

Towards Spatial Assimilation? Intergenerational Residential Mobility among Children of Immigrants in Norway

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ABSTRACT

This study addresses intergenerational residential mobility among children of immigrants in Norway.

While the spatial assimilation model predicts children of immigrants' upward social mobility to be mirrored by improved residential contexts, the place stratification model predicts this not to be the case due to external barriers (e.g., discrimination) and the ethnic enclave model yields similar predictions based on in-group preferences (e.g., migrants wishing to live alongside co-ethnics). Using Norwegian administrative data, we compare the neighborhood attainment of children of immigrants to peers in the native majority and to their immigrant parents. Despite individual-level upward socio-economic mobility, our preliminary results show that adult second-generation immigrants tend to live in neighborhoods with lower average income and higher shares of immigrant population relative to natives of similar socioeconomic origin and achieved statuses. While this does not support a spatial assimilation pattern, we are currently not able to adjudicate between barrier-based vs. preference-based explanations.

Key words:

Intergenerational mobility; spatial disadvantage; ethnic segregation; immigrant assimilation

INTRODUCTION

The legacy of large-scale immigration over the past few decades is of growing public interest in rich host societies in Europe and North America (Coleman, 2006; Alba and Foner, 2015; Waters and Pineau, 2015). Low income and high unemployment rates especially among immigrants from developing origin countries have undoubtedly contributed to ethnic residential segregation and high concentrations of immigrant populations in less socioeconomic advantaged neighborhoods in European cities. Immigrants often settle in rather deprived neighborhoods with many co-ethnics upon arrival in their receiving countries, in such ‘ethnic enclaves’ immigrants can preserve cultural traits and local ethnic networks may be beneficial for finding work and affordable accommodation (Bolt and Van Kempen, 2010). Previous research indicates that immigrants to some extent relocate to neighborhoods characterized by better socioeconomic amenities and lower shares of immigrant population as they gain socioeconomic resources and become more acculturated to the host country’s culture. In general, lack of such relocation patterns among immigrants and the persistence of ethnic residential segregation is usually explained either by preferences for so-called immigrant neighborhoods or by discrimination and other obstacles contribute to containing ethnic minorities in certain neighborhoods (e.g. Peach, 2005; Bolt and Van Kempen, 2010; Van Ham et al., 2014; McAvay, 2018). This study addresses intergenerational residential mobility among children of immigrants in Norway.

In the literature on ethnic residential segregation, the spatial assimilation model claims that ethnic minorities will gradually archive ‘spatial assimilation’ with the ethnic majority as a ‘side effect’ of improved socioeconomic status and acculturation (e.g., gain language and cultural skills) as they will attempt to relocate from ethnic enclaves to neighborhoods with better amenities. Being born in the host country, children of immigrants are believed to have better odds at realizing spatial assimilation (Massey, 1985; Alba and Logan, 1991). Second, the place stratification model asserts that immigrant minorities often face obstacles, such as discrimination in the housing market and hostile neighbors, lowers their opportunities for relocation and sorts them into a hierarchy of neighborhoods (places) according to their groups’ relative rank in an ethnic hierarchy (Alba and Logan, 1991; Pais, South et al., 2012). Finally, the ethnic enclave model questions the very notion that ethnic minorities will assimilate into the ethnic mainstream of the host society but instead will tend to preserve cultural characteristics and prefer neighborhoods with many co-ethnics despite gaining socioeconomic resources (Peach, 1997; Peach, 2005; Bolt and Van Kempen, 2010).

While previous research shows that children of immigrants often experience upward social mobility and fare better in European labor markets compared with their foreign-born parents (e.g. Heath et al., 2008; Hermansen, 2016), few studies address whether they achieve residential mobility and settle in more resourceful neighborhoods and achieve higher levels of spatial integration. Building on Sharkey’s (2008) study of intergenerational residential persistence among racial minorities in the United States, Van Ham et al. (2014) documented a pronounced risk of remaining in poor neighborhoods among adult children of immigrants in Sweden. McAvay (2018) found that adult children of immigrants from Africa and Asia tend to relocate to less deprived neighborhoods in France, but that they to a lesser extent relocate to neighborhoods with lower shares of ethnic minorities.

