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Who wants flexibility? Changing work hours preferences and life events

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ABSTRACT

Who Wants Flexibility? Changing Work Hours Preferences and Life Events^{*}

We consider desires for flexibility in weekly hours by analyzing changes in work hours preferences using four years of data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey. We control for work hours preferences in previous years and test for effects on desired labor force participation and, for those wishing to participate, on current hours preferences. Our findings reveal that, in general, women are more sensitive to life events than men. Women's preferred hours and labor force participation decline sharply with pregnancy and the arrival of children; their preferred hours approach usual levels as children enter school and ultimately decline as they become empty-nesters. We also find women's preferred hours increasing following separation but falling after divorce, with an opposing pattern for men. Finally, a sizeable minority of retirees have preferences for phased instead of full retirement.

JEL Classification: J22

Keywords: working hours, preferences, life events, HILDA survey

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Introduction

Many academics are urging employers to provide greater flexibility in work hours so that employees can reduce or increase their hours in response to life events such as the arrival of a new child at home, the illness of an aging parent, or the approach of retirement. This understanding of flexibility rests upon a vision of labor supply as dynamic and with a systematic relationship to life events. Yet previous studies of labor supply have focused on the actual behavior of individuals and not on their preferred hours of work *per se*. Examining actual hours is problematic in this context because the case for flexibility implicitly assumes that many employers are not currently providing sufficient flexibility; otherwise there would be no reason to urge employers to change their practices. These arguments suggest the need for a dynamic study of preferred working time to better understand labor supply.

A different literature focuses on the prevalence of a mismatch between the hours employees prefer and those employers provide. Two distinct sources of mismatch exist. First, employers may be providing an insufficient quantity of medium hours jobs such that many employees cannot meet their preferences. Second, employers may be unable or unwilling to accommodate changes in employee working time preferences (resulting perhaps from life events).

To date, the mismatch literature has not, any more than studies of labor supply, directly addressed the theoretically prior question of whether the hours preferences of employees change over the life course or in response to life events. We provide such an analysis here using evidence on work hours preferences from the first four waves of the Household, Income and Labour Dynamics in Australia (HILDA) Survey. By controlling for hour preferences in earlier periods, we can identify the dynamic effects of life events, such as changes in marital status, the arrival of a new child and eventual exit from the household, or impending retirement. That is, we can ascertain the extent to which individuals desire work hours flexibility over time and the circumstances surrounding those changing preferences.

Theoretical Considerations

The Case for Flexibility

Academics calling for enhanced work hours flexibility typically cast the argument in dynamic terms. For example, Moen and Roehling (2005: 188) argue that we need the clockwork of careers to become “flexible enough to be compatible with the clockwork of the rest of life for all employees, regardless of their gender, their age, or their family responsibilities”. Similarly, Hewlett and Luce’s (2005) study of highly educated women concludes that employers should create reduced hours positions for women, and particularly mothers, with the option of eventual return to full-time employment. At the other end of the life course, Leslie and Janson (2005) suggest that employers should create greater opportunities for phased retirement. These authors imply that employee preferences change in response to life events.

This line of research also views employers as potentially benefiting from flexibility due to reductions in turnover among valued employees. Employees are assumed to largely meet their work hours preferences when a job is initially taken, with a life event occurring thereafter and employers then denying employees the ability to alter work hours accordingly. Absent flexibility, employees often need to switch employers in order to meet their changed work hours preferences. Employers without flexibility policies then incur turnover and training costs that could otherwise be avoided.

Labor Supply Models

In economic models of labor markets, actual and preferred hours are assumed to be identical. The wage serves to clear the labor market such that employers purchase and employees provide the desired quantity of hours (e.g., Killingsworth 1983). Empirical studies then suggest that hours preferences are linked to age, education, children (particularly for women), divorce and separation, changes in family income, and to retirement.

Hours of work (for men) are cast as smoothly increasing and then decreasing with age until the retirement point. Workers invest in human capital when they are young, with the returns rising for a period of time, and then declining as their skills and knowledge become obsolete. Preferred and actual hours should rise along with wages as individuals enter the prime earning years where the returns to human capital are highest, but ultimately will decline. In

part, this decline follows reductions in human capital investments as the length of productive time over which the investment could be recouped becomes shorter and shorter. More generally, education or other investments in human capital are held to increase productivity, wages, and work hours. For example, higher education may lead individuals to higher levels of labor force participation and longer work hours partly due to substitution effects (i.e., due to higher wages), but also as a mechanism for increasing the returns on those investments.

As a rule, any change in an individual's circumstances that reduces productivity at work or increases the value of time spent in the home should lead to a reduction in working time. Conversely, behaviors or events that enhance productivity at work or reduce the value of time in the home should induce increases in working time.

Promotions at work typically mean higher wages. However, the effects are theoretically indeterminate, with income and substitution effects operating in opposite directions. That said, if promotions are part of a rat-race system, as in Landers, Rebitzer, and Taylor's (1996) approach, then winning a promotion may grant entry to competition for an even larger prize, and preferred hours might consistently increase following promotion.

The arrival of new children simultaneously increases the value of time in the home for childcare and the need for income. Where a gendered division of labor exists, women will reduce and men will increase their work hours after a new child arrives, although the increase for men is typically small (Hamermesh 1996). Further, although income needs are unlikely to decline as the child grows, the cost of child care tends to drop sharply as children grow out of being infants and particularly as they enter the pre-school years (Waldfogel 2006). Relatedly, parents devote less time to children as they move from the pre-school to primary and secondary schooling years (Nock and Kingston 1988). Declining costs for childcare and the reduced value of time with children should both reduce the value of a mother remaining out of the labor force as the child grows, so any initial decrease in preferred hours among new mothers may be transitory (Drobnic et al. 1999; Hynes and Clarkberg 2005).

Once a child leaves the home, the amount (and value) of unpaid work in the home should decline, leading to an increase in preferred hours among mothers as they launch or re-launch careers following the exit of children from the home (Moen and Roehling 2005), though household expenditures may decline when children depart. Regardless of this countervailing effect, we expect some increase in preferred hours when children leave home. However, we

make no conjectures regarding how the departure of one child with others remaining in the home will affect women's hour preferences.

Income typically declines for women following divorce, while men are sometimes better off financially (Amato 2000). Women are therefore expected to increase their preferred hours following marital dissolution in an attempt to restore income (Bedard and Deschenes 2005). However, it is also the case that many women engage in anticipatory behavior, expanding their participation and hours in the period leading up to a divorce (Johnson and Skinner 1986), so the actual effects of divorce and separation may be small. A divorced man, by way of contrast, may need less income to maintain a standard of living or, because of child support payment systems, may effectively face a high marginal tax on earnings following divorce. In either case, a decline in preferred hours may eventuate.

