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EU12	Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia and Slovenia

Abbreviations used in the report

CEE	central and eastern European
EU-LFS	European Union Labour Force Survey
EU-SILC	European Union Statistics on Income and Living Conditions
GDP	gross domestic product
нті	high-technology industry
KIS	knowledge-intensive services
LKIS	less knowledge-intensive services
LTI	low-technology industry
OECD	Organisation for Economic Co-operation and Development
SES	Structure of Earnings Survey

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Executive summary

Introduction

Work plays a significant role in the lives of people, companies and society at large. Since its inception, the European Union has paid considerable attention to work, and improving working conditions is one of its key policy goals. As stipulated in Article 136 of the EC Treaty, Member States should actively work towards 'the promotion of employment' and 'improved living and working conditions', so as to 'make possible their harmonisation while the improvement is being maintained'.

The European Working Conditions Survey series (the 'EWCS') aims to:

- Measure working conditions across European countries on a harmonised basis;
- analyse relationships between different aspects of working conditions;
- identify groups at risks and issues of concern, as well as areas of progress;
- monitor trends over time;
- contribute to European policy development, in particular on quality of work and employment issues.

At the time the fifth edition of the survey was carried out, in 2010, about 216 million people were employed in the EU27 main reference area of the survey. A total of 44,000 workers from 34 European countries were interviewed in 2010 on their working and employment conditions.

Policy context

The policy thrust of the Europe 2020 Strategy towards 'Smart, inclusive and cohesive growth' requires attention to be given to work and working conditions, especially the impact of growth on the quality of work, the employment of workers and companies' performance. Findings from the EWCS series feed into various strands of the Europe 2020 strategy, such as the 'agenda for new skills for new jobs' and the 'innovation union'.

Work is an important dimension in many long-standing European policies and norms, covering aspects such as equal opportunities for men and women, active ageing, working time, lifelong learning, work organisation, worklife balance, health and safety, labour standards and the prevention of discrimination, work-related stress and in-work poverty. The EWCS can contribute to discussions on the importance of work in relation to well-being at individual and societal level. By providing analysis and comparable information on working conditions in Europe, the EWCS is a useful tool for policy actors including employers, trade unions and governments and can underpin debate on quality of work and employment issues.

Key findings

- Reported levels of exposure to physical risks in the workplace have not diminished greatly since the first survey in 1991.
- Psychosocial risks that impact negatively on workers' health and well-being include high demands and work intensity, emotional demands, lack of autonomy, ethical conflicts, and poor social relationships, as well as job and work insecurity.
- Exposure to psychosocial risks tends to go hand in hand with exposure to physical risks.
- The majority of workers live in a household where both partners work, either both working full time (40%) or with one of the partners working part time (29%).
- Only a small proportion (22% of women and 17% of men) work in gender-mixed occupations.
- Plant and machine operators, craft and trades workers, workers in elementary occupations and clerical support workers report higher than average levels of work intensity as well as lower than average levels of autonomy.
- Workers in the education, health and financial services report above-average levels of workplace innovation practices.
- Most workers in the EU27 have a job which involves a degree of creativity: 82% report the ability to solve unforeseen problems and 75% can apply their own ideas at work.
- 55% of workers say that their present skills correspond well with their duties. 13% of workers report needing more training and 32% say they have the skills to cope with more demanding duties. 43% of the selfemployed and 29% of employees say they would like to reduce their working hours; conversely, 11% of the self-employed and 14% of the employed would like to increase their working hours.
- Long working hours are associated with high levels of work intensity.
- 52% of workers report having an employee representative at the workplace. ÔÔ 18% of workers report having a poor work–life balance. Factors associated with a good work–life balance include parttime working, no long working hours, flexitime and having access to emergency leave at short notice, as well having regular working hours.
- 20% of workers report a poor mental well-being. Policy pointers

- Policy attention to changing employment status over time as well as the structural change of jobs in the economy may have eclipsed attention from transforming the nature of work.
- In general, changes in working conditions over the last 20 years have been limited, but this masks changes in several respects for some groups of workers.
- Action to address social inequalities need to address inequalities at the place of work.
- Unfavourable working conditions tend to cluster disproportionally in some groups. Therefore policy solutions should be multidimensional, incorporating lifelong learning, working time and work-life balance, health and safety, pay and work organisation practices.
- The extent of differences between men and women reinforces the need to develop gendered analyses and policies in relation to working lives.
- Consultation and employee representation are central to the effectiveness of policies to improve working conditions.
- Win-win arrangements should be promoted: working conditions likely to be associated with higher wellbeing of workers are also associated with high motivation, commitment, and sustainable work.
- Current employment policy priorities to raise employment levels, prolong working life, increase the participation of women and increase flexibility and productivity depend for their success not just on changes in the external labour market but also of the successful management of life at work and at home, by all parties concerned, as well as on appropriate social support.
- Good work may well be one of the keys for smart, inclusive and sustainable growth.

Methodology

Every five years, Eurofound carries out the European Working Conditions Survey (EWCS), interviewing both employees and self-employed people on key issues related to their work and employment. Over time, the number of topics surveyed has been extended.

Fieldwork for the fifth EWCS took place from January to June 2010, with almost 44,000 workers interviewed in their homes in the EU27, Norway, Croatia, the former Yugoslav Republic of Macedonia, Turkey, Albania, Montenegro and Kosovo. Figures from the EWCS are estimates, based on a representative sample of European workers and not on the whole population. Differences over time and between countries need to be interpreted with caution. The report discusses only those differences that are likely to reflect true differences rather than being the result of sampling.



Introduction

Introduction

The improvement of working conditions and job quality: an end in itself and a means to other policy goals

Working conditions and job quality are important concerns on the European agenda.Indeed, the Treaty on the Functioning of the European Union (articles 151 and 153 TFEU) underlines as significant objectives the 'promotion of employment, improved living and working conditions, proper social protection, dialogue between management and labour, the development of human resources with a view to lasting employment and the combating of social exclusion'.

In the main motto of the 'Europe 2020' strategy ," smart, sustainable and inclusive growth", their place is implicit rather than explicit; yet, "improving the quality of work and working conditions " is definitively an objective of the European "agenda for new skills and jobs" and clearly underlined :

"High quality of work goes hand in hand with high employment participation. This is because the working environment plays a crucial role in enhancing the potential of the workforce and is a leading competitiveness factor. In order to innovate and to deliver promptly and efficiently, EU companies depend for their survival and expansion on a committed workforce, thriving in a high-quality working environment, with safe and healthy working conditions."

Improving working conditions and job quality therefore continue to be a significant goal in European policies supportive of Europe's capacity to compete. It is a cross cutting issue which is influenced by and has an impact on many other European policies. For example, industrial renaissance and enterprise policies have an impact on working conditions and job quality in Europe. In the other direction, the improvement of working conditions is important for the implementation of other European policies, for example innovation (the way we work matters greatly in framing the creativity and agility needed to adapt to a new environment and innovate) and gender equality

The improvement of working conditions takes place in a context of subsidiarity. Governments and social partners, companies and workers all play a role. Yet experience has shown that Europe also plays a vital part, and has indeed contributed to improving working conditions as exemplified by its key role on measures with regard to the improvement of safety and health of workers at work, gender equality and the wider coordination of employment policies.

Current policy concerns include work life balance (in particular for working age parents), fighting undeclared and fraudulent work(which distort fair competition among firms and undermine working conditions), rebalancing time in work and retirement, health and safety, the challenge of segmented labour markets and ensuring proper balance between flexibility and security, investing in human capital, and preparing individuals for potential risks in their lifecycles, addressing the significant inequalities that individuals face in labour market participation (joint employment report 2015).

Analysis of employment, social and industrial relations developments and the monitoring of job quality contribute evidence and increase understanding of the common challenges faced by Member States in relation to the improvements of working conditions.

Policy debates on new forms of employment (ref EF report), undeclared and fraudulent work (ref ef report) highlight the importance of monitoring working conditions and providing analysis and evidence that can contribute increased understanding of the common challenges faced by Europe and the Member States and support policy-making in relation to working conditions and job quality.

The European working conditions survey series: building on continuity and highlighting new trends

Eurofound has been monitoring working conditions since 1991 through the implementation of the European Working Conditions Survey (the "EWCS"), with a view to contributing to measuring progress in the improvement of working conditions in Europe. The survey has the objectives to

- (a) measure working conditions across European countries on a harmonised basis
- (b) analyse relationships between different aspects of working conditions,
- (c) identify groups at risks and issues of concern, as well as areas of progress,
- (d) monitor trends over time
- (e) contribute to European policy development, in particular on quality of work and employment issues.

25 years later, the 6th EWCS continues to monitor working conditions in Europe (REF Annex ?) and has grown into a source of inspiration for measuring working conditions outside Europe too. The 6th edition covers 35 European countries: the EU28 Member States; plus Albania, the Former Yugoslav Republic of Macedonia (FYROM) , Montenegro and Serbia which are all supported by the EU "instrument for Pre-accession Assistance "(the "IPA"); as well as Switzerland and Norway which joined the project.

The sample size per country is comprised between 1,000 and 3,300 in Spain. Three Member states (Belgium, Slovenia

and Spain) are contributing to increasing the sample size in their countries. In total, between February and September 2015, 43,100 workers, self-employed and employees have been interviewed.

The interview lasts forty-five minutes on average and covers job design, employment conditions, working time, exposure to physical risks, work organisation, skill use and autonomy, work life balance, worker participation and employment representation, the social environment at work health and well-being. At every edition, the questionnaire with the input of users, working conditions survey and the research community (annex ref) is reviewed.

