

Working time and work–life balance in a life course perspective

A report based on the fifth European Working Conditions Survey



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Project: Fifth European Working Conditions Survey

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Abbreviations used in the report

EU-OSHA	European Agency for Safety and Health and Work
EWCS	European Working Conditions Survey
ISCO	International Standard Classification of Occupations
LFS	Labour Force Survey (Eurostat)
NACE	Nomenclature générale des activités économiques dans les Communautés européennes (General industrial classification of economic activities within the European Communities)
ILO	International Labour Organization

Country codes

EU27

The order of countries follows the EU protocol based on the alphabetical order of the geographical names of countries in the original language.

BE	Belgium	FR	France	AT	Austria
BG	Bulgaria	IT	Italy	PL	Poland
CZ	Czech Republic	CY	Cyprus	РТ	Portugal
DK	Denmark	LV	Latvia	RO	Romania
DE	Germany	LT	Lithuania	SI	Slovenia
EE	Estonia	LU	Luxembourg	SK	Slovakia
IE	Ireland	HU	Hungary	FI	Finland
EL	Greece	MT	Malta	SE	Sweden
ES	Spain	NL	Netherlands	UK	United Kingdom
Other countriesHRCroatiaMOMontenegroPotential candidates		MK TR	former Yugoslav Republic of Macedonia ¹ Turkey		cedonia ¹
AL	Albania	XK	Kosovo ²		
Other NO	Norway				
	try groups				
EC12	12 EU Member States p	rior to en	largement in 1995		
EU15	15 EU Member States p	rior to en	largement in 2004		
EU27	Current 27 EU Member	States			

¹ MK corresponds to ISO code 3166. This is a provisional code that does not prejudge in any way the definitive nomenclature for this country, which will be agreed following the conclusion of negotiations currently taking place under the auspices of the United Nations (http://www.iso.org/iso.country_codes/iso_3166_code_lists.htm).

² This code is used for practical purposes and is not an official ISO code.

Executive summary

Introduction

Since the 1980s, most industrial societies have experienced a marked trend towards the diversification, decentralisation and individualisation of working time patterns, driven 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 increased participation of women in the labour force, various forms of working time arrangements have become more widespread, in particular part-time work. However, it is largely women who have taken advantage of the increased diversity and flexibility of working time.

Drawing on data from Eurofound's fifth European Working Conditions Survey (EWCS), based on interviews with more than 38,000 respondents in 34 countries, this report documents the prevailing working time patterns of employees, the self-employed and lone parents across five country clusters. It also analyses the relationship between paid employment and domestic activities, work–life balance and working time preferences across the life course.

Policy context

One of the main objectives of the Europe 2020 strategy is that at least 75% of the population aged 20–64 should be in employment by 2020, necessitating in many Member States a significant increase in female labour supply. To achieve this goal, the EU Member States, particularly those with low female employment rates, will have to implement policy measures that favour better work–life balance across the life course. Aspects of work–life balance, in turn, interact with key issues at stake in the current review of the EU Working Time Directive, in particular long working hours, but also unsocial working hours and the organisation of compensatory rest periods. In other words, understanding the complex interactions between working time organisation and working conditions appears to be crucial to the EU Employment Strategy. Furthermore, analysing working conditions in Europe in the context of life course, gender and cross-country perspectives is useful for identifying the potential barriers and difficulties EU Member States are confronted with. It will also pinpoint the policy reforms needed to achieve Europe's employment objectives.

Key findings

Working time

Average weekly working time varies considerably across countries, with a gap of nearly 20 hours between Turkey and the Netherlands.

Overall, the length of a country's weekly working time is negatively correlated with female employment rates. With the exception of a few countries, the higher the labour force participation of women, the shorter the average weekly working time.

The weekly working time of the self-employed (44.8 hours) is on average longer than for employed workers (38 hours), perhaps because the former are not subject to the normal working time legislation.

The gender gap in weekly working time remains significant, with men in the EU27 working on average 40.2 hours and women 35.4 hours per week.

The distribution of working time is greater among women than men. Women's working time is strongly influenced by their life stage. In all life stages, employed women work fewer paid hours than employed men.

In all country clusters, women's working time decreases during parenthood, while at the same time the gender gap in working time increases significantly.

The variation in women's working time across the life course is larger in both the northern European and the liberal market-oriented countries (Estonia, Ireland, UK) used in this analysis, as is the gender gap in working time. However, the northern countries maintain a high share of women in work even during parenthood.

Work–life balance and working time preferences

Around 80% of EWCS respondents report that their working time fits well or very well with their family or other social commitments outside work. Male employees are slightly less satisfied with their work–life balance than their female counterparts.

Compared to the northern European cluster, women in almost all other country clusters report great difficulties in combining work and family life. Family-friendly working time organisation can facilitate reconciliation of work and private life. However, during the parenting phase, employees report greater difficulties with work–life balance, even when working time and other characteristics are controlled for.

Almost 40% of employees indicate that they would like to change their current working time. There is a preference among men and women for a convergence of working time: shorter full-time hours for both.

Working time preferences vary significantly across the life course. In particular, mothers of pre-school children are more inclined to want a reduction of working time than their male counterparts.

Time spent doing unpaid work

In each life phase, employed women still spend on average more hours on non-paid domestic or care activities than employed men. The smallest gender gap is found in the northern cluster and the largest in the continental and southern cluster.

While the gender gap is lowest at the two ends of the life cycle, it increases dramatically during the parenting phase, with employed women spending twice as many hours on care and household activities compared with employed men.

When entering the parenting phase, employed women reduce their paid work by four hours a week but increase their unpaid work by 25 hours, while men's unpaid work increases by 12 hours.

The northern country cluster exhibits the lowest gender gap in time allocation, even when controlling for compositional and structural effects. This result can be ascribed to the active mainstreaming policies that promote gender equality, and to measures intended to help parents achieve a balance between paid work and family life. These measures include the provision of high-quality public childcare and elderly care facilities, and the option of flexible and reversible working time over the life course.

Policy pointers

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 (working hours) margins is crucial.

In most countries, the parenting phase remains a critical period for integrating women into the labour market. Increasing female labour force participation requires policy measures favouring a better balance between work, family and other social commitments, particularly in countries with low female employment.

Working men and women living in the northern country cluster appear to be at a significant advantage, which is undoubtedly due to an institutional design that promotes a more equal time allocation across gender. It is essential in policy design to consider time allocation as a whole (looking at paid and unpaid work), and its distribution across the life course.

Policy measures intended to reduce the gender gap in both paid work and unpaid domestic activities (both housework and care) are needed. Family-friendly, flexible and reversible working time options across the life course are also important.

Predictable working time and working time autonomy are associated with positive work–life balance outcomes whereas employer-induced working time flexibility and atypical working hours are associated with adverse outcomes.

Around 15% of male employees and 7% of female employees in the EU27 work 48 hours or more per week. Due to the negative effects of long working hours, policy and legal measures should be taken to ensure that working time limits are strictly enforced.

Introduction

In recent decades, profound changes in household and demographic structure have created new needs and challenges in modern industrial societies. The globalisation process and intense competition have had a large impact on production methods and work organisation. The introduction of new methods of production (such as just-in-time and lean production) has resulted in a gradual abandonment of the traditional ways of adjusting employment and a much more flexible organisation of work and working time. These trends mirror the transition from relatively standardised work organisation and working time patterns towards more complex and diversified structures.

Overall, since the 1980s, most industrial societies have experienced a marked trend towards a diversification, decentralisation and individualisation of working time patterns driven both by companies' requirements for greater adaptability to market constraints but also by significant changes in the gender division of labour. At the same time, there has been a trend towards a restandardisation of working hours – mainly at the supranational level with the introduction of the European Working Time Directive (2003/88/EC) that sets the European standard at a maximum of 48 hours per week. At the same time, influenced by the increased entry of women to the labour force, various forms of part-time work have become more widespread – especially in countries such as the Netherlands and Sweden but also in Germany and Austria (Lehndorff et al, 2010). Against the background of increased competition, many companies have restructured and adapted their working time according to their needs and new working time arrangements have been developed and implemented. While new forms of working time arrangements such as flexitime give workers the freedom to adjust their working time autonomy, such as working time on trust, have in some companies replaced the control of working hours by performance monitoring. While the pros and cons of these new forms of working time flexibility have been discussed elsewhere, there is no doubt that they contribute to more individualised and diversified working times (Eurofound, 2006a; Schuh et al, 2001).

Against this background, the starting point of this report is the observation that understanding how working time is organised and how this is impacting on balance of work versus private life is of fundamental importance. This general statement is very much in accordance with the main objective of the Europe 2020 employment strategy, stating that at least 75% of the population aged 20–64 should be employed by 2020, necessitating in many Member States a significant increase in women's labour market participation. As stressed by Rubery et al (2001) a decade ago, 'the European employment strategy is critically dependent upon the further integration of women into the labour market'. Today, it is well understood that work–life balance options, combined with the growing heterogeneity of living arrangements and preferences over the life course of Europeans are key issues in this respect. In other words, the success of the European employment strategy fundamentally depends on the introduction of a set of measures that will favour an increase in the female labour supply and adapt work–life balance arrangements across the life course (Eurofound, 2005b, 2006a, 2007a; Lewis, 1992).

These aspects, in turn, interact with key issues at stake in the current reviewing process of the European Working Time Directive, long working hours in particular, but also atypical working hours and the incidence of compensatory rest periods.

Key dimensions of working time are its duration, 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 (Figure 1). The basic assumption here is that working time regimes and configurations (across country, gender, industry 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 arrangements vary across the life course and that the prevailing time arrangements are also partly the outcome of this tripartite interaction.



Figure 1: Triangle of interactions impacting on working time and work-life balance

The analysis first looks at the main features of this tripartite interaction before turning to its impact on work–life balance and working time. If one accepts that the private life of workers and their respective household contexts have an impact on working time patterns, working time is also subject to major economic restrictions – both on the supply and the demand side of the labour market.

On the demand side, the imperatives of economic competition are 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 that affect key aspects of working conditions to be 'typically' encountered in the respective industries or occupations (Eurofound, 2007b). While it is true that company strategies, industries and/or occupation specificities will impact on 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. Furthermore, the social partners and/or the state, depending on the specificity of the industrial relations system, sets a regulatory framework that attempts to limit the negative externalities of certain working time configurations, or promote configurations with positive social multipliers (Lee et al, 2007).

As shown at the bottom of Figure 1, a full understanding of working time configurations and time allocation between men and women requires a life course perspective. The rationale behind this approach is that gender disparities in labour market commitments, the time devoted to one's job and working time arrangements (such as part-time work) may vary significantly over a life course. As has been confirmed by the latest working time analysis (Eurofound, 2009b) based on the European Working Conditions Survey (EWCS), 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 (Eurofound, 2008; Geyer and Steiner, 2007).

Recent comparative research shows that there are pronounced national differences between men's and women's employment profiles and working time patterns over a life course (see Anxo et al, 2007). Gender differences in working time patterns and arrangements over the life course may be dependent on the institutional and societal context, particularly the characteristics of the parental leave systems, the availability and cost of childcare services, the provision of 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 when leaving the educational system, entering the labour market, having children and retiring. 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.

The time spent on domestic and care activities is also central to the understanding of cross-country differences in the gender division of labour in general and the gender distribution of paid working time in particular. Some recent empirical evidence shows clearly that the time devoted to domestic activities and its distribution by gender and over the life course varies considerably across countries (Eurofound, 2009a; Anxo et al, 2011). The prevailing gender contract and gender division of labour between paid and unpaid activities are two factors that are also crucial for understanding the intercountry heterogeneity of working time arrangements and the extent of gender segregation in the labour market.

Eurofound's fifth EWCS gives the opportunity to shed light not only on prevailing working conditions and working time patterns in Europe but also to analyse the relationship between paid employment and domestic activities, work–life balance and working time preferences across the life course. As the EWCS covers a large array of topics beyond working time, it may serve as a good heuristic instrument for analysing the links between working time organisation and other aspects of working life, and links between working time and gender- and household-related aspects. Furthermore, the restrictions imposed on individuals' work–life balance due to productive constraints and flexibility requirements may have different consequences depending on household composition and the particular life course phase an individual is passing through. In this respect, the EWCS provides also the opportunity to identify some problematic working time arrangements requiring stakeholder and/or state intervention.

The structure of the report is as follows. Chapter 1 describes the dataset and addresses some conceptual and methodological issues principally concerning the life course approach and the adopted country-clustering method. The second chapter presents cross-country differences in actual working hours and the distribution of working time by gender, employment status (wage earners and the self-employed), household type (singles, lone parents, cohabiting couples with children) and across different life phases. Chapter 3 explores the factors affecting individuals' and households' work–life balance, while Chapter 4 analyses the gap between actual and preferred working time. The fifth chapter addresses the issue of unpaid work, by focusing on gender disparities across the life course with regard to the time devoted to domestic and care obligations. The final chapter provides some concluding remarks.

Data description and methodology

Survey methodology

Since the 1990s, the European Foundation for the Improvement of Living and Working Conditions (Eurofound) has conducted the European Working Conditions Survey (EWCS) every five years 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 fifth EWCS was conducted in 2010. In addition to repeating a large proportion of the questions posed in previous waves, the questionnaire for the fifth EWCS was updated to identify new and emerging areas of interest. Questions were included to provide detailed information on the working conditions of self-employed workers and in-depth analysis of psychosocial risks, worker participation, precarious employment and job security, place of work, work–life balance, leadership styles and health. Questions on household characteristics were expanded with respect to age, gender and economic activity of members in the respondents' household. Furthermore, the questionnaire was expanded to capture the impact of the economic downturn on working conditions.

