RE-EXAMINING THE IMPACT OF THE NATIONAL MINIMUM WAGE ON EARNINGS, EMPLOYMENT AND HOURS: THE IMPORTANCE OF RECESSION AND FIRM SIZE [1]

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Abstract

Research to date suggests that the UK National Minimum Wage (NMW) has raised the earnings of low paid workers, without significantly affecting their employment opportunities. We re-examine existing evidence and suggest the picture is less clear cut. We explore whether the impacts of the NMW differ for workers in different size firms. Examining more recent data we investigate whether the NMW has affected the employment opportunities of low paid workers during the recession. In contrast to previous research we find some evidence to suggest that the introduction of the NMW may have had a small adverse impact on the employment opportunities of particular low paid workers, although, in line with previous research, for many low paid workers we find no impact. In general, it is not obvious that the impacts of the NMW on employment have differed over the business cycle. In comparison to other workers, low paid workers are more likely to work in smaller firms. We find that on average any potentially harmful effects of the NMW on the employment chances of low paid workers tend to be more significant amongst employees in large firms. Identification of the average hours effects of the NMW is hampered by the difficulty in finding a suitable control group.

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EXECUTIVE SUMMARY

The aims of this report are to re-examine the earnings, employment and hours impacts of the National Minimum Wage (NMW), using the most recent data available, with a view to discovering whether these impacts differ over the business cycle and by size of firm. Key questions for this research are:

- What has been the impact of the NMW on the earnings of low paid workers and on the demand for low paid workers during recession and is this different from its impact during periods of strong economic growth?
- Has the NMW affected differently low paid jobs in small, medium and large size firms?

We use standard difference-in-differences estimators to examine the labour market impacts of the NMW. We use Labour Force Survey (LFS) and New Earnings Survey (NES) microdata to analyse the impact of the NMW on employment retention, changes in hours worked, and wage growth, distinguishing NMW "treatment" effects by firm size and by time. To study whether the impact of the NMW depends on the general state of the economy we examine NMW labour market impacts over time using both individual and local area data.

We present sensitivity analysis where we vary the control groups, differencing groups and time periods, outcome measures, and data sources. We examine NMW impacts for adult workers only (young workers are excluded due to sample size restrictions), by sex and by full-time/part-time status.

We find a positive effect of the NMW on wage growth for all groups considered, which is particularly large upon introduction. We find some evidence to suggest that wage differentials between NMW workers and those paid just above the NMW were restored somewhat during the recent recession years.

Using the NES we find a small negative effect of the NMW on annual employment retention for low paid female part-time workers, associated mainly with introduction and more recent years. The magnitude of this effect is on average around 3 percentage points. This effect is not evident using the LFS, which may in part be due to smaller sample sizes and measurement error in pay. We generally find little evidence to suggest

that the NMW has changed employment retention for full-time workers. In some pooled models we find evidence that employment retention may be slightly smaller for male full-time workers paid at the NMW.

Analysis of the impacts of the NMW on changes in average hours worked is complicated by the difficulty in identifying suitable control groups. For groups where we appear to have adequate control groups (female workers) we find little evidence to suggest that the NMW has changed growth in hours worked. There is some evidence to suggest that the NMW may have been associated with a small reduction in the change in weekly hours for female full-time workers during recession.

We find that the NMW raised wage growth for part-time women in all categories of firm size that we consider. We also find that the NMW raised wage growth for full-time men and women in all categories of firm size, but here the evidence is more mixed for workers in medium and large size firms. To the extent there are any adverse effects of the NMW on employment retention for female part-time workers, these are on average more significant amongst workers in large firms, although also observed amongst workers in smaller firms in individual years. The picture regarding NMW effects on changes in hours worked by firm size is not particularly consistent.

Overall our results from the spatial analysis of the impact of the NMW suggest that it has raised the wages of those at the bottom of the distribution relative to those higher up. This has resulted in a fall in inequality in the bottom half of the wage distribution. In terms of employment and unemployment outcomes, we find no strong evidence that the NMW had a harmful effect on individuals' labour market position. These results are broadly consistent with the findings reported in this paper from individual level estimates and also with a large body of literature assessing the impact of the NMW on employment. When we break down our analysis to consider separate impacts of the NMW in different years we find a mixture of results, some positive and some negative. The variation in these year specific results is difficult to interpret.

1. Introduction and overview

Much research has been conducted analysing the impacts of the National Minimum Wage (NMW) on earnings (Swaffield, 2009; Dickens and Manning, 2004; Stewart, 2009), employment and hours (Stewart, 2004a, b; Stewart and Swaffield, 2008; Dickens and Draca, 2005; Dickens, Riley and Wilkinson, 2009). Summarising very briefly, research to date suggests that the NMW has raised the earnings of low paid workers, without significantly affecting their employment opportunities. There is some suggestion that hours of work for low paid workers may have been adjusted downwards. Evidence of spillovers from the NMW further up the wage distribution is not strong.

The aims of this report are to re-examine the earnings, employment and hours impacts of the NMW, using the most recent data available, with a view to discovering whether these impacts differ over the business cycle and by size of firm. Key questions for research are:

- What has been the impact of the NMW on the earnings of low paid workers and on the demand for low paid workers during recession and is this different from its impact during periods of strong economic growth?
- Has the NMW affected differently low paid jobs in small, medium and large size firms?

There are good reasons to believe that the impact of the NMW on low paid workers may differ over the business cycle. For example, employers are more likely to retain staff during recession the higher the cost of hiring and job-specific retraining. Such motivations for retaining staff during recession are not high for low paid and less skilled workers. Also, with the NMW, employers have less scope for reducing the wages of the lowest paid workers in response to recession. This means that low paid unskilled workers are perhaps most at risk of unemployment in recession (Riley and Young, 2007). The recent recession has led to a rise in unemployment, but UK employers have also dealt with the slump in demand by imposing wage cuts and reducing hours worked rather than by adjusting the number of people employed (Holland et al., 2010; Elsby and Smith, 2010). So far there is little evidence on whether the labour market impacts of the NMW have changed during the recent recession. However, comparing employment in Wage Council industries to uncovered industries, Dickens and Dolton (2011) suggest

there is no reason to believe that the employment impacts of previous wage floors in Britain varied with the business cycle. Using cross-country data Dolton and Rosazza Bondibene (2011) find that negative effects of minimum wages on youth employment may be more pronounced during recession, although they also find that these results are sensitive to the estimation method used.

There are also good reasons to consider that the impacts of the NMW may differ for low paid workers in different size firms. First, according to the Low Pay Commission, low paid workers tend to be concentrated in smaller firms in low-paying sectors. Therefore it is likely that the NMW imposes a larger change in labour costs for these firms. Second, in comparison to larger firms, smaller firms may be less able to absorb cost changes in profits. Smaller firms may therefore find it necessary to adjust employment in response to increases in the NMW. Indeed, small and medium size firms are often regarded in a class of their own and seen as very different to their larger counterparts. Larger firms are typically regarded as more profitable, for example due to returns to scale, and there are well-documented differences in the pay awarded to workers in larger and smaller firms, arising due to differences in worker attributes as well as differences in compensation structures (Oi and Idson, 1999). In a recent study for the Low Pay Commission, Rizov and Croucher (2011) find that positive productivity impacts of the NMW are more likely to arise in larger than smaller firms.

We use standard difference-in-differences estimators to examine the labour market impacts of the NMW. We use Labour Force Survey (LFS) and New Earnings Survey (NES) microdata to analyse the impact of the NMW on employment retention, changes in hours worked, and wage growth, distinguishing NMW "treatment" effects by firm size and by time.

To study whether the impact of the NMW depends on the general state of the economy we examine NMW labour market impacts over time using both individual and local area data. In pooled models we test for a significant interaction between the NMW policy effect and the recession years. Using the micro-data we estimate separate models for small, medium and large firms. We present sensitivity analysis where we vary the control groups, differencing groups and time periods, outcome measures, and data sources. We examine NMW impacts for adult workers only (young workers are excluded due to sample size restrictions), by sex and by full-time/part-time status.

This report is organised as follows. Section 2 discusses the data we use and measurement issues. Section 3 sets out our methodology. The next section discusses the validity of the identification strategy using individual level data. Results regarding NMW impacts over time, based on analysis of individual level data, are reported in section 5. NMW treatment effects by size of firm are reported in section 6. Section 7 discusses the impact of the NMW during recession based on analysis of local labour market data.

2. Data sources and measurement issues

We use the LFS October 1996 – December 2010[2] and the NES 1994-2010 to estimate the impacts of the NMW. We use the NES rather than the Annual Survey of Hours and Earnings (ASHE) because the NES has a longer run of historical data, which proves useful for identifying NMW treatment effects.[3] We are unable to evaluate the impact of the 2010 uprating using the NES because the data does not include outcomes post the October 2010 uprating. Similarly, the LFS data post October 2010 is relatively limited, and hence our analysis of the NMW in recession/depression years focuses on the October 2008 and 2009 upratings.

The issues, advantages and disadvantages of using the NES/ASHE and the LFS to evaluate the impacts of the NMW are discussed extensively elsewhere by others and by us (Dickens, Riley, Wilkinson, 2009). Here we discuss the measurement of firm size, relevant to the research objectives of this report, and less discussed in the NMW literature. The LFS records the size of the workplace rather than the firm. Workplace is an imperfect measure of firm size, because in many instances the firm will be substantially larger than the workplace. The NES/ASHE panel includes an identifier that indicates the number of employees in the reporting unit where the respondent works.

[2] In practice observations October 1996-February 1997 are dropped because earnings data are not available for wave 1 respondents during this period.

[3] We present some robustness analysis using ASHE. The ASHE replaced the NES in 2005. The ONS extended the ASHE methodology back to 1997 so that the earliest year in the ASHE panel dataset is 1997. The NES panel dataset differs from the ASHE panel dataset in that it does not include information on second jobs and calibration weights, but it does include more historic data (back to the 1970s). It is not a separate survey.

In the vast majority of cases the reporting unit is equivalent to the enterprise. But, in some cases, typically larger firms, the firm may be made up of several reporting units.[4]

The Low Pay Commission (LPC) distinguishes between small firms defined as those employing 1-49 employees (micro firms are a subset of these defined as firms employing fewer than 10 employees), medium-sized firms employing 50-249 employees, and large firms employing at least 250 employees. The LFS allows us to distinguish between employment in micro workplaces (1-10 employees) and small workplaces (1-49 employees). Before March 2001 respondents in workplaces with 50 employees or more cannot be separated into sub-groups (for example, into medium-sized and large workplaces). Between March 2001 and March 2002 it is possible to further distinguish between LFS respondents in workplaces with 50-499 employees and workplaces with at least 500 employees. In subsequent survey months/years it becomes possible to distinguish between respondents in workplaces with 250-499 employees and respondents in workplaces with 500 or more employees (perhaps closest to LPC firm definitions). Because we typically require longer runs of data we group together employees in medium-size and large workplaces where we use the LFS, distinguishing only between employees in small workplaces with 1-49 employees and medium/large workplaces with at least 50 employees. LFS respondents that are unable to make this distinction are excluded from the analysis of workplace size. Using the NES/ASHE we look at NMW impacts by size of firm as defined by the LPC: small (1-49 employees), medium (50-249 employees) and large (250+ employees).

[4] It is possible to link in enterprise size from other business surveys, e.g. as in Riley (2010) and Görzig, Piekkola, Riley (2011), to achieve an alternative definition of firm size. This is not possible for years before 1998 and hence we interpret firm size as the size of the reporting unit. Linking employees in the ASHE 2002-2008 to enterprises in the Business Structure Database (BSD) 2002-2008 via the enterprise reference code, we find that for the majority of employees firm size as indicated by the variable IDBRNEMP in ASHE corresponds to firm size as indicated by enterprise employment recorded in the BSD. For example, 95% of employees classified as working in small firms according to the information available in ASHE are classified as working in small enterprises according to the BSD. The equivalent figures for employees in medium and large firms are 84% and 98% respectively. Differences can arise because IDBRNEMP may record employment for a subset of plants within the enterprise and because of differences in the timing to which the employment information refers in the two datasets.

Table 1 Distribution of employees across employer size groups

	NES			LFS		
	All employees	Low paid employees		All employees reporting pay	Low paid employees
Firm size			Workplace size		
1-49	18.1%	31.3%	1-49	46.5%	69.5%
50-249	11.8%	12.8%	50+	53.5%	30.5%
250+	70.2%	55.9%			

Notes: Firm size in the NES is recorded by the size of the IDBR reporting unit; Workplace size in the LFS is esimated by the employee; Average 2003-2007; Low paid employees are employees paid less than the October NMW in the year to September; Employees reporting pay are those with non-missing values for HOURPAY; Employees for whom we cannot determine firm size are excluded in these calculations; LFS figures weighted with PIWT10.

Although it may be tempting to compare our results for small workplaces using the LFS with our results for small firms using the NES, the comparison is not valid. This is because small workplaces in the LFS will include small workplaces in small firms as well as small workplaces in medium and large firms. Table 1 illustrates the difficulties. According to NES, approximately a third of low paid employees are employed in firms with 1-49 employees, whereas, according to the LFS, around 70% of low paid employees are employed in small workplaces. These differences are unlikely to be explained by differences in sample coverage and weighting schemes. Rather, for many workers, there are significant differences between the size of the workplace and the firm in which they are employed. Table 1 also illustrates that low paid workers are more likely to be employed in smaller workplaces and firms than workers in general.

Our analysis concerns adults only due to sample size restrictions, which become more severe when we wish to disaggregate NMW impacts by employer size/time period. Females (males) include individuals aged 22-58 (63). We distinguish between part-time and full-time workers (male full-time workers are excluded as there are relatively few). Of these groups, part-time women are the single largest group of NMW recipient. It is well-known that the labour market behavior of part-time workers is different to that of full-time workers, and that part-time work carries a pay penalty. The bite of the NMW is significantly higher for part-time workers (see section 7).

Sample sizes in the LFS are significantly smaller than sample sizes in the NES (see section 3.4). The LFS has a rich set of control variables that we use. NES/ASHE controls include: a cubic in the wage, an indicator of having been in the same job for at least a year, age, and age squared.

For our local area analysis we construct data on employment for different sub-groups from the LFS micro data. Local area measures of the NMW (its bite or coverage) are derived from ASHE. The LFS equivalent is less useful because of small cell size problems with the LFS wage data. Data on other local area characteristics included as additional controls in the local labour market analysis (e.g. the skill composition of the population) are constructed from the LFS. We consider measures of migration based on the country of birth of LFS respondents, including the stock of non-UK born residents in an area and the change in the stock of non-UK born residents in an area (proxying net international migration).

We use the same local area level data derivation described in Dickens, Riley and Wilkinson (2009), but focus exclusively on the 135 areas constructed for that analysis. The basis for the derivation of these area groupings was identification of local labour markets broadly in line with the Travel-to-Work-Areas (TTWA) concept. The main defining characteristics of TTWA are that at least 75% of working residents work in the area and that at least 75% of workers are resident in the area. Of the 135 areas 64% appear as local labour markets, using the TTWA definition applied to all workers, and 75% of workers in GB live in these local labour markets. Considering only the low paid and unskilled workers, more than 90% of these 135 local areas can be classified as local labour markets, according to the TTWA concept, covering 98% of these workers in Great Britain.

We construct local area labour market data for the area groupings discussed above for 6 month data periods, defined as April-September and October-March each year. These time periods fit well with the NMW up-ratings, which fall either in April or October.

3. Research methods

Following the literature that examines the impacts of the introduction and upratings to the NMW on the labour market (Stewart (2004a, b), Stewart and Swaffield (2008), Swaffield (2009), Dickens and Draca (2005), Dickens, Riley, Wilkinson (2009)) we use a difference-in-differences approach to study the earnings, employment and hours effects of the NMW over time and by size of firm. The treatment group is defined as those paid below the new level of the NMW at time *t*, before it is enforced, and the comparison group is defined as those individuals paid within some range above the new NMW, before it is enforced. Outcomes for these individuals are then compared at time *t+1*, at which point some individuals are observed when the new NMW is in place and others are observed before the new NMW is in place (note *t* does not refer to calendar time, but rather the point at which individuals are allocated to treatment and comparison groups). The policy effect is then measured as the difference in outcomes between the treatment and control group after the change/introduction of the new NMW less the difference in outcomes between the treatment and control group before the policy change. Here we describe what we do in more detail and discuss what the different estimators identify.

3.1 Evaluating the impact of a single NMW change

To estimate the effect of a change in the minimum wage we use as the basis of our analysis the model specified in equation (1):

$$z = \propto_0 + \propto_1 D_T{}^u wgap^u + \propto_{2y} D_y + \propto_3 D_T{}^u wgap^u D_{y=u} + \varepsilon \qquad (1)$$

where z is the outcome of interest, for example, the percentage change in wages over a 12 month period (conditional on being in work at the start and end of the 12 month period) or the probability of being employed in 12 months time conditional on being in work at the start of the period. $D_T{}^u$ is a dummy variable equal to one if an observation belongs to the treatment group for evaluating the uprating that occurs in year u, and zero otherwise. $wgap^u$ is the ratio of the October NMW (or for observations in the period before the introduction of the NMW the 1999 NMW deflated by the average earnings index to the relevant year) of year u to the actual wage less one. It is only defined if $D_T{}^u = 1$, and therefore it is always greater than zero. D_y are a set of year dummies that capture common (to the treatment and control groups) time effects. For

example: D_{2004} equals one if an individual is observed in year 2004 and zero otherwise; D_{1997} equals one if an individual is observed in year 1997 and zero otherwise. The sample year allocated to a particular observation refers to the year at the start of the 12 month period over which we observe labour market changes/transitions. This estimator is similar to the wage gap estimator in Stewart (2004a), except that here we measure the wage gap in relative terms, which is useful when we later consider multiple upratings. Equation (1) is a standard difference-in-differences model when we set $wgap^u = 1$. Using the standard difference-in-differences specification we examine separately the introduction of the NMW and each individual uprating since then.[5] We use this model to estimate the impact of changes in the NMW on job retention, changes in hours worked and earnings growth by firm size. Depending on the outcome variable the functional form of the estimating equation is either linear or a logit.

In estimating equation (1) we include in the sample only the treatment and control groups, observed in the "before" and "after" periods. This is different to previous studies, such as Stewart (2004a) and Dickens, Riley and Wilkinson (2009), which include individuals from higher up the wage distribution and include separate dummy variables and time dummies for this group. Using the approach in these studies overall sample sizes are boosted (although the numbers in the treatment and control groups are no different), which tends to reduce standard errors, and the parameters on the controls are assumed to be the same for high and low pay workers. In our approach the parameters we estimate are based on the behaviour of individuals at the lower end of the pay spectrum alone. We illustrate the sensitivity of our results to these methodological differences.

In the set up we describe in equation (1) $\propto_1$ measures the average difference between the treatment and control groups during the benchmarking period, $\propto_{2y}$ captures common (to the treatment and control group) time effects, and $\propto_3$ is the NMW uprating treatment effect.

[5] We also examine each NMW change using the wage gap estimator (not reported), and this gives very similar results to the basic specification.

3.2 Evaluating the impact of multiple NMW changes

We also estimate models pooled across all years using a simple difference-in-differences model as well as the wage gap estimator (as in Dickens, Riley and Wilkinson, 2009; Abowd et al., 1999), which allows for more variation in the NMW policy measure. One benefit of pooling is that we achieve larger sample sizes in the treatment and control groups, which means we are more likely to be able to detect non-zero NMW impacts to the extent these are there. We can also test explicitly whether the treatment effect differs across upratings (e.g. during recession). We estimate three pooled models:

$$z = \propto_0 + \propto_1 D_T + \propto_{2y} D_y + \propto_3 \sum_u {D_T}^u D_{y=u} + \varepsilon \quad (2)$$

$$z = \propto_0 + \propto_1 D_T wgap + \propto_{2y} D_y + \propto_3 \sum_u {D_T}^u wgap^u D_{y=u} + \varepsilon \quad (3)$$

$$z = \propto_0 + \propto_1 D_T + \propto_{2y} D_y + \propto_3 \sum_u {D_T}^u wgap^u D_{y=u} + \varepsilon \quad (4)$$

In equation (2) D_T is a dummy variable equal to one if ${D_T}^u = 1$ for any u and zero otherwise. In this specification we benchmark each uprating against the same observations in the "before" period (and these are defined to be the same for each uprating). In this specification $\propto_3$ denotes an average NMW treatment effect, and is referred to as the pooled estimator. In equation (3) $wgap = wgap^u$ for any u and in the "before" period this is defined in a similar way for each uprating. This specification captures variation in the intensity of NMW upratings over time and across individuals. In the results tables this estimator is referred to as the "pooled wage gap1" model. Another version of the pooled wage gap estimator is specified in equation (4). Here we only apply the wage gap to the treatment effect and the average difference between the treatment and control groups is captured by including the simple dummy variable D_T. In the results tables this estimator is referred to as the "pooled wage gap2" model.[6]

Finally, in cases where we have different "before" periods for the different upratings we consider the models specified in equations (5) and (6).

$$z = \propto_0 + \propto_1 \sum_u {D_T}^u wgap^u + \propto_{2y} D_y + \propto_3 \sum_u {D_T}^u wgap^u D_{y=u} + \varepsilon \quad (5)$$

[6] We define the wage gap as described in the previous section. We also estimate pooled wage gap models where the wage gap is defined as the ratio of the upcoming NMW to the actual wage and where in the "before" period this is balanced to average that in the "after" period. The results are similar to those reported here.

$$z = \propto_0 + \sum_u \propto_1{}^u D_T{}^u wgap^u + \propto_{2y} D_y + \propto_3 \sum_u D_T{}^u wgap^u D_{y=u} + \varepsilon \quad (6)$$

Here we stack observations in S^u across u, where e.g. $u = 2001, \ldots, 2009$, and where S^u denotes the sample for evaluating the NMW uprating in year u. In equation (6) we allow the average difference between the treatment and control groups during the benchmarking period to vary across upratings. In equation (5) we assume these are homogenous across upratings. We use these models to evaluate 6 month employment retention, following Dickens, Riley and Wilkinson (2009). We report estimates based on model (5), although our results do not differ much one way or the other.[7]

3.3 Vertical difference-in-difference models

We also estimate the vertical difference-in-differences model developed in Stewart (2004b) and used in Swaffield (2009). Here, one subtracts from the difference in outcomes spanning the uprating between the treatment and control group the difference in outcomes spanning the uprating between two other groups drawn from further up the wage distribution (treatment and control groups in the benchmarking group h), rather than from an earlier time period. We estimate the vertical difference-in-differences estimator using equation (7):

$$z = \propto_0 + \propto_1 D_T{}^u wgap^u + \propto_2 D_{y=u}{}^h + \propto_3 D_T{}^u wgap^u (1 - D_{y=u}{}^h) + \varepsilon \quad (7)$$

Where $D_{y=u}{}^h$ is a dummy equal to one if an observation belongs to the benchmarking group for the uprating in year u, zero otherwise. $wgap^u$ is the ratio of the October NMW of year u (or for observations in treatment groups from further up the wage distribution a multiple of the October NMW) to the wage (measured in the year to October). It is only defined if $D_T{}^u = 1$. In equation (7) $\propto_1$ measures the average difference between the treatment and control groups further up the wage distribution, $\propto_2$ captures common (to the treatment and control group) differences between the groups closer to the NMW and those further up the wage distribution, and $\propto_3$ is the NMW uprating treatment effect. Replacing $wgap^u$ with one we have a standard vertical difference-in-differences model.

[7] We also use equations (5) and (6) to evaluate 12 month transitions where we benchmark all upratings on the same "before" period, but where we choose different observations (potentially the same individuals) to evaluate each uprating. These results are not reported, but do not differ substantially from the wage gap estimators where we benchmark all upratings on the same observations in the "before" period.

We can use the vertical difference-in-differences model to evaluate all upratings simultaneously. We estimate

$$z = \propto_0 + \sum_u \propto_1{}^u D_T{}^u wgap^u + \sum_u \propto_2{}^u D_{y=u}{}^h + \propto_3 \sum_u D_T{}^u wgap^u (1 - D_{y=u}{}^h) + \varepsilon \qquad (8)$$

In equation (8) we allow differences between the groups closer to the NMW and the benchmarking groups from further up the wage distribution to vary by uprating year. We also allow the 'usual' difference between the treatment and control groups to vary across uprating years. Our results do not tend to differ substantially from more restrictive models.

3.4 Treatment and control groups

Using the NES, an observation is allocated to the treatment group of an October uprating in year u if in April of year u the wage is less than the October NMW of that year, but greater than or equal to the October NMW of year $u-1$. An observation is allocated to the corresponding control group if the wage in April of year u is greater or equal to the October NMW of that year, but not by more than 10% (control group 1). We also report estimates where the control group is paid in a band 10-20% above the October NMW (control group 2). To define the treatment and control groups in the "before" period, i.e. in the benchmarking group, we deflate the April 1999 NMW using the average earnings index.[8] Using the NES the before periods are 1994 (i.e. April 1994 – April 1995) to 1997. When we estimate NMW impacts by size of firm we are restricted to a before period of 1996 to 1997. Using the LFS we use the before period March 1997 to March 1998 (wave 1). When we analyse 6 month transitions using the LFS we use "before" and "after" periods as described in Dickens and Draca (2005) and Dickens, Riley and Wilkinson (2009). When we estimate the vertical difference-in-differences model we use the groups paid 10-20% and 20-30% above the October NMW. An observation is allocated to the treatment group in the benchmarking group if the wage received is between 10 and 20% greater than the October NMW of that year, and to the control group in the benchmarking group if the wage is between 20 and 30% greater than the

[8] We also estimated models where the treatment and control groups in the "before" period were chosen by deflating the NMW for a particular uprating to the "before" period. For example, in analysing the impact of the 2003 uprating, the 1997 'NMW' used to differentiate between the treated and controls in 1997 is calculated by scaling the October 2003 NMW with the ratio of the AEI April 1997 to the AEI April 2003. These estimates were not very different to those reported here.

October NMW of that year. All these control groups we refer to as "standard" control groups.

We also use treatment and control groups defined by particular percentiles of the wage distribution. This avoids, in some sense, the use of different treatment and control groups over time. In this approach individuals whose wages fall between the $Tmin^{th}$ and $Tmax^{th}$ percentiles of the wage distribution are allocated to the treatment group. Individuals whose wages fall between the $Cmin^{th}$ and $Cmax^{th}$ percentiles of the wage distribution are allocated to the control group. Tmin is the maximum value at which the $Tmin^{th}$ percentile is below the compliance NMW at all times (evaluated during the period when there is a NMW). Tmax is the minimum value at which the $Tmax^{th}$ percentile is above the compliance NMW at all times, which in most cases is less than the new NMW, which is not yet in place. Cmin is the minimum value at which the $Cmin^{th}$ percentile is above the new NMW at all times. Cmax is chosen to equalize the size of the treatment and control group (control group 1). A further control group is chosen by moving a similar step up the wage distribution from Cmax (control group 2).

Sample sizes for the treatment and control groups we use are illustrated in Annex 1, Tables A1.1-A1.5. Total sample sizes in the NES and LFS, including those who fall outside the treatment and comparison groups, are significantly larger. As discussed, we exclude these observations in most models.[9] In terms of estimating with precision the key parameters of interest, it is the number of observations in each of the treatment and comparison groups that is important, both before and after the change in the minimum wage. We show sample sizes for all 'before' years that we consider (1994-1997). For example, the 1996 sample includes treatment and controls in April 1996, which are then tracked over the 12 months to April 1997. The 1997 sample includes treatment and controls in April 1997, which are then tracked over the 12 months to April 1998. The intervention period varies for the different NMW upratings and the introduction of the NMW. In Table A1.1, where we report NES sample sizes for evaluating the impact of the introduction of the NMW and subsequent upratings using standard treatment and control groups, the NMW introduction period refers to 1998 (i.e. the intervention period sample is selected from the April 1998 ASHE, and these are tracked over the 12 months

[9] This is in contrast to the majority of the NMW literature. We also report results using the full sample including separate macro trends for these other (non-treatment and non-control) groups.

that span the introduction of the NMW at the start of April 1999). Considering the upratings, 2003 refers to the sample used to evaluate the 2003 uprating (i.e. the sample is selected from the April 2003 NES, and these are tracked over the 12 months that span the legislated increase in the NMW in October 2003).

Sample sizes are typically smallest for the medium size firms (reporting units with 50-249 employees) and largest for large size firms (reporting units with 250+), as can be inferred in broad terms by applying the distribution across firm size in Table 1 to the sample sizes reported in Annex 1. Looking at table A1.3 we see that, using the LFS, sample sizes for the treatment group (standard groups) are noticeably smaller for the uprating periods than for the introduction period. This is because we exclude individuals who are paid less than the compliance NMW (zero in the before NMW period) and because of measurement error in HOURPAY (we do include in the treatment group individuals paid 1 pence less than the compliance NMW). Note that we cannot use as a benchmark period the period before the introduction of the NMW using HRRATE (which would otherwise be preferred to HOURPAY), because HRRATE was first introduced in the LFS after the introduction of the NMW. NES sample sizes are significantly larger than LFS sample sizes.

3.5 Outcome variables

To measure the effect of the NMW on job retention we look at the probability of being in employment in a firm size *s* at time *t+1* conditional upon being in work in a firm size *s* at time *t*, $P(E^s_{it+1} \mid E^s_{it})$. This enables us to measure the impact of the NMW on employment retention for workers in firms of size *s*. We also look at the impact of the NMW on the probability of being in employment in any firm at time *t+1* conditional upon being in work in a firm size *s* at time *t*, $P(E_{it+1} \mid E^s_{it})$. The first outcome measure captures the effect of the NMW on employment demand in firms of a particular size group. The latter measures the effect of the NMW on employment retention *per se* for workers in firms of a particular size, rather than the impact of the NMW on the probability of remaining employed within the same type of firm.

We examine the effect of changes in average hours worked by firm size, where the sample includes only those individuals employed at time *t* and time *t+1*.

To examine wage growth, conditional on employment in both *t* and *t+1*, we follow Swaffield (2009) and look at absolute wage growth, relative wage growth and the probability of achieving a wage increase. When we examine these by size of firm we look at wage changes that occur for individuals employed in a firm size *s* at time *t*, but who are either employed in a similar or different size firm at time *t+1*. (This yields three outcome measures to explore: absolute $(w_{it+1} - w_{it}^{s})$; percentage change $(\ln w_{it+1} - \ln w_{it}^{s})$; probability of positive wage growth $P(w_{it+1} - w_{it}^{s} > 0)$.) As in Swaffield (2009), we estimate the impact of the NMW on absolute and relative wage growth using robust regression techniques, rather than OLS. This minimizes the impact of outliers that may, for example, arise due to measurement error. Wage outcomes are defined in relative terms (wages deflated by the average earnings index; an alternative is to deflate by a price index).

We examine 6 and 12 months changes in labour market status, 12 month changes in hours worked, and 12 month changes in earnings, using the wage gap and standard difference-in-differences models, and the individual uprating and pooled models.

3.6 Recession

We analyse the earnings, employment, and hours impacts of individual changes in the NMW in aggregate and by size of firm. Looking at the pattern of NMW effects over time gives us an idea of whether the NMW impacts differently on the labour market in years of recession or low growth in comparison to years of strong economic growth. In the pooled (over all NMW changes) wage-gap models, we test for an interaction between the estimated NMW effect and a measure of the economic cycle. The measure of the economic cycle that we consider is a simple indicator variable equal to one for the 2008, 2009 and 2010 upratings (policy changes during a downturn), and zero otherwise.[10] A positive interaction between the NMW treatment effect and the downturn indicates that the effect of the NMW is more positive (or less negative) during a downturn.

One of the concerns in interpreting these interactions as changes in the NMW effect over the cycle is the possibility that labour market outcomes for the treatment and

[10] We also considered local area unemployment as an alternative measure of the economic cycle. However, there is a danger that local area unemployment is endogenous and we did not pursue this. An alternative is to use a survey-based measure of the output gap, but this was ruled out because it is industry based and does not refer to low pay sectors.

control groups diverge in recession years, in comparison to times of stronger economic growth. If this is the case, then the interaction term (between the recession years and the NMW treatment) may simply capture these differential responses to recession (and the NMW effect is biased). One way of detecting whether these concerns are valid is to compare the treatment and control groups over the economic cycle during a period when there was no minimum wage. Unfortunately this is not possible as there is no recent UK recession period during which there was a complete absence of a wage floor.

The vertical difference-in-differences estimator is in essence designed to deal with the possibility that the treatment and control groups may respond differently to macroeconomic developments. The idea is that the differential response to macroeconomic shocks between the treatment and control group is mimicked by a pair of groups from further up the wage distribution. Again the problem is that, without a suitable minimum wage "free" period, we have no obvious way of verifying whether these alternate benchmarking groups do indeed mimic the differential behaviours of the treatment and control groups.

3.7 Counterfactuals

As a means of assessing the sensitivity of results, and acknowledging the inherent difficulty in identifying the impacts of a policy that is universal in coverage, we explore the impacts of the NMW using different control groups and baseline periods. It is important to consider what the counterfactuals implied by our identification strategy actually identify. We use different baseline periods: the period before the introduction of the NMW, which seems less appropriate as time passes, and for 6-month transitions the short period of no change before an uprating, following Dickens and Draca (2005). As discussed in Dickens, Riley, Wilkinson (2009), the latter is subject to criticism if policy responses are not immediate.

Using the period before the introduction of the NMW as the baseline may be criticized for a number of reasons. Importantly, it seems likely that there are factors unrelated to the NMW that may have caused labour market outcomes for the treatment group to diverge from those of the control group. For example, numerous Welfare-to-Work policies were implemented during the 5 years that followed the election of the Labour government in 1997. These policies were explicitly targeted at individuals who were

likely to be on low-incomes or who were likely to enter low-paid work. The choice of treatment and control groups within a narrow band of the NMW may help to mitigate this type of divergence.

Differencing against another set of comparison groups further up the wage distribution (as in the vertical difference-in-differences model) does not solve the potential problem of diverging trends between the treatment and control groups when these are caused by factors (e.g. policy) that mainly affect the NMW treatment group. The benefit of the vertical difference-in-differences model is that it may account for different reactions (between the treatment and control groups) to a common trend, which is a slightly different issue than the problem of diverging trends between the treated and controls caused by other, e.g. policy, factors that mainly affect the NMW treatment group.

The introduction of the NMW itself may have caused outcomes for the treatment and control groups, used to evaluate the impacts of later NMW upratings, to diverge. In evaluating the impact of recent NMW upratings, the use of the pre-NMW years as a baseline period essentially implies a counterfactual of no NMW. Using more recent periods gives a counterfactual of a (sometimes marginally) lower NMW. The appropriate baseline period depends on the counterfactual of interest.

3.8 Local area analysis

Our local area approach to identifying the impacts of the NMW on economic outcomes is an update of our earlier work (Dickens, Riley and Wilkinson, 2009). It exploits the wage variation we see across different areas of Britain (see for example; Stewart, 2002, for the UK, and Card, 1992, Card and Krueger, 1995, Neumark and Wascher, 1992 and more recently Kiel, Robertson and Symons, 2008 for the US). Since wage rates vary widely across different areas, the NMW will have a larger "bite" or impact on wages in some areas than others. For example, for our 135 areas the percentage of adults affected by the 2009 increase in the NMW varied from 0.9% of employees to 11.8% of employees. In those areas that experience the larger "bite" we may expect to see larger changes in employment or unemployment. We use pooled cross section-time series data to create a panel of local areas for the period 1997-2010. We then estimate specifications of the following form:

$$E_{it} = \beta_0 + \beta_1 Min_{it-1} + \beta_2 LowPay_{it-1} + \beta_3 X_{it-1} + YearDummies + AreaFixedEffects + u_{it} \quad (9)$$

Where E_{it} is our economic variable of interest in area i in year t (e.g. the employment rate), Min_{it-1} is our measure of the "bite" of the minimum wage in area i and year t-1 or the proportion of people paid below the upcoming minimum wage in area i and year t-1. Note this is only relevant in the years that the minimum wage existed and is set to zero in other years. LowPay is the equivalent to Min, but applies in all years irrespective of whether the minimum wage existed. It is the inclusion of this term that means that β_1 can be interpreted as a difference in difference type estimate.

We use a number of measures for the impact of the NMW, but the most common is the proportion of workers affected by changes in the NMW. We also use the Kaitz index; which measures the ratio of the NMW to median wages in the area. X_{it-1} is a set of control variables. The minimum wage treatment effect then varies both across areas and over time. Year dummies allow for aggregate employment differences from year to year. The area dummies allow for different average employment rates across the areas.

Note that identification of the minimum wage effects here rely on a pre-period before the minimum wage was introduced. Unfortunately it is difficult to derive data for our areas prior to 1997 and ASHE data is only available from 1997, hence we only have one year of pre minimum wage data, so the estimates of the minimum wage impact relative to this pre-period will be particularly sensitive to the relationship between employment and wages in that year. Our identification of the minimum wage effects rely on wage variation across regions, since the NMW is fixed each year for all regions. This is in contrast to the US studies that examine employment effects across States. In that context, the US minimum wage varies across States, permitting better identification of any economic effects. We have to be reasonably sure that employment is not changing across regions in a way that is related to the wage distribution, but not as a consequence of the NMW. For example, it may well be that, over the sample period, years of strong economic growth (2001 to 2006) may be characterised by employment in low wage areas growing faster than in high wage areas for reasons unrelated to the NMW and the reverse may be true in 2008-2010 where economic growth was weak. This would then induce a positive correlation between employment and our minimum wage variable. To this end it is important to include a set of control variables that may explain employment rates; such as the skill composition of the workforce in the area.

Also, the fixed effects will help to pick up average employment differences across areas, but not the growth in employment.

We estimate this specification over the period 1998-2010. We use different measures for the dependent variable (the employment rate and the unemployment rate) and we estimate this equation separately for all adults (over 22 years), male adults, female adults and female adults working full-time and female adults working part-time. We exclude individuals who are over retirement age.

4. Validity of the difference-in-differences identification strategy

The key assumption underlying the difference-in-differences approach to identifying the impacts of the NMW is that in the absence of the NMW intervention the change over time[11] in labour market outcomes would have been similar for the treatment and control groups. We can explore the validity of this assumption by estimating 'difference-in-differences' impacts in years where the NMW was *not* changing. This is done in Annex 2. We report difference-in-differences (DID) coefficients for each year 1995-1997 in a regression with base year 1994. If the assumptions underlying the DID identification strategy are valid, these DID estimates should be statistically insignificant in most cases (and statistically similar to one another in most cases).

Looking at Table A2.1 (standard groups) we see no significant DID coefficients for annual percentage wage growth in the pre-NMW period, which gives confidence in the identification strategy using standard control groups. In table A2.2 (percentile groups) we find some statistically significant DID coefficients for wage growth for female full-time workers, and the Wald test suggests these are jointly significant. Tables A2.3 and A2.4 focus on employment retention in the pre-NMW period. Here we see that for part-time women, using either the standard or the percentile groups, the first control group (closest to the NMW) is more appropriate than the second control group. In both tables the Wald test rejects insignificance of the DID coefficients in the period of 'no change' in the minimum wage when we use control group 2. This suggests that when looking at the results for part-time women we should concentrate on the results using control group 1. In tables 2.5 and 2.6 we assess the performance of the vertical difference-in-differences

[11] I.e. between the intervention and pre-intervention periods.

estimator in the no minimum wage period on employment retention. Once we include controls the Wald tests reject joint significance of the DID coefficients when we use standard control groups (table A2.5). But, in table A2.6, the tests suggest this estimator fails for part-time workers when we use percentile control groups.

Tables A2.7 and A2.9 suggest that the estimators we use, applied to the standard control groups, are inappropriate for detecting NMW effects on changes in basic hours worked (similarly for total hours worked in tables A2.11 and A2.13). Tables A2.8 and A2.12 suggest that, once controls are included, the horizontal DID model is suitable for evaluating the hours effects of the NMW for both groups of female workers when we use percentile treatment and control groups. Table A2.10 and A2.14 suggest the vertical DID is 'safe' for evaluating NMW impacts on changes in hours worked for part-time female workers when we use the percentile groups. But, for both groups of full-time workers the estimator appears inappropriate.

We have a shorter period over which we can examine the validity of the DID identification strategy for workers by size of firm (see Tables A2.15-A2.19). We examine the standard groups only (we do not evaluate NMW effects by firm size using the percentile groups). We find that problems arise with control group 2 (as above) and in some cases with medium size firms, which is unsurprising given the relatively small sample of workers in medium size firms. Note that the short time period disguises the problems we detected in the hours models using the period 1994-1997.

Based on the analysis in this section the DID assumptions appear less valid for some outcomes/control groups/groups of worker. We bear this in mind when we discuss the results in the next two sections.[12]

[12] In an interim report we discovered additional trends for some groups between 1996/1997 and 2000/2002 (there was little change in the NMW in 2000 and 2002). It is not clear whether these should be regarded as undermining the DID identification strategy as these trends may in part result from the NMW itself.

5. Impacts of the NMW over time

5.1 Impacts of the NMW on wage growth over time

In Annex 3 tables A3.1-A3.3 show DID estimates of the impact of the NMW on the percentage and absolute change in wages, and on the probability of positive wage growth. These are based on the NES, using 1994-1997 as the benchmarking period, and using standard control groups. The introduction of the NMW is clearly associated with an increase in wage growth on all measures for all groups considered (see rows 1998). The larger NMW upratings in 2001, 2003 and 2004 also appear to be associated with positive wage growth. Looking at the individual upratings we find some evidence of statistically significant negative wage growth impacts, although less so when controls are included. It is important to bear in mind what this implies. This is *not* saying that the level of wages for low paid workers is less as a result of the NMW. This is saying that in some years (mainly the recession years), wage growth is slower for low paid workers than it would have been had all previous changes in the NMW not taken place. In other words, we find some evidence that wage differentials between NMW workers and workers paid just above the NMW were restored during recession.

The pooled models generally show that on average wage growth for low paid workers in the treatment group (in percentage or absolute terms, and in terms of the probability of receiving a wage increase) has been higher as a result of the NMW for all groups considered (female full-time, female part-time, male full-time). The negative and significant interaction term of the treatment indicator with the recession years suggests that during recession, the NMW effect on wage growth was more muted than it was on average over the full period since its introduction.

Tables A3.4-A3.6 show DID estimates of the impact of the NMW on wage growth based on the NES, again using 1994-1997 as the benchmarking period, but using percentile control groups. As discussed in the previous section, these may be considered less appropriate estimates for female full-time workers. These results are in many ways similar to the results obtained using standard control groups, but generally show more negative wage growth impacts (associated with recession and the years 2000 and 2002 when the NMW was not changed by very much).

Tables A3.7-A3.12 report NMW wage growth impacts estimated using LFS HOURPAY (HRRATE is not available in the pre-NMW period). The striking feature of these tables is the general absence of statistically significant wage growth impacts. Using the standard control groups we find some negative wage growth impacts (Tables A3.7-A3.9). Using the percentile groups we find results more in line with expectations (indeed it might be argued that the percentile groups are less sensitive to measurement error in HOURPAY as these groups do not depend on exact identification of the hourly wage); some of the pooled estimates show positive and statistically significant impacts of the NMW on wage growth. The oddity of the wage growth results based on HOURPAY is in line with previous research (Swaffield, 2009), and is likely to be attributable to measurement error in HOURPAY (exacerbated when we look at changes in HOURPAY) and small samples. Note that when we include groups from higher up the wage distribution or when we consider simultaneously all low paid workers we tend to find more evidence of positive and statistically significant wage growth impacts (see discussion of Table A4.13).

Tables A3.13-A3.15 show for our three wage measures impact estimates based on the vertical difference-in-differences model using NES standard control groups. We generally find positive wage growth impacts for those affected by the NMW. Looking at results for individual years these impacts are typically weaker in the recession years. Table A3.16 shows pooled vertical difference-in-differences models using the LFS. When we use HRRATE to measure control groups and to measure wage growth, we find positive and significant NMW impacts on wage growth. This is not always the case when we base the estimates on HOURPAY. When we use HOURPAY percentile control groups we find positive wage growth impacts. But, when we use HOURPAY standard control groups these effects are often insignificant. The pattern of LFS vertical DID estimates across percentile versus standard control groups is similar to the pattern of LFS horizontal DID estimates, discussed above.

To summarise, we find a positive effect of the NMW on wage growth for all groups considered, which is particularly large upon introduction. We find some evidence to suggest that wage differentials between NMW workers and those paid just above the NMW were restored somewhat during the recent recession years.

5.2 Impacts of the NMW on employment retention over time

In Annex 4 tables A4.1 and A4.2 show DID estimates of the impact of the NMW on 12 month employment retention based on the NES, using 1994-1997 as the benchmarking period, and using standard and percentile control groups, respectively. Tables A4.3 and A4.4 show LFS based equivalents. According to the analysis in section 4 we should focus our attention on control groups 1, rather than control groups 2, when looking at the results for part-time females.

In table A4.1 we find little evidence of significant NMW impacts on employment retention for full-time workers. We do find evidence of a negative effect of the NMW on 12 month employment retention for low paid female part-time workers. These effects are particularly prevalent upon introduction, and there is some (albeit weak) suggestion that this effect worsened during recession in comparison to earlier years. These adverse effects of the NMW on employment retention for female part-time workers are also evident when we use the percentile control groups (table A4.2). At first glance these results are seemingly at odds with previous research on the employment effects of the introduction of the NMW (Stewart, 2004a). However, there is no real inconsistency. The analysis of NES in Stewart (2004a) excludes part-time workers on the grounds that these are more likely to fall below the PAYE threshold. Indeed, the fact that part-time workers are more likely to fall below the PAYE threshold does raise the possibility that the NES sample of part-time workers is endogenous to the NMW. This may introduce an upward bias to the measured treatment effect (because individuals are more likely to be observed in the sample and therefore are measured as being in work) or a downward bias (if the NMW brings into the treatment sample employees who tend to be at the very bottom of the pay distribution). However, we find no evidence of a change in the proportion of employees near the PAYE threshold upon introduction of the NMW. Also, our results are robust to the inclusion in our models of an indicator of pay below the PAYE threshold, which is allowed to differ before and after the introduction of the NMW.

Our results for full-time workers are very much in line with previous research. Using the LFS (tables A4.3 and A4.4) these negative effects of the NMW on employment retention are not apparent. Some of the pooled models, using both the LFS and NES based

estimates, show statistically significant negative effects of the NMW on average on 12 month employment retention for full-time male workers.

In Table A4.5 we look at NMW impacts on 6 month employment retention using the LFS. We find some positive impacts, but nothing significant on average (in line with the results of a similar analysis in Dickens, Riley and Wilkinson, 2009). Note that the counterfactual here is very different to that in previous tables. In table A4.5 we are estimating the effect of a marginal change in the NMW. In tables A4.1-A4.4 we estimate the effect of the NMW against a counterfactual of no NMW. The vertical DID models in tables A4.6 and A4.7 provide further evidence of potential adverse NMW impacts on employment retention.

In Tables A4.8-A4.13 we report a few more robustness checks. In Tables A4.8 and A4.9 we include the full sample (all individuals in NES rather than just the treatment and control groups) using standard and percentile control groups, respectively. Comparing to Tables A4.1 and A4.2 the overall picture is little different, but, including the full sample we find that the magnitude of adverse NMW impacts on the employment retention of female part-time workers is smaller. In Tables A4.10 and A4.11 we estimate the models in Table A4.1 and A4.2 using a probit rather than a logit specification. The results are almost identical. In Table A4.12 we evaluate the impact of the NMW on employment retention using standard control groups derived from the ASHE data set rather than NES. Here the benchmarking period is restricted to 1997 (rather than 1994-1997). Comparing with Table A4.1 we see that the results obtained using ASHE are very similar to those obtained using NES. Finally, in Table A4.13, we show the estimated impacts of the introduction of the NMW on annual employment retention and percentage wage growth, using the LFS, in the case where we include in the sample only treatment and control observations and in the case where we include all LFS observations (for which we can measure wages). The results using the restricted sample are not identical to those reported in Tables A3.7 (percentage wage growth) and A4.3 (employment retention) in the row that refers to 1999. This is because of slight differences in the wage deflator used to derive treatment and comparison observations. Including all observations in the sample results in larger wage impacts in some cases, but no difference in the measured employment retention effect.

In sum, using the NES we find a small negative effect of the NMW on annual employment retention for low paid female part-time workers, associated mainly with introduction and more recent years. The magnitude of this effect is on average around 3 percentage points. This effect is not evident using the LFS, which may in part be due to smaller sample sizes and measurement error in pay. We generally find little evidence to suggest that the NMW has changed employment retention for full-time workers. In some pooled models we find evidence that employment retention may be slightly smaller for male full-time workers with the NMW.

5.3 Impacts of the NMW on average hours worked over time

In Annex 5 tables A5.1-A5.2 show DID estimates of the impact of the NMW on annual growth in basic and total weekly hours, respectively, based on the NES, using 1994-1997 as the benchmarking period, and using standard control groups. NES estimates using percentile groups are shown in tables A5.3-A5.4. Equivalent estimates based on the LFS are shown in tables A5.5-A5.8. As discussed in section 4, on the basis of pre-intervention tests, it is only the estimates for female full-time workers and female part-time workers based on percentile groups that can be regarded as valid estimates of NMW impacts. Focusing on these results we find little evidence to suggest that the NMW affected changes in average hours worked (either in NES or LFS). There is some evidence of a reduction in the change in average hours worked for female full-time workers during recession associated with the NMW. The magnitude of this impact is around 2 hours per week.

An alternative estimator of hours effects for male workers (and standard control groups) might be achieved using a modified version of the growth adjusted DID estimator in Heckman and Hotz (1989). This is not done in this report. In this type of model one nets off the pre-intervention DID from the standard DID estimator. It is likely that this type of adjustment would reduce (the magnitude of) the estimated impacts of the NMW on changes in average hours worked for men.

The vertical DID estimates reported in tables A5.9-A5.11 give conflicting results across datasets. The pre-NMW tests in section 4 do not give us much confidence in these estimates.

To summarise, analysis of the impacts of the NMW on changes in average hours worked is complicated by the difficulty in identifying suitable control groups. For groups where we appear to have adequate control groups (female workers) we find little evidence to suggest that the NMW has changed growth in hours worked. There is some evidence indicating that the NMW may have been associated with a small reduction in the change in weekly hours for female full-time workers during recession.

6. Impacts of the NMW by size of firm

6.1 Impacts of the NMW on wage growth by size of firm

In Annex 6 we report NMW impacts on wage growth by size of firm. These are all based on standard control groups. Tables A6.1-A6.9 report NES DID estimates of the impact of the NMW on wage growth. Tables A6.1-A6.3 show results for small firms, tables A6.4-A6.6 for medium size firms, and tables A6.7-A6.9 for large firms. The pooled estimates in these tables are scaled to be comparable across firm size groups. Tables A6.10 and A6.11 give pooled results for small and medium/large workplaces based on the LFS.

On most measures for most groups of workers we find positive wage growth impacts of the introduction of the NMW in all firm size categories. However, for workers in large firms, the estimates of the wage growth impact of NMW introduction are in some cases insignificant. The pooled estimator suggests that on average the impact of the NMW on wage growth for part-time female workers has been positive and statistically significant for workers in all categories of firm size. For full-time workers wage growth effects obtained from the pooled estimator (on the percentage and absolute measures) are only positive and statistically significant for workers in small firms.

Looking at the individual upratings we find little consistent evidence of significant wage growth impacts on the percentage and absolute wage growth measures. The impact of individual NMW upratings on the probability of annual positive wage growth is positive and statistically significant in many cases for workers in all categories of firm size.

The pooled LFS estimates in tables A6.10 and A6.11 provide no evidence that the NMW increased wage growth for low paid workers in small or in medium/large workplaces. As before, we note the problems in using HOURPAY to measure wage growth.

The vertical DID estimates using NES are reported in tables A6.12-A6.14 for small firms, tables A6.15-A6.17 for medium size firms, and tables A6.18-A6.20 for large firms. With the exception of male full-time workers in medium size firms on the absolute wage growth measure the pooled estimators including controls (pooled across all upratings 2000-2009) suggest that on average the NMW raised wage growth for all types of workers in all firm size categories on all wage growth measures. For female workers the magnitude of average NMW impacts on percentage wage growth does not appear very different across workers in different size firms. For male full-time workers, the average NMW impact on percentage wage growth is larger for low paid workers in small firms than for low paid workers in large firms. Looking at individual NMW changes, the impacts on wage growth of the introduction of the NMW are typically larger at the point of NMW introduction than in subsequent uprating years.

The pooled vertical DID estimates based on the LFS, in tables A6.21 and A6.22, suggest that the NMW increased wage growth for low paid workers in small and in medium/large workplaces. In particular, for female part-time workers. These effects are more robust using the HRRATE measure.

To summarise, we find that the NMW raised wage growth for part-time women in all categories of firm size that we consider. We also find that the NMW raised wage growth for full-time men and women in all categories of firm size, but here the evidence is more mixed for workers in medium and large size firms.

6.2 Impacts of the NMW on employment retention by size of firm

In Annex 7 tables A7.1-A7.6 show DID estimates of the impact of the NMW on annual employment retention and annual employment retention in the same size firm based on the NES, using 1996-1997 as the benchmarking period, and using standard control groups. Tables A7.1-A7.2 show results for small firms, tables A7.3-A7.4 for medium size firms, and tables A7.5-A7.6 for large firms. Once we include controls there is no robust evidence to suggest that the NMW affected employment retention for workers in small firms. There is some evidence that the introduction of the NMW reduced employment retention for female part-time workers in small firms, but this effect is not sustained. There is no evidence to suggest that the NMW affected employment retention in medium size firms, although we note from the pre-intervention tests that the DID

estimator is probably less reliable for medium size firms. In contrast, we find that the introduction of the NMW and upratings in more recent years tend to be associated with a reduction in annual employment retention for part-time female workers in large firms. This appears to be driving the aggregate (i.e. not disaggregated by firm size) results for female part-time workers discussed in section 5.2 in the later years. Looking at the pooled LFS estimators in tables A7.7 and A7.8 the negative association between the NMW and employment retention for female part-time workers appears for workers in smaller workplaces (note that many of these workers will be employed in large firms, as discussed in section 2).

The vertical DID estimator using NES reported for workers in small firms (tables A7.9 and A7.10) and for workers in medium-size firms (tables A7.11 and A7.12) does not generally show any impact of the NMW on employment retention, although we find a few negative and significant coefficients. In contrast, for large firms (tables A7.13 and A7.14), we find a series of negative NMW coefficients. More often than not these are for female part-time workers. The pooled vertical DID estimator using LFS, reported in tables A7.15 and A7.16, provide a more mixed picture. The estimates suggest that the NMW may have been associated with a reduction in employment retention within large workplaces for male full-time workers, but this does not appear as a reduction in employment retention more generally for these workers (i.e. they find jobs in other size workplaces).

Taken together, the evidence here suggests that to the extent there are any adverse effects of the NMW on employment retention for female part-time workers, on average these tend to be more significant in large firms. However, we also observe adverse NMW impacts on employment retention amongst female part-time workers in small firms in individual years.

6.3 Impacts of the NMW on average hours worked by size of firm

In Annex 8 tables A8.1-A8.6 show DID estimates of the impact of the NMW on annual changes in basic and total weekly hours based on the NES, using 1996-1997 as the benchmarking period, and using standard control groups. Tables A8.1-A8.2 show results for small firms, tables A8.3-A8.4 for medium size firms, and tables A8.5-A8.6 for large firms. We find no consistent picture regarding hours effects amongst workers in small

firms. There is some evidence of a positive NMW effect on hours worked for female full-time workers in medium size firms, although we are wary of the results for medium size firms as discussed in section 4. There is also some evidence of a positive NMW effect on basic (but not total) hours worked for female full- and part-time workers in large size firms. The pooled horizontal DID models using the LFS (tables A8.7-A8.8) yield positive and statistically significant NMW coefficients in some models for female full-time workers, but negative impacts in some models for female part-time workers in small work places and male full-time workers. Thus the evidence is rather mixed and we are mindful of the issues raised in section 4 regarding the validity of these DID estimates of NMW impacts on changes in hours worked.

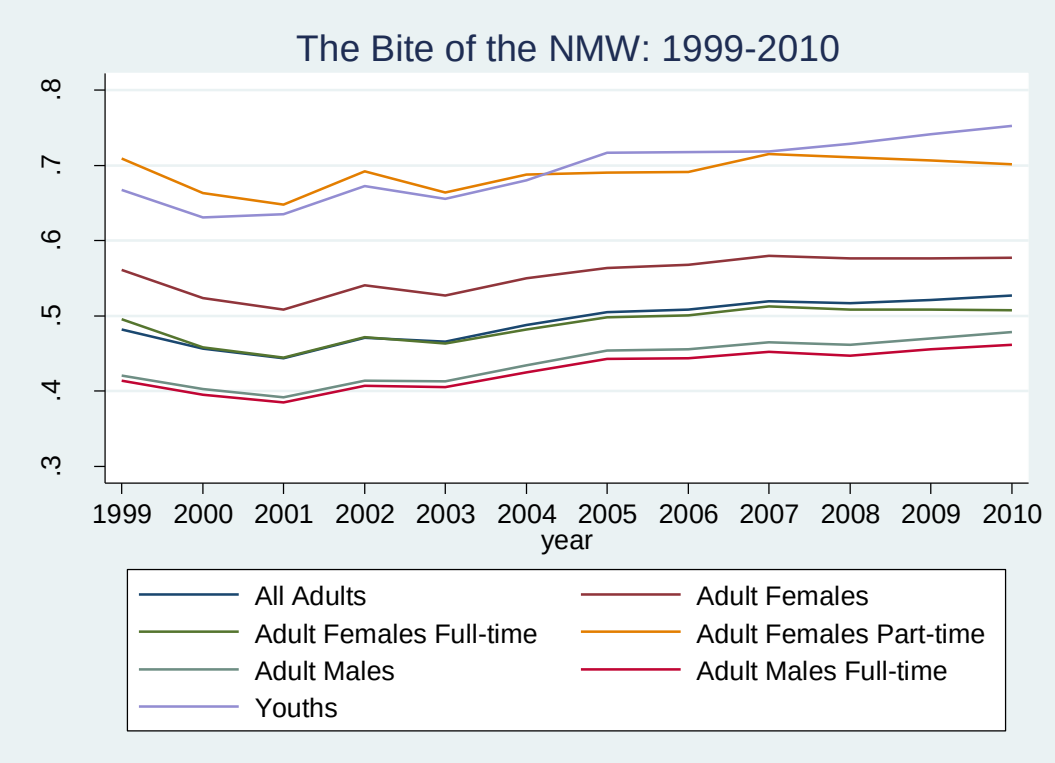
The vertical DID estimator using NES for workers in small firms (tables A8.9 and A8.10) suggest the introduction of the NMW may have reduced weekly hours for full-time workers in small firms, but these effects are not sustained beyond introduction. The analysis of workers in medium size firms (tables A8.11 and A8.12) does not suggest the NMW affected changes in hours worked for these workers. The vertical DID estimator for workers in large firms (tables A8.13 and A8.14) suggest the introduction of the NMW may have reduced weekly hours for full-time female workers in large firms, but there are no other robust impacts. Using the LFS, the pooled vertical DID estimator (tables A8.15 and A8.16) suggests the NMW may have been associated with a reduction in the change in total weekly hours for low paid part-time female workers in small workplaces. There are no other consistent significant impacts.

