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WORKING TIME DISTRIBUTION AND PREFERENCES ACROSS THE LIFE COURSE: A EUROPEAN PERSPECTIVE

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The main objective of this paper is to identify and explain cross-country gender disparities in working time distribution and working time preferences in seven EU-member states (France, Germany, Italy, the Netherlands, Poland and the UK). The selection of these countries has been essentially guided by the fact that they differ considerably in terms of welfare state regime, employment and industrial relation systems, family policies, and gender contract. Our selected European countries still display a high gender polarization of working time and the current gendered working time distribution reflects the resilience of a traditional gender contract. Regarding working time preferences a majority of wage earners seem to be satisfied with their current working time. However, around 45 per cent of dependent employees indicate that they would like to change their current working time, and most of them express a preference for a reduction of working time. Our results also show that male and female employees in our selected countries aspire to some convergence of working time, female employees expressing on average a wish of increasing their working time and men a wish of decreasing working time. Beyond measures favouring a more balanced gender division of labour, our study tends also to show the need of implementing family-friendly, flexible and reversible working time options across the life course. Finally, our results show that the current EU working time directive is not always successful in limiting excessive working time.

Il principale oggetto del testo è l'identificazione la spiegazione delle disparità di genere in materia di orario di lavoro in sette paesi membri della UE (Francia, Germania, Italia, Paesi Bassi, Polonia, e Regno Unito). La scelta dei paesi è stata guidata essenzialmente dalle loro considerevoli differenze in termini di tipologia di *welfare*, livelli occupazionali, politiche per la famiglia, regimi contrattuali di genere e relazioni industriali. Questi paesi mostrano un'elevata polarizzazione di genere nell'orario di lavoro e l'attuale distribuzione di orario in base al genere riflette la permanenza di forme contrattuali tradizionali in quanto al genere. Quanto alle preferenze relative all'orario di lavoro, una maggioranza di lavoratori salariati pare essere soddisfatta della sua situazione. Tuttavia, così non è per il 45% dei lavoratori dipendenti, che nella maggioranza dei casi desidererebbe una riduzione di orario. I nostri risultati mostrano anche che i lavoratori dipendenti sia maschi sia donne aspirano ad una convergenza negli orari, desiderando le donne una aumento di orario e gli uomini una riduzione. Oltre alle misure che possono favorire una più equilibrata divisione del lavoro fra i generi, il nostro studio tende anche a mostrare il bisogno di realizzare opzioni di lavoro favorevoli alla famiglia, flessibili e reversibili nel corso della carriera lavorativa. Infine, si mostra nell'articolo che le direttive europee non sono efficaci nell'impedire l'eccesso di orario di lavoro.

1. Introduction

Since the 1980s, most industrial societies have experienced a marked trend towards the diversification, decentralisation and individualisation of working time patterns, driven

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both by companies' needs for greater adaptability in order to meet market constraints and by large changes in the gender division of labour. At the same time, and linked to the feminisation of the labour force, various forms of working time arrangements have become more widespread, in particular part-time work. The tendency to a diversification of working time has however obvious adverse gender consequences. First, the increased diversity and flexibility of working time have disproportionally been borne by women. Even though the development of part-time work has enabled more women to enter the labour market and limited their definitive withdrawal during parenthood, part-time work often represents a trap: it has a detrimental effect on women's career opportunities as well as a negative impact on earnings development across the life course, with high risk of poverty during retirement.

Drawing on data on the Fifth Working Condition Survey, the main objective of this paper is to identify and explain the cross-country gender disparities in working time and its distribution and working time preferences in seven EU-member states (France Germany, Italy, the Netherlands, Poland and the UK). The selection of these countries has been essentially guided by the fact that they diverge considerably in terms of welfare state regime, employment and industrial relation systems, family policies, and gender contract. While systemically taking a gender perspective we adopt a life course perspective by examining the extent to which crucial life phases among female and male employees affect their working time arrangements and working time preferences and the likelihood to be found in a specific working time arrangements.

The structure of this paper is as follows: Section 2 starts with some theoretical developments regarding the factors affecting working time distribution and preferences. Section 3 describes the data set and addresses some conceptual and methodological issues principally concerning our selection of countries, our life course approach and estimations methods. Cross-country differences in the duration and distribution of working time and working time preferences by gender and across different life phases are presented in section 4. In section 5 the results of estimations are analysed. Finally, section 6 provides some concluding remarks.

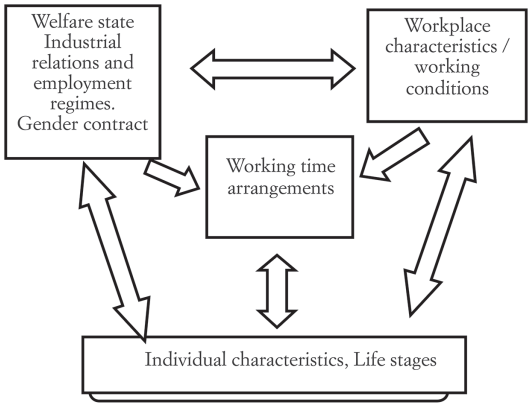
2. Working time distribution and working preferences. Some theoretical remarks

Key dimensions of working time are its duration, its scheduling and distribution. In each of these three dimensions working hours of individuals are embedded within, and subject to, a complex network of interactions, that are both set and negotiated between the relevant actors (FIG. 1). Our basic assumption here is that working time regimes and configurations (across country, gender, industries and occupation) are the outcome of a tripartite interaction between households, employers and the state/social partners. There are strong reasons to believe that preferences and needs of men and women regarding working time arrangement vary also across the life course and that the prevailing time arrangements across the life course are also partly the outcome of this tripartite interactions.

Our basic assumption is that the private life of workers and their respective household contexts have an impact on their working time patterns. At the same time working time is also subject to major economic restrictions – both on the supply and the demand side of the labour market. Regarding the demand side, the imperatives of economic competition

is reflected in employers' strategic choices regarding the efficient use and the adaptability of working times. These, in turn, are influenced, if not fully determined, by industry and occupational specific features which affect key aspects of working conditions to be "typically" encountered in the respective industries or occupations (see Kuemmerling, Lehndorff, 2007). While it is true that both company strategies, industries and/or occupation specificities will impact upon individuals' working times, companies must also take into account (depending on the need for staff retention and sustainable personnel strategies) individuals' private situations, expectations and choices. And last but not least, the social partners and/or the state, depending on the specificity of the industrial relation system, comes in as a setter of a regulatory framework which reflects the attempt to limit negative externalities of certain working time configurations, or promote specific working time arrangements.

Figure 1. Triangle of interactions impacting on working rime arrangements



As shown in the bottom of FIG. 1, a full understanding of working time arrangements and time allocation between men and women requires also taking a life course perspective. The rationale behind this approach is that gender disparities in labour market commitments, the time devoted to market work as well as working time arrangements (such as part-time work) may vary significantly over the life course. As has been confirmed by the latest EWCS-based working time analysis (Burchell *et al.*, 2009), conflicts between the working time requirements of companies on the one hand, and private or family obligations on the other, may be eased by women seeking an individual reduction of working hours with potential long-term adverse consequences in terms of income and career prospects (Fouarge *et al.*, 2008; Geyer, Steiner, 2007).

As shown by recent comparative research men's and women's employment profiles and working time patterns over the life-course exhibit pronounced national differences (e.g. Anxo, Boulin, Fagan, 2006; Anxo *et al.*, 2007). Gender differences in labour force participation, working time patterns and arrangements over the life course may be dependent upon the institutional and societal context, in particular the characteristics of the parental leave systems, the availability and cost of childcare services, the provision of elderly care when older people become partially or fully dependent, and more globally on employment regimes and the

design of tax and family policies. There are also strong reasons to believe that differences in working time regimes across countries may be related to disparities in the occurrence and the timing of key-events over the life cycle (such as the differences in age of leaving the educational system, entering the labour market, age at childbirth, retirement age etc.). Finally, it has also to be taken into account that working time needs and preferences change over the life course and it cannot be taken for granted that these are always identical with actual working time patterns and arrangements.

3. Methodological approach and sample characteristics

3.1. Survey methodology and sample selection

Since 1990s, the European Foundation for the Improvement of Living and Working Conditions has conducted every five years a survey focusing on working conditions across Europe. The main objectives of the EWCS are to assess and quantify working conditions, to identify groups at risk, issues of concern and areas of progress by monitoring trends over time across European countries on a harmonised basis, thereby contributing to European policy development. The 5th European Working Conditions Survey was conducted in 2010. In addition to repeating a large share of the questions posed in previous waves, the questionnaire for the 5th EWCS was updated to identify new and emerging areas of interest. Questions on household characteristics were expanded with respect to age, gender and economic activity of members in the respondents' household. Furthermore questions regarding time devoted to unpaid activities (housework and care activities) were asked. Fieldwork of the 5th EWCS took place from January to June 2010. Almost 44,000 workers, between 1,000 and 4,000 per country, were interviewed in the EU-27, Norway, Croatia, the Former Yugoslav Republic of Macedonia (FYROM), Albania, Kosovo, Montenegro and Turkey. Thus, the 5th EWCS covers the widest geographical area and the biggest sample size in the survey's history.

In the present paper we restrict our analysis to seven EU-member states: France, Germany, Italy, the Netherlands, Poland, Sweden and the United Kingdom. These countries were selected because they diverge significantly in terms of welfare state, employment and working time regimes, industrial relation systems, working-time policy and family reconciliation policies. This institutional diversity allows us to isolate and analyse the impact of the institutional set-up on the gender pattern of working time and also working time preferences over the life course.

