A Hard Day's Night: Collective bargaining, workers' voice and job quality

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This chapter analyses the role that collective bargaining and workers' voice play in promoting job quality, with a particular focus on its non-monetary dimension, i.e. the quality of the working environment. The chapter first builds a simplified framework to analyse the theoretical links between different forms of bargaining systems and workers' voice and the quality of the working environment. In the second part, it provides an overview of the quality of the working environment across different bargaining regimes and types of workers' voice using a mix of country-level and worker-level data. Finally, the chapter reviews what unions, workers' voice and employers can do to improve the quality of the working environment in five key dimensions: occupational safety and health, working time, training and re-skilling policies, management practices, and the prevention of workplace intimidation and discrimination.

In Brief

Key findings

Having fair and good conditions of employment is an important priority for workers and a primary goal for unions. It also matters for employers, since low job quality is associated with higher absenteeism, more physical and mental health problems, increased labour turnover and, in the end, lower productivity and firm performance. Improving job quality can thus be both welfare enhancing and economically efficient.

National laws often set minimum working conditions provisions such as e.g. minimum safety requirements, or maximum hours of work. Nonetheless, collective bargaining at all levels, and workers voice arrangements at firm level (both representative institutions such as union delegation or works councils, and direct forms of dialogue such as regular participatory meetings) can help governments, employers and unions to find mutually beneficial solutions.

The role of social partners in setting wages has been studied extensively (see Chapter 3), but their impact on non-monetary aspects of job quality such as the quality of the working environment has been less explored. Beyond the minimum standards set in the law, social partners can play a role in shaping working conditions through several channels. First, by negotiating and ensuring the enforcement of sectoral or firm-level collective agreements (which can derogate from the law, but also extend provisions in domains such as training or the adoption of new management practices and technologies). Second, by organising the expression of workers' voice through representative institutions in the workplace (such as union delegates or works councils). These can improve working conditions by bringing workers' concerns to the attention of management and leading to the development of collaborative solutions. Third, by improving standards set by the law through advocacy, lobbying and, in some cases, negotiations with governments.

Assessing the influence of social partners on job quality is empirically complicated. First, when designing a measure of quality of the working environment, data availability is an important constraint. Moreover, studying the link between national collective bargaining systems and measures of job quality would require long time series that are not available. Finally, when it comes to the impact of workers' voice arrangements on job quality at firm level, the assessment is complicated by reverse causality issues (e.g. union representation might affect working conditions, but poor working conditions might also motivate workers to join unions; unions themselves might primarily focus on firms where working conditions are most in need of improvement). Bearing these caveats in mind, this chapter shows that:

- At country level, measures of the quality of the working environment developed in the OECD
 Job Quality Framework are higher on average in countries with well-organised social partners
 and a large coverage of collective agreements where the number of job resources available
 to workers (e.g. autonomy, training and flexibility of working time), in particular, is higher.
- At firm level, voice can be mediated by representative institutions, with prerogatives varying from information to consultation and co-determination, and/or it can materialise through the organisation of regular direct exchanges between workers and managers. Direct and representative forms of voice, however, are not substitutes: the protections against retaliation and firing, and the information and consultation rights attached to the status of workers' representatives are absent in the case of direct voice.

Across European countries, the existence of direct dialogue and of mixed forms of voice (where representative institutions co-exist with direct forms of voice) are associated with a higher quality of the working environment (compared to the absence of voice arrangements). By contrast, workers with access to representative voice arrangements, but no direct voice, are on average more strained (and, in particular, they are in more demanding jobs) than workers in firms with no voice arrangements. Similar correlations are found when focusing on safety and health, working time, management practices and intimidation and discrimination. These correlations do not allow the existence or direction of any causal link to be established. The positive association between mixed voice and quality of the working environment could reflect the fact that employers and managers who create channels of direct dialogue with their employees are also more likely to engage in improving the quality of the working environment. By contrast, the presence of solely representative arrangements for voice could be characteristic of poor social dialogue contexts, where employers are unwilling to engage in direct exchanges with workers, but are either mandated by law to have representative institutions, or facing strained workers seeking representation to express their discontents, while benefiting from the legal protections attached to representative voice.

Recognising empirical limitations in dealing with these questions quantitatively, this chapter presents detailed qualitative data on the influence of collective bargaining systems and different forms of workers' voice arrangements on five key pillars of the quality of the working environment – occupational safety and health; working time; training and re-skilling policies; management practices; and the prevention of workplace intimidation and discrimination. The main results are as follows:

- Occupational safety and health (OSH): In all OECD countries, the law often contains very detailed minimum provisions and collective agreements cannot deviate from the terms set in the legislation. However, collective agreements and workers' voice arrangements, particularly dedicated health and safety representatives, are helpful in: i) increasing the amount of information available to workers; ii) acting as a communications channel for emerging problems and enabling solutions to be devised in partnership with management on the ground; iii) further improving standards; and iv) guaranteeing enforcement which is often challenging in small firms and in sectors with a high share of non-standard forms of employment.
- Working time: While international and national regulations set the basic standards, collective
 agreements on working time typically contain margins of adjustment so that firms can adapt
 specific conditions to their situations, even in countries where wage setting remains more
 centralised. For instance, social partners often shape normal working hours at sector level or
 bargain over the flexibility of working time arrangements. Interestingly, recent agreements in
 some OECD countries show that the issue of work-life balance is becoming more important as
 a topic of negotiations and campaigning.
- Training and re-skilling policies: Unions and employers' organisations are currently involved in the management of training funds, as well as skills assessments and the anticipation of skills needs, in a majority of OECD countries. The presence of any type of voice arrangements is positively associated with workers' access to training. Access to life-long training for workers is an increasingly important issue in collective bargaining agreements, as some landmark agreements in Denmark or Italy show. Yet, on average in OECD countries, only about 15% of firms are covered by an agreement including provisions on training.
- Management practices: Work organisation and management practices are primarily the
 responsibility of management. However, unions and workplace representatives strive to be
 involved in their definition to ensure that workers also have a say in them. In line with the general
 findings mentioned above on the role of workers' voice, direct and mixed forms of workers' voice

- are consistently associated with higher work autonomy and a higher incidence of practices such as teamwork, task rotation and self-assessment of own-work.
- Intimidation and discrimination prevention: While workplace discrimination has not historically been at the forefront of unions' agendas, this has changed in recent decades. Unions have carried out internal re-organisations to take account of equality concerns, negotiated specific clauses to prevent discrimination and better represent a diverse workforce in collective agreements, and developed initiatives to prevent discrimination at workplace level. The full extent of harassment at work has recently gained more prominence. Data for European countries show that direct and mixed forms of workers' voice arrangements are associated with a lower incidence of various forms of intimidation and discrimination.

Introduction

One of the key objectives of collective bargaining is to ensure fair and good conditions of employment. The link between collective bargaining and wage determination or inequality has been largely investigated in the economic literature (see Chapter 3 for a detailed review). By contrast, more attention may be needed on the association between workers' voice arrangements and collective bargaining on non-monetary aspects of job quality. To fully grasp social partners' contributions to job quality, it is essential to consider the diversity of topics covered by collective agreements, and also addressed through workplace cooperation and consultation. Workers' voice arrangements and collective bargaining are not only institutional means of articulating and pressing demands for higher wages. They also provide a platform for collective communication between governments, workers and employers, and cover other issues (Freeman and Medoff, 1984[1]).

For example, social partners can help to improve workers' labour market security by providing support, guidance and access to up- and re-skilling for workers who lose their jobs in the event of restructuring and mass-layoffs (see Chapter 5). In some cases, they are also involved in the design and management of unemployment benefit systems. Social partners can also shape a number of other aspects of non-monetary working conditions in sectoral and firm-level agreements: they often participate in the design and implementation of occupational health programmes; they can help improve work organisation. Moreover, at firm level, workers' voice can help address conflicts and foster exchanges between workers and their employers. In other words, collective bargaining and workers' voice institutions can significantly affect both the monetary and non-monetary dimensions of jobs.

While the non-monetary aspects of job quality are clearly a primary concern for workers and unions, they also matter for employers (Saint-Martin, Inanc and Prinz, 2018_[2]; Eurofound, 2017_[3]). A poor quality of the working environment is, for instance, associated with higher absenteeism, more health problems while at work, health-related early retirements and increased labour turnover, all aspects likely to have a direct effect on workers' productivity and firms' performance. Thus, ensuring a good working environment is both welfare enhancing and economically efficient and an area in which employers and unions can find mutually beneficial solutions.

Based on the premise that job quality is an inherently multi-dimensional concept,¹ which is critical for workers, firms and society, the OECD has developed a framework for measuring the quality of employment. This framework, which has been adopted by the G20, identifies three key complementary dimensions of job quality: the quality of earnings, labour market security and the quality of the working environment, which captures non-monetary aspects of job quality (OECD, 2014_[4]). Building on this framework, this chapter looks at the relationship between collective bargaining, workers' voice and job quality. It starts by providing a simplified framework of the theoretical links between collective bargaining

institutions, types of workers' voice, and the quality of jobs (Section 4.1). It then provides a descriptive overview of how the quality of the working environment (the third dimension of job quality in the OECD framework) compares across different collective bargaining regimes and forms of workers' voice (Section 4.2). Finally, Section 4.3 discusses how social partners might be able to improve the quality of the working environment through their ability to negotiate and influence regulations in five domains: occupational safety and health; working time; training and re-skilling policies; management practices; and the prevention of workplace intimidation and discrimination.

On average, some collective bargaining regimes seem to perform better than others in terms of the quality of the working environment, although no statistically significant links are evident between the two. When comparing measures of the quality of the working environment across collective bargaining systems, however, it is not possible to pinpoint the specific levers available to social partners to affect these measures. Beyond provisions negotiated in collective agreements, workers' voice arrangements in the workplace may also shape job quality outcomes, notably those linked to the working environment.

In order to gain a more detailed understanding of how social partners affect job quality and the mechanisms at play, the chapter looks in more depth at the main components of the quality of the working environment. It explores how the five aforementioned dimensions of the quality of the working environment are influenced through both the bargaining and voice functions. Therefore, the chapter provides a picture of the actual extent of bargaining and workers' voice in these fields, sheds light on how collective bargaining and workers' voice can deliver good outcomes for job quality, and identifies good practices at country and sector level.

4.1. Collective bargaining, workers' voice and job quality: A framework

The jobs people hold are one of the most powerful determinants of well-being, as most people spend a substantial part of their time at work and work for a significant part of their life. Building on international measurement efforts to provide a benchmark for policymakers (ILO, 2012_[5]; Eurofound, 2012_[6]; UNECE, 2015_[7]), the OECD has developed an operational framework for measuring and assessing job quality through three objective and measurable dimensions of job quality. These are both important for worker well-being and relevant for policy. Together, these dimensions provide a comprehensive assessment of job quality.

The first dimension, earnings quality, refers to the extent to which the earnings received by workers in their jobs contribute to their well-being. While the level of earnings provides a key benchmark for assessing their contribution to material living standards, the distribution of earnings across the workforce also matters for well-being. The OECD measure of earnings quality therefore accounts for both the level of earnings and their distribution across the workforce. The second dimension, labour market security, captures those aspects of economic security that are related to the probability of job loss and its economic cost for workers. The measure of labour market security is thus a function of the risk of unemployment (which encompasses both the risk of becoming unemployed and the expected duration of unemployment) and of the extent of compensation in case of job loss (which takes into account both the coverage of benefits and their generosity). The third dimension, the quality of the working environment, captures non-monetary aspects of job quality related to the nature and intensity of the work, access to training, working-time arrangements, management practices, etc.

How can collective bargaining shape job quality outcomes? A number of institutional theories have linked job quality outcomes to different institutional models.² Figure 4.1 sketches the main transmission channels through which collective bargaining regulation and workers' voice can influence the three key dimensions of the *OECD Job Quality Framework*. Collective bargaining does not affect all of these dimensions equally. For instance, employment protection is less directly affected by collective bargaining, though union advocacy related to legislative initiatives will have some impact. By contrast, collective bargaining has a

direct impact on earnings (see Section 4.1.1) and working conditions. The dark blue part of the figure outlines in particular how social partners could improve job quality through their ability to intervene in five areas that are constitutive of the quality of the working environment (and for which some data can be mobilised). These are occupational safety and health, working time, training, management practices, and the prevention of workplace intimidation and discrimination (see Section 4.2.2 for a more detailed discussion about the role of these domains for the quality of the working environment).



Figure 4.1. Collective bargaining and job quality

4.1.1. Collective bargaining and earnings quality

Chapter 3 of this publication provides detailed and up-to-date results on the link between collective bargaining and wage levels and dispersion, the two components of earnings quality. The main findings are summarised below.

Because unions have long been considered primarily as "wage setting institutions" in economic models, the link between collective bargaining and wage outcomes has been widely explored. Earnings quality accounts for both average earnings and their distribution. Collective bargaining, through fixing detailed pay scales for a large share of workers, has a direct effect on these two components.

From a theoretical point of view, unions can affect wage levels and dispersion in several ways -see Bryson (2014_[8]) for a detailed discussion of potential mechanisms. Unions draw their bargaining power from their representativeness and the legal right to strike: the threat to stop work can be used to negotiate higher wages or to resist wage cuts. Unions can also have an effect on wages by providing a "voice" to workers and a counterpart to employers to resolve disputes, reduce "exit" (i.e. voluntary quit rates) and thus provide an incentive for more investments in the human and physical capital of the firm. Even in the absence of a union, the threat of unionisation may lead employers to raise wages to reduce workers' incentive to organise. Moreover, unions and collective bargaining also have an effect on wage distribution. By setting wages and working conditions for many workers, bargaining at the firm level covers individuals who may not have the power to negotiate individually and, therefore, compresses pay differences within firms. When undertaken at sectoral level, collective bargaining, by centralising or co-ordinating negotiations across a large number or firms and/or sectors, reduces pay differences among a larger pool of workers – and hence further reduces overall wage inequality.

The empirical evidence on the role of unions and collective bargaining on wages and wage distribution is largely dominated by studies of English-speaking countries where there is no or little sectoral bargaining, and where union organisation at the firm or workplace level is the only way to negotiate wages collectively.

A review of the literature for the United States and the United Kingdom points to a union membership wage premium of between 10% and 15% (Bryson, $2014_{[8]}$). In Canada, the union wage premium has been found to be around 12.5% in wages and 15% in benefits when compared against non-union members (Benjamin et al., $2012_{[9]}$) – and is even larger for women, Indigenous persons, non-standard workers, young workers, and new immigrants (Gomez and Lamb, $2016_{[10]}$). Union representation has also been found to significantly reduce wage dispersion – see, among many, Blanchflower and Freeman (1993_[11]), Blau et al. (1999_[12]), Card, Lemieux and Riddell ($2004_{[13]}$) and DiNardo and Lee ($2004_{[14]}$).

The evidence in countries where bargaining happens at other levels is more limited. However, collective agreements at the firm level have also been found to have a clear positive effect on wages in the context of multi-level bargaining systems. This is not surprising, as firm-level agreements either complement existing sectoral agreements – and hence can often only raise wages – or provide the only cover for workers who would otherwise not be covered by any agreement. By contrast, on average across OECD countries, workers covered by a sectoral agreement do not necessarily enjoy a wage premium (see Chapter 3). These results are in line with a large body of the literature which finds that sectoral bargaining is not linked with higher wages on average – see Dell'Aringa and Lucifora (1994_[15]), Hartog, Leuven and Teulings (2002_[16]), Rycx (2003_[17]), Cardoso and Portugal (2005_[18]) and Eurofound (2015_[19])– and may reflect the wage moderation role played by wage co-ordination at sectoral level. They are also in line with other findings in Chapter 3, namely that wage dispersion is greater in systems with no collective bargaining or where firms set wages independently, and smallest among workers who are covered by sectoral bargaining.

4.1.2. Collective bargaining and labour market security

Social partners also affect the degree of labour market security. In the *OECD Job Quality framework*, labour market security is defined as a function of the risk of becoming unemployed coupled with the financial risk associated with staying unemployed. It is therefore a function of the financial compensation in case of unemployment. Social partners can affect labour market security through negotiating wages and sometimes hiring and firing rules, as well as through their role in managing unemployment benefits in some contexts³. In addition, social partners aim to increase labour market security by limiting the use of involuntary non-standard forms of employment.⁴

In the literature, the role of unions and collective bargaining for labour market security is a more controversial subject than their role for earnings quality. Economic theory predicts that unions risk generating unemployment if they bargain exclusively over wages (Leontief, 1946_[20]), set wages above the market equilibrium, or neglect the interest of outsiders (e.g. the unemployed, low-skilled, youth, and those in non-standard employment) – for instance by accepting the development of temporary and part-time employment as a buffer for their members (Saint-Paul, 1996_[21]; Lindbeck and Snower, 1986_[22]; Bertola, 1999_[23]).

However, if both wages and employment are covered in the negotiations – in what has been termed "efficient bargaining" (McDonald and Solow, 1981_[24]), employment is not reduced. If bargaining also includes the level of unemployment insurance or severance payment, bargaining is described as strongly efficient and employment reaches its optimal level (Cahuc, Carcillo and Zylberberg, 2014_[25]).

In addition, when product market competition is imperfect (i.e. when firms have some degree of monopoly or oligopoly power), higher wages may not induce greater unemployment but rather a rebalancing as workers exert bargaining power to increase the labour share. In cases where employers have the power to unilaterally set wages below the competitive wage, maximising profits at a lower level of employment than in the purely competitive framework, stronger bargaining power and higher wage floors can increase employment. Indeed, with higher wage floors profits will be maximised at a higher level of employment (Cahuc, Carcillo and Zylberberg, 2014_[25]).

Overall, the actual effect of collective bargaining on employment is likely to depend on the behaviour of actors and the structure of the market. As mentioned in previous chapters, insider-outsider theories suggesting that

unions tend to neglect the interest of outsiders do not receive much support in the findings of other chapters in this publication or in recent empirical evidence (Gramm and Schnell, 2001_[26]; Autor, 2003_[27])- see also OECD (2018_[28]).

For OECD countries, Freeman (1988_[29]) finds no effect of unionisation on unemployment, while Nickell (1997_[30]) and Nickell and Layard (1999_[31]) find a positive correlation. Scarpetta (1996_[32]) suggests that a high unionisation rate tends to reinforce the persistence of unemployment. However, when looking beyond union membership and analysing the role of bargaining systems as such, the previous chapter, as well as other research (Aidt and Tzannatos, 2008_[33]; Elmeskov, Martin and Scarpetta, 1998_[34]; Bassanini and Duval, 2006_[35]) has shown that sectoral bargaining systems where wage co-ordination plays a significant role are associated with lower unemployment relative to fully decentralised systems. Co-ordination in wage bargaining helps to account for the macroeconomic effects of wage agreements by ensuring that these agreements do not undermine external competitiveness and are set in line with the business-cycle situation, thus strengthening labour market security (OECD, 2017_[36]). Such systems, therefore, allow the internalisation of macroeconomic constraints better than fully decentralised ones.

