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Enfranchising non-citizens: What drives natives' willingness to share power?

Anna Maria Koukal^{a,b,*}, Patricia Schafer^a, Reiner Eichenberger^{a,c}

^a University of Fribourg, Boulevard de Pérolles 90, 1700 Fribourg, Switzerland

^b FernUni Schweiz, Überlandstrasse 12, 3900 Brig, Switzerland

^c CREMA – Center for Research in Economics, Managements and the Arts, 8008 Zürich, Switzerland

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ABSTRACT

Universal suffrage is a core element of democracy. However, in many democratic countries, a large part of the inhabitants are foreigners without suffrage. We analyze the conditions under which domestic citizens are willing to extend suffrage to non-citizen residents. This paper explores a new panel dataset (1992–2016) of Swiss referenda on the enfranchisement of non-citizens. We concentrate on the size and composition of the foreign population and the institutional context as determinants of non-citizens' enfranchisement. Our estimates show that a higher share of foreigners corresponds to a lower willingness of natives to enfranchise non-citizens. This effect seems to be driven by the cost of enfranchising non-citizens, which increases in the cultural distance between the foreign and native population and the strength of direct democracy.

1. Introduction

International migration is on the rise, yet most democratic participation rights are still tied to traditional forms of citizenship. Hence, in many democratic countries a large and increasing share of the population has no or only limited franchise.¹ An extreme case is Luxembourg, where 47 percent of residents were non-citizens in 2017 and, hence, excluded from full voting rights.² In Germany and Switzerland, this share was 12 and 24 percent, respectively. The numbers differ across age groups. Among Swiss residents aged 30 to 40, the share of foreigners is about 40 percent. Consequently, their democratic endowment is comparable to the situation of women before their enfranchisement.

Participatory political institutions are known to generate positive effects. For instance, they foster cooperation (Acemoğlu and Robinson, 2012), civic virtues (Frey, 1997), trust (Rainer and Siedler, 2009), and beneficial political outcomes (Ellis and Fender,

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* Corresponding author. Tel.: +41 26 300 82 65.

E-mail address: annamaria.koukal@unifr.ch (A.M. Koukal).

¹ In some countries, e.g., in the EU-member states, immigrants from specific countries have suffrage at the local level. See Arrighi and Bauböck (2017) for more information on local voting rights for non-citizens.

² Source: Eurostat.

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2010). While these findings refer to the potential of political integration through enfranchisement, the literature has mainly focused on the determinants of naturalization and successful economic integration of foreigners.³ We are only aware of three recent studies which empirically evaluated the conditions for non-citizens' enfranchisement (Earnest, 2015; Kayran and Erdilmen, 2020; Stutzer and Slotwinski, 2020) and mostly relied on cross-sectional variation. Given the limited democratic legitimacy of decisions taken by only a fraction of the taxpayers and the integrative effects of political empowerment (e.g., Koukal, 2013; Slotwinski et al., 2017; Koukal and Portmann, 2019), understanding the conditions under which political participation rights are transferred to non-citizens is important.

On the one hand, native citizens may benefit from enfranchising foreigners through integrative effects. On the other hand, they lose part of their political influence when sharing their political power with non-citizens. If the median voter positions of the new and established electorates differ, the majority of the established electorate may lose by enlarging the franchise, as political outcomes may change. With an increasing number of foreigners to be enfranchised, the potential costs and benefits of native citizens increase. A priori it is therefore unclear how ongoing immigration will affect the willingness to share political power and thereby the democratic endowment of the population.

In this paper we analyze the potential drivers of and barriers to non-citizens' enfranchisement in Switzerland during the 1992–2016 period and focus on the role of the size and composition of the foreign population. This paper is among the first to address this question and it is based on a much richer dataset than previous studies. We seek to contribute in at least two ways: First, this paper is one of the few empirical analyses of non-citizens' enfranchisement and the first to use an extensive panel dataset of natives' revealed preferences. Second, we contribute to a growing literature on the effects of immigrants' presence on natives' behavior by shedding light on how the presence of non-citizens affects the willingness of natives to share voting rights.

For two reasons, Switzerland provides an ideal setting for analyzing the enfranchisement process: First, the decision to enfranchise non-citizens is not taken by the national parliament but by the native electorate through popular referenda. This institutional setting allows an analysis of voters' revealed preferences. Second, due to Swiss federalism, non-citizens' enfranchisement is not a one-shot decision at the national level but a multilayered process at the municipal, cantonal, and federal levels. The extent of the franchise for cantonal and municipal matters is defined by the cantons, i.e., their respective voters. Therefore, the decision to hold a referendum vote is exogenous to the individual municipality. Thus, we exploit the within-municipality variations in the municipal acceptance to enfranchise non-citizens in 10 cantons over the 1992–2016 period.

Our results show that a larger share of foreigners in a municipality decreases natives' willingness to enfranchise non-citizens. Our estimates suggest that a one percent increase in the share of foreigners reduces natives' willingness to share political power by approximately 0.20 percentage points. We argue that this effect is likely to reflect the costs of enfranchising non-citizens for two reasons: First, the negative effect of an increase in the share of foreigners on the enfranchisement of non-citizens is driven by the cultural distance between natives and foreigners. Cultural distance plausibly results in a more pronounced preference heterogeneity and, thus, a higher cost of sharing political power. Second, our results are also affected by institutional factors. The hindering effect of a larger foreigner share is more pronounced in municipalities with strong direct democratic instruments (town meetings)—where the individual political influence loss of natives is larger.⁴ Whether and how complementary explanations, such as discrimination against foreigners, play a role to explain these effects cannot be disentangled in our setting. Since many developed countries face an increasing share of foreign residents our results imply that natives' willingness to share political power may decline in the future.

This paper is organized as follows. The next section reviews the related literature. Section 3 introduces the Swiss institutional setting. Section 4 presents the theoretical considerations and Section 5 describes our data and variables. In Section 6 we explain the empirical strategy and the results are presented and discussed in Section 7. Section 8 provides a summary of our main results and an outlook on future research.

2. Related literature

Despite the sizeable literature on franchise extensions for men and women, we are only aware of three recent papers that empirically study the conditions of non-citizens' enfranchisement. In a cross-country study over the 1975–2010 period, Earnest (2015) analyzes the conditions for the liberalization of citizenship laws, such as non-citizens' voting rights and retraction of voting rights of non-citizen residents. The author explains the former with relation to policy constraints and the latter as an interaction between policy constraints and national characteristics. In a recent cross-country comparison of 28 countries, Kayran and Erdilmen (2020) find that governments tend to (partially) delay the enfranchisement of non-citizens when their share in the total population is high. Furthermore, Stutzer and Slotwinski (2020) use data from two Swiss cantons to focus on the power dilution hypothesis for opting-in regimes to enfranchise non-citizens.⁵

Unlike the literature on non-citizens' enfranchisement, the literature on franchise extension for native men and women is well

³ For a broader discussion of the determinants of successful economic integration see Card (2005), Borjas (2014) or Card and Peri (2016). For naturalization see Bloemraad et al. (2008), Hainmueller and Hangartner (2013) or Hainmueller et al. (2015).

⁴ For a related discussion about female enfranchisement, see Koukal and Eichenberger (2017). The role of the increasing costs of power-sharing under direct democracy goes beyond the traditional explanations of the discriminatory role of direct democracy for minority rights (Gamble, 1997; Donovan and Bowler, 1998; Haider-Markel et al., 2007; Hainmueller and Hangartner, 2019).

⁵ We make use of a much richer dataset with all cantonal votes in Switzerland, while Stutzer and Slotwinski (2020) focus on two cantons (Grisons and Zurich). The largest part of their analysis relies on cross-municipality variation, whilst we can focus on within-municipality variation in all cantons of Switzerland that voted at least twice on foreigners' suffrage.

established. Acemoglu and Robinson (2000, 2001) prominently frame a theory of democratization that explains suffrage extensions as a strategic decision by the elite to prevent revolution or social unrest.⁶ Wars (e.g., Hicks, 2013; Polishchuk and Syunyaev, 2015) and the strategic concerns of a divided elite (e.g., Lizzeri and Persico, 2004; Llavador and Oxoby, 2005) have also been considered as potential drivers of suffrage extensions. Bertocchi (2011) finds that a smaller gender wage gap increases the likelihood of female enfranchisement across Europe. Engerman and Sokoloff (2005) empirically underline this result with data from North and South America, providing evidence that greater homogeneity (in terms of socioeconomic or ethnic attributes) drives democratization.

Democratization via enfranchising more natives has also been explained by various price effects. There exists evidence that the willingness of men to enfranchise women increases in their scarcity (e.g., Kenny, 1998; Braun and Kvasnicka, 2013) and decreases with the growing political influence of the actual (male) electorate (Koukal and Eichenberger, 2017). The impact of preference heterogeneity between the old and new electorate on suffrage extensions is less well explored. The few contributions about non-citizens of which we are aware find for immigrants, compared to natives, lower status quo effects (Koukal, 2013), stronger preferences for increasing social services expenditures (Vernby, 2013), and a tendency to vote for left parties (Strijbis, 2014). Moreover, they indicate ethnicity to be a main driver of party choice (Tillie, 1998).

With growing international mobility, the interest in measuring the consequences of growing ethnic diversity is increasing (Hainmueller and Hopkins, 2014). There are two prominent opposing theories on the effect of outgroup size on ingroup attitudes toward the outgroup. On the one hand, the cultural threat hypothesis suggests that natives fear immigrants because they pose a threat to their cultural identity (Hainmueller and Hiscox, 2007; Kinder and Kam, 2009). Following this approach, the size of the foreign population has been shown to positively affect the support of far-right parties (Halla et al., 2017; Brunner and Kuhn, 2018; Edo et al., 2019) and to diminish the willingness to redistribute (Luttmer, 2001; Alesina et al., 2019; Tabellini, 2020). Furthermore, restrictive naturalization rules are more prevalent within a growing foreign population (Bertocchi et al., 2010; Mariani, 2013). On the other hand, contact theory suggests that interactions between outgroup and ingroup members reduce information asymmetries, increase trust, reduce prejudices, and may moderate perceived threat (Allport et al., 1954; Yehuda, 1998; Paluck et al., 2019). Using French data, Jolly and DiGiusto (2014) find that xenophobic attitudes decrease with a growing foreign population size, while for the Netherlands, Schlueter and Scheepers (2010) provide evidence for both threat and contact theory depending on the considered measures for the size of the foreign population. Semyonov et al. (2004) show that in Germany, perceived group size drives anti-immigrant attitudes, while actual intergroup contact reduces perceived group threat.

Besides the size of the foreign population, the cultural background and institutional context also matter in the naturalization process. Hainmueller and Hangartner (2013) provide evidence for the country of origin of the applicant being the most important determinant of naturalization decisions in Swiss municipalities. Moreover, once politicians rather than citizens decide on the naturalization applications, naturalization rates increased by about 60 percent (Hainmueller and Hangartner, 2019). Therefore, direct democracy might constitute a significant barrier to the broader integration of non-citizen residents in politics, either because it raises the price of political power-sharing or because it fosters the discrimination of minorities (Gamble, 1997; Donovan and Bowler, 1998; Haider-Markel et al., 2007; Koukal and Eichenberger, 2017; Hainmueller and Hangartner, 2019).

Beyond the impact of foreigners' population size, economic circumstances have also been shown to impact attitudes toward foreigners. In a cross-country study covering 12 countries, Quillian (1995) shows that anti-immigrant attitudes are more prevalent if economic conditions are worse. Most authors analyzing the economic threat hypothesis concentrate on the labor market situation. While some authors find evidence that anti-immigrant attitudes are positively affected by greater competition in the labor market (Scheve and Slaughter, 2001; Mayda, 2006; Hyll and Schneider, 2018), others question this result (Hainmueller and Hiscox, 2007; Sides and Citrin, 2007).

3. Institutional background

Across Europe, the enfranchisement of non-citizen residents has increased since the late 1970s.⁷ In most countries, the national parliament decides on the enfranchisement of non-citizens. However, such a setting provides only limited information about the preferences of the actual electorate. In Switzerland, non-citizens' suffrage cannot be implemented by the national or cantonal parliaments, but only by the actual electorate through referenda votes. At the federal level, non-citizens' voting rights for federal matters have never been subject to a vote. In contrast, at the cantonal level, non-citizens' voting rights for cantonal and municipal matters have been subject to approximately 40 votes in 16 of the 26 cantons. The cantonal votes on non-citizens' enfranchisement result from different procedures, which are listed in Table A1 for the votes in our dataset. As voting rights are regulated at the constitutional level, the mechanisms are the following: (i) Citizens can start a popular initiative, i.e., they formulate a constitutional amendment and have to collect a certain number of supportive signatures demanding a referendum vote on the respective proposal. The proposal is implemented if it gets a simple majority of the votes. (ii) Cantonal parliaments can design a constitutional amendment. However, in all cantons, constitutional amendments are subject to a mandatory referendum. The amendment is only implemented if it gets a simple majority of the votes. (iii) Votes on non-citizens' enfranchisement sometimes result from total or partial revisions of the cantonal constitutions, which also need the consent of the citizens. In all these cases, the decision to hold a referenda vote is taken at the cantonal level and is, thus, exogenous to individual municipalities, which are our units of observation.