Retirement decisions are typically viewed as resulting from age and human capital. As mentioned earlier, preferred hours should eventually decline with age as new human capital investments wane and previously acquired human capital depreciates. The value of leisure eventually becomes larger than that of work, leading the individual to retire. However, it is perplexing that the stylized facts regarding hours of work (at least for men) are cast as smoothly increasing and decreasing over the life cycle until the retirement point, where a dramatic shift occurs with hours plummeting to zero (e.g., see Killingsworth 1983: 208). Why does the smooth decline in hours not continue? The answer may lie in institutional factors, and more specifically the way pension benefits are structured. In the U.S., for example, pension laws require that retirement benefits only be paid at or after a certain age (usually 65), and only if the employment relationship is severed, with full social security payments available around the age of 65. In Australia, pension benefits in the form of superannuation are typically only received after the age of 55 and again only upon retirement, with a separate government-funded age pension available at the age of 65 for men (the age for women is currently rising from 60 to 65).

Work Hours Mismatch

Also relevant is the work hours mismatch literature, in part because information on work hours preferences is employed, as is the case here. Two distinct pathways to mismatch exist (Reynolds and Aletraris 2006). In the static case, employers provide an insufficient quantity of medium hours jobs (say, between 30 and 40 hours per week). Many employees who prefer

medium hours are therefore relegated to either overwork in long hours jobs or underwork in short hours jobs (Drago 2000; Jacobs and Gerson 2004; Drago et al. 2005). As a result, mismatch will exist when individuals initially become employed, and will continue over time, perhaps with increasing or decreasing mismatch as life events occur.

The dynamic path to mismatch assumes that employees typically achieve an approximate match of preferred and actual hours when they take a job. However, if we further assume that employers are relatively inflexible and unresponsive to changes in employee preferences over time, then any life events that alter those preferences will result in hours mismatches (Reynolds and Aletraris 2006). This argument is consistent with the literature on the case for flexibility, but runs contrary to traditional models of labor supply.

Relevant studies find that individuals experiencing mismatch in one period often meet their preferences by changing jobs in the next period (Böheim and Taylor 2004; Reynolds and Aletraris 2006), suggesting there is either some initial state of mismatch or that mismatch is created over time. In addition, studies of managers and professionals, for whom long hours are often the norm, suggest that many of these individuals wish to work reduced hours, particularly following the arrival of new children. They are often willing to have their pay adjusted accordingly, but fear that adverse career repercussions will ensue from the utilization of reduced hours options (Williams 2000; Drago et al. 2006). Employers are seen as averse to flexibility, thereby creating mismatch when life events shift employee preferences.

Related research suggests that we as a society and as individuals place too much emphasis on work and consumption. We should therefore reevaluate our priorities and shift more of our time and resources toward family, community and leisure (Schor 1999; Williams 2000; Moen and Roehling 2005). These reevaluations cannot be directly measured, but we hypothesize from this research that many life events, such as the arrival of a new child or the death of a family member or friend, might set off such a process and induce reductions in work hours preferences. Another event which might instigate such a reevaluation is job loss. Studies have found that job loss and unemployment can result in poor mental health (Warr 1987; Headey 2002), which might in turn be associated with a preference for shorter hours. Somewhat differently, job loss may cause individuals to become demoralized. They might then reduce their hours preferences as a way to alleviate resulting cognitive dissonance.

But what is missing from the literature regarding mismatch is an answer to the question we address here: do life events exert significant effects on work hours preferences? If so, then the emergence of mismatch over time could occur as a result.

Hypotheses

Based on the foregoing review, we make the following hypotheses:

H1: Preferred hours will rise then fall with age.

H2: The receipt of a bachelor's degree will be associated with an increase in preferred hours.

H3: The arrival of a new child will reduce preferred hours of women, and this effect will weaken over time, but increase preferred hours of men.

H4: Mothers will increase preferred hours as children leave home.

H5: Divorce or separation will increase preferred hours of women and reduce preferred hours of men.

H6: Changes in family income or wealth should be negatively correlated with preferred hours.

H7: Life events may shift an individual's focus away from work and reduce preferred hours.

H8: As individuals pass retirement, there will be a structural break with preferred hours declining to and remaining at zero.

H1 to H6 are drawn from the labor supply literature, H7 is drawn from the mismatch literature, while H8 posits that individuals prefer the current system of full retirement.

Methods

To consider changes in preferred hours (PH) of work, and given the availability of data covering four time periods (see below), we specify the following model:

$$(1) \quad PH_t = f(PH_{t-1}, PH_{t-2}, PH_{t-3}, Z_{t-1}, Z_{t-2}, Z_{t-3}, X)$$

where the Z vectors capture various life events occurring during the first three periods, and X is a vector of initial conditions at time $t-3$. Note that individuals whose current hours preferences are identical to their previous preferences are picked up by the variable PH_{t-1} . Stated differently, if preferences are stable, all of the variance in PH_t will be accounted for by the variance in PH_{t-1} .

An important feature of the model is that effects are additive over time. We can therefore ascertain whether life events (Z) exert permanent or temporary effects on preferred hours. For example, suppose women who marry reduce their preferred hours because of increases in housework and the addition of partner income. The coefficient on marriage in period $t-1$ would then be negative, and the effect would be permanent if marriage in earlier periods exerted no significant effects. Now suppose men who marry reduce their preferred work hours during the first year, but that this is a honeymoon effect such that they return to their previous level of preferred hours in the second year. Here the coefficient on marriage in period $t-1$ would again be negative, but we would find a positive coefficient on marriage in period $t-2$ of the same absolute size. These effects can be added such that the effect of marriage after two years would be zero. The effects are additive because the one-period effect of marriage in period $t-2$ is accounted for by the preferred hours variable for $t-1$.

To the extent initial conditions are important, they would exert effects that tend to reduce or increase preferred hours in each and every year. However, since we only have four periods of data, changes dating back five or more periods and driving current behavior may also appear as effects of initial conditions (e.g., marriage in period $t-4$ would be picked up by the variable for initially being married).

Note that we are often adding the effects of events covering different individuals over time, rather than tracking a single individual. For example, to obtain the two period effects of marriage, we add the effects for individuals married in period $t-1$ to those from marriage in period $t-2$, and it would be unusual for the same individual to marry two years in a row. Further, macroeconomic shifts during the time periods that alter conditions for a particular demographic group might drive some apparent results. In response to both of these issues, we estimate three-period versions of the model with preferred hours in periods t and, separately, in period $t-1$ as the dependent variables to check for dynamic stability.

Linear estimation of equation (1) would assume there are no fixed costs of employment such that the difference in net income between, say, zero and 10 hours of work would be identical to the difference between 20 and 30 hours; only the costs of employment that vary directly with hours worked would matter. Where fixed costs of employment exist and particularly where fixed costs vary across individuals and occupations, the labor force participation decision will be analytically distinct from the choice between various levels of positive hours (also making the tobit method inappropriate). In the absence of strong priors regarding these fixed costs, we allow divergence in the decision processes. Exhibiting any positive hours preferences implies the individual prefers labor force participation (*LFP*), a dummy variable which is unity for individuals preferring positive hours.¹ We then estimate a two-equation model comprising a probit and a selection-corrected preferred hours regression equation, as follows:

$$(2) \quad LFP_t = f(PH_{t-1}, PH_{t-2}, PH_{t-3}, Z_{t-1}, Z_{t-2}, Z_{t-3}, X)$$

$$(3) \quad PH_t \mid (LFP_t = 1) = f(PH_{t-1}, PH_{t-2}, PH_{t-3}, Z_{t-1}, Z_{t-2}, Z_{t-3}, X)$$

All parameters are estimated by maximum likelihood and, because the system is simultaneous, we identify the system by including some variables in (2) that are closely related to fixed costs of employment and others in (3) that are associated with variable costs.

