

The Rise of the Radical Right: Agent-Based Model of Extreme Right-Wing Voting

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Overview

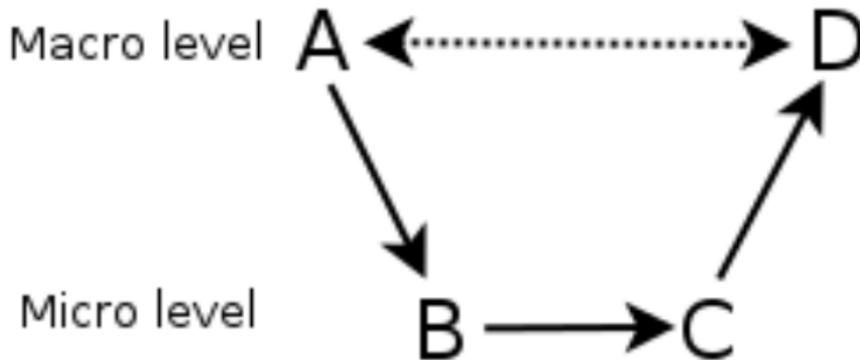
- Research question
- Agent based modelling
- Theoretical framework
- Data and Method
- Results
- Specification of the model

Research question

- How the rise of the radical right can be explained?

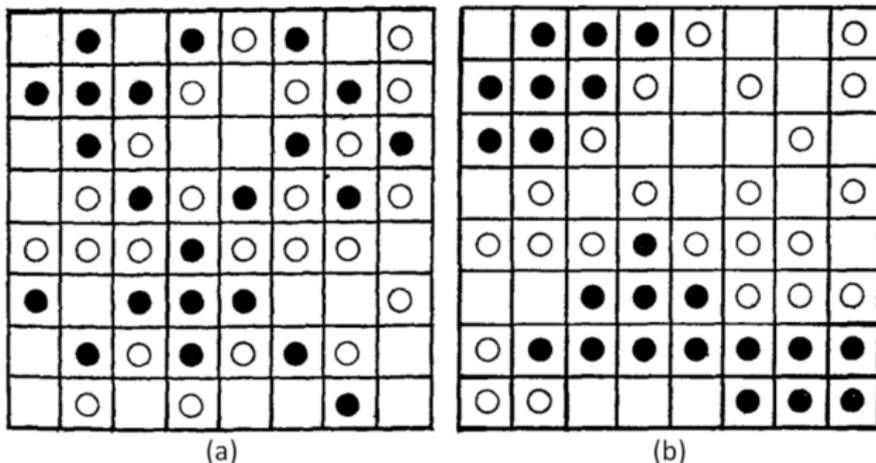


Coleman's boat

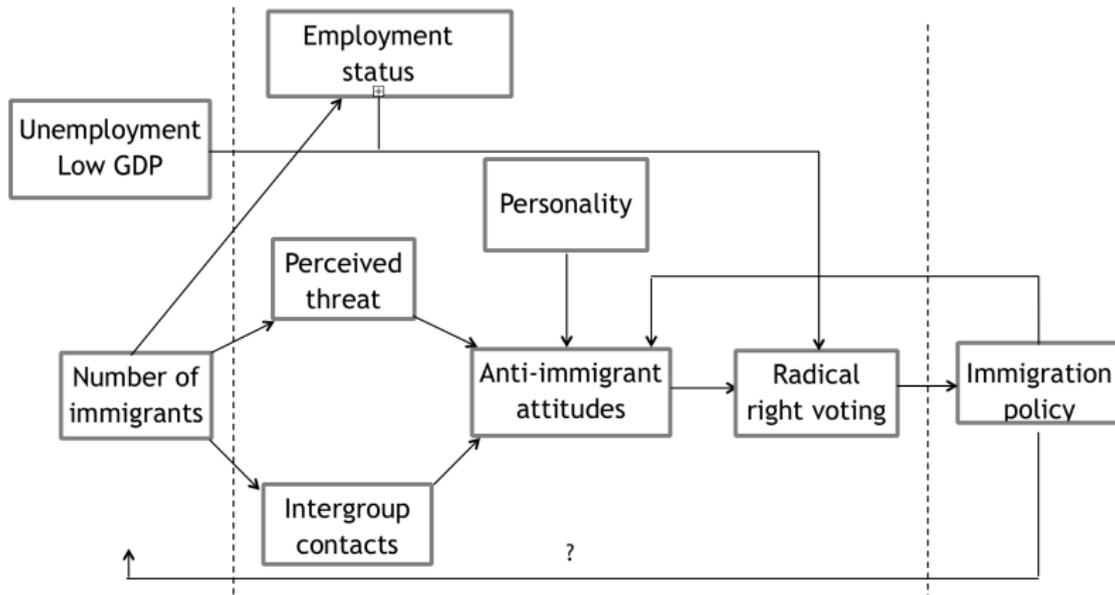


Agent-Based Models

- Agents interact based on a set of rules
- Specified environment
- Especially useful for modelling feedback loops



Theoretical Framework



Theoretical Framework

- **Ethnic competition** theory is based on group conflict theory which implies competition over resources between social groups and theory of social identity which assumes a need for superior position of own group over other groups. The self-identification with in- group becomes stronger in the context of group conflict (Scheepers, Gijsberts, and Coenders 2002; Schneider 2008).
- **Personal contacts** with ethnic minorities reduce prejudice and anti-immigrant attitudes (Pettigrew 1998). Also supported by halo effect which states that anti-immigrant attitudes are strong in neighbourhoods that are close to neighbourhoods with high proportion of immigrants and not within them (Rydgren and Ruth 2013).
- **Social marginalisation** or **relative deprivation** theory states that feeling of deprivation may arise as a result from comparing ones life conditions with past conditions or a reference group (modernisation losers) (Gurr 1970; Runciman 1966; Betz 1994).

Bayesian dynamic system modelling

