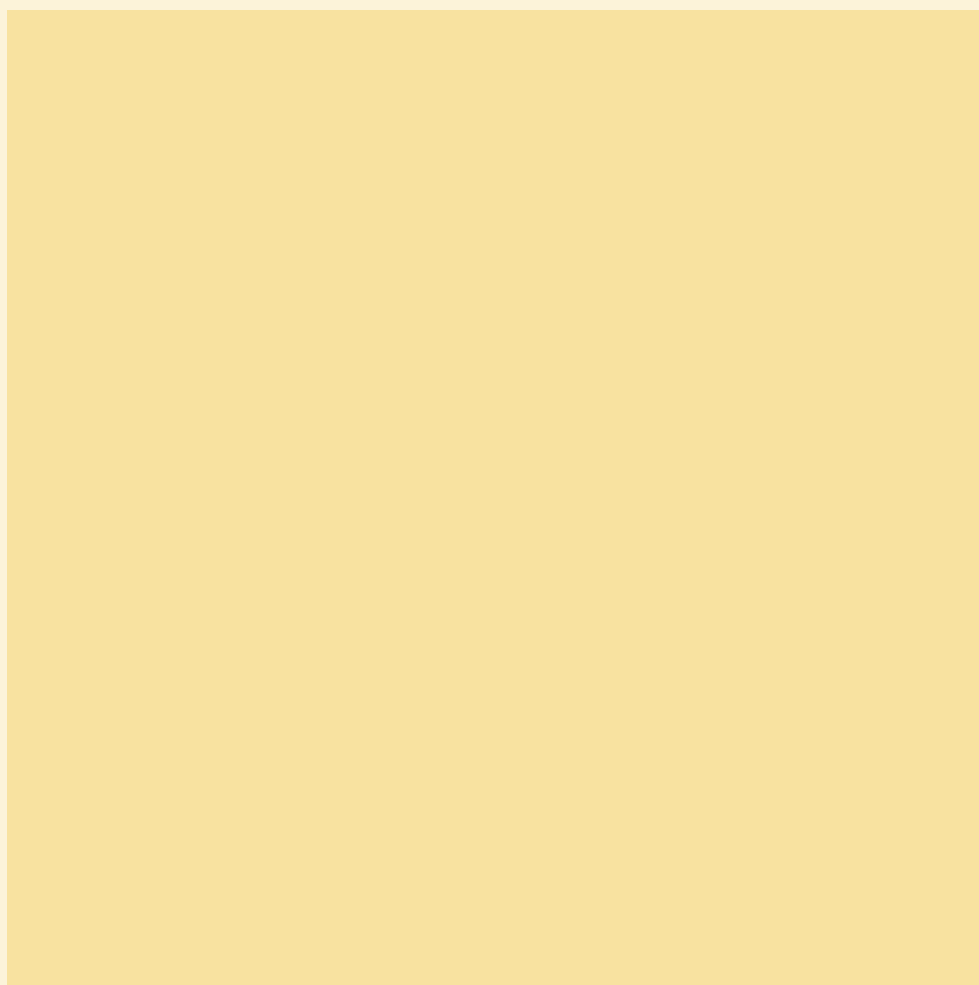




European Foundation for the Improvement of Living and Working Conditions

# Convergence and divergence of working conditions in Europe: 1990–2005



Convergence and divergence of  
working conditions in Europe:  
1990–2005

**Authors:** Ramón Peña-Casas and Philippe Pochet

**Institute:** European Social Observatory (*Observatoire social européen*), Brussels

**Research managers:** Agnès Parent-Thirion, Greet Vermeylen and Enrique Fernández Macías

**Project:** European Working Conditions Survey



European Foundation for the Improvement of Living and Working Conditions

# Convergence and divergence of working conditions in Europe: 1990–2005

Cataloguing data can be found at the end of this publication

Luxembourg: Office for Official Publications of the European Communities, 2009

ISBN 978-92-897-0846-3

© European Foundation for the Improvement of Living and Working Conditions, 2009

For rights of translation or reproduction, applications should be made to the Director, European Foundation for the Improvement of Living and Working Conditions, Wyattville Road, Loughlinstown, Dublin 18, Ireland.

The European Foundation for the Improvement of Living and Working Conditions is an autonomous body of the European Union, created to assist in the formulation of future policy on social and work-related matters. Further information can be found on the Foundation website at [www.eurofound.europa.eu](http://www.eurofound.europa.eu)

European Foundation for the Improvement of Living and Working Conditions  
Wyattville Road  
Loughlinstown  
Dublin 18  
Ireland  
Telephone: (+353 1) 204 31 00  
Fax: (+353 1) 282 42 09 / 282 64 56  
Email: [postmaster@eurofound.europa.eu](mailto:postmaster@eurofound.europa.eu)  
**[www.eurofound.europa.eu](http://www.eurofound.europa.eu)**

Printed in Denmark

The paper used in this book is chlorine-free and comes from managed forests in northern Europe.  
For every tree felled, at least one new tree is planted.

# Foreword

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) has conducted the European Working Conditions Survey (EWCS) at regular intervals since 1990. The data thus enable a comparison of trends over time. From such a comparative analysis, it is possible to look at trends and examine whether EU Member States are converging or diverging with regard to working conditions and quality of work and employment.

Acknowledging the merits and limitations of adopting a cluster-based approach (looking at groups of countries), this study offers data both according to particular groups of countries and also at national level. The survey findings reveal a relative divergence in Europe with the joining of the new Member States. On average, these countries show poorer performance to date in terms of job quality, but the results also confirm that they are reducing the gap. Meanwhile, among the older Member States, the convergence process appears to be moving not towards the best results but more towards the average, with improvements evident in some countries and deteriorating working conditions apparent in others.

Internal diversity within the clusters and within the countries can be augmented by different public policies and also by diverse economic specialisations. The development of the services sector – accompanied by the decline in industrial and agricultural activities – has impacted differently on the various countries and could partly explain dissimilarities between countries and groups of countries.

This study looks at the evolution of working conditions in the different countries, by relying on the concept of quality of work and employment which was developed by Eurofound in 2002, and which consists of four dimensions of job quality: career and employment, health and well-being, skills development and working time and work–life balance. This study complements other research approaches which highlight particular elements of job quality, for instance wages or job satisfaction.

At national level, some negative patterns of job quality have declined almost everywhere while other unfavourable factors have increased, leading to greater work intensity. The lack of training opportunities in the workplace is of particular concern. Despite the emphasis on lifelong learning in the European discourse and policies, much progress is needed in order to reach the goals set in the Lisbon Strategy. Overall, we hope that the EWCS findings will serve to highlight the need for further action towards achieving better quality of work and employment throughout the EU.

Jorma Karppinen  
*Director*

**Country groups**

|      |  |
|------|--|
| EU15 | 15 EU Member States prior to enlargement in 2004 (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom)          |
| NMS  | 12 New Member States, 10 of which joined the EU in 2004 (Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia) and the remaining two in 2007 (Bulgaria and Romania) |
| EU27 | 27 EU Member States  |

**Country groups in this report, based on Esping-Anderson, 1990**

| <b>Groups</b>            | <b>Countries</b>   |
|--------------------------|--|
| <b>Scandinavian</b>      | Denmark, Finland, Sweden   |
| <b>Continental</b>       | Austria, Belgium, France, Germany, Luxembourg, Netherlands   |
| <b>Anglo-Saxon</b>       | Ireland, United Kingdom (UK)   |
| <b>Southern</b>          | Greece, Italy, Portugal, Spain   |
| <b>Eastern NMS</b>       | Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia |
| <b>Mediterranean NMS</b> | Cyprus, Malta  |

*Note:* These groupings are explained in Chapter 1.

# Contents

|  |           |
|--|-----------|
| <b>Foreword</b>  | <b>v</b>  |
| <b>EWCS – Survey methodology</b>                                     | <b>ix</b> |
| <b>Executive summary</b>   | <b>1</b>  |
| <b>Introduction</b>  | <b>5</b>  |
| <b>1 – Conceptual and analytical framework</b>                       | <b>7</b>  |
| <b>2 – Main analysis and findings</b>                                | <b>15</b> |
| <b>3 – Job quality patterns in Europe</b>                            | <b>41</b> |
| <b>4 – Conclusions</b>   | <b>49</b> |
| <b>Bibliography</b>  | <b>53</b> |
| <b>Annex A: Available variables in the EWCS for longitudinal use</b> | <b>61</b> |
| <b>Annex B: Tables showing trends across countries</b>               | <b>65</b> |
| <b>Annex C: Literature review</b>                                    | <b>99</b> |





# EWCS – Survey methodology

## Quality assurance

The quality control framework of the European Working Conditions Survey (EWCS) made sure that the highest possible standards were applied to the questionnaire design, data collection and editing processes in order to strengthen the robustness of the research and ensure the accuracy, reliability and comparability of the survey data. A wide range of information on the survey's methodology and quality control processes was published on the website of the European Working Conditions Observatory (EWCO). As part of the quality control procedures, Eurofound also conducted a qualitative post-test for the modules on training and job development in five countries (Austria, Czech Republic, Finland, Portugal and the UK) to understand better the survey's capacity to measure complex phenomena and to make improvements in the questionnaire for future surveys.

## Geographic coverage

The evolution of the EWCS follows the changes in the EU itself over the last 15 years. In 1990/91 the survey covered the 12 EU Member States that made up the EU at that time; 15 countries were covered in 1995/96 and 16 in 2000 (including Norway for the first time). The 2001 EWCS was an extension of the 2000 survey to cover the then candidate countries (Bulgaria, Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia and Romania). The survey was subsequently extended to Turkey in 2002. The fourth major wave in 2005 had a larger geographic coverage encompassing 31 countries, including the 27 EU Member States, plus the candidate countries Croatia and Turkey, as well as the EFTA countries Switzerland and Norway.

## Questionnaire

The survey questionnaire was developed with the support of a questionnaire development group involving members of Eurofound's Governing Board, representatives of the European social partners, other EU bodies (European Commission, Eurostat, the European Agency for Safety and Health at Work), international organisations (OECD, ILO) and national statistical institutes, as well as leading European experts in the field. The questionnaire was translated into 27 languages and 15 language variants.

The fourth EWCS questionnaire consists of more than 100 questions and sub-questions covering a wide range of work-related aspects, such as job characteristics and employment conditions, occupational health and safety, work organisation, learning and development opportunities, and work-life balance. Although the total number of questions has been steadily increasing since the first survey in 1990/91, the core variables of the questionnaire have been maintained, so that trends and changes in working conditions in the EU over the last 15 years can be examined.

## Sample

The survey sample is representative of persons in employment (employees and self-employed), aged 15 years and over, resident in each of the surveyed countries. In the 2005 edition of the survey, around 1,000 workers were interviewed in each country, with the exception of Cyprus, Estonia, Luxembourg, Malta and Slovenia, where the number of persons interviewed totalled 600. The survey sample followed a multi-stage, stratified and clustered design with a 'random walk' procedure for the selection of the respondents.

## Fieldwork

In total, 29,680 workers were interviewed face-to-face in their homes from 17 September to 30 November 2005, within different timespans in each country and an average of seven weeks. The fieldwork was coordinated by Gallup Europe and a network of national contractors carried out the data collection in each country.

## Weighting

Data is weighted against the European Labour Force Survey figures. Variables used for the weighting are: sex, age, region (NUTS-2), occupation (ISCO) and sector (NACE).

### Access to the survey datasets

The complete set of survey datasets is accessible via the UK Data Archive (UKDA) of the University of Essex at [www.esds.ac.uk](http://www.esds.ac.uk). To access data files, users are required to register with the UKDA. Information on the registration procedure is available at [www.esds.ac.uk/aandp/access/login.asp](http://www.esds.ac.uk/aandp/access/login.asp). The archive also provides access to survey documentation and guidance for data users. Users are recommended to read supplementary supporting documentation on the methodology provided on this website before working with the data.

For further queries, please contact: **Sara Riso** – Monitoring and Surveys Unit  
European Foundation for the Improvement of Living and Working Conditions  
Wyattville Road, Loughlinstown, Dublin 18, Ireland  
E-mail: [sri@eurofound.europa.eu](mailto:sri@eurofound.europa.eu)

## Introduction

In 2005, the European Foundation for the Improvement of Living and Working Conditions (Eurofound) undertook the fourth wave of its European Working Conditions Survey (EWCS), which began in 1990. During this 15-year period, the European Union has experienced significant changes at various levels. The 12 EU Member States of 1990 have since been joined by 15 new countries. Consequently, the 2005 EWCS covers the 27 EU Member States (EU27) as well as Croatia, Turkey, Norway and Switzerland. However, changes in the EU have also been more structural, concerning the whole organisation of the European economy, labour markets and working conditions.

Thus, the content of the EWCS has significantly evolved in this period; it now includes more questions and has expanded from focusing on more traditional ergonomic risks to encompassing the numerous issues related to a multidimensional approach to working conditions and, more generally, quality of working life. This report primarily aims to investigate two research questions. First, it seeks to observe through the various waves of the EWCS the existence of relative movements of convergence or divergence over time concerning the quality of working life. Second, it explores whether similar movements are visible between European countries during the period.

## Policy context

Structural changes in the EU have been reflected to a certain extent in the design of European and national policies, notably through the European Employment Strategy and the Lisbon Strategy. However, various recent studies show a mixed picture of the situation regarding job quality in Europe, indicating that, although some improvements are notable, such as with regard to accidents in the workplace, certain other dimensions of job quality – such as the intensification of work or access to training opportunities – have not really improved. This assessment was already made by the European Commission in the 2003 follow-up Communication on quality in work, and has been restated more recently in the strategic report on the renewed Lisbon Strategy.

These studies are based on various sets of data and indicators, using either a purely academic approach or a more policy-driven one, such as the conceptual framework and indicators agreed at the Laeken European Council in December 2001. One significant gap in the European framework on quality in work is the absence of any indicator related to working conditions. This report reviews from a job quality perspective the trends in working conditions as reflected through the various EWCS waves covering the last 15 years.

## Key findings

The investigation of quality of work and employment highlights four main dimensions: career and employment, health and well-being, skills development and work–life balance. Each of these dimensions includes subtopics that together encompass all of the issues covered by the EWCS questionnaires and the field of European labour and social policies as a whole. Examining these areas – as well as job satisfaction in general – in order to assess job quality in its broadest sense, the survey findings reveal a relative divergence in Europe with the joining of the 12 new Member States (NMS) in 2004 and 2007. On average, these countries so far show poorer performance in terms of job quality, but the results also confirm that they are reducing the gap.

Among the older Member States (EU15), the convergence process appears to be moving not towards the optimal or higher results but more towards the average, with the improved performance in terms of job quality of the Anglo-Saxon group of countries balanced by a deterioration of the Scandinavian group. Meanwhile, the Continental and Southern groups remain relatively stable.

Internal diversity within the country groups and within the countries can be augmented by different public policies and also by diverse economic specialisations. The development of the services sector – accompanied by the decline in industrial and agricultural activities – has impacted differently on the various countries and this could partly explain dissimilarities between countries and groups of countries.

The national results presented in this report show that, within each group, a high degree of variability emerges. Finland is increasingly different from the other Scandinavian countries, but differences between Denmark and Sweden are also more marked nowadays than 10 or 15 years ago. In the Continental group, the Netherlands and, to a lesser extent, Austria are also diverging from the other countries of the group. In the Southern group, Spain is further from Italy than before, while Portugal and especially Greece appear more dissimilar from the other countries of the group than in the 1990s.

At national level, negative patterns of job quality, such as exposure to health hazards, weekend and night work, are declining almost everywhere. Workers' rights have improved in terms of consultation and information about risks. However, other negative job quality patterns – such as jobs with poor learning opportunities and poor access to training, shift work or non-fixed working schedules, greater work intensity and health-related absenteeism – are on the increase in almost all countries.

The lack of training opportunities in the workplace is of particular concern. Despite the emphasis on lifelong learning in the European discourse and policies, and the specific open method of coordination on education and lifelong learning, much progress is needed in order to reach the goals set at Lisbon in 2000.

### Policy pointers

- For an overall improvement of working conditions in all countries, greater efforts are needed with regard to training and lifelong learning.
- Other risk factors and work-related outcomes in the EU27 countries requiring attention include the intensification of work and increasing absenteeism rates.
- In-depth information on the economic and social developments in the NMS is still fragmented or of narrow scope and further research is needed in this regard.
- With 27 EU Member States, it is difficult to analyse trends country by country and therefore clustering (grouping of Member States based on similarities) is a viable alternative. However, clustering can hide internal diversity and lead to over-interpretation. Therefore, it is important at the same time to conduct a country-by-country analysis, given the increasing diversity within the existing clusters.

## Further research

- Eurofound, given its mission and resources – such as surveys, observatories and funding of secondary research – could play a role in fostering synergies and in the establishment of a transversal task force or a working group on clustering.
- Increasing the size of the national samples would help to improve the next wave of the EWCS, enabling a deeper analysis at sectoral and regional levels, for example.
- Improving the national samples in the EWCS is a precondition for a better use of the EWCS for policy monitoring purposes, as this exercise is based on a soft benchmark of national performance.



# Introduction

In 2005, the European Foundation for the Improvement of Living and Working Conditions (Eurofound) undertook the fourth wave of its European Working Conditions Survey (EWCS). This unique source of comparative data on working conditions across Europe started modestly more than 15 years ago, in 1990, covering the then 12 Member States of the European Union with a limited set of questions. During this 15-year period, the EU has experienced significant changes at various levels. The 12 Member States in 1990 have since been joined by 15 new countries. Consequently, the 2005 EWCS covers the 27 Member States (EU27) as well as Croatia, Turkey, Norway and Switzerland. However, changes in the EU have also been more structural, concerning the whole organisation of the European economy, labour markets and working conditions. For example, the services sector has grown and globalisation has had an impact on the economy. Meanwhile, labour markets have experienced an increase in non-standard forms of employment, and working conditions include greater work intensity and new forms of work organisation. These changes have been reflected to a certain extent in the design of European and national policies, notably through the European Employment Strategy<sup>1</sup> and the Lisbon Strategy<sup>2</sup>.

The concept of quality of work and employment has always been a central element in the European Employment Strategy, which is part of the Lisbon strategy since the end of the nineties. This report seeks to reflect upon this theme through a trend analysis of the data of the European Working Conditions Survey over time and across countries. The motto 'more and better jobs' was developed later. This report looks at the evolution of a number of aspects relating to quality of work and employment of workers rather than at the quantity of jobs.

Other pieces of research complement this work, such as the recent Eurofound study on *More and better jobs: Patterns of employment expansion in Europe*, which looks at the patterns between 1995 and 2006. This study is an analysis of the evolution of employment within the European Union countries ranked by their median hourly wage, which is used there as a proxy for job quality. Employment growth in each country is broken up into five job quality quintiles (5 groups of jobs ranked from lower to higher median wages) which allows for the identification of the kind of jobs created more or less. While there are differences among countries in which job quality quintiles there is more job growth, the overall conclusion of this study is that more jobs were created in the higher job quality quintile – however, there is also a substantial growth in the lowest quintile.

The Lisbon strategy has been developing and some aspects have become more prominent in the policy debate. One of these elements is the concept of flexicurity. Flexicurity attempts to conciliate both employers' and workers' needs for flexibility and security, by ensuring safe transitions for the worker inside the labour market, while maintaining and improving the company's competitiveness and also preserving the European social model. A separate study on the Fourth EWCS considers this more in-depth, looking at employability and employment security for different groups of workers.

The content of the EWCS has evolved significantly in the fifteen-year period 1990-2005; it now includes more questions and has expanded from focusing on more traditional ergonomic risks to encompassing the numerous issues related to a multidimensional approach to working conditions and, more generally, the quality of working life. This 'historical' perspective in the development of

---

<sup>1</sup> [http://ec.europa.eu/employment\\_social/employment\\_strategy/index\\_en.htm](http://ec.europa.eu/employment_social/employment_strategy/index_en.htm)

<sup>2</sup> [http://ec.europa.eu/growthandjobs/index\\_en.htm](http://ec.europa.eu/growthandjobs/index_en.htm)



the EWCS constitutes the main background of this report, which primarily aims to investigate two research questions. First, it seeks to observe through the various waves of the EWCS since 1990 the existence of relative movements of convergence or divergence across time and to look at trends concerning the quality of working life. Second, it explores whether similar movements are visible between European countries during the period in question.

This report provides an in-depth analysis of the data gathered in the various waves of the EWCS since the 1990s. From a conceptual point of view, the analysis of working conditions is based on the framework developed by Eurofound around the issue of quality of work and employment. This framework highlights four main dimensions: career and employment, health and well-being, skills development and work–life balance. Each of these dimensions comprises subtopics that together encompass all of the issues covered by the EWCS questionnaires and the overall field of European labour and social policies. This approach ensures a more consistent perspective between the findings in terms of policy convergence or divergence and the empirical findings outlined in the report. From a more practical point of view, using this framework also makes it easier to relate the report findings to the extensive information already available through Eurofound, particularly on its website, as the working conditions theme is mainly structured according to the four dimensions of the concept of quality of work and employment.

In the light of results from the literature review undertaken for this report (see Annex C), each of these dimensions of quality of work and employment are analysed using a cluster approach in a first stage, followed by a consideration of national diversity. In order to keep the statistical results as readable and comprehensible as possible for a general audience and policymakers, the study mainly uses simple analytical tools. The primary focus is on a dynamic perspective, with a greater emphasis on the evolution across time of the various patterns of job quality between and within groups of countries than on simply assessing their incidence at a given moment. Trends are also considered according to their relative intensity in terms of variation.

The main source of data is the weighted and harmonised aggregated database of the four EWCS waves provided by Eurofound for 1990, 1995, 2000/2001 and 2005. The results analysis also draws on findings provided by other studies, especially the extensive analytical material already existing at Eurofound through the primary and secondary analysis carried out on the different editions of the EWCS.

This analysis seeks to identify differences or similarities between and within groups of European countries according to the overall welfare and labour market patterns widely used in economic and social literature for the 15 EU Member States (EU15) before enlargement in 2004 and 2007 (Esping-Andersen, 1990, 1999; Begg et al, 2001; Arts and Gelissen, 2002). It also attempts to integrate the new Member States (NMS) since 2004 and 2007 into these cluster structures (Cartapanis et al, 2005; Vasconcelos Ferreira and Figueiredo, 2005).

The conclusion summarises the main findings of the literature review and the analysis of the four waves of the EWCS. It considers the observed convergences and divergences in working conditions in the enlarged EU, and the factors that may explain these developments in the framework of European social policies. It also includes some recommendations to improve the structural content of the EWCS questionnaire in order to optimise its relevance for the EU policy framework.

# Conceptual and analytical framework

1

Various recent studies consider the issue of job and employment quality in the EU Member States or countries of the Organization for Economic Co-operation and Development (OECD) (European Commission, 2001, 2002; OECD, 2003; Clark, 2005; Davoine and Erhel, 2006; Green, 2006; Eyraud and Vaughn-Whitehead, 2007). These studies show a mitigated picture of the situation of job quality in Europe, indicating that although some improvements are notable, such as with regard to accidents in the workplace, certain other dimensions of job quality have not really improved, such as the intensification of work or training. This assessment was already made by the European Commission in the 2003 follow-up Communication on quality in work, and has been restated more recently in the strategic report on the renewed Lisbon Strategy (European Commission, 2003, 2007c). These studies are based on various sets of data and indicators, using either a purely academic approach or a more policy-driven one, such as the conceptual framework and indicators agreed at the Laeken European Council outside Brussels in December 2001. One significant gap in the European framework on quality in work is the absence of any indicator related to working conditions (Peña-Casas, 2007). This report will review from a job quality perspective the trends in working conditions as reflected through the various EWCS waves covering the last 15 years.

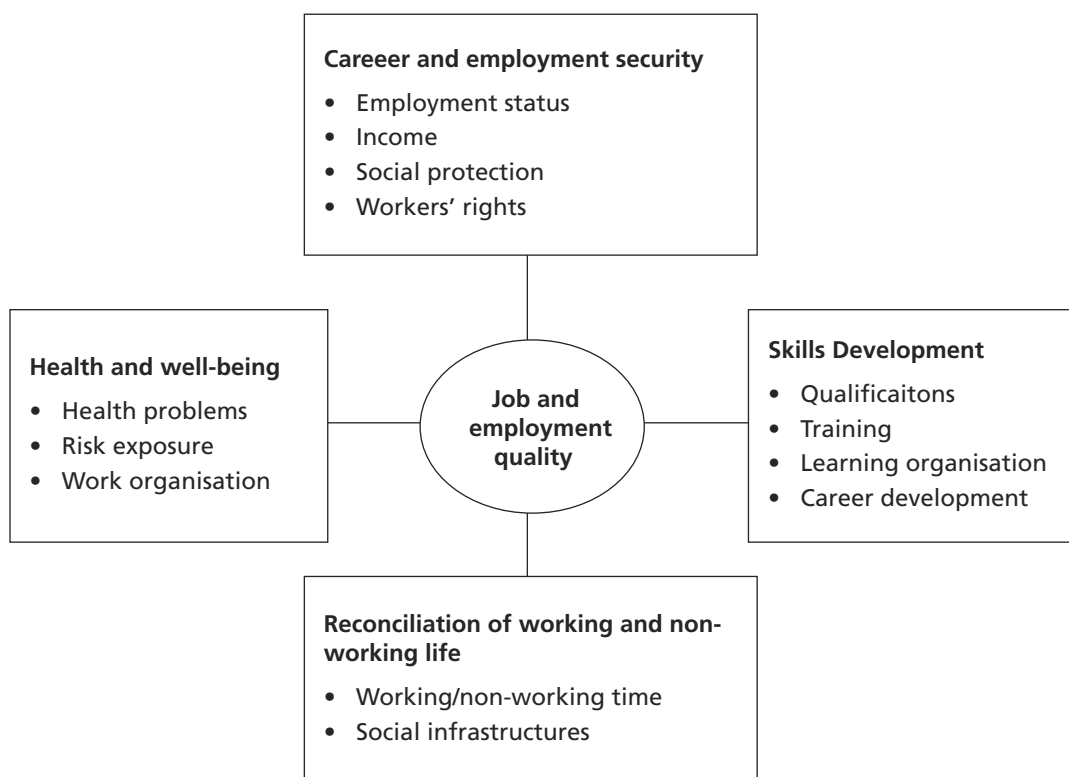
The search for convergent or divergent patterns of working conditions in relation to job and employment quality is based on complementary perspectives. In a first stage, the report assesses the existing cross-sectional similarities or differences in terms of job quality. Then, in a second stage, it focuses on the main aim of this study – the identification of trends over time to determine whether working conditions in Europe have improved or deteriorated during the last 15 years, and the extent of these fluctuations. The latter is measured through the use of ratios expressing the change from one survey wave to another in terms of absolute variation but also intensity. Both stages assess the situation mainly in terms of groups of countries, but also in a second step in terms of country differences, to highlight possible national diversity within the groups of countries.

Finally, this study will test the hypothesis that the impact of the EU regulatory framework is visible in the EWCS indicators. In this context, the time dimension is important as the focus is on expected changes related to the introduction of new or revised regulations since the 1990s. Furthermore, the analysis will also test whether the entry in 2004 of 10 NMS into the EU – which was preceded by a progressive inclusion of the European *acquis communautaire* or body of law in their legal frameworks – is translated into significant changes in working conditions indicators between 2001 and their joining the EU.

From a conceptual point of view, the analysis of working conditions indicators from the five waves of the EWCS will be undertaken using the overall framework already developed by Eurofound around the issue of quality of work and employment.<sup>3</sup> This framework encompasses all of the topics covered in the EWCS and is also coherent with the present structure of EU labour and social policies. If, for reasons of simplification, the rest of this report refers to ‘job quality’, it should be clear that this framework goes beyond simple intrinsic characteristics of jobs, as it encompasses social infrastructure and social and labour market institutions. Thus, it offers a broader perspective on quality in work than merely job quality (see figure).

<sup>3</sup> For a detailed discussion of the Eurofound conceptual framework, see Eurofound (2002). For a discussion on the conceptual frameworks and indicators used in the framework of the EU, see Peña-Casas (2007).

## Conceptual framework for quality of work and employment



Source: Eurofound, 2002

The framework of quality of work and employment highlights four main dimensions: career and employment, health and well-being, skills development and work–life balance. Each of these dimensions comprises subtopics that together encompass all of the issues covered by the EWCS questionnaires and the field of European labour and social policies as a whole. However, this report has to compromise in terms of the articulation of these dimensions on the basis of the available comparable data across time. A complete list of the indicators available in a longitudinal perspective is provided in Annex A of the report. The analysis of cross-sectional situations and time trends for each indicator is related to underlying hypotheses on patterns of improvement or degradation of job and employment quality. To give an example, an increase in the number of people highly exposed to work-related health hazards will be interpreted as a deterioration of job quality, while a decrease in this regard represents an improvement. These assumptions are generally obvious, but will be specified when necessary.

## Career and employment

The career and employment dimension includes issues related to employment status, earned income and social protection as a way to facilitate better career paths throughout the working life. Other aspects are workers' rights issues in terms of information, consultation and participation and, more generally, the transversal questions of equal opportunities and non-discrimination on the grounds of gender, age, education and qualification, national or ethnic origins, for example. From the selected variables, this study has gathered the following variables for the analysis:

- proportion of workers with non-standard employment contracts;<sup>4</sup>
- proportion of workers reporting that they experience discrimination;
- proportion of workers declaring that their immediate supervisor is a woman;
- proportion of workers reporting that they have discussed work-related problems either with their boss or an employee representative in the last 12 months;
- proportion of workers responding that they are very well informed about health and safety risks.

## Health and well-being

The health and well-being dimension includes questions related to physical and psychosocial work factors such as risk exposure, health problems induced by work, stress and violence at the workplace. It also covers issues concerning work organisation and its changing nature in terms of task repetitiveness, time pressure or work intensification. From the selected variables, this study uses the following variables for the analysis:

- proportion of workers who think that their health or safety is at risk because of work;
- proportion of workers reporting that they have been absent due to health problems over the past 12 months;
- proportion of workers whose health-related absenteeism has exceeded one month in the previous year;
- proportion of workers reporting exposure to ambient hazards more than half of their working time;
- proportion of workers citing exposure to chemical or toxic hazards more than half of their working time;
- proportion of workers reporting exposure to poor ergonomic conditions more than half of their working time;
- proportion of workers declaring that their job involves a high pace of work;
- proportion of workers responding that their pace of work is dependent on other factors than themselves;
- proportion of workers declaring that they are unable to choose or change the organisation of their daily work.

---

<sup>4</sup> The term 'non-standard employment' appears in European documents (see for instance the recent Green Paper on modernising labour law, available online at: [http://ec.europa.eu/employment\\_social/labour\\_law/green\\_paper\\_en.htm](http://ec.europa.eu/employment_social/labour_law/green_paper_en.htm)). By definition, the term 'non-standard' refers to an opposition with a 'standard' – in other words, a characteristic shared by the majority of a reference population. Concerning the employment patterns in Europe, the standard of reference remains the full-time worker with an indefinite term contract, as vouched by the latest Eurostat figures: in 2007, about 81.8% of the EU27 workforce were employed on full-time contracts and 85.5% on indefinite contracts. Some economic activities, such as agriculture or hotels and restaurants, may imply resorting more frequently to non-standard forms of employment such as temporary contracts. Nevertheless, as regards the job quality of workers in non-standard employment, previous Eurofound studies highlight that these workers are also more exposed to poor working conditions and negative health outcomes than other workers (Benavides and Benach, 1999; Goudswaard and Andries, 2002).

## Skills development

The skills development dimension covers issues linked to the training received by workers, the learning organisation at the workplace, the evolution of task content and requirements, as well as the improvement of workers' qualifications and employability and the effect in terms of career development. From the selected variables, this study uses the following variables for the analysis:

- proportion of workers in jobs with poor learning opportunities;
- proportion of workers without training in the previous year.

## Work–life balance

Finally, the work–life balance dimension concerns the problem of reconciling working time – in relation to duration, flexibility and regularity – with non-working time devoted to family and/or social life. From the selected variables, the study uses the following variable for the analysis:

- proportion of workers declaring that they work more than once a week each month on Saturdays, Sundays or at night.

The issue of subjective satisfaction with working conditions will be treated separately as an introductory assessment of job and employment quality in Europe.

## Methodological challenges

Before trying to assess and analyse the trends in the EWCS, certain methodological issues should be noted when considering the results presented in this report.

Like any other survey, the EWCS is subject to problems linked to the use of self-assessed perceptions in the context of international comparison, such as subjectivity issues and difficulties concerning translation of questions in diversified normative contexts. The information collected in the EWCS is mainly based on a subjective self-assessment by workers of their own reality. Even if the differences between workers' perception and reality can be assumed to be minor, this is methodologically more challenging for certain questions in which a subjective evaluation of factual information has more influence, such as those related to exposure to risks or health outcomes. However, in many cases the perceived reality has as much effect as the reality itself, despite minor divergences between both. Thus, working conditions which are intimately perceived as dangerous or negative, even if this is not effectively the case, will affect workers' health and social behaviour.

Another methodological issue is related to culturally driven differences arising from international comparisons, requiring caution when interpreting the results. These differences are impossible to normalise, and even if a convergence can be noted in forms of work and their conceptualisation, as well as in economic and social structures across Europe, possibilities of misunderstandings still arise concerning certain concepts. The increasing diversity of the EU makes this situation a challenge faced by all surveys in the European statistical system, including the EWCS. This issue can be addressed in various ways, such as the use of wording of questions already validated in previous surveys or the use of multiple variables to assess complex topics and detect eventual inconsistencies. The quality of translation of the original questionnaire into the different national versions plays a fundamental role in minimising misunderstandings.

Furthermore, problems arise due to the fact that the EWCS has developed over time to fit the evolution of EU structures, labour markets and policies. The survey has evolved from focusing on ergonomic traditional risks to including wider themes covering the multidimensional aspects of work organisation and quality of working life. New topics and questions have been added and some existing questions have been rephrased in the various waves of the EWCS. This generates problems for the interpretation of certain questions which have been modified over time. Moreover, some questions or items do not exist in all editions of the EWCS, which reduces substantially the richness of information available in a longitudinal perspective compared with a cross-sectional perspective.

Finally, methodological restrictions arise concerning the representativeness across sections and over time of many EWCS variables at national level. As acknowledged by Eurofound, the sampling design does not aim to study the situation in each country in depth but rather to provide strictly comparable data on working conditions at European level or for regional aggregates. Given that the objective of this report is to analyse trends in terms of convergence or divergence, it has not tried to analyse determinants of the various dimensions of working conditions according to structural characteristics such as sector or company size, or individual characteristics such as sex, age, occupation or education. The research fully acknowledges that these determinants are fundamental for an in-depth understanding of the variations between (groups of) countries. For these aspects, the study refers to the various analytical reports of the different EWCS and the extensive literature published by Eurofound through secondary analysis of the survey.

## Country groups

To surmount these difficulties – particularly the issue of national representativeness, which is of central importance in the perspective of this report – various adjustments have been made to the data. First, the items of certain questions with scales have been grouped in order to obtain more significant categories. Second, in order to reduce the number of questions investigated while staying coherent with the topic of job quality, this research has developed indices aggregating various conceptually related questions and items in the EWCS.

Third, as it was impossible to analyse in depth trends for 27 countries in the limited scope of this report, the countries have been aggregated into different groups (see below). In order to improve representativeness, different weighting variables have been used for countries and groups of countries, according to the recommendations of Eurofound. A literature review carried out for the preparation of this report pointed to a number of different models for clustering (see Annex C). Some of the highlighted clusters seem to have a certain stability across time for the EU15. This is notably the case for the three Esping-Andersen clusters, completed by the Mediterranean cluster.