Data

The data used in the analysis come from the first four waves of the HILDA Survey, a nationwide household panel survey with a focus on issues relating to employment, income and the family (see Watson and Wooden 2004). The first wave was conducted in 2001 and so the data used in this analysis cover the period 2001 to 2004.

The HILDA Survey began with a large national probability sample of households. The members of that initial sample of households then form the basis of the panel to be followed over an indefinite life. The original sample of households was selected from a sample of 488 Census Collection Districts (CDs) (each of which consists of approximately 200 to 250 households). Further, to ensure the sample provided adequate coverage of all parts of Australia, the frame of CDs was stratified by State, and within the five most populous States,

by metropolitan and non-metropolitan regions. Ignoring the clustered and stratified nature of the sample will result in incorrect standard errors. We thus employ an estimation method specific to survey data that deals with both of these sample design features.²

As with all sample surveys, non-response is a concern. The number of households identified as in-scope in wave 1 was 11,693. Interviews were successfully completed within 7682 of these and resulted in an initial responding sample of 13,969 persons. Of this group, only 10,565 or 75.2 percent were successfully re-interviewed in all three subsequent waves. These relatively high rates of non-response suggest the possibility of response bias. To correct for this, longitudinal population weights are used in all analyses. These weights include an adjustment for both attrition (based on the results of regression models predicting attrition) and initial wave non-response (based largely on benchmarking against known population characteristics) (see Goode and Watson 2006: 66-68).

The dependent variable is constructed from responses to separate questions asked of both the employed and non-employed. Persons currently employed were first asked how many hours they usually worked per week in all jobs and then whether they would prefer to work fewer, about the same, or more hours, while accounting for how those hours would affect their income. Those responding fewer or more were then asked how many hours they would choose to work, again accounting for how changes in work hours would affect earnings. Individuals who were not currently employed were asked whether they were engaged in active job search and, if not, whether they would like a job. Those responding in the affirmative to either of these questions were then asked what wage would be required to draw them into the labor market and, given that wage, how many hours per week they would choose to work. We take this response to be their preferred working hours. Respondents claiming they would not like a job were coded as preferring zero hours.

The main battery of life events questions was included in a self-completion questionnaire (SCQ) that was distributed to respondents following administration of the personal interview. While many of these completed forms were collected by the interviewer at a subsequent visit to the household, this was not always possible and hence many had to be returned by mail, leading to additional non-response.³ We thus constructed as many life events variables as possible from the information collected via personal interviews. After excluding 417 respondents initially aged 15 to 17 years on the grounds that many of these individuals will be focused on school rather than employment, 8,507 observations were available for the

larger sample. Once items from the SCQ were included, only 6,663 observations were available. We use the smaller set of observations to estimate the complete model, and use estimates from the larger sample with fewer variables as a check for possible response bias.

Table 1 provides information on the variables for women and men.⁴ Descriptions of the two dependent variables (LFP_t and PH_t), and the three lagged preferred hours variables are provided first. The preferred hours variables are highly correlated, with period-to-period correlations of over .8, suggesting that inclusion of earlier hours preferences in the model will provide relatively strong controls for the static determinants of current preferences.

Various age category dummy variables derived from wave 1 data are next, with respondents aged 18 to 24 later serving as the omitted category.⁵ A variable follows for whether the individual held a university degree at wave 4.⁶ Next come variables for pregnancy during the last year and, for three waves of change, the arrival of a first child, the arrival of a second child, a child achieving age five (when formal schooling typically begins), any resident child leaving home during the previous year, and for the last child leaving home and placing adults into “empty nest” status.⁷ Although the arrival of a second child may occur fairly soon after the arrival of the first, we treat the other child categories separately in relation to non-parent status. Marital status change and initial state variables follow (never married is the omitted category). Variables are also included for changes in household income (excluding respondent earnings) between each wave, with a similar variable for the initial state.

Other life event variables, covering events for three periods each, follow. These additional variables concern serious injury or illness to self (SelfIll), serious injury or illness to a close relative or family member (FamIll), death of a partner (not spouse), child, other close relative or friend (Death), victim of physical violence (Violence), close family member detained in a jail or correctional facility (FamJail), or the respondent was fired or made redundant by an employer (Fired), changed jobs (JobChange), or was promoted at work (Promotion).⁸

Retirement variables begin with planned retirement two years and, separately, one year hence. Retirement events are then captured by three variables for retirement in the year previous to waves 4, 3, and 2 respectively. A variable for respondents already retired at wave 1 is added to control for the initial state. Given that retirement plans presume current labor force participation, individuals responding positively regarding planned retirement in the