In this paper, we study patterns of intergeneration residential mobility among children of immigrants in Norway. We use administrative data covering all residents in Norway’s largest metropolitan area (i.e., the capital of Oslo and the surrounding municipalities) across a period of more than two decades to explore whether children of immigrants reproduce their immigrant parents’ residential patterns and how they compare to same-age peers in the native Norwegian population. We compare the characteristics in their neighborhoods of residency in adolescence and early 30s. We measure the socioeconomic status of neighborhood by the mean income among their residents of working age while the share of immigrant population indicates the neighborhoods’ ethnic characteristics. Further, we account for different individual characteristics such as their socioeconomic origin and own education and income.

Norway constitutes an interesting case due to the combination of strong welfare institutions and a large and ethnically diverse immigrant-origin population. Norway has experienced large-scale immigration

over several decades, comparable to many other European immigrant-receiving countries (Brochmann and Kjeldstadli, 2008; Dustmann and Frattini, 2013). By early 2018, immigrants and their local-born children made up 17.3% of the total population in Norway (Statistics Norway, 2018). While adult migrants often experience considerable earnings disadvantages and declining employment rates over the life course, children of immigrants often experience considerable upward socioeconomic mobility in Norway (Bratsberg, et. al., 2014; Hermansen, 2016). Currently, levels of ethnic residential segregation are moderate and comparable to or slightly lower than levels found in other countries in Western Europe (Musterd, 2005; Rogne *et al.*, 2018). In 2018, the immigrant population in the capital of Oslo constitute about one-third of the total population. Moreover, individuals born in Norway by two immigrants increasingly represent a rapidly growing proportion of this immigrant population (Statistics Norway, 2018). Further, non-European immigrants have largely settled down in traditional working-class neighborhoods in the eastern parts of Oslo (Wiggen et al., 2015; Kornstad et al., 2018) and now constitute the majority in numerous neighborhoods (Høydahl, 2014; Hundebo, 2016). Population projections show that by 2040 every second citizen in Oslo, and every third citizen in the neighboring county of Akershus, will have immigrant background (Texmon, 2012).

DATA AND METHODS

We use population-wide administrative data with annually updated and well-measured information on the individuals' socioeconomic and demographic characteristics, as well as characteristics of the neighborhoods in which they reside. We restrict our sample (N=62,020) to all Norwegian-born children of two native-born parents and all children of two foreign-born parents, who themselves were either born in Norway or immigrated before school-starting age at 7, in birth cohorts 1974-1982. Thus, the sample of children of two immigrant parents includes both 'true' second-generation immigrants and the so-called '1.5 generation' immigrants who arrive before the school-starting age. We exclude individuals of 'mixed origins' in order to avoid heterogeneity bias among those who have one foreign-born and one native-born parent. Finally, a small number of individuals had to be excluded due to missing information on educational attainment and residential location in adolescence (age 16). All sample individuals were residing in the Oslo region define here as 17 municipalities including Oslo at age 16 and were current Norwegian residents in 2014. Table 1 presents summary statistics on variables employed in the empirical analysis separately for the adult children of immigrants (n = 5,254) and native peers (n = 56,766).

Variable Definitions

The key independent variable in the analyses is the ethnic origin of the individuals, defined by their parents' country of birth. Individuals with two Norwegian-born parents are assigned to the majority groups and will henceforth be referred to as 'native Norwegians', while individuals with two foreign-born parents are referred to as 'children of immigrants'. Within the latter group, we distinguish between nine ethnic minority origin groups: Nordic; West; Eastern Europe (outside the EU); Pakistan; Vietnam; Asia; Middle East; Africa; and South America.

The mean income among residents of working age (ages 18–67) and shares of immigrant population in the individuals' destination neighborhoods are, respectfully, employed as dependent variables in the analyses. The corresponding measures of neighborhood characteristics in the origin neighborhoods are employed as independent variables in some of the analyses. We rank the mean income in a neighborhood per year in percentiles to avoid bias related to general annual income growth and economic conjunctures. Although the overall share of immigrant population gradually has increased in the Oslo region during the periods of measurement (1990-1998 and 2006-2014) we operate with the actual share of immigrant population in a neighborhood per year. We do this to present an intuitive measure of the immigrant population shares. In future analyses we will use rank-adjusted relative measures of immigrant population shares.

