

The Changing Quality of Part-time Work in Britain and Sweden?

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The growth of part-time work has been at the centre of debates about the changing nature of the labour market. For some it has been seen as providing a key source of the integration of women into the labour market, by enabling them to realize their preferences to combine employment with family life. For others it is viewed as a way in which employers have been able to segment the labour market, creating a separate sector of peripheral jobs in which female employees are trapped in poor quality work and employment conditions. However, part-time work exists in countries with very different institutional systems of skill formation and labour market regulation. Relatively little is known about how this affects the quality of part-time jobs, and still less about how the quality of part-time work has been changing under different institutional conditions. This paper seeks to address these issues by comparing the nature and change in part-time work in two countries – Britain and Sweden – that are often considered to represent quite distinct forms of institutional regime that embody very different approaches to flexibility and the integration of vulnerable labour groups.

Introduction: The Quality of Part-Time Jobs

The broad correspondence in many countries between the growth of female employment and the expansion of part-time work pointed towards its value in enhancing the integration of women into the labour market (Sundström, 1987, 1991, 1993). But, at the same time, labour market segmentation theorists underlined the possibility that women taking up part-time work were being channeled into a quite distinct low-skilled sector of the labour market, with few opportunities for skill development and low pay. Substantial research has indeed tended to highlight the inferiority of the employment conditions of part-time workers. They were found to be in lower skilled jobs (Tam, 1997; Gallie et al., 1998), to have lower pay (Bassi, 1995; EBRI, 1993; Gornick and Jacobs, 1996; Manning and Petrongolo, 2006; OECD, 1994), reduced access to employment benefits, such as

unemployment benefits, pensions, sick pay, and paid holidays (Ginn and Arber, 1998; Rubery et al., 1998), more limited opportunities for career advancement (Tam, 1997; Gallie et al., 1998; Russo and Hissink, 2005), and less well protected with respect to either legal rights or collective bargaining coverage (Meulders et al., 1993). There has been less agreement about whether part-time work is associated with lower job security (Belous, 1989; Gallie, 1998; Båvner, 2001) and about whether it constitutes a ‘bridge’ or a ‘trap’ with respect to longer-term careers (Nätti, 1995; Bothfield and O’Reilly, 2000; Sundström, 2003).

While at least the disadvantages of part-time work with respect to skill and pay are now well-established, there has been rather less direct comparative research to assess how far part-time work differs in quality between countries¹. It seems plausible that the extent of disadvantage will be affected by the institutional context of employment, for instance the coverage of collective bargaining, the nature of labour regulation, the system of skills formation and the welfare system in the society (Ellingsaeter, 1992; O’Reilly, 1994; Nätti, 1995; Blossfeld and Hakim, 1997; Daune-Richard, 1998; Anxo et al. 2000; Smith et al. 2000). In this respect, a particularly interesting comparison is between Sweden and Britain, which are often taken as exemplars of quite distinct institutional regimes. Sweden has been characterized as an ‘inclusive’ employment regime that attaches importance to policies that will reduce differences in the work and employment conditions of different categories of the workforce (Gallie, 2007). In contrast, Britain is the prime example of a ‘market’ employment regime, that allows employment to reflect the priorities of the market and that minimizes the safety net for more vulnerable groups. The two countries are also viewed as highly distinct in production regime theory, for which Sweden is one of the main examples of a coordinated market economy that places a central importance on the development of high level specific skills, whereas Britain is a paradigm case of a liberal market economy, where employers rely on general skills. Interestingly, these different institutional perspectives lead to rather different expectations as to the situation of part-timers in the two countries.

Inclusive employment regimes, where the unions play a central role in national decision-making mechanisms, are thought to give priority to high and stable employment across the labour force. As such they should be concerned not only to encourage female labour market participation, but also to ensure that women have jobs that provide stable employment integration, by enabling them to develop their skills. As part-timers constitute the potentially more vulnerable sector of the female workforce, this should entail the development of strong protective measures to ensure that they benefit from the same entitlements and opportunities as the rest of the workforce. In market employment regimes, however, part-timers can be expected to be in relatively low skilled work, as employers will be reluctant to invest in employees who work shorter hours or are more likely to be absent or leave the workforce to assume caring responsibilities. The general expectation then would be that part-timers are in rather better quality jobs in Sweden than in Britain.

¹ An important exception is O’Reilly’s case study comparison of part-timers in the banking industry in France and Britain (O’Reilly, 1994).

In production regime theory, coordinated market regimes in general place a strong emphasis on skill development, with well established vocational training provision that provides the specialized skills that are needed for the more complex work processes associated with ‘diversified quality production’. Liberal market economies make greater use of lower skilled employees, who are drawn directly from the general school system. But while these different systems of skill formation should lead to generally higher levels of skill in Sweden at least among those in the intermediary and lower reaches of the occupational hierarchy, Estevez-Abe has argued that they are likely to have very different implications for men and women. It is men that are likely to benefit primarily from a specific skills regime, while women may be particularly sharply disadvantaged. This reflects the greater difficulty and lower incentives for women to acquire specific skills, given their greater likelihood of career interruptions and statistical discrimination on the part of employers who are reluctant to train employees who they think may have extended periods away from work. Women are therefore likely to be channeled into a distinct lower skilled sector of the employment structure, with higher levels of gender segregation and poorer quality jobs. Hence there would be no particular expectation that part-timers in a coordinated market system such as Sweden would be better placed than in a liberal market regime like Britain.

Not only do we have limited comparative information on the position of part-timers, but we know little about whether or not the relative position of part-timers has been changing over time. The picture given by segmentation analysts is usually relatively static – they emphasize mechanisms of entrapment that are likely to be enduring. But, arguably, there are important factors that could be conducive to change. There has been a sharp rise in women’s educational levels and higher education has been found to be strongly associated with aspirations for better quality jobs (Gallie, 2007). Moreover, there is likely to have been an increased policy salience of the issue of the part-timer workers’ rights, in part as a result of the European Union’s part-time work directives. In general one would expect that increased policy pressures would affect most strongly countries in which part-timers are more disadvantaged relative to their European counterparts. Hence, if it is the case that part-timers in Britain have experienced higher levels of disadvantage than those in Sweden, the improvement in the position of part-timers may also have been more marked in Britain.

The paper addresses these issues of the variability and change in the conditions of part-timer work in the contrasting institutional conditions of Sweden and Britain. It first compares the position of part-timers in the two countries using cross-national data and then turns to the question of whether or not there has been change over time by taking advantage of national survey series that make it possible to chart conditions of employment from the early 1990s to the mid 2000s. The analyses focus on two central aspects of employment conditions – the skill level of work and pay. While it has been seen that there are many potential dimensions of disadvantage, there are strong theoretical and empirical grounds for thinking that skill level is a powerful determinant of other aspects of job quality.

Conceptions of Part-Time Work

A first point to note is that the definition of part-time work is far from unproblematic. Two rather different methods of classifying part-time workers have tended to be used in the literature. The first relies on people's self-definition of their status as a full-time or part-time worker, whereas the second defines part-time work in terms of specific hours of work. A further complication is that 'hours-based' definitions can differ in terms of the number of hours that are seen as separating full-time from part-time employment. In some countries (such as the UK) the conventional cut off point for part-time work has been 'less than 30 hours', whereas in other countries (including Sweden) those working less than 35 hours have been regarded as part-time employees.