All interviews were conducted face-to-face in the respondent's own household with a questionnaire which is translated into relevant languages (25 languages and 16 language variants). The survey sample is representative for employees and self-employed workers aged 15 years and over (16 years and over in Spain and the UK) in each of the countries covered. In each country, a multi-stage, stratified random sampling design was used. Representativeness is given with regard to gender, age, region, occupation and sector of economic activity of respondents, based on a comparison of EWCS with the European Labour Force Survey (EUROSTAT) and calculation of corresponding weights. To ensure the representativeness of results based on the 5th EWCS data, three types of weights need to be applied: selection probability weighting, non-response (or post-stratification) weighting, and cross-national weighting. In the empirical part of the paper we used post-stratification weighting both for country results and aggregate levels, thus providing average figures for respective countries.

3.2. Stylized household life course typology

There are strong reasons to believe that the time devoted to paid work and unpaid domestic activities, the incidence of various forms of working time arrangements as well as working time preferences and needs vary across the life course. In order to reflect this life cycle component of working time arrangements and preferences we use in the present report a variant of the family lifecycle approach (see Anxo *et al.*, 2011).

Whereas the traditional family life cycle approach implies a uniform sequence of household forms, the sequencing of life stages appears to be more diversified in contemporary societies. Our typology does not assume that everyone moves through a uniform sequence of household formations across their life course. Rather we select a range of household categories coinciding with widely experienced transitions and phases in the life course as a basis for comparative analysis, as detailed in box 1. These are young, single adults without children who are still living with their parents (category 1) or have left the parental home (category 2), union formation (cohabiting couples without children, category 3), parenting in two-parent households (by differentiating couples according to the age of children, categories 4-6), midlife "empty nest" couple households (middle-aged couples without cohabitating children, category 7) older couples (category 8) or singles without resident children in the transitional period to retirement (category 9). One consequences of our choice regarding our stylised life course is that important and in some countries growing household categories are de facto excluded, for example, lone parents. However, our typology covers more than 80 per cent of all households found in our selected sample of seven countries at a given point of time (2010)[1]. In order to illustrate and compare the situation of lone parents with other household categories we conduct nevertheless separate estimations for this category.

Box 1. Stylised household life-course typology

Single and childless young people
Single persons (18-35 years), living with their parents or relatives
Single persons (under 46 years), without children
Childless couples
Younger couples (woman under 46 years), without children
Couple households with resident children
The age of the youngest child is used to indicate the nature of parental responsibilities across the life course, from the intense nature of pre-school childcare through to the different needs and demands of children as they grow up and become more independent.
Couple with youngest children (age of children is under 7 years)
Couple with young children (age of children 7-12 years)
Couple with teenage children (age of children 13-18 years)
Older couples without children living at home
Midlife 'empty nest' couples without resident children (woman aged 46-59 years)
Older couples without resident children (woman aged 60 years or older)
Older singles
Single persons (aged 46 years or older), without resident children

[1] The distribution of the working population into our nine life cycle stages are as follows: single persons still living with their parents (18-35): 6.7%; singles (under 46 years) without children: 13.1%; younger couples (woman under 46 years) without children: 12.9%, couples with children under 7 years: 17.2%; couples with children between 7-12 years: 12.0%; couple with teenage children between 13 and 18 years: 11.8%; midlife empty nest couples without resident children: 12.9%; older couples without resident children: 3.4%; singles (aged 46 or older) without resident children: 10.0%.

Our stylized household typology makes it possible to perform a cross-country comparison of paid and unpaid working hours for women and men in different life stages as a means of illustrating the impact of the societal context on the prevailing gender division of labour over the life course, for wage earners and self employed.

Although our approach is not longitudinal the analysis might serve as a heuristic device to identify country differences in the time devoted to market work and domestic activities across different life stages in our sample of countries. This approach also makes it possible to identify at which phases in the life course, long working hours, atypical work, the discrepancies between actual and preferred working time or the possibility to combine paid work with other activities are the more limited or prevalent. However, in our interpretation we bear in mind the usual drawbacks associated with cross-sectional analysis; in particular, the difficulties of disentangling age, cohort and period effects.

3.3. Data limitations and estimation techniques

The Working Condition Survey presents some drawbacks when one wants to assess the extent of labour market integration of men and women and the gender division of labour across the life course. Besides the above mentioned drawbacks linked to the cross-sectional nature of the dataset, the EWCS sample is for obvious reasons restricted to working women and men, thus disregarding individuals outside the labour force. In other words, it is important to be aware of the fact that the EWCS is not a representative sample of the active population but restrains the population to economically active individuals (wage earners and the self-employed). For some countries with for instance low employment rates (in particular for women, like Italy and Poland) this may create some potential selection bias regarding working time patterns and preferences as well as the time devoted to housework and/or care obligations. That is some cross-country and gender differences in, say, the duration of working time or unpaid work across our household typologies can be ascribed at least partly to the sample selection processes. At the individual level more labour market-oriented women and men could for example be less inclined to have children or have a higher tendency to outsource some household activities affecting in this way working time and the gender division of labour. On the other hand, the survey provides no information about those who – due to care obligations or other reasons – did not manage to stay in the labour force and dropped out of the labour market. Obviously, these potential sample selection biases must be borne in mind when interpreting the results of our estimations. In the same way the reader must be aware that the profile of working time and/or unpaid work at different life stages are also restricted to the working population.

Working hours in the EWCS are self-reported, which applies for most individual-level surveys. To the extent that individuals may over- or under-estimate their actual working hours this might produce measurement errors and bias in the estimation of the marginal effects. Such issues are also present when data are collected by other means, such as employer-level surveys or personnel records such as time use studies. Since there is no presumption as to the size or direction of the bias produced by self-reporting it is difficult to assess the impact of this potential measurement error on our results. As usual the reader should handle the results of econometric analysis with care.

In addition to a standard descriptive and comparative analysis of our core dependent variables (working time distribution, working time preferences and work life balance facilities) and in order to control for potential structural differences and compositional

effects across countries, we estimate a set of regressions using standard econometric techniques. Since our four core dependent variables are either dichotomous (work life balance indicators) or multinomial i.e. including more than one discrete choice (working time preferences and working time distribution) we used adapted and standard econometric methods such as standard and multinomial logit. For domestic activities (housework and care work) we use a Tobit to take into account the fact that some individuals do not report housework or care work. Since in the logit and multinomial logit, the estimated coefficients have no natural interpretation, we report marginal effects evaluated at sample means.

4. Working time distribution across countries and life course

The present section analyses in more detail the distribution of working time in our seven countries and across the life course, focusing on wage earners. We start with descriptive bivariate analyses and will subsequently introduce more elaborate regression analyses.

4.1. Working time distribution

Our selected countries differ markedly with regard to the average weekly working time. On average, dependent employees work the longest in Poland (39.9 hours) and Sweden (37.4 hours), followed by German (36.6 hours), Italian (35.9 hours), French (35.2 hours) and Dutch (31.4 hours) wage earners. These figures however conceal large differences across different socio-economic groups.

Table 1. Average weekly working time and gender gap in working time, female and male wage earners, hours per week

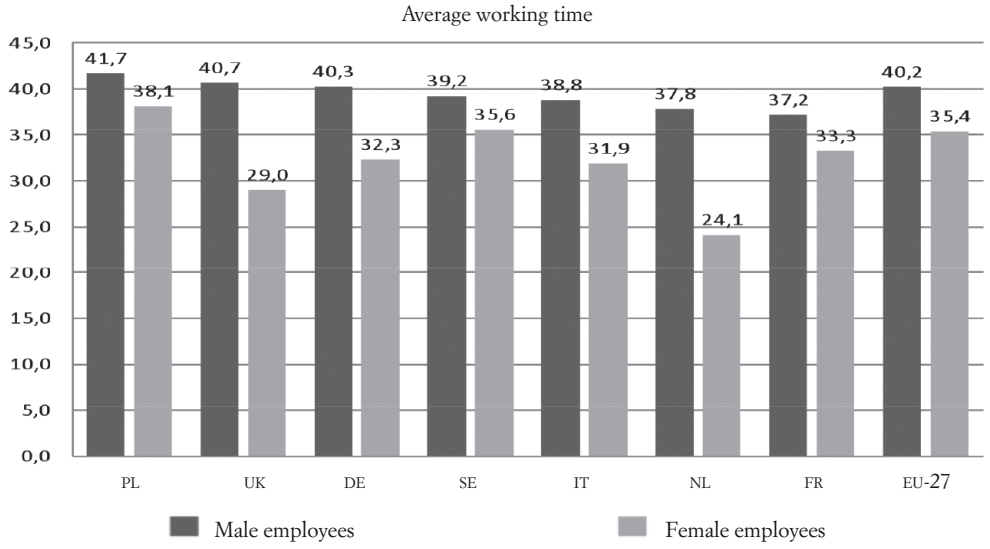
Countries	Male employees	Female employees	All employees	Gender gap
Poland	41.7	38.1	39.9	3.5
UK	40.7	29.0	34.9	11.6
Germany	40.3	32.3	36.6	7.9
Sweden	39.2	35.6	37.4	3.6
Italy	38.8	31.9	35.9	6.9
Netherlands	37.8	24.1	31.4	13.7
France	37.2	33.3	35.2	3.9
EU-27	40.2	35.4		4.8

Source: EWCS (2010), own calculations.

