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Abstract

Although there is a considerable body of research on immigrant spatial assimilation, there is a lack of comparative studies that evaluate whether differences across contexts and outcomes are genuine, or merely a product of different research designs. In response, we carry out a comprehensive analysis of childhood neighborhood contexts across multiple generations, comparing four spatial outcomes across two national contexts: France and Sweden. Our approach not only generates new evidence for both settings but also assesses the intergenerational development, multidimensionality, and generalizability of spatial assimilation. Our results provide clear evidence that spatial assimilation is occurring simultaneously across multiple domains in both France and Sweden. However, key differences emerge: in Sweden, neighborhood disadvantage for non-European immigrants and their children is initially pronounced but diminishes significantly in later generations, while in France, these disadvantages, although initially smaller, persist among the grandchildren of non-European immigrants.

Keywords: spatial assimilation; neighborhood; immigrant generation; international comparison

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Introduction

Since the Chicago School in the 1920s (Park and Burgess 1925), neighborhood characteristics have long been considered both a key dimension for the assimilation of immigrants and their descendants, and a factor conditioning their further socioeconomic attainment (Alba et al. 1999; Massey and Denton 1985; McAvay and Safi 2018). Growing evidence suggests that neighborhoods not only play an important role during adulthood, but also during childhood and adolescence (Sharkey and Faber 2014). Childhood neighborhood context has been shown to have a lasting influence on access to high-quality education, employment opportunities, and overall well-being (Chetty et al. 2016; Chetty and Hendren 2018; Hedman et al. 2015; Jivraj et al. 2020; Zuccotti and Platt 2017).

Yet, unlike the intergenerational transmission of socioeconomic status (Breen and Müller 2020), or the stability of residential context from childhood to adulthood (Tran 2020), we know relatively little about the persistence of childhood neighborhood characteristics across generations (Alvarado and Cooperstock 2021; Hedman et al. 2017; Sharkey 2008), particularly for different generations of immigrants, their children and their grandchildren. Understanding how immigrants and their descendants experience different levels of neighborhood deprivation or affluence compared to the majority population is essential for promoting equitable development and social cohesion in contexts, like Europe and North America, where immigrant populations are substantial and growing (Bucca and Drouhot 2024; Eurostat 2020; Natarajan et al. 2022; Van Mol and De Valk 2016).

Prior studies of neighborhood context during adulthood have found some evidence of spatial assimilation across generations, where the residential characteristics of immigrants and their children tend to converge gradually with those of the majority population (Iceland and Scopilliti 2008). However, there appears to be considerable heterogeneity in this spatial

assimilation trend, with slower assimilation, and a stronger persistence of neighborhood deprivation, among certain racialized minority groups (Hermansen et al. 2022; McAvay 2018; McAvay and Safi 2018). Heterogeneity is found between national contexts (Crul and Schneider 2010), and the spatial measure of neighborhood context that is studied (Andersson et al. 2014). Yet, there is limited comparative research that investigates the extent to which these differences are a result of differences in research designs between studies. There is also limited research that examines whether spatial assimilation occurs with respect to childhood neighborhoods,[1] and if so, then for which groups, and for which neighborhood characteristics.

Here, we contribute new knowledge by assessing the intergenerational development, multidimensionality, and generalizability of spatial assimilation in childhood neighborhoods. We do so by systematically assessing spatial assimilation across multiple generations and four neighborhood outcomes in two different national contexts (France and Sweden) using a fully harmonized research design. While both countries are welfare states and adhere to the EU framework for managing immigration and integration, France and Sweden have distinct histories and policies related to these issues. France's colonial history and ethnic discrimination have been underscored as sources of segregating dynamics (Drouhot and Nee 2019; Silberman et al. 2007; Silberman and Fournier 2006) reflected in residential patterns (McAvay 2018; McAvay and Safi 2018) and the perpetuation of *banlieues*, or disadvantaged suburbs (Préteceille 2011). In Sweden, governmental provisions actively strive to promote the settlement of immigrants (Bengtsson et al. 2005; Kennerberg and Åslund 2010), which may determine faster spatial convergence with the majority population. However, spatial assimilation theories make ubiquitous predictions positing that differences diminish across

[1] We are aware of the fact that individuals' childhood neighborhoods are their parents' adult neighborhood. This implies that intergenerational differences in the characteristics of the adulthood neighborhood between G1 and G2 resemble differences in the childhood neighborhood between G2 and G3. Still, they are not equivalent, as some adults do not have children, and, among those who do, some have many and others few children.

generations irrespective of national context (Massey 1985). Comparing two distinct national European contexts–while acknowledging their similarities–thus enables us to examine the generalizability of our conclusions with respect to theories of spatial assimilation.

In choosing these countries, we also make use of rarely available comparable information on four distinct generations, including both the children and grandchildren of immigrants. The four generations assessed (G1.5, G2, G2.5, G3) refer specifically to different degrees of immigrant ancestry. We make use of recently obtained nationally representative data for both countries—French survey data (*Trajectories and Origins 2*) and Swedish register data (*REFU-GEN*), which allows us to assess whether we observe patterns of spatial assimilation across multiple generations. For both countries we have detailed information on the neighborhood context in childhood, which we conceive as multidimensional, assessing spatial outcomes related to both social exclusion and social resources. Assessing spatial outcomes during childhood is important not only because they are less often studied compared to spatial outcomes in adulthood, but also because they are consequential in determining inequalities later in life (Chetty and Hendren 2018).

Our results provide clear evidence that spatial assimilation is occurring simultaneously in both France and Sweden. This is not only true for one specific aspect of childhood neighborhood context, but for all four of the spatial measures that we analyze. Our findings underline the generalizability of theories of spatial assimilation across national contexts and generations. At the same time, we also reveal important distinctions in spatial assimilation that are illuminated by a comparative approach.

Theory and previous research

The importance of childhood residential environment

Questions about the role of the neighborhood context have been a central concern across the social sciences, particularly in urban sociology (McAvay and Safi 2018; Sharkey and Faber 2014; Wilson 1987), urban economics (Diamond and Gaubert 2022), human geography (Van Kempen and Wissink 2014), public health (Kondo et al. 2018), and social psychology (Leventhal and Dupéré 2019). Although not the focus of this study, much research has studied neighborhood *effects* (Sampson et al. 2002; Sharkey and Faber 2014). The consensus, especially in the North American literature, is that neighborhood deprivation often reflects and perpetuates inequalities. For example, Wilson's (1987) seminal work on "The Truly Disadvantaged" highlights the role of neighborhoods in driving poverty and limiting opportunities for their residents. High-poverty neighborhoods often lack access to quality education, healthcare, and job opportunities, thereby constraining residents' socioeconomic mobility. At the same time, neighborhoods can have a positive impact on their residents, for example as sources of community engagement and support (Aldrich and Meyer 2015; Cramm et al. 2013; Howley et al. 2015). This may be particularly true for children and adolescents, as neighborhoods provide children with emotional support, positive role models, and a wealth of resources beyond the support provided at home and in (pre-)school (Ainsworth 2002; Minh et al. 2017; Vyncke et al. 2013).

Yet spatial studies have often paid less attention to childhood neighborhoods. As such, judgements about the importance of neighborhoods have often been based on evidence for adults alone. Perhaps one of the most famous examples is the evaluation of the *Moving to Opportunity experiment* in the United States, a program that randomized access to housing vouchers for around 4,600 families living in public housing projects in Baltimore, Boston,

Chicago, Los Angeles, and New York (Sanbonmatsu et al. 2011). In general, upward spatial mobility was found to have no material impact on the earnings or employment of adults, both in the short-run (Kling et al. 2007) and long-run (Chetty et al. 2016; Ludwig et al. 2013). There were some minor benefits for physical (Ludwig et al. 2011) and mental health (Kling et al. 2007), but it was not until researchers focused on children that the experiment was judged to have a material benefit. Longer exposure to a better neighborhood during childhood was found to increase the likelihood of attending college and having higher earnings in adulthood (Chetty et al. 2016).

In the last decade, discrepancies between the role of neighborhoods during childhood, and their role during adulthood, have also been found in Europe. Forced mobility in Iceland after a volcanic eruption had a small and negative impact on parents, whereas children had higher lifetime earnings and education as a consequence of the same mobility (Nakamura et al. 2022). Evidence for Sweden also suggests that growing up in an advantaged neighborhood is associated with better socioeconomic outcomes later in life (Brandén et al. 2023). However, there is also evidence to suggest that differences between national contexts determine this association, even when comparing countries with similar welfare states. For example, in contrast to the evidence for Sweden, Hermansen, Borgen, and Mastekaasa (2020) find that neither school nor neighborhood context plays a major role in predicting children's later-life socioeconomic outcomes in Norway.

Spatial assimilation or durable disadvantage among immigrants?

When arriving in the destination country, immigrants tend to move to neighborhoods with high concentrations of immigrants of the same origin. This is due to the fact that migration decisions are often informed by social contacts who have previously migrated (Liebig and Spielvogel 2021). Indeed, earlier cohorts of immigrants often assist later cohorts of co-ethnics in finding

housing and work upon arrival (Garip and Asad 2016; Lancee 2010). However, over time and across generations, immigrants and their descendants are predicted to move to neighborhoods that are more similar to those typically inhabited by the majority population (Massey 1985). This is the most common prediction derived from *spatial assimilation theory*, which argues that immigrants change neighborhoods as they integrate economically and culturally.

Spatial assimilation theory also discusses the mechanisms that determine this upward spatial mobility (Alba et al. 1999). Massey (1985) highlights two driving forces of spatial assimilation: acculturation and socioeconomic mobility. Acculturation, sometimes referred to as cultural assimilation, is a process that encompasses a range of social and psychological dimensions, resulting in increased cultural similarity between immigrants, their descendants, and the majority population (Berry 1997; Gans 2007). By contrast, the underlying idea behind socioeconomic mobility is that individuals can only relocate to a more advantaged neighborhood when they have enough economic resources to do so (Alba and Logan 1993; Iceland and Wilkes 2006).

Spatial assimilation theory has, however, been challenged by a range of empirical evidence. Indeed, various studies show that there has been limited spatial mobility across generations for the descendants of immigrants in Europe (Hermansen et al. 2022; McAvay 2018; Zuccotti 2019; Zuccotti and Platt 2017) and the US (Sharkey 2008). In addition, there is evidence of differences between population subgroups (Crul and Schneider 2010). For example, Swedish research indicates that the children of immigrants are much more likely to live in vulnerable neighborhoods in Sweden if their parents are non-European (Weber and Vogiazides 2023). Evidence for France similarly reveals strong stability in neighborhood environments from childhood to adulthood, especially for non-European immigrants and their descendants (McAvay 2018). McAvay and Safi (2018) further document a pattern of durable spatial disadvantage across generations for descendants of immigrants from North and Sub-

Saharan Africa. In other words, both in Sweden and France, evidence suggests that (parental) country of origin is an important predictor of neighborhood characteristics.

Place stratification theory was formulated in light of growing evidence about the persistence of neighborhood deprivation among certain racialized minority groups (Alba and Logan 1991, 1993). This theory posits that discrimination is an important mechanism contributing to the intergenerational cycle of spatial disadvantage by impeding the mobility (preferences) of immigrants and their descendants from disadvantaged backgrounds (Alba and Logan 1991, 1993). Discrimination in different domains of life applies to both immigrants and their descendants, especially visible minorities of non-European descent (Klink and Wagner 1999; Riach and Rich 2002; Roscigno et al. 2009). Although we are not able to examine discrimination directly in this study, we are able to study the extent to which intergenerational comparisons in neighborhood characteristics are stratified by country of origin, which is an approach that has frequently been used in other studies (McAvay 2018; Zuccotti 2019).

The multidimensionality of neighborhoods

As already noted, a further source of heterogeneity that is rarely appraised relates to different measures of neighborhood context. Many studies of assimilation focus on the share of immigrants (Zuccotti 2019), the share of co-ethnics (Andersson et al. 2014), or the share of co-ethnics with tertiary education (Hermansen 2023). These indicators capture both individual preferences and constraints (Schelling 1978), which impact differential mobility patterns into and out of neighborhoods. The share of immigrants can be linked to discriminatory or exclusionary practices that impede immigrants from entering majority-dominated neighborhoods (Åslund and Nordström Skans 2010), while the share of co-ethics is associated with certain advantages, such as employment opportunities or mutual support, not only for adults (Bolt et al. 2010; Damm 2009; Edin et al. 2003; Portes and Jensen 1989) but also for

children (Bygren and Szulkin 2010; Hermansen 2023; Zhou and Kim 2006). In other words, while the share of co-ethnics can be used as an indicator of the resources sometimes referred to as 'ethnic capital' (Borjas 1992; Shah et al. 2010), the share of immigrants more likely indicates a constrained concentration of foreign-born populations resulting from social exclusion. We use the latter indicator in our analysis. The unemployment rate, which we also use, likewise provides insight into the pervasiveness of another facet of exclusion in the neighborhood, i.e., labor market exclusion (Andersson et al. 2014).

With respect to other measures of spatial assimilation, median income in the neighborhood is often used to measure economic segregation (Weber and Vogiazides 2023), with a higher median income being indicative of more advantaged neighborhoods. High-income neighborhoods tend to be safer, provide more opportunities to interact with affluent neighbors, offer better local infrastructures, and all the related opportunities that come with these resources (Massey et al. 2003). The share of individuals with a certain level of education in the local area similarly taps into the resources of the neighborhood context that has been used in the literature to distinguish between 'high-skilled' and 'low-skilled' cities (Choi and Green 2022).

Hypotheses about childhood neighborhoods

Drawing on the literature reviewed above, we derive several hypotheses about the childhood neighborhood contexts that are experienced by subsequent generations of immigrants and their descendants. We compare immigrants, their children, and their grandchildren to the majority population (or G4+), who we define as native-born individuals with parents and grandparents who are also native-born. Classic theories of spatial assimilation have often been interpreted as making ubiquitous predictions that would lead us to expect that gaps—as compared with the majority population—diminish across generations, irrespective of national context or measure

of neighborhood context. Our first hypothesis is therefore: *[H1: Spatial assimilation across generations] We expect that differences in childhood neighborhood context, compared to the majority population, are highest for foreign-born children and then diminish across subsequent generations, gradually converging towards the majority population, in both countries and for all neighborhood characteristics measured.*

In partial contrast to H1, we derive a hypothesis based on place stratification theory, which predicts that the descendants of racialized minority groups are more likely to face durable obstacles to spatial assimilation and to continue to live in disadvantaged neighborhoods across generations. Given the scope of our data, racialized minority groups are best indicated using information on non-European (grand)parental origins. Our second hypothesis is therefore as follows: *[H2: Place stratification hypothesis] We expect that the childhood neighborhood context of the descendants of non-European immigrants remains distinct from that of the majority population in France and Sweden, across all four neighborhood indicators.*

Following Massey's (1985) conceptualization of the driving forces of spatial assimilation, one reason for a lack of assimilation may be a lack of socioeconomic mobility (as opposed to a lack of acculturation). To examine this expectation, we investigate the role of parental socioeconomic status. Specifically, we examine whether differences between the childhood neighborhoods of subsequent generations, as compared with the majority population, are smaller after controlling for parental socioeconomic status. An additional insight from this multivariate analysis is that it examines how conclusions about spatial assimilation depend upon the reference group used in the majority population. In other words, immigrants and their descendants are no longer compared with all members of the majority population after controlling for parental socioeconomic status, but instead with those who share the same level of parental socioeconomic status. Our third hypothesis is therefore as follows:

[H3: Parental socioeconomic status] We expect that the differences between generations will be materially reduced after controlling for parental socioeconomic status.

Our study not only contributes to the literature by assessing these hypotheses, but also in the various ways described above. Notably, by measuring neighborhoods during childhood, rather than adulthood, we focus on spatial assimilation at a time in life that is less-often studied and yet crucial for determining life-course trajectories. By including grandchildren of immigrants, we adopt a longer-term perspective on immigrant assimilation compared to previous studies. By relying on multiple indicators to characterize neighborhoods, we capture the multidimensionality of environments in which immigrants and their descendants live. In addition, by analyzing two different national contexts—France and Sweden—we test the generalizability of these theories and shed light on both the universal and context-specific aspects of childhood neighborhoods for immigrants and their descendants.

National contexts

In this study, we carry out a comparative case study of France and Sweden. Our comparative design enables us to establish whether there is consistent evidence of spatial assimilation across generations for immigrants and their descendants in two different European contexts. Considering that both France and Sweden are members of the EU, and have received immigrants from Europe for several decades, it may be reasonable to expect much similarity between the two countries with respect to the spatial assimilation of European immigrants and their descendants. Based on past research (Malmberg et al. 2018; McAvay 2018; McAvay and Safi 2018), we might also expect non-European immigrants and their descendants to be persistently disadvantaged in their residential context in both countries.

However, the two countries do differ considerably in their experiences of non-European migration (e.g. the much longer historical experience in France than Sweden) and in their

political recognition of multiculturalism (with a generally lower recognition in France). While Sweden, like many other European countries, was a country of emigration during the late 19th and early 20th century, France was already receiving many immigrants (largely from Italy, Spain, Belgium, and Poland) during this time (Dignan 1981; Hargreaves 2007; Noiriel 1988).

