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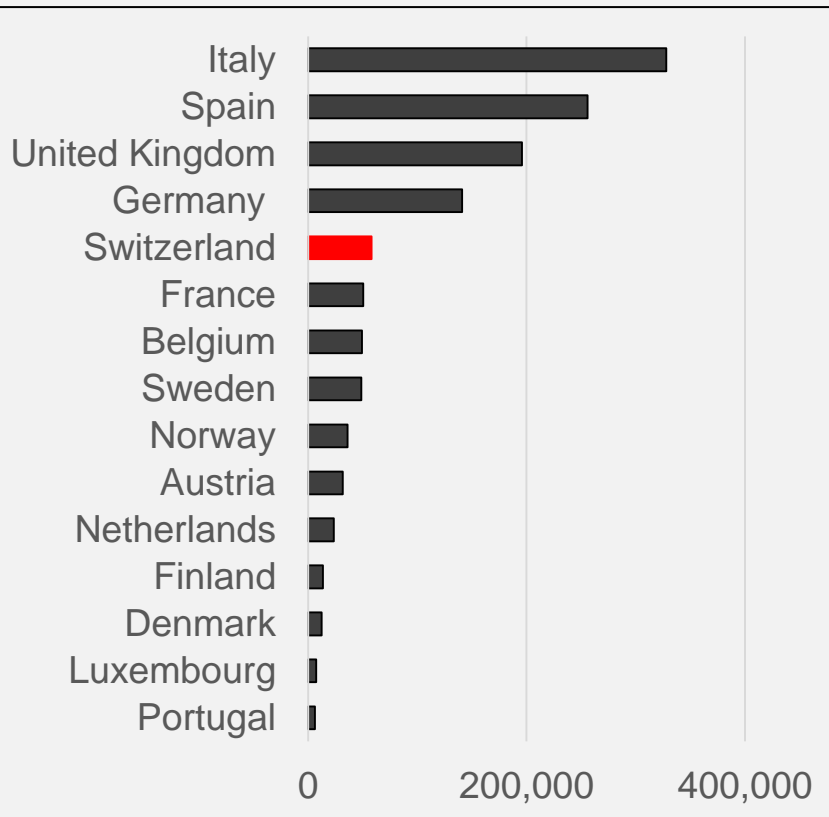
Creating a system of indicators of migration and integration based on linked administrative registers. The Swiss Experience

Ilka Steiner and Philippe Wanner

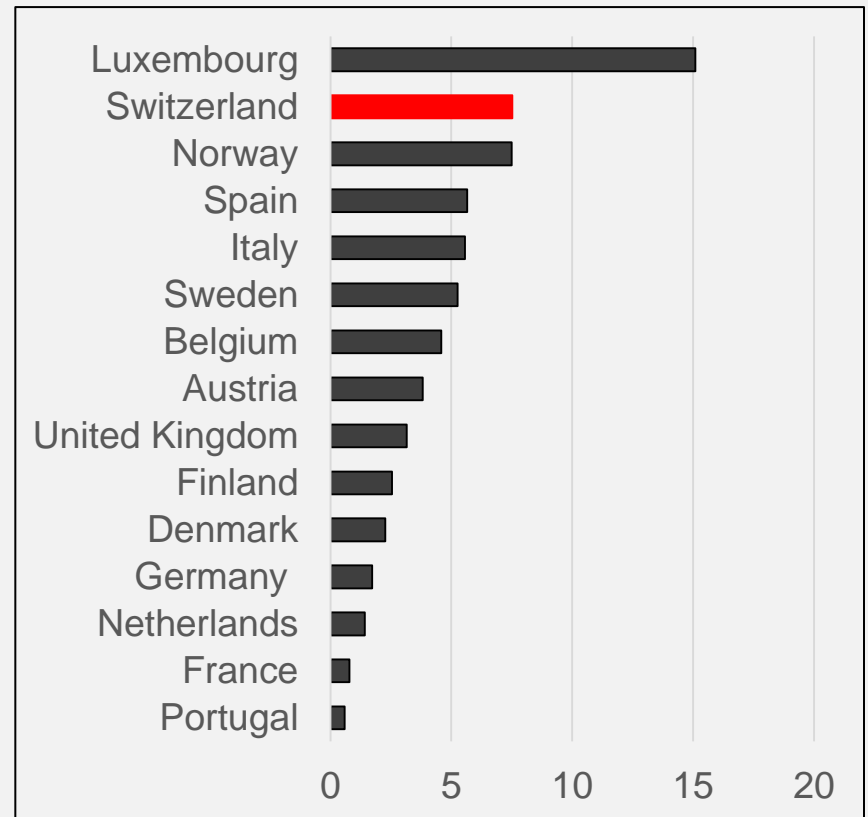
IFMS Paris, 15.02.2017

The Swiss context: International Comparison 2005-2013

Average migratory balance



Per 1000 inhabitants



Individual project 1, nccr – on the move

How to describe migration and integration processes in a quantitative way using original – longitudinal – approaches

→ SP1: Build a system of data that allows the longitudinal description of migration and structural integration

How does structural integration, measured by different indicators, vary over time and what individual and contextual characteristics influence these outcomes ?