$$\frac{dX_1}{dt} = a_0 + \frac{a_1}{X_1} + \frac{a_2}{X_2} + a_3X_1 + a_4X_2 + \frac{a_5}{X_1X_2} + a_6\frac{X_2}{X_1} + a_7\frac{X_1}{X_2} + \dots + a_{16}X_2^3$$

2 stage model selection:

- maximum log-likelihood
- Bayes factor

Data and Variables (scaled from 0 to 1)

- Time series data for 27 European countries with elections 1990 - 2013 (4 - 7 elections)
- **Anti-immigrant sentiment of elected parliament** defined as a sum of position on immigration policy for each party (Chapel Hill Expert Survey) weighted by share of votes (European election database)
- Net migration per capita
- Unemployment
- GNI per capita

Results

$$\begin{aligned} \textit{Anti.imm} &= 0.16\textit{Net.migr} * \textit{GNI} \\ &+ 0.65(\textit{GNI} * \textit{Unempl})/\textit{Net.migr} \\ &- 1.4(\textit{GNI} * \textit{Unempl} * \textit{Anti.imm})/\textit{Net.migr} \end{aligned}$$

Model. Environment

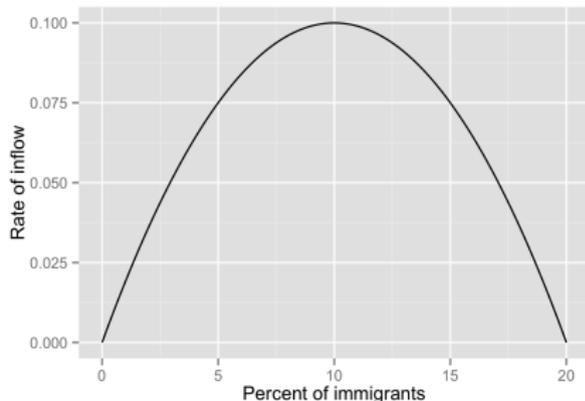
- Two types of agents citizens and immigrants
- Both types have income, however immigrant income is lower
- Citizens have attitudes towards immigration and personality characteristic - resistance to change
- Agents are segregated by income and type

Model. Individual mechanisms

- **Relative deprivation:** citizens with relatively low income in neighborhood become anti-immigrant, if the resistance is low enough
- **Personal contact:** attitudes of citizens become pro-immigrant in presence of immigrants in the neighborhood, if the resistance is low enough
- **Social norm:** citizens tend to adjust their attitudes to median level in the neighborhood, if the resistance is low enough

Model. Macro level dynamic

- Income increases with some random fluctuations
- Number of immigrants increases by the function:



Thank you!

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