

# BARWAGE



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## Wages in collective bargaining agreements (CBAs) in 10 European countries: provisions on minimum wages and pay scales

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### **Abstract**

This report presents an in-depth analysis of wage and pay scale provisions contained in collective bargaining agreements from 10 selected European countries. Utilizing the rich WageIndicator Collective Bargaining Agreement (CBA) Database, the report comprehensively examines negotiated wage rates, pay scales, compensation premiums, wage raises, and other non-wage provisions codified in labor contracts. The analyses systematically explore variations and similarities in collectively bargained wage structures across countries, industries, and levels of bargaining. A central descriptive examination maps the levels at which base wages are determined in CBAs - from national agreements down to company-level and individual contracts. Detailed summary statistics illuminate the prevalence of different wage-setting arrangements in each country and across major industries (according to a suggested aggregation). The report further segments these findings by the level of collective bargaining, shedding light on how wage determination approaches differ between sector-level, firm-level, and other negotiating structures. Beyond base pay, the study provides complementary assessments of collectively bargained compensation premiums, allowances, and other wage elements specified in labor agreements. It quantifies the frequency with which CBAs incorporate provisions for seniority pay, overtime pay, shift differentials, bonuses, and other wage supplements. Negotiated frameworks for pay increases are also examined across the database. The analysis reveals considerable heterogeneity in collectively bargained wage outcomes when viewed through national and industry lenses. However, synthesizing results across the 10 European countries shows limited significant differences in CBAs' structure patterns when segmented solely by the level of collective bargaining. The findings suggest bargaining level is not a primary driver of variation in negotiated wage and pay scale provisions across the sampled agreements.

This report provides an exploratory empirical insight into the complex landscape of wages and compensation codified in collective labor contracts across Europe. The mapping of wage determination processes, pay supplements, and scheduled raises specified in CBAs holds substantial value for researchers, policymakers, negotiators, and other stakeholders engaged with issues of employment standards, remuneration, and industrial relations.

Keywords: CBAs, minimum wage, wage bargaining, pay scales

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## **BARWAGE**

BARWAGE investigates the potential of collective bargaining as a tool for ensuring adequate minimum wages in the European Union. It explores the size of four wage-setting arenas across EU countries and industries: the national or peak level, sector-level collective bargaining, firm-level collective bargaining, and individual (non-collective) negotiations. BARWAGE uses microdata to identify what share of the workers are earning under 110% of the statutory minimum wage are covered by sectoral or enterprise collective bargaining. Using coded data of 900 CBAs from 9 EU countries, the presence and nature of pay scales in the sectoral and firm-level collective bargaining agreements (CBAs) are analysed. To deepen the insight into the impact of collective wage bargaining, national level data will be used to detail the wage arenas in 2 EU countries (Netherlands and Italy). The project lasts 2 years (2022-2024) and includes 6 work packages.

## **Utrecht University**

The Faculty of Social & Behavioural Sciences of Utrecht University is a leader in education and research in the social and behavioural sciences. The Department of Interdisciplinary Social Science deals with issues such as discrimination in the job market, reintegration at work, growing up in a multicultural neighbourhood, developing your individual identity, high-risk behaviour in young people, growing inequality and the accessibility of care. Interdisciplinary Social Science focuses on understanding these complex issues and on finding solutions to the individual and societal problems that play a role in them.

## **Fondazione Giuseppe Di Vittorio**

The Fondazione Di Vittorio (FDV) is national institute both for historical, social, and economic research, and for trade union education and training of trade union confederation CGIL. The FDV centres its activities around the core issues of work and employment, economics and welfare. Its aim is to put people and their rights back on the centre stage, along with their living and working conditions, their interests and the demands they express, linking all this to the values and ideals that make the CGIL one of the most important social and political entities in Italy.

## **Central European Labour Studies Institute (CELSI)**

Central European Labour Studies Institute (CELSI) is a non-profit research institute based in Bratislava, Slovakia. It fosters multidisciplinary research about the functioning of labour markets and institutions, work and organizations, business and society, and ethnicity and migration in the economic, social, and political life of modern societies. CELSI strives to make a contribution to the cutting-edge international scientific discourse.

## **WageIndicator Foundation**

WageIndicator Foundation collects, compares and shares labour market information through online and offline surveys and research. Its national websites serve as always up-to-date online libraries featuring (living) wage information, labour law and career advice, for employees, employers and social partners. In this way, WageIndicator is a life changer for millions of people around the world.

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## Introduction

Collective bargaining on wages is a potentially powerful institution to ensure the right to adequate wages and decent working conditions for millions of workers in the EU. Through collective bargaining, trade unions and employers' organisations negotiate on wage floors and pay levels that balance social and economic objectives. Collective bargaining negotiations have the power to shape wage inequalities, through legitimizing certain differentials while restricting others. This occurs when negotiated agreements codify wage entitlements based on factors like sector of employment, job role, and human capital characteristics such as experience. On one hand, collectively bargaining over sectoral, occupational, and skill-based wage differences may validate and institutionalize particular inequalities as fair norms. However, agreements can also impose limits that narrow unjustified pay gaps, for example by raising the wages of undervalued roles. Therefore, the outcomes of collective bargaining processes hold significance for how wage disparities manifest and are perceived within labor markets. By fixing differentiated wage scales, agreements wield influence to both permit and constrain earnings inequality. The European Commission and Council have affirmed the autonomy of social partners (unions and employers) to negotiate wages as a fundamental right under the EU Charter.