The degree of labour market security is not only determined by the risk of unemployment but also by the existence of an unemployment protection scheme to mitigate the economic cost associated with job loss. Historically, unions and other forms of workers' organisations developed the first forms of mutual insurance and increasingly mobilised for the expansion of social rights (Boeri, Brugiavini and Calmfors, 2001_[37]). In most OECD countries, many of the insurance functions that unions provided are now provided by the State. However, in Denmark, Finland, Iceland, Sweden and partly Belgium, social partners still play a significant role in the administration of unemployment insurance (so-called "Ghent systems"). While increasingly challenged by the emergence of private insurance funds that do not require union membership, union-affiliated funds still play a major role in strengthening labour market security in the countries where they are present. Moreover, in non-Ghent system countries, collective agreements sometimes include specific provisions on social security and employer contributions to pension, disability and unemployment funds that contribute to improve labour market security beyond the minimum levels established by the law. In Canada, for instance, a tripartite commission (the Canada Employment Insurance Commission) administers certain aspects of the employment insurance scheme such as premiums.

Finally, in addition to *ex post* support in case of job loss, trade unions and employer organisations also engage in *ex ante* initiatives to re-skill and re-train workers, facilitate transitions in the labour market, and reduce the risk of long unemployment spells.

4.2. Collective bargaining, workers' voice and the quality of the working environment

4.2.1. An assessment usually based on job satisfaction and plagued with issues of reverse causality

The literature on the relationship between collective bargaining and job quality, and notably its non-monetary dimensions, has developed along two main lines. First, a few studies have looked at the effect of the presence of trade unions in the workplace on specific aspects of the quality of the working environment, such as working time arrangements, occupational safety and health measures, or training. Second, other – more numerous – studies have focused on the impact of trade unions and collective bargaining on subjective well-being outcomes, such as job satisfaction.

While unions operate to improve working conditions, the theoretical predictions of the link between trade unions and job satisfaction are not clear-cut. On the one hand, unionised workers should feel more protected, with more control over their working conditions and a stronger feeling of organisational commitment, and hence overall they should be more satisfied. On the other hand, unsatisfied workers or those in jobs of lower quality

are also more likely to decide to join a union to express and address their dissatisfaction. In the absence of a union and lacking a possibility to voice their concerns, dissatisfied workers might be more likely to quit - as predicted by the exit-voice model (Hirschman, 1963_[38]). By contrast, dissatisfied workers are more likely to stay in firms where unions are present. In addition, union members may be comparatively less happy at work than non-members because they hold employers to higher standards of behaviour and obligations (Ross, 1953_[39]; Bryson, Forth and George, 2012_[40]).

Most empirical papers exploring the relationship between unions and workers' well-being actually find that unionised workers are less satisfied with their jobs than non-unionised workers – see review by Hammer and Avgar (2005_[41]) and meta-analysis by Laroche (2016_[42]). However, most of these studies suffer from problems of reverse causality. The negative correlation observed in many studies is probably due to selections effects, whereby dissatisfied workers self-select into unions – rather than to a *negative effect* of unions per se on job satisfaction. Looking at the United Kingdom and the United States, Bryson and Freeman find that poor job quality and bad management indeed increase desire for union representation among surveyed individuals (Bryson and Freeman, 2013_[43]). Another issue comes from the fact that unionisation, through offering employees an opportunity to address poor job quality via bargaining and voice, prevents the exit of dissatisfied workers (Bryson and Green, 2015_[44]). Finally, reverse causality issues may also be due to a reporting effect, facilitated by the existence of a voice channel in unionised workplaces, which is likely to increase the reporting of dissatisfaction and incidents that would otherwise go unreported.

A closer look at the literature (Laroche, 2016_[42]) reveals that only 14 out of 59 surveyed studies properly deal with these issues. Among the 14 studies that do attempt to address reverse causality and selection, only eight use panel data to control for unobserved, time-invariant confounding factors and to determine the direction of the causal relationship. When focusing only on these studies, the negative effect of union membership on job satisfaction disappears – see e.g. Bender and Sloane (1998_[45]), Bryson et al. (2004_[46]), Bryson and White (2016_[47]).

Beyond the difficulties of properly accounting for selection issues and confounding factors, using workers' satisfaction with their job creates other limitations. The major drawback of using job satisfaction as an indicator of the quality of the working environment is that it captures many other dimensions of the job (such as earnings) that are not related to the working environment. Furthermore, there are often discrepancies between objective observable characteristics of a job and reported job satisfaction due to individual expectations and comparison with reference points: individuals may not only refer to previous jobs, to reference groups or to other jobs available, but also adapt their expectations to poor quality jobs, thereby reducing gaps between job quality and job satisfaction. Overall, these drawbacks imply that job satisfaction is not a good indicator to compare the quality of the working environment across individuals, countries, or over time (OECD, 2017_[48]).

4.2.2. Towards an objective measure of the quality of the working environment

As outlined above, several important aspects of non-monetary job quality – such as workers' autonomy in their jobs, or their learning opportunities, are essential to assess accurately the quality of employment. Good relationships with colleagues matter as well, as do practical aspects such as working time arrangements and flexibility. When jobs and workplaces cumulate these factors, people are more able to manage work pressure and difficult tasks; they also tend to be healthier, more satisfied and committed, and possibly more productive (Cazes, Hijzen and Saint-Martin, 2015_[49]).

The OECD measures the quality of the working environment in a manner that is inspired by models developed in the occupational health literature, and notably job strain models. In those models, job strain results from an imbalance between high demands (work-related stress factors) and the insufficient resources workers have at their disposal. This imbalance has potentially detrimental effects on health. The *OECD Job Quality Framework* builds on the "Job Demands-Job Resources Model" developed by Bakker and Demerouti (2007_[50]); the latter is applicable to a wide range of occupations, which is important for cross-country comparisons given countries differing occupational compositions (Box 4.1).

Box 4.1. Quality of the working environment and workers' well-being: The main models

Policy interventions aimed at fostering non-monetary aspects of job quality have primarily concentrated on the quality of the *physical* working environment, notably to prevent and curb accidents at work. Yet emerging evidence on the existence of other types of risks (psychosocial ones), with equally detrimental consequences on workers' health and well-being, has broadened the scope of research to the *overall* quality of the working environment and its determinants.

Three theoretical models have been particularly influential in accounting for the rise of the "risks for mental, physical and social health, created by employment conditions and the organisational and relational factors that can interact with mental functioning" (Gollac and Bodier, 2011_[51]): the Demand-Control model; the Effort-Reward imbalance model; and the Job demands-Resources model. According to the seminal work by Karasek (1979_[52]) who developed the Demand-Control model (DCM), the primary source of job stress is caused by the joint effects of work environment factors –and notably the combination of high job demands (such as work intensity and time pressure) and low control over how individuals meet these demands (workers' latitude in taking decisions).

An alternative model is the Effort-Reward Imbalance model (ERI), which emphasises the importance of ensuring fairness in rewards (rather than job control) in a context of high demands (Siegrist, 1996_[53]). In this model, efforts in the workplace are exchanged with socially recognised occupational rewards such as adequate salary, recognition, promotion prospects and job security. One tenet of the model is that the severity of the consequences of an effort-reward imbalance increases with workers' difficulty to change jobs. Given that low-skilled workers have few exit options, in particular in a context of tight labour market, they represent a particularly exposed group to an effort-reward imbalance.

The third main model, the Job Demands-Resources (JD-R) model (Bakker and Demerouti, 2007_[50]) builds on a more flexible and comprehensive model, which considers that every occupation may have their specific underlying risk factors. The JD-R model expands the definition of Karasek's (1979_[52]) model by considering as demands all those physical, psychological and organisational aspects of the job that require sustained physical and/or psychological effort. Job resources, on the other hand, include those job attributes that may reduce job demands, be instrumental in achieving work goals or stimulate personal accomplishment. Hence, beyond work autonomy or job reward, they also include opportunities to learn, support from colleagues and managers, well-defined work goals and appropriate feedback on the work performed. The central premise of the model is that, irrespective of the occupation, job demands may generate a strain or health impairment process, whereas job resources induce a motivational one.

All three models differ in their scope of explanatory factors, and the extent to which they include personal factors. The DCM model, for instance, focuses exclusively on the nature of the working environment, while the ERI adds a personal component based on expectations, attitudes and perceptions. Moreover, the DCM model, due to the emphasis on job control⁵, tends to categorise manual/low skilled jobs as high strain jobs whereas the ERI model tends to classify fixed term jobs, or jobs without a career ladder, as high-strain jobs. Overall, both the DCM and ERI models devote a lot of attention to work overload and control, neglecting other types of drivers potentially crucial for well-being. The JD-R model, on the other hand, seeks to give an explanatory role to a broader range of factors and individual characteristics, and presents clear advantages for cross-country analyses. First, it can be applied to a wide range of occupations, which is important given countries differing occupational compositions. Second, it focuses on aspects of *work*, rather than on dimensions related to workers' personality; as such it is more directly related to job quality. Finally, it considers aspects of jobs such as achieving work goals and stimulating personal development that are likely to matter for workers' well-being. For these reasons, measures of quality of the working environment in the *OECD Job Quality Framework* follow a JD-R model.

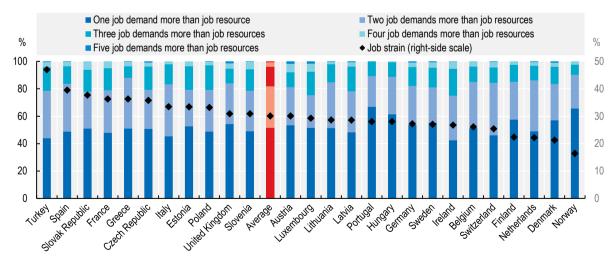
The range of potentially relevant job demands and job resources to be included in a JD-R model is very large. Schaufeli and Taris (2014_[54]) list for instance 30 different types of job demands and 31 types of job resources. However, when designing a measure of quality of the working environment, data availability is an important limitation. The imperatives of cross-country and longitudinal comparability are additional constraints. Striking a balance between the comprehensiveness of the measure and its applicability across time and countries, this chapter considers five different job resources (autonomy at work, training, working time flexibility, social support and good management practices) and five job demands (task monotony, hard physical work, work intensity, unsocial work schedule and intimidation and discrimination)⁶. These ten demands and resources are related to five domains that are key pillars of the quality of the working environment, namely occupational safety and health, working time, training and re-skilling policies, management practices, and the prevention of workplace intimidation and discrimination.⁷ Annex 4.A provides a summary of the definitions and sources used to build these data.

Various indicators of the quality of the working environment that account for both the cumulative aspects of job demands and the potential compensating effects on an individual's physical and mental well-being can be considered. Figure 4.2 displays the *distribution* of job demands exceeding job resources and therefore generating job strain, as well as the *share* of workers experiencing job strain. On average across OECD countries, 30% of workers experienced job strain in 2015, with a differential of one demand more than resources for about half of them, and at least two demands more than resources for the other half.

The incidence of job strain is lowest in Norway, where about 17% of workers are "strained", by one excess demand compared to resources for over 60% of them. By contrast, the incidence of job strain is highest – close to 50% – in Turkey, where over half of strained workers experience a differential of at least two demands more than resources. Across countries, a positive relationship between the incidence of job strain and its intensity (i.e. the size of the differential between job demands and job resources) can be observed. In other words, countries with a large share of workers in strained jobs tend to display also more severe job strain levels than countries where the majority of workers enjoy good quality working environment.

Figure 4.2. Quality of the working environment in European countries

Distribution of job demands exceeding job resources and incidence of job strain, employees aged 15-64, 2015



Note: Average is the unweighted average of countries shown. Survey weights are used. Source: OECD estimates based on the 6th European Working Conditions Survey (EWCS).

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4.2.3. Do some collective bargaining systems perform better than others in terms of the quality of the working environment?

Differences in collective bargaining systems can contribute to explaining differences in the quality of the working environment. For instance, a large coverage of collective agreements can diffuse best practices across a large number of companies. Moreover, strong social partners can help ensure a high degree of compliance with provisions spelt out in legislation or collective agreements. Figure 4.3 shows the incidence of job strain as well as the average number of job demands and job resources across collective bargaining regimes using the taxonomy developed in Chapter 3, which identified five categories of collective bargaining systems:

- Predominantly centralised and weakly co-ordinated collective bargaining systems, such as France, Italy or Spain, where sectoral agreements play a strong role, derogations are limited and wage coordination is largely absent.
- Predominantly centralised and co-ordinated collective bargaining systems, such as Belgium (and, until 2015, Finland), where sectoral agreements play a strong role but wage co-ordination is strong across sectors.
- Organised decentralised and co-ordinated collective bargaining systems, such as the Nordic countries or Germany, where sectoral agreements leave significant room for lower-level agreements to set the standards.
- Largely decentralised collective bargaining systems, such as Australia, Japan or Greece, where firm-level bargaining is the dominant bargaining form, but sectoral bargaining (or a functional equivalent such as Modern Awards in Australia) or wage co-ordination also play a role.
- Fully decentralised collective bargaining systems, such as Canada, Korea, the United States and
 most Eastern European countries where bargaining is essentially confined to the firm or
 establishment level.

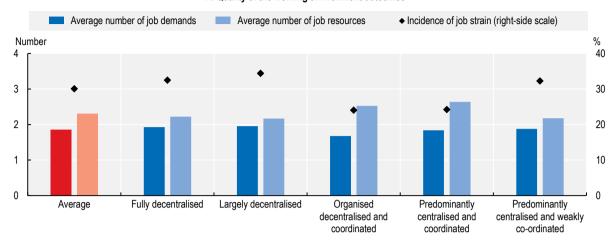
The figures in Panel A show that, on average, job strain in 2015 was lower in organised decentralised and co-ordinated systems, as well as in predominantly centralised and co-ordinated ones, and higher in fully decentralised, largely decentralised and predominantly centralised and non-coordinated systems. Organised decentralised and co-ordinated systems, as well as centralised and co-ordinated ones have in common both a strong degree of organisation of social partners and a large coverage of collective agreements. Predominantly centralised and non-coordinated systems are also characterised by relatively high coverage of collective agreements but social partners are in several cases relatively weak. On the other hand, fully and largely decentralised systems are characterised by low coverage and weak social partners. Analysis for previous years show similar patterns (see Annex 4.A).

Unpacking the factors of job strain, Panels B and C show that lower job strain in organised decentralised and co-ordinated systems, as well as in centralised and co-ordinated ones, corresponds in particular to higher job resources (autonomy, training and flexibility of the working time). The pattern in job demands is however less clear, with organised decentralised and co-ordinated systems, as well as centralised and co-ordinated ones showing a lower incidence of monotonous tasks but also a higher degree of reported intimidation or discrimination. This latter descriptive result could be explained by the "reporting effect" discussed above: the strong degree of organisation of social partners that is characteristic of these systems is likely to imply that better systems are in place to record cases of intimidation and discrimination – as reflected in an apparently higher number of cases.

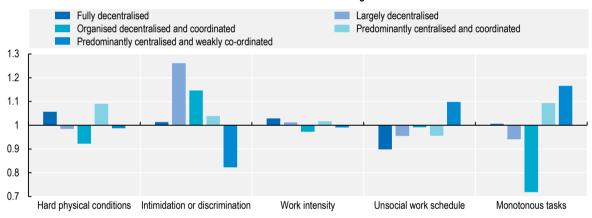
Figure 4.3. Job demands and job resources by collective bargaining systems in Europe

Unweighted averages across countries, employees aged 15-64, 2015

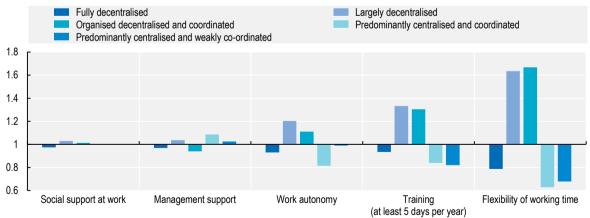
A. Quality of the working environment outcomes



B. Job demands
Ratio of incidence base 1 for the overall average across countries



C. Job resources
Ratio of incidence base 1 for the overall average across countries



Note: Average is the unweighted average of all European countries shown. Survey weights are used. For further details on definitions and constructions of the indicators, see Annex Table 4.A.1. and for a description of the taxonomy of collective bargaining systems, see Annex 3.A. Source: OECD calculations based on the 6th European Working Conditions Survey (EWCS), 2015.

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While these figures suggest that there might be some positive patterns linking specific collective bargaining systems and the quality of the working environment, they are only descriptive. They do not lead to clear conclusions on whether any particular collective bargaining system is systematically performing better in terms of the quality of the working environment.

Looking at the link between collective bargaining systems and individual sub-dimensions of the quality of the working environment reveals a similar pattern. For instance, there is no clear "best-performer" among existing types of collective bargaining institutions in terms of occupational safety and health outcomes. Rather, different combinations of collective bargaining and regulations, involving different types of collective bargaining institutions, can lead to the same results in terms of health and safety performance.⁸

4.2.4. The role of workers' voice

Beyond provisions negotiated in collective agreements, the presence of institutional arrangements for workers' voice in the workplace, may also participate in shaping job quality outcomes, notably those linked to the working environment.

Most studies of the effect of worker's voice on various non-monetary job quality outcomes primarily consider *subjective* measures of job quality such as job satisfaction. For instance, Holland et al. (2011_[55]) find that direct voice is positively associated with subjective job satisfaction. Voice, in general, when facilitating employee involvement, is found to lead to better outcomes in terms of subjective perception of risk of employment loss, of unfair treatment, or of job-status loss (Felstead, Gallie and Green, 2015_[56]). The presence of union onsite representatives is also positively associated with employees' subjective perception of job content, work-life balance and job stress (Hoque et al., 2016_[57]).

Theoretically, the link between voice and *objective* measures of the quality of the working environment remains ambivalent. On the one hand, for instance, firm-level organisational changes are more likely to be negotiated with workers where systems of employee representation are in place (Felstead, Gallie and Green, 2015_[58]; Wood, 2008_[59]). This leads one to expect a positive relation between voice and the quality of the working environment. On the other hand, the desire for voice, and in particular for representative forms of voice, might arise from poor job quality and bad management in the first place (Bryson and Freeman, 2013_[43]), leading one to expect a negative relationship.

