

Childbearing of Students – The Case of Sweden

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Background

The growth in educational attainment is one of the most fundamental social changes in Europe at the end of the 20th century. Both the number of students and the years spent in higher education have increased substantially. In an international comparison Sweden has the highest percentage attaining tertiary education of all countries in Europe and one of the highest average ages of students entering university (OECD 2006). Even though many students are in the “childbearing ages”, students have lower fertility than any other group. The low fertility of students has often been taken as evidence of normative rules on the necessity of getting established in adulthood before considering having children (Marini 1985). However, this association may also be reduced to economic arguments as students’ low earnings are generally not perceived compatible with the establishment of a family with children. In the case of Sweden, low earnings also mean a low parental-leave benefit. Students that have not worked before enrolment, and therefore do not qualify for the earnings-related parental insurance, receive a very low amount if they become parents.

The focus of this paper is the childbearing behaviour of students. By means of longitudinal data on individual childbearing and study activity in Sweden between 1986 and 1996 we detect whether the relative propensity of students to become a parent or to have another child has been affected by changes in the student financial aid system. Another aim is to examine the impact of the recession in the early 1990s on student fertility. We also investigate how the effect of being a student correlates with age and income. Finally, we look at whether the income and student status of a partner has an effect on parental couple’s higher order birth risks.

As the Nordic countries in general, and Sweden in particular, often are taken as a reference when discussing the possible impact of various family policies on fertility behaviour, it is valuable to complement previous studies with a study that specifically addresses the circumstances for students. The findings will give some indication whether there is scope for supportive family policies to enhance an earlier onset of childbearing so that it may precede the completion of education – or if instead normative rules on the sequencing of events in young adulthood leave such interventions without any noticeable effect on behaviour. As the possibility of stimulating an earlier onset of childbearing sometimes is suggested as a remedy for falling fertility in Europe (see e.g. Skirbekk, Kohler and Prskawetz 2004), it is essential to examine whether students’ childbearing behaviour indeed may be affected by economic factors.

Data

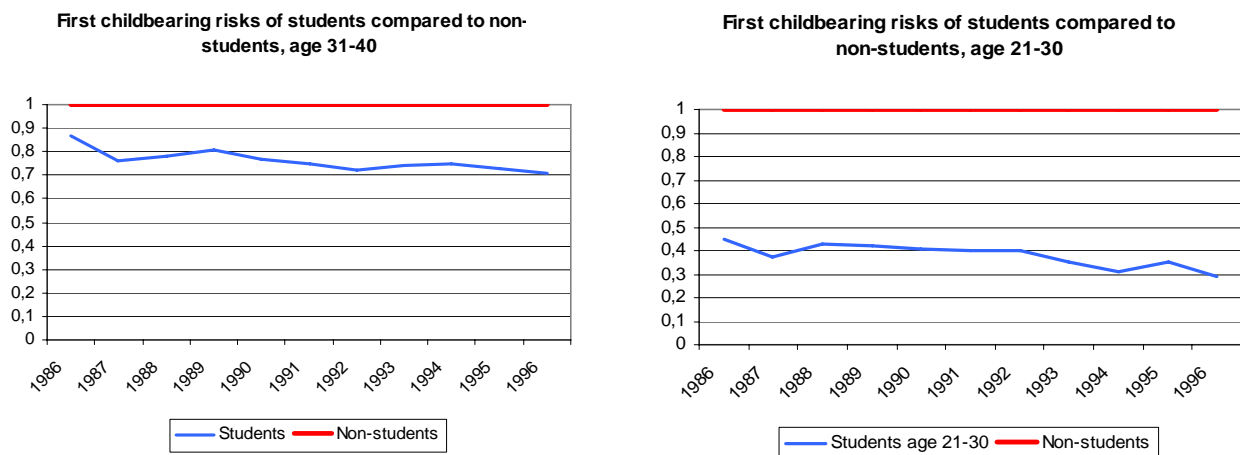
The data used in this paper are derived from the Swedish population register system. Our first step is to look at individual data on women. The data include childbearing histories of all women born in Sweden in 1945-1979 which are linked to information about earnings, study activity and age. The *income* variable is based on earned taxable income the preceding year, with levels 0-59, 60-119, 120-179 and 180 or more, thousand Swedish kronor (SEK, in fixed prices as of 1995) including income replacements during sickness and parental leave. The *student* variable shows whether or not an individual has received any kind of student financial aid (study grant and/or study loan). For first births, *age* is a single-year variable. Age groups 21-30 and 31-40 are treated separately and teenage women are not considered in our study. For second and third births, age is given in groups of ages, from the category 19-21 years to

that of 40-42. For such births we also control for the additional effect of time since the previous births, i.e. *age of the youngest child*. *Calendar year* is included as another variable with single-year periods from 1986 to 1996. Since Swedish registry data do not contain information about cohabitation status of individuals we have no information on earnings of partners (or even the existence of such persons) unless they already have a child together. This means that we can only get a picture of a woman's own study activity and how this affects her childbearing.