→ SP2: Calculating longitudinal indicators of integration

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The Swiss Longitudinal Database

Feasibility

- Legal basis: Federal Statistics Act (FSA), January 15th 2014

*In order to fulfil its statistical duties, the Federal Office may link data, provided the data is rendered **anonymous**. In the event that data links involve data considered especially sensitive or that data links generate personal profiles, the linked data must be **deleted on completion** of the statistical analysis. The Federal Council regulates the details. (Article 14.a.I)*

- Statistical basis: Introduction of the Swiss Population Register in 2010 and the Personal ID (Social Security Number) in 2008

- Scientific framework: nccr – on the move

- Political basis:

The Federal Council expressed in April 2015 the wish to develop statistics by using linkage techniques, to better understand migration and integration processes (UE/AELE migrants).

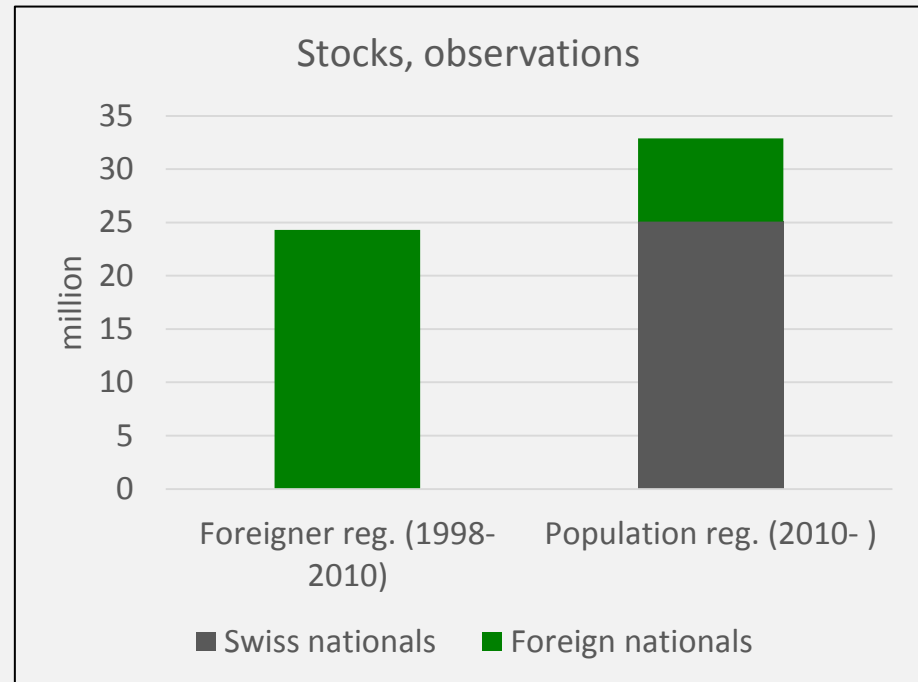
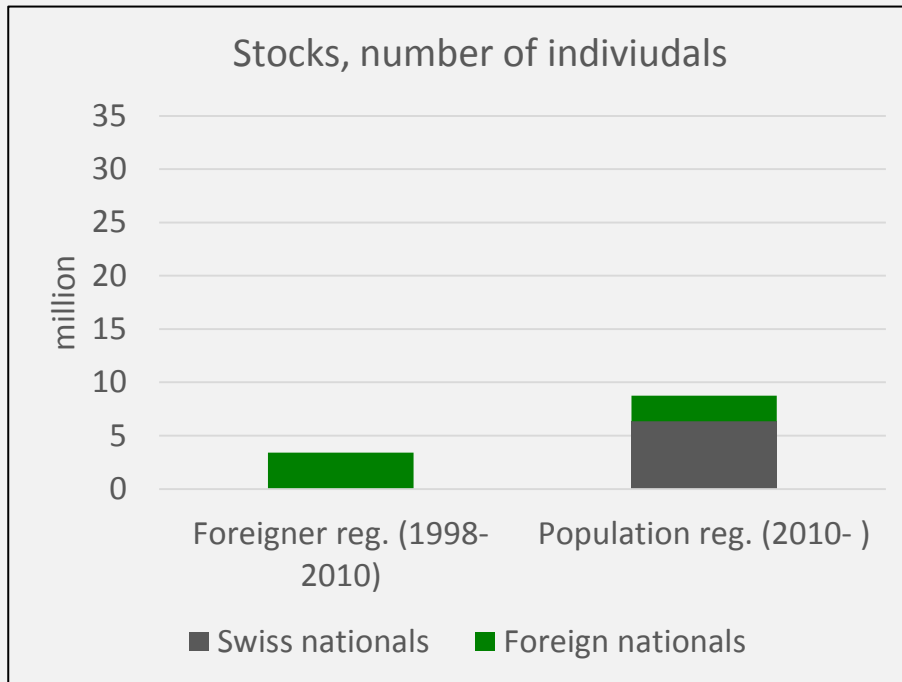
Features