After the Second World War, immigration to France continued in high numbers, with major flows of workers coming from Portugal and from (now former) colonies in North Africa, especially Algeria (Noiriel 1988). Today, the most common regions of origin of immigrants and their descendants in France are North African and Southern European, each comprising sizeable groups (Beauchemin et al. 2018). Among other common countries of origin, formers colonies figure centrally. This means that a non-negligible share of immigrants in France speak the language upon arrival, have some institutional knowledge, and a historically more sizeable co-ethnic network, all of which can facilitate immigrants' initial settlement and subsequent assimilation. At the same time, immigrants from former colonies may face greater levels of discrimination (Quillian et al. 2019), which can also persist across generations. A further point of difference is that France has a dearth of social policies that specifically target immigrants or their descendants, with these communities instead relying on mainstream welfare and housing provisions, such as subsidized social housing.

By contrast, the history of mass immigration in Sweden is much more recent, is less related to colonialism (except within the Nordic region), and is more clearly linked with explicit policies relating to migration and integration. Until the end of the 1970s the majority of immigrants to Sweden came from other European countries, and especially Finland (Statistics Sweden 2024). Then, from the mid-1970s until the present day, Sweden has received considerable numbers of refugees and members of their families, notably from former Yugoslavia, Iran, Iraq, Somalia, and Syria (Migration Agency 2024). Since 1975, Sweden has declared itself to be a multi-ethnic country, based on the three concepts of equality, freedom of

choice and cooperation (Andersson and Solid 2003). There have been a number of reforms to this policy, but until recently (notably 2015/16), Sweden has retained one of the most liberal policies in Europe towards immigration and integration, including generous support with respect to introduction programs and family reunification for refugees and other immigrants (Andersson and Solid 2003; Bengtsson et al. 2005). Refugees still face distinct challenges. For example, refugees are more prone to experiencing trauma or health-related problems upon arrival than other groups (FitzGerald and Arar 2018; Mangrio et al. 2020). For these reasons, we might expect many immigrants to experience social disadvantage on arrival in Sweden, but for these groups to convergence with the majority population over time and across generations due to governmental policies that provide necessary support for integration and social mobility.

Data and methods

Our analysis is made possible by harmonizing two data sources from France and Sweden that allow us to study the childhood neighborhood contexts of immigrants and their descendants at similar levels of aggregation (averaging about 2,000 inhabitants). This is important because measures of neighborhood composition are contingent on the size of the spatial unit (Wimark et al., 2019). The French data were collected through the nationally representative *Trajectories and Origins 2* (TeO2) survey (Beauchemin et al. 2023), whereas the data used for Sweden are from recently obtained extracts of population registers (*REFU-GEN*) that include all members of the population (Wilson 2024).

French survey data

Trajectories and Origins 2 (TeO2) (Beauchemin et al., 2023) is a large-scale (N=41,336 children whose 27,500 parents were interviewed), nationally representative, face-to-face survey that oversamples immigrants, and the children and grandchildren of immigrants. It thus

provides a unique source of information to study these populations. In the French setting, immigrants are defined as individuals who are born abroad without French nationality at birth.

Given that we study individuals' childhood context, we restrict our analytical sample to individuals aged 18 and below (27,329 children), and who live in the parental home in 2019 or 2020, when the TeO2 interviews were conducted (25,640 or 93.82% of all children). The information that we analyze was collected from adult respondents, who are one of the parents of the child studied in this analysis. While interviews were conducted in both 2019 and 2020, the majority (59%) were conducted in 2019. The data provide detailed information on the area of residence of children who live in the parental household. By contrast, TeO2 provides less information on non-resident children, and no information on their place of residence. For the present study, this does not present a major limitation, as most individuals live in the parental home up until age 18, both in France and Sweden (see Figure A1 in the Appendix).

Beyond this, we make several restrictions to the sample. We exclude respondents born in France's overseas territories and their descendants, as well as foreign-born individuals who are French nationals, and their descendants (3,944 individuals). Being neither immigrants nor part of the majority population, the excluded groups are quite specific to the French context and we cannot compare them to immigrants in Sweden in any meaningful way. In addition, 35 children are excluded as we have no information on parental education, 68 children have no information on parental employment, 1,006 children have no information on household income in the year of the survey, and 1,454 individuals who have missing information on the median income in the neighborhood. This leaves us with a total sample of 19,188 children (see Table 1).

Childhood neighborhood indicators are calculated from the French census and linked to the TeO2 survey using geocodes at the IRIS level (a common spatial unit for statistical analysis). French municipalities with more than 10,000 inhabitants, and most of the

municipalities with 5,000 to 10,000 inhabitants, are divided into IRIS (INSEE 2016). Smaller municipalities are considered to form their own IRIS. The average IRIS comprises approximately 2,000 inhabitants, varying between 1,800 and 5,000. In total, France has about 50,000 IRIS, including small municipalities.

Swedish register data

The collection of Swedish register data that we use (*REFU-GEN*) provides detailed microdata for the entire population, including data that links immigrants and their descendants across multiple generations (Wilson, 2024). We are able to link all children to all their parents and grandparents (as long as those parents and grandparents have ever lived in Sweden), as well as to their place of residence throughout childhood.

To the best of our ability, we harmonize the Swedish data so that it mirrors the properties of the French data. Akin to the French design, we restrict our study population to individuals aged 18 and below in 2019 (2,274,706 children), who live with at least one biological parent in 2019 (2,255,095 or 99.14% of all children observed in 2019). We focus on a cross-section for the year 2019, such that children's age, their residential area, and their parent's socioeconomic status are measured in 2019. We link children to their parents and grandparents to identify immigrants and their descendants. Specifically, information on the country of birth of each family member allows us to identify family migration histories that span three generations. We are unable to identify ancestry due to missing information on the country of birth of the children themselves (N=226) or members of their family (N=170,371). To capture neighborhood context, we identify the area of residence for every child in Sweden. A small number of individuals (1,250) are excluded because their exact geographical location is not recorded. Then, 8,888 children are excluded as we have no information on their neighborhood indicators in 2019, 17,264 children are excluded as we have no information on

parental education, and 7,258 are excluded as we have no information on household income in 2019 (excluding 1.60%). This leaves us with a population of 2,049,286 children (see Table 2).

Childhood neighborhood indicators are calculated at the DeSO (Demografiska Statistikområde) level. DeSOs consist of geographical units that are rather homogeneous in terms of population size and take physical barriers into account (Statistics Sweden 2019). Sweden had 5,984 unique DeSOs in 2019. The population in each DeSO varied between 659 and 5,268 individuals, with a mean population of 1,863 and a standard deviation of 479.

Generations and origins

Both data sources provide us with unique information on four distinct generations. This allows us to assess whether we observe patterns of spatial assimilation between immigrants who lived in Sweden as children (G1.5), the children of two immigrant parents (G2), children of one immigrant and one native-born parent (G2.5), the grandchildren of immigrants (G3), and the majority population (G4+), who are defined as native-born individuals with parents and grandparents who are also native-born. Tables 1 (for France) and 2 (for Sweden) provide the number of children included in each generational group in our analysis.

Children with an immigrant background have parents who come from a diverse set of geographic origins in both countries (see Table A1 in the Appendix). Given our second hypothesis, we distinguish between European and non-European origins in our analyses, which not only reflects our interest in place stratification but also our acknowledgement that the distinction between European and non-European origins is salient across European societies (Beauchemin et al., 2018; Malmberg et al., 2018). [2]

[2] European and non-European ancestry refers to the country of birth of the child (for G1.5), the country of birth of the foreign-born parent(s) (for G2 and G2.5), and the country of birth of the foreign-born grandparent(s) for G3. When an individual's father and mother have different countries of birth, information on the father's country of birth is used, as surnames are traditionally passed on through the father's side. When grandparents have different countries of birth, information on the country of birth of the father's father is used (followed by the father's mother, the mother's father, and then the mother's mother).

Outcomes: neighborhood context

Both data sets provide information on geographic units (IRIS and DeSO areas) that are comparable in size in the two countries. Within these geographic units, we identify four indicators: two relate to social exclusion, and two measure social resources. For both exclusion and resources, one indicator taps into the economic domain, while the other relates to non-economic domains.

The processes of social exclusion are captured by the neighborhood unemployment rate, an economic indicator of the pervasiveness of labor market exclusion, and the immigrant share, a non-economic indicator, providing insight into the potential exclusionary practices impeding immigrants from entering majority-dominated neighborhoods. We contrast social exclusion with favorable neighborhood indicators measuring neighborhood economic and non-economic resources, as captured respectively by the median disposable income and share of inhabitants with completed high school or higher in the neighborhood.

To obtain the unemployment rate in each residential area, we aggregate the number of unemployed individuals and divide it by the total working age population (15+ years old) residing in that same area, excluding individuals with no information on their employment status. The share of immigrants refers to the number of foreign-born individuals divided by the total population for which the country of birth is recorded in the area. For area-level disposable income, we calculate the median disposable income of the working age population (15+ years old). In Sweden, we multiply this by 0.09 to convert Swedish crowns to Euros (the currency in France and other European countries). For the share with completed high school or higher, in each residential area, we divide the number of high school graduates by the total population aged 15+ and who are not currently studying in France. In Sweden, we divide the number of high school graduates by the total population aged 19+ with a known educational level. This difference is due to the fact that students are not eligible to complete high school

(*gymnasieskola*) before age 19 in Sweden, while the French equivalent (*baccalauréat*) can be obtained between ages 15 and 18.

Figure 1 provides a correlation matrix of the neighborhood indicators used as outcomes in this study. In both countries, our two measures of neighborhood social exclusion (unemployment rate and immigrant share) are positively correlated with each other, as are our two measures of neighborhood resources (median income and share with high school or higher). In addition, the measures of exclusion are negatively correlated (or in a single case not correlated) to the measures of resources in both countries. These correlations justify our use of these four indicators as measures of either neighborhood advantage or disadvantage in both countries. In Sweden, the share of immigrants in the neighborhood is more strongly positively correlated with the unemployment rate (0.87) and negatively with median income (-0.55) than in France (0.54 and -0.27, respectively). This suggests that the immigrant share provides a clearer indicator of disadvantage in Sweden than in France. This is related both to immigrants being less educated and having a lower socioeconomic status in Sweden, when compared to France, and to them more often residing in neighborhoods where immigrants and the majority population face disadvantaged living conditions.

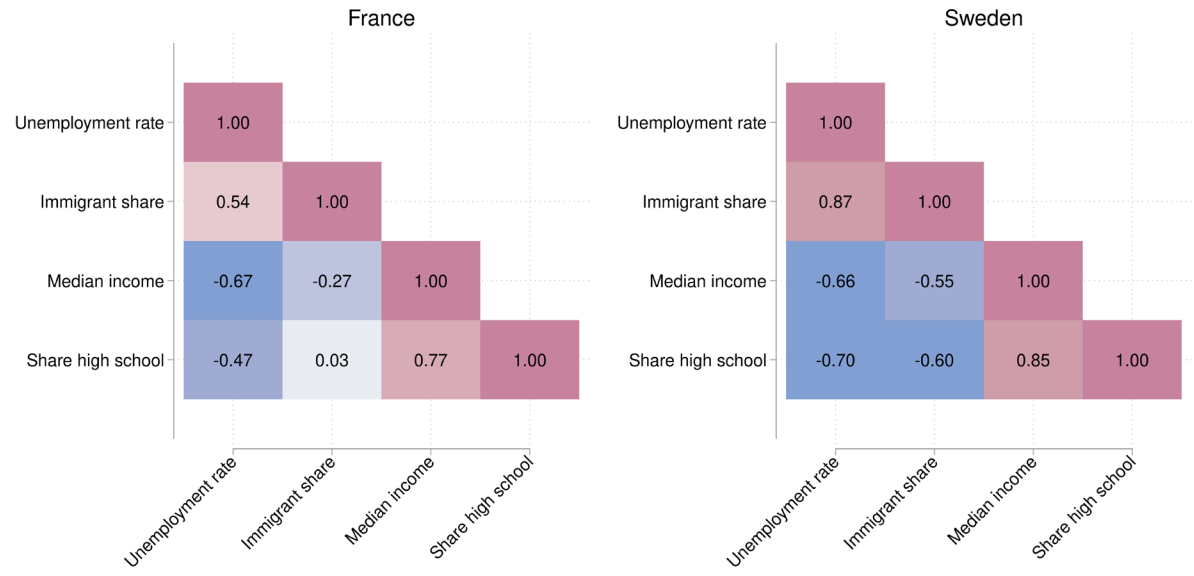

Figure 1 Heat map providing correlation matrices of the different neighborhood indicators

Methods

Our initial analysis uses descriptive statistics to summarize the variables that we use to compare generations in France and Sweden. Thereafter, we estimate ordinary least squares regressions, as our outcomes are continuous, and present results from two models. The baseline model controls for age and age squared, since parental sorting in neighborhoods is not independent of the quality of local schools, a factor that becomes increasingly relevant as children reach different developmental stages. The gender of the child, on the other hand, is not included in the model as we deem it less likely to have an effect on residential sorting. The following equation illustrates the model:

$$\boldsymbol{NeighbourhoodContext_i = \alpha + \beta_1 Generation_i + \beta_2 Age_i + \beta_3 Age_i^2 + \varepsilon_i,} \qquad (1)$$

where $NeighbourhoodContext_i$ stands for the dependent variable (i.e., unemployment rate, immigrant share, median disposable income, or percentage with completed high school or

higher). The term of interest is $Generation_i$. It is a set of dummy variables that indicates whether child *i* is G1.5, G2, G2.5, or G3. G4+ represents the omitted reference category. The terms Age_i and Age_i^2 refer to age and its squared term. In the French data, immigrants and their descendants are oversampled. Models are therefore weighted to maintain representativeness. Standard errors are clustered at the family unit, as many families have multiple children and we assess the neighborhood in which children live with their families. In Sweden, this regards the ID of the mother, or the ID of the father if the former is missing. Given that the distinction between European and non-European origins is salient in France as in Sweden, we stratify all models by European and non-European origins in our analyses of whether patterns of assimilation are segmented.

In a second model (labelled Parental SES), we additionally control for parental characteristics, as presented in the equation below:

$$\boldsymbol{NeighbourhoodContext_i = \alpha + \beta_1 Generation_i + \beta_2 Age_i + \beta_3 Age_i^2 + \beta_4 ParentalEduc_i + \beta_5 ParentalEmpl_i + \beta_6 HouseholdInc_i + \varepsilon_i,} \quad (2)$$

where $ParentalEduc_i$ refers to the highest educational attainment of the two parents, differentiating between primary, secondary, and tertiary education. When information for one of the parents is missing, we rely on the information from the other parent. The term $ParentalEmpl_i$ captures whether at least one parent is employed. $HouseholdInc_i$ stands for household disposable income and is a continuous variable, presented in Euros for both countries. The set-up is otherwise similar to that described in the baseline model.

Results

Descriptive results

Tables 1 and 2 provide descriptive statistics across generations and origin groups in France and Sweden. The top panel provides average values of the childhood neighborhood characteristics. In both countries, immigrant children tend to live in neighborhoods characterized by higher levels of social exclusion (unemployment rate and immigrant share) than the majority population, especially non-European G1.5 and G2. In France, the average neighborhoods of non-European G1.5 and G2 children have an unemployment rate of 21 and 19% (compared to 11% in the average neighborhood of G4+ children). However, these differences decline across generations. Non-European G3 live in neighborhoods with an average unemployment rate of 14%. The unemployment rate in the average neighborhood of non-Europeans in Sweden is comparatively low across generations (5 and 6% for G1.5 and G2, compared to 2% for G4+).

Table 1 Weighted distributions of childhood neighborhood characteristics, the child's demographic characteristics, and parental socioeconomic status across generation and origin groups in France

	European				Non-European				Majority population	
	G1.5	G2	G2.5	G3	G1.5	G2	G2.5	G3	G4+	Total
Childhood neighborhood										
Social exclusion										
Unemployment rate[a]	15	15	12	12	21	19	17	14	11	13
Immigrant share[a]	18	17	11	9	22	23	18	15	7	11
Social resources										
Median income in Euros[a]	23,615	22,559	24,430	23,293	18,991	19,720	20,711	22,095	22,793	22,236
Share completed high school or higher[a]	50	50	54	50	43	46	48	51	51	51
Child characteristics										
Female	50	53	54	49	49	51	51	54	51	51
Age at interview[b]	12	8	9	9	12	8	8	8	9	9
Refugee permit	13	12	1	N.A.	18	10	1	N.A.	N.A.	2
Parental socioeconomic status										
Primary education	39	37	14	15	52	44	31	23	22	25
Secondary education	20	19	21	26	15	16	21	22	16	18
Tertiary education	42	44	66	59	33	39	48	55	62	57
At least one parent is employed	90	89	89	95	79	83	85	88	95	92
Household income in Euros[a]	49,175	37,462	46,677	48,830	28,737	30,812	37,749	41,163	48,360	44,500
N	364	643	887	1,675	822	4,801	5,145	2,892	1,959	19,188

Notes: Percentage within each group reported. Data are from authors' calculations.

