



3rd European Company Survey

Direct and
indirect employee
participation

3rd European Company Survey

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Country codes for EU Member States

AT Austria	EE Estonia	IE Ireland	PL Poland
BE Belgium	EL Greece	IT Italy	PT Portugal
BG Bulgaria	ES Spain	LT Lithuania	RO Romania
CY Cyprus	FI Finland	LU Luxembourg	SE Sweden
CZ Czech Republic	FR France	LV Latvia	SK Slovakia
DE Germany	HR Croatia	MT Malta	SI Slovenia
DK Denmark	HU Hungary	NL Netherlands	UK United Kingdom

EU28: Current 28 EU Member States

Sectoral aggregates used in the analysis

Label used	NACE Rev. 2 classification
Industry	B Mining and quarrying
	C Manufacturing
	D Electricity, gas, steam and air conditioning supply
	E Water supply, sewerage, waste management and remediation activities
Construction	F Construction
Commerce and hospitality	G Wholesale and retail trade, repair of motor vehicles and motorcycles
	I Accommodation and food service activities
Transport	H Transportation and storage
Financial services	K Financial and insurance activities
	L Real estate activities
Other services	J Information and communication
	M Professional, scientific and technical activities
	N Administrative and support service activities
	R Arts, entertainment and recreation
	S Other service activities

Source: Eurostat, Statistical Classification of Economic Activities in the European Community (NACE Rev. 2)

Executive summary

Introduction

This report delivers the findings of research into the use of direct and indirect employee participation in decision-making in European establishments. Indirect employee participation is the involvement of employee representatives in decision-making processes, while direct employee participation describes direct interaction between employers and employees. Building on the overview report for Eurofound's Third European Company Survey (ECS), this report analyses the survey data with a special focus on how direct and indirect employee participation are related to each other and to national-level industrial relations characteristics. Also examined are the effects of direct and indirect employee participation practices on establishment-level outcomes – which practices of employee participation are beneficial both for the establishment and the employees in 'win-win' arrangements.

The findings generally support the findings of the overview report, which suggest that more extensive forms of direct and indirect employee participation are associated with positive establishment outcomes.

Policy context

The Europe 2020 strategy stresses the importance of employee participation. It considers industrial and employment relations to be the key building blocks of national and international social and economic development. Employer and employee cooperation is seen as the main determinant of outcomes such as employment, productivity growth, social cohesion, and quality of life.

Rapidly changing global and economic conditions seriously challenge current institutions of collaboration and cooperation in the field of industrial relations, particularly at the micro-level between and within organisations. This places substantial demands on both employers' and employees' skills in innovating and in adapting to these challenges. The Europe 2020 strategy directly refers to social dialogue and employee participation in its discussion of inclusive growth. The flagship 'Agenda for new skills and jobs' seeks to improve job quality and working conditions throughout the EU. The effectiveness of EU legislation on information and consultation of workers is under review, and European social partners are being consulted on a European framework for company restructuring.

Employment relations, an important sphere for generating social capital and trust, potentially have major spill-over effects beyond the immediate workplace. Hence, more informed policies on workplace participation contribute to social capital, trust and social cohesion in a wider societal context. Therefore, understanding how employee participation produces beneficial outcomes is vital for meeting the Europe 2020 objective of sustainable and inclusive economic growth, while at the same time building resilient and inclusive societies.

Key findings

The statistical analyses of the third ECS set out four distinct classes of indirect employee participation practices and five of direct employee participation (detailed in the report).

- For both indirect and direct employee participation, the most extensive forms are the dominant class across European establishments.
- More developed practices of indirect and direct employee participation are more prevalent in larger establishments.
- More extensive practices of direct employee participation are more apparent in establishments with younger, better-educated employees.
- Extensive forms of direct and indirect practices of employee participations are often combined.
- The absence of indirect participation in a workplace does not mean that direct participation is also absent. In most establishments where employee representation is absent, employees themselves were at least informed about changes.

National contexts shape the opportunities for – and the obstacles to – employee participation practices in their workplaces. Four national-level institutions for industrial relations were analysed to illustrate this:

- higher levels of wage coordination are associated with more extensive forms of indirect employee participation, as well as more extensive direct employee participation;
- in countries where wage coordination predominantly takes place at the company level, limited forms of direct employee participation are more prevalent;
- the legal mandate of works councils is not related to classes of indirect employee participation nor to classes of direct employee participation;

- higher employment rates are associated with extensive direct and indirect employee participation, while lower employment rates are associated with more limited direct employee participation.

The classes of indirect and direct employee participation appear to have discernible effects on workplace well-being and establishment performance.

- Establishments practising more developed classes of indirect and direct employee participation report more positively on workplace well-being.
- Establishments practising the most developed form of direct employee participation more frequently report positive establishment performance.
- Establishments in which the employee representation is provided with information more frequently report a positive establishment performance than establishments providing high levels of resources but low levels of information.

Two key findings emerged regarding the association between the classes of employee participation and outcomes that are positive for both the employer and employees ('win-win arrangements').

- Win-win arrangements are more common in establishments with employee representations that provide high levels of information than in establishments providing plentiful resources but little information.
- It was generally observed that more extensive forms of direct employee participation are positively related to beneficial outcomes in establishments.

Policy pointers

Promote extensive forms of interaction between management and employees: Extensive forms of employee participation are associated with positive outcomes for both employees and establishment. However, less than 50% of the establishments studied engage in such extensive direct and indirect employee participation. More can be done to promote extensive forms of employee participation, such as consultation and codetermination.

Stimulate further implementation of the Information and Consultation Directive: In some countries, establishments do not provide employees or their representatives with information on financial and employment matters, although this is required by the EU Information and Consultation Directive. This is particularly the case in establishments in Portugal, Cyprus, Lithuania, Malta, Estonia and Ireland.

Stimulate meaningful provision of information and resources for employee representation: Information – about the company's financial and employment situation and strategic issues – is critical for employee participation. Even establishments that provide funding for training, external advice and time for employee representative duties score low on workplace well-being if they fail to provide good-quality information to employees.

Enhance direct participation by lower-skilled employees: Direct employee participation is especially limited in establishments with a relatively high proportion of lower-skilled workers. This suggests a relationship between the level of education of employees and the degree to which they participate. Establishments with a less-skilled workforce may need to provide additional resources to help workers participate more extensively in decision-making.

Centralised wage coordination stimulates employee participation: Collective bargaining coordination has been decentralised in many EU countries. There is a correlation between the level at which wage coordination takes place and the degree of employee participation. More centralised levels of wage coordination are associated with more extensive indirect employee participation and extensive direct participation. Limited direct employee participation, on the other hand, is less common in countries in which wage coordination is largely centralised. This could imply that national-level institutions are a more fertile ground for the development of more extensive forms of employee participation. Social partners might encourage this by increasing the central-level coordination of employment conditions.

Introduction

Introduction

This report studies the role of employee participation in work processes in European companies. Employee participation refers to the involvement of employees in decision-making processes, and comes in a wide variety of forms. A common distinction is the one made between indirect and direct employee participation. Indirect employee participation means the involvement of representatives of employees in decision-making processes. Direct employee participation means the direct interaction between employer and employees in the process of decision-making.

Employee participation is often seen as an important tool of innovation because it enhances the use of people's experiences and skills. Employee participation is therefore believed to increase productivity and job satisfaction (Gallie and Zhou, 2013). A majority of European companies has already implemented practices to encourage employee participation: 8 out of 10 companies in the private sector have adopted such practices and even more public-sector establishments have done so (Eurofound, 1998). While the promotion of employee participation is popular, academic research into the outcomes of employee participation shows mixed results (Cotton et al, 1988). First of all, it is unclear how direct forms of participation are related to indirect forms of participation. Some studies find that direct and indirect participation coincide, while others suggest that the two forms of participation are competitive (Beale, 1994; Bryson, 2004). Moreover, the empirical evidence for positive effects of participation is inconclusive. Some research finds positive effects of participation on productivity and workplace well-being, while other studies find no effect and some even find negative effects. So while some studies find that employee participation increases productivity and workplace well-being, others find a decrease in productivity and workplace well-being as employee participation increases.

Research objectives

This report studies the practices that EU establishments use to encourage direct and indirect employee participation. It identifies how direct and indirect employee participation are related to each other. It links employee participation to the various industrial relations institutions across Europe. And it identifies the effect of direct and indirect employee participation on establishment-level outcomes and establishes which practices of employee participation are beneficial both for the establishment and the employees – 'win-win' arrangements.

Policy context

The European Union's Europe 2020 strategy stresses the importance of employee participation. It views industrial and employment relations as the key building blocks of national and international social and economic development. Cooperation in this domain is seen as the main determinant of key social and economic outcomes, such as employment, productivity growth, social cohesion, and quality of life. The current, rapidly changing, global economic conditions seriously challenge current practices of collaboration and cooperation in the field of industrial relations, effectively changing the micro-level relations between and within organisations. This places considerable demands on both employers' and employees' skills in innovating in order to adapt to these challenges. The Europe 2020 strategy directly refers to social dialogue and employee participation in the agenda for 'inclusive growth'. The flagship initiative 'Agenda for new skills and jobs' seeks to improve the quality of jobs and ensure better working conditions and greater competitiveness throughout the European Union. Actions within this initiative include a review of the effectiveness of EU legislation in the area of information and consultation of workers, and the consultation of European social partners on a European framework for restructuring (European Commission, 2010; Conchon et al, 2011). Employment relations, as an important sphere for generating social capital and trust, potentially have major spill-over effects beyond the immediate workplace (Healy and Côté, 2001; Coats 2004; Putnam, 2000; Sisson, 2010). Hence, more informed policies on workplace participation contribute to social capital, trust and social cohesion in a wider societal context. Therefore, understanding how employee participation produces beneficial outcomes is vital for meeting the Europe 2020 objective of sustainable and inclusive economic growth while at the same time building resilient and inclusive societies.

Structure of this report

This report reflects the outcomes of a study of direct and indirect employee participation in establishments in the EU28. For this purpose, a quantitative analysis of the data collected in Eurofound's European Company Survey (hereafter, 'ECS 2013') was carried out. The thematic focus of this third wave of the ECS was on work organisation, human resources policies, employee participation and social dialogue (Eurofound, 2015). This data was

used to analyse employee participation in the workplace in all EU28 countries. The research topic is further discussed in the analytical framework described in Chapter 1. In Chapter 2, the data and statistical tools used to answer the research questions are discussed alongside the way in which data from the ECS 2013 were supplemented with country- and sector-level characteristics that reflect economic circumstances and features of industrial relations. These data were gathered from Eurostat's online database and the ICTWSS database (Visser, 2011).¹ In Chapters 3 and 4, the prevalence of indirect employee participation and direct employee participation is mapped and classes of companies are mapped by looking at the way they combine different practices of direct and indirect participation. The relationship between the classes of direct and indirect employee participation are also discussed in Chapter 4. In Chapter 5, the linkage between the classes of employee participation and national characteristics are discussed. The relationship between employee participation and establishment-level outcomes is examined in Chapter 6. Finally, the research questions are answered and the main findings summarised in Chapter 7.

Employee representation in European workplaces

Before proceeding to the analytical framework and the empirical investigation, this report starts with a brief overview of employee representation in the EU's Member States. This overview serves both to introduce the cross-national differences that exist in the structure of workplace representation,² and shows the information that the ECS 2013 provides regarding the main bodies of representation.

In Member States, two basic channels of workplace representation exist: works councils (or other general status bodies elected by all employees) and trade union representatives (elected or nominated by trade union members). Countries where representation is organised predominantly through one channel, often the union channel, are commonly labelled as having a 'single-channel system'. Countries also providing representation through works councils are labelled 'dual-channel systems'. Recent legislative changes, such as the implementation of the EU Information and Consultation Directive, have led to a growing number of countries where both channels exist. Table 1 shows that traditional union-based, single-channel employee representation is dominant only in Cyprus, Malta and Sweden. In some of the countries that recently introduced dual-channel elements, such as the United Kingdom (UK), Italy, the Czech Republic and Poland, the trade union remains the dominant body at the workplace (see also Eurofound, 2011). At the other end of the spectrum

are the countries where works councils dominate (such as the Netherlands), or where employee representation is exclusively organised in works councils (such as Germany and Austria). In practice, however, the distinction between works council and union representation is less clear-cut because in the majority of the Member States, trade union members are involved in works councils or other representative bodies, as Table 1 shows. In countries where trade unions are not the main body with information and consultation rights, trade unions may influence information and consultation issues because, for example, they may have high membership rates among works council members (as is the case in Austria and Belgium). Or it may also be because unions are allowed a seat on works councils (in France), create works councils (Portugal), help create works councils (Germany), or nominate candidates (Slovenia).

Table 1 also shows cross-national variation in the rights of the representatives' bodies. Since the implementation of the EU Information and Consultation Directive, information and consultation rights have become commonplace in the EU. In all EU Member States, including those where there was previously no such statutory framework, such as the UK (Hall, 2005), representative bodies have gained information and consultation rights. It is beyond the scope of this introduction to discuss in detail the cross-national differences in the extent of this information and consultation (for this purpose this study refers to the European Commission's report *Employee representatives in an enlarged Europe* – European Commission, 2008). Table 1 makes clear, however, the differences between countries where representative bodies have only information and consultation rights, and countries where additional codetermination rights exist. Austria and Germany are among the countries with the strongest form of codetermination (for instance, veto rights). Other forms of codetermination exist, often related to specific issues. Bulgaria, Denmark, Estonia, Ireland, Italy, Latvia, Malta, Poland, Portugal and the UK are countries with no provision for codetermination.

Finally, Table 1 shows what type of body was included in the ECS 2013. As explained in Chapter 2 in more detail, interviews were conducted with both managers and employee representatives. For the employee representatives, the aim was to interview the chair of the body that was most likely to be involved in discussion on work organisation. Especially in dual-channel systems, there may be respondents from various types of bodies – not only trade unions or works councils, but also other types of employee delegates or health and safety representatives. For each country, Table 1 shows the two most frequently represented bodies in the employee representative interviews in the ECS 2013.

¹ Available at <http://ec.europa.eu/eurostat/data/database>

² For this overview the analysis drew from two reports by the European Commission – *Industrial relations in Europe 2006* (European Commission, 2006) and *Employee representatives in an enlarged Europe* (European Commission, 2008). Information about the trade union involvement in information and consultation bodies was retrieved from Eurofound's report on information and consultation practices across Europe five years after the EU Directive (Eurofound, 2011b).

Table 1: Workplace representation in EU28

Country	System ¹ (main body)	Body with information and consultation rights ²	Trade union involvement in information and consultation ³	Rights of the information and consultation body ¹	Main bodies in ECS 2013 ³
Austria	Single channel (works council)	Works councils	Through (high) union membership among works councillors	Information Consultation Codetermination	Works council (98%)
Belgium	Dual channel (works council)	Works councils	Through (high) union membership among works councillors	Information Consultation Codetermination (specific issues)	Works council (46%) Health and safety committee (43%)
Bulgaria	Dual channel (trade union)	Elected representatives or trade unions	Through (high) union membership among employee representatives	Information Consultation	Employee representatives (38%) Employee representatives for information and consultation (34%)
Croatia	Dual channel (works council)	Works councils	Through (high) union membership among works councillors	Information Consultation Codetermination (specific issues)	Trade union (87%) Works council (13%)
Cyprus	Single channel (trade union)	Employee (in practice trade union) representatives	Information and consultation (mainly) via union	Information Consultation Codetermination (specific issues)	Trade union (100%)
Czech Republic	Dual channel (trade union)	Trade unions or, where no unions present, employee councils	Information and consultation (mainly) via union	Information Consultation Codetermination (specific issues)	Trade union (93%) Works council (7%)
Denmark	Dual channel (trade union)	(Union-based) cooperation committees	Through (high) union membership among works councillors	Information Consultation	Works council (60%) Shop steward (29%)
Estonia	Dual channel (Union or non- union trustee)	Employee trustees	Unions involved in information and consultation where they exist	Information Consultation	Employee trustee (76%)
Finland	Dual channel (trade union)	Trade union representatives (shop steward)	Information and consultation (mainly) through union	Information Consultation Codetermination (specific issues)	Workers' delegate (50%) Works council (33%)
France	Dual channel (works council)	Works councils	Union allowed seat on works council. Through union membership among councillors	Information Consultation Codetermination (specific issues)	Workers' delegate (51%) Trade union delegate (34%)
Germany	Single channel (works council)	Works councils	Unions establish works councils. High union membership among works councillors	Information Consultation Codetermination	Works council (82%) Employee's delegate (12%)

Country	System ¹ (main body)	Body with information and consultation rights ²	Trade union involvement in information and consultation ³	Rights of the information and consultation body ¹	Main bodies in ECS 2013 ³
Greece	Dual channel (trade union)	Trade unions or, where no unions present, employee councils	Information and consultation (mainly) through union	Information Consultation Codetermination (specific issues)	Local trade union (64%) Union of persons (20%)
Hungary	Dual channel (works council)	Works councils	Through (high) union membership among works councillors	Information Consultation Codetermination (specific issues)	Works council (69%) Local trade union (18%)
Ireland	Dual channel (works council)	Company-specific information and consultation arrangements or statutory information and consultation forums	Varies according to organisation- specific arrangements.	Information Consultation	Trade union representative (51%) Statutory employee representation forum (26%)
Italy	Dual channel (trade union)	Representative trade union bodies at the workplace. Separate informa- tion and consultation bodies possible	Information and consultation (mainly) via union	Information Consultation	Unitary workplace union structure (66%) Plant-level union representation (24%)
Latvia	Dual channel (trade union)	Trade union representatives (predominant)	Information and consultation (mainly) via union	Information Consultation	Authorised employee representatives (46%) Trade union (45%)
Lithuania	Dual channel (trade union)	Trade unions or works councils	Information and consultation (mainly) through union	Information Consultation Codetermination (specific issues)	Health and safety committee (58%) Trade union (21%)
Luxembourg	Dual channel (works council)	Staff delegations or joint committees	Through union membership among works councillors	Information Consultation Codetermination (specific issues)	Staff delegation (51%) Joint works committee (40%)
Malta	Single channel (trade union)	Trade union/employ- ee representatives	Information and consultation (mainly) via union	Information Consultation	Shop steward (93%)
Netherlands	Dual channel (works council)	Works councils	Through union membership among works councillors	Information Consultation Codetermination (specific issues)	Works council (74%) Personnel delegation (26%)
Poland	Dual channel (trade union)	Works councils	Through (high) union membership among works councillors	Information Consultation	Local trade union (72%) Works council (28%)
Portugal	Dual channel (trade union)	Workers' commissions	Through (high) union membership among works councillors	Information Consultation	Shop steward (47%) Workplace union committee (30%)

Country	System ¹ (main body)	Body with information and consultation rights ²	Trade union involvement in information and consultation ³	Rights of the information and consultation body ¹	Main bodies in ECS 2013 ³
Romania	Dual channel (trade union)	Trade union representatives or, where no union is present, elected employee representatives	Information and consultation (mainly) through union	Information Consultation Codetermination (specific issues)	Employee representative (95%)
Slovakia	Dual channel (trade union)	Trade unions or works councils	Information and consultation (mainly) through union	Information Consultation Codetermination (specific issues)	Works council (39%) Trade union (36%)
Slovenia	Dual channel (works council)	Works councils	Unions establish works councils, nominate candidates	Information Consultation Codetermination (specific issues)	Works council (44%) Trade union (32%)
Spain	Dual channel (works council)	Workers' committees (workers' delegates when <50 employees)	Through (high) union membership among works councillors	Information Consultation Codetermination (specific issues)	Local trade union (62%) Works council (11%)
Sweden	Single channel (trade union)	Trade union representatives	Information and consultation (mainly) through union	Information Consultation Codetermination (specific issues)	Trade union (100%)
United Kingdom	Dual channel (trade union)	Company-specific information and consultation arrangements or statutory information and consultation forums	Through (high) union membership among works councillors	Information Consultation	Trade union (81%) Joint consultative committee (19%)

Notes: ¹ Information derived from Employee representatives in an enlarged Europe, Vol. 1, Table 4 (pp. 47–49), and Table 7 (pp.55–62) (European Commission 2008) and Industrial relations in Europe 2006, Table 3.1 (pp. 61–64) (European Commission 2006); updates made on the basis of Employee representation at establishment level in Europe (Eurofound, 2011a).

² Information derived from Information and consultation practice across Europe five years after the EU Directive (Eurofound, 2011b), Table 1 (pp. 1–3), and Table 9 (pp. 24–26).

³ Based on ECS 2013, authors' calculations, country and design weights applied.

CHAPTER 1

Aspects of employee participation

Aspects of employee participation

This chapter poses four research questions about employee participation, which will be deduced from the discussion of the academic research in this chapter. First, the chapter examines a model for the degree of participation, distinguishes direct and indirect participation and discusses the relevant literature regarding their coexistence. Next, the relationship between indirect and direct employee participation and national-level institutions for industrial relations is identified. Finally, the relationship between practices of direct and indirect employee participation and establishment-level outcomes that are beneficial to both employers and employees is discussed.

Aspects of employee participation

Since the 1970s, employee participation has been on the academic agenda with varying levels of intensity. One of the central themes in the academic debate has been the conceptualisation of participation, leading authors to conclude that 'almost everyone who employs the term ... thinks of something different' (Schregle, 1970:117; Cotton et al, 1988; Markey and Townsend, 2013). It is therefore important to ensure conceptual clarity when discussing employee participation. In general, scholarly debate has reached a consensus on four aspects of employee participation:

- the rationale for employee participation;
- the degree and type of employee participation;
- the (institutional) context of employee participation;
- the outcomes of participation (Dachler and Wilpert, 1978; Black and Gregersen, 1997).

This report builds on this mainstream conceptualisation of employee participation, and focuses on the last three aspects of employee participation. It discusses, first, the degree of participation in decision-making, then the type of employee participation, whether indirect and direct employee participation, and how current academic research considers the two forms to be related to each other. Then the institutional context of participation is discussed with

reference to national conditions for the potential degree of participation. The section considers what industrial relations characteristics are theoretically related to different patterns of employee participation. Finally, the theoretical status of the outcomes of employee participation (the fourth aspect) is discussed.

The first dimension, the rationale for employee participation, concerns the underlying goals of employee participation and refers to ideology and values orientations. Granting employees involvement in company decision-making can be motivated by a democratic perspective on participation, or can be done in the interests of efficiency. Analysing the rationale for employee participation is beyond the scope of this report.