The picture regarding NMW effects on changes in hours worked by firm size is not particularly consistent.

7. Local area analysis

In this section we examine the impact of the NMW from a spatial perspective. As outlined above in Section 3.8 we utilise the regional variation in the impact of the NMW to examine effects on labour market outcomes. A key requirement for identification here is sufficient variation in the impact of the NMW. We require this variation over time but also across the different areas. Figure 7.1 below shows the average "bite" of the NMW, as measured by the Kaitz index, for each year from 1999-2010. This figure shows that, on introduction, the NMW was set at approximately 50% of median pay of adult workers. The value then eroded somewhat over time, as the NMW failed to keep pace with real wage growth. Between 2001 and 2008 there was a steady increase in the Kaitz index, as increases in the NMW were set above real increases in median wages and in the last couple of years the index has been relatively stable.

Figure 7.1



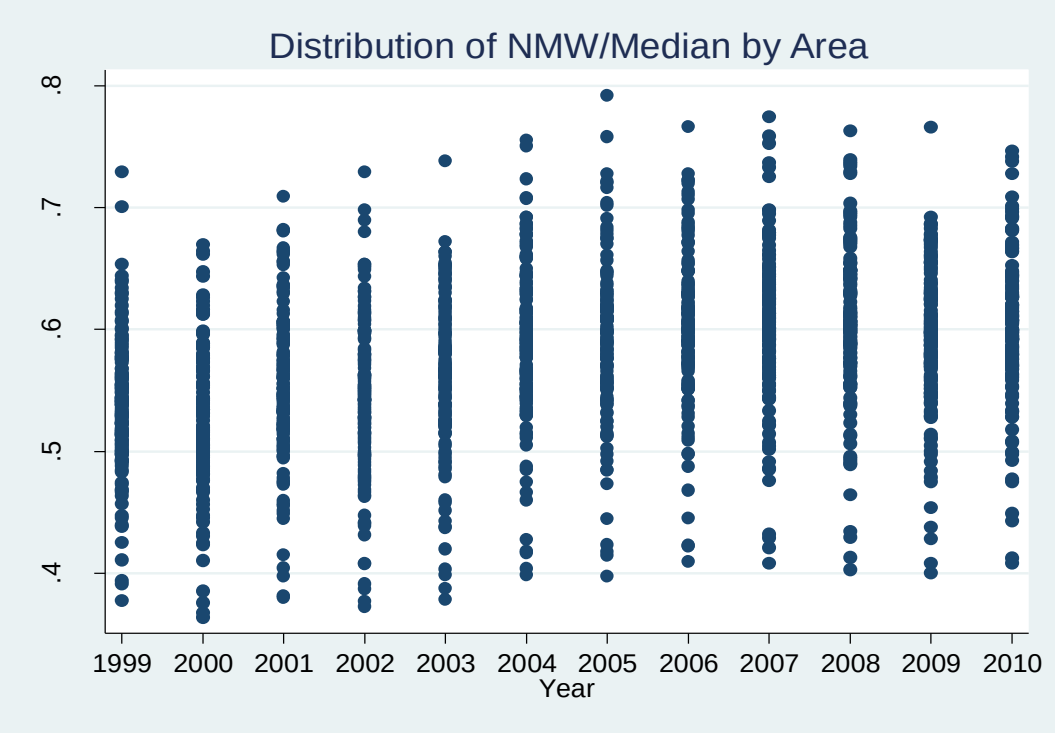
Source: Annual Survey of Hours and Earnings

Results are also reported for male and female adults and for male full-time workers and female full-time and female part-time workers and for young workers[13]. We see that the "bite" is higher for female workers and lower for males, but that the trend over time is similar. This is also true for full-time female and full-time male workers.

For part-time female workers the "bite" is much higher. On introduction the NMW was 70% of median pay for part-time adult female workers and following falls in the years after introduction the NMW was again around 70% of median pay for part-time adult female workers in 2010. The "bite" for young workers is also much higher; with the applicable NMW currently about 75% of the median wage. This is despite the fact that the youth rate is significantly lower than the adult rate.

Let us now examine the variation of this across the different areas. Figure 7.2 presents the distribution of the Kaitz index for all adults for each year.

Figure 7.2



Source: Annual Survey of Hours and Earnings

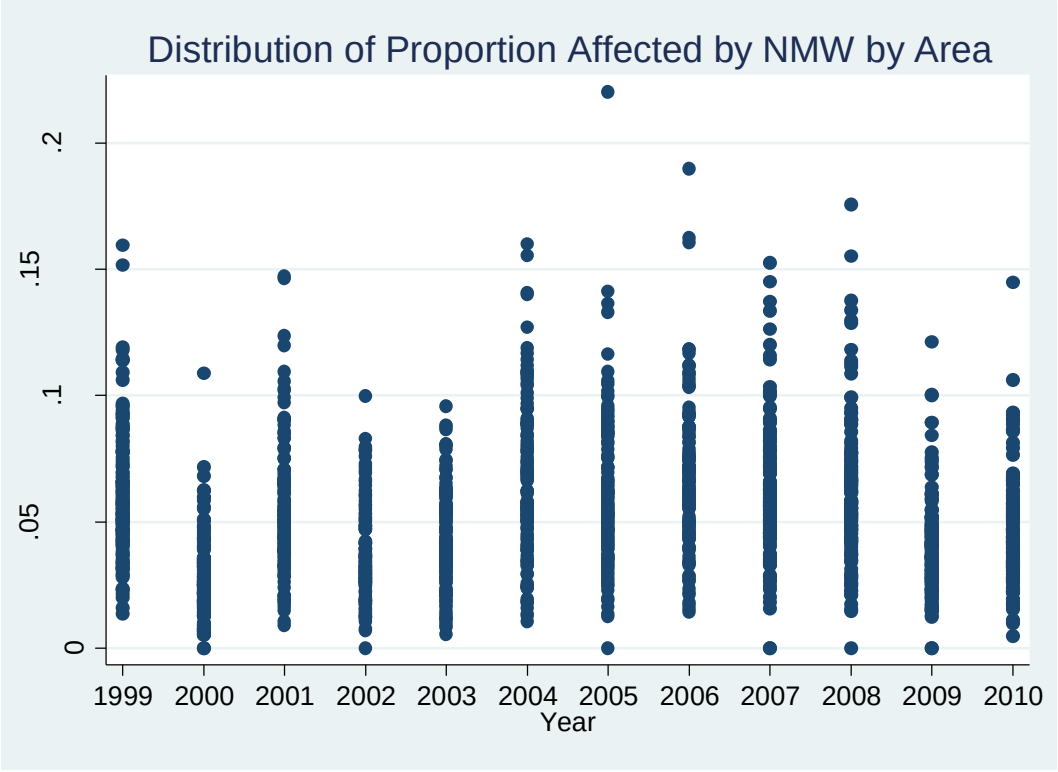
We see that there is significant variation in the impact of the NMW across areas. While the average Kaitz index was in the range 45-50%, we see some areas where this is below

[13] We don't report figures for part-time male workers because relatively few men work part-time.

35% and some areas where it was more than 70%. It is this variation that provides us with our identification of any potential minimum wage effects.

Figure 7.3 then presents an alternative measure of the "bite"; the proportion of adult workers affected by each increase in the NMW. This proportion varies from year to year. In the period from 2004-08 about 5% of workers on average were affected by each uprating, falling to less than 4% in 2009 and 2010. However, again we see significant variation across areas. Some areas having less than 1% of workers affected, and some with more than 10% of workers affected.

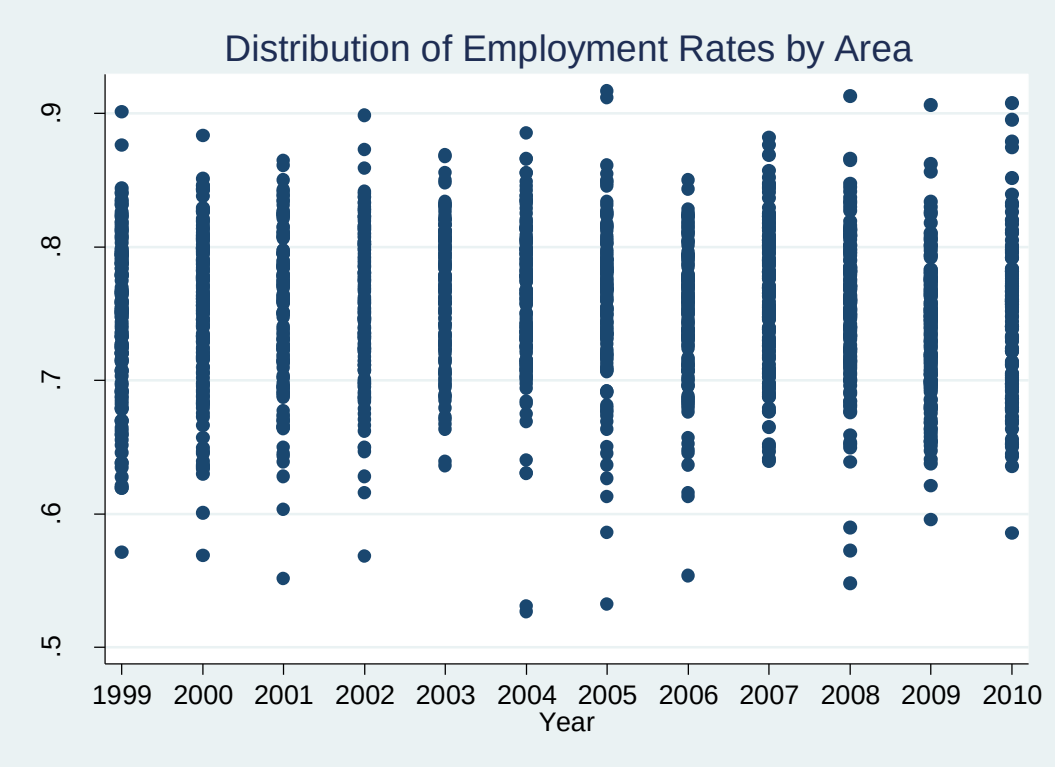
Figure 7.3



Source: Annual Survey of Hours and Earnings

Finally, we also need to establish that our dependent variables contain enough variation over the areas. Figure 7.4 presents the employment rate for each area and year. The employment rate for adults increased from 76% in 1999 to 79% in 2007, but since then has fallen back to 78%. We see considerable variation across the areas. Some areas have employment rates below 60%, while some have rates around 90%.

Figure 7.4

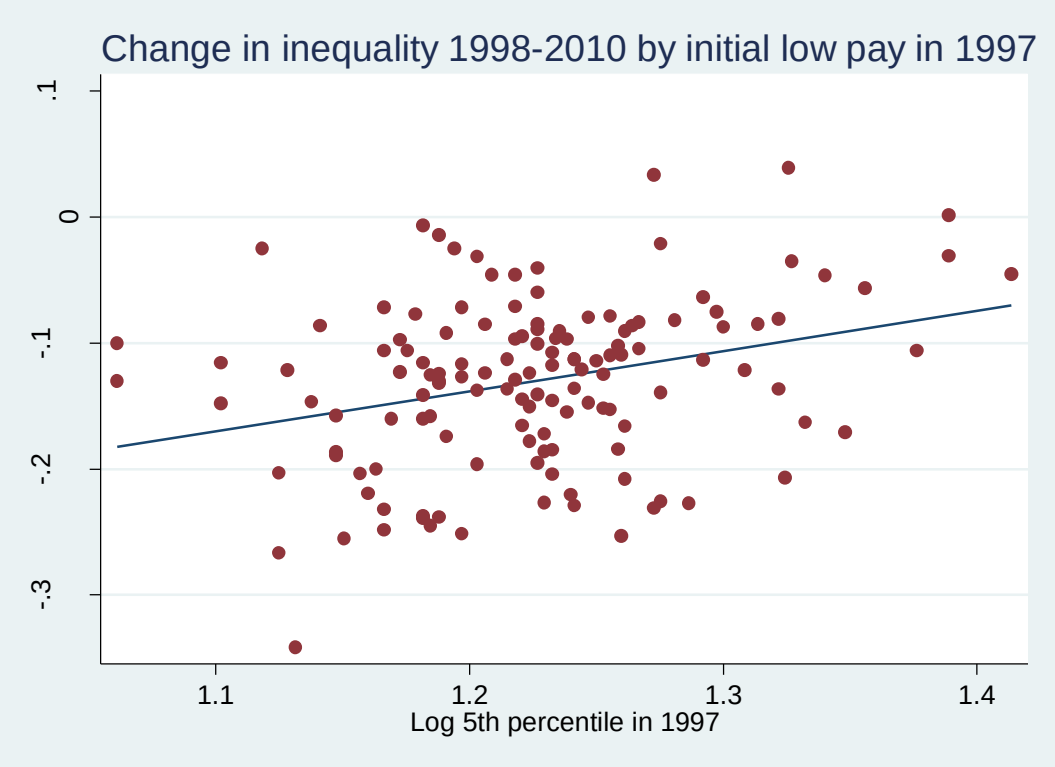


Source: Labour Force Survey

7.1 Wages

Now let us turn to our results. Before we estimate the impact on employment and other labour market outcomes we first need to establish that the NMW had an effect on the wages of individuals. Using our area level panel data we would expect to see that those regions most affected by the NMW would have the largest changes in wage inequality. Figure 7.5 below presents the change in wage inequality between 1998 and 2010, as measured by the change in the log of the ratio of the 50th percentile to the 5th percentile hourly earnings. This is plotted against the initial level of low pay in the area in 1997, as measured by the log of the 5th percentile of hourly earnings. We see that those areas with the lowest wages prior to the introduction of the NMW experience the greatest falls in inequality over the period 1998 to 2010. It seems highly likely that the NMW is compressing wages at the bottom of the distribution and this impact is greater in low wage areas.

Figure 7.5:



Source: Annual Survey of Hours and Earnings

However, in order to establish this more robustly we estimate the following regression specification:

$$\log(50th/5th)_{it} = \beta_0 + \beta_1 \mathrm{Pr}opBelow_{it-1} + \beta_2 X_{it} + YearDummies + AreaFixedEffects + u_{it} \qquad (10)$$

The dependent variable is the (log) ratio of the 50th percentile hourly wage to the 5th percentile hourly wage. This provides a measure of the degree of inequality in the bottom half of the wage distribution within each area. The PropBelowi,t-1 is then measuring the "bite" of the NMW in each region. We also include a set of controls and Year and Area fixed effects. The estimated coefficients are presented in Table A9.1 (see Appendix) for all adult workers. Results are presented for various specifications. We present results without weights in columns 1-3 and results where we weight by the population in the area in columns 4-6. We see that a larger proportion of workers affected by the increases in the NMW over this period is associated with a negative impact on inequality. In most specifications the estimated impact of the NMW is significant. If we take the coefficient in column 2 of -0.184, this implies that a 10% point

increase in the proportion of affected workers will reduce the 50/5 ratio by 1.8%. Table A9.2 presents the results with the dependent variable now in first differences, but the PropBelowi,t-1 still in levels. In the specification where we also include fixed effects, we find the estimated coefficient on PropBelowi,t-1 is -0.423. This implies that a 10% point increase in the proportion affected is associated with a 4% lower growth in the 50th/5th percentile ratio. This is quite a large effect of the NMW on pay inequality across areas.

7.2 Employment and Unemployment

Turning now to our estimates of the impact of the NMW on employment, we estimate equation (9) above on our area level panel data for the 135 area groupings. We report the regression output in Tables A9.3 to A9.12 below. We report a number of different specifications, for all adult workers, adult males, adult females, adult female full-time workers and adult female part-time workers. Since the areas vary considerably in size, we report both unweighted results as well as results using the population as a weighting variable.

It is important to note that the estimates come from difference-in-difference models using ASHE data. It is difficult to construct areas on a consistent basis for a period prior to 1997; hence ASHE is preferred over the NES because we have more accurate data on the coverage of the NMW. However, because of data availability the difference-in-difference approach only includes one year in the pre minimum wage period and hence our results will be sensitive to the relationship between employment and pay in that year.

Table A9.3 reports estimates of the impact of the NMW on the employment rate. The NMW effect is captured using the proportion of workers people paid below the NMW in April each year prior to its increase in the following October. For 1999, when the NMW was introduced in April we use the proportion of workers paid below the 1999 NMW in April 1998. We have to take this approach because this data is only collected in April each year. In addition, as noted in section 3.8, we estimate models that include a period before the NMW was introduced, for this year we calculate the proportion of workers in 1997 who were paid below the 1999 NMW as an indicator of what would have been the impact of a NMW in that year had it existed at this time. Clearly, before the introduction of the NMW, the identification of workers paid below the upcoming NMW is either 12

or 24 months before the introduction of the NMW whilst in other years it is only six months before the up-rating. Making an adjustment to the proportion paid below the introductory rate by deflating the level of the NMW by average earnings does not change the results.

The employment rate we consider is the rate in the six month period after each up-rating. So for example we associate the October 2009 up-rating with the employment rate between October 2009 and March 2010.

The estimates are in levels and all include year dummies, fixed effects and a variable that picks up the impact of NMW coverage throughout the estimation period, i.e. also including the year before the NMW was introduced. This means that our model is essentially a difference-in-difference estimator in line with the estimates using individual data presented earlier. The year dummies control for aggregate changes in employment that affect all areas the same, the fixed effects control for area differences in the level of employment and the coverage variable identifies any common impact over time of low paid employment on subsequent employment. Column 1 reports the impact with no other controls. The estimated coefficient of 0.046 implies that a 10% increase in the coverage of the NMW will increase the employment rate by 0.46 percentage points. Note, however, that the estimated coefficient is not statistically significant. It is also interesting to note that the overall low pay indicator is negative and of a greater magnitude than the minimum wage indicator. This indicates that in all years, areas with a high proportion of low paid people had lower employment rates. Again the estimated coefficient is not statistically significant.

The second column adds in controls for the share of low qualification and no qualification individuals, and also the share of young workers and manufacturing employment in the area. We also include the percentage of people born outside the UK in the area and the change in the percentage of people born outside the UK in the area to try to proxy net migration flows in the areas. The skill share variables are both significant, but the coefficient on the minimum wage is now negative although remains insignificant. The third column shows the impact of the NMW in each year and here we find a mix of negative and positive coefficients, but none are statistically significant.

The next three columns then report the same set of specifications but the regressions are weighted using the population as the weight. In column 4 the NMW impact is again positive, but is now strongly statistically significant showing higher employment rates after the introduction of the NMW than before its' introduction. The overall low pay indicator is negative and of a similar magnitude to the minimum wage indicator. This means that the positive NMW impact is in relation to a general negative relationship between low pay and employment. Once we include the control variables reported in column 5 the coefficient on the NMW variable falls substantially and is no longer statistically significant. In the final column we again find a mix of negative and positive coefficients, but now we find significant and positive coefficients between 2003 and 2007 with coefficients in 2003 and 2007 significant at conventional levels of significance. These results suggest that the impact of the NMW has had no systematic effect on the employment rate of adult workers across the whole period, but employment did seem to be boosted between 2003 and 2007 relative to 1998.

Tables A9.4 and A9.5 report results from the same regressions separately for men and women. The results are similar suggesting no overall impact of the NMW on adult male and female employment. The positive and significant coefficients in 2003 and 2007 only appear in the regressions for women, although it is worth noting that the coefficients for men are broadly similar, but are not statistically significant, whilst there was a strong positive coefficient for men in 2006.

Tables A9.6 and A9.7 again report the results from the same regressions but this time for adult female full-time workers and adult female part-time workers. Here we find a positive coefficient for full-time workers in 2009 and a corresponding negative coefficient for part-time women. This suggests that during this year employment of part-time female minimum wage workers may have been replaced with full-time female workers.

Tables A9.8 to A9.10 repeat the regressions for all adults, adult females and adult males reported in Tables A9.3 to A9.5, but this time the dependent variable is the unemployment rate. The results largely mirror those for employment with some significant negative coefficients suggesting the NMW reduced unemployment.

We also estimate models when we use an alternative measure of the impact of the NMW, the Kaitz index. These results are summarised in Tables A9.11 (unweighted) and A9.12 (weighted). The top panel of each table presents the estimated difference in difference coefficient for the whole NMW period when no other controls are included. These are equivalent to columns 1 and 4 of earlier tables. The bottom panel presents the estimates by year when all controls are included. These are equivalent to columns 3 and 6 of earlier tables. The results are broadly similar to the earlier ones, suggesting that the minimum wage indicator has little impact on the findings.

8. Conclusions

This report re-examines and updates evidence on the wage, employment and hour effects of the NMW. In particular, we look at how the labour market impacts of the NMW have changed over time, investigating whether its impacts have differed during recent years characterised by weak economic growth from earlier years when economic growth was strong and the aggregate unemployment rate was falling. Also, we explore whether the impacts of the NMW on individuals differ between those working in small versus larger firms.

We conduct a number of validity tests regarding the appropriateness of the identification strategy adopted in this report and in much of the literature that examines the labour market impacts of the NMW. We find that the standard DID assumptions appear less valid for some outcomes, control groups and groups of worker, which needs bearing in mind when interpreting the results. We also highlight the very different counterfactuals assumed when using either the pre-NMW period or more recent periods to benchmark NMW effects.

The findings in this report are broadly in line with the large body of evidence on the labour market impacts of the NMW, which suggests that the NMW has helped to raise the earnings of people in low paid work without damaging employment opportunities in low paid jobs. However, the evidence we present is perhaps more ambiguous about the latter than previous research has been. We do find some evidence that the NMW has led to a small reduction in employment retention amongst female part-time workers, particularly upon NMW introduction and during more recent years.

NMW increases have been relatively small during the recession years and we find that this has led to some restoration of wage differentials at the lower end of the pay distribution. We do not find robust evidence to suggest that the effect of the NMW on employment retention and hours worked has differed substantially during the economic downturn from previous years.

Looking at NMW impacts on individuals in different size firms we find that the NMW raised wage growth for part-time women in all categories of firm size that we consider. We also find that the NMW raised wage growth for low paid full-time workers in smaller firms. The evidence is more mixed for full-time men and women in medium and large size firms. To the extent there are any adverse effects of the NMW on employment retention for female part-time workers, these are on average more significant amongst workers in large firms.

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ANNEX 1

SAMPLE SIZES

A1.1 NES sample sizes: Standard groups

Sex	Female				Female				Male			
Hours	Full-time				Part-time				Full-time			
Group	T	C1	C2	C3	T	C1	C2	C3	T	C1	C2	C3
Year:												
1994	825	866	1198	1361	1487	1720	2119	1621	747	619	1091	1517
1995	1113	973	1319	1397	1992	1893	2412	1736	1045	745	1335	1668
1996	1104	971	1175	1364	1971	1837	2171	1800	938	712	1118	1665
1997	939	802	1032	1322	1881	1490	2102	1686	735	573	956	1544
1998	892	836	1155	1396	1744	1587	2328	1877	849	655	1157	1656
1999	0	0	0	0	0	0	0	0	0	0	0	0
2000	292	725	1070	1312	741	1745	2120	2278	226	670	966	1499
2001	712	1001	1222	1581	1748	2184	2183	2057	596	919	1266	1954
2002	346	1011	1261	1416	982	2356	2567	1865	289	879	1281	1627
2003	643	1087	1387	1675	1343	2290	2370	2109	523	981	1560	2037
2004	863	1400	1604	1786	2275	3023	2371	2052	803	1442	1890	2465
2005	791	1498	1770	1821	2164	2958	2773	2116	810	1496	2010	2272
2006	969	1600	1947	2003	2484	2949	2594	1975	1010	1710	2191	2457
2007	737	1495	1632	1476	1891	2869	2227	1657	804	1528	1755	1975
2008	777	1606	1594	1614	1981	2770	2080	1614	757	1665	1755	2079
2009	572	1889	1932	1975	1515	3562	2724	2218	718	1756	2068	2587

Notes: T includes those paid less than the NMW introduced by April the following year, but paid more or the same as the existing NMW; In the pre-NMW period the compliance NMW is zero and the upper threshold for T is equivalent to the April 1999 NMW deflated by the average earnings index; By definition there are zero observations for 1999 (compliance wage and NMW in following April are the same); C1 are those paid at least the upper threshold for T and up to 10 per cent above this; C2 are those paid [10-20[per cent above the upper threshold for T and C3 are those paid [20-30[per cent above the upper threshold for T.

A1.2 NES sample sizes: Percentile groups

Sex	Female				Female				Male			
Hours	Full-time				Part-time				Full-time			
Group	T	C1	C2	C3	T	C1	C2	C3	T	C1	C2	C3
Year:												
1994	513	530	508	496	943	999	937	962	662	718	587	654
1995	551	573	534	555	1069	1083	1076	1015	690	774	637	696
1996	561	571	569	533	1114	1205	917	1079	702	710	697	809
1997	529	557	504	503	1044	1057	1151	963	669	675	650	646
1998	532	554	555	516	1062	1071	1074	1041	689	809	586	660
1999	546	545	542	525	1088	1084	1055	1057	678	688	681	677
2000	530	527	526	515	1092	1106	1068	1109	681	696	625	674
2001	603	547	536	500	1072	1129	1058	1073	662	693	619	626
2002	559	553	523	548	1105	1208	1061	1042	653	667	639	637
2003	566	561	556	527	1155	1159	1120	1104	667	705	605	661
2004	558	594	529	540	1162	1203	1162	1158	646	673	630	649
2005	582	583	591	605	1284	1331	1277	1247	668	673	652	696
2006	606	644	604	569	1257	1315	1265	1192	690	673	649	673
2007	527	515	481	498	1085	1074	1051	1029	548	559	561	525
2008	512	515	526	488	1090	1334	758	1053	549	677	423	531
2009	632	650	609	607	1381	1309	1318	1242	741	674	654	652

Notes: Percentile cut-offs for Female Full-Time T=0.3-1.8 and C1=3.1-4.6, Female Part-time T=1.2-6.4 and C1=12.3-17.5, Male Full-Time T=0.16-1.2 and C1=2.0-3.04 (cut-offs for C2 and C3 immediately above C2 and equally spaced).

A1.3 LFS sample sizes: Standard groups

Sex	Female				Female				Male			
Hours	Full-time				Part-time				Full-time			
Group	T	C1	C2	C3	T	C1	C2	C3	T	C1	C2	C3
Year:												
1997	278	158	167	226	640	330	305	302	244	127	143	204
1998	260	143	167	193	607	280	304	228	196	108	181	184
1999	512	259	337	345	1232	508	619	447	458	198	305	423
2000	57	245	267	292	186	492	447	468	54	201	241	317
2001	159	190	222	264	356	386	293	295	116	162	203	298
2002	46	214	278	269	131	451	465	313	34	168	280	317
2003	116	249	267	325	298	443	449	367	86	217	255	372
2004	144	280	272	348	353	451	393	335	138	258	311	385
2005	112	274	252	313	256	383	400	265	87	242	321	348
2006	125	253	334	309	251	368	346	274	106	241	337	341
2007	95	287	335	320	178	440	347	290	86	294	312	362
2008	85	292	291	290	137	366	277	254	77	305	271	386
2009	40	245	266	330	93	404	335	279	48	246	276	328

Notes: Based on HOURPAY; Year refers to observations between October in the previous calendar year to September in the same calendar year; 1999 includes observations April 1998-March 1999; 1998 includes observations October 1997-March 1998; T includes those paid less than the NMW introduced by October that calendar year, but paid more or the same as the existing NMW; In the pre-NMW period the compliance NMW is zero and the upper threshold for T is equivalent to the April 1999 NMW deflated by the average earnings index; C1 are those paid at least the upper threshold for T and up to 10 per cent above this; C2 are those paid [10-20[per cent above the upper threshold for T and C3 are those paid [20-30[per cent above the upper threshold for T; No wage observations for 1996Q4, 1997Q1, 2001Q1 (before 1997Q2 earnings questions were not included in LFS wave 1 responses; 2001Q1 wage data are suppressed by ONS because of changes in the income weighting structure within the quarter).

A1.4 LFS sample sizes: Percentile groups

Sex	Female				Female				Male			
Hours	Full-time				Part-time				Full-time			
Group	T	C1	C2	C3	T	C1	C2	C3	T	C1	C2	C3
Year:												
1997	284	281	274	278	447	447	437	436	292	298	288	288
1998	302	318	268	284	556	462	456	452	303	318	306	293
1999	287	297	279	284	485	520	425	419	301	299	292	305
2000	270	270	277	255	487	536	408	438	292	301	263	290
2001	213	219	204	216	331	345	355	276	213	218	218	201
2002	248	262	237	246	389	396	365	367	260	262	249	250
2003	216	224	202	205	350	333	331	327	222	220	215	211
2004	244	258	237	239	363	391	357	354	236	246	241	218
2005	253	256	244	267	464	352	354	342	239	241	241	239
2006	239	245	232	240	335	347	317	325	223	251	197	226
2007	244	249	227	239	343	401	259	341	227	248	205	221
2008	225	223	226	217	295	316	292	291	210	213	213	204
2009	222	218	214	220	294	326	292	292	200	208	196	198

Notes: Based on HOURPAY; Year refers to observations between October in the previous calendar year to September in the same calendar year; Percentile cut-offs for Female Full-Time T=2.6-5.9 and C1=7.1-10.4, Female Part-time T=9.1-15.9 and C1=19.4-26.2, Male Full-Time T=1.4-3.35 and C1=4.1-6.05 (cut-offs for C2 and C3 immediately above C2 and equally spaced); No wage observations for 1996Q4, 1997Q1, 2001Q1 (before 1997Q2 earnings questions were not included in LFS wave 1 responses; 2001Q1 wage data are suppressed by ONS because of changes in the income weighting structure within the quarter).

A1.5 LFS sample sizes: Standard groups using HRRATE

Sex	Female				Female				Male			
Hours	Full-time				Part-time				Full-time			
Group	T	C1	C2	C3	T	C1	C2	C3	T	C1	C2	C3
Year:												
2000	104	171	168	177	369	505	390	398	70	120	165	222
2001	156	195	134	201	443	420	318	348	90	141	153	269
2002	118	184	241	166	370	515	552	267	74	132	217	198
2003	148	214	222	188	381	490	591	277	73	135	246	257
2004	180	225	202	190	500	534	393	293	142	207	218	255
2005	179	234	199	156	455	498	386	227	124	186	250	210
2006	174	200	218	161	489	413	311	181	125	186	212	178
2007	168	213	190	156	438	485	293	158	149	190	196	199
2008	157	233	156	120	342	435	212	184	106	222	189	208
2009	75	221	148	178	183	486	278	199	66	154	166	210

Notes: Based on HRRATE; Year refers to observations between October in the previous calendar year to September in the same calendar year; T includes those paid less than the NMW introduced by October that calendar year, but paid more or the same as the existing NMW; C1 are those paid at least the upper threshold for T and up to 10 per cent above this; C2 are those paid [10-20[per cent above the upper threshold for T and C3 are those paid [20-30[per cent above the upper threshold for T; No wage observations for 2001Q1 (2001Q1 wage data are suppressed by ONS because of changes in the income weighting structure within the quarter).

ANNEX 2

VALIDITY TESTS

DIFFERENCE-IN-DIFFERENCES ESTIMATES IN PERIODS OF 'NO' NMW CHANGE

A2.1 Annual percentage wage growth: Standard control group and time interactions in no minimum wage period

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
DID95	0.011	0.010	0.004	0.002	0.005	-0.001	0.012	0.009	0.004	0.001	0.003	0.002
	(0.011)	(0.010)	(0.007)	(0.005)	(0.017)	(0.011)	(0.012)	(0.010)	(0.007)	(0.005)	(0.017)	(0.012)
DID96	0.000	0.004	0.003	-0.007	0.021	0.007	-0.003	0.001	0.004	-0.008	0.019	0.009
	(0.012)	(0.010)	(0.007)	(0.006)	(0.018)	(0.012)	(0.012)	(0.010)	(0.007)	(0.005)	(0.018)	(0.012)
DID97	-0.004	-0.005	-0.008	-0.005	-0.004	0.008	-0.001	-0.005	-0.006	-0.006	0.002	0.013
	(0.012)	(0.010)	(0.007)	(0.006)	(0.019)	(0.012)	(0.012)	(0.010)	(0.007)	(0.006)	(0.019)	(0.013)
Observations	4,823	5,642	8,573	10,087	3,803	5,171	4,823	5,642	8,573	10,087	3,803	5,171
Wald test	0.68	0.87	1.06	1.28	0.76	0.33	0.72	0.67	0.92	1.34	0.51	0.48

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID95-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.2 Annual percentage wage growth: Percentile control group and time interactions in no minimum wage period

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
DID95	0.065***	0.068***	0.006	0.008	-0.006	-0.017	0.071***	0.073***	0.010	0.007	-0.003	-0.012
	(0.018)	(0.019)	(0.011)	(0.010)	(0.015)	(0.015)	(0.019)	(0.021)	(0.011)	(0.010)	(0.015)	(0.015)
DID96	0.050***	0.061***	0.009	0.003	0.008	0.012	0.043**	0.045**	0.009	0.000	0.012	0.014
	(0.018)	(0.019)	(0.010)	(0.010)	(0.015)	(0.015)	(0.019)	(0.021)	(0.011)	(0.011)	(0.016)	(0.015)
DID97	0.027	0.033*	-0.014	-0.003	0.005	0.002	0.024	0.022	-0.016	-0.012	0.010	0.006
	(0.018)	(0.020)	(0.011)	(0.010)	(0.015)	(0.015)	(0.020)	(0.021)	(0.011)	(0.011)	(0.016)	(0.015)
Observations	2,797	2,761	5,081	5,074	3,543	3,403	2,797	2,761	5,081	5,074	3,543	3,403
Wald test	4.93***	5.05***	1.89	0.45	0.33	1.37	4.89***	4.57***	2.56*	1.19	0.43	1.05

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID95-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.3 Annual employment retention: Standard control group and time interactions in no minimum wage period

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
DID95	0.007	0.022	0.008	0.018	0.015	0.014	0.012	0.029	0.012	0.014	0.013	0.010
	(0.031)	(0.028)	(0.023)	(0.021)	(0.035)	(0.029)	(0.032)	(0.028)	(0.023)	(0.022)	(0.035)	(0.030)
DID96	0.047	0.022	0.037	0.016	0.027	-0.018	0.050	0.029	0.039*	0.014	0.024	-0.016
	(0.030)	(0.028)	(0.022)	(0.021)	(0.034)	(0.031)	(0.030)	(0.028)	(0.023)	(0.022)	(0.035)	(0.031)
DID97	0.034	0.066**	0.029	0.057***	0.036	0.004	0.034	0.070**	0.028	0.057***	0.034	0.003
	(0.032)	(0.027)	(0.023)	(0.021)	(0.036)	(0.032)	(0.032)	(0.027)	(0.024)	(0.021)	(0.037)	(0.032)
Observations	7,593	8,705	14,271	16,135	6,114	7,965	7,593	8,705	14,271	16,135	6,114	7,965
Wald test	3.23	5.71	3.43	8.06**	1.1	1.33	3.13	6.05	3.25	8.16**	0.92	0.92

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID95-DID97 (Chisq-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.4 Annual employment retention: Percentile control group and time interactions in no minimum wage period

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
DID95	-0.009	0.021	0.039	0.040	0.049	-0.006	-0.009	0.019	0.033	0.034	0.044	-0.015
	(0.042)	(0.041)	(0.029)	(0.029)	(0.034)	(0.038)	(0.043)	(0.042)	(0.030)	(0.030)	(0.035)	(0.039)
DID96	0.029	0.051	0.051*	0.027	0.035	-0.028	0.028	0.052	0.057**	0.032	0.031	-0.025
	(0.039)	(0.038)	(0.028)	(0.030)	(0.035)	(0.038)	(0.040)	(0.039)	(0.029)	(0.031)	(0.036)	(0.039)
DID97	0.013	0.000	0.038	0.079***	0.030	0.004	0.014	0.003	0.036	0.084***	0.031	0.001
	(0.041)	(0.042)	(0.030)	(0.028)	(0.036)	(0.038)	(0.042)	(0.043)	(0.030)	(0.028)	(0.036)	(0.039)
Observations	4,385	4,269	8,514	8,251	5,600	5,294	4,385	4,269	8,514	8,251	5,600	5,294
Wald test	1.05	2.32	3.34	7.87**	2.05	0.94	0.94	2.19	3.69	8.67**	1.56	0.67

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID95-DID97 (Chisq-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.5 Annual employment retention: Standard control group vertical difference-in-differences in no minimum wage period

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
DID94	-0.055**	-0.038**	-0.021	-0.051**	-0.020	-0.025
	(0.023)	(0.017)	(0.023)	(0.023)	(0.017)	(0.024)
DID95	-0.039*	-0.015	-0.002	-0.030	0.003	-0.011
	(0.021)	(0.015)	(0.020)	(0.021)	(0.015)	(0.021)
DID96	-0.018	-0.016	-0.033	-0.012	0.001	-0.042*
	(0.020)	(0.016)	(0.022)	(0.020)	(0.016)	(0.022)
DID97	-0.002	0.002	-0.008	0.004	0.018	-0.018
	(0.021)	(0.016)	(0.023)	(0.021)	(0.016)	(0.023)
Observations	17,594	29,647	16,886	17,594	29,647	16,886
Wald test	8.78*	6.41	3.1	7.53	4.34	4.04

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID94-DID97 (Chisq-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.6 Annual employment retention: Percentile control group vertical difference-in-differences in no minimum wage period

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
DID94	-0.077**	-0.081***	-0.069**	-0.077**	-0.066**	-0.030
	(0.031)	(0.023)	(0.028)	(0.035)	(0.026)	(0.032)
DID95	-0.059*	-0.060***	-0.063**	-0.064*	-0.052*	-0.033
	(0.030)	(0.022)	(0.027)	(0.038)	(0.027)	(0.033)
DID96	-0.036	-0.065***	-0.065**	-0.039	-0.047*	-0.028
	(0.030)	(0.022)	(0.027)	(0.037)	(0.027)	(0.033)
DID97	-0.043	-0.025	-0.053**	-0.044	-0.010	-0.015
	(0.030)	(0.021)	(0.027)	(0.038)	(0.026)	(0.032)
Observations	8,587	16,614	10,976	8,587	16,614	10,976
Wald test	8.09*	18.5***	10.9**	5.92	9.86**	1.44

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID94-DID97 (Chisq-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.7 Annual change in basic hours: Standard control group and time interactions in no minimum wage period

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
DID95	-2.738***	-3.084***	0.809**	1.010**	-2.142***	-1.641***	-1.502**	-1.894***	0.861**	1.188***	-1.915***	-1.424**
	(0.683)	(0.645)	(0.406)	(0.397)	(0.695)	(0.595)	(0.644)	(0.606)	(0.406)	(0.398)	(0.690)	(0.585)
DID96	-1.905***	-1.837***	-0.292	0.253	-1.684**	-1.341**	-0.824	-0.837	-0.200	0.383	-1.489**	-1.185*
	(0.659)	(0.616)	(0.416)	(0.393)	(0.705)	(0.624)	(0.639)	(0.596)	(0.414)	(0.390)	(0.707)	(0.623)
DID97	-2.214***	-1.663***	0.097	0.327	-1.628**	-1.668**	-1.337**	-1.064*	0.100	0.349	-1.572**	-1.664**
	(0.653)	(0.624)	(0.433)	(0.405)	(0.788)	(0.697)	(0.633)	(0.602)	(0.429)	(0.401)	(0.788)	(0.695)
Observations	4,823	5,642	8,577	10,091	3,803	5,171	4,823	5,642	8,577	10,091	3,803	5,171
Wald test	6.86***	8.16***	2.54*	2.36*	3.84***	3.58**	2.35*	3.35**	2.54*	3.21**	3.14**	3.04**

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID95-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.8 Annual change in basic hours: Percentile control group and time interactions in no minimum wage period

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
DID95	-2.973***	-3.022***	0.282	0.292	-2.023***	-1.324*	-1.717**	-1.571*	0.547	0.602	-1.864***	-1.169
	(0.852)	(0.860)	(0.522)	(0.531)	(0.726)	(0.734)	(0.840)	(0.848)	(0.528)	(0.538)	(0.715)	(0.722)
DID96	-2.070**	-2.564***	-0.406	-0.312	-1.749**	-2.041***	-0.926	-1.151	-0.222	-0.109	-1.528**	-1.765***
	(0.845)	(0.829)	(0.520)	(0.513)	(0.716)	(0.687)	(0.833)	(0.817)	(0.524)	(0.520)	(0.711)	(0.679)
DID97	-2.713***	-2.674***	0.098	0.380	-1.437**	-1.160	-1.424*	-1.154	0.233	0.497	-1.406**	-1.068
	(0.799)	(0.805)	(0.554)	(0.548)	(0.712)	(0.706)	(0.788)	(0.796)	(0.555)	(0.554)	(0.710)	(0.706)
Observations	2,763	2,751	5,039	5,073	3,505	3,411	2,763	2,751	5,039	5,073	3,505	3,411
Wald test	5.96***	6.15***	0.55	0.65	3.87***	3.42**	1.81	1.43	0.72	0.85	3.34**	2.69**

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID95-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.9 Annual change in basic hours: Standard control group vertical difference-in-differences in no minimum wage period

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
DID94	-0.549	-0.118	0.197	-0.465	-0.180	0.409
	(0.410)	(0.282)	(0.401)	(0.398)	(0.281)	(0.398)
DID95	-3.649***	0.892***	-1.717***	-2.673***	0.933***	-1.344***
	(0.515)	(0.283)	(0.466)	(0.475)	(0.285)	(0.453)
DID96	-2.644***	0.040	-1.493***	-1.831***	0.083	-1.156**
	(0.483)	(0.298)	(0.510)	(0.458)	(0.295)	(0.511)
DID97	-2.646***	0.024	-1.578***	-2.121***	-0.036	-1.349**
	(0.471)	(0.306)	(0.588)	(0.448)	(0.303)	(0.589)
Observations	11,893	19,225	11,388	11,893	19,225	11,388
Wald test	21.9***	2.88**	6.81***	14.25***	3.28**	5.04***

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID94-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.10 Annual change in basic hours: Percentile control group vertical difference-in-differences in no minimum wage period

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
DID94	-0.434	-0.122	0.014	2.274***	0.109	1.891***
	(0.507)	(0.349)	(0.391)	(0.637)	(0.402)	(0.564)
DID95	-3.721***	0.286	-2.082***	0.138	0.764	-0.047
	(0.688)	(0.387)	(0.613)	(0.799)	(0.474)	(0.650)
DID96	-2.901***	-0.466	-2.140***	0.980	-0.091	0.040
	(0.673)	(0.376)	(0.596)	(0.785)	(0.470)	(0.701)
DID97	-3.082***	0.258	-1.594***	0.900	0.628	0.374
	(0.619)	(0.428)	(0.599)	(0.748)	(0.519)	(0.714)
Observations	5,608	10,506	7,277	5,608	10,506	7,277
Wald test	13.7***	0.82	7.26***	3.95***	1.26	4.49***

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID94-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.11 Annual change in total hours: Standard control group and time interactions in no minimum wage period

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
DID95	-2.888***	-3.253***	0.915**	0.916**	-2.045**	-1.851**	-1.655**	-2.103***	0.969**	1.105**	-1.861**	-1.700**
	(0.774)	(0.713)	(0.461)	(0.443)	(0.921)	(0.782)	(0.742)	(0.678)	(0.461)	(0.443)	(0.915)	(0.775)
DID96	-1.853**	-1.828***	-0.312	0.247	-2.435**	-2.814***	-0.784	-0.879	-0.216	0.388	-2.291**	-2.703***
	(0.761)	(0.696)	(0.458)	(0.441)	(0.960)	(0.832)	(0.745)	(0.678)	(0.456)	(0.438)	(0.961)	(0.831)
DID97	-2.147***	-1.736**	0.281	0.467	-1.823*	-2.878***	-1.266*	-1.152*	0.286	0.489	-1.775*	-2.894***
	(0.755)	(0.711)	(0.477)	(0.449)	(0.976)	(0.840)	(0.737)	(0.690)	(0.474)	(0.445)	(0.975)	(0.838)
Observations	4,823	5,641	8,573	10,087	3,801	5,170	4,823	5,641	8,573	10,087	3,801	5,170
Wald test	5.39***	7.24***	2.57*	1.55	2.87**	5.77***	1.89	3.27**	2.54*	2.16*	2.52*	5.60***

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID95-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.12 Annual change in total hours: Percentile control group and time interactions in no minimum wage period

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
DID95	-2.899***	-3.192***	0.530	0.090	-2.516***	-1.672*	-1.691*	-1.851*	0.844	0.432	-2.365**	-1.534
	(1.018)	(0.947)	(0.594)	(0.606)	(0.941)	(0.971)	(1.015)	(0.944)	(0.600)	(0.613)	(0.934)	(0.959)
DID96	-1.732*	-2.476***	-0.284	-0.027	-3.204***	-3.759***	-0.637	-1.188	-0.035	0.235	-2.999***	-3.499***
	(0.993)	(0.937)	(0.574)	(0.581)	(1.002)	(0.961)	(0.990)	(0.935)	(0.580)	(0.589)	(0.995)	(0.945)
DID97	-2.636***	-2.681***	0.555	0.624	-2.690***	-2.661***	-1.391	-1.283	0.723	0.794	-2.656***	-2.569***
	(0.954)	(0.937)	(0.611)	(0.615)	(0.910)	(0.908)	(0.947)	(0.926)	(0.613)	(0.621)	(0.909)	(0.907)
Observations	2,763	2,751	5,037	5,071	3,504	3,411	2,763	2,751	5,037	5,071	3,504	3,411
Wald test	3.75**	5.26***	0.90	0.46	5.30***	6.04***	1.17	1.50	1.16	0.57	4.89***	5.49***

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID95-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.13 Annual change in total hours: Standard control group vertical difference-in-differences in no minimum wage period

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
DID94	-0.343	-0.009	0.697	-0.275	-0.057	0.869
	(0.470)	(0.318)	(0.558)	(0.461)	(0.318)	(0.560)
DID95	-3.601***	0.966***	-1.200**	-2.657***	1.030***	-0.895
	(0.552)	(0.307)	(0.574)	(0.516)	(0.308)	(0.569)
DID96	-2.428***	0.135	-1.890***	-1.648***	0.199	-1.622**
	(0.547)	(0.321)	(0.679)	(0.525)	(0.320)	(0.681)
DID97	-2.479***	0.300	-1.560**	-1.977***	0.255	-1.378**
	(0.535)	(0.330)	(0.640)	(0.514)	(0.326)	(0.642)
Observations	11,889	19,220	11,385	11,889	19,220	11,385
Wald test	17.1***	2.63**	5.47***	10.8***	2.99**	4.61***

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID94-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.14 Annual change in total hours: Percentile control group vertical difference-in-differences in no minimum wage period

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
DID94	-0.348	-0.242	0.755	2.129***	0.114	2.378***
	(0.569)	(0.401)	(0.608)	(0.695)	(0.454)	(0.797)
DID95	-3.686***	0.232	-1.468**	-0.147	0.873*	0.293
	(0.749)	(0.419)	(0.733)	(0.893)	(0.511)	(0.853)
DID96	-2.793***	-0.412	-2.569***	0.746	0.136	-0.687
	(0.775)	(0.403)	(0.807)	(0.912)	(0.505)	(0.901)
DID97	-3.120***	0.445	-1.687**	0.529	0.975*	0.006
	(0.736)	(0.457)	(0.677)	(0.859)	(0.552)	(0.842)
Observations	5,607	10,503	7,276	5,607	10,503	7,276
Wald test	11.1***	0.84	6.51***	3.25**	1.42	4.69***

Notes: NES 1994 - 1998; Wald test is a test of joint significance of the difference-in-differences coefficients DID94-DID97 (F-statistic); Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses.

A2.15 Annual percentage wage growth: Standard control group and time interactions 1996-1997 by firm size

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Firm size:												
Any	-0.003	-0.008	-0.011	0.003	-0.027	-0.001	0.005	-0.006	-0.010	0.002	-0.021	0.003
	(0.012)	(0.010)	(0.008)	(0.005)	(0.019)	(0.013)	(0.013)	(0.011)	(0.008)	(0.005)	(0.019)	(0.013)
	2,362	*2,681*	*4,199*	*4,937*	*1,743*	*2,340*	*2,362*	*2,681*	*4,199*	*4,937*	*1,743*	*2,340*
Small	-0.006	-0.021	0.010	-0.004	-0.025	-0.010	0.000	-0.017	0.010	-0.004	-0.021	-0.007
	(0.015)	(0.016)	(0.012)	(0.015)	(0.021)	(0.016)	(0.015)	(0.015)	(0.013)	(0.015)	(0.021)	(0.017)
	988	*963*	*1,378*	*1,251*	*946*	*1,185*	*988*	*963*	*1,378*	*1,251*	*946*	*1,185*
Medium	-0.017	0.005	-0.004	0.017	0.010	0.014	-0.022	0.004	-0.016	0.001	0.016	0.017
	(0.024)	(0.020)	(0.020)	(0.025)	(0.040)	(0.024)	(0.024)	(0.020)	(0.027)	(0.032)	(0.042)	(0.024)
	461	*527*	*618*	*587*	*267*	*358*	*461*	*527*	*618*	*587*	*267*	*358*
Large	0.051	0.105***	-0.018*	0.003	-0.038	-0.019	0.022	0.085***	-0.021	0.001	-0.067	-0.022
	(0.039)	(0.027)	(0.010)	(0.005)	(0.051)	(0.032)	(0.036)	(0.027)	(0.015)	(0.005)	(0.049)	(0.032)
	877	*1,151*	*2,162*	*3,065*	*505*	*767*	*877*	*1,151*	*2,162*	*3,065*	*505*	*767*

Notes: NES 1996 - 1998; Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses; Number of observations in italics.

A2.16 Annual employment retention: Standard control group and time interactions 1996-1997 by firm size

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Firm size:												
Any	-0.012	0.049*	-0.013	0.038*	0.017	0.028	-0.015	0.045	-0.017	0.040*	0.015	0.027
	(0.032)	(0.028)	(0.023)	(0.021)	(0.036)	(0.031)	(0.032)	(0.028)	(0.024)	(0.021)	(0.037)	(0.031)
	3,765	*4,200*	*7,084*	*8,028*	*2,926*	*3,713*	*3,765*	*4,200*	*7,084*	*8,028*	*2,926*	*3,713*
Small	-0.018	0.066	-0.001	-0.008	0.074	0.068	-0.019	0.063	-0.011	-0.026	0.074	0.070*
	(0.050)	(0.047)	(.)	(0.047)	(0.048)	(0.042)	(0.051)	(0.048)	(0.042)	(0.048)	(0.049)	(0.042)
	1,543	*1,491*	*2,265*	*2,000*	*1,527*	*1,860*	*1,543*	*1,491*	*2,265*	*2,000*	*1,527*	*1,860*
Medium	-0.114	-0.012	-0.144**	-0.129*	-0.077	-0.077	-0.119	-0.028	-0.145**	-0.140*	-0.087	-0.087
	(0.076)	(0.068)	(0.065)	(0.070)	(0.093)	(0.084)	(0.078)	(0.070)	(0.067)	(0.072)	(0.096)	(0.088)
	707	*792*	*991*	*930*	*475*	*588*	*707*	*792*	*991*	*930*	*475*	*588*
Large	0.029	0.050	0.017	0.079***	0.001	0.032	0.032	0.054	0.015	0.084***	-0.003	0.027
	(0.049)	(0.042)	(0.031)	(0.025)	(0.066)	(0.053)	(0.051)	(0.043)	(0.032)	(0.025)	(0.068)	(0.055)
	1,441	*1,837*	*3,753*	*5,031*	*885*	*1,222*	*1,441*	*1,837*	*3,753*	*5,031*	*885*	*1,222*

Notes: NES 1996 - 1998; Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses; Number of observations in italics.

A2.17 Annual employment retention in same size firm: Standard control group and time interactions 1996-1997 by firm size

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Firm size:												
Any	0.022	0.050*	-0.013	0.025	0.039	0.051*	0.020	0.045	-0.016	0.028	0.042	0.051
	(0.032)	(0.029)	(0.023)	(0.021)	(0.036)	(0.031)	(0.033)	(0.030)	(0.024)	(0.022)	(0.037)	(0.032)
	3,765	*4,200*	*7,084*	*8,028*	*2,926*	*3,713*	*3,765*	*4,200*	*7,084*	*8,028*	*2,926*	*3,713*
Small	0.051	0.082*	-0.013	-0.027	0.098**	0.093**	0.050	0.076	-0.018	-0.040	0.099**	0.097**
	(0.049)	(0.049)	(0.042)	(0.047)	(0.049)	(0.042)	(0.050)	(0.050)	(0.044)	(0.049)	(0.050)	(0.043)
	1,543	*1,491*	*2,265*	*2,000*	*1,527*	*1,860*	*1,543*	*1,491*	*2,265*	*2,000*	*1,527*	*1,860*
Medium	-0.093	-0.044	-0.091	-0.175***	-0.060	-0.082	-0.097	-0.062	-0.111*	-0.204***	-0.062	-0.091
	(0.075)	(0.071)	(0.062)	(0.063)	(0.090)	(0.083)	(0.076)	(0.073)	(0.064)	(0.065)	(0.093)	(0.086)
	707	*792*	*991*	*930*	*475*	*588*	*707*	*792*	*991*	*930*	*475*	*588*
Large	0.027	0.055	0.008	0.076***	0.010	0.044	0.030	0.060	0.005	0.082***	0.010	0.043
	(0.050)	(0.044)	(0.032)	(0.026)	(0.066)	(0.054)	(0.052)	(0.044)	(0.032)	(0.026)	(0.069)	(0.056)
	1,441	*1,837*	*3,753*	*5,031*	*885*	*1,222*	*1,441*	*1,837*	*3,753*	*5,031*	*885*	*1,222*

Notes: NES 1996 - 1998; Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses; Number of observations in italics.

A2.18 Annual change in basic hours: Standard control group and time interactions 1996-1997 by firm size

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Firm size:												
Any	-0.275	0.242	0.359	0.021	0.263	-0.163	-0.457	-0.145	0.163	-0.201	0.153	-0.298
	(0.713)	(0.678)	(0.457)	(0.409)	(0.832)	(0.763)	(0.687)	(0.653)	(0.452)	(0.403)	(0.829)	(0.763)
	2,362	*2,681*	*4,200*	*4,938*	*1,743*	*2,340*	*2,362*	*2,681*	*4,200*	*4,938*	*1,743*	*2,340*
Small	0.098	0.209	-0.633	-0.367	0.845	-0.176	-0.248	-0.188	-0.841	-0.547	0.782	-0.289
	(0.935)	(0.890)	(0.764)	(0.795)	(1.007)	(0.915)	(0.913)	(0.881)	(0.756)	(0.783)	(1.000)	(0.914)
	988	*963*	*1,378*	*1,251*	*946*	*1,185*	*988*	*963*	*1,378*	*1,251*	*946*	*1,185*
Medium	-2.841*	-1.820	0.998	0.465	-0.198	0.562	-3.183**	-2.437*	0.685	0.235	-0.471	0.565
	(1.646)	(1.524)	(1.166)	(1.281)	(2.599)	(2.542)	(1.561)	(1.419)	(1.164)	(1.261)	(2.604)	(2.515)
	461	*527*	*618*	*587*	*267*	*358*	*461*	*527*	*618*	*587*	*267*	*358*
Large	1.092	1.320	0.742	0.048	-0.781	-0.689	1.021	0.809	0.653	-0.092	-1.428	-1.073
	(1.338)	(1.261)	(0.659)	(0.560)	(1.823)	(1.653)	(1.281)	(1.188)	(0.646)	(0.546)	(1.793)	(1.643)
	877	*1,151*	*2,163*	*3,066*	*505*	*767*	*877*	*1,151*	*2,163*	*3,066*	*505*	*767*

Notes: NES 1996 - 1998; Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses; Number of observations in italics.