Due to cantonal autonomy, various types of voting rights for non-citizens have been considered and partly installed. Table A1 in the

⁶ See also Conley and Temimi (2001), Ellis and Fender (2010), Aidt and Jensen (2014), or Aidt and Franck (2015).

⁷ For more information on non-citizens' voting rights across Europe, see Groenendijk (2008) or Aleinikoff and Klusmeyer (2013).

Table 1
Accepted Referenda on Non-citizens' Suffrage in Swiss Cantons.

Vote date	Yes share	Effective date	Canton	Suffrage type	Opt-in	# Municipalities
20.03.1977	80%	01.01.1997	Jura	Active local + cantonal	NO	All
30.04.1995	Cantonal assembly	Opt-in	Appenzell A.R.	Full local	YES	4
24.09.2000	76.60%	01.01.2002	Neuchâtel	Active cantonal	NO	All
22.09.2002	55.90%	14.04.2003	Vaud	Full local	NO	All
18.05.2003	59.70%	Opt-in	Grison	Full local	YES	25
16.05.2004	58.00%	01.01.2005	Fribourg	Full local	NO	All
23.03.2005	76.50%	Opt-in	Basel-City	Full local	YES	0
24.04.2005	52.30%	24.04.2005	Geneva	Active cantonal	NO	All
17.06.2007	54.40%	17.06.2007	Neuchâtel	Passive local	NO	All
28.09.2014	54.00%	28.09.2014	Jura	Passive local	NO	All

Note: In the Canton of Appenzell Ausserrhoden, the cantonal assembly has voted on non-citizens' suffrage, and thus no data on the municipal level is available.

Sources: Adler et al. (2016), cantonal chancelleries, cantonal constitutions.

Appendix provides an overview of the different types of enfranchisement that have been voted on in the cantons of our dataset. They range from active and passive voting rights at the cantonal level to optional voting rights at the municipal level, i.e., to allow municipalities to enfranchise non-citizens at the municipal level. Active voting rights provide them with the right to take part in the political process as voters, while passive voting rights allow them to run for office. Table 1 provides an overview of the cantons that introduced non-citizens' suffrage. Analogously to the enfranchisement of women, French-speaking cantons were the first to make the move to enfranchise non-citizens. Currently, the cantons of Neuchâtel and Jura grant non-citizens the most extensive political rights, i.e., active voting rights at the cantonal level and active and passive voting rights at the municipal level. However, cantons also differ with respect to the conditions under which non-citizens receive voting rights, most importantly their duration of stay.⁸

To enfranchise non-citizens in a canton, at least 50 percent of the participating voters at the cantonal level must agree. Table 1 provides an overview of accepted referenda votes and the corresponding yes shares. The cantonal decisions are imposed on municipalities where only a minority of voters agrees to enfranchise non-citizens (i.e., non-citizens are enfranchised at the municipal level against the will of the majority of municipal voters). In some cantons, an opt-in rule is used that delegates the right to enfranchise non-citizens at the municipal level to the municipalities (indicated as opt-in YES in Table 1). Currently, three cantons (Grison, Appenzell Ausserrhoden, and Basel City) have introduced opt-in rules for municipalities. Furthermore, some votes on enfranchising non-citizens are integrated into general constitutional revisions and are, therefore, part of a larger political package.⁹

4. Theoretical considerations

In the absence of non-citizens' suffrage, the electorate consists of Swiss voters only. They decide on politics, either via direct democratic institutions or by delegating their decision-making power to politicians. Extending the group of voters by enfranchising non-citizens potentially generates both costs and benefits for the actual electorate. In the following section, we discuss how these benefits and costs might evolve with a growing share of foreigners.

Enlarging the electorate has the potential of several *benefits*. Involving more and different people in the decision-making process increases the amount and quality of information on political issues, the legitimacy of political decisions, and the media's incentive to cover political topics.¹⁰ According to the Condorcet jury theorem, the quality of democratic decisions under uncertainty improves with an increase in the number of voters if their individual errors are independently distributed (i.e., if the heterogeneity of voters increases).¹¹ In addition, the political integration of non-citizens has been shown to have broader integrative effects as well (e.g., Koukal, 2013; Slotwinski et al., 2017; Koukal and Portmann, 2019). This is in line with the literature analyzing the role of participatory political institutions in fostering cooperation (Acemoglu and Robinson, 2012), civic virtue (Frey, 1997), or trust (Rainer and Siedler, 2009). A growing share of foreign residents might affect the extent to which democratic institutions unfold their positive effects. Therefore, the need for political inclusion and resulting benefits are likely to increase if the share of foreign residents grows. These considerations suggest that *natives' willingness to enfranchise non-citizens increases with the share of foreigners*.

Conversely, enlarging the electorate may also impose *costs* on the actual electorate. First, natives' individual influence on political outcomes decreases with a larger electorate, as the probability of a vote affecting the outcomes decreases.¹² These costs increase in preference heterogeneity between the native and foreign populations and depend on the institutional setting. Previous literature

⁸ For instance, for cantonal voting rights, foreigners in Neuchâtel must have been canton residents for at least five years, whereas in Jura, foreigners are granted voting rights after 10 years in Switzerland and one year in the canton.

⁹ Vote types are indicated in Table A1 in the Appendix. In our main estimation, we exclude these vote packages.

¹⁰ See, for instance, Besley and Burgess (2002) for a model and application of the role of media in the political process.

¹¹ For a discussion of the Condorcet jury theorem and its application in politics, see Stadelmann et al. (2014).

¹² One's theoretical influence in the political decision-making process is $\frac{1}{n}$, and thus, the probability of affecting outcomes decreases based on the number of individuals with political rights. We, thus, ignore the paradox of voting—see, for instance, Aldrich (1997), Blais (2000), or Besley and Case (2003)—and assume that voters take into account the number of people with whom they share the right to vote.

Table 2
Descriptive Statistics.

Variable	N	Mean	SD	Min	Max
yes share	2476	27.29	12.86	0	83
population	2476	3881.28	15,741.34	38	384,786
population (log)	2476	7.14	1.32	3.64	12.86
foreigner (share)	2476	12.45	10.03	0	61.71
MS-foreigner (share)	2476	18.33	9.35	3.31	37.81
culturally distant (share)	2476	29.80	19.67	0	100
former Yugoslavia (share)	2476	13.58	14.94	0	88.24
not neighbor (share)	2476	57.30	17.20	0	100
naturalization (share)	2476	0.21	0.29	0	2.55
unemployment Swiss (share)	2476	1.34	0.79	0	4.87
unemployment foreign (share)	2476	3.71	3.70	0	50
parliament	2101	0.18	0.38	0	1
agriculture (share)	2476	2.67	2.77	0	19.51
pensioner (share)	2476	15.37	4.24	2.45	37.10
Gini coefficient	2476	43.75	6.69	29.80	90.80
Social Democratic Party (share)	2476	18.52	7.92	0	56.00
mean income	2476	59,297.01	24,023.21	27,655	533,312
mean income (log)	2476	10.94	0.31	10.23	13.19

Note: These statistics include observations from our main sample. Votes embedded in partial or total revisions and singleton municipality observations are excluded. The number of observations is smaller for the variable parliament since this variable is not observed for all municipalities.

(Koukal, 2013; Vernby, 2013; Strijbis, 2014) found evidence that the preferences of non-citizens and natives differ, and, hence, non-citizens' suffrage is likely to move the median voter and change political outcomes. Regarding the enfranchisement of women, Kenny (1998) and Braun and Kvasnicka (2013) find that the scarcity of women, and, thus, their relative small weight in democratic decisions, has a positive effect on female enfranchisement. In other words, the larger the increase in the size of the electorate, the larger the power loss of the current electorate. This effect is likely to be more pronounced if the institutional context grants the actual electorate more political influence, for instance, with more effective direct democratic institutions (Koukal and Eichenberger, 2017). In addition, the literature also suggests that hostility against the outgroup increases when the size of the foreign population grows, as this threatens the native population in various dimensions, such as their cultural identity or their social and economic privileges (Halla et al., 2017; Brunner and Kuhn, 2018; Edo et al., 2019).¹³ Therefore, individual power loss and perceived threat suggest that *natives' willingness to enfranchise non-citizens decreases with the share of foreigners*. These costs are likely to be more pronounced if the preferences of the native and the foreign populations differ substantially from each other.

Ex-ante, the overall effect of extending the electorate to non-citizens may be positive or negative for the actual electorate, as this depends on the relative sizes of costs and benefits. In the following sections, we analyze how the presence and composition of non-citizens impact the willingness of natives to enfranchise non-citizens in different institutional settings.

5. Data and variables

Our empirical analysis relies on three data sources. (1) We collected and digitized data from 33 cantonal referenda on suffrage extension between 1992 and 2016. An overview of the referenda in our dataset is provided in Table A1 in the Appendix. (2) We combined this information with a variety of sociodemographic municipal characteristics acquired from the Swiss Statistical Office and the Federal Tax Administration. (3) For information on institutional municipal characteristics, we make use of the municipal survey data provided by Andreas Ladner. This results in a novel dataset with approximately 3200 observations. We can exploit the within-municipality variation of 24 referenda stemming from 10 cantons that voted at least twice on non-citizens enfranchisement.¹⁴ Table 2 provides the descriptive statistics of the outcome and the explanatory and control variables, including all vote types.

An empirical panel analysis at the municipality-level exhibits several advantages. It allows the examination of the effect of the foreigners' share, characteristics of the foreigners, municipal institutional features, and economic conditions on the approval of non-citizens' voting rights. Compared to cross-country data, municipal panel data enables the analysis of a richer variation in a more homogenous context. Furthermore, the decision to conduct a referendum vote is exogenous to the individual municipality, as the requirement to launch such a vote is decided at the cantonal level. Like in many other OECD countries, in Switzerland, some municipalities have merged in our period of observation (Ladner, 2011; Steiner and Kaiser, 2017). As statistical offices provide most statistical information only for the newly merged unit but not for each former subunit, the construction of a decent dataset covering a sufficient number of variables for the municipalities that merged later was not possible. Therefore, we excluded all municipalities that experienced an amalgamation in our period of observation, allowing us to include a larger variety of control variables and to work with

¹³ On the contrary, following Allport's contact theory (1954), increased intergroup contact between foreigners and natives undermines anti-foreigner sentiment, reduces information asymmetries, increases trust, and, therefore, increases the willingness to share political power with them.

¹⁴ The panel is unbalanced, as different cantons voted with different frequencies. A list with the referenda in our dataset is provided in Table A1 in the Appendix.

a balanced panel.

5.1. Dependent variable

Our outcome variable *yes share* captures the share of votes in favor of enfranchising non-citizens in a municipality. The outcome at the municipal level is observed in the cantonal referenda votes on suffrage extensions in the 1992–2016 period. Fig. A1 in the Appendix illustrates the within-municipal variation between the first and last votes in our panel and suggests that the willingness to enfranchise non-citizens is not characterized by a positive time-trend.

5.2. Explanatory variables

Our main variable of interest is *foreigner* (measured as a share); it approximates the size of the affected group that is to be enfranchised in a municipality. Fig. A2 in the Appendix provides an overview of the variation of the share of foreigners within a municipality between the first and last votes in our sample. Switzerland has been an immigration destination for decades. The vast majority (more than 80 percent) of immigrants originate from European countries. While the period between the 1960s and 1970s was characterized by a wave of immigrants from Southern Europe (Italy, Portugal, and Spain), people from (former) Yugoslavia¹⁵ constitute the largest new immigration group in our period of observation, accounting for around 24 percent of the foreign population in Switzerland in 2000 (Federal Statistical Office, 2020).

5.2.1. Measures of cultural distance

Cultural distance—which we understand as a proxy of preference heterogeneity between the native and the foreign population—can be measured by various approaches that vary widely between disciplines (Beugelsdijk et al., 2019). To meet this challenge, we follow two approaches that are well-established in the economic literature and compare the respective results. First, we apply the approach by Inglehart and Baker (2000) which is based on data from the World Values Survey (WVS). Second, we follow authors who emphasize the role of common language and geographical proximity as an important indicator of common cultural traits (Guiso et al., 2009; Jasso, 2009; Bisin and Verdier, 2011).