[a] Averages reported.

[b] Average reported. For a majority of respondents, this refers to the age in 2019.

Table 2 Distributions of childhood neighborhood characteristics, the child's characteristics, and parental socioeconomic status across generation and origin groups in Sweden

	European				Non-European				Majority population	
	G1.5	G2	G2.5	G3	G1.5	G2	G2.5	G3	G4+	Total
Childhood neighborhood										
Social exclusion										
Unemployment rate[a]	4	4	3	3	5	6	3	3	2	3
Immigrant share[a]	26	28	18	16	32	37	21	19	13	19
Social resources										
Median income in Euros[a]	21,088	20,494	23,185	23,249	18,655	19,118	22,586	23,805	23,065	22,295
Share completed high school or higher[a]	75	74	81	80	69	70	80	82	80	78
Child characteristics										
Female	48	48	49	49	48	49	49	48	49	49
Age in 2019[a]	11	7	9	9	11	8	8	7	9	9
Refugee permit	5	50	13	6	65	61	21	35	N.A.	15
Parental education										
Primary education	8	6	2	2	32	12	3	3	1	5
Secondary education	34	44	32	42	30	45	38	38	39	39
Tertiary education	58	50	66	56	38	44	59	60	60	56
Parental employment status										
Employed	91	95	98	99	68	92	98	99	99	96
Household income										
Household income in Euros[a]	49,495	50,674	63,449	64,259	37,164	43,694	55,840	64,340	65,751	59,919
N	53,991	74,694	115,118	261,241	153,846	159,069	134,087	41,191	1,056,049	2,049,286

Notes: Percentage within each group reported. Data are from authors' calculations.

[a] Averages reported.

Regarding our second indicator of social exclusion (immigrant share), we find that G1.5 and G2 tend to live in neighborhoods with considerably higher immigrant shares across contexts and origin groups. Yet, we observe particularly strong concentrations of immigrants in the earlier generations in Sweden, especially among non-Europeans. Non-European G1.5 and G2 tend to live in neighborhoods with about 32 and 37% immigrants, respectively, while the average share of immigrants in childhood neighborhoods of G4+ is 13%. In comparison, non-European G2.5 and G3 live in areas with an average immigrant share of 21 and 19% respectively. By contrast, initial differences are smaller in France, but they remain stronger. Non-European G3 live in neighborhoods with average immigrant shares of 15% (compared to 7% in typical neighborhoods of G4+ children).

Our indicators of neighborhood social resources (median income and share with completed high school or higher) indicate somewhat different patterns. In France, descendants of European immigrants across all generations live, on average, in neighborhoods with similar or higher median incomes than the majority. The same is true for the neighborhood share of individuals with completed high school or higher. Descendants of non-European immigrants in France tend to live in neighborhoods with lower social resources in the early generations (G1.5 and G2) but this is not the case for later generations (especially G3). In Sweden, European and non-European G1.5 and G2 children live in average neighborhoods with lower median incomes and lower shares of individuals with completed high school or higher. For G2.5 and G3, the social resources in the average childhood neighborhood are commensurate with those of G4+.

Neighborhood social exclusion

Figure 2 presents results from ordinary least squares regressions on social exclusion in the childhood neighborhood, captured by the unemployment rate (y-axis on the left-hand side) and immigrant share (y-axis on the right-hand side). All generations are compared to G4+, indicated

by the horizontal reference line. We provide the coefficients and standard errors (clustered at the family-unit) in Tables A2-A5 in the Appendix. In France and Sweden, the unemployment rate and immigrant share in the neighborhoods of immigrants and their descendants decreases across generations and approaches that of the average childhood neighborhood of G4+. G1.5 and G2 tend to live in neighborhoods with considerably higher unemployment rates (2-9 percentage points) and immigrant shares (10-24 percentage points), compared with the majority population. For G2.5 and G3, children live in neighborhoods that are more similar to those of G4+ children. Still, in France non-European G3 children live in neighborhoods with 2 percentage points higher unemployment rates, and 8 percentage points higher immigrant shares, compared with G4+ (as seen in the parental SES model, presented as a full circle and diamond in the figure).

In both countries, the level of social exclusion in the neighborhood is more pronounced for the descendants of non-European immigrants. In Sweden, the immigrant share in neighborhoods inhabited by the earlier generations is markedly higher than that of G4+ children. Non-European G1.5 and G2 in Sweden live in neighborhoods with shares of immigrants that are about 20 percentage points higher than G4+. By comparison, the difference is only 13 percentage points for European G1.5 and G2 children in Sweden.

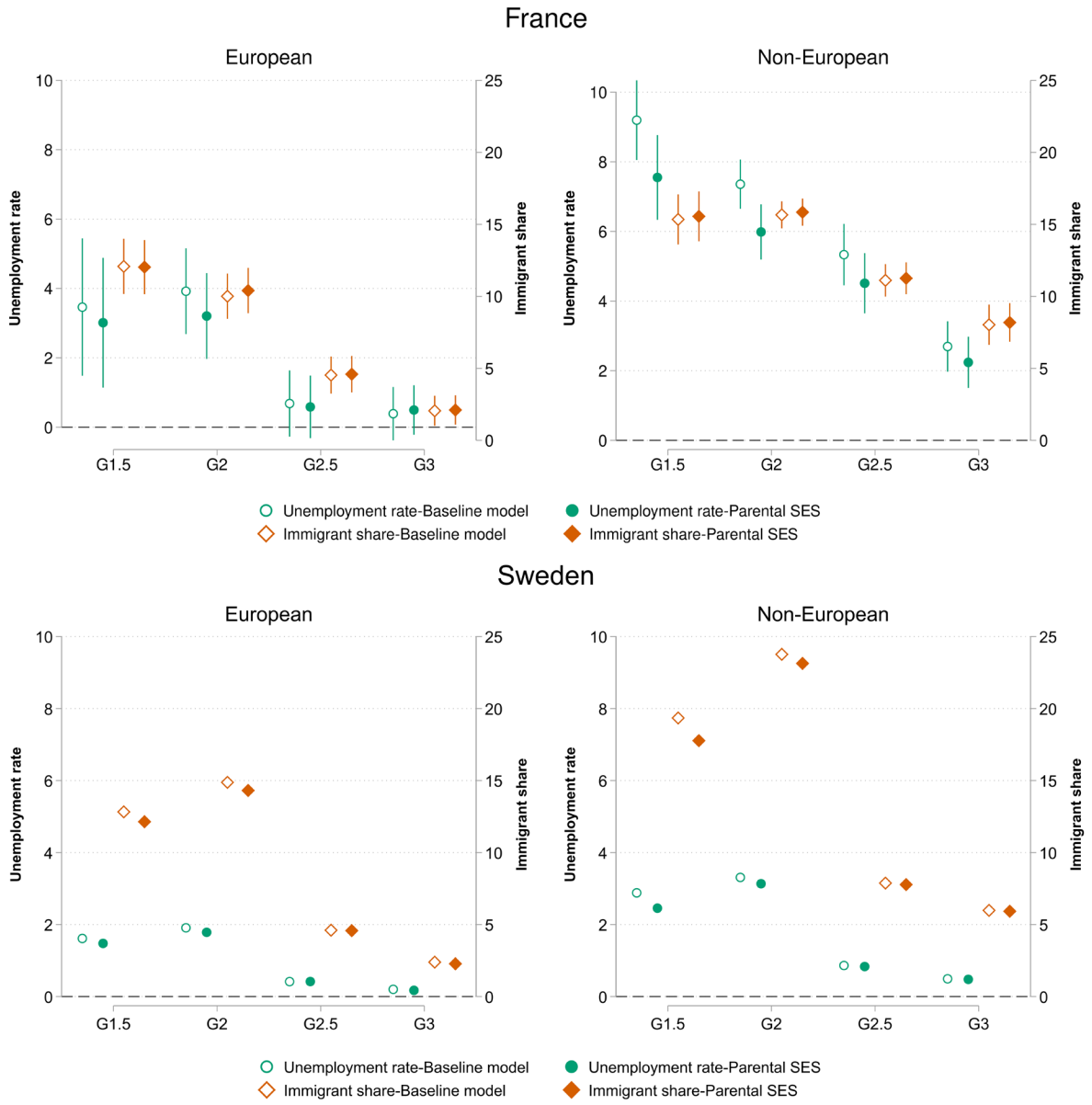

Figure 2 Estimates from OLS regressions on the unemployment rate and immigrant share in the childhood neighborhood across generations and origin groups in France (top panel) and Sweden (bottom panel)

Notes: G4+ provide the reference group (indicated by the horizontal line). The baseline model (hollow markers) controls for age and age squared. The parental SES model (full markers) additionally controls for parental education, parental employment status, and household income. For France, weighted coefficients are reported. Coefficients and standard errors (clustered at the family-unit) are provided in Tables A2 and A3 (France) and Tables A4 and A5 (Sweden) in the Appendix.

In France, we observe smaller differences for non-European G1.5 and G2 children (16 percentage points). However, differences in the neighborhoods of G2.5 and G3 descendants of non-Europeans are smaller in Sweden (about 7 percentage points) than in France (about 10 percentage points). In short, Swedish immigrants tend to live in neighborhoods with a comparatively high share of immigrants, but there is increased mixing with the majority population across generations. In France, by contrast, differences relative to the majority population persist to a greater extent, including for the grandchildren of immigrants, and especially among the descendants of non-Europeans.

In France, the patterns follow a relatively straight line for non-Europeans, indicating that the neighborhood context becomes more similar to that of G4+ across subsequent generations. By contrast, we observe a considerable difference in the neighborhoods of G2 and G2.5 children of Europeans and non-Europeans in Sweden (and a smaller though notable difference for the children of Europeans in France). Having at least one native-born parent (one in the case of G2.5 and two in the case of G3) appears to play an important role for the childhood context of descendants of European immigrants in both countries, and is especially significant for the descendants of non-European immigrants in Sweden.

Neighborhood resources

Figure 3 provides corresponding patterns for economic and human capital resources in the childhood neighborhood, captured by the median income (y-axis on the left-hand side) and share with completed high school or higher (y-axis on the right-hand side). Coefficients and standard errors (clustered at the family-unit) are provided in Tables A6-A9 in the Appendix. Akin to the descriptive patterns provided in Table 1, across all generations the descendants of Europeans in France live in neighborhoods with similar or higher levels of social resources, as compared with G4+. Likewise, across generations the descendants of non-Europeans in France

tend to live in neighborhoods with similar or higher shares of high school (or higher) education after we control for parental socioeconomic status (as seen in the parental SES model, represented as full diamonds in the figure). Here, parental SES plays a considerable role for G1.5 and G2. The only group and outcome for which we observe patterns of intergenerational convergence in France is the neighborhoods median income of descendants of non-Europeans. The patterns follow a relatively straight line, indicating that the neighborhood context becomes more similar to that of G4+ across subsequent generations.

In Sweden, descendants of Europeans and non-Europeans follow a general pattern of convergence across generations, with a shift between G2 and G2.5 that is commensurate to the shift observed for indicators of neighborhood social exclusion. That is, the neighborhoods inhabited by G1.5 and G2 descendants of both Europeans and non-Europeans are characterized by lower shares with at least a high school diploma, compared with G4+. However, irrespective of reception context and geographic origin, G2.5 and G3 tend to live in neighborhoods with similar median income and shares with completed high school or higher (compared with G4+).

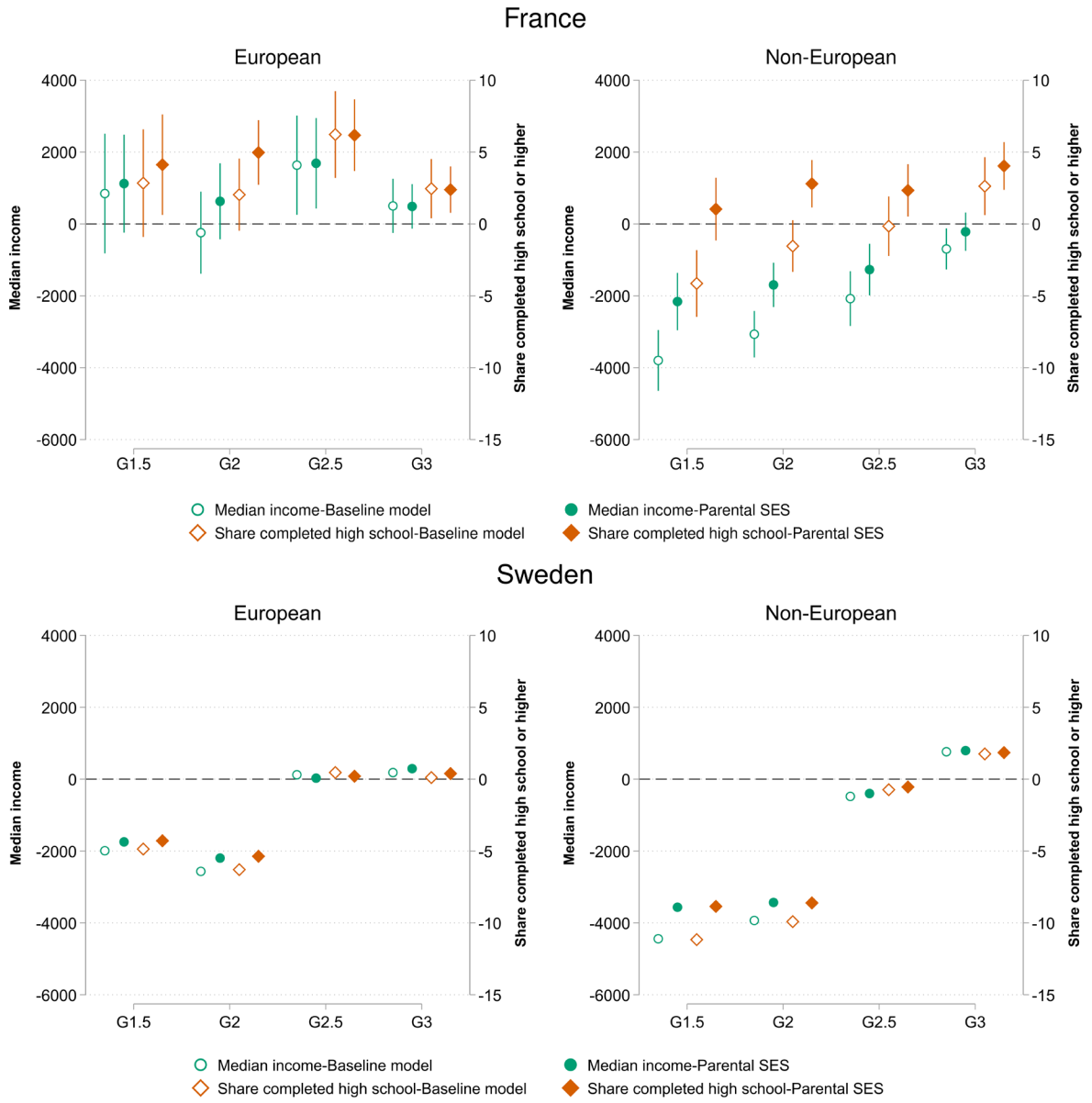

Figure 3 Coefficients from OLS regressions estimating the median income and share of the population with completed high school or higher in the childhood neighborhood across generations and origin groups in France (top panel) and Sweden (bottom panel)

Notes: G4+ provide the reference group (indicated by the horizontal line). The baseline model (hollow markers) controls for age and age squared. The parental SES model (full markers) additionally controls for parental education, parental employment status, and household income. For France, weighted coefficients are reported. Coefficients and standard errors (clustered at the family-unit) are provided in Tables A6 and A7 (France) and Tables A8 and A9 (Sweden) in the Appendix.

Sensitivity Analysis

Given that we compare different origin groups across generations (among European and non-European immigrants and their descendants), generational differences may be driven by origin group differences. To evaluate this, we run additional analyses for the largest immigrant origin groups in France and Sweden (by population size of children). Figures A2 and A3 in the Appendix provide results for for Portuguese and Algerian immigrants in France and Sweden, and Finnish and Syrian immigrants in Sweden. Figures A4 and A5 further provide analyses including country fixed effects. The analyses reveal similar patterns to those presented in the main text, with the exception of smaller differences for the unemployment rate in neighborhoods of Portuguese children in France and Sweden (Figure A2) and smaller differences for the median income and share with completed high school or higher in neighborhoods of Portuguese and Finnish children in Sweden (Figure A3).

Since refugee resettlement represents a significant proportion of all immigration to Sweden, especially those from non-European countries, we conduct additional analyses to assess whether the refugee population and their descendants reveal distinct settlement patterns (see Figures A6 and A7 in the Appendix). Given that we do not have information on refugee G3 in France, as the TeO2 survey did not include a question on the residence permit of immigrant grandparents, we exclude this group for both countries. Our analysis reveals similar patterns of diminishing differences across generations for refugees and non-refugees (compared with G4+) regarding the neighborhood unemployment rate (Figure A6), immigrant share (Figure A6), median income (Figure A7), and share of individuals with completed high school or higher (Figure A7).

