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THE EFFECT OF CAREER BREAKS ON THE WORKING LIVES OF WOMEN

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ABSTRACT

In this paper we examine the effect of career breaks on the working lives of women using survey data from the state of Queensland in Australia. After estimating the income penalty faced by women with career interruptions – according to the duration of, and reasons for, the interruptions – we seek to address a wider set of issues regarding: patterns of job change and income gains or losses related to job change; determinants of career re-entry plans; and satisfaction with hours worked. As women increasingly combine motherhood and employment, they face both penalties and costs, particularly if they have taken a career break in order to care for their young. This general labor market failure that penalizes motherhood should be addressed by relevant measures related to their income, working hours, and the type and status of employment, particularly on their re-entry into employment after a child-related career break.

KEYWORDS

Gender, labor market, career breaks, motherhood, income penalty

JEL Codes: J16, J31

INTRODUCTION

Jane Waldfogel (1998a) recently observed that it is "a well-established fact that women with children earn less than other women in the United States," noting that "even after controlling for differences in characteristics such as education and work experience, researchers typically find a family penalty of 10–15 percent [of their income] for women with children, as compared to women without children" (p. 143). No such family penalty exists for US men. In fact, Waldfogel (1998a) reported a marriage premium for men ranging from 10–15 percent. (See also Claudia Goldin 1997; Jane Waldfogel 1997; Michelle Budig and Paula England 2001 for other studies of the family penalty for women.)

Heather Joshi, Pierella Paci, and Jane Waldfogel (1999) showed that a significant pay differential existed in Britain between women with and without children. Russell Rimmer and Sheila Rimmer (1997) found that the income penalty associated with career interruptions for well-educated Australian women, and those in highly skilled work, was small relative to those who worked continuously. On the other hand, the penalty of taking a

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break from paid work was quite high for low-skilled women in Australia. Consequently, the wage gap between mothers and other women could represent a considerable cost of childbearing (Heather Joshi 1990, 1991).

A "family penalty" may exist because marriage and family are associated with interrupted careers for working women (Myra Strober and Agnes Chan 1999; Joan Williams 2000) and employers might regard career breaks as periods during which a person's human capital (Gary Becker 1991) stagnates. Given the large body of evidence linking education and work experience to the wages of women (June O'Neill and Solomon Polachek 1993; Catherine Hakim 1996; Francine Blau 1998), a human capital interpretation suggests the low earnings of women with children are the result of interrupted work histories.

In addition to this "human capital" explanation is the possibility that employers discriminate against women who interrupt their careers for the sake of their children. Perhaps employers expect the first child-related career break to be followed by other interruptions, thinking that women who return after a child-related break are more likely to take time off work to look after sick children or deal with other domestic emergencies (Gary Becker 1985). Because the dominant model of career progression (Hanna Papanek 1973; Arlie Hochschild 1975) includes requirements for linearity and continuity (Carmen Sirianni and Cynthia Negrey 2000), gender asymmetry continues to disadvantage women with childcare commitments. An appeal for a corporate "mommy track" to resolve conflicts between family and work fails to challenge gender ideologies regarding family and childcare responsibilities (Barbara Ehrenreich and Deirdre English 1989). Thus an important issue for feminist economists to understand is why and how motherhood acts as a labor market disadvantage. This paper seeks specifically to examine penalties faced by working women who took child-related career breaks compared to women whose career breaks were not child-related.

Against this background, this study examines two aspects of the effect of career breaks upon the working lives of women. First, it examines whether the effect of career breaks differs according to their duration and according to the reasons for taking them: that is to say, whether such effects embody elements of both "human capital" and "unequal treatment." Second, in the face of such differences, the paper estimates the relative contributions of "human capital" and "unequal treatment" to the overall income penalty faced by women with career interruptions. However, this study is interested in a wider set of questions than the effect of career interruptions on women's earnings or incomes. These are detailed in a subsequent section: suffice it to say here that they involve aspects of the work conditions to which women returned after their career break and their degree of satisfaction with their current conditions.

DATA AND METHODOLOGY

In 1997, the Queensland Government Statistician's Office carried out the *Survey of Queensland Women* on behalf of the Queensland Government's Office of Women's Affairs (Government Statistician's Office 1998). Between September and October, investigators interviewed and coded data with respect to 4,883 women throughout Queensland. The survey identified 3,273 women who had worked in the five years prior to being interviewed and distinguished between those who had worked continuously over those five years and those who had taken one or more career breaks. Data on these 3,273 women – 1,390 of whom had taken a career break – form the raw material of this study. Although the analysis relates to the state of Queensland in Australia, the issues raised apply to all countries where the income penalty faced by working mothers is high.

