CENTRE for ECONOMIC PERFORMANCE

CEP Discussion Paper No 1262

March 2014

The Impact of Mandatory Entitlement to Paid Leave on Employment in the UK

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E·S·R·C ECONOMIC & SOCIAL RESEARCH COUNCIL

Abstract
I evaluate the impact of the UK Working Time Regulations 1998, which introduced mandatory paid holiday entitlement. The regulation gave (nearly) all workers the right to a minimum of 4 weeks of paid holiday per a year. With constant weekly pay this change amounts effectively to an increase in the real hourly wage of about 8.5% for someone going from 0 to 4 weeks paid holiday per year, which should lead to adjustments in employment. For employees I use complementary log-log regression to account for right-censoring of employment spells. I find no increase in the hazard to exit employment within a year after treatment. Adjustments in wages cannot explain this result as they are increasing for the treated groups relative to the control. I also evaluate the long run trend in aggregate employment, using the predicted treatment probabilities in a difference-in-difference framework. Here I find a small and statistically significant decrease in employment. This effect is driven by a trend reversal in employment, coinciding with the treatment.

Key words: UK working time regulation, employment and labour regulation, UK LFS
JEL: J08, J23, J45

This paper was produced as part of the Centre's Labour Markets Programme. The Centre for Economic Performance is financed by the Economic and Social Research Council.

Acknowledgements

Alexander Lembcke is an Associate Researcher at the Centre for Economic Performance, London School of Economics.

Published by
Centre for Economic Performance
London School of Economics and Political Science
Houghton Street
London WC2A 2AE

1 Introduction

Many European countries have experimented with restricting the number of hours that individuals can work, with the aim either of improving the conditions of work for those affected or of sharing work out more equally when jobs are scarce ('work-sharing'). However, contrary to expectations of increased employment, studies of Germany (Hunt 1999) and France (Crépon and Kramarz 2002) both conclude that reductions in the standard working week reduces employment. In this paper we examine another form of restrictions on working time, the setting of minimum weeks of paid holiday entitlement. All the OECD countries with the exception of the United States, have some regulation of paid holiday entitlement.[1] In this paper we study the introduction of such a regulation in the UK where over the 1998-99 period, the law changed to give all workers (subject to some exceptions described below) the right to a minimum of 4 weeks of paid holiday a year. If there was no change in weekly pay resulting from this change (a possibility we discuss further), an employee going from 0 to 4 weeks of paid holiday is effectively going from 50 to 46 weeks of paid work (allowing for the public holidays they might have been entitled to before) an increase in the real hourly wage of about 8.5%. This is large relative to the reduction in the standard work week from 40 to 39 hours studied by Crépon and Kramarz (2002), which is an increase in the hourly wage of 2.5% and the hours reductions Hunt (1999) studies in Germany, which were a maximum of a 10% reduction.

About 9% of full-time employees in the UK Labour Force Survey (LFS) report less than three weeks entitlement to paid holidays. Another 8% are entitled to up to four weeks of leave. Since the reform was implemented at the same point in time in all of the UK we cannot use regional variation to estimate its impact. In lieu of regional variation, a natural control group are employees with paid holiday entitlement greater than the regulation threshold.

There are two problems with this control group. One, using the whole sample the treatment and control group are dissimilar and two, the limited panel nature of the data makes it impossible to track treated individuals for longer than one year. We address

[1] See Altonji and Oldham (2003) for an U.S.-centric overview.

the first problem by using propensity score estimates to select the sample. This increases comparability. To address the second issue, we construct a treatment indicator that extends beyond the treatment period. We first estimate the propensity score on a pre-treatment sample. We then use the in- and out-of-sample predictions of the propensity score as treatment indicator. This allows us to extend our analysis to a longer time-horizon and to include the non-employed in our analysis.

We first evaluate the impact on employees by estimating the hazard to non-employment. Using complementary log-log regression to account for right-censoring of the data, we find no increase in the hazard to non-employment within a year after treatment. Adjustments in wages cannot explain this result as they are increasing for the treated groups relative to the control.

Since there is no effect on the employed, we evaluate the impact on total employment. Using the predicted treatment probabilities in a difference-in-differences framework we find a small statistically significant effect on employment. This effect is driven by a trend reversal in employment, coinciding with the treatment. Until the treatment occurred, employment was on a slight upward trend for the treated groups when compared to the control. After the treatment employment switched to a downward trend.

The plan of the paper is as follows. We first describe the legislation and the data we use. We then show that there was an effect of the legislation on the amount of paid holiday received, so there was a treatment. We then turn to the effects on employment which we find to be small and insignificant. It is possible that this is because there were off-setting movements in wages or other employee related expenses so we investigate this. We then evaluate the long-run impact on employment by focussing on the labor force as a whole. The final section concludes.

2 The Working Time Regulations 1998

In 1993 the European Council issued the Council Directive 93/104/EC, which encompasses minimum requirements on working time regulations in the member states. Implementing the directive, the British parliament passed the statutory instrument 1998 No. 1833, "The

Working Time Regulations 1998" (WTR) in autumn 1998.

The European Directive demands the enactment of a national regulation either by the governing body or by a general agreement between employers' and employees' associations by November 23, 1996. Barnard (1999) lists some reasons for the delay and cites concerns of members of Parliament that the implementation was too quick and employers could not prepare for the pending changes. Despite the concerns, the WTR came into force on October 1, 1998. The regulation introduces minimum standards for adult and young (less than 18 years old) workers in three major areas: working time, rest periods and annual leave.

Weekly working hours are restricted to an average of 48 hours per week, but the regulation leaves the option for worker and employer to contractually agree on exceeding the limit. The option for an opt-out was introduced in the Council Directive at the UK's urging and remains a disputed issue (Barnard, Deakin, and Hobbs 2003).[2] The result of this clause is that the limit on standard working hours had little effect on the usual hours worked (see table 1).

The WTR includes detailed regulations on daily- and weekly rest periods as well as on breaks during working time. An adult (young) worker is entitled to a rest period of 24 (48) consecutive hours per week or 48 consecutive hours in two weeks. If daily work exceeds six (four and a half) hours, the worker is supposed to have a break of 20 (30) minutes. Night work should not last—on average—more than 8 hours per night.

Most importantly for our study, the WTR introduced, starting on October 1, 1998, that every worker who has been continuously employed by the same employer for thirteen weeks gains the right to paid holidays. In 1998 and 1999 the number of weeks that a worker qualified for depended on the leave year[3] of the worker. If the leave year began on or before November 23, 1998, the worker was entitled to three weeks of paid holidays. For a leave year beginning after the 23rd, the eligibility was three weeks plus the share of week given by the time elapsed between the November 23, 1998 and 1999. And finally employees whose leave year started after the 23 November 1999 had the right to 4 weeks

[2]In their 2004 proposal for a revision of the European Directive, the European Commission left the opt-out untouched.

[3]If not fixed by agreement, the leave year begins at the date the worker's employment began.

of paid holidays. Exempt from the eligibility to annual leave are the transport sector, workers at sea, doctors in training, and civil protection services, if their duties conflict with their rights from the WTR.

For our study the initial Working Time Regulations from 1998 are of interest. But the WTR was only one of several institutional changes that Tony Blair's "New" Labour government introduced after coming into power in 1997. Most of the impending changes were already announced in their 1997 Labour Party Manifesto and subsequently motivated in the 1998 White Paper "Fairness at Work" or they were implementations of existing EU regulations. In the next section we will give a short overview of the most important reforms (with respect to our study) at the turn of the century.

3 Other reforms

3.1 WFTC and the New Deal

With the 1998 budget, chancellor Gordon Brown introduced a reform of the family credit, the main UK in-work benefit during the 1990's.[4] Starting from October 1999 the Working Families' Tax Credit (WFTC) replaced the family credit. The reform had strong effects on labor supply incentives. Simulating the consequences of WFTC for working hours and participation in the labor market, Blundell, Duncan, McCrae, and Meghir (2000) find that for most demographic groups the incentives result in an unambiguous increase in labor supply at the extensive margin (the margin that we are concerned with in this study). The only group where employees would choose to leave work is for married couples with both partners working. The authors results suggest a small share of employed women (or men) with working partners would choose to leave employment. The distortion is therefore negligible.

Another part of the Welfare to Work initiative of the recently elected Labour government was the extension of the New Deal program. For young unemployed the New Deal was mandatory and it involved two phases. In the first phase the unemployed received job search and application support by mentors or advisers. If this gateway program was

[4]See e.g. Blundell, Duncan, McCrae, and Meghir (2000) for a detailed discussion.

unsuccessful the unemployed had to choose subsidized training, subsidized employment or employment in the voluntary sector, to remain eligible for unemployment benefits (Blundell, Costa Dias, Meghir, and Van Reenen 2004).[5] The impact of the New Deal on our study is indirect. Employment is subsidized and if the subsidy runs out, the employment chances might be affected detrimentally. Less than 1% of the individuals in the sample are on government schemes and do not influence our results.

3.2 ERA and unfair dismissal legislation

In the summer of 1999, the Employment Relations Act (ERA) came into force. The ERA intended to promote a co-operative form of trade unionism (Smith and Morton 2001) by introducing a statutory recognition procedure and strengthening the union's rights at the workplace (Oxenbridge, Brown, Deakin, and Pratten 2003). The effect on employment in our study should be negligible.

The Unfair Dismissal and Statement of Reasons for Dismissal (Variation of Qualifying Period) Order also became effective during the summer of 1999. The order reduced the required tenure for employees to sue their employer for unfair dismissal from 24 to 12 months. Marinescu (2009) finds that the reform increases the chances of remaining employed for employees with 24 to 12 months of tenure and decreases the probability of being fired in the first twelve months, which she attributes to increased recruitment efforts.

To account for the Unfair Dismissal Order we run robustness checks on a sample of employees with 2 or more years of tenure.

3.3 NMW

After all minimum wage regulations were abolished in 1993 (with the exception of the agricultural sector), the Labour government reintroduced a National Minimum Wage (NMW) in 1999. The NMW was based on the recommendations of the Low Pay Commission that had been enacted 2 years prior (Metcalf 1999). Starting April 1, 1999 the NMW was

[5]See Blundell, Costa Dias, Meghir, and Van Reenen (2004) and De Giorgi (2005) for evaluations of the New Deal.

introduced for adult workers (here defined as 22 years and older) as a minimum hourly wage of £3.60. This wage was gradually increased to £4.50 in 2003. For young workers (age 18 to 21) the minimum was £3.00 in 1999 and £3.80 by 2003. See table 2 for a timeline of the changes in the minimum wage.

Stewart (2004) finds that the minimum wage did not have any detrimental employment effects. Nonetheless we find it important to account for potentially adverse effects. We do so by explicitly controlling for wages below the (next period) minimum wage.

3.4 Amendments to the WTR 1998

The Working Time Regulations 1998 were amended nearly annually. After only a year some minor changes were introduced in autumn 1999. The main change was that rules on keeping records for workers that agree to exclude the limit on hours worked per week were slackened. The second amendment followed in 2001. This amendment acknowledges a lawsuit filed and won by the Broadcasting, Entertainment, Cinematograph and Theatre Union at the European Court of Justice (ECJ). The ECJ ruled that the European Directive, which was implemented by the WTR, does not allow for a requirement of a minimum of 13 weeks of uninterrupted work to qualify for paid leave. Accordingly the restriction on the entitlement to paid leave was abolished by the 2001 amendment. For the 2002 amendment more exceptions that allow to treat a young worker like an adult worker were introduced, but the change in rules were only related to weekly working time and night work.

The reason for the 2003 amendment was another European Council Directive, which led to the extension of the WTR to the, so far excluded, transportation sector. The regulations for doctors in training were made explicit (instead of simply exempting them from the WTR regulations) and more detailed enforcement rules were established, including the appointment of enforcement agencies that are allowed to use inspectors in order to verify the application of the WTR.

4 The data

We use the UK Labour Force Survey (LFS) from 1994 to 2004.[6] The survey comprises about 145,000 individuals with 20% being replaced every quarter (i.e. without panel attrition we observe an individual at most 5 consecutive quarters). Answers are mostly given personally by the respondent but a third of our sample relies on responses by proxy.[7] Our main variable of interest, eligibility for paid holidays, is only available in the autumn quarter (Sep.-Nov.) which limits the number of observations that we can use to construct a time-series for an individual.

We select observations where the respondent is between 16 and 64 years (men) or 59 years (women) old to account for exits into retirement. We exclude the transport and fishing industry as well as the armed forces because the changes in the WTR did not apply to them. We also do not use observations from the education sector since employees working in education show very industry specific and unusual patterns in their holiday entitlement (i.e. 60 days of paid holidays). Table 3 lists the variables used in this study.

Interviews for the Labour Force Survey are conducted throughout the year, with data provided on a quarterly basis. The interviews refer to a "reference week" within the quarter, usually the week before the interview takes place. Since the WTR comes into place about 2/3 into the autumn wave in 1998, there is a problem with distinguishing pre- and post reform observations. It is possible to identify the reference week of the interview and, therefore, construct a sharp boundary for the timing of the WTR. The drawbacks of using a sharp cut-off are two-fold. First, the number of treated observations drops decidedly and, second, within quarter variation suffers from regional selection[8]. Since autumn is the only quarter containing the variable of interest (paid holiday entitlement per year), we have to rely on observations from that quarter and cannot simply use adjacent quarters for the analysis. Given the data constraints and the descriptive evidence (see

[6]Most of the variables we use in this study are only available in the LFS from 1994 onwards and we therefore discard earlier years.

[7]While for the most part the answers given by proxy are consistent with those given personally by the respondent, there are some patterns that seem out of place, e.g. employees gaining more than 12 months of firm tenure in a 3 month period or the date an employee started with his or her current employer changing to the current date in one wave and reverting to the prior value in the next.

[8]By sampling design.

section 5), we choose to treat the autumn 1998 wave as pre-treatment.

For the first part of our analysis we focus on the change in the hazard rate to exit employment. We construct a panel of individuals who are observed in the third quarter, who are employed[9] and observed in at least one of the following quarters. There are three states that constitute an exit from employment: unemployment, inactivity or self-/family employment, we pool these states into one and refer to it as "non-employment".

As for the eligibility to paid holidays, respondents in the LFS are asked about days of paid holiday (excluding public or bank holidays). The WTR states eligibility in terms of weeks per (leave) year and therefore depends on the number of days worked per week as well as the length of employment within a year (i.e. employees in seasonal employment are only entitled to a share of the full four weeks). Since the actual length of non-permanent contracts is only available in spring quarters in the LFS, we cannot adjust paid holidays for respondents who work only part of the year. To ensure that we measure the right amount of paid holidays we keep only employees with permanent contracts in our sample.

For a small share of employees (1.8% in 1994 to 0.7% in 2001), the information about paid holidays is not available. One third of the missing values are due to imputed values from previous quarters for the holiday variable (in case of non-response and no proxy response in a quarter), the other two thirds might be due to the "employment edit" performed by the Office for National Statistics where respondents who classify themselves as "self-employed" are reclassified as "employee" given their occupational code (holidays are not asked from respondents reporting to be self-employed). For our analysis we consider only employees with non-missing responses for the "paid holidays" variable.

The advantage of using the LFS is the large sample size, the disadvantage is that the panel is limited to 5 consecutive quarters. This means that we have a problem with identifying treated employees after the treatment took place. If compliance were perfect, there would be no more employees with less than 4 weeks of paid leave after autumn 1999. We address this issue in two ways. First, for the impact on the employed, we use the limited panel nature and cut off our sample after the reform took place. Second, for

[9]We exclude respondents who are self-employed, unpaid family workers and workers on government schemes, as well as ILO unemployed respondents and respondents who are out of labour force.

the impact on the labor force, we impute treatment probabilities.

For the first part of the analysis, the impact on the employed, we focus only on employees who report to work 5 or more days per week[10] and use the number of days of paid holidays to indicate weeks of paid leave. We treat 20 days of entitlement as exactly 4 weeks of paid leave, 15–19 days as between 3 and less than 4 weeks, etc. This coding seems natural since most employees report their paid leave in multiples of 5.

The WTR was implemented at the same time across all regions in the UK. Therefore we cannot use the timing or cross-sectional variation of the reform to establish a control group. Instead we focus on employees above the WTR entitlement threshold as control. For our analysis we consider four groups. The control group are employees with more than 4 weeks of holiday entitlement, the three treated groups are employees who report no entitlement; 1–14 days (some leave but less than 3 weeks) and 15–19 days (at least 3 but less than 4 weeks) of entitlement. The former two are treated in autumn 1998, the latter in 1999.

In the second part of the paper we estimate the long run impact on the whole working age population. For this we have to construct a pseudo-panel following not individuals but groups with the same characteristics over time. The group treatment indicator is estimated using propensity score estimates from a pre-treatment sample. As we are concerned with the long run effects of the WTR, we consider all employees with a ratio of leave entitlement to usual days worked per week below 4 as treated. The estimated coefficients are then used to calculate the out-of-sample prediction for the propensity score in the treatment period and beyond. The advantage of using imputed propensity scores as treatment indicator is that we do not have to discard respondents who are not employed. We therefore keep both employees and non-employees in the sample, subject to the age and industry restrictions mentioned above.

[10]If a respondent reports to work on a 4 1/2 day week or 9-day fortnight contract, the question is not asked. Since the variable is measured in whole days, we treat these respondents as working 5 days a week. About 16% of employees report less than 5 workdays.

5 Was there a treatment

For there to have been any plausible effect on employment or other outcomes, we must first show that there was a measurable effect on the number of days of paid holiday. Figure 1 describes the proportions of workers who work more than 5 days per week with different levels of paid holiday entitlement for the period 1994–2004. Depicted are the three treatment groups, no entitlement to paid holidays, 1–14 days, and 15–19 days entitlement. Omitted are the majority of employees who have 20 or more days of paid leave.

In total the initial treatment affected about 8% of the employees in the sample, with another 8% treated in 1999. In both cases the treatment seems to be delayed, the share of employees with less than three weeks of leave entitlement drops sharply from Autumn 1998 to Autumn 1999. The same drop occurs for employees with 15–19 days of paid leave from 1999 to 2000. The graph shows that the reform had an impact on the employed, but it is also evident that treatment was not comprehensive. A fraction of the employed reports paid leave entitlement below the legal minimum up until the end of the sample period.

For some employees (those that are observed employed in two Autumn quarters) we can plot the change in paid leave. Figure 2 depicts the average leave entitlement for all four groups considered. It is apparent that even before the WTR, paid leave entitlement increased significantly for employees who initially had no paid leave. For example, employees who had no paid leave in Autumn 1994, reported, on average, about 9 days of entitlement in 1995. But the treatment is still evident, there is a clear jump in Autumn 1998, which means that employees had more paid leave in Autumn 1999 than in previous years. The transition is smoother for the two other treated groups, but small increases in the average entitlement levels are visible. There is no change in the average for untreated employees (20 days and more), it remains constant at around 24 days of paid holidays.

While a sizable share of the workforce is affected by the WTR, two factors prevented a strong impact of the reform. The implementation seems to have been slow[11] and the

[11]Note that this is not the only possible explanation, e.g. employees might also not have been aware of their entitlement.

the actual treatment is moderated because employees saw increases in leave entitlement even before the reform.

The first column of table 4 adds covariates to the graph in figure 1. We estimate a linear probability model with an indicator for less than 20 days of paid leave as dependent variable, i.e. we pool all three treated groups. Compared to 1994 (the base category) we find a statistically significant difference in the probability to have less than 4 weeks of leave entitlement in 1998. But the size of the effect is small with less than 1 percentage point. The effect becomes stronger in the following years with the biggest changes in 1999 and 2000.

The WTR accords employees paid leave, but whether they make use of their entitlement is up to individual choice. In figure 3 we plot the share of employees who report to be "on vacation" in at least one of the four interview weeks following autumn. We would expect the shares to rise for the treated groups after the WTR came into place. There is some variation across years but the share of employees on vacation seems to be fairly stable for employees with three to four and more than four weeks of paid leave. Employees with less than three weeks of paid leave exhibit an upward trend even before the WTR went into effect. This might suggest that employees did not make use of their entitlement, thereby circumventing the legislation. But the measure is too crude to draw strong conclusions.

The descriptives as well as the regressions suggest that the WTR had an effect on paid leave eligibility, at the aggregate level the share of employees in the treated groups decrease. Compliance seems to be imperfect, the shares of treated employees does not drop to zero after the reform. It also seems to be the case that treatment was delayed. While the increase in paid leave started in October 1998, the data suggests that only a very small share of employees actually received more paid leave in autumn 1998, the large changes occur over the following two years. The descriptive evidence supports the classification of observations in autumn 1998 as untreated.

6 The effect on employment

In this section we evaluate the effect of the legislation on flows out of employment. In our data we observe paid holiday entitlement for those in employment in autumn. We can then follow individuals through subsequent quarters and observe whether they stay in or leave employment. Potential exit states are unemployment, self-employment or inactivity. Because individuals remain in the survey for a maximum of 5 quarters and each quarter 1/5th of the sample is replaced, we observe 4/5th of the sample 1 quarter into the future falling to 1/5th for a time horizon of one year.

We pool all possible exit states into one category "non-employment". Intuitively this makes sense, an employer might fire employees, but offer to hire their services if they started their own company. On the other hand, losing an already marginal job due to a real wage increase, making the wage higher than the worker's productivity might discourage the employee and lead to an exit from the labor force. More positively it might encourage the worker to increase his productivity by investing in further education.

Figure 4 plots the pooled exit states for all groups of employees. Each wave starts in autumn of a given year and ends in autumn of the following year. Each dot represents the non-employment share in a quarter, conditional on being employed in Autumn. For all groups the share of employees who are not employed increases over time. The increase is nearly linear for employees without paid leave and concave for all other employees. A clear ranking emerges, where employees are less likely to exit employment the more paid leave they have. Clearly low levels of paid leave entitlement are associated with less stable employment. This is in line with the correlations from the linear probability model (first column of table 4). Treated individuals are more likely to work in Agriculture, Mining, Construction, Hotels and Restaurants and in private households, all sectors with low wages and high turnover.

Comparing the exits across waves, we see that employees with 4 or more weeks of paid leave do not exhibit a lot of variation. The share exiting employment increases evenly each quarter and after twelve months between 3 and 4% are not employed. Employees with no paid leave follow a slightly declining trend in quarterly exits until the 1998 wave,

when exit rates start to rise. Conversely employees with some paid leave (1–14 days) have fairly stable exit rates in winter and spring and exhibit a steep drop in exit rates in summer and autumn quarters starting with the 1997 wave.