- Already available data (registers and surveys)
- Exhaustive statistics are privileged
- Time range
 - 2010-now (all residents)
 - 1997-now (only foreigners)
- Close collaboration with SFSO
- Regularly updated
- Users-oriented solution (extractions of data possible for other IP)

Register	Period
Population register (stocks and flows)	2010-present
Register of foreigners and asylum seekers (stocks and flows)	1997-present
Structural survey (sample)	2010-2015
Social security register	2010-present
Student statistics	1991-present
Unemployment register	1998-present
Survey on enterprises	2008-present
Social assistance statistics	2001-present
Civil register	2010-present
Census	2000

The demographic “base”

Graph: Observations and PINs in the stock files, by origin



Methods

Merging

- All data after 2010
- By means of the PIN (Social Security Number)

Deterministic data linkage

- For asylum seekers/refugees before 2008
- Based on the nationality, sex, date of birth, civil status, arrival date, and place of residence

Limits: Data quality

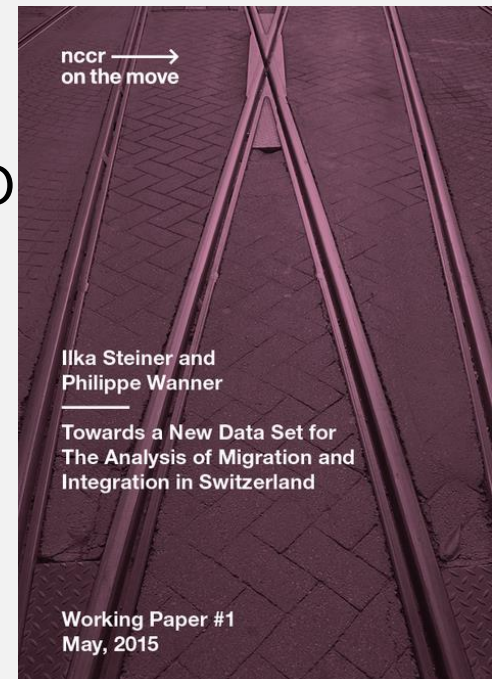
Administrative data

- Duplicate records
- Erroneous linkages
- Incoherence between information from different sources
- Multiple international movements
- Incomplete trajectories (entry or exit records)
- Date of birth asylum seekers missing and thus imputed January, 1

Conclusion

- Organizational aspects: Cooperation between public administration and research
- Extensions
 - according to the need of researchers and policy makers
 - different domains, not only migration research
- “Deletion on completion”
- First step in the direction of longitudinal data at SFSO
- Initiation of new migration research

Steiner, Ilka and Philippe Wanner (2015). Towards a New Data Set for The Analysis of Migration and Integration in Switzerland. *nccr – on the move, Working Paper 1*.



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The Longitudinal Indicators of Integration

Output

- Calculation of migration/integration indicators
- Visualization of 12 interactive indicators
 - Number, reason and location of immigrants
 - **Naturalization and emigration over time**
 - Level of qualification, sectors of the economy
 - Emigration and destination of Swiss citizens

Available online: <http://nccr-onthemove.ch/knowledge-transfer/migration-mobility-indicators/>

Session 4B: A. Perret, *Migration Indicators for Switzerland: Is visualization just a nice way to share academic research or can it offer more?*