The survey reported the annual personal income (*PERSINC*) of the women as an ordinal variable: Table 1 shows how this was coded; Table 2 provides details on the nonincome variables. In particular, Table 2 defines the type of break (child-related or nonchild-related) and its duration (long and short). These career breaks relate to the *collective* of breaks taken by the women over the five years and not to specific breaks; when women had taken more than one career break, the survey contained no information on individual breaks.

The survey did capture whether the women who took career breaks re-entered the labor market and, if they did, whether their re-entry was accompanied by a change in job type, income,[1] or status. Comparing the pre- and post-break occupations of the 836 women who had taken such breaks – and who were currently in paid employment – 612 women experienced no change of occupation: 161 women remained in managerial or professional jobs and 451 women remained in nonmanagerial or professional jobs. Of the 224 women who did experience a change after their career breaks, 143 women "traded up" to managerial or professional jobs, while 81 women "traded down" from the managerial or professional jobs they held before their career breaks. The numbers suggest that women in managerial or professional jobs were less inclined to take a career break

Table 1 Definition of income variables

Variable	*= 1*	*= 2*	*= 3*	*= 4*
PERSINC (annual personal income, A$)	0 – 16,000	16,001 – 30,000	30,001 – 50,000	50,000 +
HHLDINC (annual household income, A$)	0 – 16,000	16,001 – 30,000	30,001 – 50,000	50,000 +

Table 2 Definitions of binary variables (alphabetical listing)

Variable	*Women in category*	*= 1 (= 0, otherwise)*
AGE < 25	470	Age less than 25 years
AGE 25–34	892	Age: 25–34 years
AGE 35–45	1,012	Age: 35–45 years
AGE > 45	899	Age greater than 45 years
BREAK	1,390	Took one or more breaks
CASUALEMP	572	Casual employment
CHDCARE	416	Used paid childcare
CHDBREAK	617	Took a child-related break
FTEMP	1,276	Full-time employment
HGHED	559	"High-level" education qualification
LNGBREAK	760	Took a break > 1 year
LOWED	1,174	"Low-level" education qualification
MEDED	1,540	"Medium-level" education qualification
NONEURO	95	Non-European origin
NOPLAN	110	Did not plan on returning to work, after a break
PRFMNG_CUR	1,035	Current occupation is professional or managerial
PRFMNG_PREV	391	Previous occupation was professional or managerial
REENTER	857	Re-entered the workforce after a break
SAMEJOB	514	Returned to same type of job as before break
SELFEMP	605	Self-employed
SENLOSS	263	Experienced loss of seniority, after return to work
YNGCHD < 5	770	Child under 18 years at home, youngest ⩽ 5 years of age
YNGCHD > 5 < 13	551	Child under 18 years at home, 5 < youngest age ⩽ 13
YNGCHD > 13	338	Child under 18 years at home, youngest > 13 years age

than women in other jobs: while 40 percent of currently employed women were in managerial or professional jobs, only 28 percent of the women who took career breaks were in these jobs.

The employment status reported in the survey was classified as part-time, full-time, casual, or self-employed. The increasing trend of part-time employment, mostly women, has attracted considerable attention in Western countries (Australian Bureau of Statistics 1991; Jill Rubery and Colette Fagan 1994; Chris Tilly 1996; Susan McRae 1998; Julia O'Connor, Ann Orloff, and Sheila Shaver 1999). The survey also provided information on the number and the ages of the children of the women in the sample as well as the use of paid childcare, an important determinant of the ability of women to take up employment opportunities (Candida Brush 1998). In addition, the survey contained information on

other variables that captured aspects of human capital, such as age, education, and race.

This study used these data to address the following questions:

1 Were women who took career breaks penalized, in terms of income, compared to women who worked continuously; if so, by how much?
2 Why did some women return to the same type of job after taking a career break while others changed to a different type of job?
3 Did women who returned to a different type of job suffer an income loss, compared to women who returned to the same type of job?
4 Why did some women experience a loss of status or seniority on re-entering the workforce after career breaks?
5 Why did some women not plan on re-entering the workforce after their career breaks?

The dependent variable for addressing questions 1 and 3 was *PERSINC* (defined in Table 1): since this was an ordinal variable, the related equations were estimated using *ordered logit* (William Greene 2000; Vani Borooah 2001). The dependent variable for addressing questions 2, 4, and 5 were binary variables relating to: re-entry to the same type of job; the experience of loss of status; and lack of plans to return to work (respectively, $SAMEJOB_i$, $SENLOSS_i$, and $NOPLAN_i$ of Table 2). The related equations for these binary variables were estimated as *logit* equations.