Nevertheless, due to hybridisation between the systems resulting from convergent and/or different trends in the evolution of the institutional schemes of countries, these ideal types have to be considered with caution. Certain countries are not fitting as well as before into these clusters, while some others are closer to a different cluster than they were 10 or 15 years ago, such as Italy and Spain. All of the Member States have been affected by profound changes in their economic, social and employment structures over the years, and they face the complex and sometimes painful challenge of adaptation to change in the framework of a globalised world (Crouch, 1999; Eyraud and Vaughn-Whitehead, 2007). The two recent enlargements of the EU in 2004 and 2007 have



added supplementary layers of confusion to the clustering approach, as the NMS are the product of different pathways of history – at least in the last 60 years – and are not easily classified into the cluster models developed at the end of the 1980s (Palola and Savio, 2005). It is important to note that any typology should never be interpreted as a straight and faithful description of reality; instead, it represents an ideal type, as conceptualised by the German economist and sociologist Max Weber (1949). In other words, it is a hypothetical and simplistic benchmark tool to estimate the observed reality with some degree of liberty.

Therefore, this study must be pragmatic in its approach as it faces numerous sets of countries with diverse backgrounds. Some of the observed ‘hybrid’ countries in the typologies are Austria, Finland, Ireland, the Netherlands and Portugal. However, an approach in terms of clusters seems necessary to give more robustness to the data. Assuming that the four ‘traditional’ clusters of welfare and employment regimes characterising the EU15 can be used without too much distortion, the question remains regarding the classification of the 12 NMS into coherent clusters. In its recent report on the fourth EWCS, Eurofound uses a cluster classification of European countries, where – alongside the traditional four clusters – the eastern post-communist countries are grouped into a single cluster and Cyprus and Malta are added to the Mediterranean cluster (Parent-Thirion et al, 2007). This approach is generally adopted given the difficulty of clearly relating the NMS to the traditional clusters.

Nevertheless, this division may appear unsatisfactory as sometimes strong differences also exist within the group of eastern European countries in terms of economic and social development or labour and welfare arrangements. A growing number of studies indicate that the eastern Member States should not be perceived as a homogeneous group; despite strong ‘equalising’ factors that have influenced their conditions and institutions – mainly communism followed by International Monetary Fund and World Bank influence during the ‘transition’ years – they follow distinct pathways initiated generally at the end of the 19th century (Tomes, 2005). However, as shown in the literature review, at this moment no convincing classification emerges for these countries, so this analysis will consider them in a single group.

A similar difficulty exists concerning the classification of Cyprus and Malta. Both countries are generally assimilated to other Mediterranean countries, despite the fact that some historical differences have had a strong influence on the constitution of their welfare and employment regimes, notably the Anglo-Saxon influence as both countries were under British sovereignty for a long period. Furthermore, the economic structure of Cyprus and Malta is rather different from the other Mediterranean countries, and much closer to the Continental model. Therefore, this study will put both countries in a separate group; this strategy is also adopted for more pragmatic reasons as these countries are only surveyed in the last two waves of the EWCS, like the other NMS. Thus, the analysis emerges with a structure of six ‘groups’ of countries<sup>5</sup>, which is almost identical to the traditional clusters put forward by Esping-Andersen (Table 1).

---

<sup>5</sup> To avoid too much assimilation with theories related to cluster elaboration, given the uncertainties highlighted in the literature review, this research decided to use the wording of ‘groups of countries’ or ‘country groups’, which appear more neutral.

**Table 1: Country groups**

| Groups            | Countries  |
|-------------------|--|
| Scandinavian      | Denmark, Finland, Sweden   |
| Continental       | Austria, Belgium, France, Germany, Luxembourg, Netherlands   |
| Anglo-Saxon       | Ireland, United Kingdom (UK)   |
| Southern          | Greece, Italy, Portugal, Spain   |
| Eastern NMS       | Bulgaria, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Slovenia |
| Mediterranean NMS | Cyprus, Malta  |

These six groups will be the guideline for the study of trends. This study will be limited to the current EU27, as it seems more coherent with the EU regulatory framework and the cluster approach.

## Measuring trends

Trends across time are apprehended in two complementary ways. A first approach is to indicate the ‘absolute difference’ between the most recent and oldest periods of reference. This is complemented by a measure of intensity, which gives an idea of the relative importance of change proportionally to the previous period of reference. Intensity is calculated as a simple ratio of the absolute difference and the observed value of the oldest period of reference, expressed in percent terms.<sup>6</sup> This measure of intensity is central in the interpretation of results, especially when it is applied to results where the initial level is low and/or the absolute change is also low but may still prove to be significant. Accordingly, an increase of two percentage points in the value of an indicator – the initial value of which was, for instance, 4% – will be reflected by an absolute change value of +2 percentage points, which is delicate to interpret in the context of a survey, given the margin of error. Nevertheless, the intensity of observed change in this example is valuable information, as it indicates a proportional increase of 50% during the period.

For many questions, the results do not apply to the 1990 EWCS; furthermore, Austria, Finland and Sweden had not yet joined the EU in 1990. Therefore, the reference periods used to assess trends are 1995–2005 for countries of the former EU15 and 2001–2005 for the recent NMS.

<sup>6</sup>  $((t - (t-1))/(t-1)) * 100$ , where ‘t’ is the most recent period of reference and ‘t-1’ is the oldest.





## Subjective satisfaction with working conditions

Job satisfaction or dissatisfaction, in spite of its subjective nature, has been intensively studied mainly because it is considered to be a predictor of workers' productivity and performance, or their likelihood of exiting a job (Gospel, 2003). This has been accompanied by an ongoing debate regarding the validity of the notion and the role of subjective and objective determinants of job satisfaction. The present study will not enter into this interesting debate.<sup>7</sup> Moreover, the only comparable question across time in the EWCS concerns self-assessment of working conditions.<sup>8</sup>

Job satisfaction could also be viewed as a proxy of job quality (Llorente and Fernández Macías, 2005) and it is in this perspective that this study will consider it. Measuring job satisfaction will give a first indication of the evolution of job quality in Europe as perceived by the workers themselves. International surveys usually highlight two main constant trends when comparing countries in this regard. The first constant is that workers generally report high levels of satisfaction concerning working conditions, despite changes in economic and employment structures. This result also highlights the known paradox of developed countries where job satisfaction decreases across time despite objective improvements in working conditions, which may be partly explained by work intensification and increasing difficulties in reconciling work and personal life (Green, 2006). The second constant is that satisfaction with working conditions tends to increase with the wealth of countries (Gospel, 2003).

Unsurprisingly, the data from the various waves of the EWCS reflect the same overall trends. In 2005, the proportion of workers declaring themselves satisfied or very satisfied with their working conditions ranges from 71.3% in the group of Eastern NMS to 91.5% in the Anglo-Saxon group of countries (Table 2). The less wealthy groups of countries report the lowest levels of satisfaction, notably in the Eastern NMS group (71.3%) and the Southern group of countries (76.2%). In terms of trends, the share of workers who are satisfied with their working conditions has declined in absolute terms since 1995 in the Southern group (-3.1 percentage points) but also more surprisingly in the Scandinavian groups of countries (-4.9 percentage points). Meanwhile, satisfaction with working conditions remains virtually constant in the Continental (-0.1 percentage points) and Eastern NMS (-0.3 percentage points) groups of countries, and has increased in the Mediterranean NMS group (+2.5 percentage points) and especially in the Anglo-Saxon group (+4.4 percentage points).

In 1995, workers in the Scandinavian countries were most satisfied with their working conditions. However, in 2005, the highest level of satisfaction is found in the Anglo-Saxon countries. This suggests a declining trend regarding job quality in Scandinavian countries accompanied by improved job quality in the Anglo-Saxon group of countries. Nevertheless, this decrease in job quality in Scandinavian countries should be seen in the context of the already high levels achieved in these countries. In relative terms, the intensity of differences, either positive or negative, appears to be weak.

The analysis also examined national levels of satisfaction with working conditions and found (see table 1b in statistical annex B) a certain variability between countries within their groups. Although

<sup>7</sup> For a review of the issue of job satisfaction and its determinants, see Green (2006) or Cabrita and Perista (2006).

<sup>8</sup> The fourth EWCS includes for the first time additional questions on various dimensions of job satisfaction (Parent-Thirion et al, 2007).

**Table 2: Workers reporting to be very satisfied or satisfied with working conditions in main paid job, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 92.0     | 89.8     | 87.1     | -4.9                | -5.3                     |
| Continental       | 86.3     | 86.1     | 86.2     | -0.1                | -0.1                     |
| Anglo-Saxon       | 87.1     | 89.8     | 91.5     | 4.4                 | 5.1                      |
| Southern          | 79.3     | 76.9     | 76.2     | -3.1                | -3.9                     |
| Eastern NMS       |          | 71.6     | 71.3     | -0.3                | -0.5                     |
| Mediterranean NMS |          | 79.8     | 82.3     | 2.5                 | 3.0                      |

*Notes:* The 2000 survey in the NMS actually took place in 2001. The absolute difference in all of the tables refers to the difference in percentage points. The intensity of difference in all of the tables is calculated as  $((t - (t-1))/(t-1)) \times 100$ , where 't' is the most recent period of reference and 't-1' is the oldest.

*Source:* EWCS

the Scandinavian group of countries shows a decline in workers' satisfaction with their working conditions, this result is less marked in Denmark, which experienced only a minor reduction in worker satisfaction since 1995 (-1.5 percentage points) and remains the EU Member State with the highest level of satisfaction in 2005 (92.5%). The decrease in the number of satisfied workers is slightly more significant in Finland (-5.5 percentage points) and Sweden (-6.8 percentage points); nonetheless, both of these countries still show high levels of satisfaction among workers in 2005 (87.3% and 85.3% respectively).

Among countries of the Anglo-Saxon group, the situation is more favourable in the UK, with the rate of satisfied workers increasing since 1995 (+3.7 percentage points), placing it in the second highest position in Europe (91.6%). By contrast, a substantial reduction is found in the number of satisfied workers in Ireland (-6.9 percentage points), which nevertheless remains high (86.9%).

On the whole, the degree of satisfaction concerning working conditions remains high and stable across time for the Continental group of countries. However, significant reductions are apparent in certain countries, such as Luxembourg (-6.3 percentage points), the Netherlands (-5.6 percentage points) or Belgium (-3.7 percentage points). In 2005, France is still the country with the lowest rate of satisfied workers in its group (80.9%), while the highest level is in Belgium (88.3%).

In the Southern group of countries, a strong contrast emerges between Portugal and Spain, on the one hand, and Greece and Italy on the other. Portugal (84.8%) and Spain (80.6%) have higher and more stable rates of worker satisfaction, similar to those of the Continental countries. In Italy, the level of satisfaction is lower (76.4% in 2005) and has decreased since 1995 (-4.2 percentage points). Greece presents by far the lowest rate of workers who are satisfied with their working conditions in the EU in 2005 (56.1%), combined with the strongest reduction in levels of satisfaction since 1995 (-7.9 percentage points).

In the Mediterranean NMS, the levels of satisfaction are similar to those of the Continental countries and Portugal and Spain: at 83.8% in Cyprus and 80.3% in Malta in 2005. The degree of workers' satisfaction has increased since 2001 in Cyprus (by six percentage points) but has slightly declined in Malta (-1.7 percentage points).

Among the Eastern NMS, it is possible to distinguish three groups of countries. A first group comprises Member States with satisfaction rates in 2005 oscillating around 75% (Czech Republic, Hungary, Poland, Slovakia) and a second group includes countries with rates around 70% (Estonia, Latvia, Slovenia). A third group consists of countries with the lowest rates of satisfaction with working conditions in Europe, apart from Greece (Bulgaria, Lithuania, Romania: around 66%).

Concerning the NMS, it may be wondered if their accession to the EU has had an impact on the workers' level of satisfaction concerning their working conditions. This situation appears to vary. Certain countries, such as Slovenia (+9.3 percentage points), Slovakia (+7.4 percentage points), Cyprus (+6 percentage points) or Poland (+5.4 percentage points), present substantial increases in the levels of workers' satisfaction since the previous survey in 2001. In other countries, the impact is limited, either in the direction of a small increase, as in Latvia (+1.3 percentage points), or pointing to small decreases, such as in Estonia (-0.4 percentage points), Malta (-1.7 percentage points), Lithuania (-1.9 percentage points) or the Czech Republic (-2.2 percentage points). These low levels are difficult to interpret as significant. Meanwhile, Hungary has recorded a marked decline in satisfaction with working conditions since 2001 (-6.6 percentage points).

## Health and well-being

Health and safety issues are a major dimension of working conditions and of job quality as they are closely related to the well-being of workers. These issues are also a central theme of European social policies.<sup>9</sup> Obviously, jobs presenting risks for the health or safety of workers cannot be considered as quality jobs and should be limited as far as possible, or at least organised in a way that guarantees the highest degree of physical, mental and social well-being of workers in all occupations.

The topic of health and safety has been an overarching issue in the EWCS since the beginning of the survey and the set of dedicated questions has been expanding over the years. This section will review the evolution of some dimensions of health and safety. These include the subjective assessment of risks, health-related outcomes including absenteeism, exposure to various risk factors, or the situation in terms of the strenuousness of tasks or organisation of daily work that could negatively affect the well-being of workers.

### Awareness of risks

The subjective assessment by individuals of possible work-related risks to their health gives an initial insight into health and safety issues. In terms of quality, it is obvious that working in an environment perceived as unsafe is a sign of poor job quality, which also has psychological consequences. Of course, as always when dealing with subjective assessments, caution is required when comparing countries or groups of countries on such issues.

A clear-cut difference emerges in 2005 in the degree of perceived risks between workers of the Continental and Anglo-Saxon groups of countries and the rest of Europe (Table 3). In the Continental and Anglo-Saxon countries, about one-fifth of workers believe that their health or safety are at risk because of their work; however, this proportion rises to around one-third of workers in the

<sup>9</sup> In addition to the various directives decreed by the EU, a specific body – the European Agency for Safety and Health at Work – was launched in 1996 to improve knowledge and awareness on health and safety issues in Europe (see <http://osha.europa.eu>).

**Table 3: Workers who think their health or safety are at risk because of work, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 25.4     | 14.8     | 34.6     | 9.2                 | 36.4                     |
| Continental       | 24.4     | 23.8     | 20.2     | -4.2                | -17.2                    |
| Anglo-Saxon       | 28.7     | 26.2     | 19.2     | -9.5                | -33.1                    |
| Southern          | 33.1     | 34.5     | 33.1     | 0.0                 | 0.1                      |
| Eastern NMS       |          | 41.0     | 41.3     | 0.3                 | 0.8                      |
| Mediterranean NMS |          | 36.8     | 34.4     | -2.4                | -6.5                     |

Source: EWCS

Scandinavian, Southern and Mediterranean NMS groups and to 41.3% in the Eastern NMS. Changes across time are very marked in the Scandinavian group, where a significant increase is apparent between 1995 and 2005 in the proportion of workers who think that their health is at risk (+9.2 percentage points or an increase of one third in relative terms). In contrast, an opposite trend with similar proportions is observed in the Anglo-Saxon group during the same period, with the number of workers perceiving that their health is at risk declining significantly (-9.5 percentage points or one-third less in relative terms). In other groups of countries, a relative stability is found over time.

A notable variability appears in the degree of perceived health or safety risks among EU Member States in 2005, with levels ranging from 18.1% in the UK to 54.2% in Greece (table 2b in statistical annex B). Relatively high levels of perceived risks are also noted in Latvia (45.8%) and more surprisingly in Sweden (46.1%). In an intermediate position is a group of countries mainly composed of the NMS, Luxembourg and Spain, where levels of risk perception lie between 30% and 40%. The group with lower perceived risks (18.1% to 26.7%) includes mainly Continental, Anglo-Saxon and Scandinavian countries, except Sweden. The Czech Republic may also be found in this group, with a much lower level of perceived risks than the other NMS (21.4%).

Turning to trends among countries, the substantial increase in perceived risks between 1995 and 2005 in the Scandinavian countries is mainly caused by Sweden, where the number of workers perceiving that their health and safety are at risk has almost doubled since 1995 (+21.9 percentage points). Meanwhile, it has risen only slightly in Denmark (+4.7 percentage points) and even decreased in Finland (by four percentage points). Among the Anglo-Saxon group of countries, a diverging trend emerges between the UK, where perceived risks have significantly declined (-11.4 percentage points), and Ireland, where an increase in risk perception is noted (+6.7 percentage points). In the Continental countries, the number of workers perceiving that their health is at risk has increased in certain Member States (Belgium, Luxembourg, the Netherlands) while it has decreased in the other countries of the group. In Southern countries, perceived risks have significantly declined in Italy and Portugal (by about six percentage points), while they have remained stable in Spain but have strongly increased in Greece (+10 percentage points), where the highest level of perceived risks in the EU is observed.

Among the Eastern NMS, the Czech Republic records a substantial decrease in perceived risks since 2001 (-12.3 percentage points), thereby establishing itself as the best performing country of its group

in this regard in 2005. The situation remains stable in the other countries of this group, although some notable decreases are also observed in Lithuania and Romania (about seven percentage points) and to a lesser extent in Hungary (-4.2 percentage points). Finally, among the Mediterranean NMS, a significant decline is reported in Cyprus in the number of workers perceiving their health or safety to be at risk because of their work (-7.8 percentage points), while a slight increase is found in Malta.

### Work-related outcomes

Less subjective than a self-assessment of perceived risks for health and safety is the proportion of workers who report having been absent from work because of health problems over the past 12 months, which gives a perspective on outcomes related to work (Table 4).<sup>10</sup> This outcome is strongly determined by various factors, such as national institutional and legal arrangements, employment status, company and job pressures, or seriousness of the accident or illness; all of these factors may facilitate or hinder the possibility for a worker to use this right. Caution is required in a qualitative interpretation of this indicator, as low levels of absenteeism may also reflect restrictive legislation and decreasing trends could indicate a tightening of conditions or controls. Therefore, this study will consider the relative degree of health-related absenteeism in conjunction with the evolution of long-term periods of absenteeism (Table 5).

**Table 4: Workers reporting having been absent due to health problems over the past 12 months, by country group**

|                   | 1995 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 17.6     | 33.6     | 16.0                | 91.5                     |
| Continental       | 27.6     | 25.4     | -2.2                | -7.8                     |
| Anglo-Saxon       | 16.6     | 22.5     | 5.9                 | 35.8                     |
| Southern          | 17.9     | 19.0     | 1.1                 | 6.4                      |
| Eastern NMS       |          | 19.8     |                     |                          |
| Mediterranean NMS |          | 24.6     |                     |                          |

Source: EWCS

Unfortunately, this information is only available in the 1995 and 2005 surveys and thus the evolution across time can only be compared in the EU15. In 2005, the Scandinavian group of countries reports by far the highest level of health-related absenteeism, affecting about one-third of the workforce. In the Continental, Anglo-Saxon and Mediterranean NMS groups of countries, around one-quarter of the workers have been absent from work due to health reasons, this proportion declining to about one-fifth of the workforce in the Southern countries and Eastern NMS. Compared with 1995, the increase in health-related absenteeism has been highly significant in the Scandinavian countries (+16 percentage points), which represents almost a doubling of the share of workers concerned. In the Anglo-Saxon group too, a significant increase in health-related absenteeism is found since 1995

<sup>10</sup> Unfortunately, this is only a limited perspective in view of the richness of the EWCS on this issue. The EWCS contains a detailed set of questions concerning various physical and psychological health-related outcomes; however, a comparison of these outcomes across time is not possible given some modifications such as rephrasing of the questions, aggregating items or adding new items. It should also be noted that this indicator reflects the subjective assessment by workers of health-related problems, without distinction of the nature or cause of these complaints. Therefore, the problems may be rather subjective or may have a more objective cause such as accidents at work or occupational illnesses.

(+5.9 percentage points). In the Continental and Southern groups of countries the situation has remained relatively stable, with a low decrease in absenteeism in Continental countries and a slight increase in the Southern Member States.

The significant increase in health-related absenteeism in the Scandinavian group occurs in all countries, although they present different relative situations (see table 3b in statistical annex B). Finland reports the highest level of absenteeism in the EU in 2005 (47.3%), after a substantial increase since 1995 (+18.1 percentage points). The level of absenteeism is more moderate in Sweden (27.9%) and Denmark (33.7%), but has also strongly increased since 1995 (+19.5 and 16 percentage points respectively). Proportionally, in these two countries the level of absenteeism has more than doubled in comparison to the 1995 situation.

The increase observed in the Anglo-Saxon group is common to both countries (around +5.5 percentage points) and their relative situation in terms of absenteeism is also similar (about 20%); these are among the lowest values in Europe.

In the Continental group, contrasting situations may be observed in 2005. The Netherlands has by far the highest degree of health-related absenteeism of this group (34.9%), after a significant increase since 1995 (+7.7 percentage points). Belgium, Germany and Luxembourg present similar levels of absenteeism (about 29%); however, while the situation has remained stable in Belgium and Luxembourg, a decline is found in Germany (-5.2 percentage points). Austria and France have the lowest degree of absenteeism in the Continental group (about 20%); although the situation has remained stable in France, a substantial decrease since 1995 emerges in Austria (-14.3 percentage points).

Southern countries record the lowest levels of health-related absenteeism in 2005, notably Portugal and Spain (about 12%), while Italy is somewhat higher (25.9%) and Greece is in an intermediate position (16.1%). Italy has reported a significant increase in absenteeism since 1995 (+8.9 percentage points), which proportionally represents an increase of 50%. Meanwhile, significant decreases in the levels of health-related absenteeism are observed in Spain (-5.7 percentage points) and especially Portugal (-11.4 percentage points). In Portugal, this represents a halving of the concerned workforce since 1995. Among the NMS, in 2005 the levels of absenteeism are relatively similar to those observed in the Continental group of countries. Apart from Malta, which has the highest level of absenteeism in the NMS (40.1%), the Czech Republic, Estonia and Slovenia observe higher levels (about 30%) than the other countries, where the rates are around 20%. In Romania, the absenteeism rate is lower (13.5%).

However, as mentioned above, interpreting this indicator in qualitative terms can be problematic, as low levels of absenteeism may reflect restrictive legislation and decreasing trends could reflect a tightening of conditionality or controls. Therefore, this study will also consider the evolution of long-term periods of absenteeism, expressed by the proportion of workers whose health-related absenteeism exceeded one month in the previous year (Table 5). Here again, caution is necessary in the interpretation of this indicator. Nevertheless, an increase in long-term work absence could indicate a deterioration of working conditions, as longer periods of absenteeism are provoked by more serious health problems. This indicator has to be related to the previous one to assess the trend in terms of job quality. If both indicators follow the same direction, the trend is unambiguous.



**Table 5: Workers whose health-related absenteeism exceeded one month in previous year, by country group**

|                   | 1995 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 4.6      | 8.1      | 3.5                 | 77.1                     |
| Continental       | 5.5      | 6.8      | 1.3                 | 22.9                     |
| Anglo-Saxon       | 3.0      | 5.7      | 2.7                 | 90.4                     |
| Southern          | 4.1      | 7.6      | 3.5                 | 85.1                     |
| Eastern NMS       |          | 7.1      |                     |                          |
| Mediterranean NMS |          | 8.0      |                     |                          |

Source: EWCS

However, a decrease in general health-related absenteeism accompanied by an increase in long-term work absenteeism may indicate that health problems are generating more serious outcomes. On the other hand, an increase in general health-related absenteeism in conjunction with a decline in long-term absence may reflect an overall improvement in the situation.

The proportion of workers with long-term health-related absenteeism is moderate and rather similar in all groups of countries, ranging from 5.7% in the Anglo-Saxon group to 8.1% in the Scandinavian group. Looking at the trends, the significant increases in proportional terms observed in the Scandinavian and Anglo-Saxon groups support the idea that the growth of health-related absenteeism observed previously in these groups of countries indicates a deterioration in working conditions in terms of health outcomes. This is also the case, albeit to a lesser extent, in the Southern group of countries, where the increase in long-term absenteeism is proportionally similar to what is observed in the Anglo-Saxon and Scandinavian groups, while the general level of absenteeism has progressed more moderately. In the Continental group, a small decrease in the level of health-related absenteeism is nevertheless accompanied by a moderate increase in long-term absenteeism.

Among European countries, the higher rates of long-term absenteeism in 2005 are observed in Poland and Portugal (about 22%) but also in Lithuania and Slovenia (around 16%) (see Table 4b, Annex B). An intermediate group of countries is found in a 10%–15% bracket (Austria, Estonia, France, Hungary, Latvia, Romania, Spain, Sweden), followed by a group of countries in a 5%–10% bracket (Belgium, Bulgaria, Cyprus, Denmark, Finland, Greece, Luxembourg, the Netherlands, Slovakia). The remaining countries present long-term absenteeism rates under 5%. No aggregating logic seems evident in this distribution of countries.

Looking at the national trends since 1995, it may be observed that the proportion of workers unable to work for a long-term period because of health problems has significantly increased in all EU15 countries except Germany. The considerable increase observed previously in the Scandinavian group is mainly due to Denmark and Sweden, where the share of workers on long-term work absence has respectively tripled and quadrupled since 1995; the increment is more moderate although significant in Finland, with a 50% growth being recorded. In the Anglo-Saxon group, the proportion of workers on long-term health-related absenteeism has risen fourfold in Ireland, while it has almost doubled in the UK. In the Continental countries, the evolution is more diverse. In Austria, Belgium and Luxembourg, the numbers have increased by about two-thirds. The increase has been more moderate in the Netherlands (one-third) but much more substantial in France, where the share of workers on



long-term health-related work absence has tripled since 1995. Germany is the only country of the EU15 where a significant decline has occurred since 1995 (about two-thirds), coupled with the decrease previously observed concerning general health-related absenteeism.

In the Southern group of countries, a dichotomy emerges between Greece and Italy on one side, where long-term absenteeism is moderate, and Portugal and Spain on the other side, with higher rates – especially in Portugal, where the highest level of long-term absenteeism is observed overall (22.1%). Both of the latter countries record a decline in the rate of general health-related absenteeism, associated with a strong increase in long-term absenteeism: the proportions have more than doubled in Spain and nearly quadrupled in Portugal. Austria is the only other EU15 Member State showing a similar trend. As outlined previously, this contradiction between trends may indicate that health problems are generating more serious outcomes.

### **Exposure to hazards**

Among the several indicators of the EWCS related to health and safety, those expressing the degree of exposure to various hazardous conditions that may increase health risks and outcomes in the short but also longer term are particularly significant in a longitudinal perspective. In terms of job quality, high levels of exposure to health and safety risks are considered as negative patterns of job quality. In order to reduce the complexity of analysis and presentation, this study has developed different indices of the various indicators concerning exposure to health hazards, following three main dimensions. A first index aggregates indicators related to ambient hazards. A second index summarises indicators concerning exposure to chemical or toxic hazards. Finally, a third index considers ergonomic risks. These indices are simple arithmetic means of the various single indicators. For all of the indicators, the analysis includes the proportion of workers reporting that they are exposed to the particular risk more than half of their working time; this captures the more extreme degrees of exposure, as they clearly express poor job quality patterns. Nevertheless, it should be noted that these high degrees of exposure are taking place in a regulated framework, notably through European regulations and directives, which normally limit the negative outcomes generated by such risk exposure, at least to a certain extent.

### **Ambient hazards**

A total of three indicators of ambient risks are considered: high frequencies of exposure to loud noise, to high temperatures and to low temperatures. In 2005, the proportion of workers highly exposed to ambient hazards is rather similar in the Scandinavian, Continental and Anglo-Saxon groups of countries, ranging from 6% to 8.7% (Table 6). Exposure to ambient hazards is higher in the Southern countries and Eastern NMS (about 13%), and especially in the Mediterranean NMS (18.6%); this could be attributed to the high share of industry in the economic activities of these groups of countries. In comparison to 1995, levels of exposure have slightly increased in the Scandinavian group but more intensely in the Continental group and especially the Southern group, where proportionally the share of exposed workers has grown by one quarter. In the NMS, a slight decline is found although the levels of exposure remain rather high. A more remarkable evolution is noted in the Anglo-Saxon group, where a significant reduction in the number of workers exposed to ambient hazards is observed (almost one-third less than in 1995).

In the Scandinavian group, the increase in the number of workers frequently exposed to ambient hazards is common to all countries, but has proportionally doubled in Finland, where the initial level

**Table 6: Workers reporting exposure more than half of their working time to ambient hazards, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 6.8      | 7.0      | 7.2      | 0.4                 | 6.6                      |
| Continental       | 7.6      | 8.3      | 8.7      | 1.1                 | 14.2                     |
| Anglo-Saxon       | 8.7      | 9.5      | 6.1      | -2.6                | -30.1                    |
| Southern          | 10.1     | 11.1     | 12.6     | 2.5                 | 24.3                     |
| Eastern NMS       |          | 13.3     | 13.0     | -0.3                | -2.3                     |
| Mediterranean NMS |          | 20.6     | 18.6     | -2.0                | -9.8                     |

Source: EWCS

of exposure was already higher than in other Scandinavian countries (table 5b in statistical annex B). In the Continental group, the overall increase hides divergent country findings. In Belgium and France, the share of exposed workers has increased significantly in proportional terms (about one quarter). France has the highest rate of workers exposed to ambient hazards (12.4%) in 2005 compared with the other Continental countries (about 7%). The situation remains stable in Germany and Luxembourg. Only in Austria and particularly in the Netherlands are significant reductions observed, the latter being the EU Member State with the lowest rate of exposure (5.5%). In the Anglo-Saxon group, levels of exposure to ambient hazards are also moderate and the significant decrease observed since 1995 is common to both countries comprising this group.

In the Southern group, the situation of countries is rather diverse. Greece reports that one-quarter of its workforce (26.7%) is highly exposed to ambient hazards, which is by far the highest level in the EU. Moreover, between 1995 and 2005, the rate has almost doubled, which is also by far the highest increment observed over the period. In Spain, the degree of exposure is stable across time and reaches a level similar to that observed in the Eastern NMS and France (about 12%). The situation in Portugal (around 10%) and Italy (about 7%) has also remained stable over time. Among the Eastern NMS, the lowest level of exposure in 2005 is observed in the Czech Republic (7.6%) and is similar to rates observed in the Continental and Scandinavian countries or Italy. In other countries of this group, the proportion of exposure is about 10% in the Baltic countries, Romania and Slovakia, and increases to around 13% in the other countries. The Czech Republic, Slovakia and especially Romania record significant decreases in the share of exposed workers since 2001. Finally, exposure to ambient hazards is very high in Cyprus in 2005 (21.6%) and Malta (16.3%), without notable evolution since 2001.

## Chemical or toxic hazards

The three indicators of chemical or toxic hazards considered in this report are: high frequencies of exposure to breathing in smoke, fumes, powder or dust; to handling or having skin contact with chemical products or substances; or to radiation such as X-rays, radioactive radiation, welding light or laser beams. In terms of exposure to chemical or toxic hazards, the proportion of workers frequently exposed is moderate in 2005 (Table 7). The share is particularly low in the Anglo-Saxon group (3.5%) in comparison to the NMS, where the level is more than twice as high. This positive situation in the Anglo-Saxon countries is the result of a significant decline observed since 1995, with the number of frequently exposed workers almost halving. Indeed, all of the groups of countries report some decrease, notably also in the Mediterranean NMS and Southern groups of countries.

**Table 7: Workers reporting exposure more than half of their working time to chemical or toxic hazards, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 6.2      | 5.2      | 5.0      | -1.2                | -18.6                    |
| Continental       | 6.5      | 5.2      | 5.5      | -1.0                | -15.0                    |
| Anglo-Saxon       | 6.6      | 7.6      | 3.5      | -3.1                | -46.5                    |
| Southern          | 8.4      | 8.6      | 6.0      | -2.4                | -29.0                    |
| Eastern NMS       |          | 8.1      | 7.9      | -0.2                | -2.9                     |
| Mediterranean NMS |          | 11.7     | 7.0      | -4.7                | -39.9                    |

Source: EWCS

Looking at the level of countries, Finland again follows a distinct pattern in the Scandinavian group (Table 6b, Annex B). In 2005, its share of workers highly exposed to chemical and toxic hazards (7.1%) is nearly double the rate in the other Scandinavian countries. This was not the case in 1995, when the level was similar to the Swedish proportion; however, while a significant decrease has occurred in Sweden over time (about one-third less), the numbers have continued to climb in Finland. In Denmark, where the lowest rate in the EU is observed (3.1%), the situation remains identical since 1995. In the Continental group, France reports a higher level of exposure (7.2%) in 2005, whereas the Netherlands records the lowest rate of exposure in Europe (3.1%), together with Denmark. Although the levels have declined in all Continental countries, proportionally the Netherlands has reported the most significant decrease (almost halving since 1995). In the Anglo-Saxon group too, the decline is important in both countries, especially in the UK, and the observed shares in 2005 are among the lowest in Europe (about 3.7%).

In the Southern group, the decrease is also general in all countries but more intense in Italy and Spain (almost half) than in Greece or Portugal (about one quarter). The situation between countries is nevertheless rather diverse in 2005, with Greece presenting the highest rate of exposure to chemical and toxic hazards in Europe (11.3%) while exposure rates are much lower in Spain (4.8%) and Italy (3.5%). Among the Eastern NMS, the situation observed in 2005 is more homogeneous, with all countries included in a 6%–9% bracket, the exception being the Czech Republic (5.4%). Compared with 2001, proportions of exposure have declined significantly in the Baltic countries, Bulgaria and Slovakia (about one-third less), and less intensely in the Czech Republic, Hungary and Romania. In Poland and Slovenia, the opposite trend emerges, with a moderate increase since 2001. The Mediterranean NMS show a divergent trend between Malta, which records an increase in the proportion of exposed workers, and Cyprus, where the share is reduced by half.

## Ergonomic risks

Overall, four indicators are considered for ergonomic risks: high frequencies of exposure to tiring or painful positions; to carrying or moving heavy loads; to repetitive hand or arm movements; and to vibration from hand tools or machinery. Ergonomic risks are associated with the strenuousness of the daily tasks related to work and are an important factor of health and safety in a job quality perspective. Task strenuousness is directly linked to intrinsic characteristics of employment. Jobs implying having to carry heavy loads, to execute repetitive tasks and movements or to keep tiring positions for long periods have significant outcomes in terms of health and safety for workers,

**Table 8: Workers declaring exposure more than half of their working time to poor ergonomic conditions, by country group**

|                          | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|--------------------------|----------|----------|----------|---------------------|--------------------------|
| <b>Scandinavian</b>      | 15.5     | 17.8     | 19.9     | 4.4                 | 28.0                     |
| <b>Continental</b>       | 20.0     | 20.6     | 20.5     | 0.5                 | 2.6                      |
| <b>Anglo-Saxon</b>       | 20.3     | 20.6     | 17.2     | -3.1                | -15.3                    |
| <b>Southern</b>          | 24.7     | 26.8     | 26.4     | 1.7                 | 7.2                      |
| <b>Eastern NMS</b>       |          | 23.4     | 27.3     | 3.9                 | 16.8                     |
| <b>Mediterranean NMS</b> |          | 30.2     | 29.5     | -0.7                | -2.2                     |

Source: EWCS

especially in a mid or long-term perspective. In 2005, the Anglo-Saxon, Scandinavian and Continental groups of countries report the lowest proportions of workers constantly exposed to ergonomic risks (17%–20.5%) (Table 8). In other groups of countries, exposure is higher (around 26.4%–29.5%). In nearly all groups of countries, the shares have increased across time, notably in the Scandinavian group. Again, a significant decrease in exposure to risks may be observed in the Anglo-Saxon group, making it the lowest observed level in Europe in 2005. A small decrease is also found in the Mediterranean NMS group, which does not however affect the high level of exposure to ergonomic risks in this group.

The decrease in exposure to constant ergonomic risks in the Anglo-Saxon group is shared by both countries, but is more intense in the UK (Table 7b, Annex B). Both countries show among the lowest observed rates in Europe (about 17%). In the Scandinavian group, exposure to ergonomic risks has increased significantly in all countries, by about one-quarter in Sweden and Denmark and one half in Finland. Exposure is nevertheless notably higher in Finland (26.5%) than in Denmark or Sweden (about 17%), and the intensity of the increase is also higher in Finland. Among the Continental countries, the share of exposed workers in 2005 is much higher in France (30.1%) than in the other countries of the group (around 19%, on average). The French rate has increased since 1995 but moderately (+2.1 percentage points). In Luxembourg, a significant increase is apparent in the number of exposed workers since 2005 (+6.6 percentage points), as is the case in Austria albeit to a lesser extent. The Netherlands shows a strong decline in the proportion of exposed workers since 1995 (-6.1 percentage points), emerging as the country with the lowest exposure rate in Europe in 2005 (13.2%).