This distinction in conventions about hours-based definitions is partly reflected in patterns of self-definition. Table 1 shows the relationship in each country between hours of work and self-defined contractual status. There is a broad similarity with respect to full-time status. More than 90% of men who define themselves as full-timers work 35 hours or more a week and the same is the case for more than 80% of women, almost targeting 100% in the case of Sweden. However, there are considerable differences between the countries in the typical hours worked by women who are self-defined part-timers. Both British and Swedish self-defined part-timers were to be found in the less than 20 and less than 30 hour categories, although there is notable difference in the relative proportions in each. Whereas nearly half of British female part-timers worked less than twenty hours a week, this was the case for less than 15% of Swedish part-timers. However, it is with respect to employees working 30 to 34 hours that the pattern suggests that there was a difference in underlying conceptions of part-time work in the two countries. In Britain only 9% of part-timers worked longer than 30 hours, whereas in Sweden the majority was to be found in this category.

Table 1. Work Hours by Self-Defined Full-Time/ Part-Time Status.

	Normal Work Hours				N
	1-19 hrs	20-29 hrs	30-34 hrs	35+ hrs	
<i>Self-Defined Status</i>					
Britain					
Male FT	0.1	0.5	2.3	97.1	6525
Female FT	1.1	2.6	9.2	87.1	3593
Female PT	46.3	44.6	5.1	4.0	2275
Sweden					
Male FT	0.04	0.06	1.56	98.34	5190
Female FT	-	0.38	1.17	98.44	3662
Female PT	12.53	35.46	39.69	12.32	2411

Note: Data British Skills Surveys, pooled data 1992, 2001 and 2006; the Swedish Living Condition Survey (ULF) 1992, 1997, 2001 and 2004.

There is a risk then that, using self-defined status, any differences between part-timers in the two countries may simply reflect different notions of part-time work. We have then based our analysis on two principal categories of employees, reflecting the differences in the conventional ‘hours-based’ definitions of part-time work in the two countries. We first contrast employees working less than thirty hours a week with those working thirty or more, and then compare those working less than thirty five hours with those working thirty-five or more. This is designed primarily as a check on the robustness of the conclusions and differences between the results for the two definitions will only be commented upon if they suggest important differences in pattern between the two part-time worker categories. The sample of male part-timers was too small for reliable analysis, so these have been excluded. In the following discussion, the term ‘part-timers’ should be taken as referring to ‘female part-timers’. We contrast the position of female part-timers with that of male full-timers, since these are often taken as representing the core workforce in discussions of the core-periphery divide.

The Job Quality of Part-Time Employees: A Comparative Overview

Were there notable differences in the job quality of part-time workers in the two countries? We focus on skill-related features of the job, as these are usually seen as the main determinants of other aspects of job quality. In order to assess this we need a high quality comparative data set that includes acceptable indicators. An important development for European comparative research in recent years has been the creation of the European Social Survey, which (unlike for instance the ISSP) has insisted on common methods of data collection in the form of face-to-face interviews of randomly selected individuals and has put in place a rigorous system of data quality control. The ESS is carried out on a two-yearly basis and each wave combines a common core of questions with a more specialized module or set of modules that are specific to the particular year. The 2004 wave carried a module focusing on Work and Family, which included a number of indicators on work situation with some well-tested indicators relating to skill and opportunities for skill development². However, ESS data on pay is more rudimentary and difficult to compare, so we have not sought to make direct comparisons in this respect.

The Distributions of Part-Timers by Occupational Class

Our first approach to the job quality of part-timers in the two countries is to compare the distributions in terms of occupational class. For this, we have converted the occupational data into the most recent and most carefully constructed comparative class categorization available – the European Socio-Economic Classification. ESEC was designed to provide an improved version of the frequently used Erikson-Goldthorpe class schema, providing

² Researchers from both Britain and Sweden were involved in the design of the module. Duncan Gallie was a member of the team that proposed the module and helped with the construction of the interview schedule, together with Robert Erikson, Janne Jonnson and Michael Tahlin from the Swedish Institute for Social Research.

both more thorough validation and better documentation for comparative purposes (Harrison and Rose, 2006). It seeks to classify occupations in terms of broad differences in both labour market and work situations.

Table 2. Socio-Economic Class (ESEC) for Male Full-Timers and Female Part-timers.

	Britain					Sweden			
	MFT ≥30	MFT ≥35	FPT <30	FPT <35		MFT ≥30	MFT ≥35	FPT <30	FPT <35
Hi Mgrs/Profs	20.2	20.6	5.6	5.7		18.1	18.3	3.0	5.1
Lwr Mgrs/Profs	23.4	24.1	16.2	17.1		24.0	24.4	17.4	20.0
Intermediate	4.6	4.3	13.7	14.1		5.5	5.5	12.6	14.6
Lwr Sups & Techs	18.8	19.0	9.8	12.3		14.2	13.9	3.6	4.4
Lwr Sales/ Services	5.2	4.8	35.2	32.1		5.4	5.3	50.9	45.1
Lwr Technical	9.1	8.9	0.8	0.7		14.2	14.2	0	0
Routine	18.8	18.4	18.7	18.0		18.6	18.3	12.6	10.8
N	805	773	358	439		1034	1004	167	295

Note: Data from combined European Social Surveys 2002 and 2004.

Occupational data were collected as part of the core component in all of the ESS surveys and it is possible then to aggregate the data from both 2002 and 2004 to provide a more robust picture of the class structure in the two countries. The class distributions of full- and part-time employees (using both definitions of part-time work) are shown in Table 2. Taking first male full-time employees, which are commonly regarded as representing the ‘core’ workforce, it can be seen that there is a broad similarity between the two countries across much of the class structure. In both countries approximately a fifth of those in employment are in higher managerial and professional occupations and a further quarter are in lower managerial-professional work. The ‘intermediate’ and ‘lower service and sales’ white-collar categories are relatively small. Approximately 18% of employees are in the lowest class of ‘routine’ workers. The differences between countries are primarily with respect to blue-collar workers. Britain has a higher proportion in lower supervisory and technician occupations, while Sweden has a larger proportion in lower technical work (skilled manual workers). This may reflect differences in the way organizations are structured in the two countries, with Britain relying more heavily on traditional line management, while Sweden may have moved (in the wake of its work reform programmes) to flatter organizational structures with greater delegation of decision-making to skilled blue-collar employees.

Turning to female part-timers, it is notable that they are much less likely than men in their respective countries to be in higher professional-managerial positions. Among those working less than 30 hours, only 6% in Britain and 3% in Sweden are in such positions, and the proportions are little higher among those working less than 35 hours (6% and 5% respectively). Male full-timers are roughly four times more likely to occupy positions in

the highest part of the class structure than female part-timers. Part-timers are better represented in lower managerial and professional occupations, although there is still a difference compared with male full-timers (for longer hour part-timers, -7 percentage points in Britain and - 4 points in Sweden). In both countries, they are also less likely than male full-timers to be in lower supervisory and technician positions. In contrast, they are considerably more likely to be in both 'intermediate' and 'lower services and sales' positions. Finally, it should be noted that part-timers do not stand out in either country as being heavily over-represented in the lowest occupational positions of all - routine occupations. In Britain the proportions of male full-time and female part-timers in 'routine' occupations are very similar, whereas in Sweden part-timers are considerably less likely than male full-timers to be in such work. The two definitions of part-time work give a broadly similar picture of part-timers relative class position.