Levels of participation

While some of the academic research restricts employee participation to a binary variable (referring to the absence or presence of employee participation), more detailed studies commonly refer to it as a continuum of participation (for instance, Black and Gregersen, 1997). On this continuum, the first level of participation reflects practices in which employees (or their representatives) receive no information about imminent decisions that would enable participation. Intermediate levels reflect practices in which employees participate by receiving and giving information. Theoretically, the highest levels of participation are those in which employees are given decision power, by granting them the power to veto decisions or by a total delegation of decision-making power to employees. While the intermediate levels enable employees to influence decisions by deliberation, the highest levels enable employees to control the outcome of the decision-making process (Dachler and Wilpert, 1978). Less complex models of the degree of participation include four levels:

1. information;
2. consultation;
3. codetermination;
4. unilateral employee decision (Gold and Hall, 1990; Knudsen, 1995).

All models have a common, explicit assumption that access to information is a critical condition for employee participation: without information, employees cannot really participate.

In distinguishing the level of participation, it is important to note that the degree of participation may vary within an organisation, depending on the sort of decision to be taken. Participation in routine day-to-day task-oriented decision-making or in decisions on social issues may be greater than employee involvement in decision-making about new products or on financial matters (Knudsen, 1995). The four-level conceptual model was used to address the first research question in Chapter 3: *Which patterns of establishment practices with regard to the degree of direct and indirect employee participation can be observed in establishments in Europe?* (RQ1)

Type of participation

An important distinction in employee participation is the one made between direct and indirect participation. Indirect employee participation, also known as ‘representative participation’, or ‘social dialogue’, is commonly conceived of as the involvement of a restricted set of actors who are elected or appointed to act as the representatives of the employees (Cotton et al., 1988; Black and Gregersen, 1997). These representatives can be unions, works councils, joint committees or employee representatives on boards. Indirect employee participation concerns employees’ collective interest in, for instance, collective bargaining negotiations. Direct employee participation refers to the practices in which employees are personally involved (Knudsen, 1995; Markey and Townsend, 2013). Geary and Sisson (1994) define direct employee participation as ‘opportunities which management provide, or initiatives to which they lend their support, at workplace level, for consultation with and/or delegation of responsibilities and authority for decision-making to their subordinates either as individuals or as groups of employees, related to the immediate work task, work organisation and/or working conditions’. This report follows the definitions presented above.

For the coexistence of direct and indirect employee participation, academic literature suggests two competing views. The first view argues that direct and indirect employee participation are complementary and potentially reinforcing because both forms of employee participation address issues at different organisational levels. In this view, direct employee participation addresses issues concerning specific work tasks, while indirect employee participation facilitates involvement of employees in organisation-level issues such as investment policies and technologies (Knudsen, 1995; Levine and Tyson, 1990; Machin and Wood, 2005). The second perspective argues that indirect and direct participation are competing, and that one curtails the other.

Manager receptiveness for direct participation enhances satisfaction and reduces employees’ perceived need for union representation (Beale, 1994; Bryson, 2004). Bryson (2004) finds a negative effect of representative participation on management responses to direct voice, and suggests that managers’ preferences for direct participation is motivated by a desire to undermine and replace union representation (Willman, Bryson and Gomez, 2006; see also Marginson et al, 2010). Beale (1994) finds that management’s use of direct voice reduces representative voice. To date, the link between direct and indirect participation practices is thus not fully understood. It is possible that the inconclusive findings are caused by the use of different research methods. The inconclusive findings may also indicate that the link between direct and indirect participation varies with the type of decision. For example, for decisions involving operational or product-related issues, the involvement of employees is more plausible, since they possess the specific know-how needed to provide input. For issues that affect collective welfare issues, such as wages, working conditions or a reorganisation, employee representation through a channel such as a union is likely to provide management with the relevant expertise and experience (Knudsen, 1995).

Because the empirical link between indirect and direct employee participation is yet to be established, the second research question is posed as follows: *To what extent are direct and indirect employee participation interrelated, at the different levels of employee participation and for different types of decisions?* (RQ2). This question is addressed in Chapter 4.

National institutions for industrial relations

The second objective of this report is to deepen the understanding of employee representation by establishing the link between employee participation practices and the national institutional context for industrial relations. Industrial relations systems are known to affect employee participation because regulations and national structures shape the opportunities for employers and employees to implement and perform employee participation practices in their workplaces, and the obstacles they may encounter (Coutrot, 1998; European Commission, 2009; Jansen, 2014; Jansen et al, 2014; Whitfield et al, 1994).

Academic literature identifies several types of industrial relations systems. A well-known classification of industrial relations systems is the ‘varieties of capitalism’ typology. This typology classifies countries on the basis of their production regime (European Commission, 2009; Hall and Soskice, 2001). Other typologies classify countries based upon employment regimes (Gallie, 2007), or centre the typology more specifically on industrial relations arrangements, such as trade union involvement and collective bargaining

processes (Ebbinghaus and Visser, 1997).³ While these typologies and classifications in themselves are highly valuable for identifying patterns of industrial relation institutions and practices, they reflect combinations of institutions. Using combinations of institutions for the research object would obscure the effect of the separate institutions of industrial relations. Therefore, this report analyses the effect of four separate country-level institutions that are present in all the typologies mentioned above.

First, it examines how employee participation is related to **the level of wage coordination** in a country. For indirect employee participation in particular, a relationship with the level of wage coordination seems plausible. Decentralised, company-level bargaining will be associated with higher levels of indirect employee participation; in order to be resource-oriented for entering negotiation, employee representatives need information and need to communicate with management.

Second, the report examines the effect of **characteristics of works councils**. In theory, a clear positive effect of more extensive mandates for the works council and the degree of indirect employee participation would seem likely. Recent studies into German and Dutch works councils, however, show that in practice the role of works council as a representative body is dependent on several company-level factors, such as managerial strategy, the level of trust between management and the works council, and the strength of unions (Frege, 2002; Jirjahn and Smith, 2006; Van den Berg et al, 2008). The relation between national-level legal arrangements for works councils and employee participation thus may be less straightforward.

The report also investigates how direct and indirect employee participation is linked to **characteristics of unions and employer organisations**. Stronger positions of these interest groups are likely to affect legal procedures and institutions for employee participation, which in turn would affect company-level practices of employee participation. While a stronger union position probably stimulates the development of such institutions, it is difficult to predict the impact of strong employer organisations.

Finally, the **economic context** in a country may impact the practice of indirect and indirect employee participation. Although Wanrooy et al (2013) find no negative impact of the economic recession in their longitudinal study of workplaces in the UK, national levels of employment and economic growth may impact levels of indirect and direct employee participation.

To understand the effect of national institutions for industrial relations, the following research question was formulated: *to what extent are establishment-level practices of direct and indirect employee participation linked to national legislative and institutional systems of industrial relations?* (RQ3). Chapter 6 addresses this third research question.

Outcomes of employee participation

The third aim of this study is to map so-called win–win arrangements, the outcomes of employee participation that are beneficial for both employers and employees.

Academic research on the consequences of employee participation for workers and organisations has come a long way in identifying the mechanisms behind participation and organisation outcomes. There is ample empirical evidence of the positive effects of direct forms of participation on various establishment-level outcomes, such as work efficiency and productivity. Direct forms of participation, such as team involvement in decision-making, instigate peer control and peer pressure and so reduce the costs of direct monitoring and increasing work effort (Eaton and Voos, 1989; Kato and Morishima, 2002; Kim et al, 2010). Moreover, the increased involvement in identifying and solving workplace problems and the sharing of ‘close-to-the-problem ideas’ with team members and supervisors enhances the quality and effectiveness of decision-making and workers’ responsibility, and reduces resistance to change (MacDuffie, 1997; Heller, 1998; Boxall and Macky, 2014). In addition to the positive effects on beneficial outcomes for the organisation, employee participation also increases various aspects of employee well-being. It leads to a better use of people’s experiences and skills, enhances their self-efficacy, and improves job satisfaction and work–life balance (Cotton et al, 1988; Boxall and Macky, 2014; Gallie and Zhou, 2013; Klein et al, 2000, Parker, 2003). Direct participation in high-performance work systems is associated with higher levels of motivation and employer well-being (see also Eurofound, 2015).

The empirical evidence for the effect of indirect participation is ambiguous. While in the US only a small positive effect is found on productivity (Addison and Belfield, 2004), union representation seems to negatively affect productivity in the UK (Fernie and Metcalf, 1995). In Germany, the presence of works councils seems to be associated with no significant effect (Addison and Siebert, 2003), while in Denmark clear positive effects are found: higher levels of indirect (and direct) participation produces positive effects for the work environment (Knudsen

³ While national conditions may indeed shape workplace practices, such as the implementation of employee participation strategies, several studies stress the importance of conditions pertaining to industrial relations at the sector level (for instance, Akkerman, 2008; Bechter et al, 2012; European Commission, 2009; Katz and Darbishire, 2000). Following processes of decentralisation, sector-level characteristics are increasingly important for social dialogue in companies. This may hold true particularly for indirect employee participation when the sector level is the prominent level at which collective bargaining takes place. However, data on sector-level institutions are not available for all the EU Member States studied, which limits the analyses here to national-level institutions of industrial relations.

et al, 2011). It still unclear what explains the mixed empirical findings for the effects of indirect employee participation on organisation outcomes. The different findings could be related to the use of different research methods. The inconclusive empirical results can also point to country-level differences, or organisation-level factors such as the management strategy towards representative bodies (Frege, 2002; Jirjahn and Smith, 2006; Van den Berg et al, 2008).

The effect of joint direct and indirect participation on organisation level outcomes is even less well understood. As mentioned earlier in this chapter, there are two competing views: direct and indirect employee participation are thought of as either complementary or competing. In support of the complementary view, Freeman and Medoff (1984) propose that the coexistence of direct and indirect employee participation enhances productivity and the interaction would lead to cross-fertilisation. The proposed mechanism of cross-fertilisation finds support in some studies, which conclude that the combination of direct and indirect employee participation enhances the work climate (Knudsen et al, 2011). Further, Pyman et al (2006) find that the coexistence of both forms contributes to perceived managerial responsiveness to employee needs and job control.

In contrast, other empirical findings suggest that combinations of both practices hamper positive outcomes (Markey and Townsend, 2013). For instance, Kim et al (2010) show that the coexistence of direct and indirect participation has negative effects on productivity.

Summarising the results of academic work, this report concludes that knowledge about the effects of indirect participation in combination with direct participation in particular is still underdeveloped and therefore makes no theoretical deductions in this discussion. Instead, it is argued here that the necessary next step in gaining understanding of the interplay between direct participation, indirect participation and establishment-level outcomes is to determine when both forms of participation coincide and for which outcomes their interplay is beneficial for organisations and employees. The fourth research question, addressed in Chapter 6, was therefore formulated as follows: *To what extent and under what conditions are direct and indirect employee participation practices related to beneficial outcomes for both companies and employees?* (RQ4).

CHAPTER 2

Data and methodology

Data and methodology

This chapter presents the data and measurements used to analyse indirect and direct employee participation. It also gives a brief overview of the statistical analytical procedures applied to answer the research questions.

Collection of data

The dataset from the ECS 2013 was used to answer the research questions. Collection of this data set was conducted by the European Foundation for the Improvement of Living and Working Conditions (Eurofound) in 2013. The dataset contains information about establishments with 10 employees or more in 32 European countries: the 28 EU Member States and four (at the time) candidate countries (Iceland, the former Yugoslav Republic of Macedonia, Montenegro and Turkey). To ensure a representative sample of the establishments in these countries, a random sampling procedure was carried out. This sample was stratified for country, sector (distinguished between industries and services) and establishment size. For each selected establishment, the most senior member of the management team in charge of personnel was first approached and asked to participate in the survey. Subsequently, for those establishments with an employee representation body, the management respondent was also asked to provide contact information for a member of the employee representation body who could be approached to participate in the employee representative survey. Here, the designated respondent was the chair, secretary or spokesperson of the (largest) employee representation body. The interviews were carried out using computer-assisted telephone interviewing (CATI) and took place from February to May 2013. Ultimately, the ECS 2013 dataset contains information obtained from 30,113 management representatives and 9,094 employee representatives. Many of the questions about

indirect employee participation were asked in the employee representative interviews. This implies that this information is not available for establishments where only a management interview was carried out. Also excluded from the analyses were public services establishments and establishments in the EU candidate countries.⁴

Limitations of the data

Three important methodological limitations of the ECS 2013 dataset need to be recognised when interpreting the findings (Eurofound, 2015). Firstly, the ECS 2013 is a cross-sectional survey and its data 'provide a snapshot of issues at a certain point in time' (Eurofound, 2015, p. 18). Given the cross-sectional nature of the survey, it is necessary to be careful with causal interpretations of the associations between variables. This especially holds true for the findings in Chapter 6, where indirect and direct employee participation practices are linked to establishment-level outcomes. These outcomes, namely workplace well-being and establishment performance, could also function as a determinant of employee participation, and not as the causal outcome of employee participation.

It is also necessary to be careful about possible response biases as a result of the use of a questionnaire-based survey. One important drawback of this method is the potential problem of social desirability bias: respondents may give answers that they think are perceived as more favourable, rather than the answer that reflects the actual situation at the establishment. Furthermore, different respondents may interpret the questions differently. This problem is even more urgent in cross-national research, with large differences in respondents' cultural and linguistic backgrounds.

⁴ The technical report for the ECS 2013 (Eurofound, 2014) contains a more detailed description of the sampling procedure and description of the data set.

Finally, potential selection response biases may occur because the employee representative respondents are selected through the management representative respondents. It is impossible to rule out the possibility that the relationship between management and employee representation affects the willingness of managerial respondents to provide contact information for an employee participation representative.

Statistical approach

To answer the first research question – *Which patterns of establishment practices with regard to the degree of direct and indirect employee participation can be observed in establishments in Europe?* – latent class analyses (LCAs) were used to identify classes of indirect and direct employee participation. In preparing the LCA, the set of appropriate variables was selected first.⁵ Although the ECS 2013 dataset contains numerous variables on employee participation, not all variables are useful for identifying types of employee participation. Three criteria were used to select variables.

Levels of participation

First, variables in the ECS 2013 dataset were sought that closely matched the conceptualisation of levels of participation presented in Chapter 1. They were, from low to high levels of participation: information, consultation, codetermination, and unilateral employee decision-making. The ECS 2013 dataset contains several items available for measuring information, consultation and codetermination. The level of information for indirect participation was measured by using

items that referred to the type of information that was provided to the employee representation. In addition, the study also included items on the quality of this information. Finally, items on resources necessary to process and assess information, such as designated time for employee representation duties or funds for external advice, were included. For direct participation, the ECS 2013 provided data on several means of communication between management and employees. These data give information on the direction of communication with employees (bottom up, top-down, or interaction) and the channels of communication (such as meetings, social media, surveys). Top-down communication reflects the level of information, and bottom-up and on-demand communication reflects consultation. Codetermination was measured using items on joint decision-making in several major decisions. The data set did not contain indicators for unilateral employee decision-making. For conceptual reasons, variables measuring the personal (subjective) attitude of the respondents towards employee participation were discarded (for example, *'Would you agree or disagree? The involvement of employees leads to unnecessary delays in the implementation of changes'*). Attitudes towards employee participation, whether normative or instrumental, can guide arrangements and practices. In this view, attitudes are antecedents of participation, providing information about intentions and motives as an input variable. However, they may also be formed through existing or previous practices, and thus are informative about experience of participation practices. In the latter view, attitudes are an outcome of practices rather than an input. Because this study focuses on practices rather than opinions about employee participation practices, the analysis is restricted to the dimensions that represent facts.

⁵ An LCA is a statistical tool that makes it possible to group establishments according to their practices of indirect employee participation.

The second criterion applied in selecting the items for analysis was a methodological one. Those variables with relatively few missing cases were selected to avoid unnecessary loss of information. The third criterion was applied after the class

analyses: this excluded variables that appeared to be unrelated to any of the found classes. Table 2 and Table 3 present the variables used to identify classes of – respectively – indirect and direct employee participation.⁶

Table 2: Descriptive statistics of variables included in indirect employee participation LCAs

Item	Survey	Mean	Minimum	Maximum	N
Provision of information: the financial situation	Employee representative	0.82	0	1	6,809
Provision of information: the employment situation	Employee representative	0.85	0	1	6,802
Provision of information: new/changed products	Employee representative	0.71	0	1	6,367
Provision of information: new/changed processes	Employee representative	0.69	0	1	6,311
Provision of information: strategic plans	Employee representative	0.73	0	1	6,740
Quality of information	Employee representative	0.77	0	1	6,860
Sufficient time for employee representation duties	Employee representative	0.87	0	1	6,800
Training for employee representatives	Employee representative	0.45	0	1	6,849
Employee representative's access to funding for external advice	Employee representative	0.47	0	1	6,558

Table 3: Descriptive statistics of variables included in direct employee participation LCAs: consultation

Item	Survey	Mean	Minimum	Maximum	N
Regular meetings between employees and immediate manager	Management representative	0.88	0	1	24,167
Regular staff meetings open to all employees at the establishment	Management representative	0.61	0	1	24,137
Meetings of a temporary group or committee or ad hoc group	Management representative	0.54	0	1	24,034
Dissemination of information through media such as newsletters and website	Management representative	0.77	0	1	24,173
Discussion with employees through social media	Management representative	0.15	0	1	24,032
Suggestion schemes (for instance, a suggestion box)	Management representative	0.49	0	1	24,088
Employee surveys among employees	Management representative	0.46	0	1	24,030

After the identification of classes of indirect and direct employee participation, descriptive analyses studied the extent to which classes of direct and indirect participation are related to the involvement of employees and employee

representatives in critical decision-making (the level of codetermination). Descriptive analyses are also presented to scrutinise the prevalence of indirect and direct employee participation practices across countries, sectors and establishment size.

⁶ In Annex 1, the exact formulation of the questions and answer categories of all variables is presented.

To answer the second research question about the concurrence of direct and indirect employee participation in the establishments, descriptive statistical tools were used to investigate their coexistence in establishments at the different classes of employee participation. Also considered is the extent to which the coexistence of direct and indirect employee participation classes at establishments is related to the involvement of employees and employee representation in decision-making on major issues.

The third research question asks: *To what extent are establishment-level practices of direct and indirect employee participation linked to institutions of industrial relations?* This research question is answered by looking at differences between countries in the prevalence of classes of direct and indirect employee participation. Next, the institutional characteristics that affect these differences in the prevalence of employee participation classes were studied. To examine the relationship between (classes of) direct and indirect employee participation, mixed-effects regression analyses nests establishments (level one) within countries (level two). This makes it possible to control for the nested structure of the data set and to properly test the influence of country and establishment level characteristics. The dependent variables in these analyses are

the estimated probability that an establishment belongs to the class of direct or indirect employee participation, based on the outcomes of the LCAs. This method makes it possible to look at the relative importance of country and establishment characteristics for explaining the probability that an establishment has put in place a certain combination of practices for direct and indirect participation establishments.

At the establishment level, included is establishment size, measured as the number of employees in each establishment, with four categories ranging from fewer than 20 employees to more than 250 employees. Also included is the sector of economic activity, distinguishing between establishments in industry, construction, commerce and hospitality, transport, financial services and the 'other services' sector.⁷ The percentages of older employees, higher-educated employees, and employees working part time at the establishment are included, as are the percentage of union members among the employees, and union members among employee representatives. These are derived from the employee representative questionnaire in the indirect employee participation analyses. Table 4 presents the descriptive statistics of these variables.

Table 4: Descriptive statistics of variables at establishment level

Item	Survey	Mean	Standard deviation	Minimum	Maximum	N
Establishment size:						
– fewer than 20 employees	Management representative	0.24		0	1	24,251
– 20–49 employees	Management representative	0.27		0	1	24,251
– 50–249 employees	Management representative	0.32		0	1	24,251
– 250 or more employees	Management representative	0.17		0	1	24,251
Sector of economic activity:						
– industry	Management representative	0.33		0	1	24,251
– construction	Management representative	0.08		0	1	24,251
– commerce and hospitality	Management representative	0.25		0	1	24,251
– transport	Management representative	0.07		0	1	24,251
– financial services	Management representative	0.04		0	1	24,251
– other services	Management representative	0.22		0	1	24,251

⁷ Please see table in preliminary pages 'Sectoral aggregates used in the analysis'.

Table 4: Descriptive statistics of variables at establishment level (continued)

Item	Survey	Mean	Standard deviation	Minimum	Maximum	N
Percentage of older employees	Management representative	23.50	18.46	0	100	23,256
Percentage of higher-educated employees	Management representative	25.68	26.56	0	100	22,653
Percentage of part-time employees	Management representative	14.01	19.21	0	100	23,955
Percentage of union members	Employee representative	44.68	34.18	0	100	6,397
Percentage of union members in the employee representation body	Employee representative	72.73	38.00	0	100	6,314

At the country level, the data from the ECS 2013 is supplemented with information on the institutional context, derived from the ICTWSS database (Visser, 2011). Coordination wage setting measures the degree and the level at which the coordination of wage bargaining takes place, ranging from 1 (low coordination, largely at the firm level), to 5 (high coordination, centralised bargaining). The status of the works council is rated at (0) if works councils are effectively voluntary or (1) if works councils are mandated by law or general agreement between unions and employers. Employer organisation density in a country is measured as the proportion of employees working for an employer who is a member of an employer organisation.

Union density is measured as the proportion of union members among all wage and salary earners in employment. Economic conditions derived from Eurostat (2014) are included, based on the economic growth (in 2012, compared with 2011), and the employment rate (in 2012). Table 5 presents the descriptive statistics of the variables at country level. For all country-level variables, data for the year 2012 was used (the year before the ECS 2013 fieldwork took place) for two reasons. First, if it is assumed that institutions affect participation, these institutions need to precede participation. Second, 2012 is the most recent year for which most data are available.