Inglehart and Baker (2000) locate 65 countries on two central dimensions of cross-cultural variation, which explain around 70 percent of the variation in the applied WVS items.¹⁶ The first dimension “survival vs. self-expression” captures the importance of economic and physical integrity relative to personal self-fulfillment and self-expression. The second dimension “traditional vs. secular-rational” considers the relative importance of traditional values that concentrate on the importance of family, religion, or respect for authorities in comparison with secular values emphasizing beliefs such as tolerance of human diversity or gender equality. We use the results of Inglehart and Baker (2000) to classify the countries of origin in our sample as culturally similar or distant to Switzerland. In a next step we use this information to create an indicator of cultural distance between natives and non-citizen residents on the Swiss municipal level. The variable *culturally distant* captures the share of foreigners which are classified as cultural distant to Switzerland among the total foreign population. The group of culturally similar countries contains countries with a value system similar to the Swiss one with respect to the two dimensions explained above (survival vs. self-expression and traditional vs. secular-rational), such as historically Catholic and Protestant countries, or English-speaking OECD states. A list of countries classified as culturally similar, or culturally distant respectively, is provided in Table A2 in the Appendix. To further ensure the reliability of our classification we compared it with the composite bilateral measure of cultural distance by Kaasa et al. (2016). It strongly supports our categorization of European countries.¹⁷ In a second step, we keep following Inglehart and Baker’s (2000) classification but focus on Switzerland’s wave of immigrants from former Yugoslavia, which forms the largest immigration group in our period of observation. Moreover, immigrants from former Yugoslavia got major attention in the Swiss immigration debate (Hainmueller and Hangartner, 2013). The share of non-citizens from former Yugoslavia among the total foreign population is captured in the variable *former Yugoslavia*.

Our second approach, which emphasizes the importance of geographical and linguistic proximity, is implemented by categorizing immigrants from neighboring countries that share a common language with the Swiss population (Austria, France, Germany, Italy, and Liechtenstein) as culturally similar and foreigners from all other countries as culturally (more) distant. The variable *not neighbor* indicates the share of non-citizens among the total foreign population in a municipality who are not originally from a neighboring state of Switzerland. Table A2 in the Appendix lists the states classified as culturally distant and culturally similar in the three measures.

5.2.2. Measure of institutional price differences

Following Koukal and Eichenberger (2017), we hypothesize that more representative (instead of direct democratic) instruments at the municipal level can—under specific conditions—foster the enfranchisement of non-citizens. The intuition behind this approach is that the existing electorate is more willing to share their political power with a new group of voters if their individual influence, and, thus, their influence loss, is smaller. One way of measuring the strength of representative democracy on the local level is by using the

¹⁵ The federal office of Statistics counts the following countries (or former countries) as belonging to this group: Bosnia-Herzegovina, Croatia, Kosovo, Montenegro, North Macedonia, Serbia, Slovenia, and (former) Yugoslavia.

¹⁶ Theoretically they follow Huntington (1993), who describes eight cultural zones, which are based on persistent cultural differences.

¹⁷ Kaasa et al. (2016) use data of the European Value Survey and European Social Survey. As the data base does not cover important European and non-European countries, this cultural distance index was not suitable for our analysis.

municipal legislative institutions, which either consist of a town meeting (direct democracy) or a parliament (representative democracy).¹⁸ In direct democratic municipalities, voters meet directly (one to four times a year) and discuss and decide on municipality topics themselves. In contrast, in municipalities with a parliament, voters delegate a part of their political power to politicians. We construct the dummy variable *parliament*, which is equal to zero when a municipality has a town meeting (direct democracy) and equal to one if the municipality has a parliament (representative democracy). We rely on survey data by Ladner to classify the municipal legislative institution. Note that changes in the municipal legislative institutions are possible over time but are rather uncommon. We identify institutional switchers in our sample based on information provided by Funk and Litschig (2020) and the survey data by Ladner.¹⁹ By excluding the switchers from our analysis, we treat the variable *parliament* as being fully time-invariant.

5.3. Control variables

We introduce a set of control variables that cover a broad range of economic and non-economic factors that might shape native's willingness to enfranchise non-citizens. To account for the different sizes of municipalities, we introduce the variable *population* that constitutes the natural logarithm of the population in a municipality. A channel that has been mentioned in the literature on how natives perceive immigrants is political ideology (Mayda, 2006; Knoll et al., 2011). The variable *Social Democratic Party* reflects the vote share of the largest left party in Switzerland in the most recent national elections and aims to proxy for prevalence of left leaning voters in a municipality. To further control for the prevalence of (conservative) attitudes in the population, we introduce the variable *pensioner* that measures the share of the municipal population above 64 years and captures age-related preferences. Furthermore, we generate the variable *agriculture* as the number of farms relative to the population in a municipality. This variable captures the prevalence of traditional and conservative norms, the economic structure of a municipality and the location on the rural-urban continuum, which has shown to be an important determinant of voting behavior (Garcia and Davidson, 2013; Scala and Johnson, 2017). To control for the general openness toward foreigners in a municipality we include *naturalization*, which is constructed as the number of naturalizations relative to the resident population in the year of observation. The information for the former four variables is provided by the Swiss Federal Statistical Office. We would have liked to further analyze how the stock of naturalized individuals in a municipality affects the acceptance to enfranchise non-citizens. However, this information is not available on the municipality level. An important economic factor that has shown to influence native attitudes towards foreigners are labor market concerns (Scheve and Slaughter, 2001; Mayda, 2006; Hainmueller and Hiscox, 2007; Hainmueller and Hopkins, 2014). To consider this prominently discussed channel, we introduce the variables *unemployment foreign* and *unemployment Swiss*, which reflect the number of unemployed individuals relative to the foreign or domestic population in our set of control variables.²⁰ Besides economic competition on the labor market, also the fiscal burden has shown to impact native attitudes towards foreigners (Hanson et al., 2007). To account for this factor, we proxy the financial situation within the municipality with data from the Federal Tax Administration and include the variable *mean income* (measured in logs), which reflects the mean income of natural persons in a municipality. Finally, we also introduce the variable *Gini coefficient* to account for the prevalence of inequality in a municipality. There are further variables we would have liked to include in our analysis, such as information about the educational attainment, income, crime rate or religious affiliation, specifically for the native and the foreign population. Unfortunately, information on these variables is not available at the municipality level, which limits our analysis.

6. Empirical strategy

To gain a precise understanding on how the share of foreigners and other factors impact the willingness to enfranchise non-citizens, we need to account for the complex and multifactorial setting. Therefore, a cross-sectional analysis is not suitable to answer our research question. Due to our rich panel dataset, we choose a model with municipality fixed effects as our preferred option. Hence, we estimate the following model:

$$yes\ share_{mir} = \alpha + \beta_1 foreigner_{mt} + \theta X_{mt} + \delta_m + \gamma_r + \phi_t + \epsilon_{mir} \quad (1)$$

where X_{mt} denotes a vector of controls and δ , γ , and ϕ are fixed effects. By applying municipality fixed effects δ in our base model, we take into account the omitted variable biases stemming from the municipality level and control for time-invariant municipality

¹⁸ For simplification, we denote municipalities with a local parliament as representative democratic. Strictly speaking, also municipalities with a local parliament have access to direct democratic means on the cantonal and national levels.

¹⁹ The municipal surveys of Ladner are available at <http://www.andreasladner.ch/uebersicht.htm>. In most cantons, municipalities can choose their legislative form (parliament or town meeting). Population thresholds exist for municipalities in the cantons of Vaud, Fribourg, Valais, and Zurich (Funk and Litschig, 2020). We include these cantons in our fixed-effect analysis, as the number of municipalities around these cut-offs is low, and the assignment rule is not stringent (i.e., mandating a town meeting below the cut-off as well as allowing choice above). Only the canton of Vaud uses a sharp assignment rule and had a regulation change during our period of observation. Thus, in Table A7 we perform a robustness check excluding the canton of Vaud from the analysis.

²⁰ It would be optimal to calculate the unemployment rate with the number of unemployed individuals relative to the working population. Unfortunately, the number of the working population at the municipality level is in many cases associated with high uncertainty (data from SECO). Hence, we decided to divide the number of unemployed by the total number of foreign and native residents in a municipality based on information from the Federal Statistical Office.

characteristics, such as municipal institutions, general openness toward foreigners, culture, or geographical location. By including referenda fixed effects γ , we account for the different types of voting rights that have been debated and absorb cantonal specific time effects. Additionally, by adding time fixed effects ϕ , we control for general time effects across cantons.

Even after including municipality, time, and referenda fixed effects, a consistent estimation of β_1 is only possible under the assumption that the *yes share* is uncorrelated with the error term. As discussed in Section 4, it is not clear ex ante if we expect $\beta_1 < 0$ (costs exceeding benefits) or $\beta_1 > 0$ (benefits exceeding costs). As is always true, our estimate of β_1 can be biased due to causality and simultaneity issues. The most plausible argument is that not only natives' preferences react to high foreigner shares (our thesis), but also foreigners react to the natives' preferences, that is, they migrate to municipalities where they are welcome, which is then also mirrored in natives' support for enfranchising foreigners. However, if $\beta_1 < 0$, this chain of reactions would not inflate but deflate our estimates, which would make them rather conservative and immune to being falsely interpreted as being statistically significant.

Nevertheless, we try to control for potential endogeneity by an instrumental variable approach. One possible instrument is the 'shift-share' methodology which has been extensively used in the field of labor economics (Card, 2001; Peri, 2012). However, the instrument has also been criticized (Jaeger et al., 2018; Goldsmith-Pinkham et al., 2020) and in the Swiss setting, shift-share instruments have, to the best of our knowledge, only been used to instrument the share of foreigners at the regional levels (local labor markets or cantons).²¹ Therefore, we follow Brunner and Kuhn (2018) and instrument the share of foreigners at the municipal level with the foreigner share at the MS-regional level (MS is the abbreviation of "mobilité-spatiale" or spatial mobility).²² The boundaries of the 106 MS regions are determined by the Federal Statistical Office and follow the idea of small labor market areas, as the regions are classified by the level of local economic activities. Fig. A3 provides an overview of the distribution of MS regions.²³ In order for the MS foreigner share to be a valid instrument, two identifying assumptions must be fulfilled. First, the foreigner share in an MS region must be determined by factors other than natives' attitudes toward foreigners. A possible argumentation in favor of this assumption is that immigrants settle in a specific region due to factors such as closeness to their family or employment possibilities. Second, the exclusion restriction requires that the share of foreigners in the broader region have no direct effect on the *yes share* to enfranchise non-citizens in a municipality. The second assumption may not be fulfilled if, for instance, an individual is working in another municipality in the same MS region. In this case, the attitudes toward foreigners may not merely be driven by the share of foreigners in their living municipality but also by the share of foreigners in the workplace municipality.

Besides our base model (1), we estimate models (2) and (3) to analyze potential heterogeneous effects of *foreigner* on natives' willingness to enfranchise non-citizens. We investigate the interaction effect between the share of foreigners and the degree of cultural distance between natives and foreigners (2), as well as the interaction effect of the share of foreigners and the institutional structure, measured by the variable *parliament* (3). We hypothesize that (among others) the effect of *foreigner* on natives' willingness to enfranchise non-citizens depends on the extent of preference heterogeneity between the two groups. For proxying the extent of preference heterogeneity between the foreign and the native population, we rely on three different measures: *culturally distant*, *former Yugoslavia*, and *not neighbor*. We estimate the following model:

$$\text{yes share}_{mir} = \alpha + \beta_1 \text{culturally distant}_{mt} + \beta_2 \text{foreigner}_{mt} + \beta_3 \text{culturally distant}_{mt} * \text{foreigner}_{mt} + \theta X_{mt} + \delta_m + \gamma_r + \phi_t + \epsilon_{mir} \quad (2)$$

where X_{mt} denotes again a vector of controls and δ , γ , and ϕ are fixed effects. If preference heterogeneity, proxied by the share of culturally distant non-citizens, is a moderating factor, we expect β_3 to be negative. As mentioned in Section 5, information on other relevant characteristics of the foreign population—such as education, income, crime rates, or language proficiency—is not available on the municipality level. Therefore, we focus on the measures of cultural distance on the municipality level. Following Koukal and Eichenberger (2017), we further hypothesize that representative democracy, when compared to direct democracy can—under specific conditions—lower the price to enfranchise non-citizens, as the individual power loss is less pronounced. We thus estimate the following model:

$$\text{yes share}_{mir} = \alpha + \beta_1 \text{parliament}_m + \beta_2 \text{foreigner}_{mt} + \beta_3 \text{parliament}_m * \text{foreigner}_{mt} + \theta X_{mt} + \delta_m + \gamma_r + \phi_t + \epsilon_{mir} \quad (3)$$

where X_{mt} denotes analogous to Model (1) and (2) a vector of controls and δ , γ , and ϕ are fixed effects. We expect the boosting effect of representative democracy (compared to direct democracy) to grow in the share of foreigners and therefore expect β_3 to be positive.

7. Results and discussion

This section presents and discusses the results of our main estimations and robustness checks.

