Exposure to Immigrants and Voting on Immigration Policy: Evidence from Switzerland

Tobias Müller, Tuan Nguyen, Veronica Preotu

University of Geneva

The Swiss Experience with EU Market Access: Lessons for Brexit
College of Europe, Bruges
23 November 2017

Motivation

In Europe, political resistance to immigration has recently increased and was expressed in two popular votes threatening the *agreement on the free movement of persons* with the EU:

- Switzerland (popular initiative "Against Mass Immigration" 2014)
- UK ("Brexit" 2016)

This increase in anti-immigration attitudes happened at the same time as both countries experienced an increase in the number of immigrants

Motivation

Does the presence of immigrants (at the local level) affect attitudes of natives towards immigration?

- ▶ Inter-group contact theory: presence of immigrants reduces natives' prejudice against immigration
- ▶ Threat: immigrants represent an economic or cultural threat to natives

Switzerland is an interesting case

- ▶ High share of immigrants (29% of foreign born in population), increasing over time
- ▶ Direct democracy: Swiss citizens vote on immigration policy
  - ▶ In 2000: limit immigration to 18% of population
  - ▶ In 2014: re-introduce immigration quotas

Our paper

- Analyzes **changes in attitudes** towards immigration between 2000 and 2014, as expressed in popular votes in Switzerland
- Focuses on the impact of **inter-group contact** (or **threat**) at the local level
- Explores the conditions under which contact is beneficial
  - Skill levels of natives and migrants
  - Competition for resources (housing, employment)
  - Linguistic distance/proximity between natives and migrants

Our paper

Main challenges

- Unobservable characteristics of municipalities that might affect both natives' attitudes and migrants' location choices
  $\Rightarrow$ first difference (municipality fixed effects)

- Unobserved time-varying economic factors at the local labor market level (MS-region)
  $\Rightarrow$ Year $\times$ MS-region fixed effects

- Immigrants might avoid locations where they are not welcome
  $\Rightarrow$ use network effects as instrument (Card 2001)

Preview of main results

- We find consistent support for contact theory:
  The presence of immigrants at the local level reduces the shift towards more restrictive attitudes to immigration

- But this effect is attenuated in places where unemployment rates or housing prices are rising

- There is no consistent effect (at the local level) of the flow of immigration on changes in attitudes

Related economic literature

Immigration and electoral outcomes (support for far-right parties): Halla, Wagner and Zweimüller (2016), Steinmayr (2016) on Austria, Harmon (2015) and Dustmann, Vasiljeva and Damm (2016) on Denmark, Otto and Steinhardt (2014) on the city of Hamburg, Barone et al (2014) on Italy, Mayda, Peri, Steingress (2017) on the US, Becker and Fetzer (2016) on the UK

Immigration and referendums: Becker, Fetzer and Novy (2016) on Brexit, Brunner and Kuhn (2014) on Switzerland

Contribution of the paper

- Link between immigration and natives' voting behavior on immigration policies
- Focus on the role of immigration at the local level: threat vs. contact
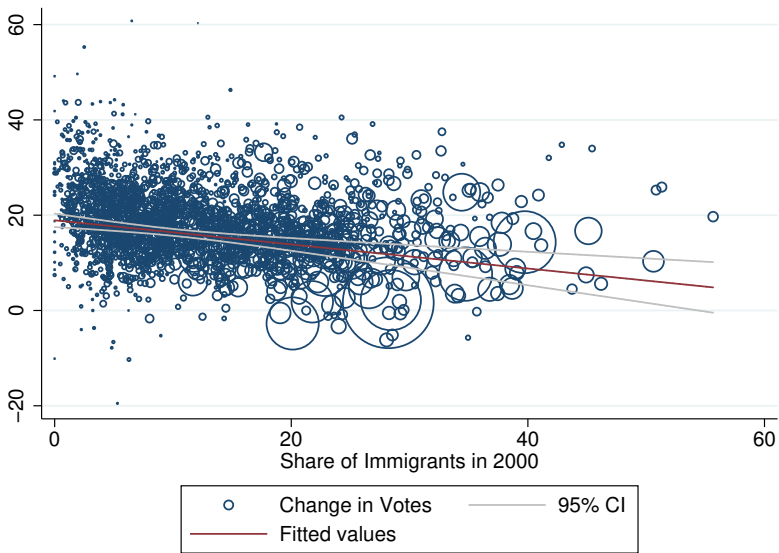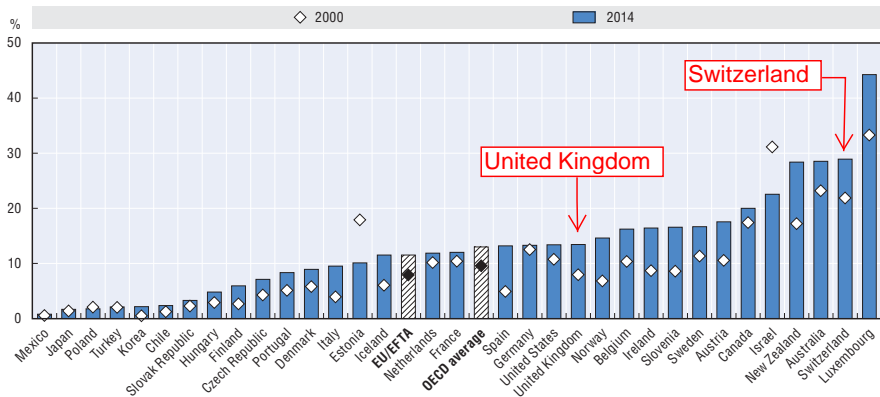- New test of contact theory

