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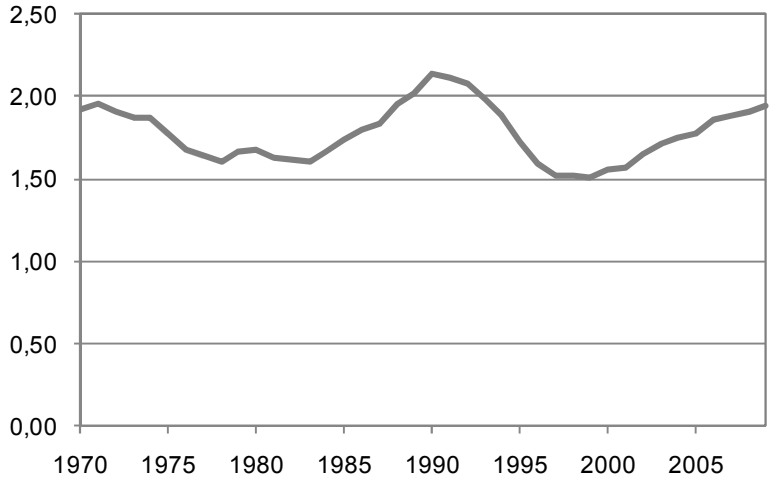
Third-birth-fertility and neighborhood effects – evidence from Sweden

Extended abstract

Fertility in Sweden varies considerably from one period to another and often switches with the economic activity. There are many studies on what stimulates these ups and downs. Several studies have shown that there is a connection between childbearing and labor force participation. Increased employment rate for women is part of the explanation of the fertility decline in the 1970s. In the late 1970s and the 1980s a series of reforms were introduced that were positive for families. Both child care and parental leave was extended and parents also got the right to work part-time and that changed the relationship between childbearing and labor force participation to the reverse. In the 1990's the economic recession lead to a decline in fertility when young women and men had difficulties establishing themselves on the labor market. During the 2000's fertility have increased and the fertility rate in Sweden is one of the highest in Europe. Generous family policies that make the combination of childbearing and work possible for both women and men is often seen as an explanation when Sweden's fertility is compared with other countries.

Total fertility rate 1970-2009



The differences between different regions and areas within Sweden is not as explored as the national differences. The studies that have been done have mostly focused on broad municipality-group differences. For example, the fertility is lowest in the largest cities, whereas higher fertility is found in

smaller municipalites and suburbs. The high fertility in suburbs is often explained by the fact that couples planning for children move to the suburbs.

There are several hypotheses about why fertility differs in different areas. For example, the composition of the population may differ with differences in socioeconomic status between regions and differences in household compositions (eg. more or fewer single person households). Fertility could also differ between areas because of the residential context. Some areas may be seen as more suitable than others for families with children. For example areas with larger apartments, townhouses and villas may attract families with children or couples planning to have children. Another hypothesis is that social attitudes and norms in the area affect the propensity to have children. According to the theory of neighborhood effects people are influenced by the social environment of the residential area.

The purpose of the study is to provide better understanding of neighborhood effects on the propensity to have children. Are women living in areas where families have many children more likely to have a third child than women living in areas where families in general have fewer children? The focus is only on the third child because it is assumed that the influence of social attitudes and norms in the residential area is greater when it comes to the third child than the first and the second. It is assumed that childless don't interact with people in the residential area in the same way as parents with children. Parents with children interact with other parents in the neighbor as they meet at preschool, school and through children's peers. The birth of the second child is not studied because of the strong two-child-norm in Sweden. Almost everyone who has children will have at least two children.

In the study longitudinal register data on all two-child mothers living in Sweden 1997-2008 is used. The risk of having the third child is compared for women living in different types of areas. The areas used in the study are a division of Sweden into smaller homogeneous neighborhoods, SAMS-areas (Small Area Market Statistics). In total Sweden has 9 230 such areas. After excluding areas with less than 20 families around 7 200 SAMS-areas are included in the study for the years 1997–2008. The child-density (average number of children per area) is calculated and the areas are divided into groups depending on child-density and type of municipality that the neighborhood is part of.

The analysis is done with a cox proportional hazard regression model where the risk of having the third child is compared for areas in different types of municipalities and with different child-densities. In the model demographic and socioeconomic factors are being controlled for: type of family, age of woman, foreign background, calendar year, labor market status, level of education, housing size and type of housing.

In a second step, selective migration is controlled for. This is done by dividing women into movers into the neighborhood or non-movers into the neighborhood. This will provide us with understanding about the importance

of selective movers. How much of the differences in third-birth-fertility can be accounted to selective moves?

The third step is to have a geographic perspective. This makes it possible to see the spread of third births over time. A spread of high third birth fertility from area to area might increase evidence for neighborhood effects when it comes to the decision of having a third child.