Empirical Analysis

The first part of the analysis documents the intergenerational change in neighborhood attainment among adult children of immigrants. We do this by comparing distribution of both socioeconomic and ethnic characteristics, respectively, in the immigrant children's origin neighborhoods (i.e. in which they resided at age 16) and their destination neighborhoods (i.e. in which they resided at age 32). We also estimate the degree of intergenerational persistence of these neighborhood characteristics within the immigrant population by using a standard regression to the mean model (OLS model) of generational neighborhood mobility.

In the second part of the analysis, we evaluate how adult children of immigrants fare in terms of neighborhood attainment relative to native peers. We start by comparing the socioeconomic and ethnic neighborhood characteristics among immigrant children and native peers who have achieved similar education and income levels, respectively. Next, we assess the contribution of observed differences in parental resources in the sample individuals' adolescence and their origin neighborhood characteristics in addition to their achieved socioeconomic status to the native-immigrant gaps in destination neighborhood attainment within each separate ethnic origin group.

PRELIMINARY RESULTS AND SUMMARY

In Figures 1 and 2, we present the distribution of ethnic and socioeconomic characteristics in origin and destination neighborhoods among adult children of immigrants and native peers, respectively. The figures reveal two striking results. First, there is high over-representation of immigrant children who grew up in neighborhoods with low mean incomes among residents and/or fairly high shares of immigrant population. Nearly half the immigrant children were raised in neighborhoods with mean incomes in the two lowest income deciles and nearly one-fourth grew up were in neighborhoods with 30 percent or higher shares of immigrant population. Respectively, only 15 percent and 2 percent of their native peers were, respectively, raised in similar neighborhoods. Secondly, the native-immigrant differentials in neighborhood characteristics are only somewhat reduced in the individuals' adulthood, especially when we consider the neighborhoods' socioeconomic status. This raises the question whether these overall trends apply to children of immigrants of all ethnic origins.

In Figure 3, we scrutinize ethnic variation in the degree of intergenerational gains in neighborhood attainment among children of immigrants by geographic origin region. We report the parent-child relationship in mean earning rank (panel A) and share of immigrant population (panel B) in the origin and destination neighborhoods. The solid lines present the bivariate origin-destination slope in socioeconomic and ethnic neighborhood characteristics, respectively, estimated with OLS regressions. These origin-destination slopes highlight the central tendencies in the degree of intergenerational persistence in neighborhood attainment among the immigrant children. To provide a bench-mark of the level of intergenerational regression to the mean, the dashed grey line along the diagonal refers to the hypothetical origin-destination slope in a situation where adult children of immigrants completely reproduce the neighborhood context in which they grew up. (i.e. where the origin-destination slope equals 1). Further, the overlaid scatter point circle in each panel, which represents the various ethnic origin groups, provide a description of how children of immigrants' neighborhood attainment is related to group-level variation in ethnic origins. The center of each circle refers to the conditional income level or shares of immigrant population in the origin neighborhoods plotted against the average income levels or shares of immigrant population in the destination neighborhoods. For further reference purposes, the black cross represents the conditional origin-destination average for each neighborhood outcome among native peers.

Overall, both panels document that children of non-European immigrants to varying degrees settle in neighborhoods with higher earnings rank compared to the neighborhoods they grew up in. However, all second-generation origin groups have settled in neighborhoods with higher shares of immigrant population compared to their origin neighborhoods. It should, however, be noted that some of this trend is likely do to the fact that the overall share of immigrant population in the Oslo region has increased

during the years of measurement. Nonetheless, it is rather striking that individuals with Pakistani and other Asian origins (except Vietnamese) have settled in neighborhoods with almost twice as high shares of immigrant population compared to their origin neighborhoods.

In Figures 4 and 5, we compare socioeconomic and ethnic characteristics, respectively, in destination neighborhoods among children of immigrants and native peers who have achieved similar levels of education (panels A) or levels of income (panels B). The plotted gradients are based on OLS models where the mean income among residents in each sample individuals' destination neighborhood is regressed on their socioeconomic achievements separately by immigrant background. Thus, each panel reports the fitted gradient between individual socioeconomic status and socioeconomic status or ethnic characteristics of neighborhoods separately for adult children of immigrants and native peers by allowing both the level of outcome variable and the slope, that is, the neighborhoods attainment gradient to vary by immigrant background. Our key interest is whether the gradient differ between children of immigrants and native peers.