The basic strategy employed to answer the above questions was to use one (or more) dummy variables to separate the sample of women, over which the equation was being estimated, into two (or more) mutually exclusive parts and then to test whether the coefficients on the determining variables were the same across these parts.

The equation specifications associated with the above questions are set out below, with the equation number referring to the relevant question:

$$\begin{aligned}\Pr(PERSINC_i = j) = &\sum_{k=1}^{K} \alpha_{ik} x_{ik} + \sum_{k=1}^{K} \beta_{ik} x_{ik} BREAK_i \\ &+ \sum_{k=1}^{K} \gamma_{ik} x_{ik} LNGBREAK_i + \sum_{k=1}^{K} \delta_{ik} x_{ik} CHDBREAK_i \\ &+ \sum_{k=1}^{K} \pi_{ik} x_{ik} LNGBREAK_i \times CHDBREAK_i\end{aligned} \quad (1)$$

$$\Pr(SAMEJOB_i = 1)/\Pr(SAMEJOB_i = 0) = \sum_{k=1}^{K} \beta_{ik} x_{ik} + \sum_{k=1}^{K} \gamma_{ik} x_{ik} LNGBREAK_i + \sum_{k=1}^{K} \delta_{ik} x_{ik} CHDBREAK_i + \sum_{k=1}^{K} \pi_{ik} x_{ik} LNGBREAK_i \times CHDBREAK_i \quad (2)$$

$$\Pr(PERSINC_i = j) = \sum_{k=1}^{K} \alpha_{ik} x_{ik} + \sum_{k=1}^{K} \beta_{ik} x_{ik} SAMEJOB_i \quad (3)$$

$$\Pr(SENLOSS_i = 1)/\Pr(SENLOSS_i = 0) = \sum_{k=1}^{K} \alpha_{ik} x_{ik} + \sum_{k=1}^{K} \beta_{ik} x_{ik} SAMEJOB_i \quad (4)$$

$$\Pr(NOPLAN_i = 1)/\Pr(NOPLAN_i = 0) = \sum_{k=1}^{K} \beta_{ik} x_{ik} + \sum_{k=1}^{K} \gamma_{ik} x_{ik} LNGBREAK_i + \sum_{k=1}^{K} \delta_{ik} x_{ik} CHDBREAK_i + \sum_{k=1}^{K} \pi_{ik} x_{ik} LNGBREAK_i \times CHDBREAK_i \quad (5)$$

The vector $x_i = (x_{i1} \ldots x_{ik})$ represents, for woman i, $i = 1 \ldots N$, observations, on K determining variables. The interpretation of the coefficients may be illustrated by observing that in equation (1): the α_k represent the coefficients of women who worked continuously; the β_k represent the *additional* effect of career breaks; the γ_k and the δ_k represent the *additional* effect of long career breaks and career breaks for child-related reasons, respectively; the π_k represent the additional effect of career breaks which were both lengthy and child-related.

FINDINGS AND DISCUSSION

The estimation results for equations (1) – (5) are shown in Table 3. Because some of the interaction terms – as shown in the equation specifications above – had z-scores less than unity, they were dropped from the estimated equation. (The likelihood ratio tests for doing so are reported for each of the equations at the foot of Table 3.) The marginal probabilities associated with the coefficients are shown, parenthetically, after the logit estimates. They compute the change in the average probability of the events occurring (i.e., returning to the same job, experiencing loss of seniority

after return, or not planning a return to work) consequent upon a *unit change* in the value of the jth variable. When the variable is a discrete variable – as are all the variables in the equations under question – a unit change in its value implies a shift from one category to another.[2]

Career breaks and income penalties

The estimation results for equation (1) show that the probability of a woman being in a particular income band, after returning to the same type of job following a break, was affected by whether she took a career break; whether the break was "long"; and whether it was child-related. Let m_j represent the mean income in income band j, $j=1\ldots4$ and let $p_{ij}^A = \Pr(PERSINC_i = j)$, $j=1\ldots4$, represent the probabilities of the individual women being in each of the four income bands when *all* 2,127 women were assumed to have worked continuously in the five years prior to the survey (so that $BREAK_i = 0$ for all $i=1\ldots N$). Then the expected income for each woman, under this scenario, would be $y_i^A = \sum_{j=1}^{4} p_{ij}^A m_j$ with $y^A = \sum_{i=1}^{N} y_i^A / N$ representing the mean expected income.