Fieldwork for the fifth EWCS took place from January to June 2010. Almost 44,000 workers, between 1,000 and 4,000 per country, were interviewed in the EU27, Norway, Croatia, the former Yugoslav Republic of Macedonia, Albania, Kosovo, Montenegro and Turkey. Thus, the fifth EWCS covers the widest geographical area and the biggest sample size in the survey's history. All interviews were conducted face-to-face in the respondent's own household with a questionnaire that was 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 Norway, 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 the EWCS with the European Labour Force Survey (Eurostat) and calculation of corresponding weights. To ensure the representativeness of results based on the fifth EWCS data, three types of weights need to be applied: selection probability weighting, non-response (or post-stratification) weighting and cross-national weighting.

For the analyses in this report, post-stratification weighting was used both for country results and aggregate levels (country clusters and EU27 or EWCS results), thus providing average figures for respective countries and not weighting each country with respect to the size of its workforce in any country group.³

Key dimensions

The main objectives of this report are to identify factors explaining gender disparities in working hours, working time distribution, working time preferences, work–life balance opportunities, atypical work and the time devoted to unpaid work. These key dimensions constitute therefore the core of the analysis and the set of dependent variables. While systemically taking a gender perspective, the analysis also adopts a life course perspective by examining the extent to which crucial life stages among employed men and women affect their working time preferences, the likelihood of them being found in a specific working time arrangement or the possibilities they have to balance work and other social commitments. From the conceptual framework – the triangle of interactions described above – a set of suitable

³ In the analyses, only results for lone parents were based on cross-national weighted data, since it was not possible to compare countries due to the small number of observations.

socioeconomic control variables were selected for the regression analysis. These variables can be divided into three main categories: individual and household characteristics; societal and institutional features; workplace and working conditions characteristics. Regarding individual and household characteristics, the analysis controls for gender, employment status⁴, nine different life stages reflecting central phases in an individual's life course, educational attainment or skills level, household economic situation and division of paid work among spouses.

In order to take into account cross-country differences in industrial relations, social protection, employment and working time regimes, countries are clustered according to a set of indicators reflecting these societal dimensions. Concerning workplace characteristics and working conditions, several indicators are included such as types of industries (NACE), establishment size, whether the respondent worked in the public or private sector, type of employment contract, extent of flexibility, predictability, regularity and autonomy of working time, and atypical work (shift, night and weekend work).

Development of country clusters

The current wave of the EWCS provides data for 34 European countries, including Turkey. Although at the country level the number of observations is at least 1,000, due to too small a sample size disaggregated regression analyses cannot be performed at the country level. Therefore, countries are clustered according to a set of meaningful indicators that can both capture the main features of the societal systems and affect also the gender distribution of paid working time, work–life balance opportunities and even unpaid work.

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 and O'Reilly, 2000a). 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 centralisation 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, regulation can be perceived as operating at five different levels:

- the supranational level (through ILO standards, European directives);
- the national level through statutory provisions and regulations;
- the cross-industry or industry level through contractual-based collective agreements;
- the enterprise or establishment level through local agreements;
- the individual level through particular employment contracts (Anxo and O'Reilly, 2000b).

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 Denmark, Sweden, Germany and the Netherlands, collective agreements at industry or enterprise level appear to be the determining factors.

⁴ Different equations are estimated for men and women, and for dependent workers and self-employed.

By analysing the relationship between the different forms of regulation and the distribution of working time, various possible patterns are conceivable. To illustrate, in those countries where statutory standards prevail, or where a centralised and coordinated collective bargaining system is predominant (high rates of union density and/or high collective bargaining coverage), a high concentration of employees around the statutory and/or collectively agreed working time norm should prevail. More variation with regard to working time can be expected in countries where industry-level agreements are dominant, but a concentration among a certain working time standard can still be expected. In those countries characterised 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 enterprise or employment contract level, a wider diversification and dispersion of working time can be expected (Anxo and O'Reilly, 2000b).

For assessing the impact of industrial relations systems it is pertinent to look beyond the existence or absence of legal standards and provide a rough picture of the procedures geared to implementing labour standards in practice. Particularly important in this respect are the capacity to enforce employees' individual and collective rights by workplace representatives, mediation and arbitration bodies, and dedicated labour courts to decide on grievances within adequate time. The Labour Rights Standard index (LRS) is an additive index consisting of 15 indicators across three dimensions: individual labour rights, collective labour rights and control of implementation.

Indicators for the individual rights dimension are: protection from dismissal; health protection; limitation of working hours; gender equity; the right to join unions; minimum wages.

The collective rights dimension is built upon representation of interests by unions or works councils, information and consultation rights, collective bargaining, the obligation to negotiate, the general extension of (sectoral) agreements and the right to strike (without restriction).

The control of implementation dimension is constructed using data on: workplace representatives; labour inspection; pre-trial conflict management by mediation, conciliation, arbitration; and labour courts/efficient sanctions for law violation (Kohl et al, 2006).

The LRS provides data for 29 countries of the EWCS sample (excluding Turkey, Albania, the Kosovo, Montenegro and the former Yugoslav Republic of Macedonia) (Kohl and Platzer, 2007). All new Member states that joined the EU since 2004, with the exception of Slovenia, range below the EU27 average.

While the specificity of the industrial relations system might impact on the overall distribution of working time at country level, it will fall short of explaining the observed gender differences (except for those differences that have their roots primarily in industry-specific differences which surface as gender differences due to the prevailing gender segregation in the labour market). This is where the gender contract comes into play.⁵ Women's (full) participation in the labour market depends on a number of factors that also vary across countries. In some countries, the incidence of childcare institutions, in particular for small children under three years, is a crucial variable; in other countries, where grandparents and close relatives are nearby and available, and informal care arrangements prevail, this might not be a decisive factor. In some countries, for instance in Germany, a conservative image of motherhood hinders mothers of young children from returning to the labour market at an early stage and promotes the development of part-time work (Luci, 2011). In other countries, while conservative gender attitudes may exist, financial and economic constraints make it indispensable even for mothers of pre-kindergarten children to work full time.

⁵ Gender contact means a societal arrangement, implicit or explicit, regarding the prevailing gender division of labour between paid, unpaid work and care activities. Traditional gender contract means, for example, the prevalence of a traditional male breadwinner model.

However, the provision of childcare facilities is both related to work–life balance issues and the working time of women. This means that if the incidence of childcare in a country is taken as an instrument for clustering countries, there is a risk of tautology. Instead, this research uses broader indicators reflecting the extent of equal opportunities among men and women.

The Gender Empowerment Measure (GEM) is a measure of inequalities between men's and women's opportunities in a country. It combines the extent of inequalities in three areas: political participation and decision-making, economic participation, and power over economic resources.

The overall index includes the following eight indicators:

- seats in parliament held by women;
- female legislators, senior officials and managers;
- female professional and technical workers;
- the ratio of estimated female to male income;
- the year/s women received the right to vote and to stand for election;
- the year a woman became the presiding officer of parliament or of one of its houses for the first time;
- women in ministerial positions (Human Development Report Office, 2009).

Thus, the GEM measures the 'extent to which women and men are able to actively participate in economic and political life and take part in decision-making' (Human Development Report, 2009). The GEM is available for more than 100 countries, among them 30 of the countries taking part in the EWCS (the exceptions are Luxembourg, Albania, Kosovo, and Montenegro). However, for the purpose of this report, and in order to take into account the limitation of the EWCS, the 'non-participation' perspective is introduced by using the female employment rate as a weighting factor for the more politically oriented GEM dimension.

The last step in this clustering process was to integrate the labour rights dimension with the gender equity dimension. By doing so, the result is a two by threefold matrix with countries having either a low or a high rank (always in comparison to the median) in the dimension of the LRS, and a high, medium or low rank with regard to the GEM (see Table 1).⁶

^b For the country grouping, cut-off points were defined for each dimension. While the median rank served as the cut-off point for the LRS (thus, taking into account the abovementioned two-key pattern), a three-point division was used in order to allocate countries to the weighted gender dimension. The reason for this approach was twofold. First, the objective was to end up with a manageable and traceable cluster solution that is easily applicable. Second, to handle the wide range of ranks in terms of the GEM scale that applies to the EWCS countries (the span for the weighted index is more than 50 points) and to take account of the complexity of the construct, it was decided to use a three-cut differentiation. The five highest scoring countries (with scores above 60) were labelled 'high gender equity'; countries with weighted scores below 60 and over 40 points were assigned to the 'medium' group; and countries with a lower score than 40 are in the 'low gender equity' group. The cluster results have been discussed with five national experts from France, Germany, Poland, Turkey and the UK. Refinements have been made in line with this discussion. For instance, it has been decided to allocate Italy to the medium gender equity cell despite its low score on the GEM.

Dimension	High gender equity	Medium gender equity	Low gender equity
High LRS	Norway, Sweden, Denmark, Netherlands, Finland (northern country cluster)	Belgium, Austria, Germany, France, Portugal, Spain, Slovenia, Luxembourg, Italy and Greece (continental and southern cluster)	
Low LRS		United Kingdom, Ireland, Estonia (liberal market-oriented cluster)	Latvia, Cyprus, Czech Republic, Lithuania, Slovakia, Bulgaria, Poland, Hungary (central and eastern European cluster)

Table 1: Country clusters according to gender empowerment and labour rights standards

Source: Authors' analysis framework

As can be seen in Table 1, 26 of the EWCS countries could be allocated to the different cells of the matrix. Eight countries (Albania, Croatia, the former Yugoslav Republic of Macedonia, Kosovo, Malta, Montenegro, Romania and Turkey) could not be classified, principally due to lack of data. In order to keep these countries in the analysis, they were clustered into a 'residual' group. It should however be stressed that Malta, Romania and Turkey were 'deliberately' clustered into the residual group. Both Turkey and Malta were at the bottom of the weighted GEM scale with very low scores. Romania finds itself at the very bottom on the LRS scale and with equally low weighted GEM scores, such that its inclusion in the main four clusters would not be appropriate. As a consequence of this procedure, five clusters were created, and three of them are reminiscent – at least to some extent – of the well-known typology of Esping-Andersen (1990, 1999), namely the Nordic, continental and liberal clusters. Clear deviations can also be identified: for example, the Netherlands in the first cluster, Spain and Italy in the second, and Estonia in the third. However, it is worth underlining again the objective of the country clusters. The objective of the clustering approach was not to develop a new typology that could compete with established models of welfare state capitalism, but to construct country clusters that are adapted to the issues at stake and serve the purposes of this research.⁷

Stylised household life course typology

There are strong reasons to believe that the time devoted to paid work and to unpaid domestic activities, the incidence of various forms of working time arrangements, and working time preferences and needs will vary during the life course of an individual. In order to reflect this life cycle component of working time, this report uses a variant of the family life cycle approach (see Anxo et al, 2011).

⁷ Some sensitivity analyses were also carried out by estimating separate equations for each of the country clusters. The results of the analysis show a relatively low extent of heterogeneity within clusters, thus validating the clustering choice.

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. The typology used here does not assume that everyone moves through a uniform sequence of household formations across their life course. Rather this study selects 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 who 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, category 4–6), midlife 'empty nest' couple households (middle-aged couples without resident children, category 7), older couples (category 8) or singles (category 9) without resident children in the transitional period to retirement (Anxo et al, 2007). In order to also tackle 'modern' family styles, no distinction is made between married or unmarried couples. For the purpose of this study, it is only decisive whether couples are cohabiting or not. One consequence of this choice regarding stylised life course is that important and, in some countries, increasingly significant household categories are in effect excluded such as, for example, lone parents.⁸ However, this typology covers more than 80% of all households found in the EWCS countries at a given point of time (2010).⁹ In order to illustrate and compare the situation of lone parents with other household categories separate estimates are nevertheless calculated for this category (ibid).

The stylised 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 (Anxo et al, 2007).

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

⁸ Although the research missed nearly 20% of respondents, it aimed through the selection made to cover all groups that are theory-relevant.

The distribution of the working population into nine life cycle stages are as follows: single persons (aged 18–35), 9%; singles (under 46 years) without children, 8%; younger cohabiting couples (woman under 46 years) without children, 10%; cohabiting couples with children aged 7–12 years, 11%; cohabiting couples with teenage children aged 13–18 years, 10%; cohabiting midlife empty-nest couples without resident children, 9%; older couples without resident children, 3%; singles (aged 50 or older) without resident children, 5%; households not classified, 19%.

Box 1: Stylised house	ehold life course typology
Single and childless y	
Single persons (18-	-35 years), living with their parents or relatives
Single persons (uno	der 46 years), without children
Childless couple hous	seholds
Younger cohabiting	g couples (woman under 46 years), without children
Couple households with	rith resident children
	est child is used to indicate the nature of parental responsibilities across the life course, from the
become more independ	school childcare through to the different needs and demands of children as they grow up and dent
Cohabiting couples	s with youngest children (children under 7 years)
Cohabiting couples	s with young children (children 7–12 years)
Cohabiting couples	s with teenage children (children 13–18 years)
Older couples withou	it children living at home
Midlife 'empty nes	st' couples without resident children (woman aged 46-59 years)
Older cohabiting co	ouples without resident children (woman aged 60 years or older)
Older singles	
Ŭ	ed 50 years or older), without resident children
	Source: Anxo et al, 2007

Data limitations and estimation techniques

As the EWCS depicts the working conditions and job quality of those who are in employment (workers and the selfemployed), this has some consequences when it is used to assess the extent of labour market integration of men and women and the gender division of labour across the life course. Besides 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 restricts its surveying to economically active individuals (wage earners and the self-employed). For some countries with, for instance, low employment rates (in particular for women) this may create some potential selection bias both regarding working time and the time devoted to housework and/or care obligations. Some crosscountry and gender differences in, say, the duration of working time or unpaid work across the 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 working time and the gender division of labour. Nevertheless, 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 estimations. In the same way, the reader must be aware that the profiles 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 estimates 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 any results. As usual, the reader should handle the results of econometric analysis with care.