In Figure 4, both panels reveal some noteworthy results. Although we find that children of immigrants like their native peers on average settle in neighborhoods with higher socioeconomic status the higher their education and income, they still settle in neighborhoods with lower socioeconomic status compared to native peers with similar education and income levers. Moreover, the difference between children of immigrants and native peers is as evident when we compare individuals with, respectively, low or high education and income, respectively.

In Figure 5, both panes reveal that adult children of immigrants tend to settle in neighborhoods with higher shares of immigrant population compared to native peers with similar education and income levels. However, the differences are more pronounced among immigrant children with low education and income, respectively, which indicate that they are somehow more bound to neighborhoods with higher shares of immigrant population.

Finally, we examine how children of immigrants in each of the separate ethnic origin groups fare in terms of neighborhood attainment compared to native peers with similar socioeconomic family backgrounds, neighborhood environment in adolescence, as well as individual education and income levels as adults. In Figure 6, we summarize the estimated native-immigrant gaps in the destination neighborhoods' socioeconomic characteristics (panel A) and ethnic characteristics (penal B) from a series of OLS regressions. To assess whether there is any gender variation across the different ethnic origin groups the results are presented separately for men and women.

The baseline estimates (models 1) which only control for birth cohort indicate that children of Pakistani, Vietnamese, other Asian, Middle Eastern, African and Eastern European immigrants settle in neighborhoods with lower socioeconomic status or higher shares of immigrant population compared to native peers and children of Nordic and other Western immigrants. The same applies for individuals with South American origins, except men who tend to settle in neighborhoods with similar socioeconomic status as their male majority peers. Comparing individuals with similar socioeconomic origins (models 2), it is striking that the native-immigrant gaps are substantially reduced only in panel A. The reduction in the native-immigrant gap concerning the neighborhoods' socioeconomic status is especially pronounced among individuals with Pakistani and Asian origins (except Vietnamese), while the gap is fully closed among men with Eastern European and Middle Eastern origins and women with Vietnamese origin.

In models 3, we narrow the comparison to individuals who were raised in the same neighborhood by employing fixed effects to eliminate ethnic disadvantages related to neighborhood segregation. The native-immigrant gaps are notably reduced among individuals in all non-Western ethnic origin groups, especially when we consider the gap related to their destination neighborhoods' immigrant population shares. The latter gap has been fully closed among men with Middle Easter and South American origins. The gap related to mean income in the destination neighborhoods, on the other hand, has fully vanished among men and women with African origins and men with Vietnamese origins.

Surprisingly, we find that comparing individuals with similar education level (models 4) as well as income levels (models 5) does not alter the native-immigrant gaps much, except for women with Middle Eastern and African origins when their income and their destination neighborhoods' immigrant population shares are concerned. These women have settled in neighborhoods with similar shares of immigrant population as their native female peers with comparable incomes.

In summary, our findings suggest that children of immigrants from non-Western countries who belong to the birth cohorts 1974-1982 and grew up in the Oslo region in general were raised in neighborhoods with lower socioeconomic status or higher shares of immigrant population compared with same-aged native Norwegians and children of immigrants from Nordic and other Western countries. Furthermore, they have largely reproduced these native-immigrant neighborhood gaps by their early 30s, although they have settled in neighborhoods with slightly higher socioeconomic status than in their origin neighborhoods. These trends are especially pronounced among individuals with Pakistani and other Asian origins (except Vietnamese). However, the gaps between socioeconomic status and ethnic characteristics in the neighborhoods are less distinct, or in some cases non-existent, when individuals in non-Western ethnic origin groups are compared with native peers of similar socioeconomic backgrounds and who were raised in neighborhoods with similar characteristics as themselves. Variances in education and income levels, on the other hand, apparently only play a minor role for differences in neighborhood characteristics between adult children of non-Western immigrants and native peers. In particular, children of Pakistani and Asian immigrants (except Vietnamese) have settled in neighborhoods with lower socioeconomic status and higher shares of immigrant population even when compared with native peers who resemble themselves on a variety of characteristics.