Next, let y^B represent the mean expected income when *all* 2,127 women were assumed to have taken short nonchild-related career breaks. The difference between the mean expected incomes under the two scenarios ("worked continuously" and "took short nonchild-related break") can be ascribed entirely to the effect of short, nonchild-related career breaks since that is the only difference between the scenarios. The "income penalty" to which such breaks give rise may be represented by the ratio of mean incomes under the two scenarios: $y^B/y^A \leqslant 1$. Similar income penalties could also be calculated for a scenario in which everyone took short child-related career breaks and for a scenario in which everyone took long child-related career breaks. In calculating these income penalties, the values of m_j, $j=1,2,3$, were taken as the midpoints of their relevant income band, respectively: \$8,000; \$23,000; and \$40,000. For the last income band, which was open-ended (\$50,000+), m_4 was set to \$60,000. Since the exercise was concerned with changes to (mean expected) income under the different scenarios, the effect of errors stemming from this arbitrariness would be ameliorated by the fact that it was applied consistently across all the scenarios.

The mean expected incomes under the four scenarios (i.e., worked continuously, took a short nonchild-related break, took a short child-related break, took a long child-related break) were: \$25,364, \$24,086, \$22,819, and \$21,004, respectively. In other words, the income penalty for women returning to the same type of job was 5 percent from taking a short, nonchild-related career break, 10 percent from taking a short, child-related career break, and 17 percent from taking a long, child-related break.

While other studies have found a penalty to part-time work (Joshi, Paci, and Waldfogel 1999), but no direct penalty to motherhood (Susan

Table 3 Econometric answers to the core questions posed: estimation results for equations (1) – (5)

	Equation (1) Dep. var.: PERSINC	*Equation (2) Dep. var.: SAMEJOB*	*Equation (3) Dep. var.: PERSINC*	*Equation (4) Dep. var.: SENLOSS*	*Equation (5) Dep. var.: NOPLAN*
HHLDINC					0.348 [0.054]
					(2.77)
SAMEJOB			− 0.343	0.505 [0.108]	
			(2.30)	(2.67)	
LNGBREAK		1.310 [0.305]		0.598 [0.127]	0.855 [0.118]
		(4.73)		(3.77)	(2.78)
CHDBREAK		− 0.808 [− 0.185]			0.603 [0.091]
		(2.36)			(2.01)
CHDBREAK × LNGBREAK		0.509 [0.123]			
		(1.43)			
AGE < 25	− 2.388	0.739 [0.182]	− 0.815		− 1.330 [− 0.154]
	(2.98)	(2.87)	(2.92)		(2.89)
BREAK × AGE < 25	1.557				
	(2.37)				
LNGBREAK × AGE < 25	1.081				
	(1.38)				
CHDBREAK × AGE < 25	− 2.436				
	(1.83)				
AGE 25 – 34	− 0.255	0.254 [0.061]	− 0.379	− 0.495 [− 0.101]	
	(2.11)	(1.43)	(1.95)	(2.96)	
AGE 35 – 45	− 0.183		− 0.457		− 0.867 [− 0.118]
	(1.67)		(2.30)		(2.44)
FTEMP	2.503		2.634	− 0.703 [− 0.140]	
	(18.98)		(12.78)	(2.75)	
SAMEJOB × FTEMP				0.556 [0.341]	
				(1.63)	

(*continued overleaf*)

Table 3 (continued)

	Equation (1) Dep. var.: PERSINC	*Equation (2) Dep. var.: SAMEJOB*	*Equation (3) Dep. var.: PERSINC*	*Equation (4) Dep. var.: SENLOSS*	*Equation (5) Dep. var.: NOPLAN*
PTEMP	0.769		0.605	− 0.234 [− 0.048]	
	(5.75)		(3.25)	(1.25)	
SELFEMP	0.613	0.438 [0.106]	0.309		
	(1.78)	(2.04)	(1.43)		
LNGBREAK × SELFEMP	− 0.882				
	(2.45)				
HGHED	2.563		0.793		− 1.411 [− 0.156]
	(6.00)		(4.78)		(2.97)
BREAK × HGHED	− 1.142				
	(3.11)				
LNGBREAK × HGHED	− 1.155				
	(2.94)				
MEDED	0.385	0.472 [0.112]		0.358 [0.075]	− 0.403 [− 0.062]
	(3.75)	(2.21)		(2.29)	(1.59)
LNGBREAK × MEDED		− 0.742 [− 0.164]			
		(2.43)			
PRFMNG_CUR	1.047	− 0.372 [− 0.086]			
	(9.942)	(1.63)			
BREAK × PRFMNG_CUR	− 0.376				
	(1.85)				
LNGBREAK × PRFMNG_CUR		− 0.547 [−0.123]			
		(1.70)			
NONEURO	− 0.393		0.744		− 1.313 [− 0.136]
	(1.42)		(1.38)		(1.24)
SAMEJOB × NONEURO				1.108 [0.265]	
				(1.25)	