As shown by FIG. 2, the gender gap in weekly working time remains important in Europe with men in the EU-27 working on average 40.2 hours and women 35.4 hours per week. Regarding disparities in weekly working time among wage earners across our sample countries, the gender gap is lowest in Poland (3.5 hours) and Sweden (3.6 hours) and highest in the UK (11.6 hours) and the Netherlands (13.7 hours). These differences reflect different strategies regarding the patterns of integration of women

into the labour market. While countries such as Germany, the UK and in particular the Netherlands are pursuing a part-time strategy to ease the entry and attachment of women into the labour market this is apparently less or not the case in France, Poland and Sweden. Generally, the gender gap in working time has a tendency to be lower in countries with low female employment rate and most probably limited opportunities to work part-time.

Figure 2. Average weekly working time in our seven countries and EU-27 by sexr

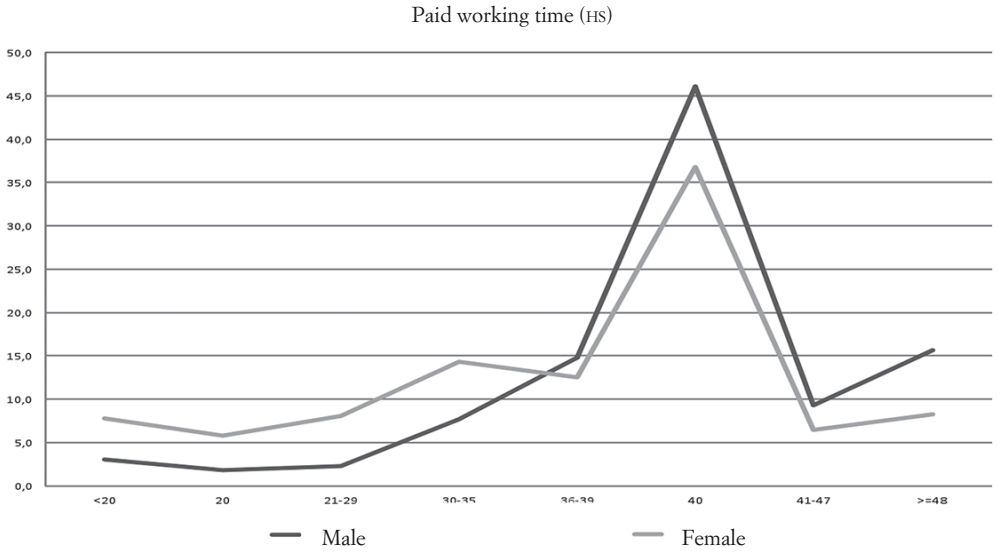


Source: EWCS (2010), own calculations.

As previously mentioned, average weekly working time might conceal lager differences in the distribution of working time. In order to map the distribution of working time we divided the working time in eight categories, thereby taking into account various forms of part-time work, various legal norms of full-time work, as well as extremely long working hours. FIG. 3 displays the gender distribution of working time for all EU member states (EU-27). A significant proportion of female and male wage earners in EU-27 are concentrated around the 40-hours norm (respectively 37 per cent and 46 per cent). As expected the dispersion of working time is higher among women compared to men[2]. More than 20 per cent of female wage earners work less than 20 hours per week compared to only 7 per cent of men. As also shown by FIG. 3 the share of wage earners working very long hours (> = 48 hours) is substantial with a significant higher incidence of long working hours among male employees (16 per cent compared to 8 per cent among female employees).

[2] Standard deviation for working time: men 9.1 vs. women 9.7. Coefficient of variation for men 0.23 vs. women 0.27.

Figure 3. Working time distribution EU-27 by gender (in per cent)



Source: EWCS (2010), own calculations.

One fundamental factor shaping the working time distribution of a specific country is the industrial relations system in general and the type of working time regulation in particular (Anxo, O'Reilly, 2000). The diversity of methods for regulating working time in Europe reflects national disparities in the nature of industrial relations, differences in bargaining systems (degree of centralization and coordination) and also different strategies by the social partners with regard to the duration and the adaptation of working time. These institutional and social differences may have a significant effect on the length and distribution of working time within the European Union. Overall, we can think of regulation operating at five different levels. At *a*) the supranational level (through ILO standards, European Directives); at *b*) the national level through statutory provisions and regulations; at *c*) the cross-industry or industry level through contractual-based collective agreements; at *d*) the enterprise or establishment level through local agreements; and at *e*) the individual level through particular employment contracts. Of course the incidence, coexistence and/or prevalence of each of these levels of regulation vary considerably in Europe. In some countries, such as France, legislation plays a central role, while in others, such as Sweden, Germany and the Netherlands, collective agreements at industry or enterprise level appear to be the determining factors, while in the UK it is mainly determined at the firm level throughout the employment contract.

By analysing the relationship between the different forms of regulation and the distribution of working time, various possible patterns are thinkable. To illustrate, in those countries where statutory standards prevail (France, Italy and Poland) or where a centralized and coordinated collective bargaining system is predominant (i.e. high rates of union density and/or high collective bargaining coverage like in Sweden) a high concentration of

employees around the statutory and/or collective agreed working time norm should prevail. More variation with regard to working time can be expected in countries where industry level agreements are dominant (Germany, The Netherlands), but we still expect some concentration among the current working time standard. In those countries characterized by an absence of statutory or even contractual norms about standard employment, and where the methods for regulating working time are basically laid down at the enterprise or employment contract level, a wider diversification and dispersion of working time can be expected (like in the UK).

While the specificity of the industrial relations system might impact upon the overall distribution of working time at country level, it will fall short of explaining the observed gender differences in the observed working time distribution. In other words, the relationship between working time regulation and working time distribution alone is not sufficient to explain women's' working time patterns and the extent of their labour market integration. It is essential to take, the prevailing gender contract, the incidence of part-time work and female employment rates into account. As displayed in TAB. 2, female employment rates differ substantially in our selected countries with Sweden and the Netherlands building the top of the scale and Italy and Poland being at the bottom.

Table 2. Female employment rate and part-time rate by country, 2010 (age 15-64)

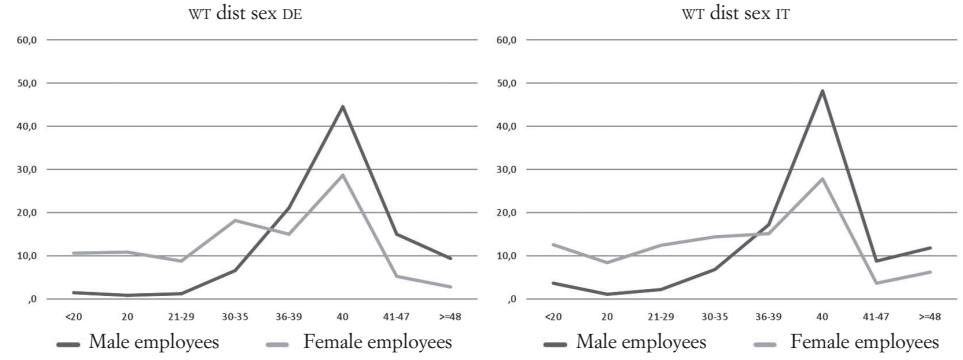
Country	Female employment rate*	Female employment rate in fulltime equivalent 2009**	Part-time employed in per cent of total employment*
FR	59.9	53.4	17.6
DE	66.1	50.7	25.5
IT	46.1	40.9	14.8
NL	69.3	45.9	48.8
PL	53.0	50.9	7.6
SE	70.3	60.7	25.3
UK	64.6	51.3	25.7
EU-27	58.2	50.1	18.6

* EUROSTAT (2011); ** European Commission (2011).

As also shown by TAB. 2, the Netherlands regresses to the sixth position when looking at female employment rates in full time equivalent. This is due to the high incidence of part-time job in this country, in particular marginal part-time.

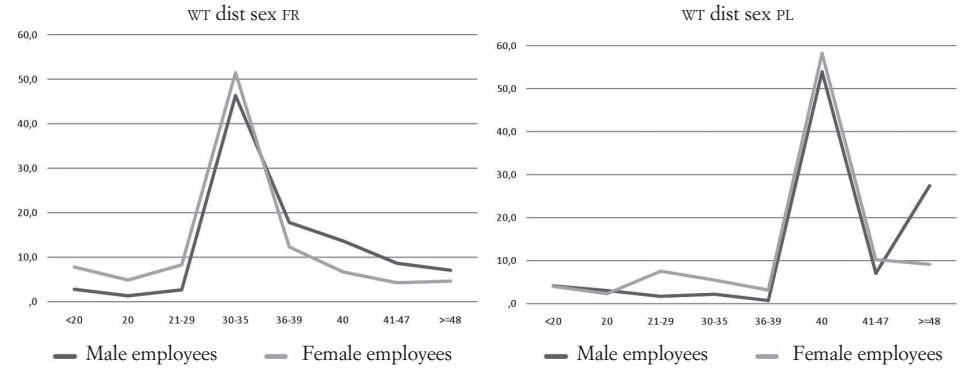
FIGG. 4-10 display the working time distribution across our country sample for male and female employees.

Figures 4 and 5. Working time distribution Germany and Italy



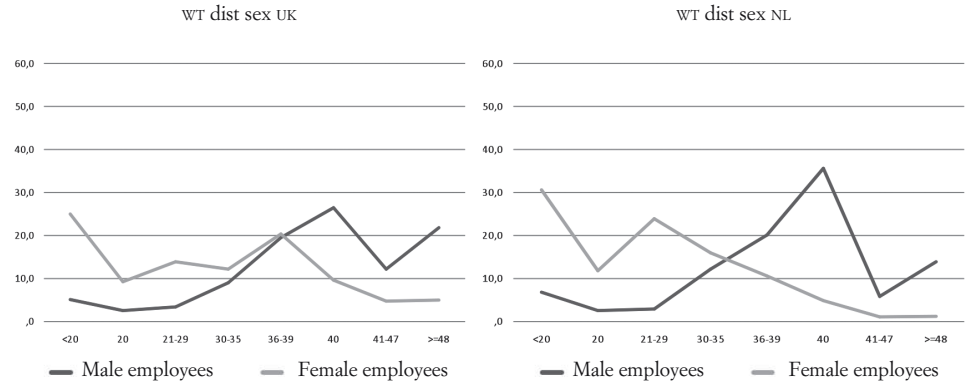
Source: EWCS (2010), own calculations.

