

Sociodemographic Patterns in Internal, International, and Onwards Migration in Swedish Municipalities

Introduction

While international migration's contribution to national population growth is well-established, its sub-national impacts and the subsequent internal movements remain underexplored. This gap is particularly significant in the context of European refugee migration, where placement policies can override migrants' autonomous settlement choices. Sweden, having received among the highest per-capita refugee flows in Europe between 2000-2020, provides an ideal case for examining how international migration reshapes sub-national demographic dynamics.

Swedish refugee policy has softly directed asylum seekers to municipalities with available social housing, predominantly rural or post-industrial areas with weak labour markets and limited ethnic community networks. This policy-driven initial placement creates a tension with established migration theories emphasising economic opportunities and social networks as primary settlement determinants. We aim to answer three questions: **1)** How do refugee placement policies shape initial settlement patterns across Swedish municipalities, and how do these patterns vary by migrant origin? **2)** What sociodemographic characteristics of municipalities predict retention versus onwards migration? And **3)** What are the long-term regional and municipal effects of internal migration, particularly in terms of the eventual effect of population retention and redistribution due to international migration?

Data & Methods

To answer these questions, we construct two complementary migration perspectives that together capture the full complexity of migration dynamics. The **Origin Perspective** follows all individuals who migrate internationally into Sweden at time T_0 , noting their initial municipality of placement. We then track these individuals four years later at T_0+4 , classifying them into three categories based on their observed location: "stayers" who remain in their initial municipality, "leavers" who have moved to a different Swedish municipality, and "emigrants" who are no longer registered in Sweden.

To complement this approach and focus on the characteristics of receiving areas, we employ a **Destination Perspective**. For this analysis, we begin with individuals observed in a municipality at T_4 and backtrace four years to T_0 to determine their origin location. This allows us to classify migrants as either "stayers" who were already in the municipality four years earlier, or "arrivers" who came from a different municipality during the observation period. Importantly, this perspective excludes those who emigrated from Sweden, focusing purely on internal redistribution patterns. Together, these dual perspectives reveal whether onwards migration concentrates in specific urban municipalities or disperses across multiple destinations, while simultaneously showing which areas lose and retain their initially placed migrant populations.

Preliminary Findings

The first figure shows us international immigration into Swedish counties for 3 different periods. In the most recent periods, Sweden has experienced a notable increase in the number of international migrants. All counties have seen a positive net migration rate, with this trend accelerating between 2013 and 2018. Between 2003 and 2012, the largest and third-largest counties, Stockholm and Skåne respectively, along with Kronoberg, received a significantly

higher number of migrants, most likely driven by migration to Malmö and Stockholm city. However, from 2013 to 2018, all regions of Sweden experienced an influx of migrants.