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Table 1. Descriptive statistics for children of immigrants and ethnic Norwegian peers (N=62,020)

Variable	Range	Children of immigrants		Children of natives	
		Mean	SD	Mean	SD
Origin neighbourhood (age 16)					
Share of immigrant population (%)	0.00-100.00	22.00	13.74	9.06	6.62
Immigrant population rank	0.00-100.00	77.39	22.22	43.83	27.32
Mean income rank	0.00-100.00	28.10	25.27	53.12	27.29
Destination neighbourhood (age 32)					
Share of immigrant population (%)	0.00-100.00	35.82	19.65	19.37	12.02
Immigrant population rank	0.00-100.00	72.89	26.07	48.01	27.85
Mean income rank	0.00-100.00	35.25	27.59	51.25	27.61
Highest education (age 30)					
Compulsory education	0-1	0.311		0.167	
Some upper secondary	0-1	0.021		0.024	
Full upper secondary	0-1	0.326		0.326	
Lower tertiary	0-1	0.220		0.323	
Higher tertiary	0-1	0.122		0.160	
Earning rank (age 30-34)	0.00-100.00	53.22	29.55	59.00	26.87
Parents' highest education (age 16)					
Compulsory education	0-1	0.445		0.085	
Some upper secondary	0-1	0.077		0.236	
Full upper secondary	0-1	0.160		0.223	
Lower tertiary	0-1	0.193		0.281	
Higher tertiary	0-1	0.063		0.174	
No education registered	0-1	0.062		0.001	
Parents' earning rank (age 13-16)	0.00-100.00	46.63	25.10	76.83	19.15
Female	0-1	0.481		0.491	
Birth cohort	1974-1982	1978.8	2.6	1978.0	2.7
Observations		5,254		56,766	

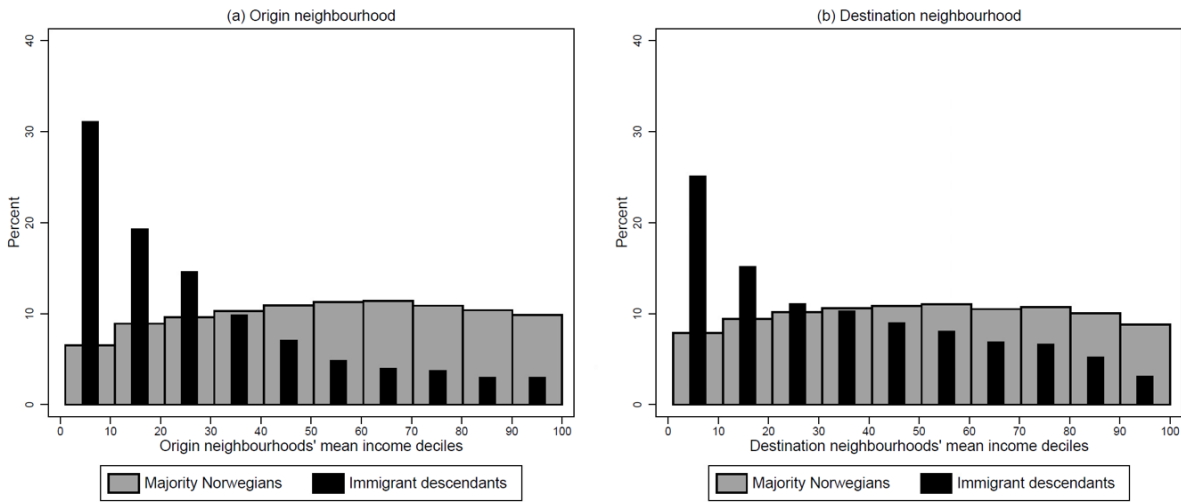


Figure 1. Distribution of mean income in the origin and destination neighborhoods among children of immigrants and native peers