Two examples

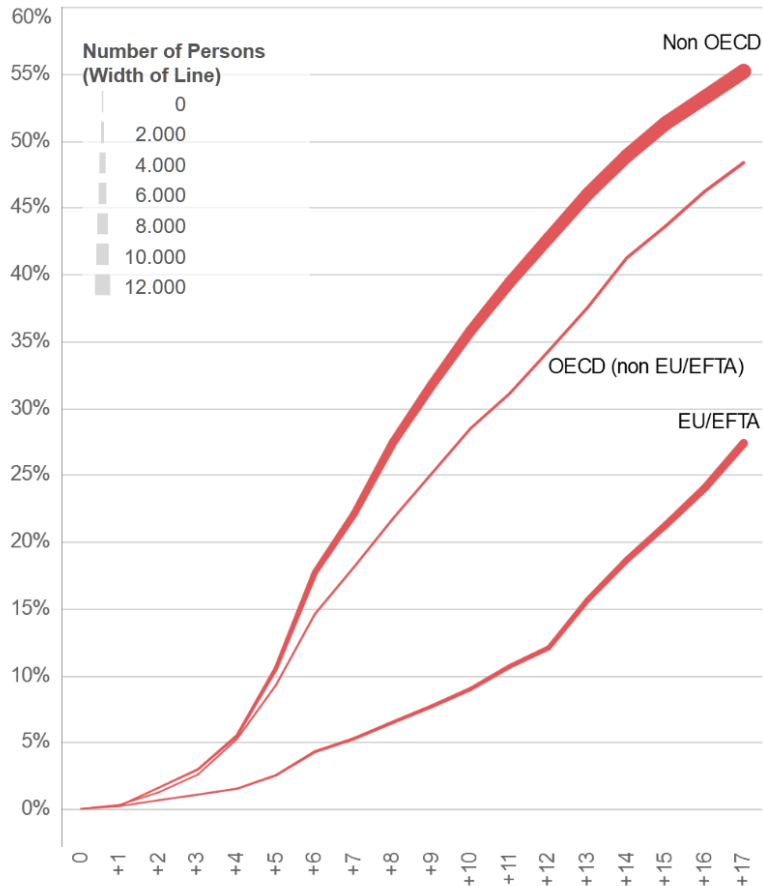
Naturalisation over time

<http://nccr-onthemove.ch/knowledge-transfer/migration-mobility-indicators/how-many-migrants-get-naturalized-over-time/>

Remigration over time

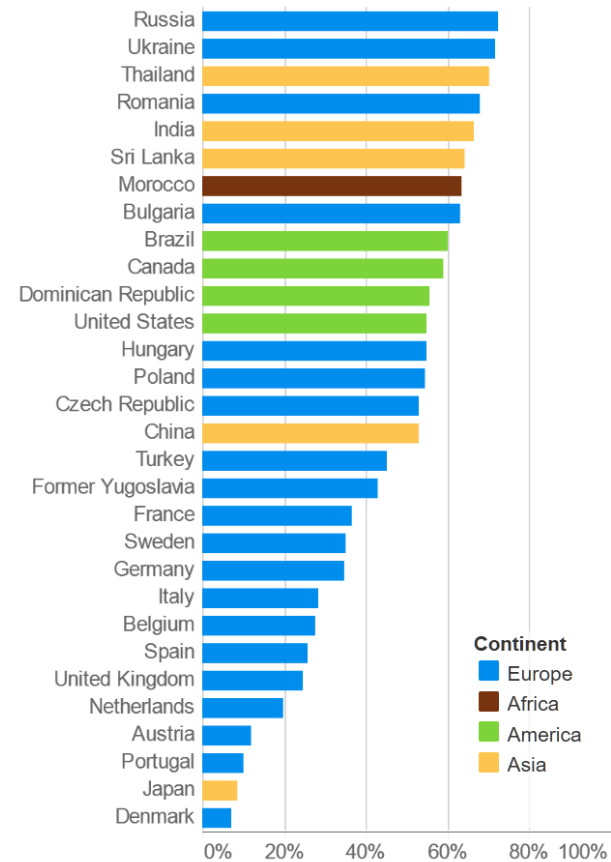
<http://nccr-onthemove.ch/knowledge-transfer/migration-mobility-indicators/how-many-migrants-leave-switzerland-over-time/>

Naturalization over Time, Cumulated Rates
(Year of Arrival 1998)



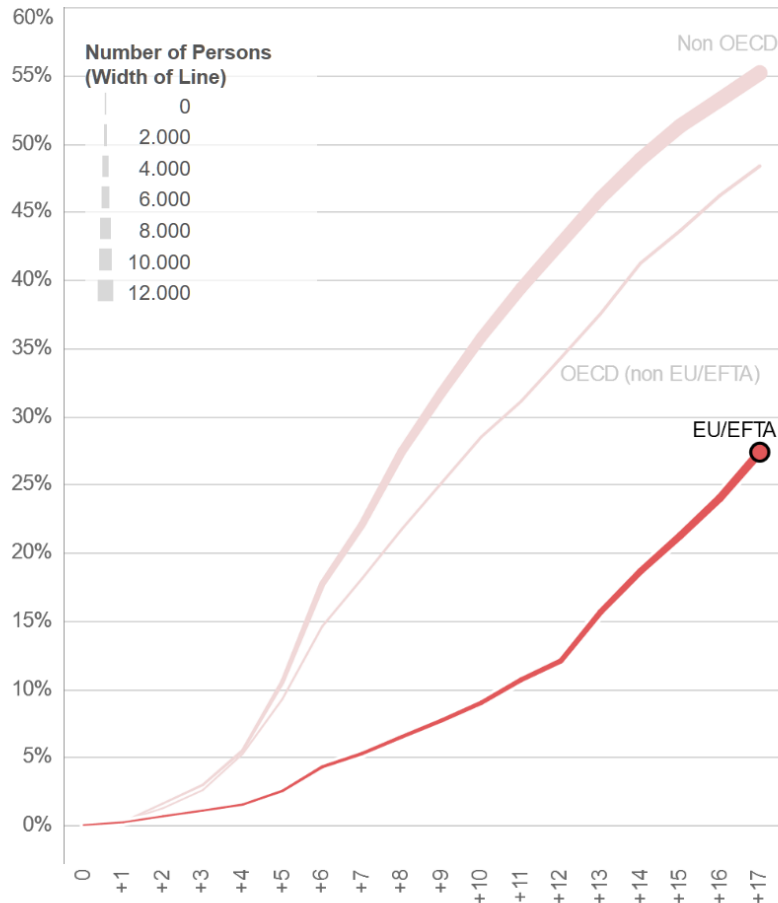
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Cumulated Naturalization Rate after
17 Years (Main Countries of Origin)