One reason for the strong variability might be the small sample size, more than 80% of the employees in the LFS have 4 or more weeks of paid leave, given that we only observe 1/5th of the base sample twelve months after the grouping makes the smaller groups more prone to be affected by outliers. Another reason might be that the jobs with low levels of paid leave are also more affected by general economic conditions and therefore more volatile. Finally we would expect the WTR to have an impact. The regulation came into place in autumn 1998. Comparing the autumn 1997 wave after 12 months (at the time the regulation came into place) with the autumn 1996 wave after twelve months we see virtually no difference in the exit probabilities for all groups except employees with 1–14 days of paid leave. The share of exits from this group is actually lower than before. The following year the regulation awarded four weeks of paid leave. The increase in exits are not in the group of employees with at least 3 but less than 4 weeks of paid leave however, but rather for those with less than 3 weeks, for both the group of employees with no paid leave and the 1–14 days of paid leave group the exits are slightly higher than in previous periods. For employees with 15–19 days of paid leave we see very little change across years and during the time of treatment the share of exits seems to fall rather than increase.

To check whether the quarterly variation masks the effects of the regulation we also plot the share of employees exiting employment in any of the observed quarters in figure 5. Employees with three or more weeks of paid leave exhibit little change over time. In contrast employees with 1–14 days of leave have declining exit probabilities from 1994 to 1997. The trend reverses in 1998, which coincides with the WTR. For employees with no leave entitlement the unconditional exit probability increases after the introduction of the WTR.

Overall the evidence suggests that treatment did not occur instantaneously in autumn 1998 but rather as a process over the following periods. We therefore choose to treat the autumn 1998 wave as untreated and assume the treatment occurred in winter 1998. Note that we have not discussed the autumn 2000 wave overly much because while some

delayed treatment seems plausible (see e.g. Crépon and Kramarz 2002) it is not clear that employees who report less than the compulsory level of leave will be treated at all or that they are in any way comparable to employees that received treatment in previous periods.

6.1 Exit from employment

We choose to model the exit from employment as a complementary log-log (cloglog) model. The binary nature of our dependent variable makes discrete choice methods appropriate. The complementary log-log model is preferable to the usual methods (Linear probability model, Probit or Logit) since it is the discrete time representation of a proportional hazard duration model (Prentice and Gloeckler 1978). Duration models can account for right-censored spells, which is crucial given the nature of our data. Duration models estimate the hazard of a change of state, conditional on remaining in the initial state up to the point of change (Cox 1972). The (continuous time) hazard at time t is defined as the ratio of the probability density function of exit at time t divided by the probability of survival (not exiting) up to the same point in time and denoted $\theta(t)$.[12] Define T the time of exit and $P(t \leq T) = F(T)$ the probability that exit occurred at or before T then survival up to T is given by the survival function $S(T) = 1 - F(T)$.

$$\theta(t) = \frac{f(t)}{1 - F(t)} = \frac{f(t)}{S(t)} \tag{1}$$

We assume that the underlying continuous time hazard satisfies the proportional hazard assumption, that is the hazard can be separated into the baseline hazard (θ_0) and a covariate dependent component where the baseline hazard proportionally scales the impact of covariates.

$$\theta(t, x) = \theta_0(t) exp(x\beta) \tag{2}$$

Depending on the nature (discrete or continuous) of the underlying covariate, the estimated coefficients β can be interpreted in two ways.

$$\frac{\partial \ln(\theta(t, x))}{\partial x} = \beta \tag{3}$$

[12] We suppress conditioning on covariates x.

For continuous variables, the estimated coefficients give the proportional increase in the hazard to non-employment. For discrete changes we can interpret β as the proportional change in the hazard ratio.

$$\ln\left(\frac{\theta(t,x)}{\theta(t,x-1)}\right) = \beta \tag{4}$$

For the implementation we assume that there are only two reasons for time-varying coefficients, first we allow for a flexible baseline hazard, and second the introduction of the working time regulation. Using the complementary log-log specification this defines the discrete time hazard function (used to calculate the contribution to the likelihood function) at time $t+j$ ($h_i(t+j,x)$) as

$$\begin{aligned} h_i(t+j,x) &= 1 - exp\left(-exp\left(x\beta\right)\right) \\ x\beta &= \alpha_j + \alpha_t + \beta_X X_{it} + \beta_H H_{it} + \beta_W (WTR_{t+j} * H_{it}). \end{aligned} \tag{5}$$

Where X_{it} is a vector of controls, α_j captures the flexible baseline, α_t time effects, H_{it} is a vector of dummies for 3 levels of paid holidays (0 days, 1–14 days and 15–19 days of paid leave) and WTR_{t+j} is the treatment indicator; it is one for employees with less than 15 days (less than 20) of paid leave from winter 1998 (1999) onwards.

In estimating this model there is a question about what to do with the data from the period after the legislation has come into force. The data from before the legislation helps identify the variation in the hazard for different levels of paid leave. After the legislation, the problem is that the observed levels of paid holiday can no longer be used as an indication of treatment in the same way as they can before the legislation. For example, if there was full compliance and coverage, one would observe zero individuals with zero days of paid holiday after the legislation, and all those who previously had 0 weeks would now have 4 weeks, thus altering the composition of that group. The simplest approach is simply to ignore the information from after the legislation—however this throws away some useful information. The evidence from section 5 suggests that compliance was not immediate but that employers gradually adjusted contracts. We, therefore, follow Crépon and Kramarz (2002) in our analysis and assume that untreated employees in the year(s) after the reform became belatedly eligible for more paid holidays. While Crepon and

Kramarz have information for three years for every individual, we can use at most two years in our panel. We allow employees to remain untreated until 2000 and evaluate separately estimates up to $t = 1998$, $t = 1999$ and $t = 2000$

A second concern is the disparity in prior trends, which invalidates the difference-in-differences set up. Difference-in-Differences accounts for different exit probabilities for the groups but we need to assume that in absence of the treatment the changes would have been the same. We alleviate this problem by re-estimating the model with a selected sample. The selection follows the procedure outlined by Crump, Hotz, Imbens, and Mitnik (2009). The discarded observations are the least comparable individuals, therefore the remaining individuals are more likely to have similar characteristics and trends. The selection is data driven and based on the estimated propensity score, i.e. the probability of being treated. Following Crump, Hotz, Imbens, and Mitnik (2009) all observations with fitted values less than 0.1 and more than 0.9 are excluded. We estimate the propensity score with a Probit model using the same covariates as in the complementary log-log model.

$$P\left(hols_{it} < 20\right) = \Phi\left(X_{it}\beta\right) \tag{6}$$

Where $hols_{it}$ are the number of days of paid leave, i.e. we consider all individuals with fewer than 20 days of paid leave as treated. And we keep all individuals where

$$\hat{P}\left(hols_{it} < 20\right) \in [0.1, 0.9]. \tag{7}$$

Since we should not observe treatment status after the WTR was implemented, we use only data until 1996 for the estimation to avoid the issue of non-random selection of belated treatment. We then use the out-of-sample prediction of the propensity score for the sample selection. The second column of table 4 shows the estimate of the propensity score.

Table 5 reports the complementary log-log results using data from individuals who entered the sample in or before Autumn 1998, 1999 and 2000 (first through third columns). With one exception, the estimated coefficients are positive, indicating an increase in the hazard to non-employment. But none of the estimates are statistically different from zero.

After the initial treatment the change in the hazard is 0 for employees with no paid leave and negative for employees with 1–14 days of paid leave.[13] The hazard increases when we extend the sample and we find a small (but not statistically significant) increase in the hazard by 10% for employees with no paid leave and employees with 15-19 days of paid leave compared to employees with 4 or more weeks of entitlement. The baseline hazard for the the first 3 months[14] is about 0.25, meaning that one in four people with base case characteristics are expected to become non-employed within these three months. A 10% increase implies a hazard of 0.275 or about 2 in 7 people exiting employment.

Running the regression on the propensity score selected sample (table 6) halves the sample size in each regression, but the standard errors remain comparable.[15] The estimated coefficients are slightly larger and we no longer find a negative estimate for the autumn 1998 sample. The estimates are in the same range as before, with the strongest effect being a 13.5% increase in the exit hazard for employees with no paid leave, when we consider data until 2001. However, this effect is not significant at the 5% level. Overall it seems that the reform did not have a strong, if any, impact on employees. But note, that this is the effect in the short run, since we can follow individuals for only up to 12 months.

6.2 Wage and other adjustments

As discussed above, we interpret the WTR as an increase in the per unit costs of labor, which should result in reduced employment. To illustrate the point we formalize this argument in a simple theoretical model.[16] We assume that a single (aggregate) good Y is consumed and that demand for this good is inelastic. Firms produce output via a concave production function (F). Concavity of the production functions means that we assume decreasing returns to scale. In addition we assume that the function is twice differentiable and takes labor (L) as its only input. The profit maximizing firm solves the following

[13]Treatment for employees with 15–19 days only took place in Autumn 1999, therefore we do not estimate a treatment effect in the first column.

[14]Estimates are exp(-1.367), exp(-1.441) and exp(-1.465) respectively.

[15]This is to be expected. As pointed out by Crump, Hotz, Imbens, and Mitnik (2009) two opposing forces are affecting the standard errors, the lower sample size leads to higher standard errors, but discarding extreme values in the propensity score reduces the variance of the estimator.

[16]See Chapter 4 in Cahuc and Zylberberg (2004) for a detailed discussion.

optimization problem:

$$\begin{aligned} \max_{L} \Pi &= pY - wL \\ \text{with} \quad & Y = F(L) \end{aligned} \tag{8}$$

The first order condition shows that firms hire workers until the marginal product is equal to the real wage per unit of labor.

$$F'(L) = \frac{w}{p} \tag{9}$$

Where $F'(L)$ denotes the first derivative of the production function with respect to labor. To find the impact of an increase in wages, we calculate the total derivative and solve for the change in labor demand as a response to a change in wages.

$$\frac{dL}{dw} = \frac{1}{pF''(L)} \tag{10}$$

Since prices are positive, the sign of the second derivative of the production function $F''(L)$ determines the direction of the impact of a wage increase on employment. Since the production function is concave, the second derivative is negative, which means that an increase in wages results in lower levels of employment.

The empirical results, at least in the short run, do not seem to confirm the theoretical prediction. A reason for this might be that the model is too simplistic. Too make the model more flexible we can consider adjustments in prices, either in the nominal wage or in the output price. If wages per unit of labor were to fall to offset the increase due to reduced annual working time there would be no change in employment. Employers can adjust wages in two ways, they can reduce nominal earnings, or they can increase the number of hours for a given level of earnings. Both will result in a change in hourly wages. Alternatively if we extend the model to allow for elastic demand, i.e. the consumers demand for the final good responds to changes in prices, we can show that the change in labor demand will be a function of the output elasticity. Depending on the size of the elasticity, the impact on labor demand will be much less than in the above benchmark model. In the following we consider both these extensions.

First we consider whether employers responded to the WTR by adjusting wages. To test this we rerun the regressions from the previous section using OLS with the natural log

of the hourly wage as dependent variable. Since only survey respondents in their first and last interview (wave 1 and 5) are asked about their earnings we have to restrict the sample to those employees we observe initially in autumn and then for 5 consecutive quarters. We would expect negative coefficients if wages adjusted in response to the increase in paid leave. The results in table 7 indicate the opposite. Relative to wages of employees with more than four weeks of paid leave, wages for employees with less than four weeks of paid leave increase with the reform. The estimated coefficients are fairly robust across the three samples and range from about 10% for employees with no paid leave to about 6% relative wage gains for employees with more than three but less than four weeks of paid leave. All estimated coefficients are highly statistically significant. Using the matched sample (table 8) attenuates the coefficients, but we cannot find any negative coefficients either. Note that we do not attribute the relative wage increases to the WTR. As discussed in section 2, a range of reforms affected employment around the time of the reform. We try to account for them explicitly, but it seems more likely that, for example, the minimum wage legislation drives the effect seen here.

The second extension we consider is a model with elastic demand, i.e we extend the above framework by modeling demand as a function of price $Y(p)$. We assume that this function is invertible, which leads to the following revised optimization problem for the firm.

$$\begin{aligned} \max_L \Pi &= p(Y)Y - wL \\ \text{with} \quad & Y = F(L) \end{aligned} \tag{11}$$

By solving the maximization problem and rearranging the first order condition we can show that the real wage is now below the marginal product.

$$F'(L) = \frac{1}{1+\eta}\frac{w}{p} \tag{12}$$

Where $\eta = \frac{\partial p(Y)}{\partial Y}\frac{Y}{p(Y)}$ is the elasticity of the inverse demand function with respect to output. Assuming that η is independent of Y and taking the derivative with respect to w yields the following expression:

$$\frac{\partial L}{\partial w} = \frac{1+\eta}{F'(L)^2 p'(Y) + p(Y)F''(L)} \tag{13}$$

The denominator is negative under standard assumptions, the numerator is positive for η between 0 and -1 and approaches 0 if (inverse) demand is very elastic, i.e. η is close to -1. To understand this result, we can consider a rearranged version of equation 12.

$$pF'(L) = \frac{1}{1+\eta}w \tag{14}$$

The left hand side is the marginal revenue for an additional unit of labor, the right hand side is the marginal cost (w) scaled by the the markup factor $\frac{1}{1+\eta}$. The smaller η the higher the markup and therefore the profit. If wages rise, the impact on labor demand is attenuated by a reduction in firms profits. While a demand elasticity close to -1 would explain our findings, it seems a rather large value given that we consider the majority of private sector industries. However, Draca, Machin, and Van Reenen (2011) present evidence that supports a profit based explanation. They evaluate the impact of the UK minimum wage on firm profits and find substantial reductions in firm profitability. Intuitively, if a job yields a certain rent, it is always preferable to reduce the rent and still make some profit, rather then to dissolve the job match and lose all rents.

There might be other mitigating factors. In the short-run employers might save on indirect costs of employment, e.g. by reducing job related training. On the one hand training employees means costs for the employer, on the other there might be an incentive to improve skills when wages increase (see Acemoglu and Pischke 1999). We consider job related training or education that employees received. Figure 7 depicts the share of respondents who received training in the past 3 months for any of the 4 quarters following autumn of a given year. We see that the share of employees who received job related education is very high among the employees with generous amounts of paid holidays. But even among employees with worse jobs the share is about 15%. The introduction of the WTR does not seem to change the trends in training. If anything, there was a slight upward trend for the jobs in the three categories with fewer than 20 days of paid holidays.

Another mitigating factor is that there is no statutory right for paid public or bank holidays (Bryan 2006) and the LFS question on holiday entitlement explicitly excludes public or bank holidays. From 1999 onward the survey is augmented by the question on which public or bank holidays the respondent worked. More than 70% of the employees

that report no paid holidays in 1999 (and thereafter) also reported that they did not work on any public/bank holiday. Since data on public/bank holidays is only available post reform and the group of employees with "no paid holidays" in our sample should only (but does not) consist of employees with less than 3 months of tenure, this can only hint at the situation prior to the reform, but it seems that most employees were eligible for paid or unpaid leave at public and bank holidays. Which would attenuate the increase in real wage.

A final explanation might be that the effect is actually driven by the Unfair Dismissal Order. As discussed in section 3, employees with less than two years of tenure were less likely to lose their jobs after the dismissal legislation was changed. To check whether this is the case we exclude those employees in tables 9 and 10. The first table replicates the complementary log-log estimation for non-employment, the second the estimation for (log) hourly wages. In both tables the first three columns are for the whole sample, the last three columns select the sample based on the propensity score as described above. Again we find that the WTR did not increase the hazard to non-employment and wages increased for treated employees compared to employees who already had 4 weeks or more of paid holiday entitlement.

6.3 Effect on total employment

As explained in section 4, paid holiday entitlement below the WTR threshold should not be observed post-treatment. In addition it is impossible to know the leave entitlement for non-employees. The short-term panel nature of our data does not allow us to impute estimates for paid leave at the individual level either. We therefore estimate the propensity to be treated based on a flexible function of gender, age (quartic), highest qualification obtained, region of residence, non-uk nationality, marital status and presence of children. We estimate the treatment probability with a Probit on data from 1994–1996. We use the results to predict the propensity score for all individuals until 2004. The first stage results are reported in table 11.

We then use the imputed values in the second stage as treatment indicator in a difference-in-differences regression. We use OLS for the second stage and bootstrap the

standard errors. For the standard errors we draw 400 samples with replacement from 120 region×education clusters and estimate both the first and the second stage on the bootstrap sample. Table 12 reports the second stage results, where the columns differ in the way we control for time effects. In the first and third column we use a dummy to control for time trends before and after the reform[17], in the second and fourth column we use a linear trend.

$$\begin{aligned} y_{it} &= \beta_0 + \beta_1 * \hat{p}_i + \beta_2 * d_t + \beta_3 * \hat{p}_i * d_t + e_{it} \\ y_{it} &= \beta_0 + \beta_1 * \hat{p}_i + \beta_2 * t + \beta_3 * \hat{p}_i * d_t * t + e_{it} \end{aligned}$$

With y being the employment status of individual i in quarter t, $\hat{p}$ the imputed propensity score and d a dummy that is 0 in and before autumn 1998 and 1 afterwards.

We find a negative and statistically significant coefficient on our treatment indicator in all specifications. Employment decreases in the post treatment period by, on average, 2 percentage points when we consider treatment for all types of employees (I). Specification (II) indicates that the effect was not immediate but that it emerged gradually. The first panel of figure 8 corroborates this finding. Here we interact the treatment indicator with dummy variables for each post-treatment period. The declining trend in employment is evident, but also high levels of seasonal variation. Few coefficients are (individually) significantly different from zero.

So far we have considered all employees with less than four weeks of paid leave as treated. For better comparison with the results for the employed, specifications (III) and (IV) in table 12 and figure 9 replicate the exercise but consider only employees with less than four weeks of paid holidays who are also working 5 or more days per week as treated. Here we find a stronger effect of the reform, with an estimated overall decrease of 4 percentage points in employment. Again we see strong seasonal variation and a declining trend rather than an ad-hoc decrease around the time of the treatment.

Causal interpretation in difference-in-differences estimation hinges on the assumption that treatment and control would have followed the same trend without the treatment.

[17]We also used dummies for each year×quarter, but the results are the same as with a single post-treatment dummy.

The lower panels in figure 8 and 9 show the estimated coefficients without constraining the treatment to the post WTR period. We can see that even before the treatment took place there is seasonal and annual variation with the treatment intensity. While this casts doubt on the parallel trends assumption, it is still apparent, that there is a trend reversal coinciding with the introduction of the WTR.

Combining the results, we should, on the one hand, be cautious about the validity of the difference-in-differences strategy, but, on the other, it seems that there was a relative decline in employment post-autumn 1998 for the more treated groups. Given the wealth of reforms at the end of the 1990s (see section 2) and potential correlation among the treated groups (e.g. the minimum wage and the WTR are likely to affect the same individuals), it is hard to attribute these changes solely to the WTR. Nonetheless it is interesting that the change in labor market outlook coincided with the treatment.

7 Summary and conclusion

We set out to find the impact of a mandatory minimum entitlement to paid leave on employment. The Working Time Regulation 1998 introduced such an entitlement in the UK in Autumn 1998. We consider the impact first on employees and second on the labor force as a whole. Since the legislation has no regional variation, we rely on employees above the entitlement threshold as control group.

For employees, we use complementary log-log regression and matching to account for the structure of the data and concerns about selecting a proper control group. While the statutory right to paid leave constitutes a large change in the real wage for some employees, we cannot find a significant impact on their chance to remain employed. But due to data constraints we are limited to estimating only short-run effects.

Since treatment and control group can no longer be distinguished once the WTR1998 is introduced, we use out-of-sample propensity score predictions as treatment indicator when estimating the impact on the labor force. Here we find a significant decline in employment. The decline is not immediate but rather incrementally increasing over time.

This would be in line with employees not being fired outright, but rather not being

replaced when an employee leaves.

An interesting question that cannot be addressed with the available data is whether paid leave actually increases productivity. Ideal for this would be firm-level data on individual employee productivity, e.g. supermarket cashiers as used in the study by Mas and Moretti (2009), and holiday absences.

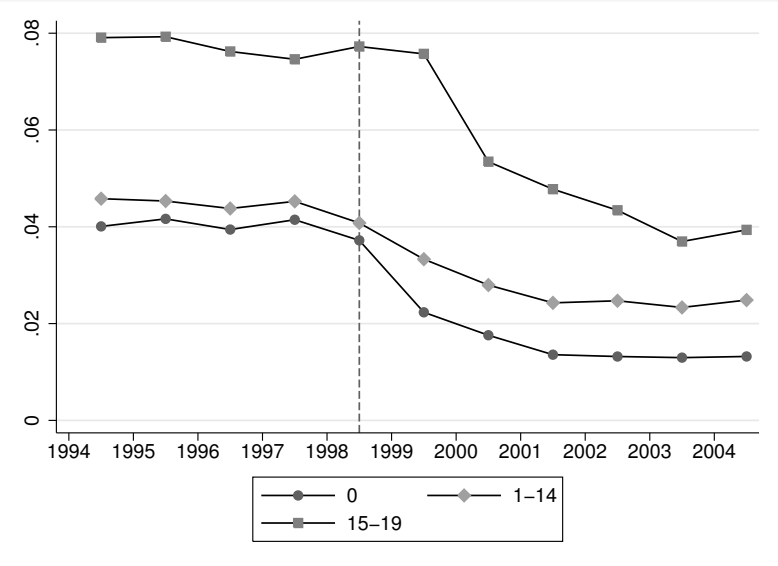
8 Appendix

Figures

Footnote for all figures:

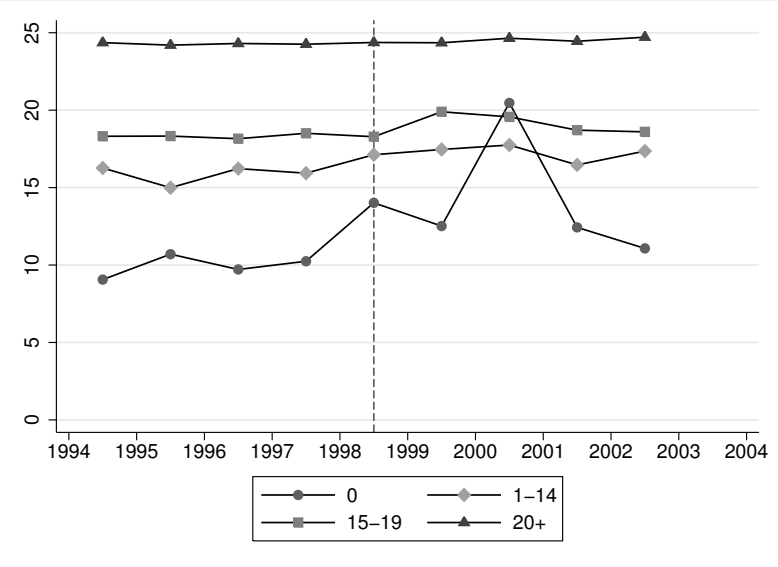
Source: Labour Force Survey 1994–2001, see text for data description.