Only a few studies have attempted to measure the effect of workers' voice in its different forms on *objective* measures of job quality. The absence of voice, for instance, is associated with higher absenteeism and turnover (Gomez, Bryson and Willman, 2010_[60]), while representative forms of voice are associated with lower quit rates than direct voice (Brown et al., 2009_[61]). Bryson and Green (2015_[58]) report evidence that union representatives facilitated innovation through the adoption of productivity-enhancing high involvement management practices encouraging workers' engagement, such as autonomous team working. Other studies highlight a negative association between the presence of workplace union representatives and hours of unpaid overtime, and a positive association with the likelihood of receiving on-the-job training (Bryson and Forth, 2017_[62]).

This section considers the links between objective measures of the quality of the working environment discussed in Section 4.2.2 above, and the various forms of workers' voice arrangements identified in Section 2.6 in Chapter 2. As explained in that chapter, workers' voice arrangements across OECD countries vary considerably, both in terms of nature and prerogatives (De Spiegelaere et al., 2019_[63]). At the workplace level, voice is often mediated by representative institutions, such as local trade union representatives (either appointed by the trade union or elected by the employees), works councils (established bodies elected or appointed by all employees in a firm, irrespective of their membership of a trade union), or workers representatives (either union members or independent). Representative voice can also materialise at company level, through employees' and/or trade unions' presence in supervisory and management boards. Importantly, prerogatives attached to representative entities vary from information,

to consultation and co-determination. This variation in strength is likely to affect the effect of representation, including on outcomes related to the quality of the working environment⁹ (see Chapter 2 for more details). Beyond representation, voice also materialises at the workplace through the organisation of direct exchanges between workers and managers (e.g. via regular town hall meetings and/or direct consultations). Direct and representative forms of voice should not be considered as substitutes, notably because of the protections against retaliation and firing, and the information and consultation rights that are attached to the status of workers' representative, and absent in the case of direct voice. However, this distinction is useful in capturing the different ways in which communication between workers and managers de facto materialises (or fails to) across OECD countries. In addition, this distinction, which can be captured in the data, at least for European countries, allows going beyond a crude distinction between cases with and without any form of voice when trying to assess the effect of workers' voice on job quality outcomes.

Using available data for European countries, Chapter 2 distinguished between three cases. First, 18% of European workers in 2015 had access to solely direct forms of voice (i.e. they had access to regular participatory meetings between workers and managers, but not to representative institutions). Second, 14% of European workers in 2015 has access to representative voice institutions (this includes cases of union representation as well as non-union representation such as that provided by elected employee delegates or statutory works councils), but did not have access to direct voice in the form of regular formal exchanges between workers and managers. Finally, 37% of European workers had access to both direct and representative forms of voice (i.e. they were in mixed voice arrangements).

For European countries, and based on the European Working Condition Survey data for 2015, Figure 4.4 shows that both direct voice and mixed forms of voice are associated with lower job strain (compared to the absence of voice arrangements). In particular, workers with access to these forms of voice have more job resources on average, compared with workers in firms with no voice arrangements at all. By contrast, workers with access to representative voice arrangements, but no direct voice, are on average more strained (and, in particular, they are in more demanding jobs) than workers in firms with no voice arrangements.

These results suggest that the type of reverse causality discussed in Section 4.2.1 above, whereby strained workers seek representation to express their discontents, might be at play. In particular, workers in more demanding jobs might seek representation to express their concerns while benefiting from the legal protections attached to representative voice. ¹¹ Alternatively, strained workers might be more concentrated in firms where the means to express their discontent exist, compared to firms where exit might be the only option – as explained above, representative forms of voice are associated with lower quit rates than direct voice (Brown et al., 2009_[61]). However, this logic does not explain why mixed forms of voice perform better than solely representative voice arrangements in Figure 4.4.

In addition, workers cannot self-select into direct voice arrangements, since the organisation of regular exchanges is not in the hands of workers but largely hinges on employers' willingness. Similarly, workers cannot self-select into representative voice arrangements in countries where workers' representation is mandated by law above particular firm size thresholds (such as Austria, Belgium, France, or the Netherlands). Therefore, *workers'* self-selection is not a plausible explanation in many of the cases recorded in the European Working Conditions Survey data and shown in Figure 4.4.

However, results in Figure 4.4 could be linked to *employers* self-selecting into specific voice arrangements. Indeed, employers willing to improve job quality might be more likely to engage into direct exchanges with workers and organise direct voice systems, potentially on top of legally mandated representative ones. This means that the mere presence of direct voice arrangements potentially signals a cooperative environment for employer-employee relations, which is likely to be conducive to a higher quality of the working environment. By contrast, cases of solely representative voice could be characteristic of poor social dialogue contexts, where employers are mandated by law to have representative institutions, but are unwilling to engage in direct exchanges with workers.¹³ Because such contexts are unlikely to be

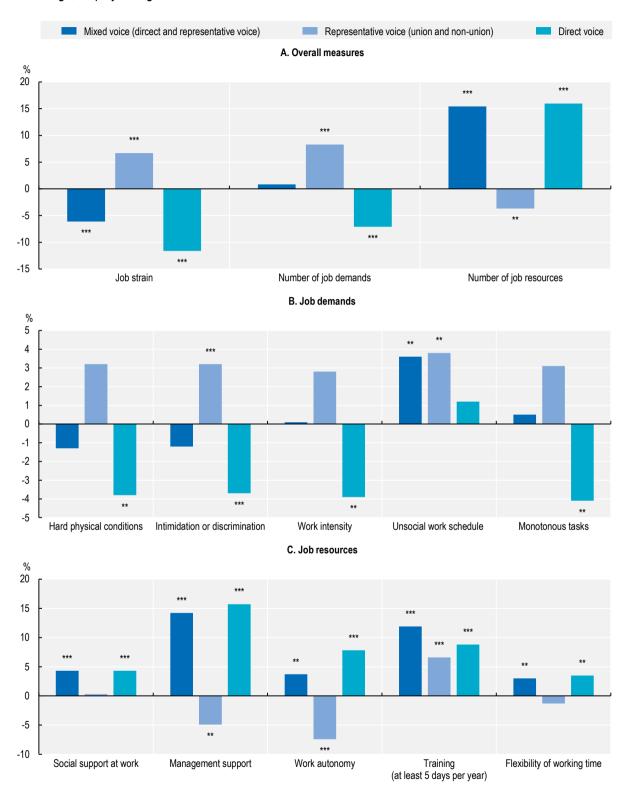
conducive to high quality of the working environment, employer self-selection effect could explain the results observed above.

While this explanation cannot be robustly tested, it is coherent with the results presented in Panels B and C in Figure 4.4, which show associations between forms of representation and the detailed list of job demands and job resources considered in this chapter. Representative-only forms of voice are not only positively associated with the number of job demands, but they are also negatively associated with management support at work and work autonomy – which is expected in contexts of adversarial industrial relations. By contrast, mixed forms of voice are not significantly related to most job demands, but they are positively related to most job resources. Direct-only forms of voice are negatively related to most job demands, and positively related to all job resources.

More generally, this explanation is also coherent with results in the literature showing that in the absence of a proper commitment by both workers' representatives and employers to engage in a meaningful dialogue, mandatory representative voice institutions might not succeed in improving job quality. Research from Canada, for instance, shows that health and safety committees (mandatory under most Canadian labour legislation) operate well in unionised environments but are much less effective in non-union workplaces where there is a lack of both employer buy-in and employee engagement (Bernard, 1995_[64]; Milgate, Innes and O'Loughlin, 2002_[65]; Yassi et al., 2012_[66]).

Figure 4.4. Workers' voice arrangements and the quality of the working environment are statistically correlated, but causality remains unclear

Percentage, employees aged 15-64, 2015



Note: Results are based on probit regressions (OLS regressions for the number of job demands and job resources in Panel A) including additional controls for age, education, gender, type of contract (permanent or temporary contract), occupation, job tenure, firm size, industry, sector (public and private) and country dummies. The chart reports marginal effects, i.e. percentage change in the outcome variable following a discrete change in the relevant explanatory variable from the base level (no workers' voice arrangements). For further details on definitions and constructions of the indicators, see Annex Table 4.A.1. *,***,****: statistically significant at the 10%, 5%, and 1% level, respectively. Source: OECD estimates based on the 6th European Working Conditions Survey (EWCS), 2015.

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4.3. Unpacking the effect of collective bargaining and workers' voice on the main sub-dimensions of the quality of the working environment

The empirical associations between different collective bargaining systems and different types of workers' voice suggest that both can play an important role in ensuring a higher quality of the working environment, but that accounting for the diversity of bargaining configurations and voice arrangements is essential. However, the available data do not allow disentangling the specific channels driving the relationship identified above or the presence of potentially confounding factors such as the high degree of trust and cooperation that characterises countries where wage co-ordination is strong or workplaces where workers' voice is most fruitful.

A qualitative analysis is necessary to understand better what unions, workers' representatives and employers actually do on the ground and what levers can be mobilised to improve the quality of the working environment. The rest of the chapter analyses in details the role of unions, collective agreements and different forms of workers' voice arrangements in five domains that are key pillars of the quality of the working environment. These are occupational safety and health, working time, training and re-skilling policies, management practices, and the prevention of workplace intimidation and discrimination

4.3.1. Occupational safety and health

Occupational safety and health (OSH) is a crucial component of the quality of the working environment. It spans a large range of issues, and notably the prevention of accidents. According to Eurostat data, the standardised incidence¹⁴ of non-fatal workplace accidents was 1 483 per 100 000 workers on average across the European Union in 2016, down from 2138 in 2008 (for fatal accidents the average rate went from 3.78 to 3.03 over that same time period) – signalling the continued importance of the issue of prevention. Yet the latter is only one aspect of occupational safety and health, which also includes other subjects such as workers' mental health.

In most OECD countries, the issue of occupational safety and health is primarily based on legislation, rather than on collective agreements. Many European and Anglo-Saxon countries have had dedicated laws on occupational safety and health since the 1970s. In the European Union, the Framework Directive of 1989¹⁵ has been transposed into national law in a majority of member states (Menéndez et al., 2009[67]). In the United States, the *Occupational Safety and Health Act* of 1970 sets out the reference terms on issues of workplace safety. Since 1981, the ILO Convention 155 also guarantees workers a basic framework of rights and protections on issues of health and safety. This means that the scope for collective bargaining to guarantee workers' occupational safety and health may seem reduced at first. Indeed, in no OECD country can collective agreements derogate from the law in matters of health and safety – they can only add to provisions in the law. Neither can individual firms opt out from collective agreements on this issue.

Yet, for instance, 75% of collective agreements in the retail and commerce sector in the European Union¹⁶ contain at least one clause on health and safety issues. Collective agreements are often ahead of the law on some issues: for instance in Spain, the General Chemical Industry agreement signed in 2004

guaranteed evaluation of workplace psychosocial risk factors while it was not yet required by law (Menéndez et al., 2009[67]). Agreements also frequently contain provisions extending guarantees beyond the legal minimum, for instance through increasing resources available to workplace safety representatives, extending consultation and participation rights, or promoting arrangements to enforce compliance by management.

More generally, Walters and Nichols (2009[68]) find that OSH law has been evolving from prescriptive to process-based regulations over time, encouraging "regulated self-regulation". In the European Union, this movement towards process-regulation, prominently featuring workers' consultation and representation in matters of occupational safety and health, including in countries with a relatively weak tradition of collective bargaining, is an outcome of the harmonising effect of the Framework Directive of 1989. More generally, this tendency was prompted by the progressive recognition of the necessity to engage workers and their representatives in the regulation process.

Indeed, beyond formal bargaining, the importance of workers' voice and in particular of workplace representation in upholding standards of occupational safety and health is well documented. In the domain of safety and health, workplace representation goes beyond the presence of shop floor representatives. In many OECD countries, there are dedicated occupational health and safety representatives at the workplace level. The latter can be appointed by unions, but can also be directly elected by workers, or integrated in existing institutions like work councils.

These safety representatives are engaged in a variety of activities. First they are often in charge of ensuring the implementation of existing protections and of controlling the quality of health and safety conditions (Eurofound, 2011_[69]). They provide information about available guarantees and increase workers' awareness of workplace risks. They also facilitate the enforcement of existing regulations through regular workplace-level control. Second, they participate in the development of enhanced protections, for instance in identifying potential issues and bringing these to the attention of managers (Menéndez et al., 2009_[67]). Finally, they also participate in elaborating innovations enhancing safety in collaboration with management. At a more macro level, unions are engaged in lobbying for new regulations implementing higher safety standards or answering to emerging risks (Li, Rohlin and Singleton, 2017_[70]; Donado, 2015_[71]; Eaton and Nocerino, 2000_[72]; Morantz, 2009_[73]). In the United States, union support of national occupational safety and health legislation contributed to the enactment of the *Occupational Safety and Health Act* of 1970 and the establishment in 1971 of the regulatory body in charge of occupational safety and health, the Occupational Safety and Health Administration (OSHA) (Barth and Mendeloff, 1980_[74]).

When it comes to health and safety *outcomes*, results from studies looking at the effect of union workplace representation can be ambiguous at first sight. In Donado and Wälde (2012_[75])'s review of the literature, a majority of empirical studies show a positive link between unionisation and the number of reported accidents and injuries. However, this is likely to be an instance of reverse causality, as identified and discussed above. Workers in more dangerous establishments are more likely to unionise to obtain safer working conditions. Moreover, workers in unionised workplaces are more likely to have knowledge of legislative health and safety standards, and therefore they are more likely to recognise a legal violation (Adams, 2008_[76]; Weil, 1999_[77]). Reporting is also likely to be better where representation guarantees the existence of efficient grievance mechanisms. Employers themselves are more likely to report accidents in unionised workplaces (Li, Rohlin and Singleton, 2017_[70]). By contrast, researchers identify dedicated health and safety representation as having a countervailing effect to employers' tendency to under-report work accidents (Amossé et al., 2012_[78]).

In an attempt to get around these potential biases, Li, Rohlin and Singleton (2017_[70]) exploit the timing and results of union elections (comparing unions which succeed or fail by a very small margin) to assess the effect of union presence and occupational and safety outcomes in manufacturing plants in the United States.¹⁷ Their results indicate that union elections improved occupational safety as measured by accident rates and number of workplace inspections.

Results are also contrasted when looking at the effect of different forms of voice more generally. Representative forms of workers' voice are associated with lower exposure to risks than direct forms of voice. Using data from the Workplace Employment Relations Study in 2011 in the United Kingdom, Bryson and Forth (2017_[62]) show that the presence of health and safety representatives was associated with workers being exposed to lower health and safety risks than in cases where health and safety was dealt with through direct consultation between management and employees.

Menéndez et al. (2009[67]) argue that the presence of workers' health and safety representatives allows for a more systematic organisation of prevention. Yet the authors add that the presence of safety representatives constitute a necessary but not sufficient condition to ensure better health and safety outcomes. Representatives must be given enough time to complete their duties, as well as appropriate training. Yet according to the Continuing Vocational Training Survey (CVTS) covering 19 European countries, in 2015, workers had access to occupational health and safety training of at least three hours in only 14.5% of firms. 18 In addition to a technical approach to health and safety issues, appropriate training for safety and health representatives includes training in participatory methodologies to equip representatives with the adequate skills for the task of relaying the concerns and problems of workers on the ground. In that regard, the constitution of networks of representatives supported by dedicated union institutions providing logistical support as well as technical information to workplace representatives is identified in the literature as a best practice. Management commitment also emerges as an important determinant of the efficiency of health and safety representatives. In particular, the efficiency of prevention policies seems to hinge on active engagement from both management and workers' representatives (Menéndez et al., 2009[67]; Walters and Nichols, 2009[68]). Finally, other complementary institutions are necessary to ensure the effectiveness of workplace safety representatives. In particular, health and safety inspectorates have an important role to play in ensuring regulatory enforcement.¹⁹

Results also vary by outcomes studied. Having dedicated health and safety representatives in the workplace is associated with improved physical working conditions and a reduced rate of accidents. The effect on injury rates is found to increase with the representatives' level of health and safety training (Eaton and Nocerino, 2000_[72]). By contrast, representatives' effect on health-issues related to work organisation and the introduction of technological changes is more limited (Walters and Nichols, 2009_[68]).

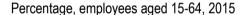
Occupational health and safety rights remain more hindered in practice in small firms, and in sectors with a relatively high share of non-standard employment, where workers' representation remains more limited (Menéndez et al., 2009[67]). Following trade union campaigning, legislation was introduced in Spain in 2006, which requires employers in the construction industry to inform safety representatives about their subcontracting arrangements. Sector-level agreements can provide for the training of a joint safety representative for subcontracted workers and direct employees on the same work site. In the case of small firms, solutions such as the Swedish network of regional safety representatives have proven to be efficient (see Box 4.2 below). Yet there remain challenges to ensure that occupational health and safety regulations cover all workers, especially as new forms of work emerge, which might be harder to reach for labour inspectorates and unions (Walters, 2017[79]), and might present new and specific risks. For example, the development of platform activities in the transport sector increases exposure to the risk of accidents (Barrios, Hochberg and Yi, 2018[80]).

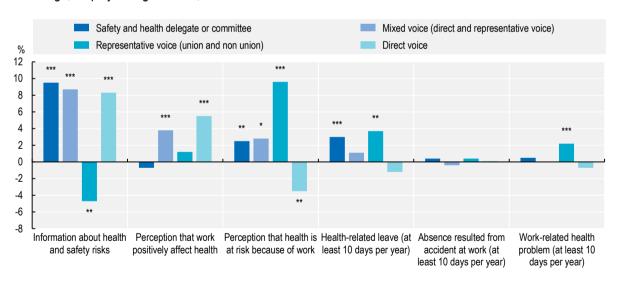
Beyond the case of non-traditional workers, small firms, and new forms of work, Bryson and Forth (2017_[62]) highlight a more general weakening of workers' representation in health and safety issues in Europe. The authors attribute this trend to deregulatory trends and managerial policies – see Walters and Wadsworth (2017_[81]). In France, following the 2018 Law ratifying the *Ordonnances* reform, the various workplace representation institutions p (with particular mandates ranging from e.g. safety and health, to more general employee representation) have been merged into one unique institution (the *Comité social et économique*, *CSE*). This was motivated by a willingness to avoid the multiplication of legally mandated institutions and to simplify the system. This reform is still being implemented and therefore has not been evaluated yet. The suppression of institutions dedicated to health and safety has raised concerns amongst social dialogue

experts (Chamboredon and Daniel, 2018_[82]), as possibly representing a loss of specific expertise on the issue of occupational health and safety. In addition, the existence of an institution with a dedicated mandate tends to guarantee that representatives have sufficient time for the job of reporting on the safety and health situation, as well as proximity with concrete on the ground issues (Vogel, 2015_[83]).

