

Underestimation of emigration - an alternative approach

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Emigration in Norwegian registers

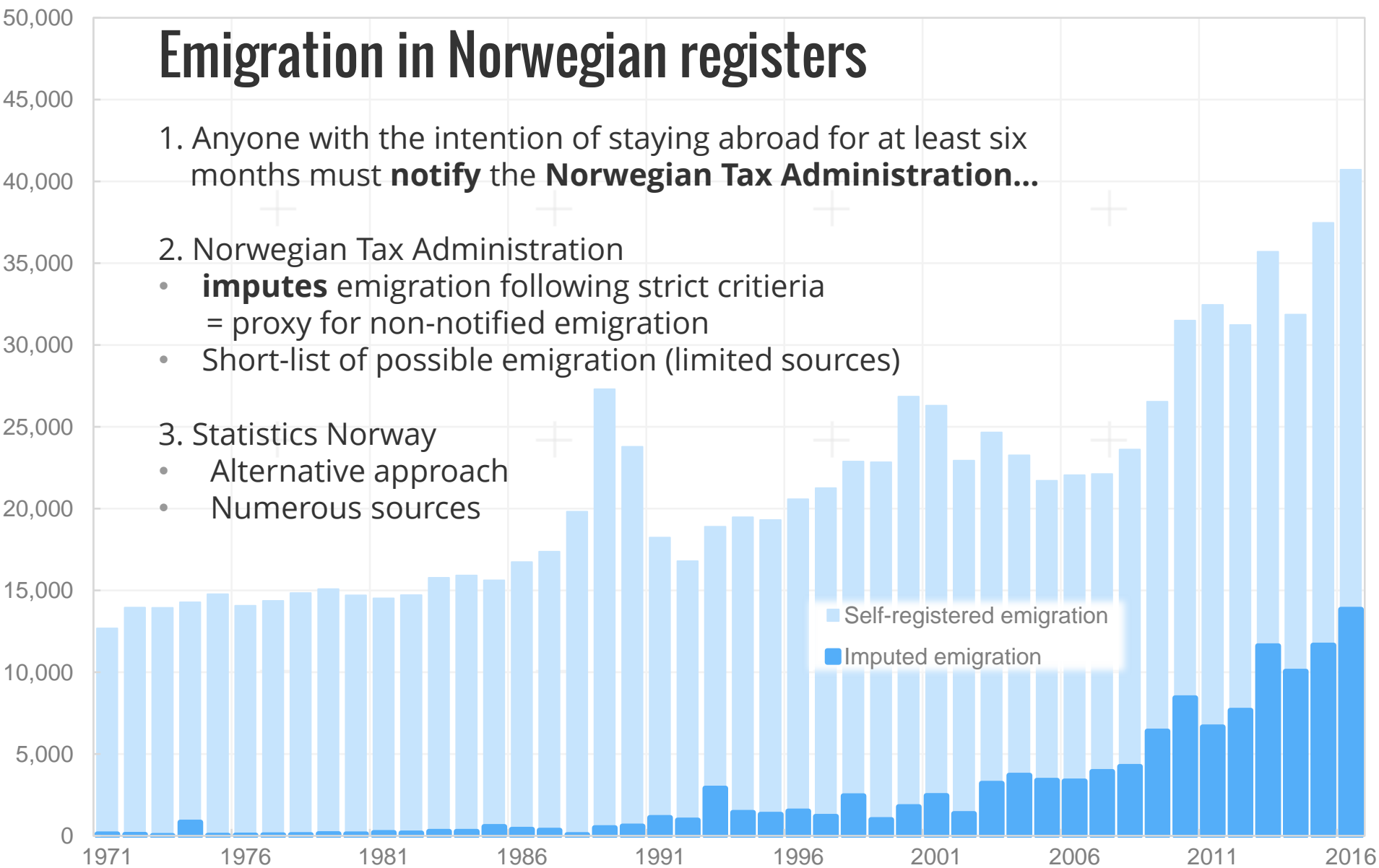
1. Anyone with the intention of staying abroad for at least six months must **notify** the **Norwegian Tax Administration**...

