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Changing Status

Women's Part-Time Work and Wages in Britain

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Changing Status: Women's Part-Time Work and Wages in Britain

Mary GREGORY and Sara CONNOLLY (With assistance from Barbara Eberth and Sarah Voitchovsky).

1. Introduction

One of the main findings of the benchmarking study¹ is that a significant part of the transatlantic employment gap arises from the differential rates of employment among women. Across the four European economies women make only around 70 per cent of the contribution to the overall employment/population ratio of their American counterparts. This deficiency is strongly marked in full-time work, especially in the Netherlands. It is, however, offset to a modest degree by a higher contribution from women working part-time (under 35 hours per week), particularly in the Netherlands and the UK, and to some extent Germany. The benchmarking study also showed that women in full-time work and workers in part-time jobs, women as well as men, generally have a greater risk of low pay and a lower presence in high pay jobs. Our own analysis for the UK, where the rate of part-time employment for women is high, indicates that part-time work carries a substantial pay penalty, not only during the work spell itself but also in terms of future earnings trajectories.

This paper traces the rise in female employment across the five economies, focusing on the growing importance of part-time employment for women, particularly amongst mothers. We then address the following questions. What role does part-time employment play in a woman's employment history? Given the growing frequency of women's part-time work and of transitions between full-time and part-time status, what are the consequences of part-time work for both current and subsequent earnings? Finally, how the employment package as a whole compare between part-time and full-time employees, i.e. are part-time and full-time jobs of similar quality? We examine these issues in detail for the case of the UK, where part-time employment for women has shown strong growth, and the part-time pay gap is becoming a major dimension of the gender pay gap.

2 - Growth in female employment

2.1 Women's labour force participation

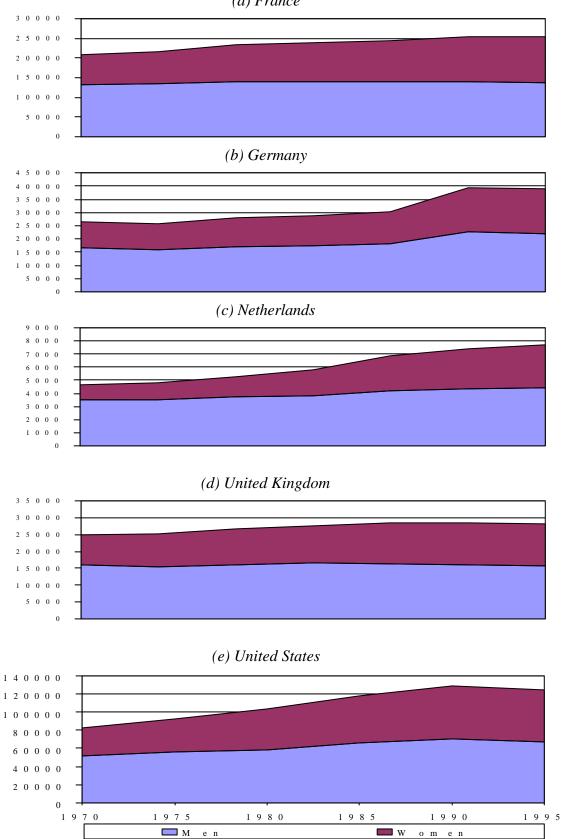
Across the European Union as a whole, the number of men in the labour force over the past 25 years has been relatively static. In the four European economies in this study it has risen significantly only in the Netherlands and post-unification Germany, while tending to decline in France and the UK. Women's employment, on the other hand, has grown continuously. In the US there has been a similar growth of female employment, while employment of men has also been rising since the beginning of the 1970s, albeit at a slower rate than for women (Charts 1(a) - (e)).

In 1970 women made up just over 35% of employment in each of the five countries; by the late 1990s this had risen to around 45%. As Chart 2 shows, women's share in total employment is now very similar across the five economies, only marginally higher in the US than in the European economies. In the earlier part of the period women's share in employment had been significantly lower in the Netherlands, but converged rapidly on the other countries over the late 1980s and is now closely comparable.

The growing proportion of women in the workforce reflects the sustained rise in female participation. In the early 1970s around 50% of women of working age were in the labour force (only 30% in the Netherlands); by the late 1990s this had risen to over 60% in each of the European economies and to 72% in the US (Chart 3). This higher participation rate for women in the US has been identified in the Report as one of the major differences with the European economies and a significant contributor to the jobs gap.²

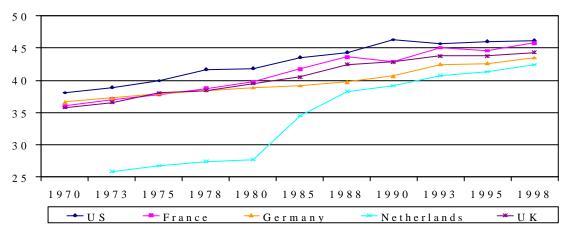
Until the early 1970s employment rates amongst women were typically below 50%, highest amongst young women (aged 15-24) and falling away sharply during child-bearing years. In the US, UK and France at this time one can see evidence of a bimodal pattern (sometimes referred to as the M curve) of female employment with slightly higher rates of employment amongst older women. Throughout the 1970s, 1980s and 1990s the employment rates of prime aged women (25-45) have risen from around 50% to over 70% (Charts 4(a) –(e)). Once again the most dramatic increases

Chart 1 Gender composition of the work force, 1970-1998 (x million persons)
(a) France



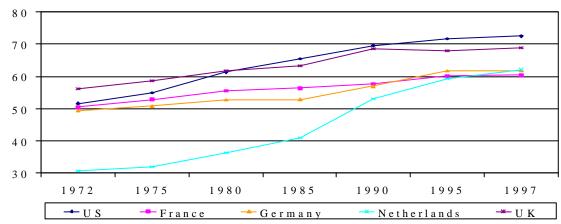
Source: OECD, Employment Outlook.

Chart 2 Female employment as % of total employment (head count), 1970-98



Source: OECD, Employment Outlook.