Table 5: Descriptive statistics of variables at country level

Item	Mean	Standard deviation	Minimum	Maximum	N
Coordination wage setting					
– firm-level bargaining	0.18		0	1	24,251
– mixed industry- and firm-level bargaining	0.25		0	1	24,251
– industry-level bargaining	0.18		0	1	24,251
– mixed industry- and national-level bargaining	0.26		0	1	24,251
– national-level bargaining	0.12		0	1	24,251
Status of works council					
– works councils are voluntary	0.19		0	1	24,251
– mandated by law	0.81		0	1	24,251
Employer organisation density	57.52	21.65	18.00	100.00	24,251
Union density	28.38	18.46	7.89	69.05	24,251
Economic growth	-0.67	2.36	-6.70	6.50	24,251
Employment rate	68.40	6.62	55.00	79.40	24,251

The answer to the fourth research question – *To what extent and under what conditions are direct and indirect employee participation practices related to beneficial outcomes for both companies and employees?* – is reached by examining which of the classes of direct and indirect employee participation are statistically associated with beneficial outcomes. Here, too, a multilevel hierarchical design was applied in which establishments are nested in countries. It examined whether direct and indirect employee participation classes are statistically related to establishment performance and workplace well-being, similar to the two beneficial outcomes studied in the ECS 2013 overview report (Eurofound, 2015). Workplace well-being is an index variable that combines information on:

human resource management (HRM) problems (namely, a high level of sickness leave, difficulties in retaining employees, and poor motivation of employees); the general work climate; and changes in the general work climate since 2010. Higher scores on the establishment performance index suggest better workplace well-being. Establishment performance is an index variable that brings together information on financial factors and their effect on labour productivity and the production of goods and services since 2010. Again, higher scores indicate a better establishment performance. All variables included in the index variables are retrieved from the management survey. Table 6 provides an overview of the descriptive statistics of these establishment outcomes.

Table 6: Descriptive statistics of establishment-level outcomes

Item	Survey	Mean	Standard deviation	Minimum	Maximum	N
High level of sickness leave	Management survey	1.84		1	2	24,113
A need to reduce staff	Management survey	1.89		1	2	24,094
Poor motivation of employees	Management survey	1.81		1	2	23,782
General work climate	Management survey	1.98	0.67	1	5	24,200
Change in work climate	Management survey	1.82	0.67	1	3	23,927
Workplace well-being index		73.09	18.27	0	100	24,212
Financial situation	Management survey	2.33	0.84	1	5	23,389
Change in financial situation	Management survey	1.99	0.78	1	3	23,103
Change in labour productivity	Management survey	1.64	0.69	1	3	23,293
Change in production of goods and services	Management survey	1.74	0.78	1	3	22,899
Change in production of services	Management survey	1.50	0.60	1	3	229
Establishment performance index		62.04	25.63	0	100	23,192

CHAPTER 3

Categories of indirect employee participation

Categories of indirect employee participation

This chapter introduces four distinct classes of indirect employee participation, based on the patterns in the wide range of practices reported for the establishments in the ECS 2013. The chapter starts with a brief description of the methodological procedure used to group companies together into classes, followed by a description of the classes. Next, it describes the prevalence of these indirect employee participation classes in sectors and in the EU Member States. Subsequently, it investigates whether these classes are related to the size of establishments. Finally, it relates the indirect employee participation classes to codetermination of employee representation in decision-making about major changes in the establishments, such as changes in the organisation of work processes, or changes in recruitment and dismissal policies.

Methodological procedure

To determine information about level, a preparatory LCA was used. Two successive LCAs were carried out to estimate classes of indirect employee participation. In the first LCA, establishments are grouped on the types of information that their management provides to the representative body. This analysis reduces the initial list of items that reflect types of information and eases the interpretation of the indirect employee participation classes in the later stages of the analyses.

Classes of establishment

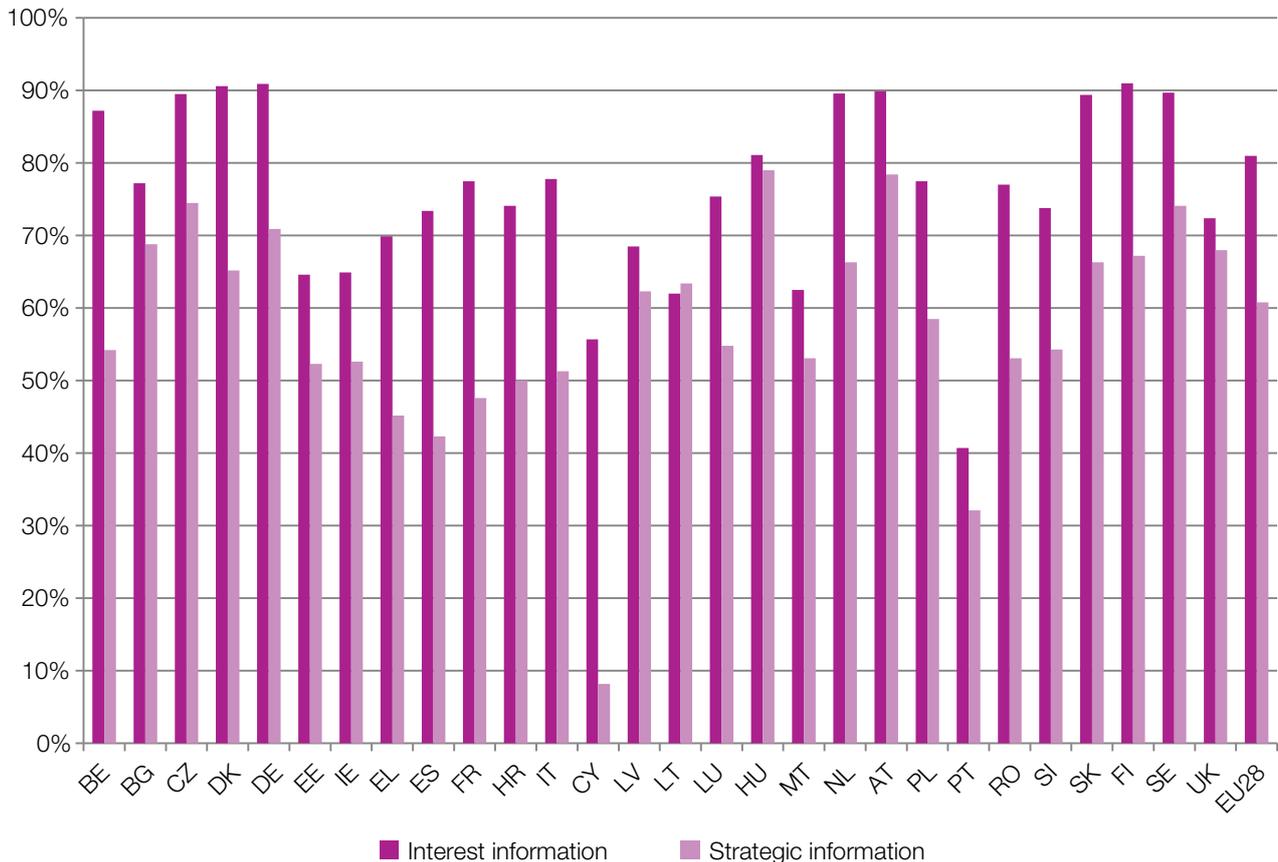
The LCA grouped the establishment into two distinct classes according to the type of information provided by the management.

Information needed for interest representation: The first class reflects the extent to which the representative body receives information on the financial and employment situation. This type of information is the minimal standard for medium-sized and large companies for informing employees, according to the Information and Consultation Directive (2002/14/EC). This study describes this type of information as 'interest information'.

Strategic information: The second class reflects the extent to which the representative body receives strategic information. Strategic information includes information on operational and business issues, such as changes in products, services, production processes or strategic plans.

The prevalence of these two classes of information provision is presented in Figure 1. This figure shows the extent to which the employee representation in establishments with 50 employees or more (those establishments to which the Information and Consultation Directive applies) received interest information and strategic information: 81% of the management of these establishments provides information on both the financial and employment situation. Establishments in Portugal, Cyprus, Lithuania, Malta, Estonia and Ireland appear to lag behind in meeting the objectives of the directive. In total, the representative bodies receive information on strategic information in 61% of the larger EU28 establishments.

Figure 1: Provision of interest information and strategic information, larger EU28 establishments (%)



Note: establishments with 50 employees or more.

Classes of indirect employee participation

Second, a subsequent LCA was applied to identify the final classes of **indirect employee participation** by analysing the prevalence of the two combinations of information provision (as determined in the previous step), the quality of this information and three different types of resources for employee representatives in European establishments.

The **quality of information** was measured by asking the representative body ‘In general, was the quality of the information satisfactory?’ Their answers were categorised as follows: ‘No’, or ‘No information was provided’ (categorised as 1); or ‘Yes, the quality was satisfactory’ (categorised as 2).

Resources for employee representatives were assessed by including training opportunities, financial resources for external

advice, and the time permitted for employee representation duties. **Training for employee representation** is a dummy variable measuring whether employee representatives receive training for their duties as a member of the employee representation body (categorised as 2) or whether they did not (categorised as 1). The employee representatives were asked: ‘In the last 12 months have you received training related to your role as employee representative?’. This training can be given internally (for instance, by the employer), but also externally (for instance, by a trade union). Employee representatives were asked ‘Does the employee representation body have access to funding for external advice?’ Replies were scored at (2) for ‘Yes’ and (1) for ‘No’. Finally, the **time available for employee representation-related duties** was assessed by including a dummy variable which asks whether the employee representative received insufficient time for their duties as an employee representative (marked as 1); if they received sufficient time, this was marked as (2). Employee representatives were first

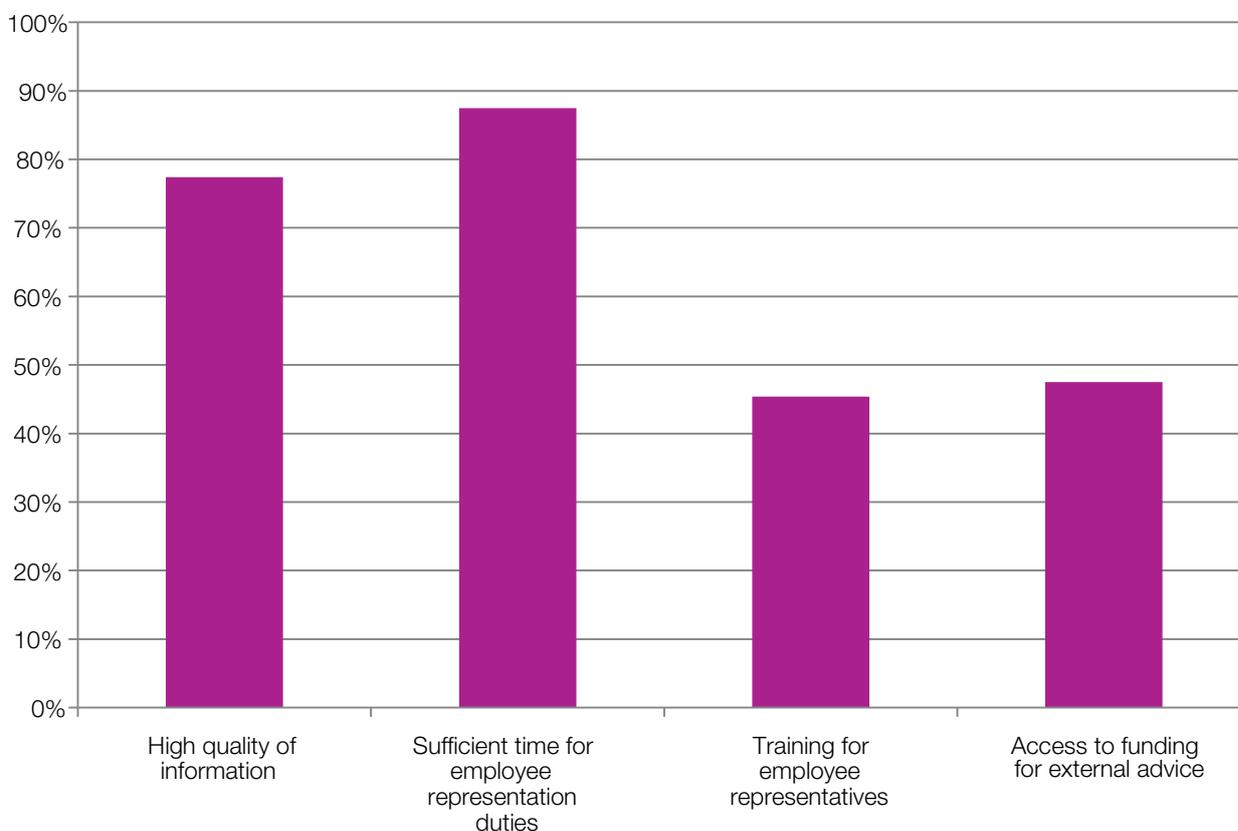
asked whether they could spend a designated number of hours per week of their working time on their duties as an employee representative. If so, respondents were asked to specify the amount of time permitted, and whether or not this was sufficient. If respondents said they had no designated time for such duties, they were asked to categorise their situation further:

- (Category a) they were not entitled to use their working time for employee representation duties;

- (Category b) there is no designated number of hours, but they can use as much time as necessary;
- (Category c) they are full-time employee representatives.

Category (a) was classified as 'insufficient time for employee representation duties', while categories (b) and (c) were classed as 'sufficient time for employee representation duties'. The prevalence of these indirect employee participation practices is presented in Figure 2.

Figure 2: Indirect employee participation practices in all EU28 establishments (%)



The LCA produced four classes.⁸ Table 7 gives the results of this LCA, showing the estimated class of population shares that reflects the proportion of establishments within each class of

indirect employee participation. It also presents the conditional item response probabilities, which represent the probability that each practice occurs in establishments in each class.

⁸ A detailed discussion of the LCA procedures is presented in Annex 2.

Table 7: Outcomes of LCA on indirect employee participation

	Limited	Resource-oriented	Information-oriented	Extensive	Average
Estimated class population shares	0.09	0.14	0.33	0.44	
Conditional item response probabilities					
Interest information	0.16	0.38	0.88	0.97	0.78
Strategic information	0.01	0.10	0.67	0.79	0.58
Quality of information	0.27	0.36	0.93	0.91	0.78
Training for employee representation	0.00	0.76	0.20	0.66	0.46
Employee representation has access to funding for external advice	0.21	0.49	0.27	0.69	0.48
Sufficient time for employee representation duties	0.76	0.79	0.91	0.90	0.87

Note: Bold values indicate above-average item response probabilities; N = 6,403.

Describing classes of indirect employee participation

The study identified and labelled four classes of establishment practice in indirect employee participation, detailed below.

Limited indirect employee participation: The first class in Table 7 reflects practices in which the participation of employee representatives is rather limited. Information supply is (relatively) limited, especially in terms of the establishment's strategic information. Moreover, the quality of information provided is evaluated as being of low quality. Resources available to the employee representative(s) are relatively limited – in particular, regarding training opportunities.

Resource-oriented indirect employee participation: The second class of indirect employee participation reflects practices in which the employee representatives are relatively little informed about matters related to employee interest (the establishment's financial situation and employment) or strategic plans and innovations. Availability of resources such as training

and external funding for employee representatives in these establishments is relatively high. However, the time available for their employee representation duties is relatively limited.

Information-oriented indirect employee participation: The third class reflects indirect employee participation practices in which the employee representative is extensively provided with high-quality information. The employee representatives in these establishments are, however, provided with relatively limited access to funding for external advice and training, while the time available for employee representation duties is relatively generous.

Extensive indirect employee participation: In the fourth class of indirect employee participation, the employee representatives are provided with high-quality information on the dimensions of information relevant to interest representation and bargaining (the establishment's financial situation and its employment plans), and information on the organisation's strategy and innovation. The establishments in this class also provide the employee representative with resources (training, expertise and time).

Country-level variation in indirect employee participation

Figure 3 shows that there is considerable variation in the prevalence of the indirect employee participation classes among the EU28 Member States. Employee representatives in Malta, Portugal, Ireland, Greece, Spain and France are most likely to have limited capacity in terms of information and resources. Employee representatives in Cyprus are most likely to have

high levels of resources – time, training and funding for external advice – but are provided with less information. Extensive information provision without high levels of resources is most common among employee representatives in Romania, Malta, Italy and France. Employee representatives are most fully equipped in terms of information and resources in more than two-thirds of the establishments in Hungary, Austria, and the Netherlands, and in over three-quarters of the establishments in the Czech Republic and Germany.

Figure 3: The prevalence of indirect employee participation classes by country, EU28 (%)



Sector-level variation in indirect employee participation

Figure 4 presents the prevalence of indirect employee participation classes across sectors of economic activity, for which there are six categories:

- industry;
- construction;
- commerce and hospitality;
- transport;
- financial services;
- other services.

Figure 4 shows that as a general pattern across the sectors, 'Extensive indirect employee participation', with fully equipped employee representatives, is the most common practice (48% of establishments on average), followed by 'Information-oriented indirect employee participation' (28%). The incidence of the classes 'Limited indirect employee participation' and 'Resource-oriented indirect employee participation' are less frequent, ranging between 10% and 15% in most sectors.

Figure 4: The prevalence of indirect employee participation classes, by sector (%)

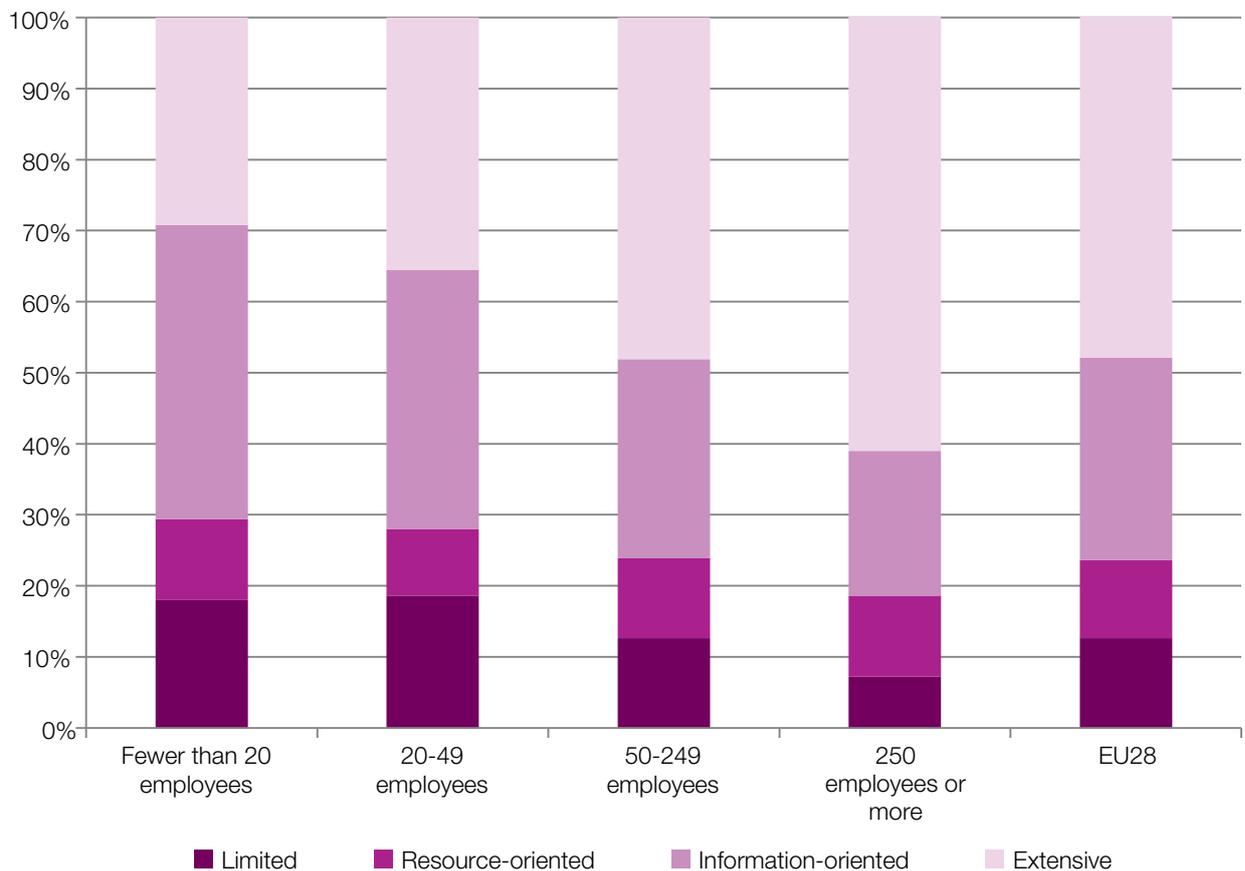


Establishment sizes and indirect employee participation

Figure 5 depicts the prevalence of indirect employee participation classes among five different establishment sizes: establishments with fewer than 20 employees; 20–49 employees; 50–249 employees; and 250 employees or more. Figure 5 shows considerable variation in the prevalence of indirect employee participation classes across the categories of

establishment sizes. Employee representatives in smaller establishments (that is, with fewer than 50 employees) are most likely to receive little information and to have fewer resources at their disposal. In contrast, it can be seen that better equipped employee representatives are more often found in larger establishments. This is most clearly shown by the prevalence of ‘Extensive indirect employee participation’ over establishment sizes: this class of indirect employee participation is practised most frequently in the largest establishments, and much less in establishments with fewer than 20 employees.

