The influence of wages on parents' allocations of time to child care and market work in the United Kingdom

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Abstract:

We use time-diary data on couples with children from the 2000 United Kingdom Time Use Survey to examine the impacts of own and partner's wages on parents' provision of child care and market work on weekdays and on weekends and holidays. We find that increases in partners' wages increase women's primary care on all days and decrease their market work on weekdays, while increases in women's own wages increase their market work on weekdays. There is little evidence that men's time use responds to changes in their own wages. However, an increase in men's partners' wages increases men's passive child-care time on weekends and reduces their market-work time on weekends.

Keywords Time use - Child care - Wages

Article:

1 Introduction

The wage and employment opportunities for women and men have changed tremendously in recent years, with women's wages and opportunities substantially improving. From 1988 through 2005, the employment rate for women aged 16–59 in the U.K. increased from 64% to 70%; over the same period, real average gross weekly earnings for women employed full-time increased by 68%.[1] Increased market opportunities give women more choice, more independence, and perhaps more bargaining power within households. It is therefore of considerable interest to see how these changes affect women's—and men's—market and nonmarket uses of time, including the time they spend caring for children.

The theory relating time-allocation decisions to wages does not yield clear predictions. In standard unitary preference models of household production, changes in own and partner's wages lead to income and substitution effects and ambiguous predictions about the directions of the relationships with the uses of time (Becker *1981*). The relationships are even more complicated in models that allow for bargaining, such as the collective utility framework (Chiappori *1992*; Browning and Chiappori *1998*) in which couples choose their time allocations to maximize a household utility function that is a weighted average of each partner's individual utility, where the weights may depend on each partner's resources.

These ambiguous predictions have mixed implications for empirical work. On the one hand, the lack of strong or simple predictions makes it harder to test specific theories. On the other hand, the lack of clear predictions increases the need for empirical work to sort out the actual relationships. Predictions notwithstanding, wages remain important to all economic theories of household activities. In standard models, they represent an explicit price on market time and an implicit price on nonmarket time; they also represent potential resources to the household. In newer bargaining models, wages are an important determinant of individuals' bargaining power within the household. Pollak (*2005*), in particular, has made this argument supporting the use of wages rather than actual labor market earnings in tests of these models. Finally, wages are a potential object of policy,

whether directly through mechanisms such as the minimum wage and comparable worth requirements or indirectly through taxes, transfers, and subsidies.

Unfortunately, research that directly examines the effect of wages on child-care time has been hampered by data limitations. A few data sets include accurate information on time use and market opportunities for both parents in a household. However, we have access to an unusually rich data set, the 2000 United Kingdom Time Use Survey (UKTUS), which includes detailed time diary information along with questionnaire data on wages and other personal characteristics for all adult household members. Using these data, we estimate gender-specific multivariate models of the time that parents in couple households each spend in primary child-care activities, passive child-care activities, and market work. The models include controls for both partners' available wages. Because the adults in the UKTUS completed diaries on both weekdays and weekend days, our analyses are further able to distinguish between activities on different days of the week, giving us insights into the timing of activities.

2 Literature review

Estimates of own- and cross-wage elasticities of labor supply for couple households abound (see, for example, Blundell's and MaCurdy's *1999* review). Most of the literature suggests that women's labor supply is more sensitive to changes in own and spouse's wages than men's labor supply. For example, a recent study by Devereux (*2004*) of 1980 and 1990 PUMS data from the U.S. found that labor supply among married women was modestly positively related to changes in their own wages and strongly negatively related to changes in their husbands' wages, while labor supply among married men was essentially unrelated to changes in either their own or their wives' wages. Similarly, an analysis of married British parents by Parera-Nicolau and Mumford (*2005*) found that mothers' labor supply was negatively related to changes in their partner's wages and that fathers' labor supply was only weakly related to changes in their wives' wages. However, the researchers reported a negative relation between mothers' labor supply and their own wages and, in contrast to much of the literature, a strong positive relation between fathers' labor supply and their own wages.

The bulk of the research on household labor supply has been based on recall questions regarding usual hours worked. With the increasing availability of time-diary data, researchers are revisiting these findings and also looking at the relationship between wages and other uses of time. One finding from the new surveys is that estimates of labor supply elasticities may be sensitive to the methods used to collect the underlying data. Klevmarken's (*2005*) analysis of the Swedish Household Panel Surveys revealed that own wage elasticities estimated using weekday time-diary data were larger than those estimated using retrospective annual work hours questions but similar to those estimated from previous-week recall questions. Within the time diaries, Klevmarken also found that the day of the week mattered, with own wage elasticities for weekdays being close to zero but elasticities for weekends being modestly negative for both men and women.

In contrast to the large number of labor supply studies, only a few studies have looked at the effects of husbands' and wives' wages on parents' child-care time, as we propose to do here.[2] Kooreman and Kapteyn (*1987*) used U.S. time-diary data on married couples and found that higher wages for fathers increased, and higher wages for mothers reduced the time mothers spent on child care, although these results were statistically insignificant. They did not find a strong relationship between fathers' provision of care and either fathers' or mothers' wages. Maassen van den Brink and Groot (*1997*) looked at child care, other housework, and market work among working married and cohabiting mothers in the Netherlands. They found that mothers' child care and market work both rose in response to increases in their own wages, but that these uses of time were not significantly related to partners' wages. Hallberg and Klevmarken (*2003*) used Swedish data on dual-earner married and cohabiting couples and estimated models in which each parent's time spent in child care depended on his/her own wages and market hours, paid child care, and the partner's child care and work hours. They found that parents' provision of child care was not directly related to changes in their own wages. However, they found that child-care time was negatively associated with own work hours and positively associated with partners' child care and work hours.

In a study framed as a test of household bargaining power, Friedberg and Webb (*2005*) examined data from the American Time Use Survey to see how couples' time use varied with their relative wages. They reported that wives with relatively high wages enjoyed more leisure time on weekends and spent less time doing chores than wives with low relative wages. Wives with high relative wages also spent less time on weekday child care. Husbands' time use was less sensitive than wives' to changes in wages.

We use recent time-diary data for the UK to calculate the effects of own and partner's wages on the time mothers and fathers spend in child care and market work. In light of previous sociological research (e.g., Nock and Kingston *1988*) and our own research (Kalenkoski et al. *2005*) that shows that different intensities of child-care activities may be important, we distinguish between time spent in primary and passive care activities. Following Klevmarken (*2005*) and Friedberg and Webb (*2005*), our analyses also distinguish between time use on weekdays and weekends/holidays.

3 Data

The data for our empirical analyses come from the United Kingdom Time Use Survey. The UKTUS is a national, household-based study with multiple questionnaire and time-diary components that was conducted in 2000–2001. Each household in the study completed one questionnaire that provided information on household-specific characteristics such as income and family composition. Each household member then completed another questionnaire providing information on personal characteristics such as education, employment status, and earnings. Finally, time diaries were collected for each individual age 8 and older; these identified the primary or secondary nature of activities, the location of each activity, and who else was present during each activity for every 10-min interval during two 24-h periods: one weekday and one weekend day. In sum, the UKTUS obtained 20,981 time diaries from 11,664 people living in 6,414 households.