Chart 3 Female participation rates (%), 1970-98

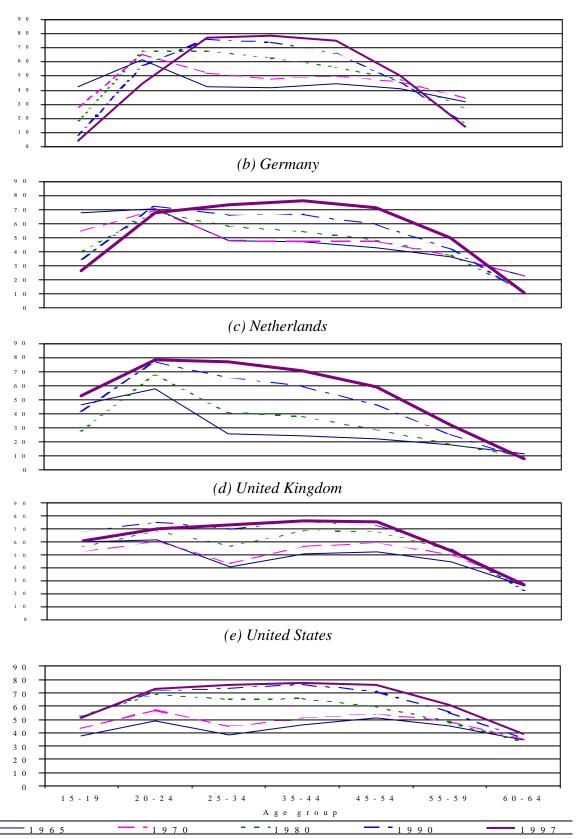


Source: OECD, Employment Outlook

have been seen in the Netherlands where employment of women in the each of the age groups 25-34, 35-44 and 45-54 has risen from under 25% to 70%. This progressive 'filling-in' of the dip in female employment rates during the years of family formation has characterised each of the five countries, and participation rates for these age-groups are now closely comparable. The rise in female employment has not, however, occurred across all age groups; the trends towards declining employment rates for younger and older workers, notable for men, also characterise employment patterns for women. As a consequence, whilst female employment rates remain lower

Chart 4 Employment rates – Women by age





Source: OECD, Employment Outlook.

than those for men (even when female employment is at its highest it never exceeds 80%), the age-employment patterns of men and women are now broadly similar. In the US, where women's employment developed earlier, participation rates remain somewhat higher, most noticeably amongst older women.

2.2 Growth in part-time employment

Among both men and women the pattern of jobs has been changing, with part-time employment rising more rapidly than full-time employment, and representing an increasing proportion of employment (Chart 5). The growth of part-time employment has been particularly marked in the Netherlands, where over 30% of workers now work part-time; strong growth has also characterised the UK and France, the latter from a very low level in the early 1970s.

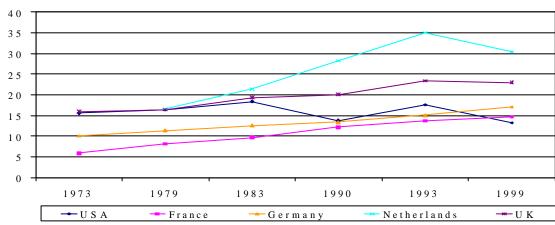


Chart 5 Part-time as % of total employment (men + women)

Source: OECD, Employment Outlook.

Table 1: Women's share of part-time employment, 1973-99

	1973	1979	1983	1990	1993	1999
France	82.3	82.2	84.4	79.8	83.3	79.0
Germany	89.0	91.6	91.9	89.7	88.6	84.1
Netherlands	n.a.	76.4	77.3	70.4	73.7	77.4
UK	90.9	92.8	89.8	85.1	84.5	79.6
USA	66.0	68.0	66.8	68.2	66.0	68.4

Source: OECD Employment Outlook, 1994, Table D; 2000, Table E.

Part-time work is predominantly, although by no means exclusively, engaged in by women. In most countries at least 80% of part-time employees are female, although

the Netherlands and the US are notable exceptions with a quarter or even one-third of part-time work undertaken by men (Table 1).

2.3 Part-time work in women's life-cycle

There is a clear difference between the US and the European economies in the role of part-time work in women's life-cycle. As shown in Table 2, in the US women's part-time work is polarised between young people, still in education, and older, pre-retirement, age-groups. In the four European economies, on the other hand, the growth in opportunities for part-time work has allowed more women to combine labour market work and earnings with responsibilities for childcare, contributing to the rising participation of women in the 25-44 age group. Changes in fertility patterns, delayed family formation and smaller family sizes have also contributed to this pattern. Even between European countries, however, this pattern shows variation, with part-time work predominating for mothers in Germany, the Netherlands and the UK while full-time work remains more common in France (Table 3).

Table 2: Proportion of part-time employment by age and sex, 1995

	France	Germany	Netherlands	UK	US
Males – All	5.0	3.6	16.8	7.7	11.0
Females – All	28.9	33.8	89.0	44.3	33.5
15-19	41.9	8.0	49.0	56.0	74.4
20-24	34.5	10.4	62.3	21.2	22.1
25-39	28.2	35.2	76.2	41.0	20.1
40-54	26.8	46.1	81.7	46.8	28.4
55-64	35.3	49.9	83.8	60.0	65.6
65+	44.7	60.6		87.5	

Source: O'Reilly, J. and Fagan, C., (eds), Part-time Prospects: An International Comparison of Part-time Work in Europe, North America and the Pacific Rim, Routledge, London and New York, Table 3.2.

Table 3 Employment rates of mother with a child aged 10 or under by full-time and part-time status 1993(%)

	Full-time	Part-time
France	40	20
Germany	18	30
Netherlands	7	40
UK	18	34

Source: EC Childcare Network 1996

3. Part-time work and pay gaps

Despite the growing numbers of women in the labour markets across the EU and US, gender pay gaps persist. On average women still only earn about 75% of the hourly wage of men. While the pay gap between men and women has tended to narrow in the US, the UK and Germany over recent years, it has tended at the same time to widen in France and the Netherlands (Chart 6).

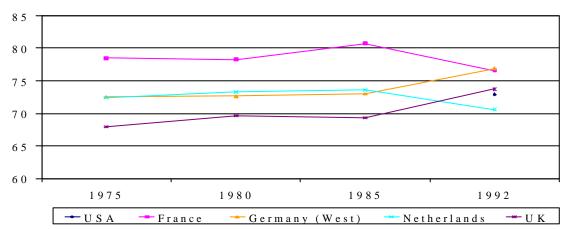


Chart 6 Female earnings as % of male earnings, 1975-97

Source: ILO, Yearbook of Labor Statistics.

The growth of part-time employment is one of the factors that can be identified as contributing to the persistence of this gap. In each country part-timers, both men and women, earn less than full-timers. Although men working part-time experience a greater pay gap on average than women, the predominance of women in part-time work make this pay disadvantage of much wider significance. Moreover, while the pay gap between men and women in full-time employment is narrowing, the pay gap between full-time and part-time employees appears to be widening. The part-time pay gap for women is widest in the US and the UK, and particularly narrow in the Netherlands (Chart 7(a)). Not only are median earnings of part-time employees lower, the distribution at the lower end is much lower. At the bottom decile the hourly earnings of part-timers are between 35 and 70% of full-time earnings, this is illustrated in Chart 7(b) where we see that the median rate of pay for part-time workers is only marginally higher than the bottom decile rate for full-time employees.