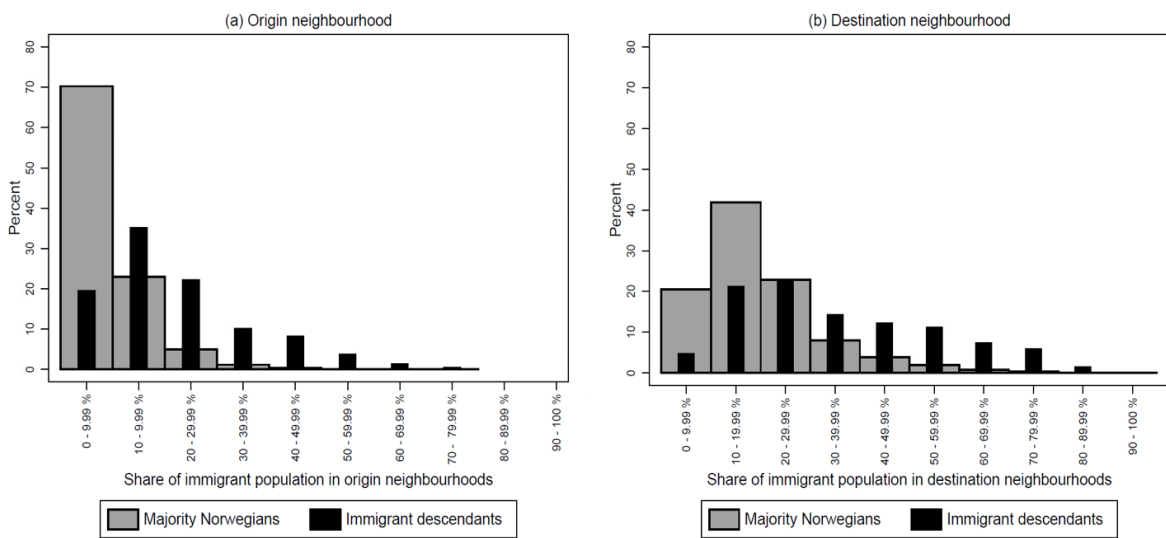


Figure 2. Distribution of immigrant population shares in the origin and destination neighborhoods among children of immigrants and native peers

