Immigrants' Geographic Mobility Is Higher than You Think
Evidence from France

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Motivations

Immigrants are defined according to their geographic mobility. But most studies about the residential mobility do not distinguish immigrants from natives and the few studies doing so omit the people who leave the country.

Objectives

The aim of this study is to compare the geographic mobility of immigrants and natives in France over 30 years taking into account the effect of emigration

1. contribute to bridge the gap between internal and international migration studies
2. show the limits of cross-sectional retrospective analysis to study immigrants

Data

INSEE's Permanent Demographic Sample **(EDP)**

- Data constructed from **census-linked data** and **civil registers** in France since 1968
- **5 exhaustives censuses** until 1999
- **Large longitudinal panel data**: 900,000 individuals tracked over 30 years
- **No sample distortion over time**: remains representative of the population in France
- Linked with death certificates
- Place of birth and nationality at birth $\Longrightarrow$ Immigrant status
- Residential location at the municipality level: over 36,000 areas ("communes")

General Method

Out-migration from municipalities btw 2 consecutive censuses in Metropolitan France (1968-1999)

- Comparison of **age-specific mobility ratios** for native and immigrants
- **Cross-sectional retrospective analysis** (traditional analysis) evaluated against **longitudinal analysis using administrative panel data**

Proportion of movers

Cross-sectional retrospective analysis is restricted to the people that can still be observed at the end of the period (*stayers* in France). This partial analysis **excludes all the individuals initially present ($c_t = 1$) who left ($c_{t+1} = 0$) due to death on French soil ($d_{t+1} = 1$) or emigration ($e_{t+1} = 1$)**. Thus, it only reflects the situation of a selected sub-group of individuals rather than the actual mobility of the people living in France at time t.

1. Average proportion of movers btw t and t+1 among people observed at t: $E(l_t \neq l_{t+1})$
2. Retrospective approach only gives: $E(l_t \neq l_{t+1} | c_{t+1} = 1)$

$$
\begin{aligned}
E(l_t \neq l_{t+1}) &= P(l_t \neq l_{t+1}) \\
&= P(l_t \neq l_{t+1} \cap c_{t+1} = 1) + P(l_t \neq l_{t+1} \cap c_{t+1} = 0) \\
&= P(l_t \neq l_{t+1} | c_{t+1} = 1) P(c_{t+1} = 1) \\
&+ P(l_t \neq l_{t+1} | d_{t+1} = 1) P(d_{t+1} = 1) + P(e_{t+1} = 1) \qquad (1) \\
&= P(l_t \neq l_{t+1} | c_{t+1} = 1)(1 - P(c_{t+1} = 0)) \\
&+ P(l_t \neq l_{t+1} | d_{t+1} = 1) P(d_{t+1} = 1) + P(c_{t+1} = 0) - P(d_{t+1} = 1) \qquad (2)
\end{aligned}
$$

2. is not equivalent to 1. from the moment there are:

- *non-stayers* **(attrition)** $P(c_{t+1} = 0) \neq 0$
- **selective** attrition based on mobility $P(l_t \neq l_{t+1} | c_{t+1} = 0) \neq P(l_t \neq l_{t+1} | c_{t+1} = 1)$

Preliminary results

Out-migration from municipalities btw two consecutive censuses for **immigrants** (Imm.) and **natives** (Nat.)

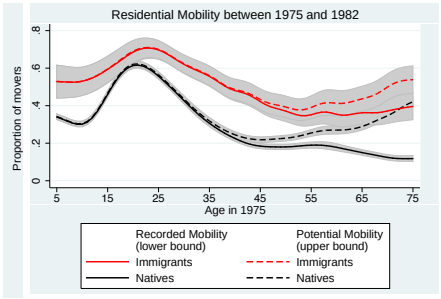
Censuses	1968-1975		1975-1982		1982-1990		1990-1999	
(proportions in %)	Imm.	Nat.	Imm.	Nat.	Imm.	Nat.	Imm.	Nat.
1. Longitudinal approach								
(i.e. among respondents 1^{st} census)								
Proportion of migrants	**49.6**	**32.6**	**50.1**	**33.1**	**47.3**	**33.0**	**45.2**	**33.7**
Proportion of deaths	6.6	5.6	3.8	5.5	5.7	7.4	6.3	8.0
N	17,543	218,588	20,247	235,555	21,590	246,559	23,112	261,331
2. Retrospective approach								
(i.e. among respondents both censuses)								
Proportion of migrants	**29.9**	**30.1**	**26.7**	**30.3**	**27.8**	**32.1**	**27.3**	**33.2**
N	10,936	192,838	12,718	207,311	14,037	215,783	15,411	228,057

Main results:

- **The proportion of movers is higher for immigrants than natives due to emigrants**
- **The proportion of movers among immigrants tends to decrease over time**

Uncertainty due to mortality

Did people who died move out after time t?
With l_{t+1} denoting their last place of residence before they died, the interval that comprises the proportion of movers is based on the extreme scenarios (Horowitz & Manski, 1998):
Lower bound: $P(l_t \neq l_{t+1} | d_{t+1} = 1) = 0$
Upper bound: $P(l_t \neq l_{t+1} | d_{t+1} = 1) = 1$



Horowitz J. L., **Manski** C. F., 1998, "Censoring of outcomes and regressors due to survey nonresponse: Identification and estimation using weights and imputations", *Journal of Econometrics*, 84 (1), pp.37-58

Determinants of migration

Analysis of the individual and household characteristics of each group of migrants (descriptive & regression analysis):

- internal migrants
- emigrants

Evolution of the differences over time depending on the country of origin

Preliminary conclusions

- Interactions between internal and international migrations
- **Underestimation of the mobility ratio among immigrants** using the traditional cross-sectional approach excluding emigrants
- Variations over time in the proportion of migrants depending on their country of origin

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