Figure 4.5 shows the correlations between various types of workers' voice and various occupational safety and health measures. The picture emerging from this analysis is consistent with the pattern of reverse causality discussed in commenting Figure 4.3 above. Namely, representative-only forms of voice are positively associated with workers' perception that their work negatively affects their health and that their health is at risk because of work. This cannot plausibly be explained by an increase in awareness of risks due to representation, since at the same time these representative-only institutions are negatively associated with access to information about occupational safety and health risks. They are also positively associated with frequencies of health-related leave and work-related health problems. This might be interpreted as signalling a self-selection phenomenon, whereby in the absence of direct channels of dialogue, workers making use of representative forms of voice are likely to be those with worse occupational health. By contrast, mixed and direct-only forms of voice are positively associated with workers' access to information, and with their perception that work has a positive effect on their health. Finally, the presence of a dedicated health and safety delegate or committee is positively associated with workers' access to information, with their perception that their health is at risk because of work, and with frequencies of health-related leave. This could be explained by the fact that the presence of a dedicated institution increases workers' awareness of risks and of the possibility to take health-related leave.

Figure 4.5. Correlations between occupational safety and health (OSH) measures and workers' voice arrangements





Note: Results are based on probit regressions including additional controls for age, education, gender, type of contract (permanent or temporary contract), occupation, job tenure, firm size, industry, sector (public and private) and country dummies. The chart reports marginal effects, i.e. percentage change in the outcome variable following a discrete change in the relevant explanatory variable from the base level (no workers' voice arrangements). For further details, see Annex Table 4.A.2. "Perception that work positively affect health" refers to the following question: "Does your work affect your health?". "Perception that health is at risk because of work" refers to the following question: "Do you think your health or safety is at risk because of your work?". *,***,****: statistically significant at the 10%, 5%, and 1% level, respectively. Source: OECD estimates based on the 6th European Working Conditions Survey (EWCS), 2015.

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Box 4.2. Extending workplace representation to small firms: the case of the Swedish regional safety representatives

The notion that health and safety representatives in the workplace have a positive impact on occupational health is relatively consensual among practitioners and researchers. However, it can be materially challenging to implement in small workplaces (Walters and Nichols, 2009_[68]). A solution to this issue has been found in Sweden, where, since the 1970s, a network of over 2 000 regional safety representatives (RSRs) have had the task of creating a culture of workplace risk prevention in small workplaces and of extending the benefits of representation to SMEs.

Safety representatives have the same status and the same rights as trade union representatives. Like local safety representatives, they are appointed by trade union organisations, but by contrast with them, they have a larger area of supervision, either sectoral or determined through a specific agreement, generally in a particular geographical remit. Regional safety representatives' mandate is primarily with SMEs with up to 50 employees (Wiklund, 2011_[84]). They currently cover about four-fifths of small workplaces (Walters and Nichols, 2009_[68]). While their activities are largely government funded, trade unions also increasingly contribute themselves to the RSRs' budget (Wiklund, 2011_[84]).

Regional safety representatives play several roles: they ensure compliance with health and safety rules through visiting workplaces, in addition to visits organised by the health and safety services; they appoint, train and support local representatives; they disseminate information and provide advice on how to solve health and safety issues on the ground; they act as whistle blowers by shedding light on emerging problems and risks; and they encourage workers' participation in health and safety programmes as well as regular interactions between employers and employees on this issue (Wiklund, 2011_[84]; Walters and Nichols, 2009_[68]).

Regional safety representatives are estimated to visit workplaces between five and ten times more often than labour inspectors do (Walters and Nichols, 2009_[68]). According to Wiklund (2011_[84]), in 2009 the Swedish Trade Union Confederation (*Landsorganisationen i Sverige*, or LO) affiliates' regional safety representatives made 74 181 workplace visits, while the Swedish Work Environment Authority did only 30 000 workplace inspections.

4.3.2. Working time

The quality of working time can be captured through two main aspects: its *duration* (i.e. the number of hours worked, overtime, etc.) and its *organisation* (atypical schedules such as night work, weekends, and the flexibility workers' have to combine work arrangements with personal or family matters). The quantity of hours worked increases the risk of poor health outcomes, notably if workers cannot properly rest and take leave.²⁰ A good work-life balance supporting workers' preferences is also crucial for enhancing individual well-being.²¹ This second aspect of working time quality is gaining ground in recent bargaining rounds with the development of increasingly flexible non-standard forms of work, of new organisational patterns, as well as the expansion of new technological and communication tools.

Working time can be regulated at different institutional levels, with complex relationships and references to each other: statutory legislation usually sets general standards, while collective agreements at sectoral or firm level further specify them or may even modify them. For instance, most aspects of working time duration (e.g. very long hours, rest and recovery, etc.) are framed by national and international legislation (EU Charter of Fundamental Rights, EU Working Time Directive, 22 the ILO Convention 001 on Working Time), but collective bargaining at sector and firm levels, as well as individual negotiation between employers and employees can result in different outcomes (e.g. agreed normal working hours versus legal working hours).

Furthermore, social partners can also play an active role through bargaining, advocacy and lobbying in the definition of minimum (or maximum) provisions of other aspects of working time, such as overtime (maximum amount of hours and negotiating extra pay), night and weekend work or flexible working time arrangements, such as teleworking facilities (European Framework Agreement on Telework, 2002).

Working time is typically one of the areas where social partners have margins to tailor the specific conditions to their needs, leading to significant differences across OECD countries in the definition of normal working hours or overtime, night and weekend work or flexible working time arrangements. In France, for instance, a series of reforms have been implemented since the 1980s (*lois Auroux*) to give enterprises greater flexibility to adjust to firm-level economic conditions and constraints, giving them the possibility to set a number of aspects of working time by collective agreements even if these were less favourable to workers (*in peius*) ²³. In 2008, the reform of the Working Time Law, offered enterprises the possibility to modulate weekly hours worked over several weeks and up to one year, and adjust compensatory rest periods and extra pay accordingly. In 2016, the Labour Law (*Loi El Khomri*) strengthened this decentralisation process by introducing the primacy of firm-level agreements over sectoral ones in defining working time, leave and rest periods; in the absence of any firm-level agreement, sectoral level agreements apply. The 2018 Law (ratifying the September 2017 *Ordonnances*) went further to promote firm-level bargaining by providing enterprises with the flexibility to adjust working time to economic fluctuations through new collective agreements for competitiveness which should even prevail over the employment contract.

Eurofound (2016_[85]) provides a useful taxonomy of working time regimes for European countries. In the "pure mandated working time regimes", collective bargaining over working time issues is not frequent, and collective agreements covering working time duration and organisation are rare, as statutory legislation covers the majority of workers (most Central and Eastern European countries). In the "adjusted mandated working time regimes" (such as France, Greece, or Portugal), the State plays a dominant role in regulating working time standards (in particular maximum working time duration), but these can be adapted through collective bargaining and at various levels (sector, firm or individual). In the "negotiated working time regimes" (Scandinavian and Northern European countries, Germany, Italy and Spain), statutory legislation is still relevant for the definition of working time standards, but defines the general framework while standards are mainly set by collective agreements, usually at sectoral level; such agreements can be further complemented by firm-level bargaining on working time organisation. Finally, in the so-called "unilateral working time regimes", the most operational level regarding working time is the individual level, and the terms of working time duration and organisation are usually set in employment contracts and tend to reflect the conditions offered by the employers (the United-Kingdom).

While working time is a crucial component of working life, it is also a key variable of labour market adjustment in providing internal flexibility to enterprises, putting its regulation at the core of economic and social debates at national and international levels.²⁴ The definition of working time duration, notably, and the compensation for overtime, have been among the most frequent topics of working time regulation over which social partners have been engaged, notably in Europe. According to the AIAS database on collective agreements in the retail and commerce sector across EU countries (Besamusca, Kahancová and Tijdens, 2018_[86]), about 90% of collective agreements deal with weekly days and hours of work, while a few limit the number of consecutive Sundays that can be worked. Available data on contractual working time in Italy also show noticeable differences between legal and collectively agreed working time at sectoral level – on average, around three weeks less of work over a year but with very large variations across sectors.²⁵ Interestingly, recent agreements in some OECD countries suggest that the flexibility of working time arrangements are gaining ground in collective bargaining (European Commission, 2018_[87]), possibly reflecting workers' individual preferences and company recognition of the negative impact of job strain on productivity (Saint-Martin, Inanc and Prinz, 2018_[21]).

In 2018, in the region of Baden Württemberg in Germany, a landmark agreement in the metalworking sector has introduced the possibility for workers to reduce their working week from the standard 35 hours to 28 hours (while preserving the right to full-time work), but also a number of options on the extent of working time

open for further negotiation at company level. This agreement provides interesting insights about a shift in bargaining priorities towards providing greater workers' choices reflecting their work-life balance preferences (Box 4.3). It is also a good example of an organised decentralisation configuration which sets working time at sectoral level, but leaves room for company-level negotiations, within a predefined set of options. "À-lacarte models" in sectoral agreements in Denmark and the Netherlands (Ibsen and Keune, 2018[88]), or Austria ("Free time option") also give individual employees significant flexibility to choose between money and time.

Box 4.3. A step towards greater employee working time "sovereignty"? Individual choice options in new German collective agreements.

In Germany, the issue of reducing working hours recently returned to the bargaining agenda in several sectors. Interestingly, collective agreements signed in 2018 were pointing to a shift of unions' claims for offering greater individual choice rather than across-the-board cuts (Schulten et al., 2019_[89]). The German metalworkers' union IG Metall and the Baden-Wuerttemberg Employers' Association of the Metal and Electrical Industry (Südwestmetall) reached an agreement in 2018 offering the possibility to workers in the metalworking sector to reduce their working week from the standard 35 hours to 28 hours (together with a proportional decline in nominal monthly wage), while preserving the right to return to full-time work. In return, firms have obtained the flexibility to offer more 40-hour-a-week contracts to compensate the individual right to request "short full time". In addition, an employee choice model was agreed allowing shift workers and employees with children or family members needing care to opt either for the annual bonus of 27.5 per cent of a monthly wage or eight extra days of holiday a year instead (see Table 4.1). Priority was clearly given to individuals' preferences over working time. This followed a large-scale survey of about 700 000 employees undertook by IG Metall, which showed that for many employees, there was a significant gap between the contractual working hours, the hours they actually worked and the hours they wanted to work. Other sectoral agreements in Germany have dealt with similar claims, such as the search for a better work-life balance and more flexibility around working time. Other sectors or regions (the Deutsche Bahn, the Deutsche Post, the local transports in Bayaria, etc.) negotiated similar agreements proposing a wider range of options for greater "employee sovereignty" in their choice between money or time off (see Table 4.1).

Table 4.1. More money or more time off?

Sector	Pay increase	Working time reduction	Eligible employees	
Deutsche Bahn (from 2018)	2.6% wage	1 hour a week or 6 days off per year (from 2018)	All those covered by collective agreement	
Metalworking and electrical industry (from 2019)	Bonus of 27,5% of one monthly wage per year	8 days off per year	Employees with children under 8, with relatives needing care or in shift work	
Deutsche Post (from 2019)	3% wage	60.27 hours annual working time	All those covered by collective agreement	
Local public transport	Up to 2.5% wage, + 0.25% (employees in shift work)	Maximum of 5 additional days off + 1 extra day (employees in shift work)	All those covered by collective agreement	

Source: Schulten et al. (2019[89]), "Collective bargaining report 2018: Large pay rises and more employee choice on working hours", https://www.boeckler.de/pdf/p ta jb 2018 english.pdf.

Empirical research on the link between collective bargaining and working time outcomes has mostly looked at unions' effects on working time duration, i.e. the role of unions in limiting long working hours or uncompensated overtime. Veliziotis' (2010_[90]) study of overtime based on the British Household Panel Survey indicates for instance that unionised employees work fewer unpaid overtime hours than non-covered ones in the for profit, non-caring sector.²⁶ This is attributed in part to union protection. Using data from the Workplace Employment Relations Survey in 2011 in the United-Kingdom, Bryson and Forth (2017_[62]) also find that unionised employees work fewer hours of unpaid overtime, and that union members enjoy longer paid holiday entitlements.

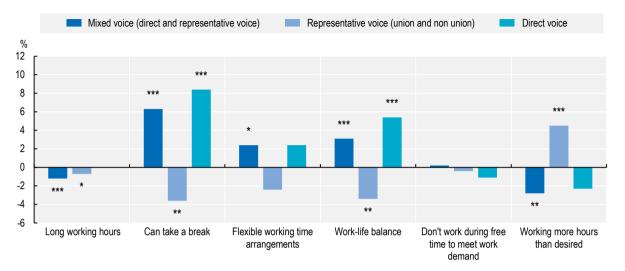
Based on the four main working time regimes described above, Eurofound (2016_[85]) finds that on average, usual working time was shorter in countries with negotiated and adjusted mandated working time regimes, and longer in unilateral and pure mandated regimes in Europe. The study also compared agreed working time (e.g. the hours that workers are expected to spend on work according to agreements reached through collective bargaining at sectoral or firm level or through individual negotiation between employer and employee) and usual working time to assess the extent of overtime and of compliance with working time regulations. It showed that the unilateral regime is associated with weaker compliance with working time regulation and longer overtime. The negotiated regime, in contrast, tends to have stronger levels of compliance with working time regulation and hence the smallest deviations from agreed provisions.

Beyond these results, evidence on unions' effect on working time organisation is rather limited. In their study on the value added of unions, Bryson and Forth (2017_[62]) report evidence from the late 1990s, on unions' impact on work-life balance arrangements, notably showing that unionised workplaces tend to have higher levels of provision of family friendly practices, such as parental leave, paid family leave, job sharing, etc. compared with similar workplaces without unions (Dex and Smith, 2002_[91]; Budd and Mumford, 2004_[92]). Unions also increase employees' awareness of such practices through information provision, thus facilitating their use. However, options to telework or have flexible working hours were less common in unionised settings (Bryson and Forth, 2017_[62]). In his study on the link between shorter workweek and well-being in Portugal and Spain, Lepinteur (2019_[93]) finds that the presence of institutions of worker representation were important for ensuring that working time reductions lead to welfare gains.

Figure 4.6 displays the correlation between the different form of workers' voice arrangements and various working time outcomes. The results show that the direct forms of workers' voice arrangements are associated with higher flexibility of working time measured as the possibility to take a break and flexibility in setting one's own working time, and with a better combination of working hours with family or social commitments. The additional presence of a representative form of workers' voice (mixed voice) is consistently associated with higher working time flexibility, and better work-life balance. It is also correlated with less long working hours (over 50 hours a week) and a better satisfaction with working time (measured as the difference between the number of hours people work and their ideal working time duration). On the other hand, representative only forms of voice, in the absence of direct voice mechanism are associated with lower working time flexibility, unbalanced work-life schedules and lower satisfaction with working time duration. These results are consistent with the previous patterns and may be partly explained by the pattern of reverse causality identified before.

Figure 4.6. Correlations between working time measures and workers' voice arrangements

Percentage, employees aged 15-64, 2015



Note: Results are based on probit regressions including additional controls for age, education, gender, type of contract (permanent or temporary contract), occupation, job tenure, firm size, industry, sector (public and private) and country dummies. The chart reports marginal effects, i.e. percentage change in the outcome variable following a discrete change in the relevant explanatory variable from the base level (no workers' voice arrangements). For further details, see Annex Table 4.A.2. *,***,****: statistically significant at the 10%, 5%, and 1% level, respectively. Source: OECD estimates based on the 6th European Working Conditions Survey (EWCS), 2015.

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4.3.3. Training and re-skilling

The skills possessed by workers and their utilisation are key drivers of workers' performance in all advanced and emerging economies. Returns to skills not only show up in the form of higher employment but also of better jobs in terms of higher earnings quality, lower job insecurity and lower job strain. Having the right skills for work and therefore getting adequate training on the job are key resources for workers to undertake the job they are assigned to as well as to improve their career opportunities. Moreover, given the speed of change of how work is organised and carried out, training is increasingly important to help individuals to maintain and upgrade their skills throughout their working lives. Beyond their instrumental role, training and learning opportunities on the job have an intrinsic value for workers as they provide workers with a chance to fulfil their ambitions, to feel useful in society and to build self-esteem.

Adequate public policies to promote adult learning are key to allow workers to skill and re-skill themselves over their working lives – see OECD (2019[94]) for a detailed discussion. However, social partners also play a major role in several countries. Most adult learning takes place at work. Large companies invest significant resources in training but medium and small firms often do not have the capacity to follow suit. Employers' organisations and workers' representatives are therefore key to ensure that enough time and resources are devoted to training in all companies irrespective of the type of firms or workers' contract type.

Early work conducted in the United States found a negative correlation between unionisation and participation in training – see e.g. Duncan and Stafford (1980_[95]), Barron et al. (1987_[96]), but more recent studies find a positive one as the issue of training rose on the agenda of unions – see e.g. Green (1993_[97]), Lynch (1994_[98]) and Booth et al. (2003_[99]).

According to OECD $(2019_{[100]})$ and $(2019_{[101]})$, the involvement of employers and worker representatives is potentially relevant at all stages of the policy cycle, from the identification of problems that require attention, to the development and management of training programmes as well as their monitoring and evaluation. Currently, unions and employers' organisations are involved in skills assessment and anticipation exercises in the majority of OECD countries: according to OECD $(2019_{[100]})$, employers and employers organisations are involved in exercises to identify which skills are needed in the current labour market and moving forward in 69% of the countries; trade unions in 59% of the countries.

Moreover, almost half of OECD countries have skills councils that, among other things, conduct skills assessment and anticipation exercises. In the United Kingdom, for instance, *Sector Skills Councils*, jointly managed by both employers and workers' representatives, produce national occupational standards, design and approve apprenticeship frameworks, and make long-term projections for their industry so that qualifications and occupational standards can meet future skill demands. In Canada, sector councils are national partnership organisations that bring together business, labour and educational stakeholders (Gunderson, 2011[102]; Gunderson and Sharpe, 1998[103]). They represent approximately half of the Canadian workforce. Their primary role is to facilitate training and foster tripartite discussion on emerging human resources and skills issues. Although sector councils operate at arm's length from the government, the federal government supports sector councils through its Labour-Management Partnerships Program by providing funding to joint labour-employer initiatives focused on education and training. Job Security Councils in Sweden and Inplacement Labour Foundations in Austria are other interesting examples of social partners actively managing and designing training services (see Chapter 5 for more details).