Comparing part-timers across countries, there is relative little difference between Sweden and Britain in terms of the proportions in higher and lower managerial and professional positions. There is some variation in the middle stretches of the class structure, with (as for male full-timers) a higher proportion in lower supervisory and technician positions in Britain and a substantially lower proportion in lower sales and services. It is also notable that there is a difference in the proportions in the lowest class positions. While some 18% of female part-timers are in these positions in Britain (whichever definition of part-time employment is used), the proportion is 13% among Swedish part-timers working less than 30 hours and 11% among those working less than 35 hours.

Variations in the middle of the class structure are difficult to interpret in terms of the quality of work and may primarily reflect different principles of organizational design. But the relative proportions in managerial and professional occupations on the one hand and in routine occupations on the other are likely to signal the relative integration of part-timers into better or worse quality jobs. This evidence would indicate that there is very little difference between the two countries in the extent to which part-timers are integrated in the highest level jobs. In both cases, they remain substantially under-represented. However, there is a difference in the extent to which they are to be found in the lowest level jobs. They are less likely to be in such occupations in Sweden than in Britain and, in contrast to Britain, Swedish part-timers are less likely to be in the lowest class position than male full-timers.

Skills and Task Discretion

Class categories are inevitably relatively broad and class comparisons may not pick up important within-class differences in job quality. We turn next, then, to compare part-timers in the two countries in terms of more specific indicators of skill and skill development opportunities. The central concern in this respect is with the skills required for the job rather than with individual skills, reflected for instance in the person's level of education. In both Britain and Sweden, research on skills has independently come to focus on rather similar key measures of the skills required by jobs. The underlying idea is that the best proxy of such skill is the time that is required to learn how to do a job -

whether in terms of pre-entry education and training or initial on the job learning. A version of these measures was introduced into the European Social Survey of 2004. The questions were:

- If someone was applying nowadays for the job you do now, would they need any education or vocational schooling beyond compulsory education? (If yes, they were asked how many years of additional education or vocational schooling they would need).
- If someone with the right education and qualifications replaced you in your job, how long would it take them to learn to do the job reasonably well?

Taking first the amount of post-compulsory education and vocational schooling required for the job, Table 3 shows, in both countries, that female part-time workers tended to be in jobs that required less post-compulsory education and training than male full-timers. On average the jobs of male full-timers required approximately a year's additional schooling. However, the most striking difference is between the two countries. Swedish male full-timers were in jobs that required on average one and a half years more post compulsory education or vocational schooling than their British equivalents. Moreover, the Swedish advantage on this skill measure was just as evident among female part-timers. Indeed, the jobs of longer hour Swedish part-timers required more than one and three quarter years more education or training.

While there can little doubt about the higher skill level of Swedish female part-timers in terms of pre-entry education, it could be argued that this may be compensated by more extensive learning in the initial period after people take up the job. Our second measure seeks to address this. In both countries, part-timers are again much lower on this measure of skill. In Britain only 37% of both longer and shorter hour part-timers reported that the initial learning time required was three months or more. In contrast to the case of pre-entry education, Swedish female part-timers were even lower than British part-timers on this measure. Only 21% of those working less than 30 hours reported three months or more initial learning time, although the proportion rose to 26% among those working less than 35 hours.

There is some support then for the idea that there may be compensatory learning mechanisms for pre-entry education and that the initial measure may underestimate the skill requirements of the jobs of British part-timers. But, while it is difficult to make any rigorous weighting of the two modes of skill acquisition, it should be borne in mind that the typical on-the-job entry learning times in Britain involved rather shorter periods of time than the extended pre-entry schooling periods in Sweden. For instance, 59% of Swedish longer-hour part-timers required post-compulsory schooling involving a year or more (compared to just over a quarter of their British equivalents). Indeed, a third of these Swedish female part-timers (compared to 6% of British) said that their jobs required four or more years of post-compulsory education (that is to say degree-level of equivalent). In comparison only 11.4% of British longer hour part-timers reported that the initial on-the-job learning required took a year or more, compared with 7.1% of the

Swedish. The in-work learning period is then usually very short. If overall learning duration is taken as the key measure of required job skills, the learning time required for Swedish part-time jobs is still considerably greater than that for British, even after initial in-work learning is taken into account.

Table 3. Skill and Task Discretion among Male Full-Timers and Female Part-timers (ESS 2004).

	Britain				Sweden			
	MFT ≥30	MFT ≥35	FPT <30	FPT <35	MFT ≥30	MFT ≥35	FPT <30	FPT <35
<i>Post-Compulsory Ed Required for the Job</i>								
0-1 years	56.8	55.6	75.5	73.8	26.6	26.0	49.3	41.0
2-3 years	21.2	21.2	17.0	20.2	35.6	36.1	24.7	28.7
4 + years	22.0	23.2	7.5	6.0	37.8	38.0	26.0	30.3
Average Years Score	1.96	2.02	0.91	0.92	3.52	3.54	2.35	2.75
<i>Initial On-the-Job Learning Time</i>								
< 1 week	5.8	4.7	19.2	18.5	6.4	5.9	29.9	22.8
1 wk-3 mths	31.5	30.6	43.8	44.0	30.1	29.8	49.4	51.2
3 months – 1 year	26.8	27.9	22.4	26.1	37.1	37.6	16.9	18.9
1 year +	36.0	36.7	14.3	11.4	26.4	26.7	3.9	7.1
<i>Job Requires Continuous Learning</i>								
Very true	37.9	38.3	30.2	30.8	42.5	42.8	32.9	38.5
Quite true	33.5	34.0	24.2	27.0	31.7	31.4	40.5	35.4
A little true	19.0	18.4	26.8	26.5	19.2	19.0	17.7	19.2
Not at all true	9.6	9.2	18.8	15.7	6.7	6.8	8.9	6.9
<i>Task Discretion</i>								
Influence wk methods	6.98	7.00	6.36	6.35	7.95	7.94	7.52	7.61
Influence org policy	4.59	4.63	3.79	3.86	4.92	4.95	3.99	4.56
Influence wk pace	5.54	5.53	5.16	5.27	6.90	6.93	6.20	6.33
Task Discretion Index	5.70	5.72	5.10	5.15	6.60	6.62	5.88	6.14

There is now a widespread view that initial learning periods increasingly need to be complemented by continuing learning. In a more competitive economic environment, technological change is likely to be faster and will require more frequent updating of skills. To assess the opportunities for such continuing skill development, the survey included a question that asked respondents how true it was that ‘My job requires that I keep learning new things’.

As can be seen in Table 3, male full-timers in both Sweden and Britain were more likely to be in jobs requiring continuous learning than female part-timers, although the difference was relatively small in the case of Swedish longer-hour part-timers. But the proportion saying it was very true that their jobs required that they kept learning new things was higher in Sweden than in Britain for both male full-timers and female part-timers respectively. Indeed Swedish longer-hour part-timers were as likely to report this as British male full-timers. The contrast between the countries for part-timers comes out particularly sharply taking together the responses of ‘very true’ and ‘quite true’. Whereas Swedish male full-timers are only a little more likely than their British equivalents to consider this was the case, Swedish part-timers were much more likely to report some degree of continuous learning in their jobs (73.4% of shorter and 74% of longer hour Swedish part-timers compared with 54% and 58% of their equivalents in Britain).