In the Southern group, Greece records the most challenging situation, with by far the highest share of workers exposed to constant ergonomic risks in Europe (40.9% in 2005), following a rising trend (+6.7 percentage points). Spain (-2.2 percentage points) and Italy have a relatively similar proportion of exposed workers (about 24%) but follow diverging trends, as shares are decreasing in Spain while increasing in Italy. Portugal also has a significant proportion of exposed workers in 2005 (30.2%), which remains stable over time. Among the Eastern NMS, the Czech Republic (18.7%), Slovakia (19.4%) and Latvia (21.9%) report the lowest exposure rates in this group, with the rest of the countries falling into a 25%–30% range. Since 2001, the proportion of constantly exposed workers has considerably escalated in Lithuania, Poland and Slovenia (about seven percentage points) and to a lesser extent in Bulgaria, the Czech Republic, Estonia and Hungary (around 3.5 percentage points). Meanwhile, the share has declined in the other Eastern countries, notably Romania (by five

percentage points). Finally, although a slight decrease is recorded in the proportion of exposed workers in Cyprus since 2001, the country has the second highest rate in Europe in 2005 (31.7%), which nonetheless remains in the same range as the levels observed in France, Hungary or Portugal. The situation remains stable in Malta, where about one-quarter of the workforce are exposed to ergonomic risks more than half of their working time.

### **Work intensification**

Intensification of work is another important aspect of health and safety outcomes in a job quality perspective. New forms of work organisation are more demanding in terms of work intensity. Traditionally, a clear distinction emerged between industrial constraints, such as production norms, and service constraints, such as adaptation to demand. However, these are increasingly combined in modern work organisation (Gollac and Volkoff, 2007). Very demanding jobs in terms of high pace of work could not be considered as good quality jobs, notably because they augment physical and psychological negative health outcomes (Boisard et al, 2003), as well as risks of accidents (Green, 2006). An increase in the pace of work can result in a deterioration of working conditions and job quality if it is not compensated by an increase in workers' autonomy (Boisard et al, 2003). A strong link emerges between excessively intense work and poor working conditions and, although some workers cope better than others with intensified work, it is not certain that this situation is sustainable in the long term. In addition, intensity is particularly high in poorly designed or functioning organisations, which in turn has a detrimental effect on all working conditions (Burchell et al, 2007).

Work intensification is thus a complex and multifaceted issue. In order to summarise the numerous questions of the EWCS reflecting these dimensions of work organisation, this study has developed three different indices. The first one focuses on work intensification by aggregating various patterns of jobs with high pace of work. A second index concerns external determinants of pace of work and denotes the lack of workers' control regarding factors determining their pace of work. Finally, a third index concerns lack of workers' autonomy in terms of organisation of their daily work.

### **High pace of work**

In terms of high pace of work, three indicators are aggregated for: jobs involving work at very high speed, working to tight deadlines or involving short repetitive tasks of less than 10 minutes. In 2005, jobs with a high pace of work, involving either high speed rhythms, tight deadlines or short repetitive tasks, are more frequent in the Mediterranean NMS (31.8%) and also, more surprisingly, in the Scandinavian group of countries (30.4%) (Table 9). In the other groups of countries, about a quarter of workers are occupied in jobs with a high pace of work, except in the Eastern NMS where the lowest share is found (21.2%); the latter result was also unexpected. In terms of trends, the Mediterranean NMS recorded the most significant increment, as jobs with a high pace of work have increased by almost half since 2001. However, the Scandinavian and Southern groups of countries have also experienced significant increases since 1995 (almost one-fifth more). Only the Anglo-Saxon group shows a notable decline since 1995 in the proportion of workers maintaining a high pace of work (nearly one fifth less).

Among European countries, the highest proportions of workers occupying jobs with a high pace of work in 2005 are found in Denmark and Finland (about 30%) and to a lesser extent in Cyprus, Greece, Malta and Slovenia (around 27%) (Table 8b, Annex B). The majority of other countries are



**Table 9: Workers declaring their jobs involve a high pace of work, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 25.6     | 30.5     | 30.4     | 4.8                 | 18.6                     |
| Continental       | 23.5     | 28.2     | 24.4     | 0.9                 | 3.7                      |
| Anglo-Saxon       | 31.1     | 29.4     | 25.3     | -5.8                | -18.7                    |
| Southern          | 21.7     | 30.1     | 25.9     | 4.2                 | 19.0                     |
| Eastern NMS       |          | 20.1     | 21.2     | 1.1                 | 5.6                      |
| Mediterranean NMS |          | 22.3     | 31.8     | 9.5                 | 42.9                     |

Source: EWCS

in a 16%–22% range, while Latvia, Poland and Slovakia report values of about 14%. This confirms the unexpected dichotomy observed previously between the Scandinavian countries and the Eastern NMS, albeit with some nuances. Although jobs with a high pace of work are found in high proportions in Denmark and Finland, this is less the case in Sweden (19.4%). In the latter country, such jobs have slightly declined since 1995; however, they have significantly increased in other Scandinavian countries, especially in Denmark since 2000, recording an increase of about 50%. Among the countries forming the Eastern NMS group, Slovenia reports one of the highest proportions of workers experiencing a high pace of work in the EU in 2005 (28.4%), after a significant increase since 2001 (more than doubling). In contrast, the other Eastern NMS, notably Latvia, Poland and Slovakia, present the lowest shares of workers occupied in jobs with a high pace of work in the EU (around 14%). In Latvia and Poland, this situation was already observed in 2001, but in Slovakia it results from a halving of the proportion over the 2001–2005 period. Jobs with a high pace of work have also declined in Bulgaria since 2001, while they have increased in Lithuania.

In the Anglo-Saxon group, the reduction in the number of jobs requiring a high pace of work since 1995 is common to Ireland and the UK in terms of intensity, although these jobs are more frequent in the latter (21.5%) than in the former (15.8%). In the Continental group of countries, the situation in 2005 is more or less homogeneous across countries (about 20%), except for Belgium where the proportion is lower (16.3%). Nevertheless, the similar situation observed in 2005 in these countries is the result of diverging trends since 1995. In Germany and especially Luxembourg, the number of jobs requiring a high pace of work has increased during the period, while it has declined in the other countries and notably in Austria (-8.4 percentage points). In the Southern group of countries, Greece presents a different pattern than other countries of its group, with a much higher share of jobs requiring a high pace of work in 2005: 27.3% compared with about 20%. In all countries of this group, the proportions have increased since 1995, but more significantly in Greece and Italy. Finally, in the Mediterranean NMS, the situation is similar between Cyprus and Malta, with a high incidence of jobs requiring a high pace of work (about 27%), increasing in the same proportion since 2001 (about one-fifth more).

### **Pace of work dependent on external factors**

As mentioned above, pace of work is also determined by various factors. In this regard, five different indicators are aggregated for jobs in which pace of work is dependent: on the work done by colleagues; on direct demands from people; on numerical production or performance targets; on the automatic speed of a machine or movement of a product; or on the direct control of the boss. The

incidence of these factors on pace of work is not controlled by the workers and thus indicates a lack of autonomy, which denotes an unfavourable pattern of job quality. Table 10 presents the proportion of workers declaring that their pace of work is dependent on factors other than themselves based on the aforementioned indicators for the various groups of countries. In 2005, the incidence of such work is relatively homogeneous between the groups of countries, encompassing a 38%–46% range. It is also rather high: it appears that pace of work is outside workers' control in nearly one out of two jobs in the EU. Across time, no significant variations emerge since 1995, except in the Continental group, where the incidence of such work has increased by a somewhat marked proportion.

**Table 10: Workers declaring their pace of work is dependent on external factors, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 36.9     | 35.9     | 38.1     | 1.2                 | 3.4                      |
| Continental       | 37.3     | 35.3     | 41.6     | 4.3                 | 11.5                     |
| Anglo-Saxon       | 45.0     | 45.4     | 44.0     | -1.0                | -2.2                     |
| Southern          | 38.6     | 39.9     | 39.5     | 0.9                 | 2.2                      |
| Eastern NMS       |          | 37.6     | 39.0     | 1.4                 | 3.6                      |
| Mediterranean NMS |          | 45.8     | 45.8     | 0.0                 | 0.1                      |

Source: EWCS

The extent, in 2005, among the European countries of the incidence of jobs with pace of work dependent on external factors is more or less the same as that observed for the groups of countries, albeit comprising a wider 34%–45% bracket (Table 9b, Annex B). At the extremes of the distribution are, on one side, countries with higher incidence rates of around 45% (Belgium, Cyprus, France, Greece, Hungary, Malta, Portugal, Romania, the UK) and, on the other side, countries with lower incidence rates of about 35% (Ireland, Poland, Sweden). No aggregate coherence emerges in terms of groups of countries. In the Scandinavian group, in 2005 the incidence of such work is higher in Finland (41.9%) than in the other two countries (about 36%). While a slow decrease is found in Sweden since 1995, a similar increase appears in Finland (+3.9 percentage points) and Denmark (+2.6 percentage points) over the same period. Among the Continental countries, jobs with pace of work dependent on external factors are slightly more frequent in Belgium and France (about 44%) than in the other Member States (around 40%). Incidence has increased in almost all countries but more notably in Austria, Belgium, Germany and Luxembourg (about one-fifth more); the rate has remained stable in the Netherlands.

In the Anglo-Saxon group, a diverging situation arises between the UK, where incidence in 2005 is high (44.3%) and stable across time, and Ireland, which presents a lower incidence (34.8%) resulting from a notable decrease since 1995, when the situation in both countries was comparable. The same pattern is observed in the Southern group of countries, where the situation was homogeneous in 1995 but is divergent in 2005. Greece and Portugal report a higher and increasing incidence over time (about 44%), while Italy and Spain record declining and lower incidence rates (around 37%). In the Eastern NMS, in 2005 jobs with pace of work dependent on external factors are less frequent in Poland (34.4%) than in the other countries, which fall into a 38%–44% bracket. These jobs have decreased since 2001 in Bulgaria, the Czech Republic, Estonia and Slovakia but have increased in

the other countries of the group, notably in Hungary and Slovenia. In Cyprus and Malta, situations are comparable in terms of incidence (about 45%), and are stable since 2001.

### Lack of autonomy in work organisation

Finally, another important dimension of work organisation in terms of job quality concerns the inability of workers to decide on the organisation of their daily work. Three indicators are aggregated in this respect: for jobs in which workers are unable to choose or change the order of tasks, the speed or rate of work, or the methods of work. The proportion of workers declaring that they are unable to choose or change the organisation of their daily work is presented in Table 11 for the groups of countries. In 2005, this share is much lower in the Scandinavian group (20.2%) than in the other groups of countries, where it is of similar size (around one-third of the workforce). This picture is the result of diverging trends across time. Although the situation has remained more or less unchanged in the Scandinavian, Continental and Eastern NMS groups, it has worsened in the other groups, notably in the Anglo-Saxon group and the Mediterranean NMS, where incidence rates have increased by about one third.

**Table 11: Workers declaring they are unable to choose or change the organisation of their daily work, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 21.9     | 22.2     | 20.2     | -1.7                | -8.0                     |
| Continental       | 31.1     | 30.5     | 32.9     | 1.8                 | 6.0                      |
| Anglo-Saxon       | 24.9     | 29.5     | 33.3     | 8.4                 | 33.4                     |
| Southern          | 29.7     | 35.2     | 34.2     | 4.5                 | 14.9                     |
| Eastern NMS       |          | 35.4     | 35.2     | -0.2                | -0.7                     |
| Mediterranean NMS |          | 25.0     | 33.4     | 8.4                 | 33.5                     |

Source: EWCS

The variability between countries is higher than for groups of countries (Table 10b, Annex B). In 2005, Bulgaria, the Czech Republic and Germany record a higher proportion of workers declaring that they are unable to choose or change the organisation of their daily work (about 40%). Meanwhile, the lowest shares are observed in the Scandinavian countries, the Netherlands and Malta (around 20%). In the Scandinavian group, the proportion is again higher in Finland (24.5%) than Sweden (19.1%) and Denmark (15.5%); the latter is the second lowest rate in Europe. In Sweden, the incidence of such work has declined since 1995, as is the case in Denmark to a lesser extent, but no change is observed in Finland. In the Continental group, the highest proportions in 2005 are in Austria and Germany (about 37%) but also in France (32%), while the lowest is in the Netherlands (23.9%). Nevertheless, the latter country has recorded a more significant increase since 1995 (one fifth), the increments being more moderate in other countries. The evolution within the Anglo-Saxon group is particularly notable. In 1995, Ireland had a significantly higher proportion of workers unable to choose or change the organisation of their daily work than the UK had; however, the situation is exactly the opposite in similar proportions in 2005 (27.9% in Ireland and 35.1% in the UK).



In the Southern Member States, the proportions are relatively comparable in 2005 and range within a 31%–36% bracket. This similarity results from diverging intensities in the increases since 1995, notably in Portugal, where the increment is more significant than in other countries (one-third more). In the Eastern NMS, Bulgaria and the Czech Republic report the highest shares in 2005 (about 41%), while the lowest rates are in the Baltic countries (around 30%). The Czech Republic had one of the lowest proportions in 2001 but has since experienced a consistent increase (almost half); meanwhile, significant declines are found in Latvia, Slovenia and particularly Romania. In the Mediterranean NMS, a contrasting situation emerges. Cyprus has one of the highest proportions in Europe in 2005 (36.6%), while Malta – despite a substantial increase since 2001 (nearly doubling) – has the lowest observed share of workers unable to choose or change the organisation of their daily work in Europe (14.3%).

### **Skills development**

The learning dimension of job quality is important as, through the acquisition of skills, it significantly affects other dimensions of job quality such as career progression, autonomy, earnings or, more broadly, job satisfaction. Higher levels of training, as well as the existence of extended opportunities for training and learning, are important not only in the framework of occupied jobs but also in terms of securing professional trajectories across the work lifecycle, as currently advocated at EU level through the ongoing discourse on ‘flexicurity’. The latter concept combines employment flexibility and security. Lifelong learning and training are central elements of the Lisbon Strategy and also the subject of a dedicated open method of coordination, which underlines the importance given to this topic at EU level in the framework of the knowledge economy.

Forms of work organisation which include learning opportunities are also associated with better working conditions, lower health-related outcomes and better quality of work and employment as a whole (Valeyre et al, 2008). Nevertheless, in a qualitative perspective, training offers better outcomes than on-the-job learning, as acquired skills are then formalised and thus certified and transferable, which in return implies greater opportunities for internal or external professional mobility, and to find a new job in case of dismissal. To capture the extent of jobs with poor learning opportunities, this study has developed an index summarising different patterns of informal learning on-the-job. For this purpose, the analysis aggregates the information from five indicators concerning: jobs which do not involve meeting precise quality standards; assessment by workers of the quality of their own work; requirement for workers to solve unforeseen problems on their own; complex tasks; and monotonous tasks. The issue of training is assessed with regard to the proportion of workers (employees only) who have not received any training in the year prior to the survey.

### **Poor learning opportunities**

Table 12 presents the proportion of workers in jobs with poor learning opportunities in the various groups of countries. These jobs are less frequent in the Scandinavian group than in the other groups. The Mediterranean NMS group records the highest share (37.4%). An improvement may be observed for the Eastern NMS since 2001. However, in the other groups the situation remains stable (Southern countries and Mediterranean NMS) or is deteriorating since 1995, notably in the Anglo-Saxon group, where the proportion of jobs with poor learning opportunities has increased by almost half during the period.

**Table 12: Workers in jobs with poor learning opportunities, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute | Difference<br>intensity (%) |
|-------------------|----------|----------|----------|----------|-----------------------------|
| Scandinavian      | 25.4     | 29.2     | 27.1     | 1.7      | 6.5                         |
| Continental       | 31.4     | 34.4     | 33.2     | 1.8      | 5.8                         |
| Anglo-Saxon       | 21.0     | 27.7     | 31.1     | 10.1     | 48.5                        |
| Southern          | 35.2     | 38.0     | 34.2     | -1.0     | -2.7                        |
| Eastern NMS       |          | 37.1     | 34.0     | -3.1     | -8.2                        |
| Mediterranean NMS |          | 37.5     | 37.4     | -0.1     | -0.2                        |

Source: EWCS

In 2005, Bulgaria, Cyprus, Greece, Lithuania and Spain report the highest proportions of jobs with poor learning opportunities (about 39%) (Table 11b, Annex B). These shares are half that level in Austria, Denmark, the Netherlands and Sweden (around 20%). Finland has a higher share (25.7%) than other countries in its group. In fact, although the Scandinavian group has on average the lowest rate in Europe, the proportion has nevertheless increased significantly in Finland and Sweden, but has declined in Denmark. In the Continental group, the shares are clearly lower in Austria and the Netherlands (about 20%) than in Belgium, France and Germany (around 29%); Luxembourg maintains an intermediate position. Jobs with poor learning opportunities have significantly declined in all Continental countries except Germany, which records a sizeable increase since 1995 (+4.1 percentage points). In the Anglo-Saxon group, the proportions are high and exactly equal in 2005 in both countries (33.4%), resulting from convergent rising trends – notably more significant in the UK than Ireland. In the Eastern NMS, the proportion of jobs with poor learning opportunities exceeds a 31% threshold almost everywhere, particularly in Bulgaria and Lithuania, where the rates almost reach 40%. Only Slovenia records a slightly lower share (28.8%). However, these proportions have decreased significantly since 2001 in Latvia, Lithuania, Romania and Slovenia and to a lesser extent in the other countries, except in the Czech Republic and Estonia, where they have increased. In the Mediterranean NMS, jobs with poor learning opportunities are more frequent in Cyprus (38.9%) and have increased since 2001, while in Malta the proportion is lower and declining (27.2%).

### Access to training

As mentioned above, beyond informal learning, access to training is of paramount importance in terms of job quality. Table 13 presents the proportion of workers without training in the previous year. The results give rise to concern – considering that in the best case, namely with regard to the Scandinavian group, one in two employees has not received any training in 2005 – and that trends show no improvement over time. After the Scandinavian group, the Anglo-Saxon group records the lowest share of workers without training (61.3%), despite a marked increase in this rate since 1995. In all other groups of countries, the proportion of untrained workers exceeds 70%, and is particularly high for the Southern group (82.4%), with no significant improvement since 1995.

**Table 13: Workers without training in previous year, by country group**

|                          | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|--------------------------|----------|----------|----------|---------------------|--------------------------|
| <b>Scandinavian</b>      | 52.0     | 51.9     | 52.7     | 0.7                 | 1.3                      |
| <b>Continental</b>       | 70.2     | 69.9     | 72.3     | 2.1                 | 3.0                      |
| <b>Anglo-Saxon</b>       | 53.7     | 52.8     | 61.3     | 7.6                 | 14.2                     |
| <b>Southern</b>          | 84.2     | 81.9     | 82.4     | -1.8                | -2.1                     |
| <b>Eastern NMS</b>       |          | 74.4     | 78.3     | 3.9                 | 5.2                      |
| <b>Mediterranean NMS</b> |          | 73.6     | 75.4     | 1.8                 | 2.5                      |

Source: EWCS

Among the EU Member States, a diverse situation emerges in this regard (Table 12b, Annex B). At one extremity of the distribution lie a number of countries, mainly the Southern ones and certain NMS (Bulgaria, Hungary, Romania), where in 2005 the proportion of workers without training exceeds 80%. On the other side of the distribution are the Scandinavian countries, as well as Belgium and Slovenia, with shares under a 60% threshold. Although the proportions are lower in the Scandinavian countries, a difference emerges between Denmark, with a higher share (58.7%) after a marked increase since 2000, and Finland and Sweden, with lower shares (about 47%). The similar result in the latter two countries results from opposite trends: a decrease in Sweden and an increase in Finland. In the Continental group, Belgium reports a proportion similar to the Danish level (56.7%), after a notable decline since 1995 in the share of workers without training in the past year (one-third less). On the other hand, the Netherlands has experienced a strong increase since 2000 and has shifted from a position similar to the Swedish level to a much higher proportion in 2005 (67.8%). Significant decreases are recorded in Austria and Luxembourg but the proportion of untrained workers remains high (about 62%). France, in spite of a small decrease, still has a high share in 2005 (76.4%), similar to that observed in Germany (75.7%), the latter proportion resulting from a notable increase since 1995.

In the Anglo-Saxon group, as was found for jobs with poor learning opportunities, the proportion of untrained workers is comparable in 2005 in both countries (about 64%). This similar level results from divergent trends, with a strong increase in the UK accompanied by an equally strong decrease in Ireland. The Southern group records persistently high shares of untrained workers (82%–88%). Among the Eastern NMS, a contrasting situation emerges. A first group gathers countries with very high proportions of untrained employees in an 80%–90% bracket (Bulgaria, Hungary, Romania). A second group comprises the majority of other countries in this group in a 70%–80% range. Finally, Slovakia (64.4%) and especially Slovenia (57.9%) have much lower shares of untrained workers than other Eastern NMS. The Czech Republic has experienced a particular deterioration in this respect, as in 2001 the proportion of untrained employees was similar to that observed in Scandinavian countries, but the situation has worsened substantially after a strong increase since 2001 in the share of untrained workers (one half more). In the Mediterranean NMS, the proportion of untrained workers is higher in Cyprus (79.3%) than Malta (69.9%).

## Career and employment security

Beyond healthy and safe working conditions and learning opportunities, an important qualitative dimension of jobs is that they should be adequate enough to ensure that workers can progress during

their professional life and that their fundamental social rights are guaranteed. The importance of learning, and especially training, was already mentioned in terms of ensuring the development of certified skills which in turn increase opportunities for the professional mobility of workers. This mobility could be internal, through career progression within the company, or external, through optimised access to good quality jobs during the lifecycle. Sustainable employment is also important as it conditions various outcomes such as full access to social protection and adequate pensions, or access to homebuyers' loans and credit. This dimension is at the core of the tension between flexibility and security, which underpins the topical concept of flexicurity (Vermeulen and Hurley, 2007; Vielle, 2007). Among the various aspects of career and employment security, this report investigates three issues drawn from the EWCS data.

The first question concerns non-standard employment contracts, as workers employed under these conditions – especially when they persist over time – do not have sufficient possibilities for career progression, and their employment security across the lifecycle is more limited. Previous studies for Eurofound also indicate that workers with non-standard employment contracts are generally more exposed to poor working conditions and negative health outcomes than other workers are (Benavides and Benach, 1999; Goudswaard and Andries, 2002). Furthermore, these workers usually have less coverage from social protection schemes. In order to assess the evolution of non-standard jobs, this study has developed an index aggregating various non-standard employment contracts: fixed-term contracts, temporary work, and apprenticeship or other training schemes. It should be mentioned that part-time work is not considered here mainly because comparable information is only available in the last two waves of the EWCS. The study nevertheless acknowledges that a complete vision of the issue of labour market segmentation in Europe should incorporate this question, as well as undeclared work.

Good quality jobs also have to guarantee respect for the fundamental social rights of the citizens or workers. The EWCS provides valuable information on the enforcement of some of these rights. Several questions concern different kinds of job-related discrimination as perceived by the workers themselves. Non-discrimination and equal opportunities are at the core of the EU project and policies in terms of social rights. To highlight the incidence of discrimination and its evolution, this study has developed an index aggregating the proportion of workers reporting to have experienced one of the various factors of discrimination that are surveyed: gender, unwanted sexual attention, nationality, ethnic origin, age and disability.<sup>11</sup> A further dimension of gender discrimination in terms of career progression is related to the existence of a 'glass ceiling' – a concept referring to situations where the advancement of a qualified person within the hierarchy of an organisation is halted at a particular level because of some form of indirect discrimination. This research uses the variable available in the EWCS concerning the sex of the worker's immediate boss to highlight this issue. Finally, another important aspect of job quality is respect for workers' rights, and notably the right to information and consultation on working conditions. This study will use two indicators to assess the incidence and evolution of certain aspects of this issue. The first indicator is an index about consultation of workers which measures the proportion of workers declaring that they have discussed work-related problems either with their boss or employee representative in the last 12 months. The second

<sup>11</sup> Of course, each of these forms of discrimination has different reasons and outcomes that should be studied separately. As mentioned, the main aim here is to check the incidence and evolution of discrimination as a pattern of poor job quality.

indicator evaluates the information available to workers through the proportion of those reporting to be very well informed about health and safety risks related to the performance of their job.

### Non-standard employment contracts

In 2005, the incidence of non-standard employment contracts – which refers here to all non-permanent employment contracts, such as fixed-term contracts or temporary agency work contracts – is higher in the Anglo-Saxon and Southern groups and in the Eastern NMS (16.4%–19.3%) than in other groups of countries (11%–12.5%) (Table 14). This pattern of employment has noticeably increased since 1995 in the Anglo-Saxon group and since 2001 in the Eastern and Mediterranean NMS groups. However, it has decreased in other groups of countries, especially in the Continental group.

**Table 14: Workers with non-standard employment contracts, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 16.4     | 10.9     | 12.5     | -3.9                | -24.0                    |
| Continental       | 16.1     | 12.6     | 11.0     | -5.1                | -31.3                    |
| Anglo-Saxon       | 10.7     | 11.7     | 16.4     | 5.7                 | 52.9                     |
| Southern          | 22.1     | 20.0     | 19.3     | -2.8                | -12.8                    |
| Eastern NMS       |          | 9.7      | 17.2     | 7.5                 | 76.5                     |
| Mediterranean NMS |          | 8.1      | 11.8     | 3.7                 | 45.9                     |

Source: EWCS

Among the EU Member States, Bulgaria, the Czech Republic, Poland and Spain report the highest proportion of workers with non-standard employment contracts (exceeding 20%), while such contracts are half as common in Austria, Belgium, Denmark, Latvia, Malta and Romania (Table 14b, Annex B). In the Scandinavian group, Finland has a higher share (15.7%) than the other two countries (about 10%). Finland and Sweden report a slight decline since 1995, while a more substantial decrease is found in Denmark. In the Continental group, higher proportions are observed in France, Germany, Luxembourg and the Netherlands (about 12%). The decrease is general except in Luxembourg, and is notable in Belgium and France (one half). In the Anglo-Saxon group, the proportion of workers with non-standard employment contracts is relatively high and similar in both countries (about 15%); nevertheless, the UK records a strong increase since 1995 while a small reduction is observed in Ireland.

In the Southern group, Spain has the highest proportion in the EU in 2005 (23.7%), despite recording the largest decrease since 1995 (one-third less). In other countries, the shares are also high, ranging between 14% and 18%. Greece reports a small decline in the number of workers with non-standard employment contracts, but this proportion rises significantly in Italy (almost one-third more). In the Eastern NMS, the situation is diverse. In the Czech Republic and Poland, the shares are very high (about 21%) and have doubled since 2001. In Bulgaria, the proportion is similar but has only slightly increased in the same period. In Hungary, Slovakia and Slovenia, shares of non-standard employment contracts are also high (about 14%) and have risen significantly since 2001. The other countries in this group record more moderate proportions, generally resulting from a declining trend. Romania is an unusual case as, despite a significant increase in relative terms, it has by far the lowest

proportion of workers with non-standard employment contracts in Europe (6.1%). In Cyprus and Malta, shares are similar (about 10%) but have strongly increased in Cyprus while declining in Malta.

### Discrimination

Discrimination is probably one of the most difficult issues to measure, especially in quantitative terms. It could be direct or indirect, concern individuals or specific groups, be subjective and/or objective. Data sources on the subject are rare in Europe, despite the social and political importance of the issue (Makkonen, 2007). Moreover, perception of discrimination is culturally driven and thus makes a comparative perspective difficult (European Commission, 2007a). The information in the EWCS is also subjective, as workers are asked for a personal assessment. It is therefore difficult to assess what their personal understanding of discrimination is as well as its objective degree. This may partly explain why the numbers observed are so low. Thus, caution is needed when interpreting these results, given the subjective approach and very low results.

Table 15 presents the data for the different groups of countries. Reported discrimination rates are below 2% in all of the country groups. The proportion of workers who are discriminated against seems to be slightly higher in the Scandinavian and Anglo-Saxon groups of countries. Small decreases are observed in the Continental and Anglo-Saxon groups. In 2005, discrimination is apparently more common in Austria, France, Slovakia and the UK (about 2%) than in other countries (table 14b in statistical annex B). The proportion of workers reporting experiencing discrimination has declined in almost all countries of the former EU15, except in Luxembourg, the Netherlands and Sweden, where this rate slightly increases. In nearly all of the NMS, the proportion has grown – notably in Latvia, Poland and Slovenia. Only the Czech Republic and Romania report a downward trend in this respect.

**Table 15: Workers reporting experiencing discrimination, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 1.4      | 1.8      | 1.8      | 0.4                 | 28.8                     |
| Continental       | 1.6      | 1.6      | 1.4      | -0.2                | -14.0                    |
| Anglo-Saxon       | 2.7      | 2.2      | 1.9      | -0.8                | -29.1                    |
| Southern          | 0.9      | 0.8      | 0.9      | 0.1                 | 8.2                      |
| Eastern NMS       |          | 1.3      | 1.3      | 0.1                 | 6.5                      |
| Mediterranean NMS |          | 1.1      | 1.6      | 0.5                 | 49.0                     |

Source: EWCS

Among the social groups experiencing discrimination, women are particularly exposed to various forms of employment-related discrimination. Despite longstanding legislation at EU level, women still earn less than men do, have less access to training, and are underrepresented in certain economic sectors and occupations (Vermeylen and Hurley, 2007). Women are also exposed to specific patterns of employment and work which impact significantly on their health (Messing, 1999; Vogel, 2003). Furthermore, their career progression is impeded in comparison to their male colleagues, with women finding it less easy than men to access supervisory functions. The latter obstacle is investigated here using an indicator of the EWCS concerning the sex of workers' immediate boss.



In 2005, the proportion of workers declaring that their boss is a woman is more or less homogeneous in almost all groups of countries (about 30%), although it is higher in the Mediterranean NMS (39.9%) (Table 16). The situation was less harmonised in 1995 and 2000, when shares were almost twice as low in the Scandinavian, Continental and Southern groups, and were similar in the Anglo-Saxon group. In 2000, the Anglo-Saxon group and the Eastern NMS observed a significantly higher proportion of female bosses than the other groups. Whereas the situation for these two groups remains stable over time, all other groups of countries have recorded a significant and continuous increase in the number of female bosses. This is particularly the case in the Mediterranean NMS, where in a five-year period the proportion of female bosses has almost tripled. Although the situation has improved overall and more women are now in supervisory occupations, considerable progress is nevertheless needed to achieve gender equality.

**Table 16: Workers declaring their immediate boss is a woman, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 16.3     | 19.3     | 31.7     | 15.4                | 94.0                     |
| Continental       | 18.2     | 19.8     | 27.3     | 9.1                 | 49.5                     |
| Anglo-Saxon       | 28.3     | 31.1     | 33.3     | 5.0                 | 17.7                     |
| Southern          | 15.3     | 20.0     | 27.5     | 12.2                | 80.1                     |
| Eastern NMS       |          | 29.1     | 30.1     | 1.0                 | 3.4                      |
| Mediterranean NMS |          | 13.8     | 39.9     | 26.1                | 190.4                    |

Source: EWCS

In 2005, Cyprus records the highest proportion of female bosses (39.4%) (Table 15b, Annex B). However, in a group of countries including Denmark, Germany, Italy, Poland, Romania and Spain, this share is only around 20%, and the rate is even lower in Austria and Slovakia (about 17%). In the Scandinavian group, Denmark has a significantly lower proportion of female bosses (22.7%) than the other two countries have (about 30%); moreover, the situation has improved faster in Finland and Sweden since 1995. In the Continental group, a varied picture emerges in 2005. Belgium reports the highest proportion of female bosses (32.4%) and the Netherlands is in second place (28.8%). At the opposite end of the spectrum, Austria and Germany present much lower shares (less than 20%). France and the Netherlands record significant changes, with their proportions doubling over a 10-year period. Both countries of the Anglo-Saxon group already had a relatively high share of female bosses in 1995; however, the progression has since been slower than in other countries, notably in Ireland where a slight decrease is observed.

Among the Southern countries, Greece records a higher proportion of female bosses in 2005 (29.4%), which amounts to a threefold increase since 1995, reversing the situation observed in 1995 in this group. In the other three countries of the group, the situation was similar in 1995 (about 15%) but has improved more significantly in Portugal (25.6%) than in Italy or Spain, where the proportion of female bosses is still very low in 2005 (about 20%). In the Eastern NMS, a marked difference arises between countries in 2005. In a first group, the proportion of female bosses is around 30% (the Baltic countries, Bulgaria and the Czech Republic); however, in Poland, Romania and Slovakia, this share is only around 20%. Although most countries have seen an increase, notably in the Czech Republic and Romania, significant decreases have been observed in Hungary and Slovakia. In the

Mediterranean NMS, a substantial increase has occurred in the proportion of female bosses since 2001 in both countries, especially in Cyprus where the level has tripled in 2005.

### Right to information and consultation

Looking first at the consultation of workers, the proportion declaring that they have discussed work-related problems either with their boss or employee representative<sup>12</sup> is more significant in the Scandinavian group of countries (59%) in 2005 than in the other groups, and it is notably lower in the Continental and Southern groups (about 33%) (Table 17). These shares have moderately increased in several groups, particularly in the Eastern NMS, but have declined in similar proportions in the Continental and Anglo-Saxon groups.

**Table 17: Workers discussing work-related problems either with boss or employee representative in last 12 months, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 52.4     |          | 59.0     | 6.6                 | 12.6                     |
| Continental       | 38.8     |          | 33.6     | -5.2                | -13.4                    |
| Anglo-Saxon       | 49.2     |          | 43.3     | -5.9                | -12.1                    |
| Southern          | 32.2     |          | 35.6     | 3.4                 | 10.5                     |
| Eastern NMS       |          | 37.9     | 46.5     | 8.6                 | 22.6                     |
| Mediterranean NMS |          | 47.2     | 48.0     | 0.8                 | 1.7                      |

Source: EWCS

Among the EU Member States, the Scandinavian countries report the highest rates of workers who are able to discuss their working conditions in 2005, especially in Finland and Sweden (more than 60%) (Table 16b, Annex B). Both countries have recorded significant increases since 1995, while the lower Danish rate remains unchanged. In the Continental group, shares are generally lower than in other groups. The highest proportion is observed in Belgium (41%), which finds the largest increase since 1995 – together with Spain (almost two-thirds more). In all other Continental countries, the shares have declined over time, and are very low in Austria and Germany (about 30%). In the Anglo-Saxon group, Ireland has a higher rate of consultation (51%) than the UK (43%), although it was the other way around in 1995. In the Southern group, Greece reports in 2005 a much higher proportion (48.8%) than the other countries, after a significant increase since 1995. In Spain, the share is lower (32%) but has substantially risen since 1995. Portugal has by far the lowest share of consulted workers in the EU (23.5%). Italy is the only country of the group to record a decline in this regard since 1995. In the Eastern NMS, the proportion of consulted workers is generally high (about 50%), except in the Czech Republic and Poland (around 40%). These shares have generally increased, especially in Bulgaria, Lithuania, Romania and Slovakia, the only exceptions being Latvia and Slovenia, where they slightly decline; however, the increase is very small in the Czech Republic and Estonia. Cyprus and Malta have a similar proportion (about 49%), which has not changed significantly since 2001.

<sup>12</sup> It should be noted that this index is very sensitive to a parameter such as company size, as workers discuss issues more easily with their boss in small enterprises, where at the same time employee representation is not always guaranteed. Looking at the single indicators composing the index (data not presented in this report), in 2005 the average proportion is considerably higher for discussion with one's boss (62.2%) than with an employee representative (26.5%).



Information about risks is another aspect of workers' rights, which is evaluated by the proportion of workers reporting to be very well informed about health and safety risks. As Table 18 shows, in 2005 the highest share by far is found in the Anglo-Saxon group (59.6%) and the lowest rates are in the Southern (27.6%) and Continental (34.8%) groups. No significant change emerges across time, except for the Anglo-Saxon group where a substantial increase is observed since 1995 (one-third more).