(*continued overleaf*)

Table 3 (continued)

	Equation (1) Dep. var.: PERSINC	*Equation (2) Dep. var.: SAMEJOB*	*Equation (3) Dep. var.: PERSINC*	*Equation (4) Dep. var.: SENLOSS*	*Equation (5) Dep. var.: NOPLAN*
YNGCHD < 5		− 0.399 [− 0.093]			
		(1.60)			
INTERCEPT		− 0.817			
		(4.34)		− 1.070	− 1.815
				(5.39)	

Notes: See Tables 1 and 2 for variable definitions. Figures in square brackets are marginal probabilities: these are only shown for the logit equations. Figures in parentheses are *z*-values. The intercept term in the ordered logit equations is absorbed in the slope coefficients and is not reported (see Borooah 2001 for discussion). *Equation (1)*: Ordered logit estimates; pseudo-$R^2 = 0.2048$; likelihood-ratio test (LR) test of zero slope coefficients: $\chi^2(17) = 1037.67$; LR test of zero restrictions: $\chi^2(33) = 26.6$. Sample was 2,127 women, all of whom knew their personal income, who had either worked continuously or who, after career breaks, had returned to the same type of job. *Equation (2)*: Logit estimates; pseudo-$R^2 = 0.0801$; LR test of zero slope coefficients: $\chi^2(11) = 87.99$; LR test of zero restrictions: $\chi^2(33) = 23.2$. Sample was 817 women, some of whom did not know their personal income, who had re-entered the workforce either in the same, or in different, types of jobs. *Equation (3)*: Ordered logit estimates; pseudo-$R^2 = 0.1912$; LR test of zero slope coefficients: $\chi^2(10) = 329.5$; LR test of zero restrictions: $\chi^2(11) = 7.5$. Sample was 797 women, all of whom knew their personal income, who had re-entered the workforce either in the same, or in different, types of jobs. *Equation (4)*: Logit estimates; pseudo $R^2 = 0.0645$; LR test of zero slope coefficients: $\chi^2(8) = 66.98$; LR test of zero restrictions: $\chi^2(13) = 0.29$. Sample was 832 women, who had re-entered the workforce, all of whom knew whether their seniority had been affected. *Equation (5)*: Logit estimates; pseudo-$R^2 = 0.0886$; LR test of zero slope coefficients: $\chi^2(9) = 41.99$; LR test of zero restrictions: $\chi^2(21) = 20.53$. Sample was 449 women, all of whom knew their household income, who had not re-entered the workforce following their latest career break.

Harkness 1996), our study shows that women who took a child-related break – either short or long – faced a higher income penalty than women who took a nonchild-related break. The introduction of legal rights such as maternity and parental leave has managed to help new mothers in the US and Europe maintain near continuous full-time careers. However, two aspects of parental leave – income replacement and the duration of leave – are important factors in determining the quality of women's employment after child birth (Shirley Dex and Heather Joshi 1999).

Type of career break and re-entry

The estimation results for equation (2) show that the probability of a woman who had re-entered the workforce following a career break doing a different type of job than the one she did before her break depended significantly on whether the break was long and child-related. A long break increased the likelihood of a return to the same type of job by 0.3 points, while a child-related break reduced it by nearly 0.2 points. The presence of pre-school children reduced the likelihood of a woman continuing in the same type of job after her break by nearly one point. Women under 25 years of age were more likely to return to the same type of job than women between the ages of 25 and 34, and women in both of these age groups were more likely to return to work than women over 35 years.

Given these observations, we analyzed the following hypothetical scenarios: all 817 women took short, nonchild-related breaks; all 817 women took short, child-related career breaks; all 817 women took long, child-related breaks. For women who had re-entered the workforce after their latest break, the average probabilities of being in a different type of job under these scenarios were, respectively: 35 percent, 20 percent, and 46 percent. In other words, taking a short child-related (rather than a nonchild-related) break lowered the average probability of women being in a different type of job after the break from 35 to 20 percent. However, taking a long (instead of a short) child-related break raised the probability of being in a different type of job from 35 to 46 percent.