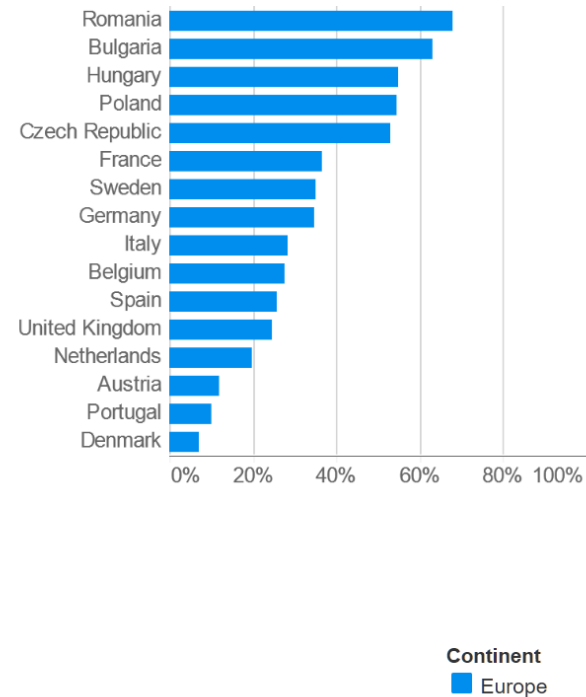


Main countries of origin are selected according to the number of migrants who entered Switzerland in 1998

Naturalization over Time, Cumulated Rates
(Year of Arrival 1998)

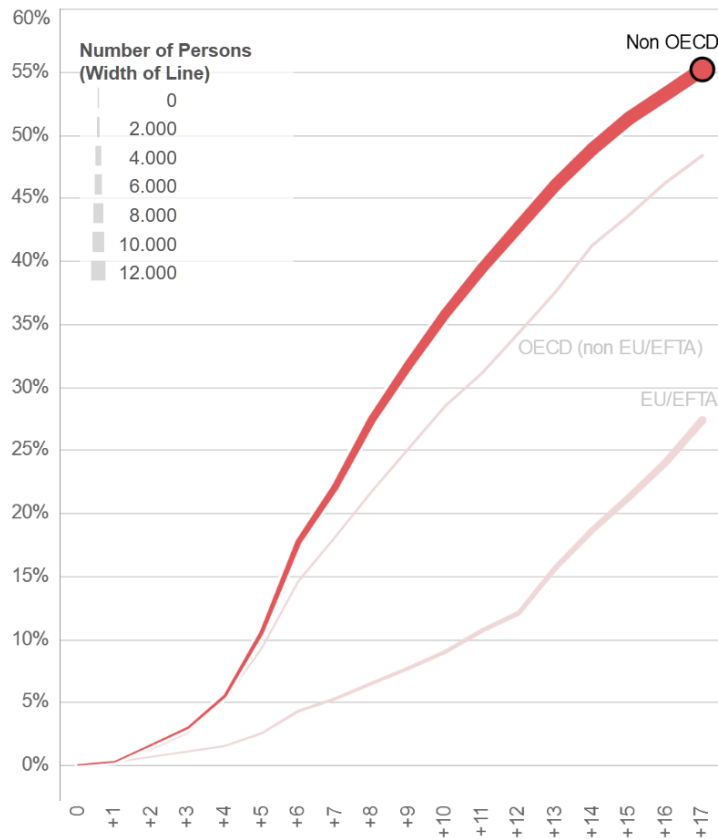


Cumulated Naturalization Rate after
17 Years (Main Countries of Origin)