Table 1. Variables for the Main Analyses

Variable	Description	Women		Men	
		Mean	S.D.	Mean	S.D.
LFP _t	Preferred hours at wave 4 exceeds zero.	0.698	0.459	0.812	0.391
PH _t	Preferred hours wave 4	20.34	16.58	32.24	18.50
PH _{t-1}	Preferred hours wave 3	20.60	16.54	32.86	18.60
PH _{t-2}	Preferred hours wave 2	20.91	16.72	33.81	18.45
PH _{t-3}	Preferred hours wave 1	21.76	16.55	34.33	18.57
Age18-24	Age 18-24 in wave 1	0.090	0.287	0.075	0.264
Age25-34	Age 25-34 in wave 1	0.200	0.400	0.192	0.394
Age35-44	Age 35-44 in wave 1	0.256	0.437	0.262	0.440
Age45-54	Age 45-54 in wave 1	0.203	0.402	0.202	0.402
Age55-64	Age 55-64 in wave 1	0.125	0.330	0.136	0.343
Age65plus	Age 65 or above in wave 1	0.126	0.332	0.132	0.339
Bachelor _t	Held Bachelor's degree at wave 4	0.248	0.432	0.237	0.425
Pregnant _t	Self or partner became pregnant year prior to wave 4	0.046	0.210	0.046	0.211
Firstchild _{t-1}	First child arrived year prior to wave 4	0.014	0.116	0.014	0.117
Firstchild _{t-2}	First child arrived year prior to wave 3	0.012	0.110	0.015	0.120
Firstchild _{t-3}	First child arrived year prior to wave 2	0.011	0.105	0.011	0.106
Secondchild _{t-1}	Second child arrived year prior to wave 4	0.010	0.100	0.011	0.103
Secondchild _{t-2}	Second child arrived year prior to wave 3	0.010	0.101	0.011	0.106
Secondchild _{t-3}	Second child arrived year prior to wave 2	0.013	0.115	0.013	0.114
Childturn5 _{t-1}	Resident child turned age 5 year prior to wave 4	0.041	0.199	0.038	0.192
Childturn5 _{t-2}	Resident child turned age 5 year prior to wave 3	0.035	0.183	0.034	0.180
Childturn5 _{t-3}	Resident child turned age 5 year prior to wave 2	0.043	0.203	0.037	0.189
Childleave _{t-1}	Resident child left household year prior to wave 4	0.024	0.153	0.019	0.138
Childleave _{t-2}	Resident child left household year prior to wave 3	0.024	0.152	0.018	0.134
Childleave _{t-3}	Resident child left household year prior to wave 2	0.026	0.159	0.017	0.130
Emptynest _{t-1}	Last resident child left household year prior to wave 4	0.015	0.121	0.017	0.128
Emptynest _{t-2}	Last resident child left household year prior to wave 3	0.017	0.131	0.022	0.145
Emptynest _{t-3}	Last resident child left household year prior to wave 2	0.011	0.103	0.015	0.120
Separate _{t-1}	Separated from partner year prior to wave 4	0.012	0.107	0.011	0.104
Separate _{t-2}	Separated from partner year prior to wave 3	0.008	0.088	0.009	0.096
Separate _{t-3}	Separated from partner year prior to wave 2	0.013	0.113	0.011	0.104
Iseparate	Separated at wave 1	0.035	0.183	0.028	0.164
Divorce _{t-1}	Divorced year prior to wave 4	0.006	0.077	0.004	0.059
Divorce _{t-2}	Divorced year prior to wave 3	0.009	0.093	0.007	0.084
Divorce _{t-3}	Divorced year prior to wave 2	0.008	0.088	0.006	0.080
Idivorce	Divorced at wave 1	0.070	0.254	0.044	0.205
Widow _{t-1}	Widowed year prior to wave 4	0.008	0.091	0.004	0.062
Widow _{t-2}	Widowed year prior to wave 3	0.004	0.060	0.002	0.044
Widow _{t-3}	Widowed year prior to wave 2	0.006	0.075	0.002	0.047
Iwidow	Widowed at wave 1	0.060	0.238	0.014	0.116
Married _{t-1}	Married year prior to wave 4	0.017	0.131	0.019	0.137
Married _{t-2}	Married year prior to wave 3	0.020	0.140	0.024	0.154
Married _{t-3}	Married year prior to wave 2	0.023	0.150	0.022	0.148
Imarried	Married at wave 1	0.691	0.462	0.745	0.436
ChHHincome _t	Change in rest of household income b/w wave 4 and 3	1908.3	42046.8	1279.0	45172.4
ChHHincome _{t-1}	Change in rest of household income b/w wave 3 and 2	821.1	41426.3	219.8	44604.3
ChHHincome _{t-2}	Change in rest of household income b/w wave 2 and 1	2510.03	42817.31	2223.35	38942.96
IHHincome	Rest of household income (HH income less respondents wages and/or salary) at wave 1	46908.5	49639.3	35444.0	43164.6
SelfIll _{t-1}	Serious injury to self year prior to wave 4	0.075	0.263	0.088	0.284
SelfIll _{t-2}	Serious injury to self year prior to wave 3	0.077	0.266	0.086	0.281
SelfIll _{t-3}	Serious injury to self year prior to wave 2	0.070	0.255	0.076	0.265
FamIll _{t-1}	Serious injury to family member year prior to wave 4	0.188	0.391	0.149	0.356
FamIll _{t-2}	Serious injury to family member year prior to wave 3	0.195	0.396	0.155	0.362

<i>Variable</i>	<i>Description</i>	<i>Women</i>		<i>Men</i>	
		<i>Mean</i>	<i>S.D.</i>	<i>Mean</i>	<i>S.D.</i>
FamIll _{t-3}	Serious injury to family member year prior to wave 2	0.194	0.396	0.156	0.363
Death _{t-1}	Death of a partner, family member or close friend year prior to wave 4	0.202	0.401	0.183	0.387
Death _{t-2}	Death of a partner, family member or close friend year prior to wave 3	0.191	0.393	0.187	0.390
Death _{t-3}	Death of a partner, family member or close friend year prior to wave 2	0.198	0.399	0.199	0.400
Violence _{t-1}	Victim of violent crime year prior to w4	0.009	0.093	0.011	0.104
Violence _{t-2}	Victim of violent crime year prior to wave 3	0.013	0.112	0.015	0.121
Violence _{t-3}	Victim of violent crime year prior to wave 2	0.016	0.124	0.014	0.116
FamJail _{t-1}	Family member jailed year prior to wave 4	0.015	0.121	0.007	0.086
FamJail _{t-2}	Family member jailed year prior to wave 3	0.012	0.109	0.005	0.074
FamJail _{t-3}	Family member jailed year prior to wave 2	0.009	0.094	0.006	0.076
Fired _{t-1}	Fired or laid off from employment year prior to w4	0.015	0.121	0.032	0.176
Fired _{t-2}	Fired or laid off from employment year prior to w3	0.022	0.148	0.033	0.179
Fired _{t-3}	Fired or laid off from employment year prior to w2	0.026	0.158	0.045	0.208
JobChange _{t-1}	Changed jobs year prior to wave 4	0.106	0.308	0.124	0.330
JobChange _{t-2}	Changed jobs year prior to wave 3	0.115	0.319	0.131	0.337
JobChange _{t-3}	Changed jobs year prior to wave 2	0.113	0.316	0.127	0.333
Promotion _{t-1}	Promoted at work year prior to wave 4	0.054	0.225	0.066	0.248
Promotion _{t-2}	Promoted at work year prior to wave 3	0.051	0.221	0.073	0.260
Promotion _{t-3}	Promoted at work year prior to wave 2	0.048	0.214	0.076	0.265
PlanRetire _{t+1}	Plan at wave 4 to retire two years hence	0.013	0.115	0.019	0.137
PlanRetire _t	Plan at wave 4 to retire in next year	0.009	0.094	0.015	0.124
Retire _{t-1}	Retired in year prior to wave 4	0.045	0.208	0.029	0.167
Retire _{t-2}	Retired in year prior to wave 3	0.029	0.168	0.024	0.153
Retire _{t-3}	Retired in year prior to wave 2	0.058	0.233	0.029	0.168
Iretire	Retired at wave 1	0.118	0.323	0.134	0.341
Imphealth _{t-1}	Health improved (overcame long-term health condition) year prior to wave 4	0.010	0.099	0.010	0.100
Imphealth _{t-2}	Health improved (overcame long-term health condition) year prior to wave 3	0.014	0.118	0.014	0.118
Imphealth _{t-3}	Health improved (overcame long-term health condition) year prior to wave 2	0.013	0.113	0.015	0.120
Dethealth _{t-1}	Health deteriorated (contracted long-term health condition) year prior to wave 4	0.014	0.119	0.015	0.121
Dethealth _{t-2}	Health deteriorated (contracted long-term health condition) year prior to wave 3	0.012	0.110	0.016	0.125
Dethealth _{t-3}	Health deteriorated (contracted long-term health condition) year prior to wave 2	0.019	0.137	0.025	0.157
N		3564		3099	

future should be focused on the variable costs and benefits of positive work hours levels. We therefore exclude the planned retirement variables from the labor force participation probits and include them as identifying variables in the preferred hours equations.