Figures 6 and 7. Working time distribution in France and Poland by sex



Source: EWCS (2010), own calculations.

Figures 8 and 9. Working time distribution in the UK and the Netherland by sex



Source: EWCS (2010), own calculations.

Figure 10. Working time distribution in Sweden by sex

Source: EWCS (2010), own calculations.

Except France and Poland the majority of our selected countries show marked gender disparities in working time distribution. While in all countries the dominant norm for men remains fulltime work (at least 35 hours per week) the female distribution of working time shows significantly larger dispersion with marked differences in the incidence of part-time work and also high heterogeneity regarding the forms of part-timework (long part-time and marginal part-time).

Basically and at first glance, it appears that we can allocate our seven countries to three different models of working time "*a strong male breadwinner model*", "*a moderate male breadwinner model*" and a "*dual breadwinner model*". The strong male breadwinner model is characterised by a significant share of women working short part-time, a large gender gap in average weekly working time and a high gender polarisation of working time (the Netherlands and the UK). Indeed, in the Netherlands 42% of women work 20 or less hours per week (men: 9%), while only 18% work full-time, i.e. at least 35 hours per week (men: 76%). Similar, but not as pronounced are the equivalent results for the UK, where the proportion of women working 20 hours or less per week is roundly 34% (men 8%) and the share of women working full time, i.e. at least 35 hours per week exceeds 39% (men: 80%). Eye catching is furthermore the high share of men in the UK working 48 hours or more (opt-out clause) and the fact that Dutch women working long hours are virtually not existent. Although the Netherlands have with 69.3% one of the highest female employment rates in our sample the large share of women working part-time in particular short part-time indicates a rather limited female labour market integration with still a high gender polarisation of working time (see also TAB. 2). Because of the high incidence of short working hours it can be assumed that a significant proportion of cohabiting/married women will not be able to make a living of their own.

Focusing on working time patterns it appears that Germany and Italy could both belong to the moderate male breadwinner model. In both countries every fifth women works 20 hours or less per week (men: DE = 2% vs. IT = 5%) and roundly 50% work full-time (men: DE = 90% vs. IT = 86%). Note, that in both countries a significant proportion of employees

work longer than 48 hours. When taking the employment rate into account, it becomes clear, though, that also the working time patterns are very similar, differences occur when also acknowledging the proportion of the non-working female population (TAB.). Here, we see that Germany achieves a higher integration of women into the labour market while the female employment rate in Italy remains remarkably low (40.9 % in full time equivalent the lowest among our selected countries, see TAB. 2) To put it bluntly, a considerable share of Italian women are either not working at all or working too few hours to be able to live independently of a partner.

In Poland and in France, the working time distribution of women and men shows surprisingly similar patterns. Women and men in both countries are mainly either working full time or not working at all. In this regard it has to be stressed however, that France seems much more successful in integrating women into the labour market than Poland as shown by its significant higher female employment rate (see TAB. 2). In both countries short part-time, i.e. 20 or fewer hours plays only a marginal role (France, 12 % of women and 4% of men vs. Poland, 6 % of women and 7% of men). It should also be noted that a striking 27 per cent of male Polish employees and one tenth of Polish female employees work at least 48 hours per week. For these reason we classify these two countries in the moderate male breadwinner model.

With a female employment rate of roundly 70% (in full time equivalent still 60%) Sweden departs significantly from our selected countries and is a good illustration of the"*dual breadwinner model*". Also worth noticing is that compared to the other countries, some convergence between men and women's working time towards shorter working hours can be observed in Sweden.

4.2. Working time arrangements across the life course

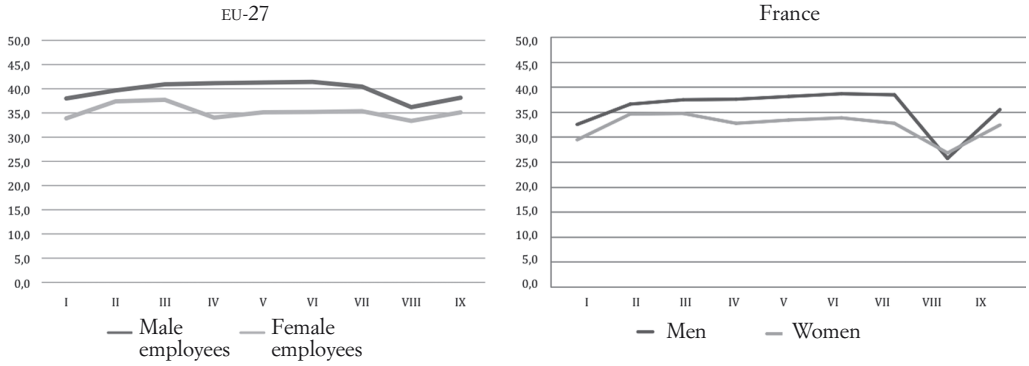
In general, the extent of women's labour market integration varies significantly across the life course, in particular during the parenthood phase. Previous empirical evidence has shown (for instance, see Anxo *et al.*, 2007) that the impact of, for example young resident children, on female labour supply varies significantly across countries. In some countries, the presence of young children affect female labour force participation throughout a definitive or temporary withdrawal from the labour market, while in other countries the impact of young children take essentially the form of a permanent or a temporary reduction of working time. Moreover, in some countries, such as Italy, not only children but union formation affects the decision to work, working time and career prospects. In Germany also there exist strong incentives for married women to reduce working time irrespective whether there have resident children or not. In other words, in our sample of economically active individuals there is a risk that the impact of changes in household composition over the life cycle on labour supply is underestimated since we only observe these impacts at the extensive margin, i.e. on working time given labour market participation.

Bearing these drawbacks in mind we now turn to the working time profiles across our stylised life course of male and female wage earners. FIGG. 11-17 shows the average weekly working time across our nine life stages in the EU-27 and for our seven countries. As shown by the diagrams, the gender gap in working time profiles are important with women basically working at every life phase fewer hours than their male counterparts. Female wage earners exhibit also a higher variability of working time across the life course. First turning to the EU-27 we see that even in the early stage of the life course where individuals have only few family or caring commitments, the gender gap is large, amounting to four hours

for singles living with their parents and 2.3 hours for singles living on their own. Women's working time attain a peak during the phase of union formation (young cohabitating women without children) – however already during this phase a widening of the working time gap can be observed. Entering the phase of motherhood has a negative impact on women's working time in all countries.

The impact of children on female working time is particular pronounced in the UK, where women with small children (*Phase IV*) work on average 13 hours less than their female counterparts living as a couple without children (*phase III*) but also in the Netherlands (–12 hours). The difference is also high in Germany (7 hours) and the smallest in Poland (–2), France (–2 hours) followed by Sweden (–3 hours) and Italy (–4 hours). Since in all these countries the average female employment rate is medium to high it can be assumed that the larger gap in working time here is due to an increase in part-time work in the parenting phase. However data show also clearly that the understanding of what part-time forms are appropriate vary across the countries. Although on the whole, the reduction in paid working time is most important during the early phase of childhood, working time remains more or less at a lower level as long as children are living in the household[3], exceptions are Poland and France. Men's working time, in contrast, appears to be less affected by the respective life stages, although the figures show tendency towards longer working time during parenthood. A clear pattern can also be identified during the retirement phase: except for women in the Continental and Southern cluster and, although to a lesser extent, women in the residual cluster, working time declines sharply for older cohabiting couples. This tendency is, however, less pronounced for singles in the same age group.

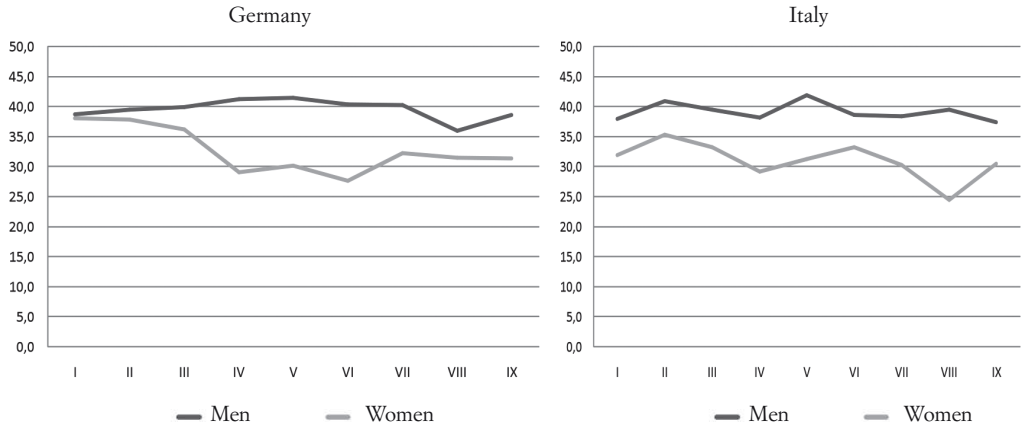
Figures 11 and 12. Working time profiles* for male and female wage earners in the EU-27 and France



* I Single persons (18-35 years), living with their parents or relatives, II Single persons (under 46 years), without children, III Younger couples (woman under 46 years), without children, IV Couple with youngest children under 7 year, V Couple with young children between 7-12 years, VI Couple with teenage children between 13-18 years, VII Midlife "empty nest" couples without resident children, VIII Older couples without resident children (since the EWCS sample is restricted to employed individuals the number of observations for this category is limited. Therefore the interpretation for this category has to be interpreted with care), IX Single persons (aged 50 years or older), without resident children.
Source: EWCS (2010), own calculations.