A2.19 Annual change in total hours: Standard control group and time interactions 1996-1997 by firm size

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Firm size:												
Any	-0.286	0.128	0.590	0.202	0.836	0.074	-0.456	-0.232	0.385	-0.038	0.804	-0.005
	(0.841)	(0.796)	(0.494)	(0.454)	(1.093)	(0.941)	(0.818)	(0.772)	(0.488)	(0.449)	(1.096)	(0.943)
	2,362	*2,681*	*4,200*	*4,938*	*1,742*	*2,339*	*2,362*	*2,681*	*4,200*	*4,938*	*1,742*	*2,339*
Small	0.209	0.263	-0.235	0.061	0.564	0.854	-0.137	-0.070	-0.447	-0.152	0.500	0.737
	(0.985)	(0.983)	(0.820)	(0.873)	(1.239)	(1.065)	(0.968)	(0.984)	(0.813)	(0.864)	(1.234)	(1.070)
	988	*963*	*1,378*	*1,251*	*946*	*1,185*	*988*	*963*	*1,378*	*1,251*	*946*	*1,185*
Medium	-3.967**	-2.125	0.594	-0.265	2.662	1.398	-4.243**	-2.708	0.341	-0.412	1.849	1.106
	(1.936)	(1.842)	(1.258)	(1.447)	(4.208)	(3.882)	(1.837)	(1.717)	(1.250)	(1.420)	(4.109)	(3.850)
	461	*527*	*618*	*587*	*267*	*358*	*461*	*527*	*618*	*587*	*267*	*358*
Large	1.317	0.952	1.079	0.341	-0.298	-1.620	1.229	0.461	0.965	0.171	-0.189	-1.375
	(1.682)	(1.539)	(0.715)	(0.623)	(2.168)	(1.936)	(1.636)	(1.483)	(0.702)	(0.611)	(2.170)	(1.939)
	877	*1,151*	*2,163*	*3,066*	*504*	*766*	*877*	*1,151*	*2,163*	*3,066*	*504*	*766*

Notes: NES 1996 - 1998; Significance at the ***1, **5, and *10 per cent levels; Standard errors in parentheses; Number of observations in italics.

ANNEX 3

WAGE GROWTH OVER TIME:

DIFFERENCE-IN-DIFFERENCES ESTIMATES OF NMW IMPACTS

A3.1 Annual percentage wage growth: Standard control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.033***	0.042***	0.054***	0.052***	0.065***	0.083***	0.038***	0.045***	0.057***	0.053***	0.063***	0.081***
	(0.009)	(0.008)	(0.005)	(0.004)	(0.015)	(0.009)	(0.010)	(0.008)	(0.006)	(0.004)	(0.015)	(0.010)
2000	-0.031**	-0.015	-0.013**	-0.008	-0.016	-0.015	-0.022*	-0.009	-0.007	-0.004	-0.012	-0.016
	(0.012)	(0.011)	(0.006)	(0.005)	(0.019)	(0.014)	(0.013)	(0.011)	(0.006)	(0.005)	(0.019)	(0.014)
2001	0.007	0.021***	0.019***	0.032***	0.021	0.034***	0.008	0.019**	0.020***	0.030***	0.021*	0.029***
	(0.008)	(0.008)	(0.004)	(0.004)	(0.013)	(0.009)	(0.009)	(0.008)	(0.004)	(0.004)	(0.013)	(0.010)
2002	-0.024**	-0.027***	-0.033***	-0.028***	-0.015	-0.006	-0.017	-0.021**	-0.028***	-0.024***	-0.007	-0.006
	(0.011)	(0.010)	(0.005)	(0.005)	(0.017)	(0.013)	(0.012)	(0.010)	(0.006)	(0.005)	(0.018)	(0.013)
2003	-0.001	0.015*	0.008	0.035***	0.035***	0.040***	0.000	0.014*	0.011**	0.036***	0.037***	0.038***
	(0.009)	(0.008)	(0.005)	(0.004)	(0.013)	(0.009)	(0.009)	(0.008)	(0.005)	(0.004)	(0.013)	(0.010)
2004	0.001	0.006	0.004	0.018***	0.036***	0.038***	-0.000	0.002	0.004	0.014***	0.031***	0.033***
	(0.007)	(0.007)	(0.004)	(0.003)	(0.010)	(0.008)	(0.007)	(0.007)	(0.004)	(0.003)	(0.010)	(0.008)
2005	-0.023***	-0.014**	-0.011***	-0.006*	0.003	0.007	-0.020***	-0.016**	-0.009**	-0.006*	-0.001	0.002
	(0.007)	(0.007)	(0.004)	(0.003)	(0.010)	(0.008)	(0.007)	(0.007)	(0.004)	(0.003)	(0.010)	(0.008)
2006	-0.002	0.001	0.010***	0.020***	0.019*	0.021***	-0.001	-0.004	0.009***	0.016***	0.015	0.016**
	(0.007)	(0.007)	(0.003)	(0.003)	(0.010)	(0.007)	(0.007)	(0.007)	(0.004)	(0.003)	(0.010)	(0.007)
2007	-0.012*	-0.013*	-0.006**	-0.003	0.010	0.016**	-0.012	-0.017**	-0.006*	-0.005	0.006	0.009
	(0.007)	(0.007)	(0.003)	(0.003)	(0.010)	(0.008)	(0.007)	(0.007)	(0.003)	(0.003)	(0.010)	(0.008)
2008	-0.010	-0.010	-0.007**	-0.010***	0.017*	0.017**	-0.008	-0.014**	-0.006*	-0.012***	0.013	0.010
	(0.007)	(0.007)	(0.003)	(0.003)	(0.009)	(0.008)	(0.007)	(0.007)	(0.004)	(0.003)	(0.009)	(0.008)
2009	-0.017**	-0.015**	-0.008**	-0.007**	0.000	0.002	-0.014**	-0.018***	-0.006*	-0.008**	-0.005	-0.004
	(0.007)	(0.007)	(0.003)	(0.003)	(0.009)	(0.007)	(0.007)	(0.007)	(0.003)	(0.003)	(0.009)	(0.007)
	Pooled NMW effect											
pooled	0.003	0.007***	0.008***	0.013***	0.026***	0.025***	0.006**	0.006**	0.011***	0.013***	0.026***	0.022***
	(0.003)	(0.003)	(0.002)	(0.002)	(0.004)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.004)	(0.003)
pooled upratings	0.002	0.005*	0.007***	0.011***	0.024***	0.022***	0.004	0.004	0.009***	0.011***	0.022***	0.019***
	(0.003)	(0.003)	(0.002)	(0.002)	(0.004)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.004)	(0.003)
pooled wage gap1	0.007***	0.009***	0.008***	0.012***	0.008***	0.011***	0.004***	0.004***	0.007***	0.010***	0.006***	0.007***
(upratings only)	(0.001)	(0.001)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.001)	(0.001)	(0.001)
pooled wage gap2	0.005***	0.006***	0.009***	0.011***	0.007***	0.008***	0.004***	0.006***	0.008***	0.011***	0.006***	0.007***
(upratings only)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.011***	-0.017***	-0.014***	-0.022***	-0.012**	-0.015***	-0.010***	-0.018***	-0.012***	-0.022***	-0.013***	-0.016***
	(0.004)	(0.004)	(0.002)	(0.002)	(0.005)	(0.004)	(0.004)	(0.004)	(0.002)	(0.002)	(0.005)	(0.004)
pooled upratings	-0.008**	-0.013***	-0.011***	-0.019***	-0.008*	-0.010**	-0.007**	-0.014***	-0.009***	-0.019***	-0.009*	-0.012***
	(0.004)	(0.004)	(0.002)	(0.002)	(0.005)	(0.004)	(0.004)	(0.004)	(0.002)	(0.002)	(0.005)	(0.004)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A3.2 Annual absolute wage growth: Standard control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.119***	0.157***	0.189***	0.179***	0.228***	0.275***	0.141***	0.173***	0.206***	0.183***	0.215***	0.264***
	(0.034)	(0.032)	(0.020)	(0.017)	(0.051)	(0.036)	(0.036)	(0.033)	(0.022)	(0.017)	(0.052)	(0.037)
2000	-0.110**	-0.045	-0.047**	-0.026	-0.039	-0.068	-0.069	-0.017	-0.017	-0.004	-0.015	-0.061
	(0.046)	(0.042)	(0.023)	(0.020)	(0.067)	(0.053)	(0.048)	(0.044)	(0.024)	(0.021)	(0.070)	(0.054)
2001	0.020	0.079***	0.066***	0.113***	0.083*	0.122***	0.026	0.072**	0.071***	0.107***	0.089*	0.110***
	(0.031)	(0.030)	(0.016)	(0.015)	(0.047)	(0.037)	(0.032)	(0.031)	(0.017)	(0.015)	(0.048)	(0.038)
2002	-0.088**	-0.104**	-0.132***	-0.132***	-0.040	-0.034	-0.058	-0.079*	-0.108***	-0.112***	-0.009	-0.025
	(0.041)	(0.041)	(0.020)	(0.019)	(0.062)	(0.050)	(0.043)	(0.042)	(0.022)	(0.019)	(0.064)	(0.050)
2003	0.002	0.064**	0.030	0.145***	0.130***	0.128***	0.015	0.058*	0.047**	0.147***	0.139***	0.128***
	(0.033)	(0.032)	(0.018)	(0.017)	(0.048)	(0.038)	(0.035)	(0.033)	(0.019)	(0.017)	(0.049)	(0.038)
2004	0.010	0.028	0.012	0.064***	0.156***	0.141***	0.008	0.007	0.015	0.049***	0.138***	0.121***
	(0.028)	(0.028)	(0.014)	(0.014)	(0.039)	(0.032)	(0.029)	(0.028)	(0.015)	(0.014)	(0.040)	(0.032)
2005	-0.095***	-0.062**	-0.045***	-0.026*	0.017	0.025	-0.080***	-0.063**	-0.033**	-0.029**	0.006	0.009
	(0.027)	(0.028)	(0.014)	(0.014)	(0.037)	(0.031)	(0.028)	(0.027)	(0.014)	(0.014)	(0.038)	(0.031)
2006	0.009	0.005	0.039***	0.084***	0.104***	0.090***	0.013	-0.011	0.038***	0.063***	0.091**	0.067**
	(0.027)	(0.028)	(0.013)	(0.014)	(0.035)	(0.030)	(0.028)	(0.028)	(0.014)	(0.014)	(0.036)	(0.030)
2007	-0.039	-0.046*	-0.026**	-0.011	0.058	0.073**	-0.034	-0.059**	-0.021	-0.023*	0.044	0.046
	(0.027)	(0.028)	(0.013)	(0.013)	(0.037)	(0.031)	(0.028)	(0.028)	(0.014)	(0.014)	(0.038)	(0.031)
2008	-0.032	-0.043	-0.036***	-0.051***	0.082**	0.061**	-0.023	-0.056**	-0.029**	-0.063***	0.069**	0.038
	(0.025)	(0.028)	(0.013)	(0.014)	(0.034)	(0.030)	(0.026)	(0.028)	(0.014)	(0.014)	(0.035)	(0.030)
2009	-0.055**	-0.059**	-0.032***	-0.035**	0.021	0.012	-0.040	-0.062**	-0.022*	-0.038***	0.010	-0.006
	(0.026)	(0.028)	(0.012)	(0.014)	(0.032)	(0.028)	(0.027)	(0.028)	(0.013)	(0.014)	(0.033)	(0.028)
	Pooled NMW effect											
pooled	0.006	0.019	0.028***	0.046***	0.092***	0.090***	0.023*	0.017	0.042***	0.043***	0.096***	0.079***
	(0.011)	(0.012)	(0.006)	(0.007)	(0.016)	(0.014)	(0.012)	(0.012)	(0.007)	(0.007)	(0.016)	(0.014)
pooled upratings	0.000	0.008	0.019***	0.037***	0.083***	0.076***	0.013	0.006	0.034***	0.034***	0.082***	0.066***
	(0.011)	(0.012)	(0.006)	(0.007)	(0.015)	(0.014)	(0.012)	(0.012)	(0.006)	(0.007)	(0.016)	(0.014)
pooled wage gap1	0.029***	0.038***	0.035***	0.053***	0.025***	0.042***	0.012***	0.021***	0.025***	0.040***	0.028***	0.028***
(upratings only)	(0.003)	(0.003)	(0.002)	(0.002)	(0.004)	(0.004)	(0.003)	(0.004)	(0.002)	(0.002)	(0.004)	(0.005)
pooled wage gap2	0.017***	0.022***	0.034***	0.041***	0.024***	0.027***	0.014***	0.020***	0.028***	0.039***	0.021***	0.025***
(upratings only)	(0.004)	(0.004)	(0.002)	(0.002)	(0.005)	(0.005)	(0.004)	(0.004)	(0.002)	(0.002)	(0.005)	(0.005)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.041***	-0.068***	-0.057***	-0.092***	-0.034*	-0.057***	-0.038**	-0.072***	-0.048***	-0.094***	-0.036*	-0.062***
	(0.015)	(0.017)	(0.008)	(0.009)	(0.019)	(0.019)	(0.015)	(0.017)	(0.008)	(0.009)	(0.019)	(0.019)
pooled upratings	-0.030**	-0.054***	-0.046***	-0.080***	-0.018	-0.038**	-0.028*	-0.057***	-0.037***	-0.082***	-0.021	-0.043**
	(0.015)	(0.017)	(0.007)	(0.009)	(0.019)	(0.019)	(0.015)	(0.017)	(0.007)	(0.009)	(0.019)	(0.019)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A3.3 Probability of annual positive wage growth: Standard control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.162***	0.177***	0.185***	0.176***	0.131***	0.166***	0.172***	0.184***	0.208***	0.200***	0.133***	0.162***
	(0.025)	(0.023)	(0.021)	(0.024)	(0.027)	(0.022)	(0.023)	(0.022)	(0.019)	(0.022)	(0.027)	(0.023)
2000	-0.179***	-0.153***	-0.165***	-0.181***	-0.049	-0.081	-0.096**	-0.079*	-0.031	-0.037	-0.013	-0.050
	(0.046)	(0.044)	(0.031)	(0.028)	(0.051)	(0.049)	(0.047)	(0.045)	(0.032)	(0.031)	(0.050)	(0.050)
2001	0.142***	0.198***	0.132***	0.151***	0.138***	0.179***	0.166***	0.209***	0.190***	0.204***	0.153***	0.182***
	(0.027)	(0.022)	(0.021)	(0.022)	(0.028)	(0.024)	(0.024)	(0.021)	(0.018)	(0.019)	(0.026)	(0.023)
2002	-0.143***	-0.182***	-0.203***	-0.273***	-0.132***	-0.147***	-0.068	-0.120***	-0.078***	-0.159***	-0.082	-0.108**
	(0.045)	(0.044)	(0.029)	(0.025)	(0.051)	(0.048)	(0.044)	(0.044)	(0.030)	(0.029)	(0.051)	(0.049)
2003	0.166***	0.206***	0.125***	0.185***	0.190***	0.203***	0.193***	0.220***	0.198***	0.238***	0.205***	0.210***
	(0.026)	(0.022)	(0.023)	(0.022)	(0.023)	(0.022)	(0.022)	(0.020)	(0.019)	(0.019)	(0.021)	(0.020)
2004	0.185***	0.204***	0.120***	0.128***	0.197***	0.222***	0.200***	0.201***	0.168***	0.146***	0.202***	0.220***
	(0.021)	(0.020)	(0.019)	(0.020)	(0.019)	(0.018)	(0.019)	(0.020)	(0.016)	(0.020)	(0.019)	(0.017)
2005	0.080***	0.133***	0.073***	0.052**	0.145***	0.169***	0.119***	0.143***	0.151***	0.101***	0.161***	0.169***
	(0.028)	(0.025)	(0.020)	(0.021)	(0.023)	(0.021)	(0.025)	(0.024)	(0.018)	(0.020)	(0.022)	(0.021)
2006	0.200***	0.218***	0.209***	0.216***	0.252***	0.275***	0.217***	0.212***	0.252***	0.221***	0.257***	0.271***
	(0.021)	(0.020)	(0.017)	(0.019)	(0.015)	(0.014)	(0.019)	(0.020)	(0.014)	(0.018)	(0.014)	(0.014)
2007	-0.122***	-0.165***	-0.199***	-0.257***	-0.006	0.002	-0.078**	-0.162***	-0.113***	-0.240***	0.011	-0.012
	(0.032)	(0.031)	(0.021)	(0.019)	(0.031)	(0.030)	(0.033)	(0.032)	(0.023)	(0.020)	(0.032)	(0.031)
2008	0.157***	0.168***	0.146***	0.130***	0.248***	0.249***	0.180***	0.167***	0.201***	0.142***	0.251***	0.244***
	(0.025)	(0.024)	(0.020)	(0.024)	(0.016)	(0.016)	(0.022)	(0.024)	(0.016)	(0.023)	(0.015)	(0.016)
2009	-0.291***	-0.285***	-0.304***	-0.299***	-0.138***	-0.106***	-0.233***	-0.272***	-0.188***	-0.251***	-0.118***	-0.121***
	(0.032)	(0.031)	(0.020)	(0.019)	(0.034)	(0.032)	(0.035)	(0.032)	(0.024)	(0.021)	(0.036)	(0.033)
	Pooled NMW effect											
pooled	0.044***	0.068***	0.015	0.004	0.118***	0.142***	0.089***	0.080***	0.102***	0.045***	0.147***	0.145***
	(0.015)	(0.015)	(0.012)	(0.012)	(0.016)	(0.014)	(0.015)	(0.015)	(0.012)	(0.012)	(0.015)	(0.014)
pooled upratings	0.033**	0.057***	0.004	-0.009	0.116***	0.139***	0.082***	0.069***	0.097***	0.034***	0.151***	0.143***
	(0.016)	(0.015)	(0.012)	(0.012)	(0.016)	(0.014)	(0.015)	(0.015)	(0.012)	(0.012)	(0.016)	(0.014)
pooled wage gap1	0.113***	0.129***	0.135***	0.159***	0.112***	0.136***	0.095***	0.121***	0.119***	0.141***	0.108***	0.136***
(upratings only)	(0.006)	(0.006)	(0.004)	(0.005)	(0.006)	(0.006)	(0.006)	(0.007)	(0.004)	(0.005)	(0.007)	(0.008)
pooled wage gap2	0.102***	0.113***	0.133***	0.133***	0.125***	0.136***	0.105***	0.112***	0.137***	0.131***	0.126***	0.134***
(upratings only)	(0.007)	(0.007)	(0.005)	(0.005)	(0.008)	(0.008)	(0.007)	(0.007)	(0.005)	(0.005)	(0.008)	(0.008)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.169***	-0.192***	-0.159***	-0.167***	-0.089***	-0.111***	-0.157***	-0.198***	-0.136***	-0.172***	-0.086***	-0.117***
	(0.025)	(0.025)	(0.017)	(0.017)	(0.024)	(0.024)	(0.025)	(0.025)	(0.017)	(0.017)	(0.024)	(0.024)
pooled upratings	-0.156***	-0.179***	-0.146***	-0.154***	-0.088***	-0.107***	-0.148***	-0.186***	-0.127***	-0.160***	-0.088***	-0.115***
	(0.025)	(0.025)	(0.017)	(0.017)	(0.024)	(0.024)	(0.025)	(0.025)	(0.017)	(0.017)	(0.024)	(0.024)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A3.4 Annual percentage wage growth: Percentile control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.022*	0.028*	0.066***	0.069***	0.090***	0.095***	0.024*	0.020	0.062***	0.066***	0.085***	0.088***
	(0.013)	(0.015)	(0.007)	(0.007)	(0.012)	(0.012)	(0.014)	(0.015)	(0.008)	(0.007)	(0.012)	(0.013)
1999	-0.048***	-0.043***	-0.034***	-0.029***	0.018	0.025**	-0.024*	-0.015	-0.030***	-0.025***	0.026**	0.028**
	(0.013)	(0.013)	(0.006)	(0.006)	(0.012)	(0.011)	(0.014)	(0.014)	(0.007)	(0.007)	(0.013)	(0.012)
2000	-0.050***	-0.038***	-0.024***	-0.025***	-0.007	0.004	-0.047***	-0.032**	-0.023***	-0.024***	-0.007	-0.005
	(0.012)	(0.013)	(0.006)	(0.006)	(0.011)	(0.011)	(0.013)	(0.013)	(0.007)	(0.006)	(0.011)	(0.012)
2001	-0.013	-0.004	0.020***	0.025***	0.020*	0.023**	-0.009	0.002	0.021***	0.025***	0.023*	0.016
	(0.011)	(0.011)	(0.006)	(0.006)	(0.012)	(0.011)	(0.012)	(0.012)	(0.006)	(0.006)	(0.012)	(0.012)
2002	-0.040***	-0.041***	-0.050***	-0.053***	-0.013	0.003	-0.037***	-0.029**	-0.049***	-0.052***	-0.012	-0.005
	(0.011)	(0.012)	(0.006)	(0.006)	(0.011)	(0.011)	(0.013)	(0.013)	(0.007)	(0.007)	(0.012)	(0.012)
2003	-0.022*	-0.020	-0.004	0.009	0.038***	0.037***	-0.019	-0.008	-0.002	0.013**	0.043***	0.036***
	(0.012)	(0.012)	(0.006)	(0.006)	(0.011)	(0.011)	(0.013)	(0.013)	(0.007)	(0.007)	(0.012)	(0.013)
2004	-0.019*	-0.015	-0.012*	0.001	0.052***	0.040***	-0.010	0.002	-0.006	0.000	0.054***	0.034***
	(0.011)	(0.012)	(0.006)	(0.006)	(0.012)	(0.012)	(0.012)	(0.013)	(0.007)	(0.006)	(0.013)	(0.013)
2005	-0.047***	-0.036***	-0.029***	-0.019***	0.008	0.009	-0.034***	-0.014	-0.028***	-0.020***	0.014	0.007
	(0.011)	(0.011)	(0.005)	(0.005)	(0.011)	(0.010)	(0.012)	(0.013)	(0.006)	(0.006)	(0.012)	(0.012)
2006	-0.028**	-0.009	-0.003	0.003	0.002	0.019*	-0.022*	0.003	-0.005	0.001	0.010	0.011
	(0.012)	(0.012)	(0.006)	(0.006)	(0.012)	(0.011)	(0.013)	(0.013)	(0.006)	(0.006)	(0.014)	(0.013)
2007	-0.043***	-0.021*	-0.032***	-0.016***	0.006	0.021*	-0.033***	0.000	-0.034***	-0.021***	0.013	0.014
	(0.011)	(0.011)	(0.006)	(0.005)	(0.013)	(0.012)	(0.013)	(0.013)	(0.006)	(0.006)	(0.014)	(0.014)
2008	-0.038***	-0.014	-0.022***	-0.010*	0.014	0.014	-0.023*	0.013	-0.024***	-0.015**	0.017	0.006
	(0.012)	(0.011)	(0.005)	(0.006)	(0.011)	(0.012)	(0.013)	(0.013)	(0.006)	(0.007)	(0.013)	(0.015)
2009	-0.040***	-0.031***	-0.024***	-0.016***	-0.007	-0.001	-0.030***	-0.012	-0.032***	-0.023***	-0.004	-0.011
	(0.010)	(0.010)	(0.005)	(0.004)	(0.010)	(0.010)	(0.011)	(0.012)	(0.005)	(0.005)	(0.012)	(0.012)
	Pooled NMW effect											
pooled	-0.010**	-0.000	0.002	0.008***	0.019***	0.024***	0.009**	0.021***	0.020***	0.029***	0.042***	0.044***
	(0.004)	(0.004)	(0.002)	(0.002)	(0.004)	(0.004)	(0.005)	(0.004)	(0.002)	(0.002)	(0.005)	(0.005)
pooled upratings	-0.010**	-0.000	0.001	0.008***	0.014***	0.020***	-0.000	0.012**	0.010***	0.019***	0.025***	0.024***
	(0.004)	(0.004)	(0.002)	(0.002)	(0.004)	(0.004)	(0.005)	(0.004)	(0.003)	(0.003)	(0.005)	(0.005)
pooled wage gap1	0.011***	0.013***	-0.005***	-0.002***	0.012***	0.012***	0.010***	0.011***	0.003***	0.005***	0.010***	0.011***
(upratings only)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
pooled wage gap2	0.011***	0.011***	0.012***	0.014***	0.012***	0.011***	0.010***	0.011***	0.012***	0.014***	0.011***	0.010***
(upratings only)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.015***	-0.011**	-0.018***	-0.014***	-0.017***	-0.017***	-0.004	0.007	-0.011***	-0.003	-0.001	-0.002
	(0.005)	(0.005)	(0.003)	(0.003)	(0.006)	(0.006)	(0.005)	(0.005)	(0.003)	(0.003)	(0.006)	(0.007)
pooled upratings	-0.012**	-0.008*	-0.015***	-0.011***	-0.010	-0.011*	-0.008	-0.001	-0.013***	-0.007***	-0.005	-0.009
	(0.005)	(0.005)	(0.003)	(0.003)	(0.006)	(0.006)	(0.005)	(0.005)	(0.003)	(0.003)	(0.006)	(0.006)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A3.5 Annual absolute wage growth: Percentile control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.062	0.086	0.213***	0.223***	0.292***	0.316***	0.077	0.080	0.197***	0.205***	0.275***	0.295***
	(0.047)	(0.054)	(0.027)	(0.027)	(0.045)	(0.046)	(0.048)	(0.055)	(0.028)	(0.028)	(0.045)	(0.047)
1999	-0.158***	-0.138***	-0.121***	-0.110***	0.077*	0.087**	-0.069	-0.038	-0.091***	-0.070***	0.106**	0.096**
	(0.047)	(0.049)	(0.024)	(0.024)	(0.046)	(0.044)	(0.050)	(0.053)	(0.026)	(0.026)	(0.047)	(0.045)
2000	-0.157***	-0.115**	-0.080***	-0.085***	-0.037	0.019	-0.135***	-0.073	-0.062**	-0.066***	-0.037	-0.009
	(0.043)	(0.047)	(0.023)	(0.023)	(0.041)	(0.041)	(0.046)	(0.050)	(0.025)	(0.025)	(0.043)	(0.045)
2001	-0.037	-0.014	0.065***	0.081***	0.079*	0.085**	-0.009	0.030	0.083***	0.101***	0.082*	0.066
	(0.041)	(0.044)	(0.022)	(0.023)	(0.043)	(0.043)	(0.043)	(0.046)	(0.024)	(0.024)	(0.045)	(0.046)
2002	-0.149***	-0.150***	-0.198***	-0.234***	-0.061	-0.001	-0.110**	-0.072	-0.168***	-0.189***	-0.059	-0.026
	(0.043)	(0.047)	(0.024)	(0.025)	(0.042)	(0.042)	(0.047)	(0.051)	(0.026)	(0.028)	(0.046)	(0.046)
2003	-0.056	-0.037	-0.008	0.042*	0.123***	0.119***	-0.021	0.026	0.019	0.079***	0.146***	0.125**
	(0.043)	(0.047)	(0.023)	(0.025)	(0.043)	(0.044)	(0.047)	(0.051)	(0.025)	(0.027)	(0.045)	(0.049)
2004	-0.040	-0.050	-0.041*	-0.007	0.197***	0.154***	0.017	0.053	0.005	0.026	0.207***	0.138***
	(0.041)	(0.047)	(0.023)	(0.022)	(0.044)	(0.045)	(0.045)	(0.051)	(0.026)	(0.025)	(0.048)	(0.050)
2005	-0.170***	-0.144***	-0.118***	-0.085***	0.038	0.025	-0.099**	-0.017	-0.081***	-0.050**	0.057	0.025
	(0.041)	(0.044)	(0.021)	(0.021)	(0.041)	(0.041)	(0.045)	(0.049)	(0.023)	(0.024)	(0.046)	(0.048)
2006	-0.075*	-0.015	-0.015	0.012	0.031	0.091**	-0.022	0.067	0.004	0.036	0.059	0.069
	(0.043)	(0.044)	(0.022)	(0.022)	(0.046)	(0.043)	(0.048)	(0.050)	(0.025)	(0.025)	(0.051)	(0.051)
2007	-0.132***	-0.064	-0.125***	-0.071***	0.039	0.082*	-0.072	0.050	-0.102***	-0.051**	0.057	0.063
	(0.041)	(0.043)	(0.021)	(0.021)	(0.046)	(0.045)	(0.046)	(0.050)	(0.025)	(0.024)	(0.053)	(0.056)
2008	-0.126***	-0.047	-0.101***	-0.055**	0.061	0.049	-0.045	0.096*	-0.073***	-0.028	0.073	0.026
	(0.042)	(0.043)	(0.021)	(0.023)	(0.042)	(0.046)	(0.049)	(0.051)	(0.024)	(0.027)	(0.049)	(0.057)
2009	-0.123***	-0.101***	-0.093***	-0.069***	-0.023	0.015	-0.080*	0.000	-0.097***	-0.059***	-0.017	-0.012
	(0.035)	(0.037)	(0.017)	(0.017)	(0.037)	(0.036)	(0.041)	(0.046)	(0.020)	(0.020)	(0.045)	(0.046)
	Pooled NMW effect											
pooled	-0.036**	-0.009	-0.001	0.022***	0.070***	0.087***	0.038**	0.078***	0.074***	0.108***	0.151***	0.164***
	(0.016)	(0.016)	(0.008)	(0.008)	(0.017)	(0.017)	(0.018)	(0.018)	(0.010)	(0.010)	(0.019)	(0.020)
pooled upratings	-0.038**	-0.012	-0.005	0.020**	0.049***	0.071***	0.003	0.041**	0.032***	0.067***	0.084***	0.092***
	(0.015)	(0.015)	(0.008)	(0.008)	(0.017)	(0.017)	(0.018)	(0.018)	(0.010)	(0.010)	(0.020)	(0.022)
pooled wage gap1	0.039***	0.047***	0.008***	0.020***	0.043***	0.045***	0.035***	0.036***	0.027***	0.036***	0.038***	0.038***
(upratings only)	(0.004)	(0.004)	(0.002)	(0.002)	(0.003)	(0.003)	(0.005)	(0.005)	(0.003)	(0.003)	(0.004)	(0.004)
pooled wage gap2	0.037***	0.039***	0.043***	0.049***	0.042***	0.039***	0.035***	0.036***	0.044***	0.050***	0.040***	0.038***
(upratings only)	(0.005)	(0.005)	(0.003)	(0.003)	(0.004)	(0.004)	(0.005)	(0.005)	(0.003)	(0.003)	(0.004)	(0.004)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.057***	-0.039*	-0.072***	-0.056***	-0.058**	-0.059**	-0.016	0.030	-0.040***	-0.010	0.004	0.003
	(0.021)	(0.020)	(0.010)	(0.011)	(0.025)	(0.025)	(0.021)	(0.021)	(0.011)	(0.011)	(0.026)	(0.026)
pooled upratings	-0.047**	-0.029	-0.060***	-0.046***	-0.028	-0.036	-0.030	0.004	-0.049***	-0.028***	-0.008	-0.025
	(0.020)	(0.019)	(0.010)	(0.010)	(0.024)	(0.024)	(0.021)	(0.020)	(0.010)	(0.011)	(0.024)	(0.025)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A3.6 Probability of annual positive wage growth: Percentile control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.072*	0.117***	0.180***	0.221***	0.169***	0.183***	0.081**	0.120***	0.191***	0.231***	0.162***	0.176***
	(0.040)	(0.033)	(0.030)	(0.025)	(0.026)	(0.026)	(0.038)	(0.033)	(0.028)	(0.024)	(0.027)	(0.027)
1999	-0.210***	-0.139***	-0.199***	-0.163***	0.048	0.060*	-0.151***	-0.075*	-0.091***	-0.031	0.085***	0.091***
	(0.045)	(0.043)	(0.030)	(0.031)	(0.035)	(0.034)	(0.046)	(0.043)	(0.034)	(0.033)	(0.033)	(0.032)
2000	-0.240***	-0.132***	-0.163***	-0.150***	-0.042	0.023	-0.214***	-0.107**	-0.076**	-0.056*	-0.017	0.033
	(0.043)	(0.043)	(0.031)	(0.031)	(0.038)	(0.036)	(0.045)	(0.045)	(0.033)	(0.033)	(0.039)	(0.039)
2001	0.149***	0.188***	0.315***	0.330***	0.158***	0.153***	0.172***	0.208***	0.338***	0.352***	0.181***	0.169***
	(0.032)	(0.025)	(0.017)	(0.015)	(0.028)	(0.029)	(0.028)	(0.022)	(0.014)	(0.012)	(0.026)	(0.028)
2002	-0.121***	-0.137***	-0.226***	-0.260***	-0.113***	-0.024	-0.091*	-0.088*	-0.116***	-0.127***	-0.075*	-0.000
	(0.045)	(0.045)	(0.031)	(0.032)	(0.041)	(0.038)	(0.048)	(0.047)	(0.035)	(0.037)	(0.044)	(0.041)
2003	0.200***	0.193***	0.168***	0.218***	0.196***	0.183***	0.217***	0.214***	0.237***	0.280***	0.224***	0.213***
	(0.026)	(0.025)	(0.026)	(0.023)	(0.024)	(0.026)	(0.024)	(0.022)	(0.022)	(0.018)	(0.022)	(0.024)
2004	0.220***	0.215***	0.252***	0.237***	0.272***	0.280***	0.232***	0.229***	0.301***	0.293***	0.283***	0.287***
	(0.024)	(0.022)	(0.021)	(0.022)	(0.017)	(0.016)	(0.022)	(0.020)	(0.017)	(0.016)	(0.016)	(0.016)
2005	0.136***	0.157***	0.143***	0.195***	0.214***	0.234***	0.161***	0.191***	0.229***	0.282***	0.241***	0.256***
	(0.033)	(0.028)	(0.026)	(0.023)	(0.023)	(0.021)	(0.031)	(0.025)	(0.022)	(0.018)	(0.021)	(0.021)
2006	0.225***	0.253***	0.310***	0.319***	0.264***	0.300***	0.237***	0.265***	0.346***	0.356***	0.283***	0.307***
	(0.025)	(0.018)	(0.018)	(0.017)	(0.020)	(0.015)	(0.023)	(0.016)	(0.014)	(0.012)	(0.017)	(0.014)
2007	-0.258***	-0.076*	-0.311***	-0.137***	-0.029	0.066*	-0.201***	0.016	-0.190***	0.032	0.045	0.123***
	(0.044)	(0.043)	(0.026)	(0.031)	(0.041)	(0.036)	(0.050)	(0.045)	(0.035)	(0.036)	(0.043)	(0.040)
2008	0.241***	0.261***	0.320***	0.346***	0.303***	0.295***	0.250***	0.271***	0.341***	0.368***	0.311***	0.302***
	(0.023)	(0.016)	(0.015)	(0.012)	(0.014)	(0.015)	(0.020)	(0.014)	(0.011)	(0.009)	(0.012)	(0.014)
2009	-0.337***	-0.256***	-0.356***	-0.249***	-0.087**	-0.104***	-0.281***	-0.161***	-0.233***	-0.077**	0.004	-0.018
	(0.038)	(0.040)	(0.024)	(0.026)	(0.038)	(0.038)	(0.048)	(0.051)	(0.033)	(0.035)	(0.044)	(0.049)
	Pooled NMW effect											
pooled	-0.024	0.040**	-0.004	0.053***	0.111***	0.139***	0.046**	0.122***	0.127***	0.201***	0.162***	0.181***
	(0.020)	(0.020)	(0.015)	(0.016)	(0.017)	(0.017)	(0.021)	(0.021)	(0.017)	(0.017)	(0.018)	(0.019)
pooled upratings	-0.013	0.052***	0.004	0.063***	0.111***	0.142***	0.049**	0.139***	0.134***	0.208***	0.164***	0.183***
	(0.020)	(0.020)	(0.016)	(0.016)	(0.017)	(0.017)	(0.022)	(0.022)	(0.017)	(0.017)	(0.019)	(0.021)
pooled wage gap1	0.110***	0.131***	0.149***	0.177***	0.077***	0.083***	0.116***	0.128***	0.148***	0.170***	0.072***	0.076***
(upratings only)	(0.007)	(0.007)	(0.005)	(0.005)	(0.005)	(0.006)	(0.008)	(0.009)	(0.006)	(0.007)	(0.006)	(0.006)
pooled wage gap2	0.099***	0.118***	0.141***	0.162***	0.072***	0.074***	0.107***	0.127***	0.178***	0.199***	0.072***	0.073***
(upratings only)	(0.008)	(0.008)	(0.007)	(0.007)	(0.006)	(0.006)	(0.008)	(0.009)	(0.008)	(0.008)	(0.006)	(0.006)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.159***	-0.129***	-0.186***	-0.147***	-0.041	-0.128***	-0.121***	-0.070**	-0.134***	-0.075***	0.003	-0.099***
	(0.032)	(0.030)	(0.022)	(0.022)	(0.027)	(0.031)	(0.032)	(0.030)	(0.022)	(0.023)	(0.026)	(0.032)
pooled upratings	-0.182***	-0.156***	-0.205***	-0.168***	-0.043	-0.140***	-0.159***	-0.109***	-0.166***	-0.113***	-0.014	-0.125***
	(0.033)	(0.031)	(0.022)	(0.023)	(0.028)	(0.032)	(0.033)	(0.031)	(0.023)	(0.023)	(0.028)	(0.033)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A3.7 Annual percentage wage growth: Standard control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	0.020	0.020	0.015	0.031	-0.000	-0.001	0.028	0.016	-0.005	0.006	-0.025	0.004
	(0.029)	(0.026)	(0.020)	(0.019)	(0.047)	(0.037)	(0.029)	(0.026)	(0.018)	(0.018)	(0.049)	(0.039)
2000	-0.067	-0.106**	-0.096***	-0.103***	-0.126*	-0.084	0.026	-0.034	0.024	0.022	0.003	0.020
	(0.050)	(0.047)	(0.031)	(0.030)	(0.073)	(0.065)	(0.052)	(0.050)	(0.031)	(0.031)	(0.082)	(0.073)
2001	-0.071**	-0.062*	-0.072***	-0.066***	-0.088	-0.087*	-0.029	-0.051	-0.022	-0.030	-0.030	-0.039
	(0.035)	(0.033)	(0.024)	(0.025)	(0.057)	(0.049)	(0.037)	(0.034)	(0.023)	(0.024)	(0.064)	(0.055)
2002	-0.124**	-0.142***	-0.091***	-0.084***	-0.088	-0.151**	-0.041	-0.064	0.017	0.004	0.038	-0.045
	(0.050)	(0.048)	(0.030)	(0.031)	(0.078)	(0.073)	(0.054)	(0.051)	(0.031)	(0.031)	(0.087)	(0.078)
2003	-0.057	-0.031	-0.102***	-0.079***	-0.046	-0.061	-0.009	-0.003	-0.021	-0.028	0.054	-0.009
	(0.036)	(0.034)	(0.024)	(0.023)	(0.055)	(0.049)	(0.037)	(0.035)	(0.024)	(0.023)	(0.062)	(0.056)
2004	-0.060*	-0.076**	-0.062***	-0.068***	-0.073	-0.080*	-0.028	-0.061*	-0.019	-0.062***	-0.021	-0.052
	(0.033)	(0.032)	(0.023)	(0.023)	(0.048)	(0.043)	(0.037)	(0.034)	(0.024)	(0.024)	(0.054)	(0.046)
2005	-0.073**	-0.099***	-0.103***	-0.103***	-0.070	-0.072	-0.035	-0.083**	-0.009	-0.059**	0.070	0.001
	(0.036)	(0.037)	(0.026)	(0.026)	(0.058)	(0.049)	(0.038)	(0.038)	(0.026)	(0.026)	(0.063)	(0.055)
2006	-0.057	-0.094***	-0.087***	-0.112***	-0.027	-0.098**	-0.020	-0.087***	-0.015	-0.087***	0.002	-0.083*
	(0.036)	(0.032)	(0.026)	(0.026)	(0.051)	(0.046)	(0.038)	(0.033)	(0.025)	(0.026)	(0.055)	(0.050)
2007	-0.131***	-0.142***	-0.115***	-0.121***	-0.045	-0.069	-0.076*	-0.117***	-0.034	-0.096***	-0.012	-0.046
	(0.039)	(0.036)	(0.028)	(0.029)	(0.053)	(0.048)	(0.041)	(0.036)	(0.028)	(0.029)	(0.059)	(0.051)
2008	-0.099**	-0.105***	-0.076**	-0.083**	-0.148**	-0.151***	-0.051	-0.086**	0.023	-0.024	-0.108	-0.144**
	(0.039)	(0.038)	(0.032)	(0.032)	(0.060)	(0.054)	(0.042)	(0.038)	(0.032)	(0.032)	(0.065)	(0.056)
2009	-0.118**	-0.082	-0.102***	-0.114***	-0.079	-0.087	-0.042	-0.070	0.007	-0.049	0.057	0.003
	(0.054)	(0.052)	(0.035)	(0.035)	(0.067)	(0.059)	(0.057)	(0.055)	(0.035)	(0.034)	(0.076)	(0.065)
	Pooled NMW effect											
pooled	-0.052***	-0.058***	-0.061***	-0.056***	-0.043*	-0.065***	-0.020	-0.043**	-0.019	-0.038***	-0.007	-0.040*
	(0.018)	(0.017)	(0.013)	(0.013)	(0.025)	(0.023)	(0.018)	(0.017)	(0.012)	(0.012)	(0.026)	(0.023)
pooled upratings	-0.071***	-0.081***	-0.081***	-0.081***	-0.057**	-0.083***	-0.048**	-0.068***	-0.038***	-0.062***	-0.031	-0.063***
	(0.018)	(0.017)	(0.012)	(0.013)	(0.025)	(0.023)	(0.019)	(0.018)	(0.013)	(0.013)	(0.027)	(0.024)
pooled wage gap1	0.002	0.010**	0.001	0.011***	0.012*	0.019***	0.001	-0.005	-0.009***	-0.003	0.002	-0.003
(upratings only)	(0.004)	(0.004)	(0.003)	(0.003)	(0.006)	(0.006)	(0.005)	(0.005)	(0.003)	(0.004)	(0.007)	(0.007)
pooled wage gap2	-0.005	-0.005	-0.001	0.000	-0.002	-0.007	-0.006	-0.008	-0.008**	-0.007*	-0.001	-0.005
(upratings only)	(0.006)	(0.005)	(0.004)	(0.004)	(0.008)	(0.008)	(0.006)	(0.006)	(0.004)	(0.004)	(0.008)	(0.008)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A3.8 Annual absolute wage growth: Standard control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	0.072	0.066	0.032	0.113	-0.078	-0.119	0.116	0.072	0.002	0.055	-0.201	-0.089
	(0.114)	(0.107)	(0.072)	(0.071)	(0.205)	(0.167)	(0.117)	(0.107)	(0.068)	(0.067)	(0.229)	(0.184)
2000	-0.275	-0.433**	-0.309***	-0.363***	-0.510	-0.359	0.044	-0.155	0.046	0.027	0.394	0.441
	(0.198)	(0.195)	(0.114)	(0.114)	(0.330)	(0.298)	(0.216)	(0.209)	(0.115)	(0.117)	(0.399)	(0.355)
2001	-0.237*	-0.210	-0.230***	-0.173*	-0.444*	-0.512**	-0.065	-0.161	-0.062	-0.024	0.017	-0.130
	(0.141)	(0.136)	(0.088)	(0.093)	(0.257)	(0.228)	(0.154)	(0.146)	(0.087)	(0.092)	(0.306)	(0.271)
2002	-0.409**	-0.483**	-0.322***	-0.270**	-0.453	-0.727**	-0.107	-0.181	0.022	0.037	0.543	0.029
	(0.197)	(0.199)	(0.114)	(0.120)	(0.350)	(0.338)	(0.222)	(0.216)	(0.114)	(0.120)	(0.434)	(0.383)
2003	-0.164	-0.034	-0.361***	-0.258***	-0.246	-0.311	0.029	0.117	-0.072	-0.075	0.429	0.014
	(0.147)	(0.143)	(0.091)	(0.089)	(0.250)	(0.225)	(0.156)	(0.148)	(0.092)	(0.090)	(0.303)	(0.272)
2004	-0.145	-0.208	-0.177**	-0.201**	-0.348	-0.361*	0.003	-0.122	-0.014	-0.141	0.027	-0.222
	(0.137)	(0.134)	(0.086)	(0.090)	(0.221)	(0.198)	(0.155)	(0.146)	(0.088)	(0.091)	(0.258)	(0.226)
2005	-0.270*	-0.342**	-0.377***	-0.336***	-0.218	-0.343	-0.127	-0.257	-0.062	-0.173*	0.713**	0.149
	(0.146)	(0.156)	(0.097)	(0.099)	(0.263)	(0.234)	(0.157)	(0.164)	(0.097)	(0.097)	(0.310)	(0.268)
2006	-0.154	-0.321**	-0.267***	-0.375***	-0.107	-0.432*	-0.001	-0.280**	-0.018	-0.235**	0.156	-0.365
	(0.146)	(0.138)	(0.096)	(0.101)	(0.235)	(0.223)	(0.157)	(0.143)	(0.095)	(0.100)	(0.263)	(0.252)
2007	-0.446***	-0.526***	-0.419***	-0.418***	-0.134	-0.308	-0.269	-0.412***	-0.156	-0.302***	0.220	-0.112
	(0.159)	(0.153)	(0.105)	(0.112)	(0.242)	(0.227)	(0.169)	(0.156)	(0.103)	(0.109)	(0.283)	(0.251)
2008	-0.302*	-0.322**	-0.261**	-0.281**	-0.639**	-0.613**	-0.084	-0.213	0.081	-0.052	-0.298	-0.534*
	(0.162)	(0.162)	(0.120)	(0.124)	(0.275)	(0.250)	(0.174)	(0.166)	(0.118)	(0.121)	(0.317)	(0.275)
2009	-0.365	-0.197	-0.327**	-0.399***	-0.503*	-0.431	-0.080	-0.127	-0.006	-0.159	0.402	0.013
	(0.223)	(0.221)	(0.130)	(0.134)	(0.300)	(0.264)	(0.238)	(0.237)	(0.129)	(0.130)	(0.366)	(0.314)
	Pooled NMW effect											
pooled	-0.175**	-0.189**	-0.218***	-0.187***	-0.143	-0.261**	-0.058	-0.121	-0.039	-0.089*	-0.015	-0.157
	(0.076)	(0.076)	(0.050)	(0.052)	(0.113)	(0.107)	(0.078)	(0.077)	(0.049)	(0.051)	(0.119)	(0.112)
pooled upratings	-0.237***	-0.263***	-0.284***	-0.278***	-0.179	-0.315***	-0.145*	-0.196**	-0.089*	-0.168***	-0.066	-0.221*
	(0.077)	(0.077)	(0.050)	(0.053)	(0.112)	(0.108)	(0.083)	(0.080)	(0.052)	(0.053)	(0.124)	(0.117)
pooled wage gap1	0.034*	0.065***	0.039***	0.081***	0.029	0.050*	0.006	-0.020	-0.025*	-0.007	-0.019	-0.052
(upratings only)	(0.019)	(0.019)	(0.012)	(0.013)	(0.028)	(0.028)	(0.022)	(0.024)	(0.014)	(0.016)	(0.032)	(0.036)
pooled wage gap2	-0.023	-0.022	-0.001	0.003	-0.019	-0.050	-0.020	-0.025	-0.018	-0.012	-0.018	-0.046
(upratings only)	(0.024)	(0.025)	(0.015)	(0.016)	(0.036)	(0.037)	(0.025)	(0.025)	(0.015)	(0.016)	(0.037)	(0.038)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A3.9 Probability of annual positive wage growth: Standard control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	0.045	0.053	0.058*	0.079**	0.066	0.063	0.052	0.051	0.053	0.078**	0.067	0.080**
	(0.043)	(0.043)	(0.034)	(0.034)	(0.044)	(0.042)	(0.041)	(0.043)	(0.034)	(0.034)	(0.042)	(0.040)
2000	-0.020	-0.120	-0.101	-0.147**	-0.168	-0.091	0.100	0.020	0.039	-0.023	-0.059	0.018
	(0.094)	(0.111)	(0.064)	(0.064)	(0.112)	(0.101)	(0.063)	(0.097)	(0.059)	(0.066)	(0.100)	(0.088)
2001	-0.078	-0.077	-0.052	-0.064	0.020	0.004	0.005	-0.043	0.016	-0.001	0.084	0.060
	(0.070)	(0.071)	(0.049)	(0.053)	(0.067)	(0.071)	(0.061)	(0.071)	(0.048)	(0.052)	(0.054)	(0.060)
2002	-0.392***	-0.375***	-0.199***	-0.188***	-0.169	-0.228*	-0.248**	-0.267**	-0.078	-0.088	-0.034	-0.066
	(0.100)	(0.095)	(0.066)	(0.065)	(0.127)	(0.128)	(0.118)	(0.116)	(0.069)	(0.069)	(0.111)	(0.118)
2003	-0.050	-0.022	-0.103**	-0.060	-0.108	-0.061	0.051	0.051	0.002	0.012	-0.003	-0.008
	(0.073)	(0.073)	(0.052)	(0.051)	(0.086)	(0.079)	(0.058)	(0.065)	(0.050)	(0.051)	(0.070)	(0.076)
2004	-0.034	-0.035	-0.016	-0.033	0.028	0.051	0.045	0.012	0.054	0.011	0.099*	0.092*
	(0.067)	(0.069)	(0.048)	(0.050)	(0.061)	(0.059)	(0.058)	(0.068)	(0.047)	(0.051)	(0.051)	(0.055)
2005	-0.136*	-0.185**	-0.094*	-0.110**	-0.007	0.015	-0.042	-0.153*	0.023	-0.053	0.103**	0.109**
	(0.080)	(0.083)	(0.056)	(0.056)	(0.074)	(0.072)	(0.076)	(0.085)	(0.054)	(0.058)	(0.044)	(0.052)
2006	-0.010	-0.117	-0.052	-0.120**	-0.021	-0.064	0.078	-0.080	0.046	-0.054	0.053	-0.024
	(0.067)	(0.076)	(0.055)	(0.058)	(0.073)	(0.077)	(0.057)	(0.079)	(0.051)	(0.059)	(0.060)	(0.076)
2007	-0.190**	-0.238***	-0.149**	-0.174***	-0.032	-0.067	-0.077	-0.174**	-0.042	-0.125*	0.038	-0.022
	(0.084)	(0.083)	(0.062)	(0.063)	(0.078)	(0.081)	(0.084)	(0.088)	(0.063)	(0.066)	(0.065)	(0.078)
2008	-0.126	-0.174*	0.017	-0.029	-0.077	-0.068	-0.025	-0.128	0.122**	0.057	-0.019	-0.025
	(0.086)	(0.089)	(0.063)	(0.069)	(0.091)	(0.091)	(0.077)	(0.088)	(0.052)	(0.064)	(0.084)	(0.085)
2009	-0.257**	-0.181	-0.120	-0.170**	-0.048	-0.060	-0.127	-0.120	0.003	-0.078	0.052	0.022
	(0.118)	(0.115)	(0.074)	(0.074)	(0.095)	(0.098)	(0.119)	(0.118)	(0.073)	(0.076)	(0.070)	(0.084)
	Pooled NMW effect											
pooled	-0.076*	-0.092**	-0.050	-0.054*	-0.020	-0.014	-0.014	-0.062	0.030	-0.005	0.060	0.036
	(0.045)	(0.046)	(0.031)	(0.031)	(0.048)	(0.046)	(0.045)	(0.047)	(0.030)	(0.032)	(0.044)	(0.044)
pooled upratings	-0.113**	-0.143***	-0.082**	-0.101***	-0.046	-0.044	-0.034	-0.105**	0.014	-0.040	0.037	0.004
	(0.050)	(0.049)	(0.033)	(0.033)	(0.053)	(0.051)	(0.051)	(0.051)	(0.033)	(0.034)	(0.051)	(0.051)
pooled wage gap1	0.018*	0.035***	0.037***	0.058***	0.020*	0.039***	0.008	0.002	0.017*	0.024**	0.016	0.028*
(upratings only)	(0.011)	(0.012)	(0.008)	(0.009)	(0.011)	(0.013)	(0.013)	(0.014)	(0.010)	(0.011)	(0.014)	(0.016)
pooled wage gap2	-0.012	-0.013	0.021**	0.022**	0.017	0.017	-0.007	-0.011	0.019*	0.020*	0.021	0.020
(upratings only)	(0.014)	(0.014)	(0.010)	(0.010)	(0.015)	(0.016)	(0.014)	(0.014)	(0.010)	(0.011)	(0.016)	(0.017)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A3.10 Annual percentage wage growth: Percentile control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	0.030	0.029	-0.008	0.003	-0.040	0.015	0.060***	0.056**	0.020	0.019	-0.016	0.028
	(0.021)	(0.021)	(0.016)	(0.017)	(0.025)	(0.025)	(0.021)	(0.024)	(0.017)	(0.020)	(0.027)	(0.028)
2000	-0.059**	-0.029	-0.025	-0.014	-0.036	0.032	-0.018	0.002	-0.004	-0.000	-0.028	0.029
	(0.026)	(0.025)	(0.020)	(0.021)	(0.031)	(0.032)	(0.027)	(0.028)	(0.021)	(0.024)	(0.033)	(0.035)
2001	-0.001	0.043	-0.003	0.004	-0.042	-0.014	0.021	0.058**	-0.001	-0.004	-0.022	-0.020
	(0.027)	(0.026)	(0.020)	(0.020)	(0.032)	(0.033)	(0.027)	(0.029)	(0.021)	(0.022)	(0.033)	(0.036)
2002	-0.031	-0.028	-0.041**	-0.009	-0.058**	-0.072**	0.016	0.011	-0.030	0.008	-0.039	-0.044
	(0.025)	(0.025)	(0.019)	(0.020)	(0.029)	(0.029)	(0.026)	(0.028)	(0.020)	(0.023)	(0.031)	(0.033)
2003	0.007	0.045*	-0.047**	-0.006	-0.024	0.017	0.042	0.089***	-0.033	0.002	-0.022	0.024
	(0.026)	(0.026)	(0.020)	(0.020)	(0.032)	(0.032)	(0.026)	(0.030)	(0.022)	(0.024)	(0.035)	(0.036)
2004	0.009	0.019	-0.008	-0.004	-0.031	0.001	0.038	0.054*	-0.008	0.003	-0.003	0.009
	(0.026)	(0.025)	(0.019)	(0.020)	(0.032)	(0.032)	(0.027)	(0.028)	(0.020)	(0.022)	(0.034)	(0.037)
2005	-0.015	0.001	-0.032*	-0.009	-0.048	-0.022	0.011	0.008	-0.011	0.001	-0.018	-0.004
	(0.025)	(0.026)	(0.019)	(0.019)	(0.032)	(0.032)	(0.025)	(0.027)	(0.020)	(0.022)	(0.034)	(0.036)
2006	0.013	0.015	-0.033*	-0.042**	-0.021	0.003	0.036	0.033	-0.015	-0.016	-0.008	0.006
	(0.027)	(0.027)	(0.020)	(0.021)	(0.032)	(0.035)	(0.027)	(0.028)	(0.021)	(0.023)	(0.034)	(0.039)
2007	-0.024	0.006	-0.027	-0.018	0.011	0.011	0.005	0.045	-0.003	-0.003	0.023	0.036
	(0.027)	(0.026)	(0.019)	(0.021)	(0.032)	(0.033)	(0.027)	(0.029)	(0.020)	(0.024)	(0.034)	(0.038)
2008	0.019	0.013	-0.006	-0.009	0.006	0.006	0.052*	0.038	0.016	0.017	0.016	0.031
	(0.027)	(0.027)	(0.021)	(0.021)	(0.034)	(0.034)	(0.027)	(0.029)	(0.022)	(0.024)	(0.037)	(0.039)
2009	-0.052*	0.021	-0.025	-0.012	-0.007	0.073**	-0.019	0.042	-0.017	-0.001	0.012	0.062
	(0.027)	(0.027)	(0.021)	(0.021)	(0.034)	(0.034)	(0.027)	(0.030)	(0.022)	(0.024)	(0.038)	(0.040)
	Pooled NMW effect											
pooled	-0.005	0.014	-0.022*	-0.009	-0.029	0.003	0.023	0.050***	0.008	0.017	-0.001	0.040*
	(0.015)	(0.015)	(0.012)	(0.012)	(0.019)	(0.019)	(0.015)	(0.017)	(0.012)	(0.014)	(0.020)	(0.021)
pooled upratings	-0.012	0.011	-0.025**	-0.011	-0.027	-0.000	0.014	0.043**	-0.003	0.007	-0.002	0.029
	(0.015)	(0.015)	(0.012)	(0.012)	(0.019)	(0.019)	(0.016)	(0.017)	(0.013)	(0.014)	(0.020)	(0.022)
pooled wage gap1	0.009	0.013*	0.015***	0.025***	0.033***	0.028***	-0.000	-0.000	-0.001	-0.001	0.011	0.003
(upratings only)	(0.008)	(0.007)	(0.006)	(0.006)	(0.007)	(0.007)	(0.008)	(0.008)	(0.006)	(0.007)	(0.007)	(0.007)
pooled wage gap2	0.021***	0.023***	0.013***	0.013***	0.016***	0.016***	0.015***	0.021***	0.008*	0.013***	0.014***	0.016***
(upratings only)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q3; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A3.11 Annual absolute wage growth: Percentile control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	0.119	0.127	-0.033	-0.035	-0.233**	0.086	0.217**	0.215*	0.061	0.082	-0.140	0.102
	(0.089)	(0.098)	(0.064)	(0.069)	(0.118)	(0.122)	(0.093)	(0.113)	(0.070)	(0.085)	(0.126)	(0.138)
2000	-0.234**	-0.095	-0.112	-0.113	-0.226	0.158	-0.066	0.011	-0.050	0.003	-0.205	0.125
	(0.112)	(0.117)	(0.080)	(0.088)	(0.147)	(0.160)	(0.116)	(0.133)	(0.087)	(0.101)	(0.158)	(0.175)
2001	-0.018	0.225*	0.011	0.005	-0.281*	-0.115	0.043	0.278**	0.025	0.026	-0.227	-0.171
	(0.117)	(0.120)	(0.082)	(0.087)	(0.149)	(0.162)	(0.120)	(0.135)	(0.087)	(0.096)	(0.157)	(0.177)
2002	-0.079	-0.067	-0.155*	-0.039	-0.238*	-0.310**	0.083	0.086	-0.117	0.095	-0.180	-0.213
	(0.109)	(0.117)	(0.079)	(0.084)	(0.137)	(0.148)	(0.114)	(0.132)	(0.086)	(0.098)	(0.146)	(0.165)
2003	0.029	0.232*	-0.169**	-0.050	-0.126	0.059	0.162	0.392***	-0.129	0.047	-0.147	0.056
	(0.113)	(0.120)	(0.083)	(0.085)	(0.149)	(0.158)	(0.114)	(0.139)	(0.093)	(0.101)	(0.163)	(0.180)
2004	0.080	0.140	-0.005	-0.024	-0.192	0.046	0.169	0.260*	0.009	0.058	-0.085	0.070
	(0.113)	(0.117)	(0.078)	(0.085)	(0.147)	(0.159)	(0.120)	(0.132)	(0.085)	(0.097)	(0.162)	(0.183)
2005	-0.051	0.090	-0.127	-0.068	-0.237	-0.084	0.040	0.119	-0.050	0.030	-0.126	-0.005
	(0.108)	(0.118)	(0.078)	(0.084)	(0.149)	(0.159)	(0.112)	(0.130)	(0.085)	(0.094)	(0.162)	(0.179)
2006	0.084	0.093	-0.119	-0.205**	-0.169	0.011	0.173	0.154	-0.066	-0.053	-0.135	-0.037
	(0.119)	(0.124)	(0.081)	(0.089)	(0.153)	(0.175)	(0.121)	(0.134)	(0.087)	(0.100)	(0.161)	(0.195)
2007	-0.088	0.018	-0.106	-0.101	0.006	0.014	0.034	0.182	-0.018	0.005	0.034	0.080
	(0.116)	(0.122)	(0.079)	(0.091)	(0.146)	(0.164)	(0.120)	(0.137)	(0.085)	(0.104)	(0.159)	(0.188)
2008	0.098	0.081	-0.021	-0.066	-0.030	-0.022	0.234*	0.175	0.067	0.092	-0.003	0.069
	(0.117)	(0.123)	(0.088)	(0.094)	(0.160)	(0.172)	(0.121)	(0.139)	(0.094)	(0.104)	(0.173)	(0.193)
2009	-0.229*	0.129	-0.083	-0.077	-0.066	0.364**	-0.093	0.183	-0.061	0.005	-0.061	0.259
	(0.118)	(0.125)	(0.087)	(0.092)	(0.159)	(0.168)	(0.120)	(0.140)	(0.095)	(0.104)	(0.175)	(0.195)
	Pooled NMW effect											
pooled	-0.010	0.090	-0.080*	-0.065	-0.177**	0.007	0.083	0.227***	0.035	0.078	-0.082	0.115
	(0.066)	(0.069)	(0.048)	(0.050)	(0.086)	(0.090)	(0.068)	(0.076)	(0.051)	(0.061)	(0.090)	(0.102)
pooled upratings	-0.037	0.083	-0.091*	-0.071	-0.164*	-0.011	0.055	0.205***	-0.004	0.041	-0.087	0.069
	(0.067)	(0.069)	(0.049)	(0.051)	(0.087)	(0.093)	(0.069)	(0.077)	(0.053)	(0.062)	(0.092)	(0.106)
pooled wage gap1	0.032	0.046	0.072***	0.128***	0.126***	0.090***	0.004	0.011	0.015	0.015	0.050	0.015
(upratings only)	(0.033)	(0.034)	(0.024)	(0.025)	(0.031)	(0.032)	(0.035)	(0.037)	(0.026)	(0.028)	(0.034)	(0.035)
pooled wage gap2	0.078***	0.089***	0.049***	0.045**	0.047***	0.054***	0.059***	0.086***	0.033*	0.045**	0.040**	0.051***
(upratings only)	(0.018)	(0.018)	(0.018)	(0.019)	(0.016)	(0.017)	(0.019)	(0.019)	(0.018)	(0.019)	(0.017)	(0.017)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q3; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A3.12 Probability of annual positive wage growth: Percentile control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	0.071	0.096**	0.006	0.028	-0.092*	-0.020	0.134***	0.141***	0.048	0.037	-0.069	0.003
	(0.046)	(0.046)	(0.041)	(0.042)	(0.054)	(0.051)	(0.045)	(0.050)	(0.044)	(0.051)	(0.056)	(0.054)
2000	-0.078	-0.046	-0.051	-0.033	-0.073	0.058	-0.008	0.013	-0.055	-0.047	-0.087	0.067
	(0.068)	(0.065)	(0.051)	(0.053)	(0.068)	(0.058)	(0.071)	(0.072)	(0.056)	(0.061)	(0.076)	(0.064)
2001	0.073	0.120**	-0.013	0.072	-0.058	0.005	0.124**	0.138**	-0.034	0.050	-0.049	0.001
	(0.059)	(0.055)	(0.054)	(0.051)	(0.070)	(0.064)	(0.056)	(0.059)	(0.058)	(0.058)	(0.075)	(0.070)
2002	0.011	-0.003	-0.093*	-0.004	-0.102	-0.123*	0.077	0.039	-0.094*	-0.010	-0.082	-0.061
	(0.060)	(0.062)	(0.052)	(0.052)	(0.067)	(0.068)	(0.060)	(0.068)	(0.057)	(0.060)	(0.071)	(0.073)
2003	0.082	0.132**	-0.052	0.045	-0.086	-0.042	0.157***	0.202***	-0.041	0.026	-0.103	-0.032
	(0.057)	(0.055)	(0.054)	(0.052)	(0.070)	(0.067)	(0.051)	(0.055)	(0.060)	(0.062)	(0.080)	(0.075)
2004	0.121**	0.128**	0.036	0.066	-0.054	0.022	0.167***	0.166***	0.035	0.073	-0.045	0.013
	(0.052)	(0.053)	(0.051)	(0.051)	(0.069)	(0.061)	(0.051)	(0.055)	(0.056)	(0.058)	(0.078)	(0.072)
2005	0.029	0.031	0.002	0.056	-0.030	-0.017	0.081	0.051	0.011	0.046	-0.018	-0.017
	(0.060)	(0.061)	(0.052)	(0.050)	(0.068)	(0.065)	(0.060)	(0.065)	(0.056)	(0.057)	(0.073)	(0.073)
2006	0.133**	0.102*	-0.024	-0.048	-0.078	0.002	0.176***	0.127**	-0.010	-0.034	-0.079	0.015
	(0.053)	(0.058)	(0.055)	(0.056)	(0.070)	(0.066)	(0.050)	(0.060)	(0.059)	(0.063)	(0.077)	(0.073)
2007	0.009	0.049	-0.036	0.005	0.040	0.044	0.085	0.120*	-0.010	-0.006	0.027	0.050
	(0.063)	(0.061)	(0.054)	(0.057)	(0.063)	(0.061)	(0.059)	(0.062)	(0.057)	(0.065)	(0.070)	(0.068)
2008	0.133**	0.094	0.068	0.071	0.008	0.028	0.186***	0.128**	0.076	0.073	-0.017	0.038
	(0.055)	(0.060)	(0.056)	(0.056)	(0.070)	(0.065)	(0.051)	(0.063)	(0.060)	(0.062)	(0.079)	(0.070)
2009	-0.031	0.136**	-0.010	0.016	-0.058	0.061	0.027	0.164***	-0.036	0.005	-0.054	0.051
	(0.070)	(0.056)	(0.057)	(0.057)	(0.076)	(0.062)	(0.068)	(0.058)	(0.063)	(0.064)	(0.085)	(0.073)
	Pooled NMW effect											
pooled	0.054	0.078**	-0.015	0.026	-0.056	-0.002	0.105***	0.138***	0.042	0.074*	-0.016	0.047
	(0.036)	(0.037)	(0.031)	(0.032)	(0.038)	(0.038)	(0.038)	(0.041)	(0.034)	(0.038)	(0.039)	(0.042)
pooled upratings	0.051	0.074*	-0.020	0.025	-0.049	0.002	0.097**	0.120***	0.013	0.051	-0.016	0.042
	(0.037)	(0.038)	(0.032)	(0.032)	(0.039)	(0.039)	(0.039)	(0.043)	(0.035)	(0.039)	(0.041)	(0.044)
pooled wage gap1	0.042**	0.044**	0.075***	0.092***	0.069***	0.060***	0.021	0.009	0.047**	0.041**	0.039***	0.026*
(upratings only)	(0.019)	(0.019)	(0.016)	(0.016)	(0.013)	(0.013)	(0.021)	(0.022)	(0.018)	(0.019)	(0.014)	(0.015)
pooled wage gap2	0.054***	0.059***	0.050***	0.057***	0.023***	0.025***	0.049***	0.058***	0.045***	0.055***	0.020**	0.024***
(upratings only)	(0.011)	(0.011)	(0.012)	(0.013)	(0.007)	(0.007)	(0.012)	(0.012)	(0.013)	(0.013)	(0.008)	(0.008)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q3; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A3.13 Annual percentage wage growth: Vertical difference-in-differences, standard control groups, NES

