Essays on Ethnic Segregation and Economic Outcomes
Contents

Acknowledgments

Introduction

Essay 1: Ethnic Segregation, Tipping Behaviour, and Native Residential Mobility

Acknowledgments

Several people have contributed in various ways to this thesis. First and foremost, I would like to thank my supervisors, Mats Hammarstedt and Lina Andersson, for their encouragement, support and guidance. Mats and Lina have always believed in me and taken their time to provide detailed comments that have greatly improved my work.

I have also benefited greatly from the advice and support from my colleagues at the Department of Economics and Statistics at Linnaeus University. In particular I would like to express my gratitude to the opponent at my final seminar, Magnus Carlsson, for valuable suggestions that improved the final content of this thesis. I would also like to direct a special thanks to Luca Fumarco, my office roommate in Växjö, for surviving the first year together and for all the interesting discussions about everything from research to football.

I also wish to express my appreciation to all my other co-workers at the School of Business and Economics at Linnaeus University. Thanks to all of you with whom I have shared coffee breaks and lunches during my years in Växjö. Especially I thank the people who have always gladly joined me in the discussions of the latest major (important) sport events.

I spent my first year as a PhD student taking courses in Gothenburg. During this time several people contributed to making my stay there more enjoyable. I am grateful for the support and friendship of the doctoral students at the Department of Economics at the University of Gothenburg. I would also like to give a special thanks to Anja for great teamwork in managing the econometric labs, and for all the fun times and the way you unconditionally invited me to your home. I am also grateful to Sofia and Emil for hosting me and for numerous dinners during my time in Gothenburg.

Finally, I would like to thank all my friends and my family for helping me occasionally keeping my mind on other things than research. I owe great gratitude to my parents, Ann-Cathrine and Sören, and to Magnus, Lovisa and Sofia for offering their unconditional support and reminding me of all the fun things in life. Last but not least, I am fortunate to have Johan as a constant source of comfort. Thank you Johan for always believing that I can accomplish something great!

Växjö, January 2013
Emma Neuman
Introduction

Researchers have noted that the immigrant population in several countries tends to be spatially concentrated. This pattern is seen both in the US and in European countries; Sweden is no exception. There is a large literature on the reasons for and economic consequences of ethnic segregation. However, the knowledge about the dynamics of ethnic segregation and, then especially, the role of the native population in the segregation process has been less explored. Essay 1: “Ethnic segregation, tipping behaviour, and native residential mobility” contributes to the literature by increasing the knowledge of the role of the native population in the process of ethnic segregation. The paper applies a tipping model and studies tipping behaviour in the residential mobility of the native population in Sweden between 1990 and 2007. The tipping framework has not been previously applied to a European context. Further, we investigate if tipping behaviour is related to an increased out-migration of natives (native flight) and/or to decreased in-migration of natives (native avoidance). The results show that the growth in native population in a neighbourhood discontinuously drops once a neighbourhood’s immigrant share exceeds the identified tipping point and, that this process is connected to both native flight and native avoidance.

There is also a large body of literature examining the consequences of ethnic segregation on the socio-economic outcomes of first-generation immigrants. However, the literature on the effects of ethnic segregation on native-born children is sparse. Essay 2: “Ethnic Residential Segregation and the Economic Outcomes of Second-generation immigrants and Children of Natives in Sweden” focuses on second-generation immigrants and analyses the association between immigrant and ethnic group concentration in childhood neighbourhood with economic outcomes in adulthood. We analyse four outcomes -- earnings, unemployment, reliance on income support and educational attainment -- and include both short- and long-term effects. In addition we analyse the association between immigrant concentration in childhood neighbourhood and the economic outcomes of native children, which has not been addressed in the research to date. The results show that second-generation immigrant children residing in a neighbourhood that contains a large share of co-ethnics might benefit from this in adulthood; however if the neighbourhood contains a large share of immigrants from other ethnic groups this could be negative for future economic outcomes. Moreover, the results indicate that the economic outcomes of natives are negatively affected by immigrant...
concentration. Finally, the results highlight the importance of including time dynamics in an analysis of the effect of childhood neighbourhood ethnic composition on economic outcomes.