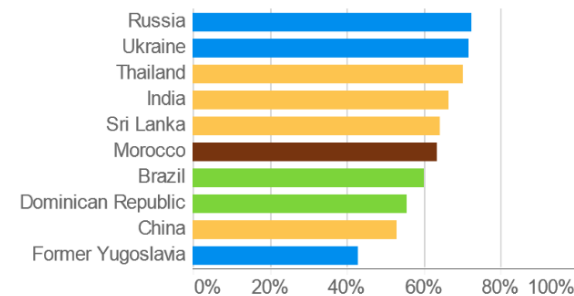
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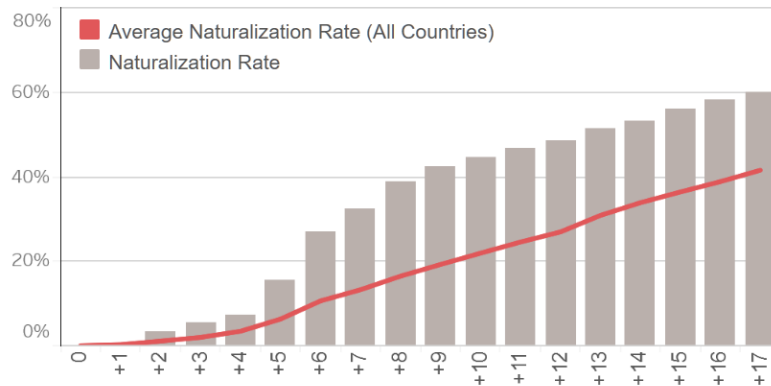
Continent

- Europe
- Africa
- America
- Asia

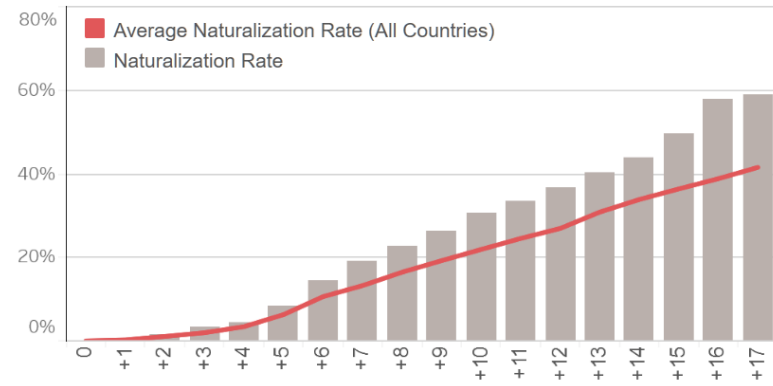
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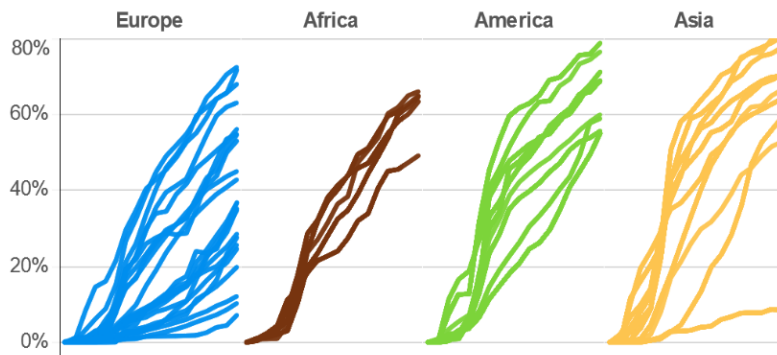
Naturalization over Time, Cumulated Rates
(Year of Arrival 1998), Brazil



Naturalization over Time, Cumulated Rates
(Year of Arrival 1998), Canada

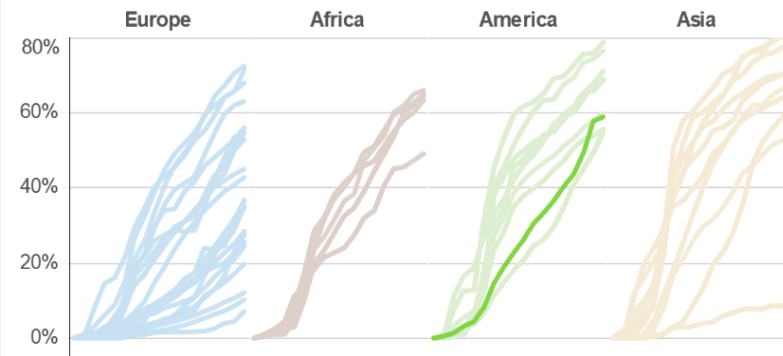


Naturalization over Time, Cumulated Rates
(Year of Arrival 1998)



Countries are displayed only when at least 100 citizens who arrived in 1998 are still in Switzerland after 15 years.