**Table 18: Workers reporting to be very well informed about health and safety risks, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute difference | Difference intensity (%) |
|-------------------|----------|----------|----------|---------------------|--------------------------|
| Scandinavian      | 42.4     | 46.1     | 45.2     | 2.8                 | 6.5                      |
| Continental       | 36.4     | 41.3     | 34.8     | -1.6                | -4.5                     |
| Anglo-Saxon       | 44.9     | 53.0     | 59.6     | 14.7                | 32.7                     |
| Southern          | 29.9     | 28.7     | 27.6     | -2.3                | -7.7                     |
| Eastern NMS       |          | 44.8     | 40.2     | -4.6                | -10.3                    |
| Mediterranean NMS |          | 38.7     | 42.6     | 3.9                 | 10.1                     |

Source: EWCS

In 2005, the highest rates of workers reporting to be very well informed about health and safety risks are found in the Anglo-Saxon countries and Denmark (about 55%), and to a lesser extent in Bulgaria, Cyprus and Finland (around 50%) (Table 17b, Annex B). By way of contrast, this proportion is less than 30% in France, Italy, Luxembourg and the Netherlands, and even lower in Malta and Spain, where it declines to about 20%. Among the Scandinavian countries, Sweden has a much lower rate of very well informed workers (40.8%) than Denmark (54.1%). The proportion has increased in all countries of the group, albeit to a more moderate extent in Sweden. In the Continental group, shares are clearly higher in Austria, Belgium and Germany (about 39%) than in other countries of the group (around 29%). Significant decreases since 1995 are observed in all countries, notably in Luxembourg and the Netherlands, with the exception of Germany where the situation remains stable. As mentioned, the highest shares of very well informed workers are found in similar proportions in Ireland and the UK (about 58%), and in both countries are the result of significant increments since 1995 (one-quarter).

In the Southern cluster, Greece reports the highest proportion of informed workers (38.4%), followed closely by Portugal (34.3%), both countries recording important increases over time. In Italy and Spain, the shares are much lower (about 24%) after significant decreases since 1995, notably in Spain. In the Eastern NMS, the shares are also high and more or less similar (about 40%), except in Bulgaria and Poland, where they are higher, and in Hungary and Lithuania, where they are lower. A moderate decline emerges in all countries since 2001, except in Slovenia. In Bulgaria and Romania, no significant change appears over time. Cyprus has a high proportion of very well informed workers (49%), after a considerable increase since 2001, while Malta has the lowest share in the EU (21.9%), after a marked decrease.

## Work–life balance

As a social structure, work and its characteristics affect all dimensions of individuals' well-being over their work course – and even life course if outcomes such as pensions and health preservation are considered. In this perspective, the possibility and freedom to opt for different working time patterns across the lifecycle are essential in a qualitative understanding of employment (Wallace et al, 2007). Social institutions and infrastructures also play a key role in this perspective. Reconciling work and social and family life is an overarching issue in the framework of EU social policies, notably in the European Employment Strategy and with regard to the current emphasis on the flexicurity approach. The fourth EWCS contains abundant information about working time and also time spent on non-work activities. Analysis demonstrates that a positive or negative work–life balance is deeply dependent on individual characteristics such as gender, parental status and working hours. It is also influenced by certain aspects of working time such as regularity, predictability and the opportunity to make a personal choice regarding working hours (Parent-Thirion et al, 2007).

Unfortunately, only a limited amount of longitudinal information is available in the EWCS concerning the dimension of reconciling work and social life. This study highlights in particular the issue of unsocial working times, as non-standard working time schedules can interfere with social and family times. Frequent unsocial working time is estimated through an index aggregating the proportion of workers declaring that they work on Saturdays, Sundays or at night more than once a week each month – in other words, five times or more a month. The analysis of overtime work presented earlier can complement this indicator.

The proportion of workers declaring that they work on Saturdays, Sundays or at night more than once a week each month in 2005 is distributed relatively evenly among the different groups of countries, in a 20%–25% range, except in the Eastern NMS, where they are more numerous (28.9%) (Table 19). These shares are relatively stable across time, decreasing slowly in the Continental, Anglo-Saxon, Southern and Eastern NMS groups, while increasing slightly in the other groups of countries.

In 2005, workers who are working more than once a week each month on Saturdays, Sundays or at night are more numerous in Romania (33.8%) and much less frequent in Luxembourg, the Netherlands and Sweden (about 17%) (Table 18b, Annex B). In the Scandinavian group, Finland has a higher proportion (23.8%) in 2005 than the other two countries (about 18%); the situation remains stable over time in all three countries. In the Continental group, shares are slightly lower in

**Table 19: Workers declaring to work more than once a week per month on Saturdays, Sundays or at night, by country group**

|                   | 1995 (%) | 2000 (%) | 2005 (%) | Absolute | Difference intensity (%) |
|-------------------|----------|----------|----------|----------|--------------------------|
| Scandinavian      | 21.0     | 20.9     | 21.4     | 0.4      | 2.0                      |
| Continental       | 22.5     | 21.1     | 20.3     | -2.2     | -9.6                     |
| Anglo-Saxon       | 29.2     | 26.8     | 25.5     | -3.7     | -12.7                    |
| Southern          | 25.9     | 25.8     | 23.9     | -2.0     | -7.5                     |
| Eastern NMS       |          | 29.3     | 28.9     | -0.4     | -1.2                     |
| Mediterranean NMS |          | 22.5     | 25.0     | 2.5      | 11.0                     |

Source: EWCS

Luxembourg and the Netherlands (about 17%) than in other countries of the group (around 21%). Levels have declined in all countries since 1995, but more noticeably in France and Luxembourg. The Anglo-Saxon group has experienced a marked decrease since 1995 in both countries, the UK having a higher proportion than Ireland in 2005 (26.5% and 21.9% respectively). In the Southern countries, Greece has a higher share than other countries (28.9%), notably Portugal (20.8%), but reports a more significant declining trend than the other Member States in its group. In the Eastern NMS, rates are higher in Latvia and Romania (about 31% on average) than the other countries (around 25%). Since 2001, these shares have declined considerably in the Baltic countries, the Czech Republic and Romania, and to a lesser extent in Poland. The proportion has risen in other countries, more notably in Slovakia. In Cyprus, the share is lower (23.1%) than in Malta, despite a significant increase since 2001.

# Job quality patterns in Europe

# 3

The aim of this report is not to provide an accurate picture and benchmarking of job quality in Europe at a given moment in time. Instead, the study mainly focuses on trends, as the available information in a longitudinal perspective is too limited to depict job quality at a given moment. For such a purpose, the use of the complete EWCS cross-sectional dataset is more suitable. In order to obtain a detailed picture of job quality, the EWCS data should however be complemented by supplementary indicators from other European data sources on various dimensions that are not covered by the EWCS, such as wages, accidents at work and career transitions. Nonetheless, albeit incomplete, the available comparable information across survey waves is sufficient to draw a rough picture of job quality in Europe which proves to be coherent with more detailed cross-sectional studies.<sup>13</sup> Here again, this study will proceed by focusing on groups of countries and then examining country variability within these groups.

By summarising the state of job quality in 2005 among the various groups of countries, it is possible to distinguish between two main sets in Europe (Table 20). The first set comprises the Anglo-Saxon, Continental and Scandinavian groups, which are characterised by higher job quality levels. In this set, job quality is still slightly higher in Scandinavian countries but the other two groups are very close. The other set is composed of the NMS and Southern countries, where job quality is generally significantly lower than in the first set. Beyond this overall dichotomy, a diversity emerges when considering each variable in particular. For many variables, the differences between groups of countries are not very significant, meaning that these are common challenges faced by all of the European groups of countries to improve job quality. Some of these common challenges are of particular concern, notably the deficit in training and the extent of jobs with poor learning opportunities, or some patterns related to work intensification – such as control over tasks and pace of work.

However, for specific indicators more important differences arise between the groups of countries. Workers in the Anglo-Saxon group, for instance, feel less than other Europeans that their health and safety is at risk; they are also clearly more satisfied with their working conditions and informed about risks. Furthermore, they are less exposed than other European workers to poor ergonomic conditions. In the Scandinavian group, workers have more control over their tasks, are less exposed to jobs with poor learning opportunities and enjoy more effective rights to consultation on working conditions. However, they also report higher levels of health-related absenteeism, including long-term work absences of more than a month. In the Continental group, workers feel less exposed to health and safety risks because of work but they are also less informed than most other European workers regarding these risks, and they have fewer opportunities to discuss working conditions with their boss or employee representative. Workers in the Southern group of countries face the same problems and, in general, the proportions that they report are below average for the majority of job quality patterns. Health-related absenteeism is nonetheless lower in the Southern group. The situation in the Eastern NMS is similar, and workers in this group experience – together with those of the Southern group – the lowest levels of satisfaction with working conditions. By contrast, in the Mediterranean NMS the degree of satisfaction with working conditions is much higher, and women have more

<sup>13</sup> In a recent study, Andranik Tangian uses the full dataset of the fourth EWCS to build a job quality index. The data are normalised and distributed into 15 different dimensions and an index is built for each of these dimensions. An overall average index is then calculated to score job quality in each country. According to this index, the EU27 Member States rank as follows in 2005, in decreasing order of job quality: Denmark, the Netherlands, Ireland, the UK, Belgium, Luxembourg, Finland, Sweden, Austria, Germany, Cyprus, Malta, Spain, Bulgaria, Latvia, Slovakia, France, Italy, Hungary, Portugal, Estonia, Romania, the Czech Republic, Slovenia, Poland, Lithuania and Greece (Tangian, 2007).

opportunities to occupy supervisory functions. However, a much higher proportion of workers are exposed to ambient hazards.

**Table 20: Job quality variables, by country group, 2005 (%)**

| Workers...   | Scandinavian | Continental | Anglo-Saxon | Southern | Eastern<br>NMS | Mediterranean<br>NMS |
|--|--------------|-------------|-------------|----------|----------------|----------------------|
| declaring to be very satisfied or satisfied with working conditions in main paid job   | 87.1         | 86.2        | 91.5        | 76.2     | 71.3           | 82.3                 |
| thinking their health or safety is at risk because of work   | 34.6         | 20.2        | 19.2        | 33.1     | 41.3           | 34.4                 |
| declaring to have been absent due to health problems over the past 12 months   | 33.6         | 25.4        | 22.5        | 19.0     | 19.8           | 24.6                 |
| reporting health-related absenteeism exceeding one month   | 8.1          | 6.8         | 5.7         | 7.6      | 7.1            | 8.0                  |
| declaring to be exposed more than half of their working time to ambient hazards  | 7.2          | 8.7         | 6.1         | 12.6     | 13.0           | 18.6                 |
| declaring to be exposed more than half of their working time to chemical or toxic hazards  | 5.0          | 5.5         | 3.5         | 6.0      | 7.9            | 7.0                  |
| declaring to be exposed more than half of their working time to poor ergonomic conditions  | 19.9         | 20.5        | 17.2        | 26.4     | 27.3           | 29.5                 |
| declaring that their jobs involve a high pace of work  | 30.4         | 24.4        | 25.3        | 25.9     | 21.2           | 31.8                 |
| declaring that their pace of work is dependent on factors other than themselves  | 38.1         | 41.6        | 44.0        | 39.5     | 39.0           | 45.8                 |
| declaring that they are unable to choose or change the organisation of their daily work  | 20.2         | 32.9        | 33.3        | 34.2     | 35.2           | 33.4                 |
| in jobs with poor learning opportunities   | 27.1         | 33.2        | 31.1        | 34.2     | 34.0           | 37.4                 |
| without training in previous year  | 14.2         | 15.5        | 12.2        | 20.3     | 20.5           | 20.0                 |
| with non-standard employment contracts   | 12.5         | 11.0        | 16.4        | 19.3     | 17.2           | 11.8                 |
| reporting that they are subject to discrimination  | 1.8          | 1.4         | 1.9         | 0.9      | 1.3            | 1.6                  |
| whose immediate boss is a woman  | 31.7         | 27.3        | 33.3        | 27.5     | 30.1           | 39.9                 |
| declaring that they have discussed work-related problems either with their boss or employee representative in the last 12 months | 59           | 33.6        | 43.3        | 35.6     | 46.5           | 48                   |
| declaring to be very well informed about health and safety risks   | 45.2         | 34.8        | 59.6        | 27.6     | 40.2           | 42.6                 |
| declaring to work more than once a week per month on Saturdays, Sundays or at night  | 21.4         | 20.3        | 25.5        | 23.9     | 28.9           | 25.0                 |

Source: EWCS

As has been constantly emphasised in the course of this report, a certain diversity emerges within each of these groups. The report has already reviewed these national differences in detail for each variable, so this section will just highlight some of the countries' specific positions. Annex B contains detailed summarising tables for each group of countries (Tables 19b to 19g, Annex B).

In the Scandinavian group, job quality is highest in Denmark and is clearly lower in Finland. In the Continental group, job quality is higher in Belgium, Luxembourg and the Netherlands, and lower in Germany. France maintains a particular position, as job quality is clearly lower than in other countries of the group, and closer to what is observed in certain Southern countries or NMS. Job quality is high in both countries of the Anglo-Saxon group. In the Southern group, job quality is lower and a marked difference appears between Italy on the one hand and Greece on the other, where job quality is the lowest in the EU. In the Eastern NMS, greater disparities arise. Job quality is relatively better in Bulgaria, Hungary, Latvia and Slovakia; it is lower in the Czech Republic, Lithuania, Poland, Romania and Slovenia. Finally, in both countries of the Mediterranean NMS group, job quality is higher and close to what is observed in the Continental group.

In explaining these differences in job quality between countries and groups of countries, dissimilarities in national labour market characteristics, institutions and policies are commonly advocated, as well as disparities in national economic structures (Gallie, 2003; Green, 2006; Davoine, 2006b; Tangian, 2007). Among these, factors such as company size, forms of work organisation or distribution of economic activities are recognised as determinants in explaining differences with regard to working conditions and job quality (European Commission, 2001; Houtman, 2002). This study will focus on the role played by differences in the economic specialisations of countries and groups of countries as a cause of dissimilarity between and within the country groups.

When employment rates are considered according to a broad division of economic activities (Table 21), it is notable that the three groups of countries where job quality is higher – the Scandinavian, Continental and Anglo-Saxon groups – have the same characteristics in terms of employment distribution: a very low proportion of agricultural activities (about 3%), moderate industrial activities (around 24%) and a strong services sector (about 73%). This pattern is similar in the Mediterranean NMS group. By way of contrast, the Southern group of countries, where job quality is lower, is characterised by a higher proportion of employment in agriculture (7.9%) and industry (28.1%) and a lower share of workers in the services sector (64%). A similar distribution is observed in the Eastern NMS, although amplified (9.9%, 33.9% and 56.1% respectively). This seems to confirm the hypothesis that job quality tends to be lower in agricultural and industrial sectors than in services,<sup>14</sup> and that distribution of economic activities explains for a great part the differences observed between groups of countries.

Concerning diversity within the groups of countries, the differences between countries in terms of economic specialisation seem to be correlated to the variations previously highlighted with regard to job quality (see Table 20b, Annex B). In the Scandinavian group, Finland is characterised by a more significant presence of agricultural and industrial activities and a lower level of services activities,

<sup>14</sup> Of course, this affirmation needs to be nuanced by a more fine-tuned analysis of economic sectors, which this report does not have the scope to undertake. To give an example, in the services sector the subsector of hotels and restaurants is known to be particularly problematic in terms of working conditions and job quality (Houtman, 2002).

**Table 21: Employment rates, by main economic sector and country group, 2007 (%)**

|                    | Scandinavian | Continental | Anglo-Saxon | Southern | Eastern<br>NMS | Mediterranean<br>NMS |
|--------------------|--------------|-------------|-------------|----------|----------------|----------------------|
| <b>Agriculture</b> | 3.2          | 3.0         | 3.4         | 7.9      | 9.9            | 3.1                  |
| <b>Industry</b>    | 23.5         | 23.4        | 24.6        | 28.1     | 33.9           | 24.3                 |
| <b>Services</b>    | 73.0         | 72.7        | 71.7        | 64.0     | 56.1           | 72.6                 |

*Note:* Data are non-weighted averages.

*Source:* Eurostat, Labour force surveys, own calculations

especially in comparison to Sweden. In the Continental group, services are less developed in Austria and Germany, both countries having a higher share of industrial activities than the other countries in this group. In the case of Austria, this is also accompanied by a more important agricultural sector. In the Anglo-Saxon group, a marked difference arises between Ireland and the UK, with the agricultural and industrial sectors being more important in the former.

In the Southern group of countries, the importance of the agricultural sector is much greater in Greece and Portugal. However, in Greece, the industrial sector is significantly less important than in other countries, while in Portugal the services sector is less developed. Among the Eastern NMS, the agricultural sector is generally still very important, notably in Poland and Romania, but this is less the case in certain countries where industrial activities are predominant (the Czech Republic, Estonia, Slovakia). The services sector is underdeveloped in this group, but countries such as Estonia, Hungary and Latvia have activity rates in services close to those observed in Southern countries. Finally, in the Mediterranean NMS, the services sector is very important in both countries, with Cyprus being characterised by a more significant proportion of agricultural activities and a lower presence of industry than Malta.

### **Intensity of changes in job quality in Europe**

Summarising the situation observed in the early 1990s concerning job quality, a disparity was found between the Scandinavian group of countries, with better job quality, and the Anglo-Saxon and especially Southern groups of countries, characterised by lower job quality. The Continental countries fell into an intermediate position between these extremes. However, this picture has significantly changed in a 10-year interval, as shown in Table 22.

Although in 2005 job quality is still high in the Scandinavian countries, a marked increase may be noted in certain negative patterns of job quality. Perception of health risks, (long-term) health-related absenteeism, exposure to ergonomic risks and discrimination have all risen significantly since 1995. Some notable improvements are nevertheless also observed, such as the decrease in the proportion of workers with non-standard employment contracts or exposed to chemical or toxic hazards. Furthermore, these countries record an increase in the number of women in supervisory occupations and the consultation of workers. The main pattern of the group is a combination of stability of the already high job quality with some decline in certain aspects.

The Anglo-Saxon group has witnessed the most significant improvements in job quality during the decade, and is now closer to the current situation in the Scandinavian group. Almost all of the indicators concerning health and safety have noticeably progressed. Discrimination has also largely



declined and workers' right to information has improved. On the other hand, various patterns of negative job quality have also escalated during the same decade: that is, with regard to health-related absenteeism, non-standard employment contracts, jobs with poor learning opportunities and untrained workers, workers without control over the organisation of their work, and workers' consultation. The Anglo-Saxon countries represent the only group where the balance between positive and negative trends is inclining towards the positive side when considering the intensity of changes.

In the Continental group of countries, no very significant changes emerge one way or another in terms of job quality during the decade, apart from a marked reduction in the proportion of workers with non-standard employment contracts and a significant increase in the number of women in supervisory occupations. The share of workers thinking their health is at risk because of work or who are exposed to chemical and toxic hazards has also declined, whereas exposure to ambient hazards and jobs with pace of work dependent on external factors have increased. Fewer workers report the use of consultation rights. The main pattern of the group is stability with a slight improvement.

In the Southern group, negative job quality patterns are still more frequent in 2005 than in other EU15 groups of countries, and have remained unchanged since 1995. The most significant improvements concern a lower exposure to chemical or toxic hazards and a higher proportion of women in supervisory occupations. Furthermore, the proportion of workers with non-standard employment contracts has declined, while more workers are exercising their consultation rights. Certain negative job quality patterns such as exposure to ambient hazards or high pace of work have increased notably since 1995. The main pattern of the group is clearly stability, or stagnation considering the lower starting level of job quality in this group compared with other EU15 groups of countries.

In relation to the NMS, as the reference period is shorter, it is difficult to really assess significant changes. Nevertheless, a considerable increase is observed in the proportion of workers with non-standard employment contracts in both groups. Furthermore, the Mediterranean NMS records a significant increase in jobs with a high pace of work and in jobs with no control over tasks, as well as in reported discrimination. Some improvements are also observed. In the Eastern NMS, the right to consultation has become much more effective, while in the Mediterranean NMS exposure to chemical or toxic hazards has declined and a substantial increase is found in the number of women in supervisory occupations.

The study has noted previously that, among the Scandinavian Member States, job quality is generally lower in Finland compared with other countries of the group (Table 21b, Annex B). Looking at the intensity of changes, job quality is diminishing in all countries of the group with regard to diverse variables, albeit with different intensities. Some of these trends are common to all countries, such as the very high increase in health-related absenteeism or the more moderate increase in workers exposed to ergonomic risks. Changes in job quality patterns, either positive or negative, are apparently more intense in Sweden than in the other countries.

For the Continental group, a moderately positive trend was previously observed since 1995; however, the situation appears more diversified at national level (Table 21c, Annex B). The two largest



Table 22: Intensity\* of changes and signs\*\*, by country group

| Workers...   | Scandinavian |    | Continental |    | Anglo-Saxon |    | Southern |    | Eastern NMS |    | Mediterranean NMS |    |
|--|--------------|----|-------------|----|-------------|----|----------|----|-------------|----|-------------------|----|
| declaring to be very satisfied or satisfied with working conditions in main paid job   | -5.3%        | =  | -0.1%       | =  | 5.1%        | =  | -3.9%    | =  | -0.5%       | =  | 3%                | =  |
| thinking their health or safety is at risk because of work   | 36.4%        | -- | -17.2%      | +  | -33.1%      | ++ | 0.1%     | =  | 0.8%        | =  | -6.5%             | =  |
| declaring to have been absent due to health problems over the past 12 months   | 91.5%        | -- | -7.8%       | =  | 35.8%       | -- | 6.4%     | =  | :           | :  | :                 | :  |
| reporting health-related absenteeism exceeding one month   | 77.1%        | -- | 2.9%        | =  | 90.4%       | -- | 85.5%    | -- | :           | :  | :                 | :  |
| declaring to be exposed more than half of their working time to ambient hazards  | 6.6%         | =  | 14.2%       | -  | -30.1%      | ++ | 24.3%    | -- | -2.3%       | =  | -9.8%             | =  |
| declaring to be exposed more than half of their working time to chemical or toxic hazards  | -18.6%       | +  | -15%        | +  | -46.5%      | ++ | -29%     | ++ | -2.9%       | =  | -39.9%            | ++ |
| declaring to be exposed more than half of their working time to poor ergonomic conditions  | 28%          | -- | 2.6%        | =  | -15.3%      | +  | 7.2%     | =  | 16.8%       | -  | -2.2%             | =  |
| declaring that their jobs involve a high pace of work  | 18.6%        | -  | 3.7%        | =  | -18.7%      | +  | 19%      | -  | 5.6%        | =  | 42.9%             | -- |
| declaring that their pace of work is dependent on factors other than themselves  | 3.4%         | =  | 11.5%       | -  | -2.2%       | =  | 2.2%     | =  | 3.6%        | =  | 0.1%              | =  |
| declaring that they are unable to choose or change the organisation of their daily work  | -8%          | =  | 6%          | =  | 33.4%       | -- | 14.9%    | -  | -0.7%       | =  | 33.5%             | -- |
| in jobs with poor learning opportunities   | 6.5%         | =  | 5.8%        | =  | 48.5%       | -- | -2.7%    | =  | -8.2%       | =  | -0.2%             | =  |
| without training in previous year  | 1.3%         | =  | 3%          | =  | 14.2%       | -  | -2.1%    | =  | 5.2%        | =  | 2.5%              | =  |
| with non-standard employment contracts   | -24%         | ++ | -31.3%      | ++ | 52.9%       | -- | -12.8%   | +  | 76.5%       | -- | 45.9%             | -- |
| reporting that they are subject to discrimination  | 28.8%        | -- | -14%        | +  | -29.1%      | ++ | 8.2%     | =  | 6.5%        | =  | 49%               | -- |
| whose immediate boss is a woman  | 94%          | ++ | 49.5%       | ++ | 17.7%       | +  | 80.1%    | ++ | 3.4%        | =  | 190.4%            | ++ |
| declaring that they have discussed work-related problems either with their boss or employee representative in the last 12 months | 12.6%        | +  | -13.4%      | -  | -12.1%      | -  | 10.5%    | +  | 22.6%       | ++ | 1.7%              | =  |
| declaring to be very well informed about health and safety risks   | 6.5%         | =  | -4.5%       | =  | 32.7%       | ++ | -7.7%    | =  | -10.3%      | +  | 10.1%             | -  |
| declaring to work more than once a week per month on Saturdays, Sundays or at night  | 2%           | =  | -9.6%       | =  | -12.7%      | +  | -7.5%    | =  | -1.2%       | =  | 11%               | -  |

Notes: \* Intensity is calculated as a simple ratio of the absolute difference and the observed value of the oldest period of reference, expressed as a percentage. The absolute difference is the difference between the last and first period of reference: 1995–2005 for all groups, except NMS: 2001–2005. \*\* = if intensity is lower than 10%; - or + if intensity is between 10% and 20%; - - or ++ if intensity is higher than 20%.

Source: EWCS

countries of the group, France and Germany, are improving their job quality, although with a limited intensity, but still have a lower job quality than other countries of the group. In Belgium and especially Luxembourg, job quality is declining more intensively, but remains among the highest of the group. In Austria and the Netherlands, the trend is more positive. In both countries, and to a lesser extent in the others – except Luxembourg – exposure to hazards has declined, while variables related to pace and organisation of work have increased – a pattern which is coherent with a greater specialisation in services. Learning and training are also improving everywhere, although in Germany the initial level was lower than that in the other countries. Consultation is improving everywhere except Belgium, while information about risks is declining in all of the countries. The proportion of non-standard employment contracts and work during non-standard working times is also decreasing significantly in all countries.

In the Anglo-Saxon group, the overall improvement of job quality is obvious, as mentioned earlier. The trends are generally moving in the same direction for both countries, albeit appearing more intense in the UK (table 21d in statistical annex B). Nevertheless, some diverging trends are observed for subjective perception of risks, pace of work dependent on external factors, inability to change tasks, workers without training, and consultation with the boss or employee representative. The more remarkable diverging trend concerns the incidence of jobs with non-standard employment contracts, which has moderately decreased in Ireland while significantly increasing in the UK.

In the Southern group of countries, job quality is significantly lower than in other countries of the former EU15 (Table 21e, Annex B). A clear difference emerges in the evolution of countries across time. In Spain and to a lesser extent Portugal, job quality is improving. On the other hand, job quality is declining in Italy and especially Greece, where it was already very low. In all countries in this group, the deterioration of job quality concerns the pace and organisation of work, which indicates an intensification of work. The only common trends are the decrease in exposure to chemicals and in discrimination, more intensely in Italy and Spain than in Greece or Portugal.

Although the reference period is shorter for the NMS, some significant trends are visible after four years (Table 21f, Annex B). In the Czech Republic, Hungary, Lithuania, Poland and Slovenia, job quality has declined. Meanwhile, Latvia and Slovakia report improving job quality as a whole. Bulgaria and Romania also record a more favourable situation, although the initial level of job quality was lower in these countries. It is difficult to find items of job quality for which the trends are similar across the whole group.

Job quality has declined in both countries of the Mediterranean NMS group, although numerous divergences arise between Cyprus and Malta regarding the modalities of this decrease in quality (Table 21g, Annex B). Common negative trends are found with respect to certain aspects – such as high pace of work, inability to change or choose tasks, or discrimination – and they are generally more intense in Malta. Furthermore, the latter reports a clear intensification of work; however, jobs with non-standard employment contracts or working times have decreased or remain stable. In contrast, Cyprus shows a moderate increase in work intensity but a strong rise in non-standard forms of employment. Opposite trends also emerge concerning learning and training, which is improving in Cyprus but not in Malta.

As outlined earlier, the economic specialisation of countries is an important factor in explaining the observed differences in job quality. Consequently, evolutions in terms of job quality may also be related to developments in the distribution of economic activities in the groups of countries over time. Indeed, the four groups including EU15 Member States are characterised by similar trends: a marked increase in the already predominant services sector, accompanied by a continuous decline in the agricultural and industrial sectors (Table 23). The adjustment in terms of job quality observed in the Anglo-Saxon group is probably partly explained by a higher intensity of the increase in services and the decline of agriculture, compared with the other groups during the same period. Among the NMS groups, over a shorter period, a trend decline in industry is not observed, the situation corresponding more to a status quo. This may partly be explained by the relocation of some industrial activities from the EU15 to the NMS in the same period. Similarly, the expansion of services is much more limited in the NMS and the decline in the important agricultural sector is less pronounced.

**Table 23: Changes in employment rates, by main economic sector\* and country group**

|                   | Absolute change |          |          | Intensity of change (%) |          |          |
|-------------------|-----------------|----------|----------|-------------------------|----------|----------|
|                   | Agriculture     | Industry | Services | Agriculture             | Industry | Services |
| Scandinavian      | -1.8            | -2.9     | 4.5      | -33.5                   | -10.8    | 6.6      |
| Continental       | -1.2            | -4.8     | 5.7      | -28.2                   | -16.8    | 8.6      |
| Anglo-Saxon       | -3.4            | -2.7     | 6.3      | -41.7                   | -9.7     | 9.7      |
| Mediterranean     | -3.4            | -1.4     | 4.9      | -28.4                   | -4.6     | 8.4      |
| Eastern NMS       | -2.8            | 0.5      | 2.4      | -18.1                   | 2.0      | 5.5      |
| Mediterranean NMS | -0.3            | -0.3     | 0.5      | -9.9                    | -0.6     | 0.8      |

Notes: \* 1995–2005 for all groups, except NMS: 2001–2005. Data are non-weighted averages. Absolute change is denoted in percentage points.

Source: Eurostat, Labour force surveys, own calculations

There are different ways of conceiving the divergence or convergence question. With 27 EU Member States, it is difficult to analyse trends country by country. Clustering, or considering groups of countries, is then a viable alternative approach to address this issue. Moreover, various authors, using different methods and covering different fields, arrive at more or less the same group of clusters. Nevertheless, this could lead to some over-interpretation and it is important to be particularly cautious when analysing the results for two main reasons.

## Defining country clusters

First, clustering could hide broader tendencies in relation to convergence or divergence. When looking at the data, two broad tendencies appear. The first is a relative divergence in Europe with the joining of the NMS. On average, the latter countries show poorer performance in terms of job quality, but their results are closest to what is observed in the Southern group. This finding is hardly surprising and the EWCS data mainly confirm this tendency; the results also verify that these countries are slowly reducing the gap. The second, more surprising tendency is the improved performance of the Anglo-Saxon group, on the one hand, and the deterioration of the Scandinavian group, on the other. Meanwhile, the Continental and Southern groups remain relatively stable. Thus, the convergence process is not towards the best results but more towards the average, excluding the NMS.

The second potential pitfall with clustering is that internal diversity could be hidden. The national results presented in this report show that, within each group, a rather high degree of variability emerges. Finland is increasingly different from the other Scandinavian countries, but differences between Denmark and Sweden are also more marked nowadays than 10 or 15 years ago. In the Continental group, the Netherlands and, to a lesser extent, Austria are also diverging from the other countries of the group. In the Southern group, Spain is further from Italy than before, while Portugal and especially Greece appear more dissimilar from the other countries of the group, notably Spain, than in the 1990s. In the Anglo-Saxon group, an upwardly converging trend emerges between Ireland and the UK; in both countries, the changes have been more intense than in other groups. In the Eastern NMS, it is more difficult to see the internal diversity, at least in relation to working conditions. Bulgaria, Poland, Romania and Slovenia have lower job quality than the rest of the group. At the opposite end of the spectrum, improvements in job quality have been more significant since 2001 in countries such as Latvia and Slovakia. This is also the case for Bulgaria, but starting from a lower initial level of job quality. Finally, in the Mediterranean NMS group, Cyprus and Malta have increasingly different profiles in terms of economic activities associated with different trends in job quality.

Internal diversity within the clusters and within the countries can be augmented by different public policies and also by diverse economic specialisations. The development of services – accompanied by the decline in industrial and agricultural activities – has impacted differently on the various countries and could partly explain dissimilarities between countries and groups of countries. Finland and the Netherlands are often border cases, but this is also true for other countries such as the Czech Republic, Portugal and Spain. This study has decided to keep the traditional clusters because it includes a longitudinal analysis. Although some countries seem to depart from their cluster now, this situation was less the case in the beginning of the 1990s. The research also decided to retain the new countries as a group, differentiating merely between the post-socialist countries, on one side, and Malta and Cyprus, on the other. This division is not an ideal solution but a lack of data impedes the

development of another satisfactory option. With the exception of Cyprus and Malta – and to a lesser extent Slovenia – the NMS have considerably changed their economic specialisation and are still in a process of change. This dynamic is complemented by massive foreign investments in some countries and migration to western countries. Beyond that, this study has also been driven by pragmatic considerations, as the NMS are investigated in the EWCS only since 2001.

Although at this stage it is still difficult to decide how to classify the NMS, a clearer picture should emerge for the next survey. A growing number of studies take into account the enlarged framework of the EU and comparable data are increasingly available, notably in the various surveys undertaken by Eurofound or the Statistical Office of the European Communities, Eurostat. However, the construction of clusters from a quantitative perspective is inadequate, as even the most sophisticated statistical methods are highly dependent on the range of considered and available variables, and the underlying assumptions. Some elements which may be of importance are not always captured by numbers, such as the religious factor in the clusters of Esping-Andersen (1990) and Ferrera (1996). Qualitative information is important to support quantitative investigations. Nevertheless, in-depth information on the economic and social developments in the new and potential future Member States is still fragmented or of narrow scope.

Eurofound, given its central position and various resources – such as surveys, observatories and funding of secondary research – and available materials, could play an important role in this ‘search for the new clusters’. Therefore, this study recommends fostering synergies inside Eurofound in order to contribute to the understanding and development of the research on clusters reflecting adequately the new reality of the EU. This could be done, for instance, through the establishment of a transversal task force or a working group on clustering. It may also be useful to undertake an extended literature review investigating the quantitative and qualitative findings about economic and social developments in new and potential future Member States. This review should present the results within a comprehensive comparative framework and be cluster oriented.

### **Mixed picture concerning job quality**

Concerning job quality as a whole, the picture is blurred and the evolution mitigated in an examination of the countries. No clear-cut vision emerges, as for each country the situation is better for certain job quality patterns than for others. Furthermore, the positive or negative developments do not necessarily affect the same job quality patterns according to the groups of countries, and their significance is heavily dependent on the initial level of job quality. Some negative patterns of job quality are declining almost everywhere – such as exposure to health hazards, weekend and night work – and apparently reflect the general declining trend of industrial activities in favour of services. Workers’ rights have improved in terms of consultation and information about risks. However, certain other negative job quality patterns have increased almost everywhere – such as jobs with poor learning opportunities and workers without training, along with a higher incidence of shift work or non-fixed working schedules, and health-related absenteeism.

Looking at the level of groups of countries, the picture is clearer. Job quality has improved in the Anglo-Saxon group and decreased in the Scandinavian group, to reach a more or less equivalent position in 2005. Meanwhile, the Continental group reports a limited improvement since 1995. Together, these three groups form, beyond their differences, a distinctive cluster in which job quality

is higher than in the rest of Europe. In the Southern group as a whole, where the situation was the worst in the EU15, no very significant changes have occurred since 1995. The Eastern and Mediterranean NMS are changing faster over a shorter reference period and are now at a similar level of job quality as the Southern countries. However, it should be noted that the intensity of change is highly dependent on the initial level of job quality. The Scandinavian decline in job quality is still less negative than the relative stagnation of job quality in Southern countries.

Among the different job quality patterns that have not improved in the last decade, one appears to be of particular significance and concern. The EWCS data show that jobs with poor learning opportunities remain a frequent pattern of employment, and moreover that the proportion of workers without any training in the previous year is still high in all EU Member States. Despite the emphasis on lifelong learning in the European discourse and policies, or the dedicated open method of coordination on education and lifelong learning, much progress is needed in order to reach the goal set for Europe at Lisbon in 2000 – to become the most competitive knowledge-based economy in the world by creating not only more but better jobs. The trends highlighted in this report on the basis of the EWCS show that only limited improvements have been achieved in terms of job quality since the mid 1990s, at least in relation to the information provided by the EWCS indicators. This pessimistic picture is in line with the assessments on quality in work made by the European Commission in the recent strategic report on the renewed Lisbon Strategy or earlier in the 2003 follow-up Communication on quality in work (European Commission, 2003, 2007c), and also in various studies (European Commission, 2001, 2002; OECD, 2003; Clark, 2005; Davoine and Erhel, 2006; Green, 2006; Eyraud and Vaughn-Whitehead, 2007).