1. Ethnic residential segregation in Sweden

Until the mid-20th century, Sweden was characterized by an ethnically homogenous population. In 1940 only 1 per cent of the people residing in Sweden were immigrants. With a large inflow of labour-force migrants until the mid-1970s, the immigrant population grew, reaching 7 per cent in 1970; among them approximately 90 per cent had immigrated to Sweden from another European country. Today this is no longer the case; in 2013 the foreign born population has doubled and now amounts to about 14 per cent of the total population. In addition, the share of immigrants originating from countries outside Europe has increased and, in 1970 about 36,000 inhabitants in Sweden had non-European background, while in 2010 the comparable figure was about 630,000, nearly 18 times higher.

The change in the ethnic composition of the Swedish population has not implied that all areas in Sweden today are more immigrant-dense. Firstly, there is a tendency for immigrants to live in metropolitan areas, mainly in Sweden's three largest cities: Stockholm, Gothenburg and Malmo. Secondly, certain neighbourhoods within cities are nearly entirely populated by people who were born abroad or whose parents were parents born abroad (Bråmå, 2006a). Nordström Skans and Åslund (2010) show that between 1985 and 2006 the immigrant share in the neighbourhood for the average immigrant rose from 26 to 40 per cent, while the same numbers for the average Swede increased from 14 to 18 per cent. This implies that the ethnic residential segregation in Sweden spans over ethnicity in the sense that immigrants from different countries concentrate in certain areas, rather than forming many ethnic clusters. The pattern of a residential segregation characterized by the division of the native population and different immigrant minority groups is not unique to Sweden, but is the general picture in many Western European cities (Bråmå, 2006b).

In the US, ethnic residential segregation is characterized by the tendency for natives and immigrants to reside in different neighbourhoods and, by substantial segregation among ethnic groups (Borjas, 1995). In addition, in the urban parts of the US black-white segregation is extensive (Cutler and Glaeser, 1997). Even though Sweden does not have ethnic enclaves to the same extent as the US there is still a tendency for immigrants with similar ethnic background to reside in the same neighbourhoods. Nordström Skans and Åslund (2010) show
that in Sweden immigrants have around five times more neighbours from the same ethnic group in relation what would be expected from that group’s relative size in the population.

2. Why do we observe ethnic residential segregation?
Several reasons for ethnic residential segregation have been put forward in earlier research. It has been linked to preferences and constraints, and been connected to both individual choices and larger societal dynamics. To start with, there is a possibility that ethnic clustering is self-chosen, i.e. that individuals that share ethnic, cultural or religious background prefer to reside alongside each other. There are several plausible reasons for why this would actually be rational in terms of possible advantages from ethnic clustering. For instance immigrants living in their own communities can avoid discrimination from natives, and can benefit from better information on job openings and have a larger social network (e.g. Borjas, 2000; Edin et al., 2003). Patacchini and Zenou (2012) show that ethnic networks matters for employment outcomes in the UK. They find that a higher ethnic group share implies that an individual is more likely to find a job through social contacts. Åslund (2005) show that immigrants in Sweden tend to relocate to more immigrant-dense areas as their time in Sweden increase. Moreover, a study by Nordström Skans and Åslund (2010) indicates that lack of information is not a reason for why immigrants in Sweden choose to reside in immigrant-dense areas. These studies indicate that ethnic residential segregation in Sweden might have a self-chosen component.

Another explanation for ethnic residential segregation takes its starting point in the behaviour of the majority group, rather than in unconstrained choices by the minority group. This hypothesis states that ethnic residential segregation is enforced and thus involuntary. Members of minority groups can be forced to remain in certain areas and denied entry to the host society and full assimilation (Bråmå, 2006b). Involuntary segregation that is detrimental to African Americans has been discussed extensively in the US literature (e.g. Massey and Denton, 1993). The passage of fair housing laws in the US has not changed the pattern of blacks and whites living in different areas, which might indicate that discrimination by whites is still prevalent (Yinger, 1995). Similarly, in Sweden there is evidence for discrimination on the housing market against people with Muslim names (e.g. Ahmed et al., 2010; Ahmed and Hammarstedt, 2008). This implies that it is possible that the ethnic residential segregation in Sweden is partly explained by the native population’s attempts to exclude immigrants from certain neighbourhoods. Furthermore, it is possible that the behaviour of the majority
population could have consequences for ethnic segregation in other ways, in the sense that members of a majority group would avoid or leave areas in which the percentage of minorities is rising. This potential explanation for the segregation has been discussed extensively in the literature on racial segregation in the US (e.g. Goering, 1978; Frey, 1979; Marshall, 1979; Clark, 1992; Quillan, 2002; Card et al., 2008). In the European case this explanation has received less attention. Bråmå’s (2006a) descriptive study, however, investigated the importance of native mobility to the growing immigrant concentration in Sweden. The findings indicate that the mobility pattern of the native population in Sweden is a factor in the increased segregation of the native and immigrant populations in Sweden.