Of particular interest to us is the relation between time use and market wages within couple households. The individual questionnaire asks respondents to report their net monthly earnings. We construct wage measures by dividing this earning report by the respondent's usual monthly work hours. While this approach is conceptually straightforward, several complications arise. The first is that the underlying earnings information is not observed for everyone in the UKTUS. The second is that wages may be endogenous. For example, a parent may accept a lower wage as a compensating differential for more flexibility and autonomy in the uses of time. Lastly, there may be some misreporting if respondents are not aware of their after-tax earnings or if they fail to account for government subsidies. Because of these problems, we predict wages for all of the men and women in our time-use analysis.

We use two samples of the UKTUS for our analysis. The first is a general sample of adults that is used to estimate selectivity-corrected wage models and to predict potential wages, while the second is a narrower sample of parents in couple households with time-diary information that is used to analyze time use as a function of those predicted wages. Both samples exclude persons who fail to provide complete information on the variables of interest, residents of Northern Ireland (because we lack data on their local unemployment rates), and persons who are younger than age 16 or older than retirement age (65 for men, 60 for women). A small number of individuals who are enrolled in school (367) or in same-sex relationships (7) are also excluded. These exclusions result in a general sample of working-age and work-ready adults used to predict wages that includes 3,330 women and 3,190 men.

The time-diary sample is further restricted to include only married or cohabiting individuals with household children under the age of 18. This sample also omits 402 "incomplete" diaries (diaries that were missing more than an hour of information) and two diaries that contained four or fewer activities for the entire day. Incomplete diaries might underestimate time spent on the activities of interest. More generally, incomplete diaries and diaries with few activity reports are indicative of low quality (Juster *1985*). These exclusions yield a time-diary sample of 1,056 households with 1,062 women and 1,023 men completing 2,012 and 1,931 diaries, respectively.

We focus on three uses of time: primary child care, passive child care, and market work. Primary child-care activities are defined here to include physical care, teaching, playing, talking, escorting, and transporting children living in one's own household. A shortcoming of the UKTUS and many other time-use surveys is that they do not identify time spent caring for own, non-coresident children. Our measure of passive care is constructed by summing up all time spent with children aged 14 and under that is not spent in child care as a primary activity, excluding time spent sleeping, working in the market, or in certain personal care activities.[3] Market-work activities are specified to include first and second jobs, travel related to work (though not commuting time), and lunch and coffee breaks.[4]

The questionnaire components of the UKTUS include many variables that we use as controls in our models. Among these are measures for the parents' marital status, education, age, and health status. There are also controls for age of the youngest child (categorized into 0–3, 4–6, 7–11, or 12–17 years of age), the total number of children, the number of children aged 12–17 (who could themselves provide child care), the number of other adults in the household, and dummies to identify households located in a rural area, households with a disabled child, and households with unearned household income. In addition, there are controls for the region of residence, the season that the diary was completed, and the type of day (weekday, weekend, or holiday) of the diary report. Means and SDs for the time-use outcomes and the full set of explanatory measures for the time-diary sample are reported separately by gender in Table 1. Descriptive statistics for the wage sample, also calculated separately by gender, are reported in Table 5 of the Appendix.

Table 1 Descriptive statistics for variables in time-use samples

Variable	Women		Men	
	Mean	SE	Mean	SE
Outcome measures				
Minutes in primary child care—weekday	104.72	109.79	39.17	65.00
Minutes in primary—child care—weekend/holiday	82.50	105.48	47.85	76.33
Minutes in passive child care—weekday	298.89	243.04	177.25	187.83
Minutes in Passive child care—weekend/holiday	404.71	295.90	338.15	290.22
Minutes in market work—weekday	203.93	222.68	414.54	247.42
Minutes in market work—weekend/holiday	56.35	141.26	108.43	209.34
Explanatory variables				
Cohabiting	0.13	0.34	0.14	0.34
Age	37.32	7.71	39.79	8.15
Respondent has a health problem	0.10	0.29	0.09	0.28
Youngest child age 0–3	0.32	0.47	0.32	0.47
Youngest child age 4–6	0.14	0.35	0.15	0.35
Youngest child age 7–11	0.28	0.45	0.27	0.44
Total number of children	1.85	0.86	1.85	0.86
Number of children 12–17	0.65	0.82	0.63	0.80
Disabled child	0.02	0.14	0.02	0.13
Number of other adults	0.18	0.50	0.17	0.48
Household receives unearned income	0.25	0.43	0.25	0.43
Rural	0.45	0.50	0.45	0.50
Winter	0.21	0.41	0.21	0.41

Variable	Women		Men	
	Mean	SE	Mean	SE
Spring	0.26	0.44	0.27	0.44
Summer	0.25	0.43	0.25	0.43
Partner's age	39.94	8.21	37.16	7.66
Partner has a health problem	0.09	0.28	0.09	0.29
Number of observations	2,012		1,931	

Descriptive statistics calculated from the UKTUS

4 Predicting wages

As discussed above, we use a sample of 3,330 women and 3,190 men to analyze employment and wages and to subsequently predict net wages for the individuals in our time-use sample. A substantial portion of the people in our general sample do not report the information needed to construct the wage measures. The information may be missing for two reasons. First, there is the matter of employment itself—992 women and 623 men in the sample do not work and therefore have no earnings to report. Second, there is some item nonresponse among those who do work. In addition to the observations that are lost for these reasons, we purposefully exclude some other wage reports. Specifically, we drop earnings data for people who are self-employed as their incomes may reflect returns to capital and returns to labor. We also drop observations where the calculations of the net hourly wage are unreasonably high or low. The exclusions for missing data, self-employment, and out-of-range values further reduce the wage sample by 564 women and 964 men, leaving net wage observations for 1,774 women and 1,603 men.

As there are two distinct mechanisms—nonemployment and incomplete or unusable reporting—that lead to missing wage data, we use a two-stage estimation procedure that addresses potential biases from these two sources of selectivity. In the first stage of this procedure, we jointly estimate gender-specific probit models of whether people worked and, conditional on their working, of whether they provided usable earnings information. In the second stage, we estimate gender-specific, selectivity-adjusted log net wage regressions, following Tunali's (*1986*) bivariate correction method.

Coefficient estimates and SEs from the first-stage conditional bivariate probit models are reported in Table 6 of the Appendix. Identification in these models requires that we include some variables in the (conditioning) employment probit that are not included in the (conditional) earnings reporting probit. We expect that characteristics of the partner, including his or her age, education, potential experience, and health, will influence employment outcomes but not reporting behavior, and we specify the models accordingly. For men and women, estimation reveals that the partner's education and health are particularly powerful determinants of one's own employment. The remaining variables, which are included in both equations, include measures for the person's own education, age, potential experience, and health status; dummy variables for region of residence and residence in a rural area; dummy variables to identify cohabiting and single persons and those with some nonlabor income; a measure of the local unemployment rate; dummy controls for the season of the year; and household composition measures that indicate the age of the youngest child, the number of children in the household, the number of children ages 12–17, the number of other adults, and the presence of a disabled child.

The results from the employment models are fairly standard, with the unemployment rate, education, age, and health status being significant predictors for women and men. The presence of young children is an additional significant predictor of women's employment, while relationship status is an important predictor of men's employment. There are fewer significant predictors in the conditional probits for reporting earnings. Education and the number of adults in the household are each significant predictors of reporting for men and women.