Understanding the outcomes of collective bargaining on pay is crucial for assessing the effectiveness of collective wage bargaining as an institution and policy instrument to realize adequate wages. Despite convincing evidence that higher wages paid by firms covered by CBAs compared to non-covered firms (Addison et al., 2014; Domínguez and Rodríguez, 2016; Garnero, 2020; Magda, Marsden and Moriconi, 2012; Teulings and Hartog, 1998; Wallerstein, 1999) relatively little is known about the actual provisions on pay included in European CBA (Besamusca, Kahancova, et al., 2018; Besamusca, Tjeldens, et al., 2018; Besamusca & Tjeldens, 2015). In consequence, current policymaking assumes that the higher average wages observed among workers who are covered by CBAs compared to those who are not, are a consequence of the wage-related provisions included in CBA texts.

There are good reasons to believe this might be the case. Previous research using the WageIndicator CBA Database shows that the overwhelming majority of European CBAs include at least some provisions on wages (Besamusca, 2021; Eurofound, 2024; Hällberg and Kjellström, 2020; Tjeldens, 2021; Tjeldens et al. 2022). Two econometric studies from Germany also showed that wages increased when firms adopted CBAs and fell behind when they were revoked (Blien et al. 2011; Heinbach and Schropfer 2007). Research consistently finds that higher union density and greater collective bargaining coverage are associated with higher average wages at both country and industry levels (Aidt & Tzannatos, 2002; Hayter & Weinberg, 2011; OECD, 2019). Wages set through CBAs exceed non-covered sectors by 10-15% (Card et al., 2004; Kristal & Cohen, 2017). Erosion of bargaining is linked to rising inequality and low-wage work (Western & Rosenfeld, 2011; Bengtsson, 2014). CBA provisions like wage floors and raises surpass minimums and inflation (Grimshaw et al., 2014; Bosch, 2015). Unions have used CBAs to lift pay in female-dominated jobs (Cardoso & Portugal, 2005). Greater bargaining coverage correlates with less low-pay incidence (Grimshaw et al., 2013). More coordinated bargaining aligns with productivity and pay growth (Baccaro & Howell, 2017). In total, substantial empirical evidence across analysis levels verifies collective bargaining's critical function in raising real wages beyond



market forces alone (Aidt & Tzannatos, 2002; Hayter & Weinberg, 2011). Documenting this effect can further support bargaining.

However, there are also reasons to question the validity of these assumptions, especially considering the diversity of bargaining practices across the European Union. In their study on the neo-liberalization of European industrial relations in the last 50 years, Baccaro and Howell (2017) identify the freedom to determine employees' wages and wage growth as a pivotal employer interest, suggesting employers' representatives might be reluctant to negotiate payable wage rates in too much detail. Research using the WageIndicator CBA Database has shown that approximately 33% of the CBAs in EU countries only agree on the pay increase or lowest pay level, implying that in those cases the wage-setting for the lion's share of employees occurs at the level of the individual employee (Besamusca 2021). Furthermore, a recent longitudinal study of pay rates in European CBAs concluded that 13% of collective agreements did not include any pay rates, 12% contain only one pay rate (i.e., a wage floor) (Eurofound 2024). Substantial shares of CBAs in some member states included wage floors below the statutory minimum (over two thirds of CBAs in Poland, Slovakia, France, Portugal and Slovenia), or explicitly set wage floors equal to the statutory minimum (Ibid)

In this report, which constitutes deliverable 3.6 of the BARWAGE project (European Union social dialogue grant 101052319), we aim to describe the specific content of CBAs on collective wage including minimum wages and pay scales to provide empirical evidence of how and at what level wages are negotiated in CBAs in 10 EU member states: Austria, Bulgaria, Czechia, Estonia, France, Italy, the Netherlands, Slovakia, Spain and Portugal. These member states represent a variety of bargaining traditions, ranging from countries where sector level bargaining covers almost the full labour force (e.g., Italy, Austria) to countries with sparse and decentralized collective bargaining (e.g., Estonia).

Studying coded CBAs from these countries, we first ask how collective bargaining agreements (CBAs) in ten EU countries set wages and wage increases, and whether differences by country, sector and bargaining level can be identified. Secondly, with the European policy agenda for adequate wage floors in mind, we ask to what extent wage floors fixed in CBAs in the 10 EU countries meet decent wage standards. This objective contributes to the EU policy agenda by providing quantitative evidence for the de-facto potential of collective bargaining as a policy instrument for achieving decent wages in Europe, as well as estimating its added value compared to European target minimum wage. While building on previous country-comparative work, our study deepens understanding of the specific content of collective wage bargaining by exploring sectoral and country differences.

## Methods

### The WageIndicator

To study collectively bargained provisions on wages and pay scales included in CBAs, we use data from the WageIndicator CBA Database. The WageIndicator CBA Database has been maintained by BARWAGE partner WageIndicator Foundation since 2013 (WageIndicator Foundation, 2023). The coding and comparison of clauses in European CBAs commenced in the BARCOM (VS/2016/0106) project, for which 120 CBAs from the commerce sector across 23 countries were collected. The sample was further expanded through coding efforts in the COLBAR-EUROPE project (VS/2019/0077), targeting CBAs from the construction, manufacturing and public sectors, and the BARCOVID project (VS/2021/0190), targeting CBAs across all economic sectors in Austria, France, the Netherlands, Spain and Italy. Another 400 CBAs from Bulgaria, Czechia, Estonia, Portugal, Slovakia were coded for the current BARWAGE project, with the aim of collecting sufficiently large samples of CBAs for statistical analyses. For this study, we select data from the 10 EU countries included in the BARCOVID and BARWAGE projects: Austria, Bulgaria, Czechia, Estonia, Italy, France, Netherlands, Portugal, Slovakia, and Spain. This dataset includes 1224 CBAs, of which 513 are firm level agreements and 710 were negotiated with multiple employers. This means that out of the total, 42% of the CBAs corresponds to a single employer and 58%, to multi-employer. Multi-employer bargaining included both sector level agreements between trade unions, professional organizations and employers' associations, as well as agreements covering multiple individual firms, although this latter type of bargaining is rare.