Figure 5: The prevalence of indirect employee participation classes, by establishment size (%)



Codetermination and indirect employee participation

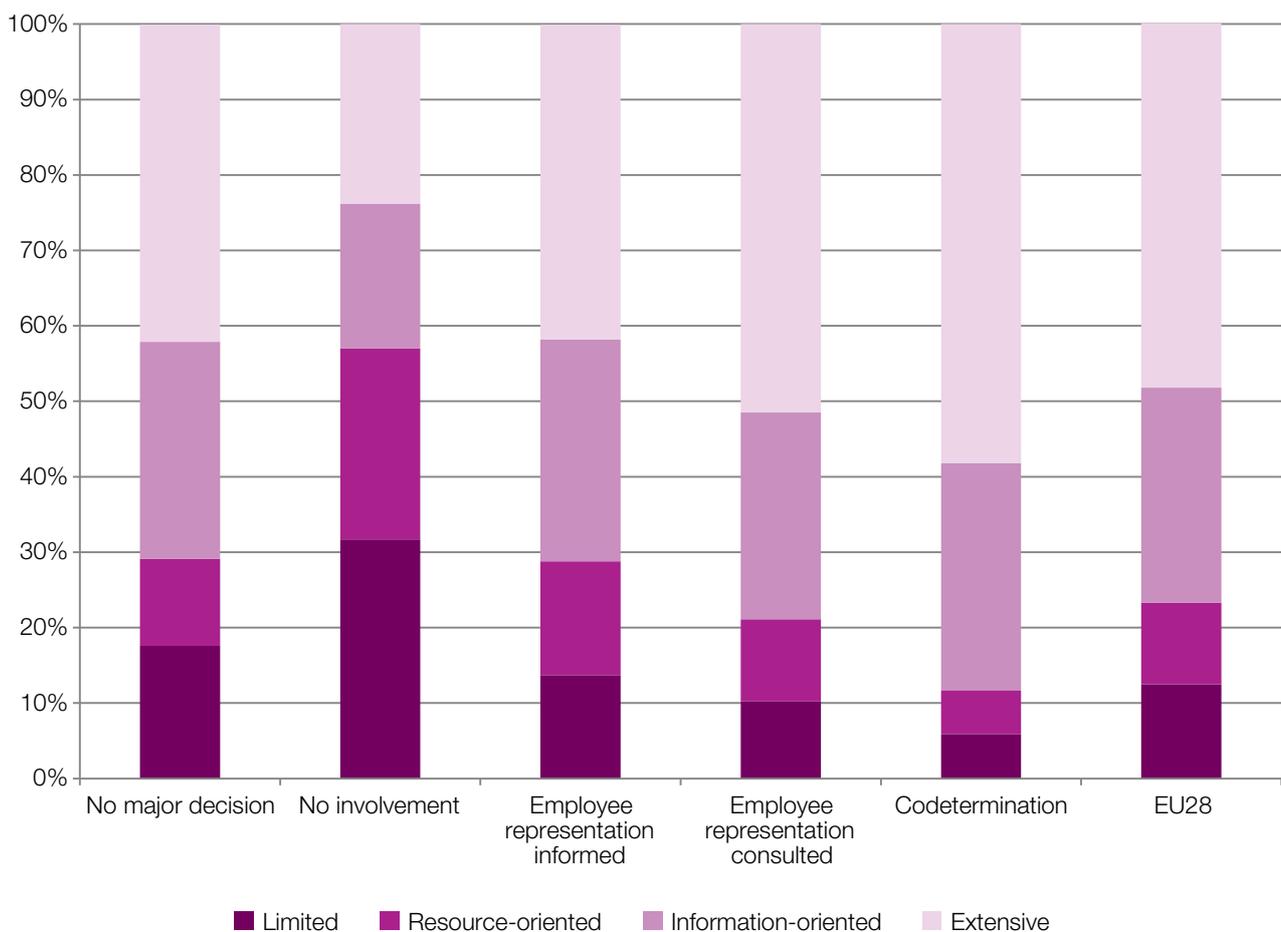
Codetermination

The highest level of indirect employee participation distinguished is that of codetermination.⁹ To determine whether the representative bodies are involved in codetermination, their involvement in decision-making about major changes in the organisation was assessed. The analysis focuses on the

involvement of employee representatives in decisions on major changes in the establishments during the three years prior to the interview, as presented in Figure 6. The major changes concerned issues directly relevant to employees:

- organisation of work processes;
- recruitment and dismissal;
- occupational health and safety;
- training and career development;
- working time arrangements;
- restructuring measures.

Figure 6: Involvement of employee representation in major decisions, by indirect employee participation class (%)



⁹ 'Codetermination is a structure of decision-making within the enterprise whereby employees and their representatives exert influence on decisions, often at a senior level and at a relatively early stage of formulation. Codetermination may operate in parallel to, and complement, other industrial relations mechanisms of employee representation and influence. It does not substitute for other mechanisms of employee influence on management decision-making, such as collective bargaining' (Eurofound's European Industrial Relations Dictionary).

Figure 6 shows that in establishments where employee representatives receive little information and lack resources (that is, the 'Limited indirect employee participation' class), employee representatives are also least likely to have been involved in major decisions. This class is greatly overrepresented among establishments where the employee representation had no involvement, and underrepresented among establishments where employee representation was consulted or even

involved in codetermination. Codetermination, however, is most likely to occur in establishments where employee representatives are better informed and have more resources at their disposal (58% of establishments). As a general rule, Figure 6 shows that informed employee representatives are more often involved in decision-making, and this is even more the case when the employee representatives also have resources at their disposal.

CHAPTER 4

Levels of direct employee participation

Levels of direct employee participation

To establish the levels for direct employee participation, a similar approach was taken to that used for indirect employee participation. First, an LCA was carried out with items relevant to direct employee participation. These classes were considered in relation to establishment size, sectors and countries. In the second step, the relationship of these classes to the involvement of employees in major changes taken by the management at European establishments was examined.

Identifying classes of direct employee participation practices

Seven items on management–employee communication on the organisation of work in the ECS 2013 were used to construct the level of direct employee participation. The answers on these items were provided by the management respondents. These items reflect the direction of communication and channels of communication (see Table 8). The direction of communication contains information about the first two levels of participation: information, and consultation. Top-down communication reflects the first level of participation, informing employees. Bottom-up and on-demand communication reflects the second level of participation, consulting employees.

Table 8: Management–employee communication and level of participation

Level of participation	Direction of communication	Communication practices
Information	Top-down	Dissemination of information through newsletters, website, notice boards, email
Consultation	Bottom-up	Suggestion schemes (the collection of ideas and suggestions from the employees, voluntarily and at any time, traditionally by means of a 'suggestion box')
		Surveys of employees
	Interactive	Discussions with employees through social media or online discussion boards
		Regular meetings between employees and immediate manager
		Regular staff meetings open to all employees at the establishment
		Meetings of a temporary group or committee or ad hoc group

Classes were established for direct employee participation by using the items on management–employee communication

in the LCA. Initially, this produced the six classes of direct employee participation presented in Table 9.¹⁰

¹⁰ Please see Annex 2 for a detailed description of the LCA procedure.

Table 9: Outcomes of LCA on direct employee participation practices

	Limited	Conventional	On demand	Consultative	Extensive I	Extensive II	Average
Estimated class population shares	0.11	0.21	0.25	0.05	0.21	0.17	
Conditional item response probabilities							
Regular meetings between employees and immediate manager	0.44	0.96	0.85	0.82	1.00	0.99	0.88
Regular staff meetings open to all employees at the establishment	0.13	0.73	0.29	0.49	1.00	0.79	0.61
Meetings of a temporary group or committee or ad hoc group	0.14	0.28	0.62	0.34	0.70	0.86	0.54
Dissemination of information through newsletters, website	0.38	0.44	0.95	0.71	0.96	0.99	0.77
Discussion with employees through social media and other outlets	0.02	0.02	0.12	0.07	0.22	0.40	0.15
Suggestion schemes	0.15	0.25	0.45	0.93	0.56	0.86	0.49
Employee surveys	0.09	0.22	0.36	1.00	0.50	1.00	0.46

Note: Bold values indicate above-average item response probabilities; N = 23,598.

Classes of direct employee participation

Limited direct employee participation: In nearly half of the establishments in this class, information is disseminated through regular meetings between employees and the immediate manager, and through newsletters, websites, and so on. Other forms of employee participation are practised only rarely.

Conventional direct employee participation: Communication between employees and management occurs mainly in conventional interactions – regular meetings between employees and immediate managers, or regular staff meetings open to all employees.

On-demand direct employee participation: Management-employee communication happens in traditional settings (regular meetings between employees and their immediate manager, and

dissemination of information through media such as newsletters or websites). Furthermore, when necessary, communication between employees and management takes place in ad hoc groups.

Consultative direct employee participation: Traditional, top-down communication (regular meetings between employees and immediate manager, and dissemination of information through media such as newsletters and websites), with a strong emphasis on bottom-up means of communication between employee and management (suggestion schemes and employee surveys).

Extensive direct employee participation Type I: This reflects practices that facilitate communication between management and employees: the provision of top-down information to employees and bottom-up consultation (gathering ideas and input from employees). All the identified means of interaction with employees are deployed in this class.

Extensive direct employee participation Type II: The practices in this last class are quite similar to those in the ‘Extensive direct employee participation’ class. However, in this class, communication through mass channels – such as social media and surveys – is used more frequently.

Combining both types of ‘Extensive direct employee participation’

About half of the establishments put one of the two types of the ‘Extensive direct employee participation’ class into practice. The size of the establishment appears to be a strong demarcation criterion between both classes. Type I is more often found in smaller (although not the smallest) establishments, whereas Type II is more prevalent in larger establishments. This is consistent with the outcomes of the LCA, which show that the largest differences were seen in discussion with employees through social media and similar online methods, and the use of suggestion schemes and employee surveys: these practices were more often found for ‘Extensive direct employee participation’ Type II. Arguably, these practices are also more useful for communication between the management and employees in large establishments. Since few differences were found in the prevalence of the two classes at the country and sector level, both are combined in the remainder of this report.

Country-level variation

Figure 7 presents the prevalence of the five classes of direct employee participation. There is substantial variation across countries. Establishments where there is relatively little

communication about the organisation of work between employees and management (‘Limited direct employee participation’) are most prevalent in Italy and Portugal (in both countries, comprising 18% of all establishments). Establishments where employee–management communication mainly takes place in conventional ways, through regular meetings between employees and immediate managers or regular staff meetings open to all employees (‘Conventional direct employee participation’), are most common in Bulgaria (34%), followed by Romania (29%), Italy (28%), Hungary (25%) and Croatia (25%). ‘On-demand direct employee participation’ – communication in traditional settings such as regular meetings between employees and immediate managers; dissemination of information through newsletters, websites; and ad hoc groups when necessary – is most common in Belgium (29%), Poland (27%) and France (25%). Establishments in which top-down and bottom-up communication practices are combined (‘Consultative direct employee participation’) are most common in Poland (10%), Latvia (9%) and Portugal (8%). Establishments with ‘Extensive’ forms of direct employee participation, where employee–management communication is top-down, bottom-up and interactive, is most common in almost half – 12 – of the 28 Member States. It is common in half or more of establishments in Austria (59%), the Czech Republic (59%), Denmark (71%), Estonia (50%), Finland (75%), Germany (49%), Ireland (60%), the Netherlands (54%), Slovakia (55%), Slovenia (57%), Sweden (80%) and the UK (50%).

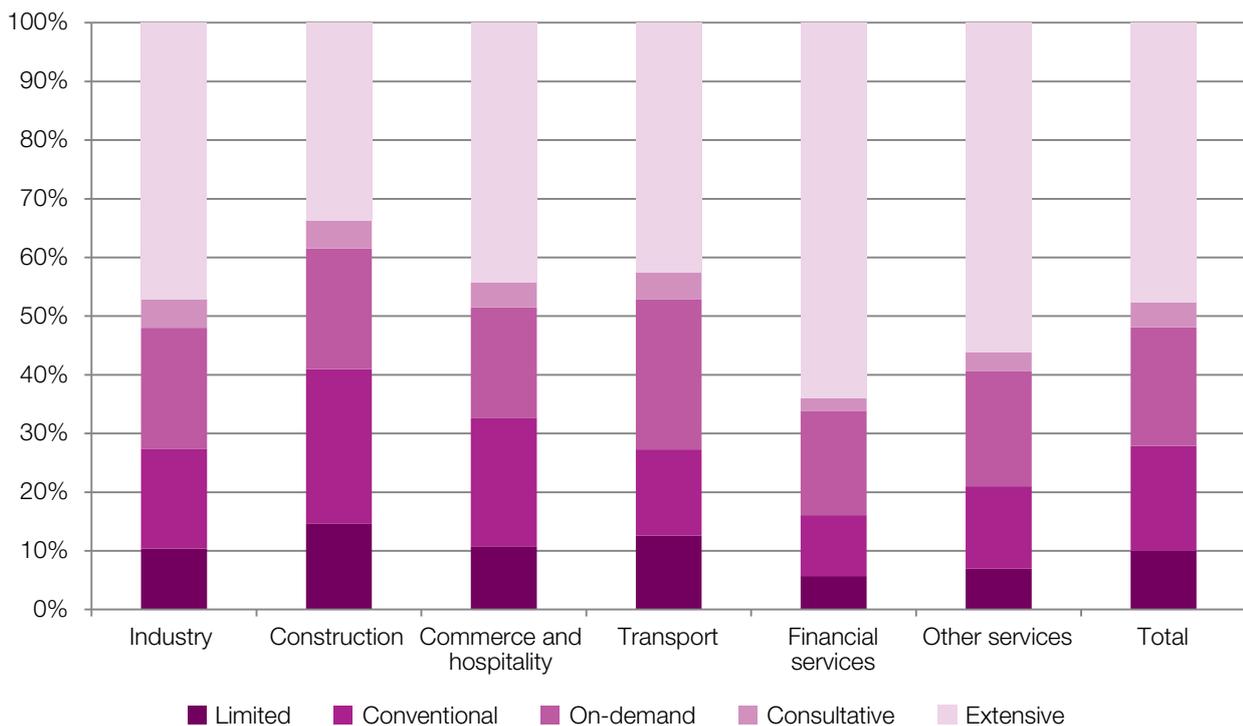
Sector-level variation

Figure 8 shows the variation in the prevalence of the classes of direct employee participation classes among the six sectors of economic activity (industry, construction, commerce and hospitality, transport, financial services, and other services). ‘Limited direct employee participation’ is relatively common in the construction sector (15%). ‘Conventional direct employee participation’ is most common in establishments in construction (26%) and in commerce and hospitality (22%). ‘On-demand direct employee participation’ is most common in over one-quarter of establishments in the transport sector. The ‘Consultative direct employee participation’ class is most common in 4%–5% of establishments in most sectors. ‘Extensive direct employee participation’ is most often seen in the financial services sector (30%). Overall, this study finds variation in the prevalence of the classes of direct employee participation among sectors, but the variation at the sector level is considerably less than that at country level.

Figure 7: The prevalence of direct employee participation classes, by country (%)



Figure 8: Prevalence of direct employee participation classes by economic sector (%)

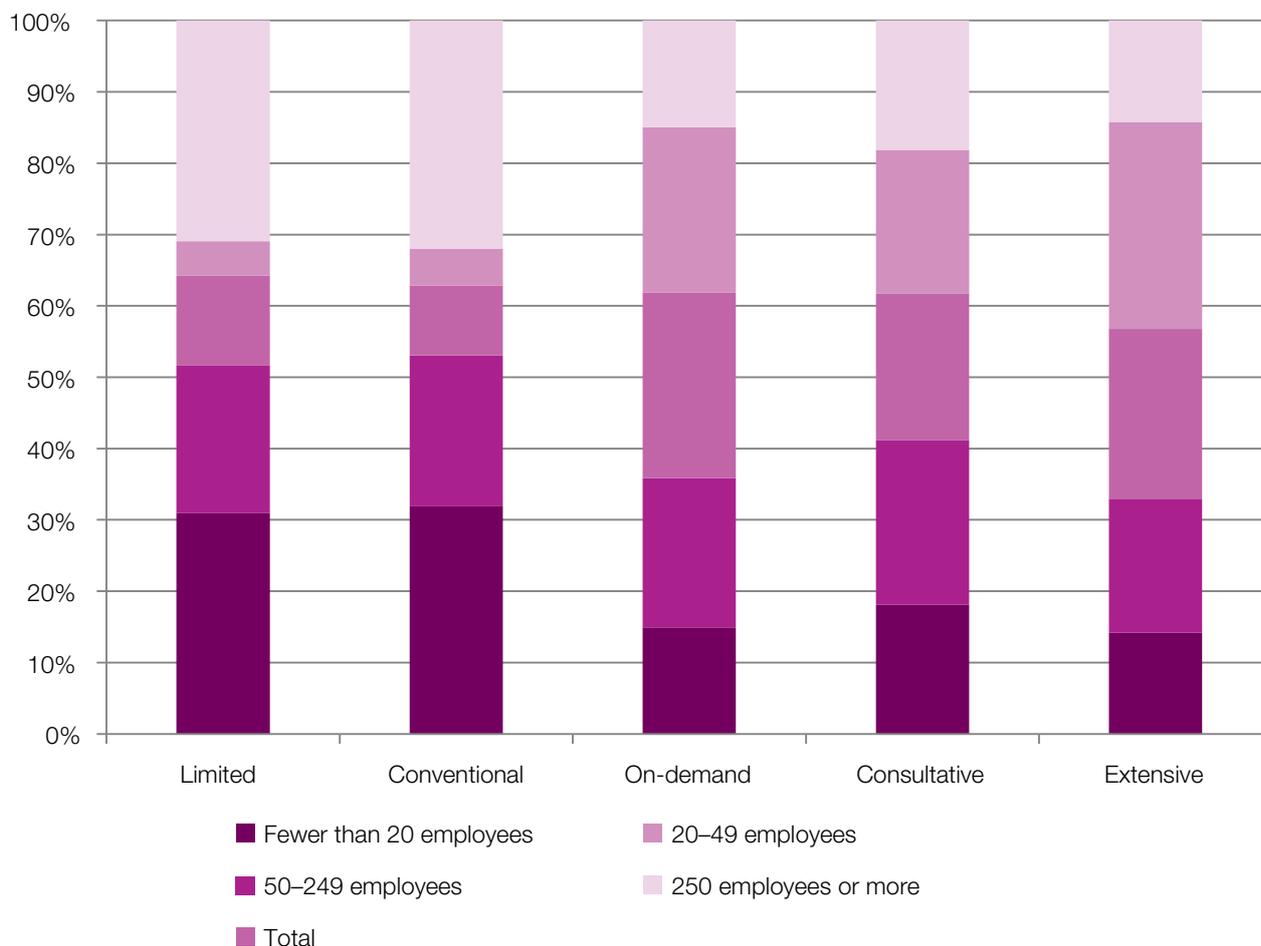


Establishment sizes and direct employee participation

Figure 9 shows the prevalence of classes of direct employee participation across establishments with different establishment sizes. It shows that the prevalence of direct employee participation classes is strongly related to the size of establishment. Limited and conventional ways of communication between employees and management are most popular in the smallest establishments (used, respectively, in 17% and 33%

of establishments with fewer than 20 employees). Traditional communication, supplemented with ad hoc or temporary group meetings when necessary (in the form of 'On-demand direct employee participation'), is most common in establishments with between 50 and 249 employees (24%) and 250 employees or more (22%). There is little variation in the prevalence of the 'Consultative direct employee participation' class, although it is somewhat less common in establishments with fewer than 20 employees (4%) or more than 250 (3%). Extensive forms of communication are most often used in the largest establishments (66%).

Figure 9: Prevalence of direct employee participation classes, by establishment size (%)

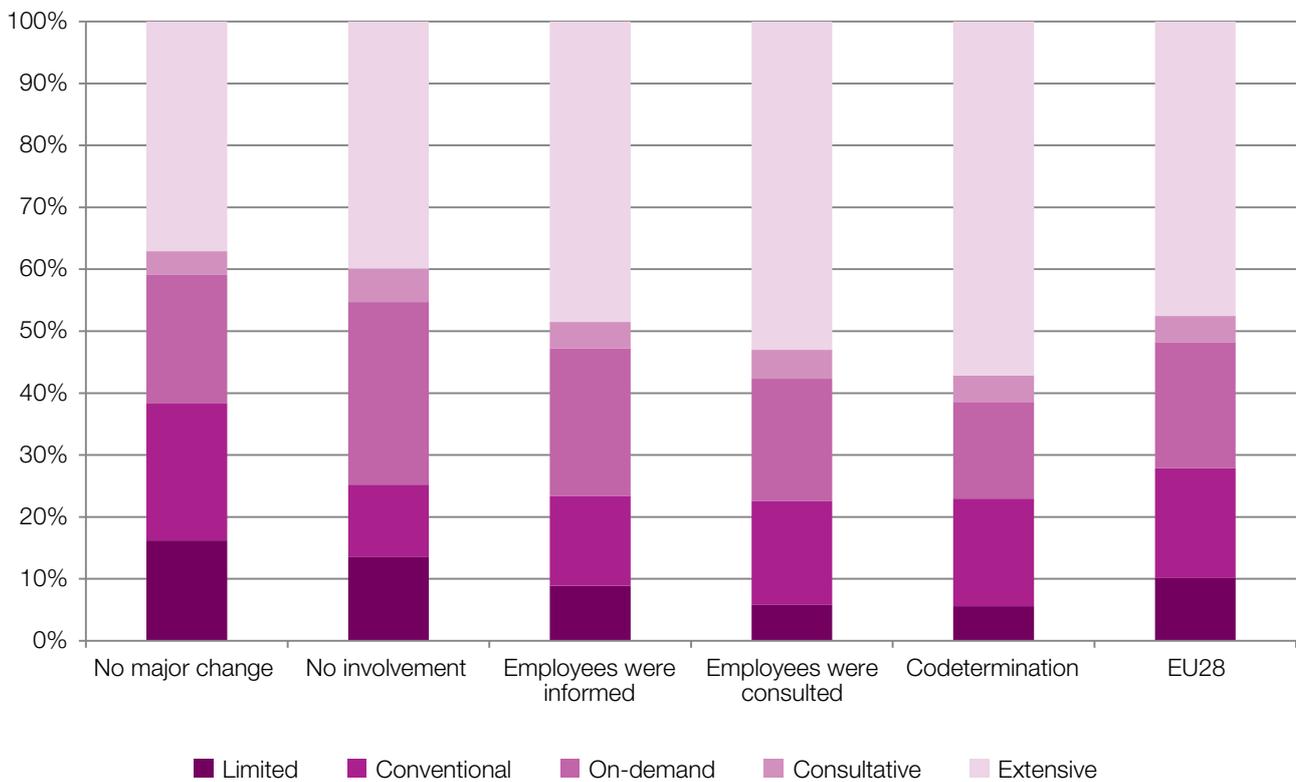


Codetermination and direct employee participation

The highest level of direct employee participation is that of codetermination. To determine whether employees are involved in codetermination, their involvement in decision-making about major changes in the organisation was assessed. The major changes were issues directly relevant to employees: remuneration systems, use of technology, allocation of work, recruitment policies, and working time arrangements.

Figure 10 shows that employees in the 'Limited direct employee participation' class are less involved in decision-making in major decisions than the average for the EU28 (14% compared with 10% overall), and are less likely to engage in codetermination (6% as against 10% overall). To a lesser extent, this also holds true for the 'On-demand direct employee participation' class and the 'Consultative direct employee participation' class. The opposite is the case for 'Extensive direct employee participation' class, in which it is rarer that there is no involvement (40% as against an average of 48%), and in which codetermination occurs more often (57% compared with 48% overall).

Figure 10: Involvement of employees in major decisions, by direct employee participation class (%)



Relationship between indirect and direct employee participation

This section examines if, and to what extent, direct employee participation and indirect employee participation coincide in establishments.

Table 10 shows which combinations of classes of direct and indirect employee participation are observed. Three combinations of direct and indirect employee participation practices predominate; they are ordered below in terms of their frequency.

1. The combination of 'Extensive indirect employee participation' and 'Extensive direct employee participation' is by far the most frequent combination. More than 30% of all establishments in the ECS 2013 combine a high level of indirect employee participation with a high level of direct employee participation.