Finally, in some of the sociological literature on work, task discretion has been regarded as an important component of skill. More generally, it is regarded as a critical dimension of job quality, with the strongest effect on job satisfaction of the various intrinsic aspects of work. The ESS has three measures of task discretion. It asks people how much ‘the management at your work allows you 1) to decide how your own daily work is organised; 2) to influence policy decisions about the activities of the organisation and 3) to choose or change your pace of work?’. We have also created a summary index of task discretion by taking the employee’s average score across the three items.

As can be seen in the final row of Table 3, in both countries male full-timers had higher task discretion scores than female part-timers, whichever definition of part-time work was used. But again the overall level of task discretion was higher in Sweden. Swedish male full-timers had greater task discretion than British male full-timers, and similarly Swedish part-timers had greater discretion than British part-timers. But perhaps the most striking feature of the data is that Swedish female part-timers had an even higher level of task discretion than British male full-timers. This was particularly the case for Swedish longer hour part-timers.

A more rigorous assessment of the difference of being a female part-time worker in Britain and Sweden can be made through regression analysis, with controls introduced for age, occupational class, and industry (Table 4)³. The top panel gives the coefficients for part-timers using the shorter hour definition (less than 30 hours), while the lower panel repeats the analysis for part-timers defined in terms of 34 hours or less.

³ Occupational class is drawn from the ESEC classification shown earlier; industry is based on first digit NACE classification.

Table 4. Female Part-time Worker Effects on Post-Compulsory Schooling, Initial On-the-Job Learning, Continuous On-the-Job Learning and Task Discretion.

	Post-Compulsory Schooling	Initial On-the-Job Learning	Continuous On-the-Job Learning	Task Discretion
<i>Part-time=<30 hours</i>				
Swed FPT rel to Brit FPT	1.89***	-.59*	.56*	.86**
Swed FPT rel to Swed MFT	-.93***	-1.19***	-.15 n.s.	-.58*
Brit FPT rel to Brit MFT	-.88***	-1.12***	-.52*	-.16 n.s.
<i>Part-time=<35 hours</i>				
Swed FPT rel to Brit FPT	1.91***	-.47*	.47*	.95***
Swed FPT rel to Swed MFT	-.81***	-1.06***	-.12 n.s.	-.41 n.s.
Brit FPT rel to Brit MFT	-.73 ***	-1.15***	-.39 n.s.	-.09 n.s.

Notes: Coefficients from unweighted regressions with controls. Ordered Logistic regression for post-compulsory, initial on-the-job learning and continuous learning; OLS regression for task discretion. Controls: age, class and industry.

The first row within each panel shows the difference between Swedish and British female part-timers in a model pooling the data for the two countries. It confirms that Swedish part-timers were in better jobs than their British equivalents with respect to pre-entry schooling requirements, opportunities for continuous learning and task discretion, even when differences in class and industrial structure have taken into account. The differences were significant in each case, but were particularly marked for the amount of pre-entry schooling required. However, at the same time, Swedish female part-timers were less likely to be in jobs requiring extended learning on initial entry into the post. The pattern is unaffected by the choice of definition of part-time work.

The second and third rows within each panel examine separately within each country the difference between female part-timers and male full-timers, to see whether relative disadvantage was lower in one country than another. Despite the fact that Swedish part-timers were in better jobs in absolute terms, it is clear that the pattern of relative disadvantage was very similar in the two countries for both pre-entry schooling requirements and initial on-the-job learning. Taking part-timers working less than 30 hours a week, Swedish workers were distinctive in not being significantly different from

male full-timers in terms of the opportunities for continuous learning on the job, but they were more disadvantaged than British female part-timers in the level of task discretion offered by the job. For both countries, among part-timers working less than 35 hours a week, disadvantage for part-timers is only evident for the measures of pre-entry schooling and initial on-the-job learning. There is little in the pattern to suggest that female part-timers experience greater relative disadvantage in one country rather than another.

Overall, the comparative evidence indicates that the jobs of female part-timers in Sweden were better than those of their British equivalents in terms both of skills and skill development, as would be anticipated from the view that it was a country characterized by greater inclusiveness and stronger policies to protect more vulnerable categories of the workforce. There were fewer part-timers employed in routine occupations in Sweden, initial learning time requirements were higher, the jobs were more likely to require continuous learning and they allowed employees greater discretion how they carried out the work. However, this did not imply that part-timers in Sweden were more fully integrated into the core workforce – their relative disadvantage compared to male full-timers remained just as strong as in Britain. The better quality of their job conditions derived from a more widespread process of upgrading of jobs in Sweden, rather than from policies that were specific to part-timers.

Analytic Strategy Using National Data Sources

Of central importance to the paper is the definition of part-time work. Employing a country comparative approach makes the operationalization even more crucial since countries often have, if not officially standards, at least relatively homogenous conceptions of what is regarded as part-time weekly working hours within the country. This conception often differs across countries as discussed in the introduction of the paper. OECD distinguishes three definitions of part-time work: a) self-defined by the employee, b) a cut-off point based on usual weekly working hours (generally 35 or 30 hours) and c) a cut-off point based on actual working hours during a reference week.

In the current paper the OECD strategy b) is used, i.e. we use usual working hours per week to define part-time workers. However, since employees working less than 30 hours a week is the common conception of part-time work in the UK, while the corresponding cut-off point for Swedish employees is working less than 35 working hours a week, we employ the analytic strategy of conducting double sets of analyzes, using the 35 and the 30 hours definition respectively. In this way we will be able to distinguish potential differences of the results originating from the definition of long versus short part-time hours.

Data and Variables

Data Sets and Selections

Two datasets are used for the Swedish analyses; the Swedish Level of Living Survey (LNU) 1991 and 2000; and the Living Conditions Survey (ULF) from 1992/1994, 1997, 2000/2002 and 2004. The Employment in Britain (EIB) 1992 and the British Skill Survey 2001, 2006; and are used in the British case.

Employed women and men aged 20-60 years were selected for the analyses. Male part-timers are excluded as well as respondents working more than 90 hours a week.

Dependent Variables

Pay a continuous variable measured as the logged gross hourly wage in the UK and as the logged yearly gross wage in Sweden⁴.

*Skills*⁵ consist of three sub measures;

The first measure is “*Qualifications Required*”, which in the Swedish data is operationalized with the two questions “*Do you need education or vocational training beyond compulsory education in your [job] position?*” and “*[If yes] Approximately, how many years of schooling beyond compulsory education do you need?*”. The question in the British data is posed “*If they were applying today, what qualifications, if any, would someone need to get the type of job you have now?*”.

The second sub measure is “*Learning Time*”, i.e. how long time it take to learn to do the job reasonably well⁶.