This 6th edition of the EWCS revisits such topics as the quality of management, the circumstances and the heterogeneity of self-employment, the place of work, restructuring and change, employee representation at the workplace, working time preferences, and the sustainability of work. It also explores some new paths, dealing for the first time with the job holder with a chronic health disease, sleeping problems, social climate and organisational justice, company size (to complement information on the establishment size), work family conflicts and engagement.

The mosaic of working conditions and job quality

Various changes –Demographic, structural and technological- affect the composition of the workforce, the number of jobs, their content and the experience of their working lives by workers. These changes challenge the role that work plays in our societies. Working life actors respond in different ways, leading to a mosaic of influences on working conditions and job quality.

Structural drivers of change

The economic and financial crisis to hit Europe and its workforce since 2008, can be seen as a 'wake-up call' which has raised awareness of long-run structural challenges to be faced; and perhaps also of the contribution which working conditions and job quality are making to the economy.

The ageing of the European working population is having a major impact on working conditions and calls for attention to two concerns : ensuring that age demanding working conditions can be accommodated by an older workforce while ensuring that working conditions are sustainable over the life course allowing thus for people to remain engage longer (concept paper : sustainable work). More women have entered the labour market and gender inequalities persist (joint employment report 2015) despite a strong commitment to gender equality, advances in the education of women - now accounting for the majority of graduates in Europe - and progress in meeting some gender gap. Women remain the main providers of care. Gender mixed jobs are the exception more than the rule. Inequalities between men and women at work are important and take many forms: the gender pay gap, the use of part-time work predominantly by women -the glass ceiling, gender discrimination and subtle differences in working conditions and their associated

costs in terms of access to training and career progression. (Rubery)

These demographic challenges have drawn considerable attention to the life-course perspective. The ability of individuals to reconcile and grow in their different roles and expectations as carer, worker, and volunteer is an important challenge that needs to be made more visible and supported by policies and practices; it is central to increasing the participation of more people for longer working careers. The provision of care infrastructures, leave and other agreements, job quality that helps to navigate between changing needs over the life course are all fundamental to addressing this challenge.

The European workforce is better qualified. A good skills match, the design of jobs which allow to make full use of workers skills, lifelong learning, the encouragement of learning organisations which support the development of competence (and prevention of skills obsolescence) are all related to job quality and working conditions. The more cognitive dimension of work makes it harder to know when work is finished, and new risks in working conditions need to be considered. At the other end of the spectrum, the low qualified remain an important policy concern, particularly as inequalities are increasing and unemployment remains high. .

Through a long-run process of structural change, the shares of agriculture and industry in employment have decreased and that of services increased; restructuring of companies and jobs can have an impact on all or part of the activities of companies and modify, at times drastically, the conditions under which work is performed.

Work in the service industry has become more industrialised; at the same time work in industry is more" customer-led". When decisions are taken in decision centres, away from and not involving the local workplaces, the role of the local management is challenged and the implementation of decisions can lead to difficulties in understanding and achieving the objectives.

The frontiers of company are blurring and their perimeter seems to increasingly vary. These changes have brought "external competition inside companies" (Boyer). Companies dispose of a full range of options; they can opt between almost infinite combinations of commercial and labour contracts to organise their production, leading to the coexistence at workplace level, of workers hired under different labour and commercial arrangements.

The combination of the blurring frontiers in companies and the increased demographic diversity of the workforce taken together draw more attention to the issue of fairness and trust and social climate, mentoring and collaboration in workplaces Technological change affects working conditions in numerous ways : the type of jobs, skill needs, use and developments, task content, processes for the management of work (the determining role of management and work processes vary; the "faceless management of work planners"); They have increased flexibility and agility, provided opportunities for more autonomy but also increased demands; poorly used, they can lead to increased blurring of the frontiers between work and non-work life, they can depersonalise relationships at work and disrupt job roles. The use of ICT is changing the collective experience of work, from a group of people physically connected to a community of contacts.

Recent progress in machine intelligence and the "rise of the robots" gives rise both to fears and hopes. Fears that knowledge workers' jobs will disappear; fears that the new jobs will give fewer opportunities for people at work to engage in meaningful activities. Hope that dirty, dangerous and dull work will be taken over by robots, allowing jobs needing human qualities (which are hard for artificial intelligence to acquire), to grow and develop .

The digital economy is changing the contours of work, bringing into the formal paid economy, and commodifying, activity which was previously informal and "private"; and enabling the outsourcing to clients of activity which was formerly paid work.

This trend is considered by some, as extremely challenging, jeopardizing the relevance and longevity of the social model of paid employment, and the very concept of a "job". It is also seen, on the other hand, as a way to liberate creativity and individual initiative, free from the constraints of employment.

Meeting the multiple expectations over work

Work plays a fundamental role in European societies and is a key ingredient of their cohesion, capacity to integrate and grow. Alongside family and care which are also central concerns in people's lives and priorities, work is a very central value around which other activities are organised. At societal level, it is a determinant in creating collective time norms (when do we work) and framing time use at individual level. It has a strong influence in the design of welfare systems.

The changes in the world of work in particular the answers to digitalisation could have disruptive effects in our societies. They indeed challenge the meaning and ends given to work. Work is like a millefeuille ((Meda Vendramin) and 3 different meanings – layers- coexist: first work as a production factor (smith), this has as a consequence that what matter the most are the goods and services produced by work and their value. For others (hegel but also a conception in psychology research eg Warr) work is the instruments through which individuals grow, develop and become themselves, the conditions under which one works matter and whether or not they allow individuals to achieve themselves through work. Thirdly work is a system for redistributing income, rights and protection. The current changes in the economy and workforce challenges the status quo on these three dimensions : the economy needs to adapt to embrace the digital challenge which challenges the products and service that are being produced; reshapes the ways in which they are produced – offering new opportunities for individuals, but perhaps circumscribing other; and the new forms of employment challenge the systems of distribution of income and rights and labour regulations.

Inequalities in working conditions

Analysis of the EWCS series (overview 5th EWCS) demonstrate the diversity, richness and complexity of working lives in Europe. It suggests the existence of multiple and contradictory 'paths of change' among the workforce. There are important variations across member states in job quality and working conditions, and, over time member states are not converging 'upward', on all job quality dimensions (ref convergence report)

Tensions between security and flexibility, commitment and loyalty and mobility, skills deepening and knowledge developments, cooperation and individualisation are addressed in different ways. The transformation of work has resulted in increasing and multiple grounds of inequalities in working conditions. Unfavourable working conditions, in some cases, cluster and affect specific groups disproportionally. Yet many win-win arrangements have been proved possible.

These developments call for the need to complement detailed analysis on working conditions themes with global representation, at job quality level.

Content of the report

Following this introduction (Chapter 1), Chapter 2 **"Working in Europe"** describes the main characteristics of the workforce in the 35 countries covered by the EWCS. Apart from traditional features such as employment levels according to occupations, sectors or types of employment status, it considers also sex, age, level of education, origin, seniority, health and household circumstances.

Chapter 3 focuses on *job quality developments* in Europe. It takes as points of departure, the work carried in 2012, on the basis of the 5th EWCS, in Trends in job quality in Europe. Seven theoretically coherent indices, have been constructed to measure job quality: a good physical environment, work intensity, working time quality, a secure social environment, skills and discretion, earnings, and prospects.

These indices cover extrinsic and intrinsic job features captured in an objective perspective. They are built on positive and negative self-reported features of the job which measure the concrete experience of work and proven to have a causal effect -positive or negative- on health and well-being of workers.

Each index - and supporting individual components - is examined. This description is completed with other characteristics of the job or the working environment, such as customer work, place of work. Other organisational resources provided through employee representation at the workplace are also considered

Chapter 4 "*working lives in Europe*, examines from the perspective of the job holder,: how their skills match their jobs, what is their engagement with their job, the financial security that their job provides them with their work life balance and preferences, how they are able to reconcile their different roles as worker, carer and citizen. It concludes by examining health and wellbeing, as well as perceived sustainability.

Chapter 5 "*Job quality profiles*" reports the clustering of workers into groups of jobs that share similar levels and combinations of the job quality indices : these fives clusters of jobs : the "high flying", "smooth running ", "active manual", "under pressure" and "poor quality" jobs are described as well as the characteristics of the workers belonging to them finally, their association with work life balance, skills match, engagement, financial security and work life balance is explored.

Chapter 6 *concludes* the report.

Technical information

This report covers EU28, Norway, Switzerland, Albania, Montenegro, Serbia, Fyrom and Turkey. Sections on trends over time cover EU 28 in 2010 and 2015 and EU27 2005. The various editions of the questionnaire are accessible through this page. 2015 data is based on ISCO 08 and NACE rev. 2 as well as ISCED 2011



2 The multiple dimensions of job quality

2 The multiple dimensions of job quality

2.2: Improving the physical environment

The absence of physical hazards known to pose risks to health and well-being is a well-recognized feature of job quality. Their elimination or substitution is at the core of occupational health and safety policy; and it has been central to European social policy. Article 153 of the Treaty of the Functioning of the European Union authorises the Council to adopt, by means of directives, minimum requirements as regards 'improvement in particular of the working environment to protect workers' health and safety'. Legislative requirements vary across Member States, as they are free to adopt stricter rules for the protection of the workers when transposing the EU directives into national law. Directive 89/392/EEC places an explicit responsibility on the employer to adapt '... the work to the individual, especially as regards the design of the workplaces, the choice of equipment and the choice of production methods."

Traditionally, physical risks have been the object of numerous preventive actions as typical of "traditional" industries. Although the economy is shifting to a more service - oriented economy, the level of exposure to physical risks is not strongly declining. There are risks which continue to affect workers health, for example, use of chemicals or exposure to electromagnetic fields. The industrial application of new technologies might generate new hazards. Nanomaterials are one example. Other emerging risks are linked to the development of biotechnologies and green technologies (European Commission, 2014) Moreover there are still some jobs that due to their level of exposure to either physical or psychosocial hazards pose a high risk for the deterioration of the workers' health. Arduous jobs involve the exposure of the workers over a period of time to several factors leading to work situations susceptible to leave long-lasting and irreversible effects on health. There are some occupations that tend to combine certain conditions which make workers in those jobs more vulnerable in relation to physical and mental health (Eurofound, 2014¹). MSDs are one of the most common work-related ailments, affecting millions of workers and costing billions of euros to employers.