Access to life-long training for workers can be negotiated and secured in collective agreements and is an increasingly important issue of collective bargaining. For instance in 2016, unions in the metal sector in Italy traded lower-than-expected wage increases for a new provision at sectoral level, ensuring a minimum amount of employer-supported yearly training to all workers, irrespective of the company they work for. The agreement, however, has largely failed to materialise so far, as companies, but also local unions, struggle to implement the new possibility opened by the sectoral agreement.

In Denmark, a national-level tripartite agreement was signed in 2017 that specifically focused on adult and continuing training. It included a series of initiatives over four years to increase and improve the access to and the quality of adult learning. In particular, the agreement set up a new "reconversion fund" of around EUR 53 million allowing workers to undertake further training on their own initiative (Eurofound, 2018[104]).

Yet there exists a substantial margin for improving the inclusion of training provisions in collective bargaining: on average in OECD countries, only about 15% of firms are covered by an agreement (either at sectoral level or at firm/establishment level) containing provisions on training.²⁷ Although there is a large cross-country variation, from almost no firms covered by training provisions in Central and Eastern European countries to only about 10% in Finland or Denmark to 79% in France (Figure 4.7). Moreover, it is important to note that firms and unions may also provide training in the absence of any collective agreement.

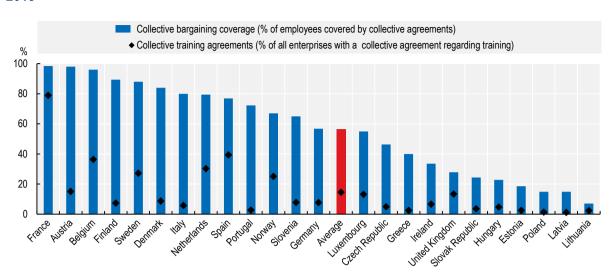


Figure 4.7. Number of firms covered by a collective agreement including training provisions, 2010-2015

Note: Data refer to 2015 or closest year. "Collective bargaining coverage" refers to the ratio of employees covered by collective agreements, divided by all wage earners with right to bargaining. "Collective training agreements" refers to the percentage of all enterprises that indicate that, at the time of the survey, collective agreements between social partners concluded at national, regional or sectoral level usually cover the provision of continuous vocational training in their enterprise (excl. agreements concluded at enterprise level). Data for Sweden and Poland refer to 2010 for the data on collective training agreements, and 2011 for the data on collective bargaining coverage. Average is the unweighted average of countries shown (survey weights are used).

Source: Eurostat CVTS data (2010, 2015), OECD Database on Collective bargaining coverage.

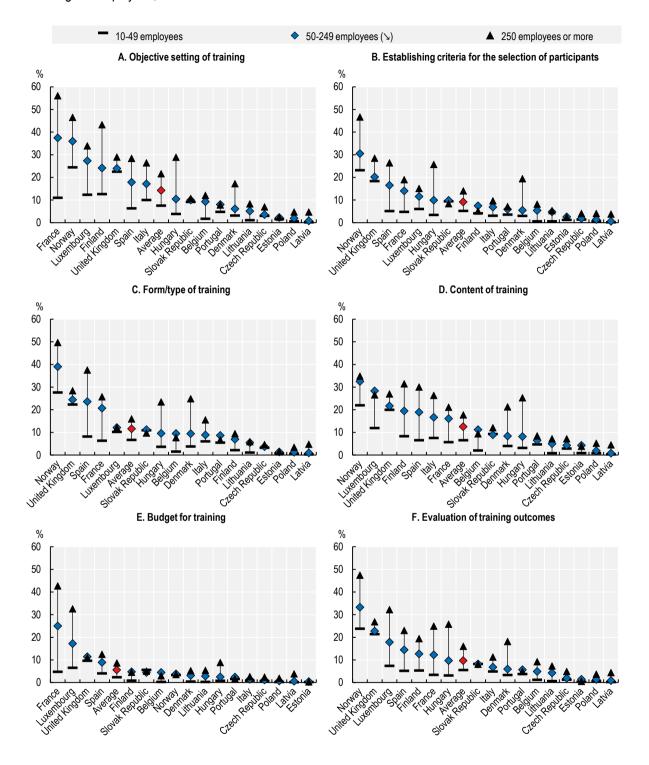
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In some cases, unions or workers' representatives are directly involved by the management in setting priorities for adult learning at company level or in defining the type and the content of training. Figure 4.8 shows the degree of involvement of staff-representatives in setting training policies at the company level in European countries by firm size. Finland, France, Luxembourg, Norway and the United Kingdom show the highest degree of social partners' involvement. However, the chart also shows that the involvement of staff representatives is largely confined to larger firms and, with the exception of Norway and the United Kingdom, quite limited otherwise. European Commission (2019[105]) shows that smaller firms' training disadvantage diminishes with employee representation.

In the United Kingdom, unions have made a specific investment in training provision by creating Unionlearn in 2006. Unionlearn supports trade unions to help workers acquire skills and qualifications to improve their employability. One of its key activities is the training of Union Learning Representatives (ULRs), who encourage the take-up of learning in the workplace, help workers identify training needs and arrange learning opportunities within their companies. Since its inception in 2006, Unionlearn has trained more than 41 000 ULRs. It provides learning opportunities to about 250 000 workers per year, including disproportionally high numbers of workers with no or low qualifications (Stuart et al., 2016[106]). Unionlearn also manages Union Learning Fund (ULF) projects that are run by individual unions to promote the take-up of learning and skills in the workplace and government provides funding for both the ULF and Unionlearn. The investment of unions on training appears to pay off: using official establishment and individual-level survey data, Stuart, Valizade and Bressa (2015[107]) show that over the period 2001-2013 union members were a third more likely to have received training than non-unionised employees. Moreover, non-union members also benefit from being in a unionised establishment: 38% report a recent training period compared to 25% in workplaces where unions do not have negotiating rights.

Figure 4.8. Training aspects covered by staff representatives/committees by firm size

Percentage of employees, 2015



Note: Average is the unweighted average of countries shown (survey weights are used). Source: OECD calculations based on CVTS 5 Scientific Use files.

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In several OECD countries, social partners play a direct role in managing and funding training programmes (see Table 4.2). A particularly interesting case is that of the O&O funds (Opleidings-Ontwikkelingsfonds) in the Netherlands, which are financed primarily through a compulsory payroll levy fixed by collective agreement. O&O funds provide lifelong learning to workers to keep them "up-to-date" and ready to find new jobs in the future. The funds also promote campaigns on the importance of training, and finance or kick-start projects on the ground. Again, a constant exchange between social partners allows O&O funds to anticipate skill needs. In Italy, social partners-led training funds also represent one of the most important sources of financing of adult learning (see Box 4.4). A direct role of social partners in the funding and management of training funds can contribute to make the system more effective as social partners can help ensuring that their own money is spent well and targeted on actual needs. However, when social partners are fragmented and numerous, their governance may be very complicated. Moreover, training funds based on mandatory firm contributions can also lead to an inefficient allocation of resources and very expansive training programmes, notably if they end up subsidising compulsory training that would happen regardless of the subsidy. Training funds can also be inefficient if the training reflects more what existing providers are able to offer, rather than the needs of companies, particularly new or growing ones (see Box 4.4). Evaluations and quality certifications are therefore key to ensure that training funds effectively respond to the skills needs of workers and companies.

Table 4.2. How much are social partners' involved in training programmes in OECD countries?

Highest level of involvement	Country			
1) Trade unions and/or employers finance some ad hoc training initiatives	Australia Chile Czech Republic	Estonia Finland	Latvia Norway	United Kingdom United States
2) Employers pay a compulsory training levy to a government fund	Canada (QB) Ireland	Korea Poland	Spain	
3) Employers and trade unions are in charge of managing and funding training programs ¹	Austria Belgium Denmark	France Germany Greece	Iceland Italy Luxembourg	Netherlands Sweden Switzerland

Note: QB: Québec. "Training" in this table refers both to vocational training and lifelong learning. Categories 1 to 3 are not mutually exclusive. Countries are classified based on social partners' highest level of engagement on average across industries. This means that countries in category 3 might also belong to categories 1 or 2 (and those in category 2 could belong to category 1). For instance, in France, there is a compulsory levy on medium and large firms (to finance the *Compte Personnel de Formation*), but social partners are further involved in the funding and managing of training funds – hence France appears in category 3. In addition, in countries in categories 1 or 2, social partners may also manage a training fund in *one* specific sector: this is the case in Spain and the United States, where social partners manage training funds in the construction sector. However, these examples are not representative of the situation in the whole country.

Source: OECD Policy Questionnaires on Collective bargaining as well as information collected in the context of the OECD project on "Getting skills right: promoting workforce adaptability".

^{1.} At least in several sectors. Depending on countries, funds for training programs can be compulsory or voluntary, and they can be mandated by law or agreed upon through collective bargaining.

Box 4.4. The role of training funds in Italy

In Italy, social partners manage Training Funds (*Fondi paritetici interprofessionali per la formazione continua*). These funds finance workers' training using resources collected through a training levy imposed on employers (small by international standards, 0.3% of the payroll compared with 0.8% in Ireland, up to 1% in France, up to 2% in the Netherlands and 2.5% in the United Kingdom). Since their introduction in 2004, they have contributed to a significant increase in adult learning participation. Covering almost 1 million firms and over 10 million workers, and managing over EUR 600 million a year, today Training Funds represent one of the most important sources of financing for workers' continuous learning in Italy.

While a large and growing number of firms are covered by Training Funds, small and medium enterprises as well as most vulnerable workers still remain to a large extent excluded. In 2016, only 57.1% of small firms (10-19 employees) provided training, compared to 93.3% of larger firms (250+ employees). Moreover, even those SMEs that supply training use available funds much less than larger companies. Furthermore, as training is funded through a levy paid by employers, firms typically have a great deal of autonomy in deciding who gets training, and often end up targeting training efforts to groups for which training yields the highest returns: the most skilled, those in high-skilled occupations, or younger workers with longer career prospects.

The type and quality of the training offered is also an issue. Compulsory Occupational Safety and Health (OSH) training represents over 30% of all supported training activities in Italy, while ICT training accounts for just above 3%. This may reflect the structure of the Italian market. Indeed the latter is characterised by a large number of small family-led businesses, which are often more concerned about complying with compulsory training obligations than with developing new skills (e.g. ICT) that may take time to pay off. However, this also reflects a more general difficulty in understanding training needs and developing appropriate plans even in the presence of generous subsidies. While some Training Funds have taken steps to measure the impact that training has on firms and workers, a systematic effort to monitor the quality of the initiatives and an evaluation of their effect is missing.

One advantage of Training Funds compared to publicly provided training is that social partners are closely associated to their management. In practice, yet, the fragmentation of the Italian bargaining system (Italy has the second highest number of employers' organisations and trade unions in the OECD) complicates their governance. Moreover, the involvement of trade unions remains in some cases only formal. Despite these limitations, the Italian Training Funds represent an important tool in the hands of social partners to invest in skills and improve the quality of the working environment.

Source: OECD (2019[108]), Adult Learning in Italy: What Role for Training Funds?, Getting Skills Right, https://dx.doi.org/10.1787/9789264311978-en.

4.3.4. Work organisation and management practices

The organisation of work as well as management practices generally aim at reaching higher productivity (Bloom and Van Reenen, 2007_[109]; Bloom et al., 2014_[110]) through influencing processes and job design. However, they also affect workers' job quality and union strive to be involved in their definition. Their effect is a priori ambiguous as it depends on the actual content of the different practices and on how they are rolled out. In particular, new work organisation and management practices may improve physical working conditions by making work less physically demanding, safer and by giving workers more autonomy and discretion over their tasks. Moreover, they may boost employees' motivation, work performance and job satisfaction. However, more efficient management practices may also come at the cost of higher pressure

and stress. Empirical studies on the effect of management practices on job quality are rare. Among the few exceptions, Applebaum et al. (2000_[111]) find that management practices promoting participation, incentives and skills are linked to higher wages, higher job satisfaction, lower job-related stress and, at the company level, to better competitiveness and efficiency.

While the deployment of management practices is first and foremost the remit of managers, unions and collective bargaining can also contribute to it in direct and indirect ways. First, the promotion of better management practices may be a way for firms to respond to unions' demands (Freeman and Medoff, 1984[1]). This is consistent with the relatively old theory that wage increases put pressure on managers to find margins of profits elsewhere, including by improving companies' productivity through more efficient management practices (Slichter, Healy and Livernash, 1960[112]). By contrast, some authors have also argued that management practices may have been strategically used to bypass and weaken trade unions (Kochan, 1980[113]). The concurrent decline of trade union membership with an increase in HR and management practices has led some researchers to study the potential link between the two phenomena. However, a review by Brown et al. (2009[114]) has failed to identify substantive evidence to back this hypothesis.

Second, unions may play a direct role in promoting or resisting the adoption of new work organisation and management practices. By providing a platform for collective voice, unions may promote the adoption of new practices to improve the working environment and even facilitate their adoption by getting workers on board. For instance, Machin and Wadhwani (1991[115]) find a positive correlation between unionised establishments and organisational change. While this may simply be due to unionised workplaces lagging behind in terms of work organisation and having to catch-up at the time of the evaluation, the authors also suggest that, by allowing for collective voice, unions stimulate organisational change and the adoption of new management practices. With more recent data, Askenazy and Forth (2016_[116]) also find that in France and the United Kingdom, practices such as team working and functional flexibility are more likely to be found in unionised than in non-unionised workplaces today. In fact, a review by Bryson and Forth (2017_[62]) concludes that, while evidence from the 1980s suggested that unions in the United Kingdom were a brake on work re-organisation, that does not appear to be anymore the case these days. A case study in Box 4.5 of the implementation of the "World Class Manufacturing" by the car manufacturer Fiat Chrysler Automobiles shows the key role played by establishment-level unions in Italy and the United States in accompanying organisational changes seen as essential by Fiat and Chrysler's management to save the company during the global financial crisis. By contrast, unions may resist organisational change and new management practices, in particular those that they deem less favourable to workers or those that have not been sufficiently discussed. For instance, union presence in United States plants has been found to be associated with a lower rate of adoption of performance pay and appraisal (Wood, 1996, 1177) as unions resist practices that result in a higher individualisation of pay policies. Similarly unionised workplaces in the United Kingdom are also less likely to have incentive-based pay systems in place (Askenazy and Forth, 2016[116]).

Finally, in some cases, the involvement of unions and collective agreements in the definition of work practices has been mandated by the law itself. For instance, the Swedish Co-Determination at Work Act of 1977 extended collective bargaining into areas of organisational and technical change in an attempt to give unions a real say over working conditions before any final decisions are taken. In Denmark social partners were directly involved in the enforcement of the Working Environment Act of 1975 which made it compulsory for employers to establish a safe working environment for staff, and to engage in regular risk assessment exercises to prevent work-related stress among employees. In Germany, workers' representation in supervisory boards in large companies also allows workers to have a say in the definition of companies' strategies. Supervisory boards are in charge of appointing the top management, reviewing its performance and giving advice on the general strategy of the company. They can also define a list of operations where its approval is required before they are undertaken. In the coal, iron and steel industries, workers' representatives on the company board can also veto the appointment of the company Human

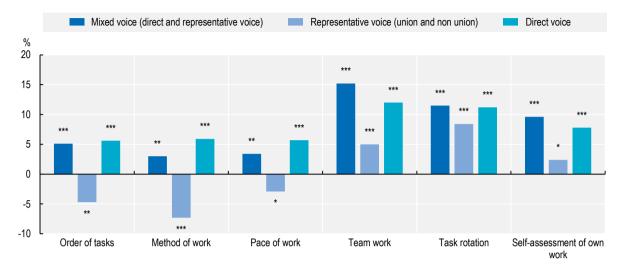
Resources director (ETUI, 2015_[118]). Since 2002, a European Union Directive²⁸ established a general framework on information and consultation according to which employees have to be consulted on decisions likely to lead to substantial changes in work organisation, in firms with more than 20 (or 50, depending on member countries) employees.

Figure 4.9 shows the correlation between some types of work organisation and management practices such as autonomy (measured as the freedom to set the order of tasks, the method of work and the pace of work), teamwork, task rotation and the self-assessment of one's own work²⁹ and different forms of workers' voice using individual-level data from the European Working Conditions Survey. The results show that, in European countries, direct and mixed forms of workers' voice are consistently associated with higher work autonomy and a higher incidence of practices such as teamwork, task rotation and self-assessment of one's own-work. In particular, they are positively associated with workers' autonomy (measured as the possibility to choose or change the sequence of tasks, the possibility to choose or change how the work is done and to choose/change the speed/rate of work), with teamwork, job rotation or with having the responsibility for quality control. By contrast, representative-only forms of voice are not consistently associated with a larger use of these work organisation and management practices.

As discussed before, this may reflect a selection effect on the side of employers. Indeed, direct forms of voice can only flourish in contexts where management is willing to hear feedbacks from workers, and where the relationship between workers and managers is characterised by a basic amount of openness and trust. In that sense, direct voice may be considered a good management practice in itself. By contrast, as explained above, the presence of solely representative arrangements for voice could be characteristic of poor social dialogue contexts, where employers are mandated by law to have representative institutions, but are unwilling to engage in direct exchanges with workers. The presence of representative arrangements could also result from strained workers seeking representation to express their discontents, while benefiting from the legal protections attached to representative voice. Besides, Hammer and Avgar (2005[41]) suggest that when representative voice is born out of such discontent, it can lead management to adopt restrictive practices in response, increasing control and monitoring and therefore further diminishing workers' autonomy. These explanations are all consistent with the results in Figure 4.9 which show a negative correlation between the presence of representative-only institutions for voice and less autonomy in terms of freedom to set the order of tasks, to define the method of work or the pace of work.

Figure 4.9. Correlations between measures of workplace organisation and workers' voice arrangements

Percentage, employees aged 15-64, 2015



Note: Results are based on probit regressions including additional controls for age, education, gender, type of contract (permanent or temporary contract), occupation, job tenure, firm size, industry, sector (public and private) and country dummies. The chart reports marginal effects, i.e. percentage change in the outcome variable following a discrete change in the relevant explanatory variable from the base level (no workers' voice arrangements). For further details, see Annex Table 4.A.2. *,***,****: statistically significant at the 10%, 5%, and 1% level, respectively. Source: OECD estimates based on the 6th European Working Conditions Survey (EWCS), 2015.