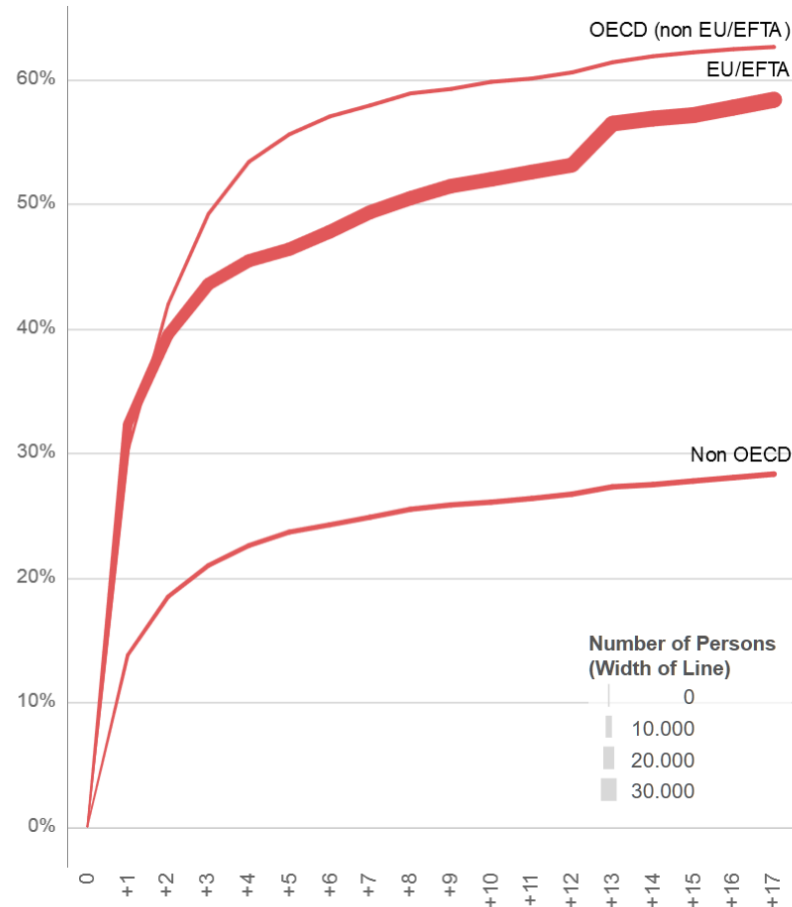
Naturalization over Time, Cumulated Rates
(Year of Arrival 1998)



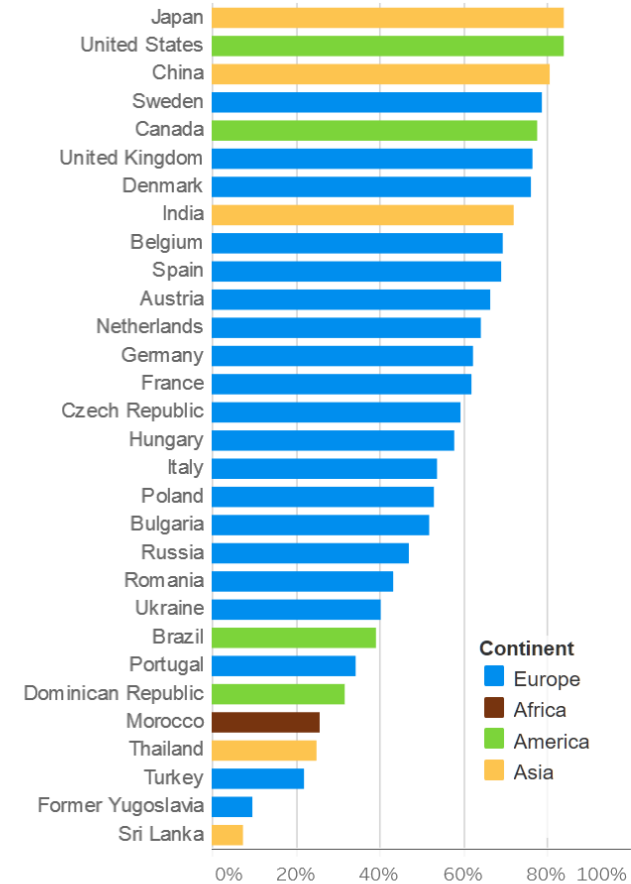
Countries are displayed only when at least 100 citizens who arrived in 1998 are still in Switzerland after 15 years.