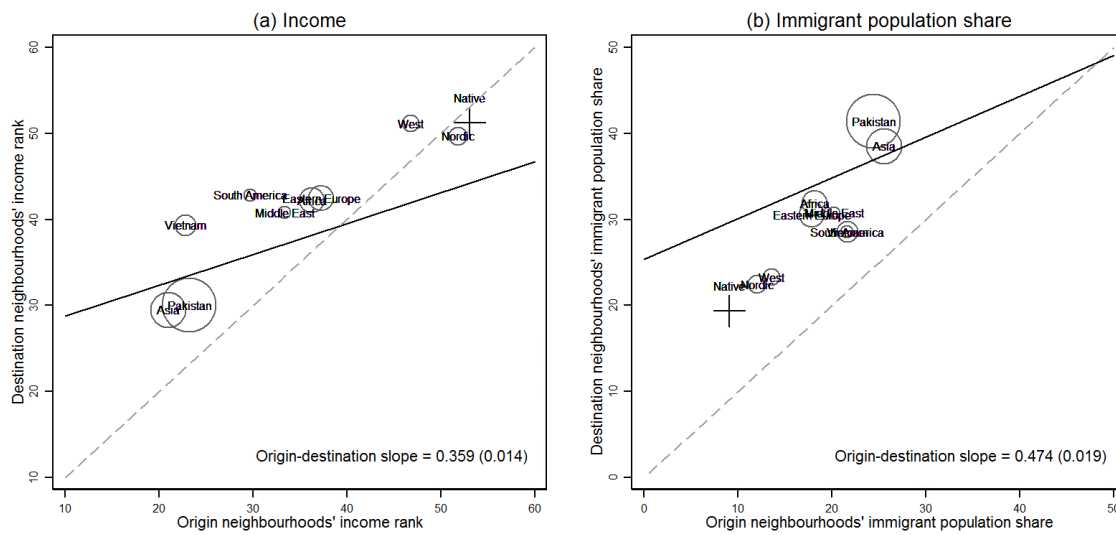


Figure 3. Neighborhood attainment among children of immigrants by ethnic origin

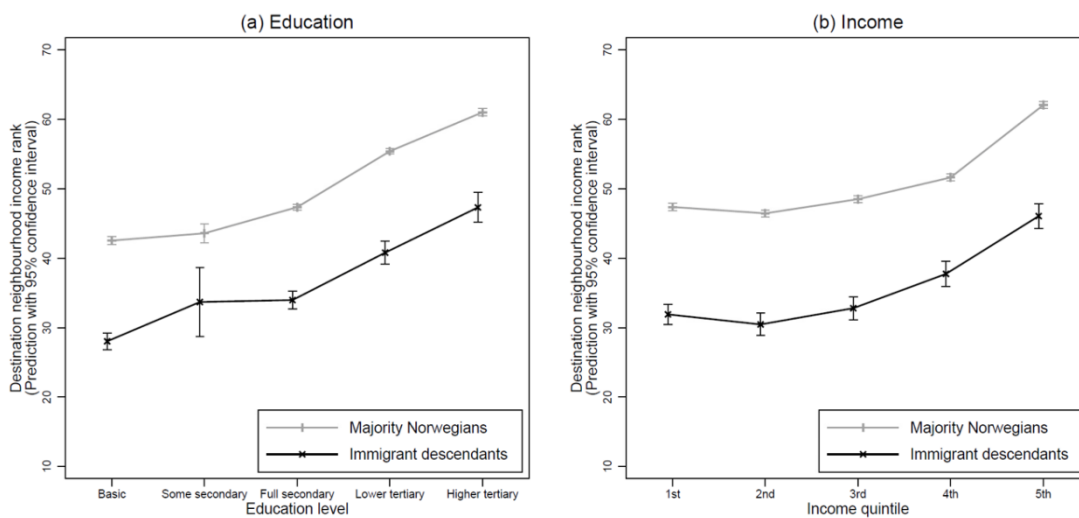


Figure 4. Intergenerational gradient in socioeconomic status of neighborhoods (mean income rank) for children of immigrants and natives according to their level of education and income

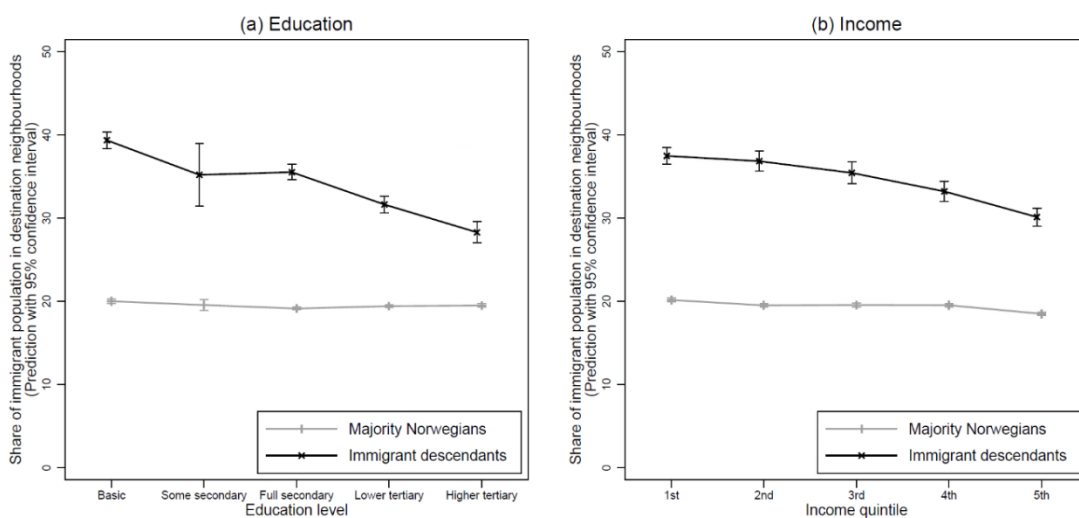
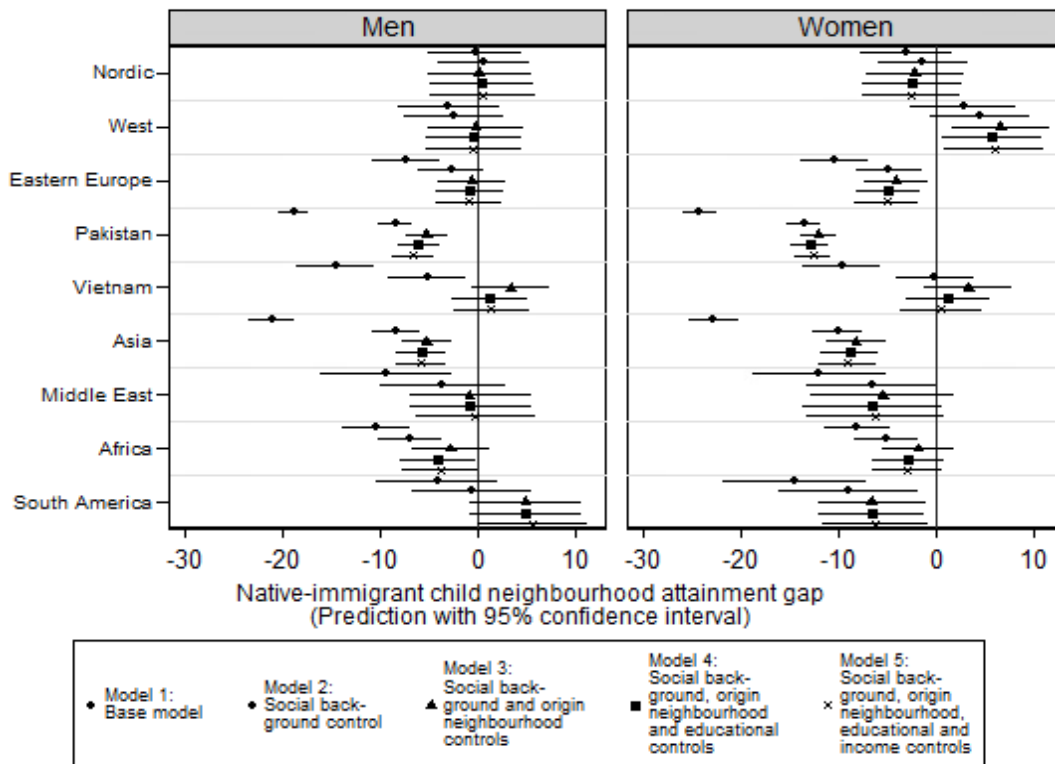


