RESIDENTIAL SEGREGATION AND INTERGENERATIONAL SOCIAL MOBILITY
EVIDENCE FROM SWEDEN
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INTRODUCTION
Intergenerational social mobility is a crucial component in a society with equality in life chances. A large number of studies have examined the prevalence of social (im)mobility in different contexts and over time (Solon, 1999; Hout and DiPrete 2006; Jäntti et al. 2006; Hertz et al. 2007; Black and Devereux 2011; Hout 2015). Often biological factors and social context are listed as mechanisms of why social immobility is so common (Björklund et al. 2005; Black and Devereux 2011).

Even if a number of studies have focused on the geographical context in order to explain social immobility, research is yet to understand how different social contexts may have differential effects on the social mobility of children from different backgrounds. This study addresses this kind of heterogeneity, by studying how geographical context throughout childhood is linked to intergenerational social mobility. The main purpose is to investigate how exposure to high-income adults during childhood is related to the probability of upward intergenerational social mobility. The overarching question can be summarized as follows: If we compare two children with identical home situations, but where one child is exposed to adults who have more resources than those that the other child is exposed to, is this increasing this child's probability of upward social mobility? We use Swedish population registers in order to follow 700,000 individuals born in 1978-1984, from early childhood until they turn 28. We examine how residential context change during childhood, and how this in turn is associated with income and education when aged 28.

BACKGROUND
A growing body of research has attempted to identify how neighborhoods can help explain social (im)mobility (Page and Solon 2003a; 2003b; Raaum et al 2006). Despite quite minor average effects, the neighborhood has been argued to be of paramount importance for the children who are the most vulnerable (Solon 1999 s.1794). In Solon’s (1999) research overview, the neighborhood's importance for social mobility was listed as a priority for future
research. In the research that focuses on how social mobility is associated with the neighborhood or other dimensions of the social context, the focus has almost always been on how social context can explain the existence of a social immobility. In this study we instead address how the degree of social mobility differs between different social contexts. This research field is much less developed.

Some related studies do exist. Chetty and colleagues (2014) investigated how the degree of social mobility differs between various US regions, and how this in turn is linked with the other attributes in the areas. They found great heterogeneity in the level of upward social mobility across the United States. Areas with high upward social mobility are characterized by low residential segregation, low income inequality, better schools and greater family stability (Chetty et al. 2014). Chetty and Hendren (2015) continued this line of work by examining whether these effects are causal, through studying the effects of the time of exposure for the new context for those who moved to a new area of residence. They concluded that a substantial fraction of the differences in outcomes remain, net of selection into regions. Rothwell and Massey (2014) used the PSID and census data to study the role of neighborhood effects on social mobility. They found that neighborhood income have about half the effect on the future income compared to the income of the parents.

**DATA AND METHODS**

Our analyses are based on a combination of anonymized Swedish register data retrieved from servers located at Statistics Sweden. We study all individuals who were born 1978-1984 and who lived in Sweden when they were 28 years of age (in robustness checks we focus on the 1978-80 cohorts in order to measure income later, at age 32). We link the main respondent (hereinafter referred to as ego) to his or her parents, through the Multi-Generation Register and construct parental income as the average income from work of both biological parents when ego was aged 6-10 years. Information about ego’s income is constructed as income from work when aged 28 and (in robustness checks) average income between ages 30-32. This information is derived from the Swedish income and taxation register. Ego’s education is measured when s/he is aged 28 and the parents’ education is measured in 1990, when ego is 6-12 years old. Together, the two measures provide a nicely complementary picture of the link between social context and social mobility.

To construct measures of geographical context, in an initial step we use SAMS area (Small Area Market Statistics) of residence as our geographical unit. Sweden consists of approximately 8000 SAMS areas. We have data from 1990 and onwards, which means that
we can follow the youngest cohort from age 6. In a next step, we will use the coordinates of 
where the individual is residing each year (with 100m² accuracy) in order to construct 
individualized neighborhoods on the income and education of the parents of ego’s K nearest 
same-age-neighbors (Östh et al. 2014; Andersson and Malmberg 2014). 
We will use a number of techniques in order to test the causality of our results. This is crucial, 
since individuals are not randomly exposed to different social contexts, and it is likely that 
children who are exposed to a more favorable social context than other children from the 
same background have parents who have traits that are also more favorable than the average. 
An estimate of the social context is therefore likely to capture both a ”true” effect of social 
context, and a selection effect. We are inspired by Chetty and Hendren (2015) and will study 
how the age when moving to a certain kind of neighborhood matters for future outcomes. If 
effects are causal, the time spent in the area should increase the effect the area has on later 
income/education. We will also compare siblings exposed to different social contexts, to take 
into account undetectable family characteristics that both influence the likelihood of exposure 
to a given context and the probability of social mobility. 

PRELIMINARY RESULTS 
Our analyses are still at an early stage. As an initial step we perform OLS regressions on 
ego’s cohort-specific income percentile age 28, by the income percentile of the SAMS area of 
residence when ego was aged 6-18 years old. The analyses are performed separately for each 
age and separately by parental income quintile and we control for birth cohort. The 
coefficients from these regressions are presented in Figure 1. 
Preliminary findings indicate that residing in a more affluent SAMS area when growing up is 
associated with greater earnings when aged 28. The effect from area of residence increases up 
until the age of 18. We see some differences in the effect by parental income quintile. 
Individuals from the two lowest quintiles (as well as the highest quintile) are consistently 
slightly more affected by their area of residence than individuals from the 3rd and 4th quintile. 
In a next step we will construct individualized neighborhoods based on coordinates of 
residence. We will also compare individuals who stay in the same place throughout their 
childhood with those who move to areas of different compositions. We will study how the 
time of exposure matters for later outcomes, and estimate sibling fixed effects models.
Figure 1. Ordinary Least Squares regressions on income percentile when aged 28 by SAMS level income percentile when ego is aged 6-18. Separate analyses by age and parental income quintile. Coefficients.

REFERENCES


