

Emigration Behaviour of Migrants in Austria

Accounting for heterogeneity in the official Austrian population projection

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Background

- The demographic behavior of migrants will influence the future size and composition of the Austrian population.
- The foreign-born population is highly diverse, as evidenced by the variation in emigration risks based on country of birth and length of residency.

Objectives

- Account for the heterogeneity among immigrants to enhance population projections for Austria.
- Incorporate information on country of birth and length of residence in population projections.

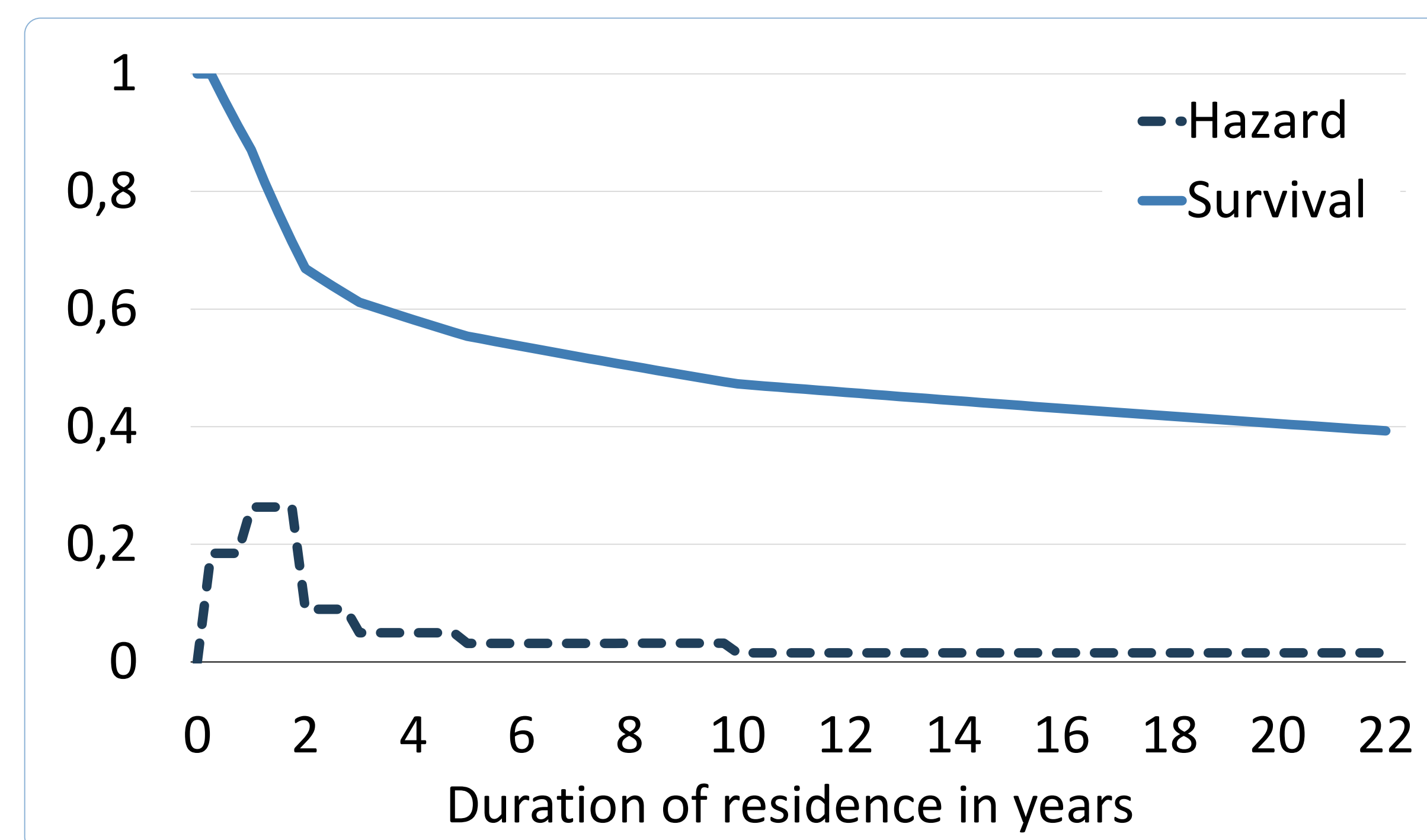
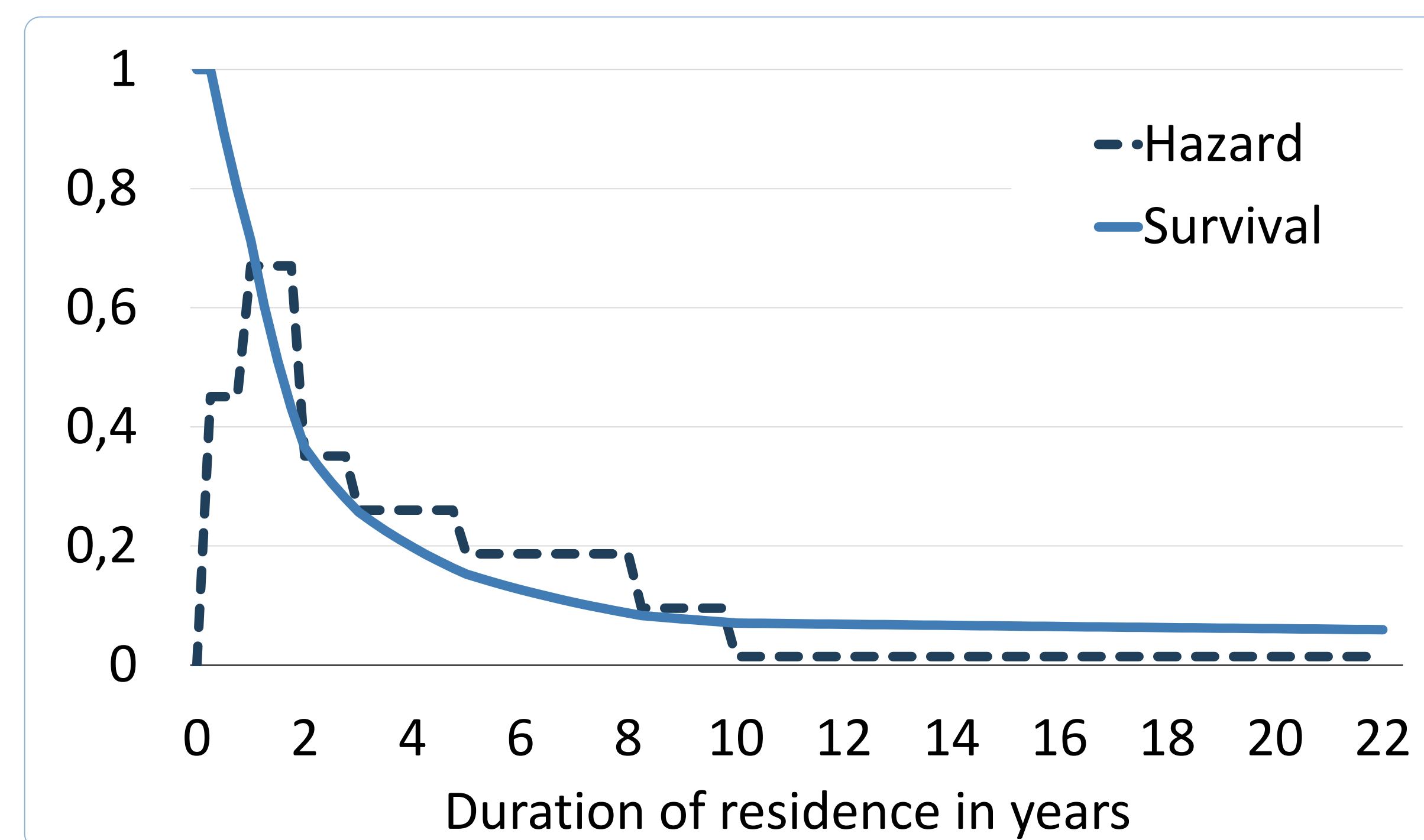
Methods