Considering immigrants' distinct settlement patterns across rural and urban regions, we also assess whether the patterns of spatial assimilation hold when delineating between the capital regions (Paris and Stockholm) and the rest of the country in France and Sweden (see

Figures A8 and A9 in the Appendix). Overall patterns are similar to those presented in the main analysis. Still, in France differences in neighborhood social exclusion are more sizeable in the rest of country than in the Paris region (Figure A8). By comparison, differences between the capital region and the rest of the country in Sweden are small for neighborhood social exclusion. However, both in France and Sweden differences in neighborhood resources are more pronounced in the capital regions than in the rest of the country (Figure A9).

Discussion and conclusion

This study set out to generate novel insights about the comparability of spatial assimilation across multiple neighborhood measures in two national contexts, France and Sweden. We used harmonized data to analyze childhood neighborhood contexts for immigrants and their descendants, which enabled us to assess the generalizability of spatial assimilation theory.

In general, and in support of our first hypothesis, our results provide clear evidence that spatial assimilation is occurring simultaneously in both France and Sweden (Alba et al. 1999; Massey 1985). This is not only true for one measure of childhood neighborhood context, but for all four of the spatial measures that we analyze. In other words, we observe patterns of spatial assimilation across generations in both settings and across our neighborhood indicators of both social exclusion and neighborhood resources.

In addition, our results imply that conclusions about spatial assimilation may be limited in absence of detailed information about both the children and grandchildren of immigrants, at least in the contexts that we study (McAvay 2018; McAvay and Safi 2018; Weber and Vogiazides 2023). For example, it is only when we compare G2.5 (children with one immigrant and one native-born parent) and G3 (grandchildren of immigrants) with other generations that the generalizable pattern of spatial assimilation across outcomes and countries becomes clear.

In general, we observe gradual convergence toward the majority across generations, specifically in terms of the childhood residential context of descendants of both European and non-European immigrants. However, we also find that geographic origin plays a role, with non-European immigrants and their descendants living in more disadvantaged neighborhood contexts in both countries. This robust result is in line with our second hypothesis, derived from place stratification theory (Alba and Logan 1991, 1993). It also suggests that spatial assimilation and place stratification are not necessarily mutually exclusive.

At the same time, our comparative approach reveals important distinctions in spatial assimilation between France and Sweden that would be hard to obtain by comparing separate studies of each country. The first notable example is that descendants of non-Europeans experience subtly different patterns of spatial assimilation in Sweden and France. Differences in most childhood neighborhood outcomes are considerable in Sweden among G1.5 and G2 non-Europeans, and larger than in France. Also, they reduce notably by G2.5 and G3 in Sweden, and to a greater extent than in France. In other words, non-European immigrants and their descendants in Sweden live in markedly distinct neighborhoods compared with both G4+ and their European-ancestry counterparts. However, these differences diminish sharply for G2.5 and G3, suggesting a faster pace of spatial integration in Sweden than France. Conversely, changes across generations in France appear to be steadier but slower, resulting in persistent gaps for the grandchildren of non-European immigrants.

What underlies the patterns observed in France and Sweden? Given that a non-negligible share of non-European immigrants in France come from its former colonies, they often have some host-country language skills and institutional knowledge (Beauchemin et al. 2018; Hargreaves 2007). At the same time, France has been found to be a context of particularly high racial discrimination both in hiring (Quillian et al. 2019; Quillian and Midtbøen 2021) and housing (Bao 2023). Thus, even though initial barriers appear weaker, they may persist more

durably across generations. By contrast, Sweden has received considerable numbers of refugees and members of their families, who face distinct and often greater challenges in adapting to the destination country, especially in the initial period after arrival (FitzGerald and Arar 2018; Mangrio et al. 2020). This may relate to large initial differences in Sweden, while over time and across generations social policies provide the necessary support for these groups to be upwardly mobile (Kennerberg and Åslund 2010). Indeed, Sweden has retained one of the most liberal policies in Europe towards immigration and integration, including generous support with respect to introduction programs and family reunification for refugees and other immigrants (Andersson and Solid 2003; Bengtsson et al. 2005).

Another distinction between the two countries concerns the difference in childhood neighborhoods between G2 and G2.5. This difference is considerable in Sweden, but generally much less marked in France. A key explanation for this may relate to different patterns of intermarriage across the two countries (Elwert 2020; Haandrikman 2014; Safi 2010). Among descendants of non-European immigrants, having one immigrant and one native-born parent (G2.5) is comparatively more common in France than in Sweden (see Tables 1 and 2). Therefore, it is likely that immigrants to Sweden who have children with Swedish-born partners are more positively selected, comparatively, on traits such as language skills or cultural and economic capital, compared with immigrants to France who have children with French-born partners (Dribe and Lundh 2008; Nekby 2010). This could account for the larger relative gap in neighborhood contexts between G2 and G2.5 in Sweden.

While parental socioeconomic status emerges as an equalizer for most studied groups, its influence is perhaps not as strong as one would have initially expected. As such, this provides only partial support for our third hypothesis. Even when compared with children of similar socioeconomic background, descendants of immigrants continue to live in residential contexts that are partly divergent from their ancestrally native-born peers. If this represents evidence

against the role socioeconomic mobility, then Massey's (1985) formulation of spatial assimilation theory would suggest that (a lack of) acculturation is a likely explanation. However, the mechanisms driving this phenomenon, including discrimination and neighborhood preferences, warrant further investigation to disentangle their respective contributions.

In drawing these conclusions, we note several limitations of our study. Previously, and despite our best efforts, we note several minor limitations in the comparability across countries, some of which relate to the different modes of data collection for our two countries (French survey versus Swedish administrative registers). With respect to our study design, we note that we compare generations cross-sectionally, rather than lagged over time, such that our comparison may potentially result in different findings if we were to compare consecutive generations born in subsequent cohorts. Furthermore, we note that, despite contributing by examining multiple measures of childhood neighborhood context, there are many other measures that could be considered (if data were available) and our analysis of these measures is not longitudinal, such that we are unable to indicate whether spatial assimilation is more evident at particular childhood ages.

Somewhat obviously, a further limitation of our findings is that they are limited to the contexts that we study. This has particular relevance for a comparative case study such as ours because it is a reminder of a key limitation, namely the possibility that findings would differ if we included other countries. However, while this is undoubtedly true, it is also a reason why we chose European countries that differ with respect to expectations regarding spatial assimilation. We also note that it would be hard to carry out the same study in most other national contexts due to data limitations, although we recommend that future research and data collection efforts be guided toward this possibility.

In summary, we find evidence that spatial assimilation is occurring in a similar way in France and Sweden, suggesting that the theory of spatial assimilation may be generalizable across contexts, as well as across spatial outcomes. At the same time, the nature and speed of this spatial assimilation clearly depends on ancestral country of birth, in particular whether it is European or not. These findings have important implications for future research on assimilation, not least because they suggests common ground between evidence of (macro-level) spatial assimilation, of the kind we study here, and (micro-level) individual assimilation, of the kind frequently discussed in debates about segmented assimilation. One fruitful avenue for research may be to try and synthesize these research strands, including through a combination of micro- and macro-level analyses.

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References

Ainsworth, J. W. (2002). Why Does It Take a Village? The Mediation of Neighborhood Effects on Educational Achievement. *Social Forces*, *81*(1), 117–152. https://doi.org/10.1353/sof.2002.0038

Alba, R. D., & Logan, J. R. (1991). Variations on two themes: Racial and ethnic patterns in the attainment of suburban residence. *Demography*, *28*(3), 431–453. https://doi.org/10.2307/2061466

Alba, R. D., & Logan, J. R. (1993). Minority Proximity to Whites in Suburbs: An Individual-Level Analysis of Segregation. *American Journal of Sociology*, *98*(6), 1388–1427. https://doi.org/10.1086/230193

Alba, R. D., Logan, J. R., Stults, B. J., Marzan, G., & Zhang, W. (1999). Immigrant Groups in the Suburbs: A Reexamination of Suburbanization and Spatial Assimilation. *American Sociological Review*, *64*(3), 446. https://doi.org/10.2307/2657495

Aldrich, D. P., & Meyer, M. A. (2015). Social Capital and Community Resilience. *American Behavioral Scientist*, *59*(2), 254–269. https://doi.org/10.1177/0002764214550299

Alvarado, S. E., & Cooperstock, A. (2021). Context in continuity: The enduring legacy of neighborhood disadvantage across generations. *Research in Social Stratification and Mobility*, *74*, 100620. https://doi.org/10.1016/j.rssm.2021.100620

Andersson, R., Musterd, S., & Galster, G. (2014). Neighbourhood Ethnic Composition and Employment Effects on Immigrant Incomes. *Journal of Ethnic and Migration Studies*, *40*(5), 710–736. https://doi.org/10.1080/1369183X.2013.830503

Andersson, R., & Solid, D. (2003). Dispersal policies in Sweden. https://bristoluniversitypressdigital.com/monochap/book/9781847425782/ch004.xml. Accessed 19 July 2024

Åslund, O., & Nordström Skans, O. (2010). Will I See You at Work? Ethnic Workplace Segregation in Sweden, 1985–2002. *ILR Review*, *63*(3), 471–493. https://doi.org/10.1177/001979391006300306

Bao, H. X. H. (2023). *Racial and Gender Discrimination in the Housing Market: A Review* (No. SSRN Scholarly paper). Rochester, NY. https://ssrn.com/abstract=4546171. Accessed 16 July 2024

Beauchemin, C., Hamel, C., & Simon, P. (Eds.). (2018). *Trajectories and Origins: Survey on the Diversity of the French Population* (Vol. 8). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-76638-6

Beauchemin, C., Ichou, M., & Simon, P. (2023). Trajectories and Origins 2 (2019–2020): A Survey on Population Diversity in France. *Population*, *78*(1), 11–28.

Bengtsson, T., Lundh, C., & Scott, K. (2005). From Boom to Bust. The Economic Integration of Immigrants in Post War Sweden. In *European Migration: What Do We Know?* (pp. 15–58). Oxford University Press.

Berry, J. W. (1997). Immigration, Acculturation, and Adaptation. *Applied Psychology*, *46*(1), 5–34. https://doi.org/10.1111/j.1464-0597.1997.tb01087.x

Bolt, G., Özüekren, A. S., & Phillips, D. (2010). Linking Integration and Residential Segregation. *Journal of Ethnic and Migration Studies*, *36*(2), 169–186. https://doi.org/10.1080/13691830903387238

Borjas, G. J. (1992). Ethnic capital and intergenerational mobility. *The Quarterly Journal of Economics*, *107*(1), 123–150.

Brandén, M., Haandrikman, K., & Birkelund, G. E. (2023). Escaping one's disadvantage? Neighbourhoods, socioeconomic origin and children's adult life outcomes. *European Sociological Review*, *39*(4), 601–614. https://doi.org/10.1093/esr/jcac063

Breen, R., & Müller, W. (Eds.). (2020). *Education and Intergenerational Social Mobility in Europe and the United States*. Stanford University Press. https://doi.org/10.1515/9781503611153

Bucca, M., & Drouhot, L. (2024). Intergenerational Social Mobility Among the Children of Immigrants in Western Europe: Between Socioeconomic Assimilation and Disadvantage. *Sociological Science*, *11*, 489–516. https://doi.org/10.15195/v11.a18

Bygren, M., & Szulkin, R. (2010). Ethnic Environment During Childhood and the Educational Attainment of Immigrant Children in Sweden. *Social Forces*, *88*(3), 1305–1329. https://doi.org/10.1353/sof.0.0298

Chetty, R., & Hendren, N. (2018). The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects. *The Quarterly Journal of Economics*, *133*(3), 1107–1162. https://doi.org/10.1093/qje/qjy007

Chetty, R., Hendren, N., & Katz, L. F. (2016). The Effects of Exposure to Better Neighborhoods on Children: New Evidence from the Moving to Opportunity Experiment. *American Economic Review*, *106*(4), 855–902. https://doi.org/10.1257/aer.20150572

Choi, J. H., & Green, R. K. (2022). The heterogeneous effects of interactions between parent's education and MSA level college share on children's school enrollment. *Journal of Housing Economics*, *57*, 101843. https://doi.org/10.1016/j.jhe.2022.101843

Cramm, J. M., Van Dijk, H. M., & Nieboer, A. P. (2013). The Importance of Neighborhood Social Cohesion and Social Capital for the Well Being of Older Adults in the Community. *The Gerontologist*, *53*(1), 142–152. https://doi.org/10.1093/geront/gns052

Crul, M., & Schneider, J. (2010). Comparative integration context theory: participation and belonging in new diverse European cities. *Ethnic and Racial Studies*, *33*(7), 1249–1268. https://doi.org/10.1080/01419871003624068

Damm, A. P. (2009). Ethnic Enclaves and Immigrant Labor Market Outcomes: Quasi-Experimental Evidence. *Journal of Labor Economics*, *27*(2), 281–314. https://doi.org/10.1086/599336

Diamond, R., & Gaubert, C. (2022). Spatial Sorting and Inequality. *Annual Review of Economics*, *14*(1), 795–819. https://doi.org/10.1146/annurev-economics-051420-110839

Dignan, D. (1981). Europe's melting pot: A century of large-scale immigration into France. *Ethnic and Racial Studies*, *4*(2), 137–152. https://doi.org/10.1080/01419870.1981.9993330

Dribe, M., & Lundh, C. (2008). Intermarriage and Immigrant Integration in Sweden: An Exploratory Analysis. *Acta Sociologica*, *51*(4), 329–354. https://doi.org/10.1177/0001699308097377

Drouhot, L. G., & Nee, V. (2019). Assimilation and the Second Generation in Europe and America: Blending and Segregating Social Dynamics Between Immigrants and Natives. *Annual Review of Sociology*, *45*(1), 177–199. https://doi.org/10.1146/annurev-soc-073117-041335

Edin, P.-A., Fredriksson, P., & Åslund, O. (2003). Ethnic enclaves and the economic success of immigrants—Evidence from a natural experiment. *The Quarterly Journal of Economics*, *118*(1), 329–357.

Elwert. (2020). Opposites Attract: Assortative Mating and Immigrant–Native Intermarriage in Contemporary Sweden | European Journal of Population. *European Journal of Population*, *36*, 675–709. https://doi.org/10.1007/s10680-019-09546-9

Eurostat. (2020). *Factsheets on demographic change in Europe*. https://ec.europa.eu/eurostat/web/population-demography/demography-population-stock-balance/publications/demography-report/2020#expand-eu-15939390. Accessed 19 July 2024

FitzGerald, D. S., & Arar, R. (2018). The Sociology of Refugee Migration. *Annual Review of Sociology*, *44*(1), 387–406. https://doi.org/10.1146/annurev-soc-073117-041204

Gans, H. J. (2007). Acculturation, assimilation and mobility. *Ethnic and Racial Studies*, *30*(1), 152–164. https://doi.org/10.1080/01419870601006637

Garip, F., & Asad, A. L. (2016). Network Effects in Mexico–US Migration: Disentangling the Underlying Social Mechanisms. *American Behavioral Scientist*, *60*(10), 1168–1193. https://doi.org/10.1177/0002764216643131

Haandrikman, K. (2014). Binational Marriages in Sweden: Is There an EU Effect? *Population, Space and Place*, *20*(2), 177–199. https://doi.org/10.1002/psp.1770

Hargreaves, A. G. (2007). *Multi-ethnic France: immigration, politics, culture and society*. Routledge.

Hedman, L., Manley, D., van Ham, M., & Östh, J. (2015). Cumulative exposure to disadvantage and the intergenerational transmission of neighbourhood effects. *Journal of Economic Geography*, *15*(1), 195–215. https://doi.org/10.1093/jeg/lbt042

Hedman, L., van Ham, M., & Tammaru, T. (2017). *Three Generations of Intergenerational Transmission of Neighbourhood Context* (IZA Discussion Paper No. 11218). http://dx.doi.org/10.2139/ssrn.3092562. Accessed 4 April 2024

Hermansen, A. S. (2023). Ethnic enclaves, early school leaving, and adolescent crime among immigrant youth. *European Sociological Review*, *39*(3), 400–417. https://doi.org/10.1093/esr/jcac034

Hermansen, A. S., Borgen, N. T., & Mastekaasa, A. (2020). Long-Term Trends in Adult Socio-Economic Resemblance between Former Schoolmates and Neighbouring Children. *European Sociological Review*, *36*(3), 366–380. https://doi.org/10.1093/esr/jcz066

Hermansen, A. S., Hundebo, P. O., & Birkelund, G. E. (2022). Spatial Assimilation at a Halt? Intergenerational Persistence in Neighborhood Contexts among Immigrant Minorities in Norway. *International Migration Review*, *56*(4), 1069–1106. https://doi.org/10.1177/01979183211067771

Howley, P., Neill, S. O., & Atkinson, R. (2015). Who Needs Good Neighbors? *Environment and Planning A: Economy and Space*, *47*(4), 939–956. https://doi.org/10.1068/a140214p

Iceland, J., & Scopilliti, M. (2008). Immigrant residential segregation in U.S. metropolitan areas, 1990–2000. *Demography*, *45*(1), 79–94. https://doi.org/10.1353/dem.2008.0009

Iceland, J., & Wilkes, R. (2006). Does Socioeconomic Status Matter? Race, Class, and Residential Segregation. *Social Problems*, *53*(2), 248–273. https://doi.org/10.1525/sp.2006.53.2.248

INSEE. (2016). IRIS. https://www.insee.fr/en/metadonnees/definition/c1523. Accessed 24 July 2024

Jivraj, S., Murray, E. T., Norman, P., & Nicholas, O. (2020). The impact of life course exposures to neighbourhood deprivation on health and well-being: a review of the long-term neighbourhood effects literature. *European Journal of Public Health*, *30*(5), 922–928. https://doi.org/10.1093/eurpub/ckz153

Kennerberg, L., & Åslund, O. (2010). *SFI och Arbetsmarknaden*. Uppsala: Institute for Evaluation of Labour Market and Education Policy (IFAU).