**Table 1.a CBAs per country<sup>1</sup>**

Austria	111
Bulgaria	101
Czechia	98
Estonia	103
France	36
Italy	166
Netherlands	175
Portugal	149
Slovakia	58
Spain	227
<b>Total</b>	<b>1224</b>

As shown by table 1.a, this database contains CBAs of 10 European countries. Spain has the highest number of CBAs (227), followed by Netherlands (175), Italy (166) and Portugal (149). Around 100 CBAs

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<sup>1</sup> The number of collective bargaining agreements (CBAs) collected from France is lower compared to other countries in the sample. This smaller French subsample is attributable to greater difficulties accessing the full texts of current and full-text agreements. However, the French CBAs collected still provide valuable insights into negotiated wage setting.

were collected from Austria, Estonia, Bulgaria and Czech Republic. Smaller samples were included from Slovakia (58) and France<sup>i</sup> (36).

The data collection further aimed to include CBAs across economic sectors. For the purpose of this study, results are shown across eight aggregated sectors: Natural Resources, Manufacturing, Construction and Energy, Wholesale and retail trade, Transportation and storage, Professional Services, Public Services, and Leisure Services and other. The manufacturing, Wholesale and retail trade; repair of motor vehicles and motorcycles and Transportation and storage sectors correspond directly to the NACE classification of economic activities (NACE codes 3, 7, and 8). Natural resources contains the collected CBAs from agriculture, forestry, fishing, mining and quarrying (NACE sectors 1 and 2). Construction and Energy contains the collected CBAs from Electricity, gas, steam and air conditioning supply, and Construction (NACE sectors 4 and 6). Professional Services contains CBAs collected from Information and communication, Financial and insurance activities, Real estate activities, Professional, scientific and technical activities, and Administrative and support service activities (NACE sectors 10, 11, 12, 13, and 14). Public Services, CBAs from Public administration and defence; compulsory social security, Education, and Human health and social work activities (NACE sectors 15, 16, and 17). And Leisure Services and Other includes Accommodation and food service activities, Arts, entertainment and recreation, and Other service activities (NACE sectors 9, 18, and 19). Note that no CBAs were collected from Water supply; sewerage, waste management and remediation activities (NACE sector 5)

Each aggregated sector contains at least 100 CBAs (see table 1b). No CBAs were collected from Water supply; sewerage, waste management and remediation activities (NACE sector 5). Table 1.b summarizes the suggested aggregation.

**Table 1.b CBAs per sector (Suggested aggregation based on NACE 2001)**

1 Natural Resources	101
2 Manufacturing	260
3 Construction and Energy	105
4 Wholesale and retail trade	152
5 Transportation and storage	149
6 Professional Services	109
7 Public Services	218
8 Leisure Services and Other	130
Total	1224

### Measures of pay in the WageIndicator CBA Database

The CBA database contains coded collective agreements, allowing for comparisons across countries and sectors on ten topics: Pay clauses, premiums and allowances; Working hours; Social Security and Pensions; Job security and employment contracts; Job descriptions and job classification systems; Training; Health and Safety; Sickness and Disability; Gender Equality, and Work-Family Arrangements. A detailed overview of coded variables by topic is available in the codebook and the CBA database

coding manual (Ceccon et al., 2016; Ceccon & Medas, 2023). To study wages in collective agreements, this report makes use of the CBA database metadata and the variables coded under the topic “pay clauses and Premiums and allowances”.

Several pay-related topics are coded in the WageIndicator CBA database. First, the database includes information on whether any clauses on pay or wages are included in the text of the CBA. This includes any type of reference to wages or pay, without further requirements, and is used for routing in the coding environment. CBAs that contain at least some reference of wages are coded as containing clauses on wages, and subsequently more detailed questions are answered by the WageIndicator coders. As Table 1.c shows, this includes items on the level at which wages are determined, pay scales, wage floors, wage increases, and premiums and allowances.

**Table 1.c Coded topics on pay, premiums, and allowances**

<b>Wages (general)</b>	<b>Inclusion of any clause on wages (1 'Yes' 0 'No')</b>
<b>Determination of wages</b>	Level at which wages determined according to the CBA (1 'Individual contracts' 2 'Industry/sectoral level' 3 'National framework agreement' 4 'State or regional level' 5 'Elsewhere' 6 'Company Level' -7 'Insufficient data')
<b>Pay scales</b>	inclusion of pay scales in the CBA; reference period for agreed wages; base for differentiation of wages in pay scales; year to which the wages refer
<b>Lowest wage</b>	Inclusion of wage floor; level of lowest wage; agreed wage for the lowest step of the lowest pay scale
<b>Highest wage</b>	Agreed wage for the highest step of the highest pay scale
<b>Negotiated wage increases</b>	Reference to negotiated wage increase; type of wage increase (structural or incidental); implementation of wage increase (percentage, lumpsum, other); groups of employees to which wage increases apply
<b>Premiums and allowances</b>	Inclusion of premium/allowance, implementation of premium/allowance, and level of premium/allowance for the following premiums: night work, on-call work, over time, annual leave, hardship, Sunday work, commuting allowance, meal vouchers, seniority

In the CBA database, the lowest and highest pay rates included in a CBA are coded: this concerns the lowest step on the lowest pay grade applicable to adult workers, and the highest step of the highest pay grade applicable to adult workers. Youth scales and other rates aim to exempt groups of workers from regular pay rates (such as the long-term unemployed). These are disregarded when choosing the lowest wage because their inclusion would impede comparisons across CBAs. The database contains further information on the year and the wage period (hourly/monthly/etc.) to which the pay scales refer. This information was used to convert all lowest and highest wages to monthly wages. To allow

comparisons across countries, all wages were converted to purchasing power parity and to euro, using the conversion factors publicly available by the World Bank applied for each country in the year that the pay scales referred to.

