Parental separation and long-term changes in income: does previous marital status matter?

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Separation is often accompanied by drops in income, especially for women. New literature suggests that these drops are larger for previously married than previously cohabiting women. In this paper, we propose to study parents with young children, over a relatively long time period. This allows us to reduce the heterogeneity of the studied population, put the focus on the child, and avoid just looking at short term changes. We use the Millennium Cohort Study, a nationally representative birth cohort of over 18000 British children followed from shortly after birth until (currently) age 11, to ask: Are there differences in changes in income between previously married and previously cohabiting parents after separation? Can we explain these differentials according to a number of background characteristics? What are the post-separation channels by which recovery occurs, and do they vary by previous marital status?

Using the first four waves of the study, from birth to 7 years of age, early results suggest that, for this group of relatively young children, equivalised household income drops after a parental separation are very large, and while there is a long term recovery effect, it is only slight. Parents who were previously cohabiting do appear to recover slightly quicker than previously married, while staying a disadvantaged group. Re-partnering is the most important post-separation recovery channel, and cohabiting mothers repartner more quickly post-separation, due to their younger average ages, and perhaps because of the difference in the separation process compared to previously married mothers, although this remains to be explored. Future work will include testing different ways to measure financial well being, and to include the latest wave of the study, which will allow us to look at children up to age 11.

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The context within which children are born and raised is changing in developed countries. Children are increasingly born to unmarried parents, and increasingly experience parental separation. In the UK, about half of all births in the UK occur outside marriage, and of those, just over half are to two unmarried cohabiting parents (Panico et al., 2010). Children born to two cohabiting or married parents may experience parental separation, even during early childhood: 20 percent of British children born to married or cohabiting parents experienced their parents' union dissolution during the first five years of life, and the risk of experiencing parental separation is higher for children born to cohabiting rather than married parents (Panico et al., 2010). A large range of literature has concerned itself with the effects of these broad demographic phenomena on family well being, and in particular what happens to households (especially in terms of child outcomes) after parental separation. An important mechanism through which parental separation affects child outcomes appears to be through financial changes.

While we know that a separation is often accompanied by drops in income, especially for women, a relatively new line of literature suggests that drops in income are larger for previously married women than previously cohabiting women. For example, Fisher and Low (2012) find that the income loss following separation was smaller for women who were cohabiting than for those who were married, in a sample of the general population in England and Wales. Similar results have been found in the US (Avellar and Smock, 2005) and the Netherlands (Manting and Bouman, 2006). This is at odds with the general assumption that marriage is protective for women, and their children.

This research so far has based itself on general population samples, including all adults in analyses. This is problematic because analyses are therefore based on very heterogeneous groups (of different ages, at different stages in their life course) and therefore potentially describe heterogeneous processes. The perspective of children has often been ignored in this literature. In this paper we propose to focus on the child's perspective by using a cohort of children born at the same time, and testing whether the change in parental income before and after separation differs by the parents' previous marital status. Furthermore, most

research has only been able to explore relatively short term effects; in this paper we make use of longitudinal measures spanning the first 11 years of children's lives to be able to look at relatively longer term income trajectories. This allows exploring whether the income changes often seen shortly after separation may recover in the medium term, and whether these recoveries different according to previous marital status.

We use the Millennium Cohort Study, a nationally representative birth cohort of over 18000 children born in 2000-2001 and living in Britain shortly after birth. This rich dataset allows controlling for a large number of background characteristics for both the household and the parents. Parents who marry or cohabit are very different groups with different profiles, and these profiles may in themselves affect their post-separation trajectories. While these groups will also be different in terms of a number of unobserved variables, our rich dataset will allow us to control for background characteristics from a number of different domains, such as economic, employment, social and psychosocial variables.

Our key research questions are:

1. How does income evolve over time for households with a young child who separate?
2. Does this evolution differ according to marital status at baseline? Are these effects driven by underlying differences in married versus cohabiting parents?
3. Through which channels does income recovers post separation, and does it vary according to previous marital status?

Data: the Millennium Cohort Study

Our sample is drawn from the Millennium Cohort Study, a recent, nationally representative birth cohort study in the UK. The initial Millennium Cohort Study sample includes more than 19,000 households who had an infant born in the UK during a 12-month period from 2000 to 2001. The sample has a probability design and is clustered at the electoral ward level, with disadvantaged residential areas and areas with a high proportion of ethnic minority population being over represented. This paper will use data from the first five waves of interviews, carried out through home visits when the cohort member was

approximately age 9 months and 3, 5, 7 and 11 years, although early results focus on the first 4 waves. The main respondent is usually the mother (98%); co-resident partners were also interviewed, separately. Non-resident parents were not directly interviewed, although information about them was collected through the main carer interview. The study provides very rich information on child characteristics (age, gender, ethnicity, limiting condition), the child's household and parents characteristics (parity, parental age, education, income, employment status, parental health, household composition), and information on parental separation (time since separation, contact with the non-resident father, the regularity and size of child maintenance payments).