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Collective agreements as well as different forms of voice can also help accompanying the introduction of new technologies and ensuring that their deployment does not come at the expense of job quality for workers (see also Chapter 5). It can also help ensure that increased work intensity, for instance, is rewarded with higher wages or more time-off. Recent research in the British context (Bryson, Barth and Dale-Olsen, 2013[119]) indicates that the job-related anxiety that accompanies organisational change at work is ameliorated when employees work in a unionised workplace and are involved in the introduction of the changes.

Box 4.5. Collective bargaining, job quality and productivity: A case study of the implementation of the "world class manufacturing" method in the automotive sector

A safer and better quality of the working environment is a primary concern for workers. It is also a significant ingredient for firms' performance (Saint-Martin, Inanc and Prinz, 2018_[2]). The implementation of a new form of work organisation in Fiat Chrysler Automobiles (FCA) plants in Italy and the United States provides an interesting example of why that is the case. In 2005, the Italian car manufacturer FIAT (later called FCA after it acquired Chrysler) adopted a new production model called World Class Manufacturing (WCM). This model was also reportedly implemented by other large international companies such as Royal Mail, Ariston, Unilever, Atlas Copco, and Barilla.

WCM is a methodology developed by Schnonberger (1986_[120]) building on the Toyota Production System or "lean manufacturing", which focuses on eliminating waste and improving quality and safety in a systematic and organised way. The methodology is based on 10 pillars. The first one is focused on safety, with the goal of zero accidents and a stronger focus on ergonomics. Other pillars include cost deployment and people development. The WCM also gives more responsibility and autonomy to the workers by asking them to think about their own work and to provide suggestions. In the words of its creator "the old division of labour concept was to divide the job into narrow elements; the unskilled people could be hired off the street and learn an assembly job quickly with little training. The WCM concept calls for assemblers to learn multiple job skills, data collection duties, and diagnosis and problem solving talents, in brief: take the skill out of the job; develop the skills of the mind" (Schonberger, 1986, p. 38_[120]). In WCM, workers are asked to play a more active role by providing feedbacks and suggestions related to work organisation and the experimentation of new methods. Moreover, the method aims at increasing job mobility to allow workers to change job and progress in their career.

A specificity of the implementation of WCM in FCA plants in the United States is that the United Auto Workers (UAW) union has been closely associated since the beginning to the deployment of the new method to help management get workers fully on-board and increase their active participation. At the local level, UAW has one representative per pillar working hand in hand with the management on its actual implementation. Moreover, UAW and FCA jointly run the UAW-Chrysler National Training Center. The latter is funded by FCA and governed by a board composed of four representatives of the union and four of the management. As part of the National Training Center, the World Class Manufacturing Academy (WCMA) in Warren, Michigan is tasked with training workers to WCM methods. According to FCA management, "the results that have been achieved in our plants could not have been realised without the support of our UAW partners. From the leadership to the shop floor, everyone has become an advocate of WCM and understands that it is critical to maintaining Chrysler Group's competitiveness into the future" (FCA, 2012[121]). According to UAW, "WCM has engaged and empowered our UAWrepresented workforce by challenging them to become more involved in driving change within our plants. By embracing WCM, we can secure manufacturing jobs and additional investment in our plants" (FCA, 2012_[121]). In Italy, the deployment of WCM was, and partly remains, more controversial: in 2010, it was a key part of the new agreement that Fiat asked unions to sign to secure the continuation of investments and production in Italian establishments together with new rules on overtime, breaks and unions' activities. This agreement was fiercely opposed by one of the three main unions, FIOM-CGIL, which considered it as a form of blackmail and still criticises the new working method as a form of work intensification without sufficient rewards for workers.

Proponents of WCM stress its role in increasing productivity and job quality. Opponents retort that increases in productivity are not sufficiently shared with workers. They also point that while physical stressors are reduced, mental stress has increased. A survey of almost 5 000 FCA workers (Campagna et al., 2015_[122]) run by the Italian metalworker unions FIM-CISL, which signed the 2010 agreement,

showed that safety has increased, that the quality of production has increased and that workers feel more involved. Workers feel that a higher degree of intellectual involvement is required from them in their job. On the other hand, they also report that WCM has increased pace by cutting small breaks, and that work has become more stressful. Moreover, workers feel that the time to provide feedback is still limited and the rewards for the feedback are often only symbolic. One of the main requests that workers have is to ensure a better share of the productivity gains that derive from WCM, which partly stem from workers' suggestions and direct involvement. The results of another survey of workers in Italian FCA plants run by FIOM-CGIL (Bubbico and Di Nunzio, 2018_[123]), which strongly opposed the 2010 agreement, stress more these negative aspects, underlying in particular the increase in workloads and pace and the fact that direct voice crowds out formal workers' representative bodies, weakening workers' bargaining power.

4.3.5. Workplace intimidation and discrimination

Workplace intimidation (also referred to as "workplace bullying") comprises situations where a worker is confronted with physical violence, threats, blackmail, or verbal abuse. Discrimination refers to the unjust or prejudicial treatment of different categories of people, on the grounds of one of their characteristics (gender, age, race, sexual orientation, religion, physical appearance, etc.)³⁰. It can happen at any step of the career path, from job application to job loss and promotion opportunities. While the attention to workplace intimidation is relatively more recent, the causes, cost and measurement of discrimination in the workplace have been the subject of many studies and experiments – see Carcillo and Valfort (2018_[124]) for a summary of the evidence.

Intimidation and discrimination are detrimental to workers mental and physical health and worsen the quality of the working environment. Discrimination, in particular, has been shown to increase the risk of depression (Noh and Kaspar, 2003_[125]), hypertension (Williams and Mohammed, 2008_[126]), cardiovascular disease (Lewis et al., 2006_[127]), breast cancer (Oyo et al., 2003_[128]), and to increase mortality (Barnes et al., 2008_[129]).

According to a 2015 Eurobarometer survey, 19.8% of employees in the European Union declare having experienced at least one form of discrimination in that year (up from 14.8% in 2012) (European Commission, 2015_[130]).³¹ Age discrimination was the most prevalent form of discrimination (5%), followed by gender discrimination (4.6%), ethnic discrimination (3.5%), religion (2.4%), disability (1.9%), sexual orientation (1.3%), and gender identity (0.6%).³² However, this ranking is different when considering the percentage of discriminated individuals in relevant groups at risk of discrimination: 30.7% of employees from ethnic minorities declare that they experienced discrimination, while 9.8% of workers under 30 and over 55 experienced age discrimination.

Intimidation appears to be more widespread. According to data from the 2015 wave of the European Working Conditions Survey, 12.5% of employees declare having experienced verbal abuse in that year, 9.2% had experienced threats and humiliating behaviours over the last month, 4.8% had been subjected to bullying/harassment in the last 12 months, 2.1% had experienced physical violence, 2.1% had received unwanted sexual attention over the last month and 1% had experienced sexual harassment in the last 12 months.

Legally prohibiting workplace intimidation and discrimination is an essential first step. Anti-discrimination law is framed by international conventions.³³ Legislation on violence and harassment at work is more recent. For instance, a specific ILO Convention (C-190) on the issue has been approved in July 2019. The Convention – which, in many OECD countries, adds some elements to already existing provisions – recognises that violence and harassment at work (defined as behaviours, practices or threats "that aim at, result in, or are likely to result in physical, psychological, sexual or economic harm") "can constitute a human rights violation or abuse" and is "incompatible with decent work". The new Convention sets a series

of standards to be implemented by member countries to better protect all workers, irrespective of their contractual status, including persons in training, interns and apprentices, workers whose employment has been terminated, volunteers, job seekers and job applicants. The Convention also extends anti-harassment policies beyond the premises of the office or the factory, to include work-related travels and social events and daily commutes.

Beyond legislations, however, ensuring that these laws are properly enforced through reporting, recording and sanctioning is crucial. In that regard, workers' representatives can play a key role by offering an onsite resource for a worker willing to report a case of intimidation or discrimination. According to Eurobarometer data (European Commission, 2015_[130]), in 2015, 16.2% of employees who declared having experienced at least one form of discrimination in the last 12 months said that they would prefer to report their case to a trade union in case of discrimination (20.5% for gender discrimination, 18.2% for age discrimination and 17.7% for disability). 27.2% mentioned going to the police, 22% would turn to an equal opportunity organisation, and 6.5% do not know whom they would turn to. This latter statistic signal the existence of space for progression for workers' representatives to act as an efficient recourse for workers in these situations. According to Ouali (2013_[131]), quoting survey research carried out between 2003 and 2005 in five European countries, the vast majority of racist incidents were not reported to union representatives for reasons ranging from fear of stigmatisation, fear of not being trusted, and fear that a legal procedure would not result in sanctions against perpetrators.

Historically, unions have not always been at the forefront of the fight against discrimination. Bargaining agendas used to centre on male-biased priorities (Tavora, 2012_[132]) and in some cases, unions replicated the type of segregation prevalent in society and in most organisations.³⁴ Moreover, the issue of racism was also generally seen as something that happened outside the factory gates (Wrench, 2015_[133]). In the 1960s and 1970s, American unions also tended to oppose migration, fearing that migrants would drag down the wages of native workers and increase unemployment (Jacobson and Geron, 2008_[134]). Still in the early 1990s, the practical responses of several European trade unions to policies and codes against discrimination were found to be "minimal and lukewarm" (Eurofound, 1996_[135]).

One source of tension is that acknowledging the disadvantage of certain groups of workers and drawing attention to differences among union members is at odds with the traditional strategy of building union strength by highlighting common collective interests and identity (Tavora, 2012_[132]). Another difficulty lies in the transmission of anti-discrimination strategies decided at national level to practices at the local level (Ouali, 2013_[131]; European Commission, 2006_[136]).

Nonetheless, unions' stance on workplace discrimination and intimidation has noticeably changed in the last decades. In 1995, the European social partners signed the Joint Declaration on the Prevention of Racial Discrimination and Xenophobia and Promotion of Equal Treatment in the Workplace, which proposed a set of anti-discrimination measures in recruitment, selection, or training. This change reflected wider societal transformations, as well as the adoption of national and international legislations such as the European Union Racial Equality Directive adopted in 2000, and the Employment Equality Directive. These laws have increased trade unions' awareness and receptiveness of immigration and racial discrimination issues (Wrench, 2015_[133]).³⁵ As the labour force has become more diverse, better taking into account the interest of a diverse workforce also became an essential element of union revitalisation strategies (Dickens, 1999_[137]).

Since the adoption of that declaration, trade unions in Europe have developed various anti-discrimination initiatives. First, unions have started to change their structure, creating dedicated departments to conduct their equality agendas, appointing officers with specific discrimination portfolios, reserving seats to representatives of groups at risk of discrimination on union executive boards (European Commission, 2010_[138]), or encouraging self-organisation of disadvantaged groups within their structures. For example, UNISON in the United Kingdom has been supporting black self-organisation (European Commission, 2006_[136]). In Italy in 2003, the Confederazione Generale Italiana del Lavoro (CGIL) created a 'New Rights'

section aimed at coordinating efforts to better address issues linked to sexual orientation and gender identity. Unions have also invested in the creation of auditing mechanisms and monitoring tools on anti-discrimination issues. The British Trade Union Congress has introduced Equality Audits since 2001, in order to draw an accurate picture of the efforts undertaken on issues of discrimination at work, to measure progress and to identify remaining gaps. Unions affiliated to the TUC are audited and reports are published every two years. Unions are also conducting diversity training to raise awareness among their members.

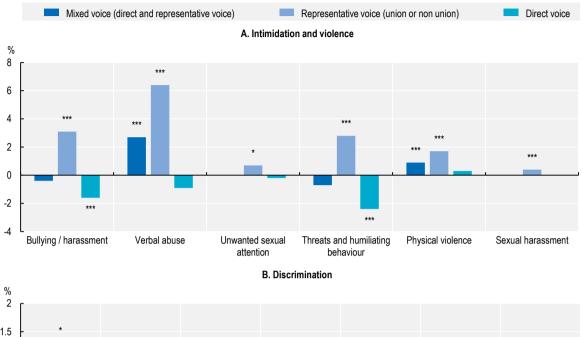
Second, policies mitigating discrimination and workplace harassment have become objects of collective bargaining and are now included in sectoral and firm-level collective agreements. For instance, around 30% of collective agreements in the retail and commerce sector in the European Union contain at least one clause on equal access to training, around 40% a clause on equal promotion opportunities, close to 50% a clause on equal pay and close to 80% a clause on non-discrimination (Besamusca, Kahancová and Tijdens, 2018[86]). Examples include clauses aimed at eliminating age bars or age-based criteria, annual leave agreements which acknowledge the needs of a diverse workforce (notably in terms of religious holiday), or collective agreements on diversity management (European Commission, 2010[138]). A 2003 national agreement in Belgium suggested a mechanism to facilitate the recruitment of young minority workers (Ouali, 2013[131]). In Lithuania, the Lietuvos profesinių sąjungų konfederacija (the Lithuanian Trade Union Confederation) (LPSK) led a campaign on the issue of age discrimination. This led to the formulation of a set of policy recommendations (including job protection for those coming up to retirement and paid time-off for retraining) being brought to the Tripartite Council in 2008, which was then implemented into collective agreements (European Commission, 2006[136]). Unions have also developed tools to negotiate anti-discrimination policies (such as the British TGWU's Negotiator's guide on Race Equality) (European Commission, 2006[136]).

Third, workers' voice mechanisms can also play a role in raising awareness about intimidation and discrimination and provide an on-site resource to address them. Workers' voice mechanisms can be direct or representative (and most often workplaces have mixed systems with both), and representative forms of voice can involve unions or not. A study in the United States showed that claims of racial and gender discrimination are less frequent in workplaces with clear channels for workers to voice their discontents, in particular when the race or gender of the supervisor is different from that of the worker (Bender, Heywood and Kidd, 2017_[139]). Examples of union-led workplace initiatives to mitigate discrimination and intimidation include the provision or targeted training to groups disadvantaged on the labour market, e.g. ethnic minorities or LGBT workers (European Commission, 2006_[136]), or the establishment of dedicated representatives (European Commission, 2010_[138]). For instance the Österreichischer Gewerkschaftsbund (OEGB —Austrian Federation of Trade Unions) has introduced workplace youth representatives, which role is to facilitate recruitment, to identify the needs of young members, and to influence company culture (European Commission, 2010_[138]). While there are many examples of good practices such as this one, a 2006 European Commission report found the workplace-level response to anti-discrimination issues to be rather heterogeneous (European Commission, 2006_[136]).

Figure 4.10 shows the correlations between various forms of intimidation and discrimination and various types of workers' voice using data from the European Working Conditions Survey. The picture emerging from this analysis is consistent with what has been found for the other dimensions of the quality of the working environment. In particular representative only forms of voice are associated with more intimidation and discrimination while mixed and direct only forms of voice tend to be associated with lower incidence of intimidation and discrimination, compared with the absence of workers' voice arrangements.

Figure 4.10. Correlations between measures of intimidation and discrimination and various forms of workers' voice arrangements

Percentage, employees aged 15-64, 2015



2
1.5
1
0.5
0
-0.5
-1
Age Ethnic background/race Nationality Sex Religion Disability Sexual orientation

Note: Results are based on probit regressions including additional controls for age, education, gender, type of contract (permanent or temporary contract), occupation, job tenure, firm size, industry, sector (public and private) and country dummies. The chart reports marginal effects, i.e. percentage change in the outcome variable following a discrete change in the relevant explanatory variable from the base level (no workers' voice arrangements). For further details, see Annex Table 4.A.2. *,***,****: statistically significant at the 10%, 5%, and 1% level, respectively. Source: OECD estimates based on the 6th European Working Conditions Survey (EWCS), 2015.

StatLink http://dx.doi.org/10.1787/888934027874

Higher incidence of intimidation and discrimination with representative only forms of voice are once again likely to reflect a selection effect and not a direct negative effect of representative bodies. Workers who feel intimidated and/or discriminated against may call on unions to set up a formal workers' representative body to defend themselves while workers who are not intimidated or discriminated may not feel the need. Moreover, the absence of direct forms of voice may signal the low willingness of employers to co-operate for a better working environment. In addition, the presence of representative bodies is likely to increase workers' awareness and knowledge of what constitutes harassment and discrimination and therefore to increase the reporting of intimidation and discrimination cases in the survey.

Beyond internal reorganisation, collective bargaining, and workers' voice, a fourth way in which unions intervene on these issues is through awareness-raising, government lobbying and legal action.

In terms of awareness-raising campaigns, European Commission (2010_[138]) highlights trade unions' engagement with employers' organisations, NGOs, and community associations. Campaigns range from highlighting issues of enforcement to demanding new measures guaranteeing equality of treatment for e.g. ethnic and religious minority, or LGBT workers. In Italy, CGIL partnered with NGOs to respond to rising xenophobia and homophobia in Italian society, raising awareness though campaigns such as the"'Same blood, same rights" campaigns highlighting the unfair treatment of migrant workers.

Unions are also invested in government lobbying in the objective of promoting legislation against intimidation and discrimination. For instance, union lobbying through the European Trade Union Confederation was important in securing the 2000 Equal Treatment Directive (European Commission, 2006_[136]). The Lithuanian Trade Union Confederation policy recommendations to address age discrimination mentioned above were ultimately brought into labour law (European Commission, 2010_[138]). In Austria, youth employment laws were modified and protective regulations protective regulations related to probation and dismissal expanded to young workers following the establishment of youth representatives.

Finally, unions are sometimes engaging in legal actions to combat workplace discrimination. For instance, the Icelandic confederation of Labour (ASÍ) launched a campaign in 2005 aimed at defending the principle of equal treatment workers, including migrant workers, who were often paid less and worked without social insurance in construction and food industries. Where they could not negotiate a solution with employers, ASÍ took legal action against the companies (European Commission, 2010[138]). In Belgium, the Fédération générale du travail de Belgique (FGTB) and the NGOs CEOOR (Centre for Equal Opportunities and Opposition to Racism) and Kif-Kif filed a joint complaint against the temporary work agency Adecco, which was condemned in 2011 for having used racially oriented labels to distinguish between candidates (Ouali, 2013[131]). In Italy, CGIL initiated legal action against the government for failing to transpose effectively the European Union Equality directives.

Conclusions

This chapter has shed new light on the role that collective bargaining and workers' voice play for the quality of the working environment in OECD countries. Good working conditions are a primary concern for workers. They also matter for employers as low quality jobs have been found to be associated with higher absenteeism, more health problems, increased labour turnover and, in the end, lower firm performance. Improving working environments is, therefore, an area where mutually beneficial solutions can be (and are already being) found through dialogue and negotiations between employers, unions and workers' representatives.