### **Comparing negotiated provisions on pay to wage levels**

Different benchmarks are used to compare the lowest wages found in the CBAs database. These include measures of minimum statutory wages, living wages and poverty lines determined for the selected countries.

The minimum statutory wages, set by the corresponding governments provide official national references. A minimum statutory wage is a legal minimum hourly or monthly pay rate that employers must provide workers, set by national governments. Most European countries have established such national minimum wage floors, and eight out of the ten countries selected for this project do so. By establishing statutory minimum wages (SMW), European countries pursue both economic aims around worker incomes and consumer spending as well as sociological objectives around promoting fair treatment of labor and challenging norms of exploitation and inequality. While impacts and debates continue, minimum wage laws remain widespread policy tools to uplift low-paid workers. The minimum statutory wage serves as a consistent, policy-defined reference point that is highly relevant for studying low pay, assessing interventions, and generally benchmarking earnings distributions. This makes it a powerful analytical tool. The data used for statutory minimum wages comes from Eurostat for all selected countries but Austria and Italy which do not have official statutory minimum wages. Specifically, the series used is: Monthly minimum wages - bi-annual data. For Italy estimations are calculated using Eurofound, and Trading Economics. For Austria, the input provided by Anna Fidrmuc is followed.

The poverty line measures the level of income below which a person or household is considered living in poverty. Many European countries define this poverty threshold as 60% of the median income, or 50% of the national mean (median) disposable household income. This means households earning less than half of the average income in their country are categorized as living in relative income poverty. By establishing official poverty lines, governments pursue income-based measurement of household wellbeing and disadvantages. While imperfect, these metrics serve both economic ends of quantifying living standards/needs and sociological ends around defining socially acceptable inclusion. Periodic adjustments of relative poverty lines represent societies' evolving judgments around minimum decency thresholds. The relative poverty line benchmark allows clear identification of disadvantaged households, measurement of poverty magnitude, tracking of poverty dynamics, assessment of policy impacts, international comparisons, and insight into social norms around economic wellbeing. This provides a rich analytical foundation for research and policymaking. For the purpose of the comparison section, this study uses the second option to calculate the threshold line, i.e. 50% of the mean income. For this data from the OECD is used, specifically the series on average annual wages.

A living wage refers to the minimum income necessary for a worker to afford a basic but decent standard of living that meets their basic needs. This goes beyond just earning enough to avoid poverty. It considers the cost of a low-cost but acceptable basket of goods and services required for essentials like food, housing, healthcare, clothing, transportation, education, and other necessities. The living

wage benchmarks codify concrete metrics, grounded in social values, which can be leveraged to evaluate wage adequacy, promote worker well-being objectives, encourage responsible business practices, and shape public discourse on what constitutes fair worker remuneration. Their defined methodologies make them powerful tools for analysis and advocacy. For this study, living wages data from the WageIndicator Foundation is used, specifically, the series Living Wages Jan 2014 to Jan 2019.

### **Statistical analyses**

The analyses provided in this report are descriptive in nature. The aim of the paper is to shed light on the pay-related provisions included in collective agreements. The dataset's analytical strategy includes descriptive analyses (frequency and cross tables with Chi-squares, t-tests, correlations) and linear and logistic regression modelling of the data. In the interest of accessibility, results are presented primarily in graphs and condensed tables. The full tables and regressions underlying the graphical representations are included in the paper's replication files and in the appendices to this report.

## The inclusion of wage provisions in CBAs

This section presents how and at what pay level CBAs in the ten European selected countries set wages and wage increases. Also, differences by industry and bargaining level are identified. For this purpose, the evidence found in the CBAs collected is presented through a series of descriptive statistics, showing the evidence of the inclusion of wage provisions, and at what level these wage provisions are determined, by country, sector and bargaining levels.