Our analytic sample includes all children present at first 4 waves, with no missing data on the key model covariates, where the mother is always present in the household, and whose parents were married or cohabiting at wave 1 (n=7 644).

Methods

We focus on equivalised income (constructed using the OECD modified scales) to study income across households who experience changes in composition. We compute simple OLS regressions predicting the change in equivalised income, the child is our unit of interest, therefore household income refers to the household the child remains in. Because of how our sample is constructed, this refers to the mother post-separation. Our data is longitudinal, which allows us exploring whether separated parents manage to financially recover after an initial drop in income, and if so, how long recovery takes. To do so, we will measure time from the separation using the following periods: 7 to 5 years before separation; 4 to 3 before separation; 2 to 1 before separation (reference category); 0 to 1 after separation; 2 to 3 yrs after separation; 4 to 7 yrs after separation.

Model 1 measures the evolution of income for those who separate compared to stable households. This model includes a wave effect to identify the period effect, especially as it corresponds to the child's age of the child and takes account of the fact that income naturally increase over time; a dummy to indicate separation over the study period; and a set of dummy indicating time until/since separation.

Model 2 measures the differential effect according to marital status and adds to model 1: a dummy for cohabitation status at baseline; a dummy for the interaction between cohabitation and separation status; and a set of dummies interacting cohabitation status at birth with time since/before separation.

Model 3 adds background characteristics, including maternal age, maternal education, country of residence (England, Wales, Scotland or Northern Ireland), rank of the cohort child, ethnicity and occupational class, and model 4 adds potential post-separation channels for income recovery, which include parental repartnering, mother's employment status, mother's number of hours worked, and whether they live with a grandparent.

Appropriate survey weights will be applied to all analyses.

Early results and further work

Taking the first four waves of the MCS (up to age 7), about 10% of the parents who were married at baseline separate by the child's seventh birthday, against under 22% of those who were previously cohabiting. These two groups have different baseline characteristics: those who were previously married had higher incomes, were more educated, and were less likely to be in routine or semi-routine occupations than the previously cohabiting parents at the first interview (at about 9 months of age). They were more likely to be older at the birth of the cohort member, this may be at least partly reflected in the different parities of these two groups.

Figure 1 shows that children who will experience parental separation already have lower incomes at baseline. The income drop around separation is evident, with households losing on average 30% of their income or about 100 pounds per week, with a small recovery that does not catch up to the stable households, as they show an upward income trend over the study period.

Our first regression model (regression models not shown here) shows that those who will separate were already 20% poorer at the start (before they separate), irrespective of marital status. Compared to the two years before the separation: (1) we notice a *further* drop of 35% in the two years post-separation; (2) income recovers slightly, but 4 to 7 years

after separation couples who separate are still experiencing a drop in income of about 25%. Therefore, at the end of the study period, couples who separate are 47% poorer than those who do not separate. Controls account for a large part of income differences between those who separate versus stable households pre-separation; but less so for the post-separation income differences.

Figure 2 shows that the trends are broadly similar for both those who were previously married and previously cohabiting, but with those who were cohabiting at baseline having overall lower levels of incomes across the study period. Model 2 confirms these trends. Model 2 shows that while cohabitants are on average 18% poorer than married households, the equivalised incomes of cohabitants who separate are not significantly different of those of cohabitants who do not separate, and cohabitants who separate are not significantly different from married couples who separate. *Except that* cohabitants who separate are 10% poorer 1 to 2 yrs before separation than married couples 1 to 2 years before their separation, this may suggest that the timing of the income loss might differ from those who were married.

Introducing baseline controls slightly explains the overall evolution of income for all separating couples, but the income drop seen around the separation remains. The baseline variables explain about half of the overall difference between married and cohabiting households, but the pattern remains and is clearer, with also a suggestion that cohabitants who separate recover quicker on the medium term than married couples who separate.

The final model shows that repartering is an important channel of recovery for all, with no differential effect according to marital status at baseline. However, previously cohabiting mothers are more likely to repartner, as they are younger on average. Therefore this channel explains why cohabitants who separate recover quicker. Working appears to be a less important channel overall, and while previously cohabiting mothers benefit more from work than previously married mothers post-separation, previously married mothers are more likely to work post separation.