Kling, J. R., Liebman, J. B., & Katz, L. F. (2007). Experimental Analysis of Neighborhood Effects. *Econometrica*, *75*(1), 83–119. https://doi.org/10.1111/j.1468-0262.2007.00733.x

Klink, A., & Wagner, U. (1999). Discrimination Against Ethnic Minorities in Germany: Going Back to the Field. *Journal of Applied Social Psychology*, *29*(2), 402–423. https://doi.org/10.1111/j.1559-1816.1999.tb01394.x

Kondo, M. C., Andreyeva, E., South, E. C., MacDonald, J. M., & Branas, C. C. (2018). Neighborhood Interventions to Reduce Violence. *Annual Review of Public Health*, *39*(1), 253–271. https://doi.org/10.1146/annurev-publhealth-040617-014600

Lancee, B. (2010). The Economic Returns of Immigrants' Bonding and Bridging Social Capital: The Case of the Netherlands. *International Migration Review*, *44*(1), 202–226. https://doi.org/10.1111/j.1747-7379.2009.00803.x

Leventhal, T., & Dupéré, V. (2019). Neighborhood Effects on Children's Development in Experimental and Nonexperimental Research. *Annual Review of Developmental Psychology*, *1*(1), 149–176. https://doi.org/10.1146/annurev-devpsych-121318-085221

Liebig, T., & Spielvogel, G. (2021). Residential segregation of immigrants: Patterns, drivers, effects and policy responses. In *International Migration Outlook 2021*. Paris: OECD Publishing. https://doi.org/10.1787/33eaff32-en. Accessed 9 May 2024

Ludwig, J., Duncan, G. J., Gennetian, L. A., Katz, L. F., Kessler, R. C., Kling, J. R., & Sanbonmatsu, L. (2013). Long-Term Neighborhood Effects on Low-Income Families: Evidence from Moving to Opportunity. *American Economic Review*, *103*(3), 226–231. https://doi.org/10.1257/aer.103.3.226

Ludwig, J., Sanbonmatsu, L., Gennetian, L., Adam, E., Duncan, G. J., Katz, L. F., et al. (2011). Neighborhoods, Obesity, and Diabetes — A Randomized Social Experiment. *New England Journal of Medicine*, *365*(16), 1509–1519. https://doi.org/10.1056/NEJMsa1103216

Malmberg, B., Andersson, E. K., Nielsen, M. M., & Haandrikman, K. (2018). Residential Segregation of European and Non-European Migrants in Sweden: 1990–2012. *European Journal of Population*, *34*(2), 169–193. https://doi.org/10.1007/s10680-018-9478-0

Mangrio, E., Carlson, E., & Zdravkovic, S. (2020). Newly arrived refugee parents in Sweden and their experience of the resettlement process: A qualitative study. *Scandinavian Journal of Public Health*, *48*(7), 699–706. https://doi.org/10.1177/1403494819893535

Massey, D. S. (1985). Ethnic Residential Segregation: A Theoretical Synthesis and Empirical Review. *Sociology and social research*, *69*, 315–350.

Massey, D. S., & Denton, N. A. (1985). Spatial Assimilation as a Socioeconomic Outcome. *American Sociological Review*, *50*(1), 94–106. https://doi.org/10.2307/2095343

Massey, D. S., Fischer, M. J., Dickens, W. T., & Levy, F. (2003). The geography of inequality in the United States, 1950-2000. *Brookings-Wharton papers on urban affairs*, 1–40.

McAvay, H. (2018). How Durable Are Ethnoracial Segregation and Spatial Disadvantage? Intergenerational Contextual Mobility in France. *Demography*, *55*(4), 1507–1545. https://doi.org/10.1007/s13524-018-0689-0

McAvay, H., & Safi, M. (2018). Is there really such thing as immigrant spatial assimilation in France? Desegregation trends and inequality along ethnoracial lines. *Social Science Research*, *73*, 45–62. https://doi.org/10.1016/j.ssresearch.2018.03.005

Migration Agency. (2024). History. https://www.migrationsverket.se. Accessed 18 July 2024

Minh, A., Muhajarine, N., Janus, M., Brownell, M., & Guhn, M. (2017). A review of neighborhood effects and early child development: How, where, and for whom, do neighborhoods matter? *Health & Place*, *46*, 155–174. https://doi.org/10.1016/j.healthplace.2017.04.012

Nakamura, E., Sigurdsson, J., & Steinsson, J. (2022). The Gift of Moving: Intergenerational Consequences of a Mobility Shock. *The Review of Economic Studies*, *89*(3), 1557–1592. https://doi.org/10.1093/restud/rdab062

Natarajan, A., Moslimani, M., & Lopez, M. H. (2022). *Key facts about recent trends in global migration*. Pew Research Center. https://www.pewresearch.org/short-reads/2022/12/16/key-facts-about-recent-trends-in-global-migration/. Accessed 19 July 2024

Nekby, L. (2010). *Inter- and Intra-Marriage Premiums Revisited: It's Probably Who You are, Not Who You Marry!* (IZA Discussion Paper No. 5317). https://doi.org/10.2139/ssrn.1712624

Noiriel, G. (1988). *Le Creuset français. Histoire de l'immigration (XIXe-XXe siècle): Histoire de l'immigration (XIXe-XXe siècle)*. Paris: Editions du Seuil.

Park, R. E., & Burgess, E. W. (1925). *The city*. Chicago: University of Chicago Press.

Portes, A., & Jensen, L. (1989). The Enclave and the Entrants: Patterns of Ethnic Enterprise in Miami before and after Mariel. *American Sociological Review*, *54*(6), 929–949. https://doi.org/10.2307/2095716

Préteceille, E. (2011). Has ethno-racial segregation increased in the greater Paris metropolitan area? *Revue française de sociologie*, *5*, 31–62. https://doi.org/10.3917/rfs.525.0031

Quillian, L., Heath, A., Pager, D., Midtbøen, A. H., Fleischmann, F., & Hexel, O. (2019). Do some countries discriminate more than others? Evidence from 97 field experiments of racial discrimination in hiring. *Sociological Science*, *6*, 467–496. https://doi.org/10.15195/v6.a18

Quillian, L., & Midtbøen, A. H. (2021). Comparative Perspectives on Racial Discrimination in Hiring: The Rise of Field Experiments. *Annual Review of Sociology*, *47*, 391–415. https://doi.org/10.1146/annurev-soc-090420-035144

Riach, P. A., & Rich, J. (2002). Field Experiments of Discrimination in the Market Place. *The Economic Journal*, *112*(483), F480–F518. https://doi.org/10.1111/1468-0297.00080

Roscigno, V. J., Karafin, D. L., & Tester, G. (2009). The Complexities and Processes of Racial Housing Discrimination. *Social Problems*, *56*(1), 49–69. https://doi.org/10.1525/sp.2009.56.1.49

Safi, M. (2010). Patterns of immigrant intermarriage in France: Intergenerational marital assimilation? *Journal of Family Research*, *22*(1), 89–108. https://doi.org/10.20377/jfr-292

Sampson, R. J., Morenoff, J. D., & Gannon-Rowley, T. (2002). Assessing "Neighborhood Effects": Social Processes and New Directions in Research. *Annual Review of Sociology*, *28*(Volume 28, 2002), 443–478. https://doi.org/10.1146/annurev.soc.28.110601.141114

Sanbonmatsu, L., Katz, L. F., Ludwig, J., Gennetian, L. A., Duncan, G. J., Kessler, R. C., et al. (2011). *Moving to Opportunity for Fair Housing Demonstration Program: Final Impacts Evaluation*. US Dept of Housing and Urban Development. https://www.scholars.northwestern.edu/en/publications/moving-to-opportunity-for-fair-housing-demonstration-program-fina. Accessed 9 May 2024

Schelling, T. (1978). *Micromotives and Macrobehavior*. New York: Norton.

Shah, B., Dwyer, C., & Modood, T. (2010). Explaining Educational Achievement and Career Aspirations among Young British Pakistanis: Mobilizing 'Ethnic Capital'? *Sociology*, *44*(6), 1109–1127. https://doi.org/10.1177/0038038510381606

Sharkey, P. (2008). The Intergenerational Transmission of Context. *American Journal of Sociology*, *113*(4), 931–969. https://doi.org/10.1086/522804

Sharkey, P., & Faber, J. W. (2014). Where, When, Why, and For Whom Do Residential Contexts Matter? Moving Away from the Dichotomous Understanding of Neighborhood Effects. *Annual Review of Sociology*, *40*(Volume 40, 2014), 559–579. https://doi.org/10.1146/annurev-soc-071913-043350

Silberman, R., Alba, R., & Fournier, I. (2007). Segmented assimilation in France? Discrimination in the labour market against the second generation. *Ethnic and Racial Studies*, *30*(1), 1–27. https://doi.org/10.1080/01419870601006488

Silberman, R., & Fournier, I. (2006). Les secondes générations sur le marché du travail en France : une pénalité ethnique ancrée dans le temps. Contribution à la théorie de l'assimilation segmentée. *Revue française de sociologie*, *47*(2), 243–292. https://doi.org/10.3917/rfs.472.0243

Statistics Sweden. (2019). DeSO–Demografiska statistikområden. Population statistics website. https://www.scb.se/hitta-statistik/regional-statistik-och-kartor/regionala-indelningar/deso---demografiska-statistikomraden/. Accessed 5 March 2021

Statistics Sweden. (2024). Foreign citizens by region, age in ten year groups and sex. Years 1973-2023. https://www.statistikdatabasen.scb.se/pxweb/en/ssd/START__BE__BE0101__BE0101F/UtlmedbTotNK/. Accessed 18 July 2024

Tran, V. C. (2020). Second-Generation Contextual Mobility: Neighborhood Attainment from Birth to Young Adulthood in the United States. *International Migration Review*, *54*(2), 356–387. https://doi.org/10.1177/0197918319832235

Van Kempen, R., & Wissink, B. (2014). Between places and flows: towards a new agenda for neighbourhood research in an age of mobility. *Geografiska Annaler: Series B, Human Geography*, *96*(2), 95–108. https://doi.org/10.1111/geob.12039

Van Mol, C., & De Valk, H. (2016). Migration and Immigrants in Europe: A Historical and Demographic Perspective. In B. Garcés-Mascareñas & R. Penninx (Eds.), *Integration Processes and Policies in Europe. IMISCOE Research Series* (pp. 31–55). Springer. https://doi.org/10.1007/978-3-319-21674-4_3

Vyncke, V., De Clercq, B., Stevens, V., Costongs, C., Barbareschi, G., Jónsson, S. H., et al. (2013). Does neighbourhood social capital aid in levelling the social gradient in the health and well-being of children and adolescents? A literature review. *BMC Public Health*, *13*(1), 65. https://doi.org/10.1186/1471-2458-13-65

Weber, R., & Vogiazides, L. (2023). Heterogeneity or consistency across life domains? An analysis of disparities between second-generation migrants and the Swedish majority population. *Research in Social Stratification and Mobility*, *83*, 100744. https://doi.org/10.1016/j.rssm.2022.100744

Wilson, B. (2024). *Using Swedish administrative registers to study immigrants and their descendants: Identifying immigrants, measuring their migration background, and linking data across generations* (Stockholm Research Reports in Demography (working paper) No. 11). Stockholm University.

Wilson, W. J. (1987). *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.

Zhou, M., & Kim, S. (2006). Community Forces, Social Capital, and Educational Achievement: The Case of Supplementary Education in the Chinese and Korean Immigrant Communities. *Harvard Educational Review*, *76*(1), 1–29. https://doi.org/10.17763/haer.76.1.u08t548554882477

Zuccotti, C. V. (2019). Ethnicity and neighbourhood attainment in England and Wales: A study of second generations' spatial integration. *Population, Space and Place*, *25*(7), e2252. https://doi.org/10.1002/psp.2252

Zuccotti, C. V., & Platt, L. (2017). Does Neighbourhood Ethnic Concentration in Early Life Affect Subsequent Labour Market Outcomes? A Study across Ethnic Groups in England and Wales. *Population, Space and Place*, *23*(6), e2041. https://doi.org/10.1002/psp.2041

Appendix

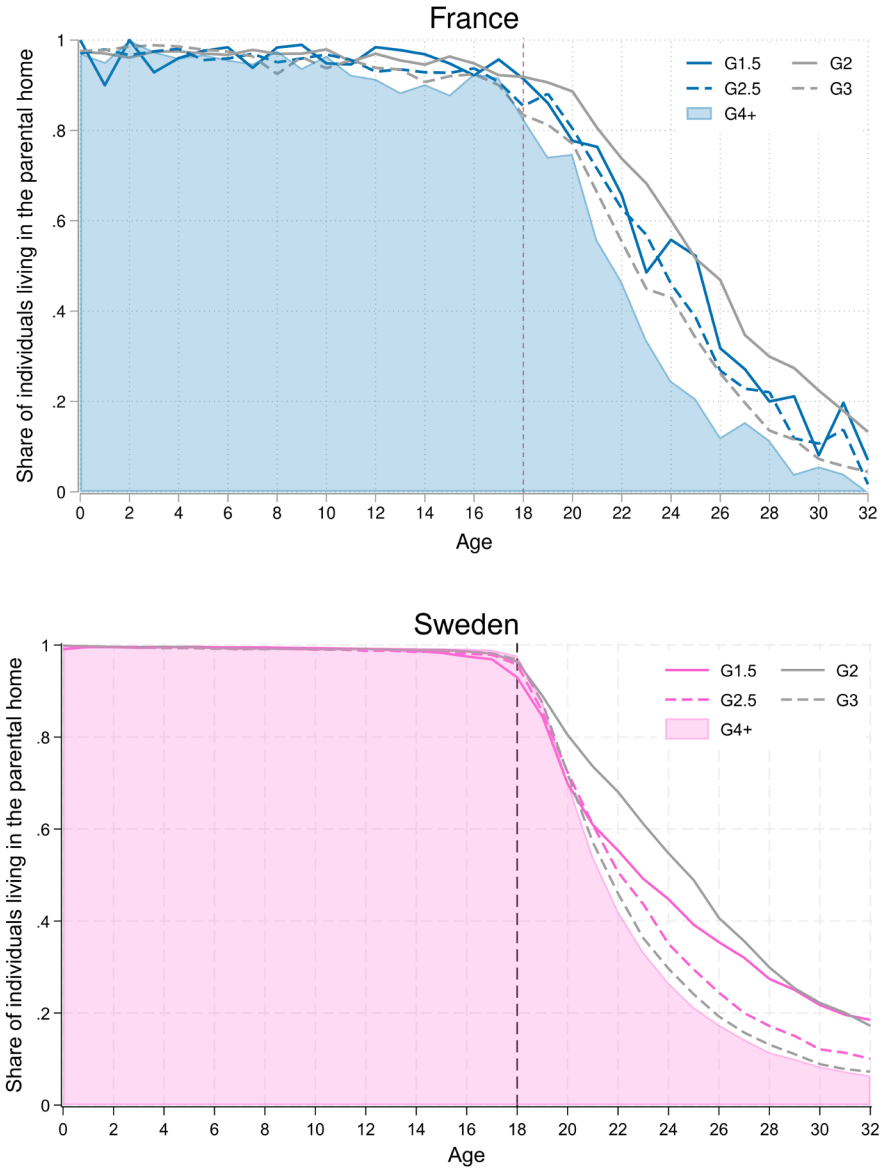

Figure A1 The share of individuals living in the parental home by age and generations in France (top panel) and Sweden (bottom panel)