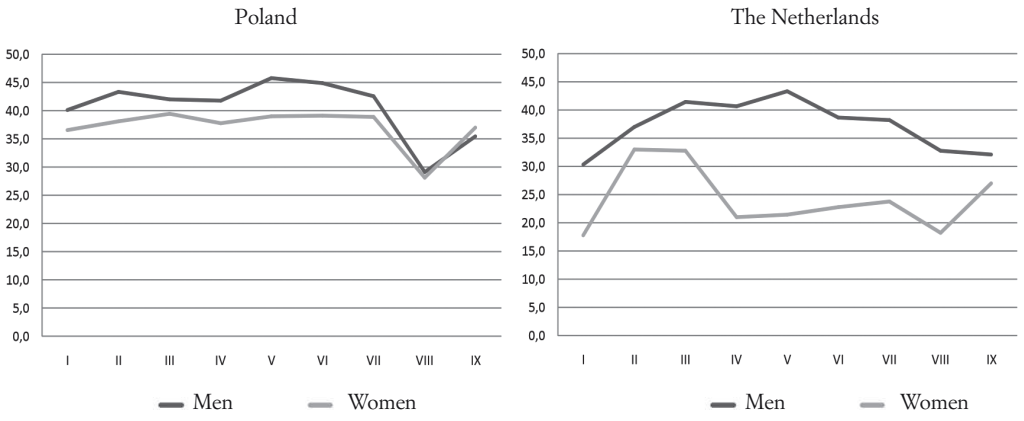
[3] Before over interpreting these findings, it should be emphasized again that our analysis is based on cross-sectional data and therefore we are not able to disentangle age and cohort effects.

Figures 13 and 14. Working time profiles* for male and female wage earners in Germany and Italy



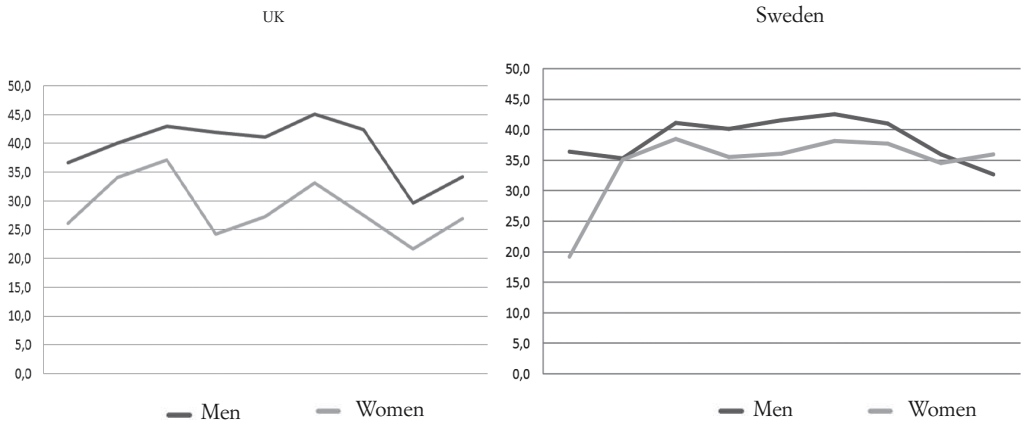
* I Single persons (18-35 years), living with their parents or relatives, II Single persons (under 46 years), without children, III Younger couples (woman under 46 years), without children, IV Couple with youngest children under 7 year, V Couple with young children between 7-12 years, VI Couple with teenage children between 13-18 years, VII Midlife "empty nest" couples without resident children, VIII Older couples without resident children (since the EWCS sample is restricted to employed individuals the number of observations for this category is limited. Therefore the interpretation for this category has to be interpreted with care), IX Single persons (aged 50 years or older), without resident children.
Source: EWCS (2010), own calculations.

Figures 15 and 16. Working time profiles* for male and female wage earners in The Netherland and Poland



* I Single persons (18-35 years), living with their parents or relatives, II Single persons (under 46 years), without children, III Younger couples (woman under 46 years), without children, IV Couple with youngest children under 7 year, V Couple with young children between 7-12 years, VI Couple with teenage children between 13-18 years, VII Midlife "empty nest" couples without resident children, VIII Older couples without resident children (since the EWCS sample is restricted to employed individuals the number of observations for this category is limited. Therefore the interpretation for this category has to be interpreted with care), IX Single persons (aged 50 years or older), without resident children.
Source: EWCS (2010), own calculations.

Figures 17 and 18. Working time profiles* for male and female wage earners in the UK and Sweden



* I Single persons (18-35 years), living with their parents or relatives, II Single persons (under 46 years), without children, III Younger couples (woman under 46 years), without children, IV Couple with youngest children under 7 year, V Couple with young children between 7-12 years, VI Couple with teenage children between 13-18 years, VII Midlife "empty nest" couples without resident children, VIII Older couples without resident children (since the EWCS sample is restricted to employed individuals the number of observations for this category is limited. Therefore the interpretation for this category has to be interpreted with care), IX Single persons (aged 50 years or older), without resident children.
Source: EWCS (2010), own calculations.

To sum up, in nearly all life stages female wage earners do work fewer hours than their male counterparts. Female working hours are also much more sensitive to life stages. In all our country clusters women's working time decreases during the parenting phase and the gender gap in working time significantly increases. The variation of women's working time across the life course is strongest in the Netherlands, the UK and Germany, likewise is the gender gap in working time. On the other hand we found comparatively smaller gender gap in France, Poland and Sweden.

5. Working time distribution and working time preferences: a multinomial approach

The above described cross-country differences in the distribution of working time as well as differences in working time profiles over the life course might be ascribed to both compositional effects and/or structural differences in, for example, a countries' demographical structure or the distribution of employment across industries. In order to take into account these structural effects and to identify the socio-economic factors that impact upon the working time distribution we estimated a set of multinomial regression analyses for female and male employees separately.

5.1. Working time distribution

In order to cover the whole working time distribution, our dependent variable, weekly working time in main job, was divided into four main categories: short part-time (less or

equal to 20 hours), long part-time (21 up to 34 hours,) normal full time (35-41 hours) and long hours 42 hours or more), whereby "normal full-time" was chosen as the reference category. Our approach makes it possible to analyse and identify the factors that affect the likelihood that one individual is found in one of our four working time categories. Following our theoretical framework for the choice of central control variables (FIG. 1) we include in the regression analysis the following independent variables: life stage categories (reference category: couples without children), our seven countries (reference category: Sweden), skill level (reference category: low skilled), industries (reference category: manufacturing), establishment size (reference category: medium sized), contract form (reference category: fixed-term contract), institutional sector (reference category: private sector), work intensity, working time organization (limited working time flexibility, regularity and autonomy of working time inserted as dummy variables) as well as atypical work (night, shift and weekend work, inserted as dummy variables)[4].

5.1.1. Female wage earners

Where women are located in the working time distribution is strongly affected by their life stages. Compared to married or cohabitating women without children (the reference category) the propensity to work short part-time increases in all life stages, except for young singles living on their own. To illustrate: compared to our reference category, the likelihood for young female singles living with their parents to work short part-time increased by 13.2 percentage points or almost 84 per cent, this probability rose also significantly for employed mothers (113 per cent for mothers with pre-school children, 97 per cent, for mothers with children aged 7-12 years and 81 per cent, for mothers with resident teenagers). The likelihood to work short part-time is also higher among older cohabiting women and older singles without resident children (see TAB. A4 first column in the Appendix). In other words, our results tend to show that *ceteris paribus* the probability to work short part-time is particularly high for mothers but also for older married or single women without resident children. For young women, working short part-time might be a strategy to combine work and education while older women may choose short part-time work for other reasons, for instance as a means for some women to re-enter the labour market or for other to progressively exit from the labour market at the end of the job career.

By contrast, and compared to the reference category (normal full time) the probability to work long part-time increases mainly during the parenting phase while at the same time the likelihood of working long part-time declines with the age of the children (see Appendix, TAB. A4 second column). The propensity to work long hours is lower in all life phases, but the reduction of the likelihood to work long hours is significantly reduced for mother with young pre-school children (a reduction of 8.9 percentage points or 106 per cent).

The incidence of female part-timers varies also significantly among our countries. Compared to Sweden, female short part-time is, *ceteris paribus*, more prevalent in all countries except France and Poland. To illustrate Dutch and British female employees have respectively a 32 and 25.7 percentage points higher likelihood to work short part-time, while polish female employees have a 9.2 percentage points lower likelihood to work

[4] A detailed description of variables included in the regression as well as a detailed presentation of the results of our estimations can be found in the Appendix.

short part time (see TAB. A4 in the Appendix). The same country pattern is found for long part-time. The likelihood to work long hours is also significantly higher among Polish female employees, but lower among Dutch, French, German female employees.