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.057***	0.069***	0.058***	0.058***	0.070***	0.058***
	(0.008)	(0.004)	(0.009)	(0.008)	(0.004)	(0.009)
2001	0.031***	0.038***	0.019**	0.034***	0.037***	0.019**
	(0.006)	(0.003)	(0.008)	(0.006)	(0.003)	(0.008)
2003	0.022***	0.022***	0.022**	0.020**	0.020***	0.024***
	(0.008)	(0.005)	(0.009)	(0.008)	(0.005)	(0.009)
2004	0.030***	0.030***	0.034***	0.028***	0.031***	0.034***
	(0.006)	(0.004)	(0.007)	(0.006)	(0.004)	(0.007)
2005	-0.004	0.003	0.003	-0.004	0.001	0.003
	(0.006)	(0.003)	(0.006)	(0.005)	(0.003)	(0.006)
2006	0.027***	0.029***	0.021***	0.026***	0.027***	0.021***
	(0.005)	(0.003)	(0.006)	(0.005)	(0.003)	(0.006)
2007	0.010**	0.008***	0.017***	0.011**	0.009***	0.016***
	(0.005)	(0.003)	(0.006)	(0.005)	(0.002)	(0.006)
2008	0.010**	0.005*	0.019***	0.009**	0.007***	0.019***
	(0.005)	(0.003)	(0.005)	(0.004)	(0.003)	(0.005)
2009	0.005*	0.003*	0.006**	0.004	0.001	0.005*
	(0.003)	(0.002)	(0.003)	(0.003)	(0.002)	(0.003)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.023***	0.026***	0.021***	0.021***	0.026***	0.020***
(upratings only)	(0.003)	(0.001)	(0.003)	(0.003)	(0.001)	(0.003)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A3.14 Annual absolute wage growth: Vertical difference-in-differences, standard control groups, NES

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.219***	0.271***	0.207***	0.226***	0.280***	0.205***
	(0.034)	(0.018)	(0.040)	(0.033)	(0.018)	(0.040)
2001	0.111***	0.143***	0.054	0.121***	0.140***	0.056*
	(0.027)	(0.015)	(0.033)	(0.027)	(0.014)	(0.033)
2003	0.074**	0.072***	0.064	0.062*	0.064***	0.079**
	(0.037)	(0.021)	(0.040)	(0.036)	(0.020)	(0.039)
2004	0.120***	0.118***	0.133***	0.113***	0.123***	0.132***
	(0.029)	(0.017)	(0.033)	(0.028)	(0.016)	(0.032)
2005	-0.024	0.008	0.002	-0.025	-0.003	0.002
	(0.026)	(0.015)	(0.029)	(0.025)	(0.015)	(0.028)
2006	0.109***	0.122***	0.080***	0.107***	0.114***	0.078***
	(0.025)	(0.013)	(0.027)	(0.023)	(0.013)	(0.026)
2007	0.041*	0.032***	0.070***	0.046**	0.038***	0.066**
	(0.022)	(0.012)	(0.026)	(0.022)	(0.011)	(0.026)
2008	0.048**	0.026*	0.080***	0.043**	0.034***	0.077***
	(0.022)	(0.014)	(0.023)	(0.021)	(0.013)	(0.023)
2009	0.028*	0.018**	0.031**	0.020	0.005	0.027**
	(0.016)	(0.008)	(0.013)	(0.015)	(0.008)	(0.013)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.083***	0.098***	0.071***	0.075***	0.100***	0.070***
(upratings only)	(0.013)	(0.007)	(0.016)	(0.012)	(0.006)	(0.015)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A3.15 Probability of annual positive wage growth: Vertical difference-in-differences, standard control groups, NES

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.231***	0.274***	0.129***	0.227***	0.277***	0.133***
	(0.024)	(0.018)	(0.031)	(0.024)	(0.018)	(0.031)
2001	0.228***	0.249***	0.153***	0.232***	0.244***	0.147***
	(0.029)	(0.022)	(0.035)	(0.029)	(0.022)	(0.035)
2003	0.254***	0.257***	0.196***	0.247***	0.242***	0.201***
	(0.026)	(0.025)	(0.031)	(0.025)	(0.027)	(0.030)
2004	0.262***	0.247***	0.237***	0.251***	0.253***	0.239***
	(0.019)	(0.016)	(0.021)	(0.019)	(0.016)	(0.020)
2005	0.161***	0.204***	0.140***	0.156***	0.193***	0.143***
	(0.027)	(0.020)	(0.029)	(0.027)	(0.021)	(0.029)
2006	0.290***	0.366***	0.303***	0.286***	0.357***	0.299***
	(0.020)	(0.018)	(0.020)	(0.020)	(0.019)	(0.020)
2007	-0.010	-0.051*	0.015	0.003	-0.044	0.008
	(0.035)	(0.026)	(0.035)	(0.036)	(0.027)	(0.036)
2008	0.193***	0.202***	0.268***	0.188***	0.202***	0.262***
	(0.022)	(0.016)	(0.019)	(0.021)	(0.016)	(0.018)
2009	-0.182***	-0.158***	-0.145***	-0.199***	-0.181***	-0.167***
	(0.035)	(0.025)	(0.033)	(0.035)	(0.026)	(0.033)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.421***	0.435***	0.424***	0.416***	0.442***	0.424***
(upratings only)	(0.022)	(0.014)	(0.026)	(0.022)	(0.014)	(0.026)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A3.16 Annual wage changes: Pooled vertical difference-in-differences, LFS

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
Control groups:						
	Percentage wage growth					
Standard HOURPAY	0.008	0.016***	0.009	0.010	0.020***	0.017*
	(0.007)	(0.006)	(0.010)	(0.008)	(0.006)	(0.010)
Standard HRRATE	0.016***	0.018***	0.016***	0.017***	0.019***	0.017***
	(0.003)	(0.002)	(0.004)	(0.003)	(0.002)	(0.004)
Percentile HOURPAY	0.024***	0.023***	0.025***	0.026***	0.026***	0.022***
	(0.007)	(0.006)	(0.006)	(0.007)	(0.006)	(0.006)
	Absolute wage growth					
Standard HOURPAY	0.005	0.057**	0.008	0.018	0.075***	0.041
	(0.035)	(0.026)	(0.047)	(0.036)	(0.026)	(0.049)
Standard HRRATE	0.061***	0.067***	0.057***	0.066***	0.073***	0.063***
	(0.012)	(0.007)	(0.018)	(0.012)	(0.008)	(0.019)
Percentile HOURPAY	0.070**	0.077***	0.092***	0.083**	0.090***	0.074**
	(0.033)	(0.027)	(0.030)	(0.033)	(0.027)	(0.030)
	Probability of positive wage growth					
Standard HOURPAY	0.023	0.057***	0.030	0.037*	0.067***	0.041*
	(0.022)	(0.016)	(0.023)	(0.022)	(0.017)	(0.024)
Standard HRRATE	0.232***	0.252***	0.218***	0.240***	0.267***	0.220***
	(0.028)	(0.018)	(0.036)	(0.028)	(0.018)	(0.036)
Percentile HOURPAY	0.083***	0.082***	0.048***	0.087***	0.087***	0.041***
	(0.020)	(0.016)	(0.014)	(0.020)	(0.017)	(0.014)

Notes: LFS1999Q4-2010; Pooled wage gap 1 (upratings only, i.e. October 2000-October 2009); Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage.

ANNEX 4

EMPLOYMENT RETENTION OVER TIME:

DIFFERENCE-IN-DIFFERENCES ESTIMATES OF NMW IMPACTS

A4.1 Annual employment retention: Standard control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.007	0.028	-0.058***	-0.074***	-0.025	-0.009	-0.004	0.021	-0.062***	-0.079***	-0.025	-0.005
	(0.025)	(0.022)	(0.019)	(0.018)	(0.028)	(0.024)	(0.026)	(0.023)	(0.020)	(0.018)	(0.029)	(0.024)
2000	0.043	0.018	-0.046*	-0.072***	0.030	-0.003	0.023	0.001	-0.055**	-0.076***	0.024	0.001
	(0.033)	(0.032)	(0.023)	(0.023)	(0.037)	(0.036)	(0.035)	(0.034)	(0.025)	(0.024)	(0.039)	(0.037)
2001	0.033	0.003	-0.001	-0.009	-0.011	-0.045*	0.024	-0.001	-0.008	-0.011	-0.011	-0.033
	(0.025)	(0.024)	(0.018)	(0.017)	(0.029)	(0.027)	(0.026)	(0.025)	(0.018)	(0.018)	(0.029)	(0.027)
2002	-0.006	-0.015	-0.028	0.000	-0.066*	-0.086**	-0.020	-0.030	-0.037*	-0.004	-0.078**	-0.082**
	(0.032)	(0.030)	(0.021)	(0.019)	(0.036)	(0.034)	(0.033)	(0.032)	(0.022)	(0.020)	(0.038)	(0.035)
2003	0.026	0.016	-0.015	-0.005	0.033	0.047*	0.013	0.005	-0.031	-0.018	0.033	0.054**
	(0.025)	(0.024)	(0.019)	(0.018)	(0.028)	(0.024)	(0.027)	(0.025)	(0.020)	(0.019)	(0.029)	(0.025)
2004	-0.004	-0.021	0.001	0.011	0.004	-0.011	-0.013	-0.023	-0.004	0.006	0.010	-0.001
	(0.024)	(0.023)	(0.016)	(0.016)	(0.025)	(0.023)	(0.024)	(0.024)	(0.017)	(0.016)	(0.025)	(0.023)
2005	-0.012	-0.035	-0.049***	-0.006	-0.015	-0.041*	-0.022	-0.039	-0.056***	-0.008	-0.001	-0.017
	(0.024)	(0.024)	(0.017)	(0.016)	(0.025)	(0.023)	(0.025)	(0.024)	(0.018)	(0.016)	(0.026)	(0.023)
2006	-0.024	-0.029	-0.043***	0.012	-0.005	0.003	-0.030	-0.020	-0.048***	0.009	0.001	0.021
	(0.023)	(0.022)	(0.016)	(0.015)	(0.024)	(0.021)	(0.024)	(0.022)	(0.017)	(0.016)	(0.024)	(0.021)
2007	-0.018	-0.053**	-0.043**	-0.025	-0.059**	-0.066***	-0.013	-0.047*	-0.037**	-0.016	-0.049*	-0.043*
	(0.025)	(0.025)	(0.017)	(0.017)	(0.026)	(0.024)	(0.025)	(0.025)	(0.018)	(0.018)	(0.026)	(0.024)
2008	-0.033	-0.031	-0.025	-0.029	-0.024	-0.023	-0.039	-0.027	-0.032*	-0.024	-0.006	0.004
	(0.024)	(0.024)	(0.017)	(0.018)	(0.025)	(0.024)	(0.025)	(0.024)	(0.018)	(0.018)	(0.026)	(0.023)
2009	0.005	-0.005	-0.074***	-0.067***	-0.040	-0.042*	0.006	0.006	-0.080***	-0.058***	-0.037	-0.023
	(0.025)	(0.025)	(0.018)	(0.018)	(0.026)	(0.024)	(0.026)	(0.025)	(0.019)	(0.019)	(0.027)	(0.024)
	Pooled NMW effect											
pooled	-0.002	-0.014	-0.034***	-0.021**	-0.018	-0.024*	-0.018	-0.016	-0.047***	-0.026***	-0.021	-0.011
	(0.013)	(0.013)	(0.010)	(0.009)	(0.015)	(0.014)	(0.014)	(0.013)	(0.010)	(0.009)	(0.016)	(0.013)
pooled upratings	-0.003	-0.018	-0.032***	-0.015	-0.018	-0.026*	-0.019	-0.021	-0.042***	-0.018*	-0.017	-0.011
	(0.014)	(0.013)	(0.010)	(0.009)	(0.016)	(0.014)	(0.014)	(0.013)	(0.010)	(0.009)	(0.016)	(0.014)
pooled wage gap1	-0.024***	-0.035***	-0.035***	-0.043***	-0.024***	-0.039***	-0.010***	-0.011***	-0.017***	-0.014***	-0.009**	-0.010**
(upratings only)	(0.003)	(0.003)	(0.003)	(0.003)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.004)	(0.004)
pooled wage gap2	-0.010**	-0.013***	-0.016***	-0.014***	-0.009*	-0.010**	-0.009**	-0.011***	-0.012***	-0.011***	-0.006	-0.007
(upratings only)	(0.004)	(0.004)	(0.003)	(0.003)	(0.005)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)	(0.005)	(0.004)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.016	-0.006	-0.017	-0.032***	-0.018	-0.011	-0.011	0.003	-0.019	-0.023*	-0.014	-0.002
	(0.018)	(0.017)	(0.012)	(0.012)	(0.017)	(0.016)	(0.018)	(0.017)	(0.012)	(0.012)	(0.018)	(0.016)
pooled upratings	-0.016	-0.000	-0.020*	-0.040***	-0.020	-0.010	-0.010	0.009	-0.021*	-0.030**	-0.014	-0.001
	(0.018)	(0.017)	(0.012)	(0.013)	(0.018)	(0.017)	(0.018)	(0.017)	(0.012)	(0.013)	(0.018)	(0.017)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A4.2 Annual employment retention: Percentile control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.027	-0.001	-0.094***	-0.044*	-0.004	0.004	-0.033	-0.003	-0.090***	-0.051**	0.006	0.010
	(0.033)	(0.032)	(0.025)	(0.024)	(0.028)	(0.029)	(0.034)	(0.033)	(0.025)	(0.025)	(0.028)	(0.029)
1999	0.026	-0.032	-0.047**	-0.045*	0.024	0.018	0.015	-0.040	-0.054**	-0.054**	0.005	0.006
	(0.031)	(0.033)	(0.024)	(0.024)	(0.028)	(0.028)	(0.033)	(0.035)	(0.026)	(0.026)	(0.029)	(0.029)
2000	-0.022	0.010	-0.067***	-0.070***	-0.034	0.006	-0.023	0.012	-0.063**	-0.066**	-0.037	-0.001
	(0.034)	(0.032)	(0.024)	(0.025)	(0.030)	(0.029)	(0.035)	(0.034)	(0.026)	(0.026)	(0.032)	(0.032)
2001	0.027	-0.009	0.014	0.021	0.016	-0.016	0.024	-0.007	0.009	0.016	0.010	-0.023
	(0.030)	(0.032)	(0.023)	(0.023)	(0.029)	(0.030)	(0.032)	(0.034)	(0.025)	(0.025)	(0.030)	(0.032)
2002	-0.006	-0.033	-0.022	-0.015	-0.021	-0.014	-0.004	-0.032	-0.028	-0.017	-0.027	-0.032
	(0.032)	(0.034)	(0.023)	(0.024)	(0.030)	(0.030)	(0.035)	(0.036)	(0.026)	(0.026)	(0.032)	(0.033)
2003	0.025	0.000	-0.042*	0.006	0.050*	0.076***	0.022	-0.004	-0.051**	-0.007	0.041	0.054*
	(0.031)	(0.032)	(0.024)	(0.023)	(0.027)	(0.027)	(0.033)	(0.034)	(0.026)	(0.025)	(0.029)	(0.030)
2004	-0.012	-0.009	-0.007	0.027	0.026	-0.004	-0.021	-0.010	-0.010	0.022	0.010	-0.026
	(0.032)	(0.033)	(0.023)	(0.022)	(0.029)	(0.030)	(0.035)	(0.036)	(0.026)	(0.025)	(0.032)	(0.034)
2005	-0.032	-0.019	-0.063***	-0.010	0.047*	0.048*	-0.033	-0.023	-0.068***	-0.010	0.030	0.018
	(0.033)	(0.032)	(0.023)	(0.022)	(0.028)	(0.028)	(0.036)	(0.036)	(0.026)	(0.025)	(0.032)	(0.034)
2006	-0.003	-0.078**	-0.057**	-0.030	0.053*	-0.008	0.006	-0.066*	-0.052**	-0.021	0.035	-0.030
	(0.031)	(0.033)	(0.023)	(0.023)	(0.028)	(0.030)	(0.034)	(0.036)	(0.026)	(0.025)	(0.033)	(0.036)
2007	-0.033	-0.068*	-0.079***	-0.021	-0.010	-0.020	-0.020	-0.055	-0.064**	-0.002	-0.039	-0.055
	(0.034)	(0.036)	(0.025)	(0.024)	(0.032)	(0.032)	(0.037)	(0.041)	(0.028)	(0.027)	(0.038)	(0.040)
2008	-0.033	-0.102***	-0.032	-0.072***	-0.013	-0.042	-0.025	-0.101**	-0.028	-0.065**	-0.024	-0.071*
	(0.034)	(0.036)	(0.023)	(0.027)	(0.031)	(0.035)	(0.038)	(0.042)	(0.026)	(0.031)	(0.036)	(0.043)
2009	0.036	-0.060*	-0.043*	-0.083***	0.018	-0.004	0.044	-0.044	-0.053**	-0.075***	-0.004	-0.030
	(0.029)	(0.033)	(0.022)	(0.023)	(0.028)	(0.029)	(0.034)	(0.039)	(0.026)	(0.027)	(0.035)	(0.038)
	Pooled NMW effect											
pooled	-0.003	-0.033*	-0.044***	-0.027**	0.014	0.005	-0.012	-0.025	-0.057***	-0.029*	-0.010	-0.012
	(0.017)	(0.018)	(0.013)	(0.013)	(0.016)	(0.016)	(0.019)	(0.020)	(0.015)	(0.015)	(0.017)	(0.018)
pooled upratings	-0.004	-0.036**	-0.040***	-0.024*	0.015	0.004	-0.006	-0.020	-0.047***	-0.019	-0.009	-0.015
	(0.018)	(0.018)	(0.013)	(0.013)	(0.016)	(0.017)	(0.021)	(0.021)	(0.016)	(0.016)	(0.020)	(0.021)
pooled wage gap1	-0.012***	-0.027***	-0.037***	-0.044***	-0.011***	-0.018***	-0.001	-0.007	-0.014***	-0.007	-0.001	-0.007**
(upratings only)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)	(0.005)	(0.005)	(0.004)	(0.004)	(0.003)	(0.003)
pooled wage gap2	-0.000	-0.006	-0.009*	0.001	-0.002	-0.006*	-0.000	-0.005	-0.007	0.002	-0.001	-0.006*
(upratings only)	(0.005)	(0.005)	(0.005)	(0.005)	(0.003)	(0.003)	(0.005)	(0.005)	(0.005)	(0.005)	(0.003)	(0.003)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	0.011	-0.055**	0.008	-0.061***	-0.013	-0.031	0.016	-0.045*	0.001	-0.058***	-0.034	-0.049**
	(0.022)	(0.024)	(0.015)	(0.017)	(0.021)	(0.023)	(0.023)	(0.025)	(0.016)	(0.018)	(0.022)	(0.024)
pooled upratings	0.012	-0.053**	0.003	-0.067***	-0.014	-0.030	0.020	-0.040	-0.001	-0.063***	-0.028	-0.042*
	(0.022)	(0.024)	(0.015)	(0.018)	(0.022)	(0.023)	(0.023)	(0.025)	(0.016)	(0.018)	(0.022)	(0.024)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A4.3 Annual employment retention: Standard control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	-0.006	0.005	-0.014	0.031	0.006	0.023	-0.006	0.006	-0.011	0.030	0.002	0.005
	(0.034)	(0.029)	(0.027)	(0.024)	(0.037)	(0.030)	(0.031)	(0.027)	(0.025)	(0.022)	(0.032)	(0.029)
2000	-0.000	0.038	0.061**	0.047*	-0.001	0.011	-0.010	0.037	0.033	0.027	0.010	0.007
	(0.047)	(0.031)	(0.025)	(0.025)	(0.057)	(0.043)	(0.047)	(0.029)	(0.029)	(0.028)	(0.038)	(0.042)
2001	-0.017	0.003	-0.032	-0.002	-0.071	-0.024	-0.022	-0.001	-0.037	0.000	-0.051	-0.059
	(0.044)	(0.036)	(0.037)	(0.034)	(0.063)	(0.046)	(0.042)	(0.035)	(0.036)	(0.031)	(0.058)	(0.056)
2002	0.011	0.030	-0.038	0.031	-0.017	0.037	-0.001	0.031	-0.068	0.012	0.025	0.042
	(0.046)	(0.036)	(0.045)	(0.029)	(0.073)	(0.039)	(0.046)	(0.031)	(0.051)	(0.032)	(0.034)	(0.028)
2003	0.007	0.019	0.008	0.036	-0.070	0.011	0.002	0.021	-0.014	0.016	-0.064	0.001
	(0.037)	(0.032)	(0.031)	(0.025)	(0.067)	(0.038)	(0.038)	(0.030)	(0.034)	(0.026)	(0.067)	(0.039)
2004	0.011	0.033	0.020	0.028	-0.053	0.002	0.006	0.039*	0.003	0.024	-0.042	-0.008
	(0.034)	(0.027)	(0.028)	(0.026)	(0.054)	(0.036)	(0.033)	(0.021)	(0.030)	(0.025)	(0.049)	(0.033)
2005	0.022	0.020	0.003	0.020	-0.067	0.013	0.026	0.022	-0.008	0.019	-0.051	0.014
	(0.033)	(0.032)	(0.034)	(0.029)	(0.064)	(0.036)	(0.025)	(0.025)	(0.035)	(0.026)	(0.058)	(0.034)
2006	0.008	0.028	0.031	0.061***	-0.066	0.012	0.001	0.025	0.010	0.047**	-0.029	0.008
	(0.037)	(0.028)	(0.030)	(0.022)	(0.061)	(0.035)	(0.034)	(0.025)	(0.032)	(0.022)	(0.048)	(0.033)
2007	0.054**	0.041	0.002	0.042	-0.082	-0.024	0.034	0.025	-0.017	0.033	-0.046	-0.022
	(0.025)	(0.026)	(0.036)	(0.027)	(0.064)	(0.046)	(0.026)	(0.026)	(0.038)	(0.026)	(0.047)	(0.043)
2008	0.027	0.025	0.068**	0.051*	0.008	0.041	0.021	0.016	0.055**	0.049*	0.014	0.033
	(0.033)	(0.032)	(0.027)	(0.029)	(0.047)	(0.031)	(0.030)	(0.031)	(0.028)	(0.026)	(0.038)	(0.027)
2009	0.065**	0.045	0.048	0.056*	0.012	0.016	0.049**	0.044	0.030	0.050*	0.047	0.015
	(0.028)	(0.033)	(0.036)	(0.029)	(0.054)	(0.042)	(0.022)	(0.027)	(0.039)	(0.027)	(0.036)	(0.035)
	Pooled NMW effect											
pooled	0.013	0.022	0.008	0.032**	-0.032	0.011	0.006	0.018	-0.004	0.025	-0.020	0.007
	(0.021)	(0.019)	(0.016)	(0.016)	(0.030)	(0.025)	(0.021)	(0.019)	(0.016)	(0.016)	(0.029)	(0.024)
pooled upratings	0.017	0.026	0.014	0.032**	-0.040	0.009	0.012	0.025	-0.005	0.023	-0.037	0.003
	(0.020)	(0.019)	(0.016)	(0.015)	(0.033)	(0.025)	(0.020)	(0.018)	(0.017)	(0.015)	(0.035)	(0.026)
pooled wage gap1	-0.010*	-0.007	-0.010**	-0.015***	-0.019***	-0.019***	-0.004	-0.001	-0.004	-0.003	-0.016**	-0.013**
(upratings only)	(0.005)	(0.005)	(0.004)	(0.004)	(0.006)	(0.005)	(0.005)	(0.006)	(0.004)	(0.004)	(0.006)	(0.006)
pooled wage gap2	-0.004	-0.001	-0.009*	-0.006	-0.015**	-0.009	-0.002	0.001	-0.008*	-0.004	-0.015**	-0.011
(upratings only)	(0.007)	(0.007)	(0.005)	(0.005)	(0.008)	(0.007)	(0.006)	(0.006)	(0.005)	(0.004)	(0.007)	(0.007)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A4.4 Annual employment retention: Percentile control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	-0.010	0.012	-0.008	0.009	0.013	-0.050	-0.008	0.014	-0.021	0.002	-0.017	-0.062*
	(0.028)	(0.025)	(0.025)	(0.024)	(0.026)	(0.035)	(0.026)	(0.025)	(0.025)	(0.027)	(0.028)	(0.036)
2000	0.031	0.017	0.034	0.024	0.012	-0.049	0.020	0.003	0.018	0.011	-0.012	-0.075
	(0.026)	(0.026)	(0.022)	(0.023)	(0.028)	(0.042)	(0.026)	(0.029)	(0.021)	(0.024)	(0.030)	(0.046)
2001	-0.015	-0.031	-0.010	0.011	-0.010	-0.042	-0.014	-0.022	-0.014	0.012	-0.056	-0.084
	(0.038)	(0.042)	(0.032)	(0.027)	(0.035)	(0.045)	(0.028)	(0.032)	(0.029)	(0.024)	(0.044)	(0.053)
2002	0.018	-0.025	0.018	0.031	0.058***	-0.009	0.008	-0.030	0.012	0.024	0.034	-0.039
	(0.029)	(0.038)	(0.026)	(0.023)	(0.020)	(0.036)	(0.029)	(0.038)	(0.025)	(0.024)	(0.021)	(0.039)
2003	-0.026	0.038	0.010	0.025	0.032	-0.070	-0.017	0.038	-0.004	0.006	-0.005	-0.107*
	(0.040)	(0.024)	(0.028)	(0.025)	(0.026)	(0.052)	(0.036)	(0.028)	(0.029)	(0.028)	(0.033)	(0.063)
2004	0.021	0.041*	0.028	0.016	0.018	-0.015	0.014	0.029*	0.014	0.007	-0.008	-0.035
	(0.028)	(0.022)	(0.025)	(0.026)	(0.028)	(0.038)	(0.020)	(0.016)	(0.024)	(0.027)	(0.031)	(0.043)
2005	0.017	0.010	0.023	0.013	0.024	0.013	0.013	0.010	0.006	0.000	-0.009	-0.011
	(0.028)	(0.028)	(0.025)	(0.026)	(0.027)	(0.033)	(0.018)	(0.022)	(0.026)	(0.027)	(0.030)	(0.034)
2006	-0.037	0.009	0.017	0.043**	-0.064	-0.019	-0.022	0.000	0.007	0.034	-0.098*	-0.063
	(0.041)	(0.030)	(0.027)	(0.022)	(0.047)	(0.040)	(0.036)	(0.025)	(0.020)	(0.022)	(0.053)	(0.049)
2007	0.002	0.013	0.022	0.035	0.049**	-0.013	-0.001	0.002	0.000	0.027	0.018	-0.039
	(0.032)	(0.029)	(0.026)	(0.025)	(0.021)	(0.039)	(0.030)	(0.025)	(0.027)	(0.025)	(0.024)	(0.044)
2008	-0.027	-0.028	0.024	-0.000	0.044*	-0.012	-0.039	-0.026	0.010	0.009	0.008	-0.042
	(0.040)	(0.039)	(0.027)	(0.031)	(0.024)	(0.039)	(0.039)	(0.038)	(0.021)	(0.029)	(0.028)	(0.045)
2009	0.009	-0.018	0.058***	0.053***	0.046*	-0.064	-0.005	-0.036	0.033	0.036*	0.019	-0.106*
	(0.032)	(0.038)	(0.021)	(0.020)	(0.024)	(0.050)	(0.031)	(0.044)	(0.022)	(0.021)	(0.027)	(0.061)
	Pooled NMW effect											
pooled	0.000	0.007	0.018	0.024	0.029	-0.027	-0.003	-0.005	0.003	0.019	0.004	-0.049**
	(0.021)	(0.021)	(0.018)	(0.018)	(0.024)	(0.023)	(0.020)	(0.021)	(0.017)	(0.019)	(0.024)	(0.024)
pooled upratings	0.002	0.006	0.024	0.026	0.031	-0.024	-0.003	-0.010	0.007	0.019	0.005	-0.051**
	(0.021)	(0.021)	(0.017)	(0.017)	(0.024)	(0.024)	(0.021)	(0.022)	(0.017)	(0.019)	(0.025)	(0.026)
pooled wage gap1	-0.000	-0.005	-0.004	-0.006	0.000	0.000	0.003	0.003	0.002	0.007	0.009	0.010
(upratings only)	(0.010)	(0.010)	(0.008)	(0.008)	(0.009)	(0.008)	(0.010)	(0.009)	(0.008)	(0.008)	(0.008)	(0.007)
pooled wage gap2	-0.009*	-0.005	-0.001	0.001	-0.004	-0.005	-0.007	-0.004	-0.000	0.001	0.001	-0.003
(upratings only)	(0.004)	(0.004)	(0.006)	(0.006)	(0.003)	(0.003)	(0.005)	(0.004)	(0.006)	(0.005)	(0.004)	(0.003)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q3; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A4.5 Six month employment retention: Standard control groups, LFS HRRATE

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
2000	-0.029	-0.087	0.022	0.007	-0.062	-0.080	-0.025	-0.034	0.013	-0.015	-0.022	-0.028
	(0.074)	(0.100)	(0.035)	(0.038)	(0.110)	(0.108)	(0.048)	(0.060)	(0.032)	(0.039)	(0.090)	(0.090)
2001	-0.036	0.047	-0.043	0.016	-0.220	-0.166	-0.029	0.008	-0.037	0.013	-0.150	-0.226
	(0.065)	(0.066)	(0.045)	(0.044)	(0.189)	(0.173)	(0.039)	(0.026)	(0.035)	(0.025)	(0.151)	(0.188)
2002	NA	NA	-0.020	0.001	0.110***	0.078***	NA	NA	-0.021	-0.001	0.039**	0.022***
	NA	NA	(0.039)	(0.032)	(0.033)	(0.023)	NA	NA	(0.035)	(0.028)	(0.018)	(0.006)
2003	-0.015	-0.042	-0.009	0.055**	-0.057	-0.172	-0.045	-0.068	-0.011	0.040**	-0.064	-0.184
	(0.061)	(0.058)	(0.040)	(0.022)	(0.099)	(0.135)	(0.071)	(0.063)	(0.034)	(0.016)	(0.103)	(0.186)
2004	-0.056	0.022	0.006	0.030	0.003	-0.006	-0.012	0.003	-0.003	0.015	-0.001	-0.068
	(0.066)	(0.035)	(0.032)	(0.027)	(0.058)	(0.050)	(0.017)	(0.019)	(0.031)	(0.024)	(0.071)	(0.083)
2005	0.024	-0.037	-0.030	-0.011	0.056	0.041	0.024*	-0.008	-0.027	-0.015	0.045	0.045*
	(0.027)	(0.056)	(0.039)	(0.036)	(0.040)	(0.037)	(0.013)	(0.026)	(0.033)	(0.031)	(0.032)	(0.027)
2006	0.017	-0.143	-0.008	-0.010	0.108***	0.086***	0.019	-0.073	-0.001	-0.014	0.081***	0.051***
	(0.042)	(0.107)	(0.035)	(0.040)	(0.026)	(0.026)	(0.033)	(0.066)	(0.024)	(0.035)	(0.022)	(0.016)
2007	0.016	0.046	0.048**	0.084***	0.092**	0.022	0.024	0.032	0.049***	0.072***	0.094***	0.015
	(0.043)	(0.036)	(0.022)	(0.032)	(0.037)	(0.041)	(0.023)	(0.032)	(0.017)	(0.028)	(0.030)	(0.036)
2008	-0.006	0.067***	-0.054	-0.023	0.032	-0.087	0.002	0.086	-0.045	-0.024	0.016	-0.150
	(0.055)	(0.020)	(0.050)	(0.046)	(0.065)	(0.111)	(0.027)	(.)	(0.043)	(0.040)	(0.048)	(0.157)
2009	-0.016	-0.069	0.006	0.039	0.036	-0.025	-0.026	-0.054	-0.002	0.022	0.023	-0.045
	(0.075)	(0.098)	(0.039)	(0.030)	(0.049)	(0.092)	(0.073)	(0.079)	(0.029)	(0.020)	(0.018)	(0.093)
2010	0.056	-0.047	-0.138	0.016	-0.275	-0.109	0.014	0.010	-0.064	0.008	-0.436*	-0.051
	(0.041)	(0.110)	(0.097)	(0.048)	(0.181)	(0.141)	(0.019)	(0.037)	(0.061)	(0.028)	(0.238)	(0.081)
	Pooled NMW effect											
pooled	0.009	-0.009	-0.012	0.021**	0.026	0.000	0.010	-0.010	-0.011	0.019**	0.024	-0.002
	(0.014)	(0.015)	(0.011)	(0.010)	(0.018)	(0.017)	(0.013)	(0.013)	(0.010)	(0.009)	(0.016)	(0.016)
pooled upratings	0.008	-0.009	-0.012	0.022**	0.026	-0.000	0.010	-0.009	-0.010	0.019**	0.023	-0.003
	(0.015)	(0.013)	(0.010)	(0.011)	(0.020)	(0.016)	(0.013)	(0.011)	(0.009)	(0.010)	(0.018)	(0.015)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	0.008	-0.024	0.010	0.017	-0.033	-0.038	0.001	-0.027	0.013	0.020	-0.038	-0.028
	(0.021)	(0.032)	(0.017)	(0.017)	(0.042)	(0.043)	(0.021)	(0.030)	(0.015)	(0.014)	(0.042)	(0.037)
pooled upratings	0.010	-0.020	0.010	0.019	-0.026	-0.030	0.002	-0.021	0.014	0.023	-0.030	-0.023
	(0.023)	(0.022)	(0.019)	(0.020)	(0.032)	(0.029)	(0.020)	(0.019)	(0.017)	(0.018)	(0.030)	(0.026)

Notes: LFS 1999 - 2010; Difference-in-differences estimates using Q4 and Q1 wave 1 as the pre-period for Q2 and Q3 wave 1 (as in Dickens & Draca, 2005; Dickens et al., 2008); Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HRRATE.

A4.6 Annual employment retention: Vertical difference-in-differences, standard control groups, NES

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-0.024	-0.038*	-0.032	-0.041	-0.037*	-0.034
	(0.029)	(0.022)	(0.030)	(0.030)	(0.023)	(0.031)
2001	0.031	-0.043**	-0.033	0.031	-0.025	-0.036
	(0.027)	(0.021)	(0.031)	(0.028)	(0.022)	(0.031)
2003	0.024	-0.022	0.027	0.016	-0.024	0.012
	(0.027)	(0.022)	(0.029)	(0.029)	(0.023)	(0.031)
2004	-0.047*	-0.017	-0.009	-0.075***	-0.020	-0.014
	(0.026)	(0.019)	(0.025)	(0.029)	(0.021)	(0.026)
2005	-0.060**	-0.057***	-0.040	-0.054*	-0.051**	-0.027
	(0.027)	(0.020)	(0.025)	(0.029)	(0.022)	(0.027)
2006	-0.093***	-0.066***	-0.034	-0.096***	-0.083***	-0.042
	(0.026)	(0.020)	(0.025)	(0.028)	(0.022)	(0.026)
2007	-0.056**	-0.099***	-0.094***	-0.034	-0.072***	-0.063**
	(0.028)	(0.022)	(0.027)	(0.030)	(0.025)	(0.030)
2008	-0.051*	-0.051**	-0.055**	-0.071**	-0.045*	-0.044
	(0.027)	(0.022)	(0.027)	(0.030)	(0.025)	(0.029)
2009	-0.032	-0.092***	-0.058**	-0.032	-0.107***	-0.073**
	(0.027)	(0.021)	(0.026)	(0.030)	(0.025)	(0.030)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	-0.055***	-0.079***	-0.054***	-0.042***	-0.050***	-0.043***
(upratings only)	(0.013)	(0.009)	(0.014)	(0.013)	(0.009)	(0.014)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A4.7 Annual employment retention: Pooled vertical difference-in-differences, LFS

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
Control groups:						
Standard HOURPAY	-0.006 (0.008)	-0.012 (0.007)	-0.028*** (0.010)	-0.004 (0.008)	-0.010 (0.007)	-0.029*** (0.010)
Standard HRRATE	-0.011 (0.010)	-0.015** (0.007)	-0.025** (0.011)	-0.005 (0.009)	-0.009 (0.007)	-0.020* (0.010)
Percentile HOURPAY	-0.006 (0.009)	-0.008 (0.008)	0.000 (0.007)	-0.006 (0.008)	-0.005 (0.007)	-0.001 (0.007)

Notes: LFS1999Q4-2010; Pooled wage gap 1 (upratings only, i.e. October 2000-October 2009); Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage.

A4.8 Annual employment retention: Standard control groups, NES, full sample

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.002	0.020	-0.051***	-0.068***	-0.023	-0.010	-0.003	0.016	-0.051***	-0.070***	-0.023	-0.009
	(0.019)	(0.016)	(0.017)	(0.016)	(0.021)	(0.017)	(0.019)	(0.016)	(0.017)	(0.016)	(0.021)	(0.017)
2000	0.031	0.013	-0.041**	-0.067***	0.024	0.002	0.028	0.014	-0.037*	-0.061***	0.035	0.014
	(0.023)	(0.023)	(0.021)	(0.021)	(0.025)	(0.026)	(0.023)	(0.023)	(0.021)	(0.021)	(0.024)	(0.025)
2001	0.023	0.002	0.002	-0.009	-0.004	-0.032	0.023	0.005	0.003	-0.006	0.002	-0.019
	(0.018)	(0.018)	(0.015)	(0.016)	(0.020)	(0.020)	(0.018)	(0.018)	(0.015)	(0.015)	(0.020)	(0.020)
2002	-0.007	-0.016	-0.022	0.002	-0.048*	-0.065**	-0.008	-0.016	-0.018	0.002	-0.042	-0.053**
	(0.024)	(0.024)	(0.018)	(0.017)	(0.028)	(0.028)	(0.024)	(0.023)	(0.018)	(0.016)	(0.027)	(0.027)
2003	0.016	0.009	-0.013	-0.005	0.023	0.035**	0.015	0.008	-0.016	-0.012	0.031*	0.044***
	(0.019)	(0.018)	(0.017)	(0.016)	(0.019)	(0.016)	(0.019)	(0.018)	(0.017)	(0.016)	(0.018)	(0.016)
2004	-0.003	-0.020	-0.001	0.010	0.003	-0.007	-0.003	-0.019	0.002	0.007	0.011	0.002
	(0.018)	(0.018)	(0.014)	(0.014)	(0.017)	(0.017)	(0.018)	(0.018)	(0.014)	(0.014)	(0.017)	(0.016)
2005	-0.008	-0.027	-0.043***	-0.004	-0.009	-0.027	-0.007	-0.025	-0.040***	-0.004	0.006	-0.009
	(0.018)	(0.019)	(0.015)	(0.014)	(0.018)	(0.018)	(0.018)	(0.018)	(0.015)	(0.014)	(0.017)	(0.017)
2006	-0.020	-0.024	-0.038**	0.011	-0.005	0.002	-0.016	-0.016	-0.034**	0.010	0.007	0.014
	(0.018)	(0.018)	(0.015)	(0.014)	(0.017)	(0.016)	(0.018)	(0.017)	(0.015)	(0.013)	(0.017)	(0.015)
2007	-0.013	-0.042**	-0.041***	-0.025	-0.042**	-0.050***	-0.005	-0.035*	-0.026*	-0.015	-0.028	-0.032*
	(0.019)	(0.020)	(0.016)	(0.016)	(0.020)	(0.019)	(0.018)	(0.019)	(0.015)	(0.015)	(0.019)	(0.018)
2008	-0.026	-0.024	-0.024	-0.025	-0.018	-0.020	-0.021	-0.018	-0.021	-0.018	-0.003	-0.002
	(0.019)	(0.019)	(0.015)	(0.016)	(0.018)	(0.018)	(0.019)	(0.018)	(0.015)	(0.015)	(0.017)	(0.016)
2009	0.003	-0.004	-0.067***	-0.060***	-0.027	-0.028	0.014	0.008	-0.056***	-0.046***	-0.018	-0.015
	(0.019)	(0.019)	(0.016)	(0.017)	(0.019)	(0.018)	(0.018)	(0.018)	(0.016)	(0.016)	(0.019)	(0.017)
	Pooled NMW effect											
pooled	-0.002	-0.013	-0.030***	-0.017**	-0.013	-0.019*	-0.001	-0.009	-0.026***	-0.014*	-0.003	-0.005
	(0.010)	(0.010)	(0.009)	(0.008)	(0.012)	(0.011)	(0.010)	(0.010)	(0.009)	(0.008)	(0.011)	(0.010)
pooled upratings	-0.002	-0.015	-0.026***	-0.012	-0.011	-0.018*	0.000	-0.011	-0.022**	-0.009	0.001	-0.003
	(0.011)	(0.010)	(0.009)	(0.008)	(0.012)	(0.011)	(0.010)	(0.010)	(0.009)	(0.008)	(0.011)	(0.010)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A4.9 Annual employment retention: Percentile control groups, NES, full sample

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.024	0.002	-0.084***	-0.037*	-0.010	0.000	-0.028	0.000	-0.079***	-0.042**	-0.006	0.002
	(0.026)	(0.023)	(0.023)	(0.021)	(0.020)	(0.021)	(0.026)	(0.024)	(0.023)	(0.021)	(0.020)	(0.021)
1999	0.023	-0.017	-0.040*	-0.036*	0.019	0.016	0.021	-0.016	-0.039*	-0.040*	0.022	0.021
	(0.022)	(0.025)	(0.021)	(0.021)	(0.019)	(0.019)	(0.022)	(0.025)	(0.021)	(0.022)	(0.018)	(0.019)
2000	-0.019	0.009	-0.054**	-0.054**	-0.025	0.004	-0.017	0.011	-0.047**	-0.047**	-0.014	0.012
	(0.026)	(0.024)	(0.022)	(0.022)	(0.022)	(0.020)	(0.026)	(0.023)	(0.022)	(0.022)	(0.022)	(0.020)
2001	0.018	-0.006	0.012	0.020	0.014	-0.009	0.018	-0.002	0.014	0.021	0.021	-0.001
	(0.022)	(0.024)	(0.019)	(0.019)	(0.019)	(0.022)	(0.022)	(0.024)	(0.019)	(0.019)	(0.019)	(0.021)
2002	-0.002	-0.020	-0.018	-0.008	-0.016	-0.006	0.000	-0.018	-0.014	-0.005	0.000	0.002
	(0.024)	(0.026)	(0.020)	(0.020)	(0.022)	(0.021)	(0.023)	(0.025)	(0.020)	(0.020)	(0.021)	(0.021)
2003	0.017	-0.000	-0.038*	0.005	0.033*	0.052***	0.016	-0.002	-0.041*	-0.003	0.040**	0.056***
	(0.022)	(0.024)	(0.021)	(0.019)	(0.018)	(0.017)	(0.022)	(0.024)	(0.021)	(0.020)	(0.017)	(0.016)
2004	-0.005	-0.009	-0.006	0.023	0.018	0.005	-0.007	-0.006	-0.005	0.022	0.023	0.010
	(0.024)	(0.025)	(0.019)	(0.018)	(0.019)	(0.020)	(0.024)	(0.025)	(0.019)	(0.018)	(0.019)	(0.020)
2005	-0.016	-0.009	-0.055***	-0.003	0.027	0.036**	-0.014	-0.010	-0.051**	-0.000	0.038**	0.042**
	(0.024)	(0.024)	(0.021)	(0.019)	(0.018)	(0.018)	(0.024)	(0.024)	(0.021)	(0.019)	(0.017)	(0.017)
2006	0.001	-0.064**	-0.052**	-0.022	0.032*	-0.008	0.007	-0.052*	-0.043**	-0.011	0.039**	-0.000
	(0.024)	(0.028)	(0.021)	(0.020)	(0.019)	(0.022)	(0.023)	(0.028)	(0.021)	(0.020)	(0.018)	(0.022)
2007	-0.024	-0.049*	-0.070***	-0.018	-0.007	-0.007	-0.015	-0.038	-0.049**	0.001	0.002	-0.002
	(0.026)	(0.029)	(0.023)	(0.021)	(0.022)	(0.023)	(0.025)	(0.028)	(0.022)	(0.020)	(0.022)	(0.023)
2008	-0.025	-0.071**	-0.032	-0.057**	-0.009	-0.027	-0.019	-0.063**	-0.024	-0.045*	0.005	-0.015
	(0.026)	(0.030)	(0.020)	(0.024)	(0.022)	(0.026)	(0.026)	(0.030)	(0.020)	(0.024)	(0.020)	(0.025)
2009	0.027	-0.048*	-0.042**	-0.069***	0.012	0.001	0.034*	-0.033	-0.038*	-0.057***	0.019	0.007
	(0.020)	(0.027)	(0.020)	(0.021)	(0.019)	(0.020)	(0.019)	(0.026)	(0.020)	(0.021)	(0.019)	(0.020)
	Pooled NMW effect											
pooled	-0.001	-0.024*	-0.040***	-0.021*	0.009	0.006	0.001	-0.019	-0.034***	-0.016	0.018*	0.013
	(0.013)	(0.014)	(0.011)	(0.011)	(0.011)	(0.012)	(0.013)	(0.014)	(0.011)	(0.011)	(0.011)	(0.011)
pooled upratings	-0.002	-0.028*	-0.036***	-0.018	0.010	0.006	0.001	-0.022	-0.030***	-0.012	0.020*	0.013
	(0.014)	(0.015)	(0.012)	(0.011)	(0.012)	(0.012)	(0.013)	(0.015)	(0.011)	(0.011)	(0.011)	(0.012)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A4.10 Annual employment retention: Standard control groups, NES, probit

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.003	0.027	-0.059***	-0.077***	-0.033	-0.016	-0.007	0.021	-0.063***	-0.082***	-0.032	-0.012
	(0.026)	(0.023)	(0.019)	(0.018)	(0.029)	(0.024)	(0.026)	(0.023)	(0.020)	(0.018)	(0.029)	(0.024)
2000	0.043	0.018	-0.048**	-0.075***	0.036	0.001	0.022	0.000	-0.057**	-0.078***	0.031	0.007
	(0.033)	(0.032)	(0.023)	(0.023)	(0.038)	(0.036)	(0.035)	(0.034)	(0.025)	(0.024)	(0.040)	(0.038)
2001	0.031	0.003	0.002	-0.010	-0.006	-0.045*	0.023	-0.002	-0.005	-0.011	-0.006	-0.031
	(0.025)	(0.025)	(0.018)	(0.017)	(0.029)	(0.027)	(0.026)	(0.025)	(0.018)	(0.018)	(0.029)	(0.027)
2002	-0.009	-0.021	-0.025	0.002	-0.067*	-0.088**	-0.023	-0.036	-0.034	-0.002	-0.078**	-0.083**
	(0.032)	(0.031)	(0.021)	(0.019)	(0.036)	(0.035)	(0.033)	(0.032)	(0.022)	(0.020)	(0.038)	(0.035)
2003	0.022	0.013	-0.015	-0.006	0.034	0.051**	0.008	0.000	-0.031	-0.019	0.034	0.057**
	(0.026)	(0.025)	(0.019)	(0.018)	(0.028)	(0.025)	(0.027)	(0.025)	(0.020)	(0.019)	(0.029)	(0.025)
2004	-0.004	-0.025	-0.000	0.012	0.004	-0.010	-0.013	-0.028	-0.006	0.006	0.009	0.001
	(0.024)	(0.023)	(0.016)	(0.016)	(0.025)	(0.023)	(0.024)	(0.023)	(0.016)	(0.016)	(0.025)	(0.023)
2005	-0.010	-0.034	-0.048***	-0.005	-0.013	-0.037	-0.020	-0.037	-0.055***	-0.006	0.001	-0.014
	(0.024)	(0.024)	(0.017)	(0.016)	(0.025)	(0.023)	(0.025)	(0.024)	(0.017)	(0.016)	(0.026)	(0.023)
2006	-0.026	-0.032	-0.043***	0.011	-0.008	0.000	-0.031	-0.021	-0.048***	0.008	-0.001	0.019
	(0.023)	(0.022)	(0.016)	(0.016)	(0.024)	(0.022)	(0.024)	(0.022)	(0.017)	(0.016)	(0.024)	(0.021)
2007	-0.017	-0.053**	-0.045***	-0.028	-0.058**	-0.068***	-0.013	-0.047*	-0.040**	-0.020	-0.048*	-0.045*
	(0.025)	(0.025)	(0.017)	(0.017)	(0.026)	(0.024)	(0.025)	(0.025)	(0.018)	(0.017)	(0.026)	(0.024)
2008	-0.034	-0.031	-0.027	-0.028	-0.027	-0.029	-0.040	-0.026	-0.034*	-0.024	-0.008	-0.000
	(0.024)	(0.024)	(0.017)	(0.017)	(0.025)	(0.024)	(0.025)	(0.024)	(0.018)	(0.018)	(0.026)	(0.024)
2009	0.004	-0.005	-0.074***	-0.067***	-0.038	-0.039	0.006	0.007	-0.081***	-0.058***	-0.035	-0.020
	(0.025)	(0.025)	(0.018)	(0.018)	(0.026)	(0.024)	(0.026)	(0.025)	(0.019)	(0.018)	(0.027)	(0.024)
	Pooled NMW effect											
pooled	-0.003	-0.015	-0.034***	-0.021**	-0.018	-0.025*	-0.019	-0.018	-0.047***	-0.026***	-0.020	-0.012
	(0.013)	(0.013)	(0.010)	(0.009)	(0.015)	(0.014)	(0.014)	(0.013)	(0.010)	(0.009)	(0.016)	(0.013)
pooled upratings	-0.004	-0.020	-0.032***	-0.016*	-0.017	-0.025*	-0.020	-0.022*	-0.042***	-0.018*	-0.016	-0.011
	(0.014)	(0.013)	(0.010)	(0.009)	(0.016)	(0.014)	(0.014)	(0.013)	(0.010)	(0.009)	(0.016)	(0.014)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A4.11 Annual employment retention: Percentile control groups, NES, probit