In addition to a standard descriptive and comparative analysis of the core dependent variables (working time distribution, working time preferences, work–life balance, atypical work and domestic activities) and in order to control for potential structural differences and compositional effects across countries, a set of regressions are estimated using standard econometric techniques. Since the five core dependent variables are either dichotomous (work–life balance indicators, atypical work) or multinomial, and so include more than one discrete choice (working time preferences and working time distribution), adapted and standard econometric methods have been used such as standard and multinomial logit. For domestic activities (housework and care work), this analysis uses a Tobit¹⁰ to take into account the fact that some individuals do not report housework or care work.

¹⁰ The Tobit model is a statistical model used to describe the relationship between a non-negative dependent variable and an independent variable. Since in the logit and multinomial logit the estimated coefficients have no natural interpretation, marginal effects evaluated at sample means are reported here.

Working time arrangements 2

Key dimensions of working time are its duration, its scheduling and its distribution over time. It is assumed that working hours of individuals in each of these three dimensions are embedded within a complex nexus of interactions between households, social partners and the state. It is well established that this complex nexus differs substantially across countries, and groups of workers producing different configurations of working times (such as by country, gender, industries and occupations; see also the latest EWCS-based working time report: Eurofound, 2009b).

This section draws attention to this tripartite interaction between households, employers and employee representatives and the state, and shows that these configurations of working time might change over the life course of individuals. Moreover, as the needs and preferences of individuals or households with respect to working time are changing, depending on their respective life 'trajectories' and life stages, the implications for work–life balance will be that working time patterns at certain life stages are either more in conflict or more in conformity with their current working time and private time needs. By relying on this concept, the aim is to identify key drivers that influence working time and the decisions of women and men about working time in different countries over their life course.

The average working time of employed persons¹¹, encompassing full-time and part-time workers, is often used in international comparisons. Once again the reader has to bear in mind that the analysis is restricted to economically active individuals and therefore does not take into account cross-country differences in employment rates. In other words, some countries might have long working hours for currently employed persons but a low participation rate, while other countries might have shorter working time but higher employment rates. Obviously cross-country differences in average working time at the aggregate level might also conceal large structural differences in, for example, the distribution of employment by industries, the extent of self-employment and also the distribution of working time. Concerning the last factor, national disparities in the incidence of part-time work is an important element. As stressed by Lehndorff et al, 'in order to clarify the gender-specific aspect of working hours, this parameter [the use of aggregate working time] is extremely useful', especially when information on female employment rate is used at the same time (Lehndorff et al, 2010, p. 16). Average working hours, especially when analysed together with employment rates and the distribution of working time, provide a more complete and exact picture on women's (and men's) participation in the labour market. Taking a life course perspective might also enhance understanding of the situation of men and women in the labour market, but also with regard to the gender division of labour.

Figure 2 displays the average weekly working time for female and male wage earners in the 34 countries. Average weekly working time varies considerably between the sample of countries. Indeed, the difference between Turkey and the Netherlands amounts to nearly 20 hours. Wage earners in Turkey work on average more than 50 hours per week, while the corresponding figure in the Netherlands is 31.4 hours. A closer look at the data reveals a clear south–east north–west divide. With the exception of Turkey, the first nine countries with the highest weekly working time belong to the former Eastern Bloc and have (if at all) only recently become EU Member States. Interestingly, 13 of those 14 countries with a weekly working time below 38 hours are former EU15 Member States.

Figure 3 shows the average working time for women and men in Europe. In all countries, men work on average longer hours than their female counterparts. However, the extent of the gender time gap differs across European countries.

¹¹ Observations where the respondent reported weekly working hours above 120 hours were deleted.



Figure 2: Average weekly working hours of male and female wage earners in Europe

Source: EWCS 2010, own calculations



Figure 3: Average weekly working hours of wage earners in Europe, by gender

Source: EWCS 2010, own calculations

Figure 4 shows that the overall length of women's weekly working time is negatively correlated to female employment rates. That is, with the exception of a few countries, the higher the entry of women to the labour force, the shorter is the aggregate weekly working time.





Source: Eurostat, Labour Force Survey data 2010 and EWCS 2010, own calculations

Obviously this result can be ascribed partly to the high proportion of female part-timers and more generally to the type of working time and gender regime prevailing in a specific country. Figure 4 also indicates differences in countries' strategies to integrate women in the labour market.

A thorough analysis of the employment rates shows that a high female employment rate – high in the sense that rates are above the EU27 average – is indeed positively correlated with the proportion of the general part-time rate. The part-time rate is especially low in the central and eastern European countries with figures varying between 2% in Bulgaria and 11% in Slovenia, while they are well beyond 25% in the Scandinavian countries and approaching 50% in the Netherlands. There are also striking differences within the EU15. It is also important to keep in mind that not only the proportion of part-time workers, but also their average working hours can differ widely across countries. In 2010, part-time employees in the EU27 worked on average 20.1 hours per week, Germany with 18.3 hours being at the lower end of the scale and Sweden with 24.0 hours at the top (Eurostat, 2011 data).

The previous development illustrates the risk of focusing only on average working time at the aggregate level and also of restricting the analysis to economically active men and women. The next section will concentrate more on gender differences across countries and life stages and will show that countries are following different strategies regarding the integration of women into the labour market.

The average weekly working time of the self-employed is highest in Greece and Poland, with those countries reporting more than 50 hours a week (Figure 5). With only very few exceptions (Estonia, Latvia and Montenegro), the average weekly working time of the self-employed (44.8 hours) is longer than that of wage earners (38 hours). Besides traditional factors such as economic constraints and/or preferences in time allocation, the observed disparities in working time across employment status might be ascribed to the fact that the self-employed are not subject to working time regulation, neither at the country nor at the EU level (as stipulated in the EU Working Time Directive 2003/88/EC).

Against this background, a part of the observed difference in average weekly working time of employed persons across countries might be explained by cross-country differences in the extent of self-employment (varying between 12% in the Czech Republic and 19% in Romania). Also worth noting is that the working time gap between wage earners and the self-employed varies across countries: particularly large differences (over 10 hours) can be found in Albania, Belgium, Denmark, Greece, Luxembourg, the Netherlands and Poland, while comparatively small differences of up to two hours are common in Estonia, Latvia, Montenegro, Sweden and Turkey.

This finding shows that potential spill-over effects from the EU working time directive to the self-employed are hardly noticeable, and that their actual weekly working time is only marginally related to the working time standard in a country.





Source: EWCS 2010, own calculations

Working time distribution among wage earners

The following section looks in more detail into the distribution of working time across country clusters and across the life course, starting with wage earners. Initial descriptive bivariate analyses are followed by more elaborate regression analyses. Taking this approach, the aim is to get more insight into the drivers of working time arrangements of women and men in Europe.

As shown by Figure 6, the gender gap in weekly working time remains important, with men in the EU27 working on average 40.2 hours and women 35.4 hours per week. As expected, given the way the country clusters have been constructed, working time and the gender gap in working time varies significantly across the sample of countries.

Regarding disparities across country clusters, the gender gap in weekly working time for wage earners is lowest in the residual countries with men working on average 44.4 hours and women 40.6 hours per week. Interesting also to note is that female wage earners in the residual countries work on average 8.6 hours longer per week than women in the northern country cluster.

The gender gap in weekly working time for wage earners is the largest among the northern and liberal market-oriented countries and less pronounced in both central and eastern European countries and the residual cluster. In general, the gender gap in working time among wage earners has a tendency to be lower in countries with a low female employment rate and most probably limited opportunities to work part time. But the gap is also low in the central and eastern European countries due to the resilience of a historical legacy inherited from the communist period, with a low gender gap in both employment rates and working time.





Source: EWCS 2010, own calculations

Since average weekly working time might conceal larger differences in the distribution of working time, working time is divided into eight categories, thereby taking into account various forms of part-time work, various definitions of full-time work, and extremely long working hours. Figure 7 displays the gender distribution of working time for the sample of countries as a whole. A significant proportion of female and male wage earners in the EU27 are concentrated around the 40-hour norm (respectively 37% and 46%). As expected, the dispersion of working time is higher among women

than men.¹² More than 20% of female wage earners work on average fewer than 30 hours per week compared with only 7% of men. An eye-catching finding is that the proportion of wage earners working very long hours (48+ hours) is notably high with a significantly higher incidence of long working hours among male employees (16% compared with 8% among female employees).





Figures 8 to Figure 12 display the working time distribution across the country clusters and within clusters by gender. In the northern countries, the 40-hour weekly norm is – even for male wage earners – not as pronounced as in the other clusters (Figure 8). As regards working time arrangements for men, a weekly working time of between 36 and 39 hours (32%) is more common than 40 hours a week (30%). Women are to a larger extent concentrated in the 36–39 hours bracket (30%) than in the 40-hour bracket (14%) There are, however, large gender differences in the extent of short part time and long hours. Every fifth woman in the northern countries works short part time (20 hours or fewer) while the respective number for men is only 8%. Conversely, nearly 20% of male employees work longer than 40 hours (compared to around 10% of women).

In the liberal market-oriented cluster, the gender disparities in working time distribution and the gender polarisation of working time is even more pronounced, with nearly 25% of women working short part-time hours (compared to 8% of men) (Figure 9). Although the 40-hour standard working time appears to be still prevalent in this cluster, the gender gap in the proportion of persons working 40 hours is 10 percentage points (39% of men compared to 29% of women). Also remarkable is the high incidence of men working extremely long hours of 48 hours or more per week (16% of men versus 6% of women), which might at least partly be a result of the possibility for employees in the UK of opting out.

Source: EWCS 2010, own calculations

¹² Standard deviation for working time: men, 9.1; women, 9.7. Coefficient of variation for men, 0.23; women, 0.27.

The gender gap in working time distribution appears even more pronounced in the continental and southern cluster (Figure 10). Female and male employees exhibit different working time standards with women clearly located in the part-time corner: about 44% of women in this cluster work fewer than 35 hours a week, while more than 80% of male wage earners work longer than 35 hours. The gender pattern of this cluster deviates noticeably from those of the other clusters, in particular from the northern cluster, central and eastern European countries and the residual clusters in exhibiting a double working time standard for women and men. While in the northern countries some convergence between men and women's working time towards shorter working hours can be observed, the continental and southern cluster mirrors a divergence in part-time working women and full-time working men. Again a significant proportion of men and women (men: 14% women: 7%) works longer than the statutory 48 hours limit.



Figure 8: Working time distribution in the northern cluster, by gender

Source: EWCS 2010, own calculations

Working time and work-life balance in a life course perspective



Figure 9: Working time distribution in the liberal market-oriented cluster, by gender

Figure 10: Working time distribution in the continental and southern cluster, by gender



Source: EWCS 2010, own calculations

Source: EWCS 2010, own calculations



Figure 11: Working time distribution in the central and eastern European cluster, by gender

Figure 12: Working time distribution in the residual cluster, by gender



Source: EWCS 2010, own calculations

Source: EWCS 2010, own calculations

In the central and eastern European countries, the working time distribution of dependent employed men and women is very similar, probably due to the abovementioned resilience of a full-time working culture and legacy, with a high concentration of men and women around the 40-hour norms (men, 52% compared to women, 53%) (Figure 11). Only 5% of women and 3.5% of men work short part time (20 hours or fewer). It should also be noted that a striking 20% of employed men and 11% of employed women work at least 48 hours per week.

The residual country cluster departs from the other clusters mainly by the lower gender gap in the weekly working time of wage earners, the low incidence of female part-timers and the high proportion of individuals working extremely long hours: 40% of men and nearly 30% of women report they work at least 48 hours per week (Figure 12).

The finding that gender-specific differences in working hours are very small in both the central and eastern European and the residual countries is remarkable, especially when considering the average female employment rates, particularly in the central and eastern European countries that are well above 50%.¹³ Taking also into account the low part-time rate in these two country clusters, it seems that (for women) the choice is to either work full time or withdraw (at least temporarily) from the labour market. Different strategies appear to be followed in the other clusters. While the northern cluster reveals a trend of convergence towards shorter full-time hours for women and men, and at the same time achieving above average female employment rates, the liberal market-oriented cluster and notably the continental and southern clusters exhibit another pattern. Except for Italy, all the countries in these clusters show medium to high female employment rates. However, there seems to be a trade-off between women's working time and the female employment rate. In these countries (with some exceptions, for instance Italy), it is mainly shorter working time that enables women (particularly mothers) to stay in the labour market.

Working time arrangements across the life course

In general, the extent of labour market participation varies significantly across the life course and in particular during the parenthood phase. Previous empirical evidence has shown (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 affects female labour force participation through a definitive or temporary withdrawal from the labour market, while in other countries the impact of young children takes essentially the form of a permanent or a temporary reduction of working time. Moreover, in some countries it might also be the case that already the decision to cohabit or marry affects the career and working time decisions of women. For instance, in Germany there are strong incentives for married women to reduce working time irrespective of whether there are children in the household. In other words, in the sample of employed individuals there is a risk that the impact of changes in household composition over the life cycle on labour supply is underestimated since these impacts are only observed at the extensive margin, that is on working time, given participation.