²¹ See, for instance, Favre (2011), Degen and Fischer (2017), or Basten and Siegenthaler (2019). A reason for the lack of shift-share instruments at the municipal level in Switzerland is the high degree of fractionalization of Swiss municipalities. To construct shift-share instruments, in general, information on the nationality of the entire foreign population is used. As the median Swiss municipality counts 1335 inhabitants (in 2005) and 1066 in our sample, the individual nationalities of foreigners at the municipal level suffer from high variance within time. Therefore, the classical shift-share approach does not seem appropriate on the municipal level.

²² This instrumental variable approach was first introduced in Dustmann and Preston (2001).

²³ Note that MS regions are not institutionally organized. In 2019, the number the conceptualization of MS regions was slightly changed, and the number of regions was reduced to 101.

Table 3
Explaining the Yes Share in Referenda on Non-Citizens' Voting Rights (OLS).

VARIABLES	(1) Yes Share	(2) Yes Share	(3) Yes Share	(4) Yes Share	(5) Yes Share
foreigner (share)	−0.196*** (0.067)	−0.215*** (0.067)	−0.171*** (0.063)	−0.170*** (0.064)	−0.169*** (0.063)
population (log)	−1.865 (1.829)	−1.936 (1.832)	−2.487 (1.703)	−2.413 (1.769)	−2.676 (1.730)
unemployment foreign (share)		0.058 (0.061)	0.036 (0.058)	0.032 (0.058)	0.027 (0.059)
unemployment Swiss (share)		−1.196** (0.488)	−1.327*** (0.462)	−1.319*** (0.459)	−1.373*** (0.466)
Social Democratic Party (share)			0.319*** (0.040)	0.312*** (0.040)	0.308*** (0.040)
pensioners (share)			−0.244*** (0.065)	−0.227*** (0.066)	−0.216*** (0.070)
Gini coefficient				0.127* (0.069)	0.130* (0.069)
mean income (log)				−0.415 (2.071)	−0.508 (2.098)
agriculture (share)					−0.215 (0.294)
naturalization (share)					0.300 (0.779)
Municipal FE	✓	✓	✓	✓	✓
Vote FE	✓	✓	✓	✓	✓
Time FE	✓	✓	✓	✓	✓
Observations	2476	2476	2476	2476	2476
R-squared	0.904	0.905	0.912	0.912	0.912

The dependent variable is the yes share_{mtr} in votes on non-citizens' enfranchisement. Robust standard errors in parentheses are clustered at the municipal level. Votes embedded in a political package are excluded from the sample.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

7.1. Size of the foreign population

Table 3 reports the OLS estimates of the base model (1) with a listwise introduction of control variables. Referenda votes that were part of constitutional revisions and, thus, embedded in a broader political package are excluded in Table 3. All specifications of Table 3 display a negative coefficient of *foreigner*, which remains statistically significant at the 1 percent level and robust in terms of size. As we estimate a model with municipality-fixed effects, β_1 captures the within-municipality variation of the share of foreigners. Our estimates suggest that a one percent increase of foreigners in one's municipality is associated with a decreased willingness to share political power by approximately 0.20 percentage points.²⁴

The results presented in Table 3 suggest that, overall, the benefits for citizens to enfranchise foreigners seem to be overcompensated by the respective costs, for instance, the loss of political power (Braun and Kvasnicka, 2013). Another possible interpretation for $\beta_1 < 0$ is that increasing foreigner shares induce the feeling of threat among natives, which would be consistent with a recent literature on the role of migration for the support for the far right (Halla et al., 2017; Brunner and Kuhn, 2018; Edo et al., 2019). Unfortunately, we cannot disentangle the threat hypothesis from other potential explanations. However, in the further analysis we try to gain a better understanding of the conditions under which the negative relationship of granting non-citizens the right to vote and the share of foreigners is more pronounced.

In a variety of robustness exercises the negative coefficient of *foreigner* stays robust in terms of size and significance. To address concerns of endogeneity, we present IV estimates as discussed in Section 6. Table A3 presents an overview of the first and second stage results of our IV estimations, which confirm the negative association of foreigner share and natives' willingness to enfranchise non-citizens, however the coefficient is larger. As a next step we estimate our model using the full sample including all referenda, also those related to partial or total constitutional revisions (Table A4, Spec. 1).

As many Swiss municipalities are small, we control for the role of municipality size in the following ways: First, we estimate our model with a non-linear effect of the absolute size of population (A4, Spec. 2). Second, we exclude the five percent smallest municipalities in our sample (A4, Spec. 3), and third, we additionally exclude the five percent largest municipalities from our sample (A4, Spec. 4). To consider the different scopes of referenda with respect to the demanded franchise, we perform an analysis with a reduced sample of only the quasi-identical referenda from the canton of Zurich (A4, Spec. 5). As we observe different cantons and regions in our sample, we want to rule out that our coefficient of interest is driven by specific regional time trends. Therefore, in Table A5, we provide robustness checks where we account for differential linear time trends among language regions (A5, Spec. 1), MS-regions (A5, Spec. 2),

²⁴ As shown in Table A1 in the Appendix, different cantons voted in different times on foreigners' suffrage. Thus, the years between the first and the second observation of a municipality may vary.

Table 4
Interaction of Culturally Distant Foreigners with Share of Foreigners (OLS).

VARIABLES		(1) Yes Share	(2) Yes Share
1st Measure: Cultural distance based on Inglehart and Baker (2000)	culturally distant (share)	0.051** (0.022)	0.052** (0.021)
	foreigner (share)	−0.121 (0.084)	−0.084 (0.077)
	culturally distant (share) * foreigner (share)	−0.004** (0.002)	−0.004** (0.002)
	Observations	2476	2476
	R-squared	0.905	0.913
2nd Measure: Country of origin in former Yugoslavia	former Yugoslavia (share)	0.034 (0.023)	0.035 (0.024)
	foreigner (share)	−0.138* (0.074)	−0.109 (0.069)
	former Yugoslavia (share) * foreigner (share)	−0.007*** (0.002)	−0.006*** (0.002)
	Observations	2476	2476
	R-squared	0.904	0.912
3rd Measure: Country of origin in non-neighbor state	not neighbor (share)	0.044*** (0.017)	0.037** (0.017)
	foreigner (share)	−0.005 (0.117)	0.025 (0.111)
	not neighbor (share) * foreigner (share)	−0.003** (0.002)	−0.003** (0.002)
	Observations	2476	2476
	R-squared	0.905	0.912
	Control variables		✓
	Municipal FE	✓	✓
Vote FE	✓	✓	
Time FE	✓	✓	

The dependent variable is the yes share_{mt} in votes on non-citizens' enfranchisement. Robust standard errors in parentheses are clustered at the municipal level. Control variables include population size (log), unemployment share, share of Social Democratic Party, pensioner share, agriculture share, naturalization share, Gini coefficient, and mean income of natural persons (log).

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

and cantons (A5, Spec. 3). Again, the coefficient of *foreigner* stays robust to this exercise. Throughout all robustness checks, the effect of the foreign population on the yes share remains similar both in terms of size and statistical significance—only in the IV estimates the coefficient is somewhat larger when compared to the OLS estimates. Although these estimations provide stable results, we cannot fully rule out that unobserved time variant factors are affecting our results. Similar to the recent literature that analyzed the enfranchisement of non-citizens across countries (Kayran and Erdilmen, 2020) or by opt-in rules (Stutzer and Slotwinski, 2020), our estimations provide robust and convincing evidence from a large municipality-level panel that an increasing share of foreigners in a municipality decreases the willingness of natives to share political power with them.

Fig. A4 in the Appendix depicts the development of the share of foreigners in the cantons of our sample and for the whole of Switzerland over the 1980–2018 period. During our observed period, the share of foreign residents in Switzerland increased by seven percentage points, from 17.43 to 24.60 percent. Thus, for a municipality that faced an average increase of foreign residents, the estimates of our base model point to a decrease in the willingness to share power by 1.40 percentage points over the 1992–2016 period.²⁵ This effect is considerable, as the mean yes share is 29.33 percent and some of the referenda ended in close decisions (see Table A1).

7.2. Composition of the foreign population

So far, we have only considered the average effect of the foreigners' share on natives' willingness to enfranchise non-citizens. In the following section, we analyze potential heterogeneous effects to gain a better understanding of the results provided in Table 3. Following the preference and the cultural-threat hypotheses, larger cultural distance (and, hence, larger preference heterogeneity) between the foreign and the native population could lead to a decreasing willingness to enfranchise non-citizens. In Section 5, we introduced three measures of cultural distance between the native and the foreign population. The measures account for the share of non-citizens among the total foreign population in a municipality that is (i) culturally distant based on Inglehart and Baker (2000), (ii) originally from former Yugoslavia, and (iii) not migrating from a neighboring country of Switzerland. We hypothesize that the negative effect of *foreigner* on natives' willingness to enfranchise foreigners is more pronounced if cultural distance is larger and interact the share of culturally distant foreigners with the total share of foreigners. In Table 4, the moderator variables are the shares of culturally

²⁵ As Figure A2 in the Appendix depicts, most municipalities in our sample faced an increase in the foreign population between their first and last vote on foreigners' suffrage.

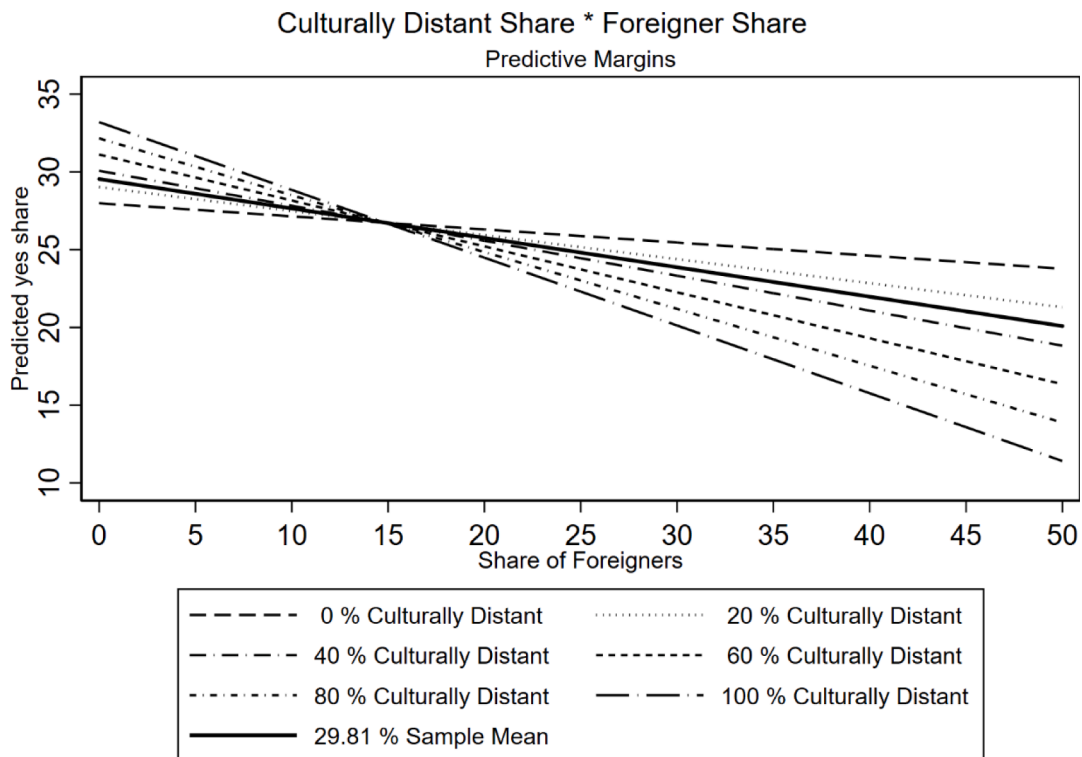


Fig. 1. Graphical Illustration of the Interaction of Culturally Distant Foreigners with Share of Foreigners.

distant foreigners (three measures) among the total foreign population in a municipality, where the share of foreigners is our main predictor.

Note that the base effect of *foreigner* is not negative and statistically significant in all specifications in Table 4, since it depicts the effect of *foreigner* in a municipality without culturally distant foreigners. The same accounts for the base effects of the three measures of cultural distance, which yield positive estimates but relate to municipalities without foreigners (which only applies for a neglectable number of municipalities). Our coefficient of interest is β_3 , which reflects the interaction of the share of residents from culturally more distant countries with the total share of foreigners. β_3 is negative and significant throughout all specifications and all measures in Table 4. In terms of size, β_3 in Table 4 varies between -0.003 and -0.007 , which seems small. However, considering the average increase of non-citizen share in Switzerland of seven percent in our period of observation (see Fig. A4), a one percentage point increase of *culturally distant* would account for -0.028 ($7 * -0.004$) percentage points of the yes share. The sample mean of *culturally distant* is 28.91 percent, hence cultural distance to the native population seems to be an important channel to explain the conditions under which the presences of immigrants negatively shapes the natives’ willingness to enfranchise non-citizens.