## Arguments for increasing national sample size

Finally, an enlargement of the national samples could be useful in order to improve the next wave of the EWCS. Different arguments arise in this regard. A first set of arguments is of a technical nature. Working conditions are strongly determined by parameters such as economic sector and company size. In order to reflect accurately the increasing diversification of jobs and activities in the EU in the framework of a globalised economy, notably in the services sector, it is important to have sufficient respondent samples at the level of at least three digits in the General industrial classification of economic activities within the European Communities (*Nomenclature générale des activités économiques dans les Communautés européennes*, NACE). This level of analysis is also necessary to highlight significant segregations between social groups, notably in a gender perspective. A larger sample will contribute to improving the robustness of conclusions drawn through the use of sophisticated statistical tools, such as factor analysis and classification, which are used to determine clusters. Similarly, the need arises to improve regional representation in the survey, as various studies show an increasing diversity in terms of the economic specialisation of regions within the countries. This report also demonstrates that, although clusters are necessary to reduce the complexity of analysis in a contemporary EU composed of numerous countries, it is nevertheless necessary in a second stage to conduct a country-by-country analysis, given the increasing diversity within the existing clusters.

A second set of arguments in favour of an increase in national samples in the EWCS is from a policy perspective. This survey is a unique source of comparative information at European level on essential topics that are not covered by the rest of the European statistical system. This is also true at national

level, as many EU Member States do not have their own surveys on working conditions. If the EWCS aims to be better used as a source of monitoring indicators of EU policies – such as the European Employment Strategy, the health and safety strategy (European Commission, 2007b) and quality in work – then it cannot be restricted to the production of information concerning aggregates such as EU averages. As this report has shown, the increased diversity of the EU reveals the limits of such an exercise. Improving the national samples is a precondition for a better use of the EWCS for policy monitoring purposes, as this exercise is based on a soft benchmark of national performance. This study reaffirms that the EWCS is a unique and valuable source of information on working conditions and work-related health outcomes in Europe, and this might be better acknowledged by policymakers, which should fund the development of the survey.



# Bibliography

- Aglietta, M. and Berrebi, L., *Désordres dans le capitalisme mondial*, Paris, Odile Jacob économie, 2006.
- Albert, M., *Capitalisme contre capitalisme*, Paris, Éditions du Seuil, 1991.
- Amable, B., *The diversity of modern capitalism*, Oxford, Oxford University Press, 2003.
- Arts, W.A. and Gelissen, J., 'Three worlds of welfare capitalism or more? A state-of-the-art report', *Journal of European Social Policy*, Vol. 12, No. 12, 2002, pp. 137–58.
- Bamber, G.J., Lansbury, R.D. and Wailes, N. (eds.), *International and comparative employment relations: Globalisation and the developed market economies*, London/New Delhi, Sage, 2004.
- Barbier, J.-C. and Letablier, M.T., (eds.), *Politiques sociales/Social policies: Enjeux méthodologiques et épistémologiques des comparaisons internationales/Epistemological and methodological issues in cross-national comparison*, Brussels, PIE Peter Lang, 2005.
- Becker, U., 'Open systemness and contested reference frames. A framework for understanding change in the varieties of capitalism', Paper presented at the seminar 'Dynamics of varieties of capitalism as open systems: A critique and reformulation', Center for European Studies, Harvard University, 6 February 2006.
- Begg, I., Berghman, J., Chassard, Y., Kosonen, P., Madsen, P., Matsaganis, M., Muffels, R., Salais, R. and Tsakoglou, P., *Social exclusion and social protection in the European Union: Policy issues and proposals for the future role of the EU*, London, South Bank University, 2001.
- Belgian Ministry of Employment and Labour (*Ministère de l'emploi et du travail du Royaume de Belgique*), *Rapport sur la qualité de l'emploi en Belgique*, Brussels, 2002.
- Benavides, F.G. and Benach, J., European Foundation for the Improvement of Living and Working Conditions (Eurofound), *Precarious employment and health-related outcomes in the European Union*, Luxembourg, Office for Official Publications of the European Communities, 1999, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef9914.htm>. 7
- Berger, S., 'Introduction', in Berger, S. and Dore, R. (eds.), *National diversity and global capitalism*, Ithaca, NY, Cornell University Press, 1996.
- Bertola, G., Boeri, T. and Nicoletti, G., *Welfare and employment in a united Europe*, Boston, Massachusetts Institute of Technology (MIT) Press, 2001.
- Boisard, P., Cartron, D., Gollac, M. and Valeyre, A., Eurofound, *Time and work: Work intensity*, Luxembourg, Office for Official Publications of the European Communities, 2003, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0248.htm>.
- Boyer, R. and Freyssenet, M., *The productive models. The conditions of profitability*, London/New York, Palgrave, 2002.
- Burchell, B., Cartron, D., Csizmadia, P., Delcampe, S., Gollac, M., Illéssy, M., Lorenz, E., Makó, C., O'Brien, C. and Valeyre, A., Eurofound, *Working time: Work intensity*, to be published in 2009.
- Burchell, B., Fagan, C., O'Brien, C. and Smith, M., Eurofound, *Working conditions in the European Union: The gender perspective*, Luxembourg, Office for Official Publications of the European Communities, 2007, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef07108.htm>.
- Cabrita, J. and Perista, H., Eurofound, *Measuring job satisfaction in surveys – Comparative analytical report*, Dublin, Eurofound, 2006, available online at: <http://www.eurofound.europa.eu/ewco/reports/TN0608TR01/TN0608TR01.htm>.
- Cartapanis, A., Koulinsky, A. and Richez, N., 'L'hétérogénéité sociale de l'Union européenne après l'élargissement et la question des délocalisations', Presented at the international conference 'Les nouvelles frontières de l'Europe', Marrakech, Morocco, 16–17 March 2005.



- Clark, A.E., 'Your money or your life: Changing job quality in OECD countries', *British Journal of Industrial Relations*, Vol. 43, No. 3, September 2005, pp. 377–400.
- Crouch, C., *Social change in western Europe*, Oxford, Oxford University Press, 1999.
- Crouch, C., *Capitalism diversity and change: Recombinant governance and institutional entrepreneurs*, Oxford, Oxford University Press, 2005.
- Crouch, C., Streeck, W., Boyer, R., Amable, B., Hall, P.A. and Jackson, G., 'Dialogue on "institutional complementarity and political economy"', *Socio-Economic Review*, Vol. 3, No. 2, 2005, pp. 359–82.
- Davoine, L., 'Are quantity and quality of jobs correlated? Using, interpreting and discussing the Laeken indicators', Working Paper No. 59, Noisy-Le-Grand, Paris, Centre for Employment Studies (*Centre d'études de l'emploi*), 2006a.
- Davoine, L., 'Les déterminants de la satisfaction au travail en Europe: L'importance du contexte', Working Paper No. 76, Noisy-Le-Grand, Paris, Centre for Employment Studies, 2006b.
- Davoine, L. and Erhel, C., 'Monitoring employment quality in Europe: European Employment Strategy and beyond', Working Paper No. 66, Noisy-Le-Grand, Paris, Centre for Employment Studies, 2006.
- Deeg, R. and Jackson, G., *Towards a more dynamic theory of capitalist variety*, Department of Management Research Papers, London, King's College, 2006.
- De Greef, M. and Van den Broek, K., European Agency for Safety and Health at Work, *Quality of the working environment and productivity – Research findings and case studies*, Working Paper, Luxembourg, Office for Official Publications of the European Communities, 2004, available online at: <http://osha.europa.eu/en/publications/reports/211/view>.
- Dore, R., *Stock market capitalism: Welfare capitalism: Japan and Germany versus the Anglo-Saxons*, Oxford, Oxford University Press, 2000.
- Esping-Andersen, G., *The three worlds of welfare capitalism*, Cambridge, Polity Press, 1990.
- Esping-Andersen, G., *Social foundations of postindustrial economies*, Oxford, Oxford University Press, 1999.
- European Commission, *Employment in Europe 2001 – Recent trends and prospects*, Luxembourg, Office for Official Publications of the European Communities, 2001, available online at: [http://ec.europa.eu/employment\\_social/employment\\_analysis/eie/2001\\_en.pdf](http://ec.europa.eu/employment_social/employment_analysis/eie/2001_en.pdf).
- European Commission, *Employment in Europe 2002 – Recent trends and prospects*, Luxembourg, Office for Official Publications of the European Communities, 2002, available online at: [http://ec.europa.eu/employment\\_social/news/2002/sep/employment\\_in\\_europe2002.pdf](http://ec.europa.eu/employment_social/news/2002/sep/employment_in_europe2002.pdf).
- European Commission, *Improving quality in work: A review of recent progress*, COM(2003) 728 final, Brussels, 26 November 2003, available online at: [http://ec.europa.eu/employment\\_social/employment\\_analysis/quality/com2003\\_728\\_en.pdf](http://ec.europa.eu/employment_social/employment_analysis/quality/com2003_728_en.pdf).
- European Commission, *Discrimination in the European Union*, Special Eurobarometer No. 263, Luxembourg, Office for Official Publications of the European Communities, 2007a, available online at: [http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_263\\_sum\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_263_sum_en.pdf) (summary) or [http://ec.europa.eu/public\\_opinion/archives/ebs/ebs\\_263\\_en.pdf](http://ec.europa.eu/public_opinion/archives/ebs/ebs_263_en.pdf) (full report).
- European Commission, *Improving quality and productivity at work: Community strategy 2007–2012 on health and safety at work*, COM(2007) 62 final, Brussels, 21 February 2007, 2007b, available online at: <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=COM:2007:0062:FIN:EN:HTML>.

- European Commission, *Strategic report on the renewed Lisbon strategy for growth and jobs: Launching the new cycle 2008–2010*, COM(2007) 803 final, Brussels, 11 December 2007, 2007c, available online at: [http://ec.europa.eu/growthandjobs/pdf/european-dimension-200712-annual-progress-report/200712-annual-report\\_en.pdf](http://ec.europa.eu/growthandjobs/pdf/european-dimension-200712-annual-progress-report/200712-annual-report_en.pdf).
- European Foundation for the Improvement of Living and Working Conditions (Eurofound), *Quality of work and employment: Issues and challenges*, Foundation Paper No. 1, Luxembourg, Office for Official Publications of the European Communities, 2002, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0212.htm>.
- Eurofound, *The gender pay gap – Background paper*, Dublin, Eurofound, 2006, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef06101.htm>.
- Eurofound, *Fifteen years of working conditions in the EU: Charting the trends*, Luxembourg, Office for Official Publications of the European Communities, 2007, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0685.htm>.
- European Industrial Relations Observatory (EIRO), part of Eurofound, *Working time developments – 2005*, Dublin, Eurofound, 2006, available online at: <http://www.eurofound.europa.eu/eiro/2006/08/update/tn0608101u.htm>.
- European Trade Union Confederation (ETUC), *Myths and facts about working longer hours in Europe: A note from the ETUC*, Brussels, ETUC, 2005, available online at: <http://www.etuc.org/a/950>.
- Eurostat, *European statistics on accidents at work (ESAW) – Methodology – 2001 Edition*, Luxembourg, Office for Official Publications of the European Communities, 2001, available online at: [http://ec.europa.eu/employment\\_social/publications/2002/ke4202569\\_en.html](http://ec.europa.eu/employment_social/publications/2002/ke4202569_en.html).
- Eurostat, *Occupational diseases in Europe in 2001*, Statistics in focus, Population and social conditions, No. 15/2004, Luxembourg, Office for Official Publications of the European Communities, 2004a, available online at: [http://www.eds-destatis.de/en/downloads/sif/nk\\_04\\_15.pdf](http://www.eds-destatis.de/en/downloads/sif/nk_04_15.pdf).
- Eurostat, *Working overtime*, Statistics in focus, Population and social conditions, No. 11/2004, Luxembourg, Office for Official Publications of the European Communities, 2004b, available online at: [http://www.eds-destatis.de/en/downloads/sif/nk\\_04\\_11.pdf](http://www.eds-destatis.de/en/downloads/sif/nk_04_11.pdf).
- Eyraud, F. and Vaughn-Whitehead, D. (eds.), *The evolving world of work in the enlarged EU. Progress and vulnerability*, Geneva, International Labour Organization (ILO) and European Commission, 2007.
- Ferrera, M., 'The "Southern Model" of welfare in social Europe', *Journal of European Social Policy*, Vol. 6, No. 1, 1996, pp. 17–37.
- Freeman, R.B., 'On the divergence in unionism among developed countries', NBER Working Paper No. 2817, Cambridge, Mass., National Bureau of Economic Research, 1989.
- Freeman, R.B., 'Single peaked Vs. diversified capitalism: the relation between economic institutions and outcomes', NBER Working Paper No. 7556, Cambridge, Mass., National Bureau of Economic Research, 2000.
- Fremigacci, F. and L'Horty, Y., 'La qualité de l'emploi en France: Tendances et cycle', Working Paper No. 51, Noisy-Le-Grand, Paris, Centre for Employment Studies, 2005.
- Galbraith, J.K., *The new industrial state*, Boston, Mass., Houghton Mifflin, 1967.
- Gallie, D., 'The quality of working life: Is Scandinavia different?', *European Sociological Review*, Vol. 19, No. 1, Oxford, Oxford University Press, 2003, pp. 61–79.

- Ghailani, D., *The gender wage gap in the European Union*, European Social Observatory (*Observatoire social européen*, OSE), Working Paper for the EU Network of Excellence – Reconciling work and welfare in Europe (RECOWWE), Brussels, OSE, 2007, available online at: [http://recwowe.vitamib.com/activities/action-03/international-seminar-1/ploneexfile.2008-02-15.6713825051/attachment\\_download/file](http://recwowe.vitamib.com/activities/action-03/international-seminar-1/ploneexfile.2008-02-15.6713825051/attachment_download/file).
- Giles, A., 'Globalisation and industrial relations theory', *Journal of Industrial Relations*, Vol. 42, No. 2, 2000, pp. 173–94.
- Goldthorpe, J.H., 'The end of convergence: Corporatist and dualist tendencies in modern western societies', in Goldthorpe, J.H. (ed.), *Order and conflict in contemporary capitalism: Studies in the political economy of western European nations*, Oxford, Clarendon Press, 1984.
- Gollac, M. and Volkoff, S., *Les conditions de travail*, Paris, La Découverte, 2007.
- Gospel, H., *Quality of working life: A review on changes in work organization, conditions of employment and work-life arrangements*, Working Paper No. 1, Conditions of Work and Employment Series, Geneva, International Labour Organization (ILO), 2003.
- Gospel, H. and Pendleton, A., *Corporate governance and labour management*, Oxford, Oxford University Press, 2005.
- Goudswaard, A. and Andries, F., Eurofound, *Employment status and working conditions*, Luxembourg, Office for Official Publications of the European Communities, 2002, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0208.htm>.
- Green, F., *Demanding work. The paradox of job quality in the affluent economy*, Princeton and Oxford, Princeton University Press, 2006.
- Hall, P.A. and Gingerich, D.W., 'Varieties of capitalism and institutional complementarities in the macroeconomy', Max Planck Institute for the Study of Societies (*Max-Planck-Institut für Gesellschaftsforschung*, MPIfG) Discussion Paper, No. 04/5, Cologne, 2004.
- Hall, P.A. and Soskice, D., *Varieties of capitalism: The institutional foundations of comparative advantage*, Oxford, Oxford University Press, 2001.
- Hancké, B., 'Review of Katz and Darbishire converging divergences', *British Journal of Industrial Relations*, Vol. 39, No. 2, 2001, pp. 305–7.
- Hancké, B., Rhodes, M. and Thatcher, M. (eds.), *Beyond varieties of capitalism: Contradictions, complementarities and change*, Oxford, Oxford University Press, 2007.
- Hay, C., 'Common trajectories, variable paces, divergent outcomes? Models of European capitalism under conditions of complex economic interdependence', Paper presented at the Biannual Conference of Europeanists, Chicago, 14–16 March 2002.
- Hollingsworth, J.R. and Boyer, R., *Contemporary capitalism: The embeddedness of institutions*, Cambridge, Cambridge University Press, 1997.
- Houtman, I., Eurofound, *Sectoral profiles of working conditions*, Luxembourg, Office for Official Publications of the European Communities, 2002, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0275.htm>.
- Howell, C., 'Varieties of capitalism: And then there was one?', *Comparative Politics*, Vol. 36, 2003, pp. 103–24.
- Jacoby, S.M., *The embedded corporation: Corporate governance and employment relations in Japan and the United States*, Princeton, Princeton University Press, 2005.
- Judge, T.A., Thoresen, C.J., Bono, J.E. and Patton, G.K., 'The job satisfaction-job performance relationship: A qualitative and quantitative review', *Psychological Bulletin*, Vol. 127, No. 3, 2001, pp. 376–407.

- Katz, H. and Darbishire, O., *Converging divergence: Worldwide changes in employment systems*, Ithaca, NY, Cornell University Press, 2000.
- Kenworthy, L., 'Institutional coherence and macroeconomic performance', *Socio-Economic Review*, Vol. 4, No. 1, 2006, pp. 69–91.
- Kerr, C., *The future of industrial societies: Convergence or continuing diversity?*, Cambridge, Mass., Harvard University Press, 1983.
- Kerr, C., Dunlop, J.T., Harbison, F.H. and Myers, C.A., *Industrialism and industrial man: The problems of labour and management in economic growth*, London, Penguin, 1960.
- Kompier, M. and Levy, L., Eurofound, *Stress at work: Causes, effects and prevention. A guide for small and medium-sized enterprises*, Luxembourg, Office for Official Publications of the European Communities, 1994.
- Llorente, R.M. and Fernández Macías, E., 'Job satisfaction as an indicator of the quality of work', *The Journal of Socio-Economics*, No. 34, 2005, pp. 656–73.
- Lorenz, E. and Valeyre, A., 'Organisational change in Europe: National models or the diffusion of a new "one best way"?' , Danish Research Unit for Industrial Dynamics (DRUID) Working Paper No. 04-04, Denmark, 2004, available online at: [http://www.druid.dk/wp/pdf\\_files/04-04.pdf](http://www.druid.dk/wp/pdf_files/04-04.pdf).
- Lorenz, E. and Valeyre, A., 'Organisational innovation, human resource management and labour market structure: A comparison of the EU15', *The Journal of Industrial Relations*, Vol. 47, December 2005, pp. 424–42.
- Makkonen, T., *Measuring discrimination – Data collection and EU equality law*, Report for the European Commission, Luxembourg, Office for Official Publications of the European Communities, 2007, available online at: [http://ec.europa.eu/employment\\_social/fundamental\\_rights/pdf/legnet/07measdis\\_en.pdf](http://ec.europa.eu/employment_social/fundamental_rights/pdf/legnet/07measdis_en.pdf).
- Messing, K., *Integrating gender in ergonomic analysis. Strategies for transforming women's work*, Brussels, European Trade Union Technical Bureau for Health and Safety, 1999.
- Morgan, G. and Kubo, I., 'Beyond path dependency? Constructing new models for institutional change: The case of capital market in Japan', *Socio-Economic Review*, Vol. 3, 2005, pp. 55–82.
- Muffels, R. and Fouarge, D., 'Working profiles and employment regimes in European panel perspective', OSA-Working Paper WP2001-12, Tilburg University, Institute for Labour Studies (*Organisatie voor Strategisch Arbeidsmarktonderzoek*, OSA), 2001.
- Ohmae, K., *The end of the nation state: The rise of regional economies*, New York, Simon and Schuster, 1995.
- O'Reilly, J., 'Comparing the quality of work and welfare for men and women across societies', in Barbier, J.-C. and Letablier, M.-C. (eds.), *Politiques sociales/Social policies: Enjeux méthodologiques et épistémologiques des comparaisons internationales/Epistemological and methodological issues in cross-national comparison*, Brussels, PIE Peter Lang, 2005, pp. 147–68.
- Organisation for Economic Co-operation and Development (OECD), *Employment Outlook 2003*, Paris, OECD, 2003.
- Palola, E. and Savio, A., (eds.), *Refining the social dimension in an enlarged EU*, Helsinki, National Research and Development Centre for Welfare and Health (*Sosiaali- ja terveystieteen tutkimus- ja kehittämiskeskus*, STAKES)/Ministry of Social Affairs and Health, 2005.
- Parent-Thirion, A., Fernández Macías, E., Hurley, J. and Vermeylen, G., Eurofound, *Fourth European Working Conditions Survey*, Luxembourg, Office for Official Publications of the European Communities, 2007, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0698.htm>.



- Peña-Casas, R., *Quality of work and employment in EU policy arena: Conceptual frameworks and monitoring indicators*, Observatoire social européen (OSE), Working Paper for the EU Network of Excellence – Reconciling work and welfare in Europe (RECOWOE), Brussels, OSE, 2007, available online at: [http://recwowe.vitamib.com/activities/action-03/international-seminar-1/ploneexfile.2007-05-25.7903122807/attachment\\_download/file](http://recwowe.vitamib.com/activities/action-03/international-seminar-1/ploneexfile.2007-05-25.7903122807/attachment_download/file).
- Peña-Casas, R. and Latta, M., Eurofound, *Working poor in the European Union*, Luxembourg, Office for Official Publications of the European Communities, 2004, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0467.htm>.
- Piore, M.J., 'Convergence in industrial relations? The case of France and the United States', Working Paper No. 286, Cambridge, Mass., Massachusetts Institute of Technology (MIT) Department of Economics, 1981.
- Platt, S., Eurofound, *Employment and health: A literature review*, Luxembourg, Office for Official Publications of the European Communities, 1997.
- Pochet, P., Beine, M., De Decker, C., Kabatusuila, F., Vanhercke, B. and Lamby, P., Eurofound, *Economic and Monetary Union, Employment, social conditions and social benefits: A literature survey*, Luxembourg, Office for Official Publications of the European Communities, 1999, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef9910.htm>.
- Pontusson, J., *Inequality and prosperity: Social Europe vs. liberal America*, Ithaca, NY, Cornell University Press, 2005.
- Poole, M., *Industrial relations: Origins and patterns of national diversity*, London, Routledge, 1986.
- Rüdiger, K. and McVerry, A., *Exploiting Europe's knowledge potential: 'Good work' or 'could do better'. Knowledge work and knowledge workers in Europe*, A report prepared for the Knowledge Economy Programme, London, The Work Foundation, 2007, available online at: [http://www.theworkfoundation.com/assets/docs/publications/53\\_exploiting\\_Europe.pdf](http://www.theworkfoundation.com/assets/docs/publications/53_exploiting_Europe.pdf).
- Saari, L.M. and Judge, T.A., 'Employee attitudes and job satisfaction', *Human Resource Management*, No. 43, 2004, pp. 395–407.
- Scharpf, F.W. and Schmidt, V.A. (eds.), *Welfare and work in the open economy*, Vol. 1: 'From vulnerability to competitiveness', Vol. 2: 'Common challenges and diverse responses', Oxford, Oxford University Press, 2001.
- Schmidt, V.A., *The futures of European capitalism*, Oxford, Oxford University Press, 2002.
- Shonfield, A., *Modern capitalism. The changing balance of public and private power*, Oxford, Oxford University Press, 1965.
- Sopart, D., 'A state-of-art literature report on varieties of capitalism approach', Working Paper, Münster, Westfälische Wilhelms University, 2005, available online at: [http://nez.uni-muenster.de/download/Literaturbericht\\_Dominik%20mit%20Deckblatt.pdf](http://nez.uni-muenster.de/download/Literaturbericht_Dominik%20mit%20Deckblatt.pdf).
- Storrie, D., Eurofound, *Temporary agency work in the European Union*, Luxembourg, Office for Official Publications of the European Communities, 2002, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0202.htm>.
- Streeck, W., 'High equality, low activity: The contribution of the social welfare system to the stability of the German collective bargaining regime', *Industrial and Labor Relations Review*, Vol. 54, No. 3, 2001, pp. 698–704.
- Streeck, W. and Thelen, K., *Beyond continuity: Institutional change in advanced political economies*, Oxford, Oxford University Press, 2005.
- Taddei, D., Eurofound, *Reduction in working time: A literature review*, Luxembourg, Office for Official Publications of the European Communities, 1998, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef9811.htm>.

- Tangian, A.S., 'Constructing the composite indicator "quality of work" from the Third European Survey on Working Conditions', Institute of Economic and Social Research (*Wirtschafts-und Sozialwissenschaftliches Institut*, WSI), Discussion Paper No. 132, Düsseldorf, Hans-Böckler Foundation, 2004.
- Tangian, A.S., 'Monitoring flexicurity policies in the EU with dedicated composite indicators', WSI Discussion Paper No. 137, Düsseldorf, Hans-Böckler Foundation, 2005.
- Tangian, A.S., 'Is work in Europe decent? A study based on the Fourth European Survey on Working Conditions 2005', WSI Discussion Paper No. 157, Düsseldorf, Hans-Böckler Foundation, 2007.
- Thelen, K. and Kume, I., 'Coordination as a political problem in coordinated market economies', *Governance*, Vol. 19, No. 1, 2006, pp. 11–42.
- Tomes, I., 'How does the EU enlargement impact on social Europe?', in Palola, E. and Savio, A. (eds.), *Refining the social dimension in an enlarged EU*, Helsinki, National Research and Development Centre for Welfare and Health (*Sosiaali- ja terveystieteiden tutkimus- ja kehittämiskeskus*, STAKES)/Ministry of Social Affairs and Health, 2005.
- Traxler, F., 'Wage policy, bargaining institutions and monetary policy: Empirical findings and policy implications for European Monetary Union', in Pochet, P. (ed.), *Wage policy in the eurozone*, Brussels, PIE Peter Lang, 2002, pp. 111–30.
- Valeyre, A., 'Conditions de travail et de santé des salariés de l'Union européenne: Des situations contrastées selon les formes d'organisation du travail', Working Paper No. 73, March 2006, Noisy-Le-Grand, Paris, Centre for Employment Studies, 2006.
- Valeyre, A., Lorenz, E., Cartron, D., Csizmadia, P., Gollac, M., Illéssy, M. and Makó, C., Eurofound, *Working conditions in the European Union: Work organisation*, Luxembourg, Office for Official Publications of the European Communities, 2008, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0862.htm>.
- Vasconcelos Ferreira, L. and Figueiredo, A., 'Welfare regimes in the EU15 and in the enlarged Europe: An exploratory analysis', FEP Working Paper 176, University of Porto, Porto Faculty of Economics (*Faculdade de Economia do Porto*, FEP), Portugal, 2005.
- Vermeulen, G., Eurofound, 'Quality of work and employment in the European Working Conditions Survey', Paper presented at a seminar on the quality of work, jointly organised by the International Conference of Labour Statisticians, the United Nations Economic Commission for Europe (UNECE), the ILO and Eurostat, Geneva, 11–13 May 2005.
- Vermeulen, G. and Hurley, J., Eurofound, *Varieties of flexicurity: Reflections on key elements of flexibility and security*, Background paper, Dublin, Eurofound, 2007, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0721.htm>.
- Vielle, P., *Flexicurity: Redéfinir la sécurité des citoyens européens*, Policy Paper, Brussels, Observatoire social européen, 2007.
- Visser, J., 'Union membership in 24 countries', *Monthly Labor Review*, January 2006, pp. 45–7.
- Vogel, L., *La santé des femmes au travail en Europe – Des inégalités non reconnues*, Brussels, European Technical Trade Union Office for Health and Safety (*Bureau Technique Syndical Européen pour la Santé et la Sécurité*), 2003.
- Wallace, C., Brites, R., Haas, B., Steiber, N. and Torres, A., Eurofound, *First European Quality of Life Survey: Time use and work-life options over the life course*, Luxembourg, Office for Official Publications of the European Communities, 2007, available online at: <http://www.eurofound.europa.eu/publications/htmlfiles/ef0699.htm>.
- Wanous, J., Reichers, A. and Hudy, M., 'Overall job satisfaction: How good are single item measures?', *Journal of Applied Psychology*, Vol. 82, No. 2, 1997, pp. 247–52.

- Weber, M., *The methodology of the social sciences*, New York, Free Press, 1949.
- Whitley, R., *Divergent capitalisms: The social structuring and change of business systems*, Oxford, Oxford University Press, 1999.
- Womack, J.P., Jones, D.T. and Roos, D., *The machine that changed the world: The story of lean production*, New York, Harper Perennial, 1990.
- Yamamura, K. and Streeck, W. (eds.), *The end of diversity? Prospects of German and Japanese capitalism*, Ithaca, NY, Cornell University Press, 2003.
- Zeitlin, J., 'Industrial districts and regional clusters', in Jones, G. and Zeitlin, J. (eds.), *The Oxford Handbook of Business History*, Oxford, Oxford University Press, 2008, Chapter 10.

# Annex A:

## Available variables in the EWCS for longitudinal use

### Individual characteristics

| Domains                            | Category                      | Question                 | Question No | 1990 EU12 | 1995 EU15 | 2000 EU15 | 2001 NMS10 + BG and RO | 2005 EU27 |
|------------------------------------|-------------------------------|--------------------------|-------------|-----------|-----------|-----------|------------------------|-----------|
| Individual and job characteristics | Individual                    | Gender                   | Hh2a        | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                                    |                               | Age                      | Hh2b        | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                                    |                               | Age groups               | age         | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                                    | Job                           | Job tenure in years      | Q2d         |           | ▲         | ▲         | ▲                      | ▲         |
|                                    |                               | Type of employment       | Q3a         |           | ▲         | ▲         | ▲                      | ▲         |
|                                    |                               | Occupation               | Isco        |           | ▲         | ▲         | ▲                      | ▲         |
|                                    |                               | Type of contract         | Q3b         |           | ▲         | ▲         | ▲                      | ▲         |
|                                    |                               | Weekly working time      | Q8a         | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                                    |                               | Sector private vs public | Q5          | ▲         | ▲         | ▲         |                        | ▲         |
|                                    |                               | Economic sectors (NACE)  | Nace        | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                                    |                               | Size of firm             | Q6          | ▲         |           | ▲         | ▲                      | ▲         |
| Job satisfaction                   | General assessment of quality |                          | Q36         |           | ▲         | ▲         | ▲                      | ▲         |

### Career and employment

| Domains           | Category                        | Question  | Question No | 1990 EU12 | 1995 EU15 | 2000 EU15 | 2001 NMS10 + BG and RO | 2005 EU27 |
|-------------------|---------------------------------|---|-------------|-----------|-----------|-----------|------------------------|-----------|
| Discrimination    | Discrimination                  | Gender  | Q29e        |           | ▲         | ▲         | ▲                      | ▲         |
|                   |                                 | Unwanted sexual attention   | Q29f        |           | ▲         | ▲         | ▲                      | ▲         |
|                   |                                 | Age   | Q29g        |           | ▲         | ▲         | ▲                      | ▲         |
|                   |                                 | Nationality/ethnicity   | Q29h&i      |           | ▲         | ▲         | ▲                      | ▲         |
|                   |                                 | Disability  | Q29k        |           | ▲         | ▲         | ▲                      | ▲         |
| Workers' rights   | Consulted on working conditions | Possibility to discuss work performance with boss or supervisors          | Q30d        |           | ▲         |           | ▲                      | ▲         |
|                   |                                 | Possibility to discuss work-related problems with employee representative | Q30e        |           | ▲         |           | ▲                      | ▲         |
|                   | Informed on risks               | Subjective assessment: information on risks                               | Q12         | ▲         | ▲         | ▲         | ▲                      | ▲         |
| Earnings          | Basic/fixed wage                |   | Ef6a        |           | ▲         | ▲         | ▲                      | ▲         |
|                   | Extra payments                  | Piece rate or productivity payment  | Ef6b        | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                   |                                 | Payment for overtime  | Ef6c        |           | ▲         | ▲         | ▲                      | ▲         |
|                   |                                 | For bad or dangerous working coonditions                                  | Ef6d        |           | ▲         | ▲         | ▲                      | ▲         |
|                   |                                 | Compensation for Sunday work  | Ef6e        |           | ▲         | ▲         | ▲                      | ▲         |
| Employment Status | Precarious work                 | Temporary contract  | Q3b         |           | ▲         | ▲         | ▲                      | ▲         |
|                   |                                 | Part-time work  |             |           |           |           |                        |           |



## Health and well-being

| Domains                   | Category               | Question  | Question No | 1990 EU12 | 1995 EU15 | 2000 EU15 | 2001 NMS10 + BG and RO | 2005 EU27 |
|---------------------------|------------------------|---|-------------|-----------|-----------|-----------|------------------------|-----------|
| General                   | Awareness of risks     | Subjective assessment: health and safety is at risk | Q32         | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                           | Work-related outcomes  | Work-related absenteeism                            | Q34a        |           | ▲         | ▲         | ▲                      | ▲         |
| Health and safety at work | Exposure               | To noise  | Q10b        | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | To excessive temperatures                           | Q10c&d      |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | To breathing vapours/chemicals                      | Q10e        |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Touching chemicals                                  | Q10g        |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Vibrations  | Q10a        |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Radiations  | Q10h        |           | ▲         | ▲         | ▲                      | ▲         |
|                           | Strenuousness of tasks | Painful or tiring positions                         | Q11a        | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Carrying heavy loads                                | Q11c        | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Repetitive hand or arm movements                    | Q11e        |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Short repetitive tasks of less than 10 minutes      | Q20a        |           | ▲         | ▲         | ▲                      | ▲         |
| Work organisation         | Pace of work           | Working at very high speed                          | Q20b-a      | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Working to tight deadlines                          | Q20b-b      | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Pace dependent on work of others                    | Q21a        |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Pace dependent on direct demands                    | Q21b        |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Pace dependent on targets performance               | Q21c        |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Pace dependent on machines                          | Q21d        |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Pace dependent on boss                              | Q21e        |           | ▲         | ▲         | ▲                      | ▲         |
|                           | Worker control         | Can choose or change order tasks                    | Q24a        | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Can choose or change work methods                   | Q24b        |           | ▲         | ▲         | ▲                      | ▲         |
|                           |                        | Can choose or change speed work                     | Q24c        |           | ▲         | ▲         | ▲                      | ▲         |

## Skills development

| Domains  | Category                 | Question                                       | Question No | 1990 EU12 | 1995 EU15 | 2000 EU15 | 2001 NMS10 + BG and RO | 2005 EU27 |
|----------|--------------------------|--|-------------|-----------|-----------|-----------|------------------------|-----------|
| Learning | Cognitive aspects of job | Solving unforeseen problems at work            | Q23c        |           | ▲         | ▲         | ▲                      | ▲         |
|          |                          | Complex tasks                                  | Q23e        |           | ▲         | ▲         | ▲                      | ▲         |
|          |                          | Monotonous tasks                               | Q23d        |           | ▲         | ▲         | ▲                      | ▲         |
|          |                          | Learning new things                            | Q23f        |           | ▲         | ▲         | ▲                      | ▲         |
|          |                          | Working with computers                         | Q11k        | ▲         | ▲         | ▲         | ▲                      | ▲         |
|          |                          | Working at home                                | Q11b        |           | ▲         | ▲         | ▲                      | ▲         |
|          |                          | Dealing with people not employees in workplace | Q11j        |           | ▲         | ▲         | ▲                      | ▲         |
| Training | Training                 | Training in workplace                          | Q28a        |           | ▲         | ▲         | ▲                      | ▲         |
|          |                          | Number of training days a year                 | Q28b        |           | ▲         | ▲         | ▲                      | ▲         |