Bearing these drawbacks in mind, the analysis now turns to the working time profiles across the stylised life course of male and female wage earners. Figures 13 to 18 show the average weekly working time across nine life stages in the EU27 and for the five country clusters. As shown in the figures, the gender gap in working time profiles are important, with women 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 EU27, 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 attains a peak during the phase of union formation (young cohabitating women without children) although 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 country clusters, the

¹³ The average female employment rate in the residual cluster is the lowest with rates between 26% (Turkey) and 52% (Romania).

impact of children on female working time being particularly pronounced in the liberal market-oriented country cluster but also in the northern countries. Compared with cohabiting women without children, cohabiting women with preschool children in the northern countries work 4.6 hours fewer; the difference for the liberal market-oriented countries is even higher (-6.2 hours). At the same time, it can be observed that the gender gap in working time widens at this stage, and again this effect is most marked in the liberal market-oriented cluster (10.6 hours) and in the northern countries (8.7 hours), followed by the continental and southern cluster (7.5 hours), that is country clusters where part-time work is widespread. Since the average female employment rate is medium to high in all these clusters, 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. 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.¹⁴ This pattern is, however, more likely to be found in the northern, the liberal market-oriented, and the continental and southern clusters. In the two other clusters, the working time of women increases again as soon as children reach school age.

Men's working time, in contrast, appears to be less affected by the respective life stages, although the figures show a clear tendency towards longer working time during parenthood. This tendency is especially pronounced in the northern cluster and also in the liberal market-oriented cluster, while it is hardly noticeable in the central and eastern European countries and the residual cluster. 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.



Figure 13: Working time profiles for male and female wage earners in the EU27, by life stage

Notes: I – Single persons (18–35 years), living with their parents or relatives; II – Single persons (under 46 years), without children; III – Younger cohabiting couples (woman under 46 years), without children; IV – Cohabiting couples with youngest children under age 7; V – Cohabiting couple with young children between 7 and 12 years; VI – Cohabiting couple with teenage children between 13 and 18 years; VII – Midlife 'empty nest' couples without resident children; VIII – Older cohabiting couples without resident children; IX – Single persons (aged 50 years or older), without resident children. Source: *EWCS 2010, own calculations*

¹⁴ Before over-interpreting these findings, it should be emphasised again that this analysis is based on cross-sectional data and therefore it is not possible to disentangle age and cohort effects.



Figure 14: Working time profiles for male and female wage earners in the northern cluster, by life stage

Note: See note to Figure 13 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*



Figure 15: Working time profiles for male and female wage earners in the liberal market-oriented cluster, by life stage

Note: See note to Figure 13 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*



Figure 16: Working time profiles for male and female wage earners in the continental and southern cluster, by life stage

Note: See note to Figure 13 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*

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Figure 17: Working time profiles for male and female wage earners in the central and eastern European cluster, by life stage

Note: See note to Figure 13 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*



Figure 18: Working time profiles for male and female wage earners in the residual cluster, by life stage

Note: See note to Figure 13 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*

To sum up, in 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 country clusters, women's working time decreases during the parenting phase and the gender gap in working time significantly increases. The variation in women's working time across the life course is stronger in both the northern countries and the liberal market-oriented cluster, as is the gender gap in working time. These findings are at a first glance somewhat counterintuitive since it is known that gender equity is particularly high in the Nordic countries. However, and in contrast to other clusters, the northern countries manage to maintain a high proportion of women in the labour market even during parenthood due to extensive reversible working time options and generous and flexible parental leave systems. As shown by previous studies (see Anxo et al, 2007, 2011), the impact of young children on female labour supply in the Nordic countries takes essentially the form of a temporary reduction of working time and has limited effect on female labour force participation. Contrasting with this situation, the impact of young children on female labour force participation in other EU Member States is much stronger, implying a temporary or definitive withdrawal from the labour market but a lower effect on working time, given participation.

As already stressed, the incidence of part-time work in both the central and eastern European and the residual country clusters is limited. Limited working time options and flexibility across the life course implies that employees have either to work full time or to drop out of the labour market.

Working time distribution among wage earners: A multinomial approach

The above-described cross-country differences in the distribution of working time and differences in working time profiles over the life course might be explained by both compositional effects and/or structural differences in, for example, a country's demographical structure or the distribution of employment across industries. In order to take into account these structural effects and to identify the socioeconomic factors that impact on the working time distribution,

a set of multinomial regression analyses was defined separately for men and women and for wage earners and the self-employed.¹⁵

In order to cover the whole working time distribution, the dependent variable of weekly working time in the main job was divided into four main categories: short part time (20 hours or fewer), long part time (21–34 hours), normal full time (35–41 hours) and long hours (42 hours or more), whereby 'normal full time' was chosen as the reference category. This approach makes it possible to analyse and identify the factors that affect the likelihood that one individual is found in one of the four working time categories. Following the theoretical framework for the choice of central control variables (Figure 1), the following independent variables are included in the regression analysis: life stage categories (reference category: cohabiting couples without children), country clusters (reference category: northern cluster), skill level (reference category: low skilled), industries (reference category: manufacturing), establishment size (reference category: public sector), working time organisation (limited working time flexibility, regularity and autonomy of working time inserted as dummy variables) and atypical work (night, shift and weekend work, inserted as dummy variables).¹⁶

Female wage earners

Where women are located in the working time distribution is strongly affected by their life stages. Compared with cohabiting women without children (the reference category), the propensity to work short part time increases in all life stages except among young singles living on their own. For instance, compared with the reference category, the likelihood for young female singles living with their parents to work short part time increased by nine percentage points or 82%. This probability also rose significantly for employed mothers (66% for cohabiting mothers with pre-school children, 62% for cohabiting mothers with children aged 7–12 years and 66% for cohabiting mothers with resident teenagers). The likelihood of working short part time is also higher among older cohabiting women and older singles without resident children. The results therefore tend to show that the probability of working short part time is particularly high for young female singles living with their parents and for older cohabiting or single women without resident children – in other words at the two extreme ends of the age distribution. 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, perhaps as a means to re-enter the labour market or to progressively exit the labour market at the end of working life.

By contrast, and compared to the reference category (normal full time), the probability of working long part time increases only during the parenting period while at the same time the likelihood of working long part time declines with the age of the children. Conversely the propensity to work long hours is lower for cohabiting mothers with pre-school children and cohabiting mothers with resident teenagers (a reduction of respectively 27% and 14%). The incidence of long working hours also decreases significantly among older cohabiting or single women without resident children (a reduction of respectively 38% and 24%).

¹⁵ The first step was to estimate a complete model with gender and employment status as independent variables. Since the analysis showed statistically significant effects for gender and employment status, it was decided to perform separate estimations for men and women and for wage earners and the self-employed.

¹⁶ In what follows, the impact of a specific control variable on the likelihood of being in one of the defined working time categories, compared to the reference category (in this case working normal full-time hours, 35–41 hours per week) is either expressed in percentage points (the marginal effect estimated at sample means) or as the percentage variation in the predicted probability.

The incidence of female part-timers also varies significantly among the country clusters. Compared with the northern countries, female short part time is more prevalent within the liberal market-oriented countries (an increase of nine percentage points, or 81%) but significantly less likely in the central and eastern European countries and the residual cluster (respectively a reduction of 74% and 61%). While the northern, the continental and southern and the liberal market-oriented country clusters do not significantly differ in the extent of long part-timers, women in the central and eastern European and residual countries are less likely to work long part time (respectively a reduction of 65% and 62% compared to the northern countries). Conversely, these two country clusters display a higher propensity to work long hours, and this is especially true for the residual countries (central and eastern European countries: 88%; residual: 231%).

Male wage earners

The incidence of part-time work among men is not surprisingly significantly lower compared to their female counterparts. As also expected, the incidence of long working hours is higher for men.¹⁷

Like women, men's working time is affected by their life phase, but in different ways. Compared with the reference category (cohabiting men without resident children), male wage earners have a significantly 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 40% higher probability of working short part time (the corresponding figures for older cohabiting or single males being respectively 127% and 83%). Even though cohabiting fathers with young children have also a higher probability of working long part time (an increase of 1.8 percentage points, or 36%), overall similar results can be seen compared to the case of short part time. In other words, part-time work among men is more prevalent at the labour market entry (combining work and education) and during the exit phase (progressive retirement). Even if the presence of young preschool children increases the likelihood of working long part time, the impact of children on male working time seems to be more short-lived and transitory compared with their female counterparts.

Whether men take on part-time work depends strongly on the country they live in. Compared with the northern countries, men's propensity to work short part time is slightly higher in the market-oriented countries (an increase of 20.3%) but lower in all other country clusters (continental and southern cluster -15.9%, central and eastern European countries -22.1%, residual countries -23.9%). There is no difference in the likelihood of working long part time for men in the northern and liberal market-oriented countries. Again, however, the probability of working long part time for men is lower in the continental and southern cluster (-17%), the central and eastern European countries (-50%) and the residual countries (-65%). Nonetheless, the likelihood of working long hours is significantly higher in the liberal market-oriented, the central and eastern European and particularly in the residual clusters (the probability increasing by respectively 46%, 20% and 134%).

As far as wage earners are concerned, some further interesting results can be identified. The impact of skill level does not differ significantly across gender. The higher the skill level, the lower the probability of working short part time and conversely the higher the probability of working long hours. The incidence of working time arrangements varies across industries and sectors. For both genders, part-time working is much more prevalent in industries such as wholesale, retail, education and health compared with manufacturing industries. As far as long working hours are concerned, the findings reveal a significantly lower incidence of long hours among the female-dominated service industries, while male employees with long working hours are overrepresented among traditional male-dominated industries such as construction and transport. Also worth noting is the fact that, for both genders, marginal part-time and long hours seem

¹⁷ The predicted probability for working short part time is 2.7 and 5.1% for men, 10.9 and 16.9% for women respectively. The predicted probability for working long hours is 27.6% for men and 13.8% for women.
to be more prevalent in the private sector than in the public sector. Regarding the type of employment contract, both parttime work and long working hours seem to be much more prevalent among employees working on short-term contracts. Like women, men working at night and at weekends have a higher probability of working long hours. Regarding the size of establishment, the incidence of part-time work is higher in medium-sized establishments.

The results of the multinomial regression analyses confirm 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 particularly 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 and of achieving their own, partner-independent financial security. Given high and increasing divorce rates (Muehling and Rost, 2009), it can be assumed that elderly women will continue to be more likely than their male counterparts to be poor or nearly poor.

Working time distribution among self-employed

Overall, 14% of employees in the EU27 are self-employed, and the majority are male (63%) and have no employees (72%). Figure 19 compares the average weekly working time of wage earners and the self-employed across the five clusters and the EU27. Note that these aggregates combine women and men and part-time and full-time employed. On average, the self-employed in the EU27 work nearly seven hours more per week than wage earners. The findings also show marked differences across country clusters. The self-employed in the residual countries and the continental and southern cluster work the longest. Interestingly, however, the differences between self-employed and employed are most pronounced in the continental and southern cluster (8.6 hours) and the northern cluster (7.1 hours). The working time gap between dependent employed and the self-employed can at least partly be attributed to differences in the distribution of working time.

Looking in detail at differences between the self-employed and dependent employed, the working time distribution for the EU27 shows notably small differences in the proportion of part-time work up to 35 hours, only then can deviations in both groups be observed (Figure 20). While the working time of wage earners in the EU27 is clearly concentrated around the 40-hour norm (42%), this applies only to every fifth self-employed person. Furthermore, the 48-hour limit set by the European working time directive seems by and large to be respected by dependent workers (although around 12% still report having a longer working week of 48 hours or more), while a high proportion of the self-employed work at least 48 hours per week (44%).

The working time patterns of the self-employed across the country clusters are remarkably similar in that part-time work, and particularly short part time, does not play an important role, except for the liberal market-oriented cluster where 20% of women and men work at most 29 hours per week. Part-time work among the self-employed is especially low in the continental and southern cluster (10%) and in the residual cluster (11%). Compared to wage earners, a significantly lower proportion of the self-employed are working 40 hours (depending on country cluster, between 15% and 25%). Particularly widespread in all country clusters is the proportion of self-employed people working 48 hours or longer, ranging from 34% in the liberal market-oriented countries to 56% in the residual cluster.



Figure 19: Mean weekly working time for the self-employed and employed, by cluster and EU27

Source: EWCS 2010, own calculations



Figure 20: Working time distribution for the self-employed and employed in the EU27

Source: EWCS 2010, own calculations

To summarise, the data analysis reveals that a large proportion of the self-employed work very long hours. A weekly working time of at least 48 hours seems to be the norm for the self-employed while part-time work seems to play a minor role only. Not only are long working hours known to be associated with bad health outcomes but they might be causing specific problems in certain life stages, especially when children are small. Therefore, the analysis now turns to look at whether working time of the self-employed differs across the different life phases.

Figures 21–26 below contrast the working time profiles of the self-employed and wage earners across the stylised life course. In all life phases, the self-employed have longer working hours than wage earners across the EU27. Since no differentiation was made between the sexes here, the impact of the various life phases on working time are not as pronounced as in the previous analyses. In general, cohabiting wage earners living with young pre-school age children have a shorter working time compared to their counterparts without childern. This is not necessarily the case for the respective groups of the self-employed, where an increase in working time can be seen in the northern and the residual cluster, which may be attributed to an unequal gender distribution across employment status and country clusters.

Still the working time pattern of the self-employed varies across the country clusters. Overall for the EU27, there is not much variation across the different household types, working time oscillates around 45 hours and only decreases for the oldest age groups.