Fig. 1 provides a graphical illustration of this interaction term. The slopes of the yes share are computed as a reaction to the varying foreigner share while holding the value of the moderator variable (*culturally distant*) constant at values running from 0 to 100 percent. The interaction of *culturally distant * foreigners* is represented by the slopes, which are consistently steeper for municipalities with a larger share of culturally distant foreigners (Fig. 1).

As Fig. 1 illustrates, the cultural composition of the immigrant population seems to be an important moderator on how the share of foreigners affects natives’ willingness to enfranchise non-citizens. To further test the reliability of this finding, Table A6 in the Appendix yields the results of various robustness checks. We perform the estimations with the full sample including all referenda, also those related to partial or total constitutional revisions (Table A6, Spec. 1 to 3), with a non-linear effect of the absolute size of population (A6, Spec. 4 to 6), and exclude population outliers (A6, Spec. 7 to 9). The results remain robust in most specifications and provide convincing evidence that with an increasing share of culturally distant foreigners, the negative effect of the share of foreigners is more pronounced. There are at least three explanations for this result, which cannot be disentangled in this paper: First, the hindering effect of cultural distance may be a consequence of larger preference heterogeneity between the native and the (potential) foreign electorate. Moreover, the negative coefficient of the *not neighbor * foreigner* interaction may also point to the importance of common languages and geographical proximities in fostering trust, thereby accelerating the speed of integration (Guiso et al., 2009; Bisin and Verdier, 2011). Second, $\beta_3 < 0$ may also be explained by the role of cultural threat (Hainmueller and Hiscox, 2007; Kinder and Kam, 2009). Third, we cannot rule out that $\beta_3 < 0$ also captures discrimination against culturally distant foreigners (Hainmueller and Hangartner, 2013).

Table 5
Interaction of Parliament with the Share of Foreigners (OLS).

VARIABLES	No Interaction (1)	With Interaction (2)	(3)	(4)
	Yes Share	Yes Share	Yes Share	Yes Share
parliament	0.928 (0.737)	−0.138 (1.201)		
foreigner (share)	−0.099*** (0.033)	−0.117*** (0.036)	−0.199** (0.079)	−0.180** (0.074)
parliament * foreigner (share)		0.057 (0.045)	0.187* (0.107)	0.229** (0.103)
Control variables	✓	✓		✓
Cantonal FE	✓	✓		
Municipal FE			✓	✓
Vote FE	✓	✓	✓	✓
Time FE	✓	✓	✓	✓
Observations	2430	2430	2101	2101
R-squared	0.756	0.756	0.905	0.912

The dependent variable is the yes share_{mt} in votes on non-citizens' enfranchisement. Robust standard errors in parentheses are clustered at the municipal level. Control variables include population size (log), unemployment share, share of Social Democratic Party, pensioner share, naturalization share, Gini coefficient, and mean income (log). Votes embedded in a political package are excluded from the sample. The number of observations is smaller in Spec. (3) and (4) due to the introduction of municipality fixed effects, which drops singleton municipality observations.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

7.3. Institutional context

As elaborated in Section 6, we estimate Model (3) to account for the strength of representative democracy on the municipal level. We expect a higher willingness to enfranchise non-citizens in municipalities with a local parliament (as compared to a town meeting), as we assume the costs of political power sharing to be lower. Moreover, we assume this effect to grow in the share of foreigners as the mentioned cost mechanism is more pronounced with a growing new electorate. If costs of sharing political power are lower in representative (parliament) than direct democracy (town meeting), we expect *parliament * foreigner* (β_3) to be positive.

As the municipal legislative institution is time-invariant, it is not possible to display the base effect of parliament when applying the municipality fixed effects in Table 5, Specifications (3) and (4). We start with a lean model considering cantonal fixed effects in Specifications (1) and (2) of Table 5. The introduction of a dummy for parliament in the cross-sectional analysis in Specification (1) does not display a significant effect on the willingness to enfranchise non-citizens. From Specification (2) onward, we introduce the interaction of the municipal legislative with the foreign share. When applying cantonal fixed effects in Specification (2), β_3 is positive but not statistically significant. A graphical illustration of Specification (2) can be found in Fig. A5 in the Appendix. However, when including municipality-fixed effects and further control variables in Specification (4), β_3 becomes positive and significant at the five percent level.

This result suggests that the share of foreign residents exhibits a heterogenous effect on the willingness to share power with respect to the strength of representative democracy. An increase in the foreign share by one percentage point in municipalities with a parliament is associated with a 0.23 higher yes share when compared to municipalities with a town meeting. Note that this effect stays positive and significant in most robustness exercises; these are presented in Table A7 in the Appendix. Robustness tests in Table A7 include estimates for the whole sample (including total revisions), samples excluding outliers based on population size, a sample excluding the canton of Vaud (as they apply sharp population threshold for the municipal legislative), a sample only of the canton of Zurich, and an estimation with cantonal time trends. The boosting effect of representative democracy, when compared to direct democracy, can be explained by two mechanisms: first, by the lower price of sharing political influence in a representative democratic setting as compared to a more direct democratic environment (Koukal and Eichenberger, 2017) and second, by the controversially debated tendency of direct democracy to be harmful to minorities (Gamble, 1997; Donovan and Bowler, 1998; Haider-Markel et al., 2007; Koukal and Eichenberger, 2017; Hainmueller and Hangartner, 2019). Unfortunately, the data structure does not allow to further disentangle these two potential mechanisms but underline the importance of local institutions in political power sharing.

7.4. Further discussion

This section discusses interesting results obtained for our control variables presented in Table 3. With the growth in municipality size, a citizen's vote is less likely to be decisive. Following the cost argument, population growth can translate into a higher willingness to share political rights with non-citizens in larger municipalities. However, when we look at the estimates in Table 3, we do not find evidence that population size has a significant effect on the approval of non-citizens' suffrage. Another factor which has gained a lot of attention is the role of labor market competition. From Specification (2) onward, we introduce the municipal unemployment rate of the

native and foreign populations as our proxy for economic competition. Throughout all specifications, the unemployment rate of natives exhibits a statistically significant negative effect on the citizens' willingness to enfranchise non-citizens. A one percent increase in the unemployment rate of natives is associated with a decrease in the willingness to enfranchise non-citizens by approximately one percentage point. This is in line with the related literature which explains anti-immigrant attitudes with increased labor market competition and economic downturn (Scheve and Slaughter, 2001; Mayda, 2006; Hainmueller and Hiscox, 2007; Hainmueller and Hopkins, 2014). The negative coefficient of *unemployment Swiss* hints to the explanation of economic threat, which may hinder the political power sharing with non-citizens. In contrast, the unemployment of foreigners in one's municipality does not seem to impact the willingness of natives to enfranchise non-citizens.

Furthermore, in Table 3, from Specification 3 onward, we control for the vote shares of the Social Democratic Party, the most important left-wing party. As expected, the coefficient of the share of Social Democratic Party voters exhibits a positive and significant coefficient throughout all specifications in Table 3. Our estimates suggest that a one percent increase of the voters of the Social Democratic Party in a municipality increases the approval of non-citizens' suffrage by approximately 0.30 percentage points. There are multiple explanations for this relation. Given that foreigners have shown to have preferences for more leftist political positions (Vernby, 2013; Strijbis, 2014), the enfranchisement decision may be driven by a strategic calculus to shift the median voter to an income bracket that supports a political position (Meltzer and Richard, 1981). However, stronger support for the Social Democratic Party may also proxy for more leftist policy preferences within the native population, which may include the political integration of non-citizens.

In Table 3, the pensioners' share exhibits a robust negative and significant effect on the willingness to share political rights with non-citizens. Our estimates suggest that a one percent increase of pensioners in a municipality reduces the willingness to share political power with non-citizens by approximately 0.22 percentage points. A simple explanation for this observation constitutes the more conservative preferences of the elderly population. Furthermore, it can also point to the role of preference heterogeneity: If preference differences between elderly natives and foreigners (who are, on average, younger) are larger, enfranchising non-citizens will result in higher costs for elderly natives than for young natives.

8. Conclusion and outlook

In several developed countries, foreigners without political participation rights represent a large and growing percentage of the population. Therefore, the political integration of non-citizens is a major political challenge. Given the limited democratic legitimacy of decisions taken only by a fraction of the taxpayers and the potential positive economic and societal effects of political integration of non-citizens, it is important to understand the conditions under which native voters are willing to share political rights with non-citizens. While this paper is among the first to consider this question, it relies on a much richer dataset than previous studies. We explore a new municipality level dataset of Swiss cantonal referenda on the enfranchisement of non-citizens. The Swiss setting provides a unique laboratory for capturing the drivers of the enfranchisement of non-citizens, as it enables measuring the actual electorate's revealed preferences. To explain the willingness to enfranchise non-citizens, we focus on the role of the size and composition of the foreign population in different institutional settings.

Our estimates reveal that the approval of non-citizens' voting rights is negatively affected by the share of foreigners present in a municipality. Thus, when confronted with a larger foreign population, the support to extend suffrage to non-citizens decreases. Our analysis reveals that this relationship is more pronounced in municipalities with strong direct democracy and larger cultural distance between the native and foreign population. There are at least three complementary explanations for this finding: First, the costs to enfranchise non-citizens are larger if the actual electorate loses more political influence (direct democracy and preference heterogeneity). Second, our results may also indicate a tendency for direct democracy to discriminate against outsiders. Third, mechanisms based on attitudes may also explain this result. The larger and more culturally distant the outgroup is, the more threatened the natives may feel in their cultural identity and the more prevalent the anti-immigrant attitudes may become. Furthermore, our results support the hypothesis that a tense situation on the labor market has a negative effect on the enfranchisement of non-citizens.

Since many developed countries face an increasing share of foreign residents and cultural differences are likely to expand, our results imply that, in the future, citizens' willingness to enfranchise non-citizens may decline and the lack of democratic legitimacy is not likely to be washed away automatically. Moreover, political integration via suffrage extension seems more likely in times of economic prosperity and phases of low unemployment. For future research on determinants of non-citizens' enfranchisement, individual data of the actual electorate might be helpful for a clearer distinction of instrumental power loss or discrimination channels.

Supplementary materials

Supplementary material associated with this article can be found, in the online version, at [doi:10.1016/j.jce.2021.03.001](https://doi.org/10.1016/j.jce.2021.03.001).

Appendix

Tables A1, A2, A3, A4, A5, A6 and A7
Figs. A1, A2, A3, A4, and A5

Table A1

List of Referenda on Non-Citizens' Enfranchisement in our Dataset.

Vote date	Canton	Suffrage	Accepted	Yes share	Vote type
27.09.1992	VD	Full local + full cantonal	0	26%	Initiative
06.06.1993	GE	Full local	0	29%	Initiative
28.11.1993	GE	Eligibility court of arbitration	0	45%	Counterproposal
26.09.1993	ZH	Full local opt-in	0	26%	Initiative
12.06.1994	BS	Full local + full cantonal	0	26%	Initiative
04.12.1994	BE	Full local + full cantonal	0	22%	Initiative
04.12.1994	BE	Full local opt-in	0	40%	Counterproposal
22.10.1995	UR	Active cantonal	0	16%	Initiative
10.03.1996	AG	Full local	0	16%	Initiative
09.06.1996	JU	Passive local opt-in	0	47%	Referendum
16.03.1997	FR	Full local	0	24%	Initiative
23.11.1997	SO	Full local + full cantonal	0	12%	Initiative
24.09.2000	NE	Active cantonal	1	77%	Complete revision
04.03.2001	GE	Full local	0	48%	Law revision
04.03.2001	SH	Active local + active cantonal	0	30%	Partial revision
22.09.2002	VD	Full local	1	56%	Complete revision
16.05.2004	FR	Full local	1	58%	Complete revision
30.10.2005	BS	Full local opt-in	1	77%	Complete revision
24.04.2005	GE	Full local	0	47%	Initiative
24.04.2005	GE	Active local + active cantonal	1	52%	Initiative
25.09.2005	SO	Full local opt-in	0	39%	Complete revision
17.06.2007	JU	Full local for executive	0	49%	Law revision
17.06.2007	NE	Passive local + passive cantonal	0	41%	Initiative
17.06.2007	NE	Passive local	1	54%	Counterproposal
26.09.2010	BS	Full cantonal	0	19%	Initiative
26.09.2010	BS	Active cantonal	0	39%	Counterproposal
26.09.2010	BE	Full local opt-in	0	28%	Initiative
04.09.2011	VD	Full cantonal	0	31%	Initiative
27.11.2011	LU	Active local opt-in	0	16%	Initiative
22.09.2013	ZH	Full local opt-in	0	25%	Initiative
28.09.2014	JU	Full local for executive	1	54%	Law revision
28.09.2014	SH	Full local + full cantonal	0	15%	Initiative
25.09.2016	NE	Passive cantonal	0	46%	Law revision

Source: Adler et al. (2016), cantonal archives, cantonal chancelleries.