2. In 16% of establishments, 'Information-oriented indirect employee participation' is combined with 'Extensive direct employee participation'. This means that a high level of direct participation is matched with indirect employee representation in which employee representatives are provided with high-quality strategic and bargaining information as well as

sufficient time to perform their duties as employee representatives. However, they have lower levels of other resources, such as funding for external expertise and training.

3. In approximately 10% of establishments, 'On-demand direct employee participation' is combined with 'Extensive indirect employee participation'. A high level of indirect employee representation is matched with conventional interaction and ad hoc interaction between management and employees. Less participatory classes ('Limited indirect employee participation' and 'Resource-oriented indirect employee participation') are not frequently found, and they are also very sparsely combined with 'Limited direct employee participation' (in fewer than 2% of establishments).

In short, extensive practices for indirect participation frequently coincide with practices for direct participation. Interestingly, more limited practices for indirect participation ('Limited indirect employee participation' and 'Resource-oriented indirect employee participation') are relatively frequently matched with more extensive practices for direct participation ('Extensive direct employee participation' and 'On-demand direct employee participation'). Conversely, limited levels of direct employee participation ('Limited direct employee participation'), do not seem to coincide with more extensive practices for indirect employee participation ('Information-oriented indirect employee participation' or 'Extensive indirect employee participation').

Table 10: Combinations of indirect and direct employee participation as a percentage of all establishments (%)

		Indirect employee participation				
		Limited	Resource-oriented	Information-oriented	Extensive	Total
Direct employee participation	Limited	1.2	0.7	1.7	1.6	5.2
	Conventional	1.5	1.2	3.3	3.0	9.0
	On-demand	3.1	2.6	6.1	9.8	21.6
	Consultative	0.5	0.5	1.2	1.6	3.7
	Extensive	6.1	6.0	16.1	32.2	60.5
Total		12.4	11.0	28.4	48.2	100.0

Note: N = 6,230

Indirect and direct employee participation and codetermination

Table 11 links the level of indirect employee participation to direct employee participation. The table shows a clear diagonal line connecting the cells of the majority of establishments. This means that direct and indirect employee involvement coincides in the majority of establishments. When employee representation

is involved in codetermination, employees are also involved in codetermination (57%); when the employee representation is consulted, mostly the employees are consulted as well (45%); when employee representation is informed, employees are also involved in the majority of cases (70%). There is some deviation from this pattern in the cases in which employee representation is not involved. Here employees are mostly informed (35%) or even involved in codetermination (22%).

Table 11: Level of involvement of official employee representation, by level of direct involvement of employees

		Direct employee participation				Total number
		No involvement	Employees are informed	Employees are consulted	Co-determination	
Indirect employee participation	No involvement	32.5%	35.2%	10.5%	21.9%	622
	Employee representation is informed	10.4%	69.7%	9.7%	10.2%	1,184
	Employee representation is consulted	8.1%	33.9%	45.4%	12.6%	1,183
	Codetermination	5.7%	24.1%	13.2%	57.0%	4,120
	Total number	656	2,436	1,261	2,756	7,109

Note: Grey cells indicate the largest percentage in the row.

With the exception of the major changes concerning recruitment policies, the same general pattern is found for all other issues, although these data are not presented here. In the majority of establishments, the level of involvement of indirect and direct employee participation concur: if employee representation was involved in decision-making, employees were also involved in this decision-making (between 39% and 58% of the cases); if the employee representation was consulted, employees were consulted as well (37%–40%); and in the cases in which the employee representation was simply informed, employees were also just informed rather than consulted (61%–77%). At the same time, the fact that

the employee representative body was not involved did not imply that the employees were not involved. In such cases, often employees were at least informed about imminent changes. As mentioned, a slightly different pattern was found with regard to major changes in recruitment policies. Here, the levels of indirect and direct employee participation coincided for all categories, including non-involvement. So low levels of indirect employee participation were not compensated for by higher levels of direct employee participation. Neither direct participation nor indirect participation was found to be commonly used for taking decisions on recruitment policies.

CHAPTER 5

National institutions for industrial relations and employee participation

National institutions for industrial relations and employee participation

Industrial relations systems are known to affect employee participation. Regulations and national structures shape the opportunities and the obstacles for employers and employees to implement and perform employee participation practices in their workplaces. The effects of four country-level institutions are analysed in this chapter.

1. First, the chapter analyses the relationship of employee participation to **the level of wage coordination** in a country.
2. Second, it examines the effect of **characteristics of works councils**.
3. It then looks at how direct and indirect employee participation are linked to **characteristics of unions and employer organisations**.
4. Finally, it considers the way in which the **economic context** in a country – national levels of employment and economic growth – may impact practices of indirect and indirect employee participation.

Figures 11 to 14 present the outcomes of the analyses of the effect of the national-level institutions on indirect employee participation. In these analyses, the dependent variables measure the probability (ranging from 0 to 1) that a particular class is the most likely. First, the statistical relationships between indirect employee participation and national-level institutions are considered. Figures 11

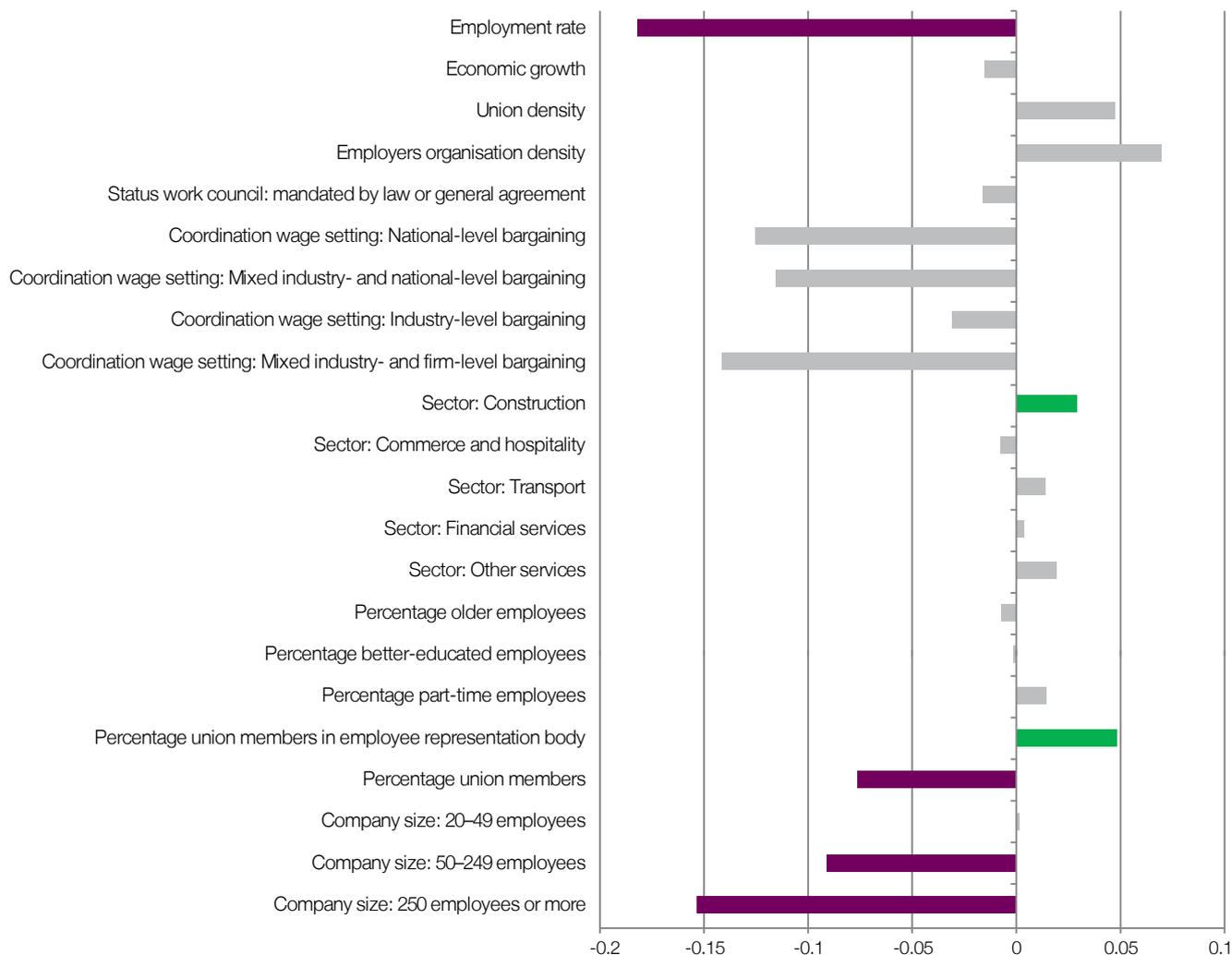
to 14 show the results of these analyses. Figures 15 to 20 present the associations between national-level institutions and direct employee participation. Figure 21 summarises the findings for both indirect and direct employee participation.¹¹

Indirect employee participation

The discussion of the statistical association between the four classes of indirect employee participation and national-level institutions begins with the class 'Limited indirect employee participation'. In this class, the provision of resources and (high-quality) information for the employee representation is relatively low. Figure 11 shows that there are four significant factors that determine whether an establishment belongs to this class of indirect employee participation. First, the lower the employment rate in a country, the more likely it is that establishments belong to the 'Limited indirect employee participation' class. Second, larger establishments practise this form of participation less often. Third, establishments that have more union members among their employees are more likely to practise 'Limited indirect employee participation' as are, fourth and finally, establishments with fewer union members among the employee representatives.

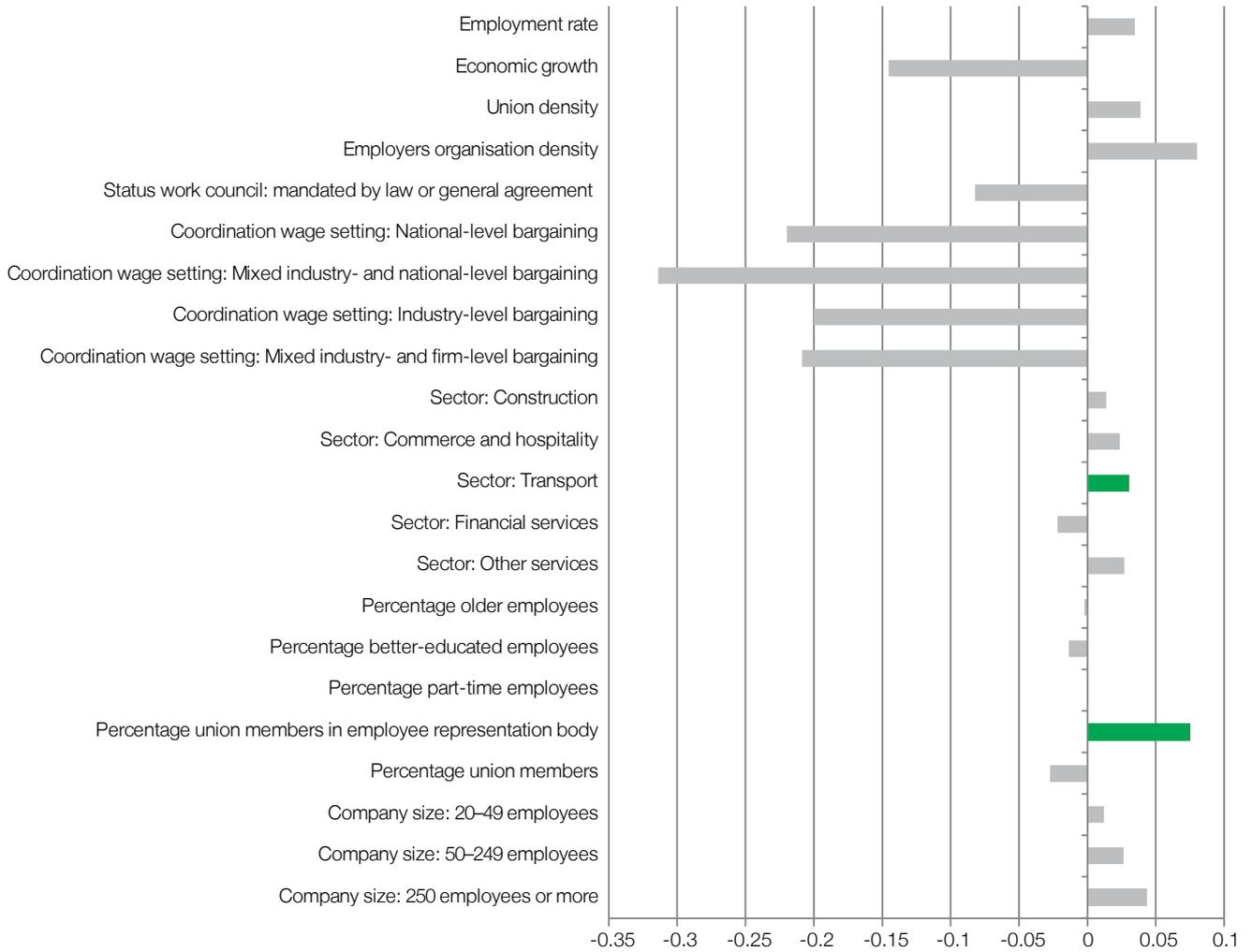
¹¹ Note that there is a large difference in sample sizes between the models explaining indirect and direct employee participation. The sample size in Figures 11–14 is based mainly on the employee representative survey and the results presented in Figures 15–20 are based on the management survey.

**Figure 11: Mixed effects regression of indirect employee participation classes:
Limited indirect employee participation**



Note: $N = 3,826$; in Figures 11–19, **green** bars indicate a positive association with the establishment or country characteristic: the characteristic at stake coincides with an increased probability that an establishment belongs to the participation class analysed in the figure. **Purple** bars indicate negative associations: the characteristic coincides with a decreased probability that an establishment belongs to the employee participation class in that figure. The **length** of the bars indicates the size of the effect: the longer the bars, the stronger the (positive or negative) association between the characteristic and the probability of an establishment belonging to this class. **Grey** bars indicate effects that were not statistically significant (at $\alpha=5\%$), meaning that the characteristic has no effect on the probability that an establishment belongs to the participation class at stake.

**Figure 12: Mixed effects regression of indirect employee participation classes:
Resource-oriented indirect employee participation**

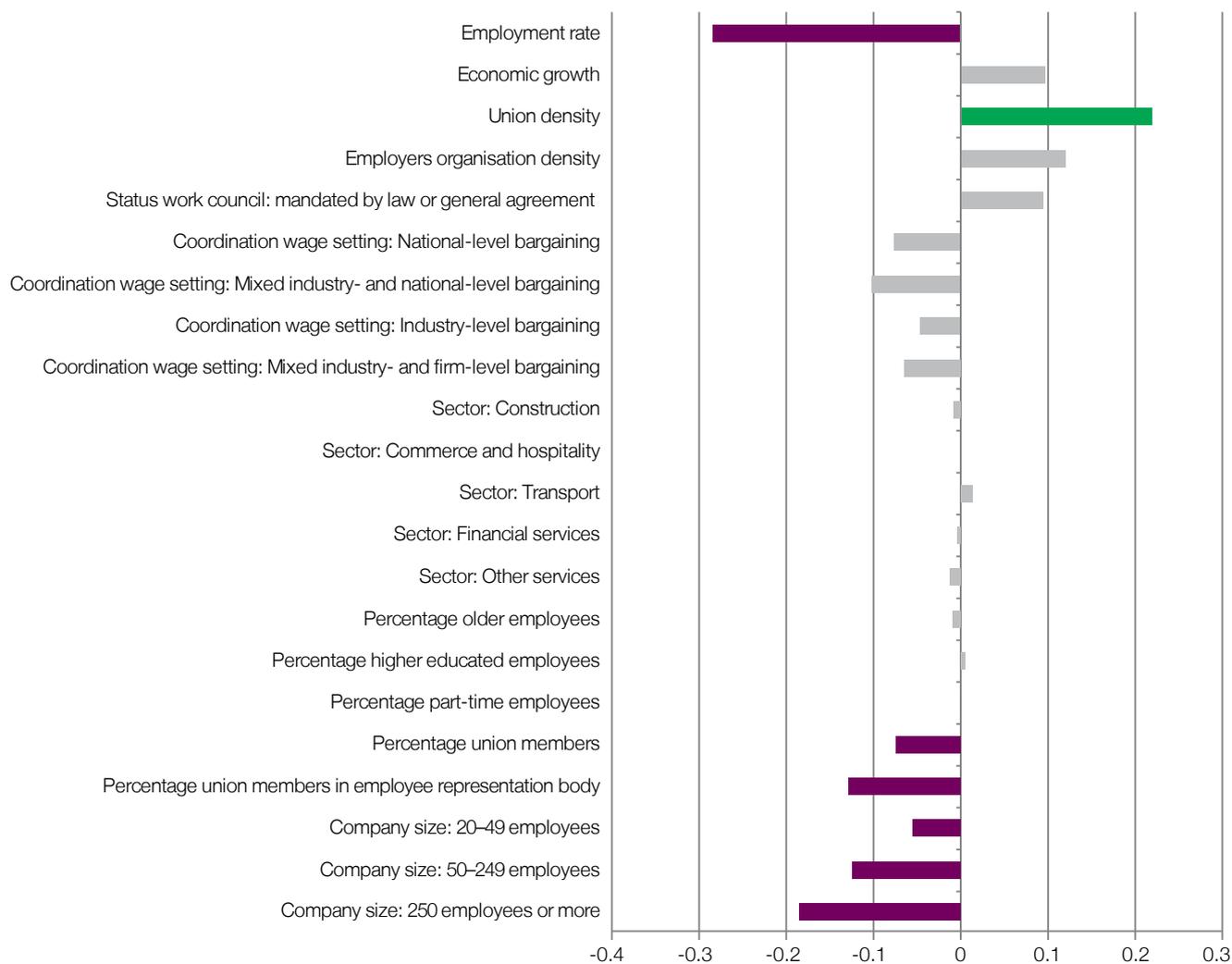


Note: See note for Figure 11.

Figure 12 shows that ‘Resource-oriented indirect employee participation’ appears to be unrelated to institutions for industrial relations.

Moreover, this class is more often found in establishments with higher percentages of union members in the representative body.

Figure 13: Mixed effects regression of indirect employee participation classes: Information-oriented indirect employee participation

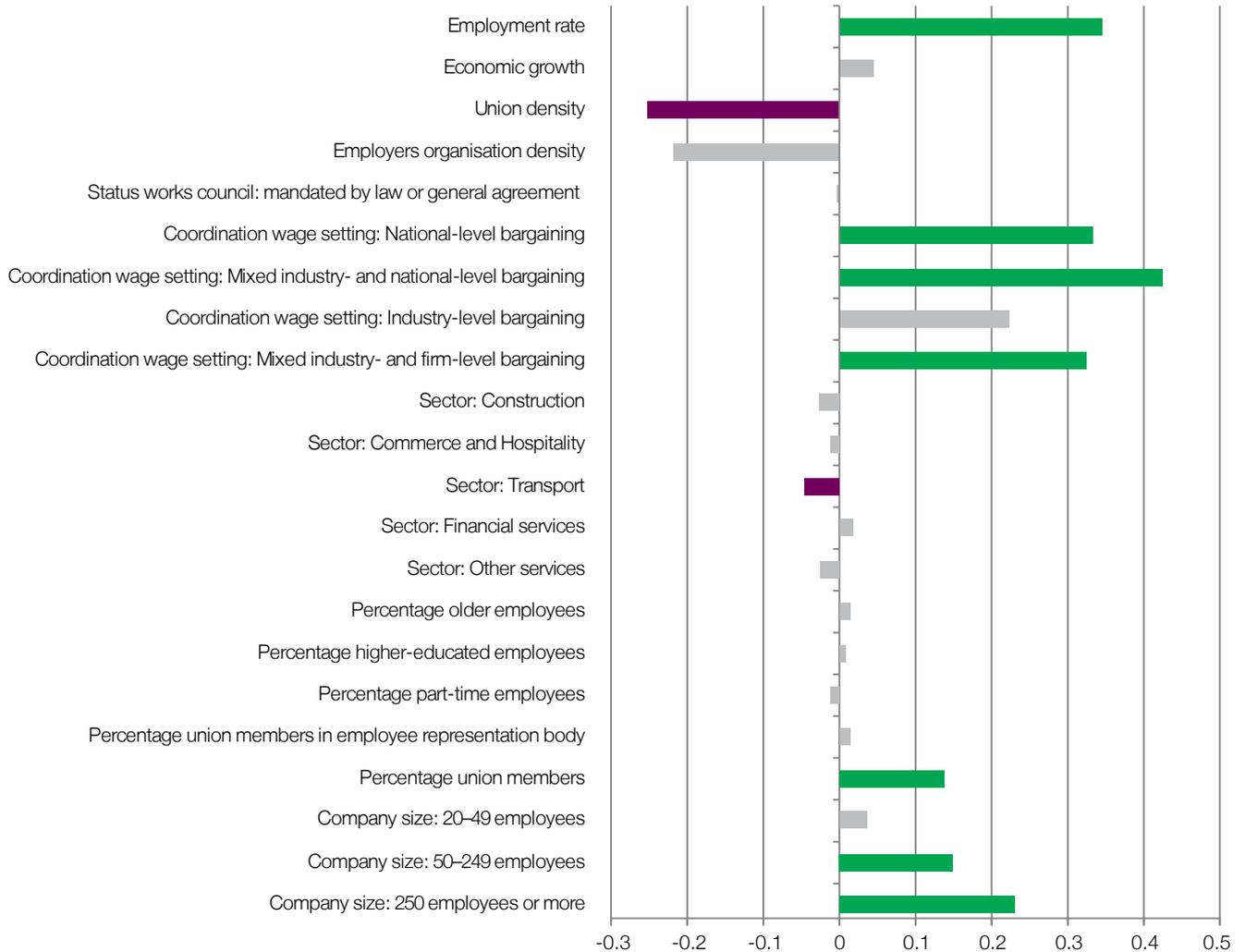


Note: See note for Figure 11.

Figure 13 displays the effect of institutions for industrial relations on the ‘Information-oriented indirect employee participation’ class. It shows that this class is more often found in establishments where the representative body consists of fewer union members, and union membership among employees is also low. This class is also

more frequently found in establishments with fewer employees. Thus, this class appears in smaller establishments with a more limited union presence and is more often found in countries with lower employment rates and higher union density rates.

**Figure 14: Mixed effects regression of indirect employee participation classes:
Extensive indirect employee participation**



Note: See note for Figure 11.