Figure 1: Share of employees with less than 20 days of paid leave (split by group)



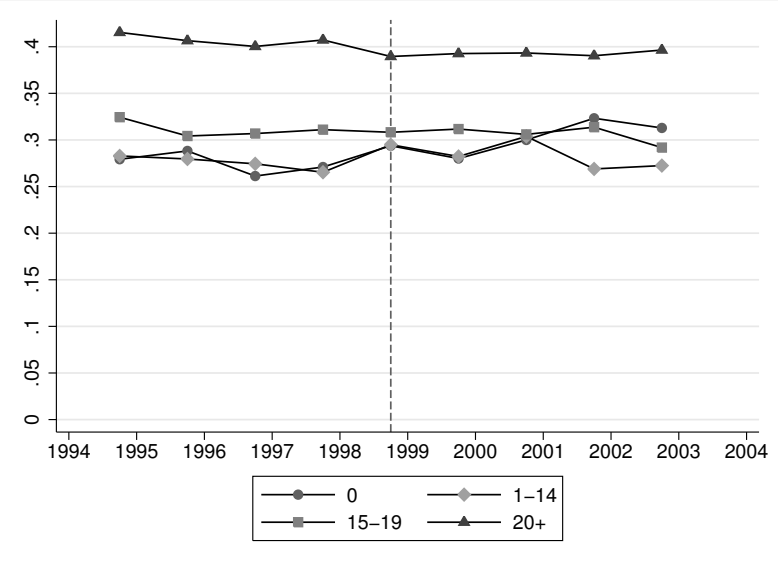
Data source: UK Labour Force Survey

Figure 2: Average number of days of paid leave for employees within each group 12 months later



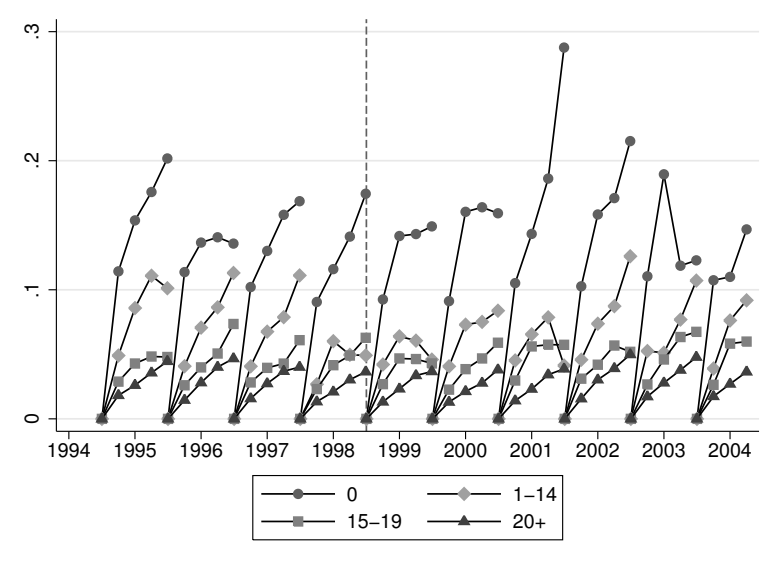
Data source: UK Labour Force Survey

Figure 3: Share of employees on vacation during the interview week in at least one of the following four quarters



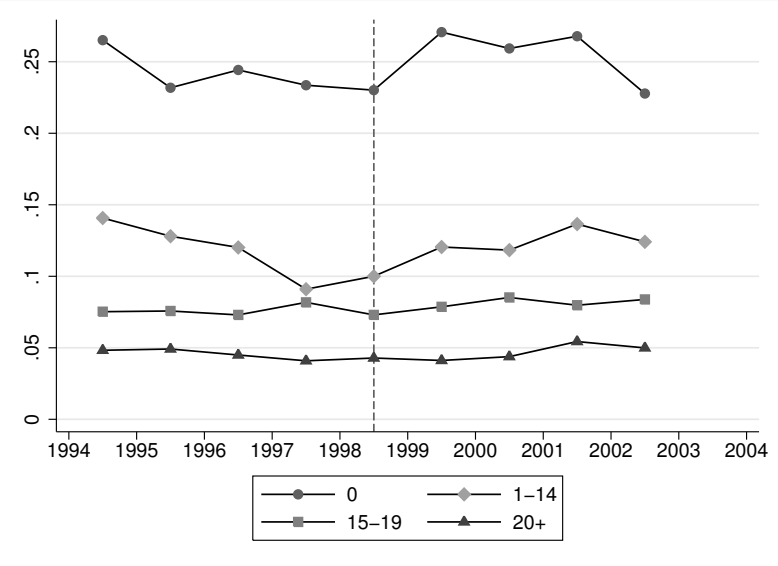
Data source: UK Labour Force Survey Observations weighted by number of quarters observed.

Figure 4: Share of employees exiting into non-employment (unemployed, inactive, self-employed)



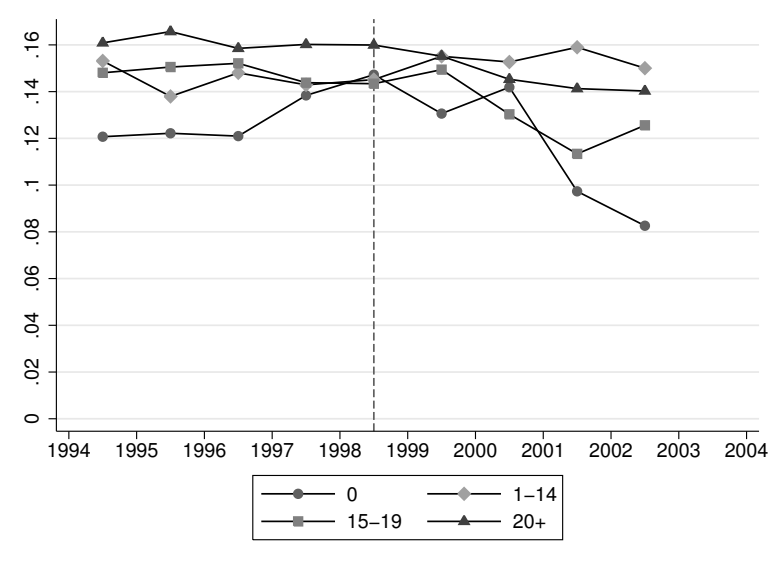
Data source: UK Labour Force Survey

Figure 5: Share of employees exiting into non-employment at least once in the next 4 quarters.



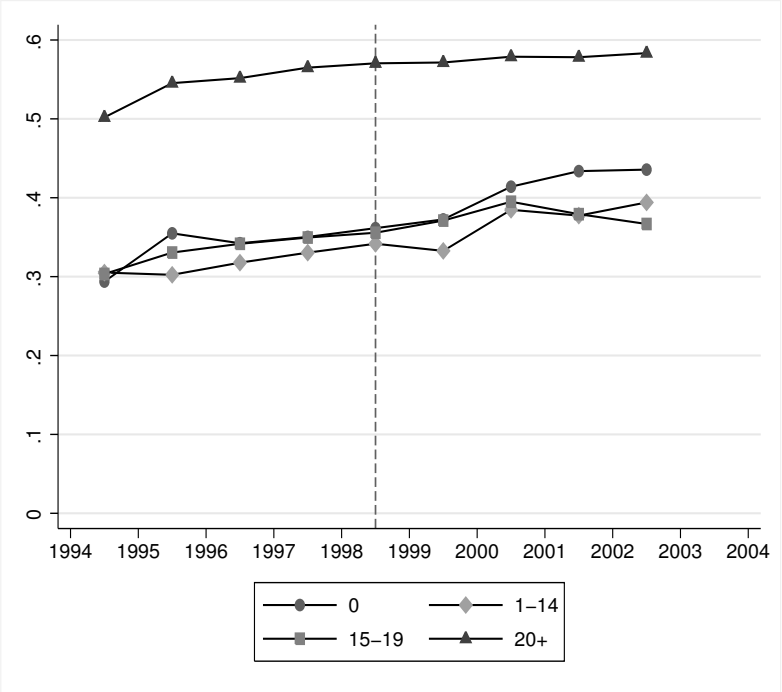
Data source: UK Labour Force Survey Observations weighted by number of quarters observed.

Figure 6: Share of employees that missed work due to illness in one of the interview weeks



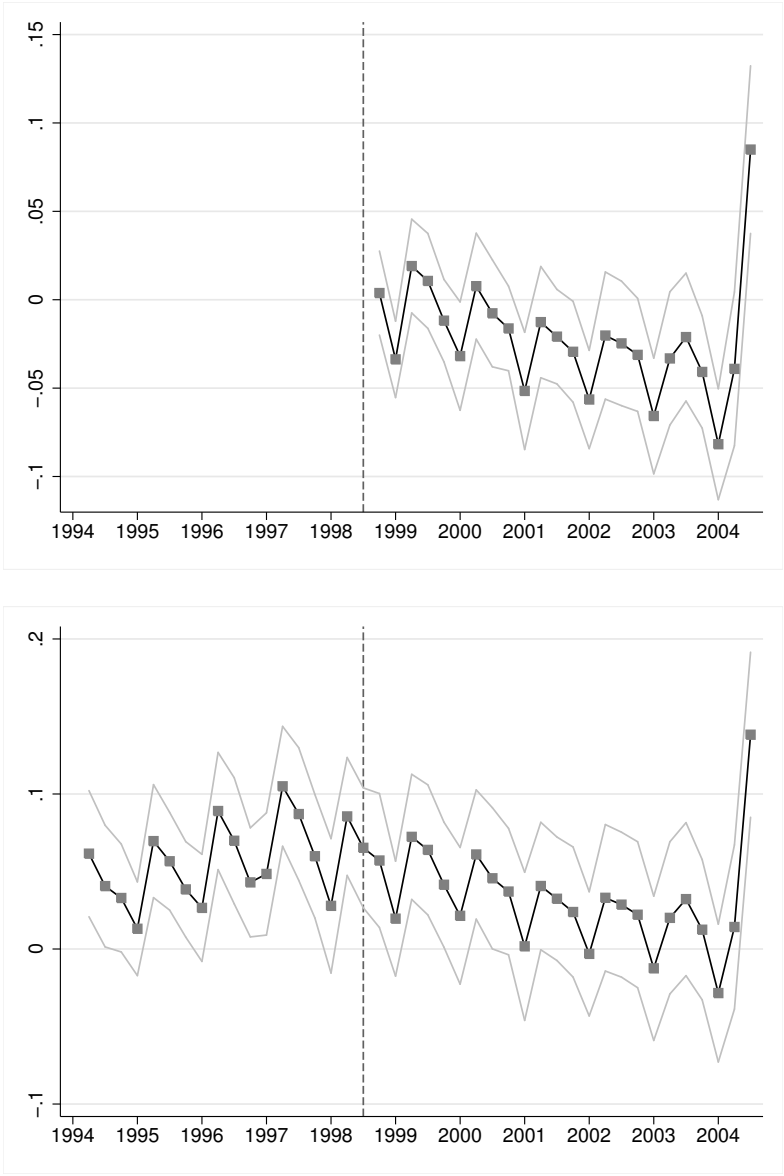
Data source: UK Labour Force Survey Observations weighted by number of quarters observed.

Figure 7: Share of employees that received training in the past 13 weeks in at least one of the next four quarters



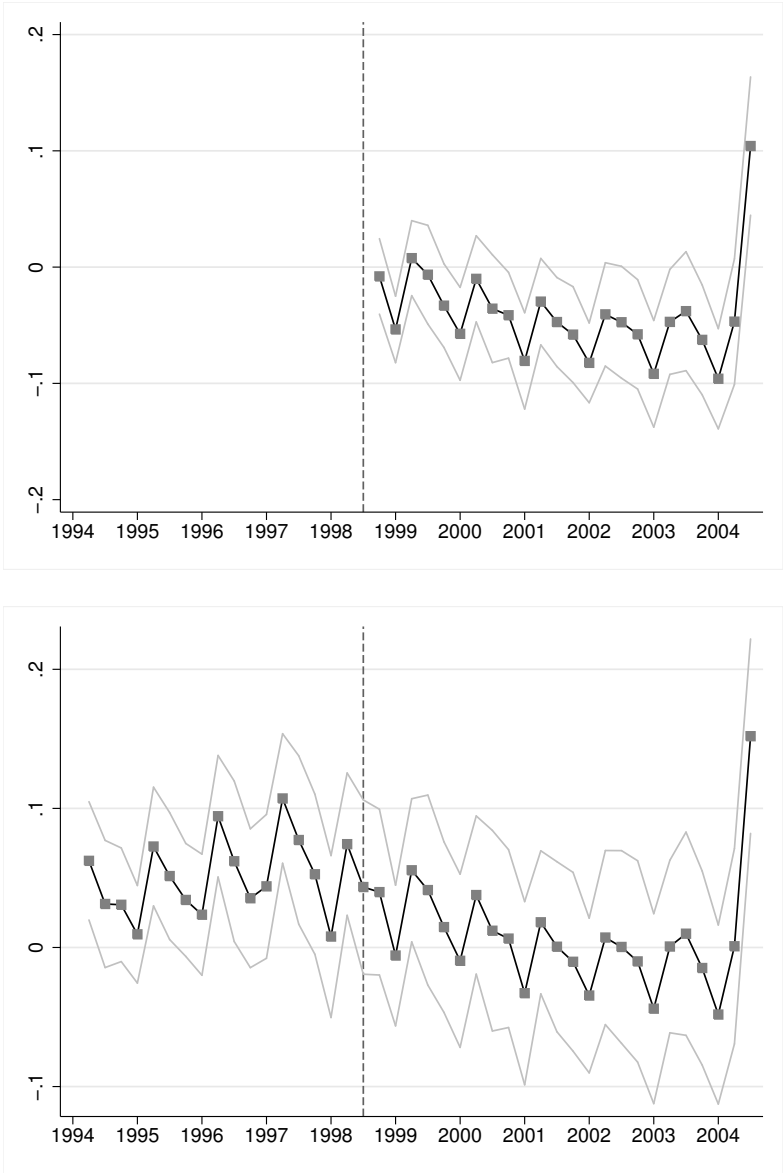
Data source: UK Labour Force Survey Observations weighted by number of quarters observed.

Figure 8: Estimated treatment effect on employment



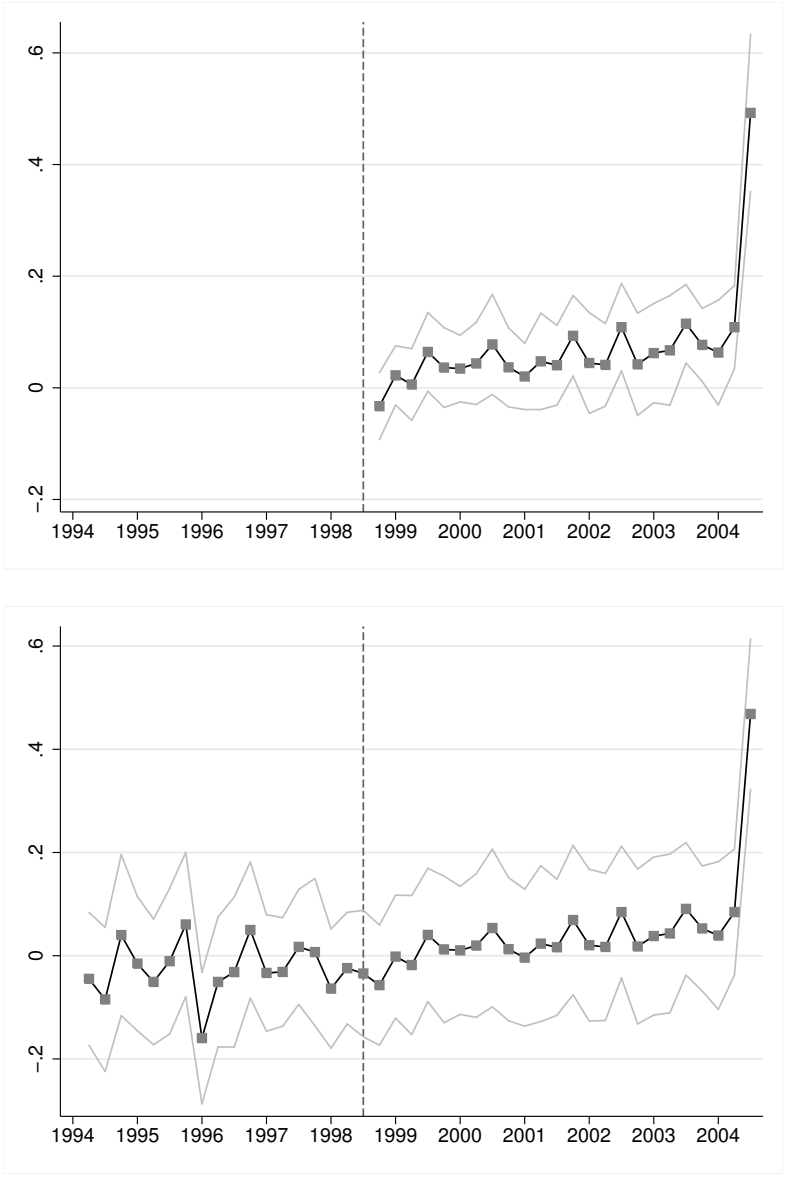
Data source: UK Labour Force Survey
Dependent variable: employed (second stage); less than 4 weeks of paid leave (first stage).
Pointwise confidence intervals based on 400 bootstrap repetitions (clustered at the region×education level).

Figure 9: Estimated treatment effect on full-time equivalent employment



Data source: UK Labour Force Survey
Dependent variable: employed (second stage); less than 4 weeks of paid leave and working 5 or more days per week (first stage).
Pointwise confidence intervals based on 400 bootstrap repetitions (clustered at the region×education level).

Figure 10: Estimated treatment effect on log hourly wages



Data source: UK Labour Force Survey
Dependent variable: log hourly wages (second stage); less than 4 weeks of paid leave (first stage).
Pointwise confidence intervals based on 400 bootstrap repetitions (clustered at the region×education level).

Tables

Table 1: Average usual hours worked and share of employees with more than 48 hours per week.

	All employees		5+ days employees	
Year	Avg. hours	More than 48	Avg. hours	More than 48
1994	37.531	0.155	41.027	0.182
1995	37.542	0.158	41.194	0.188
1996	37.423	0.160	41.222	0.190
1997	37.600	0.164	41.385	0.195
1998	37.575	0.161	41.334	0.190
1999	37.371	0.150	41.085	0.179
2000	37.316	0.148	41.092	0.178
2001	37.308	0.146	40.998	0.177
2002	37.134	0.141	40.881	0.170
2003	36.923	0.135	40.796	0.166
2004	36.551	0.127	40.492	0.154

Data sourse: UK Labour Force Survey

Table 2: National minimum wage level

Starting from	Adult workers (22 and older)	Young workers (18 to 22)
April 1999	3.60	3.00
June 2000	—	3.20
October 2000	3.70	—
October 2001	4.10	3.50
October 2002	4.20	3.60
October 2003	4.50	3.80
October 2004	4.85	4.10

Source: Low Pay Commission

Table 3: Descriptive statistics (mean and s.d.) for variables used in the complementary log-log regression.

Variable	1996	1997	1998	1999	2000
Exits employment w/in 12 months	0.050	0.047	0.047	0.045	0.044
	(0.217)	(0.211)	(0.211)	(0.207)	(0.206)
No paid holidays	0.039	0.041	0.037	0.022	0.018
	(0.193)	(0.199)	(0.189)	(0.147)	(0.134)
1–14 days of paid holidays	0.044	0.045	0.041	0.034	0.029
	(0.206)	(0.208)	(0.198)	(0.182)	(0.168)
15–20 days of paid holidays	0.077	0.075	0.079	0.078	0.056
	(0.267)	(0.263)	(0.270)	(0.268)	(0.231)
personal characteristics					
Number of quarters in sample	3.607	3.621	3.629	3.625	3.612
	(1.180)	(1.181)	(1.179)	(1.178)	(1.178)
Female	0.417	0.413	0.411	0.417	0.412
	(0.493)	(0.492)	(0.492)	(0.493)	(0.492)
Age	38.849	39.169	39.364	39.451	39.949
	(11.205)	(11.106)	(11.153)	(11.159)	(11.099)
Married	0.632	0.625	0.614	0.606	0.605
	(0.482)	(0.484)	(0.487)	(0.489)	(0.489)
Foreign	0.031	0.033	0.037	0.037	0.038
	(0.172)	(0.180)	(0.189)	(0.190)	(0.192)
Has kid(s)	0.410	0.407	0.401	0.403	0.409
	(0.492)	(0.491)	(0.490)	(0.490)	(0.492)
education					
1 Degree or equivalent	0.129	0.135	0.144	0.152	0.163
	(0.335)	(0.341)	(0.351)	(0.359)	(0.369)
2 Higher Education	0.096	0.096	0.102	0.103	0.102
	(0.295)	(0.295)	(0.303)	(0.303)	(0.302)
3 GCE A Level or equivalent	0.260	0.266	0.259	0.264	0.265
	(0.438)	(0.442)	(0.438)	(0.441)	(0.441)
4 GCSE A*-C or equivalent	0.224	0.225	0.222	0.226	0.223
	(0.417)	(0.418)	(0.416)	(0.418)	(0.417)
5 Other qualification	0.143	0.144	0.144	0.134	0.134
	(0.350)	(0.351)	(0.351)	(0.340)	(0.340)
6 No qualification	0.144	0.128	0.122	0.115	0.109
	(0.351)	(0.334)	(0.327)	(0.319)	(0.312)
7 No response on qualification	0.004	0.005	0.006	0.007	0.004
	(0.063)	(0.073)	(0.077)	(0.081)	(0.064)
Recognized trade apprenticeship	0.005	0.005	0.006	0.006	0.006
	(0.073)	(0.070)	(0.078)	(0.075)	(0.074)
job characteristics					
Tenure in years	8.824	8.726	8.644	8.674	8.798
	(8.414)	(8.455)	(8.436)	(8.585)	(8.726)
Below min. wage 3 months ahead	0.000	0.000	0.000	0.038	0.032
	(0.000)	(0.000)	(0.000)	(0.192)	(0.177)
Below min. wage 6 months ahead	0.000	0.000	0.037	0.038	0.032
	(0.000)	(0.000)	(0.190)	(0.192)	(0.177)
Below min. wage 9 months ahead	0.000	0.000	0.056	0.039	0.032
	(0.000)	(0.000)	(0.230)	(0.194)	(0.177)
Below min. wage 12 months ahead	0.000	0.000	0.056	0.044	0.051
	(0.000)	(0.000)	(0.230)	(0.204)	(0.221)
Works 48+ hours	1.598	1.604	1.529	1.426	1.405
	(4.879)	(4.799)	(4.589)	(4.339)	(4.416)
Full-time	0.891	0.891	0.895	0.896	0.896

Continued on next page...