Country of birth in-migration rate for swedish counties by periods

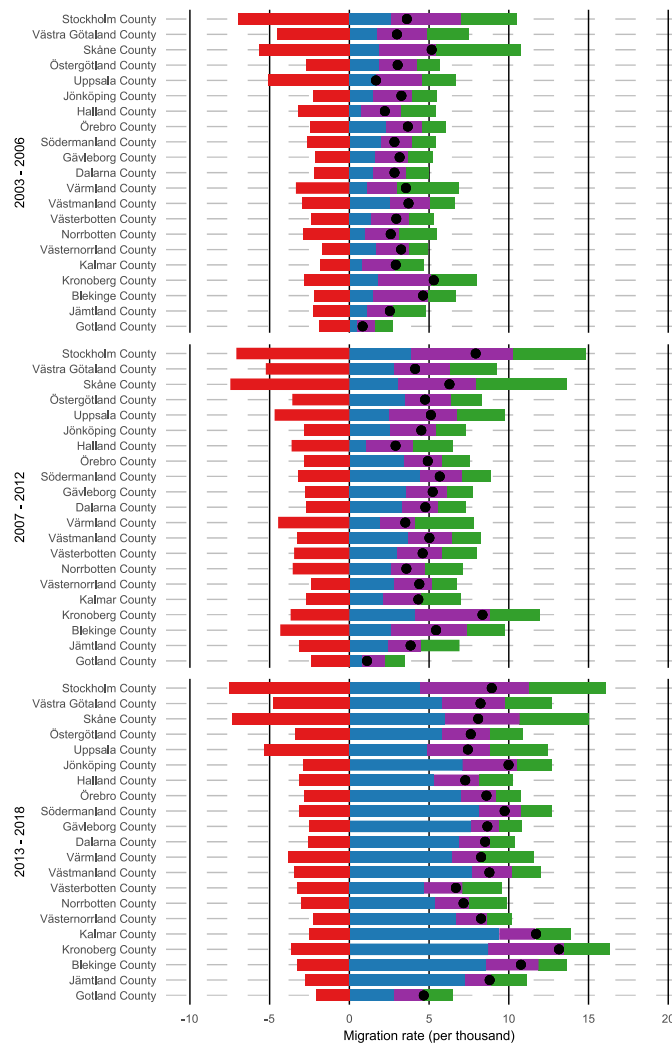
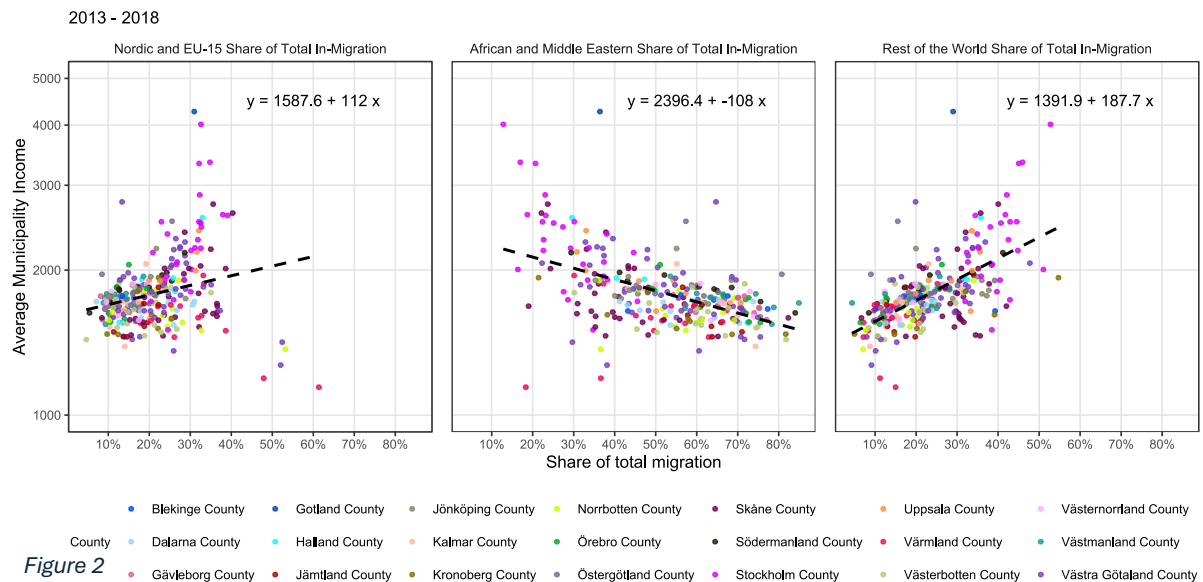


Figure 1



During the period from 2003 to 2012, the share of migrant countries of birth was relatively even across the counties. From 2003 to 2006, migrants from the Middle East and North Africa (MENA) and Sub-Saharan Africa (SSA) primarily settled in larger cities. This pattern began to reverse between 2007 and 2012. The years 2013 to 2018 saw a large increase in migrants from MENA and SSA. Additionally, there was a clear reversal in settlement patterns, with the share of MENA and SSA migrants being much higher in more peripheral areas of Sweden, far from the largest population cities. The intensity of migration was before focused to the Stockholm and Skåne regions of Sweden, with high rates of outmigration and in migration across the two previous periods, however in the 2013-2018 period, all regions see a substantial increase in the intensity of in-migration with African and middle eastern migration as the primary driver of this increase.