However, as soon as a couple has a child in common, we can link them together and examine a couple's risk of higher order births. Our next step is therefore to look at couple's second and third birth risks. Our study population is defined to include all couples, with one or two children, that are registered on the same address. Only couples where both are born in Sweden are included. The couple data cover 1981-1999. Just as in our first data set *income* is here defined as earned taxable income the preceding year and includes income replacements during sickness and parental leave. The income variable is divided into the following two categories: low and medium/high. By *low* income we refer to a yearly income of less than 125,000 SEK and by *medium/high* 125,001 SEK or more (in fixed prices as of 1995). We also control for the effect of *current age* of the woman, *calendar year*, with single-year periods from 1981 to 1999, and *student status*, i.e. whether or not the individual has received any student financial aid.

Results

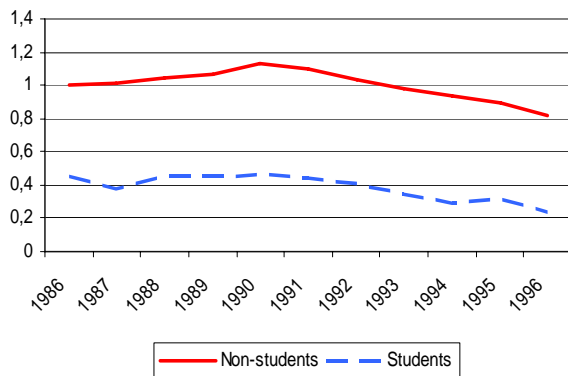
In our study, we show that the student-benefit reform of 1989 apparently did not have a noticeable impact on students' childbearing behaviour. See figure below that shows the relative effect of being a student vs non-student on first-birth fertility in 1986-1996. Perhaps, the policy change rather had an effect on the propensity of parents to enter or continue their education. Another conclusion is that the recession of the early 1990s seems to have affected student's childbearing risks in a very similar way as those of the population in general. Hence, the economic crisis had a negative effect on births risks at all parities but did not effect the relative fertility of students vs non-students.



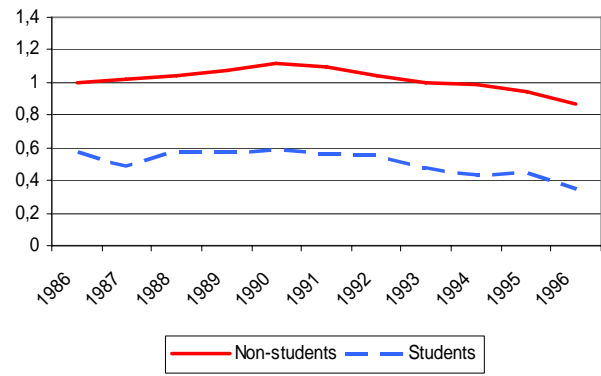
We also show that the propensity to become a mother or to have another child differs strongly by age and income, and that the negative effect of being a student on birth risks is much stronger among the younger age groups. The modifying effect of income is strongest around age 30, which may be interpreted as students under age 25 do not want children yet, while

female students in the older age groups are mainly concerned about their financial situation in their childbearing decisions. The dominating effect of students earnings in some age groups indicates that postponement of childbearing until after finishing education, at least to some extent, also is a matter of economic resources and not only about social norms about the “right” sequencing of life events.