Chart 7(a) Median hourly earnings of part-time workers as % of full-time earnings by gender, 1995

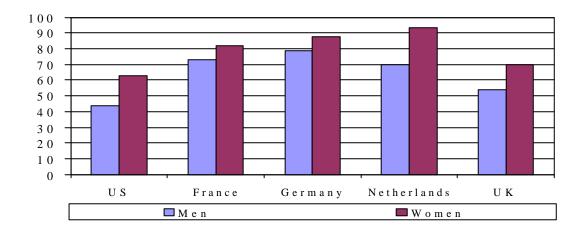
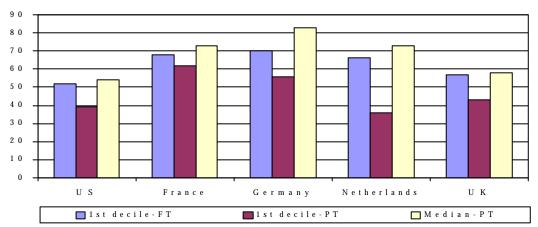


Chart 7(b) Bottom decile as % of median full-time hourly earnings



Source: OECD, (1999), Employment Outlook, "How do part-time jobs compare with full-time jobs?".

Therefore, the growth of female dominated and relatively speaking poorly paid parttime employment accentuates the gender pay gap, even as women's progression in full-time employment is narrowing it.

The growing importance of part-time employment for women, particularly amongst mothers, raises important questions. To what extent does part-time employment present women with the opportunity to leave full-time employment, and take a more marginal role in the labour market? Is it a temporary state that women move into only during family formation or does it offer women who have been out of the labour market a stepping-stone between family formation and full-time employment? What

are the consequences of part-time work for both current and subsequent earnings? *Finally, is pay the only way in which part-time and full-time jobs differ?* The remainder of this paper examines these issues in greater detail for the case of the UK, where part-time employment for women has shown strong growth, and the part-time pay gap is becoming a major dimension of the gender pay gap.

4 The UK case: part-time employment within employment histories

We investigate this role of part-time work in the adult woman's life-cycle using microdata for Britain from the New Earnings Survey Panel Data-set (NESPD). This is an annual employer survey of a random sample of all employees, giving a panel of women in employment between 1975 and 2000. It contains employment records for a total of 193,500 women, of whom around 57,000 are present in any year. In order to eliminate the role of part-time work for students and young people, and focus on its role in the adult woman's life-cycle we confine the analysis to women aged 22 or over. The first insight to emerge is the pervasive role of part-time work in the adult working life of the contemporary British woman. Of the women in the Survey who have been in employment for 5 years or more, 30% have always worked full-time, 22% have only ever worked part-time, while 49% have worked in both capacities. So a working life comprising both full-time and part-time work is the modal pattern, and 70% of adult women spend at least part of their employment life in part-time work (Table 4). Moreover, the average time spent in employment by all three categories, including completed and uncompleted spells, is closely similar. For those who have worked on both a full-time and a part-time basis, the distribution of working years between the two states is again approximately equal. At the individual level, however, the distribution of years between full-time and part-time work covers all combinations, with no 'typical' pattern.

Table 4 Average time spent in full-time and part-time work: women aged 22 and over with at least five years in employment

	Years		Years
Full-time only	10.3	Mixed:	11.3
Part-time only	9.9	Full-time years	5.3
		Part-time years	6.0

Source: Authors' calculations using NESPD.

Since the NESPD as an employer-based survey does not directly record when women are out of the labour market we supplement this evidence by the employment history data from the UK 1958 birth cohort, the National Child Development Survey (NCDS). This allows us to trace the employment patterns of women over the ten year period 1981-91 when they were aged 23 to 33, covering the period over which most family formation will take place and where the use of part-time employment is likely to be most intensive. The data were collected as part of a monthly events diary, but we concentrate on the labour market transitions that occur between years. Table 5 shows the high level of persistence typically found in this form of analysis. On average 86% of women are in the same labour market state in any year as in the previous year. (A similar analysis for the US Blank (1998) reports 79% remaining in the same state). The highest degree of persistence is in full-time employment (90%) and the lowest being out of the labour market.

Table 5 Average year t to t+1 transitions across labour market states, 1981 to 1991;

1958 birth cohort, ages 23 to 33

	Full-time	Part-time	Out of	Row
	employment	employment	labour market	total
Full-time %	45.1	1.2	3.7	50.0
(% of row)	(90.3)	(2.3)	(7.4)	
Part-time %	0.9	15.8	1.9	18.5
(% of row)	(4.9)	(85.0)	(10.1)	
Out of LM %	1.8	3.6	26.1	31.5
(% of row)	(5.8)	(11.5)	(82.7)	
Column total	47.9	20.5	31.6	100

Source: Authors' calculations using NCDS.

However, this average figure and the persistence which it indicates obscure the substantial transitions between labour market states which individual women are making. Chart 8(a) shows the year-by-year movement of the 63% of women aged 23 who were in full-time employment in 1981. This shows a steady decline in full-time employment over the following decade, such that only 47% remained in full-time employment in 1991, with 28% working part-time and 25% out of the labour market. Conversely, of those who were either in part-time employment (7%) or out of the labour market (31%) in 1981 substantial proportions gradually return to full-time or part-time employment (Chart 8 (b), (c)).

Chart 8(a) Women in full-time employment 1981

Transitions to full-time employment and out of the labour market

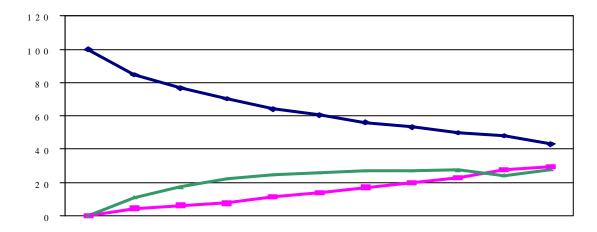


Chart 8(b) Women in part-time employment 1981

Transitions to full-time employment and out of the labour market

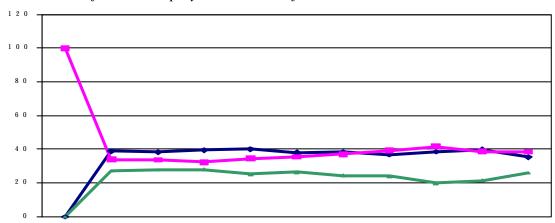
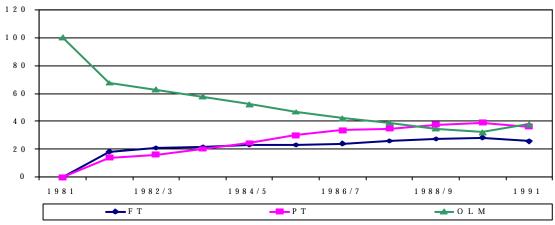


Chart 8(c) Women out of the labour market, 1981

Transitions to full-time and part-time employment



Source: Authors' calculations using NCDS.