Several causes have been identified, both physical and psychosocial risk factors such as repetitive motion, heavy lifting, frequent bending and twisting, exposure to cold, insufficient recovery time (Costa 2010). Noise has also been associated with cardiovascular diseases. In particular there seems to be 'scientific evidence that employees, both men and women, who report specific occupational exposures, such as low decision latitude, job strain or noise, have an increased incidence of ischemic heart disease (IHD), a form of cardiovascular diseases (Theorell 2016)². This section will first describe the safe physical environment index and its individual components, then consider its evolution over time, describe exposure to different types of risks and the use of personal protective equipment.

Monitoring the physical environment at work has been the core of the EWCS since its inception. Several risks have been considered and especially, as the exposure to various risks, linked with posture, chemical and ambient, could be detrimental to worker's health they have been followed over the years.

A "safe physical environment" index has been built; it is composed of 13 indicators, related to the above mentioned specific physical hazards.

The evolution over a decade, of the "safe physical environment", is interesting, as it gives an idea of how work transforms and how, in some occasions, policies impact on working conditions. The index presents a rather small but constant decline at European level.

Over the last 10 years, the "safe physical environment index" has increased by one point every 5 years, indicating lesser exposure of the workers to physical and posture related risks. In 2015, men on average report a lower safe physical environment score (81) than women (86) The safe physical environment index has increased for men in the last 10 years and, remaining constant for women, thus slightly reducing the gender gap.

¹ Eurofound 2014 Occupational profiles in working conditions: Identification of groups with multiple disadvantages http://www.eurofound.europa.eu/sites/default/files/ ef_publication/field_ef_document/ef1413en.pdf

² A systematic review of studies in the contributions of the work environment to ischaemic heart disease development Article in The European Journal of Public Health · March 2016

	2005	2010	2015
Q29a - Vibrations from hand tools, machinery ¼+	24	23	20
Q29b - Noise so loud that you would have to raise your voice to talk to people1/4+	28	29	28
Q29c - High temperatures which make you perspire even when not working	25	22	24
Q29d - Low temperatures whether indoors or outdoors	22	23	22
Q29e - Breathing in smoke, fumes (such as welding or exhaust fumes), powder or dust (such as wood dust or mineral dust)	19	17	15
Q29f - Breathing in vapors, such as solvents and thinners	11	10	11
Q29g - Handling or being in skin contact with chemical products or substances $^{1\!\!/}_{4}$ plus	14	15	17
Q29h - Tobacco smoke from other people ¼ plus	20	11	9
Q29i -Handling or being in direct contact with materials which can be infectious, such as waste, bodily fluids, laboratory materials etc. ¼ plus	9	11	13
Q30a - Tiring or painful positions	46	46	43
Q30b - Lifting or moving people	8	9	10
Q30c - Carrying or moving heavy loads	35	34	32
Q30e - Repetitive hand or arm movements	62	63	61
Safe Physical environment index	82	83	84

Table 1 : The safe physical environment index (0-100), individual components (%), changes over time, EU28, EWCS

Notes: Data refer to 2013 for Australia, 2005 for the USA and 2004 for Mexico. Countries are ranked by temporary employment share. Blue bars denote EU Member States; red bars denote non-EU28 countries.

Source: Eurostat for EU countries and OECD for non-EU countries

Slight improvement in physical risks

The evolution of the index indicates improvement since 2005 in most European countries (**Error! Reference source not found.**), with the exception of France (second lowest European country) and the United Kingdom. The most spectacular improvements were reported by Greece, Portugal (both countries plus 7 points), Hungary and Croatia (plus 6 points). Looking at safety by sector, construction (70) has by far, the lowest score on the Safe physical environment index, whereas financial services (93) and education (91) report the highest. Occupational differences also are important: There are 21 points of difference between craft workers (70) and clerical workers (91). Plant and machine operators (75), skilled agricultural farmers (75) and elementary occupations (79) are under the European average (83). Service workers are one point above the EU average.



Figure 27 : Safe physical environment index (0-100) in the last 10 years, by country, EWCS



Figure 28: Exposure to the posture-related, ambient and biochemical risks indices (0-100) by country, EUR 35, EWCS 2015

Building on questions on exposure to physical risks, three combined indices were produced using different questions of the EWCS³:

- Posture related risks: this indicator measures exposure to vibrations, tiring positions, lifting people, carrying heavy loads and repetitive movements. These are the most prevalent risks in Europe, and include risks playing a role in causing musculoskeletal disorders (MSDs)⁴.
- Biological and chemical risks measures exposure to breathing in smoke, vapours, handling chemicals and infectious materials. Biochemical risks can have a lethal long term effect. In 2008, according to the EC 'strategic framework on Health and Safety 2014-2020', "fatalities associated with chemical substances accounted for almost half of all work-related deaths"⁵. Emerging risks in this area includes nanomaterials and others linked to the development of biotechnologies. From 2010 to 2015 this group of risk is the only one increasing.
- Ambient risks measure exposure to noise, high and low temperatures. This indicator includes exposure to specific conditions in some activities of the economy (mostly in industry, construction, and agriculture) as well as exposure to noise.

Error! Reference source not found. shows the 'exposure' to the three forms of risk by country, ordered by exposure to "posture related hazards". In addition to the variation across countries, it can be seen that the country ranking is different for each risk category.

The fact that "posture related hazards" are most prevalent does not mean that they necessarily represent the greatest risk to workers health. The health consequences of 'exposure' must also be considered, and as noted above, these can be especially serious in the case of biochemical risks.

In the EU28, Greece, Romania and Cyprus have the highest levels of "posture related" risks, while the lowest levels are found in the Czech Republic, Ireland and Germany. Turning to "ambient risk", the countries with the lowest levels of exposure are: Italy, Portugal and Belgium; the highest levels are found in Romania, Spain, Greece, France and Cyprus. In relation to the third group of risks – "biochemical" -, the highest exposure levels are found in Romania, France and Hungary and the lowest in Portugal and the Netherlands. Some countries score high on all or at least two of these physical risks, such as France and Spain, while others are consistently on the lowest ranges, such as Portugal.

Patterns across the workforce

Although women have lower level of exposure to all three types of physical risks (ergonomic, ambient and chemical) than men, for certain specific risks this is not the case.

For example the most prevalent ergonomic risk "repetitive harm and arm movement" is almost equally reported by men and women (61% and 62%). High intensity exposure is reported by 34% of women who report being exposed to it all or almost all of the time, 3 percentage points more than men Another ergonomic risk, which is affecting more women (14%) than men (6%), is "lifting or moving people" and the difference grows when focusing only on those exposed to this risk with higher intensity. Finally, the risk of 'MSD' for being involved in jobs with 'posture related hazards' affects more women than men, except for 'carrying or moving heavy loads'.

³ sixth EWCS Questions...

⁴ There is a growing literatures suggesting a link between psychosocial risks and MSDs. http://www.ccohs.ca/oshanswers/psychosocial/musculoskeletal.html

⁵ EU Strategic Framework on Health and Safety at Work 2014-2020 LINK???



Figure 29: Exposure to different posture-related risks, by sex, EU28

The opposite pattern is reported in relation to noise – since 34% of men and 19% of women are exposed to it. Men (20%) also report higher exposure (4 pp more than women) to the most prevalent biochemical risk – handling or being in contact with chemicals. Women (16%) however are more exposed than men (12%) to direct contact with materials which can be infectious. This picture reflects gender segregation across sectors and occupations.

In the context of demographic ageing it is important to ensure improvements of the physical work environment for all workers. In relation to age, when considering three groups (50+, 35-49 and under 35), overall the older groups are slightly less exposed to posture-related and biochemical risks, but not to ambient hazards (with the exception of tobacco).

Sectors and occupations report substantial differences concerning exposures to risks levels. The occupations with greater exposure are craft related trades workers, plant and machine operators, skilled agricultural workers and elementary occupations.

Overall, construction displays the highest reported exposure to all type of risks, while financial services presents the lowest.

Higher exposure to 'posture related risks', is reported in Agriculture, Industry, Transport and Health Ambient risks, especially in relation to temperatures, are typical of working outside, as is the case for many workers in construction and agriculture. 54% of workers are exposed to very low temperatures in the latter, 52% in the first sector and 48% and 54% respectively to very high temperatures. Apart from construction, other sectors with high level of biochemical risks are industry, health and agriculture. In the health sector the main risk is "handling or being in direct contact with infectious materials" (50% of workers), in industry both "breathing dangerous substances" and "handling or in being in contact with chemical products" are more prevalent risks, 31 and 24% respectively. Craft related trades and plant and machine operators are the occupations with higher exposure to posture related risks (Table 2).

The occupations more affected are skilled agricultural workers and those also more exposed to posture related risk.

Table 2: Exposure to posture-related, biochemical and ambient risks indices, by occupations, EU28, sixth EWCS

	Posture related risks	Biochemical risks	Ambient risks
Managers	16	6	11
Professionals	16	6	9
Technicians	18	8	11
Clerks	16	3	8
Service and sales workers	24	8	14
Agricultural workers	31	13	30
Craft workers	37	21	31
Plant and machine operators	34	14	27
Elementary occupations	30	13	20
EU28 Average	23	10	16

Use of personal protective equipment

According to the framework Directive 89/391/EEC of 12 June 1989, on the 'introduction of measures to encourage improvements in the safety and health of workers at work', it is an obligation for the employers to give collective protective measures priority over individual protective measures (Protective Personal Equipment or PPE). However, sometimes it is not possible to address and eliminate all the risks through collective measures; furthermore, for various reasons elimination turns to be not possible(e.g. technologically impossible, interference with the production process or too expensive, etc.). In these cases the PPE is required for the job.