5.1.2. Male wage earners

Not surprisingly, the incidence of part-time work among men is significantly lower compared to their female counterparts. As also expected, the incidence of long working hours is higher for men (see TAB. A5 in the Appendix)[5]. Like women men's working time is affected by their life phase, but in different ways. Compared to our reference category (married/cohabiting male without resident children), male wage earners have a significant higher propensity to work short part-time at the beginning and at the end of their working life. To illustrate, young singles living with their parents have a 112 per cent higher probability to work short part-time (the corresponding figures for older cohabiting or single males being respectively 224 per cent and 158 per cent). Other than their female counterpart fathers are not more inclined to work part-time (short or long part-time) compared to men in cohabitating couples. In other words, male part-time is *ceteris paribus* more prevalent at the entry (combination work and education) and during the exit phase (progressive retirement) of the labour market. As for long hours, fathers with resident children between 7 and 12 years show a higher probability to work long hours than their childless counterparts in cohabiting relationships. Whether men take on *long*[6] part-time work depends strongly on the country they live in. Compared to Sweden countries men's propensity to work short part-time is lower in Germany (–67 per cent) and Poland (–78 per cent) but much higher in the Netherlands (117 per cent) On the other hand, the likelihood to work long hours is significantly higher for men living in Poland (+64 per cent) and the UK (+41 per cent) while men in France (–63 per cent and the Netherlands (–28 per cent) are less inclined to work long hours.

The results of the multinomial regression analyses confirm our previous descriptive findings. Irrespective of the life phase and country women live in, they are more likely to work fewer hours per week than their male counterparts. This is in particular true for low skilled women. This gendered working time gap is likely to have far reaching consequences, career-wise in terms of the likelihood of being promoted as well as by achieving own, partner-independent financial security. Given high and increasing divorce rates (Muehling, Rost, 2009), there are strong reasons to believe that the risk for elderly women to be poor during the retirement phase will be high compared to their male counterparts. Men's working time is on average much less affected across the life cycle compared to their female counterparts.

5.2. Working time preferences across the life course

The main purpose of this section is to identify the major determinants of working time preference among wage earners. More specifically our objective is to analyse the extent to which working time preferences (i.e. preference for increasing or reducing working time) differ across gender, life phases, countries, industries and last but not least job

[5] The predicted probability for working short and long part-time is respectively for men 2.7 and 5.1 per cent, for women 10.9 and 16.9 per cent. The predicted probability for working long hours is for men 27.6 per cent and 13.8 per cent for women.

[6] There is no statistically significant country effect for short part-time.

characteristic. In the ECWS survey, working time preference is captured by the following question: «provided that you could make a free choice regarding your working hours and taking into account the need to earn a living: how many hours per week would you prefer to work at present?». The respondent in other words is asked to indicate his/her preferred working time, taking into account the possible impact on labour earnings of a reduction of working time (i.e. a reduction of working time with no wage compensation).

Our dependent variable is constructed in the following way: in a first step we compute the difference between the respondent's preferred working hours with its actual working time and in a second step we allocate the result into three main categories: "preference for increasing working time", "preference for reducing working time" or "preference for no change". Since our dependent variable takes three distinct categorical values, we used for the estimation a standard multinomial logit. The category "preference for no change of working time" is used as the reference category in the regression analysis. As previously our control variables are: skill level, life stages, countries, industries, working time organization and scheduling of working time, where the employee is located in the working time distribution (short part-time, long part-time and long hours) household's economic situation as well as the extent of work intensity.

In general, a large majority of respondents in our selected sample of countries seems to be satisfied with their current working time: around 55 per cent of employed individuals do not want any change in their current working time. According to our estimations, employed men are on average slightly more satisfied with their current working time than their female, but the gender gap in working time preferences is small. Also worth noticing is the fact that a significant larger share of employed persons report that they would prefer to reduce their working time (the predicted probability to opt for a reduction of working time is 28 per cent) than to extend it (the predicted probability to opt for an increase of working time is 10 per cent). According also to our results, employment status does not seem to affect working time preferences. As in the previous section, we therefore restrict our analyses to wage earners and performed separate estimations for men and women.

5.2.1. Female wage earners

While a majority of female employees declare that they do not want to change their working time, twice as much female employees, however, would prefer a reduction than an increase of working time, (the predicted probability for opting for a reduction of working time amounts to 23.8 per cent compared to 11.1 per cent for an increase of working time) (see Appendix, TAB. A6). High skilled female employees have, *ceteris paribus*, a significant higher likelihood to prefer a reduction of working time (an increase of 5 percentage points or 20.9 per cent).

As expected working time preferences are related to the actual working hours. Compared to female employees who work full-time, there is a clear preference for an increase of working time among those who work part-time and especially for those who work short part-time working between 20 and 34 hours a week raises the probability to opt for an increase by 22,2 percentage points while those working less than 20 hours have a 33 percentage points higher probability to wish longer working hours. On the contrary female employees with currently long working hours are more prone to prefer a reduction of working time (a 30,3 percentage points higher probability) and less inclined to prefer a lengthening of working time.

Compared to Sweden, female employees in France, Italy, Poland and the UK have a lower probability to want a reduction of working time (7,3 percentage points for the UK, 28,6 percentage points for Poland). In the UK, we found also a lower probability (a reduction with 10,6 percentage points) to wish an increase in working time and this holds true also for the Netherlands (6,9 percentage points). Remarkably, there is no difference between working time preference of female employees in Sweden and Germany. In relation to the variation of working time preference across our stylised life course our estimations show that compared to married or cohabiting women without resident children, mothers are more likely to prefer a reduction of working time with a probability slightly decreasing by the age of resident children: for pre-school-aged children the probability to wish a reduction of working time increases by 11,5 percentage points, for children aged between 7-12 years the figure is about 10,9 percentage points and children aged 13-18 years around 9,5 percentage points.

Regarding household economic well being measured by the statement that it is "easy to make ends meet", a good economy reduces the likelihood to opt for a lengthening of working hours (by 6,4 percentage points).

For our selected sample of countries, there is no variation of working time preferences across industries except for female employees in financial services who are more prone to wish a reduction of working hours (by 11,2 percentage points compared to women working in manufacturing). Regarding sector, female public employees are less incline to wish an increase working time (a reduction of 4,6 percentage points compared to private female employees).

Variation in working time scheduling and predictability of working time do not affect of female employees' working time preferences. On contrary, those who face limited working time flexibility as well as high work intensity (working with tight deadlines) have a slightly higher probability to prefer an increase in working time (an increase with 2,4 percentage points). Female employees with high working time autonomy are also less inclined to wish a reduction of working time (a reduction of the likelihood by 8,2 percentage points.

5.2.2. Male wage earners

Globally and compared to their female counterparts a higher share of male employees wishes a reduction of working time, but the gender difference remains low: *ceteris paribus*, 27,9 per cent want a reduction of working time, the share being around 4 percentage points higher than for female employees (see first column last row of TABB. A6-A7). On the other hand the preference for an increase in working time, in comparison to full-time-employees, is less prone among male employees with only 8,7 per cent compared to 11,1 per cent of female employees opting for longer working hours. Furthermore and in contrast to the situation amongst female employees, the preference for an increase is only slightly influenced by the actual working time and not differing at all for those men who work short part-time. On the opposite the influence of actual working time on the wish to reduce working time appears to be quite the same for male as for female employees – if they already work short hours both are less inclined to opt for a further reduction and those working long hours showing a clear preference for a reduction.

Remarkably working time preferences of men in the observed countries are mostly independent of lifestages and household composition which appears to stand in sharp contrast with the situation among women – for the latter parenthood is decisive for individual preferences in terms of paid work load, the former's preferences being independent from

parenthood or age of resident children. Compared to married or cohabiting younger male employees without resident children there is only their older counterparts (also without resident children) who show a lower probability to wish an increase in working time.

Swedish male employees are significantly more prone to prefer a reduction of working time than men in all other observed countries: the probability to wish a decrease in working time is between 13,1 percentage points for German and 30,6 p.p. for Polish male employees lower than for their Swedish counterparts. Furthermore, in Poland, France and Italy the preference for increase in working time is slightly higher than in Sweden (with a likelihood being around 6 percentage points higher).

Working in the public sector lowers the probability to wish a reduction of working time among male employees by around 5,5 percentage points while there is no variation of preferences among industries. This also holds true for work intensity, scheduling and organisation of working time, having no influence on working time preferences of male employees in the observed countries. Only those who face a high predictability of working time are less prone to opt for a reduction of working hours, while working at night raises the probability to wish an increase in working time by around 2 percentage points.

6. Concluding remarks

The main objective of this study has been to identify and explain the cross-country gender disparities in working time duration, distribution and working time preferences in seven EU-member states representing distinct welfare state, working time and employment regimes. While systemically taking a gender perspective we adopted a life course perspective by examining the extent to which crucial life phases among employed men and women affect their working time preferences and the likelihood to be found in a specific working time arrangements.

Regarding the gender distribution of working time, a large proportion of female and male employees in the EU-27 are concentrated around the 40-hours norm. Even though the dispersion of working time is significantly greater among women compared to men. Our select sample of countries display a high gender polarisation of working time with a significantly higher share of women working part-time and conversely a higher proportion of men working long hours. This gender polarisation is particularly pronounced in the Netherlands and the UK.

Individual working time is further dependent of skill level, the higher the skill level the lower is the probability of working short part-time and conversely the higher is the probability of working long hours. Working time arrangements varies furthermore across industries and sectors. For both genders part-time is much more prevalent in industries such as wholesale, retails, education and health compared to manufacturing industries. As far as long working hours is concerned, we found a significantly lower incidence of long hours among the female-dominated services oriented industries while male employees with long working hours are overrepresented among traditional male-dominated industries such as construction and transport. Also worth noticing is that for genders long part-time is more prevalent in the public sector compared to the private sector, while long hours is more prevalent for men in the private sector.