It is important to keep in mind that segregation can be related not only to shared ethnicity, but also to similarities in socio-economic and/ or demographic profile within an ethnic group. Andersson (2007) notes that immigrants in Sweden tend to be younger than natives and to have lower incomes. According to Andersson (1998, 2007) this implies that immigrants tend to be over-represented in rental apartments and thus demography can explain why areas with a large share of rental housing contain many immigrants. Similarly, Nordström Skans and Åslund (2010) argue that families with children and elderly couples are likely to have different residential preferences and that low-income families are restricted in their location choice since they do not posses the same resources as high-income families. If immigrants have a different age profile, family size and income position, demographics rather than ethnicity can explain the choice of residence. However, Bråmå et al. (2006c) argue that socio-economic and demographic factors cannot fully explain the degree of ethnic residential segregation in Sweden, in the sense that immigrants tend to be over-represented in areas where rental housing is the dominant tenure form. The authors offer three possible explanations for this. First, the unexplained difference could be due to that some key socio-economic variables are omitted since they are unknown to the researcher. Secondly, immigrants and natives might have different preferences in terms of neighbourhood characteristics and tenure form. Finally, it is possible that immigrants face difficulties on the housing market, either because of institutions and rules disfavouring immigrants or by direct discrimination. So far, the research regarding the Swedish case is scarce, but Ahmed et al. (2010) and Ahmed and Hammarstedt (2008) provide evidence for that the last explanation is at least part of the total explanation.
3. What are the consequences of ethnic residential segregation?

The relationship between the ethnic and social composition of an area and the socioeconomic outcomes of its inhabitants has been extensively studied (e.g. Borjas 1995, 2000; Case and Katz, 1991; Cutler and Glaeser, 1997; Edin et al., 2003; Wilson, 1987). However, there has been an ongoing debate over the direction of the effect when it comes to the consequences of clustering of minority populations. For immigrants, residing in an ethnically segregated area can a priori have both positive and negative effects on their economic outcomes. On the one hand, it has been argued that the immigrant population’s acquisition of host country skills is slowed down by residence in an immigrant-dense area. On the other hand, a high concentration of immigrants and, then especially of immigrants with a similar ethnic background, can yield a larger labour market network and reduce possible discrimination against the immigrant population. We will proceed by discussing these arguments for possible benefits and costs of ethnic residential segregation more at length.

Research on ethnic segregation has provided good arguments for that residing near other immigrants can have positive effects on the labour market outcomes of immigrants. For instance, ethnic residential segregation can foster the creation of ethnic networks, which might improve immigrants’ labour market outcomes through various mechanisms. Edin et al. (2003) suggest that immigrants residing and working in an ethnic enclave\(^1\) can avoid discriminatory behaviour by employers, which would have been the case on the national labour market. Moreover, immigrants might gain in the sense that they are better informed about job openings when people in close proximity have the same background (e.g. Borjas, 2000; Edin et al., 2003), a pattern that is supported by the findings for UK by Patacchini and Zenou (2012). In the Swedish case it is reasonable to believe that these mechanisms, if prevalent, might be important since the labour market is characterized by substantial ethnic workplace segregation (see Åslund and Nordström Skans, 2010).

Apart from the possible labour market benefits from ethnic residential segregation, it is possible that the consumption possibilities increase for immigrants who reside alongside their co-ethnics. Chiswick and Miller (2005) argue that there are “ethnic goods,” consumption

---

\(^1\) An “ethnic enclave” is a number of individuals from the same ethnic group (most often country of origin) residing in a certain metropolitan area, city, municipality or neighbourhood. However an “ethnic enclave” could also indicate a measure of the ethnic group’s size relative to the whole population in an area or in relation to the share of this ethnic group in the population in a larger unit; see Cutler, Glaeser, and Vigdor (1999) for a discussion of different ethnic segregation measures.
characteristics that are common for immigrants or ethnic groups but not for the native population. The authors mean that ethnic goods are easier to provide if the pool of potential customers nearby is large and then the cost of the goods is also reduced by economics of scale. Thus, immigrants might benefit both in terms of being able to consume ethnic goods and in terms of lower prices for these goods if residing in a more immigrant/ethnic dense area.