Re-entry and income penalty according to change in job

The estimation results for equation (3) show that the probability of a woman who had re-entered the workforce following a career break being in a particular income band ($PERSINC_i = 1,2,3,4$) depended significantly on her age; whether she was working full-time or part-time and whether she was self-employed; her educational qualifications; whether she was in a managerial or professional occupation; and whether she was non-European.[3] Even after controlling for the influence of these variables, the probability of a woman being in a particular income band was

significantly influenced by whether or not she was doing the same type of job that she did before her break. The average income of the re-entering women was $21,205 when they all returned to the same type of job but only $19,597 when they all returned to a different type of job. Consequently, the income penalty from returning to a different type of job was 8 percent.

Re-entry and penalty in terms of status and seniority

The estimation results for equation (4) show that women who continued in the same type of job were more likely (by 0.1 points) to experience loss of status or seniority than women who changed job types, but women who were in full-time employment were less likely (relative to part-time or casual workers) to experience such loss. Women who took long breaks were more likely to lose status or seniority (by 0.13 points) as were women who had a medium (as opposed to a high or low) level of education (by nearly 0.1 points).

The average probability that the seniority or status of women (who had re-entered the workforce following a career break) would be affected was 26 percent when women were assumed to resume in the same type of jobs they were doing prior to their break and 40 percent when they were assumed to rejoin the workforce in different jobs from their previous ones. In other words, after controlling for "other" factors affecting seniority or status, changing job type after a break would raise the average probability of women losing status or seniority from 26 to 40 percent.

The decision not to return to work

The estimation results for equation (5) show that the likelihood of women *not* planning a return to work, following a career break, was higher when the break had been long (by 0.1 points), the break had been child-related (0.1 points), or household income was high. Conversely, this likelihood was lower for women under 35 years of age, with those under 25 years being more likely to return to work than those between 25 and 34. Women with higher education qualifications were more likely (by 0.16 points) to return to work than women with lower qualifications.

When we assumed that all the women took short nonchild-related career breaks, the average probability of their not planning a return to work was 10 percent. Under the assumption that all the women took short child-related career breaks, this probability rose to 17 percent. Under the further assumption that these child-related career breaks were long breaks, the average probability of not planning a return to work rose to 30 percent.

In the UK, the age of the youngest child correlates positively and strongly with the employment of the mother; however, this correlation was less pronounced in countries where childcare is subsidized (Dex and Joshi

1999). The trend in Queensland, Australia, seemed to follow that of the UK: having children – and being out of the workforce for a year or more to look after them – sharply reduced women's plans to re-enter the workforce.

"PREFERRED" VERSUS "ACTUAL" HOURS WORKED

The survey indicated that 593 of the 2,564 women currently in paid employment – nearly one in four – would prefer not to be working. The preferences of the 2,564 women can be further examined according to whether they worked continuously, took nonchild-related breaks, or took child-related breaks. Table 4 shows that a disproportionately large proportion of women who took child-related career breaks preferred to work part-time (45 percent) or to stay at home (21 percent) and a disproportionately small proportion of such women preferred full-time jobs (15 percent). However, in terms of preferred rates of nonwork, the differences between the three groups of women were smaller: for example, 24 percent of those who had worked continuously would have preferred not to be working, compared to 27 percent of those who had taken child-related breaks.

These findings suggest that a significant source of women's discontent with their labor market outcomes could be that many working women might prefer not to work at all while others might prefer not to work their current hours. Comparing the current and preferred status (full-time, part-time, or casual) of the 2,564 women currently in paid employment, 47 percent claimed to be content with their current economic status, 37 percent would have preferred to work fewer hours (including zero hours), and 16 percent would have preferred to work more hours.

We then defined the trichotomous variable Z_i for each of the currently employed women as $Z_i = 0$, if she was content with her current economic status, $Z_i = 1$, if she would have preferred to work fewer hours, and $Z_i = 2$, if

Table 4 Preferred labor market status of women in paid employment

% that would prefer to be:	*Nonchild-related career-break women (503)*	*Child-related break women (311)*	*No career-break women (1,665)*
In full-time employment	41	15	40
In part-time employment	28	45	29
In casual employment	13	13	7
Stay at home	7	21	11
Otherwise inactive	11	6	13
Total	100	100	100

Note: Data for 2,564 women currently in paid employment.

she would have preferred to work more hours. We estimated a multinomial logit model – on data for the 2,295 (out of 2,564) women who were both in paid employment and who knew their personal and their household incomes – with Z_i as the dependent variable and $Z_i = 0$ as the base outcome. The estimation results from this model are shown in Table 5 and, for each variable, the marginal probabilities associated with the three outcomes are shown in Table 6. These probabilities sum to zero across the outcomes. The results strongly suggest that younger women (particularly those below 25 years) were keen to work longer hours. Women with higher income – particularly higher personal income – were less keen on working longer hours than they currently did: they were almost equally divided between those who would have preferred lower hours and those were content with their current hours. Women with young (6–13) or pre-school (0–5) children tended to prefer working fewer than their current hours.