In all OECD countries, basic standards with respect to safety and health provisions or working time are set down by legislation. However, unions, workers' representatives and employers also shape working conditions in a variety of ways. First they can negotiate higher standards (or, in some specific cases, derogations) in sectoral or firm-level collective agreements. Second, they can negotiate provisions in areas other than those covered by the law, such as training or management practices. Third, they can change working conditions through regular exchanges and negotiations at workplace level, via representative (e.g. unions or works councils) or direct (e.g. town hall meetings) voice arrangements. Fourth, social partners affect the quality of the working environment through lobbying and negotiating legislative changes with governments.

Data on the quality of the working environment and collective bargaining are limited and do not allow causal analyses to be carried out across OECD countries. Some bargaining systems appear to perform better in terms of the quality of the working environment, which is on average higher in countries with well-organised social partners and a large coverage of collective agreements — where the number of job resources available to workers (e.g. autonomy, training and flexibility of the working time), in particular, is higher. When considering the role of workers' voice, the chapter has shown that the existence of direct forms of workers' voice and of mixed forms of voice are both correlated with a higher quality of the working environment. By contrast, the presence of workers' representatives in firms where there are no parallel means of direct exchange between workers and managers is correlated with a lower quality of the working environment (compared with firms with no workers' voice arrangements at all). These results are mere correlations and the data do not allow causal links to be identified. This chapter has suggested mechanisms that could plausibly explain these results, namely that strained workers and non-cooperative employers are both likely to self-select into these purely representative forms of voice.

The chapter has also provided a detailed analysis with several country examples of the role that collective bargaining and different forms of workers' voice arrangements play in setting standards in occupational safety and health, working time, training and re-skilling policies, management practices, and the prevention of workplace intimidation and discrimination. The implementation of high standards of safety and health provisions as well as training or management practices remains more challenging in small and medium-sized enterprises and in sectors with a relatively high share of non-standard employment. However, the chapter includes examples of how social partners and policymakers in OECD countries have tried to extend best practices across all types of firms. This could inspire similar initiatives in other contexts.

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Annex 4.A. Definition and sources of Job Quality indicators

Annex Table 4.A.1. Definition of job demand and job resource variables

	EWCS questions	E	EWCS variable		EWCS coding	Final coding		
		2015	2010	2005		(scale 0-1		
	A. Job den							
	1. Hard physical							
Painful positions (d1)	Does your job involve tiring or painful positions?	Q30A	Q30A Q24A Q11A	Scale 1–7	1 if Q30A<4;			
						(all of the time – never)	0 otherwise	
Heavy loads (d2)	Does your job involve carrying or moving heavy loads?	Q30C	Q24C	Q11C	Scale 1–7	1 if Q30C<4;		
					(all of the time – never)	0 otherwise		
Repetitive arm movements (d3)	Does your main paid job involve repetitive hand or arm movements?	Q30E Q24E	Q24E Q11E	Scale 1–7	1 if Q30E<4;			
						(all of the time – never)	0 otherwise	
High temperatures (d4)	Are you exposed at work to high temperatures which make you perspire even	Q29C	Q23C	Q10C	Scale 1–7	1 if Q29C<4		
	when not working?				(all of the time – never)	0 otherwise		
Low temperatures (d5)	eratures (d5) Are you exposed at work to low temperatures whether indoors or outdoors? Q2:	Q29D	Q23D	Q10D	Scale 1–7	1 if Q29D<3		
							(all of the time – never)	0 otherwise
High noise (d6)	Are you exposed at work to noise so loud that you would have to raise your voice to talk to people?	Q29B	Q23B	Q10B	Scale 1–7	1 if Q29B<4;		
							(all of the time – never)	0 otherwise
/ibrations (d7)	Are you exposed at work to vibrations from hand tools, machinery, etc.?	Q29A Q23A		Q29A	Q23A Q10	Q10A	Scale 1–7	1 if Q23B<4;
					(all of the time – never)	0 otherwise		
Fumes (d8)	Are you exposed at work to breathing in smoke, fumes, powder or dust etc.?	Q29E	Q23E Q10E	Q10E	Scale 1–7	1 if Q29E<6;		
					(all of the time – never)	0 otherwise		
Vapours (d9)	Are you exposed at work to breathing in vapours such as solvents and thinners?	Q29F (Q29F Q23F	Q10F	Scale 1–7	1 if Q29F<6;		
					(all of the time – never)	0 otherwise		
Chemical products (d10)	Are you exposed at work to handling or being in skin contact with chemical products or	Q29G	Q23G	Q10G	Scale 1–7	1 if Q29G<6;		
	substances?				(all of the time – never)	0 otherwise		

	EWCS questions	E	EWCS variat	ole	EWCS coding	Final coding
		2015	2010	2005		(scale 0-1
	2. Intimidation or o	discrimina	ition			
Bullying and harassment (d11)	Over the past 12 months, during the course of your work have you been subjected to bullying / harassment?	Q81C	Q71B	Q29D	Yes/No	1 Q81C=Yes
Age discrimination (d12)	Over the past 12 months at work, have you been subjected personally to age discrimination?	Q72A	Q65A	Q29G	Yes/No	1 Q72A=Yes
Discrimination linked to race, ethnic background or colour (d13)	Over the past 12 months at work, have you been subjected personally to discrimination linked to race, ethnic background or colour?	Q72B	Q65B	Q29I	Yes/No	1 Q72B=Yes 0 otherwise
Discrimination linked to nationality (d14)	Over the past 12 months at work, have you been subjected personally to discrimination linked to nationality?	Q72C	Q65C	Q29H	Yes/No	1 Q72C=Yes 0 otherwise
Gender discrimination (d15)	Over the past 12 months at work, have you been subjected personally to discrimination on the basis of your sex?	Q72D	Q65D	Q29E	Yes/No	1 Q72D=Yes 0 otherwise
Discrimination linked to disability (d16)	Over the past 12 months at work, have you been subjected personally to discrimination linked to disability	Q72F	Q65F	Q29K	Yes/No	1 Q72F=Yes 0 otherwise
Inti	midation or discrimination = 1 if (d11 + d12	+ d13 + d	14 + d15 + d	d16) ≥ 1; 0	otherwise.	
	3. Work int	ensity				
Work at very high speed	Does your job involve working at very high	Q49A	Q45A	Q20BA	Scale 1–7	1 if Q49A<
(d17)	speed?				(all of the time – never)	0 otherwise
Working with tight deadlines (d18)	Does your job involve working to tight deadlines?	Q49B	Q45B	Q20BB	Scale 1–7 (all of the time – never)	1 if Q49B< 0 otherwise
Long working hours (d19)	How many hours do you usually work per week in your main paid job?	Q24	Q18	Q8A	Number of hours	1 if Q24>50
Not enough time to get the job done (d20)	Do you have enough time to get the job done?	Q61G	Q51G	Q25F	Scale 1–5	1 if Q61G>2;
					(always – never)	0 otherwise
	Work intensity = 1 if (d17 + d18 +	d19 + d20	0) ≥ 1; 0 oth	erwise.		
	4. Unsocial wor	k schedul	le			
Night work (d21)	Normally, how many times a month do you work at night, for at least 2 hours between	Q37A	Q32	Q14A	Scale 1–17	1 if Q37A>1;
	10.00 pm and 05.00 am?				(never – more than 20 times)	0 otherwise
Work more than 10 hours a day (d22)	How many times a month do you work more than 10 hours a day?	Q37D	Q36	Q14E	Scale 1–17	1 if Q37D>5;
					(never – more than 20 times)	0 otherwise
	Unsocial work schedule = 1 if (c	d21 + d22)	≥ 1; 0 othe	rwise.		
	5. Monotono	us tasks				
Monotonous tasks (d23)	Generally, does your main paid job involve monotonous tasks?	Q53D	Q49D	Q23D	Yes/No	1 if Q53D=Yes
						0 otherwise

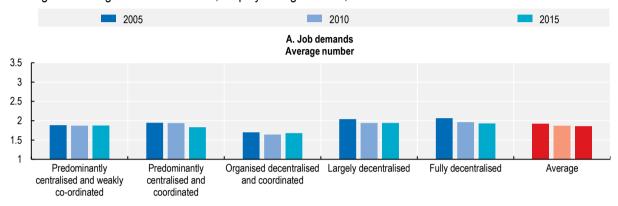
	EWCS questions	E	EWCS varia	ble	EWCS coding	Final coding
		2015	2010	2005		(scale 0-
	B. Job reso		_			
	1. Social suppo	1				4.16
Help and support from colleagues (r1)	Your colleagues help and support you	Q61A	Q51A	Q25A	Scale 1–5	1 if Q61A<3;
					(always – never)	0 otherwise
	Social support at work = 1			е.		
	2. Managemer					
Help and support from manager (r2)	Your manager helps and supports you	Q61B	Q51B	Q25B	Scale 1–5	1 if Q61B<3;
					(always – never)	0 otherwise
Respect from immediate boss (r3)	Your immediate boss respects you as a person	Q63A			Scale 1–5	1 if Q63A<4;
					(strongly agree – strongly disagree)	0 otherwise
Work support from your immediate boss (r4)	Your immediate boss is helpful in getting the job done	Q63D			Scale 1–5	1 if Q63D<4;
					(strongly agree – strongly disagree)	0 otherwise
Feedback from immediate boss (r5)	Your immediate boss provides useful feedback on your work	Q63E			Scale 1–5	1 if Q63E<4;
					(strongly agree – strongly disagree)	0 otherwise
	Management support = 1 if r1 =	= 1; 0 othe	erwise (200	5-15).		
	Management support = 1 if (r1 + r2 + r3 +	r4 + r5) =	5; 0 otherv	vise (2015	only).	
	3. Work aut	onomy				
Order of tasks (r6)	Are you able to choose or change your order of tasks?	Q54A	Q50A	Q24A	Yes/No	1 if Q54A=Yes 0 otherwise
Methods of work (r7)	Are you able to choose or change your	Q54B	Q50B	Q24B	Yes/No	1 if
	methods of work?					Q54B=Yes
	methods of work?					Q54B=Yes 0 otherwise
Pace of work (r8)		Q54C	Q50C	Q24C	Yes/No	Q54B=Yes 0 otherwise 1 if Q54C=Yes
Pace of work (r8)	methods of work? Are you able to choose or change your speed or rate of work?				Yes/No	Q54B=Yes 0 otherwise 1 if Q54C=Yes
Pace of work (r8)	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r	7 + r8) = 3	3; 0 otherw		Yes/No	Q54B=Yes 0 otherwise
. ,	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least fire	7 + r8) = 3 ve days p	3; 0 otherwier year)	ise.		Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise
Training courses paid or provided by the employer	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least five over the past 12 months, have you undergone training paid for or provided by	7 + r8) = 3	3; 0 otherw		Yes/No Yes/No	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes
Training courses paid or provided by the employer (r9)	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least five over the past 12 months, have you undergone training paid for or provided by your employer?	7 + r8) = 3 ve days p Q65A	3; 0 otherwier year)	Q28A1	Yes/No	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes 0 otherwise
Training courses paid or provided by the employer (r9) Training course duration	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least five speed or training paid for or provided by your employer? Over the past 12 months, how many days in	7 + r8) = 3 ve days p	3; 0 otherwier year)	ise.	Yes/No Scale 1–6	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes 0 otherwise 1 if Q66>3;
Training courses paid or provided by the employer (r9) Training course duration	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least fiv Over the past 12 months, have you undergone training paid for or provided by your employer? Over the past 12 months, how many days in total did you spend in training paid for or provided by your employer?	7 + r8) = 3 ve days p Q65A Q66	g; 0 otherwi er year) Q61A	Q28A1	Yes/No	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes 0 otherwise 1 if Q66>3;
Training courses paid or provided by the employer (r9) Training course duration	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least five over the past 12 months, have you undergone training paid for or provided by your employer? Over the past 12 months, how many days in total did you spend in training paid for or provided by your employer? Training = 1 if r9 = 1; 0 ce	7 + r8) = 3 ve days p Q65A Q66	g; 0 otherwier year) Q61A (2005-15).	Q28A1	Yes/No Scale 1–6 (one day or less – 20 days or more)	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes 0 otherwise 1 if Q66>3;
Training courses paid or provided by the employer (r9) Training course duration	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least five the past 12 months, have you undergone training paid for or provided by your employer? Over the past 12 months, how many days in total did you spend in training paid for or provided by your employer? Training = 1 if r9 = 1; 0 or Training (at least five days per year) = 1	7 + r8) = 3 ve days p Q65A Q66 Otherwise if (r9 + r1	3; 0 otherwier year) Q61A (2005-15). 0) = 2; 0 ot	Q28A1	Yes/No Scale 1–6 (one day or less – 20 days or more)	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes 0 otherwise 1 if Q66>3;
Training courses paid or provided by the employer (r9) Training course duration (r10)	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least five over the past 12 months, have you undergone training paid for or provided by your employer? Over the past 12 months, how many days in total did you spend in training paid for or provided by your employer? Training = 1 if r9 = 1; 0 contraining (at least five days per year) = 1 5. Flexibility of weights to choose or change your speed.	ve days por Q65A Q66 Q66 Otherwise if (r9 + r1	g; 0 otherwiser year) Q61A (2005-15). 0) = 2; 0 otherwise	Q28A1	Yes/No Scale 1–6 (one day or less – 20 days or more)	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes 0 otherwise 1 if Q66>3; 0 otherwise
Training courses paid or provided by the employer	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least five the past 12 months, have you undergone training paid for or provided by your employer? Over the past 12 months, how many days in total did you spend in training paid for or provided by your employer? Training = 1 if r9 = 1; 0 or Training (at least five days per year) = 1	7 + r8) = 3 ve days p Q65A Q66 Otherwise if (r9 + r1	3; 0 otherwier year) Q61A (2005-15). 0) = 2; 0 ot	Q28A1	Yes/No Scale 1–6 (one day or less – 20 days or more)	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes 0 otherwise 1 if Q66>3;
Training courses paid or provided by the employer (r9) Training course duration (r10) Possibility to take a break	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least five days per year) = 1 Over the past 12 months, have you undergone training paid for or provided by your employer? Over the past 12 months, how many days in total did you spend in training paid for or provided by your employer? Training = 1 if r9 = 1; 0 or Training (at least five days per year) = 1 5. Flexibility of we you can take a break when you wish	ve days p Q65A Q66 Q66 Otherwise if (r9 + r1 vorking tir	g; 0 otherwier year) Q61A (2005-15). 0) = 2; 0 otherwier year)	Q28A1 herwise (2	Yes/No Scale 1–6 (one day or less – 20 days or more) O15). Scale 1–5 (always – never)	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes 0 otherwise 1 if Q66>3; 0 otherwise 1 if Q61F<4; 0 otherwise
Training courses paid or provided by the employer (r9) Training course duration (r10) Possibility to take a break	methods of work? Are you able to choose or change your speed or rate of work? Work autonomy = 1 if (r6 + r 4. Training (at least five over the past 12 months, have you undergone training paid for or provided by your employer? Over the past 12 months, how many days in total did you spend in training paid for or provided by your employer? Training = 1 if r9 = 1; 0 contraining (at least five days per year) = 1 5. Flexibility of weights to choose or change your speed.	ve days por Q65A Q66 Q66 Otherwise if (r9 + r1	g; 0 otherwiser year) Q61A (2005-15). 0) = 2; 0 otherwise	Q28A1	Yes/No Scale 1–6 (one day or less – 20 days or more) 015). Scale 1–5	Q54B=Yes 0 otherwise 1 if Q54C=Yes 0 otherwise 1 if Q65A=Yes 0 otherwise 1 if Q66>3; 0 otherwise 1 if Q61F<4;

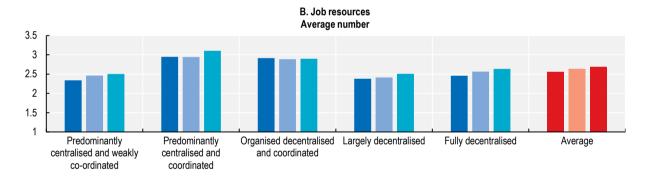
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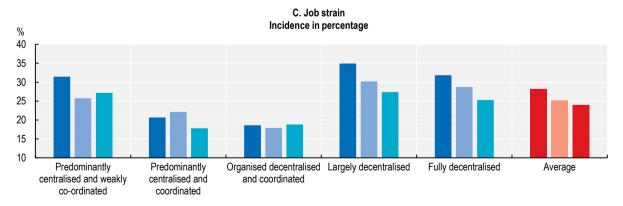
Note: Scale 1–7 refers to (1) all of the time, (2) almost all of the time, (3) around ¾ of the time, (4) around half of the time, (5) around ¼ of the time, (6) almost never and (7) never; scale 1–5 refers to (1) always, (2) most of the time, (3) sometimes, (4) rarely and (5) never; scale 1–6 refers to (1) one day or less, (2) 2-3 days, (3) 4-5 days, (4) 6-9 days, (5) 10-19 days and (6) 20 days or more; and scale 1–4 to (1) they are set by the company/ organisation with no possibility for changes, (2) you can choose between several fixed working schedules determined by the company/organisation, (3) you can adapt your working hours within certain limits (e.g. flexitime), (4) your working hours are entirely determined by yourself.

Annex Figure 4.A.1. Change in the quality of the working environment by collective bargaining systems in Europe

Unweighted averages across countries, employees aged 15-64, 2005-15







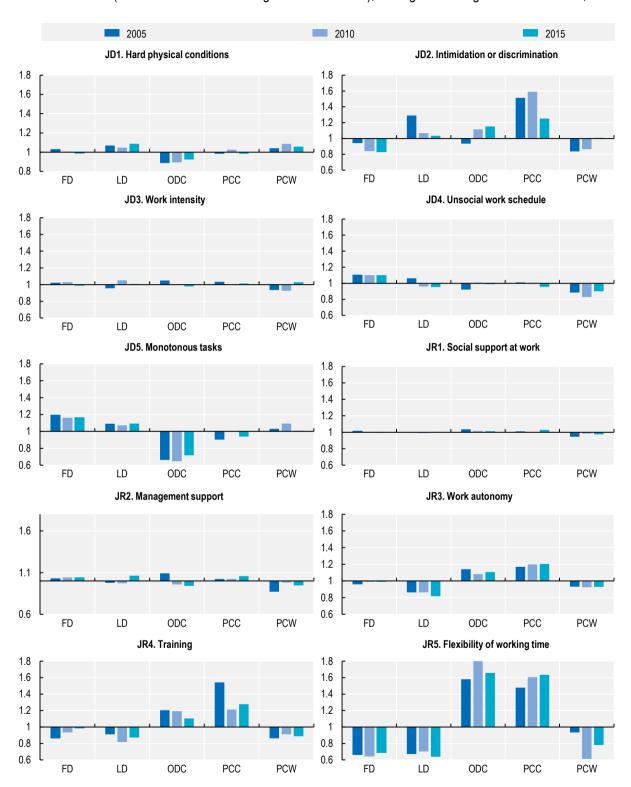
Note: Average is the unweighted average of all European countries shown (Survey weights are used) in Figure 4.2. For a description of the taxonomy of collective bargaining systems, see Annex 3.A. Data not available in 2010 for Switzerland.