To identify the participation probits, we include dummy variables in those regressions for whether the individual overcame or suffered a serious long-term health condition. Although

such conditions might alter the variable costs of employment, their major effect should be to respectively lower or increase the fixed costs of any employment.

Results

Regression results are presented in Table 2, with tests for joint significance reported in Table 3. Beginning with the preferred hours equations, H1 predicts that preferred hours will increase then ultimately decrease with age. This hypothesis is not supported. While the age variables are jointly significant in the preferred hours equations for both women and men, the size of the estimated coefficients reveals that preferred hours are largest for the youngest workers – 18 to 24 year olds – and thereafter tend to decline with age. Preferred hours do not first rise with age. This is most obvious for women, with each successive age group until age 64 years having preferences for fewer hours. For men preferred hours of work do not vary much over the greater part of their working lives, but decline markedly as they approach, enter and then pass the conventional retirement age. These findings imply that the observed increases in actual hours worked beyond the age of 24 – as individuals enter the prime earning years– are driven by employer behavior, as Jacobs and Gerson (2004: 68) similarly conclude from U.S. data.

For H2, regarding the positive correlation between preferred hours and educational attainment, we find a positive effect of about two hours for holding a bachelor's degree for women, with no significant effect for men. Given we are unable to include dynamic indicators of educational attainment, these weak results for H2 are not surprising.

Regarding H3, and preferred hours patterns around young children, the first and second child variables are jointly significant for women but not for men. For women, pregnancy yields a projected decline of 3.6 hours, while the arrival of a first child in the latest period is associated with an additional decline of almost 11 hours per week, followed by a further slight decline in the following year. If a second child arrived at that time, there would be an additional estimated decline of over seven hours, although if a second child arrived later, the net effect would be represented by the seven hours figure. The hours preferences coefficients for a child turning age five are jointly and individually insignificant for women and men, suggesting women have returned to non-parenting hours preferences by that time, consistent with H3.

Table 2. Sample Selection Models of Hours Preferences
(coefficients, standard errors in parentheses)

Variable	Women				Men			
	LFP Probit		Preferred Hours		LFP Probit		Preferred Hours	
PH _{t-1}	0.037**	(0.005)	0.350**	(0.031)	0.058**	(0.007)	0.296**	(0.029)
PH _{t-2}	0.025**	(0.005)	0.172**	(0.026)	0.014*	(0.006)	0.238**	(0.026)
PH _{t-3}	0.012**	(0.004)	0.130**	(0.024)	0.001	(0.007)	0.103**	(0.025)
Age25-34	-0.003	(0.202)	-0.838	(0.753)	0.431	(0.322)	-1.836*	(0.878)
Age35-44	0.116	(0.229)	-1.348	(0.774)	0.383	(0.368)	-1.331	(0.858)
Age45-54	-0.179	(0.247)	-2.038*	(0.846)	0.459	(0.357)	-1.842*	(0.917)
Age55-64	-0.385	(0.263)	-5.328**	(1.091)	0.104	(0.365)	-4.458**	(1.072)
Age65plus	-0.801**	(0.289)	-1.836	(2.697)	-0.043	(0.404)	-5.545**	(1.666)
Bachelor _t	0.348**	(0.117)	2.022**	(0.484)	0.196	(0.168)	0.315	(0.443)
Pregnant _{t-1}	-0.828**	(0.183)	-3.559*	(1.633)	1.401**	(0.393)	-0.126	(0.857)
Firstchild _{t-1}	-1.784**	(0.309)	-10.799**	(2.864)	-1.781**	(0.370)	1.081	(1.449)
Firstchild _{t-2}	-0.374	(0.294)	-2.546	(1.618)	5.577**	(0.660)	0.213	(1.460)
Firstchild _{t-3}	0.213	(0.337)	1.859	(1.434)	4.534**	(0.822)	-2.220	(1.324)
Secondchild _{t-1}	-0.314	(0.332)	-7.229**	(1.970)	3.848**	(0.404)	1.674	(1.381)
Secondchild _{t-2}	-0.020	(0.292)	-5.039**	(1.492)	-0.326	(0.610)	0.665	(1.669)
Secondchild _{t-3}	0.252	(0.224)	-1.261	(2.042)	-0.502	(0.474)	0.900	(1.298)
Childturn5 _{t-1}	0.079	(0.160)	0.050	(1.086)	-0.098	(0.394)	-0.476	(0.931)
Childturn5 _{t-2}	-0.105	(0.176)	-1.881	(1.173)	5.489**	(0.525)	-0.249	(1.073)
Childturn5 _{t-3}	0.216	(0.178)	-1.785	(1.011)	0.022	(0.303)	1.322	(0.955)
Childleave _{t-1}	-0.017	(0.198)	1.754	(1.192)	-0.007	(0.477)	0.484	(0.992)
Childleave _{t-2}	0.089	(0.231)	-0.818	(1.180)	0.259	(0.483)	-0.645	(1.155)
Childleave _{t-3}	0.322	(0.217)	1.687*	(0.851)	0.701	(0.583)	1.033	(1.223)
Emptynest _{t-1}	-0.072	(0.234)	-1.889	(1.152)	-0.528	(0.283)	-0.486	(1.220)
Emptynest _{t-2}	0.560*	(0.225)	-2.336	(1.233)	0.694*	(0.351)	0.290	(1.005)
Emptynest _{t-3}	0.178	(0.290)	-0.954	(1.243)	0.590	(0.413)	-0.485	(1.105)
Separate _{t-1}	-0.040	(0.381)	2.317	(1.592)	0.626	(0.435)	1.400	(1.477)
Separate _{t-2}	-0.312	(0.366)	0.194	(1.638)	0.694	(0.366)	-4.822**	(1.640)
Separate _{t-3}	0.501	(0.296)	4.457*	(1.772)	0.388	(0.441)	-0.318	(2.060)
Iseparate	-0.088	(0.252)	2.266	(1.241)	-0.763	(0.473)	0.642	(1.548)
Divorce _{t-1}	-0.619	(0.478)	-2.824	(1.661)	0.765	(0.450)	7.924**	(2.484)
Divorce _{t-2}	0.215	(0.364)	-3.207	(2.585)	0.637	(0.639)	-1.033	(2.153)
Divorce _{t-3}	0.259	(0.452)	-0.588	(1.869)	0.969	(0.672)	-3.546	(2.457)
Idivorce	0.074	(0.266)	-1.323	(0.821)	0.425	(0.296)	-1.460	(1.189)
Widow _{t-1}	0.622*	(0.279)	7.900*	(3.818)	-0.238	(0.282)	0.013	(1.926)
Widow _{t-2}	0.106	(0.417)	-8.377**	(1.423)	-1.335**	(0.442)	-5.489**	(0.865)
Widow _{t-3}	-0.163	(0.268)	-3.793	(3.846)	-0.303	(0.351)	1.113	(0.912)
Iwidow	0.061	(0.248)	-0.784	(1.510)	0.036	(0.406)	-2.172	(2.948)
Married _{t-1}	-0.354	(0.283)	0.738	(1.671)	3.467**	(0.728)	1.142	(1.505)
Married _{t-2}	-0.158	(0.335)	-1.650	(1.124)	0.074	(0.328)	0.504	(1.199)
Married _{t-3}	0.147	(0.319)	-1.599	(1.329)	-0.591	(0.413)	2.042	(1.404)
Imarried	-0.038	(0.182)	-1.369*	(0.627)	0.011	(0.234)	0.149	(0.571)
ChHHincome _t	-1.09x10 ⁻⁶	(9.16x10 ⁻⁷)	-8.22x10 ⁻⁶	(5.64x10 ⁻⁶)	-2.80x10 ⁻⁶	(1.47x10 ⁻⁶)	-3.83x10 ⁻⁶	(7.37x10 ⁻⁶)
ChHHincome _{t-1}	1.25x10 ⁻⁶	(1.49x10 ⁻⁶)	-1.63x10 ⁻⁵ **	(6.33x10 ⁻⁶)	2.16x10 ⁻⁶	(1.58 x10 ⁻⁶)	-4.77x10 ⁻⁶	(7.00x10 ⁻⁶)
ChHHincome _{t-2}	2.94x10 ⁻⁷	(1.12x10 ⁻⁶)	-7.85x10 ⁻⁶	(5.50x10 ⁻⁶)	3.73x10 ⁻⁶ *	(1.58 x10 ⁻⁶)	-1.12x10 ⁻⁵	(7.70x10 ⁻⁶)
IHHincome	-3.93x10 ⁻⁷	(7.82x10 ⁻⁷)	-8.51x10 ⁻⁶ *	(4.23x10 ⁻⁶)	2.90x10 ⁻⁶	(1.78 x10 ⁻⁶)	8.16x10 ⁻⁷	(5.83x10 ⁻⁶)
SelfIll _{t-1}	0.126	(0.177)	-0.208	(0.764)	-0.480*	(0.195)	-1.251*	0.636
SelfIll _{t-2}	-0.131	(0.131)	-0.587	(0.794)	0.014	(0.194)	0.410	0.711
SelfIll _{t-3}	-0.129	(0.147)	0.125	(1.131)	-0.199	(0.151)	1.036	0.680
FamIll _{t-1}	-0.116	(0.098)	0.136	(0.488)	0.386*	(0.156)	0.075	0.589
FamIll _{t-2}	-0.088	(0.101)	-0.093	(0.456)	-0.489**	(0.159)	-0.514	(0.530)
FamIll _{t-3}	0.060	(0.092)	-0.625	(0.472)	0.068	(0.148)	-0.360	(0.611)
Death _{t-1}	-0.257**	(0.091)	-0.005	(0.479)	-0.273	(0.182)	-0.613	(0.479)
Death _{t-2}	0.256*	(0.100)	0.029	(0.530)	-0.069	(0.139)	0.979	(0.580)