Women's working time is strongly influenced by their life stage, although in all life stages employed women do work fewer paid hours than their male counterparts. In all our

selected countries women's working time decreases during parenthood while at the same time the gender gap in working time significantly increases. However, and in contrast to other countries, Sweden manages to maintain a high share of women in the labour market even during parenthood due to reversible time options across the life course as well as generous and flexible parental leave systems.

A majority of economically active individuals seems to be satisfied with their current working time. Around 45 per cent of dependent employees indicates, however, that they would like to change their current working time, and most of these express a preference for a reduction of working time. Overall, working time preferences do not differ considerably across gender; if anything a slightly higher proportion of men want a reduction of working time whilst a slightly higher share of women would like to increase their working time. Our estimations tend also to show that a preference for a reduction of working time is positively correlated with skill level and also to work intensity. For both genders, working time preferences are also strongly related to employees' current working time. Employees working short part-time have a significant higher likelihood to prefer an increase of working time. Conversely, employees with long working hour express a particularly strong preference for working shorter hours. Against this background, the fact that a significant higher proportion of women work short part-time while a significantly higher proportion of men work long hours tends to indicate that male and female employees in our selected countries aspire to some convergence of working time. Women's working time preferences varies across the life course, in particular during parenthood. Mothers of pre-school children and teenagers are more inclined to wish a reduction of working time. By contrast, men's working time preferences do not differ significantly across the life course. Both male and female older employees seem more prone not to opt for an increase of working time. Regarding country differences in working time preferences, both men and women in Sweden seems to have a stronger preference for a reduction of working time, in spite of a relatively short weekly working time. Interestingly, men in France, Italy and also in Poland are more inclined to favor a lengthening of working time.

The Europe 2020 strategy is critically dependent on the further labour market integration of women in Europe. An increase of female labour supply both at the extensive (participation) and intensive margins (working hours) appears therefore to be crucial. In most countries the parenting phase remains a critical period for the labour market integration of women. An increase of female labour force participation requires policy measures favoring a better balance between work, family and other social commitments, in particular in countries with low female employment rates. Swedish working men and women appear to be better off, which might be attributed to an institutional design that promotes a more equal time allocation across gender. It is essential to consider time allocation as a whole not only from a theoretical, but also from a policy perspective, that is to consider paid as well as unpaid work, and its distribution across the life course. The current gendered working time distribution is a reflection of the still prevailing traditional gender contract. Beyond measures favoring a more balanced gender division of labour, our study tends also to show the need of implementing family-friendly, flexible and reversible working time options across the life course. Finally, our results show that the current EU working time directive is not always successful in limiting excessive working time: around 15% of male employees and 7% of female employees in EU-27 work 48 hours or more per week. Due to negative externalities associated with long working hours, policy and legal measures should be taken to guaranty that working time limits are enforced.

STATISTICAL APPENDIX

Table A1. Overview of variables/indicators to be used in the estimations

Independent and control variables	Dependent variables
Life course 9 Life stages (see Box 1 in the body of the paper) *Individual and household characteristics* Sex Educational attainment (3 level: low, ISCED < = 2; medium and high, ISCED > = 5) Skill level (high skill = 1, ISCO < 3) Economic situation (# households ability to make ends meet: very easily, easily, fairly easily, with some difficulty, with difficulty, with great difficulty, very easy and easy = 1) # EF6* Number of resident children *Workplace related feature* Industries (NACE, 2 digit) Sector (public vs. private) Contract form (Q7*, fix-term vs. open-ended contract) Company size (Q11): small 1-49 employees, medium 50-259 employees and large > 250) *Work intensity* *Working at high speed* (Q45A*) *Working to tight deadlines* (Q45B) *Scheduling of working time* Shift work (Q37_f) Weekend-Work (Q34/Q35) Night work (Q32) *Flexibility, predictability and autonomy* (# limited flexibility = fixed starting and finishing times = 1, high predictability: same number of hours every week = 1. Autonomy: how are working time arrangements set (fixed by company, choose between several fixed, flexitime etc., entirely determined by oneself, high autonomy = entirely determined by oneself = 1) # Limited working time flexibility (Q37_d) Predictability of working time (Q37_a, b, c) Autonomy over working time (Q39_4) *Duration of working time* (Q18) (for working time preferences) 1. SHORT PART-TIME (LESS OR EQUAL TO 20 HOURS) 2. LONG PART-TIME (21 UP TO 34 HOURS) 3. NORMAL FULL TIME (35-41 HOURS) (REFERENCE CATEGORY) 4. LONG HOURS (42 HOURS OR MORE)	*A. Working time Distribution (multinomial)* 1. Short part-time (less or equal to 20 hours) 2. Long part-time (21 up to 34 hours) 3. Normal full time (35-41 hours) (reference category) 4. Long hours (42 hours or more) *Working time preference (multinomial)* Based on the gap between usual working-time (main job) and preferred working-time (Q19). Three categories: 1. preference for a reduction of working time 2. no change (reference category) 3. increase of working time *Work life balance indicators (Binoomial)* 1. in general do your working time fit in with your family or social commitments outside work (Q41) very well, well, not very well, not at all well (very well = 1) 2. Would you say that for you arranging to take an hour or two off during working hours to take care of personal or family matters is not difficult at all, not too difficult, somewhat difficult, very difficult) (not difficult at all = 1) (Q43)

* The abbreviation within parentheses corresponds to the EWCS questions.

Table A2. Female employment rate and part-time rate by country, 2010 (age 15-64)

Country	Female employment rate	Proportion of female working part time	Part-time employed in per cent of total employment
FR	59.9	29.6	17.6
DE	66.1	n.a.	25.5
IT	46.1	28.8	14.8
NL	69.3	74.9	48.8
PL	53.0	10.5	7.6
SE	70.3	41.0	25.3
UK	64.6	40.5	25.7
EU-27	58.2	n.a	18.6

Source: EUROSTAT (2011), own calculations.

Table A3. Average Weekly Working Time, Wage earners and the self-employed

	Men		Woman		Total	
Country	Mean	Standard deviation	Mean	Standard deviation	Mean	Standard deviation
FR	37.2	7.9	33.3	8.9	35.2	8.6
DE	40.3	6.3	32.3	10.1	36.6	9.2
IT	38.8	7.8	31.9	10.8	35.9	9.8
NL	37.8	10.7	24.1	10.2	31.4	12.5
PL	41.7	10.7	38.1	8.7	39.9	9.9
SE	39.2	9.2	35.6	9.3	37.4	9.4
UK	40.7	11.9	29.0	12.8	34.9	13.7
EU-27	41.1	9.9	36.4	10.2	39.0	10.4

Source: EWCS (2010), own calculation.

Table A4. Multinomial logit regression analysis: Working Time Distribution. Marginal effect evaluated at sample means, female wage earners (Reference category: Normal Working Time, 35-42 hours)

Variables	Short part-time	Long part-time	Long hours
Skill level (ref. cat.: low skill)			
High skill	–0.097***	–0.024	0.053***
Life stage (ref. cat.: couples without children)			
Young singles living with their parents	0.132***	0.007	–0.056***
Young singles on their own	–0.004	–0.029	–0.016
Couples with resident pre–school children	0.179***	0.178***	–0.089***
Couples with resident children 7-12 years	0.153***	0.117***	–0.060***
Couples with resident children 13-18 years	0.128***	0.067***	–0.030*
Couple empty nest 46-59 years old	0.136***	0.056*	–0.044***
Older Couple	0.256***	0.087*	–0.069**

Table A4 (*continuation*)

Variables	Short part-time	Long part-time	Long hours
Older singles	0.125***	0.046	–0.038**
Countries (ref. cat: Sweden)			
Germany	0.153***	0.062**	–0.061***
France	0.040	–0.019	–0.031**
Italy	0.124***	0.086***	–0.010
The Netherlands	0.320***	0.317***	–0.129***
Poland	–0.092**	–0.161***	0.087***
United Kingdom	0.257***	0.083***	–0.024
Industries (ref. cat.: manufacturing)			
Agriculture	0.005	0.049	–0.059
Construction	0.039	–0.083	–0.048
Whole sale retail	0.092***	0.031	–0.001
Transport	–0.014	0.031	–0.014
Financial services	–0.081*	–0.012	–0.004
Public administration and defence	–0.023	0.016	–0.045*
Education	0.181***	0.142***	–0.049**
Health	0.096***	0.028	–0.074***
Other services	0.097***	0.047	–0.009
Establishment size (ref. cat.: medium size)			
Small establishment (less than 50)	–0.067***	–0.036*	–0.016
Large establishment (250 and more)	–0.052***	–0.063***	–0.003
Contract form (ref. cat: fixed–term contract)			
Open ended contract	–0.152***	–0.051***	0.021*
Sector (ref. cat: private sector)			
Public sector	0.002	0.051***	–0.010
Work intensity			
Working at high speed	–0.003	–0.009	0.051***
Tight deadline	0.020	–0.015	–0.016
Working time organisation (Dummies)			
Limited working time flexibility	–0.017	0.019	–0.050***
High predictability of working time	–0.013	–0.072***	–0.058***
High working time autonomy	0.067***	0.047	0.063**
Atypical working hours (Dummies)			
Weekend work	–0.016	0.008	0.049***
Shift work	–0.070***	0.043**	–0.033***
Night Work	0.008	0.053	0.058***
Predicted probability	0.158	0.221	0.0.084
Log likelihood	–3637.26		
LR chi2 (108)	1420.76		
Prob > chi2	0.0000		
Pseudo R2	0.1634		
Number of observations	3532		

*, ** and *** statistically significant at 10 per cent, 5 per cent and 1 per cent level.
Interpretation. *Ceteris paribus*, the predicted probability (6th row from the end of the table) that a female employee work short part-time, long part-time and long hours is respectively 15.8 per cent 22.1 per cent and 8.4 per cent. High skill female employees (second row, first column) have a 9.7 percentage point lower probability to work short-part time. Married/cohabiting female employees with young pre-school children (sixth row first column) have a 17.9 percentage point higher probability to work short part-time compared to young married/cohabiting dependent female employees without resident children.
Source: EWCS (2010), own calculations.