The last measure focuses on “*Training time*”, and the questions “*Have you received on-the-job training (OJT) during the last 12 months (on paid working hours)?*” and “*[If yes] How many days in total did the on-the-job training (OJT) last?*” are used for the Swedish data. This measure is operationalized by the following question in the British data “*Since completing full-time education, have you ever had or are you currently undertaking, training for the type of work you currently do? If yes, 'how long in total did (or will) that training last?*”

*Overeducation*⁷ is a binary variable taking the value 1 if the respondent is overeducated. In the Swedish case an employee is counted as overeducated if the years of schooling the respondent has attained exceed the years of schooling required by the employer with two years or more. In the British case, an employee is defined as overeducated if the level of

⁴ The Living Condition Survey 1992, 1997, 2001 and 2004 were used for these analyses.

⁵ The questions on skill are from the Swedish Level of Living Survey (LNU) 1991 and 2000.

⁶ It holds the response categories “*1 month or less*”, “*1-3 months*”, “*3 months – 1 year*”, “*1-2 years*”, “*Over 2 years*” for the British data and “*1 day or less*”, “*2-5 days*”, “*1-4 weeks*”, “*1-3 months*”, “*3 months-1 year*”, “*1-2 years*” and “*More than 2 years*” in the case of the Swedish data.

⁷ The measures on overeducation are from the Swedish Level of Living Survey (LNU) 1991 and 2000.

job-required qualification is lower than the level of qualification he/she actually possesses.

Learning on the job is a binary variable taking the value 1 if the respondent is learning new things in the job⁸.

Task discretion is an index that for the British data consists of four questions concerning the influence employees have over the way they do their jobs, how hard they work, which tasks to be done and how they performed these tasks with the answers consisting of four categories ranging from "None" (taking the value 0) – "A great deal" (taking the value 3). The values of these questions were added and divided by four to get an average. In the Swedish case an additive index was created using two questions on the influence on the planning and pace of work respectively⁹.

Independent Variables

Part-timer is a dummy variable taking the value 1 for female employees working less than 35 or 30 hours a week.

Female full-timer is a dummy variable taking the value 1 for women working more than 34 or 29 hours a week.

Male full-timer is a dummy variable taking the value 1 for men working more than 34 or 29 hours a week.

Age and *age square* are continuous variables included in all analyzes.

Human capital controls

Education is a dummy variable based on one digit ISCED-97 which in the British data has four categories; "*Basic education*", "*Lower secondary education*", "*Upper secondary education*" and "*Post secondary/Tertiary education*". In the case of Sweden, the categories of lower and upper secondary education are merged into one.

Tenure is a continuous variable measuring the number of years working for current employer. A squared term of tenure has also been included in the analyses.

⁸ The question: "Is your work of the kind that you have great possibilities of learning new things?" is used in the Swedish analyses. Note that the ULF-data is from the years of 1994, 1997, 2001 and 2004.

⁹ The questions posed in the surveys were the following: "What degree of influence do you personally think that you have over the planning of the work?" and "What degree of influence do you personally think that you have over your pace of work?" [No influence; Some influence; Great influence]. These questions were posed only in the ULF surveys in 1994, 1997 and 2002.

Labour Market Experience in a continuous variable in both the Swedish¹⁰ and the British case.

Occupational controls

Occupation is a variable that in the Swedish case consists of the following five classes classified according to the Socio-economic Classification (SEI); “*Upper service*”, “*Lower service*”, “*Lower non manual*”, “*Skilled manual*” and “*Non-skilled manual*”. In the UK data the occupation coding is SOC2000. It includes ‘*Managers and senior officials*’, ‘*Professional occupations*’, ‘*Associate professional and technical occupations*’, ‘*Administrative and secretarial occupations*’, ‘*Skilled trades occupations*’, ‘*Personal service occupations*’, ‘*Sales and customer service occupations*’, ‘*Process, plant and machine operatives*’, and ‘*Elementary occupations*’.

Industry is in the Swedish case a dummy variable with the following five categories based on one digit NACE; “*Transformative industry*”, “*Consumer industry*”, “*Financial sector*”, “*Welfare*” (this category is used as reference) and “*Other*”. For UK, industry code is SIC92. It includes ‘*Agriculture, hunting and forestry*’, ‘*Fishing*’, ‘*Mining and quarrying*’, ‘*Manufacturing*’, ‘*Electricity, gas and water supply*’, ‘*Construction*’, ‘*Wholesale and retail trade*’, ‘*Hotels and restaurants*’, ‘*Transport, storage and communication*’, ‘*Financial intermediation, real estate, renting and business activities*’, ‘*Public administration and defense*’, ‘*Education*’, ‘*Health and social work*’, and ‘*Other community, social and personal service activities*’.

Public sector is a dummy variable taking the value 1 if the respondent works in the public sector.

Establishment size is a continuous variable.

¹⁰ Information on labour market experience is not included in the Swedish Living Condition Survey (ULF).

Results

Sweden

We begin the analyses using national data sources by exploring the indices and changes in the quality of part-time work in the Swedish context. First we examine job skills, which are seen as a crucial aspect of the quality of work. In Table 5, the mean scores of different skill dimensions are presented. Overall, men working full-time score higher on all aspects of skill relative female part-timers both in 1991 and 2000. The gap is greatest for training time, i.e. the number of days spent in on-the-job training during the last 12 months (in 1991 male full-timers receive more than twice as much on-the-job training compared to women working part-time). The discrepancy diminished somewhat over time, but was also in 2000 of magnitude. On-the-job training was the only dimension of skill that decreased slightly between 1991 and 2000 for all categories of employees, except women working long part-time hours. Looking at the mean scores for learning time, i.e. the time it takes to learn to do the job reasonably well, we see that it was stable across time for male full-timers, while there was a slight increase for female part-timers between the two points in time (the increase was somewhat larger when employing the stricter definition of part-time work). The difference between male employees working full-time and female part-timers in average years of schooling required for the job was approximately one year and the mean job requirements have increased slightly over time.

Table 5. Mean scores of skill indices, LNU 1991 and 2000 (Sweden).

Skills Indices						
	<i>JSR</i>	<i>Training TI</i>	<i>Learning</i>	<i>JSR</i>	<i>Training TI</i>	<i>Learning</i>
	PT<30 hours			PT<35 hours		
1991						
FPT	10.62	2.36	3.68	10.77	2.85	3.94
MFT	11.70	6.30	5.46	11.71	6.31	5.48
Diff	-1.08	-3.94	-1.78	-0.94	-3.46	-1.54
2000						
FPT	11.15	1.70	3.96	11.46	3.14	4.13
MFT	12.32	5.20	5.46	12.34	5.22	5.48
Diff	-1.17	-3.50	-1.50	-0.88	-2.08	-1.35

Note: JSR: Years of Schooling Required for the Job; Training TI: Training Time Index; Learning: Days of On-the-Job Training in the Last Year.

To further explore the somewhat different patterns of change over time for male full-timers relative women working part-time hours, a series of regressions have been carried out. The results are summarized in Table 6 and 9 (the latter is presented in the British

result section below). In the first model (in Table 6) we can see that there was a significant increase in the learning time aspect of skills, implying that female part-timers have improved their relative position compared to male employees working full hours for learning time, i.e. the time it takes to learn to do the job reasonably well. Once adjusting for human capital factors like educational level and tenure the interaction estimate weakens and turns insignificant. Including only controls for occupational features, like class, industry and sector (Table 9) makes the change slightly smaller, but the estimate remains significant, with the exception of Swedish women working short part-time hours. Thus, the marked change in learning time to the advantage of part-timers compared to male full-time employees 1991 to 2000 could mainly be explained by a relative upgrading in human capital factors of the former group.