The northern countries show a deviating pattern: working time for the self-employed is particularly high for singles – especially for those still living with their parents – while for dependent employees, this is the life phase where working time is shortest. From this life phase onwards, a more or less steady decrease in working time can be observed, with older singles without resident children working the same amount of hours as their employee counterpart.

A different pattern emerges for the liberal market-oriented countries. While young singles still living with their parents display the shortest working time, working hours peak for young singles living on their own. Working time decreases again as soon as the self-employed enter marriage or cohabitation and rises again only during the empty nest phase. While older cohabiting couples have reduced working hours, their single counterparts have longer working times.

In the continental and southern cluster, working time decreases during the phase of union formation and remains comparatively stable during the parenting phase. Only when the youngest child becomes a teenager can an increase in working time be observed. Working time decreases again for the self-employed aged 60 or older. It has to be noted that average working time in nearly all life stages is at least 45 hours.

In the central and eastern European and residual clusters, no clear effect of family phase could be observed. Figures 25 and 26 show a fall and rise in working time across the family phases, although not falling below 45 hours. Only for the older self-employed in both clusters does working time decrease significantly.



Figure 21: Working time profiles for the self-employed and wage earners in the EU27, by life stage

Note: I – Single persons (18–35 years), living with their parents or relatives; II – Single persons (under 46 years), without children; III – Younger cohabiting couples (woman under 46 years), without children; IV – Cohabiting couples with young est children under age 7; V – Cohabiting couple with young children between 7 and 12 years; VI – Cohabiting couple with teenage children between 13 and 18 years; VII – Midlife 'empty nest' couples without resident children; VIII – Older cohabiting couples without resident children; IX – Single persons (aged 50 years or older), without resident children.





Figure 22: Working time profiles for the self-employed and wage earners in the northern cluster, by life stage

Note: See note to Figure 21 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*



Figure 23: Working time profiles for the self-employed and wage earners in the liberal market-oriented cluster, by life stage

Note: See note to Figure 21 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*



Figure 24: Working time profiles for the self-employed and wage earners in the continental and southern cluster, by life stage

Note: See note to Figure 21 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*



Figure 25: Working time profiles for the self-employed and wage earners in the central and eastern European cluster, by life stage

Note: See note to Figure 21 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*



Figure 26: Working time profiles for the self-employed and wage earners in the residual cluster, by life stage

Note: See note to Figure 21 for an explanation of the nine life stages. Source: *EWCS 2010, own calculations*

Working time distribution among self-employed: a multinomial approach

The same set of independent variables has been used for the self-employed. Instead of controlling for company size, as done for the wage earners, the analysis here looks at whether the self-employed had employees. Due to the limited sample size, it was not possible to formulate separate equations for men and women. Instead, the analysis controls for gender.

Not surprisingly, the incidence of long working hours is much higher among the self-employed than among wage earners. For instance, the predicted probability of working long hours amounts to 61% among the self-employed compared to 26% for wage earners. Also worth noting is that the propensity to work part time is – in contrast to what the descriptive analysis suggested – higher among the self-employed compared with wage earners once structural differences are controlled for. As expected, and compared with their male counterparts, female self-employed workers have a higher likelihood of working both short (an increase of four percentage points or 64%) or long part time (an increase of seven percentage points or an increase of 89%) but a lower propensity to work long hours (a decrease of 13 percentage points or 22%). As for the wage earners, the higher the skill level, the lower the likelihood for the self-employed to work part time. Conversely, the likelihood of working long hours increases with skill level.

The incidence of long hours among the self-employed is significantly higher in wholesale and retail, and lower in education, health and other services. Conversely, part-time work among the self-employed is more frequent in education and health. The propensity to work long hours is also higher among entrepreneurs with employees, the opposite being true for part-time work. Those self-employed who work weekends have a lower propensity to work part time but a more frequent propensity to work long hours. This also applies to those who work during the night. As far as life stages are concerned, the probability of working short part time among the self-employed increases for young singles still living with their parents (+62.6%) and also when the self-employed have young pre-school children (+64.1%). Older cohabiting couples and older self-employed singles have also a lower propensity to work long hours and a higher propensity to work short part time.

Compared with the northern countries, the self-employed are also more likely to work long hours in the continental and southern cluster (+11%), in the central and eastern European countries (+8%) and in the residual countries (+21%). In contrast to wage earners, the probability of working long hours among the self-employed is lower in the liberal market-oriented countries (-5%). The estimates tend to show that the differences in working time distributions across the country clusters are more pronounced for dependent employees than for the self-employed.

The working time of the self-employed in all countries and across nearly all life phases is longer than for dependent employees and very long working hours are especially widespread. The multivariate analyses showed that self-employed women are more likely to work part time whereas their male counterparts are more likely to work long hours. The working time of the self-employed appears to be relatively less affected during the union formation and the parenting phases; it is rather the groups at the two ends of the age distribution that show deviating working time patterns. Interestingly, the findings reveal that across Europe working time patterns differ more for wage earners than for the self-employed. Arguably, the most obvious reason for the similarities of working times of the self-employed across countries is the fact that the self-employed are not subject to labour law and labour market regulations, in particular working time regulation. Working hours of the self-employed are mainly affected by product market regulations, such as shop opening hours which may result in much longer working hours compared with wage earners. Basically, and beyond any regulation, working times of the self-employed, in contrast to wage earners, are primarily subject to self-management and, above all, individual economic needs and/or individual preferences.

Working time of employed lone parents

From previous studies (Chambaz, 2001; Jaehrling et al, 2012) it is known that lone parents, in particular single mothers, are a particularly vulnerable group. In some countries, they have higher inactivity rates, are less often full-time employed and therefore have a higher poverty risk. Previous studies have also shown that the majority of lone parents are working but that there is high variation across Europe.

The result of the data analysis for lone parents has to be interpreted with care since the EWCS includes only 1,235 lone parents (5%) as part of the sample. The large majority of lone parents are women, only 14% (n = 173) are men.

Figure 27 presents the working time distribution of lone parents compared with cohabitating couples with children in the EU27. As shown, the working time patterns of both household categories are surprisingly similar. The main differences concern the incidence of part-time work and long working hours. Indeed, the part-time proportion of lone parents is higher, with 25% of single parents compared with 17% of their cohabitating counterparts working fewer than 30 hours per week, and nearly twice as many lone parents report that they work fewer than 10 hours per week. However, a part of these differences is not necessarily due to the family situation but might be explained by compositional effects. Given the extraordinary burden of lone parents, the similarity regarding the incidence of full-time work is astonishing. For both groups, there is a relatively high concentration around the 40-hour standard (27% of single parents compared with 31% of cohabiting parents). Furthermore, the high proportion of lone parents working very long hours (48 hours or more) is noteworthy (12.5%). The younger the single parents are (and assumingly the younger their children), the shorter is their working time (see Figure 28) and the wider is the working hours gap compared with cohabitating fathers and mothers.



Figure 27: Working time profile for lone parents and cohabiting couples with children in the EU27

Source: EWCS 2010 and own calculations



Figure 28: Weekly working time by age group for lone parents and cohabiting couples with children in the EU27

Source: EWCS 2010 and own calculations

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Working time distribution among lone parents: a multinomial approach

For obvious reasons, the stylised life course approach cannot be used here to analyse the situation of lone parents. Instead, the regression analysis uses four household categories: singles without children, lone parents, cohabiting couples with children, and cohabiting couples without children (reference category). The same set of control variables has been used otherwise. Due to the small numbers of single fathers in the EWCS sample, the analysis was limited to single mothers only.

Compared with cohabiting women without children, single mothers are more likely to work short part time (+32%), and the same is true for cohabiting mothers (+45%). Single women without children do not differ from cohabiting women in this regard. Singles without children have a lower likelihood of working long part time (-10%), whereas the probability increases for single mothers (23%) and mothers in a relationship (29%). Lone mothers (-17%) and cohabiting mothers (-11%) are, nevertheless, less likely to work long hours than the reference category. Worth noting is that the difference in the likelihood of working long hours between lone mothers and cohabiting mothers is not very significant.

To summarise, it can be stated that lone mothers, once they are employed, show a very similar working time pattern as their cohabitating counterparts with resident children.

Atypical working hours

Impact of on health and work-life balance

Workers' work–life balance is known to be affected not only by the duration of working time, but also its scheduling. Moreover, atypical working hours are known to have a positive and negative impact. On the one hand, many studies have shown that they are connected with adverse health outcomes (for an overview of the most recent research, see European Commission, 2010). On the other hand, evening/night or weekend work may be the only possibility for some groups, especially mothers, to combine care activities and work. While health-related problems arising from night and shift work can be identified in employee surveys, they do not necessarily imply low levels of satisfaction with working conditions, given the extra pay traditionally (if not always) provided as a compensation for unusual working hours (Muñoz de Bustillo and Fernández, 2006). However, the negative impact on workers' health of night and shift work cannot in the long run be outweighed by extra pay. The 'sustainability' of work organisation and working times arguably ranks high on the list when it comes to coping with the challenges of an ageing workforce and health-related issues at the workplace (Lehndorff, 2006).

Next to the problem of health issues related to night and shift work, deviations from the standard working day may put pressure on many individuals' social life, including links with family and friends, but also household duties, thus exerting a dual strain on many of these workers. With regard to family and other social life-related constraints, particular attention has to be paid to weekend work since health issues are not equally important here, according to the findings of various employee surveys (Eurofound, 2002; Martin and Le Bihan, 2004). It has to be kept in mind that 'unsociable working hours' used to be a minor issue when the traditional male single-earner model was predominant in Europe. In the course of the continuous rise in female labour market participation, however, the issue of 'unsocial hours', particularly work on Saturday and Sunday, has become more prominent in public debates. In fact, the term 'work–life balance' is often primarily connected to the issue of working – particularly for women – at times of the day or the week that interfere with family obligations. This study also considers on-call work to be a form of atypical work. On-call work usually receives much less attention and little research has dealt with this issue. However, there is already evidence that, like other atypical working hours, on-call working also has adverse effects on individuals' work–life balance and health. For instance, the quality of sleep of on-call workers appears to be negatively affected even in phases when they are not on call, and they show higher stress levels and decreasing mental health (Nicol and Botterill, 2004).

In the following section, atypical working hours are defined as:

- working at night;
- working at weekends, either on Saturday or Sunday, or both;
- working shifts;
- on-call work.

The respective questions in the survey were: 'Do you work on call?'; 'Normally, how many times a month do you work at night for at least 2 hours between 10.00pm and 5.00am?'; 'How many times a month do you work on Sundays/Saturdays?'; and 'Do you work shifts?'.¹⁸

¹⁸ For the present analysis the type of shift worked, such as daily split shifts or permanent shifts, was not analysed.

Respondents were asked, for night, shift and weekend work, to indicate the number of times they worked at these atypical hours. For the purpose of this analysis, however, the answers were divided between never/seldom and often/very often. Only a minority of wage earners in the sample work atypical hours. Less than 5% work at night¹⁹, 18% during weekends, 21% do shifts and around 22% work on call.

The following multivariate analyses are limited to wage earners only. Separate standard logit was estimated for each of the identified atypical working types. As previously, the analysis controlled for gender, skill level, life stage, country cluster, sector, working time of respondent, working time of partner, establishment size, contract form, private sector and working time flexibility, regularity/predictability and autonomy.

Night work

According to the estimates, female wage earners have a significantly lower probability of working at nights than men do, and the difference is very marked (-60%). Interestingly, the likelihood of working at nights is hardly affected across the stylised life course in this study. Compared with cohabiting couples without children, the propensity to work at night increases only for the group of singles living on their own (24%). Hence, no statistically significant differences are found in the prevalence of night work between parents and cohabiting couples without resident children. Whether the decision to work at night for parents might be attributed to extra pay or whether night work was strategically chosen to account for otherwise existing difficulties in childcare maintenance or other, for example more job-related reasons stand behind it, cannot be inferred from the estimates. A negative association also emerges between skill level and night work, with high-skilled employees showing a lower likelihood of working at night (a reduction of almost 60%).

As expected, and compared with manufacturing industries, the incidence of working at night is significantly lower in construction (-200%) and financial services (-143%) and higher in transport (+59%) and healthcare (38%). There are also significant differences between the country clusters, even after controlling for industries. Compared with the northern countries, the probability of working at night rises in the liberal market-oriented cluster (69%), in the central and eastern European countries (33%) and in the continental and southern cluster (29%).

Weekend work

Almost 18% of wage earners report that they have to work on a regular basis at weekends, either on Saturday or Sunday or both. The predicted probability for wage earners to work during the weekend amounts to 13%. The incidence of weekend work does not differ significantly between men and women, with both equally likely to work on weekends. However, skill level influences the probability of working at weekends to a great extent, with highly skilled workers being much less likely to work Saturdays and/or Sundays (a decrease of the likelihood by seven percentage points or 56%). Interestingly, it appears again that the likelihood of working on weekends does not vary much between the life stage categories. Only older singles have a higher probability of working on weekends (an increase of the probability of two percentage points or 18%), compared with cohabiting couples without children.

¹⁹ The chosen operationalisation is very restrictive. When looking at the mere incidence of night work in Europe (those who report that they work at least once a month at night), the proportion is about 17% higher and corresponds to findings based on the Labour Force Survey (Lehndorff et al, 2010).

Large variations can be found among the country clusters, however. Compared with the northern country cluster, the probability of working at weekends is higher in the liberal market-oriented cluster (an increase of nine percentage points or 70%), the central and eastern European country cluster (an increase of six percentage points or 49%) and the residual countries (an increase of eight percentage points or 61%). Industries also play an important role when it comes to weekend work. Compared with manufacturing industries, the propensity to work at weekends increases in agriculture (72%), wholesale and retail (102%), transport (68%), public administration and defence (24%) and in health (128%) and the 'other' services (43%).

