Immigrant fertility in Sweden
- a cohort perspective

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Background

Immigrant fertility has been a much studied topic the last few years. Much focus has been on
the fertility behaviour after migration. In Sweden this has been studied for example by
is that immigrant with time adopt more and more to the fertility behaviour of the native
born.

Little attention has been given to cohort fertility of immigrants. To our knowledge, there is
an absence of research on completed fertility of immigrants. In this study we attempt to
measure cohort fertility of foreign born women. We do this for six different groups
depending on country of birth: Nordic country, non-Nordic country of the EU27, non-EU27
country in Europe, or in a non-European country grouped by the UN Human Development
Index (HDI), high, middle or low HDI.

Data and method

To estimate cohort fertility we need information both on childbearing before and after
migration. Childbearing after migration is easy to calculate using Swedish administrative
registers covering vital statistics of the entire population. The childbearing for foreign-born
women before migration to Sweden is more problematic. This is estimated by using the
information on foreign born women’s children that have also immigrated to Sweden. In the
Multi-Generations Register there is a link between children and parents. This method has its
limitations. Some foreign-born women may have children outside of Sweden that are not in
the registers of Statistics Sweden. Some children may remain in the country of origin and has
not migrated to Sweden. It is difficult to say how common this phenomenon is, but it is
probably more common among those who immigrate at older ages than at younger. Then the
children might have reached adulthood when the parent/parents migrate to Sweden. It is
also possible that some children have died before the migration event. In some of the
mothers’ birth countries infant mortality is high.

Results

Over the years 2000–2011, female immigrants to Sweden had a Total Fertility Rate (TFR) of
2.10, which was well above the TFR of 1.73 for the same period for women born in Sweden.
In figure 1 we have calculated the fertility rates for the six groups of foreign born by time in
Sweden. Some of the curves have a prominent peak in TFR in the years after immigration,
others do not. In the curves for immigrants from European countries outside the EU, low-
HDI countries and middle-level-HDI countries, there are peaks in the year subsequent to the
year of immigration, followed by a slow decline until we stop accounting. The curves with a peak reflects family formation as a more dominant reason for immigration for these groups of foreign born women.

**Figure 1**
Total fertility rates for female immigrants to Sweden, by single years since immigration and by type of country of birth 2000–2011. Year 0 is the year of immigration.

For year 0 only births recorded as occurring after recorded immigration is included.

In figure 2 we display the estimations on the number of children that women have at the time of migration to Sweden. According to these rough calculations it seems like foreign born women are lagging behind native born when it comes to childbearing. Foreign born women have fewer children than Swedish born women have in the same ages, at least that is applies to ages after 25. Women who immigrated at age 30 had for example 0.7 children on average at the time of immigration. The corresponding number among 30-year-old native-born women was 0.9 children.

**Figure 2**
Average number of children by age. The period 2000–2011. Foreign born women at the time of immigration to Sweden compared with Swedish born women.

Thus, foreign born women have relatively few children at immigration while birth rates are relatively high after migration. To get a full picture of foreign born women we take into account both childbearing before and after migration. This is show in figure 3 for cohorts
born in 1960, 1970 and 1980. As a comparison cohort fertility for Swedish born is also displayed. For some birth country groups cohort fertility is lower for foreign born than for native born. This is true for women born in Nordic countries, women born in non-Nordic countries in the EU27 and for women born in high-HDI countries. For the other birth country groups cohort fertility is higher than for Swedish born, but the differences decreases for later born cohorts.

**Figure 3**
Average number of children by age and by type of country of birth. Women born in 1960, 1970 and 1980
The differences between foreign born and native born are smaller when cohort fertility is compared than if we compare period fertility. For example foreign born women (in total) born in year 1970 had at age 41 an average of 2.02 children. The corresponding number among native born women was 1.92, a difference of 0.10 children per women. Among women born in 1975, the differences between native and foreign-born have declined further. When fertility of foreign born and native born are compared using the total fertility rate, the differences are larger. In 2012 the fertility rate for foreign born was 2.17 children per women, while for native born it was 1.87, a difference of 0.30 children per women.

Discussion

An attempt has been done on measuring cohort fertility for foreign born. The differences between native and foreign born are smaller when using cohort fertility than when using the often used TFR-measure. We must again bear in mind that the figures for cohorts can be underestimated because of possible children that we don’t have knowledge about. Despite this, the study shed at least some light on the quantum and tempo of immigrant fertility.

The next step of this study is to analyse cohort fertility for foreign born women for different parities. We also plan to examine if cohort fertility can be used when doing the assumptions of future births for foreign born. This method is used for Swedish born (Statistics Sweden 2012). A cohort method provides a clearer picture of future development.

References