The second-stage log net wage specifications include almost all the variables in the reporting probits and two correction terms to account for selectivity associated with employment and the availability of a useful wage report. The dummy variable indicating whether any nonlabor income was received and the number of other adults in the household were excluded to aid in the identification of the selection components. Results, reported in Table 7 of the Appendix, indicate that education, age, potential experience, and geographic location are significant predictors of log net wages.

Our time-use equations incorporate a measure of each partner's predicted log net wage not conditioned on employment or wage reporting status to gauge the impact of each partner's market value of time on household time allocation decisions. To identify the effects of wages on time use, we exclude information on own and partner's education and potential experience, the local unemployment rate, and the region of residence from the time-use models. Education and experience are assumed to impact market productivity, while the unemployment rate and geographic controls are assumed to capture labor market conditions. We also substitute information on the season of year for which the time diary is completed for the season of year for which the wage is reported. In addition to the results that we report, we have also estimated alternative time-use specifications that only rely on potential experience, the unemployment rate, and the regional controls for identification (i.e., specifications that included own and spouse's education as independent variables). Estimates from these specifications were less precise but still consistent with those that we report. Formal tests showed no evidence of problematic overidentification from the education measures. Estimates and test results from these alternative specifications are available upon request.

5 Multivariate analyses of parents' time use

Econometric specification For our multivariate analyses of parents' time spent in primary child care, passive child care, and market work, we face two further statistical challenges. The first is that the reported times spent in each activity are nonnegative with substantial numbers of observations massed at zero. Thus, we need multivariate models that are appropriate for censored-dependent variables. The second challenge involves the estimation of SEs for the model coefficients, which must be adjusted not only for the use of predicted wage variables but also for the use of repeated observations (clustering) for individuals and within households.

To address the censoring in the dependent variables, we estimate standard maximum likelihood Tobit models of the different types of time use. One way to motivate the Tobit specification is to assume that people have preferred notional, or latent, amounts of time that they would like to spend in given activities (time that may be positive or negative). The actual time that people can spend in any activity must, however, be nonnegative. Thus, we observe the latent time if it is nonnegative and a censored value of zero otherwise. Although Tobit models address censoring, they also impose strong restrictions on the relationship between the discrete decision of whether to participate in an activity and the marginal decision of how much time to spend conditional on participation. The models are also sensitive to assumptions regarding the distribution of unobserved determinants of the outcome variable. If either of these specification assumptions is incorrect, estimates from the Tobit model will be biased and inconsistent. For example, Mroz (*1987*) has shown that estimates of married women's labor supply are sensitive to these types of specification issues.

Because of the restrictions and sensitivity of the Tobit model, we also estimate alternative Censored Least Absolute Deviations (CLAD; Powell *1984*) and OLS specifications of our time-use models. The CLAD procedure places much weaker restrictions on the distribution of the unobserved components of the model. However, the procedure is less efficient than the Tobit approach and can only be applied in situations where the majority of observations for the dependent variable are uncensored. We also estimate OLS models. OLS does not address censoring as such. However, the procedure may be preferred in cases where everyone performs an activity, such as passive child care, but does not necessarily perform it every day (Blundell and Meghir *1987*).

To estimate the SEs in all these models, we employ a bootstrapping procedure. In this procedure, we first draw 200 equally sized random samples of households—including all of the employment, wage, and time diary reports for each household—with replacement from our original general sample of households. For each

random sample, we then apply our two-stage wage estimation procedure, use the resulting estimates to predict wages and, finally, estimate multivariate models of time use. For each model, this generates 200 sets of coefficient estimates, which we use as an approximation of the sampling distribution of the estimates.

Tobit estimation results Coefficient estimates, bootstrapped SEs, and marginal effects calculated at the sample means of the explanatory variables for the Tobit models of time use are reported in Table 2. The first four columns list results for the primary care models for mothers on non-holiday weekdays, mothers on weekends or holidays, fathers on non-holiday weekdays, and fathers on weekends or holidays. The middle four columns list similarly arranged results for time spent in passive care, and the final four columns report results for time spent in market work. Coefficient estimates and marginal effects are presented for the log net wages for the person and partner, three indicators for the age of the youngest child, counts of the total number of children and the number of children aged 12–17, an indicator for a disabled child, indicators for health problems for either parent, a count of the number of other adults, and an indicator for cohabitation status. In addition to these variables, the models also include indicators for unearned income and rural residence, controls for season of the year, and quadratic controls for own and partner's age. For brevity, we do not report estimates for these other controls; detailed results are available upon request.

Table 2 Coefficient estimates from Tobit models of time use

Variable	Daily minutes of primary child-care time				Daily minutes of passive child-care time				Daily minutes of market-work time			
	Women		Men		Women		Men		Women		Men	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Own potential log wage	12.5	17.9	−0.5	37.9	6.4	58.7	−51.6	59.2	263.4[a]	27.6	20.2	−190.6
	(17.1)	(22.5)	(23.8)	(28.0)	(41.1)	(58.1)	(49.7)	(80.7)	(66.2)	(134.7)	(54.4)	(139.5)
	10.1	*11.9*	*−0.2*	*18.3*	*5.6*	*51.6*	*−37.7*	*47.9*	*152.9*	*4.8*	*18.4*	*−54.4*
Partner's potential log wage	47.1[b]	76.4[b]	10.4	25.1	10.6	25.2	41.3	110.4[c]	−207.8[a]	155.5	14.5	−208.2[c]
	(21.2)	(30.6)	(20.7)	(21.4)	(52.1)	(62.3)	(41.4)	(61.6)	(72.4)	(152.0)	(50.1)	(123.4)
	38.1	*50.7*	*5.1*	*12.1*	*9.2*	*22.1*	*30.1*	*89.3*	*−120.6*	*27.4*	*13.2*	*−59.4*
Youngest child age 0–3	182.0[a]	229.8[a]	138.0[a]	162.8[a]	329.1[a]	419.1[a]	244.7[a]	429.5[a]	−192.7[a]	−187.8	7.9	84.1
	(18.3)	(26.3)	(21.6)	(20.9)	(45.0)	(55.1)	(44.5)	(61.3)	(67.3)	(136.6)	(51.8)	(125.5)
	156.1	*172.0*	*80.6*	*94.1*	*295.4*	*378.8*	*190.7*	*363.8*	*−103.9*	*−30.3*	*7.2*	*24.8*
Youngest child age 4–6	121.4[a]	146.2[a]	104.1[a]	101.2[a]	202.6[a]	397.9[a]	193.8[a]	420.3[a]	−18.5	6.6	53.4	87.7
	(16.1)	(22.3)	(18.4)	(18.4)	(45.1)	(56.4)	(40.5)	(56.8)	(68.8)	(124.8)	(51.9)	(120.8)
	108.3	*117.2*	*65.9*	*61.8*	*185.2*	*372.6*	*157.8*	*375.7*	*−10.6*	*1.2*	*49.2*	*26.8*
Youngest child age 7–11	72.6[a]	83.5[a]	67.7[a]	65.8[a]	216.8[a]	321.2[a]	180.9[a]	376.9[a]	−14.4	−64.8	33.7	−13.7
	(11.9)	(16.7)	(14.4)	(15.2)	(34.5)	(47.0)	(34.3)	(46.3)	(53.7)	(94.5)	(36.8)	(90.3)
	61.4	*60.1*	*37.3*	*35.5*	*194.6*	*292.3*	*141.3*	*324.7*	*−8.3*	*−10.9*	*30.8*	*−3.9*
Number of children	14.6[b]	0.0	4.9	−0.7	49.5[a]	16.4	26.9[b]	8.7	−65.8[b]	−56.2	−38.4[b]	3.9
	(5.7)	(7.2)	(7.0)	(5.8)	(13.8)	(16.3)	(12.4)	(18.6)	(27.4)	(41.4)	(18.1)	(37.1)
	11.8	*0.0*	*2.4*	*−0.3*	*42.9*	*14.4*	*19.6*	*7.0*	*−38.2*	*−9.9*	*−35.0*	*1.1*
Disabled	67.7[a]	55.8[b]	−13.4	7.0	66.4	33.6	132.0[b]	5.7	−240.1	63.3	−152.2	184.0