Shift work

Around 20% of wage earners in the sample work shifts. The predicted probability of working shifts among wage earners amounts to 16%, and significant gender differences were not found. The likelihood of working shifts declines significantly with skill level (a decrease by 13 percentage points or 80%). In contrast to weekend work, the likelihood of working shifts differs across the stylised life course. Young singles living with their parents (13%) and young singles living on their own (14%) have a higher probability of working shifts than cohabitating couples without children, while cohabiting couples in the empty nest phase show a reduced propensity to do so (-12%).

In contrast to the northern countries, shift work seems also to be more frequent in all other country clusters (liberal market-oriented countries: +56%; continental and southern cluster: +36%; central and eastern European countries: +72%; and residual country cluster: +86%). Not surprisingly, the type of industry impacts on the incidence of shift work. According to the findings, shift work is less likely to occur in agriculture (-59%), construction (-162%), financial services (-129%), public administration and defence (-49%), education (-85%) and other services (-44%), whereas shift work is more common in wholesale and retail (9%) and the health sector (44%) compared with manufacturing industries.

On-call work

The predicted probability of working on call among wage earners amounts to 18%. According to the estimates, female wage earners have a significantly lower probability of working on call, and the difference is marked (a reduction of seven percentage points or -39%). The propensity to work on call seems not to be affected by the employee's skill level. Nonetheless, this propensity does vary across the stylised life course. Although not the case for cohabiting couples without children, the propensity to work on call increases for singles living on their own (an increase of 2.6 percentage points or 24.5%), but also during the parenting phase, with a tendency to increase with the age of the children. As for night work or other atypical working hours, it is not possible to say whether the decision to work on call is a way of coping with childcare difficulties and/or is influenced by job-related reasons.

In contrast to manufacturing industries, the incidence of working on call is significantly lower in education and financial services (respectively a decrease of six and four percentage points or -33% and 25%), but significantly higher in other industries, such as health care and transport (respectively an increase of 35% and 34%). Significant differences can be found between country clusters. Compared to the northern countries, the incidence of working on call increases by 37% in the liberal market-oriented countries, by 58% in the continental and southern cluster, by 66% in the central and eastern European Countries and by 115% in the residual cluster.

The findings show that, with the exception of on-call work, parenthood does not seem to impact on the likelihood of working at atypical hours. Rather, cohabiting couples in the so-called empty nest phase and singles show a different pattern contrasting with individuals living in couples. Regarding gender differences, a higher tendency is found for men to work on call and at night. What seems to be decisive for the incidence of atypical working hours is the country of residence (for similar results regarding the analyses of single countries, see Schief, 2006; Eurofound, 2007b), establishment size and the type of industries.

Work–life balance across the life course $\,3$

The importance of achieving a well-balanced relationship between work and private life is broadly acknowledged today. It was not by chance that governments were being encouraged to implement policies aimed at achieving a better balance between work and family life in order to reach the Lisbon employment objectives of more and better jobs for everyone. Employees whose work demands fit with their private life obligations display lower sickness absence, show a higher work motivation and are in general more loyal to their employer. Although research on the topic of work-life balance dates back to the 1990s, the concept itself remains fuzzy and lacks a clear theoretical and operational definition (Eberling et al, 2004; Kümmerling, 2010). It has been broadly accepted, however, that work-life balance has gained importance through at least four major changes: the growing intensity of work, the increased entry of women to the labour force, changing attitudes and beliefs of people at work, and increasingly blurred borders between working and non-working time (Eurofound, 2005a, 2006a; Guest, 2002). Moreover, work-life balance is assumed to imply more than just the reconciliation of work and family commitments, by encompassing the whole life in its various dimensions. However, as Klenner and Schmidt (2007) have pointed out, evidence of the effects of the implementation of so-called family-friendly measures or measures to enhance work-life balance at the company level is scarce. While it is known that extremely long hours and certain shift systems are associated with bad health outcomes, they need not necessarily impact negatively on all employees' work-life balance, particularly not if they have organised their private life around the demands of the workplace. Moreover, as the needs and preferences of individuals with respect to working time are changing across the life course, working time arrangements at certain life stages are either more in conflict or more in conformity with individuals' work-life balance needs.

In order to assess the extent of work-life balance opportunities, the following question was asked: 'In general, do your working hours fit in with your family or social commitment outside work very well, well, not very well or not at all well?' A large majority (83%) of wage earners report that their working time fits very well or well with their family or other social commitments. Figure 29 shows the proportion of male and female employees who are satisfied with their work-life balance. Across all country clusters at least three-quarters of employees state that their work demands fit well or very well with their private life commitments. The extent of work-life balance satisfaction is higher in the northern cluster, with around 90% of respondents indicating that their working time fits well or very well with their other social commitments. Interestingly, women in all clusters, except for the northern countries, are more likely to be satisfied with their work-life balance than their male counterparts. The gender gap is particularly high in the liberal market-oriented countries. Given the prevailing gender contract regarding the division of domestic activities, it was reasonable to expect reversed results for women and men. A tentative explanation for these unexpected results can be found in the prevailing gender segregation in the labour market. By anticipating their role as both workers and 'main service providers in the domestic sphere', many women may still choose occupations and sectors that make it possible to better combine work and family commitments. This finding corresponds also with those of the fourth wave of the EWCS that found the same gender pattern and concludes that 'the main factors contributing to this unexpected outcome are, however, the volume of weekly working hours and the different ways in which working hours are organised between men and women' (Eurofound, 2007c, p. 72).



Figure 29: Proportion of women and men who report that their work hours fit well or very well with their private life demands, by cluster and EU27 (%)

Source: EWCS 2010, own calculations

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It should also be reiterated that only individuals were observed who are currently at work, implying a highly selective sample. In other words, it is important to consider that only those were observed who managed to 'survive' in the labour market although they have to struggle with care and reconciliation issues. One cannot infer from the available data whether major adaptations of working time or even job change took place in order to make it possible to conciliate work and private life.

Bearing these drawbacks in mind, a set of logistic regressions were estimated in order to identify, separately for men and women, which factors influence the perception of work–life balance among wage earners and the self-employed. The dependent variable, work–life balance, was dichotomised into two categories (fitting very well to well, compared with not very well to not at all well). Independent and control variables again included gender, life stage and life cluster, together with additional controls for industry, establishment size, contract form, own working time, partner's working time, working time organisation (limited flexibility, regularity and autonomy) and atypical working hours (night, weekend, on-call and shift work).

Work–life balance of wage earners

As previously mentioned, the majority of wage earners reported themselves satisfied with their work–life balance. Compared with men, women seem to be more satisfied with their work–life balance. The predicted probability that their working hours fit well or very well was 83% for men and 87% for women. High-skilled female and male workers seem to have fewer difficulties combining work and private life obligations. Contrasting with their female counterparts, male singles living with their parents report fewer difficulties with work–life balance compared with cohabiting men without resident children. For both sexes, those in the empty nest period, older cohabiting couples and older singles without

resident children report a higher degree of work-life balance. By contrast, and not surprisingly, as soon as employees enter parenthood, problems with work-life balance arise. However, the main gender differences in this regard is that the impact of children is limited to young pre-school children for men, but extends to the whole parenting period for women.

Compared to the northern country cluster, women living in the continental and southern cluster, central and eastern European countries or in the residual countries report greater difficulties in combining work and family life. Also worth noting is that men in all country clusters report greater difficulties in achieving work–life balance compared to men living in the northern countries. For men outside this cluster, the likelihood of reporting a good fit between working hours and other social commitments is reduced by 7 percentage points for men living in the liberal market-oriented countries, by 12 percentage points for men living in the continental and southern country cluster, by 10 percentage points for men living in central and eastern Europe and by 10 percentage points for those living in the residual countries.

The scheduling of working time is important for the individual assessment of work–life balance. Women and men working atypical hours appear to be less satisfied with their opportunities to combine work and other social commitments, and also report that the duration of working time impacts negatively. The same estimated model of control variables was used including time devoted to housework and care activities, but domestic work did not impact on the wage earners' assessment of work–life balance.²⁰ Working time organisation can make the reconciliation of work and private life easier, and both male and female employees with predictable working times or high autonomy are more likely to answer that they have no difficulty combining work and other social commitments. This indicates that working time flexibility has only positive effects when it is not employer-induced but lies within the responsibility of the employee. Employees on short-term contracts are less likely to indicate a good fit between their working time and other social commitments. The same is true for male employees working in the private sector. Male employees in transport and construction report fewer possibilities of work–life balance, while for women it is mainly in wholesale and retail that they encounter difficulties. In general, however, the disparities across industries seem to be relatively low. A further and counterintuitive gender difference with regard to work–life balance is that a partner's working time does not influence the perception of work–life balance for women. Men however with a non-working spouse have a slightly lower tendency to report that their working time fits well or very well with other social commitments.

In order to explore the possibilities for employees to be absent from work to take care of family or personal matters, the following question was asked: '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?' According to the results, only 28% of the wage earners indicate that they have this possibility. Not surprisingly, the fact that an employee declares that he/she has this possibility does increase significantly the likelihood of answering the previous question on work–life balance positively (an increase of nine percentage points, or 10%). Interestingly, results show that female employees have a significantly lower likelihood of being able to take an hour or two off to cope with urgent family or personal matters, in contrast to their male counterparts. High-skilled workers have a higher probability of being able to do this. Compared with the northern cluster, short-term absenteeism is much more restricted in all other country clusters. For instance, in the liberal market-oriented countries, the likelihood of taking an hour or two off is reduced by 49%, by 89% in the continental and southern countries, by 74% in central and eastern European countries and by 71% in the residual countries. The opportunity to be absent from work for a short period of time is also significantly more limited in transport, construction, healthcare and education. While atypical work reduces the likelihood of taking an hour or two off for urgent matters, on-call work increases it.

²⁰ Results available on request.

Work–life balance of self-employed

As previously mentioned, the self-employed are not subject to working time regulation which may at least partly explain their longer working time. Nonetheless, one of the motives, particularly for women, for opting for self-employment is the high degree of autonomy and flexibility in working time associated with self-employment, enabling a better balance between work and family life (see Mångs, 2011).

Against this background, it is interesting to note that, compared with wage earners, a lower proportion of self-employed workers report that their working time fits well or very well with their private and social commitments (overall 76%, men 73%, women 80%). Comparing the predicted probability between the self-employed and wage earners – that is, controlling for potential structural differences that could affect the difference – it is significantly lower for the self-employed than for wage earners (78% versus 84%) indicating greater problems with work–life balance for entrepreneurs.

It is also notable that no significant gender differences were found among the self-employed regarding their perception of work–life balance. In relation to the variation across the life course, only the self-employed in the parenting phase have a significantly lower likelihood of reporting a good fit between their current working time and private life (about -9% of cohabiting couples with resident pre-school children and children aged 7–12 years, and -7% of cohabiting couples with older children). Compared to the situation in the northern cluster, the self-employed in the continental and southern cluster are less satisfied with their work–life balance (-20%), followed by their counterparts living in the residual (-12%) and central and eastern European countries (-8%). Worth also noting is that no statistically significant differences were found regarding whether the respondent had employees. With regard to the duration and scheduling of working time, similar results as for wage earners were found. Working time is negatively correlated with work–life balance and atypical working hours (weekend work -9%, night work -16%). The high predictability of working time (+4%) and limited working time flexibility (+7%) nevertheless increase the likelihood of being satisfied with work–life balance.

Work–life balance of lone mothers

A large majority of lone mothers (81%) in the EU27 report that their work obligations fit well or very well with their private life commitments. (Lone fathers are not analysed here since the sample is too small.) Thus, lone mothers do not differ from the female sample as a whole. The following section focuses on the determinants of work–life balance for lone mothers. In contrast with previous estimates, the analysis deviates from the life stage approach by focusing only on the situation of lone mothers. Additional variables have also been included into the equation, such as 'age' and 'age squared' (to take into account a possible non-linear relationship between age and work–life balance), and time devoted to domestic activities.

The results show that the perceptions of work–life balance are age dependent, and the older a lone mother is, the better she rates her possibilities of combining work and other social commitments. There is not much difference between the extent of satisfaction with work–life balance across the country clusters, with the exception of the continental and southern cluster where lone mothers report significantly higher work–life balance difficulties compared with the northern cluster. Not surprisingly, a respondent's working time impacts negatively on the perceived possibilities to combine private and work commitments. Lone mothers in manufacturing. As for working time organisation, it appears that both limited working time flexibility and working time autonomy are linked with a good work–life balance, while weekend and shift work seem to decrease the possibilities of work–life balance among lone mothers. Somewhat surprisingly, the amount of hours lone mothers dedicate to care and housework does not significantly impact on their assessment of work–life balance.

Conclusion

A large majority of employees state that their working hours fit well or very well with their private life obligations. This is true for both women and men, and for wage earners and the self-employed. In general, however, male wage earners are less satisfied with their work–life balance than women (a pattern that could not be found for the self-employed). This somewhat counterintuitive finding is consistent with that of the EWCS series that linked this result to the fact that men have longer working hours while women have already adapted their working time to their needs or those of their families. However, this assumption can only partly explain the described results since the analysis controlled for actual working time. Another probable explanation is related to the prevailing gender labour market segregation and gender division of unpaid work. Many women, by anticipating their role as main care providers in the domestic sphere, may choose occupations, industries and sectors that are known to make it easier to combine work with family commitments. In this regard it is interesting that the work–life balance of men seems to be less affected across the life course than that of their female counterparts, indicating that men's dissatisfaction is actually more related to working conditions than to family obligations.