To assess the overall effect that the presence of children had on the likelihood of women's discontent with their current working lives, we constructed four scenarios: in scenario A, we assumed that none of the women had pre-school ($\leqslant 5$ years) children at home ($YNGCHD < 5_i = 0$; $YNGCHD > 5 < 13_i$ values as in the sample); in scenario B, we assumed that none of the women had pre-school or young ($\leqslant 13$ but > 5 years) children at home ($YNGCHD < 5_i = YNGCHD > 5 < 13_i = 0$); in scenario C, we assumed that all the women had pre-school children at home ($YNGCHD < 5_i = 1$; $YNGCHD > 5 < 13_i$ values as in the sample); and in scenario D, we assumed that all the women had pre-school and young children at home ($YNGCHD < 5_i = YNGCHD > 5 < 13_i = 1$). Let p_0^s, p_1^s, and p_2^s represent (under scenario $s = A, B, C, D$) the average likelihood of the 2,295 women in the estimation sample of being "contented," wanting to work fewer hours, and wanting to work more hours, respectively. Table 7 shows the estimated values of these likelihoods.

Of the 2,295 women in the estimation sample, 47 percent desired no change in employment status, 38 percent wanted fewer hours, and 15 percent wanted more hours. These percentages did not change by much when pre-school children and young children were assumed to be absent. Comparing scenario B to the base sample proportions, the proportion of those desiring fewer hours fell from 38 to 34 percent while the proportion of the "contented" rose from 47 to 50 percent.

The results were very different when the universal presence of children was assumed. When we assumed that all the women had young children, the proportion of those wishing fewer hours rose from 38 percent (base) to 45 percent (scenario C) and the proportion of the "contented" fell from 47 to 42 percent. When the universal presence of young children was supplemented with the universal presence of pre-school children (scenario D), the proportion of those desiring fewer hours rose to 54 percent and the proportion of those content with their current economic status fell to 34

Table 5 Multinomial estimation results for preferred hours

	Preferred fewer hours: z = 1	*Preferred more hours: z = 2*
BREAK		1.079
		(5.38)
CHDBREAK		− 0.926
		(4.02)
LNGBREAK		0.488
		(2.36)
AGE < 25	− 0.520	0.465
	(3.21)	(2.30)
BREAK × *AGE* < 25		− 0.596
		(1.59)
AGE 25–34	− 0.288	
	(2.63)	
SELFEMP	− 0.219	− 0.391
	(1.98)	(2.06)
HGHED	− 0.247	0.467
	(2.11)	(2.39)
PRFMNG_CUR		− 0.359
		(2.24)
NONEURO	− 0.836	
	(2.41)	
YNGCHD < 5	0.481	
	(3.89)	
YNGCHD > 5 < 13	0.345	
PERSINC	(2.95)	− 0.980
		(8.84)
HHLDINC		− 0.254
		(3.62)
Intercept	− 0.219	0.660
	(2.84)	(2.11)

Notes: The base outcome is $z = 0$: content with the number of hours worked. The model was estimated on data for 2,295 women who were in paid employment and who knew their personal and their household incomes.

percent. Shirley Dex, Heather Joshi, Andrew McCullough, and Susan Macran (1998) found that maintaining employment continuity was highly dependent on education, wages, and the ability to take maternity leave. This points toward a polarization in the women's labor force between highly educated mothers with high wages and mothers with poor educational levels and low wages.

CONCLUSIONS

The "wages of motherhood," as Joshi, Paci, and Waldfogel (1999) termed the income penalty faced by working women with children, has attracted considerable research interest. Employment continuity is crucial for income: Waldfogel (1997, 1998b) shows that mothers who avoided a career

Table 6 Marginal probabilities from the multinomial estimation results for preferred hours

	Preferred fewer hours: z = 1	*Preferred more hours: z = 2*	*Content with current status*
BREAK	− 0.053	0.121	− 0.067
CHDBREAK	0.031	− 0.069	0.038
LNGBREAK	− 0.019	0.042	− 0.023
AGE < 25	− 0.138	0.079	0.059
AGE 25 – 34	− 0.068	0.012	0.056
SELFEMP	0.069	− 0.043	− 0.026
HGHED	− 0.079	0.063	0.016
PRFMNG_CUR	0.015	− 0.034	0.019
NONEURO	− 0.176	0.031	0.144
YNGCHD < 5	0.118	− 0.021	− 0.097
YNGCHD > 5 < 13	0.084	− 0.015	− 0.069
PERSINC	0.042	− 0.094	0.053
HHLDINC	0.011	− 0.025	0.013

Note: The marginal probabilities are obtained from the estimates shown in Table 5.