... table 3 continued

Variable	1996	1997	1998	1999	2000
	(0.312)	(0.311)	(0.306)	(0.305)	(0.305)
Part-time	0.109	0.108	0.105	0.104	0.104
	(0.312)	(0.311)	(0.306)	(0.305)	(0.305)
Missing ft/pt	0.000	0.000	0.000	0.000	0.000
	(0.006)	(0.006)	(0.000)	(0.000)	(0.000)
Private company	0.762	0.768	0.778	0.777	0.773
	(0.426)	(0.422)	(0.416)	(0.417)	(0.419)
Managerial duties at work	0.437	0.430	0.433	0.429	0.437
	(0.496)	(0.495)	(0.496)	(0.495)	(0.496)
Ever work overtime	0.580	0.591	0.566	0.558	0.562
	(0.494)	(0.492)	(0.496)	(0.497)	(0.496)
type of work arrangement					
1 Flexible working hours	0.120	0.126	0.122	0.122	0.131
	(0.325)	(0.331)	(0.327)	(0.328)	(0.337)
2 Annualized hours contract	0.031	0.026	0.027	0.028	0.039
	(0.174)	(0.160)	(0.161)	(0.165)	(0.195)
3 Term time working	0.006	0.006	0.005	0.005	0.006
	(0.075)	(0.075)	(0.074)	(0.071)	(0.074)
4 Job sharing	0.002	0.002	0.002	0.002	0.003
	(0.049)	(0.045)	(0.047)	(0.049)	(0.052)
5 Nine day fortnight	0.005	0.004	0.004	0.004	0.005
	(0.069)	(0.066)	(0.064)	(0.063)	(0.069)
6 Four and a half day week	0.032	0.028	0.029	0.027	0.022
	(0.175)	(0.166)	(0.167)	(0.161)	(0.147)
7 Zero hours contract	0.800	0.802	0.806	0.806	0.793
	(0.400)	(0.399)	(0.396)	(0.395)	(0.405)
8 Missing work arrangement	0.004	0.006	0.005	0.005	0.001
	(0.065)	(0.077)	(0.073)	(0.073)	(0.039)
Union member	0.342	0.337	0.323	0.320	0.316
	(0.474)	(0.473)	(0.468)	(0.466)	(0.465)
5 day work week	0.830	0.828	0.839	0.837	0.846
	(0.376)	(0.378)	(0.368)	(0.369)	(0.361)
6 day work week	0.123	0.124	0.116	0.112	0.101
	(0.328)	(0.329)	(0.321)	(0.315)	(0.301)
7 day work week	0.039	0.041	0.037	0.043	0.044
	(0.194)	(0.198)	(0.188)	(0.202)	(0.204)
region					
1 Tyne	0.021	0.021	0.020	0.020	0.021
	(0.143)	(0.142)	(0.140)	(0.140)	(0.143)
2 Rest of Northern region	0.035	0.034	0.030	0.030	0.032
	(0.184)	(0.181)	(0.172)	(0.172)	(0.175)
3 South Yorkshire	0.020	0.022	0.022	0.021	0.020
	(0.141)	(0.146)	(0.146)	(0.142)	(0.141)
4 West Yorkshire	0.039	0.036	0.038	0.038	0.042
	(0.195)	(0.186)	(0.191)	(0.191)	(0.200)
5 Rest of Yorks	0.026	0.027	0.027	0.029	0.028
	(0.160)	(0.161)	(0.163)	(0.167)	(0.166)
6 East Midlands	0.070	0.071	0.071	0.069	0.071
	(0.255)	(0.257)	(0.256)	(0.253)	(0.256)
7 East Anglia	0.038	0.040	0.040	0.039	0.043
	(0.192)	(0.196)	(0.196)	(0.194)	(0.202)
8 Central London	0.044	0.044	0.047	0.047	0.044
	(0.206)	(0.205)	(0.211)	(0.211)	(0.206)
9 Inner London	0.028	0.029	0.027	0.027	0.030
	(0.166)	(0.168)	(0.163)	(0.163)	(0.169)
10 Outer London	0.049	0.051	0.051	0.054	0.046
	(0.215)	(0.219)	(0.221)	(0.226)	(0.210)

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... table 3 continued

Variable	1996	1997	1998	1999	2000
11 Rest of South East	0.174	0.181	0.176	0.178	0.183
	(0.379)	(0.385)	(0.381)	(0.382)	(0.386)
12 South West	0.076	0.077	0.081	0.082	0.085
	(0.266)	(0.267)	(0.272)	(0.275)	(0.279)
13 West of Midlands	0.053	0.052	0.050	0.046	0.044
	(0.224)	(0.222)	(0.219)	(0.210)	(0.205)
14 Rest of Midlands	0.043	0.046	0.046	0.045	0.045
	(0.203)	(0.208)	(0.209)	(0.207)	(0.207)
15 Greater Manchester	0.044	0.042	0.042	0.043	0.041
	(0.204)	(0.201)	(0.200)	(0.204)	(0.198)
16 Merseyside	0.019	0.020	0.018	0.018	0.018
	(0.137)	(0.139)	(0.133)	(0.132)	(0.132)
17 Rest of North West	0.045	0.044	0.040	0.040	0.037
	(0.207)	(0.205)	(0.195)	(0.196)	(0.189)
18 Wales	0.045	0.044	0.043	0.042	0.041
	(0.207)	(0.206)	(0.202)	(0.201)	(0.197)
19 Strathclyde	0.037	0.041	0.040	0.037	0.036
	(0.190)	(0.197)	(0.196)	(0.190)	(0.186)
20 Rest of Scotland	0.059	0.058	0.058	0.058	0.059
	(0.235)	(0.234)	(0.234)	(0.233)	(0.235)
21 Northern Ireland	0.032	0.020	0.032	0.034	0.035
	(0.175)	(0.141)	(0.176)	(0.182)	(0.184)
industry					
1 Agriculture, hunting and forestry	0.011	0.010	0.011	0.010	0.010
	(0.103)	(0.101)	(0.102)	(0.102)	(0.099)
2 Mining, quarrying	0.006	0.006	0.006	0.005	0.006
	(0.080)	(0.078)	(0.079)	(0.074)	(0.077)
3 Manufacturing	0.277	0.263	0.257	0.247	0.240
	(0.448)	(0.440)	(0.437)	(0.431)	(0.427)
4 Electricity, gas and water supply	0.011	0.011	0.010	0.011	0.011
	(0.104)	(0.106)	(0.102)	(0.105)	(0.104)
5 Construction	0.054	0.062	0.065	0.066	0.066
	(0.227)	(0.241)	(0.246)	(0.248)	(0.249)
6 Wholesale, retail and motor trade	0.146	0.145	0.145	0.148	0.141
	(0.354)	(0.352)	(0.352)	(0.355)	(0.348)
7 Hotels and restaurants	0.032	0.031	0.031	0.029	0.029
	(0.177)	(0.173)	(0.174)	(0.168)	(0.169)
8 Transport, storage and communications	0.049	0.054	0.054	0.056	0.058
	(0.216)	(0.225)	(0.225)	(0.229)	(0.234)
9 Financial intermediation	0.063	0.062	0.061	0.060	0.063
	(0.243)	(0.241)	(0.239)	(0.238)	(0.243)
10 Real estate and business activities	0.101	0.107	0.110	0.115	0.119
	(0.302)	(0.309)	(0.313)	(0.319)	(0.324)
11 Public adminstration and defence	0.089	0.086	0.085	0.089	0.095
	(0.284)	(0.280)	(0.279)	(0.285)	(0.293)
12 Health and social work	0.113	0.116	0.117	0.117	0.114
	(0.316)	(0.321)	(0.322)	(0.322)	(0.318)
13 Other community, social and personal	0.045	0.045	0.046	0.045	0.046
	(0.206)	(0.207)	(0.209)	(0.206)	(0.209)
14 Private hhs with empl. persons	0.002	0.002	0.002	0.002	0.001
	(0.046)	(0.044)	(0.040)	(0.043)	(0.037)
15 Industry missing	0.000	0.000	0.000	0.000	0.000
	(0.021)	(0.021)	(0.012)	(0.015)	(0.016)
occupation					
1 Managers and Senior Officials	0.181	0.182	0.185	0.183	0.192
	(0.385)	(0.386)	(0.388)	(0.387)	(0.393)
2 Professional Occupations	0.088	0.090	0.094	0.097	0.098

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... table 3 continued

Variable	1996	1997	1998	1999	2000
	(0.284)	(0.286)	(0.291)	(0.296)	(0.297)
3 Associate Professional and Tech, Occ.	0.119	0.119	0.117	0.120	0.125
	(0.324)	(0.323)	(0.321)	(0.325)	(0.330)
4 Administrative and Secretarial Occ.	0.172	0.168	0.167	0.169	0.163
	(0.377)	(0.374)	(0.373)	(0.375)	(0.369)
5 Skilled Trades Occ.	0.128	0.126	0.128	0.124	0.125
	(0.334)	(0.332)	(0.334)	(0.330)	(0.331)
6 Personal Service Occ.	0.039	0.041	0.041	0.045	0.042
	(0.194)	(0.199)	(0.198)	(0.207)	(0.202)
7 Sales and Customer Service Occ.	0.046	0.047	0.048	0.050	0.048
	(0.209)	(0.212)	(0.214)	(0.219)	(0.214)
8 Process, Plant and Machine Operatives	0.106	0.107	0.104	0.098	0.095
	(0.307)	(0.309)	(0.306)	(0.297)	(0.294)
9 Elementary Occ.	0.121	0.119	0.116	0.114	0.112
	(0.326)	(0.323)	(0.320)	(0.318)	(0.316)
10 Occ. missing	0.001	0.001	0.000	0.000	0.000
	(0.028)	(0.025)	(0.006)	(0.008)	(0.000)
firm size					
11–19 employees	0.085	0.087	0.080	0.083	0.082
	(0.278)	(0.282)	(0.272)	(0.276)	(0.275)
20–24 employees	0.040	0.039	0.037	0.038	0.038
	(0.196)	(0.194)	(0.189)	(0.191)	(0.190)
Less than 25 employees	0.008	0.009	0.009	0.012	0.012
	(0.087)	(0.093)	(0.092)	(0.107)	(0.110)
25–49 employees	0.114	0.114	0.114	0.114	0.112
	(0.318)	(0.317)	(0.318)	(0.318)	(0.315)
50 or more employees/don't know but over 24	0.590	0.585	0.588	0.587	0.593
	(0.492)	(0.493)	(0.492)	(0.492)	(0.491)
Missing number of employees	0.001	0.001	0.001	0.001	0.001
	(0.033)	(0.026)	(0.031)	(0.031)	(0.035)
N	29,789	28,855	29,286	27,990	26,130

Table reports the mean and standard deviation (in parenthesis) for
(first panel) exit from employment (the dependent variable)
(second panel) paid holidays (main regressors of interest)
(third panel) all other controls used in the regressions.
The numbers are for the Autumn quarter only.
All statistics were calculated using sampling weights.
Data source: UK Labour Force Survey

Table 4: Characteristics of treated units and propensity score

	OLS full sample	Probit 1994–1996
year = 1995	0.001	
	(0.003)	
year = 1996	-0.003	
	(0.003)	
year = 1997	-0.002	
	(0.004)	
year = 1998	-0.008*	
	(0.004)	
year = 1999	-0.032**	
	(0.004)	
year = 2000	-0.062**	
	(0.007)	
year = 2001	-0.080**	
	(0.009)	
year = 2002	-0.084**	
	(0.009)	
year = 2003	-0.090**	
	(0.010)	
year = 2004	-0.116**	
	(0.015)	
female	-0.003	-0.018
	(0.004)	(0.023)
age	-0.013**	-0.055**
	(0.001)	(0.005)
age squared	0.000**	0.001**
	(0.000)	(0.000)
tenure	-0.010**	-0.070**
	(0.001)	(0.004)
tenure squared	0.000**	0.001**
	(0.000)	(0.000)
48+ hours	0.001*	0.005**
	(0.000)	(0.002)
full-time	0.161**	0.624**
	(0.015)	(0.043)
private company	-0.081**	-0.537**
	(0.016)	(0.080)
married	-0.023**	-0.121**
	(0.003)	(0.016)
foreign	0.038**	0.195**
	(0.004)	(0.031)
has kid(s)	0.027**	0.115**
	(0.003)	(0.019)
manager duties	-0.010**	-0.103**
	(0.003)	(0.019)
education = 1	-0.017**	-0.227**
	(0.005)	(0.041)
education = 2	0.001	-0.062
	(0.005)	(0.040)
education = 4	0.002	-0.014
	(0.003)	(0.019)
education = 5	0.015**	0.057*
	(0.004)	(0.024)
education = 6	0.046**	0.206**
	(0.005)	(0.023)
education = 7	0.057**	0.242*
	(0.013)	(0.104)
apprenticeship	-0.011	-0.091

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... table 4 continued

	OLS full sample	Probit 1994–1996
	(0.022)	(0.111)
ever overtime	-0.049**	-0.275**
	(0.004)	(0.021)
industry = 1	0.061**	0.257**
	(0.018)	(0.069)
industry = 2	0.084**	0.385**
	(0.012)	(0.052)
industry = 4	-0.002	-0.147**
	(0.012)	(0.049)
industry = 5	0.069**	0.251**
	(0.007)	(0.035)
industry = 6	0.016	0.113*
	(0.008)	(0.050)
industry = 7	0.075**	0.270**
	(0.023)	(0.056)
industry = 8	-0.007	0.045
	(0.012)	(0.049)
industry = 9	-0.017*	-0.178**
	(0.008)	(0.066)
industry = 10	0.036	0.255**
	(0.021)	(0.097)
industry = 11	0.051*	0.064
	(0.020)	(0.102)
industry = 12	0.032*	0.139
	(0.015)	(0.075)
industry = 13	0.053**	0.281**
	(0.013)	(0.043)
industry = 14	0.148**	0.298
	(0.026)	(0.189)
industry = 15	0.031**	-0.121**
	(0.006)	(0.027)
work arrangement = 1	0.006	-0.038
	(0.004)	(0.028)
work arrangement = 2	-0.028**	-0.171**
	(0.004)	(0.034)
work arrangement = 3	0.126**	0.420*
	(0.040)	(0.174)
work arrangement = 4	0.040	0.250
	(0.034)	(0.158)
work arrangement = 5	0.008	-0.062
	(0.012)	(0.109)
work arrangement = 6	0.007	0.083*
	(0.005)	(0.037)
work arrangement = 8	0.021*	0.181
	(0.010)	(0.122)
union member	-0.061**	-0.421**
	(0.007)	(0.025)
6 days per week	0.052**	0.241**
	(0.008)	(0.030)
7 days per week	0.076**	0.394**
	(0.010)	(0.047)
region = 1	-0.002	0.007
	(0.006)	(0.058)
region = 2	0.010	0.109**
	(0.006)	(0.041)
region = 3	0.020**	0.234**
	(0.007)	(0.044)
region = 4	0.013*	0.114**
	(0.005)	(0.034)

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... table 4 continued

	OLS full sample	Probit 1994–1996
region = 5	-0.009	0.029
	(0.005)	(0.041)
region = 6	0.015**	0.126**
	(0.003)	(0.030)
region = 7	-0.001	-0.002
	(0.003)	(0.035)
region = 8	-0.023**	-0.254**
	(0.005)	(0.047)
region = 9	0.014*	0.077
	(0.006)	(0.046)
region = 11	0.013**	0.083*
	(0.004)	(0.034)
region = 13	0.008**	0.057*
	(0.003)	(0.028)
region = 14	0.026**	0.151**
	(0.004)	(0.027)
region = 15	0.013**	0.052
	(0.004)	(0.038)
region = 16	0.013**	0.143**
	(0.004)	(0.039)
region = 17	0.012**	0.088*
	(0.004)	(0.043)
region = 18	0.010**	0.117**
	(0.004)	(0.033)
region = 19	0.043**	0.290**
	(0.005)	(0.032)
region = 20	0.005	0.061
	(0.005)	(0.038)
region = 21	-0.014*	-0.064
	(0.005)	(0.034)
region = 22	0.054**	0.430**
	(0.008)	(0.045)
occupation = 2	-0.001	-0.066
	(0.011)	(0.066)
occupation = 3	0.012	0.020
	(0.011)	(0.062)
occupation = 4	-0.005	0.018
	(0.009)	(0.053)
occupation = 5	0.079**	0.388**
	(0.010)	(0.056)
occupation = 6	0.085**	0.542**
	(0.017)	(0.066)
occupation = 7	0.024**	0.119
	(0.009)	(0.066)
occupation = 8	0.089**	0.449**
	(0.008)	(0.050)
occupation = 9	0.100**	0.446**
	(0.022)	(0.088)
occupation = 10	0.016*	0.042
	(0.008)	(0.046)
11–19 employees	0.018**	0.070*
	(0.006)	(0.035)
20–24 employees	0.011	0.051
	(0.006)	(0.032)
less than 25	0.062**	0.327**
	(0.011)	(0.078)
25–49 employees	-0.011	-0.042
	(0.006)	(0.034)
missing # employees	0.071**	0.398**

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... table 4 continued

	OLS full sample	Probit 1994–1996
	(0.018)	(0.114)
intercept	0.435**	0.205
	(0.032)	(0.111)
Observations	235,290	76,831
R^2 LL	0.158	-27,081.0

Standard errors (clustered at the industry×occupation level) in parentheses.

Dependent variable: less than 20 days of paid leave.

Data source: UK Labour Force Survey.

Occupations: 1 Managers and Senior Officials; 2 Professional Occupations; 3 Associate Professional and Technical Occupations; 4 Administrative and Secretarial Occupations; 5 Skilled Trades Occupations; 6 Personal Service Occupations; 7 Sales and Customer Service Occupations; 8 Process, Plant and Machine Operatives; 9 Elementary Occupations

Industries: 1 Agriculture, hunting and forestry; 2 Mining, quarrying; 3 Manufacturing; 4 Electricity, gas and water supply; 5 Construction; 6 Wholesale, retail and motor trade; 7 Hotels and restaurants; 8 Transport, storage and communication; 9 Financial intermediation 10 Real estate, renting and business activities; 11 Public administration and defence; 12 Health and social work; 13 Other community, social and personal; 14 Private households with employed persons; 15 Industry missing

Table 5: Effect of the WTR98 on the exit to non-employment (complementary log-log regression)

	Aut. 1998	Aut. 1999	Aut. 2000
treated: no paid leave	0.000	0.104	0.100
	(0.092)	(0.081)	(0.071)
treated: 1–14 days	-0.057	0.037	0.069
	(0.100)	(0.090)	(0.084)
treated: 15–19 days		0.086	0.100
		(0.093)	(0.068)
base: no paid leave	1.293**	1.289**	1.287**
	(0.054)	(0.054)	(0.052)
base: 1–14 days	0.621**	0.619**	0.622**
	(0.057)	(0.056)	(0.055)
base: 15–19 day	0.282**	0.287**	0.290**
	(0.048)	(0.049)	(0.049)
baseline +12	-0.533**	-0.512**	-0.506**
	(0.051)	(0.049)	(0.047)
baseline +9	-0.324**	-0.337**	-0.325**
	(0.041)	(0.038)	(0.036)
baseline +6	-0.128**	-0.160**	-0.150**
	(0.029)	(0.028)	(0.027)
baseline. +3	-1.465**	-1.441**	-1.367**
	(0.175)	(0.170)	(0.164)
Observations	291,428	345,439	395,700
Log-likelihood	-30,322.1	-35,522.2	-40,377.4

Standard errors (clustered at the industry×occupation level) in parentheses.
Dependent variable: exit from dependent employment.
Reported controls: 'Treated' shows the impact of the WTR98 for the different treated groups (the coefficient on the interaction between group and the introduction of the WTR98). 'Base' shows the initial difference between the treated groups and the control group and the baseline gives the estimated baseline hazard for exit to non-employment from the first to the second quarter (+3), and the change of the baseline hazard with each additional quarter in the sample (+6,+9,+12)
Additional controls: Paid leave indicators (0, 1-14, 15-19 days), gender, age, age squared, tenure, tenure squared, current wage below the minimum wage 1, 2, 3 or 4 quarters ahead, usual hours per week above 48, quarter and year dummies, part-time dummy, married, kids present, managerial status, education (7 categories), apprenticeship completed, ever works overtime, industry (2 digit), special work contracts (8 categories), union membership, days worked per week (3 categories), region (21 categories), occupation (1 digit), firm size (6 categories).
Data source: UK Labour Force Survey
Observations only from individuals that entered the LFS on or before Aut. 1998 (1st column), 1999 (2nd), 2000 (3rd).

Table 6: Effect of the WTR98 on the exit to non-employment (complementary log-log regression—propensity score selected sample)

	Aut. 1998	Aut. 1999	Aut. 2000
treated: no paid leave	0.029	0.134	0.135
	(0.103)	(0.086)	(0.075)
treated: 1–14 days	0.004	0.091	0.131
	(0.110)	(0.097)	(0.091)
treated: 15–19 days		0.078	0.082
		(0.094)	(0.068)
base: no paid leave	1.225**	1.218**	1.214**
	(0.059)	(0.058)	(0.057)
base: 1–14 days	0.568**	0.566**	0.569**
	(0.058)	(0.057)	(0.058)
base: 15–19 day	0.260**	0.267**	0.271**
	(0.052)	(0.054)	(0.053)
baseline +12	-0.681**	-0.672**	-0.664**
	(0.051)	(0.045)	(0.043)
baseline +9	-0.461**	-0.480**	-0.473**
	(0.045)	(0.041)	(0.038)
baseline +6	-0.197**	-0.233**	-0.229**
	(0.031)	(0.029)	(0.029)
baseline +3	-1.655**	-1.639**	-1.598**
	(0.212)	(0.201)	(0.193)
Observations	152,173	181,272	207,749
Log-likelihood	-20,867.6	-24,468.3	-27,745.0

Standard errors (clustered at the industry×occupation level) in parentheses.
Dependent variable: exit from dependent employment.
Reported controls: 'Treated' shows the impact of the WTR98 for the different treated groups (the coefficient on the interaction between group and the introduction of the WTR98). 'Base' shows the initial difference between the treated groups and the control group and the baseline gives the estimated baseline hazard for exit to non-employment from the first to the second quarter (+3), and the change of the baseline hazard with each additional quarter in the sample (+6,+9,+12)
Additional controls: Paid leave indicators (0, 1-14, 15-19 days), gender, age, age squared, tenure, tenure squared, current wage below the minimum wage 1, 2, 3 or 4 quarters ahead, usual hours per week above 48, quarter and year dummies, part-time dummy, married, kids present, managerial status, education (7 categories), apprenticeship completed, ever works overtime, industry (2 digit), special work contracts (8 categories), union membership, days worked per week (3 categories), region (21 categories), occupation (1 digit), firm size (6 categories).
Data source: UK Labour Force Survey
Observations only from individuals that entered the LFS on or before Aut. 1998 (1st column), 1999 (2nd), 2000 (3rd).