Variable	Daily minutes of primary child-care time				Daily minutes of passive child-care time				Daily minutes of market-work time			
	Women		Men		Women		Men		Women		Men	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
child									[a]			
	(20.5)	(21.8)	(54.0)	(23.2)	(53.0)	(73.4)	(55.8)	(76.4)	(89.2)	(253.3)	(97.9)	(163.1)
	59.7	*41.7*	*−6.2*	*3.5*	*59.2*	*29.8*	*107.2*	*4.6*	*−108.2*	*12.1*	*−130.8*	*63.2*
Respondent has a health problem	10.4	10.9	26.6[c]	1.3	−25.4	−18.4	14.3	58.2	−118.6[b]	−15.7	−312.5[a]	−322.0[a]
	(11.2)	(13.1)	(15.8)	(19.0)	(30.0)	(39.5)	(35.7)	(52.1)	(52.3)	(94.7)	(50.4)	(105.7)
	8.5	*7.4*	*14.2*	*0.6*	*−21.8*	*−16.1*	*10.6*	*48.2*	*−62.4*	*−2.7*	*−250.8*	*−68.5*
Partner has a health problem	4.6	−10.0	6.7	13.5	−22.6	−29.8	−27.3	27.0	−166.9[a]	−64.2	−22.7	−12.6
	(16.2)	(16.4)	(11.3)	(13.1)	(36.9)	(46.7)	(26.8)	(44.1)	(63.5)	(94.3)	(39.9)	(76.3)
	3.8	*−6.5*	*3.3*	*6.8*	*−19.4*	*−25.9*	*−19.4*	*22.1*	*−83.6*	*−10.5*	*−20.6*	*−3.5*
Number of children ages 12–17	−16.3[b]	2.2	6.0	−0.8	−2.1	44.6[c]	12.8	26.7	34.7	16.4	−6.9	57.7
	(7.4)	(10.0)	(9.1)	(8.7)	(18.6)	(23.8)	(18.1)	(26.8)	(31.6)	(50.4)	(21.5)	(50.0)
	−13.2	*1.5*	*2.9*	*−0.4*	*−1.8*	*39.1*	*9.3*	*21.6*	*20.1*	*2.9*	*−6.3*	*16.5*
Number of adults	−7.4	−24.9[b]	−10.5	−7.3	−45.8[b]	−110.0[a]	−22.6	−105.7[a]	−78.7[b]	−37.0	−10.3	−5.2
	(7.6)	(11.5)	(9.6)	(12.1)	(21.4)	(29.1)	(19.0)	(31.9)	(33.0)	(57.4)	(21.5)	(54.3)
	−6.0	*−16.5*	*−5.1*	*−3.5*	*−39.7*	*−96.6*	*−16.5*	*−85.4*	*−45.7*	*−6.5*	*−9.4*	*−1.5*
Cohabiting	−21.1[c]	−5.9	−19.8[c]	−12.7	−36.8	−41.3	−28.1	−53.1[c]	8.8	−49.6	−52.7[c]	66.7
	(11.1)	(13.3)	(10.4)	(14.6)	(22.9)	(30.3)	(24.7)	(32.1)	(46.7)	(86.3)	(31.7)	(65.9)
	−16.6	*−3.9*	*−9.0*	*−5.9*	*−31.4*	*−35.8*	*−20.0*	*−42.0*	*5.2*	*−8.3*	*−47.5*	*20.0*

Table reports selected coefficients, bootstrapped SEs (in parentheses), and marginal effects (in italics) from Tobit models of time use. Estimated using data from the UKTUS. Other variables included in all specifications were quadratics in both own and partner's age, a dummy indicating household receipt of nonlabor income, a dummy indicating residence in a rural area, seasonal indicators, and an intercept. A dummy variable identifying holidays is included in the weekend specifications.
[a]Significant at the 1% level
[b]Significant at the 5% level
[c]Significant at the 10% level

The focus of our analysis is on the associations that own and partners' potential net wages have with time use. These are reported in the first two rows of Table 2. The estimates indicate that women in couple households in the U.K. increase their primary child-care time when their spouses' or partners' wages increase. The implied cross-wage elasticities, evaluated at the sample means, are 0.4 for weekday primary care and 0.6 for weekend/holiday care. However, women's primary child-care time is unaffected by increases in their own wages. Men's provision of primary care is unrelated to changes in their own or partners' wages.

The only statistically significant wage coefficient in the passive-care models indicates that on weekends and holidays, men partnered with higher earning women contribute more passive care time. One reason for the general lack of significance of the wage variables in the passive care equations is that passive-care times are highly variable, and so, estimates are accompanied by large SEs.

In the market-work models we find, like much of the extant literature that women significantly increase their market time as their potential wages rise and decrease their market time as their partners' potential wages rise—but only on weekdays. The implied elasticities are 0.7 and -0.6. Neither own nor partner's potential wage affect women's market-work time on weekends. The patterns for men are different. Men's weekday market-work time does not appear to respond to changes in their own or their partners' net wages. However, men's weekend and holiday market work does appear to be possibly negatively related to changes in their own wages (*p* value = 0.17) and is significantly negatively related to changes in their partners' wages. The implied elasticities for these two associations are both −0.5.

Other results indicate that child-care time is strongly related to the age and number of children in the household, as well as the presence of a disabled child. The age of the youngest child in the household has a large and significant positive effect on primary and passive child-care time for both parents on all days. The presence of younger children has a substantially larger effect than older children as, for example, women's weekday primary child-care time is 156 min larger when the youngest child is age 0–3 versus age 12–17 (the omitted/base case in the models). Passive child-care time is universally more responsive in terms of absolute time spent than primary child-care time and more responsive on weekends than on weekdays, but this does not necessarily translate to a larger relative responsiveness as more time is spent on passive child care than on primary child care. Similarly, while women generally are more responsive in an absolute time sense than men to the age of the youngest child, they generally also spend more time on child care than men. This makes the small magnitude of the gender differential for passive child-care time on weekends all the more notable as it suggests that in this case men are somewhat more responsive in relative terms.

By contrast, the age of the youngest child only has a significant impact on market time for women with children ages 0–3 on weekdays. These women work over one and a half hours less in the market on weekdays, and this difference is statistically significant. However, both men and women report less time in employment and more time in passive child care on weekdays the more children there are in the household. The number of children is also positively associated with women's primary child-care time on weekdays, though the effect is small at only 12 min for an additional child. The presence of a disabled child increases the time that women spend in weekday and weekend primary care by almost an hour; it also reduces the amount of time that women spend in weekday market work by over an hour and a half. Disabled children are not significantly associated with men's provisions of primary care. However, disabled children are positively associated with men's weekday passive care, which rises by over an hour and a half. In general, these results are consistent with greater care needs for disabled children.