At the individual level the mobility patterns that women's careers have taken over the ten year period are substantially more complex even than this indicates. The ten-year span with three possible labour market states in any one year gives 3^{10} i.e. 59,000 possible patterns of labour market involvement. The variety of career patterns actually followed is summarised in Table 6.

Table 6 Patterns of annual labour market transitions 1981-91, women aged 23-33

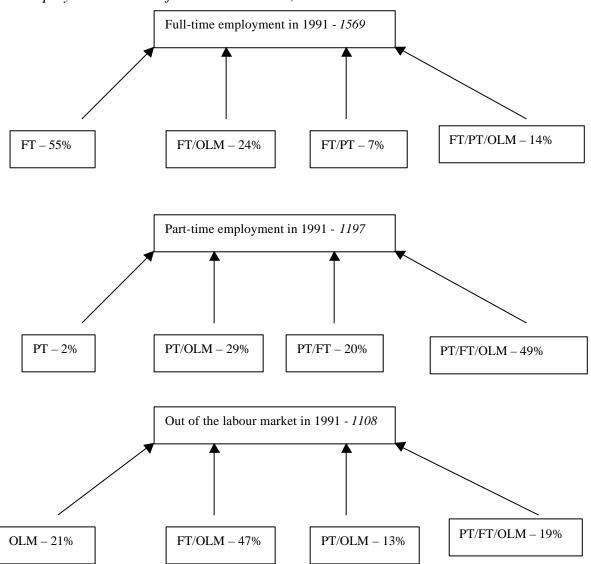
Pattern	Numbers	Percentage
Full-time employment only	859	22.2
Part-time employment only	30	0.8
Out of labour market only	230	5.9
Combinations of FT employment and OLM	905	23.4
Combinations of PT employment and OLM	510	13.2
Combinations of FT and PT employment	374	9.7
All three states	966	24.9
Total	3874	100

Source: Authors' calculations using NCDS.

Among the single-state patterns much the most frequent is full-time employment throughout the period, but this involves only 22% of women. Of patterns involving two states, the commonest is full-time work combined with one or more spells out of the labour market (23% of women). This pattern is much more common than full-time employment interspersed with part-time work. The single most frequent overall pattern involves spells in full-time work, part-time work and out of the labour market (25%), although this grouping covers many different sequences and durations at the more detailed level. These patterns confirm that women in this cohort are strongly attached to the labour market - 80% of the sample were in full-time employment at some point over the ten year period. Part-time employment also played an important role, with 50% working part-time at some stage. But they have combined work and family in a wide range of ways. In particular, there is relatively little evidence for this cohort that part-time work typically plays a stepping-stone role, assisting women who are out of the labour market to return subsequently to full-time work. Rather the evidence is of wide diversity and frequent transitions between states. This diversity is

further summarised in Figure 1, which indicates the prior labour market history of women in each state in 1991.

Figure 1 - Labour market states 1981-91 of women in full-time employment, parttime employment and out of the labour market, 1991.



Source: Authors' calculations using NCDS.

Table 7 Multinomial logit model of determinants of labour market state

	Part-time employment		Out of labour market	
	Coefficient	t-value	Coefficient	t-value
Constant	-0.030	-0.138	0.124	0.569
Degree/professional	-0.418**	-2.311	-0.613**	-3.166
A-level/ONC/TEC	-0.594**	-2.687	-0.364	-1.65
5+ O-levels/craft or equivalent	0.048	0.237	-0.038	-0.177
1-4 O-levels or equivalent	0.039	0.252	-0.272	-1.698
Other lower qualifications	-0.359	-1.109	-0.541	-1.625
Number of children living in the	0.311**	5.776	0.585**	10.822
household				
Youngest child aged three or less	1.01**	7.014	1.501**	10.115
Youngest child aged between three and	0.77**	4.237	0.722**	3.843
five				
Currently pregnant	-0.987	-1.045	-1.237	-1.528
Not married or cohabiting	-0.795**	-3.817	0.433**	2.066
Missing information on spouse	1.148	1.165	2.182**	2.271
Partner unemployed	-0.38	-1.095	1.036**	3.295
Partner not working, sick/retired/other	-0.956**	-2.168	0.546	1.375
Partner, but economic status missing	-1.009	-0.976	0.378	0.345
Partner working, pay details missing	-0.056	-0.293	0.25	1.236
Partner's pay between lower quartile	-0.152	-0.717	-0.139	-0.587
and median				
Partner's pay between median and	-0.065	-0.032	0.292	1.29
upper quartile				
Partner's pay in upper quartile	-0.122	-0.56	0.666**	2.954
Employed part-time during 1990-1991	5.236**	9.719	0.221	0.396
Employed part-time during 1989-1990	-0.615	-1.297	-0.201	-0.551
Employed part-time during 1988-1989	-0.012	-0.023	-0.517	-1.007
Employed part-time during 1987-1988	-0.416	-1.313	-0.897**	-3.192
Out of labour market during 1990-1991	1.113**	2.53	5.225**	14.498
Out of labour market during 1989-1990	0.064	0.194	-0.319	-0.919
Out of labour market during 1988-1989	-0.098	-0.234	0.613	1.571
Out of labour market during 1987-1988	-0.272	-1.11	0.312	1.189
Part-time employment for two years	-0.943	-1.358	0.265	0.412
during 87-91				
Part-time employment for three years	0.118	0.197	0.295	0.472
during 87-91				
Part-time employment for four years	-0.961**	-2.004	-0.926	-1.842
during 87-91				
Out of labour market for two years	-0.462	-0.871	-2.039**	-3.92
during 87-91				
Out of labour market for three years	0.41	0.676	-0.303	-0.612
during 87-91				
Out of labour market for four years	-1.788**	-3.231	-2.374**	-5.039
during 87-91				
Full-time employment for two years	-1.906**	-7.77	-1.547**	-7.561
during 87-91				
Full-time employment for three years	-0.88**	-3.433	-3.319**	-14.187
during 87-91				

^{**} indicates significance at the 1 percent level

Sample size = 5780 Likelihood function = -2287.34 $R^2 = 0.893$

To gain further insight into the determinants of the choice of labour market state a multinomial logit is estimated for being in part-time employment or out of the labour market, as against being in full-time employment. A range of personal and family characteristics are incorporated alongside previous labour market history. This approach is similar to that applied by Blank (1998) and Dekker et al. (2000). Given the switches between labour market states seen above, it is clear that employment history will be an important determinant of current employment status. A range of detailed patterns are therefore specified to encompass this. The results are given in Table 7.