## Work-life balance

| Domains                | Category  | Question                           | Question No | 1990 EU12 | 1995 EU15 | 2000 EU15 | 2001 NMS10 + BG and RO | 2005 EU27 |
|------------------------|---|------------------------------------|-------------|-----------|-----------|-----------|------------------------|-----------|
| Unsocial working hours | Frequency of atypical work patterns (times a month) | Night work                         | Q14a        |           | ▲         | ▲         | ▲                      | ▲         |
|                        |   | Sunday work                        | Q14c        |           | ▲         | ▲         | ▲                      | ▲         |
|                        |   | Saturday work                      | Q14d        |           | ▲         | ▲         | ▲                      | ▲         |
|                        |   | Working more than 10 hours a day   | Q14e        |           |           | ▲         | ▲                      | ▲         |
|                        | Atypical working time                               | Shift work                         | Q16a-d      | ▲         | ▲         | ▲         | ▲                      | ▲         |
|                        |   | Fixed starting and finishing times | Q16a-c      |           | ▲         | ▲         | ▲                      | ▲         |
|                        |   | Having a second job                |             |           |           |           |                        |           |



# Annex B:

## Tables showing trends across countries

**Table 1b: Share of workers declaring they are very satisfied or satisfied with working conditions in main paid job, by country**

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 94.0 | 94.0 | 92.5 | -1.5                   | -1.6%                   |
| Finland        | 92.8 | 92.5 | 87.3 | -5.5                   | -5.9%                   |
| Sweden         | 92.1 | 85.9 | 85.3 | -6.8                   | -7.4%                   |
| Belgium        | 92.0 | 88.3 | 88.3 | -3.7                   | -4.1%                   |
| Germany        | 87.5 | 86.9 | 87.9 | 0.4                    | 0.5%                    |
| France         | 82.1 | 80.6 | 80.9 | -1.3                   | -1.5%                   |
| Luxembourg     | 91.3 | 87.1 | 85.0 | -6.3                   | -6.9%                   |
| Netherlands    | 92.3 | 88.6 | 86.6 | -5.6                   | -6.1%                   |
| Austria        | 88.3 | 86.4 | 86.1 | -2.2                   | -2.4%                   |
| Ireland        | 93.4 | 90.9 | 86.9 | -6.5                   | -6.9%                   |
| United Kingdom | 87.9 | 88.3 | 91.6 | 3.7                    | 4.2%                    |
| Greece         | 64.1 | 67.6 | 56.1 | -7.9                   | -12.4%                  |
| Spain          | 79.2 | 77.6 | 80.6 | 1.4                    | 1.8%                    |
| Italy          | 80.6 | 79.8 | 76.4 | -4.2                   | -5.3%                   |
| Portugal       | 83.9 | 80.4 | 84.8 | 0.9                    | 1.1%                    |
| Czech Republic |      | 78.1 | 75.8 | -2.2                   | -2.8%                   |
| Estonia        |      | 71.3 | 70.9 | -0.4                   | -0.5%                   |
| Latvia         |      | 69.4 | 70.7 | 1.3                    | 1.9%                    |
| Lithuania      |      | 67.6 | 65.7 | -1.9                   | -2.8%                   |
| Hungary        |      | 80.1 | 73.5 | -6.6                   | -8.3%                   |
| Poland         |      | 73.4 | 78.8 | 5.4                    | 7.4%                    |
| Slovenia       |      | 62.7 | 72.0 | 9.3                    | 14.9%                   |
| Slovakia       |      | 70.1 | 77.5 | 7.4                    | 10.5%                   |
| Bulgaria       |      | 65.4 | 66.9 | 1.5                    | 2.3%                    |
| Romania        |      | 66.0 | 63.1 | -2.8                   | -4.3%                   |
| Cyprus         |      | 77.8 | 83.8 | 6.0                    | 7.7%                    |
| Malta          |      | 82.0 | 80.3 | -1.7                   | -2.1%                   |

**Table 2b: Share of workers thinking their health or safety is at risk because of work, by country**

|                | 1990 | 1995 | 2000 | 2005 | absolute difference | difference intensity |
|----------------|------|------|------|------|---------------------|----------------------|
| Denmark        | 21.7 | 18.4 | 21.9 | 23.0 | 4.7                 | 25.3%                |
| Finland        |      | 29.5 | 24.2 | 25.6 | -4.0                | -13.4%               |
| Sweden         |      | 24.3 | 4.1  | 46.1 | 21.9                | 90.1%                |
| Belgium        | 17.4 | 18.3 | 26.9 | 23.0 | 4.7                 | 26.0%                |
| Germany        | 28.1 | 21.9 | 22.5 | 18.4 | -3.5                | -15.9%               |
| France         | 30.7 | 31.3 | 28.1 | 24.9 | -6.4                | -20.5%               |
| Luxembourg     | 30.0 | 25.8 | 29.7 | 29.6 | 3.8                 | 14.8%                |
| Netherlands    | 16.0 | 22.6 | 22.3 | 23.9 | 1.3                 | 5.7%                 |
| Austria        |      | 27.1 | 20.9 | 21.5 | -5.6                | -20.7%               |
| Ireland        | 21.0 | 16.8 | 21.5 | 23.4 | 6.7                 | 39.8%                |
| United Kingdom | 27.5 | 29.5 | 28.1 | 18.1 | -11.4               | -38.6%               |
| Greece         | 41.7 | 44.2 | 45.3 | 54.2 | 10.0                | 22.7%                |
| Spain          | 58.6 | 31.6 | 35.8 | 31.3 | -0.3                | -0.9%                |
| Italy          | 23.5 | 30.9 | 24.1 | 25.1 | -5.8                | -18.6%               |
| Portugal       | 25.1 | 32.1 | 40.2 | 26.7 | -5.4                | -16.8%               |
| Czech Republic |      |      | 33.7 | 21.4 | -12.3               | -36.5%               |
| Estonia        |      |      | 38.0 | 38.4 | 0.4                 | 1.1%                 |
| Latvia         |      |      | 45.9 | 45.8 | -0.1                | -0.3%                |
| Lithuania      |      |      | 44.8 | 37.4 | -7.4                | -16.5%               |
| Hungary        |      |      | 37.1 | 32.8 | -4.2                | -11.4%               |
| Poland         |      |      | 41.7 | 40.9 | -0.8                | -1.9%                |
| Slovenia       |      |      | 41.4 | 41.7 | 0.2                 | 0.6%                 |
| Slovakia       |      |      | 34.2 | 31.6 | -2.6                | -7.5%                |
| Bulgaria       |      |      | 38.4 | 39.9 | 1.5                 | 3.9%                 |
| Romania        |      |      | 46.7 | 39.8 | -7.0                | -14.9%               |
| Cyprus         |      |      | 39.7 | 32.0 | -7.8                | -19.5%               |
| Malta          |      |      | 31.0 | 32.8 | 1.8                 | 5.9%                 |

**Table 3b: Share of workers declaring they were absent for health problems over the past twelve months, by country**

|                | 1995 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------------------------|-------------------------|
| Denmark        | 14.2 | 33.7 | 19.5                   | 137.4%                  |
| Finland        | 29.2 | 47.3 | 18.1                   | 61.8%                   |
| Sweden         | 12.0 | 27.9 | 16.0                   | 133.7%                  |
| Belgium        | 26.0 | 28.8 | 2.7                    | 10.5%                   |
| Germany        | 32.7 | 27.5 | -5.2                   | -15.9%                  |
| France         | 20.4 | 19.5 | -1.0                   | -4.7%                   |
| Luxembourg     | 30.0 | 30.4 | 0.5                    | 1.6%                    |
| Netherlands    | 27.1 | 34.9 | 7.7                    | 28.5%                   |
| Austria        | 35.2 | 20.9 | -14.3                  | -40.6%                  |
| Ireland        | 15.5 | 21.5 | 6.0                    | 38.3%                   |
| United Kingdom | 15.8 | 20.8 | 5.0                    | 32.0%                   |
| Greece         | 16.8 | 16.1 | -0.7                   | -4.3%                   |
| Spain          | 18.2 | 12.5 | -5.7                   | -31.2%                  |
| Italy          | 17.0 | 25.9 | 8.9                    | 52.8%                   |
| Portugal       | 23.0 | 11.6 | -11.4                  | -49.6%                  |
| Czech Republic |      | 29.3 |                        |                         |
| Slovenia       |      | 33.5 |                        |                         |
| Estonia        |      | 29.0 |                        |                         |
| Latvia         |      | 23.9 |                        |                         |
| Lithuania      |      | 22.9 |                        |                         |
| Hungary        |      | 22.6 |                        |                         |
| Slovakia       |      | 21.3 |                        |                         |
| Poland         |      | 17.5 |                        |                         |
| Bulgaria       |      | 20.9 |                        |                         |
| Romania        |      | 13.5 |                        |                         |
| Cyprus         |      | 18.7 |                        |                         |
| Malta          |      | 40.1 |                        |                         |

**Table 4b: Share of workers whose health-related absenteeism has exceeded one month in previous year, by country**

|                | 1995 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------------------------|-------------------------|
| Denmark        | 2.7  | 6.4  | 3.7                    | 140.1%                  |
| Finland        | 5.2  | 8.1  | 2.9                    | 55.2%                   |
| Sweden         | 4.0  | 13.0 | 9.0                    | 224.8%                  |
| Belgium        | 5.2  | 7.9  | 2.8                    | 53.2%                   |
| Germany        | 6.5  | 2.5  | -4.1                   | -62.1%                  |
| France         | 4.8  | 11.9 | 7.1                    | 146.8%                  |
| Luxembourg     | 4.4  | 7.7  | 3.2                    | 72.8%                   |
| Netherlands    | 7.1  | 9.8  | 2.7                    | 37.9%                   |
| Austria        | 6.0  | 11.3 | 5.3                    | 88.7%                   |
| Ireland        | 1.4  | 4.7  | 3.3                    | 233.1%                  |
| United Kingdom | 2.6  | 4.9  | 2.3                    | 89.7%                   |
| Greece         | 4.0  | 6.2  | 2.1                    | 53.2%                   |
| Spain          | 4.9  | 11.1 | 6.2                    | 127.3%                  |
| Italy          | 2.6  | 3.4  | 0.8                    | 31.3%                   |
| Portugal       | 7.8  | 22.1 | 14.4                   | 185.0%                  |
| Czech Republic |      | 3.0  |                        |                         |
| Estonia        |      | 12.2 |                        |                         |
| Latvia         |      | 12.4 |                        |                         |
| Lithuania      |      | 15.9 |                        |                         |
| Hungary        |      | 10.6 |                        |                         |
| Poland         |      | 23.1 |                        |                         |
| Slovenia       |      | 17.5 |                        |                         |
| Slovakia       |      | 7.1  |                        |                         |
| Bulgaria       |      | 8.2  |                        |                         |
| Romania        |      | 13.3 |                        |                         |
| Cyprus         |      | 8.4  |                        |                         |
| Malta          |      | 0.4  |                        |                         |



**Table 5b: Share of workers declaring they are exposed more than half of their working time to ambient hazards, by country**

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 5.8  | 5.4  | 6.4  | 0.6                    | 11.1%                   |
| Finland        | 7.0  | 9.1  | 8.6  | 1.6                    | 23.1%                   |
| Sweden         | 5.6  | 6.7  | 6.2  | 0.7                    | 11.8%                   |
| Belgium        | 6.2  | 8.1  | 7.5  | 1.3                    | 21.4%                   |
| Germany        | 6.1  | 7.2  | 6.8  | 0.7                    | 11.6%                   |
| France         | 9.6  | 11.4 | 12.4 | 2.8                    | 28.6%                   |
| Luxembourg     | 8.6  | 11.8 | 8.5  | 0.0                    | -0.6%                   |
| Netherlands    | 8.3  | 6.8  | 5.5  | -2.7                   | -33.2%                  |
| Austria        | 9.6  | 6.5  | 7.7  | -1.9                   | -19.5%                  |
| Ireland        | 8.0  | 10.4 | 5.6  | -2.4                   | -30.2%                  |
| United Kingdom | 10.2 | 11.0 | 6.7  | -3.5                   | -34.5%                  |
| Greece         | 13.9 | 16.0 | 26.7 | 12.8                   | 92.1%                   |
| Spain          | 12.6 | 12.5 | 12.8 | 0.1                    | 1.0%                    |
| Italy          | 7.5  | 5.9  | 7.0  | -0.5                   | -6.6%                   |
| Portugal       | 10.0 | 10.3 | 9.3  | -0.7                   | -7.1%                   |
| Czech Republic |      | 9.9  | 7.6  | -2.4                   | -23.8%                  |
| Estonia        |      | 10.6 | 11.0 | 0.4                    | 3.8%                    |
| Latvia         |      | 10.0 | 9.6  | -0.4                   | -4.0%                   |
| Lithuania      |      | 8.6  | 11.1 | 2.5                    | 28.6%                   |
| Hungary        |      | 13.3 | 14.5 | 1.2                    | 8.8%                    |
| Poland         |      | 12.4 | 13.8 | 1.3                    | 10.7%                   |
| Slovenia       |      | 13.9 | 13.4 | -0.5                   | -3.5%                   |
| Slovakia       |      | 13.7 | 9.2  | -4.5                   | -32.8%                  |
| Bulgaria       |      | 13.0 | 12.6 | -0.4                   | -3.4%                   |
| Romania        |      | 17.5 | 10.4 | -7.1                   | -40.7%                  |
| Cyprus         |      | 22.7 | 21.6 | -1.0                   | -4.6%                   |
| Malta          |      | 16.1 | 16.3 | 0.2                    | 1.1%                    |

**Table 6b: Share of workers declaring they are exposed more than half of their working time to chemicals or toxic hazards, by country**

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 3.6  | 3.1  | 3.1  | -0.5                   | -13.6%                  |
| Finland        | 6.3  | 6.4  | 7.1  | 0.8                    | 12.9%                   |
| Sweden         | 6.8  | 5.4  | 4.3  | -2.5                   | -37.1%                  |
| Belgium        | 4.7  | 4.4  | 4.1  | -0.5                   | -11.5%                  |
| Germany        | 5.3  | 4.1  | 4.6  | -0.7                   | -13.2%                  |
| France         | 8.7  | 8.0  | 7.2  | -1.4                   | -16.7%                  |
| Luxembourg     | 6.8  | 7.8  | 6.2  | -0.6                   | -9.4%                   |
| Netherlands    | 5.9  | 4.2  | 3.1  | -2.7                   | -46.4%                  |
| Austria        | 7.2  | 5.4  | 5.8  | -1.4                   | -19.0%                  |
| Ireland        | 5.7  | 7.2  | 3.7  | -2.0                   | -35.2%                  |
| United Kingdom | 6.9  | 8.3  | 3.8  | -3.1                   | -45.0%                  |
| Greece         | 15.3 | 15.6 | 11.4 | -3.9                   | -25.6%                  |
| Spain          | 9.1  | 9.0  | 4.8  | -4.3                   | -47.3%                  |
| Italy          | 6.4  | 4.7  | 3.5  | -2.9                   | -44.7%                  |
| Portugal       | 9.0  | 6.9  | 6.8  | -2.3                   | -25.2%                  |
| Czech Republic |      | 5.8  | 5.4  | -0.4                   | -6.9%                   |
| Estonia        |      | 9.8  | 7.0  | -2.8                   | -28.2%                  |
| Latvia         |      | 10.6 | 6.9  | -3.6                   | -34.3%                  |
| Lithuania      |      | 8.6  | 6.8  | -1.8                   | -20.8%                  |
| Hungary        |      | 9.2  | 8.5  | -0.8                   | -8.2%                   |
| Poland         |      | 6.2  | 6.4  | 0.2                    | 3.5%                    |
| Slovenia       |      | 8.2  | 9.4  | 1.2                    | 14.2%                   |
| Slovakia       |      | 10.1 | 6.2  | -3.9                   | -38.7%                  |
| Bulgaria       |      | 11.2 | 7.8  | -3.5                   | -30.9%                  |
| Romania        |      | 10.0 | 8.6  | -1.4                   | -14.2%                  |
| Cyprus         |      | 13.0 | 5.5  | -7.4                   | -57.5%                  |
| Malta          |      | 9.0  | 9.9  | 0.9                    | 9.9%                    |

**Table 7b: Share of workers declaring they are exposed more than half of their working time to poor ergonomic conditions, by country**

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 13.2 | 11.3 | 16.7 | 3.4                    | 25.7%                   |
| Finland        | 19.1 | 21.3 | 26.5 | 7.4                    | 39.0%                   |
| Sweden         | 13.8 | 19.5 | 17.3 | 3.4                    | 25.0%                   |
| Belgium        | 17.0 | 19.2 | 18.1 | 1.1                    | 6.6%                    |
| Germany        | 17.2 | 17.0 | 17.3 | 0.1                    | 0.4%                    |
| France         | 28.0 | 30.0 | 30.1 | 2.1                    | 7.7%                    |
| Luxembourg     | 15.4 | 21.2 | 22.0 | 6.6                    | 43.0%                   |
| Netherlands    | 19.6 | 17.8 | 13.2 | -6.4                   | -32.6%                  |
| Austria        | 20.2 | 17.6 | 23.7 | 3.5                    | 17.5%                   |
| Ireland        | 18.5 | 21.2 | 16.4 | -2.1                   | -11.4%                  |
| United Kingdom | 21.6 | 23.3 | 17.6 | -4.0                   | -18.4%                  |
| Greece         | 34.2 | 34.4 | 40.9 | 6.7                    | 19.5%                   |
| Spain          | 27.3 | 29.5 | 25.0 | -2.2                   | -8.2%                   |
| Italy          | 19.6 | 17.7 | 22.1 | 2.6                    | 13.1%                   |
| Portugal       | 30.6 | 26.6 | 30.2 | -0.4                   | -1.4%                   |
| Czech Republic |      | 16.3 | 18.7 | 2.4                    | 14.5%                   |
| Estonia        |      | 22.1 | 25.6 | 3.5                    | 15.6%                   |
| Latvia         |      | 22.6 | 21.9 | -0.6                   | -2.7%                   |
| Lithuania      |      | 20.0 | 26.3 | 6.3                    | 31.7%                   |
| Hungary        |      | 27.8 | 30.4 | 2.6                    | 9.4%                    |
| Poland         |      | 19.7 | 25.5 | 5.9                    | 29.9%                   |
| Slovenia       |      | 17.6 | 26.5 | 8.8                    | 50.1%                   |
| Slovakia       |      | 21.5 | 19.4 | -2.1                   | -9.7%                   |
| Bulgaria       |      | 23.8 | 27.0 | 3.2                    | 13.4%                   |
| Romania        |      | 32.4 | 27.4 | -5.0                   | -15.5%                  |
| Cyprus         |      | 32.6 | 31.7 | -0.9                   | -2.9%                   |
| Malta          |      | 24.8 | 26.2 | 1.5                    | 5.9%                    |

**Table 8b: Share of workers declaring that their jobs involve a high pace of work, by country**

|                | 1990 | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------|------------------------|-------------------------|
| Denmark        | 18.3 | 19.0 | 17.5 | 29.2 | 10.2                   | 53.8%                   |
| Finland        |      | 26.9 | 28.4 | 31.5 | 4.6                    | 17.0%                   |
| Sweden         |      | 20.0 | 24.5 | 19.4 | -0.6                   | -3.1%                   |
| Belgium        | 16.0 | 16.0 | 20.8 | 16.3 | 0.3                    | 2.0%                    |
| Germany        | 27.1 | 17.9 | 23.6 | 20.8 | 2.9                    | 16.1%                   |
| France         | 19.3 | 23.5 | 24.2 | 21.0 | -2.5                   | -10.5%                  |
| Luxembourg     | 16.5 | 14.0 | 23.1 | 20.1 | 6.1                    | 43.5%                   |
| Netherlands    | 21.6 | 23.3 | 22.3 | 20.6 | -2.6                   | -11.3%                  |
| Austria        |      | 26.9 | 23.4 | 18.6 | -8.4                   | -31.0%                  |
| Ireland        | 21.7 | 19.0 | 26.2 | 15.8 | -3.2                   | -16.7%                  |
| United Kingdom | 24.7 | 27.3 | 27.4 | 21.5 | -5.8                   | -21.2%                  |
| Greece         | 25.4 | 23.2 | 32.5 | 27.3 | 4.1                    | 17.8%                   |
| Spain          | 21.3 | 20.2 | 24.0 | 20.8 | 0.7                    | 3.2%                    |
| Italy          | 18.3 | 15.1 | 19.6 | 18.8 | 3.7                    | 24.3%                   |
| Portugal       | 18.2 | 17.9 | 20.5 | 18.1 | 0.3                    | 1.5%                    |
| Czech Republic |      |      | 18.1 | 19.4 | 1.3                    | 7.2%                    |
| Estonia        |      |      | 16.9 | 17.8 | 0.9                    | 5.4%                    |
| Latvia         |      |      | 11.6 | 13.8 | 2.3                    | 19.7%                   |
| Lithuania      |      |      | 11.2 | 17.5 | 6.3                    | 56.1%                   |
| Hungary        |      |      | 20.8 | 18.9 | -1.9                   | -9.2%                   |
| Poland         |      |      | 14.3 | 13.8 | -0.5                   | -3.2%                   |
| Slovenia       |      |      | 12.7 | 28.4 | 15.7                   | 123.3%                  |
| Slovakia       |      |      | 19.1 | 13.9 | -5.2                   | -27.2%                  |
| Bulgaria       |      |      | 22.3 | 18.6 | -3.8                   | -16.9%                  |
| Romania        |      |      | 20.2 | 21.2 | 0.9                    | 4.6%                    |
| Cyprus         |      |      | 22.8 | 27.3 | 4.5                    | 19.6%                   |
| Malta          |      |      | 21.4 | 26.0 | 4.6                    | 21.6%                   |

**Table 9b: Share of workers declaring that their pace of work is dependent on other factors than themselves, by country**

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 34.1 | 31.4 | 36.8 | 2.6                    | 7.7%                    |
| Finland        | 38.0 | 39.5 | 41.9 | 3.9                    | 10.2%                   |
| Sweden         | 37.4 | 37.1 | 35.8 | -1.6                   | -4.3%                   |
| Belgium        | 35.1 | 39.9 | 43.1 | 8.0                    | 22.7%                   |
| Germany        | 33.5 | 33.4 | 38.6 | 5.1                    | 15.1%                   |
| France         | 41.5 | 39.9 | 44.4 | 3.0                    | 7.1%                    |
| Luxembourg     | 35.8 | 39.2 | 41.4 | 5.6                    | 15.7%                   |
| Netherlands    | 38.1 | 30.7 | 38.6 | 0.5                    | 1.2%                    |
| Austria        | 34.4 | 34.5 | 40.4 | 6.1                    | 17.6%                   |
| Ireland        | 42.4 | 43.5 | 34.8 | -7.5                   | -17.8%                  |
| United Kingdom | 43.8 | 46.6 | 44.3 | 0.5                    | 1.2%                    |
| Greece         | 39.4 | 42.0 | 43.8 | 4.4                    | 11.1%                   |
| Spain          | 39.5 | 39.0 | 37.2 | -2.3                   | -5.8%                   |
| Italy          | 39.0 | 37.4 | 36.9 | -2.1                   | -5.5%                   |
| Portugal       | 38.4 | 36.1 | 43.8 | 5.4                    | 14.1%                   |
| Czech Republic |      | 41.4 | 38.7 | -2.7                   | -6.5%                   |
| Estonia        |      | 40.8 | 38.4 | -2.4                   | -6.0%                   |
| Latvia         |      | 38.7 | 41.1 | 2.5                    | 6.4%                    |
| Lithuania      |      | 36.4 | 38.1 | 1.7                    | 4.7%                    |
| Hungary        |      | 36.7 | 43.9 | 7.1                    | 19.4%                   |
| Poland         |      | 32.6 | 34.4 | 1.7                    | 5.2%                    |
| Slovenia       |      | 36.3 | 40.4 | 4.1                    | 11.2%                   |
| Slovakia       |      | 43.6 | 40.0 | -3.6                   | -8.3%                   |
| Bulgaria       |      | 42.5 | 41.0 | -1.5                   | -3.6%                   |
| Romania        |      | 40.6 | 43.6 | 3.0                    | 7.3%                    |
| Cyprus         |      | 44.6 | 44.3 | -0.3                   | -0.7%                   |
| Malta          |      | 48.1 | 45.6 | -2.5                   | -5.1%                   |

**Table 10b: Share of workers declaring they are unable to choose or change organisation of their daily work, by country**

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 17.1 | 18.6 | 15.5 | -1.6                   | -9.3%                   |
| Finland        | 24.7 | 27.2 | 24.5 | -0.2                   | -0.7%                   |
| Sweden         | 22.8 | 23.1 | 19.1 | -3.7                   | -16.1%                  |
| Belgium        | 24.6 | 31.6 | 26.0 | 1.4                    | 5.6%                    |
| Germany        | 36.3 | 33.8 | 38.9 | 2.6                    | 7.1%                    |
| France         | 28.9 | 31.4 | 32.0 | 3.1                    | 10.6%                   |
| Luxembourg     | 28.8 | 36.2 | 27.1 | -1.7                   | -6.0%                   |
| Netherlands    | 20.0 | 20.0 | 23.9 | 3.9                    | 19.7%                   |
| Austria        | 34.9 | 32.7 | 36.5 | 1.6                    | 4.6%                    |
| Ireland        | 33.7 | 36.3 | 27.9 | -5.7                   | -17.0%                  |
| United Kingdom | 26.8 | 32.0 | 35.1 | 8.3                    | 30.9%                   |
| Greece         | 34.3 | 37.5 | 34.8 | 0.5                    | 1.6%                    |
| Spain          | 32.5 | 34.6 | 36.1 | 3.6                    | 11.2%                   |
| Italy          | 28.4 | 30.4 | 31.0 | 2.6                    | 9.1%                    |
| Portugal       | 25.8 | 41.0 | 35.3 | 9.5                    | 36.9%                   |
| Czech Republic |      | 29.8 | 42.3 | 12.6                   | 42.2%                   |
| Estonia        |      | 25.1 | 27.6 | 2.5                    | 9.9%                    |
| Latvia         |      | 35.7 | 28.1 | -7.5                   | -21.1%                  |
| Lithuania      |      | 34.8 | 31.9 | -2.9                   | -8.5%                   |
| Hungary        |      | 29.4 | 33.0 | 3.7                    | 12.5%                   |
| Poland         |      | 34.4 | 35.8 | 1.5                    | 4.2%                    |
| Slovenia       |      | 39.1 | 33.4 | -5.8                   | -14.7%                  |
| Slovakia       |      | 34.3 | 34.7 | 0.4                    | 1.1%                    |
| Bulgaria       |      | 39.9 | 40.3 | 0.4                    | 1.1%                    |
| Romania        |      | 41.8 | 35.1 | -6.8                   | -16.2%                  |
| Cyprus         |      | 33.5 | 36.6 | 3.1                    | 9.3%                    |
| Malta          |      | 7.6  | 14.3 | 6.7                    | 88.6%                   |

Table 11b: Share of workers in jobs with poor learning opportunities, by country

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 20.6 | 18.9 | 18.8 | -1.8                   | -9.0%                   |
| Finland        | 23.5 | 26.1 | 25.7 | 2.2                    | 9.3%                    |
| Sweden         | 18.4 | 25.6 | 21.9 | 3.5                    | 19.2%                   |
| Belgium        | 31.0 | 29.8 | 28.9 | -2.1                   | -6.9%                   |
| Germany        | 25.9 | 29.3 | 30.0 | 4.1                    | 15.8%                   |
| France         | 32.2 | 29.0 | 28.8 | -3.4                   | -10.6%                  |
| Luxembourg     | 29.6 | 33.2 | 25.6 | -4.0                   | -13.6%                  |
| Netherlands    | 23.3 | 22.1 | 20.6 | -2.7                   | -11.7%                  |
| Austria        | 25.8 | 23.8 | 22.8 | -3.0                   | -11.7%                  |
| Ireland        | 31.7 | 36.0 | 33.4 | 1.7                    | 5.4%                    |
| United Kingdom | 28.5 | 30.9 | 33.4 | 4.9                    | 17.1%                   |
| Greece         | 42.5 | 45.0 | 39.4 | -3.2                   | -7.4%                   |
| Spain          | 36.9 | 38.1 | 40.0 | 3.0                    | 8.2%                    |
| Italy          | 31.3 | 31.9 | 33.3 | 2.0                    | 6.5%                    |
| Portugal       | 35.8 | 42.6 | 32.3 | -3.5                   | -9.9%                   |
| Czech Republic |      | 31.6 | 34.4 | 2.8                    | 8.8%                    |
| Estonia        |      | 28.9 | 31.6 | 2.6                    | 9.1%                    |
| Latvia         |      | 38.2 | 31.2 | -6.9                   | -18.1%                  |
| Lithuania      |      | 43.4 | 38.4 | -5.0                   | -11.4%                  |
| Hungary        |      | 33.6 | 32.6 | -1.1                   | -3.2%                   |
| Poland         |      | 34.2 | 32.8 | -1.4                   | -4.2%                   |
| Slovenia       |      | 31.4 | 28.8 | -2.6                   | -8.2%                   |
| Slovakia       |      | 35.4 | 34.1 | -1.3                   | -3.7%                   |
| Bulgaria       |      | 40.3 | 39.3 | -1.0                   | -2.5%                   |
| Romania        |      | 34.8 | 31.3 | -3.5                   | -10.0%                  |
| Cyprus         |      | 36.9 | 38.6 | 1.7                    | 4.5%                    |
| Malta          |      | 31.4 | 27.2 | -4.2                   | -13.3%                  |



Table 12b: Share of workers without training in previous year, by country

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 49.9 | 48.1 | 58.7 | 8.8                    | 17.6%                   |
| Finland        | 45.1 | 48.6 | 47.2 | 2.1                    | 4.7%                    |
| Sweden         | 52.1 | 57.9 | 47.6 | -4.5                   | -8.5%                   |
| Belgium        | 84.0 | 68.4 | 56.7 | -27.3                  | -32.5%                  |
| Germany        | 69.1 | 71.4 | 75.7 | 6.6                    | 9.6%                    |
| France         | 79.1 | 75.9 | 76.4 | -2.7                   | -3.4%                   |
| Luxembourg     | 75.0 | 72.6 | 60.8 | -14.2                  | -18.9%                  |
| Netherlands    | 58.9 | 54.0 | 67.8 | 8.9                    | 15.2%                   |
| Austria        | 72.9 | 69.0 | 62.9 | -10.0                  | -13.7%                  |
| Ireland        | 82.3 | 68.0 | 64.1 | -18.1                  | -22.1%                  |
| United Kingdom | 53.4 | 54.1 | 63.9 | 10.5                   | 19.8%                   |
| Greece         | 87.1 | 87.4 | 87.5 | 0.4                    | 0.4%                    |
| Spain          | 84.9 | 83.7 | 82.0 | -2.9                   | -3.4%                   |
| Italy          | 83.2 | 77.8 | 82.7 | -0.5                   | -0.5%                   |
| Portugal       | 87.8 | 89.9 | 86.0 | -1.9                   | -2.1%                   |
| Czech Republic |      | 49.4 | 75.9 | 26.5                   | 53.6%                   |
| Estonia        |      | 65.7 | 72.0 | 6.3                    | 9.6%                    |
| Latvia         |      | 74.3 | 76.3 | 2.1                    | 2.8%                    |
| Lithuania      |      | 74.8 | 75.4 | 0.6                    | 0.8%                    |
| Hungary        |      | 74.2 | 84.6 | 10.4                   | 14.0%                   |
| Poland         |      | 75.8 | 72.8 | -3.0                   | -3.9%                   |
| Slovenia       |      | 64.0 | 57.9 | -6.0                   | -9.5%                   |
| Slovakia       |      | 59.4 | 64.4 | 5.0                    | 8.5%                    |
| Bulgaria       |      | 88.6 | 91.4 | 2.8                    | 3.2%                    |
| Romania        |      | 86.0 | 83.3 | -2.7                   | -3.2%                   |
| Cyprus         |      | 74.0 | 79.3 | 5.4                    | 7.2%                    |
| Malta          |      | 71.4 | 69.9 | -1.5                   | -2.0%                   |

Table 13b: Share of workers with non-standard work contracts, by country

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 16.4 | 9.1  | 9.9  | -6.5                   | -39.6%                  |
| Finland        | 16.7 | 16.6 | 15.7 | -1.0                   | -6.0%                   |
| Sweden         | 12.9 | 11.0 | 11.4 | -1.5                   | -11.9%                  |
| Belgium        | 15.3 | 9.2  | 7.5  | -7.8                   | -51.1%                  |
| Germany        | 14.4 | 11.3 | 10.9 | -3.5                   | -24.2%                  |
| France         | 23.7 | 15.0 | 12.0 | -11.7                  | -49.4%                  |
| Luxembourg     | 10.4 | 6.4  | 10.7 | 0.4                    | 3.7%                    |
| Netherlands    | 17.2 | 13.7 | 13.8 | -3.4                   | -20.0%                  |
| Austria        | 9.1  | 9.0  | 6.7  | -2.4                   | -26.0%                  |
| Ireland        | 16.9 | 13.1 | 15.4 | -1.4                   | -8.5%                   |
| United Kingdom | 11.5 | 11.9 | 16.0 | 4.5                    | 39.1%                   |
| Greece         | 18.1 | 10.5 | 14.3 | -3.7                   | -20.6%                  |
| Spain          | 36.9 | 28.4 | 23.7 | -13.2                  | -35.7%                  |
| Italy          | 12.7 | 14.0 | 16.5 | 3.8                    | 29.7%                   |
| Portugal       | 17.3 | 16.3 | 18.1 | 0.8                    | 4.6%                    |
| Czech Republic |      | 9.2  | 20.3 | 11.1                   | 120.2%                  |
| Estonia        |      | 12.5 | 11.0 | -1.5                   | -12.1%                  |
| Latvia         |      | 26.3 | 8.7  | -17.6                  | -67.0%                  |
| Lithuania      |      | 14.9 | 10.8 | -4.1                   | -27.5%                  |
| Hungary        |      | 8.1  | 14.2 | 6.1                    | 74.9%                   |
| Poland         |      | 10.4 | 22.4 | 12.0                   | 115.8%                  |
| Slovenia       |      | 7.8  | 13.8 | 6.0                    | 76.9%                   |
| Slovakia       |      | 10.9 | 14.4 | 3.4                    | 31.5%                   |
| Bulgaria       |      | 20.6 | 22.2 | 1.6                    | 7.5%                    |
| Romania        |      | 3.5  | 6.1  | 2.6                    | 75.9%                   |
| Cyprus         |      | 7.9  | 11.7 | 3.8                    | 48.4%                   |
| Malta          |      | 11.6 | 9.7  | -1.9                   | -16.0%                  |

Table 14b: Share of workers reporting they are subject to discrimination, by country

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 1.1  | 0.9  | 1.0  | -0.2                   | -19.6%                  |
| Finland        | 1.4  | 2.0  | 1.4  | 0.0                    | -0.9%                   |
| Sweden         | 1.3  | 2.3  | 1.3  | 0.1                    | 3.1%                    |
| Belgium        | 1.0  | 1.4  | 0.9  | -0.1                   | -8.2%                   |
| Germany        | 1.1  | 1.2  | 0.9  | -0.1                   | -12.4%                  |
| France         | 2.7  | 1.8  | 2.6  | -0.1                   | -4.5%                   |
| Luxembourg     | 1.5  | 1.5  | 1.8  | 0.3                    | 17.8%                   |
| Netherlands    | 1.4  | 2.7  | 1.6  | 0.2                    | 5.7%                    |
| Austria        | 2.6  | 2.2  | 2.0  | -0.5                   | -25.4%                  |
| Ireland        | 1.3  | 1.2  | 1.0  | -0.3                   | -23.1%                  |
| United Kingdom | 2.7  | 2.2  | 2.4  | -0.3                   | -13.4%                  |
| Greece         | 1.5  | 1.5  | 1.3  | -0.2                   | -12.8%                  |
| Spain          | 1.0  | 0.7  | 0.8  | -0.2                   | -30.1%                  |
| Italy          | 0.7  | 0.5  | 0.5  | -0.2                   | -32.5%                  |
| Portugal       | 0.9  | 0.5  | 0.9  | -0.1                   | -13.2%                  |
| Czech Republic |      | 2.1  | 1.0  | -1.1                   | -52.6%                  |
| Estonia        |      | 1.0  | 1.3  | 0.3                    | 28.5%                   |
| Latvia         |      | 0.9  | 1.6  | 0.7                    | 81.0%                   |
| Lithuania      |      | 1.2  | 1.2  | 0.0                    | 1.0%                    |
| Hungary        |      | 0.8  | 0.9  | 0.1                    | 14.6%                   |
| Poland         |      | 0.7  | 1.7  | 1.0                    | 134.9%                  |
| Slovenia       |      | 0.8  | 1.6  | 0.8                    | 98.6%                   |
| Slovakia       |      | 1.9  | 2.2  | 0.3                    | 15.8%                   |
| Bulgaria       |      | 1.4  | 1.6  | 0.2                    | 11.6%                   |
| Romania        |      | 1.1  | 0.9  | -0.2                   | -21.2%                  |
| Cyprus         |      | 1.3  | 1.7  | 0.4                    | 30.4%                   |
| Malta          |      | 0.8  | 1.2  | 0.4                    | 45.4%                   |