Figure : Coeff.(s.e.) = -0.25(0.06)

Outline

- Context
- Theory
- Data
- Empirical strategy
- Results

Share of migrants in population: OECD countries

Figure 1.13. **The foreign-born as a percentage of the total population in OECD countries, 2000 and 2014**

Source: OECD (2016)

Institutional context

Swiss direct democracy

popular initiative

- ► group of citizens can propose a constitutional change
- ► 100'000 signatures needed ⇒ popular vote

mandatory referendum

- ► any change in the constitution or joining a supra-national organization must be approved by a popular vote

optional referendum

- ► group of citizens can challenge a law voted by the federal government
- ► 50'000 signatures needed ⇒ popular vote

⇒ in all cases the outcome of the vote is binding

Institutional context

Main Swiss votes on European integration and immigration

European integration

- 1992 membership European Economic Area: 50.3% no
- 2000 bilateral agreements EU-Switzerland: 67.2% yes
- 2005 extension of bilateral agreements to EU10: 56% yes
- 2009 extension of bilateral agreements to Bulgaria and Romania: 59.6% yes

Immigration

- 1970s "Schwarzenbach" initiatives: rejected
- 2000 "18 percent" initiative: 63.7% no
- 2014 initiative "against mass immigration": 50.3% yes

Theory

- Exposure to immigrants may increase anti-immigration attitudes due to economic or cultural threat (*threat theory*)

- Local contact between natives and immigrants may reduce prejudice between the two groups (*contact theory*)

  $\rightarrow$ Attitudes towards immigration are related to the probability of meeting immigrants in one's neighborhood

  (NB: complementarity in the labor market can also lead to more open attitudes)

Contact theory

Basic idea

- ▶ Individuals may *change* their attitudes towards immigrants when they are in contact with immigrants
- ▶ Probability to meet immigrants depends on the (local) share of immigrants in population (*stocks*, not flows)

$\Rightarrow$ Change in attitudes = f (stock of immigrants / population)

Contacts between natives and migrants lead to reduced prejudice if

- ▶ contact is direct or indirect (Pettigrew et al. 2011)
- ▶ absence of (economic) competition (Allport 1954)
- ▶ linguistic proximity between natives and migrants

Data

Main data

- Results from federal votes regarding immigration issues at the municipal level
    - in 2000: popular initiative *"18 %"*: limit the share of foreigners in population to 18%

        rejected by 63.7% of voters

    - in 2014: popular initiative *"Against Mass Immigration"*: reintroduce immigration quotas