A woman's level of education is highly significant in determining labour market status – more highly qualified woman are more likely to be in full-time employment. Women who are mothers, particularly those who have pre-school children, are more likely to work part-time or be out of the labour market than to be working full-time. Single women are less likely to be in part-time than full-time employment but somewhat surprisingly are more likely to be out of the labour market at age thirty-three. For women with partners, their employment status and income is also an important determinant, women who have partners who are unemployed or out of the labour market are more likely to also be out of the labour market or slightly more likely to be in part-time than in full-time employment. Women are less likely to work if their partner has a high income.

The individual's previous labour market history as far back as four years retains a significant impact on current labour market status. Women who were previously in part-time employment are more likely to stay in part-time employment, while those who were out of the labour market are most likely to remain in that state, or to move into part-time employment. Longer spells reinforce persistence in the same state.

The dominating impact of employment history on current employment status emerges clearly from Table 8. This evaluates the probability of a woman being currently in full-time or part-time employment or out of the labour market, given her past employment history and personal characteristics. These are evaluated for five scenarios representative of women's personal and domestic circumstances:

Specification 1: A single woman with no children and middle-level qualifications (5+ O levels/Craft qualifications).

Specification 2: A woman with middle-level qualifications and a working partner earning a middle income.

Specification 3: A woman with middle-level qualifications, a working partner earning a middle income, and two older children.

Specification 4: As above, but both children aged under 3.

Specification 5: A woman with higher qualifications (degree level), a working partner earning a middle income, and two older children.

Table 8 Simulated probabilities of labour market choices conditional on past labour market patterns

Employment history in	Full-time	Part-time	Out of labour
years t-4, t-3, t-2, and t-1	employment	employment	market
Specification 1			
FFFF	96.0	2.7	1.2
PPPP	15.6	79.8	4.5
0000	15.9	2.6	81.5
Specification 2			
FFFF	93.5	5.5	1.1
PPPP	8.4	89.4	2.1
0000	17.3	5.9	76.9
Specification 3			
FFFF	87.4	10.2	2.4
PPPP	4.4	92.9	2.7
0000	8.1	5.5	86.5
Specification 4			
FFFF	69.3	22.3	8.4
PPPP	1.6	94.0	4.4
0000	2.0	3.6	94.4
Specification 5			
FFFF	91.8	6.3	1.9
PPPP	10.8	84.3	4.9
0000	10.6	4.2	85.2

(Based on the multinomial logit coefficients from Table 7)

Table 8 shows that past employment history is much more important than variations in personal characteristics in determining women's labour market state. We can see from the probabilities using specifications 2 and 3 that women with children, particularly young children (see specification 4), are more likely to be out of the

labour market. Women with higher qualifications are more likely to be in full-time employment (specification 5). But the probability of being in a given state certainly derives from recent employment history. For example, a woman who has spent all four of the previous years out of the labour market has a probability of between 75% and 90% of staying out of the labour market in the next year. Women who have been employed part-time for all four of the previous years have a similarly high probability of continuing in part-time employment, and the same is true for women who have been in full-time employment over the last four years.

5 - The pay gap for part-time work

As women's part-time work in the UK has increased over the past 25 years, so has the raw pay gap between full-time and part-time work. The differential in hourly earnings, which was negligible in the mid-1970s, is now around 14%. Table 9 illustrates this by five-year intervals.

Table 9 Raw pay gap in hourly earnings, women in full-time and part-time work (%)

Year	Gap	Period	Gap	Period	Gap
1975	+0.5	1975-79	-2.8	1990-95	-13.7
2000	-13.8	1980-84	-8.0	1995-99	-14.1
		1985-90	-12.2		

Source: Authors' calculations using NESPD.

These raw pay gaps of course reflect all differences in characteristics between the individuals working in the two categories. Evidence suggests that part-timers tend to be less well qualified and have less experience than women or men in full-time employment. Women whose market wages are potentially lower, due for example to limited work experience or lower educational attainment, may be expected to choose part-time work more frequently. However, the degree of overlap between full-time and part-time work through the 'mixed' category above indicates that lower levels of human capital among women working part-time can be at most part of the explanation.

Using fixed effects estimation to control for all time-invariant individual attributes such as educational attainment, we find an average wage penalty to part-time status of 6.6% for adult women in Britain (Table 10). This penalty is identified for the <u>same</u> women who have moved between full- and part-time status within the observation period.

Table 10 Fixed effects estimation of earnings of women in full-time and part-time employment, 1975-2000

Dependent variable: In of hourly earnings

Variable	Coefficient	Standard error			
Part-time status	-0.066	.002			
Part-time years	0.018	.000			
Part-time years squared	-0.00002	.000			
Full-time years	.043	.000			
Full-time years squared	-0.00098	.000			
Age	0.030	.000			
Age squared	-0.00035	.000			
Also included: year dummies, part-tim	ne*time interaction				
R2 = 0.299					
No. of observations 1.3 million					
No. of individuals 193386					

While a pay penalty for current part-time work may be regarded as a compensating differential, the striking feature of the regression results from a dynamic perspective is the differential return to part-time as against full-time work. Each year of part-time employment adds 1.8% to earnings while a year of full-time employment adds 4.3%. Having worked part-time is significantly, and permanently, less valuable for a women's future earnings than a corresponding spell in full-time work. As part-time work becomes an increasing part of a woman's life-cycle this lower return will continue to accentuate the pay gap.

5.1 - Earnings transitions and part-time work

We also look directly at year-on-year earnings changes for women in full-time and part-time employment. The transitions for 1995-96 by decile groups within the female earnings distribution are summarised in Table 11 below. The differing distributions of full-time and part-time women across low and high pay has already been documented in the benchmarking study, where the high concentration ratios for part-timers in low

pay in particular was emphasised. Women changing from full-time to part-time work are not a random sample of women previously working full-time, but are significantly skewed towards lower earners. The women who move from full-time to part-time employment are between two and three times more likely to come from the lowest deciles, and just over half as likely to come from the top deciles, as are those who continue in full-time work. In terms of their exit positions in the earnings distribution, those moving to part-time work have earnings more closely resembling those of part-time than other full-time workers. Conversely, women switching from part-time to full-time work are likely to come from higher earnings deciles among part-timers than those who remain in part-time work. Thus individual transitions both out of full-time into part-time work and in reverse are correlated with relative earnings, tending towards earnings polarisation in the two categories.