Figure 5. Intergenerational gradient in shares of immigrant population in neighborhoods for children of immigrants and natives according to their level of education and income

(a) Neighbourhood mean income



(b) Neighbourhood immigrant population (share)

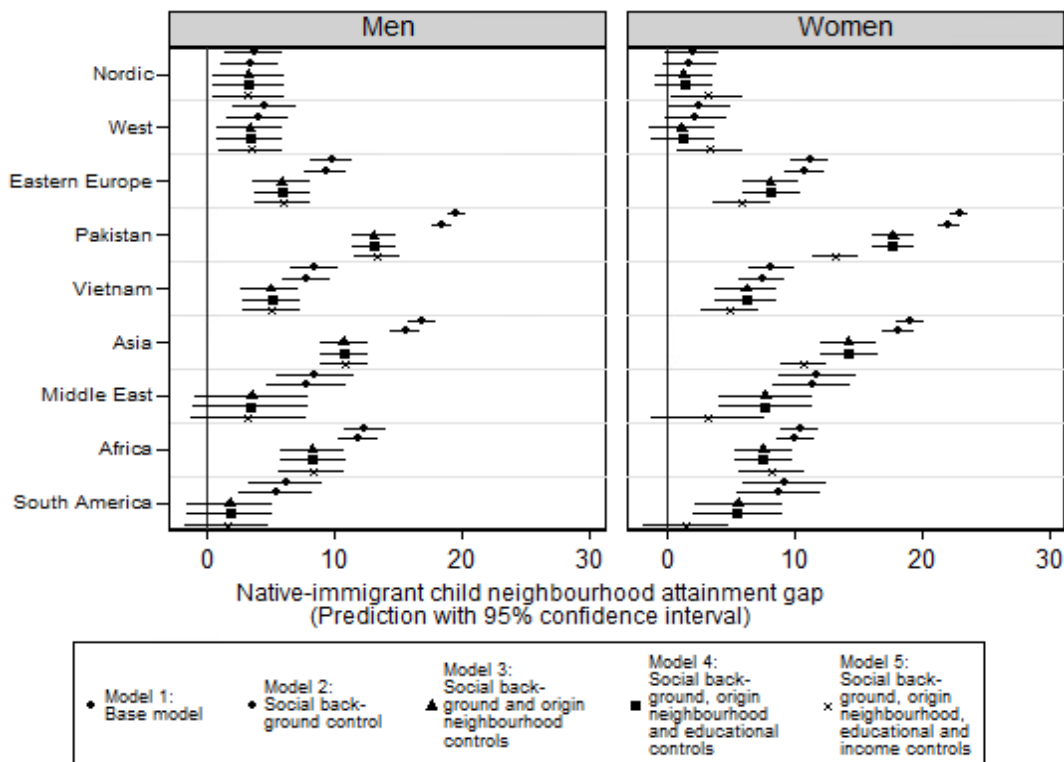


Figure 6. Estimated gaps in neighborhood attainment between adult children of immigrants and native peers