Respondents to the survey were asked whether their jobs ever require them to wear PPE. About 40% of workers in the EU28 are in that situation. Within this group of workers, 8% report not using them. Many reasons are invoked to explain this: the equipment is uncomfortable, work has to be done fast, people may not be informed; workers don't have access to the equipment, etc.

Unsurprisingly, the requirement for PPE is higher in sectors with higher exposure to physical risks (e.g. construction) and in occupations such as plant and machine operators, craft and related trade workers and skilled agricultural workers. As mentioned above, there are some workers whose job requires the wearing of protective equipment, but who admit to not always doing so. The situation is worrying in some sectors with high exposure to physical risks like construction, where10% of workers report not using PPE when it is required, and agriculture (12%). The percentage of workers 'not using PPE' is also high in financial services (34%) and commerce (10%), but the proportion of the workforce for whom this is a requirement, is much lower.

Self-employed without employees (13%) and workers with non-permanent contracts (11%) and primary level of education only (15%) are groups with a high share of workers not always using PPE when it is required.

The findings imply that there is still a considerable scope for improving the awareness of the need to use PPE as a prevention measure in some sectors with high exposure to risks (e.g. agriculture and construction) and especially addressing workers in temporary contracts, in low skilled jobs, and with low education.

2.3: Addressing work demands

While work intensity can be presented as a way to maintain and develop workers' interest in their activity, high work intensity is associated with negative effects on health and well-being; however, it is not necessarily associated with better performance for companies: indeed in many cases working too fast does not correspond to working smart or right. Work intensity can also lead to poor planning and preparation of tasks at hand, delays and defects in quality. Previous research has shown that "too high' and "too low' demands can in different ways be problematic. "High work intensity" can be therefore considered as a negative contribution to job quality.

Numerous epidemiological studies have demonstrated that a high level of demands in itself; but especially in combination with low decision latitude (a dimension included in the job quality index on skill use and development) and low job support (a dimension covered in the job quality index on secure social environment), is associated with an increased risk of cardiovascular diseases, Musculoskeletal diseases (MSDs) and depression. Two models were particularly influential in this regard: the "Demand Control model "(Karasek, 1979; Karasek- Theorell 1990) and the "Effort Reward Imbalance model " (ERI) (Siegriest°1996). Both models consider the level of demands in conjunction with other important dimensions of work.

This section will present the work intensity job quality index, and then examine its individual components.

Work intensity index

This index measures the level of work demands in the job.

For some, work is dense and fragmented; the workload appears to be too high, taking up too much mental and physical energy; it requires juggling with different demands; to carry one's work in the easiest and best way becomes particularly hard

To measure work demands, the index includes quantitative demands (working fast), time pressure (having tight deadlines, not having enough time to do the job), frequent disruptive interruptions, pace determinants and inter dependency, and emotional demands which contribute to the complexity of jobs.

13 questions are included in the index (see Table 3).

Also important, are the differences between economic sectors (ref chap)(11 points) and occupations (ref chapt) (8 points); amongst sectors, the health industry (38) followed by construction (36), industry (36) financial sector report (35) and commerce and hospitality (34) report average or above average levels of work intensity, while across occupations. Managers (37), craft workers, professionals and technicians (all three 35) and plant operators report above or average level. Employees on indefinite contracts (35) and self-employed with employees (34) report above or average level of work intensity and self-employed without employees (27) lowest. The Work intensity index per company size is highest in bigger companies (38), average in SMEs (34) and lowest in micro firms (29) Older workers report lower work intensity than younger and middle aged workers. Traditionally more intense work is allocated to younger workers; intense work is a particularly hard to bear constraint for older workers. If work is not organised in a way where individual and collective mechanisms can be put in place, it could lead to making visible health issues which had remained hidden and in the absence of solutions or reclassification within one's company, to exit from the labour market.

Table 3 : Work intensity index - individual components over time, EU28, EWCS

2015 full index	Work intensity over time (slim)	2005	2010	2015	
Quantitative demands	Q49a - Working at very high speed [And, does your job involve]3/4+ of the time	included	35	32	33
	Q49b - Working to tight deadlines [And, does your job involve] ¾+ of the time	Included	37	35	36
	Q61g - You have enough time to get the job done [select the response which best describes your work situation]never and rarely (plus sometimes)	Included	12 (30)	9 (24)	10 (27)
	Frequent disruptive interruptions	Included	15	14	16
Pace	Interdependency : 3 or more pace determinants	Included	34	32	33
determinants and interdependency	50a - The work done by colleagues [On the whole, is your pace of work dependent on…]	Included	42	39	40
	Q50b - Direct demands from people such as customers, passengers, pupils, patients, etc. [On the whole, is your pace of work dependent on]	Included	68	67	68
	Q50c - Numerical production targets or performance targets [On the whole, is your pace of work dependent on]	Included	42	40	42
	Q50d - Automatic speed of a machine or movement of a product [On the whole, is your pace of work dependent on…]	Included	19	18	18
	Q50e - The direct control of your boss [On the whole, is your pace of work dependent on]	Included	36	37	35
Emotional demands	Q610 - Your job requires that you hide your feelings [select the response which best describes your work situation] most of the time and always	Not included as 2 data points are available	na	26	31
	Q30g - Handling angry clients, customers, patients, pupils etc. [Please tell me, using the same scale, does your main paid job involve?]3/4 plus of the time	Not included as 2 data points are available	na	10	16
	Q30h - Being in situations that are emotionally disturbing for you [Please tell me, using the same scale, does your main paid job involve?] more than ¼ of the time	New	na	na	31
	Slim index over time EU 28		43	41	42
	Comprehensive index EU28				33 mean

Pace of work determinants and interdependency

Pace of work determinants provide an indication on how work is organised and what type of strategies can workers put in place to address and meet these demands. In the case of high quantitative demands, the best strategy for workers is to develop 'their best way of performing work' saving on time and energy and fitting one's individual characteristics; in case of direct demands in particular by clients, the strategy is to anticipate and prepare as much as possible the work before clients demands come. Horizontal demands whether from colleagues or management can best be managed and organised internally by procedures, the development of cooperation and trust.

32% of workers (36% of men and 29% of women) are exposed to "three or more pace of work determinants". The number of pace of work determinants and their interdependency are considered as an objective indicator of intensity. Many studies have indeed analysed the effects of having multiple pace determinants on work intensity; the various pace determinants interact in a synergic way. Indeed, individual strategies of anticipating and coping with the client rush (by restocking, setting tables, preparing etc.) are not always easily compatible with strategies of economy and precision (in time and effort) suited to address automatic rhythm; the potential contrasts lead to greater deterioration of working conditions.

Differences per country are important: more than 40% of workers are exposed to a high level of interdependency in Luxembourg, (41%), France (41%), Romania (47%), and Cyprus (50%). Nearly half of craft workers and plant operators (45%) report three or more pace determinants (direct demands, production targets, and automatic line).

The survey confirms the importance of customers as setting the rhythm of work: for 67% of workers, their pace of work is dependent on direct demands by customers. "Direct demands" is the most pace of work determinant with the greatest variation across occupations. There are 48 pp differences between service and sales workers (81%) and agricultural workers (33%). More than seven out of 10 service and sales workers (81%), managers (76%), professionals (76%) and technicians (72%) report them as a pace determinants.

42% of workers report that their pace of work is dependent on numerical production targets or performance targets (2pp increase since 2010). They are reported by around half of managers (47%), plant and machine operators (52%) and craft workers (55%)

Horizontal constraints (reported in similar proportion by all) remain present: dependency with colleagues (39%) is an important feature of work and does not show much association with occupation. Direct hierarchical control remains a significant feature of work organisation for 36% workers.

Production lines set the rhythm for a bit less than 20% of workers (19% of workers largely plant and machine operators, craft workers).

Experience of work intensity

Four questions in the survey document the experience of work intensity from the workers' perspective: work at very high speed and work to tight deadlines; frequent disruptive interruptions, and not having enough time to do the job.

Intensive work is quite prevalent in Europe: 37% of workers in the EU work 'all of the time', 'almost all of the time' or around ³/₄ of the time to tight deadlines, while 34% report working at high speed 'all of the time' or 'almost all of the time'. 10% of men and of women report never or rarely having time to do their job (which is a rather extreme situation).

Men report higher work intensity than women in case of tight deadlines ³/₄ and more of the time (7 pp difference), and work at high speed (2 pp). Women on the other hand, report slightly more exposure to frequent disruptive interruptions (1 pp) than men.

Frequent disruptive interruptions in the performance of one's task are reported by 17% of all workers. They account for 36% of all interruptions in the work; the majority of which (56%) are assessed as being without consequence and 8% positive. Some 28% of managers report them. 26% of workers in the health sector experience them.

Emotional demands

Emotional demands are the demands associated with work where workers are expected to display and manage their emotions.

Workers who engage in emotional work engage in "acting" (hochschild). "Surface acting" that is hiding one's emotions is encouraged by organisations; it covers a wide range of situations such as smiling, keeping one's tone of voice quiet and answering very politely to an angry client, following strictly the script in call centres. or... "Deep acting" describes how we modify our feelings in order to express a desired emotion. It takes effort to manage emotions carefully. Deep acting might be required not only to suppress personal feelings but also to replace them with an outward expression of feelings that are more appropriate to the setting. For example when toileting or bathing an adult under their care, workers will act as if this is not a problem at all and is a perfectly natural task.

