Initial and Subsequent Location Choices of Immigrants to the Netherlands

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Why Did They Write This Paper?

- Ethnic residential segregation is both a social and political issue in old and new immigration regions.
  - Usually associated with concentration of educational failure, welfare dependency, low labor force participation, poverty, crime, and hopelessness.

Why Did They Write This Paper?

- Previous work has looked at initial settlement behavior *or* internal mobility- not both.
  - Little is known about the location choices of immigrants in the immergence or continuation of segregation.

What This Paper Offers

- This paper looks at the settlement patterns for immigrants to the Netherlands upon arrival as well as their subsequent mobility.
  - Emphasis on ethnic residential segregation

Data

- An administrative longitudinal file from Statistics Netherlands (the Dutch Social-Statistical Database)
  - Includes all legal residents of the Netherlands
  - Looks at all immigrants who arrived in 1999 and were present in the Netherlands on the 3rd Friday of September.
    - Follow these individuals for 4 years
    - Immigrant = Foreign born person with non-Dutch parents

Points to Keep in Mind

- Family, asylum, and labor immigration.
- The highly regulated Dutch housing market significantly restricts the voluntary character of location choice.
  - Roughly one half of housing is rented.
    - The majority of rental units are in the social housing sector.

Spatial Assimilation

- Based on settlement behavior in the early 19th century of voluntary labor immigrants to the US from Europe.
- Hypotheses:
  - New immigrants are expected to settle primarily in neighborhoods where co-ethnics are concentrated
  - The shorter the distance from the native Dutch, the more likely immigrants are to settle initially and later move into a less segregated neighborhood
    - Employed immigrants move to less segregated neighborhoods and unemployed immigrants move to more segregated neighborhoods

Number of Immigrants *Settling* in a Particular Neighborhood

$$I_i = \alpha + N_i \beta + M_i \delta + \varepsilon_i$$

I_i is the number of immigrants in neighborhood i who entered the Netherlands in 1999

N_i is a vector of neighborhood characteristics that include the shares of the largest ethinic minority groups

M_i is a vector of municipality characteristics covering local labor market conditions in terms of fractions of the medium and highly skilled labor force

Settlement Equation: Level of Analysis

- Neighborhood is the unit of analysis.
- Looked at immigrants from Afghanistan, China, Iraq, Turkey, Morocco, Surinam, other non-western countries, and western countries.
  - Surinamese, Turks, and Moroccans are the largest groups.
    - Migrate for familial reasons.
  - Afghanis, Iraqis, and other non-western are generally asylum seekers.
  - Chinese in an intermediate position.
  - Western immigrants are labor migrants.
  - Primarily settle in large cities.

Settlement Equation: Level of Analysis

- Total of 15 models.
  - 7 immigrant country groups (all reasons for migration).
  - Labor (all countries).
  - Asylum (all countries).
  - Turkey (family reunification and formation).
  - Morocco (family reunification and formation).
  - Surinam (family reunification and formation).

Settlement Equation: Country Results

- Inverse relationship between the number of immigrants entering a neighborhood and housing values.
  - Locate where there is cheap housing.
  - Particularly strong for non-western immigrants.
  - Least strong for Surinamese and western immigrants.
- Location choices are largely determined by the fraction of the neighborhood population made up by ethnic minorities from the same origin.
  - Strongest for Moroccans.
  - Not found for Surinamese.

Settlement Equation: Country Results

- Relative size of other ethnic groups influences location choice.
  - Number of Turkish immigrants is positively related to the concentration of Moroccans and co-ethnics.
  - Number of Moroccan immigrants is positively related to Surinamese concentration (and not where the Turks are concentrated).
  - Number of western immigrants is negatively related to the concentration of Surinamese, Turks, and Moroccans.
  - Overall, results emphasize the strong effect of ethnic ties and socioeconomic dissimilarities between western and non-western immigrants.

Settlement Equation: Country Results

- Turkish, Moroccan, and Afghani immigrants are more likely to settle in municipalities with low unemployment levels.
- Moroccan, Chinese, and western immigrants are more likely to settle in municipalities where a relatively high proportion of the population is skilled.

Settlement Equation: Reasons Results

- Labor migrants (typically from western countries) immigrate to neighborhoods with higher levels of earnings and higher concentrations of western and non-western ethnic minority groups.
- Asylum immigrants are more likely to settle where there is a higher concentration of other non-western immigrants and less likely to settle where there is a higher concentration of Surinamese.
- Asylum immigrants are more likely to settle in municipalities with higher unemployment rates.

Settlement Equation: Reasons Results

- Turkish and Moroccan family reunification immigrants are less sensitive to the % of co-ethnics, mean wage, and unemployment rate than are immigrants for family formation.