Table A2

Classification of Culturally Similar and Culturally Distant Countries.

	1st Measure: Cultural distance based on Inglehart and Baker (2000)	2nd Measure: Country of origin in former Yugoslavia	3rd Measure: Country of origin in non-neighbor state
Classified as Culturally Similar	Australia Austria Belgium Canada Denmark Finland France Germany Great Britain Iceland Ireland Italy	Liechtenstein Japan Netherlands New Zealand Norway Portugal South Korea Spain Sweden Taiwan United States	All remaining countries Austria France Germany Italy Liechtenstein
Classified as Culturally Distant	All remaining countries	Bosnia-Herzegovina Croatia Kosovo Montenegro North Macedonia Serbia Slovenia (former) Yugoslavia	All remaining countries

Note: Liechtenstein does not participate in the WVS and was therefore not included in Inglehart and Baker's (2000) classifications. We still added Liechtenstein to the culturally similar countries, since they are arguably culturally very close to the Swiss population (i.e., geographical proximity, language, Swiss francs, labor market, Swiss customs union).

Table A3
IV Estimations with the Foreigner Share of the MS-Regions as an Instrument.

IV - Second Stage:	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable: yes share</i>	Incl. Total	Excl. Total	Incl. Total	Excl. Total	Excl. Pop.	Excl. Outliers & Total
	Revisions	Revisions	Revisions	Revisions	Outliers	Revisions
foreigner (share)	-0.749*** (0.178)	-0.587*** (0.171)	-0.665*** (0.189)	-0.420** (0.179)	-0.652*** (0.210)	-0.459** (0.204)
Control Variables			✓	✓	✓	✓
Municipal FE	✓	✓	✓	✓	✓	✓
Vote FE	✓	✓	✓	✓	✓	✓
Time FE	✓	✓	✓	✓	✓	✓
Observations	2971	2476	2971	2476	2631	2194
Root MSE	4.526	4.049	4399	3.86	4.081	3.603
First Stage:	(1)	(2)	(3)	(4)	(5)	(6)
<i>Dependent variable: foreigner share in municipality</i>						
foreigner MS-region (share)	0.767*** (0.057)	0.771*** (0.061)	0.753*** (0.059)	0.769*** (0.064)	0.714*** (0.059)	0.731*** (0.066)
Observations	2971	2476	2971	2476	2631	2194
Clusters	1074	984	1074	984	957	871
Kleibergen-Paap F Stat	183.39	162.42	163.6	144.94	144.29	124.27

The dependent variable is the yes share_{mt} in votes on non-citizens' enfranchisement. Robust standard errors in parentheses are clustered at the municipal level. The foreigner share on the municipal level is instrumented by the foreigner share in the MS-region. Control variables include population size (log), unemployment shares, share of the Social Democratic Party, pensioner share, agriculture share, naturalization share, Gini coefficient, and mean income (log). In Spec. (5) and (6) the smallest and largest 5% of the municipalities (in terms of population size) are excluded from the sample.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A4
General Robustness Checks for Base Model.

<i>Dependent variable: yes share</i>	(1)	(2)	(3)	(4)	(5)
	Incl. Total	Population	Excl. Pop.	Excl. Pop.	Only
	Revisions	Lin., Square	< 5%	< 5% & > 95%	Zurich
foreigner (share)	-0.207*** (0.068)	-0.184*** (0.063)	-0.162*** (0.061)	-0.173*** (0.064)	-0.196** (0.082)
population (log)	-2.586 (1.724)		-4.472*** (1.552)	-3.498** (1.654)	0.063 (2.336)
unemployment foreign (share)	0.038 (0.056)	0.029 (0.059)	-0.072 (0.054)	-0.052 (0.054)	0.209 (0.172)
unemployment Swiss (share)	-1.187*** (0.424)	-1.322*** (0.468)	-0.800* (0.430)	-1.075** (0.491)	-0.894 (0.928)
Social Democratic Party (share)	0.253*** (0.039)	0.314*** (0.040)	0.325*** (0.044)	0.290*** (0.046)	0.278** (0.110)
pensioners (share)	-0.216*** (0.070)	-0.192*** (0.070)	-0.288*** (0.065)	-0.233*** (0.071)	-0.335*** (0.089)
Gini coefficient	0.075 (0.064)	0.136** (0.067)	0.052 (0.060)	0.071 (0.069)	0.060 (0.109)
mean income (log)	1.682 (2.171)	-1.130 (2.008)	2.586 (2.246)	2.888 (2.393)	1.351 (3.220)
agriculture (share)	-0.110 (0.274)	-0.214 (0.305)	0.078 (0.282)	-0.336 (0.306)	1.833*** (0.632)
naturalization (share)	0.482 (0.639)	0.152 (0.781)	0.585 (0.587)	0.576 (0.628)	1.201 (1.324)
Municipal FE	✓	✓	✓	✓	✓
Vote FE	✓	✓	✓	✓	✓
Time FE	✓	✓	✓	✓	✓
Observations	2971	2476	2307	2194	310
R-squared	0.925	0.912	0.925	0.920	0.879

The dependent variable is the yes share_{mt} in votes on non-citizens' enfranchisement. Robust standard errors in parentheses are clustered at the municipal level. Votes embedded in a political package are included in Spec. (1). Spec. (2) controls for population² and population instead of population (log). In Spec. (3) the smallest 5% of municipalities are excluded and in Spec. (4) also the largest 5% are excluded. In Spec. (5) only the votes of the canton of Zurich are in the sample.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A5
Robustness Checks with Different Linear Time Trends for Base Model.

Dependent variable: <i>yes share</i>	(1)	(2)	(3)
	Language Region Trends	MS Region Trends	Cantonal Trends
foreigner (share)	−0.153** (0.062)	−0.121* (0.069)	−0.160** (0.063)
population (log)	−2.339 (1.690)	−1.846 (1.818)	−2.836 (1.744)
unemployment foreign (share)	0.012 (0.058)	0.021 (0.055)	0.026 (0.059)
unemployment Swiss (share)	−0.990** (0.439)	−1.180** (0.474)	−1.239** (0.411)
Social Democratic Party (share)	0.196** (0.041)	0.173** (0.040)	0.258** (0.039)
pensioners (share)	−0.187*** (0.068)	−0.223*** (0.075)	−0.218*** (0.070)
Gini coefficient	0.110* (0.064)	0.086 (0.063)	0.144** (0.063)
mean income (log)	−0.939 (2.008)	0.323 (2.133)	−0.928 (2.090)
agriculture (share)	−0.354 (0.297)	−0.264 (0.323)	−0.233 (0.290)
naturalization (share)	0.256 (0.809)	0.423 (0.827)	0.299 (0.766)
Municipal FE	✓	✓	✓
Vote FE	✓	✓	
Observations	2476	2476	2476
R-squared	0.917	0.921	0.775

The dependent variable is the *yes share_{mtr}* in votes on non-citizens' enfranchisement. Robust standard errors in parentheses are clustered at the municipal level. Votes embedded in a political package are excluded from the sample. Spec. (3) includes no vote FE as they are captured in the cantonal time trends.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A6
Robustness Checks of the Interactions of Culturally Distant Foreigners with the Share of Foreigners.

VARIABLES	Incl. Total Revisions			Population Linear and Squared			Excl. Population Outliers		
	(1) Yes Share	(2) Yes Share	(3) Yes Share	(4) Yes Share	(5) Yes Share	(6) Yes Share	(7) Yes Share	(8) Yes Share	(9) Yes Share
foreigner (share)	−0.129 (0.087)	−0.147** (0.074)	0.091 (0.133)	−0.095 (0.078)	−0.126* (0.069)	0.019 (0.111)	−0.067 (0.082)	−0.109 (0.072)	−0.038 (0.126)
culturally distant (share)	0.060*** (0.021)			0.051** (0.020)			0.050** (0.020)		
culturally distant (share) * foreigner (share)	−0.004** (0.002)			−0.004** (0.002)			−0.004*** (0.002)		
former Yugoslavia (share)		0.030 (0.024)			0.029 (0.023)			0.042 (0.027)	
former Yugoslavia (share) * foreigner (share)		−0.006*** (0.002)			−0.006*** (0.002)			−0.006*** (0.002)	
not neighbor (share)			0.045** (0.018)			0.036** (0.017)			0.037** (0.018)
not neighbor (share) * foreigner (share)			−0.005*** (0.002)			−0.003** (0.002)			−0.002 (0.002)
Control variables	✓	✓	✓	✓	✓	✓	✓	✓	✓
Municipal FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
Vote FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
Time FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
Observations	2971	2971	2971	2476	2476	2476	2194	2194	2194
R-squared	0.926	0.925	0.925	0.913	0.912	0.912	0.921	0.920	0.921

The dependent variable is the *yes share_{mtr}* in votes on non-citizens' enfranchisement. Robust standard errors in parentheses are clustered at the municipal level. Spec. (1) to (3) include votes embedded in a political package. Spec. (4) to (6) include population (total) and population (squared) instead of population (log). In Spec. (7) to (9) the smallest and largest 5% of the municipalities (in terms population size) are excluded from the sample. Control variables include population size (log), unemployment shares, share of Social Democratic Party, pensioner share, agriculture share, naturalization share, Gini coefficient, and mean income (log).

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Table A7
Robustness Checks of the Interaction of Parliament with the Share of Foreigners.

Dependent variable: yes share	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Incl. TotalRevisions	PopulationLinear, Square	Excl. Pop.< 5%	Excl. Pop.< 5% & > 95%	Excl. Vaud	OnlyZurich	CantonalTime Trends
foreigner (share)	-0.221*** (0.078)	-0.184** (0.074)	-0.209*** (0.073)	-0.174** (0.075)	-0.216** (0.084)	-0.260*** (0.086)	-0.165** (0.074)
parliament * foreigner (share)	0.182 (0.113)	0.200* (0.111)	0.266*** (0.102)	0.154 (0.132)	0.633*** (0.138)	0.368*** (0.090)	0.214** (0.102)
Control variables	✓	✓	✓	✓	✓	✓	✓
Municipal FE	✓	✓	✓	✓	✓	✓	✓
Vote FE	✓	✓	✓	✓	✓	✓	
Time FE	✓	✓	✓	✓	✓	✓	
Cantonal Time Trends							✓
Observations	2455	2101	1951	1877	1731	306	2103
R-squared	0.925	0.912	0.925	0.917	0.927	0.885	0.770

The dependent variable is the yes share_{mtr} in votes on non-citizens' enfranchisement. Robust standard errors in parentheses are clustered at the municipal level. Control variables include population size (log), unemployment shares, share of Social Democratic Party, pensioner share, agriculture share, naturalization share, Gini coefficient, and mean income (log).

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

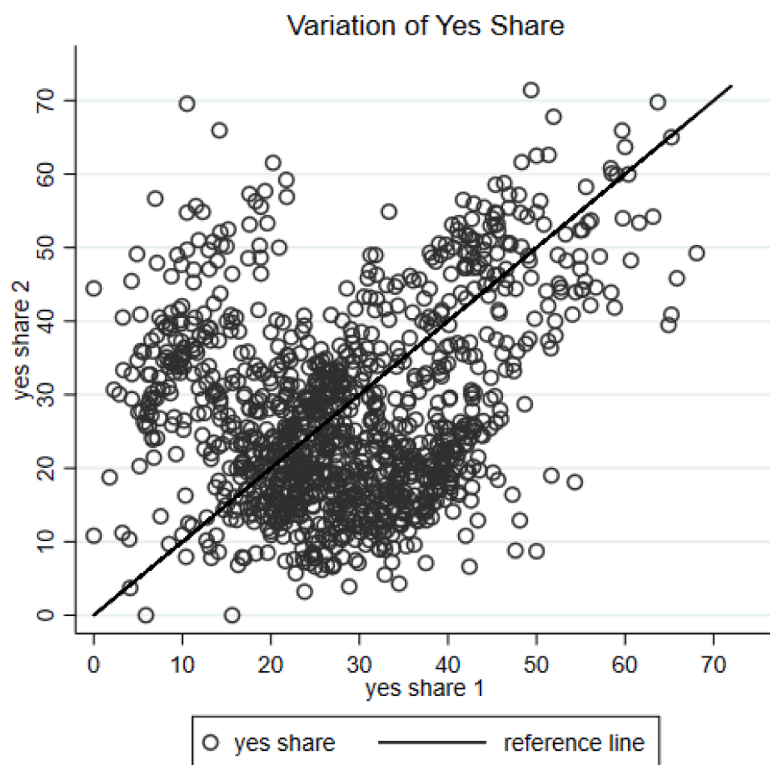


Fig. A1. Intermunicipal Variation of Yes Share between First and Last Vote in the Panel. *Note:* Only the first and the last vote per canton is considered. Therefore, the variation is not identical with the variation used in our empirical analysis.