Emotional demands are more frequent in jobs relating to people, particularly those that require care, and granting support to people. Emotional labour can be a marginal or a significant part of one's activity. (High) emotional demands were found in studies to predict low vitality, mental health issues, fatigue and burnout. In jobs where emotional labour is a significant part of the activity, recruitment and retention were identified as significant issues. Supportive measures can be developed: for example, training to prepare for difficult situations and supportive managers can help to reduce emotional strain, allowing work to become less exhausting mentally. Furthermore, research shows how workers can develop individual and collective strategies to deal with the difficult aspects of their job. Finally, raising awareness is paramount as workers facing difficulties in dealing with third parties can experience stress; which if suffered over a long period of time may have then negative long term consequences for the workers' health and well-being.

Differences between countries, are striking. Hiding one's feeling 'always' or 'most of the time' (31% EU28) is reported by less than one in five workers in Denmark, the Netherlands and Norway between 18% and 19%), but a bit less than or half the workers in France (46%), Bulgaria (47%) and Greece (50%).

17% on average report having to deal with angry clients ³⁄₄ or plus of the time: between 4% in Denmark, Finland and Norway , and 37% in Albania and 30% in Spain report dealing with angry clients ³⁄₄ more of the time. This proportion has been increasing since 2010; similarly, the proportion of workers exposed all or almost of all the time has doubled between 2010 and 2015. The greatest increases in the high intensity level of dealing with angry clients (all of the time) occurred in Education, followed by the health sector and to less extent in Commerce and Hospitality, the sectors where workers have to deal more with third parties. This is an indication that the relationship between worker and third parties might have deteriorated during the last 5 years in Europe. The issue deserves further research

31% of workers on average in Europe report being in emotionally disturbing situations "one quarter or more" of their time; one in five in Portugal and Ireland but more than twice as much in Malta (40%), Montenegro (40%), Albania (46%) and Serbia (45%) and nearly six out of ten in Lithuania. Women report more frequently report emotional demands than men: 35% report having to hide their feelings 'always' or 'most of the time' (28% of men), 36% being in emotionally disturbing situations (27% of men) and 17% having to deal with angry clients " ³/₄+ of their time" (15% men).

Work intensity and occupations

When considering occupations in more details, it is interesting to look at the various combinations of answers on the individual items constituting the index (**Error! Reference source not found.**). Craft and related workers and plant and machine operators report the highest level of quantitative demands (3 pace of work determinants) and subjective work intensity (working to tight deadlines, working fast); Service workers and professionals report the highest incidence of emotional work;

Frequent disruptive interruptions are more frequently reported by managers, professionals and technicians. Never enough time to do the job is reported by equally all occupations.

All occupations with the exception of farmers report some exposure to emotional demands.



Figure 31: Components of the work intensity index by occupations, EU28, EWCS 2015

Work intensity and sectors

Sectors display differentiated combinations of work intensity features as illustrated by Figure 32. Industry, construction and transport report a high level of quantitative demands; health and commerce and hospitality too, but to a lower level. On the other hand, these sectors present high level of emotional demands: Health reporting by far, the highest levels while Public administration, commerce and education report below average levels.



Figure 32: Components of the Work intensity index by sectors, EU28, EWCS 2015

2.4: Developing working time quality

Working time, in its duration and organisation, is important for job quality in basically two ways. On the one hand, working time may impact on workers' health and wellbeing. For example, the extent to which workers are exposed to certain risks increases with the duration of work whereas the availability of sufficient periods for rest is crucial for a proper recovery. On the other hand, a good fit between working time and non-working time throughout the life course is essential for workers to be able to work and continue working. A good fit can be promoted through adapting both duration and organisation of working time to the needs of organisations and individuals. More flexible and non-standard working-time arrangements are developing with regard to start and finishing times, rest-periods, on-call time, etc. also as a consequence of Information and Communication Technologies facilitating work to be performed anytime and anywhere.

The next sections will look at the Working time quality index which measures the extent to which working time meets the needs for a good balance between the time demands of work and life outside paid employment. After a brief examination of its recent evolution, the 2015 findings of the index's individual components will be described. Place of work will be discussed then as recent technological developments allow more 'nomadism'with some consequences on working time practices. Work-life balance, which depends of individual and household circumstances, is discussed specifically and in more detail in chapter 4.

Working time quality index

The Working time quality index consists of four dimensions: duration, atypical working time, working time arrangements and flexibility (see Table 4)

The first dimension includes long working weeks (over 48 hours a week), long working days (10 hours or more a day) and the lack of recovery period between 2 working days. Long working hours have been associated with negative health and well-being effects such as cardiovascular diseases (Kivimaki, 2015, Theorell, 2016), future depressive symptoms (Theorell, 2015); and MSDs (Trinkoff AM, Rong L, Geiger-Brown J, et al., 2006).

The second dimension of the index is on 'atypical working hours' including weekend work, night work and shift work. Shift work and night work have been the most studied and are associated with negative health and well-being consequences such as increased risk of cardiovascular disease, fatigue, reduction in the quantity and quality of sleep, anxiety, depression, gastrointestinal disorders, increased risk of spontaneous abortion, low birth weight and prematurity and cancer for shift work (Harrington, 2001). The third dimension covers discretion over working time arrangements and includes questions on who sets the working time arrangements as well as to what extent workers are informed in advance of changes in their work schedules or are requested to come to work in very short notice. In principle, more discretion by workers is a positive resource.

The last dimension refers to flexibility and includes the possibility to take off an hour or two during working hours to take care of personal or family matters as well as working in their free time to meet work demands.

The evolution of working time quality over time is given by a reduced index (the slim Working time quality index). This index covers all indicators except recovery period, requested to come to work at short notice, easy to take time off to take care of personal or family matters and work in free time. It indicates that working time quality has been increasing in the EU28 by 2 points since 2005, up to 84 points in 2015. It has increased or remained stable in most European countries in the same period.

The full Working time quality index results show that differences on working time quality between men and women, age groups and countries are rather small. Women report a higher working time quality than men (+4 points) and older workers 3 points more than middle aged workers.

There are moderate differences in working time quality per country, occupations and sectors. As far as countries are concerned, the lowest value of working time quality is reported in Greece (66), Spain and the former Yugoslav Republic of Macedonia (both 67) and highest in the Netherlands, Germany, Bulgaria, Italy, Portugal and Austria (all 73).

Confirming the results of the fifth edition of the EWCS, working time quality is lowest in transport (66) and agriculture (66) and highest in financial services (74) and public administration (73) (Eurofound, 2014). In terms of occupations, clerical staff report the highest level of Working time quality index (77) while managers (64) and plant and machine operators (68) show a lower index.

The largest differences on working time quality are due to employment status: Employees (71) report a higher working time quality than self-employed without employees (68) and self-employed with employees (60). These differences can be partly explained by the existing regulation: the working time directive indeed contains dispositions limiting long working hours which are, nevertheless, not applicable to self-employed individuals.

		2005	2010	2015	
Duration	How many hours do you usually work per week in your main paid job? 48+	18	16	15	
	Thinking of the last month, has it happened at least once that you had less than 11 hours between 2 working days? No recovery period	na	na	26	
	Long working days	36	32	32	
Atypical working time*	Night work	19	18	19	
	Saturday work	53	51	52	
	Sunday work	28	28	30	
	Shift work	17	17	21	
	(shift regime) daily split shift	7	8	7	
	(shift regime) permanent shift	38	38	41	
	(shift regime) alternating/rotating shifts	50	50	48	
	(shift regime) other type of shift work	5	4	4	
Discretion over working time	Working time arrangements authority				
arrangements**	Set by the company	56	59	56	
	Can choose between different schedules	9	8	9	
	you can adapt your working hours	17	16	18	
	entirely determined by self	18	17	17	
	Change on working time arrangements				
	No regular change	69	65	69	
	Change the same day	8	8	5	
	Change the day before	9	9	8	
	Change several days in advance	11	13	12	
	Change several weeks in advance	4	4	5	
	Requested to come to work at short notice - at least several times a month	na	na	12	
Flexibility	Very easy to arrange to take a hour or 2 off during working hours to take care of personal or family matters	na	na	26	
	Work in free time to meet work demands - at least several times a month	na	na	22	
	Working time over time - slim	82	84	84	
	Working time quality (full index)			70	

Table 4: Working time quality index and its components, EU28, 2005 -2015 (%)

Notes: * Contribution of shift work to index - no shift scores 100, permanent shifts scores 66, alternating shifts 33 and daily split shifts scores 0.

** Scores 100 if working time arrangement not set by the company or set by the company but no changes in arrangements occur. Scores 75 if set by the company and changes occur several weeks in advance, 50 if several days in advance, 25 if the day before, 0 if on the same day.

Working hours' duration

Overall, the trend for a decrease of the average usual weekly working hours continues. The EU28 average declined, from 38.6 hours in 2005 to 37.5 in 2010 and 36.4 hours in 2015 (following the same pattern shown by the average number of usual weekly hours of work in main job of the Eurostat LFS: from 38 hours in 2005 to 37.2 in 2014). This is essentially the result of more workers working part time and less working long working hours (48 hours or more), which is a trend applicable to both women and men. In 2015, 16% of workers work 20 hours or less, a share that increased from 11% in 2005, whereas the share of those working 48 hours or more diminished from 18% to 15%. On average, men continue to work more paid hours than women.



Figure 33: Usual weekly working hours, women and men



The decrease of weekly hours was experienced by all groups of workers defined by age, sex, employment status and contracts with the exception of self-employed with employees and part-time workers, who, on average, are working longer in 2015 than in 2005. Self-employed without workers, however, report the largest decline in average working hours (10 hours less on average than in 2005).