- Cluster analysis to group countries of origin based on similarities in emigration patterns.
- Hazard regression, capturing differences in emigration risks based on age, sex, province, country of birth and duration of stay.
- Dynamic competing risk microsimulation, incorporating these detailed emigration hazards in the population projection.

Results

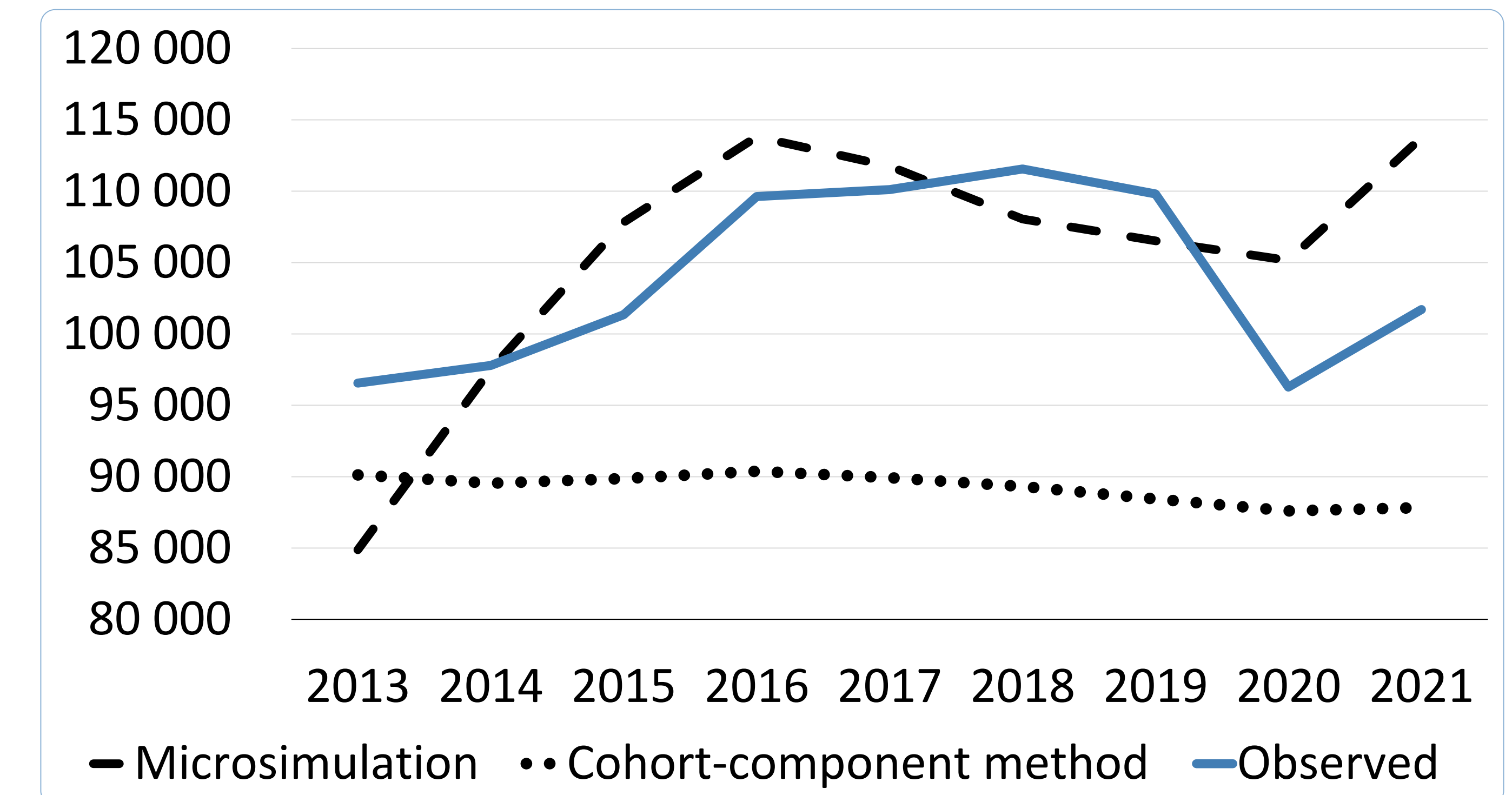
- Emigration risks differ substantially by country of birth and decrease with the duration of residence.
- For instance, immigrants from Northern and Western EU member states face three times higher emigration risks than immigrants from Syria during the first ten years of residency.
- Retrospective projection demonstrates the efficacy of the model in capturing emigration patterns, as evidenced by the close alignment with the observed emigration levels from 2013 to 2021.

Figure 1. Emigration hazard and survival rates for an 18 year old male immigrant who lives in Vienna and was born in an EU member state in Northern/Western Europe (top panel) vs. Syria (bottom panel)



Hazard: Rate at which a person emigrates in a given time interval.
Survival: Proportion of individuals who do not emigrate until a given point in time.

Figure 2. Projected and observed emigration from Austria



Conclusions

- Country of birth and duration of residence are important determinants of emigration.
- Accounting for these differences impacts the projection of emigration numbers as well as the size and composition of the Austrian population.
- Dynamic microsimulation allows to add detail and enhances the accuracy of population projections.

Outlook

- Refine the microsimulation model further by accounting for heterogeneity in fertility and mortality within the migrant population.
- Add further characteristics, such as education.