Health problems on the part of the respondent or his/her partner also impact time use. Own health problems significantly and substantially decrease market-work time for women on weekdays (about an hour) and for men on all days of the week (over 4 h on weekdays and about 1 h on weekends). Men with health problems also report more time on primary child care during weekdays, but the effect is small at 14 min. Partner's health status is not a significant determinant of one's own provision of primary or passive child care. Having a partner in poor health does significantly decrease weekday market work for women (by almost an hour and a half) but not for men.

When we examine the results for older children and other adults in the household, we find that the number of children ages 12–17 decreases by a small amount women's primary child-care time on weekdays. While this result is consistent with older children serving as substitute caregivers, we also find that children 12–17 increase the time women report spending on passive child care on weekends. This latter finding may reflect the different types of care required by older and younger children rather than caregiving on the part of older children. Other

adults in the household have a more substantial impact on time use. The more other adults, the less time either parent spends on passive child care on any day with only the effect for men on weekdays being insignificant. Women also report spending a little less time on primary child care on weekends and substantially less time on the job on weekdays when there are other adults present. In general, the presence of other adults appears to reduce parental time in both primary and passive child care.

Cohabiting parents of both genders spend a little less time on primary child care on weekdays relative to their married counterparts. Cohabiting parents also spend less time in passive care, though the estimated associations are only significant for men's weekend care. Finally cohabitation status is associated with significantly less market work for men on weekdays.

CLAD estimation results We were able to estimate CLAD models for eight of our activity × gender × day-of-week outcomes. For four of the outcomes—men's weekday and weekend primary care and women's and men's weekend market work—there were too few positive observations to obtain estimates. As expected, given the lower efficiency of the CLAD procedure, there were also fewer significant findings among the models that we could estimate. Coefficient estimates and SEs from the CLAD models of time use are reported in Table 3.

Table 3 Coefficient estimates from CLAD models of time use

Variable	Primary child-care time		Passive child-care time				Market-work time	
	Women		Women		Men		Women	Men
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekday
Own potential log wage	−6.5	11.9	−0.7	94.9	−29.2	147.2	325.6[a]	11.8
	(22.3)	(19.5)	(61.3)	(68.8)	(45.5)	(138.8)	(97.6)	(35.5)
Partner's potential log wage	57.2[b]	28.3	−37.5	−33.2	−10.8	−20.8	−312.0[b]	18.5
	(28.0)	(22.7)	(76.5)	(77.6)	(50.0)	(111.8)	(131.5)	(29.8)
Youngest child age 0–3	164.4[a]	169.4[a]	298.4[a]	509.6[a]	258.0[a]	373.6[a]	−270.6[c]	−13.9
	(37.0)	(41.2)	(71.8)	(77.4)	(63.4)	(136.3)	(151.1)	(33.5)
Youngest child age 4–6	112.6[a]	95.7[b]	164.9[a]	522.5[a]	207.9[a]	356.5[a]	−66.8	10.6
	(34.9)	(45.3)	(61.5)	(80.4)	(56.9)	(127.8)	(107.7)	(35.1)
Youngest child age 7–11	59.6[c]	44.9	179.1[a]	439.1[a]	161.0[a]	303.4[b]	−51.7	−6.7
	(32.6)	(44.3)	(51.2)	(65.9)	(48.6)	(126.1)	(88.7)	(29.8)
Number of children	11.8	2.1	63.6[a]	26.5	16.2	19.5	−49.0	−4.7
	(7.7)	(6.4)	(20.2)	(16.9)	(13.6)	(29.4)	(46.3)	(11.0)
Disabled child	50.3[c]	62.4[c]	56.7	89.8	189.4[a]	168.9	−150.1	−121.1
	(28.5)	(35.1)	(76.3)	(119.0)	(71.3)	(163.0)	(129.8)	(85.7)
Respondent has a health problem	15.9	21.0[c]	−19.8	−3.0	21.4	18.1	−238.3[c]	−465.7[a]
	(13.0)	(12.5)	(44.2)	(45.5)	(42.9)	(73.3)	(125.2)	(106.1)
Partner has a health problem	−1.7	−29.8	−35.1	−201.9[c]	−37.7	−5.7	−316.3[a]	−14.2
	(22.0)	(25.0)	(60.8)	(109.7)	(33.3)	(77.3)	(120.6)	(29.1)
Number of children ages 12–17	−21.7[c]	−0.1	−25.6	19.7	4.1	−49.6	20.5	−17.3
	(11.9)	(9.8)	(25.4)	(35.5)	(22.5)	(52.1)	(51.0)	(18.0)
Number of adults	−4.7	−0.2	−38.9	−115.9[c]	−15.8	−66.5	−61.9	−1.8

Variable	Primary child-care time		Passive child-care time				Market-work time	
	Women		Women		Men		Women	Men
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekday
	(12.4)	(22.0)	(26.8)	(65.8)	(35.1)	(69.0)	(49.0)	(13.0)
Cohabiting	−12.0	−6.1	−11.8	−3.2	−16.1	−63.0	19.0	−21.2
	(15.3)	(13.0)	(29.6)	(36.8)	(25.7)	(41.5)	(68.9)	(22.4)

Table reports selected coefficients and bootstrapped SEs (in parentheses) from CLAD models of time use. Estimated using data from the UKTUS. Other variables included in all specifications were quadratics in both own and partner's age, a dummy indicating household receipt of nonlabor income, a dummy indicating residence in a rural area, seasonal indicators, and an intercept. A dummy variable identifying holidays is included in the weekend specifications.
[a]Significant at the 1% level
[b]Significant at the 5% level
[c]Significant at the 10% level

In the CLAD models for women's weekday market work, the significant positive coefficient for own wages and the significant negative coefficient for partners' wages from the Tobit models are reproduced. The positive coefficients on partners' wages in the women's weekday and weekend primary care models are also reproduced, though not at conventional significance levels for the weekend specification (p value = 0.21). The significant positive coefficients for young children on mothers' primary care and both parents' passive care are also reproduced. Many of the other significant coefficients from the Tobit model are also significant with similar signs in the CLAD specifications. However, a few of these coefficients lose their significance in the CLAD models. The similarity of the results across the alternative specifications suggests that the restrictions of the Tobit model do not unduly alter our findings.

OLS estimation results We also estimated each specification using OLS; results from these specifications are reported in Table 4. Most of the significance levels and marginal effects are similar to those found for the Tobit models. In only three cases did a significant result change, and in none of these cases did a sign change. Overall, our main results are quite robust to the choice of model specification.