Part-time continues to be extensively used in the Netherlands (42% of workers) and in the United Kingdom, Ireland and Germany (all above 30%). On the opposite pole, there is a group of countries, where only 10% or less of respondents work short working hours – Slovakia, Bulgaria, Malta, Turkey, Cyprus, Romania, Estonia, France and Croatia.

Country differences in the distribution of working hours' are important because they reflect not only sectoral and

occupational composition but also the influence of working time regulations. As shown by Eurofound research, there is a variety of working time setting regimes in the EU in which regulation and collective bargaining interact in different ways and at different levels to define the working time standards (Eurofound, 2016).

Whereas some countries, such as Lithuania, Luxembourg, Cyprus or Sweden do not display a great dispersion of hours worked, in others, such as Greece, Poland and Spain, dispersion is much wider. 40 hours a week remains an influential "reference" in working time: it remains the mode in the vast majority of countries with the exception of Belgium (38), France (35), Denmark (37), Norway (38), Switzerland (42) and Turkey (60). Nevertheless, 28% of all workers (41% of women and 16% of men) work 34 hours or less per week (21% in 2005).



Figure 34: Usual weekly working hours by country and sex, 2015

Note: The grey box represents the interquartile range (i.e. 50% of workers fall within the box limits) and the lines (whiskers) represent the 5th and 95th percentiles. The blue and orange diamonds represent the means for men and women.

	20 or less	21-34	35-40		41-47	48 or	more
] [
Self-employed with employees	7	6	22		11		54
Self-employed without employees	22	12	25		8		34
Employee, indefinite contract	11	13	57		9		11
Employee, fixed term contract	22	15	46		5		11
Employee, other or no contract	43	16	28		3		10
Agriculture	22	8	27		6		37
Industry	6	4	66		8		15
Construction	9	4	55		11		21
Commerce and hospitality	18	13	40		9		20
Transport	9	8	51		11		22
Financial services	8	12	55		11		14
Public administration	7	12	68		5		7
Education	23	23	41		6		6
Health	17	22	47		6		8
Other services	24	14	41		7		14
Managers	7	7	37		12		37
Professionals	13	16	48		9		13
Technicians	11	14	55		8		13
Clerks	15	14	61		6		4
Service and sales workers	21	17	39		7		16
Agricultural workers	21	8	28		6		36
Craft workers	7	5	61		9		18
Plant and machine operators	6	5	60		9		19
Elementary occupations	35	14	38		4		8
Micro (1-9)	22	13	36		7		22
SME (10-249)	13	14	55		8		11
Large (250+)	7	11	62		9		11

Figure 33: Usual weekly working hours by employment status, occupation, sector of activity

Working hours also vary according to the workers' occupation and size of the workplace (Figure 35). Self-employed workers tend to work more hours than employees but, among the former, those with employees tend to work longer hours. Shorter working hours (34 hours or less per week) are more frequent among employees with fixed-term contracts or with "other or no contract" but very short working weeks (20 hours or less) were also reported by more than 20% of the self-employed without employees.

	Very short working hours (20 hours or less)	Short working hours (34 hours or less)	35 hours or more	Odds ratio (very short working hours)	Odds ratio (short working hours)
Belongs to the 20% with lower income (40% with lower income)	69 (83)	51 (73)	7.8 (26)	16.806	13.708
Prefer to work more hours than currently	43	35	4.8	8.206	12.729
Good fit between working hours and family and social commitments	92	90	78	2.717	2.486
Very easy to take time off to take care of personal or family issues	34	30	23	1.851	1.536
Job offers good career prospects	28	31	41	0.658	0.672
Job insecurity (might lose job in the next 6 months)	20	19	15	1.396	1.444
Non-Indefinite contracts and self-employed without employees	49	40	22	3.302	2.470
Night work	11	12	22	0.542	0.498
Health or safety at risk because of work	14	17	25	0.566	0.688
Work affects health negatively	16	19	28	0.539	0.669

Table 5: Working hours and association with aspects of working conditions, EU28, 2015

Note: The effect of working (Very) short working hours on the different variables is given by the odds ratio, which compares the probability of a phenomenon occurring between the presence and absence of a given situation. In this situation an odds ratio of one means the phenomenon is equally likely for those working (20 hours or less) and those working (21 hours or more. If it is greater than one, it means the phenomenon is more likely for those working (short) working hours. If it less than one, it means that the phenomenon is less likely for those working (short) working hours. If it less than one, it means that the phenomenon is less likely for those working (short) part-time. The effects are controlled for variation between country, sectors and occupations. All odds ratio are statistically significant (p<0.05).

Short and very short working hours

Working (very) short working hours (Table 5) is not only associated with lower earnings but also with a strong preference for working longer hours, suggesting that these are not all "voluntary" situations. In addition, job insecurity is highest for those working (very) short working hours and they are less likely to report having good career prospects.

On the positive side, those working (very) short hours are more likely to report better work–life balance, as well as finding it easier to take time off for taking care of family and personal issues. They are also less likely to report less night work, that their health and safety is at risk because of work and that their work affects their health negatively.

Long working hours

Long working hours have a proven to be association with such conditions as depressive state, anxiety, sleeping disorders and coronary heart disease (Kivimaki et al., 2015 and, Bannai and Tamakoshi, 2014). They also make reconciliation of work with other parts of life more difficult as well. There are about 15% of workers in the EU28 usually working 48 hours or more per week, 21% of men and 9% of women. Long working hours are reported by more than half of the self-employed with employees (54%), and a third of the selfemployed without employees (34%), and about 1 out of 10 employees,. The proportions of individuals reporting long working hours vary greatly between countries. In the former Yugoslav Republic of Macedonia, Greece, Albania and Montenegro more than one third of the workers report long hours. In Turkey the share reaches 57%. At the opposite extreme are Luxembourg, Germany, Denmark and Norway where long working hours are reported by fewer than 10% of workers.

Workers reporting long working hours are more likely to have problems with work-life balance and health than their counterparts (Table 6). They are almost four times less likely to report a good fit between working hours and social commitments, and they are more likely to report their health and safety is at risk because of work and that work affects their health negatively. They are also more likely to report feeling exhausted at the end of the working day and are twice as likely to report presenteeism - working when sick - than others.

Long working days

About one third of respondents (32%) in the EU28, have worked more than 10 hours in a day at least once in the month prior the survey took place. On average, men have worked 3.1 'long days' per month and women 1.6. Workers aged 35 to 49, who may have more care responsibilities and demands - two thirds within this group are working parents - also report a higher incidence of long days. The average number of long working days varies significantly per country and is very high in Turkey (4.6), Malta (4.2), UK (3.6), Ireland (3.4), Sweden (3.1), Albania (3) Greece (3) and Finland (2.9).

Self-employed workers are much more likely to report long working days: 65% of the self-employed with employees and 45% of those without employees reported at least one long working day. On the other hand, employees with indefinite contracts have larger share (30%) than those with fixed-term contracts (24%) or with 'other or no contract' (19%).

'Managers', 'skilled agricultural, forestry and fishery workers' and 'professionals' are the occupations with the largest shares of individuals reporting long working days whereas 'clerical support workers' and 'elementary occupations' have the smallest.

Break between periods of work

The Working Time Directive states that workers must be entitled to a "minimum daily rest period of 11 consecutive hours per 24-hour period" and to a rest break when the working day is longer than six hours. A new question of the sixth EWCS asks workers whether, during the previous month, it has happened, at least once, that they had less than 11 hours between the end of one working day and the start of the next working day.

Table 7: Shift work and association with selected working conditions aspects, EU28, 2015

A quarter of workers (26%) reported such occurrence: 20% of employees but 30% of self-employed without workers and 46% of self-employed with workers, who are not necessarily covered by the Directive as they have "autonomous decision-making powers".

Health, transport and agriculture are the sectors where the shares of workers reporting having less than 11 hours between two days of work are larger, whereas, in terms of occupations, managers and skilled agricultural, forestry and fishery workers are above average. Shares per country (Figure **36**) range between 9% in Bulgaria and 28% in Sweden, Finland and the Netherlands, 33% in Norway. Spain is exceptionally high with 49% of workers reporting such occurrence. This could be explained by the long break at lunch time.

Not having enough rest hours between two working days is associated to the level of income and the usual weekly number of working hours. The share of workers reporting having less than 11 hours between two days of work increases with the level of income and with the hours worked. Workers who have multiple workplaces also report more frequently not having enough rest between 2 working days.

It is important to note that those working long hours (48 hours per week or more) display not only higher levels of work intensity (index of 38 versus 33 of the rest) but are also more than twice as likely to report that they did not have enough rest between two working. This indicates that about 15% of the whole workforce in the EU not only accumulates long hours with higher work intensity but also sometimes does not have enough rest between working days. This group is almost twice as likely to always feel exhausted at the end of the day.



Figure 36: Less than 11 working hours between 2 working days*, by country (%)* at least once in the previous month.

A typical working time arrangements

In certain situations, work is performed at times which are usually reserved for other parts of life such as evenings, nights and weekends. These working hours are called 'atypical' and also 'asocial' as workers working in these range of hours, have fewer opportunities to interact socially.

More than half of the EU28 respondents (52%) report working at least one Saturday per month (the same proportion as in 2005). Almost a quarter (24%) report at least three Saturdays a month, roughly the same as in 2010 . Saturday work is more commonly reported by men (56%) than women (47%). Between 2010 and 2015, Saturday work decreased for 'Skilled agricultural, forestry and fishery workers' from 85% to 77% and increased for 'managers' (from 56% to 62%), 'technicians and associate professionals' (40 to 45%,) and 'craft and related trades workers' (47 to 50%). Saturday work is extensively practised by the self-employed (over 75%).