The trends of slightly increased job requirements over time did not seem to be different for male full-timers and female part-timers studying the descriptives (cf. Table 5). This conclusion is supported by the analyses in Table 6. The estimates are very small in general and including controls for human capital variables, occupational variables (Table 9) or them jointly does not imply any considerable change.

Table 6. Summary of change in part-time effects on skills, relative to male full-time employees, with and without controls for human capital.

	Without controls	+ Controls for Human Capital	Without controls	+ Controls for Human Capital
	PT<30 hours		PT<35 hours	
Sweden (Part-time effect in 2000 relative to 1991)				
FPT2000 Job Required Schooling	-0.03	0.00	0.11	- 0.02
FPT2000 Training Time	0.41	0.42	1.39	1.25
FPT2000 Learning Time	0.46**	0.32	0.34**	0.22
Britain (Part-time effect in 2006 relative to 1992)				
FPT2006 Job Required Qualifications	0.49***	0.35**	0.44***	0.31*
FPT2006 Training Time	0.64***	0.52***	0.62***	0.50***
FPT2006 Learning Time	0.18	0.03	0.23*	0.09

Turning to training time, i.e. days in on-the-job training in the last year, the descriptives pointed to a positive increase for women working short part-time hours, while the mean scores decreased over time for other categories of employees. Nevertheless, even if the change in on-the-job training over time for female employees working less than 30 hours

a week is of some magnitude, the trend is not significant relative male full-timers (cf. Table 6 and 9).

In addition to the dimensions of skills discussed above, there are other importance factors closely related to the conception of work quality. We proceed by exploring the incidences of overeducation, task discretion, learning new things in the job as well as wages of part-timers relative male full-time employees. Descriptives of the proportions and means are presented in Table 7. The overall picture points to an advantage position of men working full hours compared to female part-timers, and there are no tendencies to any significant positive changes across time. On the contrary, some aspects seem to have been aggravated. The proportion of overeducated part-timers did for example increase markedly to exceed the share of male full-time workers with 6% in 2000 (using the stricter definition of part-time employment). This implies that mismatch between the education attained and the years of schooling required for the job is more common among women working part-timer hours. There is a relatively small gap between female part-time employees and male full-timers in the mean scores of the task discretion index, i.e. to what extent you are able to influence the planning of your job and the pace of work, and it is stable over time.

Table 7. Trends in pay, task discretion, continuous learning and overeducation (Sweden).

	Pay	TD	CL%	OE%	Pay	TD	CL%	OE%
	PT<30 hours				PT<35 hours			
1991/1992/1994								
FPT	1070.2	2.40	51.69	27.11	1166.8	2.43	55.32	27.86
MFT	2090.4	2.65	68.85	30.53	2098.3	2.65	69.00	30.16
Diff	-1020.2	-0.25	-17.16	-3.42	-931.5	-0.22	-13.68	-2.30
2000/2004								
FPT	1611	2.35	55.83	39.75	1825.3	2.37	60.77	38.33
MFT	3247.5	2.61	72.37	33.60	3268.9	2.62	72.85	32.94
Diff	-1636.5	-0.26	-16.54	6.15	-1443.6	-0.25	-12.08	5.39

Note: Pay: Gross Yearly Pay; TD: Task Discretion Index; CL: Continuous learning; OE: overeducation.

A majority of all employees stated that they learned new things in their jobs. The shares increased across the period 1994 to 2004 for all groups of workers, but from different initial levels. The proportion of female part-time workers stating that they learn new things in the job was more than 12% lower compared to male full-time workers and even higher if the 30 hour definition of part-time work was applied. Finally, the mean yearly gross wage was clearly higher for the male full-time group relative part-timers and the gap seems to have become wider across time. Nonetheless, it is highly plausible that this could be due changes related to individual factors, such as education, or the structure of the labour market as regards for example branches of industry. In Table 11 and 12 (see

the tables in the British result section below) we therefore try to isolate the potential diverge trends of males working full-time and part-time employees by adjusting for human capital factor and factors related to occupation. However, the relative trends as regards task discretion, learning new things in the job as well as wage do not differ in any systematic way between men working full-time and female part-timers. And the estimates do not appear significant when including controls for human capital variables and occupational variables. Nevertheless, the analyses reveal that female part-timers indeed have increased in the risk of overeducation relative male full-timers over the time period 1991 and 2000. This change remains significant also when holding factors related to the occupation constant. The disadvantage in overeducation seemed to be greater for female employees working short part-time hours compared to those working longer part-time hours.

To summarize the findings: It is only in one dimension of the job quality aspects studied where the change of female part-timers in Sweden over time systematically differed from the development of the job quality of male full-time workers – that was in the increased risk of overeducation for female part-time employees. Hence, if anything, the job quality of female part-time workers in Sweden became slightly deteriorated relative male employees working full-time in the last decade.

Britain

Having examined the nature and changes in the quality of part-time employment in Sweden, we now turn to the picture in Britain. Table 8 compares the means of the skill indices of British male full-time workers with their female part-time counterparts, first for those working less than 30 hours a week and then for those working less than 35 hours. It can be seen that in both 1992 and 2006 the skill levels of female part-timers are notably lower than those of male full-timers, whichever definition of part-time work we take. For instance, contrasting women who worked less than 30 hours a week with male full-time workers in 1992, the mean score of Job Required Qualifications is 1.19 for the former and 2.18 for the latter. Similarly, in both years the training time and initial learning time that one spends on the job is considerably longer for male full-timers than female part-timers. In 1992 the mean Training Time Index of female part-timers is 1.26, compared to 2.65 for male full-timers. The respective figures for Learning Time Index are 2.19 and 3.25.

Examining the pattern of change over time, however, there appears to have been a narrowing of the gap between the two groups. In 1992, the difference between part-time and full-time workers in terms of Job Required Qualifications Index is -0.99, whilst it decreased to -0.50 by 2006. Similarly, the gap in Training Time Index declined from -1.39 to -0.39, and in Learning Time Index from -1.06 to -0.84. The pattern is similar for the longer-hour part-timers. Table 6 (in the Swedish result section) shows the regression analysis conducted on both category of part-time workers, first without controls and then with controls for employees' human capital. The first and third column of Table 6 (cf. the Swedish result section) show that the improvement in part-timers' situation relative to

their full-time counterparts was highly significant for two out of the three skills indicators. This is reflected in the significant interaction effects of female part-time workers and year 2006, with male full-timers and year 1992 taken as the reference category.

Table 8. Mean scores of skill indices, 1992 and 2006 (Britain).

Skills Indices						
	<i>JQR</i>	<i>Training TI</i>	<i>Learning TI</i>	<i>JRQ</i>	<i>Training TI</i>	<i>Learning TI</i>
	PT<30 hours			PT<35 hours		
1992						
FPT	1.19	1.26	2.19	1.27	1.36	2.23
MFT	2.18	2.65	3.25	2.20	2.65	3.26
Diff	-0.99	-1.39	-1.06	-0.93	-1.29	-1.03
2006						
FPT	1.66	2.26	2.54	1.71	2.34	2.61
MFT	2.16	2.65	3.38	2.18	2.67	3.39
Diff	-0.50	-0.39	-0.84	-0.47	-0.33	-0.78

Note: JQR: Job Required Qualifications; Training TI: Training time index; Learning TI: Learning time index.