### Wages and decision levels

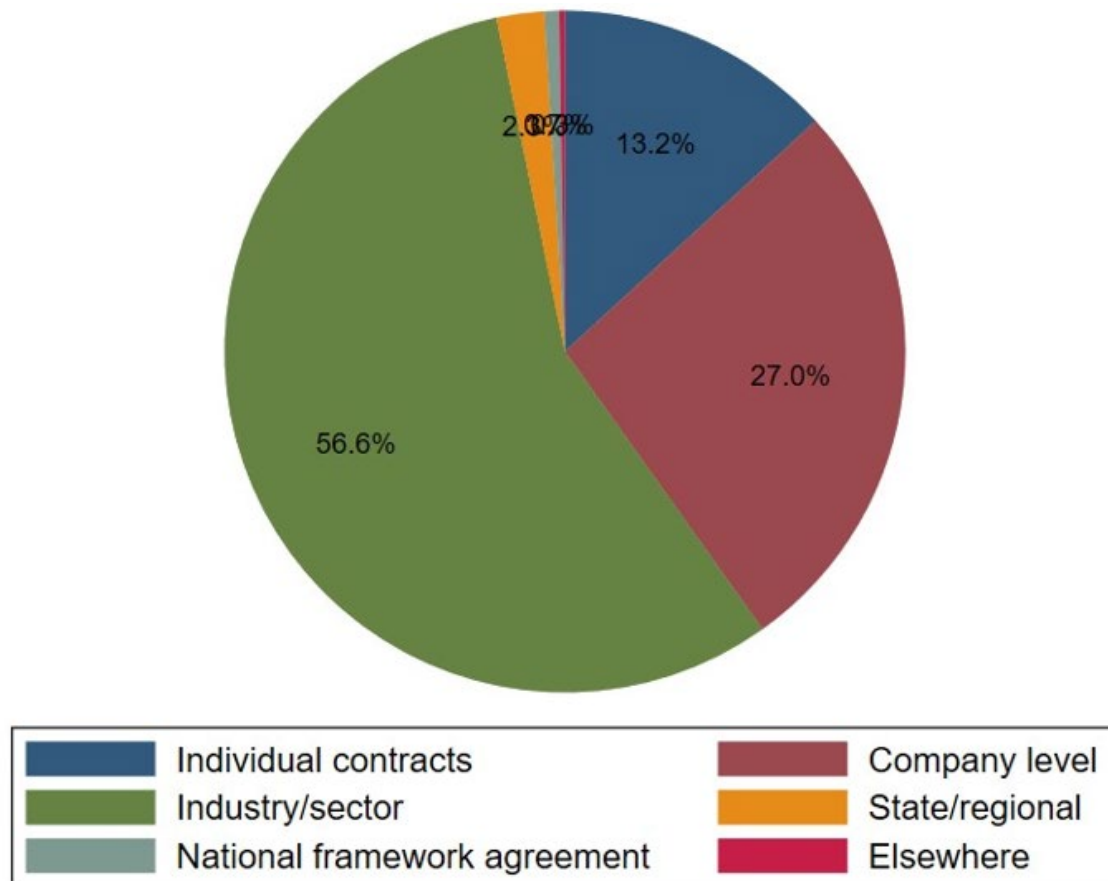
The analysis of the CBA dataset of these 10 European countries shows that more than 97% of the CBAs collected include clauses on wages. As table 2 shows, all the CBAs collected for Austria, France, and Slovakia contain clauses on wages; as do virtually all CBAs from Czechia, Italy, the Netherlands, Spain and Portugal. In Estonia and Bulgaria, about 1 in 10 CBAs did not include clauses on wages. Analyses by sector show that CBAs from public services least often include provisions on wages (95%), followed by leisure services and other (96%). In the rest of the aggregated industries, above 98% of CBAs include explicit wages clauses (see appendix table A1). By bargaining level, there is no significant difference between single and multi-employer agreements. The former shows 96% of their CBAs with clauses on wages, while the latter displays 99% (appendix table A2).

**Table 2 Share of CBAs with clauses on wages, by country**

	Does the agreement have clauses on wages?		
	No	Yes	Total
Austria	0 0%	111 100%	111 100%
Bulgaria	9 9%	92 91%	101 100%
Czechia	1 1%	97 99%	98 100%
Estonia	10 10%	93 90%	103 100%
Spain	1 0.44%	226 99.5%	227 100%
France	0 0%	36 100%	36 100%
Italy	2 1%	164 99%	166 100%
Netherlands	1 1%	174 99%	175 100%
Portugal	3 2%	146 98%	149 100%
Slovakia	0 0%	58 100%	58 100%
Total	27 2%	1197 98%	1224 100%

1146 CBAs, i.e. 94% of the total CBAs collected, contain provisions that specify at which bargaining level wages should be determined. As figure 2 shows, the majority of collected CBAs, more than half of them, determines wages at industry level, while more than a quarter of the total does at company level. One eighth of CBAs specify that wages are determined in individual employment contracts.