Figure 14 displays the effect of institutions for industrial relations on the ‘Extensive indirect employee participation’ class. Establishments in countries with higher levels of employment are more likely to practise this form of participation. The level of wage coordination also has a clear effect: in countries in which wage coordination occurs at higher levels, establishments are more likely to belong to this class than in countries where wage coordination takes place at the company level. Establishments in countries where national-level union density is high are less likely to belong to this class, while

higher establishment-level union membership increases the likelihood that an establishment belongs to this class. Finally, this class appears in establishments with more employees. So, ‘Extensive indirect employee participation’, the class in which indirect employee participation practices are most developed, is associated with larger establishments that have strong union presence, countries in which union density is relatively low and countries where wage bargaining coordination takes place either at national level, or at a combination of national and industry/firm-level.

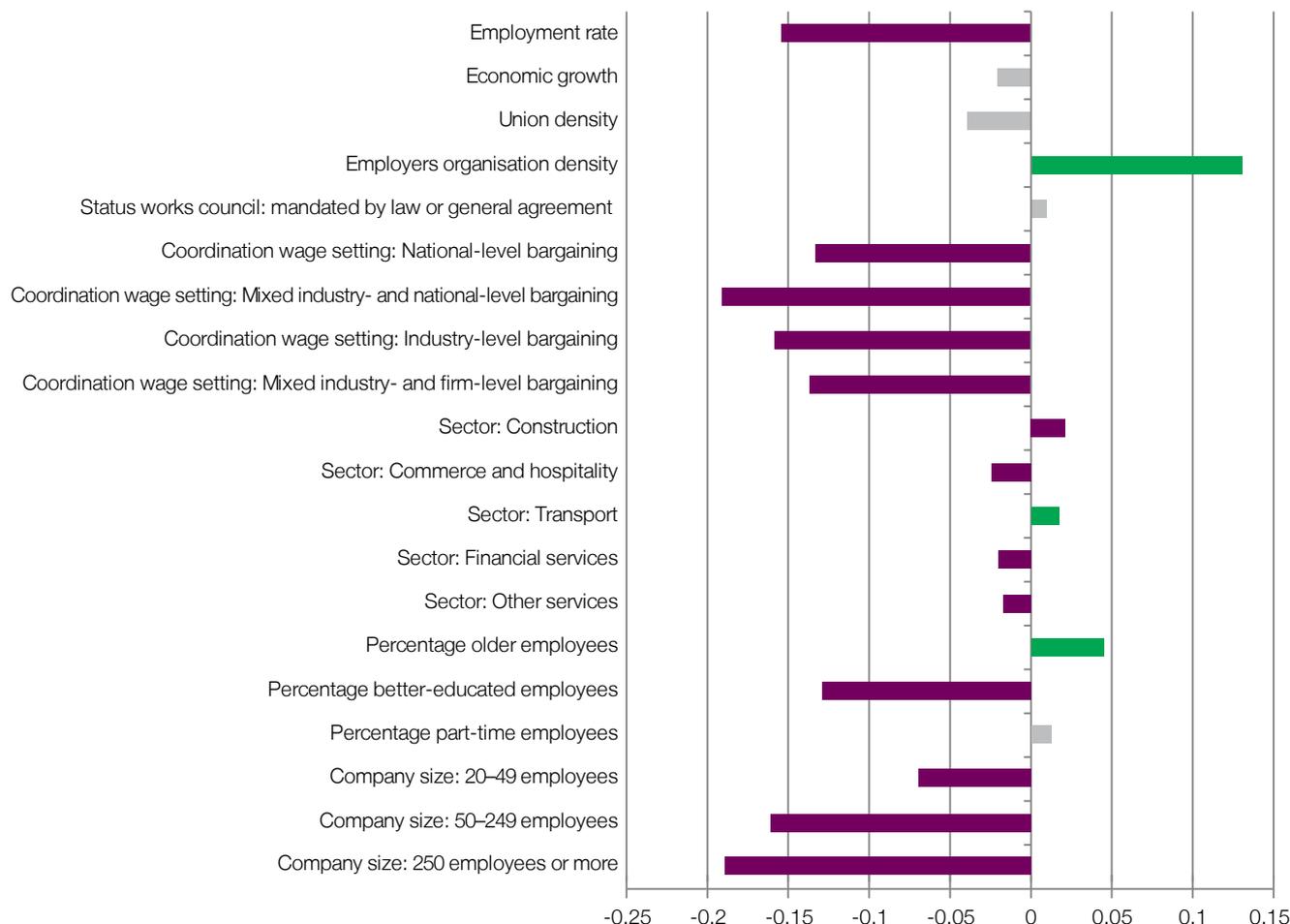
Classes of direct employee participation

In this section, the relationship between national-level institutions and direct employee participation is examined in the same way as indirect employee participation.

The discussion of the findings begins with the least-developed form of direct employee participation, ‘Limited direct employee

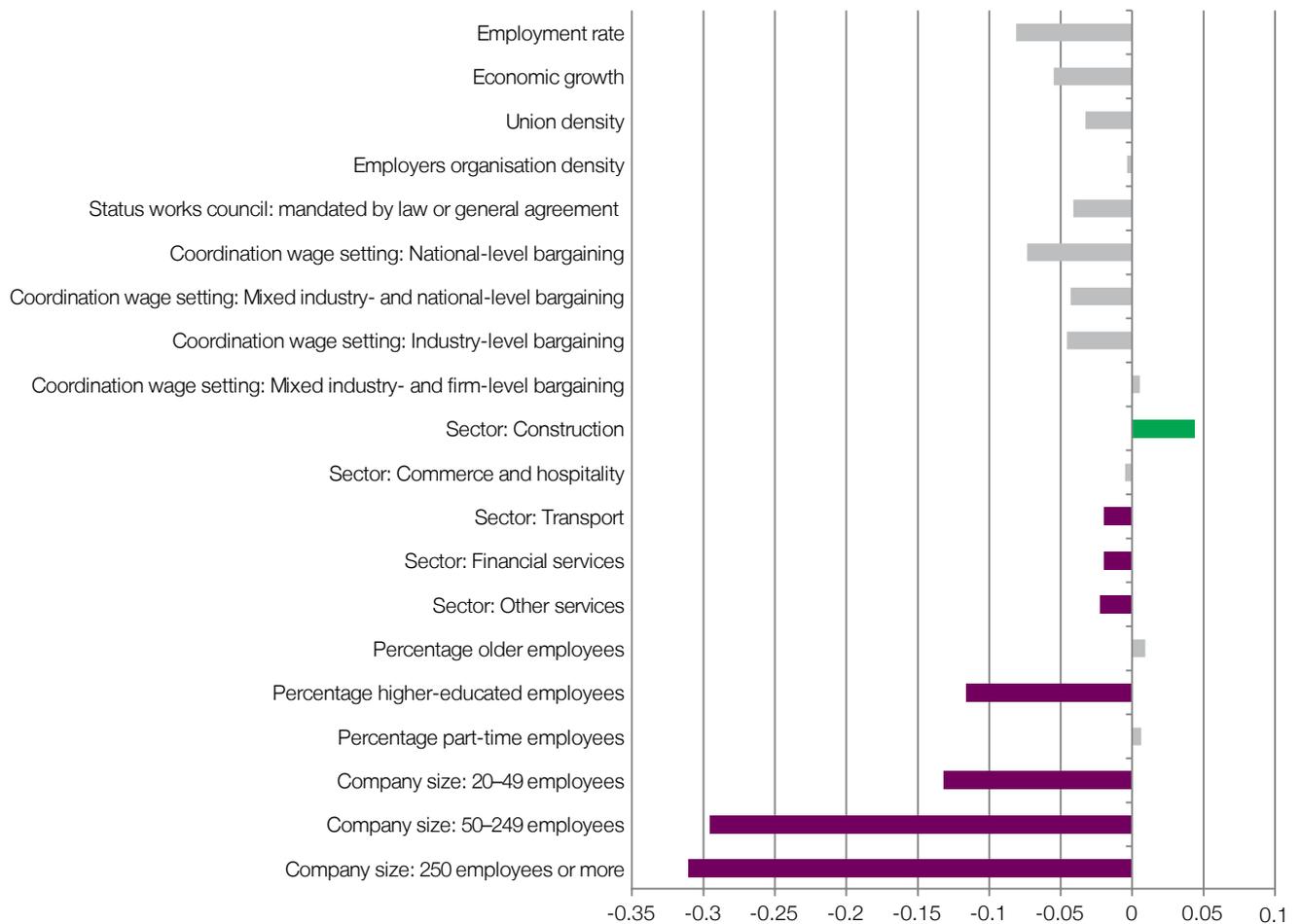
participation’. Figure 15 shows that this is more often practised in countries with lower employment rates and a higher employer organisation density. It is less often practised in countries with a more central-level wage bargaining coordination. Compared to industry, this class is more prevalent in transport and construction and less prevalent in hospitality and finances. Finally, some employee characteristics also seem important: smaller establishments with older employees with relatively lower levels of education seem more likely to practise ‘Limited direct employee participation’.

Figure 15: Mixed effects regression of direct employee participation classes: Limited direct employee participation



Note: See note for Figure 11; here, however, N = 21,473.

**Figure 16: Mixed effects regression of direct employee participation classes:
Conventional direct employee participation**



Note: See note for Figure 11; here, however, $N = 21,473$.

Figure 16 shows the association between ‘Conventional direct employee participation’ and country and establishment characteristics. National institutions do not significantly matter for the occurrence of this class. This class is more prevalent in industry, and less often in the transport, financial services

and ‘other services’ sectors. ‘Conventional direct employee participation’ is more frequently practised in smaller establishments and establishments with relatively high proportions of lower-educated employees.

**Figure 17: Mixed effects regression of direct employee participation classes:
On-demand direct employee participation**



Note: See note for Figure 11; here, however, N = 21,473.

Figure 17 shows the relationship of national and establishment characteristics and ‘On-demand direct employee participation’. This class is more prevalent in the transport sector and in larger establishments, with a higher percentage of older employees and lower proportions of part-time workers. Considering that the difference between ‘On-demand direct employee participation’ and ‘Conventional direct employee participation’ lies

mainly in their channels of communication, this finding suggests that the tools of employee–management communication and interaction are related to establishment size. This confirms the findings in Chapter 4.

**Figure 18: Mixed effects regression of direct employee participation classes:
Consultative direct employee participation**

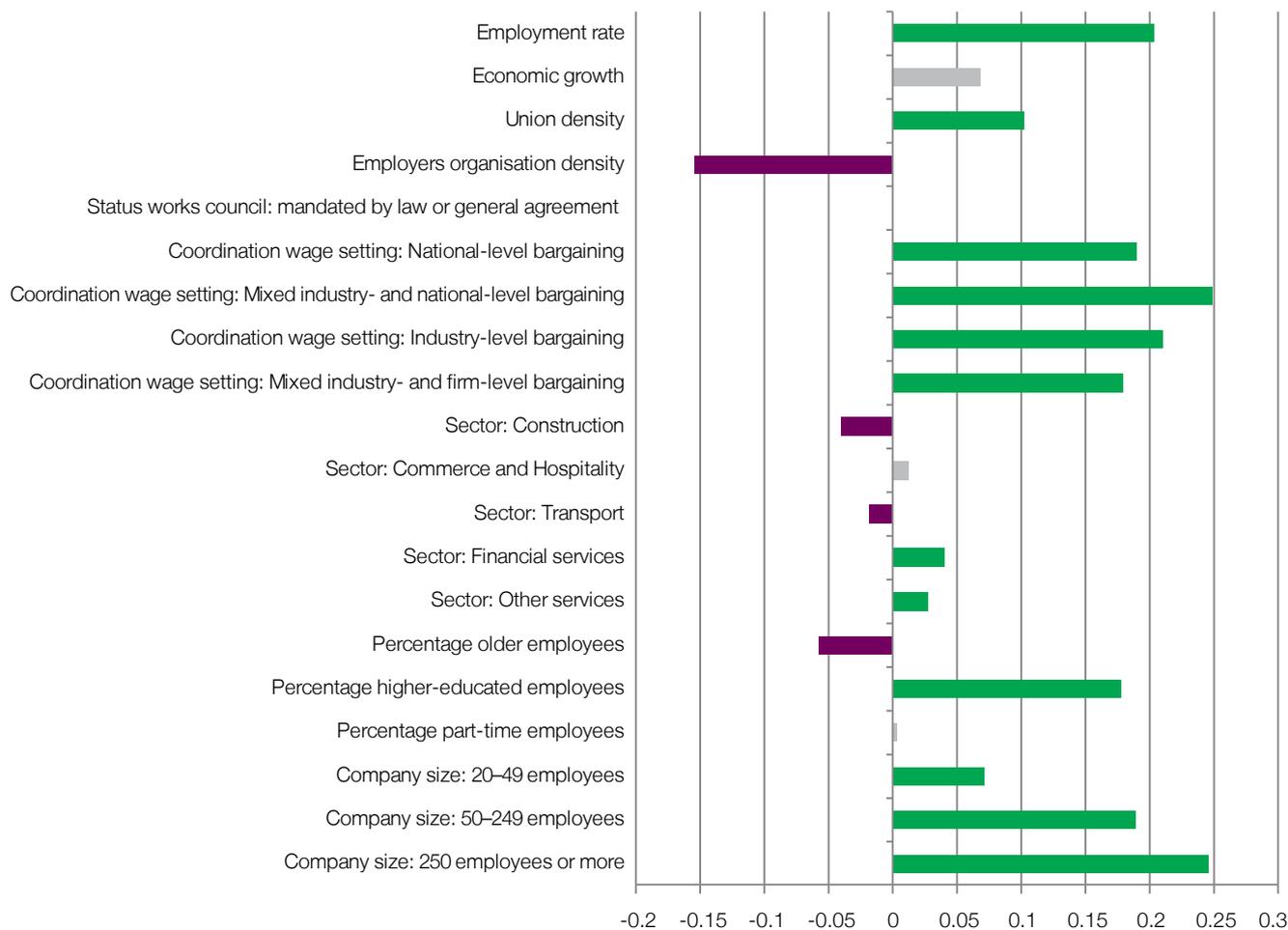


Note: See note for Figure 11; here, however, $N = 21,473$.

Figure 18 shows the relationship between country and establishment characteristics and 'Consultative direct employee participation'. It shows that this class occurs more frequently in

establishments with more employees and a larger proportion of lower-educated employees.

**Figure 19: Mixed effects regression of direct employee participation classes:
Extensive direct employee participation**



Note: See note for Figure 11; here, however, N=21,473.

Finally, Figure 19 shows the most developed class of direct employee participation, ‘Extensive direct employee participation’. It demonstrates a relationship with several country-level institutions. First, establishments are more likely to employ such developed employee participation practices in countries where employment rates are high. Second, this class also appears more frequently in countries where employer organisation

density is low, and union density at the country level is high. Third, these practices are more common in countries where wage bargaining coordination takes place more at the central or at a mixed level than in countries with decentralised, establishment-level wage bargaining. Finally, ‘Extensive direct employee participation’ is more apparent in larger establishments and in establishments with younger, higher-educated employees.

Employee participation and national institutions for industrial relations

Summarising the country and establishment antecedents of indirect employee participation classes (Table 12), there is a clear relationship with the size of establishments: extended practices of indirect employee participation are more prevalent in larger establishments. The position of unions seems to be more complex. ‘Information-oriented indirect employee

participation’ is negatively related to the percentage of union members among employees and in the employee representation body, but positively related to union density at the country level. The opposite is the case for ‘Extensive indirect employee participation’, which is more often practised in establishments with larger proportions of union members, and is associated with lower levels of union density at the country level. At the same time, the effect of wage coordination suggests another, more institutionalised position of unions in central wage bargaining, since this class is associated with central and mixed-level wage bargaining coordination.

Table 12: Summary of effects of country- and establishment-level antecedents of indirect employee participation

	Limited	Resource-oriented	Information-oriented	Extensive
Employment rate				
Union density				
Employers' organisation density				
Coordination wage setting: National-level bargaining				
Coordination wage setting: Mixed industry and national-level bargaining				
Coordination wage setting: Industry-level bargaining				
Coordination wage setting: Mixed industry and firm-level bargaining				
Sector: Construction				
Sector: Transport				
Percentage of union members in the employee representation body				
Percentage of union members				
Establishment size: 250 employees or more				
Establishment size: 50–249 employees				
Establishment size: 20–49 employees				

Note: Reference categories: wage coordination: firm-level bargaining; sector: industry; establishment size: fewer than 20 employees; **Green** cells indicate a positive effect of the establishment or country characteristic: the characteristic at stake increases the probability that an establishment belongs to the participation class analysed in the figure. **Purple** cells indicate negative effects: the characteristic decreases the probability that an establishment belongs to the employee participation class. **Grey** cells indicate insignificant effects, meaning that the characteristic has no effect on the probability that an establishment belongs to the participation class at stake.

Table 13 clearly shows the effect of establishment size on the likelihood of the five classes of direct employee participation: more detailed participation practices are associated with larger establishments. Moreover, looking at the two most extreme classes of direct employee participation, 'Limited direct employee participation' and 'Extensive direct employee participation', there is a relationship with wage bargaining coordination level: decentralised levels of wage coordination are associated with less developed direct employee participation,

and 'Extensive direct employee participation' is more prevalent in countries with higher union density at the national level and less employer organisation.

In addition to the observation that there are distinct sector antecedents of the classes, there is also a clear effect of employee characteristics: 'Extensive direct employee participation', a developed practice of direct employee participation, is more prevalent in establishments with younger, higher-educated employees.

Table 13: Effects of country and establishment-level antecedents of direct employee participation

	Limited	On-demand	Conventional	Consultative	Extensive
Employment rate					
Union density					
Employers' organisation density					
Coordination wage setting: National-level bargaining					
Coordination wage setting: Mixed industry and national-level bargaining					
Coordination wage setting: Industry-level bargaining					
Coordination wage setting: Mixed industry and firm-level bargaining					
Sector: Other services					
Sector: Financial services					
Sector: Transport					
Sector: Commerce and Hospitality					
Sector: Construction					
Percentage part-time employees					
Percentage higher-educated employees					
Percentage older employees					
Establishment size: 250 employees or more					
Establishment size: 50–249 employees					
Establishment size: 20–49 employees					

Note: Reference categories: wage coordination: firm level bargaining; sector: industry; establishment size: fewer than 20 employees. **Green** cells indicate a positive effect of the establishment or country characteristic: the characteristic at stake increases the probability that an establishment belongs to the participation class analysed in the figure. **Purple** cells indicate negative effects: the characteristic decreases the probability that an establishment belongs to the employee participation class. **Grey** cells indicate insignificant effects, meaning that the characteristic has no effect on the probability that an establishment belongs to the participation class at stake.

CHAPTER 6

Establishment-level outcomes

Establishment-level outcomes

Effects of practices on well-being and performance

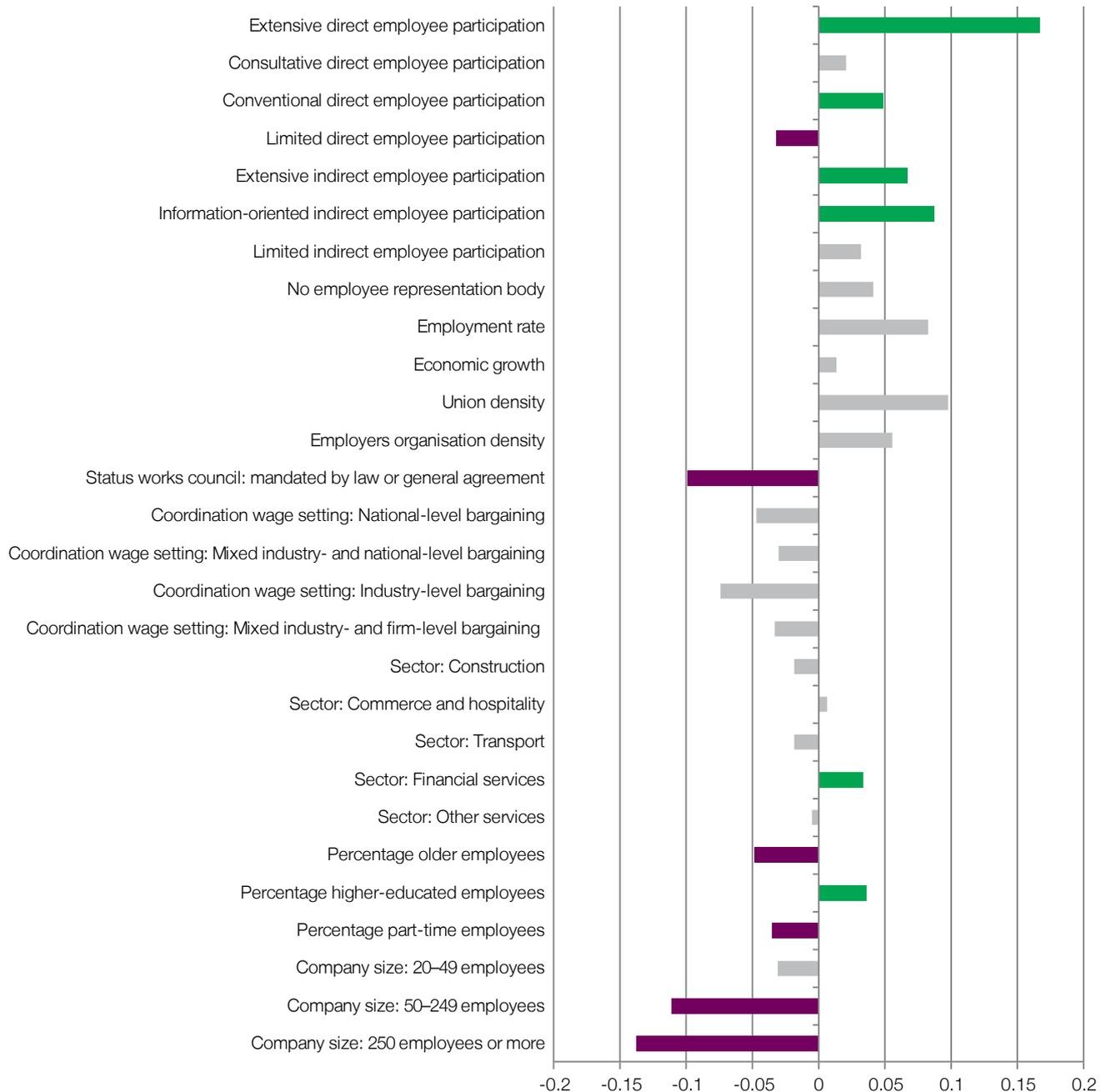
This chapter relates practices of indirect and direct employee participation to establishment level outcomes. In so doing, it distinguishes between workplace well-being and establishment performance. Similar to Eurofound's overview report for the ECS 2013 (Eurofound, 2015), workplace well-being is measured as a scale variable that comprises information on HRM problems and (change in) the work climate. To account for establishment performance, a scale variable was computed that combines information on the financial situation and changes in financial situation, labour productivity and the production of goods and services since 2010.