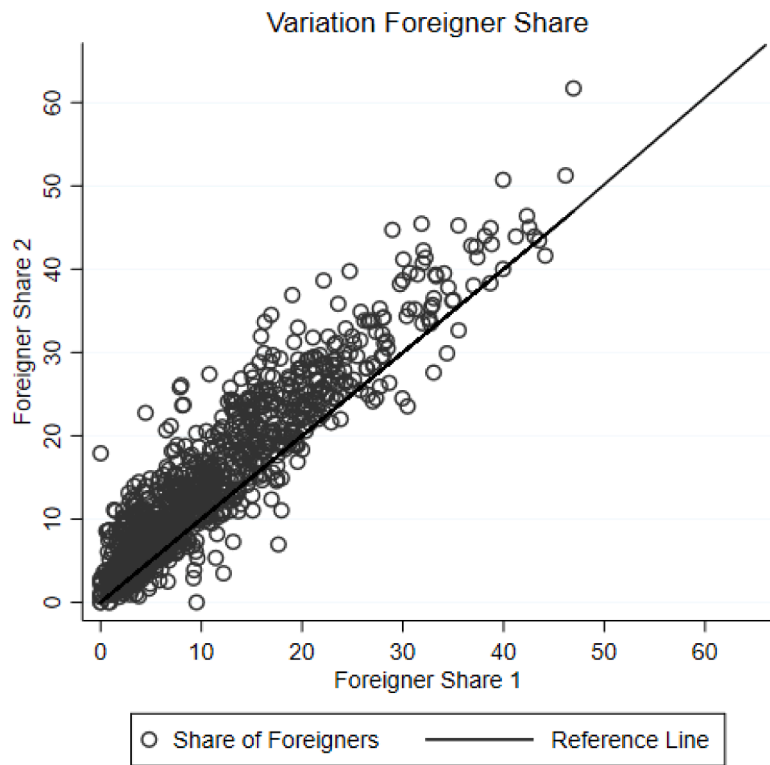


Fig. A2. Intermunicipal Variation of Foreigner Share between First and Last Vote in the Panel. Note: Only the first and the last vote per canton is considered. Therefore, the variation is not identical with the variation used in our empirical analysis.

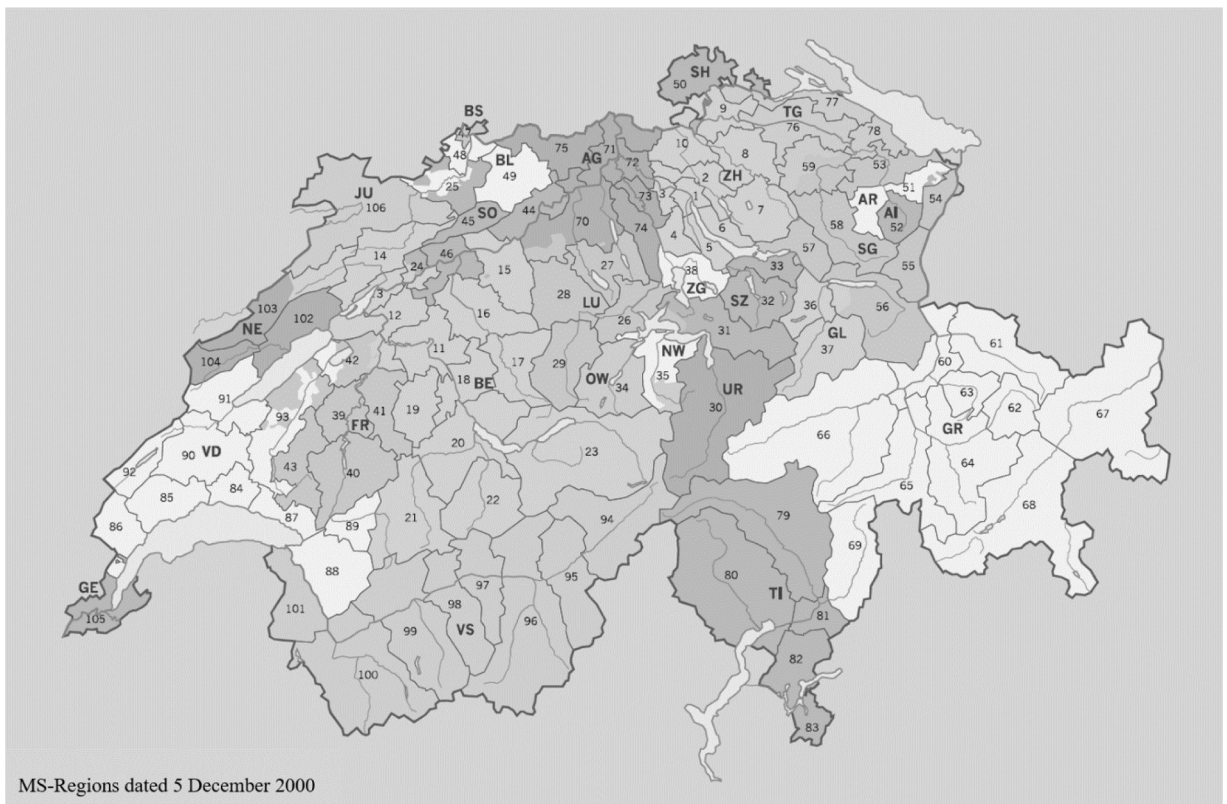
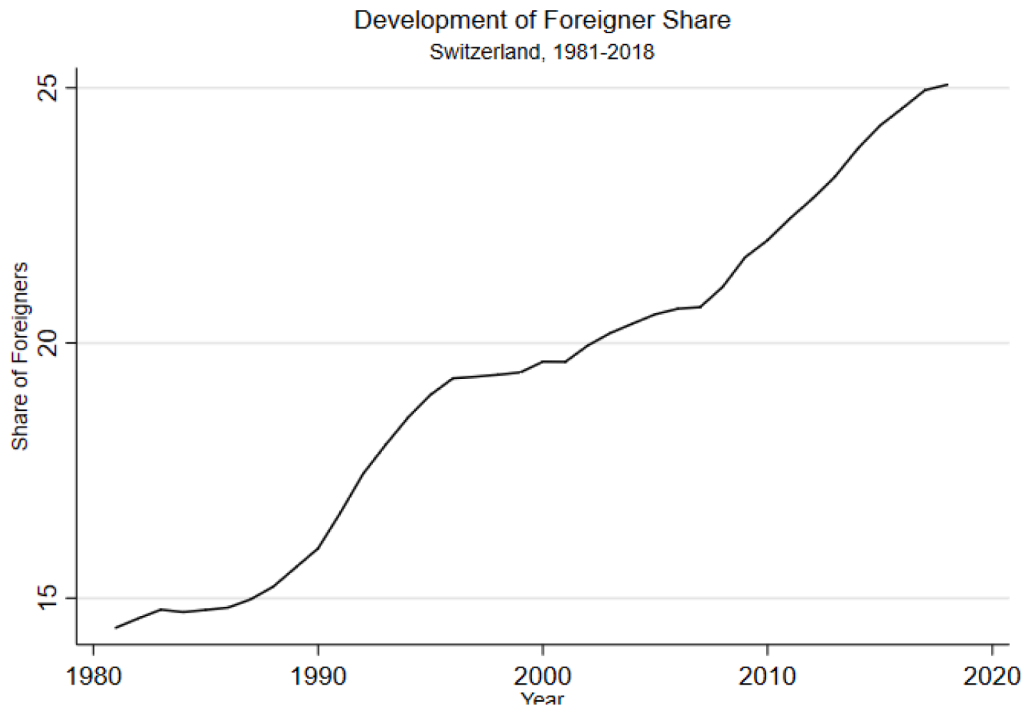


Fig. A3. Map of MS-Regions in Switzerland. Source: Federal Statistical Office.



Source: Federal Statistical Office.

Fig. A4. Development of Foreigner Share in Switzerland from 1980 to 2020. Source: Federal Statistical Office.

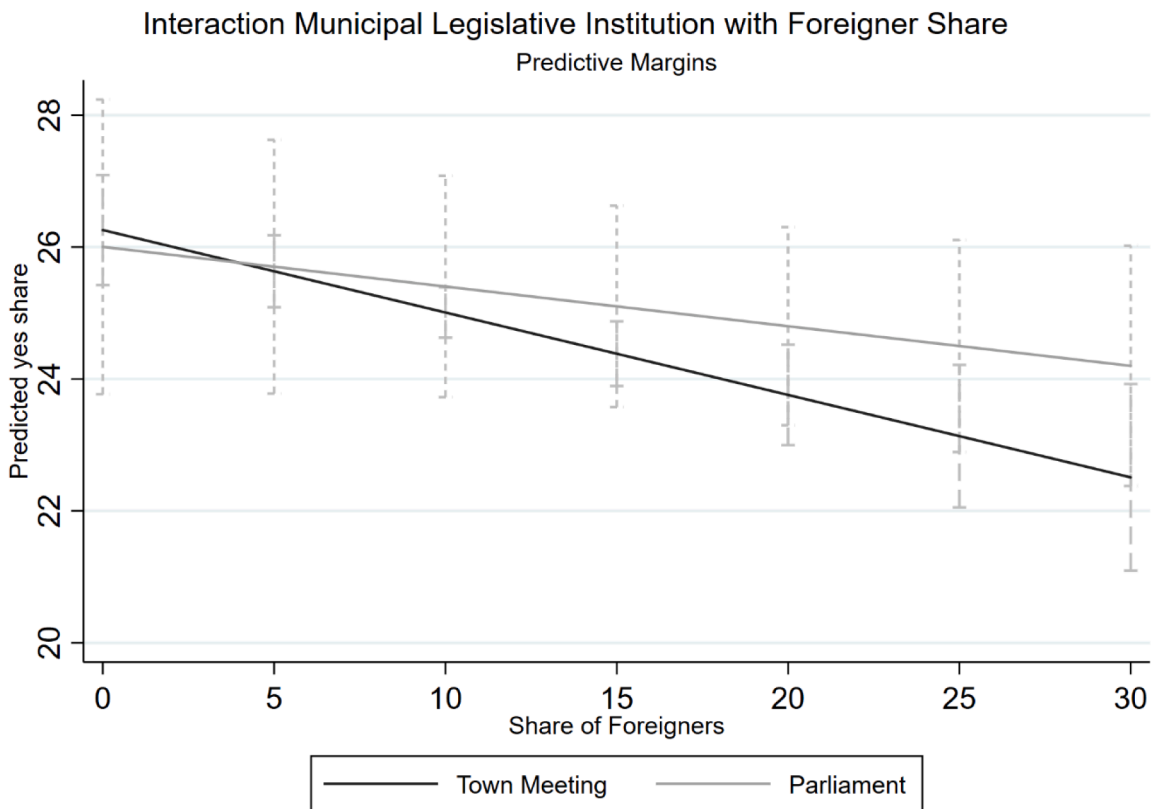


Fig. A5. Graphical Illustration of the Interaction of Legislative Institution with Foreigner Share. Note: As base effects of time-invariant institutions cannot be displayed for our preferred specification with municipality fixed effects, this figure reflects predicted margins for a specification with cantonal fixed effects.