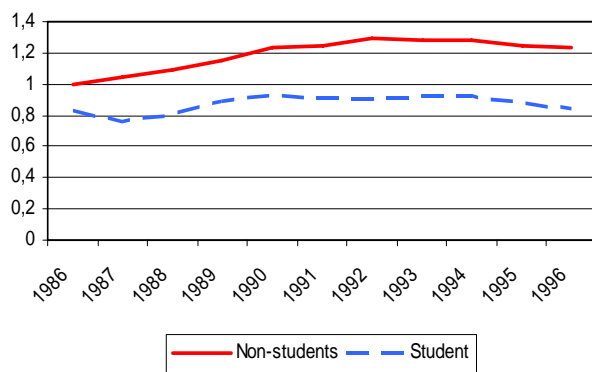
Relative first birth risks for students and non-students age 21-30, *not* standardized for income



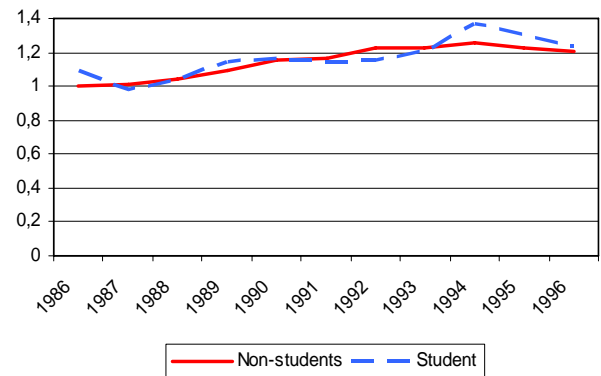
Relative first birth risks for students and non-students, age 21-30, standardized for income



Relative first birth risks among students and non-students, age 31-40, *not* standardized for income



Relative first birth risks among students and non-students, age 31-40, standardized for income



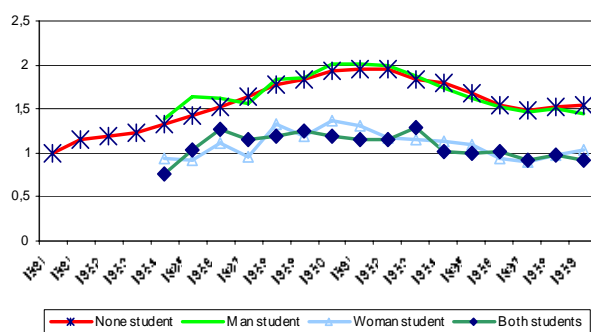
Our couple data show that a couple where neither the mother nor the father is a student and both have medium/high incomes has the highest second birth risks. More surprising is that a couple where the man is a student and the woman is a non-student shows an equally high birth risk, regardless of their income levels. The lowest risks are consistently found among couples where the woman is a student, and their fertility is only marginally affected by the father having a high income. The fertility of couples where both are students have roughly the same low risks as couples where only the woman is a student, which indicates that the student status of the mother is decisive.

When it comes to third birth risks the pattern is somewhat different. Also here, the lowest risks are found among couples where the woman is a student and the highest risks are found among couples where the man is a student and the woman is not. Interestingly, couples where the man is a student has an even higher third birth risk than couples where none of the parents is a student. Moreover, third-birth fertility is higher if the man has a low income than if he has

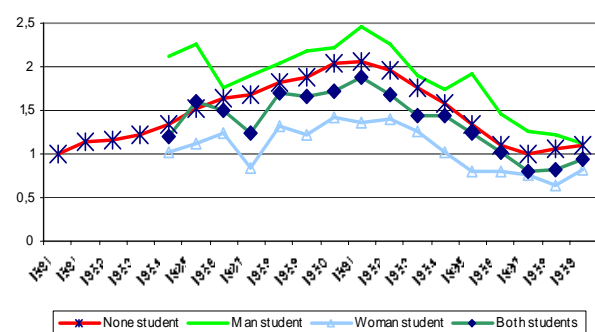
a medium/high income, independent of the woman's earnings. This unexpected result is in line with previous studies on Scandinavia that show that men with a weak labour market attachment, such as low-income earners, students, welfare recipient, or non-participants, have the highest propensity to have a third child (Andersson and Scott 2007).

Even though some of the curves presented below are irregular due to few exposures it is clear that the impact of parents' student status on second and third births is stable over time. Couples who are non-students and couples where only the father is a student have the highest second and third birth risks while couples where the woman is a student, or both are students, have the lowest risks.

Relative risk for a couple of having a second child by gender and student status, standardized for current age and duration since previous birth



Relative risk for a couple of having a third child by gender and student status, standardized for current age and duration since previous birth



References

Andersson, G. and K. Scott (2007) "Childbearing dynamics of couples in a universalistic welfare state: The role of labor market status, country of origin, and gender", *Demographic research*, Special collection 6: *Interdependencies in the Life Course*.

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OECD, Online Education Database: <http://www1.oecd.org/scripts/cde/members/linkpage.html>

Skirbekk, V., H - P. Kohler, A. Prskawetz (2004) "Birth month, school graduation, and the timing of births and marriages". *Demography* 41: 547-599