Table 15b: Share of workers declaring their immediate supervisor is a woman, by country

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 16.6 | 15.4 | 22.7 | 6.1                    | 36.5%                   |
| Finland        | 19.5 | 20.5 | 30.9 | 11.4                   | 58.5%                   |
| Sweden         | 13.3 | 19.3 | 27.5 | 14.1                   | 106.2%                  |
| Belgium        | 25.6 | 27.9 | 32.4 | 6.9                    | 26.9%                   |
| Germany        | 19.5 | 17.4 | 19.2 | -0.3                   | -1.6%                   |
| France         | 11.5 | 27.6 | 23.9 | 12.4                   | 108.5%                  |
| Luxembourg     | 21.0 | 15.8 | 23.8 | 2.8                    | 13.4%                   |
| Netherlands    | 13.1 | 12.3 | 28.8 | 15.8                   | 120.6%                  |
| Austria        | 12.1 | 10.3 | 17.6 | 5.5                    | 45.7%                   |
| Ireland        | 26.6 | 28.9 | 25.7 | -0.9                   | -3.2%                   |
| United Kingdom | 26.6 | 27.6 | 30.5 | 3.8                    | 14.3%                   |
| Greece         | 10.9 | 16.8 | 29.4 | 18.5                   | 170.3%                  |
| Spain          | 16.5 | 19.9 | 21.2 | 4.7                    | 28.6%                   |
| Italy          | 14.8 | 16.2 | 20.6 | 5.9                    | 39.8%                   |
| Portugal       | 15.9 | 19.0 | 25.6 | 9.7                    | 61.4%                   |
| Czech Republic |      | 20.6 | 28.0 | 7.4                    | 35.9%                   |
| Estonia        |      | 33.3 | 33.8 | 0.5                    | 1.5%                    |
| Latvia         |      | 30.6 | 33.5 | 2.9                    | 9.5%                    |
| Lithuania      |      | 29.4 | 33.7 | 4.3                    | 14.7%                   |
| Hungary        |      | 27.9 | 25.0 | -2.9                   | -10.3%                  |
| Poland         |      | 21.5 | 21.9 | 0.4                    | 1.8%                    |
| Slovenia       |      | 23.8 | 24.7 | 0.9                    | 3.8%                    |
| Slovakia       |      | 28.0 | 17.2 | -10.8                  | -38.5%                  |
| Bulgaria       |      | 28.9 | 30.3 | 1.4                    | 4.8%                    |
| Romania        |      | 16.9 | 20.9 | 4.0                    | 23.7%                   |
| Cyprus         |      | 13.3 | 39.4 | 26.1                   | 196.5%                  |
| Malta          |      | 12.8 | 32.4 | 19.6                   | 153.5%                  |

**Table 16b: Share of workers declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months, by country**

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 55.9 |      | 56.2 | 0.2                    | 0.4%                    |
| Finland        | 57.4 |      | 65.6 | 8.1                    | 14.2%                   |
| Sweden         | 52.1 |      | 60.1 | 7.9                    | 15.2%                   |
| Belgium        | 25.4 |      | 41.0 | 15.6                   | 61.3%                   |
| Germany        | 36.1 |      | 29.1 | -7.0                   | -19.3%                  |
| France         | 45.2 |      | 36.1 | -9.0                   | -20.0%                  |
| Luxembourg     | 46.5 |      | 37.3 | -9.2                   | -19.8%                  |
| Netherlands    | 42.1 |      | 38.0 | -4.1                   | -9.7%                   |
| Austria        | 35.5 |      | 31.2 | -4.3                   | -12.1%                  |
| Ireland        | 41.5 |      | 51.0 | 9.6                    | 23.0%                   |
| United Kingdom | 48.0 |      | 43.0 | -5.0                   | -10.4%                  |
| Greece         | 38.6 |      | 48.8 | 10.2                   | 26.4%                   |
| Spain          | 20.0 |      | 32.0 | 12.1                   | 60.4%                   |
| Italy          | 42.8 |      | 36.0 | -6.7                   | -15.7%                  |
| Portugal       | 20.8 |      | 23.5 | 2.8                    | 13.4%                   |
| Czech Republic |      | 41.7 | 41.8 | 0.1                    | 0.3%                    |
| Estonia        |      | 49.4 | 52.5 | 3.1                    | 6.2%                    |
| Latvia         |      | 58.4 | 56.0 | -2.4                   | -4.0%                   |
| Lithuania      |      | 43.2 | 55.9 | 12.7                   | 29.5%                   |
| Hungary        |      | 39.3 | 48.5 | 9.3                    | 23.6%                   |
| Poland         |      | 34.5 | 39.6 | 5.1                    | 14.6%                   |
| Slovenia       |      | 54.5 | 49.2 | -5.3                   | -9.7%                   |
| Slovakia       |      | 38.1 | 50.6 | 12.5                   | 32.8%                   |
| Bulgaria       |      | 39.3 | 52.0 | 12.7                   | 32.3%                   |
| Romania        |      | 34.6 | 51.1 | 16.5                   | 47.7%                   |
| Cyprus         |      | 48.2 | 48.4 | 0.2                    | 0.5%                    |
| Malta          |      | 45.8 | 49.7 | 3.9                    | 8.5%                    |

**Table 17b: Share of workers declaring they are very well informed about health and safety risks, by country**

|                | 1990 | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------|------------------------|-------------------------|
| Denmark        | 52.5 | 47.1 | 55.3 | 54.1 | 7.0                    | 14.8%                   |
| Finland        |      | 41.2 | 39.0 | 48.3 | 7.1                    | 17.4%                   |
| Sweden         |      | 38.9 | 44.4 | 40.8 | 1.8                    | 4.7%                    |
| Belgium        | 31.7 | 44.0 | 37.4 | 38.8 | -5.2                   | -11.9%                  |
| Germany        | 36.1 | 37.1 | 43.5 | 37.9 | 0.8                    | 2.2%                    |
| France         | 31.3 | 33.5 | 36.4 | 27.2 | -6.3                   | -18.9%                  |
| Luxembourg     | 43.0 | 45.2 | 39.1 | 29.8 | -15.4                  | -34.1%                  |
| Netherlands    | 43.7 | 39.9 | 36.0 | 28.7 | -11.2                  | -28.1%                  |
| Austria        |      | 45.7 | 48.2 | 41.4 | -4.3                   | -9.5%                   |
| Ireland        | 49.4 | 45.2 | 52.9 | 57.5 | 12.3                   | 27.2%                   |
| United Kingdom | 45.8 | 46.7 | 53.1 | 58.6 | 12.0                   | 25.7%                   |
| Greece         | 33.9 | 27.1 | 23.4 | 38.4 | 11.3                   | 41.8%                   |
| Spain          | 38.0 | 35.5 | 35.6 | 22.7 | -12.7                  | -35.9%                  |
| Italy          | 25.0 | 30.3 | 29.1 | 26.4 | -3.9                   | -12.8%                  |
| Portugal       | 16.3 | 18.6 | 17.1 | 34.3 | 15.7                   | 84.4%                   |
| Czech Republic |      |      | 43.4 | 41.6 | -1.9                   | -4.3%                   |
| Estonia        |      |      | 49.3 | 40.4 | -8.9                   | -18.1%                  |
| Latvia         |      |      | 42.7 | 39.2 | -3.5                   | -8.3%                   |
| Lithuania      |      |      | 36.9 | 32.4 | -4.5                   | -12.3%                  |
| Hungary        |      |      | 42.5 | 36.2 | -6.3                   | -14.8%                  |
| Poland         |      |      | 50.8 | 46.5 | -4.3                   | -8.4%                   |
| Slovenia       |      |      | 33.9 | 38.8 | 4.9                    | 14.3%                   |
| Slovakia       |      |      | 50.1 | 42.7 | -7.4                   | -14.8%                  |
| Bulgaria       |      |      | 51.3 | 52.3 | 1.1                    | 2.1%                    |
| Romania        |      |      | 36.6 | 37.0 | 0.3                    | 0.9%                    |
| Cyprus         |      |      | 35.6 | 49.8 | 14.2                   | 39.9%                   |
| Malta          |      |      | 43.8 | 21.9 | -21.9                  | -50.0%                  |

**Table 18b: Share of workers declaring they work more than once a week per month on Saturdays, Sundays or at night, by country**

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 18.4 | 17.8 | 19.1 | 0.7                    | 4.1%                    |
| Finland        | 23.7 | 23.1 | 23.8 | 0.2                    | 0.7%                    |
| Sweden         | 18.4 | 22.9 | 17.3 | -1.1                   | -5.8%                   |
| Belgium        | 21.0 | 20.9 | 20.8 | -0.1                   | -0.6%                   |
| Germany        | 22.4 | 20.4 | 21.7 | -0.7                   | -3.1%                   |
| France         | 25.2 | 24.5 | 21.4 | -3.8                   | -15.0%                  |
| Luxembourg     | 23.5 | 23.9 | 17.5 | -6.1                   | -25.8%                  |
| Netherlands    | 18.9 | 18.5 | 17.3 | -1.5                   | -8.2%                   |
| Austria        | 23.5 | 22.4 | 22.4 | -1.1                   | -4.6%                   |
| Ireland        | 27.5 | 27.3 | 21.9 | -5.6                   | -20.3%                  |
| United Kingdom | 31.3 | 29.4 | 26.5 | -4.8                   | -15.2%                  |
| Greece         | 32.7 | 30.8 | 28.9 | -3.8                   | -11.6%                  |
| Spain          | 25.7 | 25.0 | 23.3 | -2.3                   | -9.1%                   |
| Italy          | 26.5 | 24.1 | 25.3 | -1.3                   | -4.8%                   |
| Portugal       | 20.4 | 20.9 | 20.8 | 0.4                    | 2.1%                    |
| Czech Republic |      | 26.5 | 23.6 | -2.9                   | -11.0%                  |
| Estonia        |      | 33.0 | 27.7 | -5.3                   | -16.0%                  |
| Latvia         |      | 34.2 | 29.4 | -4.8                   | -14.0%                  |
| Lithuania      |      | 28.7 | 23.9 | -4.8                   | -16.7%                  |
| Hungary        |      | 22.6 | 23.7 | 1.1                    | 5.0%                    |
| Poland         |      | 26.7 | 25.0 | -1.7                   | -6.4%                   |
| Slovenia       |      | 24.4 | 26.4 | 2.0                    | 8.3%                    |
| Slovakia       |      | 23.8 | 27.1 | 3.3                    | 13.9%                   |
| Bulgaria       |      | 24.9 | 25.3 | 0.4                    | 1.6%                    |
| Romania        |      | 40.0 | 33.8 | -6.2                   | -15.5%                  |
| Cyprus         |      | 19.3 | 23.1 | 3.8                    | 19.6%                   |
| Malta          |      | 27.9 | 27.6 | -0.3                   | -0.9%                   |



**Table 19b: Summary of job quality variables in 2005 – Scandinavian group**

|   | DK   | FI   | SE   |
|---|------|------|------|
| Share of workers declaring to be very satisfied or satisfied with working conditions in main paid job   | 48.6 | 20.8 | 25.6 |
| Share of workers thinking their health or safety is at risk because of work   | 23.0 | 25.6 | 46.1 |
| Share of workers declaring to have been absent for health problems over the past twelve months  | 33.7 | 47.3 | 27.9 |
| Health related absenteeism exceeding one month  | 6.4  | 8.1  | 13.0 |
| Share of workers declaring to be exposed more than half of their working time to ambient hazards  | 6.4  | 8.6  | 6.2  |
| Share of workers declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | 3.1  | 7.1  | 4.3  |
| Share of workers declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 16.7 | 26.5 | 17.3 |
| Share of workers declaring that their jobs involve a high pace of work  | 29.2 | 31.5 | 19.4 |
| Share of workers declaring that their pace of work is dependent on factors other than themselves  | 36.8 | 41.9 | 35.8 |
| Share of workers declaring they are unable to choose or change organisation of their daily work   | 15.5 | 24.5 | 19.1 |
| Share of workers in jobs with poor learning opportunities   | 18.8 | 25.7 | 21.9 |
| Share of workers without training in previous year  | 58.7 | 47.2 | 47.6 |
| Share of workers with non-standard work contracts   | 9.9  | 15.7 | 11.4 |
| Share of workers reporting they are subject to discrimination   | 1.0  | 1.4  | 1.3  |
| Share of workers whose immediate boss is a woman  | 22.7 | 30.9 | 27.5 |
| Share of workers declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 56.2 | 65.6 | 60.1 |
| Share of workers declaring to be very well-informed about health and safety risks   | 54.1 | 48.3 | 40.8 |
| Share of workers declaring to work more than once a week per month on Saturdays, Sundays or at night  | 19.1 | 23.8 | 17.3 |

**Table 19c: Summary of job quality variables in 2005 – Continental group**

|   | BE   | DE   | FR   | LU   | NL   | AU   |
|---|------|------|------|------|------|------|
| Share of workers declaring to be very satisfied or satisfied with working conditions in main paid job   | 31.8 | 25.8 | 22.6 | 27.1 | 23.7 | 35.7 |
| Share of workers thinking their health or safety is at risk because of work   | 23.0 | 18.4 | 24.9 | 29.6 | 23.9 | 21.5 |
| Share of workers declaring to have been absent for health problems over the past twelve months  | 28.8 | 27.5 | 19.5 | 30.4 | 34.9 | 20.9 |
| Health-related absenteeism exceeding one month  | 7.9  | 2.5  | 11.9 | 7.7  | 9.8  | 11.3 |
| Share of workers declaring to be exposed more than half of their working time to ambient hazards  | 7.5  | 6.8  | 12.4 | 8.5  | 5.5  | 7.7  |
| Share of workers declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | 4.1  | 4.6  | 7.2  | 6.2  | 3.1  | 5.8  |
| Share of workers declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 18.1 | 17.3 | 30.1 | 22.0 | 13.2 | 23.7 |
| Share of workers declaring that their jobs involve a high pace of work  | 16.3 | 20.8 | 21.0 | 20.1 | 20.6 | 18.6 |
| Share of workers declaring that their pace of work is dependent on factors other than themselves  | 43.1 | 38.6 | 44.4 | 41.4 | 38.6 | 40.4 |
| Share of workers declaring they are unable to choose or change organisation of their daily work   | 26.0 | 38.9 | 32.0 | 27.1 | 23.9 | 36.5 |
| Share of workers in jobs with poor learning opportunities   | 28.9 | 30.0 | 28.8 | 25.6 | 20.6 | 22.8 |
| Share of workers without training in previous year  | 56.7 | 75.7 | 76.4 | 60.8 | 67.8 | 62.9 |
| Share of workers with non-standard work contracts   | 7.5  | 10.9 | 12.0 | 10.7 | 13.8 | 6.7  |
| Share of workers reporting they are subject to discrimination   | 0.9  | 0.9  | 2.6  | 1.8  | 1.6  | 2.0  |
| Share of workers whose immediate boss is a woman  | 32.4 | 19.2 | 23.9 | 23.8 | 28.8 | 17.6 |
| Share of workers declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 41.0 | 29.1 | 36.1 | 37.3 | 38.0 | 31.2 |
| Share of workers declaring to be very well-informed about health and safety risks   | 38.8 | 37.9 | 27.2 | 29.8 | 28.7 | 41.4 |
| Share of workers declaring to work more than once a week per month on Saturdays, Sundays or at night  | 20.8 | 21.7 | 21.4 | 17.5 | 17.3 | 22.4 |

**Table 19d: Summary of job quality variables in 2005 – Anglo-Saxon group**

|   | IE   | United Kingdom |
|---|------|----------------|
| Share of workers declaring to be very satisfied or satisfied with working conditions in main paid job   | 30.4 | 44.8           |
| Share of workers thinking their health or safety is at risk because of work   | 23.4 | 18.1           |
| Share of workers declaring to have been absent for health problems over the past twelve months  | 21.5 | 20.8           |
| Health-related absenteeism exceeding one month  | 4.7  | 4.9            |
| Share of workers declaring to be exposed more than half of their working time to ambient hazards  | 5.6  | 6.7            |
| Share of workers declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | 3.7  | 3.8            |
| Share of workers declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 16.4 | 17.6           |
| Share of workers declaring that their jobs involve a high pace of work  | 15.8 | 21.5           |
| Share of workers declaring that their pace of work is dependent on factors other than themselves  | 34.8 | 44.3           |
| Share of workers declaring they are unable to choose or change organisation of their daily work   | 27.9 | 35.1           |
| Share of workers in jobs with poor learning opportunities   | 33.4 | 33.4           |
| Share of workers without training in previous year  | 64.1 | 63.9           |
| Share of workers with non-standard work contracts   | 15.4 | 16.0           |
| Share of workers reporting they are subject to discrimination   | 1.0  | 2.4            |
| Share of workers whose immediate boss is a woman  | 25.7 | 30.5           |
| Share of workers declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 51.0 | 43.0           |
| Share of workers declaring to be very well-informed about health and safety risks   | 57.5 | 58.6           |
| Share of workers declaring to work more than once a week per month on Saturdays, Sundays or at night  | 21.9 | 26.5           |

Table 19e: Summary of job quality variables in 2005 – Southern group

|   | GR   | ES   | IT   | PT   |
|---|------|------|------|------|
| Share of workers declaring to be very satisfied or satisfied with working conditions in main paid job   | 18.0 | 18.4 | 17.9 | 20.8 |
| Share of workers thinking their health or safety is at risk because of work   | 54.2 | 31.3 | 25.1 | 26.7 |
| Share of workers declaring to have been absent for health problems over the past twelve months  | 16.1 | 12.5 | 25.9 | 11.6 |
| Health-related absenteeism exceeding one month  | 6.2  | 11.1 | 3.4  | 22.1 |
| Share of workers declaring to be exposed more than half of their working time to ambient hazards  | 26.7 | 12.8 | 7.0  | 9.3  |
| Share of workers declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | 11.4 | 4.8  | 3.5  | 6.8  |
| Share of workers declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 40.9 | 25.0 | 22.1 | 30.2 |
| Share of workers declaring that their jobs involve a high pace of work  | 27.3 | 20.8 | 18.8 | 18.1 |
| Share of workers declaring that their pace of work is dependent on factors other than themselves  | 43.8 | 37.2 | 36.9 | 43.8 |
| Share of workers declaring they are unable to choose or change organisation of their daily work   | 34.8 | 36.1 | 31.0 | 35.3 |
| Share of workers in jobs with poor learning opportunities   | 39.4 | 40.0 | 33.3 | 32.3 |
| Share of workers without training in previous year  | 87.5 | 82.0 | 82.7 | 86.0 |
| Share of workers with non-standard work contracts   | 14.3 | 23.7 | 16.5 | 18.1 |
| Share of workers reporting they are subject to discrimination   | 1.3  | 0.8  | 0.5  | 0.9  |
| Share of workers whose immediate boss is a woman  | 29.4 | 21.2 | 20.6 | 25.6 |
| Share of workers declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 48.8 | 32.0 | 36.0 | 23.5 |
| Share of workers declaring to be very well-informed about health and safety risks   | 38.4 | 22.7 | 26.4 | 34.3 |
| Share of workers declaring to work more than once a week per month on Saturdays, Sundays or at night  | 28.9 | 23.3 | 25.3 | 20.8 |

Table 19f: Summary of job quality variables in 2005 – Eastern NMS group

|   | CZ   | EE   | LV   | LT   | HU   | PL   | SI   | SK   | BU   | RO   |
|---|------|------|------|------|------|------|------|------|------|------|
| Share of workers declaring to be very satisfied or satisfied with working conditions in main paid job   | 15.9 | 10.3 | 10.1 | 12.9 | 11.0 | 16.9 | 13.2 | 16.5 | 14.5 | 13.8 |
| Share of workers thinking their health or safety is at risk because of work   | 21.4 | 38.4 | 45.8 | 37.4 | 32.8 | 40.9 | 41.7 | 31.6 | 39.9 | 39.8 |
| Share of workers declaring to have been absent for health problems over the past twelve months  | 29.3 | 33.5 | 29.0 | 23.9 | 22.9 | 22.6 | 21.3 | 17.5 | 20.9 | 13.5 |
| Health-related absenteeism exceeding one month  | 3.0  | 12.2 | 12.4 | 15.9 | 10.6 | 23.1 | 17.5 | 7.1  | 8.2  | 13.3 |
| Share of workers declaring to be exposed more than half of their working time to ambient hazards  | 7.6  | 11.0 | 9.6  | 11.1 | 14.5 | 13.8 | 13.4 | 9.2  | 12.6 | 10.4 |
| Share of workers declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | 5.4  | 7.0  | 6.9  | 6.8  | 8.5  | 6.4  | 9.4  | 6.2  | 7.8  | 8.6  |
| Share of workers declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 18.7 | 25.6 | 21.9 | 26.3 | 30.4 | 25.5 | 26.5 | 19.4 | 27.0 | 27.4 |
| Share of workers declaring that their jobs involve a high pace of work  | 19.4 | 17.8 | 13.8 | 17.5 | 18.9 | 13.8 | 28.4 | 13.9 | 18.6 | 21.2 |
| Share of workers declaring that their pace of work is dependent on factors other than themselves  | 38.7 | 38.4 | 41.1 | 38.1 | 43.9 | 34.4 | 40.4 | 40.0 | 41.0 | 43.6 |
| Share of workers declaring they are unable to choose or change organisation of their daily work   | 42.3 | 27.6 | 28.1 | 31.9 | 33.0 | 35.8 | 33.4 | 34.7 | 40.3 | 35.1 |
| Share of workers in jobs with poor learning opportunities   | 34.4 | 31.6 | 31.2 | 38.4 | 32.6 | 32.8 | 28.8 | 34.1 | 39.3 | 31.3 |
| Share of workers without training in previous year  | 75.9 | 72.0 | 76.3 | 75.4 | 84.6 | 72.8 | 57.9 | 64.4 | 91.4 | 83.3 |
| Share of workers with non-standard work contracts   | 20.3 | 11.0 | 8.7  | 10.8 | 14.2 | 22.4 | 13.8 | 14.4 | 22.2 | 6.1  |
| Share of workers reporting they are subject to discrimination   | 1.0  | 1.3  | 1.6  | 1.2  | 0.9  | 1.7  | 1.6  | 2.2  | 1.6  | 0.9  |
| Share of workers whose immediate boss is a woman  | 28.0 | 33.8 | 33.5 | 33.7 | 25.0 | 21.9 | 24.7 | 17.2 | 30.3 | 20.9 |
| Share of workers declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 41.8 | 52.5 | 56.0 | 55.9 | 48.5 | 39.6 | 49.2 | 50.6 | 52.0 | 51.1 |
| Share of workers declaring to be very well-informed about health and safety risks   | 41.6 | 40.4 | 39.2 | 32.4 | 36.2 | 46.5 | 38.8 | 42.7 | 52.3 | 37.0 |
| Share of workers declaring to work more than once a week per month on Saturdays, Sundays or at night  | 23.6 | 27.7 | 29.4 | 23.9 | 23.7 | 25.0 | 26.4 | 27.1 | 25.3 | 33.8 |

**Table 19g: Summary of job quality variables in 2005 – Mediterranean NMS group**

|   | CY   | MT   |
|---|------|------|
| Share of workers declaring to be very satisfied or satisfied with working conditions in main paid job   | 40.7 | 25.5 |
| Share of workers thinking their health or safety is at risk because of work   | 32.0 | 32.8 |
| Share of workers declaring to have been absent for health problems over the past twelve months  | 18.7 | 40.1 |
| Health-related absenteeism exceeding one month  | 8.4  | 0.4  |
| Share of workers declaring to be exposed more than half of their working time to ambient hazards  | 21.6 | 16.3 |
| Share of workers declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | 5.5  | 9.9  |
| Share of workers declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 31.7 | 26.2 |
| Share of workers declaring that their jobs involve a high pace of work  | 27.3 | 26.0 |
| Share of workers declaring that their pace of work is dependent on factors other than themselves  | 44.3 | 45.6 |
| Share of workers declaring they are unable to choose or change organisation of their daily work   | 36.6 | 14.3 |
| Share of workers in jobs with poor learning opportunities   | 38.6 | 27.2 |
| Share of workers without training in previous year  | 79.3 | 69.9 |
| Share of workers with non-standard work contracts   | 11.7 | 9.7  |
| Share of workers reporting they are subject to discrimination   | 1.7  | 1.2  |
| Share of workers whose immediate boss is a woman  | 39.4 | 32.4 |
| Share of workers declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 48.4 | 49.7 |
| Share of workers declaring to be very well-informed about health and safety risks   | 49.8 | 21.9 |
| Share of workers declaring to work more than once a week per month on Saturdays, Sundays or at night  | 23.1 | 27.6 |

Table 20b: Employment rates by main economic sectors of activities, by country

|                | Agriculture | Industry | Services |
|----------------|-------------|----------|----------|
| Denmark        | 3.0%        | 23.2%    | 73.7%    |
| Finland        | 4.5%        | 25.7%    | 69.6%    |
| Sweden         | 2.2%        | 21.6%    | 75.8%    |
| Belgium        | 1.9%        | 24.4%    | 73.7%    |
| Germany        | 2.2%        | 29.8%    | 67.9%    |
| France         | 3.4%        | 23.2%    | 73.2%    |
| Luxembourg     | 1.9%        | 16.6%    | 81.4%    |
| Netherlands    | 3.0%        | 19.1%    | 73.2%    |
| Austria        | 5.7%        | 27.3%    | 67.0%    |
| Ireland        | 5.5%        | 27.2%    | 67.0%    |
| United Kingdom | 1.4%        | 22.0%    | 76.3%    |
| Greece         | 11.5%       | 22.5%    | 66.0%    |
| Spain          | 4.5%        | 29.3%    | 66.2%    |
| Italy          | 4.0%        | 30.2%    | 65.9%    |
| Portugal       | 11.6%       | 30.5%    | 57.8%    |
| Czech Republic | 7.5%        | 35.5%    | 57.0%    |
| Estonia        | 3.6%        | 40.2%    | 56.2%    |
| Latvia         | 4.7%        | 35.2%    | 60.0%    |
| Lithuania      | 9.9%        | 28.5%    | 61.5%    |
| Hungary        | 10.4%       | 30.7%    | 58.9%    |
| Poland         | 4.6%        | 32.7%    | 62.7%    |
| Slovenia       | 14.7%       | 30.7%    | 54.5%    |
| Slovakia       | 29.5%       | 31.4%    | 39.1%    |
| Bulgaria       | 9.8%        | 34.9%    | 54.3%    |
| Romania        | 4.2%        | 39.4%    | 56.4%    |
| Cyprus         | 4.4%        | 22.5%    | 73.1%    |
| Malta          | 1.8%        | 26.2%    | 72.0%    |

Source: Eurostat, Labour force surveys



**Table 21b: Summary of intensity of changes – Scandinavian countries**

| Share of workers....   | DK     | FI     | SE     |
|--|--------|--------|--------|
| declaring to be very satisfied or satisfied with working conditions in main paid job   | -1.6%  | -5.9%  | -7.4%  |
| thinking their health or safety is at risk because of work   | 25.3%  | -13.4% | 90.1%  |
| declaring to have been absent for health problems over the past twelve months  | 137.4% | 61.8%  | 133.7% |
| declaring to be exposed more than half of their working time to ambient hazards  | 11.1%  | 23.1%  | 11.8%  |
| declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | -13.6% | 12.9%  | -37.1% |
| declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 25.7%  | 39.0%  | 25.0%  |
| declaring that their jobs involve a high pace of work  | 53.8%  | 17.0%  | -3.1%  |
| declaring that their pace of work is dependent of other factors than themselves  | 7.7%   | 10.2%  | -4.3%  |
| declaring they are unable to choose or change organisation of their daily work   | -9.3%  | -0.7%  | -16.1% |
| in jobs with poor learning opportunities   | -9.0%  | 9.3%   | 19.2%  |
| without training in previous year  | 17.6%  | 4.7%   | -8.5%  |
| reporting they are subject to discrimination   | -19.6% | -0.9%  | 3.1%   |
| declaring their immediate supervisor is a woman  | 36.5%  | 58.5%  | 106.2% |
| declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 0.4%   | 14.2%  | 15.2%  |
| declaring to be very well informed about health and safety risks   | 14.8%  | 17.4%  | 4.7%   |
| with non-standard work contracts   | -39.6% | -6.0%  | -11.9% |
| declaring to work more than once a week per month on Saturdays, Sundays or at night  | 4.1%   | 0.7%   | -5.8%  |

Table 21c: Summary of intensity of changes – Continental countries

| Share of workers....   | BE     | DE     | FR     | LU     | NL     | AU     |
|--|--------|--------|--------|--------|--------|--------|
| declaring to be very satisfied or satisfied with working conditions in main paid job   | -4.1%  | 0.5%   | -1.5%  | -6.9%  | -6.1%  | -2.4%  |
| thinking their health or safety is at risk because of work   | 26.0%  | -15.9% | -20.5% | 14.8%  | 5.7%   | -20.7% |
| declaring to have been absent for health problems over the past twelve months  | 10.5%  | -15.9% | -4.7%  | 1.6%   | 28.5%  | -40.6% |
| declaring to be exposed more than half of their working time to ambient hazards  | 21.4%  | 11.6%  | 28.6%  | -0.6%  | -33.2% | -19.5% |
| declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | -11.5% | -13.2% | -16.7% | -9.4%  | -46.4% | -19.0% |
| declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 6.6%   | 0.4%   | 7.7%   | 43.0%  | -32.6% | 17.5%  |
| declaring that their jobs involve a high pace of work  | 2.0%   | 16.1%  | -10.5% | 43.5%  | -11.3% | -31.0% |
| declaring that their pace of work is dependent on factors other than themselves  | 22.7%  | 15.1%  | 7.1%   | 15.7%  | 1.2%   | 17.6%  |
| declaring they are unable to choose or change organisation of their daily work   | 5.6%   | 7.1%   | 10.6%  | -6.0%  | 19.7%  | 4.6%   |
| in jobs with poor learning opportunities   | -6.9%  | 15.8%  | -10.6% | -13.6% | -11.7% | -11.7% |
| without training in previous year  | -32.5% | 9.6%   | -3.4%  | -18.9% | 15.2%  | -13.7% |
| reporting they are subject to discrimination   | -8.2%  | -12.4% | -4.5%  | 17.8%  | 5.7%   | -25.4% |
| declaring their immediate supervisor is a woman  | 26.9%  | -1.6%  | 108.5% | 13.4%  | 120.6% | 45.7%  |
| declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 61.3%  | -19.3% | -20.0% | -19.8% | -9.7%  | -12.1% |
| declaring to be very well informed about health and safety risks   | -11.9% | 2.2%   | -18.9% | -34.1% | -28.1% | -9.5%  |
| with non-standard work contracts   | -51.1% | -24.2% | -49.4% | 3.7%   | -20.0% | -26.0% |
| declaring to work more than once a week per month on Saturdays, Sundays or at night  | -0.6%  | -3.1%  | -15.0% | -25.8% | -8.2%  | -4.6%  |

**Table 21d: Summary of intensity of changes – Anglo-Saxon countries**

| Share of workers....   | IE     | United Kingdom |
|--|--------|----------------|
| declaring to be very satisfied or satisfied with working conditions in main paid job   | -6.9%  | 4.2%           |
| thinking their health or safety is at risk because of work   | 39.8%  | -38.6%         |
| declaring to have been absent for health problems over the past twelve months  | 38.3%  | 32.0%          |
| declaring to be exposed more than half of their working time to ambient hazards  | -30.2% | -34.5%         |
| declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | -35.2% | -45.0%         |
| declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | -11.4% | -18.4%         |
| declaring that their jobs involve a high pace of work  | -16.7% | -21.2%         |
| declaring that their pace of work is dependent on factors other than themselves  | -17.8% | 1.2%           |
| declaring they are unable to choose or change organisation of their daily work   | -17.0% | 30.9%          |
| in jobs with poor learning opportunities   | 5.4%   | 17.1%          |
| without training in previous year  | -22.1% | 19.8%          |
| reporting they are subject to discrimination   | -23.1% | -13.4%         |
| declaring their immediate supervisor is a woman  | -3.2%  | 14.3%          |
| declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 23.0%  | -10.4%         |
| declaring to be very well informed about health and safety risks   | 27.2%  | 25.7%          |
| with non-standard work contracts   | -8.5%  | 39.1%          |
| declaring to work more than once a week per month on Saturdays, Sundays or at night  | -20.3% | -15.2%         |

Table 21e: Summary of intensity of changes – Southern countries

| <i>Share of workers....</i>  | GR     | ES     | IT     | PT     |
|--|--------|--------|--------|--------|
| declaring to be very satisfied or satisfied with working conditions in main paid job   | -12.4% | 1.8%   | -5.3%  | 1.1%   |
| thinking their health or safety is at risk because of work   | 22.7%  | -0.9%  | -18.6% | -16.8% |
| declaring to have been absent for health problems over the past twelve months  | -4.3%  | -31.2% | 52.8%  | -49.6% |
| declaring to be exposed more than half of their working time to ambient hazards  | 92.1%  | 1.0%   | -6.6%  | -7.1%  |
| declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | -25.6% | -47.3% | -44.7% | -25.2% |
| declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 19.5%  | -8.2%  | 13.1%  | -1.4%  |
| declaring that their jobs involve a high pace of work  | 17.8%  | 3.2%   | 24.3%  | 1.5%   |
| declaring that their pace of work is dependent on factors other than themselves  | 11.1%  | -5.8%  | -5.5%  | 14.1%  |
| declaring they are unable to choose or change organisation of their daily work   | 1.6%   | 11.2%  | 9.1%   | 36.9%  |
| in jobs with poor learning opportunities   | -7.4%  | 8.2%   | 6.5%   | -9.9%  |
| without training in previous year  | 0.4%   | -3.4%  | -0.5%  | -2.1%  |
| reporting they are subject to discrimination   | -12.8% | -30.1% | -32.5% | -13.2% |
| declaring their immediate supervisor is a woman  | 170.3% | 28.6%  | 39.8%  | 61.4%  |
| declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 26.4%  | 60.4%  | -15.7% | 13.4%  |
| declaring to be very well informed about health and safety risks   | 41.8%  | -35.9% | -12.8% | 84.4%  |
| with non-standard work contracts   | -20.6% | -35.7% | 29.7%  | 4.6%   |
| declaring to work more than once a week per month on Saturdays, Sundays or at night  | -11.6% | -9.1%  | -4.8%  | 2.1%   |