The results also reveal that longer working hours are negatively associated with work–life balance, and that specific working time organisation can improve work–life balance. High predictability and/or working time autonomy do increase the likelihood for a balanced work–life situation. Work–life balance opportunities seem to be more prevalent in the northern countries. Interestingly, the situation of lone parents with regard to work–life balance does not differ much across the country clusters, with the exception of the continental and southern cluster where lone parents are most likely to report that their work–life does not fit with their private needs. In general, there are no large differences in the situation of employed lone parents compared with the situation of employees in the whole sample. This might be a further indication that working mothers, and especially lone working mothers, are a highly selective group that manages to reconcile work and private life obligations.

Working time preferences across 4 the life course

The main purpose of this section is to identify the major determinants of working time preference among wage earners. More specifically, the objective is to analyse the extent to which working time preferences (for increasing or reducing working time) differ across gender, life phases, countries, industries and job characteristics. In the EWCS 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 is asked, in other words, to indicate his/her preferred working time, taking into account the possible impact on earnings of a reduction of working time (that is, a reduction of working time with no wage compensation).

The dependent variable is constructed in the following way. In the first step, the difference is calculated between the respondent's preferred working hours and actual working time, and then the result is allocated into three main categories: preference for increasing working time; preference for reducing working time; preference for no change. Since the dependent variable takes three distinct categorical values, a standard multinomial logit is used for the estimates. The category 'preference for no change of working time' is used as the reference category in the regression analysis. As previously, the control variables are:

- skill level;
- life stages;
- country cluster;
- industries;
- working time organisation and scheduling of working time;
- whether working marginal part time (15 hours or fewer) or long hours (42 hours or more);
- partner's working time and household's economic situation;
- the extent of work intensity.²¹

In general, a large majority of respondents seem to be satisfied with their current working time. Around 62% of employed individuals do not want any change in their current working time. According to estimates, employed men are on average slightly more satisfied with their current working time than their female counterparts, but the gender gap in working time preferences is small.²² Also worth noting is that a significantly larger proportion of employed persons report that they would prefer to reduce their working time (the predicted probability of opting for a reduction of working time is 28%) than to extend it (the predicted probability of opting for an increase of working time is 11%). According also to the results, employment status does not seem to affect working time preferences. Therefore, the analyses are restricted to wage earners and, as in the previous section, separate estimates are performed for men and women.

²¹ The variable work intensity is a continuous index ranging from 0 to 1 and based on the following EWCS questions: 'Does your job involve a) working at very high speed and b) working to tight deadline?

²² According to estimates, female employees are three percentage points more likely to want a reduction of working time, and one percentage point more likely to want an increase than their male counterparts.

Female wage earners

While a large majority of female employees declare that they do not want to change their working time, twice as many, however, would prefer a reduction than an increase of working time (the predicted probability for opting for a reduction of working time amounts to 25% compared with 13% for an increase of working time). High-skilled female employees have a significantly higher likelihood to prefer a reduction of working time (an increase of six percentage points or 24%). Conversely, the probability for preferring an increase of working time decreased by five percentage points (or almost 40%) among high-skilled female employees.

In relation to the variation of working time preference across the stylised life course, estimates show that compared with cohabiting women without resident children, cohabiting mothers of pre-school children and cohabiting mothers of teenagers are more likely to prefer a reduction of working time. Independently of their family status, older female employees are less likely to want an increase of their working time. High work intensity also affects positively the likelihood of a preference for a reduction of working time (an increase of 11 percentage points, or 45%). Paradoxically, work intensity is also positively correlated with the likelihood of preferring an increase in working time.

Compared with female employees living in northern countries, women in all other country clusters are less likely to wish for a reduction of working time. Female employees in the residual cluster have, however, a lower propensity of opting for longer working hours. A partner's working time does not impact on women's preferences for a reduction of working time. Nonetheless, women whose partner is not working or working part time are more likely to indicate a preference for an increase in working time. Regarding household economic well-being, measured here by 'easy to make ends meet', a good economy reduces the likelihood of opting for a lengthening of working hours. Women working during weekends are also more likely to want a reduction of working time, but not women working shifts. Regarding variations across industries, women working in education or wholesale/retail have a higher likelihood of opting for a lengthening of working time. Conversely, women working in public administration, financial services and the health sector are more likely to want a reduction of working time. The same is true for women working in the private sector.

As expected, working time preference is strongly dependent on female employees' current working time. Women with short working time, in particular marginal part-timers, have a significantly lower likelihood of wishing for a shortening of their working time (the likelihood decreases by 18 percentage points or 125%), and conversely a higher probability of wishing for a lengthening of working time (the likelihood increases by 18 percentage points or 165%). In contrast, female employees with long working hours are more likely to prefer a reduction of working time and less inclined to prefer a lengthening of working time.

Comparing the working time preferences between lone mothers and cohabiting mothers, no statistically significant differences are found regarding the preferences for a reduction of working time. Yet, lone mothers are more likely to opt for an increase in working time compared with other household categories.

Male wage earners

Turning to men's preferences, the higher the skill level, the lower the likelihood that men opt for an increase of working time, However, in contrast to women, men's skill levels do not affect their preference for a reduction of working time. High working intensity increases significantly the likelihood of opting for a reduction of working time (the probability increasing by almost five percentage points or 19%). Regarding the variation of men's preferences across the life course during the parenting period only, cohabiting fathers with children aged 7–12 years seem to want a reduction of working time. Conversely, and like their female counterparts, cohabiting male employees in the empty nest phase, and older employees irrespective of marital status, are less likely to want a lengthening of working time. In contrast to their female

counterparts, men working in the private sector have a higher likelihood of opting for a lengthening of working time; the same is true for men working in construction and education. However, wage earners working in the financial sector are less likely to want an increase of working time.

Globally, and compared with their female counterparts, a higher proportion of male employees want a reduction of working time, but the gender difference remains low (two percentage points). Male employees living in the northern countries are significantly more likely to prefer a reduction of working time than men in all other country clusters. Yet, male employees living in the liberal market-oriented countries or central and eastern European countries are more inclined to want longer working hours. Men whose partners are not working are more likely to opt for a lengthening of working time and less inclined to prefer a reduction of working time. Like their female counterparts, men working weekends are more likely to prefer a reduction of working time. However, men working shifts are less inclined to want a reduction of working nights are more likely to opt for a lengthening of working time. Surprisingly, men working nights are more likely to opt for a lengthening of working time. Surprisingly, men working nights are less inclined to either reduce or increase working time. As for women, but to a lesser extent, men's working time preferences are negatively correlated with their current working time.

Conclusion

Overall, a large majority of economically active individuals seem satisfied with their current working time. Among those expressing a preference for a change in working time, a majority of them say that they would like to reduce their current working hours. Working time preferences do not differ drastically across gender; if anything, a slightly higher proportion of men want a reduction of working time while a slightly higher proportion of women would like to increase their working time. The estimates tend also to show that a preference for a reduction of working time is positively correlated with skill level and work intensity. Irrespective of gender, working time preferences are also strongly related to employees' current working time. Marginal part-timers have a significantly higher preference for an increase in working time while employees with long working hours express a particularly strong preference for working shorter hours. This confirms the results of previous studies (Eurofound, 2002 and 2006b).

Against this background, the fact that a significantly 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 aspire to some convergence of working time. Working time preferences vary also across the life course, in particular during parenthood. Cohabiting mothers of pre-school children and teenagers are more inclined to want a reduction of working time while for fathers this is only the case when they have children aged between 7 and 12. Both male and female older employees seem also more likely not to opt for an increase in working time. Regarding country differences in working time preferences, both men and women in the northern countries seem to have a stronger preference for a reduction of working time. Men in the liberal market-oriented country cluster and in the central and eastern European cluster are more inclined to prefer a lengthening of working time.

Domestic activities across the life course 5

In spite of the increased entry of women to the labour force and the related shift from the single male breadwinner household towards dual earner households, there are still large gender differences in the patterns of time allocation.

Women are still devoting a much larger proportion of household time to domestic and parental activities than their male counterparts. Hence, in spite of a clear tendency towards a reduction of the gender employment gap over recent decades, the gender division of labour remains traditional with the resilience of a high gender specialisation in the domestic and the 'productive' sphere. European labour markets also remain highly gender segregated with women and men working in different industries and occupations, a part of this segregation being related to the persistence of this traditional gender division of labour between paid and unpaid work. Although this situation is practically universal, the extent of gender differences in the division of labour varies according to the type of welfare regime, employment systems and societal norms. Several cross-country comparative studies have shown that men's and women's employment profiles over the life course shows pronounced national differences (Anxo et al, 2007 and 2011).

In some countries, in particular southern European countries, a significant proportion of women still withdraw from the labour market during the life course phases of union formation and parenthood. In other countries, such as the Nordic countries, union formation and parenthood have little or no impact on female employment rates due in particular to generous and flexible parental leave systems, reversible time options over the life course and the provision of high-quality and subsidised childcare facilities. As noted previously, the time devoted to work in the labour market varies remarkably during the life course, even when the analysis is restricted to employed persons only. Several time-use studies (see Anxo et al, 2011) have also shown that the same is true for time spent on domestic activities, with persistent and significant differences over the life course across gender and countries. In particular, the phase of parenthood often implies a crystallisation of gender roles, with a significant increase in the time women devote to housework and childcare and a decrease in leisure time.

As shown in Figure 30, the time devoted to domestic activities varies across the country clusters. Overall, women spend on average more hours on unpaid activities than their male counterparts. In the northern countries, employed women spend on average less time on domestic activities than employed women in Europe. The opposite is true for employed men in the northern countries who spend, on average, more hours on domestic activities than other European men. As also shown below, the smallest gender gap is found in the northern countries, and the largest gap is in the continental and southern cluster, followed by the central and eastern European country cluster.



Figure 30: Time spent on domestic activities (housework and care activities), by gender, cluster and EU27, hours per week

Source: EWCS 2010, own calculations

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The time devoted to domestic activities also varies significantly across the life course (Figure 31). While the gender disparity is lowest at the two ends of the stylised life cycle, the gender gap increases dramatically during the parenting phase, reflecting the crystallisation of gender roles during parenthood.

Figure 31: Time spent on domestic activities over the life course (housework and care activities), employed men and women, hours per week





The figures below illustrate the large gender disparities in the division of domestic activities over the life course in the two clusters at opposite ends of this spectrum, the northern countries (Figure 32) and the continental and southern cluster (Figure 33). Compared with the northern countries, the gender gap is much higher in the continental and southern cluster, particularly during the parenting period. Worth also noting is that the time devoted to domestic activities is equal in the early and late phase of the life cycle in the northern cluster while the gender disparities are significant in the continental and southern and southern cluster.



Figure 32: Time spent on domestic activities across the life course (housework and care activities), northern country cluster, hours per week

Source: EWCS 2010, own calculations



Figure 33: Time spent on domestic activities across the life course (housework and care activities), continental and southern cluster, hours per week

The EWCS data only take account of the time devoted to domestic tasks among employed men and women and one should refrain from the temptation to extend the results to the whole population. As mentioned, in many European countries the prevailing gender contract still implies the persistence of the male breadwinner model with a high gender specialisation in the domestic sphere and the labour market. For countries with low female employment rates, there are strong reasons to believe that the employed women constitute a highly selected group with distinct preferences regarding time allocation between paid work and domestic activities. For these reasons, one cannot exclude the possibility that the results are biased and that the analysis underestimates the actual gender gap in domestic activities. Despite this, it may be argued that the country clusters partly take into account the cross-country disparities in equality of opportunity between genders, female empowerment and the differences in female employment rates. Furthermore, it may be argued that the observed gender disparities in the actual distribution of working time also reflect the resilience of a traditional gender division of paid and unpaid work with, for some countries, a high incidence of part-timers and particularly marginal part-timers.

Bearing in mind these drawbacks, the main objective of this section is to assess the extent to which the time devoted to domestic activities varies by gender, over the life course and between country clusters, controlling also for a range of other socioeconomic variables. In order to discriminate between traditional household tasks and caring activities, domestic activities are also divided into two broad categories: 'housework', comprising traditional tasks such as cleaning, cooking, washing, gardening and repairs, while 'care activities' include both childcare and care for adults.

Source: EWCS 2010, own calculations

Time spent on domestic activities

To take account of the fact that some individuals do not report domestic activities, a standard Tobit is used. As before, separate equations are formulated for men and women and use the following control variables: employment status, life stages, country clusters, an individual's working time and their partner's working time, the individual's economic situation, working time organisation and atypical working hours. In contrast to the way the distribution of working time, work–life balance or working time preferences were estimated, this analysis used educational attainment²³ instead of skill level and controls also for the number of resident children. Extreme values are also eliminated, using a maximum of 70 hours per week for domestic activities (or 10 hours per day).

In general, the proportion of employed women not participating in domestic activities in the sample of countries is much lower than the proportion of employed men (8% for women versus 31% for men).

Given participation in domestic activities and controlling for the above-described covariates, employed persons spend on average 14 hours a week on domestic activities (housework and care). Employed women devote almost 12 hours more to unpaid work than their male counterparts. Not surprisingly, the time spent on domestic activities increases during the parenting period. Cohabiting couples with pre-school children dedicate on average 15.5 hours more a week to domestic chores. Also worth noting is that the time devoted to domestic activities declines with children's age. As expected, the time spent on household activities increases with the number of children in a household (almost one hour per additional child). With the exception of liberal market-oriented countries, the time devoted to domestic activities is shorter in all country clusters compared with the northern countries. This is mainly due to the fact that, in these clusters, the gender gap is significantly higher and that men spend on average less time on domestic activities (Figure 34).