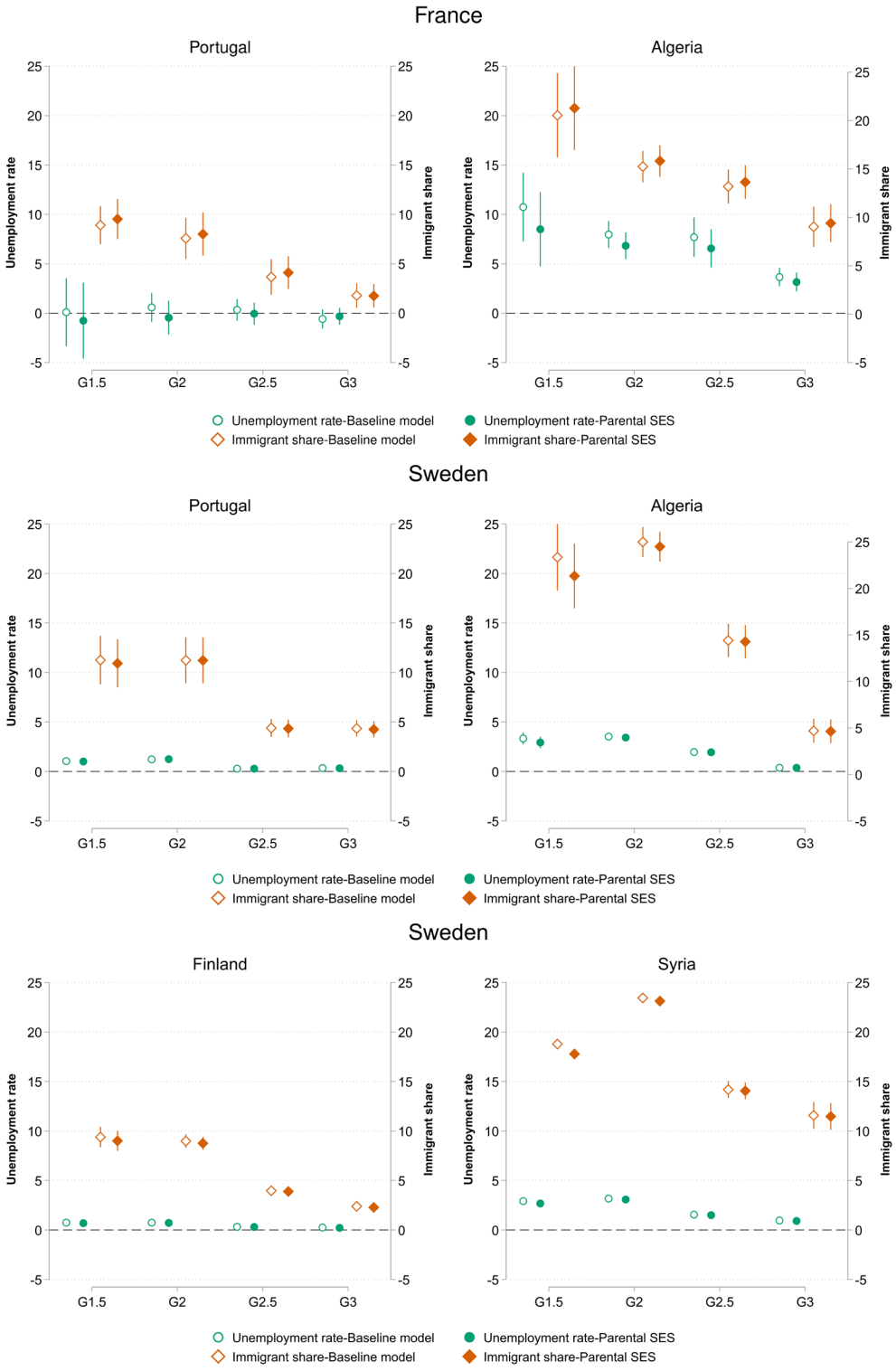

Figure A2 Estimates from OLS regressions on the unemployment rate and immigrant share in the childhood neighborhood across generations and top immigrant origin groups in France (top panel) and Sweden (bottom panel)

Notes: G4+ provide the reference group (indicated by the horizontal line). The baseline model (hollow markers) controls for age and age squared. The parental SES model (full markers) additionally controls for parental education, parental employment status, and household income. For France, weighted coefficients are reported. Standard errors are clustered at the family unit.

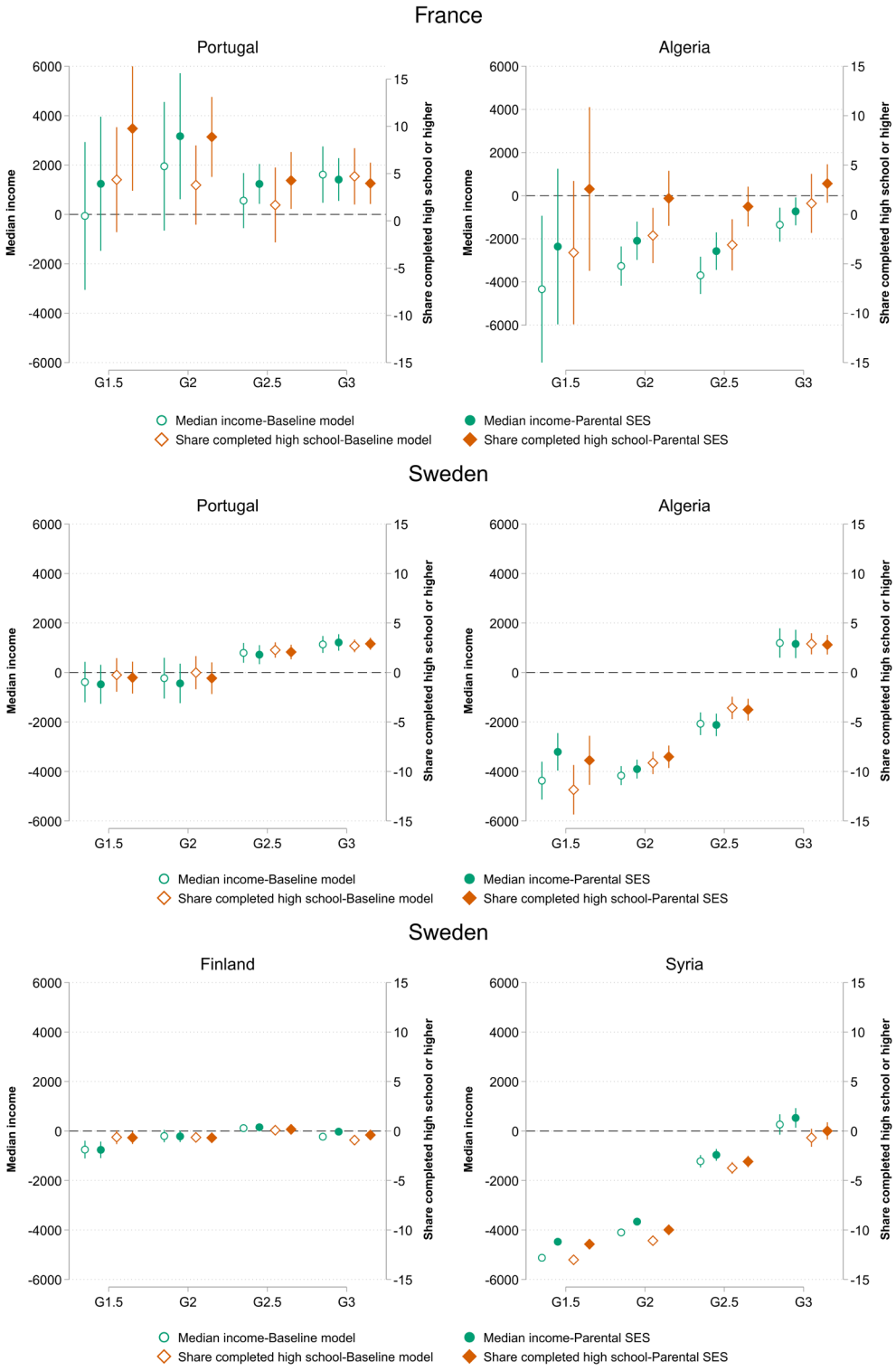

Figure A3 Coefficients from OLS regressions estimating the median income and share of the population with completed high school or higher in the childhood neighborhood across generations and top immigrant origin groups in France (top panel) and Sweden (bottom panel)

Notes: G4+ provide the reference group (indicated by the horizontal line). The baseline model (hollow markers) controls for age and age squared. The parental SES model (full markers) additionally controls for parental education, parental employment status, and household income. For France, weighted coefficients are reported. For Sweden, Swedish crowns are converted to Euros. Standard errors are clustered at the family unit.

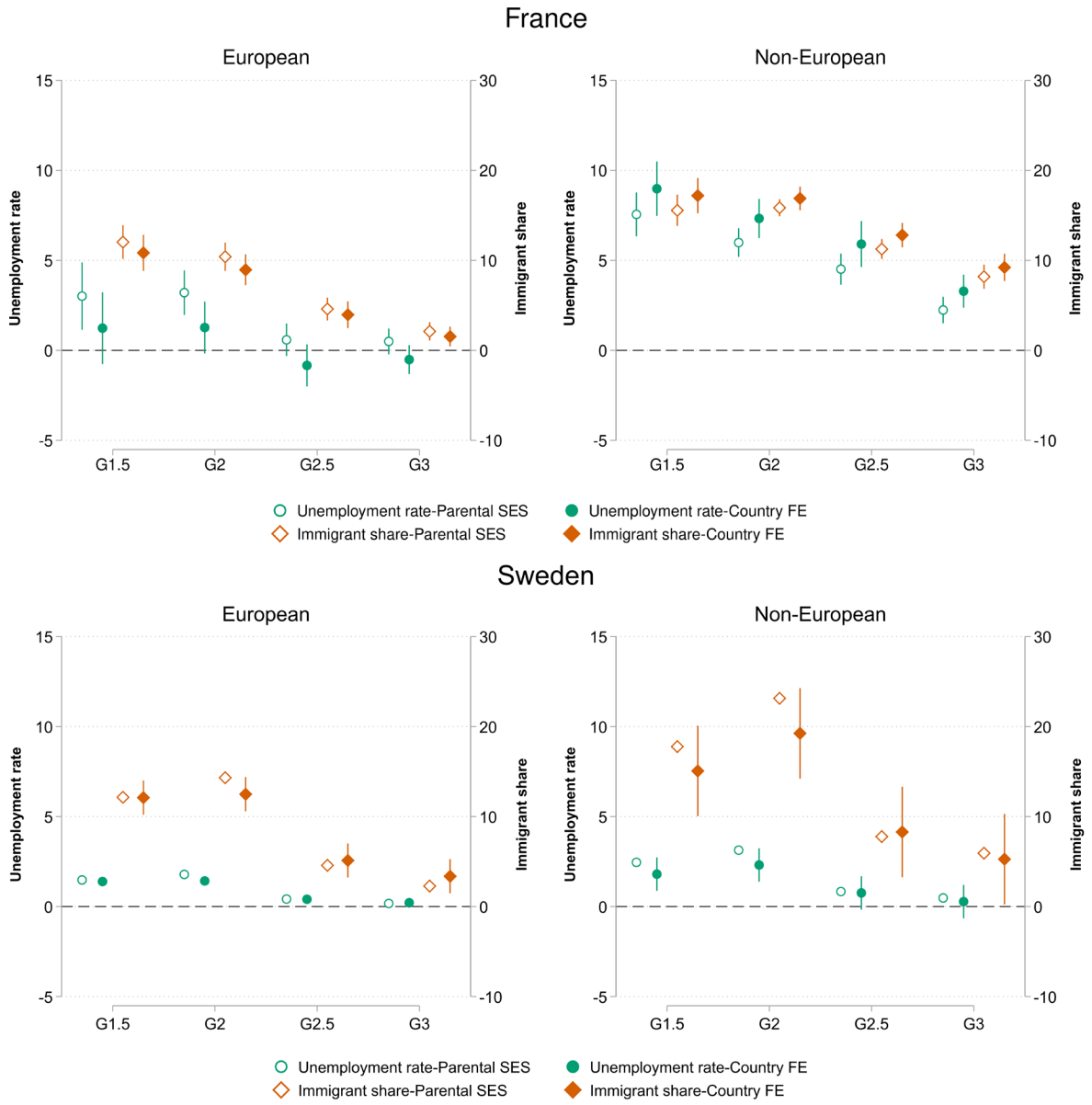

Figure A4 Estimates from OLS regressions on the unemployment rate and immigrant share in the childhood neighborhood across generations and origin groups with country fixed effects in France (top panel) and Sweden (bottom panel)

Notes: G4+ provide the reference group (indicated by the horizontal line). The parental SES model (hollow markers) controls for age and age squared, parental education, parental employment status, and household income. The country FE model (full markers) additionally includes country fixed effects. For France, weighted coefficients are reported. Standard errors are clustered at the family unit.

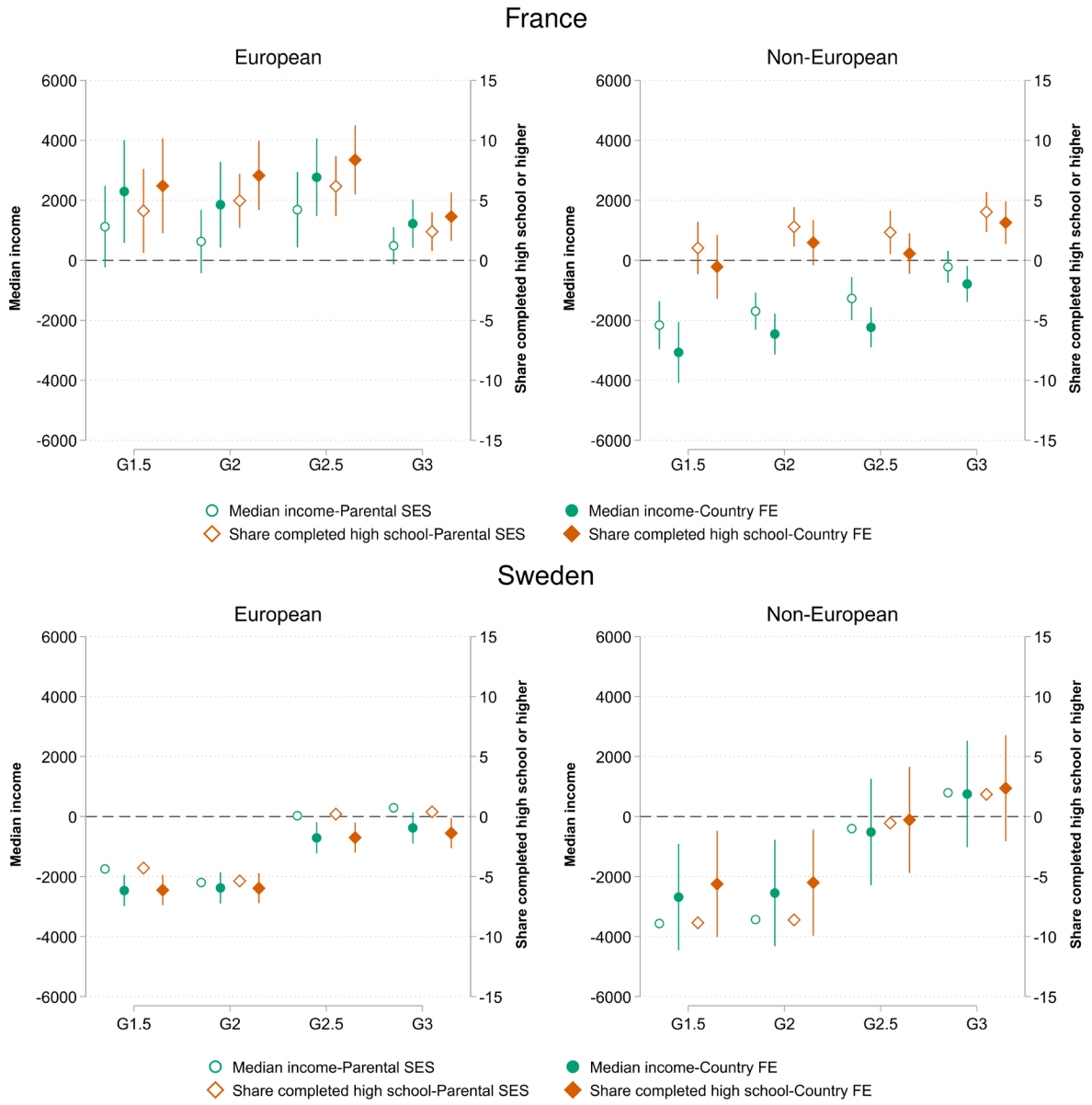

Figure A5 Coefficients from OLS regressions estimating the median income and share of the population with completed high school or higher in the childhood neighborhood across generations and origin groups with country fixed effects in France (top panel) and Sweden (bottom panel)

Notes: G4+ provide the reference group (indicated by the horizontal line). The parental SES model (hollow markers) controls for age and age squared, parental education, parental employment status, and household income. The country FE model (full markers) additionally includes country fixed effects. For France, weighted coefficients are reported. For Sweden, Swedish crowns are converted to Euros. Standard errors are clustered at the family unit.