Table A5: Multinomial logit regression analysis: Working Time Distribution. Marginal Effect evaluated at sample means, male wage earners (Reference category: Normal Working Time, 35-42 hours)

Variables	Short part-time	Long part-time	Long hours
Skill level (ref. cat.: low skill)			
High skill	–0.012**	–0.0123	0.137***
Life stage (ref. cat.: couples without children)			
Young singles living with their parents	0.025***	0.041***	0.008
Young singles on their own	0.018**	0.024**	0.011
Couples with resident pre-school children	0.006	0.013	0.025
Couples with resident children 7-12 years	–0.011	0.009	0.063**
Couples with resident children 13-18 years	–0.004	0.001	0.043
Couple empty nest 46-59 years old	0.012	0.032**	0.023
Older couple	0.051***	0.080***	–0.072
Older singles	0.036***	0.051***	–0.028
Countries (ref. cat: Sweden)			
Germany	–0.012	–0.029**	–0.015
France	–0.005	0.003	–0.127***
Italy	–0.004	–0.003	0.025
The Netherlands	0.009	0.052***	–0.057*
Poland	0.002	–0.034**	0.129***
United Kingdom	0.013	0.009	0.083***
Industries (ref. cat.: manufacturing)			
Agriculture	0.008	–0.010	0.156***
Construction	–0.019*	–0.024*	0.116***
Whole sale retail	0.015**	0.011	0.028
Transport	–0.002	–0.017	0.119***
Financial services	–0.026	–0.010	–0.024
Public administration and defence	0.004	–0.027	–0.009
Education	0.046***	0.075***	–0.007
Health	0.021**	0.055***	–0.077*
Other services	0.015**	0.018	0.014
Establishment size (ref. cat.: medium size)			
Small establishment (less than 50)	–0.011**	–0.017**	0.041
Large establishment (250 and more)	–0.020***	–0.011	0.245
Contract form (ref. cat: fixed-term contract)			
Open ended contract	–0.033***	–0.050***	0.018
Sector (ref. cat: private sector)			
Public sector	0.001	0.016*	–0.045**
Work intensity			
Working at high speed	–0.003	–0.011	0.043**
Tight deadline	–0.013**	–0.003	0.037**
Working time organisation (Dummies)			
Limited working time flexibility	–0.010**	0.008	–0.040**
High predictability of working time	0.001	–0.001	–0.154***
High working time autonomy	0.011	0.004	0.153***
Atypical working hours (Dummies)			
Weekend work	0.011*	0.011	0.093***
Shift work	–0.025***	0.019**	–0.067***
Night work	–0.006	–0.031*	0.102***
Predicted probability	0.023	0.044	0.0.202
Log likelihood	–2625.0977		
LR chi2 (108)	1115.04		
Prob > chi2	0.0000		
Pseudo R2	0.1752		
Number of observations	3,416		

*, ** and *** statistically significant at 10 per cent, 5 per cent and 1 per cent level.
Interpretation. *Ceteris paribus*, the predicted probability (6th row from the end of the table) that a male employee work short part-time, long part-time and long hours is respectively 2.3 per cent 4.4 per cent and 20.2 per cent. High skill male employees (second row, first column) have a 1.2 percentage point lower probability to work short-part time. Young singles male employees living with their parents (fourth row first column) have a 2.5 percentage point higher probability to work short part-time compared to young married/cohabiting dependent male employees without resident children.
Source: EWCS (2010), own calculations.

Table A6. Working time preferences. Female wage earners. Marginal effects (evaluated at sample means) from multinomial logit model (Reference category: preference for unchanged working time)

Variables	Preference for a reduction	Preference for an increase
Skill level (ref. cat.: low skill)		
High skill	0.050**	–0.018
Life stage (ref. cat.: couples without children)		
Young singles living with their parents	–0.011	–0.005
Young singles on their own	0.062**	–0.031
Couples with resident pre-school children	0.115***	–0.082***
Couples with resident children 7-12 years	0.109***	–0.082***
Couples with resident children 13-18 years	0.095***	–0.061***
Couple empty nest 46-59 years old	0.099***	–0.099***
Older couple	0.067	–0.140***
Older singles	0.024	–0.065***
Countries (ref. cat: Sweden)		
Germany	–0.041	–0.023
France	–0.111***	0.005
Italy	–0.115***	–0.001
The Netherlands	–0.048	–0.069***
Poland	–0.286***	0.013
United Kingdom	–0.073**	–0.106***
Industries (ref. cat.: manufacturing)		
Agriculture	–0.124	0.025
Construction	0.090	–0.002
Whole sale retail	0.028	–0.003
Transport	–0.030	0.014
Financial services	0.112**	–0.057
Public administration and defence	0.017	–0.006
Education	0.011	–0.002
Health	0.001	0.013
Other services	0.040	0.008
Sector (ref. cat: private sector)		
Public sector	0.007	–0.046***
Work intensity		
Working at high speed	0.051	0.017
Tight deadline	0.023	0.024*
Working time (ref category: full-time (35-41 hours)		
Short part-time (< 20 hours)	–0.437***	0.330***
Long part-time (20-34 hours)	–0.202***	0.222***
Long working hours (> = 42 hours)	0.303***	–0.015
Household economy		
Good economy	0.022	–0.064***
Working time organisation (Dummies)		
Limited working time flexibility	–0.038**	0.024**
High predictability of working time	–0.021	–0.019*
High working time autonomy	–0.082**	0.016
Atypical working hours (Dummies)		
Weekend work	0.001	0.010
Shift work	–0.025	–0.041
Night work	–0.024	0.004
Predicted probability	0.238	0.111
Log likelihood	–2821.6833	
LR chi2 (108)	1438	
Prob > chi2	0.0000	
Pseudo R2	0.2031	
Number of observations	3,581	

*, ** and *** statistically significant at 10 per cent, 5 per cent and 1 per cent level.
Interpretation. Around 23.8 per cent of female employees have *ceteris paribus* a preference for a reduction of working time and 11.1 per cent a preference for increasing working time. (See 6th row from the bottom of the table). Married/cohabiting female wage employees with young pre-school children have a 11.5 percentage points higher probability to want a reduction of working time compared to young married/cohabiting female dependent employees without resident children (6th row, first column).
Source: EWCS (2010), own calculations.

Table A7. Working time preferences. Male wage earners. Marginal effects (evaluated at sample means) from multinomial logit model

Variables	Preference for a reduction	Preference for an increase
Skill level (ref. cat.: low skill)		
High skill	0.052**	–0.071***
Life stage (ref. cat.: couples without children)		
Young singles living with their parents	–0.062	0.019
Young singles on their own	–0.005	0.019
Couples with resident pre-school children	–0.008	0.003
Couples with resident children 7-12 years	–0.048	–0.015
Couples with resident children 13-18 years	–0.022	–0.020
Couple empty nest 46-59 years old	0.019	–0.057***
Older couple	0.039	–0.089***
Older singles	0.014	–0.027
Countries (ref. cat: Sweden)		
Germany	–0.131***	–0.006
France	–0.206***	0.060***
Italy	–0.220***	0.061**
The Netherlands	–0.203***	–0.020
Poland	–0.306***	0.064**
United Kingdom	–0.238***	0.016
Industries (ref. cat.: manufacturing)		
Agriculture	0.001	0.005
Construction	0.014	–0.003
Whole sale retail	0.006	–0.006
Transport	0.085	–0.020
Financial services	0.028	–0.052
Public administration and defence	0.030	–0.049
Education	0.009	–0.011
Health	0.094	–0.014
Other services	0.033	–0.015
Sector (ref. cat: private sector)		
Public sector	–0.055**	0.005
Work intensity		
Working at high speed	–0.009	–0.003
Tight deadline	0.003	–0.006
Working time (Ref category: full-time (35-41 hours)		
Short part-time (< 20 hours)	–0.350***	–0.020
Long part-time (20-34 hours)	–0.217***	–0.052*
Long working hours (> = 42 hours)	0.311***	–0.049**
Household economy		
Good economy	0.003	–0.011
Working time organisation (Dummies)		
Limited working time flexibility	–0.008	–0.014
High predictability of working time	–0.048***	–0.015
High working time autonomy	–0.031	0.005
Atypical working hours (Dummies)		
Weekend work	0.022	–0.021
Shift work	–0.053	0.021
Night work	–0.033	0.021*
Predicted probability	0.279	0.087
Log likelihood	–2781.4835	
LR chi2 (108)	998.03	
Prob > chi2	0.0000	
Pseudo R2	0.1521	
Number of observations	3,464	

*, ** and *** statistically significant at 10 per cent, 5 per cent and 1 per cent level.
Interpretation. Around 27.9 per cent of male employees have *ceteris paribus* a preference for a reduction of working time and 8.7 per cent a preference for an increase of working time. (See 6th row from the bottom of the table). Married/cohabiting male wage employees with young pre-school children have a 11.5 percentage points higher probability to want a reduction of working time compared to young married/cohabiting male dependent employees without resident children (6th row, first column).
Source: EWCS (2010), own calculations.

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