Variable	Women				Men			
	LFP Probit		Preferred Hours		LFP Probit		Preferred Hours	
Death _{t-3}	-0.017	(0.104)	0.227	(0.492)	-0.268	(0.159)	-0.170	(0.544)
Violence _{t-1}	-0.119	(0.343)	0.282	(2.119)	0.440	(0.402)	0.490	(1.470)
Violence _{t-2}	-0.103	(0.377)	1.907	(1.435)	1.308**	(0.451)	-1.087	(1.406)
Violence _{t-3}	-0.603*	(0.271)	-3.878	(2.134)	1.082*	(0.483)	0.785	(1.516)
FamJail _{t-1}	-0.472	(0.308)	-1.368	(1.964)	0.006	(0.251)	3.302	(3.629)
FamJail _{t-2}	0.685	(0.397)	0.411	(1.930)	1.778**	(0.434)	0.791	(4.850)
FamJail _{t-3}	-0.608	(0.586)	2.034	(2.246)	0.413	(0.554)	4.557	(3.502)
Fired _{t-1}	-0.386	(0.280)	-0.064	(1.325)	-0.409	(0.387)	-0.996	(0.857)
Fired _{t-2}	-0.094	(0.280)	0.936	(1.071)	0.470	(0.258)	-0.660	(0.953)
Fired _{t-3}	0.257	(0.306)	0.383	(1.295)	-0.503	(0.333)	0.105	(1.040)
JobChange _{t-1}	0.501**	(0.176)	1.340*	(0.676)	1.425**	(0.437)	0.641	(0.639)
JobChange _{t-2}	0.224	(0.167)	0.320	(0.532)	0.009	(0.219)	-0.069	(0.498)
JobChange _{t-3}	0.075	(0.225)	-0.815	(0.547)	0.224	(0.231)	-0.150	(0.747)
Promotion _{t-1}	0.899*	(0.414)	2.794**	(0.625)	0.315	(0.523)	1.892*	(0.793)
Promotion _{t-2}	0.167	(0.288)	-0.309	(0.663)	0.120	(0.356)	0.748	(0.678)
Promotion _{t-3}	-0.208	(0.215)	-0.045	(0.772)	0.356	(0.296)	-0.120	(0.649)
PlanRetire _{t+1}			0.441	(1.253)			-1.171	(1.256)
PlanRetire _t			-1.691	(1.689)			-2.869	(1.901)
Retire _{t-1}	-1.228**	(0.341)	-0.070	(2.969)	-2.479**	(0.324)	-0.722	(1.836)
Retire _{t-2}	-0.387	(0.226)	-3.429	(1.874)	-0.486	(0.286)	-0.880	(2.894)
Retire _{t-3}	-1.165**	(0.197)	-0.365	(2.369)	-0.502*	(0.242)	-0.729	(2.433)
Iretire	-0.901**	(0.194)	-5.767**	(2.103)	-1.075**	(0.226)	0.903	(2.054)
Imphealth _{t-1}	0.539	(0.456)			-0.710	(0.462)		
Imphealth _{t-2}	-0.650	(0.358)			0.237	(0.513)		
Imphealth _{t-3}	0.453	(0.297)			-0.609	(0.328)		
Dethealth _{t-1}	-1.089**	(0.303)			-0.724**	(0.266)		
Dethealth _{t-2}	-1.341**	(0.436)			-0.106	(0.496)		
Dethealth _{t-3}	0.397	(0.360)			-0.415	(0.449)		
F-statistic	11.68**		16.99**		53.20**		18.91**	
Rho	0.299 (0.169)				0.149 (0.126)			
Lambda	2.479 (1.433)				1.231 (1.049)			
N	3564				3099			

Note: * statistically significant at the 0.05 level; ** statistically significant at the 0.01 level.

Consistent with H4, the coefficients relevant to children leaving home are jointly significant for women. The individual coefficients, however, suggest that women increase their preferred hours when any child leaves home (by a total of around 2.5 hours after three or more years), but reduce their hours by a total of around five hours after achieving empty nest status for three years or more. These results suggest the relative value of time in employment rises when one child leaves home but another remains, presumably because remaining children tend to be teenagers with high income demands,⁹ while the need for income declines after empty nest status is achieved. This pattern is not as predicted by H4.

