Introduction

In recognition of the interdependence of individuals within couples (Blossfeld and Drobnic 2001, Moen 2003), the main hypothesis of this paper is that fathers' hours of work are partially determined by their earnings relative to their partner and by their partner's labour force participation. That is, the hours that fathers work are determined taking into account their partner's labour market situation relative to their own. This hypothesis is investigated through the answers to a number of sub-hypotheses. First, men who are partnered to women who earn substantially more than they do will reduce their hours of work relative to other men with the same qualifications and experience. Second, men who are equal earners to their partner will reduce their hours of work relative to other men with the same qualifications and experience, but by less than men whose partners earn substantially more than they do. Third, this effect of partner's earnings on father's hours of work differs by fathers' level of education and occupational status. The paper also investigates whether fathers whose partners out-earn them substantially are concentrated in particular occupations or have other characteristics that distinguish them from other fathers.

The exploration of these hypotheses involves testing theories concerning how men and women act to assert their gender identity around the time of parenthood. Men who earn less than their partners are in a situation that goes against the prevailing gender order. If men earn substantially less than their partner they may not reduce their hours of work to compensate for their partner's work participation but may continue to work hours that are as long as men whose partners do not work, or who earn less than them, as an assertion of their gender
identity. An opposing perspective draws on the theories of Gary Becker $(1965,1991)$. In this perspective one would expect that as one partner specialises in paid work (mothers in the case of mothers who out-earn fathers) then the other partner, the father, would tend to reduce his hours in market work and divert more effort to unpaid work.

Previous literature has examined the effect of marriage and having children on men's earnings. Much of this has found that married men experience a wage premium relative to unmarried men. Other studies have found that the effects of having children on men's wages are more important than the effect of marriage, for the UK and Australia (Whitehouse, 2002). Explanations for this effect are found in theories breadwinner role theories, namely that men strengthen their breadwinner role on having children and the employer signal effect, that is that fatherhood as a demonstration of masculinity is prized and rewarded by employers. Lundberg and Rose (2000) find that the effect on earnings of having children differs within the group of fathers: men whose wives worked continuously before and after child birth experienced a lower increase in earnings after childbirth (Lundberg and Rose 2000).

Although a huge body of work has sought to explain women's labour market participation and how it is altered by childbirth and by having children, little work has focussed on men and fathers labour market participation. Men's high rate of labour market participation has justified an assumption that men's labour market experiences are little affected by fatherhood. One study that does take up the issue of men's hours of work and how they are affected by fatherhood is that of Dermott (2006). She finds that fatherhood has little impact on men's hours of work when other factors are controlled. Fathers do work longer hours on average than other men but this can be explained largely by the time in the life course in which men have children coinciding with a period in their labour market. The issue of how decision making on labour market issues for men is linked with fatherhood has so far
received little attention in the UK context. One of the aims of this paper is to explore how and which fathers decision making on labour market, fatherhood and being in a relationship is a unitary process. This is a particularly important issue given women's much improved educational attainment in the UK and mother's increased labour market participation which makes it more likely that more couples in future will be in a situation where they earn equally or where women earn substantially more than men.

Data and Method

The data are drawn from the first three rounds of the Millennium Cohort Survey, a nationally representative sample of babies born in the United Kingdom over a twelve month period starting from 1 September 2000 in England and Wales and 1 December 2000 in Scotland and Northern Ireland. The analysis uses data from the first three sweeps of the survey: sweep 1 occurred between June 2001 and January 2003 when these children were aged about nine months, the second sweep took place when the children were around three years of age and the third sweep took place when the survey children entered primary school, at around age five. The final sample in sweep 1 covered 18,552 families.

The analysis is confined to partnered couples of a male and female partner. The unit of analysis of this study is men's weekly hours of work. We eliminate observations where the father has not responded to the questionnaire. We take into account that not all fathers work by estimating fathers' hours of work using a tobit specification. We exploit the panel nature of the data by estimating a random effects tobitregession of fathers' hours of work.
$\mathbf{P r}\left(\mathbb{( H r} \rrbracket_{2}\left(\llbracket i t \rrbracket^{\top}>\right) 0\right)=\mathbf{P r} \llbracket\left(b X_{1} i t+U_{1} i t>0 \rrbracket\right.$

$$
\begin{aligned}
& H r_{i t}==0 \text { if } H r_{i t} \leq 0 \\
& H r_{i t}=H r_{i t}^{*}=c X_{i t}+V_{i t} \text { if } H r_{i t}^{*}>0
\end{aligned}
$$

Where $H r_{i t}^{\mathrm{B}}$ is fathers' hours of work per week, c is the set of coefficients and $V_{i t}$ is an error term assumed to be normally distributed.

The explanatory variables include father's age, father's age squared, whether the father is married or co-habiting, father's highest educational qualification, age father left education, father's occupational category and whether the father is self employed. The regression also included a set of variables designed to estimate the impact of particular types of couple partnerships. Dummy variables are included to cover if the mother is the main earner (that is her annual earnings exceed the father's annual earnings by 25 per cent) if the mother and father are equal earners (mothers earnings are between 75 per cent and 125 per cent of father's earnings) if the mother is a minor earner (mother earns less than 75 per cent of father's earnings) and if the mother does not work.

## Results

The results show that fathers' hours of work are affected by their earnings relative to their coresident partner. Fathers partnered with a woman who is the main earner work substantially less than other fathers, while fathers who are equal earners with their partners work less than other fathers but more than fathers who earn substantially less, controlling for age and education. Fathers are not as impervious to their partner's working patterns as has been previously suggested. For certain types of fathers their earnings relative to their partner make a substantial difference, suggesting that co-ordination of working patterns can go against established gender norms of working arrangements in couples.

