-right, free market policies and improved access to international markets |
| Die Mitte | Conservative centrist, pro-defense, tax cuts for married couples                |
| GLP       | Progressive centrist, climate protection, EU alignment, liberal market policies |
| GPS       | Left-wing, climate protection, biodiversity, state regulation of business       |

While many European countries have seen an extraordinary rise of right-wing politics throughout the 2010s, not much had shifted in Switzerland. The right-wing SVP (Schweizerische Volkspartei, in french: Union démocratique du centre UDC) has been part of the governing coalition since the 1990s. Certain segments of the party have been classified as far-right and right-wing extremist, most notably due to the party’s hardline positions on migration and strict opposition to any legal protection of social, cultural and religious minorities like swiss muslims or LGBT citizens (Ellermann, 2021, p. 3 & p.102; Jansesberger & Rhein, 2024, pp. 3–5).

The relationship between regional demographic composition and voting behavior has been a subject of ongoing research and debate, particularly if areas with lower proportions of migrants tend to support stricter immigration policies compared to ethnoculturally diverse regions. In this study, we examine the most recent Swiss election to analyze potential correlations between the percentage of non-Swiss residents and the electoral performance of the Swiss People’s Party (SVP), which centered its campaign on an anti-immigration platform. To control for cofounding variables, other demographic markers as age and education will be included.

### 2.3 Research Question and Hypothesis

- “There is a positive correlation between ethnocultural homogeneity and success of far-right party in the 2023 Swiss elections.”

## 3 Method

### 3.1 Data Set

All datasets used in this analysis were obtained from the Swiss Federal Office of Statistics (BFS). Each dataset included the BFS municipality ID, with the exception of the dataset on education levels by district, which lacked an ID. Matching this dataset by district name using regular expressions was not feasible due to inconsistencies in district naming conventions. To address this, district numbers were manually added to the table. Aside from this exception, no further modifications were made to the datasets.

Table 2: Overview of Used Datasets

| Dataset Description                       | Dataset ID                               |
|---|--|
| Election Results 2023                     | sd-t-17.02-NRW2023-parteien-appendix.csv |
| Citizenship Percentage                    | px-x-0102010000_104_20250127-155044.xlsx |
| Education                                 | su-e-40.02.15.08.05-2022.xlsx            |
| Citizenship acquisition                   | px-x-0102020000_201_20250129-134648.xlsx |
| Age distribution                          | su-d-01.02.03.06.xlsx                    |
| Some income or wealth metric TBD          | TBD                                      |
| Datatable Communes, Districts and Cantons | Gemeindestand.xlsx                       |

During preprocessing of data there were minor inconsistencies since the used datasets span from 2019 to 2024 and some smaller municipalities had merged with larger communes during those years. Therefore, some smaller communities can not be represented perfectly in the analysis. In 2020, the former municipalities of Vogorno, Sonogno, Corippo, Brione (Verzasca) and Frasco merged to form the new municipality of Verzasca. In 2021 many small communes disappeared from the map: Haldenstein (merged into Chur), Bauen (merged into Seedorf), Surpierre (merged into Cheiry), Charrat (merged into Martigny), Montherod (merged into Aubonne), Casti-Wergenstein, Donat, Lohn and Mathon (merged together), Miège, Venthône and Veyras (merged together), municipalities of Gänsbrunnen and Welschenrohr (merged together), Obersteckholz (merged into Langenthal), Gettnau (merged into Willisau), Altwis (merged into Hitzkirch), Rohr (merged into Stüsslingen), Bagnes and Vollèges (merged together), Corcelles-Cormondèche, Peseux and Valangin (merged into Neuchâtel), Les Brenets (merged into Le Locle), Bioley-Orjulaz (merged into Assens), Apples, Cottens, Pampigny, Sévery, Bussy-Chardonney and Reverolle merged into the new municipality of Hautemorges. In 2022, the following communes were dissolved: Galmiz, Gempenach and Clavaleyres (merged into Murten), Essertes (merged into Oron), Bözen, Effingen, Elfingen and Hornussen



(merged together), Bad Zurzach, Baldingen, Böbikon, Kaiserstuhl, Rekingen, Rietheim, Rümikon and Wislikofen (merged into the municipality of Zurzach), Rüte and Schwende (merged together), Blonay and Saint-Légier-La Chiésaz merged together. 2023 saw the dissolution of Herznach and Ueken (merged together), La Chaux-des-Breuleux (merged into Le Breuleux), Burg (merged into Menziken), Adlikon and Humlikon (merged to form the municipality of Andelfingen (merged together), Hemberg and Oberhelfenschwil merged into the new municipality of Neckertal. In 2021, Lüterswil-Gächliwil merged into Buchegg, Turgi was merged into Baden. Bonfol merged with Beurnevésin, Wangenried merged into Wangen an der Aare.

Even though the list of communes seems long, most of these municipalities do not affect the outcome of the weighted correlation since their population is in almost all cases below 1000 and in many cases below 100, with Corippo TI having a population of to 9 inhabitants at the time of the merger being the lowest populated commune ever recorded in Switzerland. Therefore these mergers do not affect the outcome of the analysis in any significant way.