Table 11 Earnings Transitions 1995-96, Women in Full-time and Part-time Work

1995 decile position	group	1	996 decile posit	ion
	distribution in	1 - 3	4 - 7	8 – 10
	1995			
(a) Full-time in both yea	(a) Full-time in both years (%)			
1 – 3	13.9	75.2	23.5	1.2
4 - 7	46.3	4.6	84.9	10.5
8 - 10	39.9	0.6	6.8	92.6
(l	b) Full-time to par	t-time transiti	ion (%)	
1 – 3	34.4	63.8	29.8	6.4
4 – 7	43.3	15.8	64.3	19.9
8 - 10	22.4	5.2	12.6	82.3
(c) Part-time in both yea	ars (%)			
1 – 3	41.4	85.2	13.1	1.6
4 - 7	33.5	13.8	80.2	6.0
8 - 10	25.1	3.0	8.1	88.9
(d) Part-time to full-time transition (%)				
1 – 3	34.7	71.4	26.1	2.5
4 – 7	38.3	27.6	64.9	7.4
8 - 10	27.0	7.1	26.9	66.0

Source: Authors' calculations using NESPD.

Women with low full-time earnings tend to improve their ranking in the earnings distribution when they go part-time, while high earners clearly lose, and those in the middle range are both more likely to move up and to move down the earnings

distribution. Similarly, among women moving from part-time to full-time employment, those who were low earners in part-time employment tend to gain relative to those who remain either part-time or full-time, while those who were high earners when part-time do less well than both full- and part-time stayers. Transitions between full- and part-time work tend to promote earnings progression for the low-paid, but retard progression for higher earners.

Table 12 Earnings transitions 1995-96, women in full-time and part-time work, with and without change of job (%)

1995 decile	group distribution	no job change		group distribution	1 0		nange	
position	in 1995	1996 decile position		in 1995	1996 decile position			
		1 - 3	4 - 7	8 - 10		1 - 3	4 - 7	8 – 10
(a) Full-ti	ime in both yea	ırs (%)						
1 – 3	15.1	78.2	20.8	1.0	16.1	53.7	43.1	3.2
4 - 7	47.7	4.2	86.6	9.2	44.1	8.3	70.2	21.6
8 - 10	37.2	0.5	6.6	92.9	39.8	1.3	9.1	89.6
persons	21111				2710			
(b) Full-time to part-time (%)								
1 – 3	34.0	63.5	30.9	5.6	35.8	65.4	25.2	9.5
4 – 7	43.7	9.7	68.9	21.4	41.4	42.2	44.2	13.6
8 - 10	22.2	3.4	11.7	84.9	22.8	12.3	16.0	71.6
persons	1463				355			
(c) Part-tin	(c) Part-time to part-time (%)							
1 – 3	40.2	86.3	12.3	1.4	53.7	77.4	19.6	3.0
4 - 7	33.8	12.3	81.9	5.8	30.3	31.1	60.4	8.4
8 - 10	26.0	2.8	7.6	89.6	16.0	6.7	17.2	76.1
persons	15656				1491			
(d) Part-time to full-time (%)								
1 – 3	30.7	74.9	22.9	2.1	48.0	64.1	32.7	3.2
4 - 7	40.4	27.7	65.3	7.0	31.4	27.5	63.3	9.2
8 - 10	28.9	6.8	26.0	67.2	20.6	8.6	31.2	60.2
persons	1520				452			

Source: Authors' calculations using NESPD.

5.2 - Earnings transitions and job changes

More tentative results emerge when employment status is set in the context of job changing (Table 12). The further subdivision makes the numbers smaller, while the question asked 'Was the employee in her present job with the current employer a year ago?' is open to ambiguous interpretations in the case of promotion or transfer

between full-time and part-time work. Among women continuing in full-time work, job-changers come from similar positions in the earnings distribution to stayers, and, as noted in other contexts elsewhere in the benchmarking study, job changers from all but the top deciles are substantially more likely to move up the earnings distribution than stayers. Women moving from full-time to part-time work similarly come from the same parts of the distribution as stayers, but those from middle and upper earnings positions are substantial losers when the move to part-time work also involves a job change. Job-changers among part-timers, both those remaining part-time and those moving into full-time work, are heavily drawn from the lower earnings groups. In each case the job-changers from the lower deciles tend to achieve more earnings progression than the stayers.

6 - Jobs worth having? Job satisfaction and job quality for women working part-time

The previous section established that most part-time employees experience a pay penalty, not only during the work spell itself but also in terms of future earnings trajectories. Given the growing frequency of women's part-time work and of transitions between full-time and part-time status, these implications are disturbing. We now turn our attention to two supplementary questions. Does the fact that part-time work is poorly rewarded result in lower levels of job satisfaction or do part-time employees accept some kind of pay-flexibility trade-off? Secondly, is pay is the only aspect of the employment package for part-timers that can be considered inferior, for example, do part-timers have the same access to training, the same rights to paid holiday and other employer provided benefits as full-time employees? Such issues are of importance because the rising levels of part-time employment account for much of the employment growth in the EU.

6.1 - Part-time employment and job satisfaction

Although there is a pay penalty associated with part-time employment, there are strong reasons to believe that this will not lead to lower levels of job satisfaction. The growing availability of part-time employment has allowed many women to combine work and motherhood in a way that was not available to earlier generations and

therefore the pay penalty may be accepted as part of a trade-off between hours and pay. But this argument relies on employees choosing to work part-time. We would expect job satisfaction to be lower if those in part-time employment had taken these jobs because they were the only ones available.

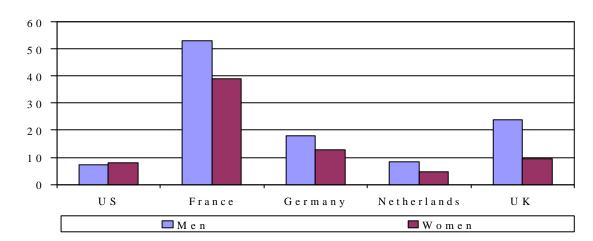
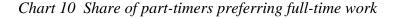
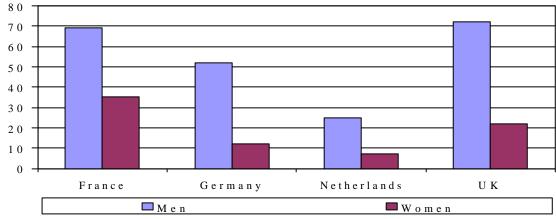


Chart 9 Involuntary as % of part-time work





Source for Charts 9 and 10: OECD, (1999), Employment Outlook, "How do part-time jobs compare with full-time jobs?".