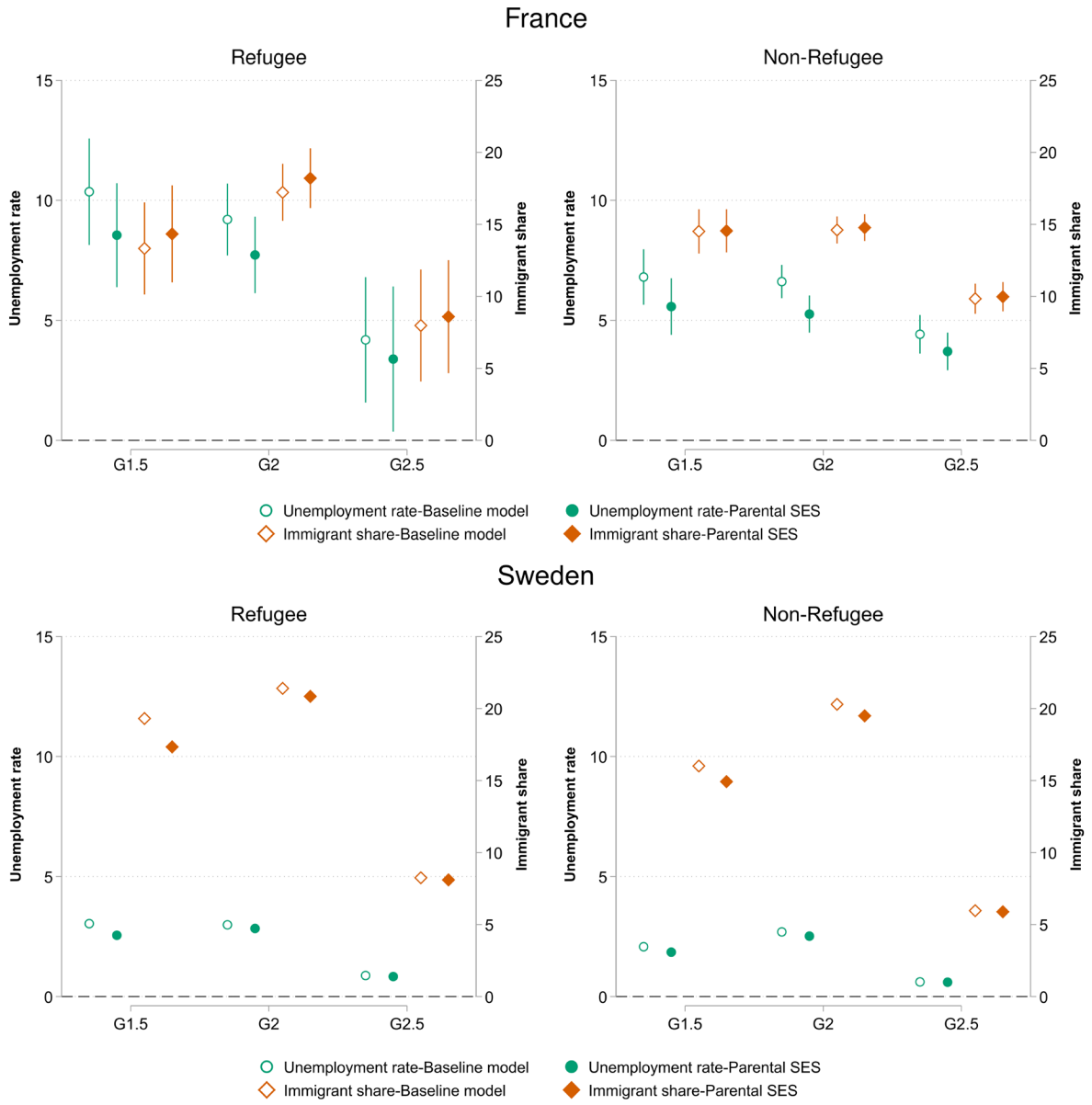

Figure A6 Estimates from OLS regressions on the unemployment rate and immigrant share in the childhood neighborhood across generations and refugee status in France (top panel) and Sweden (bottom panel)

Notes: G3 are excluded from these analyses, as the French survey did not collect information on immigrant grandparents' refugee status. G4+ provide the reference group (indicated by the horizontal line). The baseline model (hollow markers) controls for age and age squared. The parental SES model (full markers) additionally controls for parental education, parental employment status, and household income. For France, weighted coefficients are reported. Standard errors are clustered at the family unit.

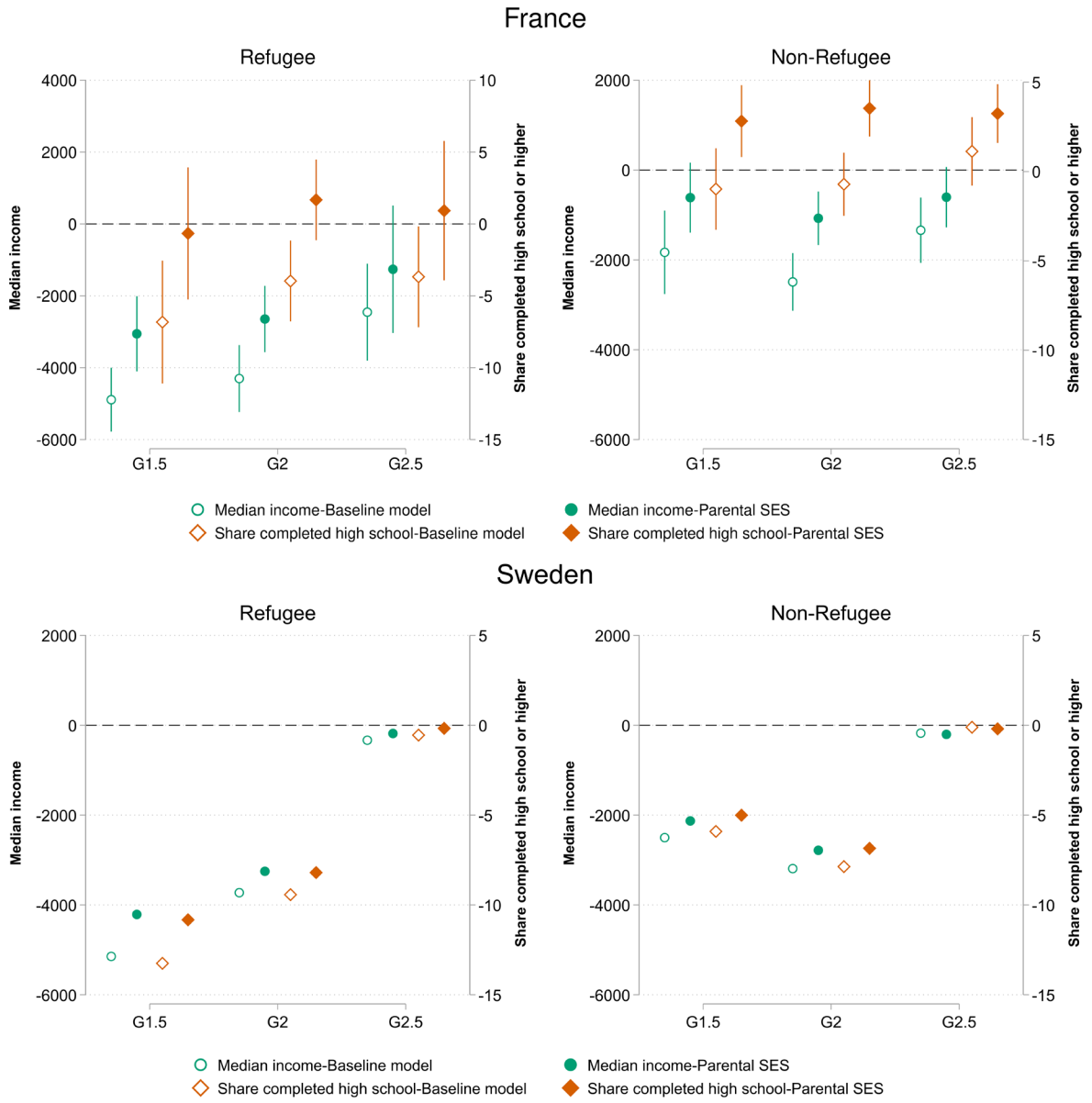

Figure A7 Coefficients from OLS regressions estimating the median income and share of the population with completed high school or higher in the childhood neighborhood across generations and refugee status in France (top panel) and Sweden (bottom panel)

Notes: G3 are excluded from these analyses, as the French survey did not collect information on immigrant grandparents' refugee status. G4+ provide the reference group (indicated by the horizontal line). The baseline model (hollow markers) controls for age and age squared. The parental SES model (full markers) additionally controls for parental education, parental employment status, and household income. For France, weighted coefficients are reported. For Sweden, Swedish crowns are converted to Euros. Standard errors are clustered at the family unit.

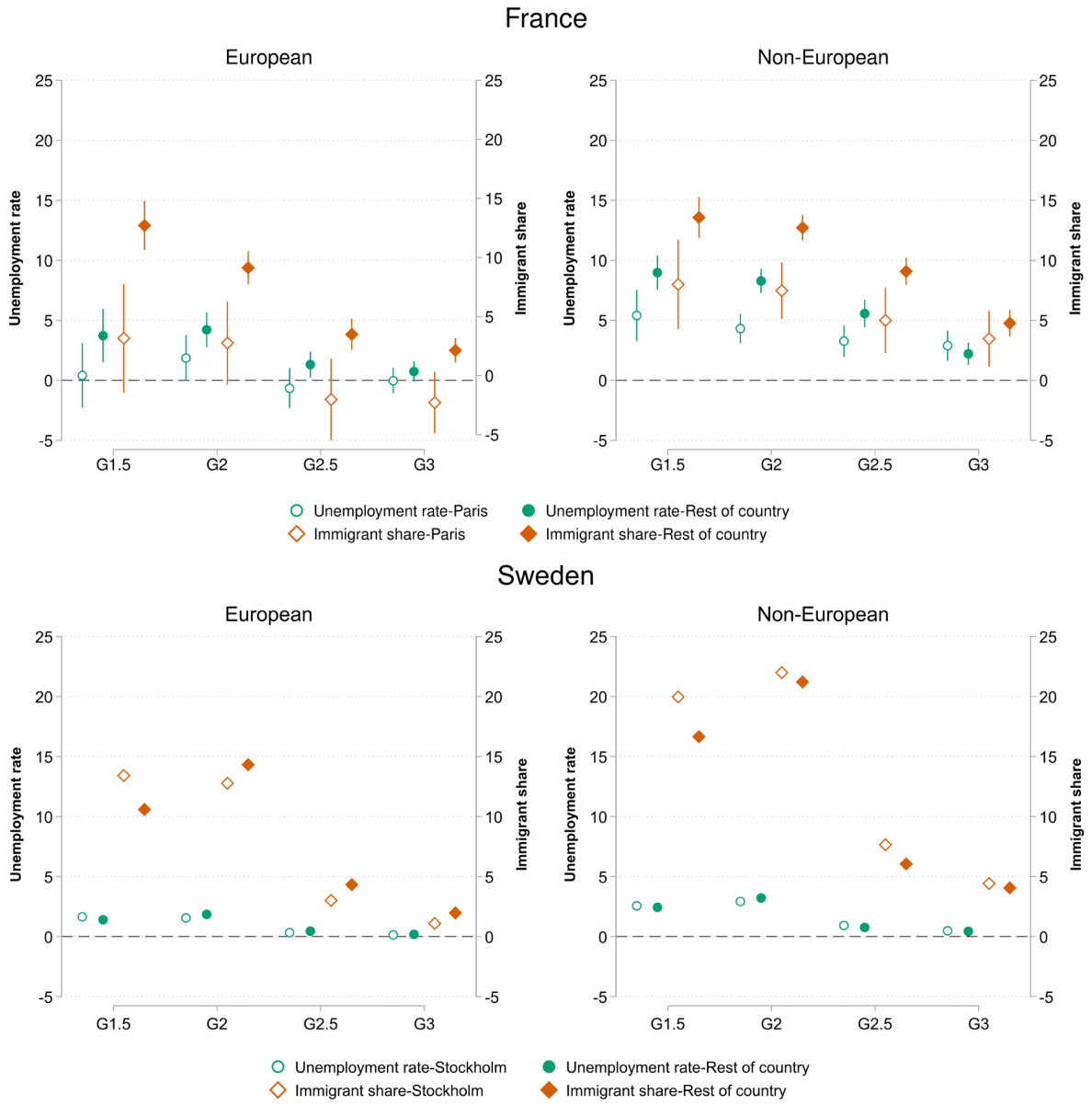

Figure A8 Estimates from OLS regressions on the unemployment rate and immigrant share in the childhood neighborhood across generations and origin groups, stratified by capital region and the rest of the country in France (top panel) and Sweden (bottom panel)

Notes: G4+ provide the reference group (indicated by the horizontal line). The Paris/Stockholm model (hollow markers) provides estimates for the capital regions. The rest of the country model (full markers) provides estimates for all other parts of France/Sweden. All models are commensurate to the parental SES model and control for age and age squared, parental education, parental employment status, and household income. For France, weighted coefficients are reported. Standard errors are clustered at the family unit.

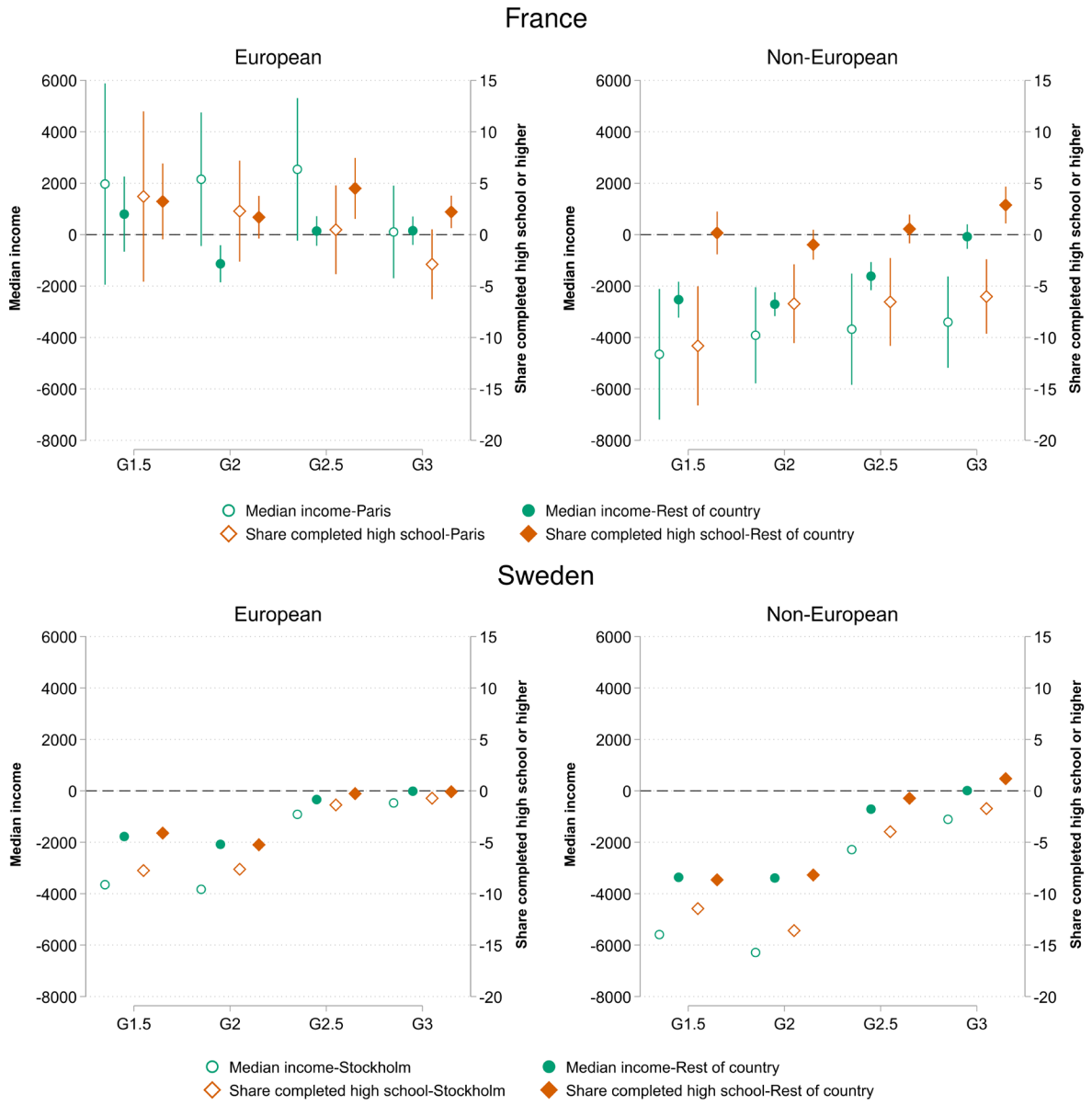

Figure A9 Coefficients from OLS regressions estimating the median income and share of the population with completed high school or higher in the childhood neighborhood across generations and origin groups, stratified by capital region and the rest of the country in France (top panel) and Sweden (bottom panel)

Notes: G4+ provide the reference group (indicated by the horizontal line). The Paris/Stockholm model (hollow markers) provides estimates for the capital regions. The rest of the country model (full markers) provides estimates for all other parts of France/Sweden. All models are commensurate to the parental SES model and control for age and age squared, parental education, parental employment status, and household income. For France, weighted coefficients are reported. For Sweden, Swedish crowns are converted to Euros. Standard errors are clustered at the family unit.