Figures 20 and 21 show the effects of indirect and direct employee participation practices on workplace well-being and establishment performance. These figures present the standardised effect sizes. (The figures can be read according to the note for Figure 20.)

In the analyses, the variables for indirect and direct employee participation classes represent the probability that they are

practised at an establishment. For both types of classes, the middle category was used as the reference group. For the indirect employee participation classes, 'No employee representation body present' was included, as were 'Limited indirect employee participation', 'Information-oriented indirect employee participation' and 'Extensive indirect employee participation', using 'Resource-oriented indirect employee participation' as the reference category.

The bars thus specify the effect of the indicated class relative to 'Resource-oriented indirect employee participation'. The green bar of 'Extensive indirect employee participation', for example, means that this class has a larger positive effect on the outcome than does 'Resource-oriented indirect employee participation'. For the direct employee participation classes, 'On-demand direct employee participation' (the middle class) was used as the reference category. The effects of the direct employee participation classes should be interpreted in a similar fashion as those of the indirect employee participation classes. The discussion of the analyses on establishment level outcomes was limited to the effects of the various classes. The effect of the control variables is not discussed.

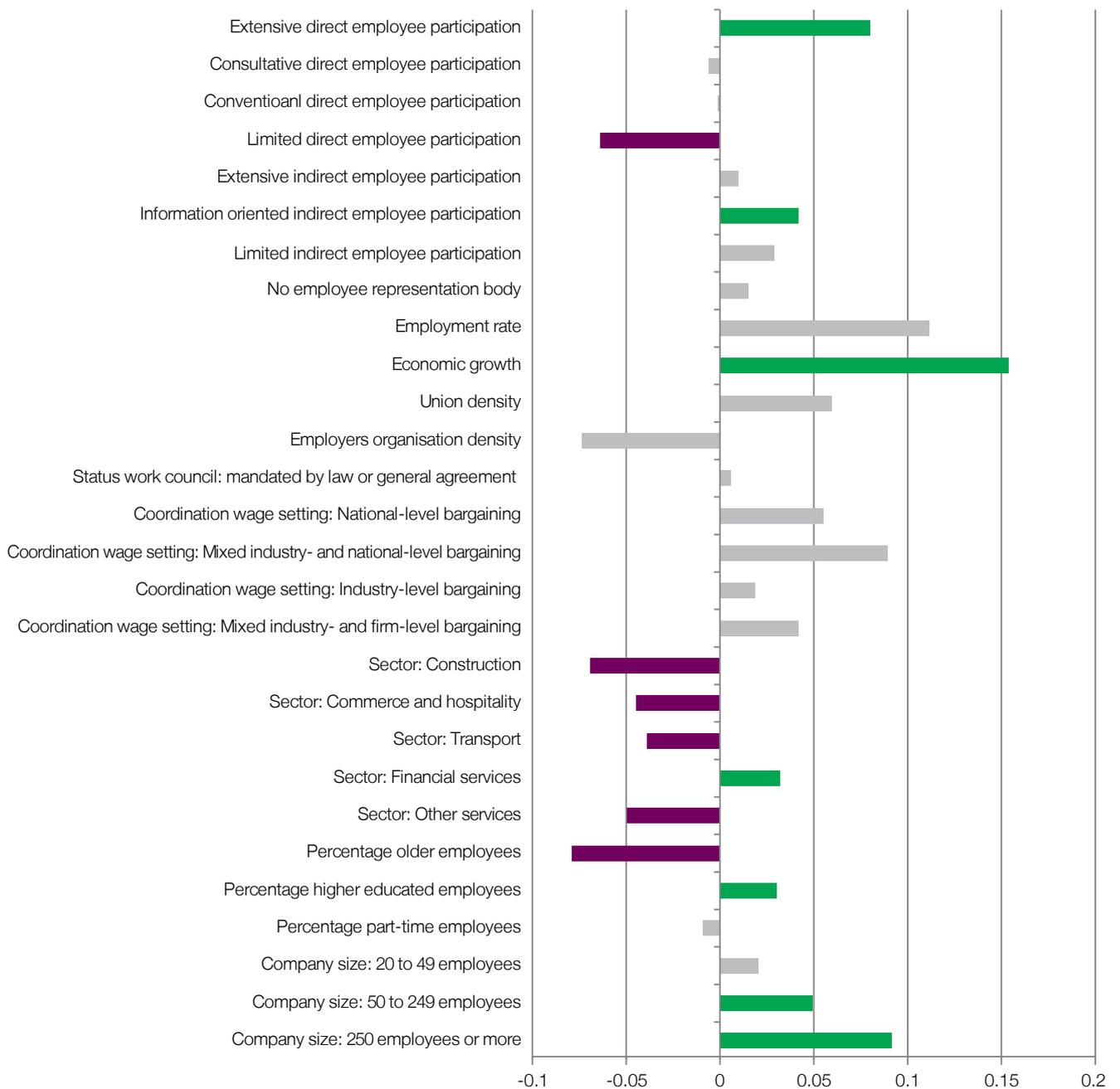
Figure 20: Mixed effects regression of workplace well-being

Note: Green bars indicate a positive effect of the participation-class characteristics, showing an increase in the probability that a particular beneficial outcome occurs; purple bars indicate negative effects, that is, the participation class decreases the likelihood of the particular outcome in that figure. The length of the bars indicates the size of the effect: the longer the bars, the larger the (positive or negative) impact the characteristic has on the establishment-level outcome. Grey bars indicate insignificant effects (at $\alpha > 0.05$), where there is no impact on the particular establishment-level outcome.

Figure 20 shows the association between the indirect and direct employee participation classes and workplace well-being in establishments. While most of the classes are associated with better workplace well-being than their reference

groups, establishments practising more developed classes of indirect and direct employee participation classes generally show the best workplace well-being scores.

Figure 21: Mixed effects regression of establishment performance



Note: See note for Figure 20.

Figure 21 shows the association between the classes of indirect and direct employee participation and establishment performance. Establishments practising 'Extensive direct employee participation' more frequently report positive establishment performance than establishments practising 'On-demand direct employee participation'. Establishments practising 'On-demand direct employee participation' report better establishment

performance than establishments practising 'Limited direct employee participation' (as indicated by the red bar by 'Limited direct employee participation'). Finally, establishments practising 'Information-oriented indirect employee participation' report better establishment performance than the reference group ('Resource-oriented indirect employee participation'). Table 14 summarises the significant effects of both figures.

Table 14: Association between indirect and direct employee participation classes and establishment-level outcomes

	Workplace well-being	Establishment performance
Indirect employee participation		
No employee representation		
Limited		
Resource-oriented	Reference category	
Information-oriented		
Extensive		
Direct employee participation		
Limited		
Conventional		
On-demand	Reference category	
Consultative		
Extensive		

Note: **Green** cells indicate a positive effect of the establishment or country characteristic: the characteristic at stake increases the probability that an establishment belongs to the participation class analysed in the figure. **Purple** cells indicate negative effects: the characteristic decreases the probability that an establishment belongs to the employee participation class. **Grey** cells indicate insignificant effects, meaning that the characteristic has no effect on the probability that an establishment belongs to the participation class at stake.

Win-win arrangements: positive establishment-level outcomes

The results presented in the previous section show the extent to which classes of direct and indirect employee participation are related to establishment-level outcomes. The following analyses study whether direct and indirect employee participation classes are associated with so-called 'win-win arrangements' – that is, the accumulation of beneficial outcomes for both employees and employers in

an establishment. To do this, information from the workplace well-being index and the establishment performance index were combined to create a new variable. This variable measures whether an establishment scores: average or below average on both workplace well-being and establishment performance; above average on either dimension; or above average on both dimensions (see Eurofound, 2015). The latter category reflects a win-win arrangement where establishment level outcomes are beneficial for both employees and employers. In Table 15 it can be seen that win-win arrangements are observed in 40% of the establishments under study.

Table 15: Win–win arrangements in EU28 establishments (%)

Above average scores	
Neither workplace well-being nor establishment performance	22
Workplace well-being or establishment performance	38
Both workplace well-being and establishment performance	40

Next, mixed effect logistic regression analysis was applied, with establishments nested in EU28 countries to estimate the extent to which classes of direct and indirect employee participation are related to the accumulation of beneficial outcomes in establishments. This model estimates the chance that win–win arrangements occur at establishments (compared to no

win–win arrangement). These models were re-run with different reference categories for the classes of direct and indirect employee participation to test whether the contrast between each class is significant. The outcomes of these analyses are summarised in Tables 16 and 17.

Table 16: Indirect employee participation and win–win arrangements

	Reference category				
	No employee representation	Limited	Resource-oriented	Information-oriented	Extensive
No employee representation					
Limited					
Resource oriented					
Information oriented					
Extensive					

Note: **Green** cells indicate a positive effect of the establishment or country characteristic: the characteristic at stake increases the probability that an establishment belongs to the participation class analysed in the figure. **Purple** cells indicate negative effects: the characteristic decreases the probability that an establishment belongs to the employee participation class. **Grey** cells indicate insignificant effects, meaning that the characteristic has no effect on the probability that an establishment belongs to the participation class at stake.

Table 16 shows which indirect employee participation classes are related to win–win arrangements. The green and red cells indicate respectively positive and negative relations between the indirect employee participation class and win–win arrangements (significant at $\alpha < 0.05$), and grey cells represent non-significant relations. Table 16 is best read by its rows. The third

and fourth rows show that win–win arrangements are less likely to occur in establishments with ‘Resource-oriented indirect employee participation’ than in ‘Information-oriented indirect employee participation’; however, the ‘Resource-oriented indirect employee participation’ class does not differ significantly from the other indirect employee participation classes.

Table 17: Direct employee participation and win-win arrangements

	Reference category				
	Limited	Conventional	On-demand	Consultative	Extensive
Limited					
Conventional					
On demand					
Consultative					
Extensive					

Note: See Table 16.

Table 17 presents the extent to which direct employee participation classes are related to win-win arrangements. This table shows that win-win arrangements are more likely to be found in all other establishments than those in the 'Limited direct employee participation' class. In contrast, all other forms of direct employee participation are significantly less likely to have

win-win arrangements than the 'Extensive direct employee participation' class. Thus, establishments with 'Extensive direct employee participation' are more likely to have win-win arrangements. Table 17 shows that more extensive forms of direct employee participation are, in general, positively related to an accumulation of beneficial outcomes in establishments.

CHAPTER 7

Summary and conclusions

Summary and conclusions

This report set out to investigate current practices of employee participation in the EU Member States. The study focused on four main research questions. The first research question aimed to identify patterns in establishment-level practices of indirect and direct employee participation, by way of statistical classification of these practices. The second research question explored the relationship between indirect and direct employee participation, and the involvement of employees in major decision-making. The third research question was directed at the relationship between the classes of indirect and direct employee participation and country and establishment-level characteristics. Finally, the fourth aimed to establish the connection between employee participation classes and establishment-level outcomes.

Answers to these questions built upon the work presented in the overview report for Eurofound's Third European Company Survey (ECS 2013) (Eurofound, 2015). This study used a similar approach of identifying groups of establishments based on their participation practices and used some of the same indicators. It went beyond the research for the overview report because it more systematically isolated actual participation practices from the attitudes of the actors towards these practices and towards each other. It also explicitly addressed the relationship between combinations of practices and the economic and institutional environment in which establishments find themselves. The analyses broadly confirmed the findings from the overview report and offered some interesting and actionable further insights.

The research findings and the answers to the four research questions are summarised and discussed below.

Research aim 1: Discovering patterns of practices for direct and indirect employee participation at establishment level in Europe

This statistical analyses of the ECS 2013 provided four distinct classes of indirect employee participation practices, and five distinct classes of direct employee participation.

Characteristics of practices of indirect employee participation

Limited indirect employee participation (13% of establishments): The participation of employee representatives is rather limited. Information supply is (relatively) limited, especially concerning the establishment's strategic information. Moreover, the quality of information provided is evaluated as low. Resources available to the employee representative(s) are relatively low – in particular, regarding training opportunities.

Resource-oriented indirect employee participation (11%): Employee representatives have relatively little information about both matters related to employee interest and strategic plans and innovations. Training and external funding resources available to the employee representative in these establishments are relatively high, while available time for their employee representation duties is relatively low.

Information-oriented indirect employee participation (29%): The employee representative is fully provided with high-quality information. The employee representatives in these establishments are given relatively limited access to funding for external advice and training, while their available time for employee representation duties is relatively high.

Extensive indirect employee participation (48%): The employee representation body is provided with high-quality information on both information dimensions (information relevant for interest representation and bargaining, and information on the organisation's strategy and innovation). Establishments in this class provide the employee representative with resources.

Characteristics of practices of direct employee participation

Limited direct employee participation (10% of establishments): Information is disseminated through regular meetings between employees and the immediate manager, and through media such as newsletters, websites. Other forms of employee participation are practised only rarely.

Conventional direct employee participation (18%): Communication between employees and management takes place mainly in traditional, top-down settings.

On-demand direct employee participation (20%): Mainly top-down communication complemented with ad hoc meetings.

Consultative direct employee participation (4%): Traditional, top-down means of communication are combined with bottom-up means of communication between employee and management.

Extensive direct employee participation (48%): Practices facilitate communication between management and employee: employees are involved through both top-down information as well as bottom-up consultation (gathering ideas and input from employees). All the identified means of interaction with employees are deployed in this class.

A clear relationship was found between the four classes of indirect employee participation and establishment size. More developed practices of indirect employee participation are more prevalent in larger establishments. More developed practices for direct employee participation were more likely to be found in larger establishments.

In addition to the observation that there are distinct sector antecedents of the classes, a clear effect of employee characteristics was also observed. At establishment level, 'Extensive direct employee participation' is more apparent in larger establishments with younger, higher-educated employees.

Research aim 2: Exploring relationship between indirect and direct employee participation

Practices of extensive employee participations are often combined: 'Extensive indirect employee participation' practices are often observed in combination with high levels of direct employee participation. Second, practices of 'Limited indirect employee participation' are usually matched with a high level of direct employee participation practices. The reverse does not appear to be the case, establishments with limited levels of direct employee participation being no more likely than other establishments to have extensive practices for indirect participation.

In addition to asking which combinations of indirect and direct employee participation exist, the study also investigated to what extent employees are involved in decision-making on major changes on several issues. With the exception of decision-making on recruitment policies, in the majority of the establishments the levels of participation of indirect and direct participation coincide. If employee representatives are involved in the decision-making, employees are often also involved in the decision. Similarly, if the degree of involvement of the employee representation was that of consultation only, employees were likely to only be consulted as well. In establishments in which the employee representative body is only informed, employees are also only informed. Thus, the degree of participation of indirect and direct participation concurs. However, if the employee representation is not involved at all this does not necessarily imply that employees are not involved directly either. In establishments where an employee representation is absent, the employees were at least informed about the change. The latter pattern is somewhat different for major changes regarding recruitment policies. Neither direct employee participation, nor indirect employee participation is common in decisions on recruitment policies.

Research aim 3: Linking establishment-level practices of participation to national institutions for industrial relations

National contexts shape the opportunities for – and the obstacles to – employee participation practices in their workplaces. Four such national-level institutions for industrial relations were examined.

The study looked first at how employee participation is related to the **level of wage coordination** in a country. For indirect employee participation in particular, a relationship with the level

of wage coordination was expected because employee representation bodies need to be resource-oriented and involved when entering negotiation. Higher levels of wage coordination are found to be associated with more extensive forms of indirect employee participation, and with more extensive direct employee participation. Contrary to expectations, there is no relationship between company-level wage coordination and more extensive forms of indirect employee participation. Finding no relationship means that company-level wage coordination is no more associated with different levels of indirect employee participation, than, for instance, industry-level wage coordination. There is, however, a significant link between company-level wage coordination and limited forms of direct employee participation. These findings suggest that both indirect and direct participation is stimulated by wage coordination at more centralised levels.

The effect of **characteristics of works councils** was then examined. Intuitively, it may seem plausible that extended mandates for works councils would be reflected in higher levels of indirect employee participation. However, on the basis of previous empirical research, it was expected that the relationship between national-level legal arrangements for works councils and employee participation would be less straightforward. The empirical analyses indicate that the mandate for works councils is unrelated to classes of indirect employee participation. Works council characteristics are also unrelated to classes of direct employee participation.

The study then investigated how direct and indirect employee participation was linked to **characteristics of unions**. It might be expected that a stronger position of unions in particular would stimulate the development of legal procedures and institutions for employee participation, which then would affect company-level practices of employee participation. The relationship with the position of unions seems to be more complex than this. Lower levels of union density at the country level are associated with extensive forms of indirect employee participation, even though 'Extensive indirect employee participation' is practised more often in establishments with larger proportions of union members. An explanation for the weaker union position at the national level is that the position of unions becomes weaker after institutions that promote indirect employee participation have developed.

Finally, the study analysed whether the **economic context** impacts practices of direct and indirect employee participation. Higher employment rates are associated with both extensive direct and indirect employee participation, while lower employment rates are associated with more limited direct employee participation. The causal direction of these relations is – however – difficult to establish without longitudinal research.

Research aim 4: Establishing the connection between employee participation classes and establishment-level outcomes

Chapter 6 analysed the effect of the various classes of indirect and direct employee participation on establishment-level outcomes. Firstly, practices were related to two separate establishment-level outcomes. For workplace well-being, it was found that this beneficial outcome is strongly related to the approaches establishments take to direct and indirect employee participation. Establishments with more developed practices for indirect and direct employee participation are more likely to report higher levels of employee well-being.

For establishment performance, it was found that, particularly in establishments practising 'Extensive direct employee participation' (the most developed form of direct employee participation), a positive financial situation was significantly more frequently reported than in the reference group ('On demand direct employee participation'). For indirect employee participation practices, establishments practising 'Information-oriented indirect employee participation' (in which employee representation bodies are provided with information but relatively limited resources) more frequently report a positive financial situation than the reference group ('Resource-oriented indirect employee participation').

Secondly, the association between classes of employee participation and win-win arrangements was analysed. To establish what combinations of establishment-level outcomes are positive for both employer and employees, the study analysed the proportion of establishments in each class of direct and indirect employee participation that score above average on both workplace well-being and establishment performance.

For indirect employee participation classes, there were no significant differences between most classes in terms of win-win arrangements. There was one important exception: win-win arrangements are significantly less often observed in establishments with 'Resource-oriented indirect employee participation', where employee representatives have plenty of resources but no information, than in establishments with 'Information-oriented indirect employee participation'.

The relationship between win-win arrangements and direct employee participation is perhaps more straightforward. In general, more extensive forms of direct employee participation are positively related to an accumulation of beneficial outcomes in establishments.

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Annex 1 – Variable descriptions

This annex describes the variables used in the analyses and presented in the main report. For each variable, it describes:

- the name of the variable(s) selected from the ECS 2013 dataset;
- the questionnaire in which the question was asked;
- the formulation of the question(s) and answer categories in the questionnaires;
- the variable label as it appears in the main report;
- any modifications applied in the construction of the variable.

Variables to measure classes of indirect employee participation

Six variables were included to distinguish classes of indirect employee participation:

- interest information;
- strategic information;
- quality of information;
- training for employee representation;
- access to funding for external advice;
- sufficient time for employee representation duties.

Interest information and **strategic information** are based on five variables in the ECS-2013 data set. In the questionnaire for employee representatives (in short: ER questionnaire), respondents were asked: “In the last 12 months, has management provided the [ER-body] with any information on the following issues?”. Five issues were mentioned, namely (q21_a) the financial situation of the establishment, (q21_b) the employment situation of the establishment, (q21_c) the introduction of new or significantly changed products or services in the establishment, (q21_d) the introduction of new or significantly changed processes to produce goods or provide services in the establishment, (q21_e) strategic plans with regard to the establishment. The answer categories were: (1) Yes, and (2) No,

the missing values were (7) Not applicable’, (8) ‘Don’t know’, and (9) ‘No answer’.

Interest information is a binary variable that measures 1 if the respondent indicated that the ER-body received information on the financial situation and also on the employment situation of the establishment, and 0 if the ER-body received no information on the financial and/or the employment situation of the establishment. **Strategic information** is a binary variable based on the provision of information on the introduction of new or significantly changed products, on the introduction of new or significantly changed processes, and on strategic plans. If the respondent indicated that the employee representation body received information on at least two of these issues, the value (1) was assigned to the variable **strategic information**, while ‘0’ indicates that the employee representation-body received no information on any of these issues, or only information on one of these issues. For both **interest information** and **strategic information**, establishments were excluded in case there were missing values on the variables q21_a to q21_e.

In a follow-up question, respondents who indicated that they had received information on the five aforementioned issues were asked: (q25) ‘And, in general, was the quality of the information satisfactory?’ The answer categories read (1) Yes, and (2) No, with (8) Don’t know, and (9) No answer as missing values. To account for the **quality of information**, a binary variable was constructed that measures ‘1’ in case the quality of the information was satisfactory, and ‘0’ in case the information was not satisfactory, or if the respondent did not assess the quality of the information. Further, this variable was also set to zero in case the employee representation body had not received any information on the five specified issues.

Training for employee representation is based on the variable q14. Employee representatives were asked ‘In the last 12 months have you received training related to your role as employee representative?’ The answer categories read (1) Yes, and (2) No, with (8) Don’t know, and (9) No answer, as missing values. This variable was recoded, with ‘0’ indicating that the respondent had not received training in the last 12

months, and '1' indicating that the respondent had received training. Establishments with missing values were excluded list-wise. The variable **ER Access to funding for external advice** is measured in a similar way. Here, the question of the original variable (q15) read 'Does the employee representation body have access to funding for external advice?'. The answer categories were the same as those for (q14). Again this variable was recoded, with '1' indicating that the employee representation body has access to funding for external advice, and excluded establishments with missing information.