Furthermore, hypotheses based on human capital externalities arising as a consequence of ethnic segregation has been discussed in the literature (Borjas, 2000; Cutler and Glaeser, 1997; Edin et al., 2003). A situation where many natives and immigrants reside in different neighbourhoods, yielding an increased ethnic segregation might also imply less socioeconomic segregation. It is possible that immigrants with high income and/or high educational attainment have positive spill-over effects on their less affluent neighbours (Cutler and Glaeser, 1997).

However, the literature has also identified the possible cost of ethnic segregation. Early US research suggested that racial segregation could be harmful for blacks (e.g. Massey and Denton 1993; Wilson, 1987). Cutler and Glaeser (1997) suggest that one explanation for this pattern is that residents of a minority-dominated neighbourhood acquire fewer skills and develop values that are not in line with those of mainstream society. For immigrants it is reasonable to expect that less interaction with natives will limit the acquisition of host country skills and thus hamper assimilation into the host society (Edin et al., 2003). The rate of assimilation in the host society can also slow down because immigrants living in immigrant-dense areas learn to rely on welfare from their cohabitants. Wilson (1987) argued that poverty was reinforcing itself by welfare culture spill-over in the American inner cities. Bertrand et al. (2000) suggest that networks can provide more information on the possibility of using welfare than on filling job vacancies. In this sense ethnic networks can actually hinder assimilation and encourage welfare dependence.

Lack of proficiency in the host country's language is often considered the main drawback of ethnic segregation. This is supported by Lazear (1999), who finds that immigrants have a higher probability of becoming fluent in English if they reside in a community with fewer co-residents from the same country. He argues that minority groups that are successful in acquiring skills in the native language and culture face better opportunities on the labour market because of more potential trading partners. Similar results for the US are found by
Chiswick and Miller (2005). Moreover, Borjas (2000) suggests that lack of skills might also lead to reluctance to accept employment outside the ethnic environment and/or lack of information about the national labour market.

Furthermore it is possible that it is not a lack of willingness to move to job opportunities, but rather discriminatory treatment in the housing market and/or lack of resources to move that creates worse employment outcomes for people who live in ethnically segregated areas. If ethnic residential segregation is enforced rather than voluntary, from the perspective of the minority group, there might be a spatial mismatch between where minority group members and where available jobs can be found (e.g. Ihlanfeldt and Sjoquist, 1998; Kain 1968). Moreover, a larger immigrant concentration could be connected to lower quality of local amenities; this appears to be the case both in the US and Sweden (e.g. Cutler et al. 2008 for the US; Andersson, 1998 for Sweden). These secondary effects, on for instance the quality of schools, can explain some of the negative effects of ethnic segregation on economic outcomes.

Ethnic residential segregation has been almost exclusively viewed from the ethnic minority group’s perspective and the large body of literature about its effect on economic outcomes stemming from ethnic segregation is considered mainly in terms of minority group outcomes. Still there is evidence that in the US whites leave neighbourhoods that have reached a certain share of black residents (Card et al., 2008). What is the rationale behind this? Research indicates that whites have prejudices against having black neighbours and blacks' association with poverty, social problems and crime, induce whites to avoid black neighbourhoods (e.g. Farley et al., 1994; Zubrinsky, 2000). Andersson (1998) argue that natives have similar reasons for leaving immigrant-dense areas; a higher immigrant concentration might have negative secondary effects on schools and other social institutions and some natives might prefer not to have immigrant neighbours. He adds that native children might be negatively affected by a reduction in school quality and difficulties with socialisation. Native children raised in very immigrant-dense areas might also have difficulties in learning their native language even though they have native-speaking parents.