Table 7: Effect of the WTR98 on hourly wages (OLS regression)

	Aut. 1998	Aut. 1999	Aut. 2000
treated: no paid leave	0.062*	0.108**	0.105**
	(0.029)	(0.028)	(0.027)
treated: 1–14 days	0.104**	0.131**	0.133**
	(0.029)	(0.023)	(0.020)
treated: 15–19 days		0.064**	0.069**
		(0.016)	(0.015)
base: no paid leave	-0.112**	-0.118**	-0.122**
	(0.023)	(0.023)	(0.022)
base: 1–14 days	-0.150**	-0.155**	-0.157**
	(0.016)	(0.016)	(0.016)
base: 15–19 day	-0.122**	-0.123**	-0.125**
	(0.015)	(0.015)	(0.015)
Observations	35,951	44,012	51,984
R-squared	0.579	0.589	0.598

Standard errors (clustered at the industry×occupation level) in parentheses.
Dependent variable: log hourly wage (surveyed only in entry and exit interview).
Reported controls: 'Treated' shows the impact of the WTR98 for the different treated groups (the coefficient on the interaction between group and the introduction of the WTR98). 'Base' shows the initial difference between the treated groups and the control group.
Additional controls: Paid leave indicators (0, 1-14, 15-19 days), gender, age, age squared, tenure, tenure squared, current wage below the minimum wage 1, 2, 3 or 4 quarters ahead, usual hours per week above 48, quarter and year dummies, part-time dummy, married, kids present, managerial status, education (7 categories), apprenticeship completed, ever works overtime, industry (2 digit), special work contracts (8 categories), union membership, days worked per week (3 categories), region (21 categories), occupation (1 digit), firm size (6 categories).
Data source: UK Labour Force Survey
Observations only from individuals that entered the LFS on or before Aut. 1998 (1st column), 1999 (2nd), 2000 (3rd).

Table 8: Effect of the WTR98 on hourly wages (OLS regression—propensity score selected sample)

	Aut. 1998	Aut. 1999	Aut. 2000
treated: no paid leave	0.019	0.064*	0.072*
	(0.031)	(0.028)	(0.029)
treated: 1–14 days	0.067*	0.092**	0.098**
	(0.030)	(0.024)	(0.022)
treated: 15–19 days		0.054**	0.061**
		(0.015)	(0.013)
base: no paid leave	-0.092**	-0.097**	-0.103**
	(0.022)	(0.022)	(0.021)
base: 1–14 days	-0.130**	-0.133**	-0.137**
	(0.015)	(0.015)	(0.015)
base: 15–19 day	-0.111**	-0.109**	-0.110**
	(0.014)	(0.013)	(0.013)
Observations	18,389	22,546	26,737
R-squared	0.473	0.490	0.506

Standard errors (clustered at the industry×occupation level) in parentheses.
Dependent variable: log hourly wage (surveyed only in entry and exit interview).
Reported controls: 'Treated' shows the impact of the WTR98 for the different treated groups (the coefficient on the interaction between group and the introduction of the WTR98). 'Base' shows the initial difference between the treated groups and the control group.
Additional controls: Paid leave indicators (0, 1-14, 15-19 days), gender, age, age squared, tenure, tenure squared, current wage below the minimum wage 1, 2, 3 or 4 quarters ahead, usual hours per week above 48, quarter and year dummies, part-time dummy, married, kids present, managerial status, education (7 categories), apprenticeship completed, ever works overtime, industry (2 digit), special work contracts (8 categories), union membership, days worked per week (3 categories), region (21 categories), occupation (1 digit), firm size (6 categories).
Data source: UK Labour Force Survey
Observations only from individuals that entered the LFS on or before Aut. 1998 (1st column), 1999 (2nd), 2000 (3rd).

Table 9: Robustness check excluding employees with less than 2 years of tenure: Exit to non-employment

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
treated: no leave	-0.148	-0.047	0.059	-0.138	-0.016	0.087
	(0.150)	(0.134)	(0.122)	(0.171)	(0.156)	(0.147)
treated: 1–14	-0.347	0.074	0.127	-0.305	0.076	0.132
	(0.195)	(0.141)	(0.126)	(0.216)	(0.156)	(0.141)
treated: 15–19		0.036	0.106		-0.073	-0.036
		(0.142)	(0.119)		(0.157)	(0.120)
base: no leave	1.430**	1.435**	1.426**	1.419**	1.427**	1.406**
	(0.074)	(0.076)	(0.072)	(0.086)	(0.089)	(0.086)
base: 1–14 days	0.564**	0.563**	0.561**	0.558**	0.560**	0.557**
	(0.071)	(0.070)	(0.067)	(0.077)	(0.076)	(0.072)
base: 15–19 day	0.179*	0.183*	0.186**	0.169*	0.180*	0.186*
	(0.072)	(0.072)	(0.071)	(0.082)	(0.082)	(0.083)
baseline +12	-0.095	-0.072	-0.082	-0.154*	-0.160*	-0.175**
	(0.064)	(0.062)	(0.061)	(0.075)	(0.066)	(0.063)
baseline +9	0.043	0.032	0.046	-0.032	-0.066	-0.066
	(0.040)	(0.034)	(0.034)	(0.052)	(0.048)	(0.046)
baseline +6	0.038	-0.001	0.012	0.003	-0.067	-0.061
	(0.038)	(0.039)	(0.035)	(0.053)	(0.050)	(0.048)
baseline +3	-1.399**	-1.302**	-1.172**	-1.644**	-1.532**	-1.406**
	(0.204)	(0.194)	(0.176)	(0.243)	(0.235)	(0.218)
Observations	236,106	278,953	319,148	102,552	121,790	139,467
Log-likelihood	-18,626.8	-21,736.8	-24,762.9	-10,158.0	-11,871.7	-13,486.2

Standard errors (clustered at the industry×occupation level) in parentheses.
Dependent variable: exit from dependent employment.
Reported controls: 'Treated' shows the impact of the WTR98 for the different treated groups (the coefficient on the interaction between group and the introduction of the WTR98). 'Base' shows the initial difference between the treated groups and the control group and the baseline gives the estimated baseline hazard for exit to non-employment from the first to the second quarter (+3), and the change of the baseline hazard with each additional quarter in the sample (+6,+9,+12)
Additional controls: Paid leave indicators (0, 1-14, 15-19 days), gender, age, age squared, tenure, tenure squared, current wage below the minimum wage 1, 2, 3 or 4 quarters ahead, usual hours per week above 48, quarter and year dummies, part-time dummy, married, kids present, managerial status, education (7 categories), apprenticeship completed, ever works overtime, industry (2 digit), special work contracts (8 categories), union membership, days worked per week (3 categories), region (21 categories), occupation (1 digit), firm size (6 categories).
Data source: UK Labour Force Survey
Observations only from individuals that entered the LFS on or before Aut. 1998 (1st/4th column), 1999 (2nd/5th), 2000 (3rd/6th).

Table 10: Robustness check excluding employees with less than 2 years of tenure: wage regression

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
treated: no leave	0.125**	0.179**	0.165**	0.080	0.132**	0.127**
	(0.039)	(0.039)	(0.037)	(0.040)	(0.039)	(0.040)
treated: 1–14	0.099**	0.140**	0.147**	0.057	0.095**	0.106**
	(0.036)	(0.028)	(0.027)	(0.036)	(0.028)	(0.027)
treated: 15–19		0.069**	0.068**		0.063**	0.062**
		(0.019)	(0.019)		(0.019)	(0.018)
base: no leave	-0.134**	-0.143**	-0.146**	-0.107**	-0.115**	-0.120**
	(0.033)	(0.033)	(0.033)	(0.032)	(0.032)	(0.032)
base: 1–14 days	-0.160**	-0.166**	-0.169**	-0.134**	-0.139**	-0.143**
	(0.018)	(0.018)	(0.018)	(0.016)	(0.015)	(0.015)
base: 15–19 day	-0.124**	-0.126**	-0.128**	-0.112**	-0.110**	-0.112**
	(0.017)	(0.017)	(0.017)	(0.016)	(0.016)	(0.016)
Observations	30,273	36,983	43,452	13,764	16,831	19,804
R-squared	0.574	0.583	0.594	0.456	0.472	0.489

Standard errors (clustered at the industry×occupation level) in parentheses.
Dependent variable: log hourly wage (surveyed only in entry and exit interview).
Reported controls: 'Treated' shows the impact of the WTR98 for the different treated groups (the coefficient on the interaction between group and the introduction of the WTR98). 'Base' shows the initial difference between the treated groups and the control group.
Additional controls: Paid leave indicators (0, 1-14, 15-19 days), gender, age, age squared, tenure, tenure squared, current wage below the minimum wage 1, 2, 3 or 4 quarters ahead, usual hours per week above 48, quarter and year dummies, part-time dummy, married, kids present, managerial status, education (7 categories), apprenticeship completed, ever works overtime, industry (2 digit), special work contracts (8 categories), union membership, days worked per week (3 categories), region (21 categories), occupation (1 digit), firm size (6 categories).
Data source: UK Labour Force Survey
Observations only from individuals that entered the LFS on or before Aut. 1998 (1st/4th column), 1999 (2nd/5th), 2000 (3rd/6th).

Table 11: First stage propensity score estimates for long-run estimates

	(I)	(II)
age	-2.172**	-2.141**
	(0.338)	(0.504)
age squared	0.075**	0.073**
	(0.013)	(0.020)
age cubed	-0.001**	-0.001**
	(0.000)	(0.000)
age quartic	0.000**	0.000**
	(0.000)	(0.000)
2.educ×age	1.061*	1.152*
	(0.415)	(0.527)
3.educ×age	1.288**	1.370**
	(0.350)	(0.518)
4.educ×age	1.200**	1.608**
	(0.352)	(0.523)
5.educ×age	2.004**	1.914**
	(0.376)	(0.534)
6.educ×age	2.018**	1.974**
	(0.371)	(0.535)
2.educ×agesq	-0.038*	-0.042*
	(0.016)	(0.021)
3.educ×agesq	-0.046**	-0.048*
	(0.014)	(0.020)
4.educ×agesq	-0.040**	-0.056**
	(0.014)	(0.021)
5.educ×agesq	-0.072**	-0.067**
	(0.015)	(0.021)
6.educ×agesq	-0.073**	-0.070**
	(0.015)	(0.021)
2.educ×agecub	0.001*	0.001
	(0.000)	(0.000)
3.educ×agecub	0.001**	0.001*
	(0.000)	(0.000)
4.educ×agecub	0.001*	0.001*
	(0.000)	(0.000)
5.educ×agecub	0.001**	0.001**
	(0.000)	(0.000)
6.educ×agecub	0.001**	0.001**
	(0.000)	(0.000)
2.educ×agequart	-0.000*	-0.000
	(0.000)	(0.000)
3.educ×agequart	-0.000**	-0.000*
	(0.000)	(0.000)
4.educ×agequart	-0.000*	-0.000*
	(0.000)	(0.000)
5.educ×agequart	-0.000**	-0.000**
	(0.000)	(0.000)
6.educ×agequart	-0.000**	-0.000**
	(0.000)	(0.000)
female×age	-1.148**	-0.747**
	(0.101)	(0.122)
female×agesq	0.048**	0.032**
	(0.004)	(0.005)
female×agecub	-0.001**	-0.001**
	(0.000)	(0.000)
female×agequart	0.000**	0.000**
	(0.000)	(0.000)

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... table 11 continued

	(I)	(II)
married	-0.084**	-0.086**
	(0.013)	(0.015)
foreign	0.174**	0.255**
	(0.032)	(0.038)
has kid(s)	0.259**	0.194**
	(0.018)	(0.016)
female	9.603**	6.001**
	(0.903)	(1.044)
2.educ	-10.677**	-11.527*
	(3.785)	(4.845)
3.educ	-12.814**	-13.872**
	(3.239)	(4.763)
4.educ	-12.448**	-16.145**
	(3.262)	(4.806)
5.educ	-19.329**	-18.852**
	(3.483)	(4.906)
6.educ	-19.191**	-19.163**
	(3.404)	(4.898)
female×2.educ	-0.074	-0.030
	(0.068)	(0.081)
female×3.educ	-0.110*	-0.027
	(0.051)	(0.052)
female×4.educ	-0.089	0.014
	(0.056)	(0.053)
female×5.educ	-0.164**	-0.016
	(0.051)	(0.057)
female×6.educ	-0.051	0.091
	(0.052)	(0.054)
2.region	0.138**	0.097
	(0.036)	(0.071)
3.region	0.117**	0.146
	(0.036)	(0.076)
4.region	0.087**	0.120
	(0.033)	(0.072)
5.region	0.181**	0.103
	(0.035)	(0.070)
6.region	0.167**	0.131
	(0.035)	(0.071)
7.region	0.126**	0.068
	(0.045)	(0.076)
8.region	0.033	0.059
	(0.037)	(0.072)
9.region	-0.035	0.033
	(0.039)	(0.071)
10.region	0.058	0.003
	(0.031)	(0.069)
11.region	0.177**	0.118
	(0.035)	(0.072)
12.region	0.069	0.119
	(0.040)	(0.072)
13.region	0.096**	0.052
	(0.032)	(0.070)
14.region	0.074	0.114
	(0.044)	(0.075)
15.region	-0.017	0.020
	(0.038)	(0.070)
16.region	0.055	0.077
	(0.035)	(0.072)
17.region	0.178**	0.207**

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... table 11 continued

	(I)	(II)
	(0.042)	(0.069)
18.region	-0.007	0.011
	(0.038)	(0.072)
19.region	0.066	0.031
	(0.036)	(0.072)
20.region	0.259**	0.200**
	(0.053)	(0.075)
Intercept	21.663**	21.265**
	(3.145)	(4.652)
Observations	120,062	84,579
Log-likelihood	-64,420.3	-35,003.8

First stage: Generate treatment indicator as an out-of-sample prediction based on a Probit on data from 1994–1996 using age (quartic), qualification, gender, married, foreign born, kids present, region of residence, interaction of age polynomial with qualification, interaction of qualification and gender and interaction of gender and age polynomial as controls. Dependent variable is "less than 4 weeks of paid leave" in column I and "less than 4 weeks of paid leave and working 5 or more days per week" in column II.

Standard errors (clustered at the region×education level) in parentheses.

Data source: UK Labour Force Survey.

Table 12: Long-run impact of WTR1998 on employment

	(I)	(II)	(III)	(IV)
treatment	-0.022*	-0.003**	-0.041**	-0.005**
	(0.010)	(0.001)	(0.014)	(0.002)
group	-0.471**	-0.469**	-0.644**	-0.645**
	(0.036)	(0.037)	(0.049)	(0.050)
post	0.032**		0.033**	
	(0.002)		(0.002)	
trend		0.005**		0.005**
		(0.000)		(0.000)
constant	0.746**	0.735**	0.732**	0.721**
	(0.007)	(0.008)	(0.007)	(0.007)
Observations	3,320,112	3,320,112	3,320,112	3,320,112
R^2	0.030	0.030	0.036	0.037

First stage: Generate treatment indicator as an out-of-sample prediction based on a Probit on data from 1994–1996 using age (quartic), qualification, gender, married, foreign born, kids present, region of residence, interaction of age polynomial with qualification, interaction of qualification and gender and interaction of gender and age polynomial as controls. Dependent variable is less than 4 weeks of paid leave in columns I and II. Column III and IV dependent variable is less than 4 weeks of paid leave and working 5 or more days per week. Second stage: Dependent variable is exit from dependent employment, data from 1994–2004.
Bootstrap standard errors in parentheses. Bootstrap of the second stage resampling from clusters (500 replications, resampling from 120 clusters at the region×education level).
Data source: UK Labour Force Survey

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Additional Appendix: full regression results

Table 13: Complementary log-log regression—Full table

	Aut. 1998	Aut. 1999	Aut. 2000
base: no paid leave	1.293**	1.289**	1.287**
	(0.054)	(0.054)	(0.052)
base: 1–14 days	0.621**	0.619**	0.622**
	(0.057)	(0.056)	(0.055)
base: 15–19 day	0.282**	0.287**	0.290**
	(0.048)	(0.049)	(0.049)
treated: no paid lve	0.000	0.104	0.100
	(0.092)	(0.081)	(0.071)
treated: 1–14 days	-0.057	0.037	0.069
	(0.100)	(0.090)	(0.084)
treated: 15–19 day		0.086	0.100
		(0.093)	(0.068)
female	0.050	0.053	0.063
	(0.042)	(0.038)	(0.040)
age	-0.095**	-0.094**	-0.098**
	(0.010)	(0.010)	(0.009)
age squared	0.001**	0.001**	0.001**
	(0.000)	(0.000)	(0.000)
tenure	-0.132**	-0.133**	-0.130**
	(0.005)	(0.005)	(0.005)
tenure squared	0.003**	0.003**	0.003**
	(0.000)	(0.000)	(0.000)
below min. wage 3		0.047	0.144
		(0.150)	(0.143)
below min. wage 6	0.046	0.049	0.049
	(0.167)	(0.162)	(0.163)
below min. wage 9	-0.115	0.370	0.025
	(0.152)	(0.456)	(0.210)
below min. wage 12		-0.532	-0.189
		(0.451)	(0.202)
48+ hours	0.009**	0.010**	0.011**
	(0.003)	(0.003)	(0.002)
baseline haz. +6	-0.128**	-0.160**	-0.150**
	(0.029)	(0.028)	(0.027)
baseline haz. +9	-0.324**	-0.337**	-0.325**
	(0.041)	(0.038)	(0.036)
baseline haz. +12	-0.533**	-0.512**	-0.506**
	(0.051)	(0.049)	(0.047)
year = 1995	-0.018	-0.021	-0.020
	(0.038)	(0.037)	(0.037)
year = 1996	-0.059	-0.063	-0.063
	(0.034)	(0.033)	(0.033)
year = 1997	-0.157**	-0.160**	-0.160**
	(0.036)	(0.036)	(0.036)
year = 1998	-0.139**	-0.164**	-0.164**
	(0.049)	(0.051)	(0.049)
year = 1999		-0.157**	-0.167**
		(0.047)	(0.046)
year = 2000			-0.142**
			(0.042)
full-time	0.085	0.116**	0.122**
	(0.045)	(0.043)	(0.042)
private company	-0.234**	-0.263**	-0.250**
	(0.069)	(0.069)	(0.060)

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... table 13 continued

	Aut. 1998	Aut. 1999	Aut. 2000
married	-0.056	-0.045	-0.046
	(0.036)	(0.035)	(0.032)
foreign	0.064	0.058	0.043
	(0.060)	(0.053)	(0.050)
has kid(s)	0.163**	0.153**	0.146**
	(0.033)	(0.030)	(0.028)
manager duties	-0.040	-0.037	-0.038
	(0.037)	(0.033)	(0.031)
education = 1	-0.092*	-0.060	-0.008
	(0.046)	(0.043)	(0.039)
education = 2	-0.131*	-0.129*	-0.102*
	(0.056)	(0.053)	(0.047)
education = 4	0.060	0.036	0.035
	(0.034)	(0.033)	(0.030)
education = 5	0.015	-0.000	0.008
	(0.043)	(0.042)	(0.041)
education = 6	0.116**	0.096**	0.095*
	(0.035)	(0.037)	(0.038)
education = 7	-0.369	-0.267	-0.223
	(0.200)	(0.198)	(0.167)
apprenticeship	-0.559**	-0.494**	-0.535**
	(0.185)	(0.162)	(0.172)
ever overtime	-0.335**	-0.330**	-0.344**
	(0.025)	(0.024)	(0.025)
industry = 1	0.100	0.030	-0.011
	(0.061)	(0.063)	(0.062)
industry = 2	0.020	-0.082	-0.092
	(0.168)	(0.153)	(0.154)
industry = 4	0.374*	0.368*	0.293
	(0.182)	(0.185)	(0.163)
industry = 5	0.373**	0.303**	0.270**
	(0.087)	(0.100)	(0.094)
industry = 6	-0.043	-0.097*	-0.113**
	(0.041)	(0.041)	(0.041)
industry = 7	0.065	0.009	-0.031
	(0.070)	(0.068)	(0.066)
industry = 8	-0.013	-0.036	-0.069
	(0.068)	(0.059)	(0.057)
industry = 9	0.011	-0.031	-0.023
	(0.044)	(0.045)	(0.040)
industry = 10	0.007	-0.025	-0.036
	(0.067)	(0.068)	(0.064)
industry = 11	0.062	0.025	-0.020
	(0.078)	(0.078)	(0.073)
industry = 12	-0.084	-0.104	-0.129*
	(0.072)	(0.068)	(0.064)
industry = 13	0.119	0.079	0.071
	(0.073)	(0.070)	(0.068)
industry = 14	0.152	0.068	0.060
	(0.111)	(0.104)	(0.105)
industry = 15	-0.472**	-0.622**	-0.685**
	(0.050)	(0.044)	(0.042)
work arr. = 1	-0.038	-0.069	-0.060
	(0.044)	(0.041)	(0.038)
work arr. = 2	0.008	-0.060	-0.093
	(0.078)	(0.072)	(0.071)
work arr. = 3	-0.237	-0.249*	-0.316**
	(0.129)	(0.118)	(0.108)
work arr. = 4	-0.237	-0.380*	-0.308

Continued on next page...

... table 13 continued

	Aut. 1998	Aut. 1999	Aut. 2000
	(0.187)	(0.191)	(0.205)
work arr. = 5	0.312*	0.179	0.125
	(0.157)	(0.158)	(0.155)
work arr. = 6	0.108*	0.064	0.046
	(0.051)	(0.063)	(0.064)
work arr. = 8	-0.153	-0.062	-0.107
	(0.210)	(0.179)	(0.180)
union member	-0.099*	-0.096*	-0.118**
	(0.045)	(0.040)	(0.037)
6 days per week	-0.040	-0.034	-0.048
	(0.037)	(0.036)	(0.037)
7 days per week	-0.016	-0.030	-0.001
	(0.048)	(0.046)	(0.045)
region = 1	0.181*	0.140	0.157*
	(0.081)	(0.076)	(0.065)
region = 2	-0.078	-0.105	-0.059
	(0.095)	(0.102)	(0.090)
region = 3	0.105	0.080	0.053
	(0.085)	(0.072)	(0.067)
region = 4	0.035	-0.002	-0.016
	(0.073)	(0.063)	(0.056)
region = 5	-0.070	-0.096	-0.109
	(0.092)	(0.085)	(0.082)
region = 6	-0.054	-0.060	-0.051
	(0.049)	(0.046)	(0.043)
region = 7	-0.077	-0.101	-0.120
	(0.075)	(0.069)	(0.063)
region = 8	0.193**	0.165**	0.137**
	(0.059)	(0.053)	(0.051)
region = 9	0.126	0.141	0.140
	(0.089)	(0.082)	(0.075)
region = 11	0.039	0.062	0.008
	(0.061)	(0.054)	(0.048)
region = 13	-0.054	-0.043	-0.065
	(0.042)	(0.044)	(0.041)
region = 14	-0.101*	-0.098*	-0.089*
	(0.050)	(0.048)	(0.045)
region = 15	-0.113	-0.101	-0.105
	(0.071)	(0.067)	(0.065)
region = 16	0.138*	0.153**	0.119*
	(0.064)	(0.058)	(0.055)
region = 17	0.102	0.136	0.124
	(0.088)	(0.083)	(0.077)
region = 18	-0.036	-0.020	-0.006
	(0.057)	(0.053)	(0.050)
region = 19	0.024	0.018	0.013
	(0.072)	(0.069)	(0.067)
region = 20	0.011	0.028	0.023
	(0.087)	(0.079)	(0.074)
region = 21	-0.038	-0.043	-0.051
	(0.062)	(0.056)	(0.050)
region = 22	-0.086	-0.064	-0.114
	(0.081)	(0.084)	(0.064)
occ. = 2	-0.058	-0.066	-0.083
	(0.079)	(0.080)	(0.082)
occ. = 3	-0.104	-0.101	-0.076
	(0.055)	(0.060)	(0.054)
occ. = 4	-0.254**	-0.227**	-0.215**
	(0.059)	(0.058)	(0.054)

Continued on next page...