²³ The educational variables used in the estimation measure three levels of attainment. The lowest educational level is up to completion of compulsory primary school and brief vocational training; the intermediate level requires the completion of either higher vocational training or upper secondary school. The high attainment level includes individuals with college or university degrees. The intermediate level is the omitted reference category in the estimation.



Figure 34: Time devoted to housework excluding care, by gender, country cluster and EU27, hours per week

Source: *EWCS 2010, own calculations*

Time spent on housework

Restricting the analysis to housework excluding care (Figure 34), the time devoted to housework by employed men is significantly longer in the northern countries compared with other European countries. The gender gap in time devoted to housework is also much lower in the northern countries in contrast to the other country clusters.

Controlling for the above-described independent variables, estimates show contrasted results by gender. Working men with low educational attainment spend on average less time on domestic activities, and well-educated men spend more. The opposite is true for employed women. If one assumes a relatively high degree of assortative mating according to educational attainment, the results indicate that the division of domestic labour is more unequal among low-educated cohabiting couples than highly educated households, suggesting that education level is positively related to egalitarian household values.

Regarding the variation of housework over the stylised life course, young women living with their parents devote much less time to unpaid household activities (on average around nine hours fewer per week compared with cohabiting women without children, or a reduction of 76%). It is also interesting to note that young single women without children spend less time on housework (a reduction of around two hours or 18%). Contrasting with their female counterparts, young single men living on their own spend on average more time on household activities (an increase of 93% compared with the reference categories). These results therefore imply that union formation entails an increase of unpaid work for women and a decrease for men, and so a widening of the gender division of labour. More surprising and unexpected is that the time devoted to housework activities does not increase significantly during the early phase of parenthood, irrespective of gender. Obviously the main effect of children on unpaid work is an increase of time devoted to caring activities, as discussed in more detail in the next section. The strong complementarity between caring activities and traditional housework tasks during the early phase of parenthood may be another explanation. Cohabiting mothers of

teenagers dedicate more time to housework, while cohabiting fathers of teenagers devote less time in contrast to the reference categories. It is also interesting to note that older single men (mainly widowers and divorced men) allocate significantly more time to housework than young cohabiting men without resident children.

As expected, family size (number of children) does increase the time devoted to housework (almost one hour per additional child). Looking at regional differences, employed women in the northern countries spend on average less time on domestic chores compared with women in the other country clusters (a reduction of between one-and-a-half and almost three hours, or between 13% and 25% less). Men living outside the northern countries and the liberal market-oriented economies spend significantly less time on housework (between 47% and 67% less). The results confirm therefore that the gender gap in the time devoted to unpaid work is significantly lower in the northern countries. Irrespective of gender, greater commitments in the labour market to longer working hours also reduces the time spent on household activities, but the impact is stronger for men.

Women living in households with a good economic background spend on average less time doing household activities. One hypothesis is that in well-off households, employed women outsource some housework tasks. While working time organisation and atypical work do not impact on the time women spend on housework, men working shifts devote on average more time to housework (an increase of 17.5% or around half an hour a week).

Time spent on care activities

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On average, men and women spend eight hours a week on care activities, men devoting on average 5.5 hours and women 10.7 hours. The gender gap in care activities follows the same patterns found for housework, with the lowest gender gap found in the northern countries, and the largest among the continental and southern cluster, followed by the central and eastern European countries (Figure 35). Also worth noting is the fact that employed men in the northern cluster and the residual cluster spend more time on caring activities compared with other men in Europe.



Figure 35: Time devoted to care activities, by gender, country cluster and EU27, hours per week

Source: EWCS 2010, own calculations

While the level of educational attainment does not affect the time women devote to care activities, highly educated men spend on average more time on care activities, the opposite being true for poorly educated men. Young women and young men devote less time to care activities than cohabiting women without resident children. Not surprisingly, the time dedicated to care increases dramatically for cohabiting mothers and fathers, and declines with the increasing age of children. Cohabiting mothers of pre-school children devote on average 28 hours more to care activities, compared with the reference category, more than twice as much as fathers with children of the same age. Cohabiting mothers with children aged between 7 and 12 spend nearly 25 hours more (men 12 hours) while mothers with teenagers are still devoting 18 hours more (men 10 hours) to childcare activities.

In contrast to their female counterparts, the difference in men's engagement in care is not statistically significant. One hypothesis is that older women without resident children take care of grandchildren or other, perhaps elderly, relatives when the children leave home. For both genders, family size increases the time devoted to care activities, but the impact is stronger on women. Compared with northern countries, women in all other clusters devote more time to care work.

The opposite pattern is found for men: compared with the northern countries and with the exception of the liberal marketoriented countries, men in all other country clusters devote less time to care. Furthermore, the household's economic situation, the type of working time organisation or the scheduling of working time has no impact on women's care activities. Men working at night or on shifts spend on average more time on care activities, while atypical work does not impact on women's care activities.

In contrast to cohabiting mothers, employed lone mothers do not seem to spend more hours on care activities, both dedicating around 12 hours more per week to childcare than young cohabiting women without resident children. Nonetheless, lone mothers spend on average one hour less on housework activities than the reference categories or cohabiting mothers. This might indicate that lone mothers have to reduce the time spent on household activities in order to maintain paid work while at the same time taking care of children.

Conclusion

The results of the analysis show clearly that the northern country cluster exhibits the lowest gender gap in time allocation even when controlling for potential compositional and structural effects. This result can be explained by the active policies that promote gender equality and measures aiming at balancing paid work and family, in particular a generous and flexible parental leave system, the provision of high-quality public childcare and elderly care facilities, and reversible paid working time options over the life course.

A more equal gender distribution of educational attainment and limited loss of earnings related to childbirth are also important factors explaining the relatively lower gains to specialisation in domestic activities in northern countries compared with the other European countries. The specificity of the institutional setup alongside the societal environment in these countries contributes to strengthening the bargaining power of women and hence explains why a relatively more equal gender division of labour can be observed.

Furthermore, the overall political context characterised by gender mainstreaming, as well as high female involvement in the political process and institutions (government bodies, parliament and labour market organisations), creates a favourable institutional setup conducive to a more balanced gender division of labour and responsibilities over the life course.

As mentioned, readers should treat the results with care since the sample is restricted to working women only. In other words, the estimates disregard the impact of, say, young children on female labour supply at the extensive margins. There are strong reasons to believe that a larger proportion of women, especially in the southern part of Europe and in the residual countries, still withdraw from the labour market during the phases of union formation and parenthood (Anxo et al, 2007; Lehndorff et al, 2010). In these countries, there is a stronger specialisation between men and women, with a sharp decrease of women's labour market participation when children are born, whereas men's paid working hours have a tendency to increase. In other words, it is likely that the calculations made in this study underestimate the impact of children on women's domestic and caring activities, which may explain why a relatively lower gender gap can be found in the residual countries than, for example, in the continental and southern cluster or in the central and eastern European countries. Bearing in mind these limitations, the study found that these two groups of countries display the largest gender gap in time devoted to unpaid work along all stages of the life course. In these countries, the gender roles are still shaped in a traditional way, especially when children are very young. In accordance with previous results (Anxo et al, 2011), the estimates confirm that in a majority of European countries balancing motherhood and labour market participation is particularly difficult. This is because of cultural factors such as traditional gender roles and scarce support from male partners, and structural constraints such as limited supply of public childcare, the rigidity of the labour market, low working time flexibility and reversible time options.

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Annex: The European Working Conditions Survey series

The European Working Conditions Survey (EWCS), established in 1990, is one of the few sources of information providing an overview of working conditions in Europe for the purposes of:

- assessing and quantifying working conditions of both employees and the self-employed across Europe on a harmonised basis;
- analysing relationships between different aspects of working conditions;
- identifying groups at risk and issues of concern, and progress made;
- monitoring trends by providing homogeneous indicators on these issues;
- contributing to European policy development on quality of work and employment issues.

The EWCS was carried out in 1991, 1995, 2000 (with an extension to the then-candidate countries in 2001 and 2002), 2005 and 2010. The growing range of countries covered by each wave reflects the expansion of the European Union. The first wave in 1991 covered only 12 countries, the second wave in 1995 covered 15 countries, and from the third wave in 2000–2002 onwards, all 27 current EU Member States were included. Other countries covered by the survey include Turkey (in 2002, 2005 and 2010), Croatia and Norway (in 2005 and 2010), Switzerland (in 2005), and Albania, Kosovo, Montenegro and the former Yugoslav Republic of Macedonia (in 2010).

The fifth EWCS

The fieldwork for the fifth EWCS was carried out between January and June of 2010.³² In total, 43,816 face-to-face interviews were carried out, with workers in 34 European countries answering questions on a wide range of issues regarding their employment situation and working conditions.

The target population consisted of all residents in the 34 countries aged 15 or older (aged 16 or older in Norway, Spain and the UK) and in employment at the time of the survey. People were considered to be in employment if they had worked for pay or profit for at least one hour in the week preceding the interview (ILO definition).

The scope of the survey questionnaire has widened substantially since the first wave, aiming to provide a comprehensive picture of the everyday reality of men and women at work. Consequently, the number of questions and issues covered in the survey has expanded in each subsequent wave. By retaining a core of key questions, the survey allows for comparison over time. By using the same questionnaire in all countries, the survey allows for comparison across countries.

The main topics covered in the questionnaire for the fifth EWCS were job context, working time, work intensity, physical factors, cognitive factors, psychosocial factors, violence, harassment and discrimination, work organisation, skills, training and career prospects, social relationships, work–life balance and financial security, job fulfilment, and health and well-being.

³² Fieldwork continued until 17 July 2010 in Belgium, due to the extended sample size, and until 29 August 2010 in Norway, due to organisational issues.

New questions were introduced in the fifth wave to enable more in-depth analysis of psychosocial risks, workplace social innovation, precarious employment and job security, place of work, work–life balance, leadership styles, health, and the respondent's household situation. The questionnaire also included new questions addressed specifically to self-employed workers (such as financial security). Gender mainstreaming has been an important concern when designing the questionnaire. Attention has been paid to the development of gender-sensitive indicators and to ensuring that the questions capture the work of both men and women. Revisions to the questionnaire are developed in cooperation with the tripartite stakeholders of Eurofound.

Sample

In each country, a multistage, stratified random sampling design was used. In the first stage, primary sampling units (PSUs) were sampled, stratifying according to geographic region (NUTS 2 level or below) and level of urbanisation. Subsequently, households in each PSU were sampled. In countries where an updated, high-quality address or population register was available, this was used as the sampling frame. If such a register was not available, a random route procedure was applied. In the fifth EWCS, for the first time, the enumeration of addresses through this random route procedure was separated from the interviewing stage. Finally, a screening procedure was applied to select the eligible respondent within each household.

The target number of interviews was 1,000 in all countries, except Slovenia (1,400), Italy, Poland and the UK (1,500), Germany and Turkey (2,000), France (3,000) and Belgium (4,000). The Belgian, French and Slovenian governments made use of the possibility offered by Eurofound to fund an addition to the initial sample size.

Fieldwork outcome and response rates

The interviews were carried out face to face in the respondents' homes. The average duration of the interviews was 44 minutes. The overall response rate for the fifth wave was 44%, but there is considerable variation in response rates between countries, varying between 31% in Spain and 74% in Latvia.

Weighting

Weighting was applied to ensure that results based on the fifth EWCS data could be considered representative for workers in Europe.

- Selection probability weights (or design weights): To correct for the different probabilities of being selected for the survey associated with household size. People in households with fewer workers have a greater chance of being selected into the sample than people in households with more workers.
- **Post-stratification weights**: To correct for the differences in the willingness and availability to participate in the survey between different groups of the population. These weights ensure that the results accurately reflect the population of workers in each country.
- Supra-national weights: To correct for the differences between countries in the size of their workforce. These
 weights ensure that larger countries weigh heavier in the EU-level results.

Quality assurance

Each stage of the fifth EWCS was carefully planned, closely monitored and documented, and specific controls were put in place. For instance, the design phase paid close attention to information gathered in a data user survey on satisfaction with the previous wave and on future needs, and an assessment was made of how the survey could better address the topics that are central to European policymaking.

In order to ensure that the questions were relevant and meaningful for stakeholders and respondents in all European countries, the questionnaire was developed by Eurofound in close cooperation with a questionnaire development expert group. The expert group included members of the Foundation's Governing Board, representatives of the European Social Partners, other EU bodies (the European Commission, Eurostat and the European Agency for Safety and Health at Work), international organisations (the OECD and the ILO), national statistical institutes, and leading European experts in the field.

Access to survey datasets

The Eurofound datasets and accompanying materials are stored with the UK Data Archive (UKDA) in Essex, UK and promoted online via the **Economic and Social Data Service (ESDS) International**.

The data is available free of charge to all those who intend to use it for non-commercial purposes. Requests for use for commercial purposes will be forwarded to Eurofound for authorisation.

In order to download the data, you must register with the ESDS if you are not from a UK university or college. For more information, please consult the ESDS page on **how to access data**.

Once you are registered, the quickest way to find Eurofound data is open the **Catalogue search** page, select **Data Creator/Funder from the first drop-down list and** enter in the words 'European Foundation' in the adjacent search box. Once Eurofound's surveys are listed, you can click on the name of the relevant survey for more information and download it using your user name and password.

For more information

The overview report and detailed information and analysis from the EWCS are available on the Eurofound website at www.eurofound.europa.eu. This information is updated regularly.

For further queries, please contact Sophia MacGoris in the Working Conditions and Industrial Relations unit.

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