Table A1 Top countries of birth of individuals, their parents, and grandparents

		France					Sweden			
		Ego	**Non-native parent(s)**	**Non-native grandparent(s)**			**Ego**	**Non-native parent(s)**	**Non-native grandparent(s)**
G1.5	European	Other EU c.[a]	-	-	G1.5	European	Poland	-	-
		Portugal	-	-			Norway	-	-
		Romania	-	-			UK	-	-
		Italy	-	-			Germany	-	-
		UK	-	-			Denmark	-	-
	Non-European	Morocco	-	-		Non-European	Syria	-	-
		Algeria	-	-			Somalia	-	-
		Middle East	-	-			Iraq	-	-
		South Asia[c]	-	-			Eritrea	-	-
		Congo	-	-			Afghanistan	-	-
G2	European	France	Other EU c.[a]	-	G2	European	Sweden	Yugoslavia	-
		France	Portugal	-			Sweden	Bosnia[d]	-
		France	Romania	-			Sweden	Poland	-
		France	Germany	-			Sweden	Romania	-
		France	Belgium[b]	-			Sweden	Finland	-
	Non-European	France	Morocco	-		Non-European	Sweden	Iraq	-
		France	Algeria	-			Sweden	Somalia	-
		France	Turkey	-			Sweden	Turkey	-
		France	Tunisia	-			Sweden	Lebanon	-
		France	South Asia[c]	-			Sweden	Iran	-
G2.5	European	France	Portugal	-	G2.5	European	Sweden	Finland	-
		France	Other EU c.[a]	-			Sweden	Norway	-
		France	Poland	-			Sweden	UK	-
		France	Italy	-			Sweden	Poland	-
		France	Belgium[b]	-			Sweden	Denmark	-
	Non-European	France	Algeria	-		Non-European	Sweden	Thailand	-
		France	Morocco	-			Sweden	Chile	-
		France	Tunisia	-			Sweden	Iran	-
		France	Turkey	-			Sweden	Turkey	-

		France	Cameroun	-			Sweden	USA	-

Continued

Table A1 Continued

		France					Sweden		
		Ego	**Non-native parent(s)**	**Non-native grandparent(s)**			**Ego**	**Non-native parent(s)**	**Non-native grandparent(s)**
G3	European	France	France	Portugal	G3	European	Sweden	Sweden	Finland
		France	France	Spain			Sweden	Sweden	Denmark
		France	France	Italy			Sweden	Sweden	Germany
		France	France	Germany			Sweden	Sweden	Norway
		France	France	Poland			Sweden	Sweden	Yugoslavia
	Non-European	France	France	Algeria		Non-European	Sweden	Sweden	Turkey
		France	France	Morocco			Sweden	Sweden	USA
		France	France	Tunisia			Sweden	Sweden	Chile
		France	France	Turkey			Sweden	Sweden	Iran
		France	France	Laos			Sweden	Sweden	Morocco
G4+		France	France	France	G4+		Sweden	Sweden	Sweden

[a] Other EU c. refers to other European countries (a residual category).
[b] Belgium includes Belgium, Luxembourg, and the Netherlands.
[c] South Asia includes Inidia, Pakistan, Sri Lanka, among others.
[d] Bosnia refers to Bosnia and Herzegovina.

Table A2 Weighted coefficients from OLS regressions estimating the unemployment rate in the childhood neighborhood across generations and origin groups in France

	European		Non-European	
	(1)	(2)	(1)	(2)
Generations (ref. G4+)				
G1.5	3.46***	3.01**	9.20***	7.55***
	(1.01)	(0.95)	(0.58)	(0.62)
G2	3.92***	3.21***	7.36***	5.99***
	(0.63)	(0.63)	(0.36)	(0.40)
G2.5	0.68	0.59	5.33***	4.51***
	(0.49)	(0.46)	(0.45)	(0.44)
G3	0.39	0.50	2.70***	2.24***
	(0.39)	(0.36)	(0.37)	(0.37)
Child characteristics				
Age at interview	-0.01	0.02	0.02	0.05
	(0.10)	(0.09)	(0.08)	(0.07)
Age at interview squared	-0.01	-0.01	-0.01	-0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Parental socioeconomic status				
Parental education (ref. primary)				
Secondary education		-1.42*		-1.76**
		(0.72)		(0.56)
Tertiary education		-1.82**		-2.44***
		(0.64)		(0.49)
At least one parent is employed		-2.97*		-2.69***
(ref. neither is employed)		(1.21)		(0.71)
Household income/100,000		-2.23***		-2.69***
		(0.50)		(0.50)
Constant	11.78***	16.99***	11.70***	17.35***
	(0.52)	(1.31)	(0.44)	(0.90)
R^2	0.02	0.09	0.17	0.23
N	5,528	5,528	15,619	15,619

Notes: Standard errors (clustered at the family-unit) in parentheses. Data are from authors' calculations.

* p < .05; ** p < .01; *** p < .001

Table A3 Weighted coefficients from OLS regressions estimating the immigrant share in the childhood neighborhood across generations and origin groups in France

	European		Non-European	
	(1)	(2)	(1)	(2)
Generations (ref. G4+)				
G1.5	12.08***	12.03***	15.34***	15.55***
	(0.98)	(0.96)	(0.89)	(0.88)
G2	10.01***	10.40***	15.66***	15.84***
	(0.80)	(0.80)	(0.48)	(0.48)
G2.5	4.53***	4.60***	11.11***	11.25***
	(0.66)	(0.65)	(0.57)	(0.56)
G3	2.05***	2.11***	8.03***	8.18***
	(0.53)	(0.52)	(0.71)	(0.68)
Child characteristics				
Age at interview	-0.37*	-0.41*	-0.32*	-0.35*
	(0.17)	(0.17)	(0.15)	(0.14)
Age at interview squared	0.01	0.01	0.01	0.01
	(0.01)	(0.01)	(0.01)	(0.01)
Parental socioeconomic status				
Parental education (ref. primary)				
Secondary education		-0.82		-1.61*
		(0.80)		(0.65)
Tertiary education		-0.25		-1.24*
		(0.67)		(0.53)
At least one parent is employed		-0.76		-1.24
(ref. neither is employed)		(1.11)		(0.73)
Household income/100,000		4.49***		3.64***
		(1.15)		(1.11)
Constant	8.72***	7.81***	8.46***	9.15***
	(0.85)	(1.37)	(0.74)	(1.08)
R^2	0.10	0.13	0.35	0.36
N	5,528	5,528	15,619	15,619

Notes: Standard errors (clustered at the family-unit) in parentheses. Data are from authors' calculations.

* p < .05; ** p < .01; *** p < .001

Table A4 Coefficients from OLS regressions estimating the unemployment rate in the childhood neighborhood across generations and origin groups in Sweden

	European		Non-European	
	(1)	(2)	(1)	(2)
Generations (ref. G4+)				
G1.5	1.61***	1.48***	2.88***	2.46***
	(0.02)	(0.02)	(0.01)	(0.01)
G2	1.91***	1.78***	3.31***	3.13***
	(0.02)	(0.01)	(0.01)	(0.01)
G2.5	0.41***	0.42***	0.86***	0.83***
	(0.01)	(0.01)	(0.01)	(0.01)
G3	0.20***	0.17***	0.49***	0.48***
	(0.01)	(0.01)	(0.01)	(0.01)
Child characteristics				
Age in 2019	-0.03***	-0.02***	-0.04***	-0.03***
	(0.01)	(0.01)	(0.01)	(0.01)
Age in 2019 squared	0.01***	0.01***	0.01***	0.01***
	(0.01)	(0.01)	(0.01)	(0.01)
Parental socioeconomic status				
Parental education (ref. primary)				
Secondary education		-0.94***		-0.47***
		(0.02)		(0.02)
Tertiary education		-1.32***		-0.89***
		(0.02)		(0.02)
At least one parent is employed		-0.71***		-0.54***
(ref. neither is employed)		(0.03)		(0.02)
Household income/100,000		-0.05***		-0.06***
		(0.01)		(0.01)
Constant	2.56***	4.44***	2.60***	3.89***
	(0.01)	(0.03)	(0.01)	(0.03)
R^2	0.09	0.12	0.29	0.31
N	1,561,093	1,561,093	1,544,242	1,544,242

Notes: Standard errors (clustered at the family-unit) in parentheses. Data are from authors' calculations.

* p < .05; ** p < .01; *** p < .001

Table A5 Coefficients from OLS regressions estimating the immigrant share in the childhood neighborhood across generations and origin groups in Sweden

	European		Non-European	
	(1)	(2)	(1)	(2)
Generations (ref. G4+)				
G1.5	12.83***	12.14***	19.34***	17.77***
	(0.10)	(0.10)	(0.07)	(0.08)
G2	14.87***	14.31***	23.76***	23.13***
	(0.09)	(0.09)	(0.07)	(0.07)
G2.5	4.61***	4.58***	7.88***	7.77***
	(0.05)	(0.05)	(0.06)	(0.06)
G3	2.39***	2.27***	5.98***	5.92***
	(0.03)	(0.03)	(0.09)	(0.09)
Child characteristics				
Age in 2019	-0.19***	-0.17***	-0.23***	-0.21***
	(0.01)	(0.01)	(0.01)	(0.01)
Age in 2019 squared	0.01***	0.01***	0.01***	0.01***
	(0.01)	(0.01)	(0.01)	(0.01)
Parental socioeconomic status				
Parental education (ref. primary)				
Secondary education		-5.24***		-2.14***
		(0.14)		(0.11)
Tertiary education		-6.52***		-3.47***
		(0.14)		(0.11)
At least one parent is employed		-3.48***		-1.83***
(ref. neither is employed)		(0.15)		(0.12)
Household income/100,000		-0.12***		-0.17***
		(0.02)		(0.03)
Constant	13.76***	23.22***	13.92***	18.73***
	(0.03)	(0.19)	(0.03)	(0.14)
R^2	0.14	0.15	0.36	0.37
N	1,561,093	1,561,093	1,544,242	1,544,242

Notes: Standard errors (clustered at the family-unit) in parentheses. Data are from authors' calculations.

* p < .05; ** p < .01; *** p < .001

Table A6 Weighted coefficients from OLS regressions estimating the median income in the childhood neighborhood across generations and origin groups in France

	European		Non-European	
	(1)	(2)	(1)	(2)
Generations (ref. G4+)				
G1.5	845.92	1122.77	-3797.66***	-2159.39***
	(848.89)	(694.74)	(431.41)	(406.71)
G2	-242.75	629.03	-3068.61***	-1695.67***
	(581.55)	(538.65)	(329.28)	(314.20)
G2.5	1635.41*	1687.81**	-2078.23***	-1270.57***
	(703.58)	(641.56)	(388.83)	(365.79)
G3	501.97	487.48	-695.50*	-216.57
	(384.03)	(315.65)	(291.51)	(271.50)
Child characteristics				
Age at interview	-46.95	-111.64	-49.54	-103.78
	(101.96)	(92.19)	(81.73)	(74.37)
Age at interview squared	2.22	5.15	2.79	5.43
	(4.62)	(4.21)	(3.70)	(3.40)
Parental socioeconomic status				
Parental education (ref. primary)				
Secondary education		238.24		661.07*
		(376.52)		(334.28)
Tertiary education		1365.20***		1687.93***
		(343.98)		(288.65)
At least one parent is employed		324.75		406.82
(ref. neither is employed)		(767.85)		(453.80)
Household income/100,000		5842.51***		5390.53***
		(880.07)		(630.05)
Constant	22975.08***	19223.89***	22934.48***	18992.13***
	(532.44)	(892.53)	(454.49)	(629.69)
R^2	0.01	0.21	0.06	0.22
N	5,528	5,528	15,619	15,619

Notes: Standard errors (clustered at the family-unit) in parentheses. Data are from authors' calculations.

* p < .05; ** p < .01; *** p < .001

Table A7 Weighted coefficients from OLS regressions estimating the share with completed high school or higher in the childhood neighborhood across generations and origin groups in France

	European		Non-European	
	(1)	(2)	(1)	(2)
Generations (ref. G4+)				
G1.5	2.84	4.12*	-4.14***	1.03
	(1.91)	(1.78)	(1.18)	(1.11)
G2	2.03	4.97***	-1.54	2.80***
	(1.28)	(1.15)	(0.92)	(0.84)
G2.5	6.22***	6.17***	-0.16	2.34*
	(1.54)	(1.27)	(1.06)	(0.93)
G3	2.45*	2.39**	2.63*	4.03***
	(1.05)	(0.82)	(1.03)	(0.85)
Child characteristics				
Age at interview	-0.56	-0.75**	-0.47	-0.63**
	(0.32)	(0.27)	(0.26)	(0.23)
Age at interview squared	0.02	0.03**	0.02	0.03**
	(0.01)	(0.01)	(0.01)	(0.01)
Parental socioeconomic status				
Parental education (ref. primary)				
Secondary education		1.69		2.90**
		(1.16)		(0.99)
Tertiary education		6.93***		7.36***
		(1.04)		(0.86)
At least one parent is employed		0.21		0.15
(ref. neither is employed)		(2.38)		(1.36)
Household income/100,000		16.27***		15.17***
		(2.41)		(2.52)
Constant	50.25***	38.27***	49.77***	37.78***
	(1.60)	(2.70)	(1.39)	(1.85)
R^2	0.02	0.24	0.01	0.20
N	5,528	5,528	15,619	15,619

Notes: Standard errors (clustered at the family-unit) in parentheses. Data are from authors' calculations.

* p < .05; ** p < .01; *** p < .001

Table A8 Coefficients from OLS regressions estimating the median income in the childhood neighborhood across generations and origin groups in Sweden

	European		Non-European	
	(1)	(2)	(1)	(2)
Generations (ref. G4+)				
G1.5	-1993.33***	-1746.85***	-4443.47***	-3565.42***
	(27.84)	(27.83)	(16.48)	(24.02)
G2	-2566.84***	-2197.08***	-3933.93***	-3432.63***
	(23.41)	(23.22)	(17.62)	(20.07)
G2.5	121.25***	27.32	-480.35***	-400.24***
	(19.74)	(18.87)	(18.70)	(18.59)
G3	182.17***	291.61***	761.37***	793.11***
	(13.30)	(12.70)	(33.64)	(32.22)
Child characteristics				
Age in 2019	106.81***	79.36***	105.29***	81.14***
	(2.57)	(2.63)	(2.60)	(2.69)
Age in 2019 squared	-5.97***	-4.16***	-5.56***	-3.99***
	(0.14)	(0.13)	(0.14)	(0.13)
Parental socioeconomic status				
Parental education (ref. primary)				
Secondary education		1459.87***		491.40***
		(32.78)		(23.32)
Tertiary education		3568.80***		2440.28***
		(35.82)		(25.39)
At least one parent is employed		771.53***		659.31***
(ref. neither is employed)		(45.39)		(27.84)
Household income/100,000		285.82***		319.55***
		(54.60)		(61.41)
Constant	22760.61***	19142.01***	22728.87***	20250.56***
	(10.79)	(52.37)	(10.97)	(39.74)
R^2	0.03	0.10	0.14	0.20
N	1,561,093	1,561,093	1,544,242	1,544,242

Notes: Standard errors (clustered at the family-unit) in parentheses. Swedish crowns are converted to Euros. Data are from authors' calculations.

* p < .05; ** p < .01; *** p < .001

Table A9 Coefficients from OLS regressions estimating the share with completed high school or higher in the childhood neighborhood across generations and origin groups in Sweden

	European		Non-European	
	(1)	(2)	(1)	(2)
Generations (ref. G4+)				
G1.5	-4.86***	-4.29***	-11.16***	-8.85***
	(0.07)	(0.07)	(0.05)	(0.06)
G2	-6.30***	-5.37***	-9.91***	-8.61***
	(0.06)	(0.06)	(0.05)	(0.05)
G2.5	0.46***	0.20***	-0.74***	-0.55***
	(0.04)	(0.04)	(0.04)	(0.04)
G3	0.11***	0.39***	1.75***	1.85***
	(0.03)	(0.03)	(0.07)	(0.06)
Child characteristics				
Age in 2019	0.08***	0.02**	0.11***	0.05***
	(0.01)	(0.01)	(0.01)	(0.01)
Age in 2019 squared	-0.01***	-0.01	-0.01***	-0.01***
	(0.01)	(0.01)	(0.01)	(0.01)
Parental socioeconomic status				
Parental education (ref. primary)				
Secondary education		4.27***		1.99***
		(0.09)		(0.07)
Tertiary education		9.77***		7.12***
		(0.09)		(0.08)
At least one parent is employed		1.42***		1.33***
(ref. neither is employed)		(0.11)		(0.08)
Household income/100,000		0.48***		0.55***
		(0.09)		(0.10)
Constant	80.04***	70.87***	79.87***	73.22***
	(0.02)	(0.13)	(0.03)	(0.11)
R^2	0.03	0.14	0.16	0.23
N	1,561,093	1,561,093	1,544,242	1,544,242

Notes: Standard errors (clustered at the family-unit) in parentheses. Data are from authors' calculations.

* p < .05; ** p < .01; *** p < .001

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