... table 13 continued

	Aut. 1998	Aut. 1999	Aut. 2000
occ. = 5	-0.009	0.014	0.021
	(0.065)	(0.071)	(0.069)
occ. = 6	-0.166*	-0.172**	-0.146*
	(0.066)	(0.062)	(0.058)
occ. = 7	-0.095	-0.063	-0.054
	(0.060)	(0.058)	(0.058)
occ. = 8	-0.029	-0.032	-0.018
	(0.051)	(0.047)	(0.045)
occ. = 9	-0.049	-0.023	-0.003
	(0.068)	(0.063)	(0.060)
occ. = 10	-0.345**	-0.147**	-0.127**
	(0.046)	(0.045)	(0.041)
size 11–19	0.012	-0.015	-0.017
	(0.044)	(0.043)	(0.039)
size 20–24	-0.045	-0.037	-0.018
	(0.058)	(0.057)	(0.051)
size < 25	0.043	0.013	-0.018
	(0.106)	(0.092)	(0.084)
size 25–49	-0.042	-0.019	-0.015
	(0.041)	(0.040)	(0.037)
missing size	0.048	0.058	0.008
	(0.219)	(0.217)	(0.200)
baseline haz. +3	-1.465**	-1.441**	-1.367**
	(0.175)	(0.170)	(0.164)
Observations	291,428	345,439	395,700
Log-likelihood	-30,322.1	-35,522.2	-40,377.4

Standard errors (clustered at the industry×occupation level) in parentheses.

Dependent variable: exit from dependent employment.

Data source: UK Labour Force Survey

Observations only from individuals that entered the LFS on or before Aut. 1998 (1st column), 1999 (2nd), 2000 (3rd).

Table 14: Complementary log-log regression—propensity score selected sample—Full table

	Aut. 1998	Aut. 1999	Aut. 2000
base: no paid leave	1.225**	1.218**	1.214**
	(0.059)	(0.058)	(0.057)
base: 1–14 days	0.568**	0.566**	0.569**
	(0.058)	(0.057)	(0.058)
base: 15–19 day	0.260**	0.267**	0.271**
	(0.052)	(0.054)	(0.053)
treated: no paid lve	0.029	0.134	0.135
	(0.103)	(0.086)	(0.075)
treated: 1–14 days	0.004	0.091	0.131
	(0.110)	(0.097)	(0.091)
treated: 15–19 day		0.078	0.082
		(0.094)	(0.068)
female	0.057	0.053	0.075
	(0.046)	(0.041)	(0.042)
age	-0.069**	-0.068**	-0.071**
	(0.012)	(0.011)	(0.010)
age squared	0.001**	0.001**	0.001**
	(0.000)	(0.000)	(0.000)
tenure	-0.162**	-0.164**	-0.160**
	(0.006)	(0.006)	(0.007)
tenure squared	0.004**	0.004**	0.004**
	(0.000)	(0.000)	(0.000)
below min. wage 3		0.006	0.078
		(0.153)	(0.142)
below min. wage 6	0.031	0.037	0.038
	(0.173)	(0.167)	(0.167)
below min. wage 9	-0.064	0.642	0.154
	(0.165)	(0.496)	(0.206)
below min. wage 12		-0.750	-0.267
		(0.508)	(0.210)
48+ hours	0.010**	0.010**	0.011**
	(0.003)	(0.003)	(0.003)
baseline haz. +6	-0.197**	-0.233**	-0.229**
	(0.031)	(0.029)	(0.029)
baseline haz. +9	-0.461**	-0.480**	-0.473**
	(0.045)	(0.041)	(0.038)
baseline haz. +12	-0.681**	-0.672**	-0.664**
	(0.051)	(0.045)	(0.043)
year = 1995	-0.038	-0.041	-0.040
	(0.041)	(0.041)	(0.040)
year = 1996	-0.109**	-0.113**	-0.112**
	(0.038)	(0.038)	(0.038)
year = 1997	-0.160**	-0.163**	-0.162**
	(0.040)	(0.040)	(0.040)
year = 1998	-0.186**	-0.218**	-0.219**
	(0.056)	(0.056)	(0.052)
year = 1999		-0.190**	-0.201**
		(0.044)	(0.040)
year = 2000			-0.179**
			(0.051)
full-time	0.118**	0.150**	0.148**
	(0.045)	(0.043)	(0.041)
private company	-0.095	-0.117	-0.089
	(0.089)	(0.087)	(0.071)
married	-0.056	-0.048	-0.055
	(0.039)	(0.037)	(0.035)

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... table 14 continued

	Aut. 1998	Aut. 1999	Aut. 2000
foreign	0.008	0.004	0.002
	(0.061)	(0.055)	(0.053)
has kid(s)	0.165**	0.154**	0.156**
	(0.035)	(0.033)	(0.032)
manager duties	-0.022	-0.030	-0.039
	(0.040)	(0.033)	(0.034)
education = 1	-0.051	-0.014	0.042
	(0.071)	(0.065)	(0.058)
education = 2	-0.118	-0.102	-0.059
	(0.064)	(0.058)	(0.052)
education = 4	0.027	-0.012	0.001
	(0.039)	(0.034)	(0.032)
education = 5	0.004	-0.018	-0.007
	(0.047)	(0.045)	(0.044)
education = 6	0.140**	0.113**	0.120**
	(0.038)	(0.038)	(0.040)
education = 7	-0.447	-0.365	-0.264
	(0.239)	(0.216)	(0.167)
apprenticeship	-0.582**	-0.509**	-0.554**
	(0.194)	(0.170)	(0.182)
ever overtime	-0.303**	-0.303**	-0.314**
	(0.032)	(0.031)	(0.032)
industry = 1	0.169*	0.117	0.088
	(0.067)	(0.065)	(0.071)
industry = 2	-0.071	-0.135	-0.121
	(0.168)	(0.148)	(0.152)
industry = 4	0.111	0.148	0.161
	(0.202)	(0.262)	(0.211)
industry = 5	0.381**	0.322**	0.302**
	(0.094)	(0.102)	(0.089)
industry = 6	-0.066	-0.115*	-0.116*
	(0.052)	(0.052)	(0.050)
industry = 7	0.014	-0.025	-0.056
	(0.071)	(0.072)	(0.068)
industry = 8	-0.049	-0.045	-0.070
	(0.070)	(0.066)	(0.058)
industry = 9	-0.059	-0.107	-0.093
	(0.107)	(0.115)	(0.084)
industry = 10	-0.046	-0.070	-0.074
	(0.069)	(0.070)	(0.065)
industry = 11	-0.023	-0.046	-0.069
	(0.115)	(0.112)	(0.097)
industry = 12	-0.135	-0.155	-0.184*
	(0.087)	(0.081)	(0.076)
industry = 13	0.063	0.027	0.036
	(0.080)	(0.083)	(0.079)
industry = 14	0.198	0.112	0.105
	(0.115)	(0.111)	(0.115)
industry = 15	-0.924**	-1.023**	-1.043**
	(0.061)	(0.054)	(0.052)
work arr. = 1	-0.031	-0.073	-0.033
	(0.060)	(0.059)	(0.055)
work arr. = 2	0.022	-0.038	-0.109
	(0.100)	(0.093)	(0.091)
work arr. = 3	-0.420**	-0.403**	-0.470**
	(0.142)	(0.127)	(0.119)
work arr. = 4	-0.264	-0.404	-0.321
	(0.207)	(0.210)	(0.222)
work arr. = 5	0.381	0.261	0.250

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... table 14 continued

	Aut. 1998	Aut. 1999	Aut. 2000
	(0.215)	(0.206)	(0.202)
work arr. = 6	0.181**	0.136	0.106
	(0.059)	(0.070)	(0.070)
work arr. = 8	-0.147	-0.094	-0.144
	(0.219)	(0.195)	(0.197)
union member	-0.108	-0.097	-0.111*
	(0.068)	(0.056)	(0.053)
6 days per week	-0.024	-0.017	-0.031
	(0.040)	(0.039)	(0.041)
7 days per week	-0.004	-0.023	0.003
	(0.054)	(0.053)	(0.052)
region = 1	0.181	0.141	0.169*
	(0.096)	(0.095)	(0.081)
region = 2	-0.097	-0.107	-0.068
	(0.126)	(0.130)	(0.119)
region = 3	0.090	0.075	0.049
	(0.096)	(0.087)	(0.081)
region = 4	0.055	0.005	-0.019
	(0.075)	(0.067)	(0.061)
region = 5	-0.119	-0.119	-0.141
	(0.104)	(0.096)	(0.094)
region = 6	-0.046	-0.048	-0.045
	(0.054)	(0.051)	(0.051)
region = 7	-0.110	-0.121	-0.140*
	(0.074)	(0.065)	(0.060)
region = 8	0.227**	0.187*	0.168*
	(0.085)	(0.077)	(0.080)
region = 9	0.115	0.137	0.145
	(0.091)	(0.092)	(0.083)
region = 11	0.058	0.080	0.031
	(0.069)	(0.060)	(0.052)
region = 13	-0.082	-0.069	-0.094
	(0.051)	(0.055)	(0.050)
region = 14	-0.106	-0.098	-0.096
	(0.060)	(0.056)	(0.055)
region = 15	-0.088	-0.089	-0.098
	(0.082)	(0.077)	(0.076)
region = 16	0.127	0.147*	0.099
	(0.070)	(0.063)	(0.065)
region = 17	-0.038	0.010	0.011
	(0.114)	(0.104)	(0.096)
region = 18	-0.066	-0.038	-0.019
	(0.064)	(0.059)	(0.060)
region = 19	0.019	0.015	-0.003
	(0.087)	(0.086)	(0.079)
region = 20	0.017	0.053	0.029
	(0.092)	(0.080)	(0.075)
region = 21	-0.045	-0.049	-0.070
	(0.070)	(0.063)	(0.056)
region = 22	-0.031	-0.004	-0.079
	(0.083)	(0.090)	(0.070)
occ. = 2	-0.045	-0.091	-0.080
	(0.135)	(0.138)	(0.130)
occ. = 3	-0.055	-0.038	-0.024
	(0.089)	(0.096)	(0.090)
occ. = 4	-0.266**	-0.222**	-0.210**
	(0.067)	(0.067)	(0.065)
occ. = 5	0.030	0.052	0.073
	(0.077)	(0.084)	(0.079)

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... table 14 continued

	Aut. 1998	Aut. 1999	Aut. 2000
occ. = 6	-0.176*	-0.169*	-0.138
	(0.079)	(0.080)	(0.074)
occ. = 7	-0.104	-0.056	-0.053
	(0.072)	(0.072)	(0.074)
occ. = 8	-0.021	-0.018	0.001
	(0.067)	(0.064)	(0.060)
occ. = 9	-0.025	0.008	0.027
	(0.074)	(0.072)	(0.068)
occ. = 10	-0.292**	-0.317**	-0.284**
	(0.060)	(0.058)	(0.055)
size 11–19	-0.005	-0.033	-0.027
	(0.049)	(0.047)	(0.041)
size 20–24	-0.080	-0.058	-0.045
	(0.067)	(0.066)	(0.060)
size < 25	0.034	0.005	-0.013
	(0.102)	(0.088)	(0.081)
size 25–49	-0.083	-0.065	-0.064
	(0.049)	(0.046)	(0.044)
missing size	-0.094	-0.057	-0.107
	(0.255)	(0.241)	(0.225)
baseline haz. +3	-1.655**	-1.639**	-1.598**
	(0.212)	(0.201)	(0.193)
Observations	152,173	181,272	207,749

Standard errors (clustered at the industry×occupation level) in parentheses.

Dependent variable: exit from dependent employment.

Data source: UK Labour Force Survey

Observations only from individuals that entered the LFS on or before Aut. 1998 (1st column), 1999 (2nd), 2000 (3rd).

Table 15: Wage regression—Full table

	Aut. 1998	Aut. 1999	Aut. 2000
base: no paid leave	-0.112**	-0.118**	-0.122**
	(0.023)	(0.023)	(0.022)
base: 1–14 days	-0.150**	-0.155**	-0.157**
	(0.016)	(0.016)	(0.016)
base: 15–19 day	-0.122**	-0.123**	-0.125**
	(0.015)	(0.015)	(0.015)
treated: no paid lve	0.062*	0.108**	0.105**
	(0.029)	(0.028)	(0.027)
treated: 1–14 days	0.104**	0.131**	0.133**
	(0.029)	(0.023)	(0.020)
treated: 15–19 day		0.064**	0.069**
		(0.016)	(0.015)
female	-0.165**	-0.156**	-0.151**
	(0.015)	(0.014)	(0.013)
age	0.043**	0.043**	0.043**
	(0.003)	(0.003)	(0.003)
age squared	-0.000**	-0.000**	-0.000**
	(0.000)	(0.000)	(0.000)
tenure	0.008**	0.008**	0.008**
	(0.001)	(0.001)	(0.001)
tenure squared	-0.000**	-0.000**	-0.000**
	(0.000)	(0.000)	(0.000)
below min. wage 3	-0.151**	-0.167**	-0.116*
	(0.053)	(0.051)	(0.046)
below min. wage 6	0.028	0.028	0.029
	(0.059)	(0.059)	(0.059)
below min. wage 9	-0.297**	-0.288**	-0.292**
	(0.065)	(0.064)	(0.064)
below min. wage 12	-0.351**	-0.366**	-0.364**
	(0.046)	(0.021)	(0.022)
48+ hours	-0.006**	-0.006**	-0.005**
	(0.001)	(0.001)	(0.001)
base quarter +12	0.002	-0.001	-0.003
	(0.004)	(0.003)	(0.003)
year = 1995	-0.435**	-0.415*	-0.401*
	(0.163)	(0.163)	(0.164)
year = 1996	-0.395*	-0.375*	-0.359*
	(0.163)	(0.164)	(0.165)
year = 1997	-0.358*	-0.340*	-0.326
	(0.165)	(0.165)	(0.167)
year = 1998	-0.279	-0.261	-0.247
	(0.165)	(0.165)	(0.166)
year = 1999	-0.252	-0.235	-0.224
	(0.165)	(0.165)	(0.166)
year = 2000		-0.199	-0.187
		(0.165)	(0.166)
year == 2001			-0.122
			(0.168)
full-time	-0.042**	-0.041**	-0.039**
	(0.011)	(0.011)	(0.010)
ft/pt missing	-0.075**	-0.073**	-0.079**
	(0.021)	(0.021)	(0.020)
private company	0.004	-0.001	-0.003
	(0.013)	(0.013)	(0.013)
married	0.029**	0.030**	0.029**
	(0.006)	(0.005)	(0.005)
foreign	0.029	0.030	0.024

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... table 15 continued

	Aut. 1998	Aut. 1999	Aut. 2000
	(0.022)	(0.020)	(0.018)
has kid(s)	0.028**	0.028**	0.028**
	(0.006)	(0.006)	(0.005)
manager duties	0.108**	0.105**	0.104**
	(0.008)	(0.008)	(0.007)
education = 1	0.267**	0.265**	0.263**
	(0.020)	(0.020)	(0.020)
education = 2	0.093**	0.093**	0.089**
	(0.015)	(0.015)	(0.014)
education = 4	-0.031**	-0.033**	-0.035**
	(0.006)	(0.005)	(0.005)
education = 5	-0.094**	-0.095**	-0.097**
	(0.010)	(0.010)	(0.009)
education = 6	-0.140**	-0.136**	-0.135**
	(0.010)	(0.010)	(0.009)
education = 7	-0.052	-0.065*	-0.072**
	(0.032)	(0.029)	(0.027)
apprenticeship	-0.235**	-0.204**	-0.218**
	(0.032)	(0.028)	(0.030)
ever overtime	0.041**	0.041**	0.039**
	(0.007)	(0.007)	(0.007)
industry = 1	-0.190**	-0.180**	-0.188**
	(0.024)	(0.029)	(0.028)
industry = 2	0.144**	0.131**	0.130**
	(0.020)	(0.019)	(0.015)
industry = 4	0.094**	0.079**	0.066**
	(0.021)	(0.020)	(0.021)
industry = 5	-0.026	-0.016	-0.008
	(0.019)	(0.019)	(0.018)
industry = 6	-0.145**	-0.140**	-0.133**
	(0.019)	(0.019)	(0.017)
industry = 7	-0.210**	-0.201**	-0.197**
	(0.075)	(0.071)	(0.074)
industry = 8	-0.003	0.000	-0.001
	(0.017)	(0.014)	(0.015)
industry = 9	0.117**	0.120**	0.117**
	(0.037)	(0.035)	(0.032)
industry = 10	-0.002	0.007	0.012
	(0.023)	(0.024)	(0.023)
industry = 11	-0.014	-0.012	-0.015
	(0.021)	(0.021)	(0.020)
industry = 12	-0.076**	-0.070**	-0.068**
	(0.022)	(0.022)	(0.022)
industry = 13	-0.139**	-0.135**	-0.134**
	(0.037)	(0.039)	(0.038)
industry = 14	-0.222**	-0.190**	-0.187**
	(0.029)	(0.034)	(0.032)
industry = 15	0.098	0.107*	0.016
	(0.050)	(0.041)	(0.060)
work arr. = 1	-0.013	-0.014	-0.017
	(0.012)	(0.012)	(0.012)
work arr. = 2	0.010	0.010	0.002
	(0.016)	(0.014)	(0.014)
work arr. = 3	-0.067*	-0.060*	-0.055
	(0.032)	(0.029)	(0.030)
work arr. = 4	0.008	0.005	0.024
	(0.032)	(0.032)	(0.033)
work arr. = 5	0.009	0.015	0.016
	(0.035)	(0.034)	(0.032)

Continued on next page...

... table 15 continued

	Aut. 1998	Aut. 1999	Aut. 2000
work arr. = 6	-0.062**	-0.062**	-0.055**
	(0.008)	(0.008)	(0.007)
work arr. = 8	-0.008	-0.013	-0.011
	(0.034)	(0.033)	(0.032)
union member	0.029	0.026	0.028*
	(0.014)	(0.014)	(0.013)
6 days per week	-0.046**	-0.053**	-0.054**
	(0.013)	(0.013)	(0.014)
7 days per week	-0.024	-0.020	-0.019
	(0.019)	(0.018)	(0.018)
region = 1	-0.131**	-0.129**	-0.130**
	(0.016)	(0.014)	(0.014)
region = 2	-0.117**	-0.113**	-0.116**
	(0.021)	(0.019)	(0.018)
region = 3	-0.101**	-0.106**	-0.115**
	(0.017)	(0.015)	(0.015)
region = 4	-0.109**	-0.105**	-0.104**
	(0.013)	(0.012)	(0.011)
region = 5	-0.123**	-0.127**	-0.128**
	(0.017)	(0.015)	(0.014)
region = 6	-0.119**	-0.113**	-0.111**
	(0.014)	(0.014)	(0.013)
region = 7	-0.093**	-0.087**	-0.087**
	(0.013)	(0.012)	(0.011)
region = 8	0.265**	0.271**	0.268**
	(0.024)	(0.023)	(0.022)
region = 9	0.116**	0.118**	0.118**
	(0.018)	(0.016)	(0.015)
region = 11	0.064**	0.063**	0.057**
	(0.015)	(0.013)	(0.013)
region = 13	-0.107**	-0.098**	-0.101**
	(0.012)	(0.011)	(0.011)
region = 14	-0.073**	-0.073**	-0.077**
	(0.012)	(0.011)	(0.011)
region = 15	-0.110**	-0.107**	-0.106**
	(0.013)	(0.012)	(0.011)
region = 16	-0.091**	-0.090**	-0.094**
	(0.010)	(0.009)	(0.010)
region = 17	-0.119**	-0.116**	-0.113**
	(0.016)	(0.014)	(0.013)
region = 18	-0.106**	-0.102**	-0.105**
	(0.013)	(0.012)	(0.011)
region = 19	-0.124**	-0.123**	-0.127**
	(0.015)	(0.015)	(0.015)
region = 20	-0.116**	-0.115**	-0.115**
	(0.014)	(0.012)	(0.011)
region = 21	-0.111**	-0.108**	-0.111**
	(0.012)	(0.010)	(0.009)
region = 22	-0.152**	-0.151**	-0.158**
	(0.026)	(0.023)	(0.022)
occ. = 2	-0.005	-0.005	-0.008
	(0.028)	(0.028)	(0.028)
occ. = 3	-0.084**	-0.087**	-0.096**
	(0.020)	(0.020)	(0.019)
occ. = 4	-0.244**	-0.254**	-0.265**
	(0.024)	(0.023)	(0.022)
occ. = 5	-0.271**	-0.278**	-0.286**
	(0.021)	(0.021)	(0.021)
occ. = 6	-0.311**	-0.318**	-0.328**

Continued on next page...

... table 15 continued

	Aut. 1998	Aut. 1999	Aut. 2000
	(0.025)	(0.025)	(0.024)
occ. = 7	-0.307**	-0.304**	-0.311**
	(0.035)	(0.034)	(0.031)
occ. = 8	-0.336**	-0.339**	-0.348**
	(0.024)	(0.025)	(0.024)
occ. = 9	-0.372**	-0.376**	-0.383**
	(0.029)	(0.029)	(0.029)
occ. = 10	-0.317**	-0.319**	-0.309**
	(0.021)	(0.020)	(0.023)
size 11–19	-0.034**	-0.034**	-0.038**
	(0.008)	(0.008)	(0.008)
size 20–24	-0.023	-0.023	-0.023*
	(0.013)	(0.012)	(0.011)
size < 25	-0.062*	-0.059**	-0.056*
	(0.026)	(0.022)	(0.022)
size 25–49	-0.012	-0.013	-0.012
	(0.008)	(0.008)	(0.008)
missing size	-0.068	-0.043	-0.078
	(0.096)	(0.071)	(0.082)
intercept	1.667**	1.641**	1.639**
	(0.194)	(0.194)	(0.191)
Observations	35,951	44,012	51,984
R^2	0.579	0.589	0.598

Standard errors (clustered at the industry×occupation level) in parentheses.

Dependent variable: log hourly wage (surveyed only in entry and exit interview).