Table 21f: Summary of intensity of changes – Eastern NMS countries

| Share of workers....   | CZ     | EE     | LV     | LT     | HU     | PL     | SI     | SK     | BG     | RO     |
|--|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| declaring to be very satisfied or satisfied with working conditions in main paid job   | -2.8%  | -0.5%  | 1.9%   | -2.8%  | -8.3%  | 7.4%   | 14.9%  | 10.5%  | 2.3%   | -4.3%  |
| thinking their health or safety is at risk because of work   | -36.5% | 1.1%   | -0.3%  | -16.5% | -11.4% | -1.9%  | 0.6%   | -7.5%  | 3.9%   | -14.9% |
| declaring to have been absent for health problems over the past twelve months  | :      | :      | :      | :      | :      | :      | :      | :      | :      | :      |
| declaring to be exposed more than half of their working time to ambient hazards  | -23.8% | 3.8%   | -4.0%  | 28.6%  | 8.8%   | 10.7%  | -3.5%  | -32.8% | -3.4%  | -40.7% |
| declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | -6.9%  | -28.2% | -34.3% | -20.8% | -8.2%  | 3.5%   | 14.2%  | -38.7% | -30.9% | -14.2% |
| declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | 14.5%  | 15.6%  | -2.7%  | 31.7%  | 9.4%   | 29.9%  | 50.1%  | -9.7%  | 13.4%  | -15.5% |
| declaring that their jobs involve a high pace of work  | 7.2%   | 5.4%   | 19.7%  | 56.1%  | -9.2%  | -3.2%  | 123.3% | -27.2% | -16.9% | 4.6%   |
| declaring that their pace of work is dependent on factors other than themselves  | -6.5%  | -6.0%  | 6.4%   | 4.7%   | 19.4%  | 5.2%   | 11.2%  | -8.3%  | -3.6%  | 7.3%   |
| declaring they are unable to choose or change organisation of their daily work   | 42.2%  | 9.9%   | -21.1% | -8.5%  | 12.5%  | 4.2%   | -14.7% | 1.1%   | 1.1%   | -16.2% |
| in jobs with poor learning opportunities   | 8.8%   | 9.1%   | -18.1% | -11.4% | -3.2%  | -4.2%  | -8.2%  | -3.7%  | -2.5%  | -10.0% |
| without training in previous year  | 53.6%  | 9.6%   | 2.8%   | 0.8%   | 14.0%  | -3.9%  | -9.5%  | 8.5%   | 3.2%   | -3.2%  |
| reporting they are subject to discrimination   | -52.6% | 28.5%  | 81.0%  | 1.0%   | 14.6%  | 134.9% | 98.6%  | 15.8%  | 11.6%  | -21.2% |
| declaring their immediate supervisor is a woman  | 35.9%  | 1.5%   | 9.5%   | 14.7%  | -10.3% | 1.8%   | 3.8%   | -38.5% | 4.8%   | 23.7%  |
| declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 0.3%   | 6.2%   | -4.0%  | 29.5%  | 23.6%  | 14.6%  | -9.7%  | 32.8%  | 32.3%  | 47.7%  |
| declaring to be very well informed about health and safety risks   | -4.3%  | -18.1% | -8.3%  | -12.3% | -14.8% | -8.4%  | 14.3%  | -14.8% | 2.1%   | 0.9%   |
| with non-standard work contracts   | 120.2% | -12.1% | -67.0% | -27.5% | 74.9%  | 115.8% | 76.9%  | 31.5%  | 7.5%   | 75.9%  |
| declaring to work more than once a week per month on Saturdays, Sundays or at night  | -11.0% | -16.0% | -14.0% | -16.7% | 5.0%   | -6.4%  | 8.3%   | 13.9%  | 1.6%   | -15.5% |

**Table 21g: Summary of intensity of changes – Mediterranean NMS countries**

| <i>Share of workers....</i>  | <b>CY</b> | <b>MT</b> |
|--|-----------|-----------|
| declaring to be very satisfied or satisfied with working conditions in main paid job   | 7.7%      | -2.1%     |
| thinking their health or safety is at risk because of work   | -19.5%    | 5.9%      |
| declaring to have been absent for health problems over the past twelve months  | :         | :         |
| declaring to be exposed more than half of their working time to ambient hazards  | -4.6%     | 1.1%      |
| declaring to be exposed more than half of their working time to chemicals or toxic hazards                                     | -57.5%    | 9.9%      |
| declaring to be exposed more than half of their working time to bad ergonomic conditions                                       | -2.9%     | 5.9%      |
| declaring that their jobs involve a high pace of work  | 19.6%     | 21.6%     |
| declaring that their pace of work is dependent on factors other than themselves  | -0.7%     | -5.1%     |
| declaring they are unable to choose or change organisation of their daily work   | 9.3%      | 88.6%     |
| in jobs with poor learning opportunities   | 4.5%      | -13.3%    |
| without training in previous year  | 7.2%      | -2.0%     |
| reporting they are subject to discrimination   | 30.4%     | 45.4%     |
| declaring their immediate supervisor is a woman  | 196.5%    | 153.5%    |
| declaring that they have discussed work-related problems either with boss or employee representative in the last twelve months | 0.5%      | 8.5%      |
| declaring to be very well informed about health and safety risks   | 39.9%     | -50.0%    |
| with non-standard work contracts   | 48.4%     | -16.0%    |
| declaring to work more than once a week per month on Saturdays, Sundays or at night  | 19.6%     | -0.9%     |

Table 22b: Changes in employment rates by main economic sectors of activity\*, by country

|                | Absolute change |          |          | Intensity of change |          |          |
|----------------|-----------------|----------|----------|---------------------|----------|----------|
|                | Agriculture     | Industry | Services | Agriculture         | Industry | Services |
| Denmark        | -1.2%           | -3.2%    | 4.4%     | -27.5%              | -11.8%   | 6.4%     |
| Finland        | -2.9%           | -1.8%    | 4.6%     | -37.9%              | -6.6%    | 7.1%     |
| Sweden         | -1.2%           | -3.6%    | 4.5%     | -35.1%              | -14.0%   | 6.4%     |
| Belgium        | -0.6%           | -3.6%    | 4.2%     | -23.9%              | -12.6%   | 6.1%     |
| Germany        | -0.8%           | -6.3%    | 7.1%     | -25.5%              | -17.4%   | 11.6%    |
| France         | -1.3%           | -3.2%    | 4.2%     | -26.2%              | -11.8%   | 6.2%     |
| Luxembourg     | -2.1%           | -7.9%    | 10.4%    | -54.1%              | -31.4%   | 14.7%    |
| Netherlands    | -0.5%           | -3.1%    | 1.9%     | -14.4%              | -13.6%   | 2.7%     |
| Austria        | -1.8%           | -4.6%    | 6.4%     | -25.0%              | -14.2%   | 10.5%    |
| Ireland        | -6.1%           | -0.1%    | 6.5%     | -50.7%              | -0.3%    | 10.8%    |
| United Kingdom | -0.7%           | -5.2%    | 6.1%     | -32.7%              | -19.1%   | 8.7%     |
| Greece         | -8.0%           | -0.8%    | 8.8%     | -39.3%              | -3.3%    | 15.6%    |
| Spain          | -3.7%           | -0.5%    | 4.2%     | -41.3%              | -1.6%    | 6.9%     |
| Italy          | -2.4%           | -2.9%    | 5.3%     | -36.2%              | -8.6%    | 8.8%     |
| Portugal       | 0.4%            | -1.6%    | 1.2%     | 3.1%                | -5.0%    | 2.2%     |
| Czech Republic | -0.9%           | -1.0%    | 1.9%     | -18.4%              | -2.6%    | 3.6%     |
| Estonia        | -1.6%           | -0.1%    | 1.7%     | -22.9%              | -0.4%    | 2.8%     |
| Latvia         | -3.3%           | 0.2%     | 3.1%     | -21.8%              | 0.8%     | 5.4%     |
| Lithuania      | -3.5%           | 2.4%     | 1.1%     | -20.1%              | 9.2%     | 1.9%     |
| Hungary        | -1.3%           | -1.9%    | 3.3%     | -21.3%              | -5.7%    | 5.5%     |
| Poland         | -1.8%           | -1.5%    | 3.3%     | -9.5%               | -4.9%    | 6.5%     |
| Slovenia       | -0.8%           | -1.3%    | 2.7%     | -7.8%               | -3.4%    | 5.4%     |
| Slovakia       | -1.5%           | 1.7%     | -0.3%    | -24.3%              | 4.6%     | -0.6%    |
| Bulgaria       | -0.7%           | 1.5%     | -0.7%    | -7.7%               | 4.6%     | -1.2%    |
| Romania        | -12.1%          | 4.6%     | 7.5%     | -27.3%              | 17.8%    | 25.3%    |
| Cyprus         | -0.1%           | 0.4%     | -0.3%    | -2.2%               | 1.6%     | -0.4%    |
| Malta          | -0.4%           | -0.9%    | 1.3%     | -17.7%              | -2.9%    | 2.0%     |

\*: 1995–2005 for EU15 countries and 2001–2005 for NMS

Source: Eurostat, Labour force surveys

**Table 24b: Share of employees declaring to usually work 48 hours or more a week, by country**

|                | 1995 | 2000 | 2005 | absolute<br>difference | difference<br>intensity |
|----------------|------|------|------|------------------------|-------------------------|
| Denmark        | 6.2  | 5.3  | 6.6  | 0.4                    | 6.5%                    |
| Finland        | 5.7  | 8.4  | 2.9  | -2.8                   | -49.8%                  |
| Sweden         | 6.7  | 7.1  | 7.6  | 0.9                    | 14.0%                   |
| Belgium        | 7.8  | 5.6  | 6.0  | -1.8                   | -22.9%                  |
| Germany        | 5.4  | 5.4  | 7.1  | 1.7                    | 31.9%                   |
| France         | 7.9  | 6.7  | 6.8  | -1.1                   | -13.7%                  |
| Luxembourg     | 7.8  | 6.4  | 7.1  | -0.7                   | -9.5%                   |
| Netherlands    | 6.9  | 5.8  | 4.4  | -2.5                   | -35.7%                  |
| Austria        | 10.1 | 8.8  | 6.2  | -3.8                   | -38.2%                  |
| Ireland        | 9.9  | 12.1 | 7.8  | -2.1                   | -20.9%                  |
| United Kingdom | 13.8 | 10.9 | 10.2 | -3.6                   | -25.9%                  |
| Greece         | 17.5 | 10.5 | 17.7 | 0.2                    | 1.2%                    |
| Spain          | 14.7 | 11.6 | 9.9  | -4.8                   | -32.7%                  |
| Italy          | 6.0  | 9.8  | 6.2  | 0.2                    | 4.0%                    |
| Portugal       | 9.8  | 8.8  | 9.7  | -0.1                   | -0.9%                   |
| Czech Republic |      | 21.4 | 19.1 | -2.2                   | -10.4%                  |
| Estonia        |      | 16.3 | 10.5 | -5.9                   | -36.0%                  |
| Latvia         |      | 25.3 | 17.1 | -8.3                   | -32.6%                  |
| Lithuania      |      | 20.1 | 17.4 | -2.7                   | -13.5%                  |
| Hungary        |      | 14.0 | 14.5 | 0.6                    | 4.1%                    |
| Poland         |      | 16.7 | 14.7 | -2.0                   | -11.8%                  |
| Slovenia       |      | 8.8  | 12.2 | 3.4                    | 38.2%                   |
| Slovakia       |      | 16.4 | 15.0 | -1.4                   | -8.7%                   |
| Bulgaria       |      | 17.8 | 14.0 | -3.7                   | -21.1%                  |
| Romania        |      | 28.7 | 24.5 | -4.3                   | -14.8%                  |
| Cyprus         |      | 12.2 | 10.6 | -1.6                   | -13.0%                  |
| Malta          |      | 8.0  | 10.1 | 2.1                    | 25.5%                   |





# Annex C:

## Literature review

### Introduction

In addressing the question of convergence or divergence, it should be noted that at least three different but interrelated levels of analysis exist. The first is the national level, which is shaped by the national institutions and their supposed complementarities. Very often, the comparison is between the performances of the various Member States. The second level is sectoral: each economic sector has its own characteristics – for example, working in the steel industry is different from working in a bank. Therefore, differences could be attributed more to the specificity of the sector than to the institutional infrastructure of a country. Finally, the company level and the form of the enterprise (small and medium-sized enterprises (SMEs), national, multinational or transnational) are also important. All of these levels are not independent variables and some affinities exist between the national level, the main sector and the type of enterprise in a particular country. In this review of the literature, it is not possible to address all levels in detail; thus, it will focus on the national level.

The debate around convergence and divergence is a broad discussion, which involves several academic communities including political economists, political scientists, sociologists, as well as international business and employment relations specialists. The debates address a range of institutions and levels – national, sectoral and enterprise; however, the national level has so far drawn more attention than the other two, at least in a comparative approach.

In most of the suggested typologies, employment relations are among the key variables used for delimiting different clusters. Nevertheless, working conditions are generally not addressed in great detail. This literature review will present the different approaches taking into account a broader perspective which is not limited to working conditions.

Comparative analysis of employment relations and labour law is not easy (see Bamber et al, 2004). Each country has a particular legacy of institutions, procedures and actors, which have developed over a long period. Particular policies and practices have to be understood in their historical and political-economic context – that is, from the perspective of path dependency – and in relation to the governmental strategies and institutions. Moreover, countries' systems are not static; external circumstances and internal factors can help to induce change. Several theories have been suggested to help to understand the dynamics of comparative employment relations. The convergence thesis was rejuvenated by the recent increasing pace of globalisation and by the evident strength of deregulated capitalist economies in recent years, on the one hand, as well as by the rapid and continuous technological change, on the other hand. However, powerful arguments posit that countries such as Germany and Japan, for example, are still quite different from others such as the UK and the United States (US) (Dore, 2000; Yamamura and Streeck, 2003).

This study will first outline the convergence and divergence theses in different fields. It will then review the different approaches linked to varieties of capitalism (VoC). The study distinguishes between three possibilities: a) bipolarisation between coordinated and uncoordinated ideal types; b) clustering around several models; c) hybridisation within each cluster and internal diversity. The study then draws some conclusions.

## Convergence

The convergence<sup>15</sup> thesis was developed in several branches of the social sciences in the period after 1945. The proposition is that a tendency exists for technological and market forces to push national systems towards uniformity or convergence. This proposition was based on the logic of industrialism that, as more societies adopt industrial forms of production and organisation, this would create ‘common characteristics and imperatives’ across these societies. Kerr et al (1960) have applied this approach to employment relations. To accommodate these imperatives, Kerr et al (1960, pp. 384–92) argue that industrial societies had to develop a means of developing employment relations systems which embodied the ‘principles of pluralistic industrialism’, which played a central role in establishing consensus. They concede that total convergence is unlikely because of the persistence of political, social, cultural and ideological differences. These authors acknowledged that factors existed which could mediate the relationship between industrialism and the particular institutions that developed, including the timing of development and the nature of the modernising elite. However, they also argue that the logic of industrialism tended to override these sources of difference and would produce convergence on a particular set of institutional arrangements of labour market regulation.

This tradition is mirrored by discussions of modern capitalism, which tended to suggest a convergence process at broad level toward a political-economy model based on mixed public and private ownership, strong planning activities and neo-corporatist institutions (see, for example, Shonfield, 1965; Galbraith, 1967). At that time, many authors already doubted that the convergence thesis could be considered as a general theory. They observed that certain aspects of industrial societies tend to converge while others diverge, depending on time and circumstances. An alternative approach which Piore (1981) suggested was to focus on the role of regulatory institutions in the employment relations of different societies. Piore argues that capitalist economies pass through a series of regulatory systems in the course of their historical development. As technology and industry change, they outgrow the regulatory structures initially adopted and the system is decreasingly likely to remain in some kind of balance. The result is an economic and social crisis which is settled only by the development of a new set of institutions.

In more general terms, others questioned the basic assumption that a common pressure will lead to common results. Even though strong pressures may be associated with industrialism, this does not necessarily imply convergence on a single set of societal institutions, much less on a single set of institutions resembling those that had developed in the US (Berger, 1996, pp. 2–4). In other words, common pressures are mediated by national institutions and trajectories, meaning path dependency. Pressures could be similar, but the outcomes may be different.<sup>16</sup>

Since the collapse of the Soviet Union, the emphasis on globalisation and continuing technological change induced a renewed interest in the convergence thesis, albeit one in a neo-liberal and financial paradigm. Among the factors leading to convergence, arguably there has been an increase in the international flows of information and capital, with more attention on shareholders’ short-term

---

<sup>15</sup> Some paragraphs in this section partly draw on Bamber et al (2004).

<sup>16</sup> Kerr later modified his views to take into account some of these criticisms. Kerr (1983) argues that convergence is a tendency that is not likely to precipitate identical systems among industrialised countries.

interests. Less emphasis is put on the longer-term horizon of patient capital from the banks. Shareholders' short-term interests have a stronger influence on managers' and companies' corporate behaviour. The financial markets, including the stock exchanges and private equity, are becoming central players. In the post-1990 context, as in the earlier context, several studies suggest that, rather than convergence, continuing diversity if not divergence can be seen (see, for example, Gospel and Pendelton (2005) on corporate governance).

The single market and the European Monetary Union (EMU) have also been considered by some academics as leading to some social convergence mainly concerning pay and working conditions (see the literature review on EMU in Pochet et al, 1999). Competitive pressures and social and fiscal dumping would lead to a downward spiral in social and working conditions.

Similar criticisms of not taking into account the institutions apply to this post-1990 globalisation thesis as applied to the earlier logic-of-industrialisation convergence thesis.

It may be useful here to distinguish between two versions of convergence. The simplest is the total convergence towards complete deinstitutionalisation and the supremacy of market forces (Ohmae, 1995), or the 'one best way approach' – be it technological or organisational; in other words, what this review has presented in the preceding paragraphs. A second version highlights an inversion of the institutional hierarchy and a new set of institutional complementarities. The French school of regulation argues that the post-war institutions, which may be referred to as 'Keynesian' following the theories of the British economist John Maynard Keynes, were dominated by considerations of labour markets and wage costs. The current context is dominated by considerations of capital markets and finance, which tends to govern the relations between the institutions (see, for example, Aglietta and Berrebi, 2006).

### **Continuing and renewing diversity**

Goldthorpe (1984) argues that, far from converging, industrialised countries have followed divergent paths. On the one hand, European countries like Austria, Germany, Sweden and Norway have mitigated inequalities between capital and labour through neo-corporatist institutions and state public policies; these countries seek to balance, to an extent, the interests of employers, trade unions and the state (see also Pontusson, 2005). In the 1980s, Japan attracted considerable attention at micro plant level with its 'lean production' work organisation strategies often referred to as 'Toyotaism' (Womack et al, 1990), and also at macro level with the interaction between different institutions (Dore, 2000). The success of the Japanese economy and a series of leading companies relaunched the debate over divergent forms of production and capitalism. The economic successes of the northern Italian districts were, at the same time, presented as a regional innovation within a country (see Zeitlin, 2008). Streeck (2001) and Poole (1986) identify several factors which operate to induce structural change, but argue that these are leading to diverse outcomes or 'divergent evolutionary trajectories'. Streeck likens this situation to the growing diversity in the use of technology and the structure of work organisation. The trend has been described as an 'explosion', with different strands of development moving away from each other in different directions – as opposed to 'implosive' convergence towards one notion of best practice.

In approaching this continuing and/or renewing diversity, this study will discuss three approaches: the VoC approach, the cluster approach, and the hybridisation and internal diversity approach.

### Varieties of capitalism

The best practice form of capitalism in the face of increasing international competition at micro level – that is, in companies – and at macro level is the institutional fitness of national economies in the face of globalisation (Dore, 2000; Sopart, 2005). A catalyst to the debate was the best-seller book by Albert (1991), which distinguishes between two ideal types – the Rhineland<sup>17</sup> and Neo-American models – which have similar economic performances; the variables used are religion, companies and wages, housing, urban transport, media, education and health. Hall and Soskice (2001) develop a parallel but more sophisticated distinction between ‘liberal’ and ‘coordinated’ market economies as two ideal types ‘at the poles of a spectrum along which many nations can be arrayed’ (p. 8); they used a more micro-level approach based on the interests of the employers. According to these authors, Ireland, the UK, Australia, Canada, New Zealand and the US can be characterised as liberal market economies. These countries may be contrasted with the relatively more coordinated market economies of Austria, Belgium, Denmark, Finland, Germany, the Netherlands, Sweden, Norway, Switzerland and Japan. It should be noted that an ideal type is formed from characteristics of a given situation, but it does not necessarily correspond to all of the characteristics of any particular case. Following Max Weber, an ideal type is a logical construct and is used to help to understand and explain reality by selecting and accentuating certain elements of it.<sup>18</sup> Unfortunately, confusion can often arise about the nature of this exercise and many authors try to classify all of the countries in one or another ideal type.

Hall and Soskice argue against the notion of convergence, and believe that more than one path leads to economic success; they consider that it is not inevitable – even in a period of globalisation – that there will be a convergence to a single Anglo-American model. These authors take into consideration four dimensions: corporate governance, education and training, industrial relations and intercompany relations – that is, the governance system between companies.

Beyond the argument of different complementarities, discussion is still ongoing about the indicators which could support the thesis. Hall and Gingerich (2004) have found evidence supporting the VoC thesis by using a sophisticated statistical analysis. Nevertheless, the thesis is still highly debatable; Kenworthy (2006) arrives at different conclusions with a no less sophisticated statistical analysis. From this perspective, it appears that it is difficult to support such an analysis by statistics which are unchallenged, mainly because most of the developed countries do not fit into the two ideal types: France or Italy are good examples.

More specifically on labour market institutions, Freeman (2000) questions the notion of a one best practice approach – or one peak capitalism – compared with diversified forms of capitalism and the differing impacts in terms of economic performance. Such approaches conclude that the market is

---

<sup>17</sup> The Rhineland model is not a geographic one. It includes, according to the author, northern Europe as far south as Switzerland and partially includes Japan.

<sup>18</sup> ‘An ideal type is formed by the one-sided accentuation of one or more points of view and by the synthesis of a great many diffuse, discrete, more or less present and occasionally absent concrete individual phenomena, which are arranged according to those one-sidedly emphasised viewpoints into a unified analytical construct. In its conceptual purity, this mental construct cannot be found empirically anywhere in reality’ (Weber, 1949, p. 90).

not the only efficient coordinating mechanism. They tend to argue that different configurations could reach similar results in terms of economic efficiency (see also Crouch et al, 2005).

As Thelen and Kume (2006) underline: ‘Much of the writing in the VoC literature (for example, Hall and Soskice, 2001) is based on a stylised and highly composite (national level) picture of employers’ interests.’ Thus, in this literature, employers – at least within a given country – in coordinated market economies are seen as having ‘invested’ in various institutions, such as wage-bargaining institutions. From this, it follows that they have an interest in maintaining these institutions, for instance, as the locus within which they can continue to coordinate among themselves, ‘to the benefit of all’ (Thelen and Kume, 2006, pp. 13–14).

In fact, Thelen and Kume’s study shows a growing sectoral diversity, with some economic sectors having increased coordination and others moving in the opposite direction (see also Jacoby, 2005). Furthermore, Morgan and Kubo (2005) distinguish the societal, sectoral, company and individual levels of analysis which reveal disjuncture or loosening of linkage both between the levels of analysis and within them. In other words, much more diversity at work could exist even within countries like Germany or the US – which are the models for creating the ideal types used in these approaches.

### Clustering

A recurrent criticism of the VoC approach is that it includes only two poles. Pontusson (2005) shows differences between the Nordic countries and Germany. Schmidt (2002) notes that another variety of capitalism exists: a statist one. This category includes France and to a lesser extent Italy, as well as South Korea. Perhaps this category could also encompass developmental states – such as Brazil – which are often apparent in newly industrialising economies. For Schmidt, at least three possible coordination mechanisms exist: the market, employers and the state.

A second stream of criticism focuses on the usefulness of working with only a limited number of variables. Most of the countries’ practices are far from the ideal types and the diversity of institutional complementarities could be lost by limiting the analysis to a few variables. Whitley (1999), for example, analyses what he refers to as ‘business models’ with much more variables. He considers eight aspects: the means of ownership control; the extent of integration of supply chains; the extent of integration of industrial sectors; the extent of alliance coordination of the supply chain; the extent of coordination between sectors; the extent of employer–employee interdependence; the extent of delegation; and the trust accorded to employees. Based on these variables, Whitley distinguishes between six types of business model: fragmented, coordinated industrial district, compartmentalised, state-organised, collaborative and highly coordinated. While such an approach is valuable, one limitation is that each case seems to represent a particular type of country. As Whitley is a specialist of Asian countries, his cases tend to refer to the east – for example, South Korea and Taiwan rather than France or Italy. In a logical way, he finds more diversity, since he uses more variables.

Others use statistical tools to delineate different clusters. Amable (2003) is one of the most cited studies in this regard. Amable proceeds in two steps. First, he constructs a typology based on five domains: product market competition, wage–labour nexus, finance and corporate governance, welfare state and education. Second, he conducts a statistical analysis, initially for each dimension and then regrouping all dimensions. The analysis confirms his typology so Amable proposes five models of political economy: market-based, social-democratic, continental European, Mediterranean



and Asian – the latter including Japan and Korea. In a way, it is not very different from the classical thesis of Esping-Andersen (1990).

It is notable that most analysts do not depart from the three types of welfare capitalism posited by Esping-Andersen (1990) and the fourth ‘world’ (Southern Europe) proposed by Ferrera (1996); for a recent review of literature on this topic, see Arts and Gelissen (2002). Different authors from various disciplines arrive at broadly similar clusters for the diverse domains which they analyse. Begg et al (2001) present a typology of employment regimes which is very similar to the welfare state typology. Other studies also confirm the prevalence of these four clusters for the EU15 Member States when focusing on different themes such as forms of work organisation (Lorenz and Valeyre, 2005), employment quality (Davoine and Erhel, 2006), flexicurity policies (Tangian, 2005; Vermeylen, 2006) or knowledge workers (Rüdiger and McVerry, 2007).

Nevertheless, each time the clusters are a little bit different. For example, Austria and the Netherlands are considered by some as belonging in the Scandinavian cluster, while Finland is often at the limit of that particular cluster and closer to the Continental one. Furthermore, Ireland generally does not perfectly fit with the characteristics of the Anglo-Saxon cluster.

Focusing on the EU, the main problem of this clustering model concerns the NMS and how to classify them. An interesting approach is presented in the work of Cartapanis et al (2005). They use a statistical approach with a principal component analysis and a hierarchical clustering method to classify 10 of the 12 NMS, excluding Cyprus and Malta. According to their analysis, Slovenia is close to the Continental model, the three Baltic States show similarities to the Anglo-Saxon model, and Bulgaria, Poland, Romania and Slovakia are close to the Mediterranean or Latin model. They hesitate for the Czech Republic and Hungary between the Continental and Latin models, before in the end deciding that they are closer to the latter.

However, other researchers consider the new continental Member States as a group, underlining their common path from a communist to market economy. It is difficult to clearly advocate in favour of one or another thesis – that is, to add the NMS to existing clusters or to create a new cluster – partly because the boundaries between clusters are blurring (see below).

The notion of clustering is appealing, not least in the way that it allows for much more diversity than the earlier, simpler approaches. Clustering is also a way to reduce the complexity and to consider specific institutional complementarities. Nevertheless, a limitation of clustering is that, although it seems to make sense for most of the EU15 – as well as the Anglophone developed market economies of Cyprus and Malta, for example – it makes much less sense for the range of newly industrialising economies, including the other NMS as well as Asian countries. Therefore, the architects of this notion try to assimilate emerging cases with the old categories – for example, France and Korea, Italy and Taiwan, and Slovenia with the continental EU Member States – or to create ad hoc categories, such as the NMS as a group.

Another default of a clustering strategy is that it tends to be conservative and to reproduce the same clusters, giving less attention to innovative and border cases. In other words, the conservative bias does not facilitate a consideration of the new dynamics which could be much more interesting to analyse.

### Hybridisation and internal diversity

One criticism of the national model notion is highlighted by considering intra-national differences between sectors or industries. For example, Katz and Darbshire (2000) examined six countries and found increased diversity of employment patterns across the countries studied. They call this trend 'converging on divergence' and argue that it was characterised by the spread of four employment patterns: low wage, human resource management (HRM), Japanese-oriented and joint team based. However, they also note differences in the distribution of these patterns between countries as well as within countries. They attribute these variations to differences in national institutions. In particular, they argue that differences reflect the differential impact of national-level institutions, the degree of centralisation of bargaining, the extent of commonality of processes at a decentralised level and the degree of effective coordination between decentralised bargaining structures.

Some argue, however, that the empirical evidence does not support their claim that four employment patterns are spreading across the six countries studied (Giles, 2000, p. 476; Hancké, 2001, p. 306; Streeck, 2001). It is also suggested that these employment patterns are not mutually exclusive.

One explanation of the continuing diversity is that borrowed institutions react differently to the surrounding institutions in the new environment and will necessitate adaptation of those 'imported practices' (Deeg and Jackson, 2006; see also the considerable volume of literature on policy transfer). Most of the literature on the supposed 'Anglo-Saxonisation' of German and Japanese companies shows a substantial adaptation and hybridisation of the role of shareholder value (Jacoby, 2005; Gospel and Pendleton, 2005) and the coexistence of various models within each country. The same results are found by those interested in the introduction of lean production in the car industry – that is, much more internal diversity rather than one common model (Boyer and Freyssenet, 2002).

Other commentators have developed a perspective of the actors involved. For example, the changes in the structure of employment are exacerbating the loss of trade unions' power. Although these changes are widespread, they are likely to have different consequences for employers, governments and trade unions, depending on their organisational base. Where union density is low, it is likely to decline further; whereas where density is high, it is more likely to remain stable. Heterogeneity is increasing not only between, but also within, national employment relations systems. Freeman (1989) finds evidence of divergent trends in trade union membership and density. He points out that a convergence is by no means occurring towards trade unionism as a modal type. In fact, Freeman notes that, although this is the principal worker institution under capitalism, trade unionism has developed remarkably differently. Since the 1980s, union density has risen or at least maintained high levels in the Scandinavian countries and Belgium, but has declined significantly in the UK, Australia, Japan, the US and other countries (Visser, 2006).

Streeck and Thelen (2005, p. 31) have theorised institutional change by distinguishing between the following five modes of transformation:

- displacement – a slowly rising salience of subordinate structures relative to dominant institutions;
- layering – new elements attached to existing institutions gradually changing their status and structure;
- drift – neglect of institutional maintenance in spite of external change resulting in slippage in institutional practice on the ground;



- conversion – redeployment of old institutions to new purposes;
- exhaustion – gradual breakdown over time.

These authors add two important elements in the debate. First, institutionalised rules are subject to reinterpretation by the actors. Collective bargaining is typically an institution in which rules are reinterpreted regularly (see, for example, Traxler, 2002). Their second point pertains to institutional diversity, as more than one institution may be present in the same domain in a particular country. This highlights that the diversity within each country may counter apparent similarities between countries.

Lorenz and Valeyre (2004, pp. 1–2), analysing organisational change in Europe based on the third EWCS conducted by Eurofound in 2000, conclude that: ‘One way of reading the evidence... on organisational diversity is that hybridisation is a pervasive phenomenon across European nations.’ They continue that an alternative reading would argue that much of the variety across Europe has resulted from building on local traditions in work organisation that offer alternative ways of achieving flexibility and cooperation.

The hybridisation thesis could also be seen as a form of convergence theory. If all national systems become hybrid, borrowing the most efficient institutions from other jurisdictions, eventually only one overall hybrid should emerge. As Becker (2006, p. 16) explains, since, in practice, real varieties of capitalism are always hybrids, it does not make sense to describe the process of convergence as ‘hybridisation’. What is described as hybridisation could be better understood as the re-mix of existing hybrids. The difference between hybridisation and internal diversity is that the former deals with only one way in which the cases may deviate from types, and it is still very close to the idea of clear, macro-level types, because it sees these as the source of hybridisation (Crouch, 2005, p. 41).

A variant of the approach of hybridisation is the internal diversity thesis, which is based on two approaches. The first focuses on the ‘meso’ level and suggests that no real national model exists. Sectors or regions are organised in different ways. For example, the ‘network’ capitalism district in northern Italy differs from the car industry around the northern city of Turin, which differs from the ‘paternalistic’ capitalism in the south of the country. Thus, internal diversity prevails.

The second approach underlines the role of the transnational companies and multi-level governance. According to Deeg and Jackson (2006, p. 14):

One consequence of the multi-level governance is the growing heterogeneity among firms within national models – in short, “models within models”. For instance, in many economies regulatory reforms offer distinct sets of rules for globally-oriented firms, which firms can opt into if they so desire.

Internal diversity is increasing because, to an extent, actors are able to choose which rules they would observe. Different coordination principles seem to coexist, even in liberal market economies. For example, in the US, Silicon Valley, California, has a different set of rules and practices compared with the car industry around Detroit, Michigan.

The British sociologist Colin Crouch (2005, p. 26) states that:

empirical cases must be studied, not to determine to which (singular) of a number of theoretical types they should each be allocated, but to determine which (plural) of these forms are to be found within them, in roughly what proportions, and with what change over time.

## Conclusions

This short review of literature on convergence and divergence did not aim to validate one approach against another. Instead, it has tried to show that each approach helps to understand a part of the reality.

When addressing this issue of convergence and divergence, it is important to specify the level of generality (Hay, 2002). For instance, a process of convergence may exist overall, for example around the idea of flexibility, an active labour market, a new form of organisation or lean production. However, at the same time, diverse national, sectoral or company policies may remain path dependent. Moreover, divergent trends may arise from one sector to another or in the implementation of practical measures on the ground. Thus, depending on the level chosen, convergence could occur at one level of analysis at the same time as diversity around country, sector or enterprise-specific policies, and even divergences when investigating at a very detailed level.

The convergence approach by nature will underline the common features. It is already known that no overall or total convergence on one unique model applies; nevertheless, a common direction or evolution can dominate at one point in time. This study highlights where a common dynamic often departs from the previous one.

The bipolar approach and more generally the cluster approach go one step beyond this and highlight persistent diversity, on the one hand, but also the sharing of common characteristics, on the other hand. This approach can be developed at national, sectoral, company or even category levels, depending on the variable(s) chosen. The ambiguity of such an approach is that it is an ideal-type approach, which often tends to try to prove that a country belongs to a particular cluster. In a way, the idea of family could fit better than a cluster: in a family, each member shares some characteristics but could also be very different. Contrary to the convergence approach, the cluster or family approach reduces the complexity without having to consider each case as a particular.

However, the obvious limitation to this approach is twofold: first, the number of cases under consideration is limited and covers the same few countries. Generally, four or five clusters or families are considered. It is difficult to take new cases into consideration, such as the NMS. Secondly, the approach takes for granted that no possibility arises of internal change which could create hybridity – that is, the transfer or adaptation of traits belonging theoretically to another family. In other words, it does not consider a modern-style family which could be composite and much more complex than a traditional one.

Finally, the hybridity or internal diversity approach underlines the internal diversity and growing complexity of each case. Although national institutions shape the main characteristics of a country, sectoral differences also exist. This approach highlights the fact that account should be taken of incremental change and non-complementarities.



European Foundation for the Improvement of Living and Working Conditions

**Convergence and divergence of working conditions in Europe: 1990–2005**

Luxembourg: Office for Official Publications of the European Communities

2009 – X, 107 p. – 21 x 29.7 cm

ISBN 978-92-897-0846-3

## **SALES AND SUBSCRIPTIONS**

Publications for sale produced by the Office for Official Publications of the European Communities are available from our sales agents throughout the world.

### ***How do I set about obtaining a publication?***

Once you have obtained the list of sales agents, contact the sales agent of your choice and place your order.

### ***How do I obtain the list of sales agents?***

- Go to the Publications Office website: <http://www.publications.europa.eu/>
- Or apply for a paper copy by fax (352) 2929 42758

*Quality of work and employment is a central element in the European Employment Strategy. This report examines whether EU Member States are converging or diverging with regard to working conditions and quality of work and employment. Taking as its point of departure the fourth European Working Conditions Survey which covered 31 countries, the report significantly draws on findings from the three previous surveys to compare trends across a fifteen-year time span. While the findings reveal a relative divergence in Europe with the joining of the new Member States in 2004 and 2007, the results confirm that the gap is closing and that in some of the older Member States there is evidence of disimprovements in some areas, such as prevalence of work intensity and reduced access to training. The report explores four main dimensions of job quality: career and employment security, health and well-being, skills development, and working time and work-life balance.*

**The European Foundation for the Improvement of Living and Working Conditions is a tripartite EU body, whose role is to provide key actors in social policymaking with findings, knowledge and advice drawn from comparative research. The Foundation was established in 1975 by Council Regulation EEC No 1365/75 of 26 May 1975.**



**Publications Office**

*Publications.europa.eu*

ISBN 978-92-897-0846-3



9 789289 708463