2. Norwegian Tax Administration

- **imputes** emigration following strict criteria = proxy for non-notified emigration
- Short-list of possible emigration (limited sources)

3. Statistics Norway

- Alternative approach
- Numerous sources

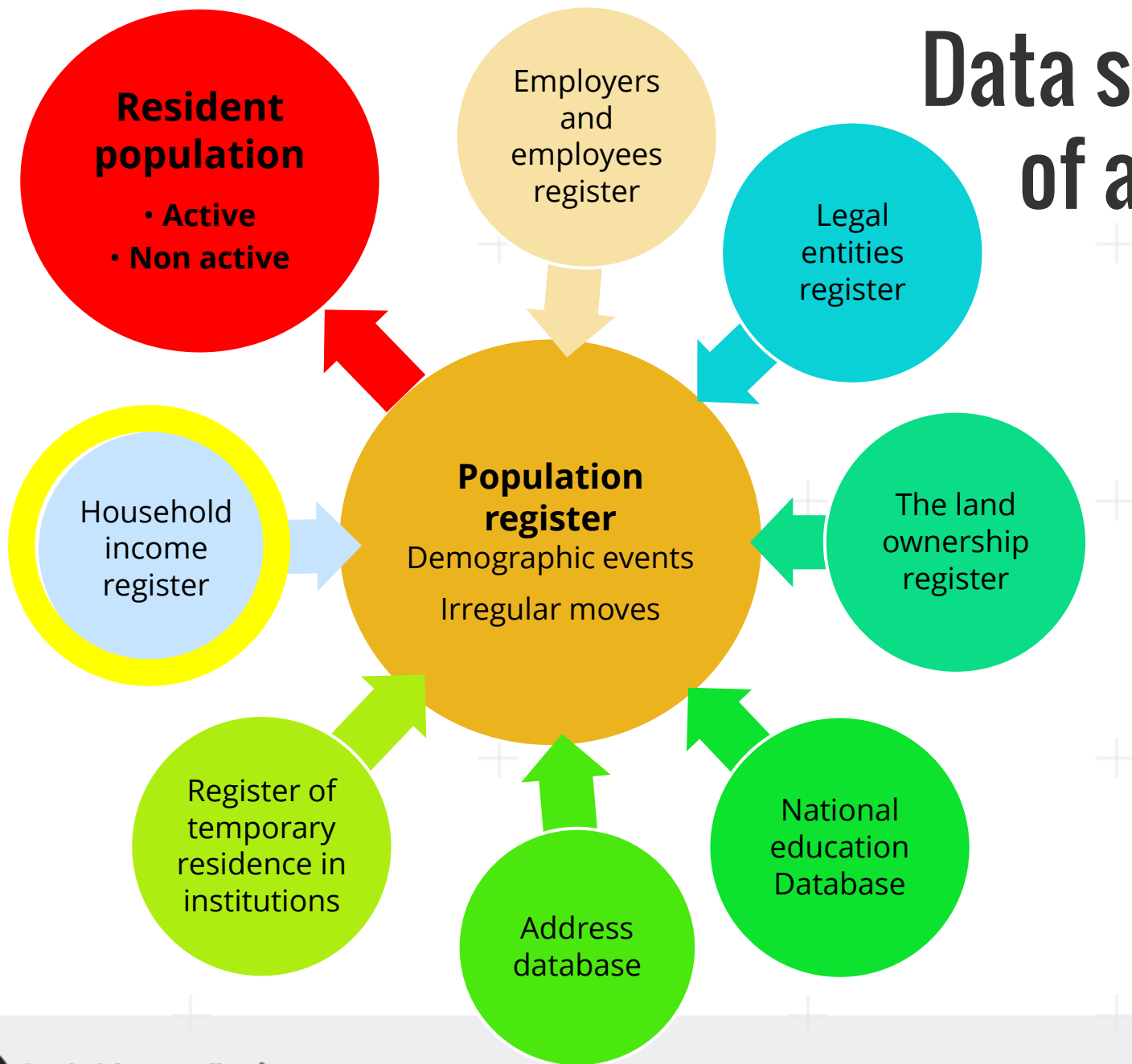


Underestimation of emigration

- an alternative and explorative approach

- Traces of «activity» in Norway?
- No trace \approx emigrated
- Merge numerous administrative registers
- Arrive at an estimate
 - Complement to the work at the Tax Administration
 - More accurate
 - More up to date
- Similar efforts in other Nordic countries
- Results
- Further plans

Data sources of activity



Income an important indicator

Lower annual income limit for living in Norway:

1 person household per month:

Social assistance rate = 5 850 NOK (585 EUR)

+ housing expenses = 2 500

Total = 8 350

1 person household per year => 100 000 NOK

Possibly emigrated if annual:

$$\frac{\textit{Household income}}{0,5 + (0,5 \times \textit{number of hh members})} < 100\,000 \textit{ NOK}$$

Why household income?