## 3.2 Research Process

- Description of steps from research question to analysis.

### **3.3 Indicators**

#### **3.3.1 Election Indicators**

**3.3.1.1 Partys** Focus parties vs. the rest Mention local Parties (Lega, MCR)

**3.3.1.2 Elections** 2019 vs. 2023

### **3.3.2 Geographic Indicators**

**3.3.2.1 Switzerland** TBD

**3.3.2.2 Cantons** TBD

**3.3.2.3 Municipalities** TBD

### 3.3.3 Demographic Indicators

For our analysis we have focused on the following five demographic indicators below (s. Table). The five indicators are of particular interest for measuring their influence on far-right politics, since previous research has shown them to be a predictor of far-right party's success.

(here Table)

**3.3.3.1 Non-Swiss Population** The indicator "Non-Swiss Population" represents the percentage of citizens holding another passport than the swiss one per XX.XX.DATE in relation to the base number of the entire population. Migrants that have acquired swiss citizenship count as swiss population are not disclosed or analysed separately.

**3.3.3.2 Citizenship Aquisition** The indicator "Citizenship Aquisition" represents the percentage of citizens acquiring swiss passport in 202X in relation to the base number of the entire migrant population. The rate of absorption of foreign nationals into the swiss society indicates both willingness to become Swiss citizen from a migrant perspective as well as the willingness of local communities to support non-swiss population's aim to integrate on a citizenship level.

**3.3.3.3 Income Per Capita** The Income per capita is a normalized measure used by the Bundesamt für Statistik to compare income across Switzerland. It represents the income (minus deductibles on federal level) that is recorded by the federal tax office in collaboration with the cantonal tax administrations. Therefore it does not represent the net income, but rather the taxable income.

**3.3.3.4 Education Level** The three indicators are as follows: - Low Education: Only obligatory school education, which in Switzerland represents usually 9 school years. - Secondary Education: A professional college degree, usually acquired as a result of an apprenticeship (Berufslehre, Apprentissage) - Tertiary Education: An academic university degree, acquired as a result of a university study program but also includes higher degrees from professional colleges (Höhere Fachschule, Ecole Supérieure)

**3.3.3.5 Age ratio** The age ratio is a standardized measure of the Bundesamt für Statistik, that measures the percentage of aged populations (65 and above) in relation to the adult respectively working-age population (18-64). Therefore, high number indicates an outsized aged population.

### 3.4 Statistical Methods

Initially the correlation between migrant population and far-right election success was calculated both weighted and unweighted, meaning each municipality counts as one unit nevertheless of the population size. The unadjusted analysis did not produce a significant correlation, presumably, because both left-wing votership and migrant populations tend to be concentrated in larger cities and therefore could not be represented in an unweighted statistical design. But when adjusted for population size, there were clear correlations visible.

- Statistical methods applied (e.g., Correlation, Multiple Linear Regression).

## 4 Results

### 4.1 Tables

Some tables.

## 4.2 Plots

### 4.2.1 Explanatory Analysis of the Dataset

#### Explanatory Analysis

In order to better understand the results of the analysis we assessed the data set. The main goal was to get an idea of the existing trends and distributions to reason why certain effects might cause correlations or regressions.

The graph visualises the proportion of non-swiss citizens per canton as well as all of Switzerland. This information is of importance since previous studies (Sources) show that areas, which do not have large populations of migrants, tend to vote for partys that run on anti-migration campaigns. This highlights an important contradiction, meaning that people who are not exposed to migrant populations tend to be more critical towards migrations, than votes in areas with higher ethno-cultural diversity.



The graph visualises the proportion of different educational layers in the demography. We know from other studies (Source here) that most swiss people do have in fact a Secondary Education degree, which leads us to the assumption that the demographic segment only in possession of a obligatory education might contain a high percentage of non-swiss populations, particularly refugees which could not complete their schooling programme since they have been forced to leave by war and conflict. Therefore the swiss population can be divided roughly in secondary and tertiary educated people. The populations having a secondary-level education are of particular interest since they represent mostly swiss and swiss-born migrants, with or without swiss citizenship, that did not further continue education after receiving their professional degree. From prior studies on this topic, we know that they might be more likely to vote in favour of the far-right party SVP and less likely to vote in favour of left-wing SP and Greens as well as centrist parties GLP and FDP. From the graph we can extract the information that we see some consistency in educational level across Switzerland with some fluctuations from XX on the lower end up to XX on the higher end.

### **4.2.2 General Election Results 2023**

Plots TBD

### **4.2.3 Demographic Indicators of Far-Right Success**

#### 4.2.4 Regression Analysis

### 4.3 Maps

Maps with municipalities (or cantons, districts etc.).

## 5 Limitations

- High percentage of non-voters whose opinions can't be measured.
- Some people vote for SVP for reasons unrelated to migration policy.
- Different statistical methods yield different results.

## 6 Discussion

Details of the analysis.

## 7 Conclusion

How to interpret the results.

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