Figure 2 demonstrates the relationship between municipal socioeconomic characteristics and the share of different origin groups in total in-migration during 2013-2018. For Nordic and EU-15 migrants, there is a positive relationship with average municipality income, wealthier municipalities receive higher shares of these migrants. In stark contrast, African and Middle Eastern migrants show a strong negative relationship with income lower-income municipalities receive disproportionately higher shares of these migrants.



This pattern provides evidence that refugee placement policy overrides market-driven settlement preferences, concentrating MENA and SSA migrants in economically weaker municipalities with available social housing.

Figure 3 shows the distribution of the share of Middle Eastern and North African (MENA) and Sub-Saharan African (SSA) migration mapped to municipalities. The migration flows were large from all regions of the world, but in 2013-2018 there were particularly large inflows of refugee migration from MENA+SSA. The urban areas and university towns had higher shares of both European and rest-of-the-world migration (not shown here), while MENA-SSA was largely concentrated in rural and post-industrial parts of Sweden. The difference is very large, with around 10-20% of migrants in Greater Stockholm being MENA+SSA, while rising to over 60% and sometimes over 80% in many rural parts of Sweden.

MENA + SSA share of total in-migration
 Per thousand, for the period 2013 - 2018

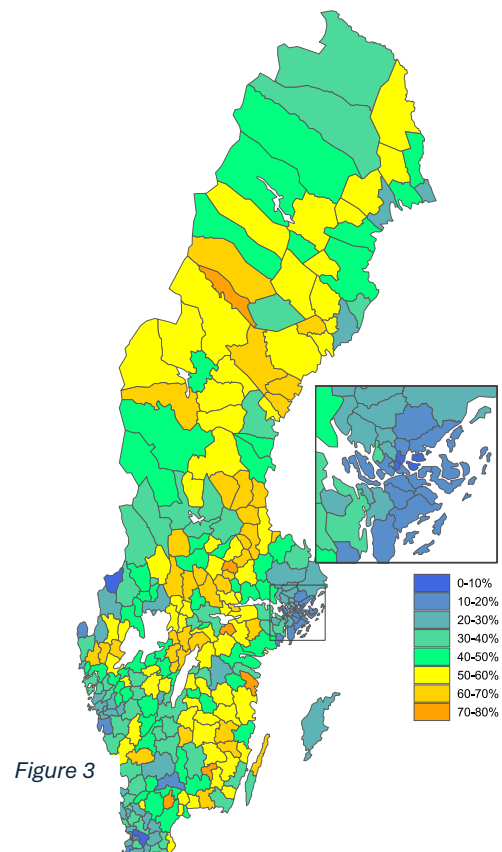


Figure 4 shows the destination net migration rate, which municipalities receive and retain migrants when accounting for both direct international arrivals and internal redistribution. A pattern emerges: semi-rural municipalities, particularly in Småland, benefit greatly from either direct placement or receiving onwards migrants. The largest cities and suburban municipalities receive moderate migration through this measure, but not the highest intensities.

The most remote northern municipalities show low or negative net migration rates despite receiving initial refugee placements, indicating high onwards migration from these areas. Notably, the distribution is relatively uniform across parts of Sweden, suggesting significant internal redistribution of initially placed refugees.