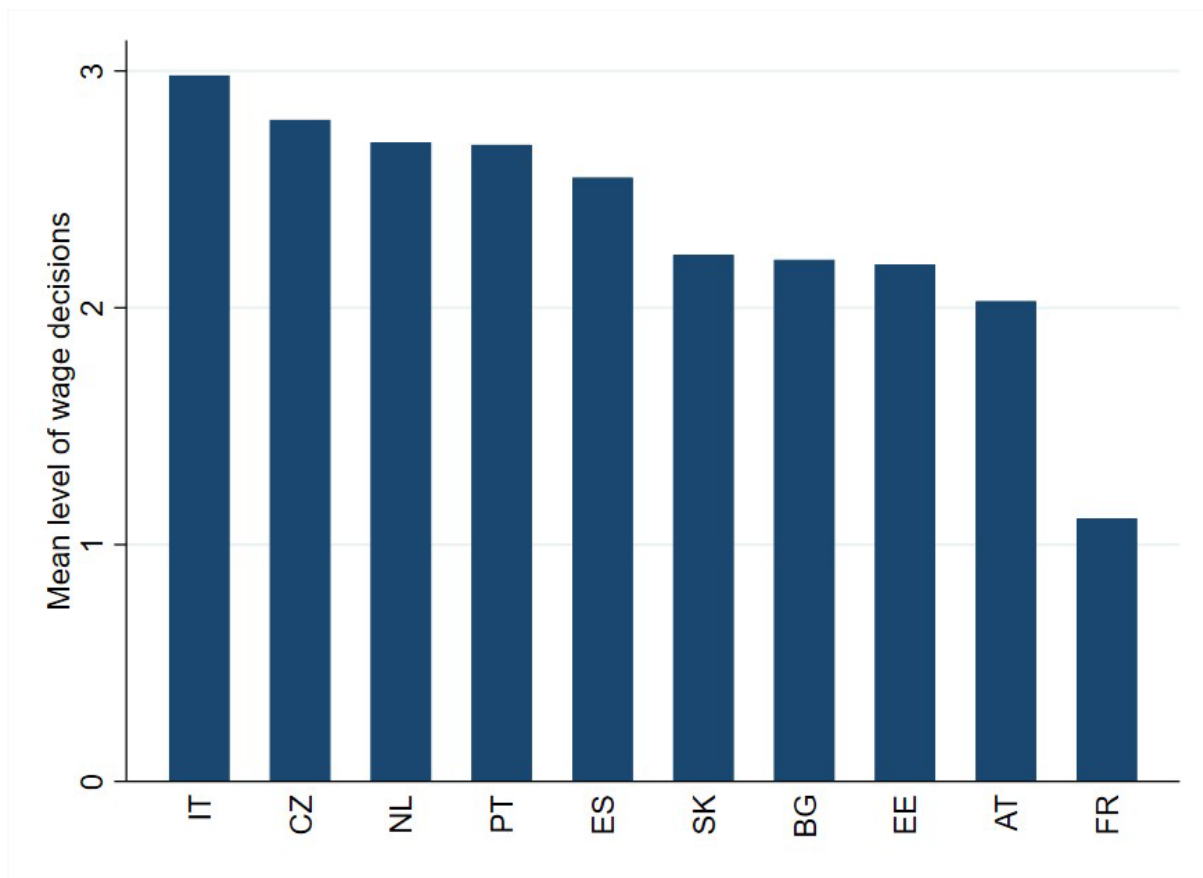
**Figure 1 Level at which wages are determined in CBAs**



Clear country difference exist in the level at which CBAs state wages should be determined. As Figure 3 shows, Italy has the highest portion of CBAs determining wages at industry level (almost 96%) followed by the Netherlands (75%) and Portugal (71%). At company level, Bulgaria (78%) and Slovakia (66%) lead, while at individual contracts France does with the highest percentage (94%), leaving only less than 6% to the industry determination. The detailed distribution of the wages determination level per country is displayed in the Appendix, table A3.



Figure 2 Mean level of wage decisions, selected countries



Examining wage determination levels by industrial sector reveals some variation, but overall a predominant reliance on industry-level setting across all major sectors. As shown in Table 3, natural resources and manufacturing lead with approximately 65% industry-level determination. Transportation and storage displays the lowest industry-level share at 46%, offset by having the highest firm-level share at 35%. The remaining sectors fall in between, ranging from 51-59% industry-level and 22-30% company-level determination. Therefore, while minor differences emerge, all sectors demonstrate a strong majority preference for industry-level wage setting rather than company-bargaining. No sector stands out as exceptionally decentralized or centralized in its wage determination approach. Though moderate diversity exists, sector does not appear to be a primary driver of wage-setting differences in the data.

Table 3 Level at which wages are determined, by sector

Eight sectors	Level at which wages are determined						Total
	Individual contracts	Company level	Industry/sector	State/regional	National framework agreement	Elsewhere	
Natural Resources	6 6%	22 23%	64 66%	4 4.17	0 0%	0 0%	96 100%
Manufacturing	21 8%	69 27%	161 64%	0 0%	0 0%	0 0%	251 100%
Construction and Energy	8 8%	28 28%	60 60%	1 1%	3 3%	0 0%	100 100%
Wholesale and retail trade	32 22%	32 22%	73 51%	2 1.40	3 2%	1 1%	143 100%
Transportation and storage	23 16%	50 35%	66 46%	3 2%	1 1%	0 0%	143 100%
Professional Services	13 13%	28 27%	59 58%	0 0%	0 0%	2 1.96	102 100%
Public Services	26 13%	45 23%	108 55%	16 8%	1 1%	0 0%	196 100%
Leisure Services and other	22 19%	35 30%	58 50%	0 0%	0 0%	0 0%	115 100%
Total	151 13%	309 27%	649 57%	26 2%5	8 1%	3 0.3%	1146 100%

Analysis by bargaining level reveals clear differences in wage-setting approaches. Single-employer agreements predominantly determine wages at the company level, with 56% doing so. In contrast, multi-employer agreements most often set wages at the industry level, evidenced by 76% adopting this approach. Notably, both single and multi-employer contracts rarely establish wages through national framework agreements, with less than 1% occurring at this centralized level. The incidence of individual employment contracts setting wages also remains low across both bargaining structures, below 15%. In summary, multi-employer bargaining chiefly utilizes industry-level determination, while firm-level determination is more common for single employers. But neither approach heavily relies on fully centralized or decentralized wage setting, as both categories do below 1% at the national framework agreement, and below 15% at individual contracts.. More granular data on bargaining level differences can be found in Table 4.