Table 7 The likelihood of women being contented/discontented about their current economic status

% desiring→ Scenario↓	*No change*	*Fewer hours*	*More hours*
Base scenario	47	38	15
Scenario A	48	36	16
Scenario B	50	34	16
Scenario C	42	45	13
Scenario D	34	54	12

Notes: Base scenario: sample averages, 2,295 women. Scenario A: none of the women has pre-school (under 6 years) children at home. Scenario B: none of the women has young (under 13 years) children at home. Scenario C: all the women have children 6 – 13 years at home, pre-school children as in sample. Scenario D: all the women have children 6 – 13 years and under 6 at home.

break were not disadvantaged, in terms of income, compared to childless women. There are three reasons, which *inter alia* could combine to produce this income penalty. First, women who take career breaks interrupt their accumulation of human capital and pay a penalty in terms of lower earnings (unless the career break is for work-related reasons, such as gaining an advanced degree). Second, women who take child-related career breaks could pay a further penalty because, within the class of women who interrupt their careers, employers might discriminate against those who interrupt careers for family-related reasons. Third, women who take child-related career breaks might not be able to return to the same type of job and this could generate an income penalty.

As we discussed earlier, we separated the effects of these three factors. We estimated the overall expected income penalty faced by women who took

career breaks of different duration and for different reasons, as well as the income penalty associated with changes in job type following a career interruption. Our paper also addressed a wider set of issues relating to perceptions of seniority or status loss at work following a return to employment after a career break, whether women planned on returning to work after a break, and the degree to which working women were discontented with their current economic status. Perceptions of a loss in seniority or status were aggravated when women changed to a different type of job, while the presence of young children and of a comfortable household income influenced plans not to return.

The results, taken collectively, buttress a point frequently made in the feminist literature: women often have to accept low quality employment because of their caring and household responsibilities (Rosemary Crompton 1997). Labor market structures, policies by government and employers, work practices, and cultural traditions play an important role in combining parenthood and employment in postindustrial societies. Not only are labor markets structured by practices, norms, and networks – which are indelibly stamped by issues of gender – but they also reinforce gender inequality. Thus labor markets, and also public policy interventions in the labor market, take into account only the costs of the working time forgone by women workers with children and entirely ignore the general benefit that society receives from such activity (Shirley Dex and Robert Rowthorn 1997).

Policies of statutory maternity leave and other family-friendly policies have benefited some women by enabling them to maintain continuous employment (Waldfogel 1998a). However, the evidence suggests that family-friendly policies have done little to improve the terms on which the average mother enters the labor market (Joshi, Paci, and Waldfogel 1999). Moreover, these policies have not sufficiently ensured equality of wages in most occupational categories. John Evans (2001) offers a comprehensive review of "family-friendly" workplace arrangements for four countries of the OECD: Australia, Japan, the United Kingdom, and the United States. Compared to many European countries, these four countries have relatively low levels of public provision for childcare and relatively low levels of statutory family leave benefits, stemming largely from the belief that government should not interfere in family life and in the organization of enterprises. In a comparison of social policies in Australia and Finland, Michael Bittman (1999) shows how entitlement to generous parental leave and public provision of childcare can significantly reduce the economic and social penalties faced by mothers.

Dex and Joshi (1999) illustrate diverse ways for reconciling both family and employment, including choices in parental leave, regulation of working hours that do not impinge on status of employment or other rights, appropriate state benefits or income replacement, and good and effective

childcare provision. In addition to the feminist goal of pay equity, Sirianni and Negrey (2000) argue for alternative working arrangements to foster gender equality both at home and in the market. If the current "market failure" is to be corrected then the positive externality that women, in their role as mothers and carers, provide should be internalized. One way of doing so might be to pay "working" mothers – defined to include those who work within and outside the home – a "social" wage, instead of the market wage that they currently receive.

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NOTES

[1] Annual income (in Australian dollars) before taxes, including pensions and investment income. Unfortunately, the survey did not have any information on earnings, wages, or any information on pre- and post-break incomes.

[2] In interpreting the marginal probabilities it should be borne in mind that the upper and lower limits for all the probabilities are one and zero, respectively. A marginal probability of, say, 0.116 (− 0.116) is then referred to as an increase (decrease) of *0.116 points* in the probability of the event.

[3] That is, spoke a non-European language at home.

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