Figure 5 maps the ratio between "leavers" (those

Ratio between leavers (2) and stayers (1)
for the period 2013 - 2018

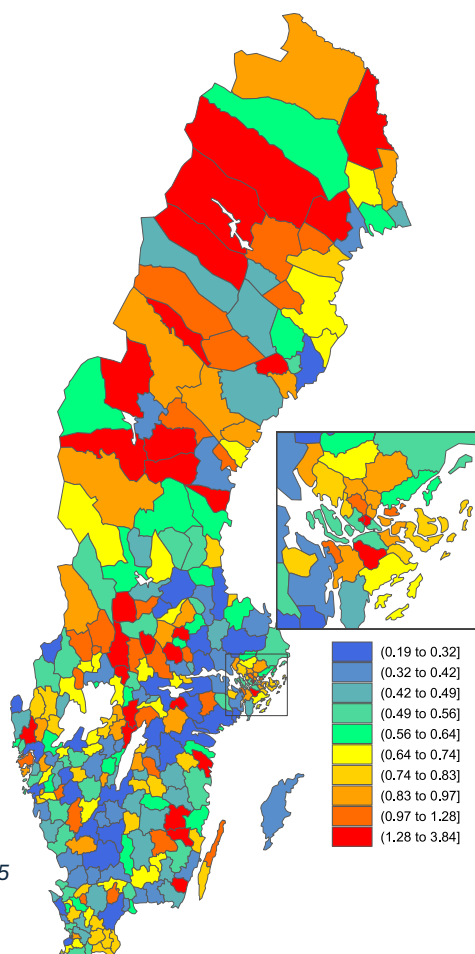


Figure 5

Destination net migration rate
Per thousand, for the period 2013 - 2018

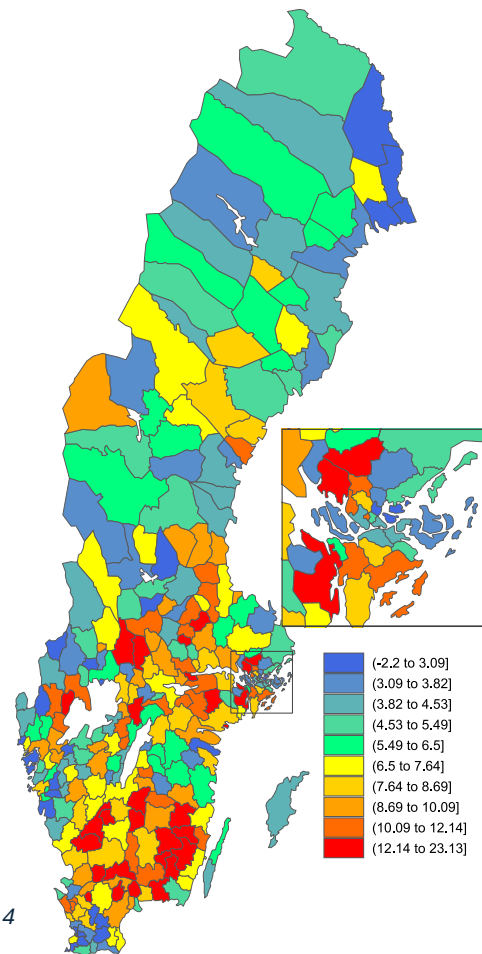


Figure 4

who moved to a different municipality) and "stayers" (those who remained). High ratios (red/orange colours) indicate municipalities where more people left than stayed, these are predominantly found in northern Sweden (Norrbotten) but also sporadically distributed throughout the country.

Importantly, there is not a simple urban-rural divide. Some rural areas, particularly in Småland, show relatively good retention (lower ratios, blue/green colours), while some areas closer to urban centres show poor retention. This heterogeneity suggests that factors beyond pure economic conditions, such as local integration policies, specific labour market characteristics, or community composition, influence retention outcomes.

6. Conclusion

This paper provides the first comprehensive analysis of how refugee placement policies interact with onwards migration to shape municipal-level demographic outcomes in Sweden. By tracking individual migration trajectories using population-level registry data, we demonstrate that international migration creates complex, multi-stage settlement processes that differ fundamentally from classical economic migration patterns.

The substantial heterogeneity in retention rates suggests that local context matters considerably. When accounting for both direct international arrivals and subsequent internal movements, the demographic impacts of refugee migration disperse more widely across the Swedish settlement system than initial placement patterns alone would suggest. The success of some economically disadvantaged municipalities in retaining refugees suggests that policy interventions can make a difference, but the mechanisms remain to be fully understood.

Future research should examine the causal mechanisms underlying differential retention rates and explore whether the patterns we identify in Sweden generalise to other Nordic or European countries with dispersed refugee placement systems. As European countries continue to grapple with both refugee migration and regional depopulation, understanding these complex migration dynamics becomes increasingly critical for effective policymaking and demographic resilience.