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.032	0.003	-0.097***	-0.045*	-0.015	-0.000	-0.037	0.001	-0.094***	-0.053**	-0.004	0.004
	(0.033)	(0.032)	(0.024)	(0.024)	(0.028)	(0.030)	(0.034)	(0.032)	(0.025)	(0.024)	(0.028)	(0.030)
1999	0.032	-0.023	-0.047**	-0.043*	0.027	0.023	0.022	-0.031	-0.054**	-0.055**	0.007	0.011
	(0.032)	(0.033)	(0.024)	(0.024)	(0.028)	(0.028)	(0.033)	(0.035)	(0.026)	(0.026)	(0.029)	(0.029)
2000	-0.025	0.011	-0.062***	-0.062**	-0.035	0.005	-0.027	0.014	-0.060**	-0.058**	-0.037	-0.002
	(0.034)	(0.032)	(0.024)	(0.024)	(0.030)	(0.029)	(0.035)	(0.034)	(0.026)	(0.026)	(0.031)	(0.032)
2001	0.025	-0.008	0.015	0.025	0.020	-0.014	0.023	-0.005	0.009	0.017	0.013	-0.022
	(0.031)	(0.032)	(0.023)	(0.023)	(0.029)	(0.030)	(0.032)	(0.033)	(0.025)	(0.025)	(0.030)	(0.032)
2002	-0.003	-0.027	-0.021	-0.009	-0.023	-0.009	-0.001	-0.026	-0.027	-0.014	-0.030	-0.028
	(0.032)	(0.033)	(0.023)	(0.023)	(0.030)	(0.030)	(0.035)	(0.036)	(0.026)	(0.026)	(0.032)	(0.033)
2003	0.023	-0.001	-0.044*	0.005	0.049*	0.079***	0.019	-0.006	-0.053**	-0.009	0.039	0.055*
	(0.031)	(0.033)	(0.024)	(0.023)	(0.028)	(0.028)	(0.033)	(0.034)	(0.025)	(0.025)	(0.030)	(0.031)
2004	-0.006	-0.011	-0.006	0.028	0.026	0.007	-0.014	-0.014	-0.012	0.020	0.008	-0.015
	(0.032)	(0.033)	(0.023)	(0.022)	(0.029)	(0.030)	(0.034)	(0.036)	(0.025)	(0.025)	(0.032)	(0.034)
2005	-0.021	-0.013	-0.061***	-0.003	0.040	0.054*	-0.020	-0.020	-0.068***	-0.005	0.021	0.024
	(0.032)	(0.032)	(0.023)	(0.022)	(0.028)	(0.028)	(0.035)	(0.036)	(0.026)	(0.025)	(0.032)	(0.034)
2006	0.000	-0.080**	-0.060***	-0.027	0.045	-0.013	0.009	-0.069*	-0.054**	-0.019	0.027	-0.035
	(0.031)	(0.033)	(0.023)	(0.023)	(0.028)	(0.030)	(0.034)	(0.036)	(0.026)	(0.025)	(0.033)	(0.036)
2007	-0.033	-0.063*	-0.079***	-0.021	-0.011	-0.011	-0.019	-0.054	-0.066**	-0.006	-0.041	-0.047
	(0.034)	(0.035)	(0.025)	(0.024)	(0.032)	(0.032)	(0.038)	(0.040)	(0.028)	(0.028)	(0.038)	(0.040)
2008	-0.034	-0.090**	-0.038	-0.065**	-0.013	-0.039	-0.026	-0.091**	-0.035	-0.060**	-0.025	-0.068
	(0.034)	(0.036)	(0.023)	(0.026)	(0.031)	(0.035)	(0.038)	(0.042)	(0.026)	(0.030)	(0.036)	(0.043)
2009	0.038	-0.060*	-0.049**	-0.078***	0.017	0.000	0.046	-0.045	-0.059**	-0.072***	-0.007	-0.028
	(0.030)	(0.032)	(0.022)	(0.023)	(0.029)	(0.029)	(0.034)	(0.039)	(0.026)	(0.027)	(0.035)	(0.038)
	Pooled NMW effect											
pooled	-0.002	-0.030*	-0.045***	-0.024*	0.012	0.009	-0.011	-0.023	-0.059***	-0.028*	-0.012	-0.009
	(0.017)	(0.017)	(0.013)	(0.013)	(0.016)	(0.016)	(0.019)	(0.019)	(0.015)	(0.015)	(0.017)	(0.018)
pooled upratings	-0.002	-0.034*	-0.040***	-0.020	0.013	0.008	-0.005	-0.019	-0.049***	-0.017	-0.010	-0.010
	(0.018)	(0.018)	(0.013)	(0.013)	(0.016)	(0.017)	(0.021)	(0.021)	(0.016)	(0.016)	(0.019)	(0.021)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A4.12 Annual employment retention: Standard control groups, ASHE

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.008	-0.014	-0.070***	-0.095***	-0.041	-0.015	-0.016	-0.017	-0.073***	-0.093***	-0.041	-0.008
	(0.032)	(0.030)	(0.024)	(0.022)	(0.036)	(0.031)	(0.032)	(0.030)	(0.024)	(0.022)	(0.036)	(0.031)
2000	0.007	-0.042	-0.070***	-0.108***	0.004	-0.018	-0.046	-0.081*	-0.076**	-0.106***	-0.002	-0.010
	(0.040)	(0.039)	(0.027)	(0.026)	(0.045)	(0.041)	(0.045)	(0.043)	(0.030)	(0.029)	(0.049)	(0.044)
2001	0.021	-0.031	-0.014	-0.030	-0.025	-0.045	0.000	-0.037	-0.014	-0.022	-0.022	-0.029
	(0.032)	(0.031)	(0.022)	(0.022)	(0.037)	(0.033)	(0.034)	(0.032)	(0.023)	(0.022)	(0.038)	(0.034)
2002	-0.016	-0.048	-0.044*	-0.035	-0.071*	-0.058	-0.051	-0.071*	-0.051*	-0.030	-0.082*	-0.044
	(0.037)	(0.036)	(0.025)	(0.024)	(0.043)	(0.039)	(0.042)	(0.039)	(0.028)	(0.025)	(0.047)	(0.041)
2003	0.010	-0.018	-0.021	-0.030	0.012	0.049	-0.022	-0.033	-0.034	-0.038	0.017	0.060*
	(0.033)	(0.031)	(0.023)	(0.022)	(0.036)	(0.031)	(0.035)	(0.033)	(0.025)	(0.023)	(0.038)	(0.032)
2004	-0.026	-0.068**	-0.017	-0.036*	-0.004	-0.010	-0.048	-0.070**	-0.015	-0.033	-0.002	-0.002
	(0.031)	(0.031)	(0.021)	(0.021)	(0.034)	(0.031)	(0.033)	(0.031)	(0.022)	(0.021)	(0.035)	(0.030)
2005	-0.026	-0.070**	-0.061***	-0.036*	-0.025	-0.037	-0.052	-0.075**	-0.061***	-0.029	0.001	-0.009
	(0.031)	(0.030)	(0.022)	(0.021)	(0.034)	(0.031)	(0.034)	(0.031)	(0.023)	(0.021)	(0.036)	(0.030)
2006	-0.038	-0.067**	-0.057**	-0.013	-0.013	0.008	-0.058*	-0.053*	-0.061***	-0.010	-0.014	0.023
	(0.032)	(0.030)	(0.022)	(0.021)	(0.034)	(0.031)	(0.033)	(0.030)	(0.023)	(0.021)	(0.035)	(0.031)
2007	-0.037	-0.095***	-0.052**	-0.050**	-0.076**	-0.067**	-0.040	-0.086***	-0.036	-0.029	-0.059	-0.042
	(0.032)	(0.031)	(0.022)	(0.022)	(0.035)	(0.032)	(0.034)	(0.032)	(0.023)	(0.022)	(0.037)	(0.032)
2008	-0.051	-0.065**	-0.034	-0.058***	-0.036	-0.021	-0.075**	-0.062**	-0.037	-0.046**	-0.010	0.010
	(0.032)	(0.031)	(0.022)	(0.022)	(0.034)	(0.031)	(0.034)	(0.031)	(0.023)	(0.022)	(0.036)	(0.031)
2009	-0.005	-0.035	-0.086***	-0.096***	-0.052	-0.040	-0.030	-0.026	-0.096***	-0.080***	-0.048	-0.017
	(0.032)	(0.031)	(0.023)	(0.023)	(0.035)	(0.032)	(0.036)	(0.032)	(0.025)	(0.023)	(0.038)	(0.032)
	Pooled NMW effect											
pooled	-0.018	-0.051**	-0.047***	-0.050***	-0.031	-0.022	-0.041*	-0.052**	-0.058***	-0.049***	-0.036	-0.009
	(0.024)	(0.022)	(0.017)	(0.016)	(0.028)	(0.025)	(0.025)	(0.022)	(0.018)	(0.016)	(0.028)	(0.024)
pooled upratings	-0.019	-0.055**	-0.045***	-0.045***	-0.030	-0.023	-0.047*	-0.057**	-0.053***	-0.041**	-0.033	-0.008
	(0.024)	(0.023)	(0.017)	(0.016)	(0.028)	(0.025)	(0.025)	(0.023)	(0.018)	(0.016)	(0.029)	(0.025)
pooled wage gap1	-0.029***	-0.044***	-0.043***	-0.054***	-0.032***	-0.052***	-0.005	-0.013**	-0.016***	-0.016***	-0.011*	-0.014**
(upratings only)	(0.005)	(0.004)	(0.003)	(0.003)	(0.005)	(0.005)	(0.006)	(0.006)	(0.004)	(0.004)	(0.007)	(0.007)
pooled wage gap2	-0.014**	-0.018***	-0.020***	-0.021***	-0.012*	-0.011*	-0.006	-0.012*	-0.011**	-0.015***	-0.008	-0.010
(upratings only)	(0.006)	(0.006)	(0.004)	(0.004)	(0.007)	(0.006)	(0.007)	(0.006)	(0.004)	(0.004)	(0.007)	(0.007)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.015	0.000	-0.014	-0.032***	-0.017	-0.011	-0.012	0.009	-0.018	-0.023*	-0.012	-0.001
	(0.018)	(0.017)	(0.012)	(0.012)	(0.017)	(0.016)	(0.018)	(0.017)	(0.012)	(0.012)	(0.018)	(0.016)
pooled upratings	-0.014	0.006	-0.017	-0.039***	-0.018	-0.011	-0.010	0.015	-0.019	-0.030**	-0.012	-0.001
	(0.018)	(0.017)	(0.012)	(0.013)	(0.018)	(0.017)	(0.018)	(0.017)	(0.012)	(0.013)	(0.018)	(0.017)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A4.13 Annual employment retention and percentage wage growth: NMW introduction, Standard control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Outcome:												
	Sample includes treatment and control groups only											
Employment retention	0.013	-0.013	-0.008	0.024	0.015	0.000	0.002	-0.010	-0.004	0.025	0.012	-0.019
	(0.031)	(0.031)	(0.027)	(0.024)	(0.035)	(0.031)	(0.030)	(0.028)	(0.025)	(0.022)	(0.029)	(0.030)
Percentage wage growth	0.045	0.038	0.025	0.036*	0.021	0.001	0.051*	0.037	0.013	0.016	-0.024	0.003
	(0.031)	(0.027)	(0.020)	(0.019)	(0.050)	(0.039)	(0.031)	(0.027)	(0.019)	(0.018)	(0.066)	(0.041)
	Sample includes all observations											
Employment retention	0.010	-0.008	-0.006	0.018	0.009	0.000	0.006	-0.006	-0.004	0.014	0.017	-0.002
	(0.017)	(0.022)	(0.020)	(0.016)	(0.021)	(0.023)	(0.015)	(0.018)	(0.017)	(0.014)	(0.013)	(0.019)
Percentage wage growth	0.061***	0.052***	0.023	0.037**	0.032	0.003	0.061***	0.046**	0.024	0.037**	0.031	0.010
	(0.020)	(0.019)	(0.019)	(0.019)	(0.029)	(0.025)	(0.020)	(0.019)	(0.019)	(0.019)	(0.030)	(0.025)

Notes: LFS 1997 - 2000; Difference-in-differences estimates using 1997Q2-1998Q1 wave 1 as the pre-period and 1998Q2-1999Q1 wave 1 as the post-period; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

ANNEX 5

HOURS CHANGES OVER TIME:

DIFFERENCE-IN-DIFFERENCES ESTIMATES OF NMW IMPACTS

A5.1 Annual change in basic hours: Standard control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.570	0.149	-0.046	-0.047	-0.002	-0.404	-0.999**	-0.117	-0.151	-0.115	-0.050	-0.446
	(0.527)	(0.508)	(0.353)	(0.338)	(0.606)	(0.508)	(0.505)	(0.486)	(0.351)	(0.336)	(0.605)	(0.505)
2000	3.134***	2.867***	0.509	1.190***	1.124*	1.437**	-0.234	-0.385	0.060	0.795*	0.156	0.474
	(0.570)	(0.522)	(0.466)	(0.449)	(0.669)	(0.591)	(0.581)	(0.527)	(0.469)	(0.451)	(0.691)	(0.612)
2001	3.130***	3.616***	-0.331	0.164	1.493***	1.935***	1.473***	2.434***	-0.554*	-0.044	0.899*	1.461***
	(0.446)	(0.422)	(0.289)	(0.272)	(0.501)	(0.446)	(0.433)	(0.403)	(0.293)	(0.274)	(0.503)	(0.443)
2002	2.907***	3.450***	-0.076	0.149	2.176***	1.982***	-0.206	1.006*	-0.459	-0.143	1.172*	1.216**
	(0.565)	(0.535)	(0.379)	(0.361)	(0.652)	(0.591)	(0.572)	(0.527)	(0.386)	(0.364)	(0.674)	(0.601)
2003	2.689***	2.484***	-0.047	0.207	0.966	0.831	0.564	1.264***	-0.240	0.184	0.278	0.317
	(0.526)	(0.497)	(0.324)	(0.311)	(0.663)	(0.616)	(0.522)	(0.486)	(0.330)	(0.310)	(0.670)	(0.617)
2004	2.167***	1.828***	0.171	0.017	0.153	0.177	0.768	1.573***	-0.041	-0.034	-0.373	-0.018
	(0.482)	(0.453)	(0.277)	(0.273)	(0.547)	(0.503)	(0.469)	(0.446)	(0.279)	(0.269)	(0.545)	(0.500)
2005	1.834***	1.936***	0.100	0.271	0.863	0.956*	-0.366	1.179**	-0.171	0.173	0.233	0.678
	(0.499)	(0.490)	(0.296)	(0.295)	(0.559)	(0.512)	(0.490)	(0.475)	(0.302)	(0.294)	(0.568)	(0.508)
2006	1.939***	2.306***	-0.257	0.062	1.077*	1.348**	0.454	2.348***	-0.435	0.006	0.542	1.234**
	(0.556)	(0.514)	(0.293)	(0.295)	(0.569)	(0.529)	(0.550)	(0.512)	(0.293)	(0.291)	(0.567)	(0.523)
2007	1.419***	2.007***	0.400	0.692**	-0.200	-0.140	-0.650	1.515***	0.038	0.474	-0.880	-0.386
	(0.529)	(0.513)	(0.314)	(0.315)	(0.618)	(0.579)	(0.520)	(0.505)	(0.319)	(0.312)	(0.624)	(0.575)
2008	1.882***	1.912***	0.201	0.183	-0.320	0.042	-0.066	1.556***	-0.047	-0.007	-0.940*	-0.202
	(0.492)	(0.475)	(0.304)	(0.306)	(0.558)	(0.525)	(0.482)	(0.464)	(0.309)	(0.302)	(0.566)	(0.520)
2009	1.419**	1.714***	0.428	0.771**	-0.355	-0.125	-1.301**	0.410	-0.036	0.422	-1.310**	-0.581
	(0.609)	(0.598)	(0.344)	(0.343)	(0.592)	(0.553)	(0.609)	(0.582)	(0.354)	(0.344)	(0.606)	(0.552)
	Pooled NMW effect											
pooled	1.886***	2.088***	0.090	0.289*	0.471	0.581**	0.610**	1.609***	-0.118	0.155	0.063	0.336
	(0.296)	(0.281)	(0.174)	(0.166)	(0.316)	(0.278)	(0.275)	(0.263)	(0.179)	(0.165)	(0.319)	(0.275)
pooled upratings	2.051***	2.204***	0.078	0.287*	0.517*	0.679**	0.855***	1.751***	-0.076	0.186	0.149	0.459*
	(0.284)	(0.269)	(0.167)	(0.159)	(0.303)	(0.268)	(0.262)	(0.251)	(0.171)	(0.157)	(0.305)	(0.264)
pooled wage gap1	0.031	-0.155**	0.147***	0.158***	-0.233***	-0.386***	0.358***	0.402***	0.113**	0.121**	0.126	0.274***
(upratings only)	(0.068)	(0.066)	(0.046)	(0.046)	(0.078)	(0.075)	(0.089)	(0.089)	(0.053)	(0.057)	(0.094)	(0.094)
pooled wage gap2	-0.037	-0.192***	0.154***	0.180***	-0.299***	-0.343***	0.322***	0.379***	0.139**	0.121**	-0.009	0.167
(upratings only)	(0.073)	(0.071)	(0.049)	(0.049)	(0.090)	(0.086)	(0.094)	(0.096)	(0.057)	(0.061)	(0.108)	(0.110)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.271	-0.330	0.270	0.212	-1.039***	-0.786**	-0.607	-0.313	0.184	0.072	-1.143***	-0.814**
	(0.376)	(0.367)	(0.220)	(0.223)	(0.392)	(0.371)	(0.377)	(0.367)	(0.219)	(0.221)	(0.393)	(0.370)
pooled upratings	-0.515	-0.523	0.259	0.181	-1.072***	-0.898**	-0.752**	-0.481	0.192	0.047	-1.131***	-0.897**
	(0.367)	(0.358)	(0.215)	(0.218)	(0.384)	(0.364)	(0.368)	(0.358)	(0.213)	(0.215)	(0.385)	(0.363)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A5.2 Annual change in total hours: Standard control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.899	-0.218	-0.016	-0.572	0.285	-0.153	-1.305**	-0.466	-0.127	-0.646*	0.249	-0.192
	(0.608)	(0.577)	(0.395)	(0.372)	(0.707)	(0.592)	(0.587)	(0.558)	(0.394)	(0.371)	(0.707)	(0.590)
2000	2.931***	2.886***	0.358	0.876*	1.785**	1.668**	-0.405	-0.249	-0.107	0.434	1.059	1.014
	(0.634)	(0.579)	(0.509)	(0.489)	(0.818)	(0.711)	(0.652)	(0.592)	(0.513)	(0.493)	(0.847)	(0.749)
2001	2.523***	3.427***	-0.310	0.240	1.305**	2.029***	0.887*	2.262***	-0.534*	0.016	0.860	1.699***
	(0.501)	(0.483)	(0.315)	(0.295)	(0.626)	(0.579)	(0.490)	(0.466)	(0.320)	(0.298)	(0.635)	(0.585)
2002	2.980***	3.470***	0.081	0.028	3.069***	1.855***	-0.090	1.103**	-0.322	-0.303	2.333***	1.306*
	(0.599)	(0.566)	(0.402)	(0.384)	(0.781)	(0.708)	(0.610)	(0.562)	(0.412)	(0.390)	(0.813)	(0.728)
2003	2.450***	2.182***	-0.111	-0.114	1.132	0.936	0.366	1.001*	-0.305	-0.153	0.618	0.573
	(0.577)	(0.546)	(0.351)	(0.334)	(0.736)	(0.687)	(0.574)	(0.536)	(0.359)	(0.336)	(0.751)	(0.693)
2004	2.126***	1.750***	0.265	0.016	-0.493	-0.447	0.734	1.486***	0.036	-0.046	-0.923	-0.595
	(0.511)	(0.482)	(0.301)	(0.293)	(0.669)	(0.620)	(0.498)	(0.475)	(0.303)	(0.290)	(0.672)	(0.619)
2005	1.653***	2.025***	0.065	0.002	0.494	0.783	-0.516	1.305**	-0.258	-0.111	0.043	0.601
	(0.555)	(0.546)	(0.320)	(0.318)	(0.654)	(0.601)	(0.549)	(0.534)	(0.327)	(0.317)	(0.671)	(0.599)
2006	1.579***	1.975***	-0.448	-0.317	1.113*	1.226**	0.119	1.996***	-0.645**	-0.373	0.736	1.143*
	(0.603)	(0.559)	(0.313)	(0.316)	(0.644)	(0.589)	(0.597)	(0.557)	(0.315)	(0.313)	(0.649)	(0.585)
2007	1.165**	1.696***	0.173	0.236	-0.423	-0.567	-0.875	1.206**	-0.212	0.001	-0.934	-0.768
	(0.578)	(0.559)	(0.337)	(0.340)	(0.713)	(0.667)	(0.571)	(0.553)	(0.344)	(0.338)	(0.727)	(0.667)
2008	1.587***	1.670***	0.168	0.106	-0.137	-0.239	-0.324	1.322***	-0.100	-0.096	-0.588	-0.434
	(0.532)	(0.512)	(0.325)	(0.328)	(0.635)	(0.599)	(0.525)	(0.503)	(0.332)	(0.325)	(0.650)	(0.598)
2009	1.702***	1.809***	0.547	0.761**	0.076	-0.158	-0.990	0.529	0.019	0.399	-0.686	-0.451
	(0.640)	(0.629)	(0.361)	(0.360)	(0.666)	(0.616)	(0.642)	(0.614)	(0.375)	(0.362)	(0.690)	(0.623)
	Pooled NMW effect											
pooled	2.132***	2.300***	0.101	0.321*	0.514	0.688**	0.850***	1.814***	-0.066	0.209	0.118	0.452
	(0.299)	(0.284)	(0.176)	(0.168)	(0.319)	(0.282)	(0.277)	(0.265)	(0.181)	(0.166)	(0.323)	(0.278)
pooled upratings	3.569***	3.470***	0.282***	0.327***	-0.637***	-0.860***	2.892***	3.407***	0.235**	0.366***	-0.175	0.349
	(0.360)	(0.340)	(0.089)	(0.089)	(0.227)	(0.272)	(0.369)	(0.345)	(0.104)	(0.130)	(0.208)	(0.232)
pooled wage gap1	0.466***	0.509***	0.058	0.093	0.198**	0.247***	0.532***	0.637***	0.033	0.077	0.205**	0.268***
(upratings only)	(0.088)	(0.085)	(0.061)	(0.059)	(0.100)	(0.095)	(0.088)	(0.087)	(0.059)	(0.059)	(0.101)	(0.096)
pooled wage gap2	0.389***	0.459***	0.066	0.088	0.068	0.139	0.453***	0.583***	0.044	0.071	0.073	0.155
(upratings only)	(0.095)	(0.093)	(0.064)	(0.063)	(0.118)	(0.113)	(0.096)	(0.095)	(0.063)	(0.062)	(0.119)	(0.113)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.595	-0.610*	0.262	0.176	-1.122***	-0.947**	-0.799**	-0.551	0.199	0.042	-1.170***	-0.939**
	(0.380)	(0.370)	(0.222)	(0.225)	(0.397)	(0.376)	(0.381)	(0.370)	(0.221)	(0.223)	(0.397)	(0.375)
pooled upratings	-0.596	-0.619*	0.265	0.181	-1.117***	-0.953***	-0.678*	-0.592	0.213	0.048	-1.170***	-0.922**
	(0.372)	(0.362)	(0.218)	(0.220)	(0.388)	(0.368)	(0.372)	(0.362)	(0.216)	(0.218)	(0.388)	(0.367)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A5.3 Annual change in basic hours: Percentile control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.534	0.699	0.108	0.311	0.027	-0.480	0.101	0.577	-0.025	0.221	0.239	-0.349
	(0.620)	(0.632)	(0.443)	(0.439)	(0.602)	(0.578)	(0.599)	(0.611)	(0.440)	(0.437)	(0.597)	(0.575)
1999	2.477***	2.185***	0.532	0.812*	0.469	0.043	0.607	0.021	0.154	0.420	-0.383	-0.849
	(0.617)	(0.574)	(0.420)	(0.416)	(0.585)	(0.561)	(0.638)	(0.582)	(0.439)	(0.430)	(0.596)	(0.583)
2000	2.412***	2.622***	0.727*	1.503***	1.478***	1.629***	0.738	0.768	0.455	1.112***	0.566	0.685
	(0.536)	(0.538)	(0.412)	(0.402)	(0.481)	(0.488)	(0.540)	(0.546)	(0.430)	(0.419)	(0.493)	(0.509)
2001	3.459***	3.382***	-0.432	0.321	1.869***	1.852***	1.804***	1.524***	-0.733*	-0.010	1.004*	0.938*
	(0.567)	(0.537)	(0.387)	(0.368)	(0.507)	(0.477)	(0.579)	(0.546)	(0.406)	(0.389)	(0.515)	(0.491)
2002	2.979***	3.602***	0.014	0.485	1.220**	1.425***	0.604	0.927*	-0.361	-0.008	0.003	0.253
	(0.543)	(0.515)	(0.421)	(0.400)	(0.491)	(0.515)	(0.586)	(0.560)	(0.453)	(0.439)	(0.519)	(0.554)
2003	2.960***	2.685***	-0.430	0.172	1.223**	0.874	1.047	0.688	-0.599	0.037	0.131	-0.361
	(0.636)	(0.603)	(0.405)	(0.390)	(0.615)	(0.604)	(0.653)	(0.613)	(0.422)	(0.405)	(0.636)	(0.656)
2004	2.348***	2.090***	0.422	0.740*	-0.613	-0.488	0.062	-0.556	0.016	0.304	-2.137***	-2.072***
	(0.653)	(0.638)	(0.421)	(0.397)	(0.670)	(0.631)	(0.684)	(0.684)	(0.455)	(0.439)	(0.706)	(0.710)
2005	1.477**	1.380**	0.931**	0.942**	0.678	1.439**	-1.423**	-2.082***	0.551	0.549	-0.980	-0.357
	(0.648)	(0.691)	(0.420)	(0.434)	(0.680)	(0.649)	(0.705)	(0.751)	(0.464)	(0.478)	(0.740)	(0.752)
2006	0.961	2.055***	0.147	0.744	1.370*	0.944	-1.712**	-0.988	-0.313	0.139	-0.517	-1.138
	(0.765)	(0.745)	(0.463)	(0.460)	(0.776)	(0.729)	(0.797)	(0.780)	(0.494)	(0.494)	(0.848)	(0.852)
2007	1.476*	1.134	0.617	1.368***	0.178	0.157	-1.980**	-2.984***	-0.061	0.638	-1.865**	-2.042**
	(0.787)	(0.772)	(0.485)	(0.465)	(0.842)	(0.826)	(0.884)	(0.897)	(0.540)	(0.522)	(0.901)	(0.936)
2008	0.999	1.204	1.018**	1.472***	-0.192	0.448	-2.312***	-3.158***	0.535	0.815	-2.240***	-1.891**
	(0.752)	(0.742)	(0.451)	(0.489)	(0.685)	(0.750)	(0.827)	(0.872)	(0.495)	(0.549)	(0.758)	(0.892)
2009	1.468**	1.785**	0.395	0.804*	-0.665	-0.902	-2.106***	-2.663***	-0.113	0.096	-3.090***	-3.718***
	(0.705)	(0.703)	(0.441)	(0.412)	(0.669)	(0.656)	(0.797)	(0.825)	(0.502)	(0.477)	(0.791)	(0.852)
	Pooled NMW effect											
pooled	1.975***	2.074***	0.347	0.799***	0.588*	0.570*	0.204	0.089	-0.065	0.323	-0.393	-0.395
	(0.368)	(0.359)	(0.227)	(0.221)	(0.324)	(0.314)	(0.380)	(0.370)	(0.257)	(0.253)	(0.345)	(0.348)
pooled upratings	2.007***	2.119***	0.306	0.776***	0.659**	0.720**	0.342	0.213	-0.099	0.344	-0.194	0.017
	(0.358)	(0.350)	(0.220)	(0.215)	(0.316)	(0.306)	(0.383)	(0.377)	(0.261)	(0.256)	(0.348)	(0.358)
pooled wage gap1	-0.131	-0.197**	0.145**	0.263***	-0.221***	-0.219***	-0.152	-0.138	0.062	0.158**	-0.127	-0.127
(upratings only)	(0.098)	(0.096)	(0.061)	(0.059)	(0.078)	(0.076)	(0.118)	(0.119)	(0.075)	(0.077)	(0.081)	(0.080)
pooled wage gap2	-0.238**	-0.230**	0.206***	0.236***	-0.325***	-0.265***	-0.239*	-0.135	0.135*	0.114	-0.239***	-0.220**
(upratings only)	(0.102)	(0.102)	(0.065)	(0.063)	(0.085)	(0.084)	(0.125)	(0.127)	(0.081)	(0.082)	(0.090)	(0.090)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-0.863*	-0.657	0.416	0.335	-1.239***	-1.101**	-1.944***	-2.273***	0.241	0.036	-2.124***	-2.071***
	(0.495)	(0.490)	(0.306)	(0.303)	(0.461)	(0.485)	(0.506)	(0.515)	(0.308)	(0.309)	(0.482)	(0.519)
pooled upratings	-0.937*	-0.761	0.435	0.324	-1.328***	-1.280***	-1.798***	-2.075***	0.282	0.075	-1.894***	-1.878***
	(0.488)	(0.483)	(0.302)	(0.300)	(0.456)	(0.480)	(0.500)	(0.511)	(0.304)	(0.305)	(0.476)	(0.515)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A5.4 Annual change in total hours: Percentile control groups, NES

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.216	0.483	0.027	-0.210	0.300	-0.628	-0.178	0.386	-0.141	-0.327	0.479	-0.523
	(0.750)	(0.745)	(0.498)	(0.493)	(0.706)	(0.712)	(0.731)	(0.727)	(0.496)	(0.493)	(0.706)	(0.711)
1999	2.193***	2.258***	0.864*	0.830*	0.280	-0.519	0.424	0.236	0.382	0.354	-0.484	-1.387**
	(0.679)	(0.637)	(0.461)	(0.456)	(0.705)	(0.672)	(0.706)	(0.656)	(0.480)	(0.473)	(0.725)	(0.701)
2000	2.416***	2.839***	0.867*	1.384***	1.357**	1.310**	0.841	1.095*	0.496	0.951**	0.484	0.375
	(0.589)	(0.597)	(0.447)	(0.436)	(0.623)	(0.652)	(0.600)	(0.614)	(0.465)	(0.454)	(0.650)	(0.686)
2001	2.776***	3.276***	-0.047	0.224	1.515**	2.042***	1.178*	1.528**	-0.424	-0.160	0.715	1.108
	(0.629)	(0.625)	(0.415)	(0.396)	(0.671)	(0.651)	(0.645)	(0.640)	(0.437)	(0.421)	(0.691)	(0.676)
2002	2.912***	3.697***	0.287	0.298	0.999	0.887	0.729	1.215*	-0.181	-0.277	-0.169	-0.233
	(0.610)	(0.575)	(0.447)	(0.431)	(0.650)	(0.651)	(0.656)	(0.628)	(0.483)	(0.477)	(0.699)	(0.705)
2003	2.575***	2.740***	-0.290	0.019	1.234*	1.001	0.790	0.858	-0.559	-0.228	0.234	-0.216
	(0.704)	(0.671)	(0.443)	(0.424)	(0.723)	(0.710)	(0.725)	(0.687)	(0.461)	(0.442)	(0.763)	(0.775)
2004	1.932***	2.239***	0.870*	0.619	-1.582**	-1.799**	-0.213	-0.227	0.341	0.078	-3.029***	-3.310***
	(0.684)	(0.679)	(0.459)	(0.430)	(0.797)	(0.771)	(0.723)	(0.735)	(0.496)	(0.475)	(0.852)	(0.862)
2005	1.753**	1.421*	1.022**	0.264	-0.129	0.702	-1.047	-1.881**	0.503	-0.240	-1.748**	-1.094
	(0.710)	(0.738)	(0.449)	(0.466)	(0.789)	(0.744)	(0.771)	(0.809)	(0.493)	(0.513)	(0.883)	(0.884)
2006	0.603	2.151***	0.260	0.404	1.009	0.877	-1.950**	-0.695	-0.319	-0.292	-0.691	-1.145
	(0.826)	(0.790)	(0.489)	(0.480)	(0.901)	(0.846)	(0.864)	(0.838)	(0.522)	(0.520)	(1.009)	(1.005)
2007	1.381*	1.262	0.723	1.033**	-0.596	-0.655	-1.941**	-2.596***	-0.081	0.207	-2.488**	-2.707**
	(0.835)	(0.817)	(0.523)	(0.505)	(0.943)	(0.928)	(0.936)	(0.955)	(0.579)	(0.563)	(1.038)	(1.081)
2008	0.735	1.563**	0.959**	1.076**	-0.153	0.177	-2.428***	-2.521***	0.319	0.286	-2.048**	-2.084**
	(0.777)	(0.778)	(0.479)	(0.512)	(0.765)	(0.813)	(0.861)	(0.927)	(0.525)	(0.578)	(0.886)	(1.010)
2009	2.052***	2.200***	0.603	0.454	-0.772	-0.976	-1.352	-1.989**	-0.059	-0.378	-3.101***	-3.668***
	(0.737)	(0.742)	(0.459)	(0.444)	(0.782)	(0.717)	(0.841)	(0.883)	(0.524)	(0.513)	(0.952)	(0.974)
	Pooled NMW effect											
pooled	2.070***	2.199***	0.351	0.841***	0.666**	0.735**	0.271	0.132	-0.070	0.388	-0.264	-0.034
	(0.377)	(0.369)	(0.232)	(0.227)	(0.333)	(0.322)	(0.405)	(0.401)	(0.276)	(0.272)	(0.369)	(0.381)
pooled upratings	2.397***	2.510***	0.398*	0.845***	0.766**	0.834***	0.911**	0.912**	-0.164	0.302	-0.023	0.622
	(0.374)	(0.368)	(0.221)	(0.217)	(0.331)	(0.321)	(0.424)	(0.429)	(0.317)	(0.310)	(0.397)	(0.420)
pooled wage gap1	0.047	0.036	-0.001	0.111	-0.129	-0.122	0.041	0.018	-0.072	0.028	-0.118	-0.125
(upratings only)	(0.123)	(0.122)	(0.085)	(0.082)	(0.082)	(0.081)	(0.121)	(0.119)	(0.086)	(0.083)	(0.082)	(0.081)
pooled wage gap2	-0.063	0.026	0.075	0.073	-0.238***	-0.218**	-0.068	0.007	-0.007	-0.001	-0.226**	-0.219**
(upratings only)	(0.129)	(0.129)	(0.091)	(0.088)	(0.092)	(0.091)	(0.127)	(0.126)	(0.092)	(0.090)	(0.092)	(0.091)
	Interaction between recession years and pooled NMW effect (pooled NMW effect not shown for these models)											
pooled	-1.018**	-0.844*	0.426	0.296	-1.390***	-1.350***	-1.848***	-2.125***	0.284	0.059	-1.941***	-1.934***
	(0.502)	(0.497)	(0.312)	(0.308)	(0.470)	(0.493)	(0.514)	(0.523)	(0.312)	(0.313)	(0.489)	(0.526)
pooled upratings	-0.991**	-0.824*	0.432	0.313	-1.378***	-1.341***	-1.639***	-1.834***	0.269	0.056	-1.885***	-1.711***
	(0.489)	(0.484)	(0.303)	(0.300)	(0.459)	(0.482)	(0.501)	(0.515)	(0.306)	(0.309)	(0.486)	(0.533)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998 and 1999; Difference-in-differences estimates using 1994-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A5.5 Annual change in basic hours: Standard control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	0.758	0.415	-0.173	-0.338	-2.633**	0.109	0.680	0.113	-0.246	-0.252	-2.593**	0.410
	(0.802)	(0.762)	(0.495)	(0.472)	(1.094)	(0.951)	(0.821)	(0.788)	(0.493)	(0.475)	(1.154)	(0.983)
2000	1.666*	1.769*	0.165	-0.148	0.151	2.757***	0.603	1.311	0.223	-0.203	-0.880	2.094*
	(0.990)	(0.951)	(0.766)	(0.777)	(1.080)	(1.042)	(1.089)	(1.075)	(0.807)	(0.803)	(1.318)	(1.250)
2001	1.484*	2.457***	0.533	0.746	-1.426	-0.436	0.903	1.996**	0.566	0.779	-2.386*	-1.130
	(0.878)	(0.891)	(0.536)	(0.563)	(1.277)	(1.229)	(0.909)	(0.915)	(0.539)	(0.556)	(1.419)	(1.294)
2002	3.117***	2.360**	0.012	-0.252	1.225	3.358	1.563	1.232	0.334	-0.407	0.217	2.170
	(1.113)	(1.062)	(0.834)	(0.832)	(2.389)	(2.341)	(1.199)	(1.192)	(0.842)	(0.854)	(2.466)	(2.424)
2003	1.715**	2.387***	-0.057	-0.637	-0.593	-0.120	1.045	2.139**	-0.119	-0.638	-1.879	-0.593
	(0.830)	(0.819)	(0.552)	(0.555)	(1.190)	(1.120)	(0.873)	(0.866)	(0.559)	(0.557)	(1.315)	(1.197)
2004	1.173	1.350	0.071	0.004	0.326	2.440**	-0.010	0.358	-0.020	0.032	-0.598	1.318
	(0.880)	(0.890)	(0.528)	(0.516)	(1.009)	(0.986)	(0.956)	(0.977)	(0.543)	(0.532)	(1.141)	(1.043)
2005	0.872	2.231**	0.226	-0.002	0.812	1.668	0.091	1.916*	0.112	-0.091	-0.063	0.812
	(0.955)	(0.983)	(0.562)	(0.585)	(1.085)	(1.038)	(1.010)	(1.003)	(0.576)	(0.580)	(1.215)	(1.089)
2006	1.158	0.774	-0.101	-0.400	0.137	1.560	0.489	0.369	0.034	-0.229	-0.333	1.236
	(0.956)	(0.933)	(0.567)	(0.571)	(1.044)	(0.951)	(0.985)	(0.919)	(0.560)	(0.567)	(1.170)	(1.021)
2007	2.728***	2.399***	-0.043	-0.313	-0.257	1.096	2.025**	2.148**	0.079	-0.451	-0.864	0.227
	(0.867)	(0.847)	(0.686)	(0.692)	(1.193)	(1.122)	(0.893)	(0.855)	(0.670)	(0.669)	(1.313)	(1.176)
2008	1.893**	1.311	-0.480	-0.596	-0.562	1.072	0.977	0.848	-0.464	-0.550	-0.986	0.730
	(0.899)	(0.876)	(0.645)	(0.622)	(1.114)	(1.058)	(0.945)	(0.911)	(0.659)	(0.631)	(1.168)	(1.091)
2009	3.299**	3.361**	-0.415	-0.685	-1.983	-0.953	2.503*	2.918**	-0.244	-0.544	-2.265	-1.366
	(1.355)	(1.344)	(0.668)	(0.673)	(1.634)	(1.581)	(1.386)	(1.362)	(0.704)	(0.692)	(1.814)	(1.702)
	Pooled NMW effect											
pooled	1.521**	1.590***	-0.001	-0.215	-0.674	0.962	0.707	1.073*	-0.081	-0.304	-1.243	0.615
	(0.601)	(0.592)	(0.365)	(0.369)	(0.780)	(0.707)	(0.620)	(0.603)	(0.363)	(0.369)	(0.836)	(0.733)
pooled upratings	1.716***	1.934***	0.042	-0.178	-0.211	1.220*	0.872	1.621***	0.156	-0.274	-1.154	0.582
	(0.607)	(0.600)	(0.371)	(0.377)	(0.785)	(0.716)	(0.626)	(0.601)	(0.370)	(0.374)	(0.858)	(0.749)
pooled wage gap1	-0.157	-0.099	-0.061	0.031	-0.102	-0.209	0.045	0.091	-0.068	0.021	-0.103	-0.035
(upratings only)	(0.126)	(0.127)	(0.079)	(0.080)	(0.152)	(0.153)	(0.162)	(0.176)	(0.096)	(0.106)	(0.189)	(0.202)
pooled wage gap2	-0.010	0.118	0.017	0.007	-0.205	-0.017	-0.051	0.095	0.002	0.006	-0.313	-0.105
(upratings only)	(0.176)	(0.177)	(0.104)	(0.105)	(0.209)	(0.207)	(0.179)	(0.180)	(0.104)	(0.106)	(0.219)	(0.213)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A5.6 Annual change in total hours: Standard control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	2.594	2.970*	-0.955	1.198	-2.176	-0.507	4.341**	3.095*	-0.786	1.324	-1.331	0.814
	(2.303)	(1.741)	(1.332)	(1.618)	(2.038)	(2.139)	(1.950)	(1.755)	(1.416)	(1.623)	(2.207)	(2.150)
2000	3.287	-0.956	-7.739**	-3.974	0.696	2.652	5.370	-0.990	-3.595	-0.132	0.284	4.646
	(4.008)	(3.507)	(3.686)	(3.475)	(3.019)	(2.986)	(4.931)	(3.792)	(2.471)	(2.079)	(3.321)	(3.392)
2001	4.515	3.469**	2.130	5.663	1.476	2.357	4.671	2.567	2.607	6.211	2.859	3.062
	(2.923)	(1.731)	(2.839)	(3.619)	(3.748)	(1.868)	(2.945)	(1.805)	(3.133)	(4.166)	(4.148)	(2.081)
2002	6.551**	7.814***	0.925	1.929	-0.446	1.876	5.361*	7.177***	2.405	1.884	-0.290	3.044
	(2.684)	(2.205)	(1.745)	(1.636)	(3.059)	(2.695)	(2.851)	(2.288)	(2.284)	(1.751)	(3.617)	(2.713)
2003	-1.521	0.548	-2.126	-4.055**	-3.035	-0.488	-1.623	-0.168	-2.093	-2.832	-3.776	0.035
	(3.178)	(2.316)	(1.751)	(1.934)	(3.157)	(2.541)	(3.016)	(2.568)	(2.410)	(1.863)	(3.581)	(2.409)
2004	2.669	3.198*	-2.248	-1.575	-1.795	-0.319	2.571	3.396**	-1.357	-1.668	-2.240	-0.133
	(2.201)	(1.721)	(2.684)	(2.527)	(2.530)	(1.738)	(2.028)	(1.691)	(3.444)	(3.028)	(2.364)	(1.868)
2005	-1.954	0.993	4.923***	5.037***	-2.144	-1.180	-0.397	-0.505	4.841**	4.759***	-4.447	-1.297
	(3.173)	(2.199)	(1.785)	(1.755)	(2.973)	(3.114)	(3.132)	(2.183)	(1.967)	(1.623)	(3.555)	(3.436)
2006	3.024	2.532	-4.687	-0.041	0.558	3.125	2.481	0.100	-3.618	1.662	-0.125	1.942
	(2.929)	(3.420)	(3.201)	(2.495)	(1.901)	(2.104)	(2.249)	(2.911)	(4.206)	(3.028)	(2.164)	(1.909)
2007	4.883*	3.040	7.695	5.625	-5.049*	-3.871*	4.836*	4.030	8.869	4.903	-5.415	-3.549*
	(2.722)	(3.278)	(5.840)	(5.095)	(3.018)	(1.970)	(2.649)	(4.217)	(5.629)	(4.435)	(3.348)	(1.980)
2008	0.073	0.921	-1.003	-1.563	-0.882	-0.188	-0.162	1.239	-0.917	-1.247	-1.715	0.758
	(3.061)	(2.048)	(1.392)	(2.993)	(2.419)	(1.963)	(2.928)	(1.999)	(1.826)	(3.092)	(2.269)	(2.105)
2009	7.244	5.931	-2.462	0.727	0.222	1.323	8.000	6.243	2.750	4.557	0.285	3.301
	(5.117)	(3.959)	(3.270)	(2.562)	(5.361)	(5.709)	(6.124)	(3.813)	(4.769)	(4.411)	(5.373)	(6.411)
	Pooled NMW effect											
pooled	2.564	2.720**	-0.774	0.525	-1.429	0.160	2.286	2.712**	-0.420	1.143	-0.804	0.959
	(2.000)	(1.360)	(1.145)	(1.106)	(1.402)	(1.330)	(1.511)	(1.335)	(1.270)	(1.181)	(1.542)	(1.266)
pooled upratings	2.554	2.635*	-0.716	0.307	-1.202	0.415	2.068	2.798**	-0.122	1.164	-1.099	0.992
	(2.039)	(1.403)	(1.270)	(1.223)	(1.462)	(1.323)	(1.591)	(1.345)	(1.513)	(1.377)	(1.690)	(1.338)
pooled wage gap1	-0.571*	-0.539**	-0.856**	-0.522	-0.916**	-0.859***	0.127	0.083	-0.991**	-0.914	-1.412***	-0.744**
(upratings only)	(0.344)	(0.275)	(0.414)	(0.473)	(0.414)	(0.295)	(0.426)	(0.407)	(0.498)	(0.607)	(0.473)	(0.370)
pooled wage gap2	-0.108	-0.009	-1.096**	-0.878	-0.892**	-0.600	0.083	0.227	-1.103**	-0.852	-1.292***	-0.573
(upratings only)	(0.453)	(0.358)	(0.493)	(0.537)	(0.445)	(0.368)	(0.446)	(0.412)	(0.517)	(0.604)	(0.467)	(0.381)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A5.7 Annual change in basic hours: Percentile control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	-0.780	0.250	-0.632	-0.306	0.253	0.217	-1.005	-0.139	-0.755	-0.266	-0.049	-0.574
	(0.659)	(0.649)	(0.486)	(0.467)	(0.753)	(0.779)	(0.726)	(0.775)	(0.542)	(0.559)	(0.853)	(0.914)
2000	-0.296	0.031	0.316	0.176	1.361*	1.155	-0.754	-0.330	0.391	0.096	1.205	0.913
	(0.690)	(0.679)	(0.535)	(0.554)	(0.780)	(0.800)	(0.750)	(0.804)	(0.575)	(0.615)	(0.892)	(0.949)
2001	0.867	0.757	0.266	0.447	-0.195	-0.240	0.245	0.456	0.307	0.234	-0.651	-0.365
	(0.783)	(0.702)	(0.569)	(0.536)	(0.990)	(0.923)	(0.834)	(0.799)	(0.598)	(0.578)	(1.053)	(1.095)
2002	0.108	0.403	1.102*	-0.051	1.673**	0.607	-0.193	0.108	1.185*	-0.341	1.131	0.254
	(0.815)	(0.800)	(0.580)	(0.626)	(0.845)	(0.831)	(0.859)	(0.919)	(0.616)	(0.682)	(0.938)	(1.024)
2003	-0.378	0.699	-0.003	-0.256	-0.978	-0.959	-0.949	0.319	0.278	-0.238	-1.298	-1.190
	(0.774)	(0.755)	(0.577)	(0.566)	(0.955)	(0.903)	(0.828)	(0.890)	(0.620)	(0.640)	(1.122)	(1.129)
2004	-0.667	-0.173	-0.763	-0.283	0.857	1.949**	-1.166	-0.591	-0.785	-0.385	0.674	1.260
	(0.771)	(0.747)	(0.522)	(0.482)	(0.852)	(0.942)	(0.894)	(0.887)	(0.570)	(0.549)	(0.987)	(1.106)
2005	-0.518	1.343*	-0.118	-0.309	0.712	0.385	-0.856	1.151	0.048	-0.607	0.528	0.613
	(0.711)	(0.775)	(0.518)	(0.524)	(0.895)	(0.831)	(0.740)	(0.847)	(0.561)	(0.579)	(1.012)	(1.030)
2006	-0.140	0.360	-0.025	0.100	0.366	-0.085	-0.322	0.286	0.171	-0.029	0.098	-0.045
	(0.693)	(0.711)	(0.580)	(0.554)	(0.827)	(0.840)	(0.719)	(0.759)	(0.610)	(0.613)	(0.954)	(1.052)
2007	0.010	-0.175	-0.753	-0.635	0.930	0.710	-0.543	-0.556	-0.390	-0.659	0.828	0.783
	(0.741)	(0.742)	(0.538)	(0.537)	(0.927)	(0.857)	(0.777)	(0.857)	(0.573)	(0.595)	(1.028)	(1.082)
2008	0.721	0.380	-0.035	-0.226	-0.534	-0.302	0.570	0.407	0.046	-0.416	-0.928	-0.254
	(0.847)	(0.753)	(0.601)	(0.542)	(1.015)	(0.999)	(0.861)	(0.846)	(0.633)	(0.591)	(1.061)	(1.143)
2009	0.936	1.282*	-0.670	-0.561	-0.903	-1.110	0.499	0.990	-0.412	-0.437	-0.942	-1.125
	(0.743)	(0.714)	(0.542)	(0.509)	(1.059)	(1.049)	(0.780)	(0.809)	(0.592)	(0.576)	(1.215)	(1.241)
	Pooled NMW effect											
pooled	-0.096	0.443	-0.139	-0.168	0.396	0.274	-0.391	0.053	-0.079	-0.469	0.060	-0.266
	(0.492)	(0.459)	(0.358)	(0.334)	(0.568)	(0.576)	(0.513)	(0.530)	(0.381)	(0.400)	(0.622)	(0.683)
pooled upratings	0.032	0.478	-0.043	-0.141	0.423	0.285	-0.326	0.147	0.118	-0.476	0.113	0.022
	(0.497)	(0.464)	(0.361)	(0.339)	(0.576)	(0.581)	(0.519)	(0.540)	(0.385)	(0.403)	(0.638)	(0.704)
pooled wage gap1	0.459*	0.201	-0.154	-0.234	-0.357*	-0.323	0.485*	0.324	-0.248	-0.309	-0.227	-0.102
(upratings only)	(0.261)	(0.258)	(0.183)	(0.176)	(0.195)	(0.200)	(0.281)	(0.284)	(0.203)	(0.200)	(0.212)	(0.218)
pooled wage gap2	-0.139	-0.131	-0.131	-0.060	-0.222**	-0.177*	-0.084	-0.080	-0.159	-0.093	-0.142	-0.162
(upratings only)	(0.119)	(0.118)	(0.128)	(0.126)	(0.097)	(0.096)	(0.135)	(0.124)	(0.128)	(0.125)	(0.102)	(0.099)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q3; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A5.8 Annual change in total hours: Percentile control groups, LFS HOURPAY

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1999	-0.754	1.707	3.540**	2.136	-0.063	-0.244	-0.107	1.393	0.978	2.171	0.244	-1.129
	(1.748)	(1.499)	(1.740)	(1.598)	(1.624)	(1.485)	(1.491)	(1.643)	(1.866)	(1.845)	(1.666)	(1.607)
2000	-3.028	-1.170	0.676	2.219	2.419*	0.213	-0.549	-1.379	-0.692	2.621	3.905**	0.469
	(2.798)	(1.554)	(2.173)	(2.559)	(1.398)	(2.090)	(2.610)	(1.749)	(1.991)	(2.308)	(1.521)	(2.439)
2001	-2.433	-0.778	5.748*	4.661	1.112	1.540	-1.210	-1.593	2.732	3.907	0.312	1.025
	(1.729)	(2.343)	(3.167)	(3.255)	(2.937)	(2.635)	(1.626)	(2.921)	(3.653)	(3.642)	(2.889)	(2.326)
2002	1.912	1.715	3.214*	0.992	1.744	1.660	3.464**	1.258	0.564	0.518	2.026	1.038
	(1.710)	(2.161)	(1.886)	(1.328)	(1.995)	(2.127)	(1.563)	(2.109)	(1.939)	(1.463)	(2.051)	(2.674)
2003	-2.333	-1.791	-0.264	-4.402	1.379	2.861	0.000	-2.984	-4.386	-5.529*	1.335	0.155
	(3.141)	(2.942)	(2.417)	(2.989)	(2.968)	(3.099)	(2.911)	(3.448)	(2.894)	(3.151)	(2.577)	(2.772)
2004	-1.308	0.437	-0.936	-0.547	0.685	0.572	0.696	0.876	-2.976	-1.036	-0.798	0.061
	(1.736)	(1.529)	(3.126)	(2.635)	(2.880)	(2.698)	(1.878)	(2.070)	(3.256)	(2.889)	(2.778)	(3.266)
2005	-4.439*	-0.536	5.259***	4.798***	1.256	-0.652	-2.043	-0.681	1.860	3.296**	1.923	0.068
	(2.614)	(1.619)	(1.541)	(1.423)	(1.701)	(2.749)	(2.407)	(1.713)	(1.458)	(1.323)	(1.875)	(2.913)
2006	-2.811	-0.605	0.879	5.791	2.219	4.714	-2.244	-1.726	-1.711	4.689	3.355	4.351
	(3.181)	(2.525)	(4.327)	(3.527)	(2.141)	(2.905)	(2.699)	(3.196)	(4.645)	(3.099)	(2.657)	(2.892)
2007	-2.231	-2.164	3.272	-0.446	-0.538	0.717	-0.873	-2.256	-0.343	-1.284	-0.247	0.713
	(1.769)	(4.283)	(3.483)	(1.510)	(2.944)	(1.403)	(1.663)	(4.612)	(3.474)	(1.454)	(2.883)	(1.862)
2008	-0.379	-3.747	4.085	0.625	-1.529	-1.402	1.016	-4.825	-0.034	0.423	-0.721	-0.790
	(2.129)	(3.132)	(3.649)	(4.063)	(3.069)	(2.208)	(2.120)	(3.072)	(3.811)	(4.383)	(3.215)	(2.313)
2009	0.488	0.140	-1.519	1.628	2.714	4.804	1.266	0.416	-1.713	1.531	4.291	3.459
	(3.942)	(1.965)	(3.182)	(1.692)	(2.766)	(4.058)	(4.189)	(2.281)	(2.599)	(1.890)	(3.122)	(3.714)
	Pooled NMW effect											
pooled	-1.417	-0.269	2.347*	1.498	0.967	1.030	-0.648	-0.815	1.051	1.265	0.462	-0.402
	(1.427)	(1.101)	(1.407)	(1.236)	(1.005)	(1.029)	(1.170)	(1.299)	(1.368)	(1.372)	(1.097)	(1.290)
pooled upratings	-1.561	-0.684	2.089	1.358	1.211	1.340	-0.720	-1.288	0.566	1.059	0.738	0.297
	(1.461)	(1.156)	(1.461)	(1.300)	(1.060)	(1.103)	(1.214)	(1.367)	(1.408)	(1.402)	(1.171)	(1.407)
pooled wage gap1	0.620	0.199	-0.856	-0.792	-0.278	-0.520	1.252**	0.563	-0.192	-0.362	-0.550	-0.433
(upratings only)	(0.595)	(0.519)	(0.736)	(0.683)	(0.424)	(0.422)	(0.550)	(0.581)	(1.025)	(0.969)	(0.472)	(0.508)
pooled wage gap2	-0.254	-0.312	-0.789	-1.071*	-0.371	-0.205	-0.050	-0.359	-0.736	-1.083*	-0.488	-0.224
(upratings only)	(0.312)	(0.323)	(0.609)	(0.601)	(0.350)	(0.348)	(0.405)	(0.380)	(0.683)	(0.616)	(0.349)	(0.345)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q3; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A5.9 Annual change in basic hours: Vertical difference-in-differences, standard control groups, NES

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-2.650***	-0.065	-0.979*	-2.483***	-0.150	-0.961*
	(0.518)	(0.374)	(0.561)	(0.502)	(0.375)	(0.554)
2001	1.237***	0.123	0.686	1.175***	-0.006	0.726
	(0.442)	(0.308)	(0.462)	(0.444)	(0.322)	(0.465)
2003	-0.004	0.253	-0.019	-0.099	0.366	-0.173
	(0.512)	(0.342)	(0.639)	(0.529)	(0.358)	(0.664)
2004	-0.238	0.052	-1.041**	-0.128	-0.033	-1.245**
	(0.460)	(0.307)	(0.512)	(0.471)	(0.324)	(0.503)
2005	-0.770	0.439	0.112	-0.849	0.588	0.344
	(0.500)	(0.347)	(0.533)	(0.517)	(0.392)	(0.558)
2006	-0.681	-0.084	0.338	-0.571	0.026	0.298
	(0.566)	(0.343)	(0.553)	(0.597)	(0.364)	(0.563)
2007	-0.916*	0.819**	-1.247**	-0.982*	0.544	-1.402**
	(0.515)	(0.378)	(0.606)	(0.545)	(0.396)	(0.636)
2008	-0.097	0.650*	-1.068**	-0.394	0.641	-1.310**
	(0.491)	(0.362)	(0.538)	(0.527)	(0.398)	(0.564)
2009	-0.867	0.848**	-1.779***	-1.236**	0.819**	-2.028***
	(0.601)	(0.369)	(0.555)	(0.613)	(0.415)	(0.578)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.035	0.533***	-0.287	0.040	0.356**	-0.301
(upratings only)	(0.252)	(0.156)	(0.311)	(0.253)	(0.155)	(0.313)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A5.10 Annual change in total hours: Vertical difference-in-differences, standard control groups, NES

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-2.627***	0.157	-0.503	-2.426***	0.080	-0.471
	(0.605)	(0.425)	(0.699)	(0.594)	(0.426)	(0.701)
2001	0.608	0.310	1.066*	0.564	0.238	0.946
	(0.510)	(0.341)	(0.623)	(0.511)	(0.352)	(0.635)
2003	-0.334	0.259	0.240	-0.423	0.412	0.179
	(0.571)	(0.376)	(0.725)	(0.595)	(0.398)	(0.756)
2004	-0.221	0.315	-1.522**	-0.121	0.180	-1.693***
	(0.495)	(0.342)	(0.645)	(0.516)	(0.363)	(0.646)
2005	-0.493	0.305	-0.258	-0.397	0.349	0.184
	(0.567)	(0.373)	(0.640)	(0.592)	(0.422)	(0.668)
2006	-1.090*	-0.479	0.566	-0.927	-0.357	0.531
	(0.621)	(0.368)	(0.624)	(0.656)	(0.392)	(0.640)
2007	-0.680	0.374	-1.673**	-0.772	0.037	-1.880**
	(0.565)	(0.401)	(0.694)	(0.594)	(0.424)	(0.730)
2008	-0.342	0.527	-0.807	-0.418	0.428	-0.829
	(0.527)	(0.388)	(0.608)	(0.563)	(0.429)	(0.644)
2009	-0.500	0.916**	-1.309**	-0.804	0.838*	-1.580**
	(0.630)	(0.388)	(0.622)	(0.646)	(0.442)	(0.655)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	-0.145	0.505***	-0.309	-0.131	0.324*	-0.312
(upratings only)	(0.277)	(0.168)	(0.368)	(0.278)	(0.168)	(0.370)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A5.11 Annual change in hours: Pooled vertical difference-in-differences, LFS

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
Control groups:						
	Basic hours					
Standard HOURPAY	0.017	0.041	-0.035	-0.071	-0.010	-0.144
	(0.225)	(0.163)	(0.271)	(0.228)	(0.163)	(0.280)
Standard HRRATE	-0.226	0.167	-0.483*	-0.233	0.159	-0.475*
	(0.246)	(0.154)	(0.274)	(0.255)	(0.155)	(0.280)
Percentile HOURPAY	-0.162	0.296*	-0.227	-0.136	0.222	-0.223
	(0.204)	(0.159)	(0.161)	(0.206)	(0.158)	(0.161)
	Total hours					
Standard HOURPAY	-0.868	-1.835*	-1.557**	-0.871	-1.436	-1.877***
	(0.675)	(1.025)	(0.701)	(0.690)	(1.061)	(0.721)
Standard HRRATE	-0.079	-1.503	0.076	-0.276	-1.682*	0.277
	(1.069)	(0.972)	(0.974)	(1.099)	(1.020)	(1.008)
Percentile HOURPAY	-1.697*	-2.833***	0.266	-1.414	-2.682***	0.000
	(0.896)	(0.951)	(0.573)	(0.943)	(0.988)	(0.535)

Notes: LFS1999Q4-2010; Pooled wage gap 1 (upratings only, i.e. October 2000-October 2009); Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage.