        accepted by 50.3% of voters

- Share of immigrants (foreigners) at the municipal level from the population census or the State Secretariat for Migration (SEM)
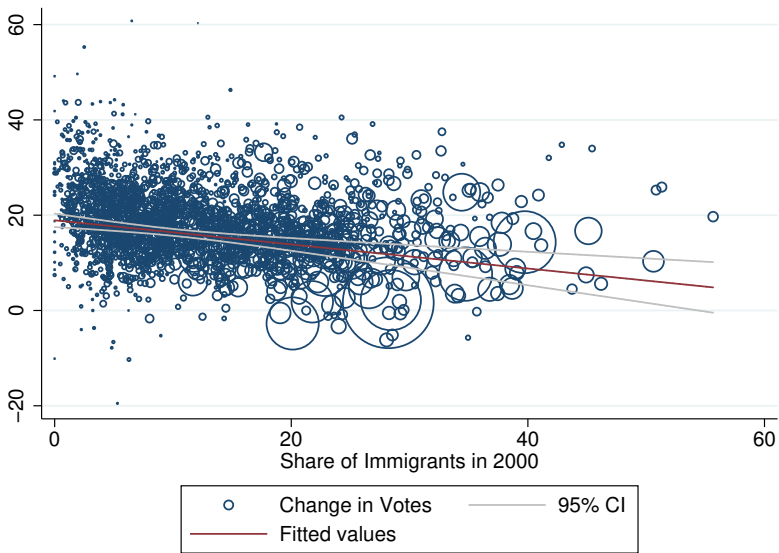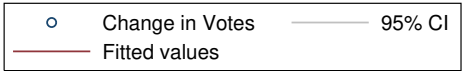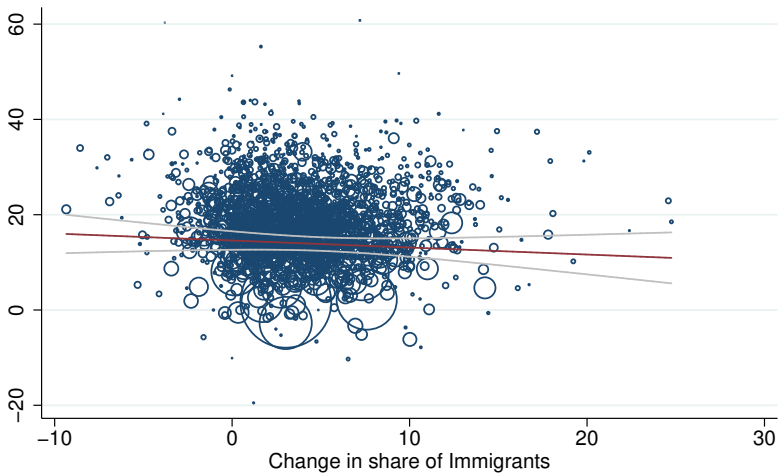
Figure : Coeff.(s.e.) = -0.25(0.06)

	Change in Votes		95% CI
	Fitted values		

Change in share of Immigrants

Empirical Strategy (1)

ΔRestricting Immigration = change in percentage of "yes" votes (in favor of restricting immigration) between 2000 and 2014

$$\Delta Restricting_{mt} = \beta Imm_{m,2000} + \delta \Delta X_{mt} + \mu_r + \Delta \varepsilon_{mt}$$

- ▶ $Imm_{m,2000}$: share of immigrants in municipality m in 2000.
- ▶ ΔX_{mt}: set of control variables
- ▶ μ_r: MS-region FE (aggregation of municipalities based on commuting pattern)
- ▶ Standard errors clustered at the MS-region level
- ▶ Observations are weighted by the municipal population size

Empirical Strategy (2)

Add immigration flows (i.e. changes in the share of immigrants): threat theory

$$\Delta Restricting_{mt} = \beta Imm_{m,2000} + \eta \Delta Imm_{mt} + \delta \Delta X_{mt} + \mu_r + \Delta \eta_{mt}$$

- ΔImm_{mt}: change in the share of immigrants

Identification Issues

- Reverse causality: migrants may avoid municipalities where they are unwelcome

- Omitted variable bias: unobserved time-varying municipality characteristics may influence both immigrants' choice of municipality and natives' attitudes

IV Strategy

- Use network effect and past settlement of immigrants in 1970 to construct an instrument à la Card (2001):

$$\sum_n \frac{immigrants_{n,m,1970}}{immigrants_{n,1970}} immigrants_{n,t}$$

  - n nationality of immigrants
  - m municipality

Results

Table : The effect of the share of immigrants on the change in the share of votes for restricting immigration - 2000 & 2014

Dependent variable: ΔRestricting

	(1) OLS	(2) IV	(3) OLS	(4) IV	(5) OLS	(6) IV	(7) OLS	(8) IV
%Immigrants in 2000	-0.168***	-0.273***	-0.167***	-0.264***	-0.154***	-0.190***	-0.152***	-0.188***
	(0.041)	(0.063)	(0.040)	(0.066)	(0.024)	(0.033)	(0.025)	(0.033)
Δ%Immigrants			-0.113	-0.717**			0.069	0.082
			(0.080)	(0.335)			(0.052)	(0.159)
Municipality Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MS-region Controls	Yes	Yes	Yes	Yes	No	No	No	No
MS-region FE	No	No	No	No	Yes	Yes	Yes	Yes
N	2275	2275	2275	2275	2275	2275	2275	2275
Kleibergen-Paap Wald F		190.97		14.48		287.89		37.33

This table presents the estimated effects of the share of immigrants on the change in the share of votes for restricting immigration between 2000 and 2014 at the municipality level. The independent variables are the share of immigrants in 2000 and the change in the share of immigrants between 2000 and 2014. The share of immigrants are defined as the share of residents without the Swiss citizenship. The municipality controls capture socio-demographic changes in the native population between 2000 and 2014 at the municipal level. It includes changes in the marital status by sex (share of natives who are single, married, divorced or widowed by sex), the age distribution, the employment status (share of natives who are employed, unemployed, student, retired or inactive), the occupation structure (the share of native workers by ISCO 1-digit occupations relative to the sum of all native workers in a municipality) and the educational attainment (share of primary, secondary or tertiary educated) of the native population. It also includes the change in the number of inhabitants in a municipality and its square. The MS-region controls used in columns (1) to (4) captures changes in the housing prices (measured by the change in the logarithm of an index of transaction costs of private property and by the changes in the logarithm of the average rent paid by household) and the change in the unemployment rate of natives between 2000 and 2014 at the MS-region level. The regressions in columns (5) to (8) use MS-region fixed effects. The complete results and the first stage can be found in the appendix. Robust Standard errors clustered at the MS-region level are reported in parenthesis. Weights (municipality population size) are used in the regression. Significance levels at 10% (*), 5% (**) and 1% (***).