Table 4 Coefficient estimates from OLS models of time use

Variable	Daily minutes of primary child-care time				Daily minutes of passive child-care time				Daily minutes of market-work time			
	Women		Men		Women		Men		Women		Men	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
Own potential log wage	4.7	7.9	2.7	14.0	−3.1	45.5	−32.8	41.3	158.5[a]	−4.9	9.4	−40.0
	(14.0)	(16.0)	(11.9)	(15.5)	(33.2)	(46.6)	(35.6)	(63.3)	(38.0)	(25.4)	(44.3)	(41.9)
Partner's potential log wage	36.1[b]	46.6[b]	3.8	16.6	11.2	14.9	19.9	79.9[c]	−123.1[a]	7.6	9.5	−92.0[a]
	(17.3)	(21.0)	(11.0)	(11.3)	(42.3)	(49.8)	(31.3)	(48.1)	(39.4)	(29.3)	(40.4)	(33.6)
Youngest child	126.8[a]	146.1[a]	65.7[a]	74.0[a]	230.8[a]	307.2[a]	131.0[a]	271.7[a]	−110.5[a]	−39.3	7.9	28.3

Variable	Daily minutes of primary child-care time				Daily minutes of passive child-care time				Daily minutes of market-work time			
	Women		Men		Women		Men		Women		Men	
	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend	Weekday	Weekend
age 0–3	(15.4)	(18.4)	(12.6)	(11.1)	(38.4)	(44.4)	(34.3)	(48.3)	(35.1)	(27.3)	(41.0)	(36.9)
Youngest child age 4–6	66.1[a]	64.1[a]	38.1[a]	26.3[a]	106.7[a]	288.7[a]	87.9[a]	257.8[a]	−32.4	−16.3	44.3	29.4
	(13.4)	(14.6)	(11.1)	(9.3)	(37.1)	(45.9)	(31.1)	(44.8)	(36.1)	(25.0)	(40.8)	(33.7)
Youngest child age 7–11	24.9[a]	24.7[b]	21.4[a]	12.9[c]	124.8[a]	221.4[a]	79.4[a]	228.8[a]	−20.3	−20.9	27.5	−2.8
	(9.0)	(9.6)	(7.5)	(6.7)	(28.5)	(36.7)	(25.3)	(35.4)	(29.1)	(18.3)	(29.3)	(27.5)
Number of children	13.9[a]	−1.3	3.8	−0.4	46.8[a]	14.0	25.8[b]	9.9	−31.9[b]	−6.9	−27.6[c]	−3.2
	(5.2)	(5.7)	(4.9)	(3.7)	(12.7)	(14.1)	(10.7)	(15.5)	(12.6)	(6.0)	(14.2)	(11.4)
Disabled child	55.9[a]	35.1[b]	5.4	−0.5	55.4	17.3	101.6[b]	−6.5	−121.6[a]	0.2	−103.0	46.1
	(18.9)	(15.6)	(16.7)	(9.5)	(44.7)	(60.2)	(45.8)	(60.3)	(29.7)	(29.2)	(64.5)	(56.4)
Respondent has a health problem	10.7	4.8	15.5[c]	4.0	−22.9	−15.5	−24.6	34.0	−49.6[b]	−1.4	−218.1[a]	−74.9[a]
	(9.2)	(10.1)	(9.3)	(9.4)	(24.3)	(31.5)	(19.2)	(38.5)	(24.8)	(16.5)	(32.5)	(22.4)
Partner has a health problem	7.9	−7.8	0.8	2.6	−17.9	−32.1	14.9	17.6	−80.1[a]	−12.6	−12.4	−7.8
	(11.8)	(9.7)	(6.6)	(6.9)	(28.5)	(36.2)	(25.8)	(33.7)	(30.9)	(17.3)	(30.5)	(21.7)
Number of children age 12–17	−18.8[a]	0.5	3.8	−2.9	−18.8	24.9	−6.4	−3.4	18.2	−0.9	−8.2	12.5
	(6.4)	(7.2)	(5.4)	(4.4)	(16.6)	(20.1)	(14.9)	(21.9)	(15.9)	(8.8)	(17.4)	(14.6)
Number of adults	−0.5	−0.8	−1.7	−0.3	−23.0[c]	−66.1[a]	−10.0	−56.5[a]	−36.0[b]	1.6	−3.2	−6.9
	(3.8)	(4.2)	(3.0)	(3.0)	(13.5)	(17.3)	(11.1)	(17.4)	(16.9)	(11.5)	(15.6)	(14.8)
Cohabiting	−16.6[c]	−4.3	−7.7	−5.0	−25.1	−24.0	−7.8	−34.4	9.3	−2.8	−38.3	25.5
	(9.8)	(10.4)	(5.5)	(9.0)	(19.6)	(25.5)	(19.4)	(24.7)	(24.0)	(15.2)	(24.8)	(20.9)

Table reports selected coefficients and bootstrapped SEs (in parentheses) from OLS models of time use. Estimated using data from the UKTUS. Other variables included in all specifications were quadratics in both own and partner's age, a dummy indicating household receipt of nonlabor income, a dummy indicating residence in a rural area, seasonal indicators, and an intercept. A dummy variable identifying holidays is included in the weekend specifications.

[a]Significant at the 1% level

[b]Significant at the 5% level

[c]Significant at the 10% level

6 Conclusion

In this paper, we use time-diary data on couples with children from the 2000 United Kingdom Time Use Survey to investigate the effects of own and partner's net wages on the time parents spend in primary child care, passive child care, and market work. We find that consistent with the previous literature, women increase their market time when their wage increases and decrease their market-work time as their partner's wage increases. However, we find that this is true only on weekdays; there are no significant wage effects on women's market-work time on weekends. Also consistent with much of the previous literature, we find that men's weekday market-work time is relatively insensitive to both their own and their partners' wages. However, we find in our Tobit and OLS models that men whose partners have high potential wages spend significantly less time on market work on weekends. There is also some equivocal evidence that men with high wages work less on weekends.

With respect to child-care time, we find that women whose partners have higher potential wages spend significantly more time on primary child care on all days. Men whose partners have higher potential wages spend significantly more time only on secondary child care and only on weekends. Neither men's nor women's child-care time is significantly associated with their own wages. Thus, we do not find cross-section evidence to support the proposition that women's rising potential wages have negatively affected parental child-care time in the U.K. If anything, the increase in women's wages may have prompted men to spend more time in passive care.

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Appendix

Table 5 Descriptive statistics for variables in wage sample

Variable	Women		Men	
	Mean	SE	Mean	SE
Employed	0.7021	0.4574	0.8047	0.3965
Report a wage	0.5327	0.4990	0.5025	0.5001
Log Wage (a)	1.7135	0.7601	1.8720	0.8428
Cohabiting	0.1036	0.3048	0.1094	0.3122
Single	0.3411	0.4742	0.2950	0.4561
First or postgraduate degree	0.1144	0.3184	0.1238	0.3294
Other degree	0.0252	0.1568	0.0524	0.2228
Some higher education, no degree	0.1330	0.3397	0.0912	0.2880
"A" level or vocational level 3	0.1018	0.3024	0.1395	0.3465
"O" level, gcse grade a-c, or vocational level 2	0.2018	0.4014	0.1549	0.3618
gcse below grade c, cse, or vocational level 1	0.0408	0.1980	0.0361	0.1864
Other qualifications	0.0399	0.1958	0.0567	0.2314
Age	38.3688	11.4842	40.7056	12.8244
Potential experience	20.9009	11.9232	23.1749	13.2129
Respondent has a health problem	0.1297	0.3361	0.1270	0.3330
Youngest child age 0–3	0.1495	0.3567	0.1216	0.3269