Source: OECD estimates based on the European Working Conditions Survey (EWCS).

StatLink http://dx.doi.org/10.1787/888934027893

Annex Figure 4.A.2. Change in subcomponents of the quality of the working environment by collective bargaining systems in Europe

Ratio of incidence (base 1 for the overall average across countries), unweighted averages across countries, 2005-15



Note: FD: Fully decentralised; LD: Largely decentralised; ODC: Organised decentralised and coordinated; PCC: Predominantly centralised and coordinated; PCW: Predominantly centralised and weakly co-ordinated. Average is the unweighted average of all European countries shown in Figure 4.2 (Survey weights are used). For further details on definitions and constructions of the indicators, see Annex Table 4.A.1; and for a description of the taxonomy of collective bargaining systems, see Annex 3.A. Data not available in 2010 for Switzerland. Source: OECD estimates based on the European Working Conditions Survey (EWCS).

StatLink http://dx.doi.org/10.1787/888934027912

Annex Table 4.A.2. Definition of workers' voice arrangements and measures of the quality of the working environment

	EWCS questions	EWCS variable	EWCS coding	Final coding
	A. Workplace representation	n		
Employee representation (wr1)	Does a trade union, works council or a similar committee representing employees exist at your company or organisation?	Q71A	Yes/No	1 if Q71A=Yes;
				0 otherwise.
Regular meeting (wr2)	Does a regular meeting in which employees can express their views about what is happening in the organisation exist at your company or organisation?	Q71C	Yes/No	1 if Q71C=Yes;
				0 otherwise.
Mixed voice = 1 if (wr1 + wr2) =	= 2; 0 otherwise.			
Representative voice (union a	nd non-union) = 1 if wr1 =1 and wr2 =0; 0 otherwis	se.		
Direct voice = 1 if wr1 =0 and v	vr2 =1; 0 otherwise.			
Safety and health delegate or	Does health and safety delegate or committee	Q71B	Yes/No	1 if Q71B=Yes;
committee (wr3)	exist at your company or organisation?			0 otherwise.
	B. Occupational Health and Safety	(OHS)1		
Information about health and	Regarding the health and safety risks related to	Q33	Scale 1–4	1 if Q33=1;
safety risks (o1)	performance of your job, how well informed would you say you are?		(very well informed – not at all well informed)	0 otherwise.
Perception that work positively	Does your work affect your health?	Q74	Scale 1–3	1 if Q74=1;
affect health (o2)			(yes, mainly positively – no)	0 otherwise.
Perception that health is at risk because of work (o3)	Do you think your health or safety is at risk because of your work?	Q73	Yes/No	1 if Q73=Yes;
				0 otherwise.
Health-related leave, at least 10 days per year (o4)	Over the past 12 months how many days in total were you absent from work due to sick leave or health-related leave?	Q82	Number of working days	1 if Q82>9;
				0 otherwise.
Absence resulted from	How many of these days of absence resulted from	Q83A	Number of working days	1 if Q83A>9;
accident at work, at least 10 days per year (o5)	Accident(s) at work?			0 otherwise.
Work-related health problem,	How many of these days of absence resulted from	Q83B	Number of working days	1 if Q83B>9;
at least 10 days per year (o6)	health problems caused or made worse by your work (excluding accidents)			0 otherwise.
	C. Working time ²			
Long working hours (w1)	How many hours do you usually work per week in your main paid job?	Q24	Number of hours	1 if Q24>50;
				0 otherwise.
Can take a break (w2)	You can take a break when you wish	Q61F	Scale 1–5	1 if Q61F<4;
			(always – never)	0 otherwise.
Flexible working time arrangements (w3)	How are your working time arrangements set?	Q42	Scale 1–4	1 if Q42>2;
			(imposed – free choice)	0 otherwise.
Work-life balance (w5)	In general, how do your working hours fit in with your family or social commitments outside work?	Q44	Scale 1–4	1 if Q44<3;
			(very well – not at all well)	0 otherwise.
Don't work during free time to meet work demand (w6)	Over the last 12 months, how often have you worked in your free time to meet work demands?	Q46	Scale 1–5	1 if Q46>3;
			(daily – never)	0 otherwise.
Working more hours than desired (w7)	How many hours per week would you prefer to work at present?	Q25	Number of preferred hours or same number of hours as actually worked	1 if Q24>Q25;
	How many hours do you usually work per week in your main paid job?	Q24	Number of hours	0 otherwise.

	EWCS questions	EWCS variable	EWCS coding	Final coding
	D. Management practices		,	
Order of tasks (m1)	Are you able to choose or change your order of tasks?	Q54A	Yes/No	1 if Q54A=Yes;
				0 otherwise.
Method of work (m2)	Are you able to choose or change your methods of work?	Q54B	Yes/No	1 if Q54B=Yes;
				0 otherwise.
Pace of work (m3)	On the whole, is your pace of work dependent, or	Q50D	Yes/No	1 if Q50D=Yes;
	not, on automatic speed of a machine or movement of a product?			0 otherwise.
Team work (m4)	Do you work in a group or team that has common tasks and can plan its work?	Q58	Yes/No	1 if Q58=Yes;
				0 otherwise.
Task rotation (m5)	Does your job involve rotating tasks between	Q55	Yes/No	1 if Q55=Yes;
	yourself and colleagues?			0 otherwise.
Self-assessment of own work (m6)	Generally, does your main paid job involve	Q53B	Yes/No	1 if Q53B=Yes;
	assessing yourself the quality of your own work?			0 otherwise.
	E. Intimidation and violence at	-	I	
Bullying / harassment (v1)	Over the past 12 months, during the course of	Q81C	Yes/No	1 if Q81C=Yes;
	your work have you been subjected to bullying / harassment?			0 otherwise.
Verbal abuse (v2)	Over the last month, during the course of your	Q80A	Yes/No	1 if Q80A=Yes;
	work have you been subjected to verbal abuse?			0 otherwise.
Unwanted sexual attention (v3)	Over the last month, during the course of your	Q80B	Yes/No	1 if Q80B=Yes;
	work have you been subjected to unwanted sexual attention?			0 otherwise.
Threats or humiliating behaviours (v4)	Over the last month, during the course of your work have you been subjected to threats?	Q80C	Yes/No	1 if Q80C=Yes o Q80D=Yes;
	Over the last month, during the course of your work have you been subjected to humiliating behaviours?	Q80D		0 otherwise
Physical violence (v5)		Q81A	Yes/No	1 if Q81A=Yes;
	your work have you been subjected to physical violence?			0 otherwise
Sexual harassment (v6)	Over the past 12 months, during the course of your work have you been subjected to sexual harassment?	Q81B	Yes/No	1 if Q81B=Yes;
				0 otherwise
	F. Discrimination at work			
Age (d1)	Over the past 12 months at work, have you been subjected personally to age discrimination?	Q72A	Yes/No	1 if Q72A=Yes;
				0 otherwise.
Ethnic background/race (d2)	Over the past 12 months at work, have you been subjected personally to discrimination linked to race, ethnic background or colour?	Q72B	Yes/No	1 if Q72B=Yes;
				0 otherwise.
Nationality (d3)	Over the past 12 months at work, have you been subjected personally to discrimination linked to nationality?	Q72C	Yes/No	1 if Q72C=Yes;
				0 otherwise.
Sex (d4)	Over the past 12 months at work, have you been subjected personally to discrimination on the basis of your sex?	Q72D	Yes/No	1 if Q72D=Yes;
				0 otherwise.
Religion (d5)	Over the past 12 months at work, have you been subjected personally to discrimination linked to religion?	Q72E	Yes/No	1 if Q72E=Yes;
				0 otherwise.
Disability (d6)	Over the past 12 months at work, have you been subjected personally to discrimination linked to disability?	Q72F	Yes/No	1 if Q72F=Yes;
				0 otherwise.
Sexual orientation (d7)	Over the past 12 months at work, have you been subjected personally to discrimination linked to sexual orientation?	Q72G	Yes/No	1 if Q72G=Yes;
				0 otherwise.

^{-:} not applicable.

- 1. Scale 1–4 refers to (1) very well informed, (2) well informed, (3) not very well informed and (4) not at all well informed; and scale 1–3 to (1) yes, mainly positively, (2) yes, mainly negatively and (3) no.
- 2. Scale 1–5 refers to (1) always, (2) most of the time, (3) sometimes, (4) rarely and (5) never; scale 1–4 related to w2 (flexible working-time arrangements) refers to (1) they are set by the company / organisation with no possibility for changes, (2) you can choose between several fixed working schedules determined by the company/organisation, (3) you can adapt your working hours within certain limits (e.g. flexitime), (4) your working hours are entirely determined by yourself; scale 1–4 related to w4 (work-life balance) refers to (1) very well, (2) well, (3) not very well and (4) not at all well; and scale 1–5 related to w5 (don't work during free time to meet work demand) refers to (1) daily, (2) several times a week, (3) several times a month, (4) less often and (5) Never.

Notes

- ¹ See the influential report by the Stigliz-Sen-Fitoussi Commission (Stiglitz, Sen and Fitoussi, 2009_[144]).
- ² Gallie (2007_[141]) distinguishes between "inclusive regimes" (e.g. European Nordic countries), where policies are designed to extend both employment and workers' rights as widely as possible in the working age population, and "dualist regimes" (e.g. Mediterranean countries), where overall employment levels are less of a concern, while strong rights are guaranteed for a core of workers, at the expense of poor conditions for workers at the margins of the workforce. Yet another regime identified is the "market employment regime" (e.g. Anglo-Saxon countries), characterised by an emphasis on minimal employment regulation and an assumption that market adjustments will lead to higher employment levels and rewards for workers in line with their marginal productivity. Building on the varieties of capitalism typology proposed by Amable (2003_[142]), Holman et al. (2012_[143]) also propose to distinguish between different institutional regimes of job quality, extending it to a larger set of countries. They conclude that social democratic regimes (e.g. Nordic states) have the highest proportion of high-quality jobs, continental regimes (e.g. Germany, France) the second highest, liberal regimes (e.g. the United Kingdom) the third highest, and southern European (e.g. Spain, Greece) and transitional regimes (e.g. Eastern European countries) the lowest proportion of high-quality jobs.
- ³ In some countries they also manage or participate in managing sickness insurance schemes (e.g. Austria) or parental leave benefit schemes (e.g. Denmark and Italy).
- ⁴ Non-standard forms of work refers to all forms of work that are not based on a full-time open-ended employment contract. Involuntary non-standard forms of work therefore thus refers to cases such as involuntary temporary work. An example of union limiting the use of involuntary non-standard forms of work is that of IG Metall in Germany, which responded to the proliferation of temporary agency work in the early 2000s by negotiating direct agreements with companies defining a maximum quota of agency workers. These agreements often mandate the company to offer wages in line with the metalworking industry agreement. Furthermore, worker representation structures at company level such as works councils are also instrumental in discussing and regulating the use of precarious work contracts by management.
- ⁵ The JDC model was extended in the 1980s with the addition of a social support dimension see Johnson and Hall (1988_[145])and Johnson, Hall and Theorell (1989_[154]).
- ⁶ Other interesting dimensions, such as opportunities for career advancement, or intrinsic interest could not be systematically added due to comparability issues across countries and/or time, or due to data unavailability.
- ⁷ The job demand "work intensity" is captured by two questions (see Annex 4.A) that relate both to working time ("long hours") and work organisation ("pace of work").
- ⁸ Variation across systems is very limited when it comes to outcomes like access to Occupational Safety and Health information, or workplace adaptation to workers' health conditions.
- ⁹ Ideally, analyses of the effect of various forms of workers' voice should take account of this variation in the rights granted to representative institutions, to arrive at nuanced and precise assessments. Unfortunately, comparative data with this level of precision is largely missing. Further data collection efforts on this dimension are needed.

- ¹⁰ As explained in Chapter 2, direct voice, as conceptualised in this publication should not be confused with freedom of speech at the workplace. Rather, it corresponds to cases where workers' voice takes the form of institutionalised, regular meetings between employers and workers for the latter to express their concerns. The contrast with representative forms of voice comes from the presence or absence of a representative *intermediary* between workers and managers. The distinction between direct and representative forms of voice is a regular feature in the literature see e.g. Duran and Corral (2016_[152]), Gallie and Zhou (2013_[150]), Bryson et al. (2013_[151]).
- ¹¹ In addition, workers in more demanding jobs are also more likely to be *aware* that representative institutions at the workplace exist at all, since they are more likely to have sought their help. This could also partly explain the results observed in Figure 4.4 and following, since workers' access to various workplace arrangements is captured through a survey item asking workers about the situation at their workplace (and, therefore, depends on their knowledge of existing institutions).
- ¹² In the European Union, the Directive 2002/14/EC requires the establishment of adequate structures for employee information and consultation. In some countries, the establishment of workers representation is mandatory after a certain threshold. In others, such as Germany, Greece, Portugal or Spain, it hinges on an employee or trade union initiatives (Donaghey et al., 2013_[153]).
- ¹³ The plausibility that these results are driven by the fact that non-cooperative employers self-select into that type of voice arrangements is reinforced by the fact that workers with access to only representative forms of voice represent the lowest category (14% in 2015, compared to 33% with no voice arrangements). The logic here is that we do not presume a majority of employers to be non-cooperative (Source: OECD estimates based on the 6th European Working Conditions Survey, 2015)
- ¹⁴ Standardised incidence rates of accidents correct for the variation in the size of various economic sectors, characterised by higher or lower risks of accidents between countries to capture the variation in prevention measures, keeping the structure of the economy constant.
- ¹⁵ Council Directive 89/391/EEC, 1989.
- ¹⁶ The Amsterdam Institute for Advanced Labour studies (AIAS) compiled a sectoral database of collective agreements in the retail trade sector for the EU member states. See https://wageindicator.org/Wageindicatorfoundation/projects/barcom/barcom and Besamusca, Kahancová and Tijdens (2018_[86]).
- ¹⁷ The identification assumption is that, by following the same establishment over time, changes in safety outcomes are attributable to the union election and the election outcome.
- ¹⁸ Source: OECD calculations based on CVTS 5 Scientific Use files. These figures are the unweighted average of countries covered by the data, namely: Belgium, the Czech Republic, Denmark, Estonia, Finland, France, Hungary, Italy, Latvia, Lithuania, Luxembourg, Norway, Poland, Portugal, the Slovak Republic, Slovenia, Spain, Sweden, and the United Kingdom (survey weights are used).
- ¹⁹ The ILO recommends a minimum of one labour inspectors for 10 000 workers in industrial market economies (ILO, 2006_[146]). That proportion is not reached in about half of European Union Member States (Menéndez et al., 2009_[67]).
- ²⁰ Numerous studies on occupational health have investigated the impact of working very long hours on workers' well-being. Results suggest that working long hours impairs workers' physical and mental health outcomes, particularly when workers have little control on the number of hours they work and/or on their work schedule see the literature review by Bassanini and Caroli (2015_[147]).

- ²¹ For instance, Lepinteur (2019_[93]) using data from the European Community Household Panel, argues that reductions in weekly working hours introduced in Portugal and France generated significant increases in job satisfaction and leisure.
- ²² The Working Time Directive (2003/88/EC) sets minimum standards for working hours and ensures that workers are not working too long hours and have adequate rest and holidays. Article 15 also allows Member States to apply or introduce laws, regulations or administrative provisions and promote the application of collective agreements that are more favourable to the protection of workers' health and safety. With very few exceptions, it applies to all sectors (public and private) and to all workers.
- ²³ This may to a certain extent have inverted the favourability principle which stipulates that a lower-ranking agreement can only take precedence over a higher-ranking one if more beneficial to the worker for some bargaining items
- ²⁴ Notably during the 2008 economic crisis when short time schemes were introduced to facilitate labour market resilience (for instance *Chômage partiel* in France and *Kurzarbeit* in Germany).
- ²⁵ ISTAT, Contratti collettivi e retribuzioni contrattuali.
- ²⁶ On the other hand, in the non-profit, caring sector, union members work more unpaid extra hours than covered non-members because of their specific pro-social motivations.
- ²⁷ The data do not allow computing the proportion of workers covered which is likely to be higher as large firms are more likely to be covered by a collective agreement including training provisions.
- ²⁸ Directive 2002/14/EC of the European Parliament and of the Council of 11 March 2002.
- ²⁹ These practices have been listed among the High Performance Work Practices that foster performance at company level (OECD, 2016_[140]).
- ³⁰ A specific, but not less important, form of discrimination is discrimination against union members or union representatives. Even if union members and union representatives are protected by the right to organise, evidence for France shows that union representatives are paid about 10% less than other workers, while union members are paid around 4% less (Bourdieu and Breda, 2017_[149]).
- ³¹ Although further analysis is necessary to determine whether this increase corresponds to improved reporting, a greater awareness of what amounts to discrimination, or an actual increase in volume.
- ³² These statistics are slightly lower when using data from the 2015 wave of the European Working Conditions Survey. In this data, age discrimination was the most frequent type of discrimination in the workplace in 2015 (3.7% of the respondents declared having experienced it in the last 12 months), followed by gender discrimination and that linked to nationality (2.3% each), ethnic background (1.9%), disability (1.1%), religion (0.9%) and sexual orientation (0.6%). Eurobarometer data are reported in the text because they allow looking at the incidence of particular type of discrimination among vulnerable groups, which the EWCS does not allow to do. Further analysis would be necessary to assess the origins of the difference between the two surveys.
- ³³ The ILO Convention 111 approved in 1958 was one of the first legal instruments against discrimination. Currently, about two-thirds of countries worldwide prohibit discrimination in employment based on gender, race, religion or disability while only 37% prohibit discrimination in employment based on sexual orientation (Valfort, 2017_[148]).

- ³⁴ One of the major points of contention between the American Federation of Labor and Congress (AFL) and the Congress of Industrial Organizations (CIO) in the era immediately after the CIO split off, was the CIO's willingness to include black workers, who were excluded by the AFL.
- ³⁵ Although they have not fully solved the issue. Researchers found that 10 years after the Directive's introduction, some unions in Central and Eastern European countries were adopting a "no problem here" stance (Wrench, 2015_[133]).



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