ANNEX 6

WAGE GROWTH BY FIRM SIZE:

DIFFERENCE-IN-DIFFERENCES ESTIMATES OF NMW IMPACTS

A6.1 Annual percentage wage growth: Standard control groups, NES, small firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.043***	0.046***	0.058***	0.066***	0.069***	0.084***	0.048***	0.054***	0.062***	0.066***	0.062***	0.082***
	(0.013)	(0.013)	(0.011)	(0.012)	(0.019)	(0.014)	(0.013)	(0.013)	(0.011)	(0.012)	(0.019)	(0.015)
2000	-0.012	-0.017	-0.002	0.006	-0.003	-0.011	-0.004	-0.005	0.004	0.013	-0.019	-0.025
	(0.015)	(0.016)	(0.010)	(0.013)	(0.021)	(0.018)	(0.016)	(0.016)	(0.011)	(0.013)	(0.022)	(0.020)
2001	0.006	0.016	0.028***	0.022**	0.020	0.043***	0.009	0.020	0.027***	0.013	0.013	0.028*
	(0.012)	(0.013)	(0.009)	(0.011)	(0.017)	(0.014)	(0.012)	(0.013)	(0.009)	(0.011)	(0.018)	(0.015)
2002	-0.004	-0.016	-0.031***	-0.004	0.009	0.015	0.004	-0.002	-0.025**	-0.003	-0.003	0.009
	(0.015)	(0.016)	(0.010)	(0.011)	(0.022)	(0.018)	(0.016)	(0.016)	(0.011)	(0.012)	(0.023)	(0.019)
2003	0.009	0.004	-0.000	0.019*	0.037**	0.033**	0.015	0.010	0.007	0.019*	0.029	0.024
	(0.013)	(0.014)	(0.010)	(0.011)	(0.018)	(0.015)	(0.013)	(0.013)	(0.010)	(0.011)	(0.019)	(0.016)
2004	0.012	0.021*	0.014*	0.033***	0.028*	0.040***	0.015	0.019	0.013	0.027***	0.018	0.032**
	(0.012)	(0.013)	(0.008)	(0.009)	(0.015)	(0.013)	(0.012)	(0.013)	(0.009)	(0.009)	(0.016)	(0.013)
2005	0.003	-0.000	-0.007	-0.000	0.020	0.026**	0.005	-0.000	-0.005	-0.003	0.007	0.015
	(0.011)	(0.012)	(0.007)	(0.008)	(0.015)	(0.012)	(0.012)	(0.012)	(0.008)	(0.009)	(0.015)	(0.013)
2006	0.007	0.016	0.005	0.032***	0.024	0.032**	0.008	0.017	0.005	0.027***	0.013	0.024*
	(0.012)	(0.013)	(0.008)	(0.010)	(0.015)	(0.013)	(0.013)	(0.013)	(0.009)	(0.010)	(0.016)	(0.013)
2007	-0.025*	-0.004	-0.003	0.005	0.040**	0.048***	-0.020	-0.003	-0.002	0.003	0.023	0.027*
	(0.014)	(0.014)	(0.008)	(0.009)	(0.016)	(0.014)	(0.014)	(0.013)	(0.008)	(0.009)	(0.016)	(0.015)
2008	0.007	0.014	0.005	0.006	0.038**	0.046***	0.011	0.013	0.006	0.004	0.028*	0.035**
	(0.013)	(0.014)	(0.008)	(0.010)	(0.015)	(0.014)	(0.013)	(0.013)	(0.008)	(0.010)	(0.016)	(0.014)
2009	-0.004	-0.004	-0.013*	-0.006	-0.010	0.010	0.004	0.001	-0.007	-0.006	-0.024	0.002
	(0.012)	(0.012)	(0.007)	(0.008)	(0.014)	(0.012)	(0.013)	(0.012)	(0.007)	(0.009)	(0.015)	(0.012)
	Pooled NMW effect											
pooled wage gap1	0.008***	0.010***	0.006***	0.009***	0.007***	0.010***	0.004**	0.005***	0.006***	0.008***	0.011***	0.011***
(upratings only)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.2 Annual absolute wage growth: Standard control groups, NES, small firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.147***	0.156***	0.204***	0.247***	0.242***	0.279***	0.176***	0.193***	0.221***	0.245***	0.212***	0.263***
	(0.048)	(0.050)	(0.038)	(0.044)	(0.065)	(0.053)	(0.048)	(0.049)	(0.039)	(0.047)	(0.066)	(0.055)
2000	-0.051	-0.058	-0.016	0.028	-0.006	-0.058	-0.008	0.001	0.014	0.066	-0.037	-0.082
	(0.057)	(0.061)	(0.037)	(0.047)	(0.074)	(0.071)	(0.059)	(0.063)	(0.039)	(0.050)	(0.077)	(0.073)
2001	0.003	0.054	0.083**	0.096**	0.044	0.134**	0.025	0.080	0.082**	0.069	0.029	0.108*
	(0.046)	(0.052)	(0.034)	(0.041)	(0.061)	(0.055)	(0.045)	(0.050)	(0.035)	(0.043)	(0.063)	(0.057)
2002	-0.025	-0.046	-0.134***	-0.032	0.026	0.028	0.020	0.009	-0.101**	-0.019	0.000	0.020
	(0.057)	(0.063)	(0.037)	(0.043)	(0.078)	(0.070)	(0.059)	(0.064)	(0.039)	(0.045)	(0.082)	(0.071)
2003	0.034	0.016	-0.008	0.059	0.139**	0.111*	0.064	0.041	0.020	0.058	0.128*	0.100
	(0.049)	(0.053)	(0.038)	(0.041)	(0.066)	(0.061)	(0.049)	(0.052)	(0.038)	(0.043)	(0.068)	(0.063)
2004	0.033	0.092*	0.045	0.119***	0.100*	0.153***	0.051	0.088*	0.046	0.084**	0.077	0.135***
	(0.048)	(0.052)	(0.032)	(0.037)	(0.056)	(0.052)	(0.047)	(0.050)	(0.032)	(0.037)	(0.057)	(0.052)
2005	-0.001	0.005	-0.042	0.000	0.079	0.092*	0.017	0.014	-0.027	-0.015	0.050	0.063
	(0.043)	(0.049)	(0.029)	(0.033)	(0.052)	(0.049)	(0.044)	(0.048)	(0.029)	(0.034)	(0.054)	(0.050)
2006	0.022	0.069	0.008	0.119***	0.110**	0.124**	0.038	0.078	0.006	0.092**	0.085	0.097*
	(0.047)	(0.053)	(0.032)	(0.038)	(0.055)	(0.051)	(0.047)	(0.051)	(0.033)	(0.038)	(0.057)	(0.052)
2007	-0.094*	0.003	-0.020	0.008	0.155***	0.198***	-0.067	0.007	-0.016	-0.009	0.110*	0.144**
	(0.051)	(0.054)	(0.030)	(0.037)	(0.058)	(0.057)	(0.052)	(0.053)	(0.031)	(0.037)	(0.061)	(0.059)
2008	0.026	0.069	0.012	0.007	0.163***	0.172***	0.049	0.062	0.018	-0.009	0.146***	0.140***
	(0.047)	(0.054)	(0.030)	(0.039)	(0.055)	(0.054)	(0.048)	(0.052)	(0.032)	(0.039)	(0.055)	(0.053)
2009	-0.020	-0.018	-0.057**	-0.042	-0.031	0.025	0.028	0.005	-0.033	-0.041	-0.047	0.009
	(0.046)	(0.050)	(0.025)	(0.033)	(0.051)	(0.048)	(0.047)	(0.048)	(0.025)	(0.033)	(0.053)	(0.048)
	Pooled NMW effect											
pooled wage gap1	0.030***	0.037***	0.036***	0.051***	0.030***	0.044***	0.013*	0.015*	0.026***	0.038***	0.023***	0.027***
(upratings only)	(0.005)	(0.006)	(0.003)	(0.004)	(0.006)	(0.006)	(0.007)	(0.008)	(0.004)	(0.005)	(0.007)	(0.008)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.3 Probability of annual positive wage growth: Standard control groups, NES, small firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.196***	0.161***	0.184***	0.252***	0.138***	0.164***	0.208***	0.178***	0.218***	0.271***	0.137***	0.160***
	(0.042)	(0.044)	(0.043)	(0.037)	(0.046)	(0.040)	(0.041)	(0.042)	(0.040)	(0.035)	(0.046)	(0.040)
2000	-0.164**	-0.209***	-0.177***	-0.135**	-0.076	-0.127*	-0.091	-0.137*	-0.060	0.007	-0.084	-0.133*
	(0.071)	(0.070)	(0.051)	(0.058)	(0.079)	(0.075)	(0.077)	(0.078)	(0.057)	(0.062)	(0.083)	(0.080)
2001	0.176***	0.210***	0.166***	0.169***	0.135**	0.179***	0.198***	0.225***	0.213***	0.197***	0.141***	0.168***
	(0.047)	(0.043)	(0.046)	(0.046)	(0.053)	(0.045)	(0.043)	(0.040)	(0.041)	(0.042)	(0.054)	(0.047)
2002	-0.152**	-0.178**	-0.252***	-0.114**	-0.135*	-0.108	-0.073	-0.106	-0.127**	-0.017	-0.124	-0.097
	(0.073)	(0.072)	(0.051)	(0.057)	(0.080)	(0.075)	(0.076)	(0.075)	(0.058)	(0.058)	(0.085)	(0.078)
2003	0.201***	0.235***	0.064	0.212***	0.241***	0.239***	0.225***	0.255***	0.162***	0.262***	0.252***	0.239***
	(0.048)	(0.042)	(0.055)	(0.044)	(0.044)	(0.040)	(0.043)	(0.038)	(0.048)	(0.039)	(0.042)	(0.040)
2004	0.231***	0.260***	0.119***	0.216***	0.186***	0.242***	0.246***	0.257***	0.160***	0.204***	0.188***	0.236***
	(0.040)	(0.036)	(0.045)	(0.040)	(0.044)	(0.036)	(0.036)	(0.035)	(0.042)	(0.041)	(0.044)	(0.037)
2005	0.161***	0.211***	0.045	0.121***	0.197***	0.238***	0.197***	0.221***	0.128***	0.135***	0.200***	0.226***
	(0.048)	(0.043)	(0.046)	(0.043)	(0.044)	(0.037)	(0.044)	(0.042)	(0.042)	(0.043)	(0.045)	(0.038)
2006	0.200***	0.260***	0.186***	0.322***	0.251***	0.293***	0.222***	0.264***	0.226***	0.314***	0.255***	0.286***
	(0.047)	(0.039)	(0.045)	(0.034)	(0.038)	(0.031)	(0.043)	(0.038)	(0.041)	(0.034)	(0.037)	(0.032)
2007	-0.213***	-0.128**	-0.250***	-0.188***	0.069	0.081	-0.168**	-0.110*	-0.193***	-0.186***	0.060	0.052
	(0.064)	(0.065)	(0.043)	(0.050)	(0.057)	(0.053)	(0.068)	(0.067)	(0.048)	(0.051)	(0.060)	(0.056)
2008	0.285***	0.269***	0.327***	0.301***	0.345***	0.338***	0.304***	0.267***	0.358***	0.299***	0.347***	0.332***
	(0.038)	(0.040)	(0.034)	(0.034)	(0.030)	(0.028)	(0.033)	(0.040)	(0.029)	(0.033)	(0.029)	(0.029)
2009	-0.265***	-0.228***	-0.328***	-0.352***	-0.193***	-0.113*	-0.211***	-0.213***	-0.221***	-0.308***	-0.191***	-0.128**
	(0.060)	(0.062)	(0.036)	(0.039)	(0.061)	(0.060)	(0.066)	(0.064)	(0.047)	(0.044)	(0.066)	(0.062)
	Pooled NMW effect											
pooled wage gap1	0.129***	0.151***	0.174***	0.202***	0.127***	0.142***	0.113***	0.138***	0.162***	0.215***	0.121***	0.136***
(upratings only)	(0.012)	(0.012)	(0.010)	(0.010)	(0.012)	(0.012)	(0.014)	(0.016)	(0.011)	(0.013)	(0.013)	(0.015)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.4 Annual percentage wage growth: Standard control groups, NES, medium firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.039*	0.056***	0.053***	0.051**	0.057*	0.088***	0.052**	0.061***	0.052***	0.053**	0.068*	0.103***
	(0.021)	(0.018)	(0.017)	(0.022)	(0.034)	(0.020)	(0.022)	(0.018)	(0.017)	(0.022)	(0.036)	(0.020)
2000	-0.034	-0.011	-0.023	-0.051**	-0.040	-0.039	-0.015	-0.005	-0.007	-0.025	-0.047	-0.023
	(0.026)	(0.020)	(0.020)	(0.025)	(0.040)	(0.027)	(0.028)	(0.021)	(0.023)	(0.026)	(0.044)	(0.029)
2001	0.026	0.045***	0.024	0.040*	0.006	0.012	0.029	0.043***	0.019	0.042*	0.003	0.017
	(0.018)	(0.016)	(0.018)	(0.021)	(0.027)	(0.017)	(0.018)	(0.016)	(0.019)	(0.021)	(0.027)	(0.017)
2002	0.007	0.005	-0.025	-0.030	-0.016	-0.006	0.019	0.008	-0.007	-0.009	-0.018	0.007
	(0.022)	(0.020)	(0.021)	(0.025)	(0.033)	(0.023)	(0.023)	(0.021)	(0.023)	(0.025)	(0.036)	(0.024)
2003	0.013	0.029*	0.007	0.004	0.008	0.008	0.020	0.030*	0.008	-0.001	0.013	0.014
	(0.019)	(0.017)	(0.017)	(0.020)	(0.026)	(0.018)	(0.020)	(0.017)	(0.018)	(0.021)	(0.026)	(0.019)
2004	0.009	0.024*	-0.013	-0.006	0.021	0.027	0.014	0.023*	-0.013	-0.014	0.023	0.026
	(0.016)	(0.014)	(0.014)	(0.016)	(0.024)	(0.017)	(0.016)	(0.013)	(0.015)	(0.017)	(0.025)	(0.017)
2005	-0.019	-0.004	-0.004	0.009	0.019	0.016	-0.016	-0.006	-0.003	-0.001	0.026	0.020
	(0.016)	(0.013)	(0.013)	(0.017)	(0.022)	(0.015)	(0.016)	(0.013)	(0.015)	(0.018)	(0.023)	(0.015)
2006	0.020	0.012	0.002	-0.010	0.016	0.023	0.021	0.010	-0.000	-0.020	0.016	0.026*
	(0.016)	(0.016)	(0.014)	(0.019)	(0.021)	(0.015)	(0.016)	(0.016)	(0.015)	(0.019)	(0.021)	(0.015)
2007	-0.004	-0.006	-0.011	-0.015	-0.014	-0.003	-0.001	-0.007	-0.009	-0.020	-0.010	-0.002
	(0.017)	(0.016)	(0.014)	(0.018)	(0.021)	(0.014)	(0.018)	(0.016)	(0.014)	(0.019)	(0.022)	(0.014)
2008	-0.005	0.002	-0.015	-0.015	0.017	0.012	-0.005	-0.003	-0.017	-0.022	0.023	0.013
	(0.015)	(0.015)	(0.013)	(0.017)	(0.022)	(0.016)	(0.015)	(0.015)	(0.014)	(0.017)	(0.022)	(0.016)
2009	-0.003	-0.003	-0.005	-0.010	-0.007	-0.007	-0.004	-0.008	-0.001	-0.014	0.004	-0.004
	(0.013)	(0.014)	(0.012)	(0.014)	(0.014)	(0.012)	(0.014)	(0.014)	(0.013)	(0.015)	(0.015)	(0.012)
	Pooled NMW effect											
pooled wage gap1	-0.003*	0.001	0.006***	0.008***	0.003	0.009***	-0.000	0.003	0.004***	0.007***	0.005	0.007**
(upratings only)	(0.002)	(0.002)	(0.001)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.5 Annual absolute wage growth: Standard control groups, NES, medium firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.136*	0.202***	0.155**	0.172**	0.161	0.365***	0.188**	0.225***	0.126*	0.119	0.180	0.398***
	(0.078)	(0.071)	(0.061)	(0.086)	(0.127)	(0.079)	(0.079)	(0.072)	(0.072)	(0.099)	(0.131)	(0.080)
2000	-0.133	-0.046	-0.065	-0.192**	-0.137	-0.123	-0.053	-0.008	0.101	0.102	-0.166	-0.068
	(0.094)	(0.082)	(0.074)	(0.097)	(0.147)	(0.109)	(0.102)	(0.086)	(0.104)	(0.131)	(0.162)	(0.117)
2001	0.081	0.155**	0.086	0.155*	0.016	0.058	0.097	0.151**	0.064	0.108	0.004	0.073
	(0.067)	(0.063)	(0.067)	(0.084)	(0.100)	(0.072)	(0.069)	(0.064)	(0.074)	(0.096)	(0.103)	(0.072)
2002	0.030	-0.002	-0.087	-0.112	-0.070	0.012	0.079	0.025	0.098	-0.003	-0.083	0.051
	(0.081)	(0.082)	(0.076)	(0.099)	(0.127)	(0.093)	(0.087)	(0.085)	(0.102)	(0.124)	(0.139)	(0.099)
2003	0.027	0.104	0.031	0.012	0.008	0.031	0.064	0.113*	0.035	-0.074	0.033	0.048
	(0.072)	(0.067)	(0.063)	(0.080)	(0.100)	(0.078)	(0.075)	(0.068)	(0.070)	(0.093)	(0.101)	(0.080)
2004	0.022	0.078	-0.056	-0.060	0.081	0.143**	0.045	0.070	-0.060	-0.115	0.090	0.134*
	(0.061)	(0.056)	(0.056)	(0.069)	(0.093)	(0.071)	(0.062)	(0.056)	(0.061)	(0.073)	(0.099)	(0.071)
2005	-0.080	-0.023	-0.015	0.050	0.089	0.089	-0.062	-0.043	-0.001	-0.111	0.119	0.099
	(0.059)	(0.054)	(0.052)	(0.070)	(0.085)	(0.065)	(0.062)	(0.055)	(0.058)	(0.088)	(0.088)	(0.065)
2006	0.060	0.032	0.044	-0.027	0.053	0.134**	0.066	0.017	0.023	-0.219**	0.065	0.140**
	(0.060)	(0.066)	(0.055)	(0.076)	(0.083)	(0.062)	(0.061)	(0.067)	(0.059)	(0.087)	(0.085)	(0.061)
2007	-0.034	-0.034	-0.042	-0.064	-0.047	0.016	-0.011	-0.043	-0.039	-0.156*	-0.024	0.021
	(0.067)	(0.068)	(0.051)	(0.074)	(0.084)	(0.060)	(0.068)	(0.068)	(0.058)	(0.087)	(0.087)	(0.060)
2008	-0.024	0.000	-0.053	-0.063	0.082	0.082	-0.015	-0.031	-0.061	-0.132*	0.100	0.081
	(0.057)	(0.059)	(0.051)	(0.070)	(0.084)	(0.065)	(0.060)	(0.062)	(0.056)	(0.076)	(0.086)	(0.067)
2009	-0.025	-0.017	-0.013	-0.052	-0.005	-0.003	-0.015	-0.035	0.005	-0.053	0.030	0.010
	(0.052)	(0.057)	(0.045)	(0.060)	(0.056)	(0.048)	(0.055)	(0.059)	(0.049)	(0.061)	(0.057)	(0.049)
	Pooled NMW effect											
pooled wage gap1	0.007	0.016**	0.031***	0.044***	0.010	0.035***	0.004	0.016	0.020***	0.031***	0.015	0.026*
(upratings only)	(0.007)	(0.008)	(0.005)	(0.006)	(0.010)	(0.010)	(0.009)	(0.010)	(0.006)	(0.008)	(0.014)	(0.014)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.6 Probability of annual positive wage growth: Standard control groups, NES, medium firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.172**	0.197***	0.163***	0.180***	0.193***	0.269***	0.196***	0.203***	0.201***	0.215***	0.199***	0.273***
	(0.070)	(0.060)	(0.063)	(0.061)	(0.066)	(0.050)	(0.065)	(0.059)	(0.055)	(0.052)	(0.064)	(0.049)
2000	-0.287***	-0.181*	-0.198**	-0.255***	-0.188	-0.119	-0.178	-0.086	-0.012	-0.058	-0.116	0.005
	(0.095)	(0.100)	(0.094)	(0.093)	(0.138)	(0.129)	(0.111)	(0.108)	(0.103)	(0.107)	(0.146)	(0.132)
2001	0.093	0.224***	0.084	0.154**	0.110	0.151**	0.138*	0.237***	0.146**	0.207***	0.128	0.165**
	(0.082)	(0.059)	(0.075)	(0.066)	(0.083)	(0.076)	(0.075)	(0.057)	(0.065)	(0.057)	(0.080)	(0.074)
2002	-0.092	-0.101	-0.272***	-0.192**	-0.107	-0.101	0.024	-0.014	-0.079	-0.022	-0.047	-0.016
	(0.113)	(0.111)	(0.091)	(0.097)	(0.125)	(0.118)	(0.110)	(0.108)	(0.102)	(0.097)	(0.129)	(0.116)
2003	0.194***	0.283***	0.106	0.134*	0.106	0.141*	0.239***	0.297***	0.197***	0.193***	0.160**	0.167**
	(0.072)	(0.051)	(0.079)	(0.076)	(0.082)	(0.075)	(0.060)	(0.046)	(0.063)	(0.064)	(0.073)	(0.072)
2004	0.226***	0.284***	0.163**	0.192***	0.201***	0.276***	0.261***	0.285***	0.215***	0.202***	0.220***	0.275***
	(0.057)	(0.046)	(0.066)	(0.061)	(0.060)	(0.052)	(0.049)	(0.045)	(0.055)	(0.057)	(0.056)	(0.052)
2005	0.072	0.165***	0.114*	0.214***	0.182***	0.215***	0.121*	0.169***	0.200***	0.247***	0.235***	0.230***
	(0.076)	(0.062)	(0.069)	(0.059)	(0.064)	(0.061)	(0.069)	(0.062)	(0.055)	(0.052)	(0.055)	(0.057)
2006	0.255***	0.282***	0.135*	0.192***	0.262***	0.324***	0.272***	0.270***	0.187***	0.184***	0.276***	0.323***
	(0.059)	(0.050)	(0.071)	(0.064)	(0.046)	(0.040)	(0.054)	(0.053)	(0.061)	(0.065)	(0.042)	(0.039)
2007	-0.130	-0.135	-0.262***	-0.259***	-0.129	-0.068	-0.084	-0.120	-0.171**	-0.241***	-0.063	-0.059
	(0.090)	(0.086)	(0.071)	(0.077)	(0.098)	(0.093)	(0.095)	(0.089)	(0.081)	(0.082)	(0.102)	(0.094)
2008	0.154*	0.221***	0.146**	0.188***	0.268***	0.259***	0.184**	0.219***	0.207***	0.199***	0.287***	0.258***
	(0.079)	(0.065)	(0.074)	(0.067)	(0.048)	(0.050)	(0.072)	(0.065)	(0.058)	(0.062)	(0.042)	(0.049)
2009	-0.342***	-0.346***	-0.305***	-0.244***	-0.232**	-0.236***	-0.300***	-0.333***	-0.193**	-0.187**	-0.155	-0.241***
	(0.069)	(0.071)	(0.066)	(0.075)	(0.091)	(0.085)	(0.080)	(0.075)	(0.081)	(0.083)	(0.101)	(0.089)
	Pooled NMW effect											
pooled wage gap1	0.140***	0.186***	0.115***	0.138***	0.124***	0.175***	0.140***	0.180***	0.103***	0.122***	0.150***	0.214***
(upratings only)	(0.016)	(0.017)	(0.015)	(0.016)	(0.018)	(0.019)	(0.018)	(0.021)	(0.015)	(0.017)	(0.022)	(0.028)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.7 Annual percentage wage growth: Standard control groups, NES, large firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.001	-0.003	0.055***	0.043***	0.041	0.082***	0.024	-0.002	0.027**	0.044***	0.036	0.053**
	(0.032)	(0.023)	(0.008)	(0.005)	(0.042)	(0.024)	(0.029)	(0.022)	(0.012)	(0.005)	(0.039)	(0.025)
2000	-0.167***	-0.044*	-0.011	-0.008	-0.054	-0.016	-0.035	-0.060*	-0.009	-0.008	0.026	-0.014
	(0.044)	(0.024)	(0.009)	(0.005)	(0.049)	(0.029)	(0.044)	(0.031)	(0.009)	(0.006)	(0.049)	(0.034)
2001	-0.074***	-0.007	0.019***	0.028***	-0.012	0.002	-0.094***	-0.106***	0.020***	0.027***	-0.001	-0.034
	(0.023)	(0.015)	(0.005)	(0.004)	(0.028)	(0.020)	(0.026)	(0.019)	(0.006)	(0.004)	(0.028)	(0.022)
2002	-0.129***	-0.076***	-0.028***	-0.027***	-0.102***	-0.066***	-0.076**	-0.121***	-0.024***	-0.025***	-0.026	-0.073***
	(0.030)	(0.020)	(0.007)	(0.005)	(0.039)	(0.025)	(0.033)	(0.025)	(0.008)	(0.006)	(0.040)	(0.028)
2003	-0.096***	-0.021	0.018***	0.036***	0.009	0.024	-0.094***	-0.092***	0.017***	0.037***	0.034	-0.007
	(0.024)	(0.016)	(0.006)	(0.005)	(0.030)	(0.019)	(0.027)	(0.019)	(0.006)	(0.005)	(0.030)	(0.021)
2004	-0.036**	-0.027**	0.010**	0.019***	0.018	0.007	-0.126***	-0.033***	0.010*	0.018***	-0.016	-0.034**
	(0.015)	(0.012)	(0.005)	(0.004)	(0.020)	(0.015)	(0.019)	(0.012)	(0.005)	(0.004)	(0.021)	(0.016)
2005	-0.048***	-0.032***	-0.005	-0.007*	-0.021	-0.037***	-0.050***	-0.031***	-0.005	-0.006	-0.048**	-0.044***
	(0.013)	(0.011)	(0.004)	(0.004)	(0.017)	(0.014)	(0.014)	(0.011)	(0.005)	(0.004)	(0.019)	(0.014)
2006	-0.012	-0.009	0.017***	0.021***	0.021	-0.008	-0.020	-0.020**	0.017***	0.020***	-0.029*	-0.033***
	(0.012)	(0.010)	(0.004)	(0.003)	(0.015)	(0.012)	(0.012)	(0.010)	(0.004)	(0.003)	(0.017)	(0.012)
2007	-0.001	-0.017*	0.000	-0.001	0.000	-0.013	-0.011	-0.023**	0.002	0.000	-0.029	-0.020*
	(0.009)	(0.010)	(0.004)	(0.003)	(0.016)	(0.011)	(0.011)	(0.010)	(0.004)	(0.003)	(0.018)	(0.011)
2008	-0.008	-0.024**	-0.003	-0.010***	0.011	-0.021*	-0.013	-0.028***	-0.002	-0.010***	0.007	-0.031***
	(0.010)	(0.010)	(0.004)	(0.003)	(0.013)	(0.011)	(0.011)	(0.010)	(0.004)	(0.003)	(0.013)	(0.011)
2009	-0.004	-0.017*	0.002	-0.003	0.023**	-0.004	-0.008	-0.017*	0.003	-0.003	0.015	-0.014
	(0.008)	(0.010)	(0.003)	(0.003)	(0.012)	(0.010)	(0.009)	(0.010)	(0.003)	(0.003)	(0.013)	(0.010)
	Pooled NMW effect											
pooled wage gap1	-0.008***	-0.006***	0.002***	0.007***	-0.010***	-0.007***	-0.013***	-0.007***	-0.002**	0.005***	-0.014***	-0.011***
(upratings only)	(0.001)	(0.001)	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.003)	(0.003)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.8 Annual absolute wage growth: Standard control groups, NES, large firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.016	0.002	0.190***	0.150***	0.203	0.221**	0.050	-0.016	0.085**	0.157***	0.181	0.154
	(0.128)	(0.094)	(0.032)	(0.019)	(0.169)	(0.097)	(0.115)	(0.089)	(0.043)	(0.019)	(0.154)	(0.099)
2000	-0.665***	-0.234**	-0.057*	-0.030	-0.123	-0.114	-0.218	-0.147	-0.037	-0.022	0.162	-0.032
	(0.175)	(0.102)	(0.033)	(0.022)	(0.189)	(0.117)	(0.176)	(0.118)	(0.035)	(0.023)	(0.190)	(0.131)
2001	-0.294***	-0.135**	0.059***	0.092***	0.005	-0.031	-0.293***	-0.238***	0.065***	0.093***	0.064	-0.108
	(0.091)	(0.066)	(0.021)	(0.016)	(0.111)	(0.084)	(0.100)	(0.073)	(0.022)	(0.016)	(0.113)	(0.089)
2002	-0.558***	-0.426***	-0.127***	-0.139***	-0.292**	-0.319***	-0.326**	-0.435***	-0.107***	-0.125***	-0.053	-0.286**
	(0.122)	(0.092)	(0.028)	(0.022)	(0.147)	(0.107)	(0.130)	(0.104)	(0.031)	(0.024)	(0.154)	(0.115)
2003	-0.389***	-0.202***	0.060***	0.142***	0.083	0.017	-0.291***	-0.300***	0.065**	0.144***	0.166	-0.036
	(0.098)	(0.072)	(0.023)	(0.021)	(0.119)	(0.082)	(0.105)	(0.079)	(0.025)	(0.021)	(0.121)	(0.085)
2004	-0.184***	-0.209***	0.029	0.061***	0.094	-0.026	-0.356***	-0.365***	0.025	0.055***	0.030	-0.178**
	(0.060)	(0.055)	(0.019)	(0.016)	(0.085)	(0.068)	(0.073)	(0.059)	(0.020)	(0.017)	(0.087)	(0.071)
2005	-0.258***	-0.188***	-0.030*	-0.040**	-0.115	-0.208***	-0.280***	-0.199***	-0.025	-0.036**	-0.147*	-0.263***
	(0.057)	(0.051)	(0.018)	(0.016)	(0.072)	(0.060)	(0.065)	(0.052)	(0.019)	(0.016)	(0.076)	(0.060)
2006	-0.063	-0.099**	0.058***	0.080***	0.087	-0.065	-0.095*	-0.152***	0.062***	0.074***	-0.045	-0.210***
	(0.047)	(0.046)	(0.015)	(0.014)	(0.062)	(0.052)	(0.051)	(0.047)	(0.016)	(0.015)	(0.068)	(0.054)
2007	-0.019	-0.120***	-0.004	-0.010	-0.002	-0.078*	-0.043	-0.147***	0.004	-0.010	-0.076	-0.114**
	(0.038)	(0.044)	(0.014)	(0.013)	(0.065)	(0.047)	(0.041)	(0.045)	(0.015)	(0.013)	(0.072)	(0.047)
2008	-0.057	-0.171***	-0.025*	-0.062***	0.029	-0.129**	-0.063	-0.192***	-0.016	-0.062***	0.004	-0.186***
	(0.039)	(0.047)	(0.015)	(0.015)	(0.055)	(0.050)	(0.043)	(0.047)	(0.016)	(0.015)	(0.058)	(0.050)
2009	-0.023	-0.106**	-0.002	-0.027*	0.073	-0.048	-0.032	-0.114***	0.008	-0.031**	0.062	-0.088*
	(0.033)	(0.044)	(0.012)	(0.015)	(0.048)	(0.044)	(0.036)	(0.044)	(0.013)	(0.015)	(0.052)	(0.045)
	Pooled NMW effect											
pooled wage gap1	-0.018***	-0.009	0.037***	0.059***	-0.037***	-0.022***	-0.037***	-0.013	0.022***	0.049***	-0.053***	-0.038***
(upratings only)	(0.005)	(0.006)	(0.002)	(0.003)	(0.008)	(0.008)	(0.006)	(0.008)	(0.003)	(0.003)	(0.010)	(0.011)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.9 Probability of annual positive wage growth: Standard control groups, NES, large firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.124***	0.181***	0.171***	0.164***	0.108**	0.148***	0.133***	0.183***	0.188***	0.187***	0.108***	0.139***
	(0.041)	(0.037)	(0.033)	(0.039)	(0.048)	(0.051)	(0.038)	(0.034)	(0.031)	(0.036)	(0.042)	(0.051)
2000	-0.168*	-0.103	-0.186***	-0.179***	0.015	-0.078	-0.083	-0.028	-0.053	-0.052	0.069	-0.044
	(0.089)	(0.082)	(0.046)	(0.040)	(0.086)	(0.099)	(0.090)	(0.083)	(0.051)	(0.048)	(0.078)	(0.103)
2001	0.100**	0.146***	0.072**	0.094***	0.110**	0.128**	0.129***	0.167***	0.156***	0.171***	0.140***	0.140***
	(0.047)	(0.045)	(0.033)	(0.034)	(0.048)	(0.053)	(0.042)	(0.041)	(0.029)	(0.031)	(0.040)	(0.049)
2002	-0.170**	-0.236***	-0.192***	-0.316***	-0.212**	-0.339***	-0.103	-0.175**	-0.068	-0.205***	-0.107	-0.267***
	(0.080)	(0.079)	(0.042)	(0.036)	(0.095)	(0.086)	(0.081)	(0.081)	(0.043)	(0.043)	(0.096)	(0.094)
2003	0.114**	0.114**	0.119***	0.134***	0.170***	0.139***	0.144***	0.135***	0.198***	0.203***	0.186***	0.148***
	(0.046)	(0.049)	(0.034)	(0.036)	(0.038)	(0.049)	(0.042)	(0.045)	(0.031)	(0.034)	(0.034)	(0.046)
2004	0.103***	0.098**	0.088***	0.076**	0.166***	0.144***	0.127***	0.102**	0.144***	0.110***	0.167***	0.132***
	(0.040)	(0.042)	(0.027)	(0.030)	(0.036)	(0.041)	(0.037)	(0.041)	(0.024)	(0.029)	(0.034)	(0.042)
2005	-0.007	0.028	0.033	-0.021	0.060	0.022	0.042	0.048	0.113***	0.038	0.088**	0.017
	(0.050)	(0.049)	(0.031)	(0.032)	(0.048)	(0.053)	(0.047)	(0.047)	(0.029)	(0.032)	(0.044)	(0.053)
2006	0.150***	0.147***	0.197***	0.163***	0.229***	0.230***	0.177***	0.139***	0.255***	0.181***	0.231***	0.207***
	(0.037)	(0.039)	(0.026)	(0.029)	(0.029)	(0.032)	(0.033)	(0.039)	(0.023)	(0.029)	(0.027)	(0.035)
2007	-0.157***	-0.262***	-0.212***	-0.291***	-0.084	-0.164***	-0.117**	-0.270***	-0.119***	-0.270***	-0.064	-0.193***
	(0.053)	(0.049)	(0.029)	(0.025)	(0.065)	(0.060)	(0.057)	(0.050)	(0.033)	(0.027)	(0.066)	(0.059)
2008	0.057	0.064	0.061**	0.036	0.161***	0.146***	0.088**	0.072*	0.133***	0.058*	0.165***	0.133***
	(0.040)	(0.042)	(0.028)	(0.033)	(0.031)	(0.037)	(0.036)	(0.040)	(0.024)	(0.033)	(0.030)	(0.038)
2009	-0.321***	-0.338***	-0.299***	-0.287***	-0.125*	-0.179***	-0.250***	-0.333***	-0.162***	-0.246***	-0.103	-0.215***
	(0.054)	(0.050)	(0.031)	(0.027)	(0.066)	(0.060)	(0.061)	(0.052)	(0.036)	(0.030)	(0.069)	(0.061)
	Pooled NMW effect											
pooled wage gap1	0.147***	0.158***	0.164***	0.192***	0.139***	0.166***	0.110***	0.154***	0.133***	0.177***	0.118***	0.167***
(upratings only)	(0.010)	(0.011)	(0.006)	(0.007)	(0.013)	(0.015)	(0.011)	(0.013)	(0.007)	(0.009)	(0.015)	(0.018)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.10 Annual wage changes: Pooled difference-in-differences, standard control groups, LFS HOURPAY, small workplaces

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
	Percentage wage growth											
pooled	-0.045**	-0.018	-0.063***	-0.047***	-0.038	-0.048	-0.012	0.002	-0.017	-0.024	-0.003	-0.021
	(0.023)	(0.024)	(0.015)	(0.015)	(0.032)	(0.030)	(0.024)	(0.024)	(0.015)	(0.015)	(0.034)	(0.031)
pooled upratings	-0.068***	-0.041*	-0.081***	-0.072***	-0.057*	-0.077**	-0.049*	-0.026	-0.038**	-0.051***	-0.039	-0.058*
	(0.023)	(0.023)	(0.015)	(0.015)	(0.032)	(0.030)	(0.025)	(0.024)	(0.016)	(0.015)	(0.035)	(0.033)
pooled wage gap1	0.006	0.012**	0.003	0.009**	0.003	0.010	0.012*	0.003	-0.008**	-0.002	0.002	-0.006
(upratings only)	(0.006)	(0.006)	(0.003)	(0.004)	(0.008)	(0.008)	(0.007)	(0.007)	(0.004)	(0.004)	(0.009)	(0.010)
pooled wage gap2	0.000	0.005	-0.001	0.001	-0.006	-0.010	0.000	0.000	-0.008*	-0.006	-0.006	-0.009
(upratings only)	(0.007)	(0.007)	(0.004)	(0.005)	(0.010)	(0.010)	(0.007)	(0.007)	(0.004)	(0.005)	(0.011)	(0.011)
	Absolute wage growth											
pooled	-0.133	0.014	-0.216***	-0.151**	-0.055	-0.136	-0.021	0.091	-0.016	-0.039	0.036	-0.024
	(0.095)	(0.102)	(0.059)	(0.062)	(0.141)	(0.138)	(0.100)	(0.104)	(0.057)	(0.060)	(0.147)	(0.143)
pooled upratings	-0.209**	-0.065	-0.279***	-0.247***	-0.107	-0.231	-0.136	0.001	-0.070	-0.127**	-0.037	-0.116
	(0.097)	(0.103)	(0.059)	(0.063)	(0.141)	(0.142)	(0.106)	(0.108)	(0.062)	(0.063)	(0.155)	(0.152)
pooled wage gap1	0.034	0.058**	0.032**	0.071***	0.007	0.031	0.046	0.019	-0.024	-0.006	0.013	-0.037
(upratings only)	(0.024)	(0.024)	(0.014)	(0.015)	(0.035)	(0.037)	(0.028)	(0.031)	(0.016)	(0.018)	(0.041)	(0.048)
pooled wage gap2	0.001	0.023	0.003	0.008	-0.027	-0.052	0.010	0.011	-0.013	-0.008	-0.016	-0.044
(upratings only)	(0.030)	(0.031)	(0.018)	(0.019)	(0.046)	(0.049)	(0.031)	(0.032)	(0.018)	(0.019)	(0.047)	(0.050)
	Probability of positive wage growth											
pooled	-0.053	0.010	-0.051	-0.052	-0.001	0.023	-0.000	0.047	0.032	-0.001	0.054	0.066
	(0.057)	(0.059)	(0.037)	(0.038)	(0.063)	(0.060)	(0.058)	(0.059)	(0.037)	(0.039)	(0.061)	(0.057)
pooled upratings	-0.094	-0.038	-0.082**	-0.102**	-0.032	-0.010	-0.029	0.005	0.020	-0.039	0.000	0.026
	(0.062)	(0.064)	(0.039)	(0.040)	(0.069)	(0.066)	(0.067)	(0.066)	(0.041)	(0.042)	(0.074)	(0.066)
pooled wage gap1	0.018	0.029**	0.037***	0.056***	0.031*	0.055***	0.015	0.009	0.018	0.023*	0.021	0.034
(upratings only)	(0.014)	(0.014)	(0.010)	(0.011)	(0.017)	(0.018)	(0.018)	(0.018)	(0.012)	(0.013)	(0.021)	(0.024)
pooled wage gap2	-0.004	0.006	0.023*	0.023*	0.025	0.031	-0.004	0.001	0.022*	0.021	0.021	0.029
(upratings only)	(0.018)	(0.018)	(0.012)	(0.012)	(0.022)	(0.023)	(0.019)	(0.019)	(0.013)	(0.013)	(0.023)	(0.025)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A6.11 Annual wage changes: Pooled difference-in-differences, standard control groups, LFS HOURPAY, medium/large workplaces

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
	Percentage wage growth											
pooled	-0.088***	-0.136***	-0.070***	-0.080***	-0.056	-0.093***	-0.041	-0.113***	-0.029	-0.075***	-0.005	-0.070*
	(0.031)	(0.027)	(0.024)	(0.023)	(0.043)	(0.035)	(0.032)	(0.027)	(0.024)	(0.023)	(0.046)	(0.037)
pooled upratings	-0.102***	-0.159***	-0.091***	-0.109***	-0.056	-0.088**	-0.059*	-0.137***	-0.047*	-0.099***	-0.001	-0.072*
	(0.030)	(0.027)	(0.024)	(0.023)	(0.043)	(0.036)	(0.033)	(0.029)	(0.025)	(0.024)	(0.047)	(0.039)
pooled wage gap1	0.002	0.012*	0.018***	0.027***	0.025**	0.036***	-0.024***	-0.029***	-0.009	-0.007	0.003	0.002
(upratings only)	(0.007)	(0.007)	(0.006)	(0.006)	(0.010)	(0.009)	(0.009)	(0.009)	(0.007)	(0.007)	(0.012)	(0.012)
pooled wage gap2	-0.017*	-0.027***	0.000	-0.002	0.004	-0.003	-0.020**	-0.027***	-0.008	-0.010	0.008	0.000
(upratings only)	(0.010)	(0.009)	(0.007)	(0.008)	(0.013)	(0.012)	(0.010)	(0.010)	(0.007)	(0.008)	(0.013)	(0.012)
	Absolute wage growth											
pooled	-0.334**	-0.562***	-0.247**	-0.284***	-0.273	-0.421**	-0.140	-0.461***	-0.087	-0.234**	-0.139	-0.410**
	(0.132)	(0.120)	(0.100)	(0.100)	(0.204)	(0.174)	(0.135)	(0.123)	(0.100)	(0.100)	(0.233)	(0.190)
pooled upratings	-0.391***	-0.640***	-0.323***	-0.395***	-0.239	-0.387**	-0.189	-0.536***	-0.129	-0.318***	0.001	-0.341*
	(0.131)	(0.123)	(0.099)	(0.102)	(0.201)	(0.176)	(0.141)	(0.130)	(0.106)	(0.104)	(0.226)	(0.195)
pooled wage gap1	0.025	0.067**	0.081***	0.120***	0.077	0.113**	-0.084**	-0.112***	-0.027	-0.023	-0.125**	-0.093
(upratings only)	(0.033)	(0.034)	(0.023)	(0.026)	(0.048)	(0.046)	(0.037)	(0.042)	(0.028)	(0.033)	(0.057)	(0.059)
pooled wage gap2	-0.082*	-0.124***	0.000	-0.005	-0.018	-0.049	-0.084*	-0.115***	-0.017	-0.029	-0.024	-0.041
(upratings only)	(0.043)	(0.043)	(0.031)	(0.033)	(0.061)	(0.058)	(0.043)	(0.044)	(0.031)	(0.033)	(0.063)	(0.062)
	Probability of positive wage growth											
pooled	-0.170**	-0.273***	-0.092	-0.110*	-0.030	-0.076	-0.084	-0.241***	-0.004	-0.064	0.080	-0.010
	(0.084)	(0.083)	(0.060)	(0.060)	(0.078)	(0.080)	(0.085)	(0.086)	(0.059)	(0.061)	(0.061)	(0.075)
pooled upratings	-0.208**	-0.325***	-0.136**	-0.168***	-0.049	-0.096	-0.106	-0.310***	-0.031	-0.114*	0.090	-0.024
	(0.090)	(0.084)	(0.065)	(0.063)	(0.087)	(0.089)	(0.097)	(0.089)	(0.065)	(0.066)	(0.065)	(0.087)
pooled wage gap1	0.011	0.016	0.030**	0.045***	0.001	0.004	-0.004	0.001	0.001	0.012	0.003	0.005
(upratings only)	(0.018)	(0.021)	(0.014)	(0.016)	(0.003)	(0.006)	(0.019)	(0.021)	(0.017)	(0.019)	(0.005)	(0.007)
pooled wage gap2	-0.010	-0.031	0.007	0.004	0.007	-0.000	-0.010	-0.025	-0.000	0.001	0.020	0.007
(upratings only)	(0.022)	(0.023)	(0.018)	(0.018)	(0.022)	(0.023)	(0.022)	(0.024)	(0.019)	(0.019)	(0.025)	(0.026)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A6.12 Annual percentage wage growth: Vertical difference-in-differences, standard control groups, NES, small firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.068***	0.080***	0.066***	0.071***	0.081***	0.065***
	(0.013)	(0.011)	(0.013)	(0.013)	(0.012)	(0.014)
2001	0.017	0.036***	0.010	0.019	0.036***	0.013
	(0.012)	(0.011)	(0.011)	(0.012)	(0.011)	(0.011)
2003	0.019	0.024**	0.015	0.020	0.023**	0.018
	(0.013)	(0.010)	(0.013)	(0.013)	(0.010)	(0.013)
2004	0.027**	0.050***	0.028***	0.028**	0.051***	0.030***
	(0.013)	(0.009)	(0.011)	(0.012)	(0.009)	(0.011)
2005	0.014	0.012*	0.021**	0.014	0.010	0.019**
	(0.010)	(0.007)	(0.009)	(0.010)	(0.007)	(0.009)
2006	0.025**	0.026***	0.024**	0.026***	0.026***	0.022**
	(0.010)	(0.007)	(0.009)	(0.010)	(0.007)	(0.010)
2007	-0.002	0.011*	0.040***	-0.001	0.010	0.036***
	(0.011)	(0.006)	(0.011)	(0.012)	(0.006)	(0.011)
2008	0.016*	0.017***	0.038***	0.018*	0.016***	0.036***
	(0.009)	(0.006)	(0.007)	(0.009)	(0.006)	(0.007)
2009	0.003	0.004	0.005	0.005	0.003	0.003
	(0.005)	(0.003)	(0.004)	(0.007)	(0.003)	(0.004)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.020***	0.030***	0.043***	0.020***	0.029***	0.041***
(upratings only)	(0.006)	(0.003)	(0.008)	(0.006)	(0.003)	(0.008)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.13 Annual absolute wage growth: Vertical difference-in-differences, standard control groups, NES, small firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.256***	0.297***	0.232***	0.273***	0.302***	0.226***
	(0.053)	(0.046)	(0.057)	(0.054)	(0.048)	(0.058)
2001	0.055	0.142***	0.014	0.064	0.137***	0.023
	(0.053)	(0.046)	(0.050)	(0.052)	(0.045)	(0.051)
2003	0.074	0.092**	0.046	0.070	0.089**	0.056
	(0.058)	(0.044)	(0.056)	(0.058)	(0.044)	(0.057)
2004	0.103*	0.212***	0.120**	0.111*	0.212***	0.131***
	(0.059)	(0.039)	(0.050)	(0.058)	(0.039)	(0.049)
2005	0.063	0.049	0.088**	0.067	0.043	0.084**
	(0.045)	(0.031)	(0.041)	(0.043)	(0.032)	(0.042)
2006	0.096**	0.106***	0.086**	0.102**	0.104***	0.079*
	(0.046)	(0.031)	(0.043)	(0.047)	(0.032)	(0.045)
2007	-0.018	0.044	0.169***	-0.013	0.039	0.155***
	(0.051)	(0.028)	(0.053)	(0.053)	(0.027)	(0.053)
2008	0.061	0.065**	0.159***	0.072	0.063**	0.155***
	(0.042)	(0.027)	(0.031)	(0.044)	(0.028)	(0.031)
2009	0.013	0.014	0.016	0.023	0.010	0.011
	(0.023)	(0.014)	(0.020)	(0.030)	(0.015)	(0.020)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.064***	0.117***	0.158***	0.067***	0.113***	0.149***
(upratings only)	(0.025)	(0.015)	(0.036)	(0.025)	(0.015)	(0.036)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.14 Probability of annual positive wage growth: Vertical difference-in-differences, standard control groups, NES, small firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.260***	0.340***	0.133***	0.269***	0.354***	0.130***
	(0.043)	(0.041)	(0.048)	(0.042)	(0.040)	(0.048)
2001	0.194***	0.226***	0.140**	0.199***	0.215***	0.136**
	(0.051)	(0.048)	(0.055)	(0.050)	(0.049)	(0.055)
2003	0.258***	0.276***	0.228***	0.257***	0.274***	0.231***
	(0.046)	(0.046)	(0.056)	(0.046)	(0.047)	(0.055)
2004	0.254***	0.320***	0.235***	0.260***	0.320***	0.239***
	(0.041)	(0.039)	(0.039)	(0.040)	(0.039)	(0.038)
2005	0.243***	0.218***	0.231***	0.242***	0.220***	0.223***
	(0.048)	(0.044)	(0.046)	(0.049)	(0.044)	(0.048)
2006	0.262***	0.408***	0.270***	0.269***	0.403***	0.269***
	(0.051)	(0.041)	(0.047)	(0.050)	(0.041)	(0.047)
2007	-0.122*	-0.055	0.114*	-0.110	-0.075	0.096
	(0.073)	(0.060)	(0.061)	(0.074)	(0.061)	(0.063)
2008	0.304***	0.397***	0.422***	0.306***	0.398***	0.417***
	(0.050)	(0.030)	(0.033)	(0.050)	(0.030)	(0.034)
2009	-0.159**	-0.198***	-0.172***	-0.157**	-0.204***	-0.185***
	(0.067)	(0.050)	(0.056)	(0.068)	(0.050)	(0.055)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.375***	0.498***	0.648***	0.383***	0.491***	0.638***
(upratings only)	(0.043)	(0.030)	(0.068)	(0.043)	(0.030)	(0.068)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.15 Annual percentage wage growth: Vertical difference-in-differences, standard control groups, NES, medium firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.038**	0.070***	0.042**	0.045**	0.076***	0.049**
	(0.019)	(0.019)	(0.020)	(0.019)	(0.019)	(0.020)
2001	0.042***	0.061***	0.001	0.045***	0.059***	-0.006
	(0.014)	(0.020)	(0.016)	(0.014)	(0.021)	(0.016)
2003	0.027	0.018	0.007	0.028	0.016	0.008
	(0.017)	(0.015)	(0.018)	(0.017)	(0.016)	(0.018)
2004	0.026**	-0.012	0.025	0.031**	-0.016	0.022
	(0.012)	(0.014)	(0.016)	(0.012)	(0.015)	(0.017)
2005	-0.011	0.019	0.024*	-0.018	0.021	0.024*
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
2006	0.027**	0.043***	0.023*	0.030**	0.045***	0.029**
	(0.013)	(0.012)	(0.013)	(0.013)	(0.012)	(0.013)
2007	-0.002	-0.004	-0.006	-0.001	0.002	-0.009
	(0.013)	(0.011)	(0.013)	(0.013)	(0.011)	(0.013)
2008	0.007	0.014	0.008	0.006	0.015*	0.008
	(0.010)	(0.009)	(0.013)	(0.010)	(0.009)	(0.012)
2009	-0.003	0.011**	-0.001	-0.003	0.012**	-0.002
	(0.008)	(0.005)	(0.005)	(0.009)	(0.006)	(0.005)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.018***	0.024***	0.011**	0.018***	0.027***	0.009*
(upratings only)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.16 Annual absolute wage growth: Vertical difference-in-differences, standard control groups, NES, medium firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.114	0.225***	0.158*	0.145*	0.252***	0.178**
	(0.079)	(0.075)	(0.085)	(0.079)	(0.078)	(0.088)
2001	0.149**	0.236***	-0.026	0.164***	0.229***	-0.054
	(0.061)	(0.083)	(0.071)	(0.060)	(0.086)	(0.070)
2003	0.078	0.070	0.008	0.078	0.063	0.008
	(0.074)	(0.063)	(0.083)	(0.074)	(0.067)	(0.083)
2004	0.094	-0.087	0.083	0.118**	-0.108	0.079
	(0.057)	(0.066)	(0.076)	(0.057)	(0.068)	(0.080)
2005	-0.070	0.064	0.091	-0.095	0.073	0.096*
	(0.058)	(0.055)	(0.060)	(0.061)	(0.057)	(0.058)
2006	0.112*	0.199***	0.099	0.123**	0.209***	0.129**
	(0.061)	(0.053)	(0.061)	(0.060)	(0.054)	(0.060)
2007	-0.006	-0.014	-0.036	0.002	0.011	-0.047
	(0.062)	(0.051)	(0.060)	(0.061)	(0.049)	(0.060)
2008	0.022	0.065	0.029	0.027	0.068*	0.029
	(0.047)	(0.040)	(0.059)	(0.046)	(0.041)	(0.057)
2009	-0.031	0.051**	-0.007	-0.037	0.054**	-0.011
	(0.033)	(0.024)	(0.021)	(0.036)	(0.026)	(0.022)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.059**	0.096***	0.027	0.059**	0.108***	0.023
(upratings only)	(0.023)	(0.024)	(0.024)	(0.023)	(0.024)	(0.024)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.17 Probability of annual positive wage growth: Vertical difference-in-differences, standard control groups, NES, medium firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.188***	0.334***	0.244***	0.203***	0.339***	0.248***
	(0.072)	(0.064)	(0.063)	(0.070)	(0.065)	(0.062)
2001	0.233***	0.221***	0.127	0.232***	0.197**	0.105
	(0.068)	(0.082)	(0.088)	(0.069)	(0.085)	(0.093)
2003	0.292***	0.200**	0.140*	0.312***	0.214**	0.133
	(0.069)	(0.093)	(0.081)	(0.065)	(0.094)	(0.083)
2004	0.315***	0.273***	0.277***	0.327***	0.268***	0.278***
	(0.053)	(0.069)	(0.057)	(0.051)	(0.071)	(0.057)
2005	0.136*	0.281***	0.206***	0.114	0.301***	0.216***
	(0.073)	(0.074)	(0.068)	(0.077)	(0.073)	(0.065)
2006	0.321***	0.309***	0.334***	0.320***	0.313***	0.338***
	(0.049)	(0.074)	(0.043)	(0.049)	(0.074)	(0.041)
2007	-0.035	-0.115	-0.093	-0.040	-0.071	-0.096
	(0.096)	(0.098)	(0.088)	(0.100)	(0.102)	(0.091)
2008	0.240***	0.237***	0.276***	0.247***	0.246***	0.273***
	(0.062)	(0.069)	(0.056)	(0.062)	(0.067)	(0.057)
2009	-0.292***	0.009	-0.295***	-0.294***	-0.013	-0.312***
	(0.076)	(0.091)	(0.063)	(0.078)	(0.094)	(0.063)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.388***	0.397***	0.275***	0.389***	0.405***	0.282***
(upratings only)	(0.045)	(0.051)	(0.039)	(0.045)	(0.052)	(0.039)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.18 Annual percentage wage growth: Vertical difference-in-differences, standard control groups, NES, large firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.056***	0.054***	0.064***	0.055***	0.058***	0.067***
	(0.012)	(0.004)	(0.016)	(0.011)	(0.005)	(0.016)
2001	0.040***	0.033***	0.042***	0.041***	0.031***	0.043***
	(0.009)	(0.004)	(0.013)	(0.009)	(0.004)	(0.013)
2003	0.042***	0.030***	0.057***	0.037***	0.032***	0.055***
	(0.013)	(0.006)	(0.015)	(0.013)	(0.005)	(0.014)
2004	0.030***	0.031***	0.053***	0.027***	0.031***	0.050***
	(0.009)	(0.004)	(0.011)	(0.009)	(0.004)	(0.011)
2005	-0.007	0.000	-0.013	-0.007	-0.002	-0.012
	(0.008)	(0.004)	(0.010)	(0.008)	(0.004)	(0.010)
2006	0.027***	0.028***	0.022***	0.024***	0.026***	0.018**
	(0.007)	(0.003)	(0.008)	(0.007)	(0.003)	(0.008)
2007	0.015***	0.008***	0.016**	0.016***	0.009***	0.014*
	(0.005)	(0.003)	(0.007)	(0.006)	(0.003)	(0.007)
2008	0.009	0.005	0.008	0.009	0.005	0.010
	(0.006)	(0.003)	(0.007)	(0.006)	(0.003)	(0.007)
2009	0.008*	0.003	0.014***	0.006	-0.000	0.012***
	(0.005)	(0.002)	(0.004)	(0.004)	(0.002)	(0.004)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.033***	0.028***	0.019***	0.030***	0.029***	0.017***
(upratings only)	(0.004)	(0.002)	(0.003)	(0.004)	(0.002)	(0.003)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.19 Annual absolute wage growth: Vertical difference-in-differences, standard control groups, NES, large firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.258***	0.237***	0.293***	0.263***	0.245***	0.306***
	(0.054)	(0.021)	(0.076)	(0.054)	(0.020)	(0.076)
2001	0.151***	0.129***	0.164***	0.154***	0.123***	0.169***
	(0.040)	(0.016)	(0.057)	(0.040)	(0.015)	(0.056)
2003	0.157***	0.106***	0.201***	0.134**	0.116***	0.207***
	(0.059)	(0.024)	(0.069)	(0.058)	(0.023)	(0.068)
2004	0.127***	0.120***	0.211***	0.113***	0.120***	0.197***
	(0.041)	(0.019)	(0.051)	(0.040)	(0.018)	(0.050)
2005	-0.038	-0.007	-0.071	-0.036	-0.017	-0.071
	(0.036)	(0.018)	(0.046)	(0.036)	(0.018)	(0.046)
2006	0.114***	0.117***	0.079**	0.098***	0.109***	0.062*
	(0.032)	(0.016)	(0.038)	(0.031)	(0.015)	(0.037)
2007	0.065**	0.034***	0.065*	0.070***	0.040***	0.059*
	(0.025)	(0.013)	(0.035)	(0.026)	(0.012)	(0.035)
2008	0.048*	0.030*	0.031	0.045*	0.026*	0.041
	(0.028)	(0.016)	(0.035)	(0.027)	(0.015)	(0.033)
2009	0.042*	0.020*	0.071***	0.033	0.002	0.062***
	(0.022)	(0.011)	(0.021)	(0.020)	(0.010)	(0.021)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.128***	0.108***	0.069***	0.118***	0.112***	0.062***
(upratings only)	(0.018)	(0.008)	(0.016)	(0.018)	(0.007)	(0.016)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.20 Probability of annual positive wage growth: Vertical difference-in-differences, standard control groups, NES, large firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.239***	0.261***	0.140***	0.228***	0.261***	0.139***
	(0.031)	(0.023)	(0.052)	(0.030)	(0.022)	(0.049)
2001	0.260***	0.230***	0.188***	0.255***	0.227***	0.190***
	(0.042)	(0.029)	(0.052)	(0.042)	(0.030)	(0.051)
2003	0.272***	0.281***	0.223***	0.263***	0.281***	0.227***
	(0.035)	(0.033)	(0.041)	(0.034)	(0.034)	(0.039)
2004	0.240***	0.234***	0.234***	0.222***	0.234***	0.231***
	(0.025)	(0.019)	(0.026)	(0.026)	(0.018)	(0.025)
2005	0.127***	0.185***	0.069	0.125***	0.173***	0.071
	(0.039)	(0.025)	(0.044)	(0.039)	(0.026)	(0.044)
2006	0.290***	0.358***	0.311***	0.281***	0.349***	0.301***
	(0.024)	(0.022)	(0.025)	(0.024)	(0.023)	(0.025)
2007	0.033	-0.041	-0.011	0.048	-0.027	-0.020
	(0.044)	(0.031)	(0.048)	(0.044)	(0.032)	(0.049)
2008	0.151***	0.154***	0.198***	0.147***	0.148***	0.193***
	(0.027)	(0.019)	(0.026)	(0.025)	(0.019)	(0.024)
2009	-0.133***	-0.129***	-0.047	-0.154***	-0.165***	-0.083*
	(0.049)	(0.032)	(0.048)	(0.049)	(0.032)	(0.049)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.470***	0.426***	0.308***	0.466***	0.438***	0.303***
(upratings only)	(0.031)	(0.017)	(0.025)	(0.031)	(0.017)	(0.025)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A6.21 Annual wage changes: Pooled vertical difference-in-differences, LFS, small workplaces

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
Control groups:						
	Percentage wage growth					
Standard	0.005	0.016**	-0.002	0.007	0.020***	0.006
HOURPAY	(0.010)	(0.007)	(0.013)	(0.010)	(0.007)	(0.013)
Standard	0.020***	0.022***	0.016***	0.021***	0.024***	0.020***
HRRATE	(0.004)	(0.002)	(0.006)	(0.004)	(0.002)	(0.006)
Percentile	0.016	0.022***	0.013	0.016*	0.027***	0.009
HOURPAY	(0.010)	(0.007)	(0.008)	(0.010)	(0.007)	(0.009)
	Absolute wage growth					
Standard	-0.001	0.057*	-0.046	0.007	0.076**	-0.008
HOURPAY	(0.048)	(0.033)	(0.064)	(0.049)	(0.033)	(0.065)
Standard	0.079***	0.085***	0.056**	0.083***	0.093***	0.072***
HRRATE	(0.017)	(0.009)	(0.026)	(0.018)	(0.010)	(0.027)
Percentile	0.027	0.071**	0.032	0.034	0.090***	0.019
HOURPAY	(0.045)	(0.033)	(0.040)	(0.046)	(0.033)	(0.041)
	Probability of positive wage growth					
Standard	0.019	0.058***	0.034	0.027	0.070***	0.045
HOURPAY	(0.029)	(0.020)	(0.034)	(0.030)	(0.021)	(0.035)
Standard	0.273***	0.294***	0.259***	0.287***	0.315***	0.273***
HRRATE	(0.039)	(0.023)	(0.053)	(0.040)	(0.024)	(0.052)
Percentile	0.053**	0.100***	0.025	0.050*	0.108***	0.016
HOURPAY	(0.027)	(0.021)	(0.021)	(0.028)	(0.021)	(0.021)

Notes: LFS1999Q4-2010; Pooled wage gap 1 (upratings only, i.e. October 2000-October 2009); Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage.