What was underlying the changes in the relative position of female part-time workers? Has the improvement in job-required skills reflected the changing profile of part-time workers in terms of their human capital characteristics? As can be seen in the second and fourth columns of Table 6 (in the Swedish result section), controlling for employees' human capital characteristics (defined in terms of employees' age, work experience, tenure and educational level) substantially reduced the magnitude of the relative increase of female part-timers' job skills (a 29% reduction in the case of Job Required Qualifications and 19% reduction in the case of Training Time Index, using the 30 hours definition), but effects remained strong and robust, no matter which definition of part-time work we take. This suggests the relative improvement of female part-timers' job skills cannot be entirely attributed to the increase in their own stock of human capital.

If changes in employee characteristics was not the main factor underlying the improved skill position of part-time workers, what about the effects of structural changes of the labour market, such as the changed composition of occupation, industry, or workplace size? For instance, has the rising skill content of part-timers' jobs reflected demand-side factors such as the increase in the proportion of professional and managerial jobs among part-timers?

To answer the question, we repeated the regression to examine the changes in the relative situation of female part-timers, first without controls and then with controls entered

stepwise for employees' occupational class, industry, establishment size and human capital characteristics. The results are shown in Table 9.

Table 9. Change in part-time effects on skills, relative to male full-time employees, with and without controls for occupation, industry, establishment size and human capital.

	With controls for:							
	With out	Occ. Class	+ Indus., Estab. Size and Sector	+ Human capital	With out	Occ. Class	+ Indus., Estab. Size and Sector	+ Human capital
	PT<30 hours				PT<35 hours			
Sweden (Part-time effect in 2000 relative to 1991)								
FPT2000 Job Required Qualifications	-0.03	-0.02	0.03	0.06	0.11	- 0.01	0.01	-0.02
FPT2000 Training Time	0.41	0.65	0.62	0.60	1.39	1.52	1.44	1.39
FPT2000 Learning Time	0.46**	0.41*	0.41*	0.30	0.34**	0.25	0.26**	0.18
Britain (Part-time effect in 2006 relative to 1992)								
FPT2006 Job Required Qualifications	0.49** *	0.39**	0.43**	0.32*	0.44** *	0.36**	0.39**	0.28*
FPT2006 Training Time	0.64** *	0.50** *	0.47** *	0.36**	0.62** *	0.50** *	0.46** *	0.35**
FPT2006 Learning Time	0.18	0.00	0.02	-0.10	0.23*	0.08	0.10	-0.02

Note: Establishment size is only included in the British models, while sector is only included in the Swedish models.

It can be seen in Table 9 that although the inclusion of a set of wider work context characteristics significantly reduced the initial coefficient of the interaction term, it cannot fully account for part-timers' relative skills increases either. Taken together with human capital characteristics, these factors reduced the initial part-time effect by a third in the case of Job Required Qualifications and 44% in the case of Training Time Index. The pattern is very similar for shorter-hour and longer-hour part-timers. Clearly there have been other mechanisms underlying the skills upgrading of female part-timers' jobs, which are external to both individual employees and their workplace characteristics.

There has been a strong interest in recent years in the issue of skills mismatch among female part-time workers, as growing evidence shows that part-timers are particularly likely to be employed in jobs that under-utilize their skills and abilities (e.g., Equal Opportunities Commission, 2005). In the light of these perspectives, we constructed a variable of over-qualification by subtracting the level of an employee's own educational level from the level of qualification required for getting his/her job. The variable takes the value '1' if an employee possessed higher level of qualification than required by his/her job, and '0' if his/her qualification is lower than or equal to job required level of qualification.

Table 10. Trends in pay, task discretion, continuous learning and over-qualification (Britain).

	Pay	TD	CL%	OQ%	pay	TD	CL%	OQ%
	PT<30 hours				PT<35 hours			
1992								
FPT	4.93	2.41	59.2	15.6	5.00	2.39	61.6	15.9
MFT	7.09	2.43	80.8	19.3	7.04	2.43	81.1	19.3
diff	-2.16	-0.02	-21.6	-3.7	-2.04	-0.04	-19.5	-3.4
2006								
FPT	8.52	2.08	73.3	23.3	8.56	2.10	75.3	22.8
MFT	10.87	2.20	84.6	23.0	12.95	2.20	85.1	22.7
diff	-2.35	-0.12	-11.3	0.30	-4.39	-0.10	-9.80	0.10

Note: Pay: gross hourly pay; TD: task discretion; CL: continuous learning; OQ: over-qualification.

Table 10 compares female part-timers with male full-timers along these four dimensions of job quality for each year. The first four columns show the results for part-timers defined as those working less than 30 hours a week and the last four columns show the results for the 35-hours category. It can be seen that there is no evidence that female part-timers have managed to close their wage gap with male full-timers over time. In 1992, the average gross hourly pay was 4.9 pounds for a female part-time worker (taking the shorter-hour part-timers), compared to 7.1 pounds for a male full-time worker. By 2006, the figure increased to 8.5 for the former and 10.9 for the latter. The absolute difference in the wage gap thus increased slightly from -2.16 to -2.35. For the longer-hour part-timers, there has been an even greater widening of the gap (from -2.04 to -4.39).

The pattern of change is no more optimistic for task discretion. In 1992, there was little difference between full-time and part-time workers in terms of the influence they were able to exercise over their job tasks (the Task Discretion index was 2.41 for shorter-hour part-timers and 2.43 for full-timers), but the gap can be clearly discerned by 2006 (2.08 and 2.20 respectively). The picture is broadly similar for longer-time part-timers. It is notable that both full-time and part-time workers experienced a marked decline in terms

of task discretion from 1992 to 2006, in contrast to the pattern of generally increasing wages over the period.

With respect to the continuous learning opportunities offered by the job, there seemed to have been more positive developments over time. In 1992 81% of male full-timers said that their jobs required them to keep learning new things, compared to only 59% of female part-timers. By 2006 there was a slight increase in the proportion of full-timers reporting this was the case with their job (from 81% to 85%), whereas the increase for part-timers was substantially greater (from 59% to 73%). This result is quite consistent with our earlier findings about the narrowing skills gap between part-time and full-time workers.

Finally, turning to the question of over-qualification, Table 10 shows that in 1992 male full-time workers were a little more likely than female part-time workers to be employed in jobs that require lower qualifications than those they actually held, but over time, full-time and part-timers had become similar in terms of their likelihood of landing in jobs below their abilities. In 2006, just above a fifth of the British workforce were to be found in jobs that require less qualification than what they had attained, regardless of their contract status. There is virtually no difference between shorter-hour and longer-hour part-time workers in this respect.

To test the significance of these trends and elucidate the factors underlying the changes, we performed a regression analysis that first takes into account employees' human capital characteristics and then the wider set of work context characteristics. The results are specified in Table 11 and Table 12. In the first column of Table 11, it can be seen that shorter-hour female part-timer worker experienced a significant decline in task discretion compared to male full-time workers from 1992 to 2006. This relative decline became even more pronounced when controls are entered for human capital. This trend cannot be accounted for by changes in occupational or industrial characteristics either (Table 12). The coefficient remained robust even when both human capital and structural factors are entered together into the model. This effect is however largely limited to shorter-hour part-timers who worked less than 30 hours a week. The longer-hour part-timers did not appear to have experienced a significant deterioration of job quality in this respect.