Sufficient time for employee representation duties is based on two variables in the employee representation questionnaire. First, respondents were asked 'Is there a designated number of hours per week of your working time that you are entitled to spend on your duties as an employee representative?' (q11). Here, the respondent could answer: (1) 'Yes', (2) 'No, I am not entitled to use my working time', (3) 'No, but I can use as much of my working time as is necessary'. The respondent could also indicate whether (s)he is a full-time employee representative, or whether (s)he did not know (8) or refused to answer (9). In case of a designated number of hours per week, a follow-up question was asked, which read: 'Is the designated time usually sufficient for fulfilling your duties as an employee representative?' (q13). The respondent could indicate (1) 'Yes' or (0) 'No'. The variable was coded for sufficient time for employee representation duties in such manner that respondents who are full-time employee representatives or who are entitled to use as much of their working time as is necessary, and those who indicated that they received sufficient time for fulfilling their employee representation duties score a '1' on this variable, and those who are not entitled to use their working time, or who indicated that the designated time for employee representation duties is not sufficient received a '0'.

Variables to measure classes of direct employee participation

Seven variables on direct employee participation practices were used to identify classes of direct employee participation. In the management questionnaire, the respondent was asked 'In this establishment, which of the following practices are used to involve employees in how work is organised?'. A list of seven practices was then presented:

- regular meetings between employees and immediate manager (JREGMEE);
- regular staff meetings open to all employees at the establishment (JSTAFFME);
- meetings of a temporary group or committee, or ad hoc group (JADHOC);

- dissemination of information through newsletters, website, notice boards, email and so on (JDISSINF);
- discussions with employees through social media or in online discussion boards (JSOMEDI);
- suggestion schemes (the collection of ideas and suggestions from the employees, voluntary and at any time, traditionally by means of a suggestion box) (JSUGGS);
- employee surveys (JSURVEY).

For each, the respondent could answer 'Yes' (1) or 'No'(0) . They could also answer 'Don't know' (8) or refuse to answer (9). The latter two categories are treated as missing values, and respondents with missing values on any of these items are excluded from the LCAs, and the subsequent analyses in the main report.

Variables to measure involvement of employee representatives and employees

After constructing the classes of indirect employee participation (in Chapter 4) and direct employee participation (in Chapter 4), the identified classes are related to the involvement of employee representatives and employees in major changes. For the involvement of employee representatives, the employee representation respondent was first asked: 'In the last 12 months, were any major decisions taken by the management of this establishment in the following areas? Please only refer to decisions that affect the entire establishment or a large part of it.' (q26). A list of six areas followed, namely: (1) The organisation of work processes, (2) Recruitment and dismissals, (3) Occupational health and safety, (4) Training and career development, (5) Working time arrangements, (6) Restructuring measures. The respondent could then indicate whether (1) or not (0) such a decision was taken, or (s)he could indicate that (s)he did not know (8) or refused to answer (9). When a respondent indicated that major decisions were taken by the management in more than one of these areas, a follow-up question was asked to determine which of these decisions has had, according to the respondent, the greatest impact on working conditions in the establishment (q27). Next, the respondent was asked to indicate whether (1) or not (2) the employee representation body was informed by the management (q28a), asked to give their views ahead of the decision (q28b), and involved in joint decision-making with management (q28c), either with respect to the most important decision (in case multiple major decisions were taken), or with respect only to the important decision (in case one decision was taken). To account for the involvement of employee representation in major decisions, a variable was constructed, which indicated

whether (0) no major decision was taken, (1) the employee representation body was only informed by management (if q28a=1 and q28b and q28c=2, (2) the employee representation-body was consulted by management (if q28b=1 and q28c=2), or was involved in a joint decision (q28c=1).

A similar set of questions was asked to the management representation. Here, the management respondents were first asked: 'Please tell me, whether any of the following changes have been made since the beginning of 2010:', followed by the areas: changes in the remuneration system (JCHREMU), changes in the use of technology (JCHTECH), changes in ways to coordinate and allocate the work to employees (JCHALLOC), changes in recruitment policies (JCHRECRU), and changes in the working time arrangements (JCHTIME). The respondent could indicate whether such change took place (1) or not (2), or whether (s)he did not know (8) or refused to answer (9). Again, a follow-up question on the most important change was asked in case the respondent indicated that multiple changes had occurred in the establishment (JMOIMPCH). For either the most important change or the only important change, the respondent was then asked to indicate whether or not respectively the employee representation and the employees were informed by management (JERINF/JEMPINF), asked to give their views ahead of the decision (JERCONS/JEMPCONS), and involved in joint decision-making with the management (JERDEC/JEMPDEC). Variables were constructed measuring the involvement of employee representation in major changes and involvement of employees in major changes. Here, the analysis distinguishes between (0) no major change, (1) the employee representation is / employees are informed, but not consulted and not involved in joint decision-making, (2) the employee representation is / employees are consulted, but not involved in joint decision-making, and (3) codetermination, that is, the employee representation is / employees are involved in joint decision-making.

Establishment-level variables in the mixed-effects regression analyses

To account for characteristics of establishments that may be related to employee participation practices and/or beneficial outcomes, several variables are included. First, establishment size is accounted for. This is a categorical variable which distinguishes between establishments with less than 20 employees, 20 to 49 employees, 50 to 249 employees, and 250 employees or more. Information is retrieved from the management questionnaire. Here, respondents were first asked 'Approximately how many employees work in this establishment? Please include all employees that are formally based in this establishment, regardless of whether they are physically present or

carry out their work outside of the premises. Each employee is counted as one person, regardless whether they are working full-time or part-time (= headcount). Your best estimate is good enough.' (ANUMBEMP). If the respondent was unable to give an exact number, a follow-up question was asked, which read 'Could you please give me your best estimate using the following categories?' (AEMPCAT). Here, the answer categories also range from (1) less than 20 employees to (5) 250 or more employees. ANUMBEMP was recoded into categories, and combined both variables to account for the establishment size.

To account for the percentage of older employees, higher-educated employees, and part-time employees, the management representatives were asked, 'Could you please tell me for this establishment, the number or percentage of employees, who are older than 50 years of age (CEMPOLD), have a university degree or higher (CEMPHIED), and work part-time, that is less than the usual full-time arrangement (CEMPPART)?'. The respondent could then give the exact number, or indicate either (1) none, (2) less than 20%, (3) 20% to 39%, (4) 40% to 59%, (5) 60% to 79%, (6) 80% to 99% or (7) all employees fit the description. Respondents who gave an exact number were assigned to the categories, using the total number of employees in the establishment. Next, these variables were recoded again so that they reflect the approximate percentage of employees fitting the description: a value of 0% was assigned to answering category 1 (none), the value of the category mid-point to answering categories 2 to 6 (for instance, 10% for category 2), and 100% to answering category 7. Missing values on these variables were excluded list-wise from the relevant analyses.

The variables percentage of union members among employees and percentage of union members among employee representatives are derived from the employee representation questionnaire. First, the percentage of union members among employees is based on q4, which reads 'Approximately what percentage of employees at this establishment are members of a trade union?'. Besides giving an (estimated) percentage, respondents could also give the exact number of employees that are members of a trade union. For these cases, the percentage of union members was estimated by relating it to the size of the establishment. If the respondent was unable to provide an exact percentage or number, a follow-up question was asked, which read 'Could you please give me your best estimate using the following categories?' (q5). Here, the answer categories read (1) none, (2) less than 20%, (3) 20% to 39%, (4) 40% to 59%, (5) 60% to 79%, (6) 80% to 99% or (7) all. For these respondents, the percentage of union members among employees was set to the mid-point of the category they mentioned. Again, missing values were list-wise excluded from the relevant analyses. To account for the percentage of union members among employee representatives, the employee representation respondent was first asked: 'Besides you, how many representatives are on the [employee representation

body] that you are a member of?’ (Q1) and subsequently: ‘How many members of the [employee representation-body] act on behalf of a trade union?’ (Q2). The respondent was asked to provide the exact number. Based on these two variables, the percentage of union members was determined among employee representatives.

The sector of economic activity in which the establishment operates is also included. This categorical variable is directly based on the ECS 2013 variable *nace10*, which measures the sector of economic activity based on the Nace Rev.2 classification in 10 categories. Since public sector establishments are excluded, the study distinguishes between the following categories: (1) industry, (2) construction, (3) commerce and hospitality, (4) transport, (5) financial services, and (6) other services.

Country-level variables in the mixed-effects regression analyses

The study includes six country-variables in the analyses in Chapter 6 and 7. All country-level variables refer to the situation in 2012, the year prior to the ECS 2013 fieldwork. Firstly, four variables derived from the ICTWSS database are included (Visser, 2014). Coordination wage setting measures the degree and the level at which the coordination of wage bargaining takes place, ranging from 1 (low coordination, largely at the firm level), to 5 (high coordination, centralised bargaining). This variable is based on the *COORD* variable in the ICTWSS-database (Visser, 2014). Although this measure is intended to capture the degree of wage setting coordination, the answer categories clearly include information on the level of wage bargaining. This variable is based on the *COORD* variable in the ICTWSS database (Visser, 2014). Although this measure is intended to capture the degree of wage-setting coordination, the answer categories clearly include information on the level of wage bargaining. ‘Status of the works council’ is measured as a binary variable, which distinguishes between countries where (0) works councils are voluntary, either *de jure* or *de facto*, and (1) countries where works councils are mandated by law or general agreement between unions and employers. ‘Employers organisation density’ measures the proportion of employees working in establishments that are associated with employers organisations. ‘Union membership’ is measured as the share of union members among all wage and salary earners in employment. Since Croatia is not included in the ICTWSS database, information on the Croatian context is based on secondary sources. Information on wage-setting coordination in Croatia is derived from Grimshaw (2012), information on the status of the works council, employers’ organisation and union membership is derived from Eurofound (2014a; 2014b).

Two more variables are included that reflect the economic situation in a country: ‘economic growth’ (in 2012, compared to 2011), and ‘employment rate’ (in 2012). Both variables are derived from Eurostat (2014).

Variables measuring establishment outcomes

Two index variables were included to account for the beneficial establishment outcomes in the analyses in Chapter 7: workplace well-being and establishment performance. Firstly, workplace well-being comprises information on HRM problems and (change in) the work climate. To account for **HRM problems**, the study combined whether (1) or not (0) the management encountered high levels of sickness leave (*KOSICK*), difficulties in retaining employees (*KORETEN*), and / or low motivation of employees (*KOLOMOT*), by calculating the sum-score. The analysis recoded this variable, so that higher scores reflect less HRM problems. The MM survey further includes the variable **Work climate**. Here, respondents were asked: ‘How would you rate the current general work climate in this establishment? Is it very good, good, neither good nor bad, bad, or very bad?’ (*KCLIMATE*), with answer categories reading (1) Very good, (2) Good, (3) Neither good nor bad, (4) Bad, and (5) Very bad. This variable was recoded, so that higher values reflect a better work climate. Respondents were also allowed to give no answer (9) or indicate that they did not know (8). The analysis excluded respondents with these answers from the relevant analyses. Furthermore, the analysis computed the **Change in work climate**. The management questionnaire included the question ‘Since the beginning of 2010, the general work climate in this establishment...?’ (*KCLIMACH*). Here, the answer categories read (1) improved, (2) remained about the same, and (3) worsened. Again, the analysis recoded the variable, so that higher scores indicate a better work climate. The no answer and don’t know category are treated as missing values, which are list-wise excluded from the relevant analysis. These three variables were then combined into an index variable measuring **Workplace well-being**. To compute this variable, HRM problems, Work climate, and Change in work climate were standardised, so that each variable had the same range. The workplace well-being index variable is then computed by calculating the mean of these three variables.

Next, to account for the establishment performance, information was combined on the financial situation, changes in the financial situation, the labour productivity and the production of goods and services since 2010. To account for the **Financial Situation**, the management respondent was asked: ‘How would you rate the financial situation of this establishment? Is it very good, good, neither good nor bad, bad, or very bad?’ (*KFINAN*) with the answer categories (1) Very good, (2) Good, (3) Neither good nor bad, (4) Bad, and (5) Very bad. To account

for the **Change in the financial situation**, the management respondent was asked 'Since the beginning of 2010, has the financial situation of this establishment...?' (KFINANCH). The answer categories read (1) improved, (2) remained about the same, and (3) worsened. The **change in labour productivity** is measured with the management survey question 'Since the beginning of 2010, has the labour productivity of this establishment...?' (KLABPRCH). The **change in production of goods and services** is measured by combining two MM survey questions, namely 'Since the beginning of 2010, has the amount of goods and services produced by this establishment...?' (KGOSEPR, asked to management respondents of private-sector establishments) and 'Since the beginning of 2010, has the amount of services provided by this organisation'

(KSERPROV, asked to management respondents of public-sector establishments). For the latter three variables, the answer categories read (1) increased, (2) remained about the same, and (3) decreased. All variables were recoded so that high scores indicate a better financial situation. Respondents who gave no (valid) answer were excluded from the relevant analyses. These variables were then combined into an index variable measuring **Establishment performance**. To compute this variable, the items on the financial situation were first standardised as were change in financial situation, labour productivity and production of goods and services variables, so that each variable had the same range. The establishment performance index variable is then computed by calculating the mean of these three variables.

Annex 2 – Description of the LCA process

Latent class analysis (LCA) is a data-reduction technique that makes it possible to identify different (latent) classes based on a number of observed variables. When applying this technique, researchers estimate LCA with different numbers of classes, and select the optimal number of classes, based on statistical reasons (that is on goodness-of-fit measures) and/or on theoretical arguments. This appendix describes the procedure for selecting the latent class analyses outcomes that are presented in Chapter 4 of the main report. All models are estimated using the PoLCA package in R 3-1-2.

LCA for classes of indirect employee participation, the construction of indirect employee participation classes began with a LCA with five variables on information provision for the

employee participation. In so doing, the number of variables on information provision in the final LCAs for indirect employee participation classes are reduced thereby avoiding that those analyses be disproportionately based on variables on information provision. Variables on the provision of information about the financial situation, information about the employment situation, information about the introduction of new or significantly changed products or services in the establishment, information about the introduction of new or significantly changed processes to produce goods or provide services in the establishment, and information about strategic plans with regard to the establishment was included. LCA models with one to five classes were then estimated. Table A2-1 presents the fit measures for these LCAs.

Table A2-1: Fit measures for LCAs on information provision for employee representation

Number of classes	G ² (df)	ΔG ² (Δdf)	BIC
1	7896.55 (26)		31318.00
2	1251.3 (20)	6645.25 (6)	24724.44
3	351.42 (14)	899.88 (6)	23876.55
4	6.68 (8)	344.74 (6)	23583.79
5	0.23 (2)	6.45 (6)	23629.33

The second column of Table A2-1 shows the G², the change in G² (compared to the model with a class less), and the BIC value. The G² is a likelihood ratio / deviance statistic which follows a Chi²-distribution. Here, the null hypothesis reads that the model has a good fit. Values higher than the critical Chi²-value ($\alpha < 0.01$) thus indicate a refutation of the null hypothesis. In this column, bold values indicate that the null hypothesis is not refuted, which supports the hypothesis that the model has a good fit. Based on the G², it is possible

to conclude that both the models with four and five classes have a good fit.

The next column shows the change in G² (ΔG²). Similar to the G², this statistics follows a Chi²-distribution. Here, a bold value indicates that the goodness-of-fit is significantly better than the goodness-of-fit of a model with one class less. Up to the four-class LCA, adding a class improves the goodness-of-fit significantly, but the fit of the model does not improve when a fifth class is added.

The fourth column shows the BIC-value. The BIC-value is another goodness-of-fit statistic, with lower values indicating a better goodness-of-fit. The lowest BIC-value is in bold and it shows that the four-class LCA produces the best-fitting outcome. All in all, the three fit measures all point towards a four-class LCA providing the best fitting models.

Next, the analysis proceeded with a LCA to identify classes of indirect employee participation. These models include two

variables on information provision (namely Interest Information, Strategic Information), and variables measuring the quality of information, training opportunities for employee representation, access to funding for external advice, and sufficient time for employee representation duties. LCA-models with one to six classes were estimated. Table A2-2 presents the fit measures of these models.

Table A2-2: Fit measures for LCAs on indirect employee participation

Number of classes	G ² (df)	ΔG ² (Δdf)	BIC
1	2943.27 (57)		44823.56
2	372.06 (50)	2571.21 (7)	42313.70
3	154.02 (43)	218.04 (7)	42157.02
4	70.47 (36)	83.55 (7)	42134.82
5	50.52 (29)	19.95 (7)	42176.22
6	33.85 (22)	16.67 (7)	42220.90

Table A2-2 shows a more complex picture. Based on the G²-values, the models with five and six classes produce the best goodness-of-fit. Based on the change in G², adding one class to the LCA improves the goodness-of-fit up until a five class analysis. However, the model with the lowest BIC-value is a four class LCA.

Based on these outcomes, it is thus not clear whether a four-class or a five-class solution should be opted for. A closer look was taken at the item response probabilities of

both models, presented in Table A2-3. The model with four classes is not only more parsimonious – since fewer classes are distinguished – but it also presents a picture that is easier to interpret. The five-class solution computes similar classes as the four-class solution, but adds a class (Class IV) which only deviates from Class 1 in one way, more often providing (that is, in almost all cases) interest information. In addition, the fourth class in the five-class LCA also prevails at a relative small number of establishments (about 5%). Given these arguments, this study opts for a four-class LCA model in the main report.

Table A2-3: Comparison of conditional item response probabilities of a 4 and 5 class LCA on indirect employee participation

4 Class LCA					
	Class I	Class II	Class III	Class IV	Average
Estimated class population shares	0.09	0.14	0.33	0.44	
Predicted class memberships	0.13	0.11	0.28	0.48	
<i>Conditional item response probabilities</i>					
Interest Information	0.16	0.38	0.88	0.97	0.78
Strategic Information	0.01	0.1	0.67	0.79	0.58
Quality of Information	0.27	0.36	0.93	0.91	0.78
Training for Employee Representation	0.00	0.76	0.20	0.66	0.46
Employee representation access to funding for external advice	0.21	0.49	0.27	0.69	0.48
Sufficient time for employee representation duties	0.76	0.79	0.91	0.9	0.87

5 Class LCA					
	Class I	Class II	Class III	Class IV	Average
Estimated class population shares	0.11	0.37	0.38	0.06	
Predicted class memberships	0.12	0.32	0.44	0.05	
<i>Conditional Item response probabilities</i>					
Interest Information	0.03	0.89	0.98	1.00	0.78
Strategic Information	0.02	0.68	0.79	0.32	0.58
Quality of Information	0.29	0.96	0.91	0.24	0.78
Training for Employee Representation	0.14	0.25	0.68	0.44	0.46
Employee representation access to funding for external advice	0.23	0.29	0.73	0.28	0.48
Sufficient time for employee representation duties	0.77	0.92	0.90	0.70	0.87

LCA for classes of direct employee participation

To identify classes of direct employee participation, LCA analyses with variables on seven direct employee participation practices were applied. Models with one to eight classes were estimated. Table A2-4 presents the fit measures of these

models. Again, a less than clear picture emerges from these fit measures. Based on the G^2 -value, a seven- and eight-class LCA produces the best fit. Based on the change in G^2 , it can be concluded that adding another class improves the goodness-of-fit until a model with seven classes. However, based on the BIC value, a six-class solution produces the lowest BIC value, thereby indicating that this model produces the best fit.

Table A2-4: Fit measures for LCAs on direct employee participation

Number of classes	$G^2(df)$	$\Delta G^2(\Delta df)$	BIC
1	12391.03 (120)		192137.45
2	1986.23 (112)	10404.80 (8)	181813.21
3	1028.77 (104)	957.46 (8)	180936.29
4	536.10 (96)	492.67 (8)	180524.18
5	233.22 (88)	302.88 (8)	180301.85
6	129.69 (80)	103.53 (8)	180278.87
7	93.25 (72)	36.44 (8)	180322.98
8	68.77 (64)	24.48 (8)	180379.06

Again, a closer look was taken at the conditional item response probability (see Table A2-5) to decide whether to opt for a six- or a seven-class LCA model. Compared to the six-class model, one 'new' class appears in the seven-class model, Class VII, where regular (staff) meetings and the use of suggestion

schemes and surveys are relatively popular in such establishments. However, Class VII only prevails in a small number of establishments: the predicted class membership is just 0.02. This study therefore opts for the more parsimonious six-class LCA model.

Table A2-5: Comparison of conditional item response probabilities of a 6 and 7 class LCA on direct employee participation

6 Classes LCA								
	Class I	Class II	Class III	Class IV	Class V	Class VI		
Estimated class population shares	0.11	0.21	0.25	0.05	0.21	0.17		
<i>Conditional item response probabilities</i>								
Regular meetings between employees and immediate manager	0.44	0.96	0.85	0.82	1.00	0.99		0.88
Regular staff meetings open to all employees at the establishment	0.13	0.73	0.29	0.49	1.00	0.79		0.61
Meetings of a temporary group or committee or ad-hoc group	0.14	0.28	0.62	0.34	0.70	0.86		0.54
Dissemination of information through newsletters, website etc.	0.38	0.44	0.95	0.71	0.96	0.99		0.77
Discussion with employees through social media etc.	0.02	0.02	0.12	0.07	0.22	0.40		0.15
Suggestion schemes	0.15	0.25	0.45	0.93	0.56	0.86		0.49
Employee surveys	0.09	0.22	0.36	1.00	0.50	1.00		0.46
7 Classes LCA								
	Class I	Class II	Class III	Class IV	Class V	Class VI	Class VII	
Estimated class population shares	0.22	0.16	0.09	0.05	0.23	0.18	0.07	
<i>Conditional item response probabilities</i>								
Regular meetings between employees and immediate manager	0.94	1.00	0.35	0.75	0.86	0.99	1.00	0.88
Regular staff meetings open to all employees at the establishment	0.66	1.00	0.10	0.32	0.30	0.79	1.00	0.61
Meetings of a temporary group or committee or ad-hoc group	0.27	0.73	0.14	0.34	0.64	0.85	0.47	0.54
Dissemination of information through newsletters, website etc.	0.43	1.00	0.38	0.73	0.95	0.99	0.67	0.77
Discussion with employees through social media etc.	0.02	0.24	0.02	0.08	0.12	0.39	0.08	0.15
Suggestion schemes	0.19	0.52	0.14	0.82	0.44	0.86	0.72	0.49
Employee surveys	0.19	0.49	0.07	0.83	0.35	0.98	0.56	0.46



This report studies practices in EU establishments for direct and indirect employee participation in decision-making. Indirect employee participation is the involvement of employee representatives in decision-making processes, while direct employee participation describes direct interaction between employers and employees. The study builds on the survey data from the Eurofound Third European Company Survey Overview report and focuses on how direct and indirect employee participation are related to each other and to national-level industrial relations characteristics. It establishes which practices of employee participation are beneficial both for the establishment and the employees. It finds that more extensive forms of direct and indirect employee participation are associated with positive establishment outcomes.