- Supported financially by someone else in the household
- But all family members treated as one - no deviation from the family

Assumed emigrated - alternatives

Description	Assumed emigrated			In Norway
	Min.	Intermediate	Max.	
Group 1 Income < 50 000 NOK/year. Not in any other register sources. No demographic events. Address with irregular move*.	8 030	8 030	8 030	
Group 2 Income < 100 000 NOK/year. Not in any other register sources. No demographic events. Address with irregular move*.		10 179	10 179	
Group 3 Income < 100 000 NOK/year. Found in other register sources or demographic event. Address with irregular move*.			26 628	
Group 4 Found in other register sources or demographic event. No address with irregular move*.				5 120 965
SUM	8 030	18 209	44 837	5 120 965

*Addresses with more than one family, where the originally residing family moved out without notifying the population register.

Assumed emigrated - results

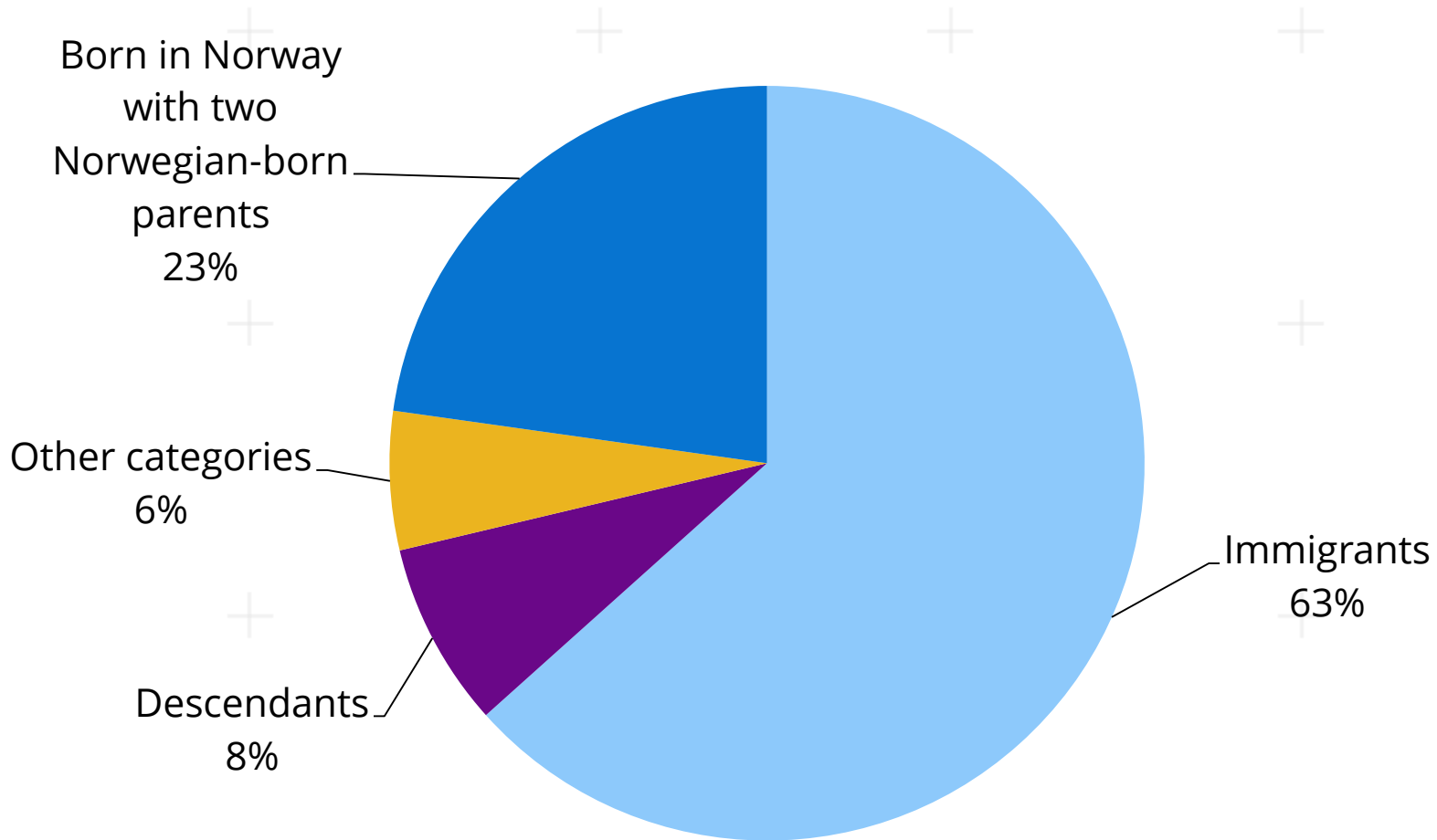
- **Statistics Norway:**

- 44 837 – max. alternative (least strict)
- 8 030 – min. alternative (most strict)
- = **0,2-0,9 %** of all residents 1.1. 2015
 - Maks 4 % among immigrants
 - Maks 0,4 % among rest of population
- 18 % are already registered as suspected emigrated by the Tax Adm.
- Increases the number of emigrated in official population register by 0,6 percentage points to 7,65%