Conclusions and further work

Children who experience parental separation also experience large drops in income, which does not fully recover post-separation in the medium term (up to 7 years post separation). Cohabitees appear to recover slightly quicker than previously married mothers, while staying a disadvantaged group. Re-partnering is a strong post-separation income recovery channel, and cohabiting mothers repartner more quickly post-separation, due to their younger average ages, and perhaps because of the difference in the separation process compared to previously married mothers, although this remains to be further explored.

Future work will include testing different ways to measure financial well being, and to include the latest wave of the study, which will allow us to look at children up to age 11, and testing different measures of financial strain. We will consider imputation strategies, to avoid dropping households who don't have complete information (some imputations are already done, notably when the month of separation is missing), and exploring households were the child does not stay always with the mother.

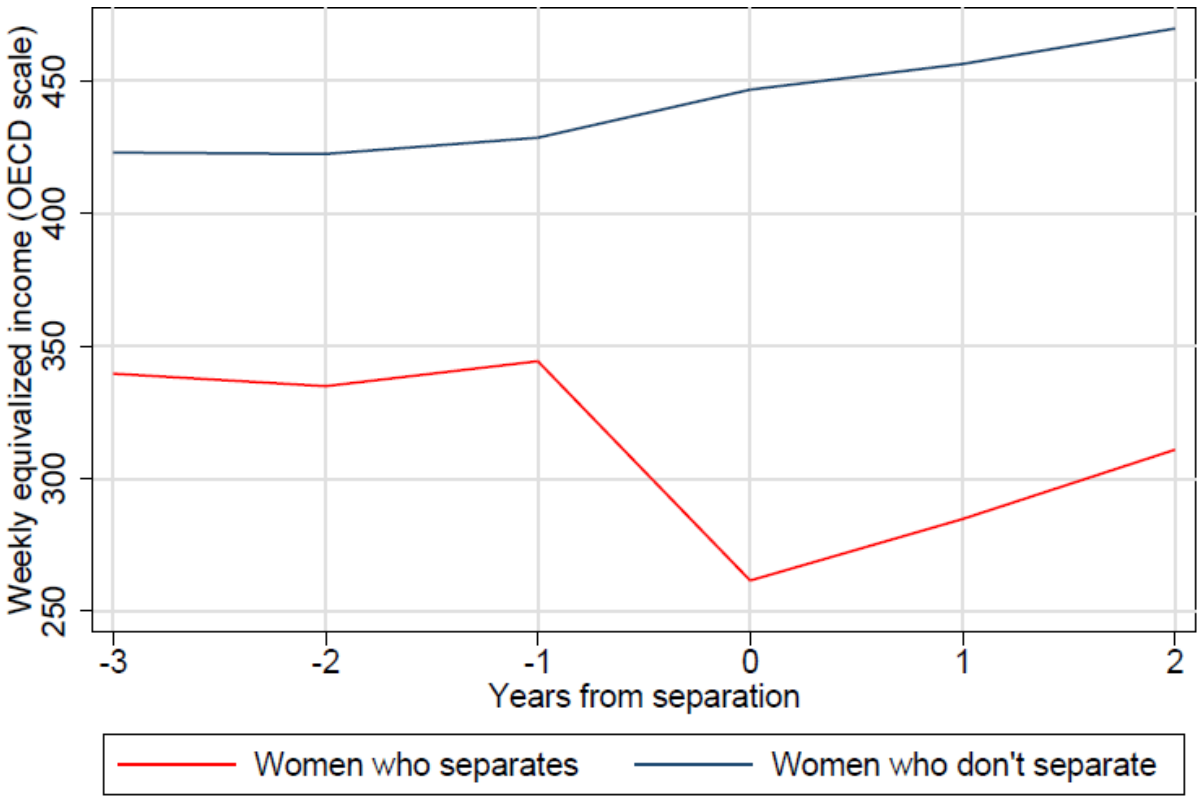

Figure 1: Weekly equivalised incomes for stable two parent households versus two parent households who will separate.
Note: groups of years since separation refer to: -3: 7 to 5 years before separation; -2: 4 to 3 before separation; -1: 2 to 1 before separation (reference category); 0: 0 to 1 after separation; 1: 2 to 3 yrs after separation; 2: 4 to 7 yrs after separation.

Figure 2: Weekly equivalised incomes for stable two parent households versus two parent households who will separate, and by marital status at baseline. Note: groups of years since separation refer to: -3: 7 to 5 years before separation; -2: 4 to 3 before separation; -1: 2 to 1 before separation (reference category); 0: 0 to 1 after separation; 1: 2 to 3 yrs after separation; 2: 4 to 7 yrs after separation.

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