Table 3. Tests of Joint Significance (F-statistics)

Variables	Women		Men	
	LFP Probit	Preferred Hours	LFP Probit	Preferred Hours
Age (Age25-34 – Age65plus)	4.08**	5.48**	1.54	4.82**
First Child (Firstchild _{t-1} – Firstchild _{t-3})	11.55**	6.08**	43.36**	1.24
Second Child (Secondchild _{t-1} – Secondchild _{t-3})	0.70	8.05**	33.84**	0.66
Child Turn Age 5 years (Childturn5 _{t-1} – Childturn5 _{t-3})	0.76	1.76	46.67**	0.66
Child Leaving Household (Childleave _{t-1} – Emptynest _{t-3})	1.47	2.23*	1.74	0.30
All Children variables (Firstchild _{t-1} – Emptynest _{t-3})	3.36**	3.40**	34.81**	0.59
Separation and Divorce (Separate _{t-1} – Idivorce)	0.95	2.12*	2.26*	2.78**
Widowed (Widow _{t-1} – Iwidow)	1.35	10.52**	2.45*	10.35**
Marriage (Married _{t-1} – Imarried)	0.48	1.81	5.99**	0.68
Income (ChHHincome _t – IHHincome)	0.91	2.12	4.92**	1.19
Life Events (Pregnant _t – Promotion _{t-3})	2.65**	1.69*	2.84**	1.04
Retirement (PlanRetire _{t+1} – Iretire)		2.31*		0.64
Retirement (Retire _{t-1} – Iretire)	10.98**		19.38**	
Health (Imphealth _{t-1} – Dethealth _{t-3})	5.12**		3.31**	

Note: * statistically significant at the 0.05 level; ** statistically significant at the 0.01 level.

H5 suggests women will increase and men reduce their preferred hours upon separation or divorce. For women and for men, these coefficients are jointly significant, and the hypothesis is supported for separation. Women seek an initial two hour increase immediately following separation, and then further increases in the third and later years totalling over nine additional preferred hours subsequent to separation. For men, the effects of separation appear in an immediate increase of around one-and-a-half hours followed by a decline in the second year of almost five hours, with a long-term net effect of around a three hour reduction. Divorce, however, reverses these patterns. For women, the long-term effect of divorce is a reduction of almost eight hours while, for men, divorce is associated with an immediate increase of almost eight hours, with a dampened effect over time. It seems likely that many women are initially economically vulnerable during a separation, but are less so after divorce is well past.¹⁰ For men, however, we suspect that strategic behavior may be involved, with reduced hours following separation representing an attempt to reduce any divorce settlement, and post-divorce increases proxying efforts to restore income levels. The separation results are consistent with H5, but the overall story may be considerably more complicated.

The next two hypotheses, H6 and H7, concern income effects, wherein income is negatively correlated with preferred hours, and life events that may lead to a reevaluation of priorities,

respectively. Widowhood should reduce income while marriage effectively increases it. For women and men, the widowhood coefficients are jointly significant. For women, widowhood has an immediate positive and significant effect of almost seven-and-a-half hours, with a countervailing decrease in the following year, and further declines in future years. We might infer that employment is sometimes used as a short-term device to fill the gap left by a loved one, although it is also possible that widowhood generates initial uncertainty about the economic future. For men, widowhood reduces preferred hours, particularly in the second year, which could reflect a reduced need for income, mourning, or perhaps a greater burden of housework.

The marriage coefficients are jointly insignificant for both men and women. However, the individual coefficients for women tend to be negative, and the initial state of marriage is associated with a significant reduction of over an hour. The delayed effects of marriage on women's hours preferences do not fit either H6 or H7, since those predict relatively immediate effects.

Of greatest relevance to H6 are the coefficients for initial and alterations in family income (after excluding respondent wage earnings). These should exert pure income effects and yield negative coefficients. In accord with H6, seven of the eight coefficients are negative. Nevertheless, these coefficients were jointly insignificant in explaining the preferred hours of both women and men.

We continue analyses of H6 and H7 for hours preferences with the life event variables, which run down to but exclude retirement. For women, these additional variables are jointly significant, while they are not for men, implying that at a general level women respond to life events while men do not. Regarding specific coefficients, for women the largest, of borderline significance, is a four hour reduction for being a victim of violence in the third year prior to the most recent wave of data, a result that could reflect resulting ill mental health. Recent job changes and promotions are associated with expanded hours preferences. The latter fits the tournament model of promotions, and not income effects. For men, as with women, promotions are associated with increased hours preferences.

To test for a structural break at the point of retirement, H8, we turn to the labor force participation coefficients for retirement at $t-1$. For both women and men, the coefficients are negative and significant as predicted. Simulations holding age between 55 and 64 years and

others values at their group means and age, indicate that the probability of women desiring any positive hours declines from 54.5 percent to 13 percent immediately following retirement. For men, the simulations reveal movement from a 92 percent to a 15 percent probability of preferring positive hours at that time. We interpret these declines as large and hence supportive of H8. However, the figures also suggest the institutions favoring full retirement are causing some individuals to drop out of the labor force prematurely.

We can also estimate the probabilities of preferring any positive hours one and two years after retirement.¹¹ These calculations yield, for women, probabilities of preferring positive hours a year out from retirement of seven percent, and of .4 percent two years out, with comparable figures for men of six and two percent. These figures suggest that even with a phased retirement program, the vast majority of women and men would seek full retirement by two years after retirement as it occurs under the present system.

For the women who prefer positive hours, the retirement coefficients for preferred hours are jointly significant. Given the average employed woman prefers 29.4 hours per week, the coefficients suggest that there is a slight rise in the second year prior to planned retirement, followed by declines generating a preference for under 20 hours per week among the rare women who prefer to work at or after four years of retirement. For men, the pattern is similar though dampened, with the coefficients being jointly insignificant.

It may be informative to consider other simulations for significant results in the labor force participation probits. For both women and men, the child variables are jointly significant. The probability of a woman preferring positive hours declines from a projected 92 to 73 percent upon the advent of pregnancy, a figure that declines to 12 percent following the arrival of a first child, to six percent in that child's second year, with an increase to nine percent in the child's third year.¹² Some women choose to re-enter the labor force after achieving empty nest status, when preferred participation rates are estimated to rise from 90 percent in the first to 97 percent in the second year of that status.

Considering other significant coefficients in the labor force participation probit for women, we estimate that a university degree for women raises their preferences for participation from 95 to 97.5 percent. Widowhood (typically above 65 years of age) initially raises preferred participation from 17.5 to 38 percent. The simulated effect of the death of someone close (in age group 45-54) immediately reduces women's participation from 91.5 to 87 percent, but

with a return to 91.5 percent in the following year, suggesting the existence of a mourning period of approximately one year. Although only significant in the third year after the event, the long-term effects of violence against women are estimated to be large, dropping desired participation from 95 to only 78.5 percent over a three-year period. Again echoing the hours results, job changes are associated with around a four percent increase and promotions with a five percent increase in the probability of preferring positive hours.