Several recent studies have considered the issue of whether those employed part-time have taken the job through choice or necessity. Evidence from attitude surveys (responses to the questions: "did you only take this job because no full-time employment was available?" (Chart 9) and "would you prefer to be working full-time?" (Chart10)) suggest that most part-time employees are happy with their hours and that this proportion rises with the share of total employment accounted for by

part-time employment. The responses from women suggest that they have made an active choice to enter part-time employment, whereas men express stronger preferences for full-time employment. Finally, the levels of job satisfaction are lower in countries with higher rates of unemployment, suggesting that in these cases part-timers have taken these jobs because they are the only jobs available.

6.2 - Part-time employment and job quality

Lower wage rates are just one of the ways in which employment conditions in parttime and full-time jobs differ. There are significant differences in other aspects of the employment conditions including the length of tenure, the level of training and the compensation packages offered.

Temporary or permanent?

The growth of part-time employment is often seen as evidence of a more flexible labour market. Other features of a more flexible labour market are an increase in the number of short-term or temporary employment contracts and falling job tenure. In fact there is some overlap between these. A large number of part-time jobs are also temporary (Chart 11) and in addition part-time employees appear to have shorter tenure, this is particularly noticeable in France and the UK (Table 13).

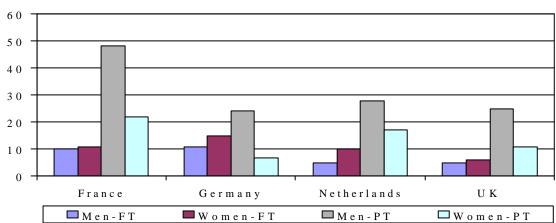


Chart 11 Proportions of temporary jobs

Source: OECD, Employment Outlook, (1998), "Working hours: latest trends and policy initiatives".

Table 13 Distribution of part-time and full-time jobs by tenure (%)

		All full-tim	ne	All part-time			
	FT < 1 FT 1-5 F		FT > 5	PT < 1	PT 1-5	PT > 5	
	year	years	years	year	years	years	
France	13	23	65	24	27	49	
Germany	13	27	59	18	31	51	
Netherlands	11	28	61	11	32	57	
UK	19	29	53	30	34	36	

Source: OECD, Employment Outlook, (1998), "Working hours: latest trends and policy initiatives".

Training

Since many part-timers have lower qualifications and work in smaller firms, it might be expected that they will also have a lower incidence of employer based training. The OECD report that "In nine countries women part-timers experienced training incidences that are more than 25% lower than for those women full-timers; this is also true for men in three countries" (OECD 1999). The OECD study estimates the probability of receiving employer based training controlling for personal and firm characteristics. They conclude that "the estimated impact of the part-time/full-time distinction on the likelihood of training remains substantial" OECD (1999).

Compensation package

Part-time employees are less likely to be covered by state or employer provided insurance, they often have reduced entitlement to paid leave and are less likely to be protected by employment legislation. These differences are greatest where employment protection rights and social protection is based on hours of work or on private provision and there are smaller differences between the rights of full-timers and part-timers in countries where social protection is a factor of citizenship rather than employment status³.

Many have argued that the reduced protection and hence lower non-wage costs of employing part-timers is precisely the reason that there has been such a growth in part-time employment across the OECD⁴. This gap in the relative costs of employing full-time and part-time workers is highlighted in study of the UK, where it is estimated that it would cost twice as much to equalise the benefits for part-timers with full-timers in the same type of firm (not necessarily in the same type of job) than it

would to equalize hourly pay with full-timers in the same type of job, (Lissenberg (1996)).

Part-time employment and job quality in the EU

Whilst it was certainly true that outside of northern Europe part-time employees were badly served in terms of social protection, the position of part-timers in European labour markets has changed in recent years. Many of the changes that have occurred are the result of EU directives and high profile legal cases. Some differences do remain, Ruberry (1998) reports that in Britain and France part-timers have lower levels of paid leave with very high numbers of part-timers reporting no or very low holiday entitlement (23% of British part-timers and 28% of French part-timers with less than three weeks or no holiday entitlement). Part-time employees in Europe remain at risk from reduced levels of pension provision. Ginn and Arber (1998) argue that not only do many part-timers find that they are not eligible for employer or even some state pension plans, the lower rates of pay in part-time employment mean that it is difficult to accumulate a sizeable pension fund, in addition, transitions from full-time to part-time employment often involve a change of employer, and therefore imply a loss of membership of many occupational pension schemes.

Part-time employment and job quality in the USA

Given the lower levels of employment protection and the greater reliance on private provision of health and other insurance schemes, we might expect the gap in the compensation package between part-time and full-time employees to be larger in the US. Snider (1995) surveys the rates of coverage of pension and health insurance amongst full-time and part-time employees. She finds that part-timers are much less likely to be offered an employer based pension plan, only 30.1% of part-timers compared with 57.9% of full-timers are employed in jobs offering pension coverage. This disparity is exacerbated when one considers the take-up rates of these plans, 83% of full-timers and only 38% of part-timers choose to participate, leading to an actual coverage rate of 48% for full-timers and 11.4% of part-timers. Snider finds similar differences in health insurance coverage. Employer based health insurance is offered to 61.2% of full-timers compared with 16.4% of part-timers⁵. There is also evidence of a decline in the already lower rates of insurance coverage amongst part-timers. In their study of falling levels of health insurance, Farber and Levy (1998) find that

whereas the decline in coverage amongst full-time workers is due to a fall in take-up rates, the decline amongst part-timers is a consequence of reduced eligibility.

Part-time employment is more common in smaller firms who are less likely to offer fringe benefits and where they are offered, they are typically lower. Therefore, employer size is one explanation for gap in compensation between full-time and part-time employees. However, this does not provide a full account of the gap. Studies conducted by the US Bureau of Labor Statistics (US BLS) show that whilst coverage is lower in small establishments a sizeable gap also exists between full-timers and part-timers in medium and large establishments (Table 14).

Table 14 Employer provided insurance by employer size

	Health I	nsurance	Pension Plans		
	Medium and large firms	Small firms	Medium and large firms	Small firms	
Full-timers	77%	64%	80%	46%	
Part-timers	19%	6%	37%	13%	

Source: US Employee Benefits Survey (1997, 1998)

Naturally, these differences in insurance coverage translate into different costs of employment to the employer. The US BLS calculate that on average it costs an employer twice as much to employ a full-time as a part-time worker, \$20.95 per hour compared with \$10.01, with non-wage benefits accounting for 28.3% of the cost of employing a full-timer and 19.0% for a part-timer⁶. These figures represent the average levels of coverage, Lettau (1997) uses firm based data to estimate the cost of non-wage benefits and uses these to compare the overall benefits package between full-time and part-time employees within the same establishment. For private non-union jobs he finds a log wage gap of -0.164 and a log compensation gap of -0.227 between full-time and part-time employees, giving an overall differential of -0.475.