The base model also shows a significant increase in continuous learning opportunities for female part-time workers, consistent with what was seen in Table 10. The effect disappeared once the human capital variables are entered into the model, suggesting that the increase in part-time workers' human capital has been a main factor underlying the increased learning requirements of the job.

Table 11. Summary of change in part-time effects on pay, task discretion, job-required learning and over-qualification, relative to male full-time employees, with and without controls for human capital.

	Without controls	+ Controls for Human Capital	Without controls	+ Controls for Human Capital
	PT<30 hours		PT<35 hours	
Sweden (Part-time effect in 2000/2002/2004 relative to 1991/1992)				
FPT2004 Pay	0.01	0.01	0.05	0.04
FPT2002 Task Discretion	0.03	0.03	-0.00	-0.00
FPT2004 Continuous Learning	-0.04	-0.06	0.03	0.03
FPT2000 Overeducation	0.45*	--	0.36*	--
Britain (Part-time effect in 2006 relative to 1992)				
FPT2006 Pay	0.02	-0.01	0.00	-0.03
FPT2006 Task Discretion	-0.08*	-0.10*	-0.04	-0.06
FPT2006 Continuous Learning	0.31*	0.21	0.29*	0.20
FPT2006 Over-qualification	0.26	--	0.28	--

Note: Labour market experience is not adjusted for in the Swedish models based on ULF data (i.e. above).

Table 12. Summary of change in part-time effects on pay, task discretion, continuous learning and over-qualification, relative to male full-time employees, with and without controls for occupation, industry, establishment size and human capital.

With controls for:								
	With out	Occ. Class	+ Indus., Estab. Size and Sector	+ Human capital	With out	Occ. Class	+ Indus., Estab. Size and Sector	+ Human capital
	PT<30 hours				PT<35 hours			
Sweden (Part-time effect in 2000/2004 relative to 1991/1992/1994)								
FPT2004 Pay	0.01	0.02	0.01	0.02	0.05	0.05	0.04	0.03
FPT2002 TD	0.03	-0.03	0.12	0.15	-0.00	-0.03	0.11	0.13
FPT2004 CL	-0.04	0.15	-0.04	-0.05	0.03	0.02	0.04	0.04
FPT2000 OE	0.45*	0.52*	0.46*	--	0.36*	0.43**	0.39**	--
Britain (Part-time effect in 2006 relative to 1992)								
FPT2006 Pay	0.02	0.02	0.03	0.02	0.00	0.00	0.01	0.00
FPT2006 TD	-0.08*	-0.10**	-0.09*	-0.10*	-0.04	-0.06	-0.05	-0.06
FPT2006 CL	0.31*	0.19	0.18	0.14	0.29*	0.16	0.15	0.12
FPT2006 OD	0.26	0.26	0.34	--	0.28	0.26	0.33*	--

Note: Establishment size is only included in the British models, while sector is only included in the Swedish models. Also note that labour market experience is not adjusted in the Swedish models based on ULF data (i.e. pay, task discretion and continuous learning above).

With respect to pay and over-qualification, Table 12 shows that there has been no significant change in part-timers' relative position over time. The disadvantage of part-timers in terms of their gross hourly pay has remained stable over time, and there is no sign that they have become more concentrated in jobs that tend to under-utilize their skills and abilities compared to full-time workers.

In sum, the positive message that emerged from the analysis of the British data is that female part-time employees have been catching up with male full-timers in terms of the skill contents of their jobs. This is the case for job required educational qualifications, training time spent on the job and continuous learning opportunities offered by the job. The rise in part-timers' human capital has been the main factor underlying the increased learning opportunities on the job, but for required qualifications and training time, neither human capital nor work context characteristics can fully account for the rise in part-timers' skills status. It is also notable that rising skill requirements has not translated into a faster pay rise for female part-timers, and the extent of task discretion that part-timers could exercise over their jobs has even declined relative to full-timers over time. These results suggest that there is no ground for expecting that different dimensions of job quality would always move in a consistent direction. Despite the faster skills rise of female part-timers over the last one and half decade, they have not managed to improve their relative position with respect to some other key aspects of their job quality.

Conclusion

Part-time work is central in current to current labour market debates. For some it is seen as a way of coming to terms with the incompatibility between work and family life as well as increasing the general labour supply. Others argue that part-time work creates a dual workforce, with part-time employees holding low quality jobs and being less integrated into the labour force compared to individuals working full-time. The aim of the paper has been to examine the effects of different institutional systems on the quality and change of part-time work. There is still relatively little research upon the extent to which the work and employment conditions of part-time work vary between societies. Similarly, we know little about whether the trend over time has been towards increased integration or greater marginalization of part-time workers. We have explored these questions by studying female part-time work in Sweden and Britain – two countries often taken as examples institutional regimes with respect to skill formation, labour market regulation and policies targeted toward weaker labour market groups.

Due to the different conceptions of part-time work in Sweden and Britain, two definitions of weekly part-time hours were employed; less than 35 hours of weekly work and, more restrictedly, less than 30 hours of work. The former would correspond to the longer working hours of Swedish part-timers, while the latter matches the conception of part-time work in the British context. The major conclusions of our analyses proved to be the same whichever of these definitions of were selected.

The view of Sweden as a more inclusive society, that provides stronger protection for more vulnerable workers, led to the expectation that Swedish part-timers' jobs would be of higher quality than those of their British equivalents. Arguments focussing on the nature of skill formation, on the other hand, pointed to the likelihood of particularly severe disadvantages for Swedish female workers more generally and part-time workers in particular due to their greater difficulty in acquiring specific skills in a society where these were central to the production regime. Our findings suggest that Swedish female part-timers do hold higher quality jobs compared to British women working part-time hours. They were less likely to be employed in non-skilled work, their jobs were more likely to require continuous learning and they allowed employees greater discretion in how work was carried out. However, it should be noted that this did not imply greater integration in the sense of convergence between the conditions of male full-time and female part-time jobs. The relative disadvantage of female part-time employees compared to men working full-time seems to be equally strong in Sweden as in Britain.

Turning to the change of part-time work across time, our hypothesis was that the increased salience of the issue of part-time work, in part from the interventions of the European Commission, was most likely to affect countries where the conditions of part-time work were relatively poor. This is supported by our evidence. The overall results indicate a somewhat more favourable development of the quality of part-time work in Britain compared to Sweden. British women working part-time have caught up with male full-timers on among other things, job qualifications and training time, and these changes cannot be explained by the general level of human capital within this group or structural changes of the labour market. No similar patterns are found in the Swedish case.

To summarize, the findings indicate that differences in the institutional systems of Sweden and Britain do have a significant effect on the absolute quality of part-time work. As with other types of employee, Swedish workers benefit from policies that give much greater salience to improvements in the quality of work. However, the relative disadvantage of part-timers is not affected by such policies. The trend over time has been for some measure of improvement in the position of British part-timers compared to male full-timers, whereas this has not been the case in Sweden over the period of the last decade.

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