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Departures over Time, Cumulated Rates
(Year of Arrival 1998)



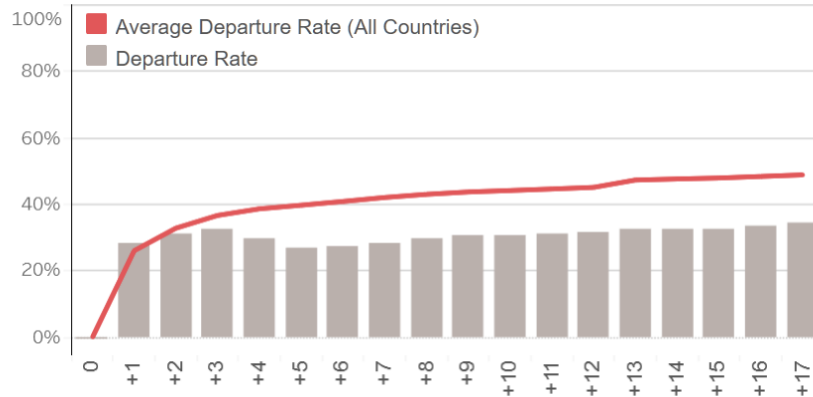
Cumulated Departure Rate after
17 Years (Main Countries of Origin)



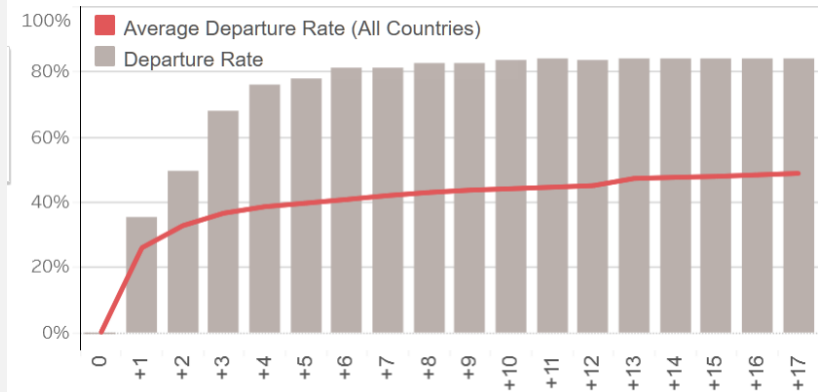
Main countries of origin are selected according to the number of migrants who entered Switzerland in 1998

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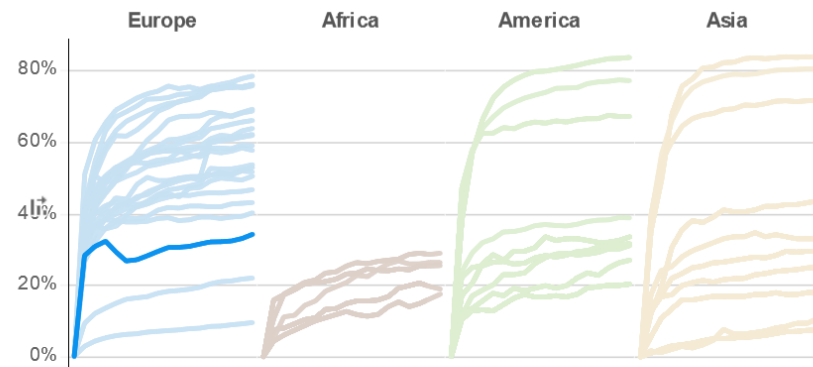
Departure over Time, Cumulated Rates
(Year of Arrival 1998), Portugal



Departure over Time, Cumulated Rates
(Year of Arrival 1998), Japan

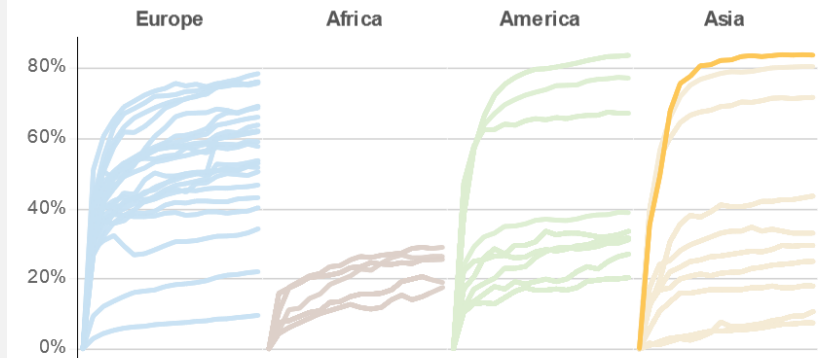


Departure over Time, Cumulated Rates
(Year of Arrival 1998)



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Departure over Time, Cumulated Rates
(Year of Arrival 1998)



Countries are displayed only when at least 100 citizens who arrived in 1998 are still in Switzerland after 15 years.

Relevance

- Longitudinal perspective: up to now, the measure of structural integration in Switzerland refers to cross-sectional indicators
- More detailed estimation of migratory flows (e.g. level of education)
- Explanatory approach of the integration process, by using typology approaches and logistic models integrating independent variables (country of origin, socio-economic characteristics and the purpose of migration)
- Better knowledge of the migratory phenomenon
- Tool for researchers, policy-makers and the public to better apprehend migration and integration processes of different migrant groups over a longer period of time.

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Thank you

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