**Table 4 Level at which wages are determined, by level of bargaining**

Single vs multi-employer bargaining	Level at which wages are determined						
	Individual contracts	Company level	Industry/sector	State/regional	National framework agreement	Elsewhere	Total
SEB	55 12%	264 56%	133 28%	16 3%	3 0.6%	0 0%	471 100%
MEB	96 14%	45 7%	515 76%	10 1%	5 0.7%	3 0.4%	674 100%
Total	151 13%	309 27%	648 57%	26 2%	8 0.7%	3 0.3%	1145 100%

### Wage floors

An important function of collective agreements, especially those aiming to create a level playing field among firms active in the same sector, is to fix a minimum payable wage. Collective bargaining agreements can include such wage floors through different provisions. Most commonly, CBAs either reaffirm the statutory minimum wage, include a specific clause on the applicable wage floors, or negotiate pay scales that include the first step of the lowest pay grade for a wage floor. Considering minimum wages, the CBA database provides valuable information on the minimum limits of pay scales, low wages amount and whether CBAs explicitly state that minimum wages set by the government should be respected. Only 8% of the CBAs in the sample provides explicit clauses referring to compliance with minimum wages set by the government (appendix's tables A4, A5 and A6). Such clauses are most common in French CBAs (28%), followed by the Netherlands (21%), and more rare in Portugal and Italy (less than 1%) (appendix table A4). Comparing the prevalence of statutory minimum wage references across sectors (table A5), we note that only in professional services and wholesale and retail trade do more than 10% of CBAs include such a clause. By bargaining level (appendix table A6), only 6% of single-employer and 9% of multi-employer agreements contain clauses respecting statutory minimum wages set by the governments.

Only 28% of the collected CBAs have separate clauses on the lowest wage to be paid. As shown in table 5, explicit clauses on the lowest wage to be paid are most common in Italy (79%) and France (75%). On the other side, clauses on the lowest wage to be paid are least common in Bulgarian (3%), Portuguese (7%), and Czech (11%) CBAs.

**Table 5 Share of CBAs with clauses on the lowest wages by country**

	Agreement has clause on lowest wage to be paid (% all)		
	No	Yes	Total
Austria	75	25	100
Bulgaria	97	3	100
Czechia	89	11	100
Estonia	76	24	100
Spain	78	22	100
France	25	75	100
Italy	21	79	100
Netherlands	73	27	100
Portugal	93	7	100
Slovakia	79	21	100
Total	72	28	100

Concerning the allocation through industries, there is less variation than over countries as shown by table 6. Professional services leads with the higher proportion of CBAs containing separate clauses on the lowest wage to be paid (slightly above 40%), followed by wholesale and retail trade (almost 38%). The aggregated sector with the lowest portion concerning such clauses is natural resources (16%). No differences were found between single-employer and multi-employer agreements as it can be seen in table A7 in the appendix.

**Table 6 Share of CBAs with clauses on the lowest wages by sector**

Eight sectors	Agreement has clause on lowest wage to be paid (% all)		
	No	Yes	Total
Natural Resources	84.2	15.8	100
Manufacturing	77.3	22.7	100
Construction and Energy	80	20	100
Wholesale and retail trade	62.5	37.5	100
Transportation and storage	67.8	32.2	100
Professional Services	59.6	40.4	100
Public Services	70.2	29.8	100
Leisure Services and other	74.6	25.4	100
Total	72	28	100

The content of the CBA database allows us to acknowledge the difference between *mentioning* a wage floor and *fixing* an amount, as it covers specific clauses fixing the lowest wages. Of the selected countries (Appendix's Table A8), around 19% of them include such a clause. Italy leads, with 78% of its CBAs setting the lowest wages to be paid, in a second and distant place is France with 36%. Bulgaria and Czechia, on the other side, present the lowest proportions, around 2%. By sector (Appendix's Table A9), Wholesale and retail trade lead the aggregated industries when assessing the inclusion of this type of clause, with 26%. It is trailed by Professional Services, showing 23%. And by bargaining level, there is not a significant difference as 18% of single employer and 19% of multi-employer includes this type of clause. The details of these clauses can be found in the appendix's tables A8-A10.

## CBA wage floors and decent wages

With the available information on minimum/lowest wages set explicitly in the CBAs, the general mean calculation indicates almost 1640 euros per month. This number must be acknowledged carefully. It involves CBAs from different years from 2004 to 2023 and countries that differ regarding their development stages, and therefore count with different institutional settings.