Out of every ten workers, three report to work at least one Sunday per month (a 2 percentage point increase since 2010) and 11% at least 3 times a month. Again, Sunday work is reported by more men (32%) than women (29%). It increased for managers (from 31% to 40%), service and sales workers (from 43 to 47%), but decreased for 'Skilled agricultural, forestry and fishery workers' (from 62% in 2010 to 48%). It is particularly extensive in agriculture where it decreased from 56% in 2010 to 50%, commerce and hospitality, where increased from 34 to 39%, and health, where it increased from 46% to 50%. Sunday work is also frequently reported by the self-employed, especially if they have employees (46%, and 42% of those without employees).

Almost two in every ten workers (19%) report working during the night (defined as at least 2 hours between 10pm and 5am) at least once every month. This is more common among men (24%) – particularly if they are under 50 years of age - than among women (14%).

According to the EWCS, about 21% of all workers in the EU report working shifts, which represents a strong increase from the 17%¹ recorded in 2010 and 2005. The most prevalent type of shift work is alternating or rotating shifts followed by permanent shifts (mornings, afternoons or nights). Daily split shifts, which imply a break of at least 4 hours in between working periods, are less common. This distribution has remained relatively steady, at least, since 2005.

The difference between the shares of men and women doing shift work are small. In terms of occupations, shift work is more prevalent among 'service and sales workers' (37%) and 'plant and machine operators, and assemblers' (38%), whereas, in terms of sector, it is common in 'Health' (41%), 'Transport' (33%) as well as 'Industry' and 'Commerce and hospitality' (28%). Noteworthy is the much smaller share of self-employed reporting shift work: 7% of those with employees and only 4% of those without employees.

	Shift Work (%)	No shift work (%)	Odds Ratio (shift work)
Good fit between working hours and family and social commitments	71	84	0.511
Health and safety at risk because of work	35	21	1.932
Work affects health negatively	35	24	1.628
Working at high speed at least half the time	58	44	1.792
Not feeling well paid for the job	37	29	1.301
Feeling exhausted at the end of the working day	41	32	1.381
Consulted before work objectives are set ('always' or 'most of the time')	37	48	0.722
Able to do job until 60	63	75	0.587

Table 7: Shift work and association with selectedworking conditions aspects, EU28, 2015

Note: The effect of shift work on the different variables is given by the odds ratio, which compares the probability of a phenomenon occurring between the presence and absence of a given situation. In this situation an odds ratio of one means the phenomenon is equally likely for those working shifts and those not working shifts. If it is greater than one, it means the phenomenon is more likely for those working shifts. If it less than one, it means that the phenomenon is less likely for those working shifts. The effects are controlled for variation between country, sectors and occupations. All odds ratio are statistically significant (p<0.05).

Workers doing shift work (Table 7), irrespective of the type of shift, are less likely to report a good fit between working hours and family and social commitments, are more likely to report health and safety at risk because of work and more likely to report that work affects their health negatively. They are also more likely to report working to high speed, feeling exhausted at the end of the working day and not feeling they are paid appropriately considering the efforts and achievements in their job. Additionally, they are less likely to report that they are consulted before their work objectives are set and to report that they are able to do the same job until they are 60 years old.

⁶ The LFS reports a lower proportion of shift work (18%) than the EWCS. The LFS is defines shift work a regular work schedule during which an enterprise is operational or provides services beyond the normal working hours from 8 am to 6 pm on weekdays (evening closing hours may be later in the case of a longer break at noon in some Member states). It asks the question only to employees. In the EWCS shift work is self-reported by workers and includes shifts during the day.



Figure 37 : Association between job quality profiles and well-being.

Note: Coefficients of latent class Step 3 analysis

Regularity of working hours

The regularity of working hours refers to the extent to which people work the same hours every day or every week and the same number of days every week. In general, this regularity facilitates the planning and combination of work with private or family life but, depending on a number of factors such as household composition, non-work activities or life stage, workers might find irregular working hours more suitable for them and their families. They may also prefer some employee based flexitime.

A vast majority of workers works the same number of days per week (75%) and the same hours every week (63%). Regular working hours (same hours every day) are a pattern reported by 57% of respondents, but more so by women aged between 35 and 49 (62%) and less so by men 50 and over (53%). Moreover, 62% of all workers report having fixed starting and finishing times, with a much larger proportion for women (67%) than for men (57%).

Taking those four aspects captured by the EWCS, workers' working hours can be grouped in three categories according to their regularity:

- 'high regularity' means the same number of hours every day, same number of days every week, same number of hours every week and fixed starting and finishing times;44% of workers in 2015 report high regularity, a 1 pp down from 2005.
- 'medium regularity' between 2 and 3 possibilities; the proportion of workers in medium regularity has been increasing from 19% in 2005 to 27% in 2015.
- 'low regularity' up to one of the possibilities only.
 The proportion of worker with low regularity has been decreasing from 36 % in 2005 down to 29% in 2015.

Low regularity is more often reported by men (33%) than by women (25%) and by more self-employed than employees. Country differences are important to note (Figure 37).

Skilled agricultural, forestry and fishery workers' (59%) and 'managers' (43%) are the occupations displaying the largest shares of low regularity of working hours. Likewise, agriculture (59%) is the sector with the largest share of workers reporting low regularity of working hours but industry displays the highest share of workers reporting high regularity (54%). Commerce and public administration show high regularity for large shares of workers as well (45 and 46%, respectively).

The regularity of working hours is strongly associated with a good fit between working hours and workers' family and social commitments outside work: workers with high regularity are almost 2.5 times more likely to report a good or very good fit.

Working time arrangements

For most workers in the EU, working time arrangements are set by the company (or organisation) with no possibility for changes (56%). Almost one out of each ten workers (9%) says they can choose between several fixed schedules whereas two out of ten (19%) report they can adopt their working hours within certain limits. The rest (16%) report that working hours are entirely determined by themselves. This is very similar to the situation in 2005.

Workers with managerial occupations or in agriculture, forestry or fisheries related occupations are less likely to have their working hours determined by the company or organisation. On the other hand, more than 60% of workers in transport, education and industry have their working hours set by their organisation.

Figure 38: Association between job quality indices and work-life balance



Blurring the boundaries between work and other aspects of life

Working outside working hours, that is in one's free time to meet work demands is done by one worker in five (20 % of workers) several times a month, 9% indicate that they work in their free time several times a week and 2 % do so every day. 55% of respondents state that they never had to work in their free time to meet work demands. The differences between men and women are small but indicate, nevertheless, that there are slightly more men than women reporting working in their free time in the age group 35 to 49: 50% vs 44%.

Working daily in their free time to meet work demands is a feature reported by about 2.5% of all workers but it is more common among managers (7%), skilled agricultural, forestry and fishery workers (7.5%) or professionals (5%), and self-employed with employees (7%) or without employees (5%).

Working in one's free time appears to be associated with poor work–life balance. Whereas only 14% of those reporting they did not work in their free time stated having difficulties with work–life balance, the proportion increases with the frequency individuals work in their own time and, not surprisingly, reaches 42% of those who work in their own time on a daily basis. This relationship with work–life balance is stronger for men.

Figure 39: Working in one's free time and being requested to come to work at short notice at least once or twice a month by income quintile (%) Figure 40: Working in one's free time and being requested to come to work at short notice at least once or twice a month by usual weekly hours in main paid job (%)



Working in one's free time seems to be also related to the income level and the usual number of hours as can be seen in Figure 38 and Figure 39.

A significant share of respondents – almost 40% - stated that over the previous 12 months they were requested to come into work at short notice. This does not seem to take place on a daily basis (0.5%) or several times a month (3%) but rather several times a month (9%) or, more commonly, less often than that (27%).

Being requested to come into work at short notice at least several times a month is more common among certain occupations - 'Service and sales workers' (18%) and 'Skilled agricultural, forestry and fishery workers' (17%) and less so for 'Clerical support workers' (5%) – and certain sectors of activity – 'Agriculture', Transport', 'Health' (17%) and Construction (16%). The employment status seems also related as the self-employed (25% of those with employees and 21% of those without) and employees with 'other or no contract' (18%) present higher than average shares of individuals reporting being requested to come into work at short notice.

Being requested to come into work at short notice also displays an interesting relationship with the workers' income level and their usual weekly number of hours as shown in figures 19 and 20. Those in the lower and higher income quintiles are more likely to be requested to come into work at short notice as well as those working the least and the most hours in a week.

SUMMARY V

Working time quality

Working time – its duration and organisation – is important for job quality in two ways. On the one hand, working time plays a role in workers' health and well-being. For example, the extent to which workers are exposed to workplace risks increases with the duration of work while the availability of sufficient periods for rest is crucial for a proper recovery. On the other hand, a good fit between working time and non-working time throughout the life course is essential for workers to be able to work and to continue working.

The working time quality index consists of four dimensions: long working days or weeks, atypical working time (working at weekends, at night, or on shifts); ability to choose or being informed of working time arrangements and flexibility – being able to take some time when needed, or doing work in one's own free time. An overview of the index indicates that working time quality has improved in the EU28 – having by two points to 84 points since 2005; it has increased or remained stable in most Member States.

From the perspective of the index, working time quality is lowest in transport and agriculture; it is highest in financial services and public administration. Differences are moderate, ranging from 66 to 74 index points. They are similarly moderate in terms of occupations; clerical staff have the best working time quality while managers and plant and machine operators have the lowest; here figures range from 64 to 77 points on the index. Employees report a somewhat higher working time quality than self-employed workers, in part the result of the Working Time Directive, which limits long working hours – but not for self-employed workers.

Working week getting shorter: This is essentially the result of more workers working part time and fewer workers working long working hours (48 hours or more). On average, men continue to work more paid hours than women. However, self-employed workers (with employees) and part-time workers on average are working longer now than 10 years ago. Interestingly, self-employed workers without workers report the largest decline in working hours – 10 hours less per week than in 2005.