Data source: UK Labour Force Survey

Observations only from individuals that entered the LFS on or before Aut. 1998 (1st column), 1999 (2nd), 2000 (3rd).

Table 16: Wage regression—propensity score selected sample—Full table

	Aut. 1998	Aut. 1999	Aut. 2000
base: no paid leave	-0.092**	-0.097**	-0.103**
	(0.022)	(0.022)	(0.021)
base: 1–14 days	-0.130**	-0.133**	-0.137**
	(0.015)	(0.015)	(0.015)
base: 15–19 day	-0.111**	-0.109**	-0.110**
	(0.014)	(0.013)	(0.013)
treated: no paid lve	0.019	0.064*	0.072*
	(0.031)	(0.028)	(0.029)
treated: 1–14 days	0.067*	0.092**	0.098**
	(0.030)	(0.024)	(0.022)
treated: 15–19 day		0.054**	0.061**
		(0.015)	(0.013)
female	-0.166**	-0.153**	-0.149**
	(0.017)	(0.015)	(0.014)
age	0.046**	0.046**	0.045**
	(0.003)	(0.003)	(0.003)
age squared	-0.001**	-0.001**	-0.001**
	(0.000)	(0.000)	(0.000)
tenure	0.006**	0.006**	0.005**
	(0.001)	(0.001)	(0.001)
tenure squared	-0.000**	-0.000**	-0.000*
	(0.000)	(0.000)	(0.000)
below min. wage 3	-0.120*	-0.119*	-0.095*
	(0.050)	(0.046)	(0.041)
below min. wage 6	0.019	0.020	0.020
	(0.056)	(0.056)	(0.056)
below min. wage 9	-0.249**	-0.221**	-0.230**
	(0.048)	(0.050)	(0.050)
below min. wage 12	-0.310**	-0.344**	-0.339**
	(0.035)	(0.020)	(0.020)
48+ hours	-0.008**	-0.008**	-0.007**
	(0.001)	(0.001)	(0.001)
base quarter +12	-0.001	-0.001	-0.004
	(0.005)	(0.004)	(0.004)
year = 1995	-0.244**	-0.232**	-0.222**
	(0.035)	(0.032)	(0.031)
year = 1996	-0.213**	-0.200**	-0.188**
	(0.036)	(0.034)	(0.033)
year = 1997	-0.175**	-0.163**	-0.154**
	(0.032)	(0.031)	(0.029)
year = 1998	-0.067*	-0.054	-0.044
	(0.031)	(0.030)	(0.028)
year = 1999	-0.033	-0.025	-0.018
	(0.033)	(0.031)	(0.029)
year = 2000		0.013	0.019
		(0.031)	(0.029)
year == 2001			0.078**
			(0.028)
full-time	-0.059**	-0.058**	-0.052**
	(0.012)	(0.012)	(0.011)
private company	0.042**	0.042**	0.039**
	(0.012)	(0.013)	(0.012)
married	0.028**	0.030**	0.027**
	(0.008)	(0.007)	(0.006)
foreign	0.031	0.037	0.027
	(0.027)	(0.024)	(0.021)

Continued on next page...

... table 16 continued

	Aut. 1998	Aut. 1999	Aut. 2000
has kid(s)	0.015	0.016*	0.018**
	(0.008)	(0.007)	(0.006)
manager duties	0.096**	0.091**	0.089**
	(0.009)	(0.008)	(0.007)
education = 1	0.191**	0.198**	0.192**
	(0.028)	(0.028)	(0.028)
education = 2	0.086**	0.086**	0.083**
	(0.017)	(0.016)	(0.015)
education = 4	-0.032**	-0.034**	-0.038**
	(0.007)	(0.007)	(0.006)
education = 5	-0.085**	-0.085**	-0.087**
	(0.012)	(0.012)	(0.011)
education = 6	-0.122**	-0.117**	-0.115**
	(0.010)	(0.010)	(0.009)
education = 7	-0.074	-0.076*	-0.084**
	(0.039)	(0.034)	(0.030)
apprenticeship	-0.290**	-0.261**	-0.273**
	(0.030)	(0.031)	(0.034)
ever overtime	0.038**	0.037**	0.034**
	(0.008)	(0.007)	(0.007)
industry = 1	-0.177**	-0.162**	-0.167**
	(0.022)	(0.023)	(0.025)
industry = 2	0.145**	0.130**	0.133**
	(0.026)	(0.024)	(0.018)
industry = 4	0.166**	0.099*	0.076
	(0.051)	(0.041)	(0.045)
industry = 5	0.028	0.035	0.040
	(0.024)	(0.023)	(0.022)
industry = 6	-0.123**	-0.121**	-0.117**
	(0.012)	(0.012)	(0.011)
industry = 7	-0.199**	-0.191**	-0.187**
	(0.059)	(0.057)	(0.058)
industry = 8	-0.008	-0.010	-0.011
	(0.017)	(0.014)	(0.016)
industry = 9	0.048	0.053	0.054
	(0.033)	(0.034)	(0.029)
industry = 10	0.004	0.013	0.019
	(0.031)	(0.033)	(0.032)
industry = 11	-0.082**	-0.082**	-0.099**
	(0.022)	(0.021)	(0.019)
industry = 12	-0.100**	-0.099**	-0.102**
	(0.023)	(0.022)	(0.023)
industry = 13	-0.134**	-0.131**	-0.125**
	(0.030)	(0.031)	(0.030)
industry = 14	-0.220**	-0.194**	-0.184**
	(0.029)	(0.042)	(0.038)
industry = 15	-0.200**	-0.193**	-0.239**
	(0.036)	(0.038)	(0.016)
work arr. = 1	0.019	0.025*	0.026**
	(0.012)	(0.010)	(0.009)
work arr. = 2	0.010	0.011	0.004
	(0.021)	(0.017)	(0.017)
work arr. = 3	-0.053*	-0.053**	-0.048*
	(0.023)	(0.020)	(0.020)
work arr. = 4	-0.000	-0.017	0.005
	(0.030)	(0.024)	(0.028)
work arr. = 5	-0.014	-0.062	-0.062
	(0.107)	(0.094)	(0.094)
work arr. = 6	-0.059**	-0.065**	-0.057**

Continued on next page...

... table 16 continued

	Aut. 1998	Aut. 1999	Aut. 2000
	(0.008)	(0.008)	(0.007)
work arr. = 8	0.015	0.005	0.002
	(0.040)	(0.039)	(0.038)
union member	0.083**	0.080**	0.082**
	(0.014)	(0.013)	(0.012)
6 days per week	-0.031*	-0.035**	-0.034*
	(0.014)	(0.013)	(0.013)
7 days per week	0.000	0.005	0.007
	(0.018)	(0.017)	(0.016)
region = 1	-0.116**	-0.119**	-0.121**
	(0.022)	(0.020)	(0.022)
region = 2	-0.148**	-0.135**	-0.136**
	(0.027)	(0.024)	(0.022)
region = 3	-0.105**	-0.111**	-0.117**
	(0.023)	(0.019)	(0.018)
region = 4	-0.131**	-0.119**	-0.117**
	(0.016)	(0.014)	(0.013)
region = 5	-0.136**	-0.133**	-0.133**
	(0.023)	(0.021)	(0.020)
region = 6	-0.110**	-0.107**	-0.107**
	(0.016)	(0.014)	(0.013)
region = 7	-0.094**	-0.087**	-0.087**
	(0.020)	(0.017)	(0.015)
region = 8	0.253**	0.251**	0.246**
	(0.029)	(0.027)	(0.028)
region = 9	0.098**	0.099**	0.099**
	(0.027)	(0.025)	(0.023)
region = 11	0.051*	0.052**	0.044**
	(0.020)	(0.018)	(0.016)
region = 13	-0.121**	-0.111**	-0.114**
	(0.017)	(0.014)	(0.013)
region = 14	-0.082**	-0.076**	-0.077**
	(0.016)	(0.016)	(0.015)
region = 15	-0.112**	-0.111**	-0.107**
	(0.017)	(0.014)	(0.012)
region = 16	-0.095**	-0.090**	-0.093**
	(0.016)	(0.014)	(0.014)
region = 17	-0.156**	-0.149**	-0.145**
	(0.026)	(0.021)	(0.019)
region = 18	-0.101**	-0.100**	-0.102**
	(0.017)	(0.016)	(0.014)
region = 19	-0.108**	-0.111**	-0.114**
	(0.018)	(0.017)	(0.016)
region = 20	-0.132**	-0.125**	-0.124**
	(0.018)	(0.016)	(0.015)
region = 21	-0.106**	-0.106**	-0.110**
	(0.016)	(0.015)	(0.013)
region = 22	-0.168**	-0.170**	-0.174**
	(0.034)	(0.030)	(0.027)
occ. = 2	0.019	0.026	0.026
	(0.052)	(0.056)	(0.054)
occ. = 3	-0.045	-0.052	-0.056
	(0.030)	(0.033)	(0.032)
occ. = 4	-0.184**	-0.202**	-0.212**
	(0.032)	(0.033)	(0.031)
occ. = 5	-0.221**	-0.231**	-0.238**
	(0.029)	(0.030)	(0.029)
occ. = 6	-0.271**	-0.284**	-0.286**
	(0.034)	(0.035)	(0.034)

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... table 16 continued

	Aut. 1998	Aut. 1999	Aut. 2000
occ. = 7	-0.271**	-0.271**	-0.276**
	(0.032)	(0.033)	(0.031)
occ. = 8	-0.300**	-0.306**	-0.314**
	(0.029)	(0.031)	(0.030)
occ. = 9	-0.328**	-0.336**	-0.344**
	(0.037)	(0.038)	(0.038)
occ. = 10	-0.471**	-0.479**	-0.469**
	(0.032)	(0.033)	(0.032)
size 11–19	-0.012	-0.014	-0.016
	(0.010)	(0.008)	(0.009)
size 20–24	-0.012	-0.012	-0.011
	(0.017)	(0.016)	(0.014)
size < 25	-0.046	-0.046*	-0.039
	(0.027)	(0.023)	(0.022)
size 25–49	-0.002	-0.001	0.003
	(0.010)	(0.010)	(0.010)
missing size	-0.013	0.005	-0.045
	(0.074)	(0.052)	(0.079)
intercept	1.385**	1.369**	1.377**
	(0.072)	(0.069)	(0.060)
Observations	18,389	22,546	26,737
R^2	0.473	0.490	0.506

Standard errors (clustered at the industry×occupation level) in parentheses.

Dependent variable: log hourly wage (surveyed only in entry and exit interview).

Data source: UK Labour Force Survey

Observations only from individuals that entered the LFS on or before Aut. 1998 (1st column), 1999 (2nd), 2000 (3rd).

Table 17: Robustness check excluding employees with less than 2 years of tenure: exit to non-employment—Full table

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
base: no paid leave	1.430**	1.435**	1.426**	1.419**	1.427**	1.406**
	(0.074)	(0.076)	(0.072)	(0.086)	(0.089)	(0.086)
base: 1–14 days	0.564**	0.563**	0.561**	0.558**	0.560**	0.557**
	(0.071)	(0.070)	(0.067)	(0.077)	(0.076)	(0.072)
base: 15–19 day	0.179*	0.183*	0.186**	0.169*	0.180*	0.186*
	(0.072)	(0.072)	(0.071)	(0.082)	(0.082)	(0.083)
treated: no paid lve	-0.148	-0.047	0.059	-0.138	-0.016	0.087
	(0.150)	(0.134)	(0.122)	(0.171)	(0.156)	(0.147)
treated: 1–14 days	-0.347	0.074	0.127	-0.305	0.076	0.132
	(0.195)	(0.141)	(0.126)	(0.216)	(0.156)	(0.141)
treated: 15–19 day		0.036	0.106		-0.073	-0.036
		(0.142)	(0.119)		(0.157)	(0.120)
female	0.155**	0.163**	0.168**	0.116	0.122*	0.151*
	(0.047)	(0.047)	(0.048)	(0.064)	(0.060)	(0.062)
age	-0.145**	-0.149**	-0.153**	-0.110**	-0.114**	-0.120**
	(0.011)	(0.010)	(0.010)	(0.015)	(0.014)	(0.013)
age squared	0.002**	0.002**	0.002**	0.001**	0.001**	0.002**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
tenure	-0.041**	-0.041**	-0.038**	-0.034**	-0.038**	-0.034**
	(0.005)	(0.005)	(0.005)	(0.007)	(0.007)	(0.006)
tenure squared	0.001**	0.001**	0.001**	0.001**	0.001**	0.001**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
below min. wage 3		0.060	0.263		-0.061	0.108
		(0.188)	(0.180)		(0.197)	(0.180)
below min. wage 6	0.024	0.013	0.005	0.193	0.183	0.175
	(0.256)	(0.258)	(0.260)	(0.286)	(0.284)	(0.288)
below min. wage 9	0.057	0.561	0.069	-0.005	0.483	0.105
	(0.233)	(0.780)	(0.317)	(0.264)	(0.785)	(0.361)
below min. wage 12		-0.580	-0.123		-0.557	-0.208
		(0.710)	(0.227)		(0.710)	(0.261)
48+ hours	0.008*	0.008**	0.009**	0.007*	0.007*	0.009**
	(0.004)	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)
baseline haz. +6	0.038	-0.001	0.012	0.003	-0.067	-0.061
	(0.038)	(0.039)	(0.035)	(0.053)	(0.050)	(0.048)
baseline haz. +9	0.043	0.032	0.046	-0.032	-0.066	-0.066
	(0.040)	(0.034)	(0.034)	(0.052)	(0.048)	(0.046)
baseline haz. +12	-0.095	-0.072	-0.082	-0.154*	-0.160*	-0.175**
	(0.064)	(0.062)	(0.061)	(0.075)	(0.066)	(0.063)
year = 1995	-0.034	-0.035	-0.034	-0.072	-0.072	-0.069
	(0.050)	(0.050)	(0.049)	(0.056)	(0.056)	(0.055)
year = 1996	-0.065	-0.069	-0.068	-0.156**	-0.161**	-0.158**
	(0.045)	(0.045)	(0.046)	(0.055)	(0.056)	(0.056)
year = 1997	-0.163**	-0.165**	-0.165**	-0.170**	-0.172**	-0.171**
	(0.048)	(0.048)	(0.049)	(0.054)	(0.055)	(0.054)
year = 1998	-0.148*	-0.176**	-0.184**	-0.170*	-0.215**	-0.230**
	(0.060)	(0.063)	(0.063)	(0.076)	(0.079)	(0.078)
year = 1999		-0.174*	-0.201**		-0.187*	-0.220**
		(0.073)	(0.074)		(0.087)	(0.084)
year = 2000			-0.127			-0.142
			(0.065)			(0.089)
full-time	0.051	0.076	0.102*	0.095	0.122*	0.145**
	(0.056)	(0.051)	(0.049)	(0.064)	(0.056)	(0.055)
private company	-0.323**	-0.363**	-0.358**	-0.187	-0.221	-0.231*
	(0.083)	(0.079)	(0.080)	(0.133)	(0.120)	(0.112)
married	-0.010	0.001	0.011	-0.050	-0.031	-0.018

Continued on next page...

... table 17 continued

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
	(0.055)	(0.052)	(0.044)	(0.065)	(0.058)	(0.052)
foreign	0.212*	0.158*	0.163*	0.201*	0.151	0.175*
	(0.085)	(0.077)	(0.077)	(0.090)	(0.080)	(0.082)
has kid(s)	0.171**	0.154**	0.145**	0.184**	0.158**	0.167**
	(0.046)	(0.039)	(0.036)	(0.061)	(0.051)	(0.045)
manager duties	-0.004	-0.004	-0.001	-0.015	-0.010	-0.025
	(0.046)	(0.041)	(0.038)	(0.060)	(0.050)	(0.050)
education = 1	-0.121*	-0.067	-0.022	-0.247	-0.128	-0.023
	(0.053)	(0.052)	(0.047)	(0.135)	(0.104)	(0.091)
education = 2	-0.139	-0.151*	-0.120	-0.128	-0.182	-0.135
	(0.078)	(0.075)	(0.071)	(0.101)	(0.105)	(0.100)
education = 4	0.028	0.044	0.038	-0.135*	-0.110*	-0.084
	(0.049)	(0.043)	(0.042)	(0.062)	(0.051)	(0.050)
education = 5	-0.006	0.005	0.028	-0.073	-0.051	-0.024
	(0.056)	(0.050)	(0.045)	(0.070)	(0.070)	(0.064)
education = 6	0.156**	0.163**	0.158**	0.143**	0.163**	0.173**
	(0.044)	(0.043)	(0.044)	(0.054)	(0.056)	(0.054)
education = 7	-0.466*	-0.252	-0.178	-0.423	-0.286	-0.142
	(0.222)	(0.254)	(0.212)	(0.262)	(0.267)	(0.212)
apprenticeship	-0.274	-0.219	-0.277	-0.294	-0.237	-0.301
	(0.248)	(0.228)	(0.179)	(0.262)	(0.234)	(0.179)
ever overtime	-0.392**	-0.377**	-0.397**	-0.358**	-0.340**	-0.366**
	(0.038)	(0.035)	(0.036)	(0.063)	(0.055)	(0.053)
industry = 1	-0.029	-0.112	-0.174	0.022	-0.052	-0.119
	(0.108)	(0.118)	(0.138)	(0.137)	(0.151)	(0.177)
industry = 2	-0.055	-0.144	-0.160	-0.304	-0.326	-0.293
	(0.197)	(0.195)	(0.174)	(0.223)	(0.216)	(0.177)
industry = 4	0.465*	0.434*	0.369*	0.200	0.030	0.153
	(0.199)	(0.187)	(0.158)	(0.457)	(0.440)	(0.284)
industry = 5	0.378**	0.289**	0.221*	0.363**	0.286**	0.238*
	(0.099)	(0.104)	(0.102)	(0.107)	(0.109)	(0.099)
industry = 6	0.014	-0.050	-0.094**	-0.050	-0.109**	-0.130**
	(0.043)	(0.032)	(0.033)	(0.043)	(0.035)	(0.040)
industry = 7	0.091	0.049	-0.007	0.002	-0.022	-0.064
	(0.119)	(0.110)	(0.096)	(0.112)	(0.107)	(0.096)
industry = 8	0.033	-0.025	-0.046	0.029	0.005	0.021
	(0.075)	(0.069)	(0.076)	(0.078)	(0.064)	(0.048)
industry = 9	0.104	0.076	0.079	-0.055	0.022	0.032
	(0.069)	(0.060)	(0.062)	(0.217)	(0.175)	(0.175)
industry = 10	0.090	0.092	0.040	0.043	0.054	-0.004
	(0.070)	(0.067)	(0.066)	(0.075)	(0.070)	(0.066)
industry = 11	0.100	0.079	0.009	-0.088	-0.087	-0.135
	(0.096)	(0.089)	(0.090)	(0.221)	(0.206)	(0.174)
industry = 12	-0.069	-0.087	-0.131	-0.069	-0.076	-0.147
	(0.090)	(0.083)	(0.072)	(0.096)	(0.093)	(0.081)
industry = 13	0.131	0.124	0.106	0.043	0.034	0.050
	(0.082)	(0.071)	(0.059)	(0.068)	(0.064)	(0.055)
industry = 14	0.159	0.185	0.096	0.216	0.240	0.144
	(0.234)	(0.181)	(0.130)	(0.193)	(0.149)	(0.113)
industry = 15	-0.386**	-0.507**	-0.638**			
	(0.067)	(0.056)	(0.048)			
work arr. = 1	-0.064	-0.090	-0.079	-0.082	-0.117	-0.057
	(0.060)	(0.054)	(0.051)	(0.104)	(0.096)	(0.091)
work arr. = 2	-0.022	-0.110	-0.095	0.065	-0.031	-0.056
	(0.103)	(0.097)	(0.090)	(0.141)	(0.140)	(0.127)
work arr. = 3	-0.330	-0.343	-0.405*	-0.561**	-0.552**	-0.593**
	(0.205)	(0.195)	(0.177)	(0.187)	(0.172)	(0.160)
work arr. = 4	-0.453	-0.593	-0.422	-0.556	-0.702	-0.482

Continued on next page...

... table 17 continued

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
	(0.370)	(0.387)	(0.331)	(0.410)	(0.426)	(0.354)
work arr. = 5	0.277	0.172	0.093	0.616	0.476	0.352
	(0.197)	(0.202)	(0.198)	(0.329)	(0.322)	(0.324)
work arr. = 6	0.004	-0.013	-0.030	0.054	0.046	0.016
	(0.074)	(0.081)	(0.083)	(0.141)	(0.143)	(0.145)
work arr. = 8	0.119	0.215	0.177	0.067	0.122	0.084
	(0.248)	(0.187)	(0.187)	(0.291)	(0.223)	(0.224)
union member	-0.057	-0.049	-0.079*	-0.007	0.003	-0.029
	(0.039)	(0.037)	(0.036)	(0.063)	(0.054)	(0.049)
6 days per week	-0.072	-0.061	-0.071	-0.076	-0.063	-0.069
	(0.054)	(0.049)	(0.051)	(0.056)	(0.054)	(0.054)
7 days per week	0.062	0.048	0.073	0.082	0.053	0.074
	(0.072)	(0.068)	(0.061)	(0.077)	(0.075)	(0.069)
region = 1	0.123	0.076	0.098	0.078	0.001	0.021
	(0.114)	(0.098)	(0.086)	(0.154)	(0.141)	(0.109)
region = 2	-0.144	-0.172	-0.124	-0.112	-0.126	-0.113
	(0.113)	(0.111)	(0.102)	(0.168)	(0.166)	(0.162)
region = 3	-0.010	-0.005	-0.042	-0.091	-0.049	-0.096
	(0.115)	(0.090)	(0.079)	(0.152)	(0.126)	(0.111)
region = 4	-0.058	-0.074	-0.086	-0.026	-0.085	-0.127
	(0.105)	(0.090)	(0.086)	(0.123)	(0.112)	(0.105)
region = 5	0.009	-0.034	-0.046	-0.007	-0.007	-0.036
	(0.101)	(0.096)	(0.093)	(0.125)	(0.115)	(0.106)
region = 6	-0.103	-0.109	-0.086	-0.085	-0.088	-0.080
	(0.071)	(0.066)	(0.069)	(0.090)	(0.088)	(0.091)
region = 7	-0.096	-0.140	-0.163	-0.148	-0.172	-0.218*
	(0.111)	(0.097)	(0.095)	(0.118)	(0.104)	(0.094)
region = 8	0.189*	0.159*	0.137	0.268	0.212	0.207
	(0.086)	(0.077)	(0.072)	(0.182)	(0.164)	(0.146)
region = 9	0.227	0.227	0.181	0.232	0.214	0.150
	(0.133)	(0.121)	(0.110)	(0.165)	(0.157)	(0.144)
region = 11	0.033	0.048	-0.030	0.064	0.072	-0.019
	(0.093)	(0.084)	(0.076)	(0.100)	(0.090)	(0.084)
region = 13	-0.003	-0.002	-0.027	-0.014	-0.012	-0.052
	(0.067)	(0.062)	(0.059)	(0.086)	(0.089)	(0.077)
region = 14	-0.119	-0.124*	-0.128*	-0.115	-0.110	-0.139*
	(0.065)	(0.063)	(0.056)	(0.076)	(0.069)	(0.063)
region = 15	-0.204*	-0.137	-0.166*	-0.204	-0.160	-0.194*
	(0.090)	(0.076)	(0.069)	(0.111)	(0.102)	(0.089)
region = 16	0.107	0.098	0.065	0.126	0.135	0.067
	(0.087)	(0.084)	(0.078)	(0.111)	(0.108)	(0.106)
region = 17	-0.033	0.004	0.005	-0.432	-0.377	-0.355
	(0.143)	(0.134)	(0.124)	(0.233)	(0.215)	(0.191)
region = 18	-0.059	-0.042	-0.078	-0.077	-0.050	-0.104
	(0.085)	(0.083)	(0.076)	(0.100)	(0.086)	(0.085)
region = 19	-0.140	-0.113	-0.102	-0.179	-0.157	-0.166
	(0.097)	(0.092)	(0.090)	(0.136)	(0.133)	(0.123)
region = 20	-0.108	-0.113	-0.093	-0.176	-0.134	-0.143
	(0.092)	(0.092)	(0.087)	(0.119)	(0.106)	(0.091)
region = 21	-0.042	-0.058	-0.076	-0.054	-0.047	-0.088
	(0.080)	(0.073)	(0.068)	(0.096)	(0.086)	(0.081)
region = 22	-0.068	-0.074	-0.110	-0.050	-0.057	-0.147
	(0.108)	(0.110)	(0.093)	(0.120)	(0.128)	(0.113)
occ. = 2	0.007	0.003	-0.018	-0.054	-0.059	-0.046
	(0.079)	(0.077)	(0.083)	(0.112)	(0.118)	(0.126)
occ. = 3	-0.076	-0.081	-0.047	-0.039	-0.051	-0.046
	(0.063)	(0.060)	(0.052)	(0.090)	(0.093)	(0.080)
occ. = 4	-0.276**	-0.278**	-0.290**	-0.296**	-0.299**	-0.339**

Continued on next page...