Variable	Women		Men	
	Mean	SE	Mean	SE
Youngest child age 4–6	0.0748	0.2631	0.0558	0.2296
Youngest child age 7–11	0.1309	0.3374	0.1031	0.3042
Total number of children	0.8736	1.1035	0.7094	1.0479
Number of children 12–17	0.2976	0.6297	0.2486	0.5926
Disabled child	0.0138	0.1167	0.0075	0.0864
Number of adults	0.4850	0.8995	0.5113	0.9104
Household receives unearned income	0.2264	0.4186	0.2420	0.4284
Unemployment rate	6.8877	3.7941	6.7864	3.7317
Rural	0.4306	0.4952	0.4461	0.4972
Northeast	0.0471	0.2120	0.0414	0.1992
Northwest	0.1120	0.3154	0.1160	0.3203
Yorkshire and Humberside and East Midlands	0.1991	0.3994	0.1940	0.3955
West Midlands	0.0772	0.2669	0.0812	0.2732
East	0.0979	0.2972	0.1056	0.3074
South East (except London)	0.1282	0.3344	0.1313	0.3378
South West	0.1018	0.3024	0.0962	0.2950
Wales	0.0471	0.2120	0.0505	0.2189
Scotland	0.1066	0.3087	0.1063	0.3082
Winter	0.2384	0.4262	0.2335	0.4232
Spring	0.2634	0.4405	0.2661	0.4420
Summer	0.2270	0.4190	0.2398	0.4270
Partner: First or postgraduate degree	0.0838	0.2771	0.0787	0.2693
Partner: Other degree	0.0360	0.1864	0.0166	0.1278
Partner: Some higher education, no degree	0.0658	0.2479	0.0972	0.2962
Partner: “A” level or vocational level 3	0.0934	0.2910	0.0693	0.2540
Partner: “O” level, gcse grade a-c, or vocational level 2	0.0958	0.2944	0.1364	0.3432
Partner: gcse below grade c, cse, or vocational level 1	0.0207	0.1425	0.0254	0.1573
Partner: other qualifications	0.0420	0.2007	0.0270	0.1620
Partner’s age	28.6754	22.5138	29.2865	21.0584
Partner’s potential experience	17.1309	15.4610	16.9937	14.6288
Partner has a health problem	0.0736	0.2611	0.0853	0.2793
Number of observations	3,330		3,190	

Table 6 Full sample selection controlled probits on wage reporting

Variable	Women		Men	
	Wage Report	Employed	Wage Report	Employed
Cohabiting	0.0486	0.0925	−0.1525[c]	−0.3940[a]
	(0.1062)	(0.1001)	(0.0882)	(0.1213)

Variable	Women		Men	
	Wage Report	Employed	Wage Report	Employed
Single	0.0783	0.2597	−0.1181	0.3853
	(0.0896)	(0.9094)	(0.0959)	(1.3292)
First or postgraduate degree	0.3036[c]	0.7164[a]	0.5762[a]	0.1175
	(0.1688)	(0.1220)	(0.1122)	(0.1436)
Other degree	−0.4709[b]	0.6818[a]	−0.2373[c]	0.2308
	(0.1940)	(0.1988)	(0.1239)	(0.1841)
Some higher education, no degree	0.0823	0.5647[a]	0.2751[a]	0.1513
	(0.1354)	(0.0906)	(0.0952)	(0.1197)
“A” level or vocational level 3	0.0608	0.4002[a]	0.2573[a]	0.2931[a]
	(0.1302)	(0.0945)	(0.0819)	(0.1042)
“O” level, gcse grade a-c, or vocational level 2	0.3003[b]	0.4248[a]	0.2907[a]	0.1524
	(0.1216)	(0.0752)	(0.0793)	(0.0937)
gcse below grade c, cse, or vocational level 1	0.4315[b]	0.2112	0.2220	0.3961[b]
	(0.1831)	(0.1320)	(0.1372)	(0.1882)
Other qualifications	−0.1685	0.3507[a]	−0.0897	0.0961
	(0.1614)	(0.1340)	(0.1178)	(0.1333)
Age	0.0675	0.1379[a]	0.0976[b]	0.2245[a]
	(0.0609)	(0.0496)	(0.0450)	(0.0478)
Age squared	−0.0011	−0.0022[a]	−0.0018[a]	−0.0029[a]
	(0.0008)	(0.0007)	(0.0005)	(0.0006)
Potential experience	−0.0048	−0.0028	−0.0171	−0.0366
	(0.0306)	(0.0284)	(0.0247)	(0.0309)
Potential experience squared	0.0005	0.0005	0.0011[b]	0.0007
	(0.0007)	(0.0006)	(0.0005)	(0.0005)
Respondent has a health problem	0.2495	−0.9859[a]	−0.2679	−1.4898[a]
	(0.2334)	(0.0724)	(0.1925)	(0.0823)
Youngest child age 0–3	0.1817	−0.7156[a]	0.1255	0.2401
	(0.2098)	(0.1285)	(0.1442)	(0.2221)
Youngest child age 4–6	−0.0935	−0.2986[b]	0.0745	0.2950
	(0.1957)	(0.1416)	(0.1655)	(0.2380)
Youngest child age 7–11	0.0046	−0.1684	0.0023	0.2063
	(0.1493)	(0.1122)	(0.1235)	(0.1788)
Total number of children	−0.0483	−0.2687[a]	−0.1375[b]	−0.2531[a]
	(0.0992)	(0.0562)	(0.0652)	(0.0900)
Number of children 12–17	0.0011	0.2031[a]	0.0817	0.2212[b]
	(0.1026)	(0.0695)	(0.0761)	(0.1061)
Disabled child	0.4927	−0.1118	0.2893	0.5449

Variable	Women		Men	
	Wage Report	Employed	Wage Report	Employed
	(0.3321)	(0.2089)	(0.2889)	(0.4328)
Number of adults	−0.0989[a]	0.0825[b]	−0.0883[b]	0.0593
	(0.0382)	(0.0351)	(0.0344)	(0.0386)
Household receives unearned income	−0.0780	0.0758	0.0120	−0.0140
	(0.0707)	(0.0653)	(0.0610)	(0.0770)
Unemployment rate	0.0106	−0.0462[a]	−0.0075	−0.0320[a]
	(0.0127)	(0.0076)	(0.0085)	(0.0086)
Rural	−0.0915	−0.1270[b]	−0.1085[c]	−0.0341
	(0.0700)	(0.0590)	(0.0571)	(0.0707)
Northeast	−0.0229	0.1828	−0.1095	−0.0190
	(0.1824)	(0.1474)	(0.1609)	(0.1793)
Northwest	0.4282[a]	0.3267[a]	0.0983	−0.0059
	(0.1613)	(0.1197)	(0.1234)	(0.1438)
Yorkshire and Humberside and East Midlands	−0.2113	0.3174[a]	0.0379	0.1330
	(0.1377)	(0.1093)	(0.1116)	(0.1338)
West Midlands	0.2562	0.2437[c]	0.1440	0.0021
	(0.1694)	(0.1288)	(0.1326)	(0.1524)
East	−0.2299	0.3417[a]	0.0119	0.1955
	(0.1536)	(0.1275)	(0.1241)	(0.1567)
South East (except London)	0.2648[c]	0.2376[b]	0.1155	0.3777[b]
	(0.1499)	(0.1177)	(0.1182)	(0.1506)
South West	0.0564	0.3385[a]	−0.1317	0.3057[b]
	(0.1601)	(0.1252)	(0.1272)	(0.1555)
Wales	0.1851	0.2483	0.0375	0.0699
	(0.1924)	(0.1513)	(0.1527)	(0.1773)
Scotland	0.1523	0.1489	0.1564	0.0392
	(0.1497)	(0.1208)	(0.1252)	(0.1471)
Winter	0.1453[c]	−0.0784	0.0522	0.0082
	(0.0827)	(0.0724)	(0.0718)	(0.0887)
Spring	0.1660[b]	−0.0575	0.0989	−0.1317
	(0.0809)	(0.0702)	(0.0717)	(0.0839)
Summer	0.0520	−0.0943	0.0232	0.0007
	(0.0838)	(0.0730)	(0.0703)	(0.0878)
Partner: first or postgraduate degree		−0.1548		0.6580[a]
		(0.1391)		(0.2142)
Partner: other degree		−0.1976		−0.3065
		(0.1597)		(0.2729)