For men, simulations for changes in significant coefficients mainly yielded small changes in the order of two percent or less. The key exception was for widowhood (typically above age 65), which is associated with a large decline in the probability of preferring any hours, albeit with a lag into the second year, when the probability was estimated to drop from 32 to only four percent.

Note that the identifying variables functioned as expected. Planned retirement in the next year or two was associated with slight declines in preferred hours, while the onset of adverse health conditions is associated with a lower probability of preferring positive hours.

Next consider the results of various specification tests. The check for response bias involved comparing coefficients from the main analysis here with those from the larger sample which excluded life events variables from the SCQ. For three of the equations, the pattern of results was virtually identical, with some improved significance. However, in the probit for men, eight coefficients gained significance without changing signs but three coefficients lost significance and another retained significance but changed sign; this instability probably reflects the fact that most men in the sample prefer positive hours. Importantly, results surrounding retirement for men changed very little. Given most results were generally stronger in the larger sample, it seems reasonable to conclude that it is unlikely that response bias in the smaller sample is generating spurious correlations.

A check on the dynamic character of the model involved comparing the preferred hours results reported in Table 2 with those from otherwise identical models that excluded the lagged preferred hours variables. The pattern and significance of results changed markedly with, for example, men who hold a university degree preferring significantly fewer hours, no significant effect on women for pregnancy, and a delayed positive effect of marriage on men's preferred hours. These results suggest the model we employ is appropriate and likely capturing dynamic effects, as claimed.

Finally, we compared three-year results for Waves 1 through 3 and for Waves 2 through 4 as a check for the dynamic stability of the model. The pattern of hours preferences results remained unchanged, although significance was lost for women's coefficients regarding education, pregnancy, widowhood, marriage and job change in the Waves 1 through 3 model, and for men around separation, divorce, widowhood and serious illness in that same model. In addition, significant negative effects of around 2.5 hours for children turning five appear for women in both models (though with different lags), suggesting mothers do not always seek a return to usual hours at that point, while marriage exerts a positive and significant effect on women's preferred hours in the Waves 1 through 3 model, suggesting we discount the earlier finding of a negative effect.

Conclusion

Do employees exhibit preferences for flexibility in usual hours over time? Our analysis of four waves of longitudinal Australian data suggests the answer is 'yes,' although the patterns were not always as predicted by traditional economic or life events considerations. For age, we found that both men and women typically prefer longer hours during their youth, with declining hours thereafter, suggesting that employers drive any increase in hours as employees enter the prime earning years. Pregnancy and the birth of a first or of a second child dramatically reduce the preferred hours of women, with a return to near usual hours once children enter school, an increase in hours as one child leaves home but others remain, and decreasing hours preferences as women enter the empty nest phase of their lives, albeit with increased levels of labor force participation. Contrary to stereotypical patterns for highly educated, professional women, the average mother in our sample was not interested in putting most of her energies into a career when the empty nest phase of life arrived. Further, a solid majority of women preferred full retirement, with less than one-seventh preferring a phased retirement option for a year.

Women also responded to changes in marital status, increasing preferred hours following separation and reducing them post-divorce. Women were also responsive to widowhood through temporary increase in preferred hours. A contrary effect appeared for the death of other loved ones and close friends. Finally, a long-term decline in preferred labor force participation occurred for women who were victims of violence

Men were largely unresponsive to these events, and indeed to most life events. However, they were prone to reducing their hours following marital separation, and increasing those hours post-divorce, perhaps reflecting incentives around divorce law. Further, men two years post-widowhood tended to reduce both their preferred hours and labor force participation. Finally, a majority of men preferred full retirement, with others preferring continuation of employment for a year or two.

For policy-makers, the evidence suggests that sizeable minorities of women and men would prefer phased retirement options. Although the additional period of employment would in most cases represent only a year or two, this would represent a net addition to labor supply because few individuals exhibited a preference for reducing their hours pre-retirement.

For work-life and human resource practitioners, the findings suggest that many employees who desire flexibility are confronting intensely personal issues around the death of someone close to them. Creating conditions where employees can readily access flexibility either while feeling comfortable relating such information to the employer or without needing to provide a reason could go far towards making employee desires for flexibility a reality.

For both practitioners and policy-makers, our most troubling findings concern the role of children in women's and men's preferences. Women exhibit clear preferences for flexibility around commitments to children while men do not. New fathers may be spending more time with their children, but they are not seeking to take that time from their employers. Therefore, efforts to improve access to hours flexibility may serve to isolate the women who would likely use the policies. Men's behavior and preferences would need to change to alter this dynamic.

We have not here asked the question of whether preferences for work hours flexibility are being met, and leave that for future research. However, the results presented here clearly suggest that the demand for flexibility among employees exists.

Endnotes

¹ The preferred *LFP* variable largely overlaps actual labor force participation. For example, in wave 4, only 0.2 percent of respondents claiming they prefer zero hours were simultaneously employed. However, 5.8 percent of the sample report being out of the labor force while preferring positive hours; these are presumably discouraged job seekers.

² The regression method employed is the SVY Heckman procedure in STATA Release 9.

³ Over the first four waves, the rate of SCQ returns averaged around 92 per cent of all interviewed respondents.

⁴ All variables are drawn from the personal interview, except for pregnancy and the life events variables discussed in the following paragraph, which were contained in the SCQ.

⁵ We initially included an age quadratic, as is standard in labor supply or wage equation models, but the coefficients were mainly insignificant, leading us to use the categories employed here.

⁶ We initially included variables for holding a degree at wave 1 along with change variables for degree receipt in later waves. However, less than 20 respondents per wave received a degree, and regressions did not converge when these additional variables were included.

⁷ Step and foster children were excluded. The number of third and higher order children born in the last three waves was insufficient for inclusion in the analysis. Note also that we considered variables for entry into and the initial state of lone parenthood, but the results were uniformly insignificant.

⁸ Variables for reconciliation with a partner or spouse, being the victim of a property crime, or moving household were also available, but the relevant coefficients were always insignificant, so were excluded for brevity.

⁹ The average age of remaining children when a child leaves home between waves is 15.4 (Waves 1-2), 13.4 (Waves 2-3) and 14.4 (Waves 3-4) years.

¹⁰ This effect is not mainly due to the positive financial effects of remarriage among women following divorce; only 10.9 percent of women divorced in Wave 1 were remarried by Wave 4.

¹¹ These simulations involve setting the $t-1$ and $t-2$, and then the $t-1$, $t-2$, and $t-3$ retirement dummies to unity, recalling that effects are additive. Note that for all simulations, the values of dummy variables such as for life events were set at their modal value (usually zero, except for marriage), with income and lagged hours set at their means for the relevant gender, age and marital status.

¹² For the simulations, all pregnancy, first child, second child, and children age variables were initially set to zero. Then the pregnancy value was switched to unity, then the first child variable for $t-1$ was also set to unity, then the variable for first child in $t-2$ was also set to unity, and finally the variables for first child in $t-3$ and for a second child in $t-1$ were switched to unity.

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