Results: Interactions

Table : The effect of the share of immigrants on the change in the share of votes for restricting immigration - 2000 & 2014

Dependent variable: ΔRestricting						
	(1) OLS	(2) IV	(3) OLS	(4) IV	(5) OLS	(6) IV
%Immigrants in 2000	-0.247*** (0.038)	-0.322*** (0.047)	-0.441*** (0.059)	-0.501*** (0.086)	-0.204*** (0.039)	-0.267*** (0.048)
Imm 2000 x ΔUnemployment rate of Swiss	0.099*** (0.025)	0.131*** (0.031)				
Imm 2000 x ΔLog(Housing price index)			0.507*** (0.089)	0.564*** (0.128)		
Imm 2000 x ΔLog(Rent)					0.269* (0.151)	0.442** (0.191)
Municipality Controls	Yes	Yes	Yes	Yes	Yes	Yes
MS-region FE	Yes	Yes	Yes	Yes	Yes	Yes
N	2275	2275	2275	2275	2211	2211
Kleibergen-Paap Wald F		119.10		153.54		121.96

Robust Standard errors clustered at the ms region level are reported in parenthesis. Weights (municipality population size) are used in the regression. Significance levels at 10% (*), 5% (**) and 1% (***).

Linguistic Distance

Separate linguistically proximate nationalities and distant nationalities with respect to Switzerland by different measures of linguistic proximity:

- ▶ Toubal and Melitz (2012):
  - ▶ by official language (COL)
  - ▶ by native language: probability that a pair of individuals from two countries speak the same language (CNL)
  - ▶ by spoken language: probability that a pair from the two countries understand one another in some language (CSL)

- ▶ Spolaore and Wacziarg (2015):
  - ▶ cognate-based: whether two words stem from the same ancestor word (COG)
  - ▶ tree-based: percentage of common linguistic nodes between (TREE)

Linguistic Distance

Table : Linguistic distance versus proximity - The effect of the share of immigrants on the change in the share of votes for restricting immigration - 2000 & 2014

Dependent variable: ΔRestricting	COL (1) OLS	(2) IV	CSL (3) OLS	(4) IV	CNL (5) OLS	(6) IV	COGNATE (7) OLS	(8) IV	TREE (9) OLS	(10) IV
%Immigrants in 2000 (Distance)	-0.167***	-0.244***	-0.221***	-0.323*	-0.163***	-0.185***	-0.463***	-1.439*	-0.252***	-0.265
	(0.025)	(0.056)	(0.069)	(0.180)	(0.026)	(0.070)	(0.108)	(0.841)	(0.060)	(0.192)
%Immigrants in 2000 (Proximity)	-0.056	0.303	-0.018	0.059	-0.126	-0.674	0.344	1.819	0.929	0.474
	(0.142)	(0.518)	(0.165)	(0.392)	(0.359)	(0.986)	(0.223)	(1.378)	(0.755)	(2.090)
Controls Municipality	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
MS-region FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2243	2243	2243	2243	2243	2243	2243	2243	2243	2243
Kleibergen-Paap Wald F		6.18		29.49		10.95		2.20		9.98
Test ($\beta_{Distance} = \beta_{Proximity}$) F-stat	0.61	0.95	0.80	0.45	0.01	0.22	6.08	2.16	2.13	0.11

The controls include the share of highy educated among Swiss defined at the municipal level. COL=common official language; CNL=common native language; CSL=common spoken language; COGNATE=cognate-based language; TREE=tree-based language. Robust Standard errors clustered at the ms region level are reported in parenthesis. Weights (municipality population size) are used in the regression. Significance levels at 10% (*), 5% (**) and 1% (***).

Robustness checks

- Foreign-born instead of foreigners
- Average share of immigrants
- Level of education of immigrants
- Recent inflows of immigrants
- Linguistic distance on flow
- Other votes on immigration
- Control for naturalization
- Level of education of natives (and relative skill ratio)
- Selection of natives
- Selection of immigrants
- Contact

Summing up

- We use data on Swiss votes to analyze the impact of the presence of immigrants on natives' attitudes toward immigrants
- At the local level we find consistent support for inter-group contact theory (but not for threat theory)
- The positive effect of contact is weaker in places where unemployment rates or housing prices are rising