A6.22 Annual wage changes: Pooled vertical difference-in-differences, LFS, medium/large workplaces

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
Control groups:						
	Percentage wage growth					
Standard	0.010	0.029***	0.029*	0.014	0.030***	0.038**
HOURPAY	(0.012)	(0.010)	(0.015)	(0.012)	(0.010)	(0.015)
Standard	0.012***	0.011***	0.014**	0.013***	0.012***	0.015**
HRRATE	(0.004)	(0.003)	(0.006)	(0.004)	(0.003)	(0.006)
Percentile	0.033***	0.032***	0.040***	0.036***	0.029***	0.037***
HOURPAY	(0.011)	(0.011)	(0.010)	(0.011)	(0.011)	(0.010)
	Absolute wage growth					
Standard	0.003	0.111**	0.095	0.012	0.116**	0.129*
HOURPAY	(0.057)	(0.045)	(0.076)	(0.057)	(0.046)	(0.078)
Standard	0.040**	0.038***	0.048*	0.044**	0.045***	0.055*
HRRATE	(0.018)	(0.013)	(0.028)	(0.018)	(0.014)	(0.029)
Percentile	0.117**	0.117**	0.162***	0.133**	0.111**	0.139***
HOURPAY	(0.053)	(0.048)	(0.050)	(0.053)	(0.049)	(0.050)
	Probability of positive wage growth					
Standard	0.044	0.069**	0.033	0.052	0.073**	0.043
HOURPAY	(0.037)	(0.028)	(0.036)	(0.037)	(0.029)	(0.037)
Standard	0.190***	0.180***	0.195***	0.205***	0.194***	0.200***
HRRATE	(0.044)	(0.032)	(0.056)	(0.045)	(0.034)	(0.059)
Percentile	0.115***	0.054*	0.066***	0.120***	0.047	0.062***
HOURPAY	(0.032)	(0.029)	(0.020)	(0.032)	(0.029)	(0.021)

Notes: LFS1999Q4-2010; Pooled wage gap 1 (upratings only, i.e. October 2000-October 2009); Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage.

ANNEX 7

EMPLOYMENT RETENTION BY FIRM SIZE:

DIFFERENCE-IN-DIFFERENCES ESTIMATES OF NMW IMPACTS

A7.1 Annual employment retention: Standard control groups, NES, small firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.047	-0.061	-0.086**	-0.033	-0.057	0.033	-0.060	-0.073	-0.107***	-0.059	-0.053	0.038
	(0.044)	(0.044)	(0.038)	(0.038)	(0.044)	(0.036)	(0.045)	(0.045)	(0.039)	(0.040)	(0.045)	(0.036)
2000	-0.042	-0.042	-0.045	-0.042	0.056	0.014	-0.094	-0.095	-0.080*	-0.073	0.066	0.040
	(0.055)	(0.054)	(0.041)	(0.045)	(0.053)	(0.052)	(0.060)	(0.060)	(0.044)	(0.049)	(0.056)	(0.054)
2001	0.029	0.006	0.025	0.009	-0.042	-0.084*	0.004	-0.016	0.005	-0.006	-0.031	-0.064
	(0.043)	(0.046)	(0.037)	(0.042)	(0.048)	(0.046)	(0.045)	(0.048)	(0.039)	(0.043)	(0.049)	(0.047)
2002	0.002	-0.031	-0.029	0.011	-0.024	-0.066	-0.053	-0.078	-0.056	-0.016	-0.021	-0.045
	(0.051)	(0.052)	(0.041)	(0.042)	(0.058)	(0.056)	(0.056)	(0.056)	(0.044)	(0.045)	(0.061)	(0.056)
2003	-0.023	0.011	0.018	0.033	0.038	0.024	-0.066	-0.016	-0.022	-0.000	0.047	0.032
	(0.049)	(0.047)	(0.039)	(0.040)	(0.050)	(0.045)	(0.052)	(0.049)	(0.042)	(0.042)	(0.051)	(0.046)
2004	0.043	-0.008	0.033	0.068*	0.011	0.009	0.015	-0.010	0.007	0.051	0.015	0.016
	(0.043)	(0.046)	(0.035)	(0.037)	(0.045)	(0.041)	(0.045)	(0.046)	(0.037)	(0.038)	(0.046)	(0.041)
2005	0.000	-0.039	-0.065*	0.020	-0.038	-0.041	-0.024	-0.051	-0.093**	0.014	-0.013	-0.003
	(0.046)	(0.047)	(0.036)	(0.037)	(0.046)	(0.041)	(0.048)	(0.047)	(0.038)	(0.038)	(0.048)	(0.041)
2006	-0.019	-0.045	-0.033	-0.010	-0.051	0.002	-0.046	-0.048	-0.052	-0.012	-0.046	0.015
	(0.045)	(0.047)	(0.036)	(0.038)	(0.044)	(0.040)	(0.047)	(0.048)	(0.037)	(0.039)	(0.046)	(0.040)
2007	-0.020	-0.081	-0.022	-0.010	-0.069	-0.065	-0.047	-0.091*	-0.031	0.000	-0.052	-0.043
	(0.048)	(0.051)	(0.038)	(0.041)	(0.048)	(0.045)	(0.051)	(0.052)	(0.039)	(0.041)	(0.050)	(0.045)
2008	-0.029	-0.022	-0.029	-0.027	0.031	0.021	-0.071	-0.027	-0.054	-0.020	0.064	0.051
	(0.050)	(0.051)	(0.038)	(0.042)	(0.048)	(0.045)	(0.053)	(0.051)	(0.040)	(0.043)	(0.048)	(0.044)
2009	0.025	-0.023	-0.053	-0.025	-0.013	-0.036	-0.027	-0.034	-0.097**	-0.054	0.001	-0.018
	(0.048)	(0.051)	(0.037)	(0.040)	(0.047)	(0.044)	(0.053)	(0.052)	(0.040)	(0.042)	(0.050)	(0.045)
	Pooled NMW effect											
pooled wage gap1	-0.015**	-0.028***	-0.011*	-0.025***	-0.019***	-0.033***	0.002	-0.008	0.010	0.012	-0.009	-0.008
(upratings only)	(0.007)	(0.007)	(0.006)	(0.006)	(0.007)	(0.006)	(0.009)	(0.009)	(0.007)	(0.008)	(0.008)	(0.008)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.2 Annual employment retention within same size firm: Standard control groups, NES, small firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.030	-0.042	-0.076**	-0.027	-0.026	0.021	-0.046	-0.057	-0.094**	-0.055	-0.020	0.026
	(0.045)	(0.044)	(0.037)	(0.039)	(0.044)	(0.037)	(0.046)	(0.045)	(0.039)	(0.040)	(0.044)	(0.038)
2000	0.015	0.005	-0.029	-0.048	0.053	0.014	-0.050	-0.079	-0.045	-0.054	0.078	0.050
	(0.054)	(0.054)	(0.041)	(0.046)	(0.056)	(0.054)	(0.059)	(0.060)	(0.044)	(0.049)	(0.059)	(0.056)
2001	0.024	-0.003	0.013	0.011	-0.066	-0.090**	-0.009	-0.035	0.003	0.003	-0.049	-0.064
	(0.045)	(0.048)	(0.038)	(0.043)	(0.048)	(0.046)	(0.047)	(0.050)	(0.040)	(0.044)	(0.050)	(0.047)
2002	0.028	-0.028	0.010	0.008	-0.040	-0.077	-0.044	-0.093	0.003	-0.008	-0.028	-0.052
	(0.052)	(0.053)	(0.041)	(0.043)	(0.059)	(0.056)	(0.057)	(0.057)	(0.044)	(0.046)	(0.062)	(0.057)
2003	-0.015	0.029	0.027	0.019	0.056	0.049	-0.065	-0.008	0.001	-0.010	0.074	0.064
	(0.050)	(0.048)	(0.040)	(0.042)	(0.051)	(0.046)	(0.052)	(0.050)	(0.043)	(0.044)	(0.052)	(0.046)
2004	0.045	-0.016	0.051	0.054	0.044	0.044	0.015	-0.017	0.032	0.033	0.057	0.056
	(0.045)	(0.047)	(0.036)	(0.039)	(0.045)	(0.041)	(0.047)	(0.048)	(0.038)	(0.040)	(0.046)	(0.041)
2005	-0.022	-0.030	-0.063*	0.004	-0.011	-0.024	-0.055	-0.047	-0.081**	-0.003	0.026	0.022
	(0.048)	(0.047)	(0.036)	(0.038)	(0.046)	(0.042)	(0.050)	(0.048)	(0.038)	(0.039)	(0.048)	(0.042)
2006	-0.017	-0.058	-0.044	-0.050	-0.059	-0.001	-0.051	-0.061	-0.052	-0.055	-0.048	0.015
	(0.047)	(0.048)	(0.036)	(0.039)	(0.044)	(0.041)	(0.048)	(0.048)	(0.038)	(0.040)	(0.046)	(0.042)
2007	-0.027	-0.078	-0.037	-0.049	-0.093*	-0.108**	-0.065	-0.093*	-0.032	-0.035	-0.069	-0.081*
	(0.050)	(0.051)	(0.038)	(0.042)	(0.048)	(0.045)	(0.052)	(0.052)	(0.040)	(0.043)	(0.050)	(0.046)
2008	-0.024	0.003	-0.015	-0.014	-0.003	0.005	-0.074	-0.003	-0.029	-0.001	0.045	0.043
	(0.051)	(0.051)	(0.039)	(0.043)	(0.050)	(0.048)	(0.053)	(0.052)	(0.041)	(0.044)	(0.051)	(0.047)
2009	0.033	-0.028	-0.058	-0.042	-0.000	-0.031	-0.035	-0.049	-0.083**	-0.062	0.027	-0.005
	(0.049)	(0.052)	(0.037)	(0.040)	(0.047)	(0.045)	(0.054)	(0.053)	(0.040)	(0.042)	(0.050)	(0.046)
	Pooled NMW effect											
pooled wage gap1	-0.008	-0.022***	-0.012**	-0.028***	-0.018***	-0.029***	0.008	-0.000	0.008	0.009	-0.011	-0.006
(upratings only)	(0.007)	(0.008)	(0.006)	(0.006)	(0.007)	(0.007)	(0.009)	(0.010)	(0.007)	(0.008)	(0.008)	(0.008)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.3 Annual employment retention: Standard control groups, NES, medium firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.005	0.001	-0.021	-0.024	-0.000	0.041	-0.016	-0.010	-0.003	-0.018	-0.009	0.035
	(0.063)	(0.059)	(0.057)	(0.061)	(0.084)	(0.066)	(0.066)	(0.060)	(0.058)	(0.063)	(0.085)	(0.067)
2000	0.046	0.015	-0.048	-0.124	0.105	0.133	0.058	0.033	-0.042	-0.141*	0.069	0.091
	(0.077)	(0.076)	(0.072)	(0.079)	(0.101)	(0.082)	(0.077)	(0.075)	(0.076)	(0.084)	(0.110)	(0.093)
2001	0.035	-0.005	0.130**	0.100*	0.049	-0.018	0.043	-0.004	0.133**	0.087	0.039	-0.018
	(0.062)	(0.061)	(0.052)	(0.056)	(0.075)	(0.071)	(0.063)	(0.062)	(0.053)	(0.059)	(0.078)	(0.072)
2002	-0.117	-0.052	-0.020	-0.130*	0.006	-0.037	-0.099	-0.056	-0.030	-0.178**	-0.024	-0.043
	(0.085)	(0.079)	(0.070)	(0.077)	(0.088)	(0.082)	(0.089)	(0.081)	(0.074)	(0.080)	(0.094)	(0.088)
2003	-0.011	0.069	-0.054	0.003	0.096	0.145**	-0.013	0.057	-0.063	-0.011	0.104	0.142**
	(0.067)	(0.058)	(0.068)	(0.066)	(0.072)	(0.058)	(0.070)	(0.060)	(0.072)	(0.069)	(0.073)	(0.059)
2004	-0.031	-0.002	0.015	-0.060	0.027	0.045	-0.041	-0.019	0.024	-0.053	0.019	0.055
	(0.065)	(0.059)	(0.058)	(0.065)	(0.069)	(0.062)	(0.067)	(0.060)	(0.060)	(0.066)	(0.071)	(0.061)
2005	-0.025	-0.015	0.062	0.056	0.035	0.009	-0.016	-0.012	0.090*	0.057	0.042	0.023
	(0.062)	(0.058)	(0.053)	(0.057)	(0.068)	(0.064)	(0.063)	(0.059)	(0.054)	(0.059)	(0.071)	(0.063)
2006	0.026	0.006	0.012	0.032	0.081	0.106*	0.023	-0.000	0.013	0.021	0.091	0.124**
	(0.061)	(0.059)	(0.056)	(0.058)	(0.066)	(0.060)	(0.062)	(0.060)	(0.058)	(0.060)	(0.067)	(0.059)
2007	-0.017	-0.128*	-0.024	-0.018	0.016	-0.017	-0.004	-0.146**	-0.015	-0.011	0.000	-0.001
	(0.066)	(0.069)	(0.060)	(0.064)	(0.071)	(0.066)	(0.067)	(0.070)	(0.063)	(0.065)	(0.074)	(0.066)
2008	-0.059	-0.017	-0.014	-0.087	0.039	0.097	-0.045	-0.015	-0.007	-0.105	0.042	0.111*
	(0.067)	(0.064)	(0.061)	(0.070)	(0.071)	(0.061)	(0.068)	(0.065)	(0.064)	(0.072)	(0.073)	(0.061)
2009	0.049	0.080	-0.023	-0.093	0.067	0.116**	0.075	0.091	0.027	-0.045	0.035	0.115**
	(0.059)	(0.056)	(0.057)	(0.064)	(0.067)	(0.057)	(0.060)	(0.055)	(0.060)	(0.065)	(0.074)	(0.058)
	Pooled NMW effect											
pooled wage gap1	-0.028***	-0.036***	-0.018**	-0.036***	-0.020*	-0.039***	-0.018	-0.013	-0.011	-0.007	-0.001	-0.007
(upratings only)	(0.010)	(0.010)	(0.009)	(0.009)	(0.012)	(0.011)	(0.012)	(0.013)	(0.011)	(0.011)	(0.015)	(0.015)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.4 Annual employment retention within same size firm: Standard control groups, NES, medium firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.031	-0.016	-0.037	-0.070	-0.007	0.048	0.012	-0.028	-0.023	-0.069	-0.011	0.041
	(0.065)	(0.062)	(0.057)	(0.061)	(0.083)	(0.070)	(0.067)	(0.063)	(0.059)	(0.063)	(0.085)	(0.072)
2000	0.064	-0.003	-0.036	0.014	0.072	0.124	0.050	-0.006	-0.056	-0.028	0.052	0.079
	(0.084)	(0.083)	(0.072)	(0.076)	(0.109)	(0.096)	(0.089)	(0.087)	(0.076)	(0.080)	(0.112)	(0.103)
2001	0.034	0.008	0.109*	0.130**	0.111	0.030	0.031	-0.000	0.099	0.103	0.111	0.044
	(0.068)	(0.065)	(0.062)	(0.064)	(0.078)	(0.072)	(0.069)	(0.067)	(0.065)	(0.067)	(0.080)	(0.074)
2002	-0.005	0.009	-0.054	-0.103	0.057	-0.010	-0.015	-0.019	-0.106	-0.171**	0.050	-0.016
	(0.084)	(0.080)	(0.071)	(0.072)	(0.090)	(0.085)	(0.087)	(0.083)	(0.072)	(0.069)	(0.096)	(0.090)
2003	0.013	0.047	-0.052	-0.020	-0.027	0.072	-0.004	0.026	-0.081	-0.054	-0.023	0.061
	(0.070)	(0.066)	(0.066)	(0.069)	(0.079)	(0.072)	(0.073)	(0.069)	(0.069)	(0.070)	(0.082)	(0.074)
2004	-0.005	0.062	0.011	-0.043	0.113	0.079	-0.021	0.048	-0.002	-0.045	0.107	0.090
	(0.066)	(0.060)	(0.060)	(0.063)	(0.070)	(0.065)	(0.068)	(0.062)	(0.063)	(0.065)	(0.072)	(0.066)
2005	-0.075	-0.084	0.053	0.066	0.087	0.025	-0.079	-0.085	0.060	0.058	0.103	0.048
	(0.064)	(0.062)	(0.058)	(0.062)	(0.070)	(0.067)	(0.066)	(0.062)	(0.062)	(0.064)	(0.074)	(0.068)
2006	0.069	-0.033	-0.007	0.022	0.073	0.093	0.059	-0.037	-0.021	0.010	0.096	0.114*
	(0.064)	(0.062)	(0.057)	(0.061)	(0.069)	(0.066)	(0.065)	(0.063)	(0.059)	(0.062)	(0.071)	(0.066)
2007	-0.039	-0.125*	-0.108*	-0.075	0.065	0.030	-0.049	-0.147**	-0.129**	-0.081	0.062	0.051
	(0.070)	(0.067)	(0.058)	(0.064)	(0.072)	(0.068)	(0.071)	(0.067)	(0.061)	(0.065)	(0.075)	(0.069)
2008	-0.005	0.001	0.040	0.022	0.071	0.156**	-0.002	0.007	0.026	0.001	0.083	0.173***
	(0.068)	(0.068)	(0.062)	(0.067)	(0.073)	(0.064)	(0.069)	(0.068)	(0.066)	(0.069)	(0.076)	(0.064)
2009	0.042	0.053	-0.070	-0.134**	0.060	0.111*	0.055	0.060	-0.057	-0.111*	0.035	0.111*
	(0.064)	(0.064)	(0.058)	(0.060)	(0.071)	(0.063)	(0.068)	(0.066)	(0.063)	(0.064)	(0.077)	(0.065)
	Pooled NMW effect											
pooled wage gap1	-0.026**	-0.030***	-0.029***	-0.036***	-0.012	-0.039***	-0.003	-0.001	-0.014	0.001	0.003	0.002
(upratings only)	(0.011)	(0.011)	(0.010)	(0.010)	(0.012)	(0.012)	(0.013)	(0.014)	(0.011)	(0.012)	(0.016)	(0.016)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.5 Annual employment retention: Standard control groups, NES, large firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.015	0.074**	-0.080***	-0.111***	-0.045	-0.063	0.014	0.077**	-0.079***	-0.112***	-0.055	-0.058
	(0.045)	(0.037)	(0.029)	(0.026)	(0.057)	(0.050)	(0.046)	(0.037)	(0.030)	(0.026)	(0.059)	(0.052)
2000	0.143**	0.104*	-0.068*	-0.081**	-0.045	-0.006	0.119*	0.101*	-0.055	-0.070*	-0.098	-0.032
	(0.056)	(0.054)	(0.036)	(0.034)	(0.080)	(0.070)	(0.062)	(0.057)	(0.039)	(0.036)	(0.088)	(0.079)
2001	-0.001	-0.017	-0.044*	-0.034	-0.005	0.029	-0.008	-0.006	-0.040	-0.029	-0.026	0.026
	(0.046)	(0.042)	(0.026)	(0.025)	(0.054)	(0.046)	(0.049)	(0.044)	(0.028)	(0.026)	(0.056)	(0.047)
2002	0.003	0.001	-0.048	-0.003	-0.150**	-0.086	0.009	0.011	-0.042	0.006	-0.209***	-0.113*
	(0.056)	(0.052)	(0.030)	(0.027)	(0.064)	(0.060)	(0.060)	(0.054)	(0.032)	(0.029)	(0.068)	(0.064)
2003	0.027	-0.028	-0.051*	-0.053**	-0.012	0.042	0.020	-0.028	-0.055*	-0.061**	-0.037	0.044
	(0.044)	(0.042)	(0.028)	(0.026)	(0.052)	(0.044)	(0.047)	(0.043)	(0.030)	(0.027)	(0.055)	(0.044)
2004	-0.062	-0.054	-0.028	-0.013	-0.018	0.002	-0.061	-0.048	-0.022	-0.018	-0.019	0.004
	(0.040)	(0.037)	(0.023)	(0.022)	(0.045)	(0.039)	(0.042)	(0.038)	(0.024)	(0.022)	(0.047)	(0.039)
2005	-0.049	-0.063*	-0.067***	-0.026	-0.017	-0.009	-0.069	-0.066*	-0.068***	-0.031	-0.014	0.005
	(0.041)	(0.038)	(0.024)	(0.022)	(0.045)	(0.039)	(0.045)	(0.039)	(0.026)	(0.023)	(0.047)	(0.039)
2006	-0.083**	-0.057	-0.069***	0.003	-0.015	0.019	-0.087**	-0.035	-0.066***	-0.002	-0.029	0.036
	(0.038)	(0.035)	(0.023)	(0.022)	(0.044)	(0.039)	(0.041)	(0.035)	(0.025)	(0.022)	(0.045)	(0.039)
2007	-0.040	-0.032	-0.066***	-0.041*	-0.083*	-0.037	-0.019	-0.010	-0.050*	-0.036	-0.081*	-0.014
	(0.039)	(0.036)	(0.024)	(0.024)	(0.046)	(0.041)	(0.042)	(0.036)	(0.026)	(0.024)	(0.048)	(0.041)
2008	-0.059	-0.051	-0.044*	-0.039*	-0.080*	-0.037	-0.061	-0.044	-0.043*	-0.038	-0.080*	-0.017
	(0.038)	(0.036)	(0.024)	(0.023)	(0.044)	(0.040)	(0.041)	(0.036)	(0.026)	(0.024)	(0.046)	(0.040)
2009	-0.058	-0.048	-0.102***	-0.087***	-0.109**	-0.060	-0.045	-0.018	-0.098***	-0.075***	-0.134***	-0.045
	(0.042)	(0.040)	(0.026)	(0.025)	(0.046)	(0.042)	(0.046)	(0.040)	(0.029)	(0.026)	(0.050)	(0.042)
	Pooled NMW effect											
pooled wage gap1	-0.036***	-0.048***	-0.050***	-0.057***	-0.038***	-0.059***	-0.014*	-0.016**	-0.031***	-0.027***	-0.009	-0.010
(upratings only)	(0.006)	(0.006)	(0.004)	(0.004)	(0.007)	(0.007)	(0.008)	(0.008)	(0.005)	(0.005)	(0.010)	(0.010)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.6 Annual employment retention within same size firm: Standard control groups, NES, large firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.043	0.096***	-0.074***	-0.102***	-0.010	-0.041	0.043	0.100***	-0.072**	-0.103***	-0.017	-0.034
	(0.045)	(0.037)	(0.029)	(0.025)	(0.057)	(0.050)	(0.046)	(0.037)	(0.030)	(0.026)	(0.058)	(0.051)
2000	0.115*	0.054	-0.078**	-0.087**	-0.068	-0.025	0.094	0.053	-0.061	-0.075**	-0.109	-0.040
	(0.061)	(0.060)	(0.036)	(0.034)	(0.080)	(0.073)	(0.067)	(0.063)	(0.039)	(0.037)	(0.085)	(0.079)
2001	-0.003	-0.013	-0.051*	-0.037	-0.006	0.015	-0.006	0.000	-0.046	-0.033	-0.023	0.015
	(0.047)	(0.043)	(0.027)	(0.025)	(0.054)	(0.048)	(0.050)	(0.045)	(0.028)	(0.026)	(0.057)	(0.049)
2002	-0.028	-0.026	-0.065**	-0.006	-0.133**	-0.070	-0.017	-0.014	-0.058*	0.002	-0.182***	-0.087
	(0.058)	(0.054)	(0.030)	(0.027)	(0.064)	(0.061)	(0.062)	(0.057)	(0.033)	(0.029)	(0.067)	(0.064)
2003	0.022	-0.025	-0.054*	-0.051*	-0.016	0.043	0.018	-0.025	-0.057*	-0.059**	-0.035	0.049
	(0.045)	(0.042)	(0.028)	(0.026)	(0.053)	(0.045)	(0.048)	(0.044)	(0.030)	(0.028)	(0.055)	(0.046)
2004	-0.056	-0.033	-0.032	-0.010	-0.007	0.012	-0.053	-0.026	-0.025	-0.015	-0.005	0.016
	(0.040)	(0.037)	(0.023)	(0.022)	(0.046)	(0.040)	(0.042)	(0.038)	(0.024)	(0.023)	(0.047)	(0.040)
2005	-0.065	-0.076*	-0.067***	-0.009	-0.024	-0.006	-0.085*	-0.078*	-0.065**	-0.014	-0.016	0.011
	(0.041)	(0.039)	(0.024)	(0.022)	(0.046)	(0.040)	(0.045)	(0.040)	(0.026)	(0.023)	(0.048)	(0.040)
2006	-0.084**	-0.064*	-0.064***	0.021	-0.009	0.025	-0.087**	-0.042	-0.060**	0.016	-0.018	0.045
	(0.038)	(0.035)	(0.023)	(0.022)	(0.044)	(0.039)	(0.041)	(0.036)	(0.025)	(0.022)	(0.045)	(0.039)
2007	-0.037	-0.033	-0.064***	-0.038	-0.084*	-0.036	-0.014	-0.009	-0.045*	-0.032	-0.074	-0.011
	(0.040)	(0.037)	(0.025)	(0.024)	(0.046)	(0.042)	(0.043)	(0.037)	(0.026)	(0.024)	(0.048)	(0.042)
2008	-0.070*	-0.063*	-0.045*	-0.031	-0.096**	-0.047	-0.066	-0.055	-0.043*	-0.029	-0.095**	-0.025
	(0.039)	(0.037)	(0.024)	(0.023)	(0.045)	(0.041)	(0.042)	(0.037)	(0.026)	(0.024)	(0.047)	(0.041)
2009	-0.083*	-0.072*	-0.105***	-0.087***	-0.115**	-0.079*	-0.065	-0.038	-0.101***	-0.073***	-0.139***	-0.062
	(0.043)	(0.041)	(0.026)	(0.025)	(0.046)	(0.042)	(0.047)	(0.042)	(0.029)	(0.026)	(0.050)	(0.043)
	Pooled NMW effect											
pooled wage gap1	-0.043***	-0.055***	-0.055***	-0.062***	-0.042***	-0.065***	-0.017**	-0.016**	-0.035***	-0.030***	-0.011	-0.010
(upratings only)	(0.006)	(0.006)	(0.004)	(0.004)	(0.008)	(0.007)	(0.008)	(0.008)	(0.005)	(0.005)	(0.010)	(0.010)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.7 Annual employment retention: Pooled difference-in-differences, standard control groups, LFS HOURPAY, small workplaces

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
pooled	-0.029	-0.027	0.000	0.043*	-0.055	0.025	-0.041	-0.031	-0.019	0.028	-0.055	0.020
	(0.032)	(0.033)	(0.021)	(0.022)	(0.042)	(0.034)	(0.033)	(0.033)	(0.021)	(0.021)	(0.042)	(0.034)
pooled upratings	-0.019	-0.019	0.010	0.044**	-0.062	0.027	-0.015	-0.015	-0.014	0.028	-0.091	0.021
	(0.033)	(0.034)	(0.021)	(0.020)	(0.045)	(0.033)	(0.032)	(0.033)	(0.022)	(0.020)	(0.056)	(0.033)
pooled wage gap1	-0.012*	-0.009	-0.011**	-0.018***	-0.021***	-0.019***	-0.012*	-0.013*	-0.007	-0.009*	-0.017**	-0.009
(upratings only)	(0.006)	(0.007)	(0.005)	(0.005)	(0.008)	(0.007)	(0.007)	(0.008)	(0.005)	(0.005)	(0.009)	(0.009)
pooled wage gap2	-0.015*	-0.013	-0.014**	-0.011*	-0.018*	-0.005	-0.011	-0.011	-0.014**	-0.011**	-0.017*	-0.006
(upratings only)	(0.008)	(0.009)	(0.006)	(0.006)	(0.011)	(0.010)	(0.008)	(0.008)	(0.006)	(0.005)	(0.010)	(0.009)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A7.8 Annual employment retention: Pooled difference-in-differences, standard control groups, LFS HOURPAY, medium/large workplaces

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
pooled	0.052*	0.074***	0.024	0.019	-0.023	-0.004	0.035	0.061***	0.028	0.016	-0.001	-0.008
	(0.026)	(0.021)	(0.025)	(0.022)	(0.047)	(0.040)	(0.022)	(0.018)	(0.022)	(0.019)	(0.039)	(0.036)
pooled upratings	0.045*	0.069***	0.023	0.012	-0.039	-0.017	0.024	0.055***	0.018	0.005	-0.010	-0.015
	(0.024)	(0.017)	(0.025)	(0.023)	(0.053)	(0.043)	(0.022)	(0.015)	(0.024)	(0.021)	(0.043)	(0.038)
pooled wage gap1	-0.006	-0.002	0.000	-0.005	-0.015*	-0.014*	0.008	0.019**	0.010	0.015**	-0.010	-0.013
(upratings only)	(0.008)	(0.008)	(0.007)	(0.006)	(0.008)	(0.008)	(0.007)	(0.009)	(0.007)	(0.007)	(0.009)	(0.009)
pooled wage gap2	0.012	0.021*	0.010	0.009	-0.013	-0.011	0.010	0.020**	0.013	0.012	-0.010	-0.015
(upratings only)	(0.012)	(0.012)	(0.010)	(0.009)	(0.011)	(0.011)	(0.009)	(0.010)	(0.008)	(0.007)	(0.010)	(0.010)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A7.9 Annual employment retention: Vertical difference-in-differences, standard control groups, NES, small firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-0.120**	-0.066	-0.024	-0.129**	-0.084	-0.002
	(0.052)	(0.050)	(0.044)	(0.053)	(0.051)	(0.045)
2001	0.045	-0.031	-0.070	0.041	-0.009	-0.068
	(0.052)	(0.050)	(0.051)	(0.054)	(0.052)	(0.052)
2003	0.017	0.088*	0.044	-0.007	0.062	-0.005
	(0.053)	(0.046)	(0.048)	(0.059)	(0.053)	(0.055)
2004	0.016	0.081*	0.047	-0.025	0.049	0.024
	(0.050)	(0.041)	(0.041)	(0.056)	(0.045)	(0.044)
2005	-0.039	0.007	-0.029	-0.059	0.025	-0.013
	(0.052)	(0.043)	(0.045)	(0.057)	(0.047)	(0.050)
2006	-0.037	-0.076*	-0.052	-0.064	-0.086*	-0.073
	(0.054)	(0.045)	(0.045)	(0.059)	(0.049)	(0.048)
2007	0.023	-0.019	-0.130**	0.062	0.016	-0.108*
	(0.055)	(0.049)	(0.051)	(0.060)	(0.055)	(0.057)
2008	-0.008	0.031	-0.003	-0.096	0.042	0.009
	(0.057)	(0.048)	(0.051)	(0.065)	(0.054)	(0.056)
2009	-0.046	-0.068	-0.009	-0.087	-0.150***	-0.025
	(0.056)	(0.044)	(0.046)	(0.064)	(0.055)	(0.053)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	-0.025	-0.000	-0.036	-0.031	0.008	-0.034
(upratings only)	(0.026)	(0.020)	(0.038)	(0.027)	(0.021)	(0.038)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.10 Annual employment retention within same size firm: Vertical difference-in-differences, standard control groups, NES, small firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-0.106**	-0.061	0.004	-0.111**	-0.074	0.020
	(0.052)	(0.050)	(0.044)	(0.053)	(0.052)	(0.045)
2001	0.021	-0.049	-0.091*	0.021	-0.026	-0.097*
	(0.055)	(0.051)	(0.052)	(0.057)	(0.053)	(0.054)
2003	0.023	0.082*	0.070	-0.009	0.056	0.014
	(0.056)	(0.048)	(0.050)	(0.062)	(0.056)	(0.057)
2004	0.039	0.092**	0.092**	0.012	0.063	0.068
	(0.052)	(0.043)	(0.042)	(0.057)	(0.047)	(0.045)
2005	-0.036	0.004	-0.004	-0.040	0.014	0.016
	(0.054)	(0.044)	(0.046)	(0.059)	(0.049)	(0.051)
2006	-0.045	-0.092**	-0.046	-0.067	-0.107**	-0.072
	(0.054)	(0.044)	(0.045)	(0.059)	(0.048)	(0.047)
2007	-0.014	-0.066	-0.140***	0.028	-0.018	-0.123**
	(0.058)	(0.050)	(0.050)	(0.066)	(0.057)	(0.057)
2008	0.014	0.045	-0.019	-0.062	0.036	-0.011
	(0.058)	(0.049)	(0.053)	(0.066)	(0.056)	(0.059)
2009	-0.043	-0.089**	0.015	-0.079	-0.183***	-0.002
	(0.056)	(0.044)	(0.046)	(0.065)	(0.054)	(0.054)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.003	-0.010	-0.003	-0.008	-0.005	-0.010
(upratings only)	(0.027)	(0.021)	(0.039)	(0.028)	(0.021)	(0.040)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.11 Annual employment retention: Vertical difference-in-differences, standard control groups, NES, medium firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-0.055	-0.075	-0.087	-0.053	-0.067	-0.102
	(0.071)	(0.076)	(0.081)	(0.071)	(0.078)	(0.084)
2001	0.024	0.022	-0.035	0.032	0.028	-0.036
	(0.066)	(0.078)	(0.070)	(0.068)	(0.082)	(0.072)
2003	0.103*	-0.073	0.082	0.048	-0.047	0.082
	(0.062)	(0.083)	(0.064)	(0.074)	(0.088)	(0.068)
2004	-0.105	-0.096	-0.041	-0.113	-0.092	-0.029
	(0.071)	(0.077)	(0.063)	(0.077)	(0.090)	(0.066)
2005	-0.073	0.040	-0.061	-0.051	0.088	-0.038
	(0.066)	(0.071)	(0.064)	(0.071)	(0.077)	(0.069)
2006	-0.024	0.037	0.014	-0.031	0.021	0.018
	(0.066)	(0.076)	(0.061)	(0.073)	(0.081)	(0.065)
2007	-0.092	-0.024	0.002	-0.096	0.017	0.036
	(0.077)	(0.080)	(0.064)	(0.084)	(0.091)	(0.069)
2008	-0.074	-0.148*	-0.045	-0.062	-0.170*	-0.112
	(0.075)	(0.083)	(0.070)	(0.082)	(0.092)	(0.078)
2009	0.070	-0.063	0.054	0.048	-0.018	0.053
	(0.059)	(0.072)	(0.056)	(0.070)	(0.088)	(0.063)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	-0.039	-0.063*	-0.026	-0.027	-0.046	-0.014
(upratings only)	(0.028)	(0.034)	(0.024)	(0.028)	(0.035)	(0.025)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.12 Annual employment retention within same size firm: Vertical difference-in-differences, standard control groups, NES, medium firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-0.067	-0.140*	-0.100	-0.067	-0.117	-0.117
	(0.072)	(0.077)	(0.081)	(0.073)	(0.079)	(0.084)
2001	-0.000	0.037	0.033	0.002	0.079	0.041
	(0.073)	(0.081)	(0.072)	(0.076)	(0.086)	(0.075)
2003	0.055	-0.099	-0.049	0.011	-0.066	-0.078
	(0.075)	(0.085)	(0.075)	(0.083)	(0.092)	(0.079)
2004	-0.061	-0.086	0.044	-0.045	-0.110	0.051
	(0.071)	(0.077)	(0.064)	(0.077)	(0.088)	(0.068)
2005	-0.148**	-0.011	0.003	-0.115	0.064	0.035
	(0.068)	(0.076)	(0.065)	(0.074)	(0.085)	(0.072)
2006	-0.053	0.008	0.012	-0.068	-0.012	0.029
	(0.063)	(0.075)	(0.062)	(0.070)	(0.080)	(0.066)
2007	-0.086	-0.137*	0.088	-0.154*	-0.099	0.119
	(0.077)	(0.080)	(0.067)	(0.084)	(0.096)	(0.074)
2008	-0.014	-0.028	-0.021	-0.002	-0.038	-0.062
	(0.075)	(0.081)	(0.070)	(0.082)	(0.092)	(0.077)
2009	0.050	-0.096	0.027	0.033	-0.015	0.013
	(0.064)	(0.073)	(0.061)	(0.075)	(0.092)	(0.070)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	-0.020	-0.053	0.008	-0.014	-0.035	0.022
(upratings only)	(0.030)	(0.035)	(0.026)	(0.030)	(0.036)	(0.026)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.13 Annual employment retention: Vertical difference-in-differences, standard control groups, NES, large firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.041	-0.033	-0.039	0.026	-0.025	-0.058
	(0.040)	(0.027)	(0.052)	(0.041)	(0.027)	(0.053)
2001	0.010	-0.059**	0.012	0.006	-0.054*	0.004
	(0.040)	(0.027)	(0.046)	(0.041)	(0.028)	(0.047)
2003	0.017	-0.054*	-0.013	0.022	-0.059*	-0.009
	(0.039)	(0.028)	(0.045)	(0.041)	(0.030)	(0.047)
2004	-0.067*	-0.027	-0.027	-0.095**	-0.029	-0.029
	(0.035)	(0.022)	(0.035)	(0.038)	(0.024)	(0.037)
2005	-0.068*	-0.069***	-0.030	-0.062	-0.083***	-0.029
	(0.036)	(0.024)	(0.035)	(0.039)	(0.027)	(0.037)
2006	-0.134***	-0.064***	-0.032	-0.130***	-0.087***	-0.039
	(0.034)	(0.024)	(0.034)	(0.036)	(0.027)	(0.036)
2007	-0.062*	-0.114***	-0.098***	-0.037	-0.096***	-0.064
	(0.036)	(0.026)	(0.038)	(0.038)	(0.029)	(0.041)
2008	-0.053	-0.055**	-0.078**	-0.057	-0.052*	-0.044
	(0.033)	(0.025)	(0.035)	(0.036)	(0.029)	(0.037)
2009	-0.058	-0.082***	-0.126***	-0.040	-0.088***	-0.143***
	(0.037)	(0.025)	(0.037)	(0.040)	(0.030)	(0.042)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	-0.073***	-0.094***	-0.047***	-0.053***	-0.065***	-0.037***
(upratings only)	(0.017)	(0.010)	(0.013)	(0.017)	(0.010)	(0.013)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.14 Annual employment retention within same size firm: Vertical difference-in-differences, standard control groups, NES, large firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	0.060	-0.030	0.002	0.045	-0.021	-0.014
	(0.040)	(0.028)	(0.051)	(0.041)	(0.028)	(0.053)
2001	0.003	-0.067**	0.007	-0.007	-0.063**	0.000
	(0.042)	(0.027)	(0.047)	(0.044)	(0.028)	(0.049)
2003	0.009	-0.060**	-0.012	0.013	-0.064**	-0.014
	(0.041)	(0.028)	(0.046)	(0.043)	(0.030)	(0.049)
2004	-0.053	-0.040*	-0.020	-0.081**	-0.037	-0.023
	(0.035)	(0.023)	(0.036)	(0.038)	(0.025)	(0.038)
2005	-0.088**	-0.070***	-0.030	-0.082**	-0.082***	-0.021
	(0.037)	(0.024)	(0.036)	(0.040)	(0.027)	(0.038)
2006	-0.149***	-0.063***	-0.023	-0.148***	-0.084***	-0.032
	(0.033)	(0.024)	(0.034)	(0.036)	(0.027)	(0.036)
2007	-0.071*	-0.117***	-0.104***	-0.043	-0.097***	-0.063
	(0.037)	(0.026)	(0.038)	(0.039)	(0.030)	(0.041)
2008	-0.078**	-0.062**	-0.098***	-0.079**	-0.056*	-0.066*
	(0.035)	(0.026)	(0.036)	(0.038)	(0.029)	(0.039)
2009	-0.094**	-0.084***	-0.133***	-0.075*	-0.091***	-0.156***
	(0.038)	(0.026)	(0.037)	(0.042)	(0.030)	(0.042)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	-0.091***	-0.106***	-0.049***	-0.071***	-0.074***	-0.038***
(upratings only)	(0.018)	(0.010)	(0.014)	(0.018)	(0.010)	(0.014)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A7.15 Annual employment retention: Pooled vertical difference-in-differences, standard control groups, LFS, small workplaces

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
Control groups:						
	Employment retention					
Standard	-0.009	-0.021**	-0.026*	-0.005	-0.018*	-0.026**
HOURPAY	(0.012)	(0.010)	(0.014)	(0.011)	(0.009)	(0.013)
Standard	-0.008	-0.009	-0.026	-0.006	-0.006	-0.024
HRRATE	(0.014)	(0.010)	(0.017)	(0.013)	(0.010)	(0.016)
Percentile	0.004	-0.005	-0.003	0.004	-0.001	-0.003
HOURPAY	(0.013)	(0.010)	(0.011)	(0.012)	(0.010)	(0.010)
	Employment retention within same size firm					
Standard	-0.022	-0.023*	-0.019	-0.013	-0.025*	-0.023
HOURPAY	(0.017)	(0.013)	(0.020)	(0.017)	(0.013)	(0.020)
Standard	-0.041**	-0.001	-0.028	-0.038**	0.001	-0.032
HRRATE	(0.019)	(0.013)	(0.024)	(0.019)	(0.013)	(0.024)
Percentile	-0.021	-0.025*	-0.015	-0.018	-0.024*	-0.018
HOURPAY	(0.017)	(0.013)	(0.013)	(0.017)	(0.013)	(0.013)

Notes: LFS1999Q4-2010; Pooled wage gap 1 (upratings only, i.e. October 2000-October 2009); Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage.

A7.16 Annual employment retention: Pooled vertical difference-in-differences, standard control groups, LFS, medium/large workplaces

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
Control groups:						
	Employment retention					
Standard	-0.002	0.007	-0.025	-0.000	0.008	-0.025*
HOURPAY	(0.012)	(0.011)	(0.016)	(0.010)	(0.010)	(0.015)
Standard	-0.016	-0.019*	-0.028*	-0.005	-0.010	-0.026*
HRRATE	(0.013)	(0.011)	(0.015)	(0.011)	(0.010)	(0.014)
Percentile	-0.016	-0.006	0.003	-0.013	-0.004	0.001
HOURPAY	(0.012)	(0.013)	(0.010)	(0.010)	(0.012)	(0.009)
	Employment retention within same size firm					
Standard	-0.028	0.023	-0.051**	-0.034*	0.025	-0.063***
HOURPAY	(0.020)	(0.019)	(0.023)	(0.019)	(0.018)	(0.024)
Standard	-0.043*	-0.053***	-0.083***	-0.031	-0.046***	-0.087***
HRRATE	(0.023)	(0.018)	(0.024)	(0.023)	(0.018)	(0.024)
Percentile	-0.025	0.009	-0.048***	-0.025	0.009	-0.051***
HOURPAY	(0.020)	(0.020)	(0.016)	(0.019)	(0.020)	(0.016)

Notes: LFS1999Q4-2010; Pooled wage gap 1 (upratings only, i.e. October 2000-October 2009); Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage.

ANNEX 8

HOURS CHANGES BY FIRM SIZE:

DIFFERENCE-IN-DIFFERENCES ESTIMATES OF NMW IMPACTS

A8.1 Annual change in basic hours: Standard control groups, NES, small firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.450	0.474	-0.292	0.268	-0.804	-0.902	0.078	0.324	-0.507	0.405	-0.863	-0.939
	(0.774)	(0.719)	(0.617)	(0.673)	(0.763)	(0.714)	(0.749)	(0.695)	(0.613)	(0.668)	(0.761)	(0.711)
2000	2.458***	2.837***	0.134	1.745**	1.035	1.141	0.336	0.826	-0.880	0.877	0.328	0.332
	(0.721)	(0.720)	(0.762)	(0.782)	(0.825)	(0.703)	(0.770)	(0.769)	(0.781)	(0.811)	(0.884)	(0.769)
2001	1.681**	2.242***	-0.280	0.445	1.546**	0.898	0.748	1.628**	-0.783	0.324	1.190	0.505
	(0.713)	(0.753)	(0.624)	(0.633)	(0.747)	(0.660)	(0.689)	(0.728)	(0.626)	(0.627)	(0.747)	(0.668)
2002	1.586*	1.897**	-0.289	-0.694	1.510	1.006	-0.643	0.443	-1.230*	-0.964	0.858	0.437
	(0.959)	(0.908)	(0.678)	(0.730)	(0.923)	(0.870)	(0.991)	(0.913)	(0.718)	(0.740)	(0.949)	(0.895)
2003	1.900**	1.382	-0.612	0.495	0.646	1.566*	0.699	0.594	-1.149*	0.525	0.231	1.071
	(0.912)	(0.878)	(0.677)	(0.648)	(0.943)	(0.889)	(0.919)	(0.863)	(0.695)	(0.649)	(0.940)	(0.878)
2004	1.266	1.272*	-0.019	0.454	0.036	-0.006	0.501	1.401*	-0.295	0.845	-0.392	-0.225
	(0.802)	(0.768)	(0.638)	(0.617)	(0.897)	(0.863)	(0.781)	(0.768)	(0.631)	(0.609)	(0.892)	(0.866)
2005	1.009	-0.068	0.026	0.689	0.698	1.117	-0.322	-0.311	-0.472	0.888	0.113	0.781
	(0.836)	(0.747)	(0.673)	(0.642)	(0.811)	(0.742)	(0.832)	(0.733)	(0.681)	(0.625)	(0.827)	(0.758)
2006	0.946	0.174	-0.627	0.182	1.820*	0.550	0.096	0.199	-1.151*	0.198	1.396	0.298
	(1.043)	(0.953)	(0.688)	(0.711)	(1.002)	(0.900)	(1.037)	(0.959)	(0.680)	(0.693)	(0.998)	(0.898)
2007	1.705*	2.694***	0.426	1.315*	-1.750	-1.385	0.265	2.401**	-0.249	1.104	-2.356**	-1.848*
	(0.997)	(1.001)	(0.705)	(0.683)	(1.092)	(1.051)	(0.991)	(0.999)	(0.711)	(0.673)	(1.115)	(1.068)
2008	2.702***	2.345***	0.066	0.584	-0.182	0.318	1.411	2.378***	-0.444	0.434	-0.668	-0.022
	(0.924)	(0.875)	(0.718)	(0.758)	(0.940)	(0.901)	(0.909)	(0.876)	(0.725)	(0.753)	(0.952)	(0.900)
2009	0.543	0.260	-0.311	0.594	1.023	1.260	-1.198	-0.520	-1.169*	0.281	0.364	0.819
	(1.053)	(1.000)	(0.639)	(0.681)	(0.879)	(0.795)	(1.065)	(0.977)	(0.668)	(0.675)	(0.913)	(0.807)
	Pooled NMW effect											
pooled wage gap1	0.119	-0.145	0.183*	0.152	-0.133	-0.305***	0.117	0.128	0.224*	0.279**	0.123	0.263*
(upratings only)	(0.128)	(0.127)	(0.098)	(0.097)	(0.114)	(0.106)	(0.158)	(0.162)	(0.125)	(0.135)	(0.142)	(0.142)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.2 Annual change in total hours: Standard control groups, NES, small firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	0.679	0.366	-0.099	0.364	-0.639	-0.346	0.323	0.291	-0.347	0.469	-0.694	-0.348
	(0.896)	(0.837)	(0.665)	(0.730)	(0.887)	(0.821)	(0.878)	(0.819)	(0.659)	(0.724)	(0.885)	(0.822)
2000	2.678***	2.824***	-0.168	1.269	2.239**	1.090	0.527	1.000	-1.205	0.281	1.637*	0.319
	(0.799)	(0.792)	(0.842)	(0.858)	(0.907)	(0.826)	(0.848)	(0.844)	(0.863)	(0.884)	(0.990)	(0.886)
2001	1.531*	1.900**	-0.166	0.373	1.358	1.374	0.593	1.330	-0.704	0.213	0.951	0.967
	(0.817)	(0.889)	(0.673)	(0.692)	(0.968)	(0.877)	(0.795)	(0.860)	(0.676)	(0.682)	(0.981)	(0.881)
2002	2.313**	2.062**	-0.370	-0.607	3.984***	2.037**	0.097	0.738	-1.421*	-0.951	3.367***	1.529
	(0.918)	(0.875)	(0.718)	(0.780)	(1.165)	(1.026)	(0.952)	(0.872)	(0.760)	(0.787)	(1.208)	(1.058)
2003	2.416**	1.555*	-0.293	0.949	1.093	1.505	1.207	0.809	-0.853	0.874	0.668	1.098
	(0.965)	(0.930)	(0.732)	(0.691)	(1.076)	(0.996)	(0.972)	(0.911)	(0.749)	(0.689)	(1.088)	(0.986)
2004	1.913**	1.359	0.078	0.902	-0.280	-0.228	1.181	1.481*	-0.244	1.300**	-0.625	-0.396
	(0.833)	(0.835)	(0.700)	(0.668)	(1.086)	(1.044)	(0.814)	(0.834)	(0.692)	(0.659)	(1.084)	(1.045)
2005	0.325	-0.466	0.109	0.575	0.399	1.529*	-1.000	-0.676	-0.459	0.752	-0.111	1.287
	(0.977)	(0.907)	(0.713)	(0.690)	(0.948)	(0.863)	(0.968)	(0.891)	(0.724)	(0.670)	(0.982)	(0.881)
2006	0.672	-0.203	-0.575	-0.022	1.989*	0.749	-0.145	-0.173	-1.149	-0.018	1.652	0.511
	(1.144)	(1.059)	(0.732)	(0.752)	(1.102)	(0.971)	(1.133)	(1.061)	(0.725)	(0.735)	(1.110)	(0.968)
2007	1.619	2.314**	0.413	1.159	-1.703	-0.995	0.214	2.033*	-0.313	0.922	-2.185*	-1.387
	(1.054)	(1.047)	(0.748)	(0.735)	(1.183)	(1.147)	(1.046)	(1.041)	(0.758)	(0.724)	(1.216)	(1.158)
2008	2.568**	2.058**	0.062	0.379	0.427	0.668	1.292	2.103**	-0.483	0.206	0.012	0.386
	(0.996)	(0.928)	(0.777)	(0.807)	(1.042)	(1.021)	(0.986)	(0.932)	(0.784)	(0.803)	(1.073)	(1.027)
2009	0.914	0.621	-0.154	0.822	1.874*	1.316	-0.787	-0.110	-1.162*	0.452	1.353	1.000
	(1.080)	(1.042)	(0.674)	(0.732)	(1.007)	(0.931)	(1.093)	(1.016)	(0.704)	(0.724)	(1.057)	(0.943)
	Pooled NMW effect											
pooled wage gap1	0.105	-0.160	0.193*	0.182*	-0.268**	-0.312**	0.138	0.131	0.224*	0.262*	0.013	0.181
(upratings only)	(0.135)	(0.134)	(0.104)	(0.101)	(0.132)	(0.123)	(0.168)	(0.179)	(0.131)	(0.142)	(0.160)	(0.164)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.3 Annual change in basic hours: Standard control groups, NES, medium firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.074	1.502	0.328	1.108	2.461	2.275	-0.773	1.267	0.088	0.859	2.272	1.919
	(1.255)	(1.202)	(1.126)	(1.203)	(2.187)	(1.763)	(1.196)	(1.161)	(1.166)	(1.229)	(2.174)	(1.740)
2000	1.805	2.120	0.238	0.956	1.223	1.677	-2.153	-1.329	-0.373	0.124	-0.332	-0.154
	(1.377)	(1.290)	(1.320)	(1.412)	(2.227)	(2.058)	(1.320)	(1.255)	(1.385)	(1.509)	(2.251)	(2.093)
2001	4.371***	5.734***	-0.573	0.515	3.024**	4.296***	2.730***	4.919***	-0.960	-0.070	2.323	3.691***
	(1.070)	(1.004)	(1.000)	(0.989)	(1.514)	(1.387)	(0.989)	(0.919)	(1.033)	(1.018)	(1.490)	(1.357)
2002	2.973**	2.873***	-0.836	2.140	3.345**	3.602**	-0.888	0.224	-1.103	1.689	1.596	2.435
	(1.179)	(1.062)	(1.455)	(1.418)	(1.679)	(1.567)	(1.162)	(0.968)	(1.476)	(1.450)	(1.701)	(1.569)
2003	1.118	1.883*	-1.475	-0.010	1.652	2.903	-1.360	0.800	-1.776	-0.440	0.801	2.610
	(1.152)	(1.125)	(1.150)	(1.181)	(1.943)	(1.900)	(1.061)	(1.068)	(1.189)	(1.176)	(1.936)	(1.888)
2004	2.676**	3.213***	0.485	1.570	1.133	1.526	0.871	3.152***	-0.073	1.065	0.302	1.417
	(1.171)	(1.053)	(1.154)	(1.107)	(1.676)	(1.584)	(1.071)	(1.024)	(1.187)	(1.109)	(1.615)	(1.568)
2005	3.253**	3.528***	-0.042	0.228	3.084*	3.413**	1.156	3.059***	-0.690	-0.058	2.287	3.070*
	(1.280)	(1.234)	(0.974)	(1.060)	(1.822)	(1.691)	(1.191)	(1.184)	(1.062)	(1.058)	(1.848)	(1.656)
2006	2.990**	3.741***	-0.325	0.826	1.306	1.815	1.651	4.334***	-0.751	0.607	0.671	1.924
	(1.411)	(1.242)	(1.168)	(1.202)	(1.760)	(1.710)	(1.341)	(1.276)	(1.157)	(1.171)	(1.715)	(1.707)
2007	-0.624	1.473	-1.684	-0.905	2.441	2.678	-2.697*	0.901	-2.278*	-1.317	1.678	2.536
	(1.513)	(1.497)	(1.157)	(1.229)	(1.939)	(1.847)	(1.431)	(1.464)	(1.229)	(1.258)	(1.959)	(1.842)
2008	1.963	2.789**	0.106	1.179	1.545	1.465	0.140	2.795**	-0.387	0.968	0.759	1.353
	(1.307)	(1.295)	(1.090)	(1.184)	(1.940)	(1.828)	(1.228)	(1.283)	(1.131)	(1.167)	(1.937)	(1.828)
2009	0.827	1.929	0.396	2.205*	-0.703	0.356	-1.832	0.785	-0.674	1.014	-2.352	-0.095
	(1.378)	(1.274)	(1.312)	(1.325)	(1.882)	(1.778)	(1.337)	(1.193)	(1.405)	(1.392)	(1.879)	(1.732)
	Pooled NMW effect											
pooled wage gap1	0.329	0.318	-0.058	0.008	0.052	-0.095	0.692***	0.939***	-0.041	0.097	0.617*	0.718**
(upratings only)	(0.203)	(0.200)	(0.159)	(0.157)	(0.271)	(0.261)	(0.233)	(0.221)	(0.190)	(0.208)	(0.339)	(0.342)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.4 Annual change in total hours: Standard control groups, NES, medium firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-0.121	0.669	0.520	0.537	2.765	3.480	-0.824	0.438	0.365	0.391	2.560	3.040
	(1.466)	(1.416)	(1.246)	(1.251)	(2.812)	(2.267)	(1.414)	(1.384)	(1.277)	(1.271)	(2.784)	(2.212)
2000	1.683	2.524	0.606	-0.190	3.673	3.604	-2.121	-0.736	0.223	-0.696	1.646	0.854
	(1.621)	(1.535)	(1.541)	(1.603)	(3.122)	(2.589)	(1.642)	(1.561)	(1.610)	(1.697)	(3.136)	(2.649)
2001	3.574***	5.083***	-0.115	-0.156	3.686*	5.129***	1.974*	4.316***	-0.373	-0.626	2.729	4.298**
	(1.204)	(1.204)	(1.109)	(1.106)	(2.170)	(1.964)	(1.088)	(1.101)	(1.141)	(1.117)	(2.131)	(1.912)
2002	1.632	1.892	-0.014	1.652	3.445	3.532*	-1.890	-0.626	-0.106	1.573	1.076	1.310
	(1.414)	(1.281)	(1.484)	(1.541)	(2.408)	(2.143)	(1.517)	(1.195)	(1.526)	(1.556)	(2.388)	(2.097)
2003	1.128	1.669	-0.373	-0.055	1.424	3.146	-1.103	0.650	-0.543	-0.320	0.130	2.660
	(1.409)	(1.449)	(1.284)	(1.333)	(2.436)	(2.268)	(1.341)	(1.375)	(1.323)	(1.319)	(2.418)	(2.236)
2004	2.221*	2.604**	0.553	0.882	-1.084	-0.160	0.519	2.539**	0.082	0.434	-2.017	-0.240
	(1.335)	(1.274)	(1.222)	(1.189)	(2.411)	(2.194)	(1.214)	(1.251)	(1.261)	(1.197)	(2.415)	(2.180)
2005	3.085**	3.890***	-0.281	-0.699	2.876	3.400	1.153	3.472***	-0.802	-0.853	1.692	3.198
	(1.410)	(1.386)	(1.031)	(1.124)	(2.391)	(2.184)	(1.304)	(1.328)	(1.124)	(1.112)	(2.380)	(2.134)
2006	2.756*	3.183**	-0.145	0.122	2.311	2.330	1.536	3.740**	-0.437	-0.062	1.181	2.609
	(1.603)	(1.435)	(1.267)	(1.323)	(2.335)	(2.143)	(1.508)	(1.506)	(1.243)	(1.288)	(2.231)	(2.133)
2007	-1.328	0.517	-1.512	-1.508	2.215	2.681	-3.340**	-0.060	-1.933	-1.875	0.752	2.468
	(1.640)	(1.619)	(1.264)	(1.295)	(2.763)	(2.559)	(1.528)	(1.580)	(1.337)	(1.320)	(2.785)	(2.542)
2008	1.797	3.049**	-0.085	0.674	1.341	0.658	0.153	3.048**	-0.422	0.536	0.316	0.560
	(1.519)	(1.523)	(1.188)	(1.273)	(2.573)	(2.342)	(1.426)	(1.524)	(1.229)	(1.255)	(2.532)	(2.319)
2009	1.321	2.256	0.112	1.623	0.648	1.037	-1.138	1.177	-0.808	0.475	-1.603	0.347
	(1.547)	(1.485)	(1.417)	(1.390)	(2.426)	(2.227)	(1.512)	(1.382)	(1.521)	(1.448)	(2.375)	(2.162)
	Pooled NMW effect											
pooled wage gap1	0.102	0.128	0.020	0.038	-0.090	-0.272	0.820***	1.046***	0.009	-0.088	0.282	0.401
(upratings only)	(0.307)	(0.304)	(0.168)	(0.168)	(0.349)	(0.335)	(0.312)	(0.290)	(0.203)	(0.225)	(0.456)	(0.480)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.5 Annual change in basic hours: Standard control groups, NES, large firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-1.006	-0.362	0.524	-0.134	0.971	0.186	-1.558	-0.796	0.268	-0.300	0.845	0.173
	(1.096)	(1.056)	(0.568)	(0.527)	(1.488)	(1.257)	(1.035)	(0.994)	(0.558)	(0.516)	(1.488)	(1.245)
2000	5.466***	3.695***	1.371*	1.562**	2.556	3.295**	1.154	-0.128	0.347	0.746	1.168	2.194
	(1.361)	(1.214)	(0.763)	(0.722)	(1.674)	(1.542)	(1.432)	(1.238)	(0.778)	(0.729)	(1.774)	(1.574)
2001	4.801***	4.751***	0.352	0.277	2.163*	3.470***	2.273**	2.897***	-0.195	-0.176	1.300	3.086***
	(0.946)	(0.874)	(0.452)	(0.412)	(1.240)	(1.142)	(0.911)	(0.813)	(0.464)	(0.417)	(1.262)	(1.120)
2002	5.371***	5.859***	0.742	0.559	3.507**	3.799***	1.825*	3.068***	-0.134	-0.112	2.279	3.156**
	(1.050)	(0.989)	(0.568)	(0.528)	(1.521)	(1.404)	(1.077)	(0.971)	(0.586)	(0.536)	(1.678)	(1.441)
2003	5.348***	4.486***	1.127**	0.782	1.984	0.834	2.661**	2.957***	0.571	0.506	1.171	0.473
	(1.064)	(0.989)	(0.523)	(0.486)	(1.445)	(1.332)	(1.037)	(0.947)	(0.537)	(0.484)	(1.492)	(1.329)
2004	3.844***	2.983***	0.749*	-0.023	1.056	1.357	1.967**	2.261***	0.270	-0.173	0.599	1.423
	(0.938)	(0.886)	(0.419)	(0.395)	(1.180)	(1.078)	(0.891)	(0.840)	(0.426)	(0.388)	(1.192)	(1.081)
2005	3.295***	3.572***	0.818*	0.494	1.387	1.647	0.548	2.389***	0.247	0.191	1.095	1.650
	(0.954)	(0.929)	(0.453)	(0.432)	(1.220)	(1.129)	(0.928)	(0.872)	(0.468)	(0.430)	(1.258)	(1.116)
2006	3.813***	4.229***	0.382	0.144	1.793	3.125***	1.870**	3.797***	0.074	0.040	1.300	3.366***
	(0.958)	(0.897)	(0.429)	(0.407)	(1.172)	(1.086)	(0.929)	(0.859)	(0.435)	(0.399)	(1.172)	(1.089)
2007	3.478***	3.459***	1.187***	0.928**	1.059	1.333	0.899	2.596***	0.522	0.622	0.407	1.418
	(0.901)	(0.853)	(0.460)	(0.440)	(1.205)	(1.114)	(0.870)	(0.810)	(0.475)	(0.436)	(1.231)	(1.100)
2008	3.357***	3.170***	0.805*	0.186	0.357	1.156	0.961	2.290***	0.269	-0.138	-0.218	1.212
	(0.876)	(0.833)	(0.442)	(0.418)	(1.142)	(1.062)	(0.851)	(0.783)	(0.458)	(0.410)	(1.177)	(1.056)
2009	3.741***	3.855***	1.268**	0.979**	0.111	0.538	0.622	2.215**	0.341	0.408	-1.096	0.352
	(1.104)	(1.077)	(0.515)	(0.494)	(1.229)	(1.146)	(1.097)	(1.026)	(0.544)	(0.499)	(1.297)	(1.139)
	Pooled NMW effect											
pooled wage gap1	-0.199	-0.497***	0.234***	0.249***	-0.491***	-0.683***	0.461**	0.484**	0.253***	0.183*	0.013	0.245
(upratings only)	(0.147)	(0.143)	(0.073)	(0.073)	(0.189)	(0.183)	(0.182)	(0.190)	(0.091)	(0.098)	(0.235)	(0.241)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.6 Annual change in total hours: Standard control groups, NES, large firms

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
Year:												
1998	-2.336*	-1.093	0.258	-1.117*	2.388	1.370	-2.902**	-1.560	-0.012	-1.294**	2.440	1.392
	(1.241)	(1.178)	(0.642)	(0.598)	(1.684)	(1.442)	(1.190)	(1.127)	(0.636)	(0.591)	(1.681)	(1.439)
2000	4.532***	3.346**	1.303	1.366*	2.689	5.012***	0.231	-0.523	0.180	0.408	2.939	5.543***
	(1.479)	(1.305)	(0.810)	(0.771)	(1.989)	(1.827)	(1.580)	(1.355)	(0.835)	(0.788)	(2.059)	(1.856)
2001	3.705***	4.646***	0.207	0.268	2.029	4.385***	1.177	2.667***	-0.381	-0.251	2.270	4.563***
	(1.040)	(0.971)	(0.481)	(0.440)	(1.422)	(1.343)	(1.024)	(0.931)	(0.506)	(0.457)	(1.454)	(1.323)
2002	5.162***	5.845***	0.871	0.284	3.735**	3.987**	1.485	2.902**	-0.067	-0.489	4.260**	4.444***
	(1.219)	(1.154)	(0.606)	(0.565)	(1.707)	(1.590)	(1.261)	(1.156)	(0.641)	(0.590)	(1.851)	(1.615)
2003	4.185***	3.570***	0.511	0.004	3.072*	2.935*	1.458	1.931*	-0.125	-0.299	3.295**	3.010**
	(1.166)	(1.078)	(0.558)	(0.522)	(1.616)	(1.501)	(1.159)	(1.056)	(0.587)	(0.530)	(1.658)	(1.498)
2004	3.287***	2.801***	0.845*	-0.099	1.069	2.107*	1.339	2.017**	0.307	-0.292	1.083	2.110*
	(1.010)	(0.940)	(0.450)	(0.428)	(1.372)	(1.249)	(0.977)	(0.903)	(0.469)	(0.429)	(1.369)	(1.254)
2005	3.004***	3.677***	0.652	0.074	1.274	2.404*	0.182	2.498***	-0.104	-0.280	1.970	2.553**
	(1.045)	(1.004)	(0.490)	(0.471)	(1.412)	(1.299)	(1.043)	(0.964)	(0.515)	(0.477)	(1.433)	(1.281)
2006	3.034***	3.793***	0.076	-0.316	1.764	3.843***	1.090	3.357***	-0.325	-0.440	1.999	3.898***
	(1.040)	(0.962)	(0.456)	(0.440)	(1.335)	(1.217)	(1.025)	(0.930)	(0.473)	(0.437)	(1.333)	(1.227)
2007	2.902***	3.149***	0.787	0.290	0.917	1.546	0.310	2.191**	0.002	-0.070	1.131	1.625
	(1.008)	(0.946)	(0.494)	(0.479)	(1.353)	(1.235)	(0.995)	(0.914)	(0.520)	(0.480)	(1.376)	(1.228)
2008	2.611***	2.702***	0.765	0.115	0.736	1.919	0.240	1.803**	0.131	-0.242	0.971	1.960*
	(0.957)	(0.896)	(0.469)	(0.451)	(1.290)	(1.188)	(0.950)	(0.858)	(0.497)	(0.450)	(1.315)	(1.189)
2009	3.453***	3.504***	1.368**	0.877*	0.304	1.345	0.238	1.769	0.274	0.282	0.154	1.517
	(1.170)	(1.130)	(0.538)	(0.520)	(1.374)	(1.254)	(1.180)	(1.093)	(0.583)	(0.534)	(1.427)	(1.244)
	Pooled NMW effect											
pooled wage gap1	-0.324**	-0.570***	0.197**	0.237***	-0.562***	-0.555***	0.315	0.383*	0.291***	0.198*	-0.153	0.441
(upratings only)	(0.157)	(0.153)	(0.080)	(0.079)	(0.198)	(0.192)	(0.197)	(0.209)	(0.097)	(0.104)	(0.262)	(0.269)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using 1996-1997 as the pre-period; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.7 Annual hours changes: Pooled difference-in-differences, standard control groups, LFS HOURPAY, small workplaces

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
	Change in basic hours											
pooled	1.606*	1.629**	-0.051	-0.099	-1.035	0.535	0.298	0.984	-0.263	-0.297	-1.680	0.336
	(0.833)	(0.825)	(0.431)	(0.476)	(1.091)	(1.020)	(0.860)	(0.847)	(0.430)	(0.475)	(1.172)	(1.061)
pooled upratings	1.987**	2.081**	0.011	0.041	-0.524	1.012	0.779	1.796**	-0.057	-0.155	-1.719	0.546
	(0.840)	(0.832)	(0.440)	(0.487)	(1.101)	(1.041)	(0.871)	(0.836)	(0.441)	(0.482)	(1.225)	(1.099)
pooled wage gap1	0.095	0.125	-0.080	0.031	-0.089	-0.102	0.191	0.184	-0.064	0.041	0.034	0.171
(upratings only)	(0.156)	(0.157)	(0.098)	(0.097)	(0.208)	(0.217)	(0.207)	(0.224)	(0.116)	(0.127)	(0.264)	(0.295)
pooled wage gap2	0.154	0.224	-0.053	-0.016	-0.177	0.079	0.060	0.200	-0.039	0.012	-0.197	0.099
(upratings only)	(0.214)	(0.213)	(0.125)	(0.127)	(0.290)	(0.296)	(0.223)	(0.224)	(0.123)	(0.127)	(0.308)	(0.309)
	Change in total hours											
pooled	1.108	0.953	-0.704	1.331	-0.719	0.479	1.249	1.111	-0.178	1.411	-0.462	2.092
	(3.963)	(2.354)	(1.256)	(1.252)	(1.941)	(2.053)	(2.755)	(2.287)	(1.488)	(1.568)	(2.168)	(1.835)
pooled upratings	1.357	1.181	-1.020	1.010	-0.767	0.448	-0.622	0.628	-0.829	1.034	-1.696	2.021
	(3.986)	(2.384)	(1.413)	(1.313)	(2.030)	(2.097)	(2.924)	(2.083)	(1.759)	(1.656)	(2.340)	(1.904)
pooled wage gap1	-0.422	-0.284	-1.279**	-0.289	-0.950	-0.592	-0.456	-0.852	-1.377*	-1.092	-1.584**	-0.227
(upratings only)	(0.345)	(0.308)	(0.584)	(0.673)	(0.686)	(0.424)	(0.675)	(0.547)	(0.771)	(0.882)	(0.779)	(0.633)
pooled wage gap2	-0.148	-0.294	-1.580**	-0.822	-0.561	-0.351	-0.299	-0.310	-1.646**	-1.033	-1.300	-0.095
(upratings only)	(0.623)	(0.465)	(0.692)	(0.782)	(0.772)	(0.562)	(0.644)	(0.517)	(0.785)	(0.926)	(0.802)	(0.648)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A8.8 Annual hours changes: Pooled difference-in-differences, standard control groups, LFS HOURPAY, medium/large workplaces

Control variables	no		no		no		yes		yes		yes	
Sex	Female		Female		Male		Female		Female		Male	
Hours	Full-time		Part-time		Full-time		Full-time		Part-time		Full-time	
Control group	1	2	1	2	1	2	1	2	1	2	1	2
	Change in basic hours											
pooled	1.526*	1.625*	-0.026	-0.507	-0.139	1.384	1.168	1.362	0.081	-0.352	-0.662	0.760
	(0.879)	(0.888)	(0.704)	(0.622)	(1.051)	(0.982)	(0.895)	(0.906)	(0.693)	(0.618)	(1.199)	(1.033)
pooled upratings	1.543*	1.872**	0.022	-0.660	0.270	1.390	0.925	1.622*	0.203	-0.562	-0.433	0.476
	(0.891)	(0.905)	(0.711)	(0.633)	(1.054)	(0.974)	(0.891)	(0.900)	(0.701)	(0.626)	(1.177)	(1.017)
pooled wage gap1	-0.417**	-0.332*	-0.075	-0.041	-0.267	-0.411*	-0.117	-0.047	-0.122	-0.058	-0.340	-0.195
(upratings only)	(0.196)	(0.197)	(0.140)	(0.145)	(0.226)	(0.220)	(0.251)	(0.272)	(0.184)	(0.196)	(0.267)	(0.275)
pooled wage gap2	-0.174	0.002	0.074	-0.035	-0.263	-0.148	-0.180	-0.013	0.013	-0.072	-0.451	-0.293
(upratings only)	(0.270)	(0.274)	(0.196)	(0.196)	(0.304)	(0.301)	(0.274)	(0.281)	(0.201)	(0.197)	(0.297)	(0.288)
	Change in total hours											
pooled	4.493**	4.638***	-0.923	0.177	-1.757	-0.334	3.556*	5.247***	0.417	0.633	-2.415	0.499
	(1.760)	(1.665)	(2.295)	(2.349)	(2.032)	(1.591)	(2.085)	(1.928)	(2.630)	(2.696)	(2.296)	(1.886)
pooled upratings	4.181**	4.022**	-0.345	0.181	-0.693	0.521	3.823	4.037**	1.815	1.150	-3.002	1.205
	(1.949)	(1.789)	(2.507)	(2.636)	(2.118)	(1.519)	(2.403)	(2.011)	(3.152)	(3.348)	(2.604)	(2.065)
pooled wage gap1	-0.668	-0.833*	-0.266	-0.655	-0.775	-1.195***	-0.228	0.525	-0.033	-0.505	-1.193**	-0.936*
(upratings only)	(0.660)	(0.485)	(0.537)	(0.679)	(0.477)	(0.367)	(0.791)	(0.850)	(0.658)	(1.011)	(0.584)	(0.505)
pooled wage gap2	-0.034	0.234	-0.174	-0.612	-1.264**	-0.914**	-0.060	0.780	0.025	-0.492	-1.518**	-0.772
(upratings only)	(0.761)	(0.599)	(0.641)	(0.731)	(0.535)	(0.449)	(0.789)	(0.832)	(0.692)	(0.972)	(0.659)	(0.533)

Notes: LFS 1996 - 2010; Pooled models that concern the upratings only exclude 1999; Difference-in-differences estimates using 1996Q4-1998Q1 wave 1 as the pre-period; Evaluation of April 1999 NMW introduction includes wave 1 observations 1998Q2-1999Q1; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage; HOURPAY.

A8.9 Annual change in basic hours: Vertical difference-in-differences, standard control groups, NES, small firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-1.223*	0.301	-1.518**	-1.709**	-0.014	-1.437**
	(0.738)	(0.724)	(0.664)	(0.758)	(0.745)	(0.644)
2001	0.487	0.306	0.959	0.399	-0.178	1.089
	(0.765)	(0.691)	(0.653)	(0.764)	(0.710)	(0.671)
2003	-0.016	-0.196	0.420	-0.224	-0.568	0.478
	(0.908)	(0.704)	(0.916)	(0.986)	(0.843)	(0.935)
2004	-0.201	-0.203	-1.210	-0.588	-0.119	-1.389*
	(0.825)	(0.671)	(0.828)	(0.866)	(0.683)	(0.823)
2005	-1.375*	0.417	0.470	-0.809	0.583	0.164
	(0.810)	(0.748)	(0.746)	(0.821)	(0.806)	(0.776)
2006	-2.031*	-0.430	0.937	-1.616	-0.371	1.218
	(1.079)	(0.759)	(0.954)	(1.225)	(0.780)	(0.958)
2007	0.868	1.072	-3.481***	1.592	1.322	-3.865***
	(1.035)	(0.798)	(1.103)	(1.101)	(0.865)	(1.193)
2008	2.187**	0.099	-0.564	1.651	-0.379	-0.815
	(1.003)	(0.807)	(0.925)	(1.076)	(0.863)	(0.940)
2009	-1.170	0.674	0.743	-0.833	0.517	0.790
	(1.055)	(0.694)	(0.816)	(1.108)	(0.817)	(0.889)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.204	0.509	0.004	0.278	0.385	0.017
(upratings only)	(0.465)	(0.336)	(0.665)	(0.468)	(0.337)	(0.672)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.10 Annual change in total hours: Vertical difference-in-differences, standard control groups, NES, small firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-1.010	0.535	-1.509*	-1.482*	0.187	-1.436*
	(0.862)	(0.798)	(0.841)	(0.885)	(0.817)	(0.839)
2001	-0.358	0.287	0.721	-0.449	-0.145	0.570
	(0.940)	(0.766)	(0.965)	(0.925)	(0.777)	(0.989)
2003	0.443	0.400	0.205	0.252	0.087	0.468
	(0.972)	(0.764)	(1.085)	(1.049)	(0.875)	(1.109)
2004	0.345	0.355	-2.266**	0.149	0.255	-2.081**
	(0.892)	(0.775)	(1.051)	(0.947)	(0.744)	(1.050)
2005	-2.432**	0.264	-0.242	-1.794*	0.514	-0.500
	(1.005)	(0.789)	(0.928)	(0.992)	(0.854)	(0.999)
2006	-2.464**	-0.295	0.862	-2.069	-0.186	1.051
	(1.174)	(0.799)	(1.076)	(1.290)	(0.827)	(1.091)
2007	0.889	0.905	-3.836***	1.631	1.087	-4.463***
	(1.095)	(0.844)	(1.220)	(1.173)	(0.926)	(1.309)
2008	2.017*	0.003	0.031	1.395	-0.438	0.153
	(1.050)	(0.861)	(1.058)	(1.141)	(0.915)	(1.147)
2009	-0.766	0.887	0.973	-0.341	0.681	0.845
	(1.082)	(0.736)	(0.955)	(1.142)	(0.910)	(1.066)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.171	0.543	-0.643	0.259	0.417	-0.682
(upratings only)	(0.515)	(0.361)	(0.796)	(0.518)	(0.362)	(0.804)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.11 Annual change in basic hours: Vertical difference-in-differences, standard control groups, NES, medium firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-2.037*	0.804	0.067	-2.416**	0.679	-0.525
	(1.119)	(1.294)	(1.695)	(1.113)	(1.333)	(1.723)
2001	3.696***	0.172	1.189	3.608***	-0.101	1.199
	(0.906)	(1.083)	(0.931)	(0.973)	(1.126)	(0.950)
2003	-1.840*	-1.797	0.329	-1.830*	-1.662	0.861
	(1.014)	(1.249)	(1.596)	(1.041)	(1.355)	(1.664)
2004	0.216	0.414	-1.016	-0.017	-1.105	-1.005
	(1.039)	(1.265)	(1.155)	(1.159)	(1.473)	(1.153)
2005	1.083	-0.669	1.913	1.111	-0.065	2.283
	(1.206)	(1.116)	(1.380)	(1.323)	(1.255)	(1.520)
2006	1.400	-1.023	-0.251	1.028	-0.692	-0.166
	(1.349)	(1.417)	(1.353)	(1.395)	(1.447)	(1.302)
2007	-1.146	-2.136	0.326	-1.995	-1.603	0.589
	(1.452)	(1.579)	(1.531)	(1.542)	(1.815)	(1.594)
2008	-1.138	0.880	-1.525	-1.088	1.638	-1.984
	(1.286)	(1.439)	(1.599)	(1.344)	(1.619)	(1.689)
2009	-0.626	0.942	-3.037**	-1.396	1.163	-3.709***
	(1.270)	(1.476)	(1.418)	(1.368)	(1.666)	(1.432)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.729	-0.202	0.238	0.694	-0.251	0.238
(upratings only)	(0.465)	(0.583)	(0.549)	(0.469)	(0.579)	(0.554)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.12 Annual change in total hours: Vertical difference-in-differences, standard control groups, NES, medium firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-1.248	1.253	0.639	-1.480	1.030	0.451
	(1.325)	(1.451)	(2.160)	(1.339)	(1.491)	(2.248)
2001	2.800***	0.760	2.531*	2.501**	0.527	2.662*
	(1.026)	(1.193)	(1.316)	(1.097)	(1.243)	(1.357)
2003	-1.893	-0.874	0.679	-1.491	-0.885	1.929
	(1.296)	(1.375)	(1.775)	(1.385)	(1.501)	(1.871)
2004	-0.608	0.900	-3.577**	-1.331	-0.406	-3.320*
	(1.240)	(1.374)	(1.620)	(1.414)	(1.597)	(1.770)
2005	2.055	-1.380	1.236	2.530*	-0.943	2.384
	(1.296)	(1.207)	(1.653)	(1.438)	(1.377)	(1.779)
2006	1.187	-0.855	0.742	1.134	-0.308	-0.300
	(1.502)	(1.589)	(1.588)	(1.524)	(1.594)	(1.587)
2007	-1.924	-1.377	0.120	-2.510	-1.183	0.129
	(1.525)	(1.641)	(2.084)	(1.636)	(1.952)	(2.193)
2008	-0.958	0.762	-1.730	-0.101	1.704	-1.473
	(1.502)	(1.635)	(1.917)	(1.534)	(1.824)	(2.033)
2009	-0.072	0.646	-1.843	-0.505	0.736	-2.450
	(1.413)	(1.625)	(1.603)	(1.535)	(1.851)	(1.682)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	0.603	-0.030	-0.044	0.630	-0.094	-0.068
(upratings only)	(0.533)	(0.636)	(0.711)	(0.537)	(0.634)	(0.719)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.13 Annual change in basic hours: Vertical difference-in-differences, standard control groups, NES, large firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-4.822***	-0.323	-0.998	-4.179***	-0.467	-1.049
	(0.936)	(0.515)	(1.140)	(0.893)	(0.500)	(1.138)
2001	0.444	0.176	0.278	0.387	0.048	0.362
	(0.734)	(0.391)	(0.850)	(0.735)	(0.411)	(0.836)
2003	0.509	0.988**	-0.585	0.464	0.983**	-0.898
	(0.874)	(0.472)	(1.110)	(0.887)	(0.482)	(1.134)
2004	-0.712	0.061	-1.071	-0.572	-0.051	-1.277*
	(0.697)	(0.364)	(0.770)	(0.699)	(0.386)	(0.757)
2005	-1.317*	0.646	-0.711	-1.702**	0.683	-0.202
	(0.761)	(0.428)	(0.830)	(0.776)	(0.483)	(0.853)
2006	-0.800	0.004	0.106	-0.789	0.110	-0.033
	(0.764)	(0.397)	(0.778)	(0.798)	(0.424)	(0.800)
2007	-1.519**	1.045**	-0.662	-1.792***	0.576	-0.852
	(0.651)	(0.449)	(0.815)	(0.683)	(0.467)	(0.850)
2008	-0.743	0.751*	-1.189*	-0.979	0.766	-1.373*
	(0.632)	(0.424)	(0.708)	(0.679)	(0.468)	(0.753)
2009	-0.735	0.964**	-2.861***	-1.215	0.879*	-3.155***
	(0.921)	(0.468)	(0.826)	(0.932)	(0.517)	(0.858)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	-0.651	0.695***	-0.616*	-0.646	0.403**	-0.612*
(upratings only)	(0.398)	(0.196)	(0.330)	(0.396)	(0.193)	(0.332)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.14 Annual change in total hours: Vertical difference-in-differences, standard control groups, NES, large firms

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
1998	-5.410***	-0.371	0.329	-4.804***	-0.512	0.339
	(1.071)	(0.597)	(1.389)	(1.037)	(0.585)	(1.386)
2001	0.042	0.216	0.663	0.135	0.175	0.608
	(0.822)	(0.424)	(1.062)	(0.823)	(0.440)	(1.072)
2003	-0.434	0.394	0.578	-0.526	0.426	0.188
	(0.955)	(0.514)	(1.250)	(0.979)	(0.534)	(1.281)
2004	-0.701	0.249	-0.529	-0.528	0.094	-0.913
	(0.732)	(0.402)	(0.931)	(0.748)	(0.435)	(0.927)
2005	-0.659	0.425	-0.735	-0.891	0.362	-0.071
	(0.834)	(0.466)	(0.990)	(0.866)	(0.523)	(1.009)
2006	-1.244	-0.579	0.281	-1.237	-0.509	0.385
	(0.835)	(0.427)	(0.871)	(0.878)	(0.459)	(0.901)
2007	-1.000	0.332	-1.170	-1.417*	-0.152	-1.353
	(0.736)	(0.479)	(0.883)	(0.764)	(0.499)	(0.932)
2008	-1.069	0.588	-0.889	-1.059	0.481	-1.009
	(0.672)	(0.452)	(0.779)	(0.720)	(0.503)	(0.826)
2009	-0.544	0.978**	-2.484***	-1.036	0.858	-2.813***
	(0.953)	(0.487)	(0.896)	(0.966)	(0.543)	(0.934)
	Pooled NMW effect (2000-2009)					
pooled wage gap1	-0.950**	0.523**	-0.278	-0.938**	0.248	-0.257
(upratings only)	(0.436)	(0.211)	(0.372)	(0.435)	(0.209)	(0.374)

Notes: NES 1994 - 2010; Pooled models that concern the upratings only exclude 1998; Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include quadratic in age, indicator of whether in same job as last year, and a cubic in the real wage.

A8.15 Annual hours changes: Pooled vertical difference-in-differences, standard control groups, LFS, small workplaces

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
Control groups:						
	Change in basic hours					
Standard	0.599**	0.127	0.004	0.374	0.081	-0.150
HOURPAY	(0.293)	(0.207)	(0.406)	(0.301)	(0.206)	(0.418)
Standard	0.164	0.108	-0.394	0.031	0.106	-0.326
HRRATE	(0.367)	(0.203)	(0.385)	(0.382)	(0.207)	(0.391)
Percentile	0.025	0.419**	-0.414*	0.000	0.342*	-0.492**
HOURPAY	(0.294)	(0.207)	(0.242)	(0.298)	(0.207)	(0.243)
	Change in total hours					
Standard	-0.905	-2.683**	-1.184	-1.365	-2.774**	-1.712
HOURPAY	(0.765)	(1.073)	(1.116)	(0.832)	(1.155)	(1.173)
Standard	1.049	-2.959**	1.158	0.327	-3.564**	1.234
HRRATE	(1.451)	(1.345)	(1.954)	(1.555)	(1.450)	(2.056)
Percentile	-2.796**	-2.877**	0.340	-2.923**	-2.648**	-0.425
HOURPAY	(1.322)	(1.294)	(0.913)	(1.380)	(1.314)	(0.807)

Notes: LFS1999Q4-2010; Pooled wage gap 1 (upratings only, i.e. October 2000-October 2009); Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage.

A8.16 Annual hours changes: Pooled vertical difference-in-differences, standard control groups, LFS, medium/large workplaces

Control variables	no	no	no	yes	yes	yes
Sex	Female	Female	Male	Female	Female	Male
Hours	Full-time	Part-time	Full-time	Full-time	Part-time	Full-time
Control groups:						
	Change in basic hours					
Standard	-0.679**	-0.112	-0.329	-0.605*	-0.174	-0.430
HOURPAY	(0.340)	(0.271)	(0.372)	(0.343)	(0.277)	(0.377)
Standard	-0.435	0.320	-0.295	-0.420	0.289	-0.288
HRRATE	(0.353)	(0.266)	(0.407)	(0.359)	(0.264)	(0.424)
Percentile	-0.316	0.036	-0.225	-0.238	0.025	-0.138
HOURPAY	(0.293)	(0.252)	(0.241)	(0.294)	(0.253)	(0.242)
	Change in total hours					
Standard	-1.249	-1.026	-1.515*	-1.371	-0.302	-1.840**
HOURPAY	(1.194)	(1.897)	(0.859)	(1.239)	(1.952)	(0.856)
Standard	-0.920	-0.255	-1.134	-0.829	-0.040	-1.392
HRRATE	(1.771)	(1.356)	(1.125)	(1.800)	(1.434)	(1.363)
Percentile	-0.831	-3.392**	0.268	0.073	-3.138*	0.309
HOURPAY	(1.233)	(1.682)	(0.845)	(1.307)	(1.668)	(0.865)

Notes: LFS1999Q4-2010; Pooled wage gap 1 (upratings only, i.e. October 2000-October 2009); Difference-in-differences estimates using C2 and C3 groups as the benchmarking groups; Control variables include highest educational qualification, temporary job, public sector job, quadratic in age, ethnic minority, marital status, quadratic in job tenure, presence of children under 5, region, and a cubic in the real wage.

ANNEX 9

LOCAL AREA ANALYSIS

A9.1 Impact on Inequality Levels 2000-2010, All Adults

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Log(50th/5th hourly wage percentile)						
Proportion Below NMW t-1	-0.191**	-0.184**	-0.183**	-0.179**	-0.122	-0.092
	(0.085)	(0.087)	(0.086)	(0.090)	(0.088)	(0.084)
Low Qual Share of Employment		-0.005	-0.005		-0.010	-0.030
		(0.035)	(0.036)		(0.035)	(0.035)
No Qual Share of Employment		-0.015	-0.014		0.076	0.079
		(0.050)	(0.050)		(0.056)	(0.056)
Youth Share of Employment		0.004	0.003		-0.083	-0.081
		(0.041)	(0.041)		(0.051)	(0.049)
Manufacturing share of Employment		0.064	0.064		0.166***	0.156***
		(0.041)	(0.041)		(0.046)	(0.044)
Migrant rate			0.013			0.232***
			(0.059)			(0.060)
Observations	1485	1485	1485	1485	1485	1485
Number of Areas	135	135	135	135	135	135
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.2 Impact on Change in Inequality 2000-2010, All Adults

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Log(50th/5th hourly wage percentile)						
Proportion Below NMW t-1	-0.430***	-0.423***	-0.427***	-0.423***	-0.428***	-0.424***
	(0.159)	(0.151)	(0.150)	(0.090)	(0.090)	(0.090)
Low Qual Share of Employment		-0.059	-0.058		-0.035	-0.038
		(0.038)	(0.038)		(0.028)	(0.028)
No Qual Share of Employment		0.076	0.073		0.040	0.044
		(0.058)	(0.057)		(0.039)	(0.038)
Youth Share of Employment		0.019	0.020		0.030	0.029
		(0.041)	(0.041)		(0.033)	(0.033)
Manufacturing share of Employment		0.006	0.006		-0.023	-0.024
		(0.034)	(0.034)		(0.029)	(0.029)
Migrant rate			-0.032			0.057
			(0.062)			(0.047)
Observations	1485	1485	1485	1485	1485	1485
Number of Areas	135	135	135	135	135	135
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.3 Employment Rate in Levels 1998-2010, All Adults

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Employment Rate (proportion)						
Proportion Below NMW t-1 x Years						
1999-2010	0.046	-0.021		0.281***	0.081	
	(0.109)	(0.112)		(0.067)	(0.070)	
1999			-0.069			-0.049
			(0.164)			(0.094)
2000			-0.112			-0.167
			(0.193)			(0.133)
2001			-0.138			-0.005
			(0.130)			(0.102)
2002			-0.066			0.118
			(0.204)			(0.152)
2003			0.195			0.244**
			(0.169)			(0.106)
2004			-0.228			0.128
			(0.169)			(0.090)
2005			-0.151			0.170*
			(0.191)			(0.101)
2006			0.071			0.198*
			(0.153)			(0.101)
2007			0.147			0.194**
			(0.170)			(0.089)
2008			0.095			0.052
			(0.138)			(0.123)
2009			0.068			0.126
			(0.173)			(0.148)
2010			0.172			-0.011
			(0.243)			(0.154)
Proportion below NMW t-1	-0.144	-0.019	-0.020	-0.316***	-0.106	-0.140*
	(0.108)	(0.112)	(0.112)	(0.071)	(0.075)	(0.078)
Low Qual Share of Employment		-0.084***	-0.077**		-0.082***	-0.080***
		(0.031)	(0.030)		(0.023)	(0.022)
No Qual Share of Employment		-0.246***	-0.242***		-0.219***	-0.207***
		(0.046)	(0.045)		(0.032)	(0.032)
Youth Share of Employment		-0.015	-0.021		-0.032	-0.038
		(0.035)	(0.035)		(0.026)	(0.026)
Manufacturing share of Employment		-0.007	-0.005		0.047*	0.053**
		(0.032)	(0.031)		(0.025)	(0.025)
Migrant rate		-0.139**	-0.134**		-0.220***	-0.189***
		(0.056)	(0.056)		(0.040)	(0.044)
Change in migrant rate		0.050	0.045		0.072**	0.052
		(0.046)	(0.046)		(0.033)	(0.035)
Observations	1755	1755	1755	1755	1755	1755
Number of Areas	135	135	135	135	135	135
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.4 Employment Rate in Levels 1998-2010, Adult Females

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Employment Rate (proportion)						
Proportion Below NMW t-1 x Years						
1999-2010	0.010	-0.046		0.271***	0.061	
	(0.099)	(0.094)		(0.066)	(0.054)	
1999			-0.109			-0.008
			(0.122)			(0.069)
2000			-0.057			-0.099
			(0.170)			(0.115)
2001			-0.070			0.048
			(0.132)			(0.072)
2002			-0.173			0.086
			(0.161)			(0.122)
2003			0.049			0.201**
			(0.162)			(0.094)
2004			-0.194			0.046
			(0.141)			(0.078)
2005			0.069			0.117
			(0.157)			(0.092)
2006			-0.061			0.127
			(0.139)			(0.084)
2007			0.100			0.194**
			(0.136)			(0.076)
2008			0.063			0.030
			(0.134)			(0.093)
2009			0.127			0.191
			(0.159)			(0.118)
2010			-0.076			-0.047
			(0.217)			(0.119)
Proportion below NMW t-1	-0.009	0.036	0.039	-0.298***	-0.096*	-0.109*
	(0.097)	(0.092)	(0.092)	(0.068)	(0.057)	(0.059)
Low Qual Share of Employment		-0.151***	-0.147***		-0.112***	-0.111***
		(0.031)	(0.031)		(0.023)	(0.023)
No Qual Share of Employment		-0.110**	-0.108**		-0.174***	-0.165***
		(0.048)	(0.048)		(0.036)	(0.036)
Youth Share of Employment		-0.039	-0.045		-0.033	-0.040
		(0.048)	(0.049)		(0.037)	(0.037)
Manufacturing share of Employment		-0.069	-0.065		-0.016	-0.006
		(0.045)	(0.045)		(0.035)	(0.036)
Migrant rate		-0.231***	-0.216**		-0.338***	-0.306***
		(0.086)	(0.086)		(0.053)	(0.058)
Change in migrant rate		0.085	0.074		0.129***	0.103**
		(0.067)	(0.068)		(0.045)	(0.048)
Observations	1703	1703	1703	1703	1703	1703
Number of Areas	131	131	131	131	131	131
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.5 Employment Rate in Levels 1998-2010, Adult Males

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Employment Rate (proportion)						
Proportion Below NMW t-1 x Years						
1999-2010	0.216	0.080		0.307*	0.159	
	(0.187)	(0.194)		(0.164)	(0.168)	
1999			0.176			0.073
			(0.363)			(0.288)
2000			0.087			-0.008
			(0.337)			(0.290)
2001			-0.165			-0.202
			(0.270)			(0.247)
2002			0.083			0.247
			(0.354)			(0.276)
2003			-0.011			0.230
			(0.331)			(0.253)
2004			-0.070			0.153
			(0.263)			(0.208)
2005			0.029			0.330
			(0.254)			(0.214)
2006			0.361			0.467**
			(0.251)			(0.228)
2007			0.240			0.185
			(0.242)			(0.189)
2008			-0.115			0.020
			(0.264)			(0.227)
2009			0.243			0.214
			(0.294)			(0.265)
2010			0.182			0.098
			(0.337)			(0.291)
Proportion below NMW t-1	-0.245	-0.102	-0.090	-0.296*	-0.131	-0.142
	(0.177)	(0.183)	(0.185)	(0.161)	(0.164)	(0.165)
Low Qual Share of Employment		-0.013	-0.009		-0.055**	-0.055**
		(0.027)	(0.027)		(0.022)	(0.022)
No Qual Share of Employment		-0.250***	-0.255***		-0.202***	-0.201***
		(0.040)	(0.040)		(0.031)	(0.031)
Youth Share of Employment		-0.004	-0.008		-0.034	-0.039
		(0.040)	(0.040)		(0.032)	(0.032)
Manufacturing share of Employment		0.086**	0.086**		0.105***	0.107***
		(0.034)	(0.033)		(0.027)	(0.027)
Migrant rate		-0.115*	-0.111*		-0.136***	-0.121**
		(0.066)	(0.067)		(0.050)	(0.050)
Change in migrant rate		0.016	0.008		0.027	0.017
		(0.055)	(0.056)		(0.040)	(0.040)
Observations	1703	1703	1703	1703	1703	1703
Number of Areas	131	131	131	131	131	131
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.6 Employment Rate in Levels 1998-2010, Adult Full-time Females

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Employment Rate (proportion)						
Proportion Below NMW t-1 x Years						
1999-2010	-0.073	-0.085		0.185**	-0.028	
	(0.128)	(0.127)		(0.087)	(0.088)	
1999			-0.023			-0.096
			(0.160)			(0.116)
2000			-0.254			-0.229
			(0.228)			(0.184)
2001			-0.290*			-0.166
			(0.160)			(0.108)
2002			-0.035			0.000
			(0.207)			(0.155)
2003			-0.036			0.026
			(0.223)			(0.143)
2004			-0.104			-0.037
			(0.183)			(0.129)
2005			-0.012			0.043
			(0.210)			(0.135)
2006			-0.116			-0.006
			(0.221)			(0.168)
2007			0.054			0.170
			(0.251)			(0.152)
2008			-0.228			0.049
			(0.215)			(0.143)
2009			0.375			0.651***
			(0.276)			(0.213)
2010			-0.021			0.250
			(0.405)			(0.216)
Proportion below NMW t-1	-0.044	-0.014	-0.011	-0.289***	-0.057	-0.071
	(0.118)	(0.119)	(0.119)	(0.084)	(0.085)	(0.084)
Low Qual Share of Employment		-0.172***	-0.172***		-0.135***	-0.136***
		(0.037)	(0.036)		(0.028)	(0.028)
No Qual Share of Employment		-0.075	-0.076		-0.148***	-0.138***
		(0.052)	(0.052)		(0.038)	(0.039)
Youth Share of Employment		0.040	0.040		0.086**	0.072*
		(0.052)	(0.052)		(0.041)	(0.041)
Manufacturing share of Employment		-0.018	-0.012		0.015	0.027
		(0.048)	(0.047)		(0.035)	(0.035)
Migrant rate		-0.077	-0.077		-0.285***	-0.241***
		(0.097)	(0.098)		(0.063)	(0.062)
Change in migrant rate		0.021	0.017		0.144***	0.110**
		(0.075)	(0.075)		(0.052)	(0.052)
Observations	1703	1703	1703	1703	1703	1703
Number of Areas	131	131	131	131	131	131
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.7 Employment Rate in Levels 1998-2010, Adult Part-time Females

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Employment Rate (proportion)						
Proportion Below NMW t-1 x Years						
1999-2010	0.017	0.008		0.082*	0.080*	
	(0.070)	(0.070)		(0.045)	(0.045)	
1999			-0.011			0.122**
			(0.090)			(0.054)
2000			-0.059			0.014
			(0.118)			(0.079)
2001			0.118			0.114**
			(0.116)			(0.056)
2002			0.131			0.123*
			(0.101)			(0.070)
2003			-0.083			0.079
			(0.127)			(0.075)
2004			-0.046			0.047
			(0.096)			(0.065)
2005			0.211**			0.115*
			(0.096)			(0.064)
2006			0.001			0.069
			(0.112)			(0.066)
2007			-0.003			0.062
			(0.091)			(0.062)
2008			-0.037			0.002
			(0.097)			(0.070)
2009			-0.091			-0.165**
			(0.108)			(0.084)
2010			-0.083			-0.071
			(0.124)			(0.081)
Proportion below NMW t-1	-0.005	-0.004	0.001	-0.030	-0.033	-0.024
	(0.066)	(0.067)	(0.068)	(0.045)	(0.045)	(0.044)
Low Qual Share of Employment		0.022	0.018		0.022	0.019
		(0.034)	(0.033)		(0.025)	(0.025)
No Qual Share of Employment		-0.033	-0.035		-0.022	-0.032
		(0.044)	(0.044)		(0.033)	(0.034)
Youth Share of Employment		-0.079	-0.082*		-0.113***	-0.105***
		(0.049)	(0.049)		(0.038)	(0.038)
Manufacturing share of Employment		-0.049	-0.056		-0.022	-0.031
		(0.042)	(0.041)		(0.035)	(0.035)
Migrant rate		-0.144*	-0.152*		-0.043	-0.088
		(0.082)	(0.084)		(0.053)	(0.055)
Change in migrant rate		0.063	0.068		-0.018	0.002
		(0.068)	(0.068)		(0.047)	(0.048)
Observations	1703	1703	1703	1703	1703	1703
Number of Areas	131	131	131	131	131	131
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.8 Unemployment Rate in Levels 1998-2010, All Adults

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Unemployment Rate (proportion)						
Proportion Below NMW t-1 x Years						
1999-2010	-0.023	0.001		-0.125**	-0.088*	
	(0.052)	(0.054)		(0.049)	(0.050)	
1999			0.138			0.115
			(0.091)			(0.078)
2000			-0.043			0.112
			(0.098)			(0.075)
2001			-0.059			-0.107
			(0.063)			(0.069)
2002			0.044			-0.145*
			(0.107)			(0.076)
2003			0.071			-0.167**
			(0.093)			(0.068)
2004			0.003			-0.179***
			(0.071)			(0.057)
2005			0.117			-0.205**
			(0.149)			(0.082)
2006			-0.026			-0.141**
			(0.066)			(0.057)
2007			-0.057			-0.153***
			(0.072)			(0.058)
2008			-0.125			-0.091
			(0.089)			(0.085)
2009			-0.036			0.032
			(0.110)			(0.105)
2010			-0.052			0.029
			(0.137)			(0.095)
Proportion below NMW t-1	0.126**	0.081	0.087	0.127**	0.076	0.112**
	(0.051)	(0.056)	(0.055)	(0.050)	(0.051)	(0.050)
Low Qual Share of Employment		0.028	0.026		0.041***	0.037***
		(0.018)	(0.018)		(0.013)	(0.013)
No Qual Share of Employment		0.084***	0.081***		0.041**	0.033*
		(0.022)	(0.022)		(0.018)	(0.018)
Youth Share of Employment		0.039*	0.040*		0.057***	0.058***
		(0.021)	(0.021)		(0.015)	(0.015)
Manufacturing share of Employment		-0.012	-0.012		-0.044***	-0.046***
		(0.016)	(0.016)		(0.014)	(0.014)
Migrant rate		0.086**	0.079**		0.066***	0.040
		(0.034)	(0.033)		(0.024)	(0.025)
Change in migrant rate		-0.019	-0.018		-0.032	-0.019
		(0.029)	(0.028)		(0.020)	(0.020)
Observations	1755	1755	1755	1755	1755	1755
Number of Areas	135	135	135	135	135	135
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.9 Unemployment Rate in Levels 1998-2010, Adult Females

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Unemployment Rate (proportion)						
Proportion Below NMW t-1 x Years						
1999-2010	0.020	0.027		-0.072***	-0.049	
	(0.048)	(0.048)		(0.027)	(0.030)	
1999			0.091			0.017
			(0.064)			(0.048)
2000			0.017			0.054
			(0.086)			(0.057)
2001			-0.004			-0.062
			(0.060)			(0.039)
2002			0.048			-0.048
			(0.077)			(0.046)
2003			-0.002			-0.094**
			(0.075)			(0.046)
2004			0.068			-0.059
			(0.070)			(0.041)
2005			-0.016			-0.113**
			(0.086)			(0.053)
2006			0.071			-0.074*
			(0.060)			(0.039)
2007			-0.047			-0.099**
			(0.064)			(0.042)
2008			-0.091			-0.074
			(0.066)			(0.048)
2009			0.062			-0.028
			(0.119)			(0.079)
2010			0.122			0.014
			(0.120)			(0.071)
Proportion below NMW t-1	0.002	-0.002	-0.002	0.084***	0.061**	0.077**
	(0.050)	(0.049)	(0.049)	(0.028)	(0.031)	(0.031)
Low Qual Share of Employment		0.005	0.003		0.013	0.012
		(0.015)	(0.015)		(0.012)	(0.012)
No Qual Share of Employment		0.015	0.014		0.011	0.005
		(0.021)	(0.020)		(0.016)	(0.016)
Youth Share of Employment		0.045**	0.048**		0.043**	0.046**
		(0.023)	(0.023)		(0.018)	(0.018)
Manufacturing share of Employment		0.020	0.020		-0.007	-0.011
		(0.019)	(0.019)		(0.015)	(0.015)
Migrant rate		0.078**	0.075*		0.065***	0.044
		(0.040)	(0.040)		(0.025)	(0.027)
Change in migrant rate		-0.018	-0.018		-0.035	-0.022
		(0.033)	(0.032)		(0.022)	(0.023)
Observations	1703	1703	1703	1703	1703	1703
Number of Areas	131	131	131	131	131	131
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.10 Unemployment Rate in Levels 1998-2010, Adult Males

	1	2	3	4	5	6
		Unweighted			Weighted	
Dependent Variable: Unemployment Rate (proportion)						
Proportion Below NMW t-1 x Years						
1999-2010	-0.185*	-0.139		-0.287***	-0.242**	
	(0.103)	(0.110)		(0.100)	(0.101)	
1999			0.089			0.159
			(0.231)			(0.181)
2000			0.076			0.245
			(0.196)			(0.188)
2001			-0.035			-0.138
			(0.149)			(0.151)
2002			-0.249			-0.408**
			(0.204)			(0.164)
2003			0.065			-0.247
			(0.195)			(0.166)
2004			-0.133			-0.403***
			(0.137)			(0.129)
2005			-0.168			-0.488***
			(0.150)			(0.146)
2006			-0.234**			-0.378***
			(0.119)			(0.127)
2007			-0.192			-0.312***
			(0.151)			(0.120)
2008			-0.157			-0.256
			(0.180)			(0.158)
2009			-0.297**			-0.059
			(0.152)			(0.168)
2010			-0.266			-0.170
			(0.191)			(0.179)
Proportion below NMW t-1	0.225**	0.164	0.173	0.289***	0.224**	0.256***
	(0.096)	(0.104)	(0.106)	(0.096)	(0.097)	(0.096)
Low Qual Share of Employment		0.033**	0.033**		0.057***	0.055***
		(0.016)	(0.016)		(0.014)	(0.014)
No Qual Share of Employment		0.070***	0.068***		0.044**	0.043**
		(0.025)	(0.025)		(0.021)	(0.020)
Youth Share of Employment		0.071***	0.075***		0.073***	0.075***
		(0.024)	(0.024)		(0.021)	(0.021)
Manufacturing share of Employment		-0.055***	-0.054***		-0.071***	-0.074***
		(0.020)	(0.020)		(0.018)	(0.018)
Migrant rate		0.087**	0.077*		0.084***	0.061*
		(0.043)	(0.044)		(0.033)	(0.032)
Change in migrant rate		-0.014	-0.008		-0.040	-0.027
		(0.036)	(0.036)		(0.028)	(0.026)
Observations	1703	1703	1703	1703	1703	1703
Number of Areas	131	131	131	131	131	131
Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes	Yes

A9.11 Employment Rate in Levels 1998-2010, Unweighted estimates

	All Adults	Adult Females	Adult Males	Adult Full-time Females	Adult Part-time Females
Dependent Variable: Employment Rate (proportion)					
			Unweighted		
Log (NMW / Median Wage) x 1999-2010	0.037	0.023	0.070**	0.013	-0.006
	(0.027)	(0.040)	(0.028)	(0.040)	(0.049)
Controls	No	No	No	No	No
Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes
Log (NMW / Median Wage) x 1999	0.015	0.036	-0.030	0.023	0.057
	(0.044)	(0.043)	(0.052)	(0.051)	(0.061)
2000	-0.013	0.037	-0.072	-0.028	-0.057
	(0.033)	(0.035)	(0.052)	(0.049)	(0.063)
2001	-0.016	0.040	-0.055	-0.056	0.017
	(0.034)	(0.034)	(0.046)	(0.049)	(0.068)
2002	-0.002	0.044	-0.039	-0.027	0.004
	(0.033)	(0.034)	(0.047)	(0.048)	(0.064)
2003	0.044	0.066**	0.035	0.042	-0.029
	(0.033)	(0.032)	(0.046)	(0.062)	(0.071)
2004	-0.016	0.027	-0.052	-0.035	-0.035
	(0.038)	(0.038)	(0.054)	(0.049)	(0.075)
2005	0.007	0.038	0.005	-0.034	0.070
	(0.038)	(0.036)	(0.052)	(0.053)	(0.064)
2006	0.036	0.037	0.029	0.003	0.007
	(0.044)	(0.039)	(0.059)	(0.055)	(0.076)
2007	0.055	0.031	0.045	0.038	-0.047
	(0.038)	(0.036)	(0.051)	(0.065)	(0.068)
2008	0.023	0.051	-0.005	-0.007	-0.039
	(0.035)	(0.038)	(0.049)	(0.053)	(0.073)
2009	0.012	0.038	0.029	0.040	-0.089
	(0.036)	(0.036)	(0.054)	(0.064)	(0.064)
2010	0.030	0.072*	0.001	0.023	-0.086
	(0.041)	(0.039)	(0.061)	(0.065)	(0.074)
Controls	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes

A9.12 Employment Rate in Levels 1998-2010, Weighted estimates

	All Adults	Adult Females	Adult Males	Adult Full-time Females	Adult Part-time Females
Dependent Variable: Employment Rate (proportion)					
			Weighted		
Log (NMW / Median Wage) x 1999-2010	0.056***	0.086***	0.029*	0.060***	0.020
	(0.011)	(0.013)	(0.017)	(0.016)	(0.030)
Controls	No	No	No	No	No
Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes
Log (NMW / Median Wage) x 1999	0.004	0.003	0.012	-0.031*	0.072**
	(0.013)	(0.015)	(0.020)	(0.017)	(0.033)
2000	-0.001	-0.002	-0.006	-0.014	-0.001
	(0.014)	(0.016)	(0.019)	(0.017)	(0.038)
2001	0.014	0.020	0.008	-0.000	0.023
	(0.016)	(0.017)	(0.021)	(0.017)	(0.035)
2002	0.031**	0.033	0.024	0.013	0.006
	(0.016)	(0.021)	(0.018)	(0.019)	(0.038)
2003	0.036**	0.046**	0.020	0.010	0.017
	(0.016)	(0.020)	(0.018)	(0.023)	(0.036)
2004	0.022	0.015	0.025	-0.014	0.018
	(0.014)	(0.018)	(0.019)	(0.020)	(0.036)
2005	0.019	0.011	0.028	0.004	-0.000
	(0.015)	(0.018)	(0.020)	(0.020)	(0.035)
2006	0.031**	0.038**	0.026	0.036*	-0.009
	(0.015)	(0.018)	(0.020)	(0.021)	(0.036)
2007	0.031*	0.048***	0.007	0.031	-0.005
	(0.016)	(0.018)	(0.020)	(0.023)	(0.036)
2008	-0.004	-0.006	-0.008	0.015	-0.041
	(0.017)	(0.019)	(0.024)	(0.023)	(0.045)
2009	0.004	0.032*	-0.019	0.079***	-0.115***
	(0.015)	(0.019)	(0.021)	(0.022)	(0.035)
2010	-0.005	0.015	-0.018	0.025	-0.071*
	(0.016)	(0.019)	(0.022)	(0.022)	(0.040)
Controls	Yes	Yes	Yes	Yes	Yes
Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Dummies	Yes	Yes	Yes	Yes	Yes