Long working hours: Some 15% of workers in the EU28 habitually work 48 hours or more per week. Gender differences are stark: 21% of men work such long weeks as against 9% of women. Self-employed workers are much more likely to work long weeks: 54% of the self-employed with employees and 34% third of those without employees (34%). In contrast, only around 10% of employees do so. The proportions of individuals reporting long working hours vary greatly between countries, reflecting the influence of working time regulations. In Turkey, 57% of workers work more than 48 hours per week. In contrast, only 10% in Luxembourg, Germany, Denmark and Norway do so.

Workers who work long hours are almost four times less likely than other workers to report a good fit between working hours and social commitments. They are also more likely to say that: their health and safety is at risk because of work; work affects their health negatively; and they feel exhausted at the end of working day. And are twice as likely as other workers to say that they go work when they are sick (so-called 'presenteeism').

Working short weeks: Working a very short week is associated with earning less; it is also associated with a strong preference for working more, suggesting that for many people they are not working such short working weeks by choice. Moreover, for such workers job insecurity is at its highest and they are less likely to have good career prospects. However, they are more likely to report better work-life balance and find it easier to take time off for family and personal issues. They are also less likely to work at night, or feel that their health and safety is at risk because of their work.

Working long days: About one-third of the respondents in the EU28, have worked more than 10 hours in a day at least once in the month prior to the survey. On average, men worked 3.1 long days per month and women 1.6. Workers aged 35–49, who may have more care responsibilities (two-thirds of them being working parents) are more likely to work long days. Self-employed workers are much more likely to report long working days: 65% of those with employees and 45% of those without working at least one long day. Employees with indefinite contracts are more likely to work long days than those with fixed-term contracts with other contracts or none.

Daily rest periods: The Working Time Directive entitles workers to a daily rest period of 11 consecutive hours in every 24-hour period. Some 26% of workers reported that in the month prior to the survey that at least once they had a break of less than 11 hours between the end of one working day and the start of the next. This is substantially more prevalent among self-employed workers than employees. Working longer hours (48 or more per week) and having a higher income is associated with not having sufficient rest between working days. And those who work long hours are also likely to experience greater work intensity: about 15% of the EU workforce accumulates long hours with higher work intensity and sometimes does not have enough rest between working days. This group is almost twice as likely to always feel exhausted at the end of the day.

Figure 41: Association between job quality indices and work–life balance



Figure 42: Association between job quality indices and work–life balance



Traditionally, physical risks have been the subject of numerous preventive actions across traditional manufacturing industries. However, although the economy is shifting to a more service-oriented economy, the level of exposure to physical risks is not declining significantly. Some risks continue to affect workers' health: for example, use of chemicals or exposure to electromagnetic fields. The industrial application of new technologies could in fact generate new hazards - nanomaterials are one example. Other emerging risks are linked to the development of biotechnologies and green technologies (European Commission, 2014b). In general, there could be increasing potential for the release of novel, difficult-to-identify and potentially hazardous materials all along the lifecycle of green technologies and products, and in particular during end-of-life processing (EU-OSHA, 2013).

Moreover, there are still some jobs that due to their level of exposure to either physical or psychosocial hazards pose a high risk for workers' health. Arduous jobs involve the workers being exposed over a period of time to several factors resulting in conditions that can have long-lasting and irreversible effects on health.

There are some occupations that tend to combine certain conditions which make workers in those jobs more vulnerable in terms of their physical and mental health (Eurofound, 2014e). Musculoskeletal disorders (MSDs) are one of the most common work-related complaints, affecting millions of workers and costing billions of euros to employers. Several physical and psychosocial risk factors have been identified: repetitive movements, heavy lifting, frequent bending and twisting, exposure to cold, insufficient

Physical environment index

Monitoring the physical environment at work has been central to the EWCS since its inception. Several risks have been observed over the years. The Physical environment index comprises 13 indicators related to specific physical hazards (see Table 1).

The evolution of the index over a decade shows a small increase at European level in the period 2005–2010 (one point) but stability over the next five years, indicating a small improvement in this dimension of job quality.

In 2015, men on average report a lower physical environment score (81) than women (86) The physical environment index has increased for men in the last 10 years and remained constant for women, thus slightly reducing the gender gap.

Nevertheless, the evolution of the index masks changes in several areas in terms of individual hazards (Table 1). Since 2005, there has been a reduction in the proportion of workers exposed to 'breathing smoke, fumes, etc.', and especially an important decline in tobacco exposure, probably due to the stringent legislation in relation to workplace smoking introduced in many European countries (European Commission, 2013a). Also important is the fall in exposure to noise. Exposure to other ambient risks – high temperatures, low temperatures and breathing in vapours – has remained constant over the period. However, there is a trend of growing exposure to other biochemical risks, such as 'handling or being in skin contact with chemical products or substances' and 'handling or being in direct contact with materials which can be infectious, such as waste, bodily fluids, laboratory materials, etc.'. Another relevant change is in the percentage of workers exposed to 'lifting or moving people', which is the only posture-related risk among those included in the EWCS which is shown to be on the increase. One explanation could be the recent expansion of the care sector in Europe where a number of occupations require these type of tasks (European Commission, 2013b).

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European Commission (2010b), Lisbon Strategy evaluation document, Commission Staff Working Document, SEC(2010) 114 final, Brussels Work plays a pivotal role in people's lives, in the functioning of companies and in society at large. Improving the quality of work and working conditions has long been at the forefront of EU policy, most recently in the Europe 2020 Strategy towards 'Smart, inclusive and cohesive growth'.

The fifth European Working Conditions Survey (EWCS) explores topics as diverse as physical risks, working time, gender segregation, worklife balance, employee representation, work organisation, stress at work, skills development and pay, as well as health and well-being. The survey charts trends in working conditions, identifies major risk factors and highlights issues meriting policy attention. Based on interviews with 44,000 workers across 34 European countries, the fifth EWCS represents a rich store of information and analysis on work in all its dimensions in Europe today. TJ-30-12-411-EN-C







Summary of styles in Survey report / Page 1

Box Style 1

Monitoring the physical environment at work has been central to the EWCS since its inception. Several risks have been observed over the years. The Physical environment index comprises 13 indicators related to specific physical hazards (see Table 1).

The evolution of the index over a decade shows a small increase at European level in the period 2005–2010 (one point) but stability over the next five years, indicating a small improvement in this dimension of job quality.

SUMMARY Box style 2

Working time – its duration and organisation – is important for job quality in two ways. On the one hand, working time plays a role in workers' health and well-being.

The working time quality index consists of four dimensions: long working days or weeks, atypical working time (working at weekends, at night, or on shifts); ability to choose or being informed of working time arrangements and flexibility.

Box Style 3

Monitoring the physical environment at work has been central to the EWCS since its inception. Several risks have been observed over the years. The Physical environment index comprises 13 indicators related to specific physical hazards (see Table 1).

The evolution of the index over a decade shows a small increase at European level in the period 2005–2010 (one point) but stability over the next five years, indicating a small improvement in this dimension of job quality.

Table 1: Sample table heading spans 2 cols Sample table heading spans 2 cols

	2001			2008			2012		
	Permanent	Temporary	NA	Permanent	Temporary	NA	Permanent	Temporary	NA
AT	2,888	142		3,161	178		3,250	203	
BE	3,099	282		3,477	291		3,545	293	
BG	1,947	139	215	2,808	116		2,485	103	

Note: There is a significant level of non-responses on type of contract (shown in the n.a. column) in several countries. **Source:** EU-LFS

2 EF Heading 1 31pt Source Semibold



Figure 37 : Association between job quality profiles and well-being.

EF Heading 2 - 16pt Source Reg

The absence of physical hazards known to pose risks to health and well-being is a well-recognized feature of job quality. Their elimination or substitution is at the core of occupational health and safety policy; and it has been central to European social policy. Article 153 of the Treaty of the Functioning of the European Union authorises the Council to adopt, by means of directives, minimum requirements as regards 'improvement in particular of the working environment to protect workers' health and safety'.

Through a long-run process of structural change, the shares of agriculture and industry in employment have decreased and that of services increased; restructuring of companies and jobs can have an impact on all or part of the activities of companies and modify, at times drastically, the conditions under which work is performed.

Figure 41: Association between job quality indices and work–life balance



EF Heading 3 - 12pt Source Sans Semibold

The economic and financial crisis to hit Europe and its workforce since 2008, can be seen as a 'wake-up call' which has raised awareness of long-run structural challenges to be faced; and perhaps also of the contribution which working conditions and job quality are making to the economy.

Building on questions on exposure to physical risks, three combined indices were produced using different questions of the EWCS:

- *Posture related risks*: this indicator measures exposure to vibrations, tiring positions, lifting people, carrying heavy loads and repetitive movements.
- *Biological and chemical risks* measures exposure to breathing in smoke, vapours, handling chemicals and infectious materials.
- *Ambient risks* measure exposure to noise, high and low temperatures.

EF Heading 4 - 10 pt Source Semibold

The proportion of the EU workforce who works Saturdays is largely unchanged since 2010: more than half work at least one Saturday per month. Around one-third of workers work at least one Sunday per month (a 2 percentage point increase since 2010) and 11% at least 3 times a month. Some 75% of self-employed workers work Saturdays, and almost 45% work Sundays.

EF Heading 5 - 9.3 pt Source Semibold (80% black) Around one-third of workers work at least one Sunday per month (a 2 percentage point increase since 2010) and 11% at least 3 times a month. Some 75% of self-employed workers work Saturdays, and almost 45% work Sundays.

3 sixth EWCS Questions...

- 4 There is a growing literatures suggesting a link between psychosocial risks and MSDs. http://www.ccohs.ca/oshanswers/psychosocial/musculoskeletal.html
- 5 EU Strategic Framework on Health and Safety at Work 2014-2020 LINK???