The empirical evidence on the effects of ethnic residential segregation has shown a large variation both in sign and magnitude. Here we will not summarize all results, but focus on the Swedish case and other relevant studies. Studies for Denmark and Sweden have investigated
the effect on earnings of refugees from living in an ethnic enclave using quasi-natural experiments (e.g. Edin et al., 2003; Damm 2009). The main result is that residing in enclaves improves earnings for refugees; in Sweden this appears to be true for those with low skills. Beaman (2012) however notes the importance of including dynamics in the sense that increased ethnic enclave size might benefit some cohorts while others might lose. She finds that an “increase in the number of network members who arrive in the U.S. one year prior to a newly arrived refugee lowers his probability of being employed” and on the contrary an “increase in the number of network members who have two years’ tenure in the U.S. increases the employment probability”. Borjas (2000) analyses how ethnic enclaves can explain why immigrants in the US from different national groups show different rates of economic assimilation. In comparison to the studies mentioned earlier, Borjas (2000) is not restricted to the impact of ethnic residential segregation on refugee immigrants. He shows that the rate of wage growth is negatively related to ethnic residential segregation; in other words, residing in an ethnic enclave slows down wage growth. However, Cutler et al. (2008) find that earnings of young first-generation immigrants in the US are positively related to ethnic concentration.

From an integration perspective it is important to investigate if the effects of ethnic residential segregation on labour market outcomes are persistent over generations. The literature on this question is scarcer in relation to studies on first-generation immigrants. Skyt-Nilesen et al. (2003) find that the labour market performance of second-generation immigrant males in Denmark is negatively affected by a high concentration of immigrants in their childhood neighbourhood. For second-generation immigrant women, they find the opposite. In a similar study for Sweden, Grönqvist (2006) finds that second-generation immigrant children residing in ethnically dense municipalities during childhood have a lower probability of being unemployed as adults.

The segregation literature has also looked at the relationship between ethnic residential segregation and school achievement. In Sweden this question has been approached in a study by Åslund et al. (2011) of first-generation immigrant children. They show that compulsory school grades are better if the number of individuals with higher educational attainment and of the same ethnicity as the child in the childhood neighbourhood is large. This effect appears to be apparent mainly for boys and people with a non-academic background. They also show that a high number of immigrants in the childhood neighbourhood has rather the opposite
effect and deteriorates grades. Other studies have reached the same conclusions and indicated that immigrant concentration has a negative effect on the grades of native children (e.g. Sulzkin and Jonsson, 2007; Gould et al., 2009a; Jensen and Rasmussen, 2011). For children of immigrants, Grönqvist (2006) finds evidence that second-generation immigrants are less likely to graduate from university if they grew up in a municipality with a large number of co-ethnics. Furthermore, Gould et al. (2009b) show that Yemenite immigrants were more likely to complete higher education if they resided outside ethnic enclaves as children and also that their native-born children had better educational achievement.

It appears to be the pattern both in the US and some European countries that immigrants tend to be more dependent on social welfare (e.g. Barrett and McCarthy, 2008). This has led researchers to ask if the higher welfare use is linked to ethnic residential segregation. In general, co-ethnic networks can both be a substitute for welfare use and encourage it through a social culture that views it as acceptable. Bertrand et al. (2000) find that in the US, welfare use is increasing in the interaction between neighbourhood share of other individuals from the same language group and the country average use of social welfare in this language group. This implies that ethnic clustering will induce welfare participation; at least in the ethnic groups where this is already frequent. Consistent results were found for Sweden by Åslund and Fredriksson (2009). They show that first-generation immigrants have a higher probability to be dependent on welfare payments if residing in a neighbourhood where a large share of their ethnic community is also dependent on welfare. Åslund and Fredriksson (2009) also find some evidence that ethnic networks substitute for welfare use, since the size of the ethnic group affects welfare use negatively, but the effect is rather small.

4. Summary

With this background this thesis adds to the literature by increasing the knowledge about the dynamics of ethnic residential segregation and how it matters for second-generation immigrants. The literature suggests several reasons for ethnic segregation; one of the least explored is the residential mobility of the native population. In Essay 1 we show that the residential mobility of the native population has contributed to a pattern of increasing residential segregation in Sweden between 1990 and 2007. We present evidence that this pattern is connected to natives’ tendency to leave neighbourhoods when they reached a certain threshold value in the immigrant share and that natives avoid moving into such neighbourhoods. Further, there is a large body of literature on the effects of ethnic residential
segregation on economic outcomes of first-generation immigrants. Less is known about how ethnic segregation affects second-generation immigrants. Essay 2 contends that some of the results for first-generation immigrants are also seen for second-generation immigrants. The results support a positive association between a neighbourhood’s ethnic group share and economic outcomes of second-generation immigrants. In contrast, second-generation immigrants who grew up in a neighbourhood with a high immigrant share are affected negatively by this.

References