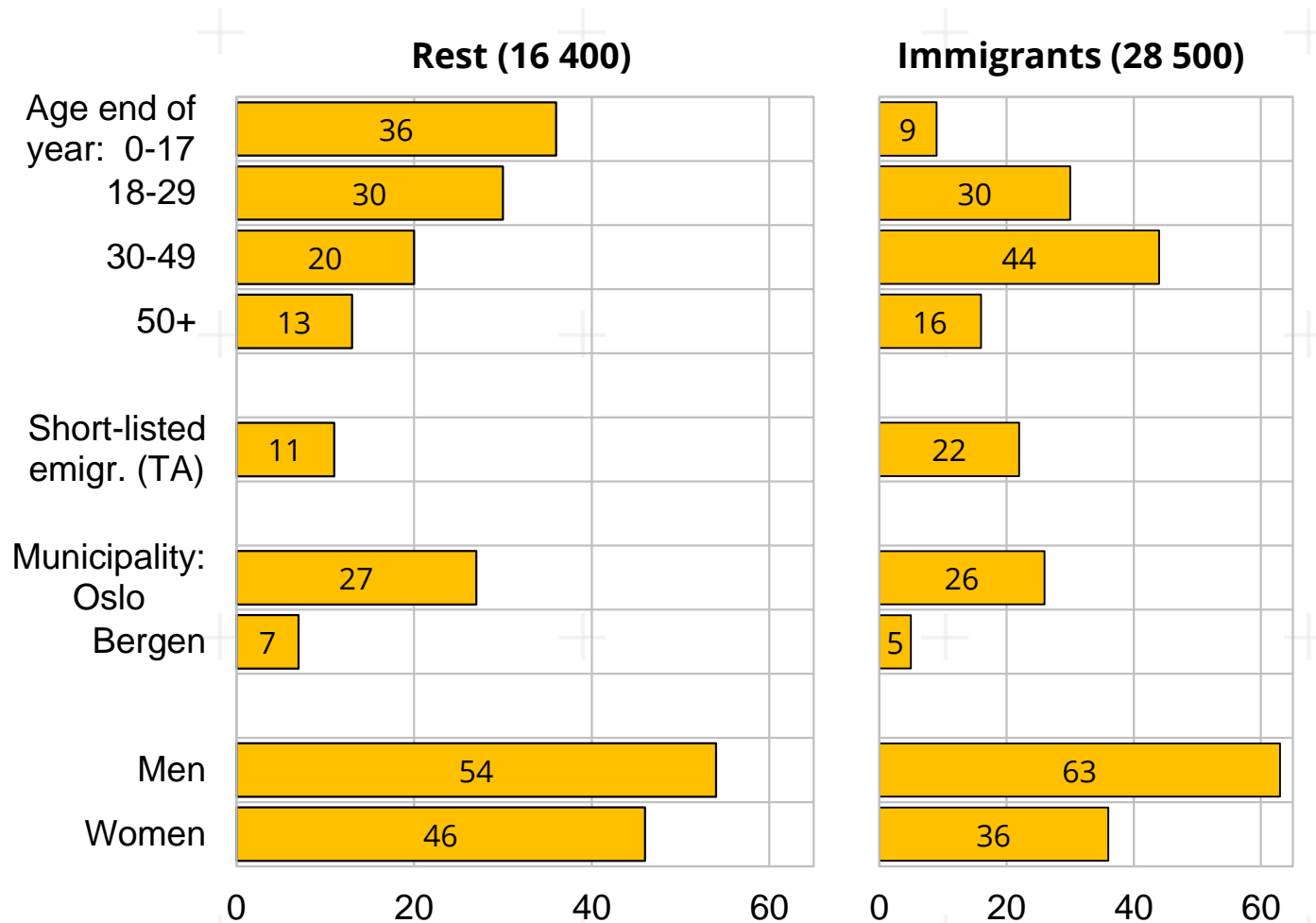
- **Statistics Sweden:**

- Interval 30 000 – 60 000 persons
- = **0,3-0,6 %** among all residents in 2012

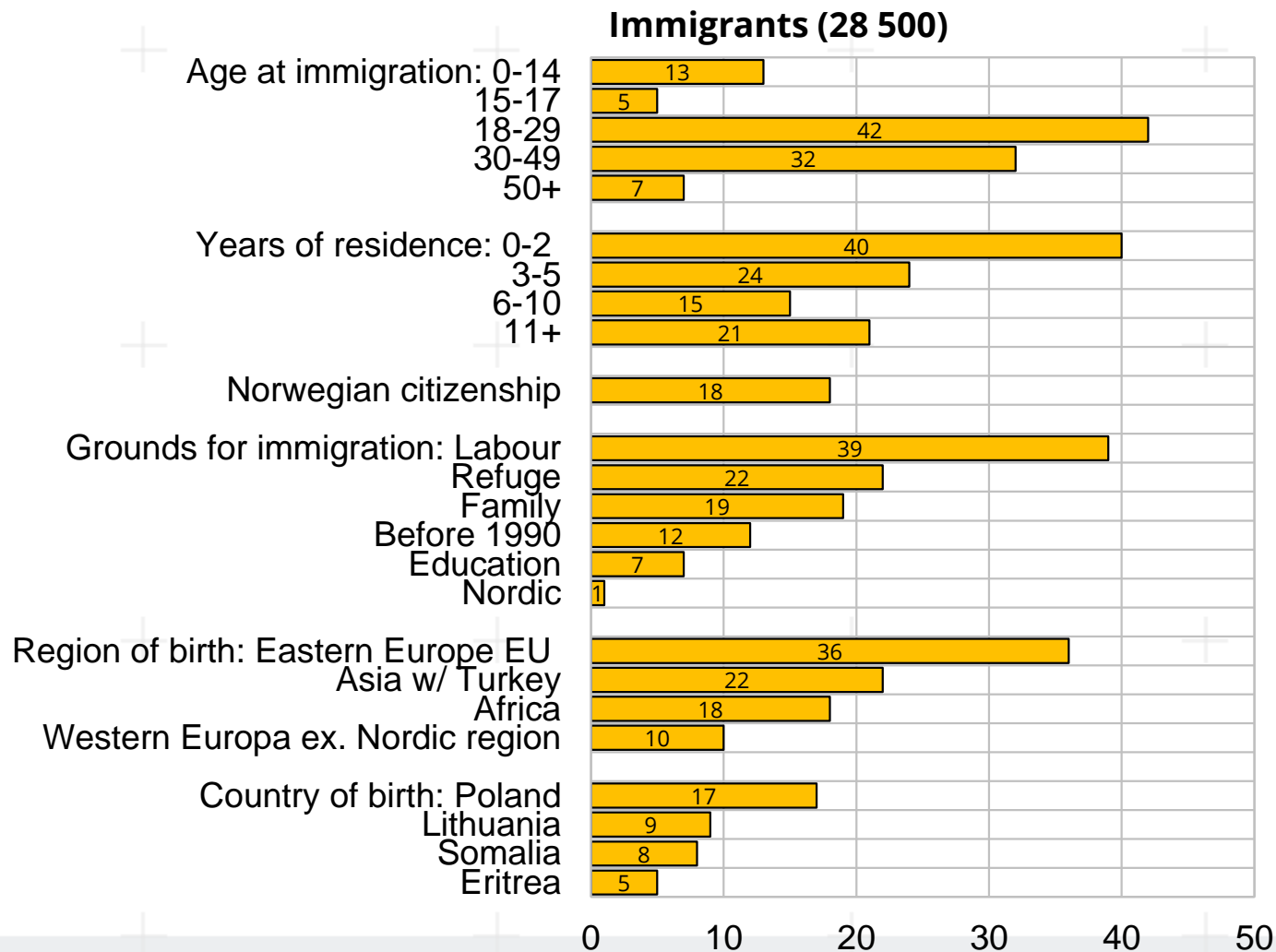
- Who is assumed to be emigrated?



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Further plans

- Publish report on method and results
- Update annually, improve further
- Make variable available for research purposes
- Link report to annual official population statistics releases
- Use in quality control of registers at Statistics Norway
- Feed-back to Tax Administration