References

- Acemoglu, D., Robinson, J.A., 2000. Why did the west extend the Franchise? Democracy, inequality, and growth in historical perspective. *Q J Econ* 115, 1167–1199.
- Acemoglu, D., Robinson, J.A., 2001. A theory of political transitions. *Am Econ Rev* 91, 938–963.
- Acemoglu, D., Robinson, J.A., 2012. *Why Nations fail: The Origins of Power, Prosperity, and Poverty*. Crown Books.
- Adler, T., Moret, H., Pomezny, N., Schlegel, T., 2016. *Passives Wahlrecht für Aktive Ausländer*.
- Aidt, T.S., Franck, R., 2015. Democratization under the threat of revolution: evidence from the Great Reform Act of 1832. *Econometrica* 83, 505–547.
- Aidt, T.S., Jensen, P.S., 2014. Workers of the world, unite! Franchise extensions and the threat of revolution in Europe, 1820–1938. *Eur Econ Rev* 72, 52–75.
- Aldrich, J.H., 1997. When is it rational to vote. *Perspectives Public Choice* 373–390.
- Aleinikoff, T.A., Klusmeyer, D., 2013. *From Migrants to Citizens: Membership in a Changing World*. Brookings Institution Press, New York, NY.
- Alesina, A., Murard, E., Rapoport, H., 2019. *Immigration and Preferences for Redistribution in Europe*, IZA Discussion Paper No. 12130.
- Allport, G.W., Clark, K., Pettigrew, T., 1954. The nature of prejudice.
- Arrighi, J.-T., Bauböck, R., 2017. A multilevel puzzle: migrants' voting rights in national and local elections. *Eur J Polit Res* 56, 619–639.
- Basten, C., Siegenthaler, M., 2019. Do Immigrants take or create Residents' jobs? Evidence from free movement of workers in Switzerland. *Scand. J. of Economics* 121, 994–1019.
- Bertocchi, Graziella, Strozzi, C., 2010. The evolution of citizenship: economic and institutional determinants. *J Law Econ* 53, 95–136.
- Besley, T., Burgess, R., 2002. The political economy of government responsiveness: theory and evidence from India. *Q J Econ*.
- Besley, T., Case, A., 2003. Political institutions and policy choices: evidence from the United States. *J Econ Lit* 41, 7–73.
- Beugelsdijk, S., Ambos, B., Nell, P.C., 2019. Conceptualizing and Measuring Distance in International Business Research: recurring Questions and Best Practice Guidelines. In: Eden, L., Nielsen, B.B., Verbeke, A. (Eds.), *Research Methods in International Business*. Palgrave Macmillan, Basingstoke, pp. 449–498.
- Bisin, A., Verdier, T., 2011. The economics of cultural transmission and socialization. *Handbook Soc Econ* 1, 339–416.
- Blais, A., 2000. To Vote or not to Vote?: The merits and Limits of Rational Choice Theory. University of Pittsburgh Press, Pittsburgh, Pa.
- Bloemraad, I., Korteweg, A., Yurdakul, G., 2008. Citizenship and Immigration: multiculturalism, assimilation, and challenges to the nation-state. *Annu Rev Sociol* 34, 153–179.
- Borjas, G.J., 2014. *Immigration Economics*. Harvard University Press, Cambridge, Massachusetts.
- Braun, S., Kvasnicka, M., 2013. Men, Women, and the Ballot: gender imbalances and suffrage extensions in the United States. *Explor Econ Hist* 50, 405–426.
- Brunner, B., Kuhn, A., 2018. Immigration, cultural distance and natives' attitudes towards immigrants: evidence from swiss voting results. *Kyklos* 71, 28–58.
- Card, D., 2001. Immigrant inflows, native outflows, and the local labor market impacts of higher immigration. *J Labor Econ* 19, 22–64.
- Card, D., 2005. Is the new immigration really so bad? *Econ J* 115, F300–F323.
- Card, D., Peri, G., 2016. Immigration economics by George J. Borjas: a review essay. *J Econ Lit* 54, 1333–1349.
- Conley, J.P., Temimi, A., 2001. Endogenous enfranchisement when groups' preferences conflict. *J Political Econ* 109, 79–102.
- Degen, K., Fischer, A.M., 2017. Immigration and Swiss House Prices. *Swiss Soc Econ Statist* 153, 15–36.
- Donovan, T., Bowler, S., 1998. Direct democracy and minority rights: an extension. *Am J Pol Sci* 42, 1020–1024.
- Dustmann, C., Preston, I., 2001. Attitudes to ethnic minorities, ethnic context and location decisions. *Econ J* 111, 353–373.
- Earnest, D.C., 2015. The enfranchisement of resident aliens: variations and explanations. *Democratization* 22, 861–883.
- Edo, A., Giesing, Y., Öztunc, J., Poutvaara, P., 2019. Immigration and electoral support for the far-left and the far-right. *Eur Econ Rev* 115, 99–143.
- Ellis, C.J., Fender, J., 2010. Information cascades and revolutionary regime transitions. *Econ J* 121, 763–792.
- Engerman, S.L., Sokoloff, K.L., 2005. The evolution of suffrage institutions in the new world. *J Econ History* 65, 891–921.
- Favre, S., 2011. *The Impact of Immigration on the Wage Distribution in Switzerland*, University of Zurich Working Paper No. 22.
- Federal Statistical Office, 2020. Ständige Ausländische Wohnbevölkerung nach Staatsangehörigkeit, 1980–2019. <https://www.bfs.admin.ch/asset/de/je-ddd-01.05.01.01>. Accessed 4 February 2021.
- Frey, B.S., 1997. A constitution for knaves crowds out civic virtues. *Econ J* 107, 1043–1053.
- Funk, P., Litschig, S., 2020. Policy choices in assembly versus representative democracy: evidence from Swiss communes. *J Public Econ* 182, 104–122.
- Gamble, B.S., 1997. Putting civil rights to a popular vote. *Am J Pol Sci* 245–269.
- Garcia, C., Davidson, T., 2013. Are rural people more anti-immigrant than urban people? A comparison of attitudes toward immigration in the United States. *J Rural Soc Sci* 28, 80–104.
- Goldsmith-Pinkham, P., Sorkin, I., Swift, H., 2020. Bartik Instruments: what, When, Why, and How. *Am Econ Rev* 110, 2586–2624.
- Groenendijk, K., 2008. Local voting rights for non-nationals in Europe: what we know and what we need to learn. *Migration Policy Inst* 1–18.
- Guiso, L., Sapienza, P., Zingales, L., 2009. Cultural Biases in Economic Exchange. *Q J Econ* 124, 1095–1131.
- Haider-Markel, D.P., Queree, A., Lindaman, K., 2007. Lose, win, or draw? A reexamination of direct democracy and minority rights. *Polit Res Q* 60, 304–314.
- Hainmueller, J., Hangartner, D., 2013. Who gets a swiss passport? A natural experiment in immigrant discrimination. *Am Political Sci Rev* 107, 159–187.
- Hainmueller, J., Hangartner, D., 2019. Does direct democracy hurt immigrant minorities? Evidence from naturalization decisions in Switzerland. *Am J Pol Sci* 63, 530–547.
- Hainmueller, J., Hangartner, D., Pietrantuono, G., 2015. Naturalization fosters the long-term political integration of immigrants. *Proc. Natl. Acad. Sci. U.S.A.* 112, 12651–12656.
- Hainmueller, J., Hiscox, M.J., 2007. Educated Preferences: explaining Attitudes toward Immigration in Europe. *Int Organ* 61, 399–442.
- Hainmueller, J., Hopkins, D.J., 2014. Public Attitudes Toward Immigration. *Ann Rev Pol Sci* 17, 225–249.
- Halla, M., Wagner, A.F., Zweimüller, J., 2017. Immigration and voting for the far right. *J Eur Econ Assoc* 15, 1341–1385.
- Hanson, G.H., Scheve, K., Slaughter, M.J., 2007. Public Finance and Individual Preferences over Globalization Strategies. *Econ Politics* 19, 1–33.
- Hicks, D.L., 2013. War and the political zeitgeist: evidence from the history of female suffrage. *Eur J Polit Econ* 31, 60–81.
- Huntington, S.P., 1993. The clash of civilizations? *Foreign Affairs* 72, 22–49.
- Hyll, W., Schneider, L., 2018. Income comparisons and attitudes towards foreigners - Evidence from a natural experiment. *J Comp Econ* 46, 634–655.
- Inglehart, R., Baker, W.E., 2000. Modernization, cultural change, and the persistence of traditional values. *Am Sociol Rev* 65, 19.
- Jaeger, D.A., Ruist, J., Stuhler, J., 2018. Shift-Share Instruments and the Impact of Immigration, NBER Working Paper No. 24285.
- Jasso, G., 2009. Ethnicity and the immigration of highly skilled workers to the United States. *Int J Manpow* 30, 26–42.
- Jolly, S.K., DiGiusto, G.M., 2014. Xenophobia and immigrant contact: french public attitudes toward immigration. *Soc Sci J* 51, 464–473.
- Kaasa, A., Vadi, M., Varblane, U., 2016. A new dataset of cultural distances for European countries and regions. *Res Int Business Finance* 37, 231–241.
- Kayran, E.N., Erdilmen, M., 2020. When do states give voting rights to non-citizens?: the role of population, policy, and politics on the timing of enfranchisement reforms in liberal democracies. *J Ethn Migr Stud* 1–22.
- Kenny, L.W., 1998. *Explaining the Puzzle why Men gave Women the Right to Vote Unpublished Manuscript*.
- Kinder, D.R., Kam, C.D., 2009. *Us against them: Ethnocentric Foundations of American Opinion*. University of Chicago Press, Chicago and London.
- Knoll, B.R., Redlawsk, D.P., Sanborn, H., 2011. Framing labels and immigration policy attitudes in the Iowa Caucuses: "Trying to Out-Tancredo Tancredo". *Pol Behav* 33, 433–454.
- Koukal, A.M., 2013. *Bekunden Ausländer an der Urne andere Präferenzen als Inländer?: eine empirische Analyse der Wählerpräferenzen im Kanton Neuenburg*. Master Thesis. University of Fribourg.
- Koukal, A.M., Eichenberger, R., 2017. Explaining a paradox of democracy: the role of institutions in female enfranchisement, CREMA Working Paper No. 2017-13.
- Koukal, A.M., Portmann, M., 2019. Political Integration of Foreigners: how does foreigners suffrage impact natives' attitudes?, CREMA Working Paper No. 2020-05.
- Ladner, A., 2011. Switzerland: Subsidiarity, Power-Sharing, and Direct Democracy. *The Oxford handbook of local and regional democracy in Europe*.

- Lizzeri, A., Persico, N., 2004. Why did the elites extend the suffrage? Democracy and the scope of government, with an application to Britain's "Age of Reform". *Q J Econ* 119, 707–765.
- Llavador, H., Oxoby, R.J., 2005. Partisan competition, growth, and the franchise. *Q J Econ* 120, 1155–1189.
- Luttmer, E.F.P., 2001. Group loyalty and the taste for redistribution. *J Pol Econ* 109, 500–528.
- Mariani, F., 2013. The political economy of naturalization. *Can J Econ* 46, 656–688.
- Mayda, A.M., 2006. Who is against immigration? A cross-country investigation of individual attitudes toward immigrants. *Rev Econ Stat* 88, 510–530.
- Meltzer, A.H., Richard, S.F., 1981. A Rational Theory of the Size of Government. *J Polit Econ* 89, 914–927.
- Paluck, E.L., Green, S.A., Green, D.P., 2019. The contact hypothesis re-evaluated. *Behav Public Policy* 3, 129–158.
- Peri, G., 2012. The effect of immigration on productivity: evidence from U.S. states. *Rev Econ Stat* 94, 348–358.
- Polishchuk, L., Syunyaev, G., 2015. Ruling Elites' rotation and asset ownership: implications for property rights. *Public Choice* 162, 159–182.
- Quillian, L., 1995. Prejudice as a response to perceived group threat: population composition and anti-immigrant and racial prejudice in Europe. *Am Sociol Rev* 586–611.
- Rainer, H., Siedler, T., 2009. Does democracy foster trust? *J Comp Econ* 37, 251–269.
- Scala, D.J., Johnson, K.M., 2017. Political Polarization along the Rural-Urban Continuum? The geography of the presidential vote, 2000–2016. *Ann Am Acad Pol Soc Sci* 672, 162–184.
- Scheve, K.F., Slaughter, M.J., 2001. Labour market competition and individual preferences over immigration policy. *Rev Econ Stat* 83, 133–145.
- Schlueter, E., Scheepers, P., 2010. The relationship between outgroup size and anti-outgroup attitudes: a theoretical synthesis and empirical test of group threat- and intergroup contact theory. *Soc Sci Res* 39, 285–295.
- Semyonov, M., Rajzman, R., Tov, A.Y., Schmidt, P., 2004. Population size, perceived threat, and exclusion: a multiple-indicators analysis of attitudes toward foreigners in Germany. *Soc Sci Res* 33, 681–701.
- Sides, J., Citrin, J., 2007. European opinion about immigration: the role of identities, interests and information. *Br J Polit Sci* 37, 477–504.
- Slotwinski, M., Stutzer, A., Gorinas, C., 2017. Democratic Involvement and Immigrants' Compliance with the Law, IZA Discussion Paper No. 10550.**
- Stadelmann, D., Portmann, M., Eichenberger, R., 2014. Politicians and preferences of the voter majority: does gender matter? *Econ Polit* 26, 355–379.
- Steiner, R., Kaiser, C., 2017. Effects of amalgamations: evidence from Swiss municipalities. *Public Management Review* 19, 232–252.
- Strijbis, O., 2014. Migration Background and Voting Behavior in Switzerland: a Socio-Psychological Explanation. *Swiss Polit Sci Rev* 20, 612–631.
- Stutzer, A., Slotwinski, M., 2020. Power sharing at the local level: evidence on opting-in for non-citizen voting rights. *Const Political Econ* 1–30.
- Tabellini, M., 2020. Gifts of the immigrants, woes of the natives: lessons from the age of mass migration. *Rev Econ Stud* 87, 454–486.
- Tillie, J.N., 1998. Explaining migrant voting behaviour in the Netherlands: combining the electoral research and ethnic studies perspective. *Revue européenne des migrations internationales* 14.
- Vernby, K., 2013. Inclusion and Public Policy: evidence from Sweden's Introduction of Noncitizen Suffrage. *Am J Pol Sci* 57, 15–29.
- Yehuda, A., 1998. The contact hypothesis in intergroup relations. In: Weiner, E. (Ed.), *The Handbook of Interethnic Coexistence*. Continuum, New York, pp. 231–237.