... table 17 continued

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
	(0.078)	(0.070)	(0.064)	(0.112)	(0.099)	(0.090)
occ. = 5	-0.088	-0.044	-0.041	-0.129	-0.075	-0.052
	(0.074)	(0.072)	(0.069)	(0.100)	(0.099)	(0.095)
occ. = 6	-0.159	-0.186	-0.193*	-0.302*	-0.329**	-0.329**
	(0.124)	(0.108)	(0.098)	(0.121)	(0.118)	(0.103)
occ. = 7	-0.140	-0.122	-0.118	-0.155	-0.130	-0.164*
	(0.080)	(0.070)	(0.070)	(0.092)	(0.083)	(0.079)
occ. = 8	-0.090	-0.102	-0.085	-0.160	-0.176*	-0.161*
	(0.064)	(0.058)	(0.054)	(0.092)	(0.086)	(0.079)
occ. = 9	-0.103	-0.108	-0.100	-0.121	-0.127	-0.136
	(0.078)	(0.072)	(0.068)	(0.096)	(0.090)	(0.083)
occ. = 10	-0.481**	-0.088	-0.070	-0.282**	-0.285**	-0.278**
	(0.066)	(0.061)	(0.056)	(0.097)	(0.093)	(0.088)
size 11–19	-0.022	-0.085	-0.083	-0.051	-0.124	-0.114
	(0.070)	(0.065)	(0.059)	(0.089)	(0.082)	(0.073)
size 20–24	-0.158*	-0.155*	-0.134	-0.225*	-0.204	-0.202*
	(0.079)	(0.077)	(0.074)	(0.107)	(0.106)	(0.099)
size < 25	0.062	0.017	-0.009	0.039	-0.015	-0.028
	(0.150)	(0.133)	(0.128)	(0.164)	(0.139)	(0.126)
size 25–49	-0.059	-0.036	-0.039	-0.111	-0.100	-0.115
	(0.052)	(0.047)	(0.045)	(0.068)	(0.062)	(0.065)
missing size	0.163	0.057	-0.035	0.182	0.064	-0.034
	(0.343)	(0.328)	(0.313)	(0.399)	(0.380)	(0.368)
baseline haz. +3	-1.399**	-1.302**	-1.172**	-1.644**	-1.532**	-1.406**
	(0.204)	(0.194)	(0.176)	(0.243)	(0.235)	(0.218)
Observations	236,106	278,953	319,148	102,552	121,790	139,467

Standard errors (clustered at the industry×occupation level) in parentheses.

Dependent variable: exit from dependent employment (upper panel); log hourly wage (surveyed only in entry and exit interview, lower panel).

Data source: UK Labour Force Survey

Observations only from individuals that entered the LFS on or before Aut. 1998 (1st/4th column), 1999 (2nd/5th), 2000 (3rd/6th).

Table 18: Robustness check excluding employees with less than 2 years of tenure: wage regression—Full table

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
base: no paid leave	-0.134**	-0.143**	-0.146**	-0.107**	-0.115**	-0.120**
	(0.033)	(0.033)	(0.033)	(0.032)	(0.032)	(0.032)
base: 1–14 days	-0.160**	-0.166**	-0.169**	-0.134**	-0.139**	-0.143**
	(0.018)	(0.018)	(0.018)	(0.016)	(0.015)	(0.015)
base: 15–19 day	-0.124**	-0.126**	-0.128**	-0.112**	-0.110**	-0.112**
	(0.017)	(0.017)	(0.017)	(0.016)	(0.016)	(0.016)
treated: no paid lve	0.125**	0.179**	0.165**	0.080	0.132**	0.127**
	(0.039)	(0.039)	(0.037)	(0.040)	(0.039)	(0.040)
treated: 1–14 days	0.099**	0.140**	0.147**	0.057	0.095**	0.106**
	(0.036)	(0.028)	(0.027)	(0.036)	(0.028)	(0.027)
treated: 15–19 day		0.069**	0.068**		0.063**	0.062**
		(0.019)	(0.019)		(0.019)	(0.018)
female	-0.171**	-0.161**	-0.156**	-0.179**	-0.163**	-0.158**
	(0.015)	(0.015)	(0.014)	(0.018)	(0.017)	(0.016)
age	0.038**	0.038**	0.038**	0.041**	0.040**	0.040**
	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
age squared	-0.000**	-0.000**	-0.000**	-0.000**	-0.000**	-0.000**
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
tenure	0.010**	0.009**	0.009**	0.007**	0.006**	0.005**
	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)
tenure squared	-0.000**	-0.000**	-0.000**	-0.000**	-0.000**	-0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
below min. wage 3	-0.182**	-0.195**	-0.135*	-0.162**	-0.153**	-0.120*
	(0.061)	(0.059)	(0.055)	(0.058)	(0.054)	(0.051)
below min. wage 6	0.047	0.047	0.047	0.028	0.030	0.030
	(0.076)	(0.076)	(0.076)	(0.071)	(0.070)	(0.070)
below min. wage 9	-0.340**	-0.329**	-0.334**	-0.267**	-0.230**	-0.243**
	(0.079)	(0.079)	(0.080)	(0.058)	(0.059)	(0.061)
below min. wage 12	-0.358**	-0.378**	-0.375**	-0.302**	-0.349**	-0.341**
	(0.050)	(0.026)	(0.026)	(0.038)	(0.023)	(0.022)
48+ hours	-0.006**	-0.006**	-0.005**	-0.009**	-0.008**	-0.008**
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
base quarter +12	-0.002	-0.006	-0.008*	-0.005	-0.007	-0.010*
	(0.004)	(0.004)	(0.003)	(0.005)	(0.005)	(0.004)
year = 1995	-0.441**	-0.420**	-0.404*	-0.272**	-0.259**	-0.241**
	(0.157)	(0.158)	(0.159)	(0.038)	(0.036)	(0.035)
year = 1996	-0.400*	-0.379*	-0.363*	-0.242**	-0.228**	-0.209**
	(0.158)	(0.159)	(0.160)	(0.039)	(0.038)	(0.036)
year = 1997	-0.361*	-0.343*	-0.328*	-0.203**	-0.190**	-0.175**
	(0.160)	(0.161)	(0.162)	(0.036)	(0.035)	(0.033)
year = 1998	-0.284	-0.266	-0.251	-0.087*	-0.073*	-0.057
	(0.159)	(0.160)	(0.161)	(0.035)	(0.034)	(0.031)
year = 1999	-0.260	-0.243	-0.231	-0.061	-0.053	-0.040
	(0.159)	(0.160)	(0.161)	(0.035)	(0.034)	(0.031)
year = 2000		-0.204	-0.191		-0.010	0.003
		(0.160)	(0.161)		(0.036)	(0.032)
year == 2001			-0.131			0.053
			(0.164)			(0.031)
full-time	-0.039**	-0.039**	-0.038**	-0.058**	-0.060**	-0.054**
	(0.011)	(0.010)	(0.010)	(0.013)	(0.012)	(0.011)
private company	-0.001	-0.007	-0.009	0.045**	0.047**	0.040**
	(0.013)	(0.014)	(0.014)	(0.014)	(0.015)	(0.015)
married	0.024**	0.025**	0.025**	0.024**	0.025**	0.023**
	(0.005)	(0.005)	(0.004)	(0.008)	(0.007)	(0.006)
foreign	0.027	0.032	0.026	0.036	0.042	0.031

Continued on next page...

... table 18 continued

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
	(0.027)	(0.024)	(0.021)	(0.036)	(0.032)	(0.027)
has kid(s)	0.033**	0.034**	0.033**	0.019*	0.024**	0.026**
	(0.006)	(0.005)	(0.005)	(0.008)	(0.007)	(0.007)
manager duties	0.101**	0.099**	0.099**	0.087**	0.083**	0.083**
	(0.008)	(0.008)	(0.007)	(0.010)	(0.008)	(0.008)
education = 1	0.280**	0.279**	0.279**	0.222**	0.230**	0.219**
	(0.019)	(0.020)	(0.019)	(0.026)	(0.027)	(0.024)
education = 2	0.099**	0.100**	0.099**	0.090**	0.094**	0.095**
	(0.015)	(0.015)	(0.014)	(0.020)	(0.019)	(0.017)
education = 4	-0.031**	-0.032**	-0.032**	-0.031**	-0.032**	-0.032**
	(0.006)	(0.006)	(0.006)	(0.009)	(0.008)	(0.007)
education = 5	-0.096**	-0.097**	-0.098**	-0.085**	-0.083**	-0.084**
	(0.010)	(0.009)	(0.008)	(0.011)	(0.011)	(0.009)
education = 6	-0.142**	-0.138**	-0.136**	-0.120**	-0.114**	-0.111**
	(0.011)	(0.011)	(0.010)	(0.012)	(0.011)	(0.010)
education = 7	-0.063*	-0.080**	-0.085**	-0.092*	-0.097**	-0.105**
	(0.030)	(0.029)	(0.026)	(0.036)	(0.033)	(0.027)
apprenticeship	-0.200**	-0.175**	-0.176**	-0.257**	-0.232**	-0.233**
	(0.043)	(0.042)	(0.038)	(0.047)	(0.048)	(0.043)
ever overtime	0.042**	0.043**	0.040**	0.040**	0.039**	0.035**
	(0.007)	(0.007)	(0.007)	(0.008)	(0.008)	(0.007)
industry = 1	-0.202**	-0.194**	-0.201**	-0.191**	-0.172**	-0.178**
	(0.026)	(0.032)	(0.032)	(0.021)	(0.023)	(0.025)
industry = 2	0.140**	0.125**	0.127**	0.139**	0.122**	0.129**
	(0.019)	(0.019)	(0.015)	(0.026)	(0.027)	(0.018)
industry = 4	0.098**	0.088**	0.074**	0.181**	0.134**	0.099*
	(0.021)	(0.021)	(0.022)	(0.047)	(0.044)	(0.045)
industry = 5	-0.038*	-0.025	-0.018	0.022	0.032	0.037
	(0.019)	(0.019)	(0.017)	(0.023)	(0.022)	(0.021)
industry = 6	-0.152**	-0.148**	-0.140**	-0.130**	-0.129**	-0.123**
	(0.019)	(0.019)	(0.016)	(0.013)	(0.012)	(0.012)
industry = 7	-0.212**	-0.200**	-0.203**	-0.200**	-0.190**	-0.192**
	(0.076)	(0.075)	(0.075)	(0.057)	(0.057)	(0.057)
industry = 8	0.002	0.006	0.004	-0.000	-0.002	-0.005
	(0.016)	(0.015)	(0.015)	(0.014)	(0.012)	(0.016)
industry = 9	0.118**	0.122**	0.117**	0.048	0.052	0.046
	(0.039)	(0.036)	(0.033)	(0.047)	(0.046)	(0.041)
industry = 10	0.003	0.014	0.017	0.002	0.015	0.020
	(0.024)	(0.024)	(0.024)	(0.033)	(0.035)	(0.034)
industry = 11	-0.006	-0.002	-0.004	-0.068	-0.074*	-0.093**
	(0.022)	(0.022)	(0.021)	(0.035)	(0.033)	(0.027)
industry = 12	-0.068**	-0.061*	-0.060*	-0.103**	-0.100**	-0.103**
	(0.025)	(0.024)	(0.023)	(0.027)	(0.025)	(0.024)
industry = 13	-0.141**	-0.135**	-0.134**	-0.142**	-0.135**	-0.127**
	(0.041)	(0.042)	(0.042)	(0.035)	(0.036)	(0.034)
industry = 14	-0.161**	-0.138**	-0.145**	-0.161**	-0.152**	-0.145**
	(0.051)	(0.051)	(0.055)	(0.045)	(0.055)	(0.053)
industry = 15	0.053**	0.079**	0.025	-0.154**	-0.137**	-0.185**
	(0.017)	(0.017)	(0.015)	(0.026)	(0.024)	(0.018)
work arr. = 1	-0.010	-0.011	-0.015	0.027	0.032*	0.032*
	(0.013)	(0.013)	(0.013)	(0.017)	(0.015)	(0.013)
work arr. = 2	0.007	0.007	-0.000	-0.001	-0.001	-0.007
	(0.017)	(0.015)	(0.014)	(0.025)	(0.019)	(0.020)
work arr. = 3	-0.066	-0.063*	-0.057	-0.057*	-0.062**	-0.055**
	(0.033)	(0.029)	(0.030)	(0.023)	(0.019)	(0.019)
work arr. = 4	0.037	0.028	0.046	0.017	-0.008	0.020
	(0.035)	(0.034)	(0.035)	(0.038)	(0.027)	(0.031)
work arr. = 5	0.006	0.016	0.016	-0.032	-0.083	-0.080

Continued on next page...

... table 18 continued

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
	(0.037)	(0.034)	(0.033)	(0.141)	(0.119)	(0.114)
work arr. = 6	-0.064**	-0.062**	-0.057**	-0.064**	-0.066**	-0.061**
	(0.009)	(0.009)	(0.008)	(0.007)	(0.008)	(0.008)
work arr. = 8	-0.033	-0.037	-0.033	-0.009	-0.022	-0.022
	(0.038)	(0.037)	(0.036)	(0.045)	(0.045)	(0.044)
union member	0.023	0.020	0.023	0.084**	0.080**	0.084**
	(0.015)	(0.014)	(0.014)	(0.014)	(0.013)	(0.012)
6 days per week	-0.048**	-0.055**	-0.057**	-0.035*	-0.038**	-0.035**
	(0.013)	(0.013)	(0.014)	(0.014)	(0.013)	(0.013)
7 days per week	-0.030	-0.022	-0.021	-0.007	0.002	0.005
	(0.020)	(0.019)	(0.018)	(0.021)	(0.019)	(0.018)
region = 1	-0.124**	-0.124**	-0.126**	-0.119**	-0.123**	-0.126**
	(0.017)	(0.015)	(0.015)	(0.023)	(0.022)	(0.023)
region = 2	-0.113**	-0.111**	-0.115**	-0.158**	-0.146**	-0.150**
	(0.021)	(0.019)	(0.018)	(0.029)	(0.025)	(0.023)
region = 3	-0.087**	-0.094**	-0.103**	-0.088**	-0.098**	-0.103**
	(0.016)	(0.014)	(0.014)	(0.020)	(0.016)	(0.016)
region = 4	-0.106**	-0.104**	-0.103**	-0.144**	-0.132**	-0.126**
	(0.014)	(0.013)	(0.013)	(0.021)	(0.018)	(0.016)
region = 5	-0.120**	-0.124**	-0.126**	-0.139**	-0.135**	-0.136**
	(0.017)	(0.015)	(0.014)	(0.024)	(0.021)	(0.020)
region = 6	-0.114**	-0.109**	-0.108**	-0.110**	-0.106**	-0.108**
	(0.015)	(0.014)	(0.013)	(0.018)	(0.015)	(0.014)
region = 7	-0.096**	-0.088**	-0.090**	-0.106**	-0.095**	-0.099**
	(0.015)	(0.014)	(0.013)	(0.024)	(0.021)	(0.018)
region = 8	0.268**	0.273**	0.269**	0.242**	0.243**	0.228**
	(0.023)	(0.022)	(0.020)	(0.036)	(0.032)	(0.032)
region = 9	0.128**	0.129**	0.127**	0.102**	0.104**	0.102**
	(0.019)	(0.018)	(0.017)	(0.029)	(0.026)	(0.025)
region = 11	0.060**	0.062**	0.057**	0.042	0.047*	0.043*
	(0.016)	(0.014)	(0.013)	(0.022)	(0.019)	(0.017)
region = 13	-0.096**	-0.089**	-0.094**	-0.115**	-0.105**	-0.110**
	(0.013)	(0.012)	(0.012)	(0.020)	(0.017)	(0.015)
region = 14	-0.070**	-0.069**	-0.073**	-0.087**	-0.076**	-0.077**
	(0.013)	(0.013)	(0.012)	(0.018)	(0.018)	(0.017)
region = 15	-0.107**	-0.104**	-0.106**	-0.112**	-0.114**	-0.112**
	(0.013)	(0.013)	(0.012)	(0.017)	(0.015)	(0.013)
region = 16	-0.091**	-0.090**	-0.096**	-0.102**	-0.095**	-0.102**
	(0.011)	(0.010)	(0.010)	(0.018)	(0.017)	(0.015)
region = 17	-0.109**	-0.108**	-0.106**	-0.155**	-0.148**	-0.143**
	(0.017)	(0.016)	(0.015)	(0.031)	(0.026)	(0.022)
region = 18	-0.111**	-0.106**	-0.109**	-0.115**	-0.111**	-0.116**
	(0.015)	(0.013)	(0.012)	(0.021)	(0.018)	(0.016)
region = 19	-0.124**	-0.123**	-0.127**	-0.117**	-0.118**	-0.121**
	(0.015)	(0.015)	(0.015)	(0.020)	(0.019)	(0.018)
region = 20	-0.110**	-0.111**	-0.114**	-0.134**	-0.128**	-0.131**
	(0.015)	(0.013)	(0.012)	(0.022)	(0.020)	(0.018)
region = 21	-0.108**	-0.107**	-0.111**	-0.098**	-0.101**	-0.108**
	(0.012)	(0.011)	(0.010)	(0.017)	(0.016)	(0.015)
region = 22	-0.148**	-0.150**	-0.155**	-0.183**	-0.186**	-0.183**
	(0.026)	(0.024)	(0.023)	(0.036)	(0.031)	(0.029)
occ. = 2	-0.013	-0.014	-0.015	0.001	0.013	0.015
	(0.029)	(0.028)	(0.028)	(0.060)	(0.064)	(0.062)
occ. = 3	-0.086**	-0.088**	-0.097**	-0.042	-0.048	-0.052
	(0.020)	(0.020)	(0.019)	(0.031)	(0.033)	(0.032)
occ. = 4	-0.242**	-0.251**	-0.261**	-0.173**	-0.189**	-0.201**
	(0.024)	(0.023)	(0.021)	(0.034)	(0.035)	(0.033)
occ. = 5	-0.275**	-0.285**	-0.291**	-0.220**	-0.232**	-0.239**

Continued on next page...

... table 18 continued

	without selection			with selection		
	Aut. 1998	Aut. 1999	Aut. 2000	Aut. 1998	Aut. 1999	Aut. 2000
	(0.021)	(0.021)	(0.020)	(0.029)	(0.031)	(0.030)
occ. = 6	-0.311**	-0.314**	-0.324**	-0.266**	-0.271**	-0.273**
	(0.025)	(0.025)	(0.024)	(0.035)	(0.037)	(0.035)
occ. = 7	-0.318**	-0.311**	-0.316**	-0.280**	-0.272**	-0.277**
	(0.036)	(0.035)	(0.030)	(0.032)	(0.033)	(0.031)
occ. = 8	-0.334**	-0.336**	-0.344**	-0.297**	-0.299**	-0.306**
	(0.024)	(0.024)	(0.023)	(0.030)	(0.032)	(0.031)
occ. = 9	-0.373**	-0.374**	-0.379**	-0.327**	-0.331**	-0.335**
	(0.028)	(0.028)	(0.028)	(0.037)	(0.038)	(0.037)
occ. = 10	-0.340**	-0.340**	-0.340**	-0.465**	-0.469**	-0.470**
	(0.020)	(0.021)	(0.020)	(0.032)	(0.034)	(0.034)
size 11–19	-0.031**	-0.032**	-0.036**	-0.007	-0.010	-0.011
	(0.008)	(0.008)	(0.008)	(0.011)	(0.009)	(0.009)
size 20–24	-0.022	-0.023	-0.022	-0.009	-0.009	-0.005
	(0.014)	(0.013)	(0.012)	(0.019)	(0.018)	(0.017)
size < 25	-0.056	-0.055*	-0.057*	-0.036	-0.040	-0.041
	(0.029)	(0.024)	(0.024)	(0.031)	(0.026)	(0.026)
size 25–49	-0.007	-0.008	-0.009	0.006	0.007	0.009
	(0.010)	(0.009)	(0.009)	(0.012)	(0.012)	(0.011)
missing size	-0.170	-0.097	-0.167	-0.092	-0.033	-0.130
	(0.144)	(0.107)	(0.118)	(0.092)	(0.075)	(0.113)
intercept	1.764**	1.746**	1.744**	1.511**	1.505**	1.508**
	(0.195)	(0.195)	(0.192)	(0.077)	(0.075)	(0.066)
Observations	30,273	36,983	43,452	13,764	16,831	19,804
R^2	0.574	0.583	0.594	0.456	0.472	0.489

Standard errors (clustered at the industry×occupation level) in parentheses.

Dependent variable: exit from dependent employment (upper panel); log hourly wage (surveyed only in entry and exit interview, lower panel).

Data source: UK Labour Force Survey

Observations only from individuals that entered the LFS on or before Aut. 1998 (1st/4th column), 1999 (2nd/5th), 2000 (3rd/6th).

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