Subsequent Geographical Mobility

- Share of movers is fairly high.
  - 8% of total population moves annually.
    - 66% remain in the same municipality.
- Non-western immigrants move more frequently than do western immigrants.
- Asylum immigrants move more frequently than family and labor immigrants.
  - More often move between municipalities.
- There is a general rising trend in the frequency of moves in the first 2 years.

Subsequent Geographical Mobility: Level of Analysis

- Three neighborhood types:
  - Native (N): < 10% ethnic minority population.
  - Mixed (M): 10-35% ethnic minority population.
  - Segregated (S): > 35% ethnic minority population.

Subsequent Geographical Mobility: Probabilities

- Probability of moving from one neighborhood to another is given by a 3x3 matrix, **P**

$$\mathrm{P} = \begin{bmatrix} p_{MN} & p_{MM} & p_{MS} \\ p_{NN} & p_{NM} & p_{NS} \\ p_{SN} & p_{SM} & p_{SS} \end{bmatrix} \qquad \text{with} \sum_{i,j=1}^{3} p_{ij} = 1$$

$$P(p_{ij(t+1)} \mid p_{ij(t)})$$

Subsequent Geographical Mobility Equations

$$(k_{i0}, k_{i1}, k_{i2}, k_{i3}, k_{i4}) \qquad \text{(Eq.1)}$$

$$\Pr(k_4 \mid k_0) = \sum_{k_3=1}^{3} \Pr(k_4 \mid k_3) \sum_{k_2=1}^{3} \Pr(k_3 \mid k_2) \sum_{k1=1}^{3} \Pr(k_2 \mid k_1) \Pr(k_1 \mid k_0) \qquad \text{(Eq. 2)}$$

Subsequent Geographical Mobility Equations

$$\ln(p_{ijt} / p_{i0t}) = \phi + X_{i(t-1)}\lambda + N_{i(t-1)}\eta + \upsilon \qquad \text{(Eq. 3)}$$

$$P_{ijt} = \exp(\mathrm{X}_{i(t-1)}\lambda_j + \mathrm{N}_{i(t-1)}\eta_j) \Big/ \sum_{k=1}^{3} \exp(\mathrm{X}_{i(t-1)}\lambda_j + \mathrm{N}_{i(t-1)}\eta_j) \qquad \text{(Eq. 4)}$$

Subsequent Geographical Mobility: Multinomial Logit Model

- Used pooled data from 1999-2003.
- Models the individual *i*'s contribution to the likelihood function in the individual's residential location *j* at the end of year *t-1*.
- Dependent variable has four response categories:
  - Native, Mixed, Segregated, Staying (reference).
- Western immigrants are the reference group.
- $X_{i(t-1)}$ *and* $N_{i(t-1)}$.
  - Vector of characteristics of individuals and the locations where individuals lived at time *t-1*.

Mobility Results

- Clear pattern of concentration into more segregated neighborhoods among immigrants from non-western countries.
  - Those who settled in a less segregated neighborhood tend to move towards segregated neighborhoods.
    - Particularly strong for asylum, Surinamese, Moroccan, and Turkish immigrants.

Mobility Results

- The ethnic composition of the initial neighborhood has a modest effect.
  - Concentration of Surinamese in the initial neighborhood is associated with a smaller probability of moving into a less segregated neighborhood.
  - Concentration of other non-western immigrants in the initial neighborhood is associated with a greater probability moving into a more segregated neighborhood.
- Age and gender do not play a prominent role in explaining immigrant mobility.
- The shift from less segregated to segregated neighborhoods is very strong for immigrants in The Hague, Rotterdam, Utrecht, and Amsterdam.

Mobility Results

- Employment status is important.
  - Employed immigrants are more likely to move to a less segregated neighborhood.
  - Unemployed immigrants are more likely to more into more segregated neighborhoods.

Mobility Results

- Economic status of municipality matters.
  - A higher unemployment rate in the municipality is associated with a higher probability of moving to a more segregated neighborhood (for those who reside in a native neighborhood).

Conclusions

- More likely to settle where co-ethnics are concentrated.
- Substantial mobility following arrival.
  - Particularly for non western immigrants.
- There is a propensity to migrate to more segregated neighborhoods.
  - Particularly strong for asylum immigrants.
- Initial location choice explains only part of immigration concentration.

Conclusions

- Surinamese immigrants have different settlement and mobility patterns than Turkish and Moroccan immigrants.
  - Surinamese settlement is less likely to be affected by presence of co-ethnics.
  - Turkish and Moroccan immigrants' subsequent mobility is mainly towards more segregated neighborhoods.
- Favorable neighborhood economic conditions is positively associated with more labor and family immigrants.

Thank You