Variable	Women		Men	
	Wage Report	Employed	Wage Report	Employed
Partner: some higher education, no degree		−0.0338		0.0153
		(0.1199)		(0.1334)
Partner: “A” level or vocational level 3		0.0511		0.1987
		(0.1118)		(0.1581)
Partner: “O” level, gcse grade a–c, or vocational level 2		0.0413		0.0267
		(0.1061)		(0.1116)
Partner: gcse below grade c, cse, or vocational level 1		–0.1732		0.1930
		(0.1876)		(0.2517)
Partner: other qualifications		0.1304		0.0730
		(0.1396)		(0.1935)
Partner’s age		0.0256		0.0594
		(0.0577)		(0.0876)
Partner’s age squared		−0.0005		−0.0006
		(0.0006)		(0.0010)
Partner’s potential experience		0.0300		−0.0051
		(0.0347)		(0.0509)
Partner’s potential experience squared		−0.0003		0.0000
		(0.0006)		(0.0010)
Partner has a health problem		−0.4224[a]		−0.4150[a]
		(0.0995)		(0.1057)
Correlation coefficient	−0.1563		0.6092[a]	
	(0.4093)		(0.1871)	
Number of observations	2,338	3,330	2,567	3,190

Table reports coefficients and SEs (in parentheses) estimated using data from the UKTUS.
[a]Significant at the 1% level
[b]Significant at the 5% level
[c]Significant at the 10% level

Table 7 Full sample log wage regression results

Variable	Women		Men	
	Coefficient	SE	Coefficient	SE
Cohabiting	0.0176	(0.0370)	0.0583	(0.0418)
Single	0.0021	(0.0298)	−0.1148	(0.0447)[b]
First or postgraduate degree	0.4397	(0.0716)[a]	0.1832	(0.0975)[c]
Other degree	0.4312	(0.0956)[a]	0.4349	(0.0706)[a]
Some higher education, no degree	0.2684	(0.0500)[a]	0.1274	(0.0599)[b]
“A” level or vocational level 3	0.1319	(0.0468)[a]	0.1068	(0.0542)[b]
“O” level, gcse grade a-c, or vocational level 2	0.0587	(0.0566)	0.0083	(0.0573
gcse below grade c, cse, or vocational level 1	−0.0868	(0.0756)	−0.0543	(0.0681)

Variable	Women		Men	
	Coefficient	SE	Coefficient	SE
Other qualifications	0.0712	(0.0652)	0.0500	(0.0585)
Age	−0.0446	(0.0241)[c]	−0.0122	(0.0251)
Age squared	0.0011	(0.0003)[a]	0.0008	(0.0004)[b]
Potential experience	0.0306	(0.0112)[a]	0.0129	(0.0102)
Potential experience squared	−0.0015	(0.0003)[a]	−0.0012	(0.0003)[a]
Respondent has a health problem	−0.1133	(0.0729)	−0.0934	(0.1016)
Youngest child age 0–3	0.1699	(0.0708)[b]	−0.0341	(0.0629)
Youngest child age 4–6	0.0838	(0.0703)	−0.0819	(0.0704)
Youngest child age 7–11	−0.0015	(0.0512)	0.0158	(0.0520)
Total number of children	−0.0411	(0.0350)	0.0284	(0.0350)
Number of children 12–17	0.0175	(0.0357)	−0.0277	(0.0350)
Disabled child	−0.0496	(0.1055)	−0.0698	(0.1240)
Unemployment rate	−0.0033	(0.0042)	−0.0179	(0.0038)[a]
Rural	−0.0305	(0.0276)	−0.0296	(0.0299)
Northeast	−0.1682	(0.0645)[a]	−0.1983	(0.0709)[a]
Northwest	−0.1740	(0.0750)[b]	−0.1720	(0.0534)[a]
Yorkshire and Humberside and East Midlands	−0.1959	(0.0521)[a]	−0.1490	(0.0477)[a]
West Midlands	−0.1883	(0.0668)[a]	−0.1677	(0.0591)[a]
East	−0.1003	(0.0596)[c]	−0.0725	(0.0527)
South East (except London)	−0.0990	(0.0630)	−0.1155	(0.0538)[b]
South West	−0.2115	(0.0566)[a]	−0.0727	(0.0585)
Wales	−0.2902	(0.0731)[a]	−0.1538	(0.0664)[b]
Scotland	−0.1864	(0.0569)[a]	−0.2134	(0.0585)[a]
Winter	0.0072	(0.0332)	0.0335	(0.0314)
Spring	0.0364	(0.0338)	0.0316	(0.0325)
Summer	0.0220	(0.0308)	0.0234	(0.0305)
Correction for employment	−0.1528	(0.2658)	−0.4969	(0.2735)[c]
Correction for wage reporting	0.0040	(0.1177)	−0.1240	(0.1806)
Constant	2.0273	(0.4599)[a]	2.0390	(0.4956)[a]
Number of observations	1,774		1,603	

Coefficients and SEs (in parentheses) from dual sample selection controlled log wage regressions estimated using data from the UKTUS.
[a]Significant at the 1% level
[b]Significant at the 5% level
[c]Significant at the 10% level

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Footnotes

[1] Authors' calculation from Statistics UK data.

[2] There is a related sociological literature that has examined how the provision of child care is related to own and partners' work hours. For example, Nock and Kingston (*1988*) found that the amount of time that married parents spend in different types of child care activities is sensitive to each parent's work schedule. Bryant and Zick (*1996*) found that increases in mothers' work times only modestly reduced the time they spent in family care and did not affect the time that fathers spent in this activity. Bianchi (*2000*) has reported surprising evidence that mothers' time spent with children has increased slightly over time, even as more mothers have entered the labor force.

[3] The UKTUS does not identify the specific people who are present during an activity. Instead, for most activities, it lists categories of people present, including household children up to age 9, household children ages 10–14, other household members, and other known persons.

[4] One might include commuting time as a market work activity, as it captures time away from home that otherwise could be used for child care. However, parents dropping off children at school or day care on the way to work may lengthen their commute to work, thus making it difficult to disentangle work-related and child-care time. Alternative estimates of our time-use models that include commuting time in the measure of market-work time were quite similar to those reported here that do not.