7 - Conclusions

Part-time work is an important mechanism through which women can combine labour market participation with family responsibilities. The opportunity to move between full-time and part-time work as domestic circumstances evolve is an important form of labour market mobility for women. In the UK we find that a woman's employment

history typically includes some spells of part-time employment. Taking women who have been in employment for 5 years or more (data from the New Earnings Survey), a working life comprising both full-time and part-time work is the modal pattern, with 70% of adult women spending at least part of their employment life in part-time work. The NCDS gives us a detailed account of the employment history of a birth cohort between the ages of 23 and 33. This shows the importance of part-time employment (50% of the cohort worked part-time at some stage) but it also illustrates a diversity of employment patterns and frequent transitions between states. But part-time employment typically carries a pay penalty, both while it is the current status and, more significantly, over the future career path, through the lower earnings return to time spent in part-time work. So this mobility between types of employment comes at a serious price for the individual. In the aggregate, as more women spend more time in part-time work over the life-span this adverse status of part-time work threatens increasing polarisation of earnings. However, lower wages are just one of the ways in which employment conditions in part-time and full-time jobs differ. There are significant differences in other aspects of the employment conditions, women in parttime work typically have shorter tenure, less training and are less likely to be offered non-wage benefits.

Bibliography

Blank, R., (1998) "Labor market dynamics and part-time work", *Research in Labor Economics*, Vol 17, p57-93.

Dekker, R., Muffels, R., and Stancanelli, E., (2000), "A longitudinal analysis of part-time work by women and men in the Netherlands", in *Gender and the labour market: econometric evidence of obstacles to achieving gender equality*, Gustafsson, S.S. and Meulders, D.E. (eds.), Macmillan Press Ltd, Basingstoke, UK.

Delsen, L., (1995), Atypical Employment: An international perspective. Causes, consequences and policy, Wolters-Noordhoof, Groningen.

Delsen, L., (1998), "When do men work part-time?", Chapter 3 in *Part-time Prospects: An international comparison of part-time work in Europe, North America and the Pacific Rim*, O'Reilly, J., and Fagan, C., (eds), Routledge, London and New York.

Farber, H.S., and Levy, H., (1998), "Recent trends in employer sponsored health insurance coverage: are bad jobs getting worse?", Princeton University, Industrial Relations Section, Working Paper Number 402.

Ginn, J., and Arber, S., "How does part-time work lead to a low pension income?", Chapter 8 in *Part-time Prospects: An international comparison of part-time work in Europe, North America and the Pacific Rim*, O'Reilly, J., and Fagan, C., (eds), Routledge, London and New York.

Hirsch, B., (2000), *The relative compensation of PT and FT workers*, July, Employment Policies Institute, Washington DC.

Lettau, M.K, (1997), "Compensation in part-time versus full-time jobs: what if the job is the same?", *Economic Letters*, Vol 56, September, pp 101-6.

Lissenburgh, S., (1996), Value for Money: The costs and benefits of giving part-time workers equal rights, Report to the TUC, January.

Kaarina Nurmi, 1999, Trends in women's and men's labour market position in the EU, Ministry of Social Affairs and Health, Finland.

http://www.vn.fi/stm/english/tao/publicat/tandem/nurmi/kaarina.htm

OECD (1998), Employment Outlook, "Working hours: latest trends and policy initiatives", Paris.

OECD (1999), Employment Outlook, "How do part-time jobs compare with full-time jobs?", Paris.

O'Reilly, J., and Fagan, C., (eds), (1998), Part-time Prospects: An international comparison of part-time work in Europe, North America and the Pacific Rim, Routledge, London and New York.

Rubery, J., (1998), "Part-time employment: a threat to labour standards?", Chapter 7 in *Part-time Prospects: An international comparison of part-time work in Europe, North America and the Pacific Rim*, O'Reilly, J., and Fagan, C., (eds), Routledge, London and New York.

Snider, S., (1995), "Characteristics of the part-time work force and part-time employee participation in health and pension benefits", *Journal of Labor Research*, Vol 16, Summer, pp 239-48.

US Bureau of Labor Statistics, (1997), "BLS reports on employee benefits in medium and large private establishments", USDL: 97-246, News Release, July 25th.

US Bureau of Labor Statistics, (1998), "BLS reports on employee benefits in small private establishments", USDL: 98-240, News Release, June 15th.

Williams, D.R., (1995), "Women's part-time employment: a gross flow analysis" *Monthly Labor Review*, April, pp 36-44.

Notes

Wiemer Salverda, Brian Nolan, Bertrand Maitre and Peter Mühlau, Benchmarking Low-Wage and High-Wage Employment in Europe and the United States, A study of New European Datasets and National Data for France, Germany, the Netherlands, the United Kingdom and the United States. Report to the European Commission, May 2001.

² The higher female participation rate in the US does not convert into a higher female share in employment because male participation is also higher.

³ "In the EU, the legal protection for part-time workers proscribes discrimination by employers against part-time workers, in pay, certain benefits, working conditions and redundancy policy [European Council Directive 97/81/EC (15 December 1997)]. In addition, in many European countries, collective agreements are used to support the principle that part-time workers are entitled to the same rights and benefits as full-time workers. However, in some countries, this does not apply to part-time workers who work below a certain threshold of hours. ... Outside the EU part-time workers may be less well protected. They may, in particular, receive fewer employer provided benefits (e.g. paid holidays) ... in the US, where part-time work is less common ... part-timers appear to be offered comparatively few benefits." OECD (1999).

⁴ "In many OECD countries, especially in Europe, substantial growth in part-time employment has gone hand in hand with increases in non-wage labour costs. Full-time and full-year wage employment is still the standard in business and industry as well as within labour law, collective bargaining and social security and pension systems, resulting in discrimination and exclusion of those workers on part-time contracts. There are many examples of partial coverage existing in Europe, Japan and the US. This creates, ceteris paribus, an incentive for employers to hire part-timers, notably on marginal jobs." Delsen (1998)

⁵ Although part-timers are less likely to be offered employer based health insurance, over a third of part-time employees are covered indirectly as a dependant on another insurance policy – spouse or parent – resulting in 52% of part-timers having either direct or indirect insurance coverage compared with 73.3% of full-timers. Finally, many part-timers are entitled to publicly provided health insurance. Once this is taken into account part-timers remain more likely to be without health insurance with a coverage rate of 79.5% compared with 84.1% amongst full-timers.

⁶ In fact most of the non-wage benefits offered to part-timers are those required by government, statutory benefits account for 57% of all benefits - \$1.08 out of \$1.90 per hour. This contrasts with a figure of 30% for full-timers - \$1.78 out of \$5.93 per hour.



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