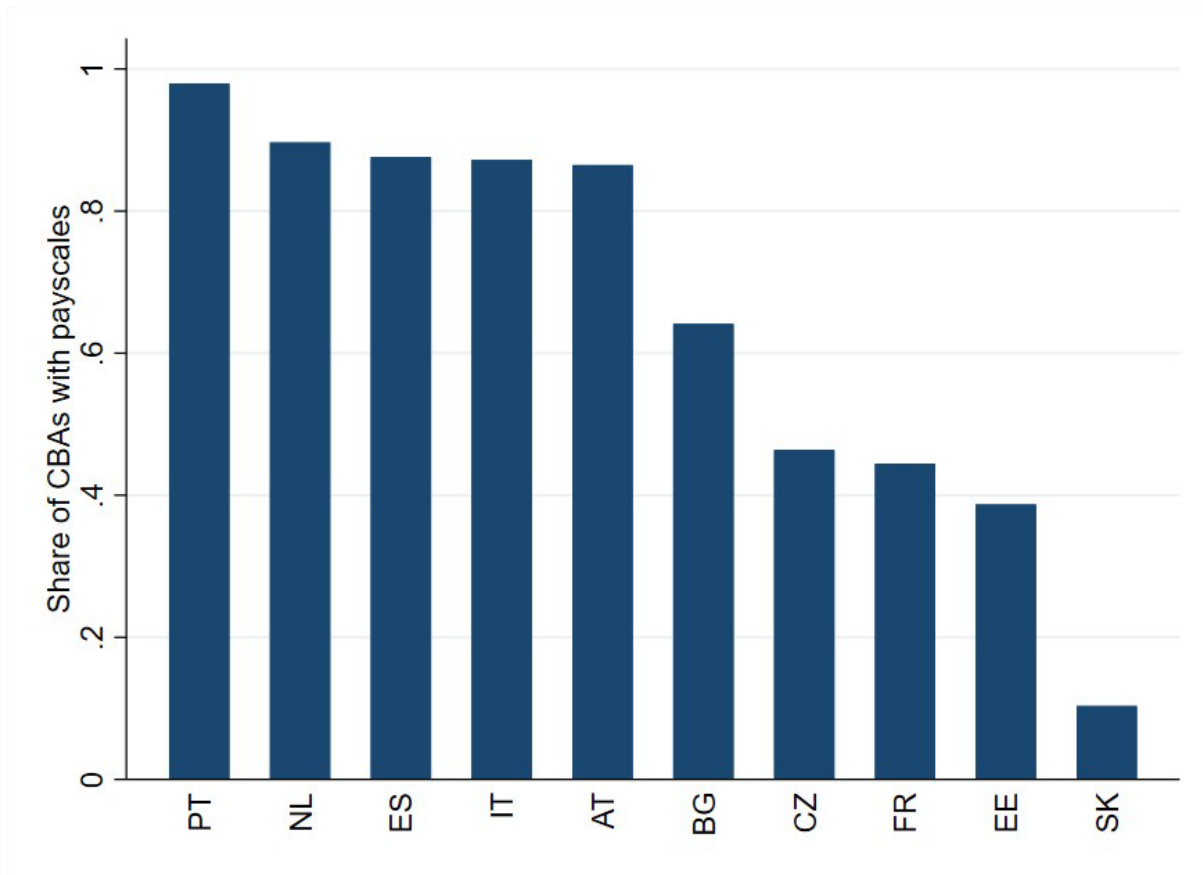
This section presents the lowest wages from CBAs collected in the ten European selected countries. Also, differences by industry and bargaining level are identified. For this purpose, the evidence found in the CBAs collected is presented through a series of descriptive statistics, showing the evidence on pay scales, identifying the lowest step of them, their basis for differentiation, premiums and allowances, and wage increase, by country, sector and bargaining levels.

### Specific CBAs' content on wages and pay scales

Beyond fixing a wage floor, CBAs in many EU member states have traditionally negotiated more comprehensive pay systems covering all employees in the sector or firm. About three quarters (75%) of the CBAs in sample contain pay scales, which set an exact amount or a pay range in which separate groups of employees are supposed to be paid. Pay scales, or pay grids, are commonly included in the CBA texting one or more tables containing euro amounts, or via indices.

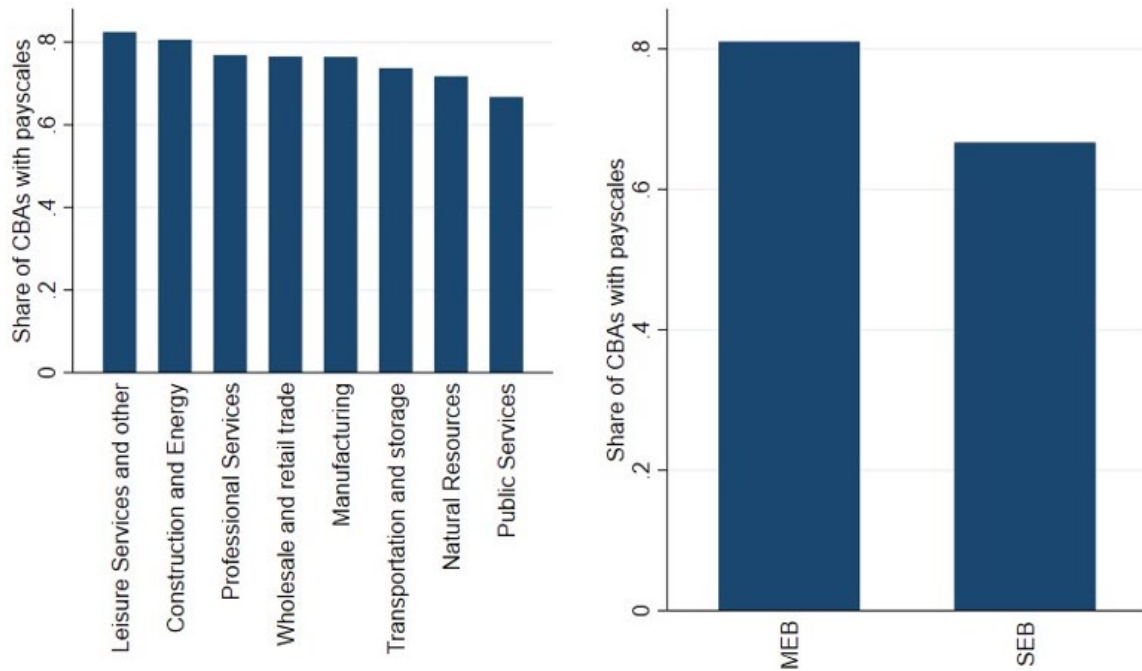
As Figure 3 shows, Slovakia shows the lowest portion of CBAs collected per country containing explicit information about pay scales (10%). Estonia (39%), France (44%), and Czechia (47%) complete the set of countries that do not reach half of their corresponding CBAs with pay scales. On the other extreme of the distribution, Portuguese and Dutch CBAs most often include pay scale tables, with 98% and 89% of their corresponding CBAs containing one or more than one pay scale table. They are followed by Austria, Spain and Italy exceeding 85%. Details by country are included in Appendix, table A11.

Figure 3 Share of CBAs containing pay scales, selected countries (%)



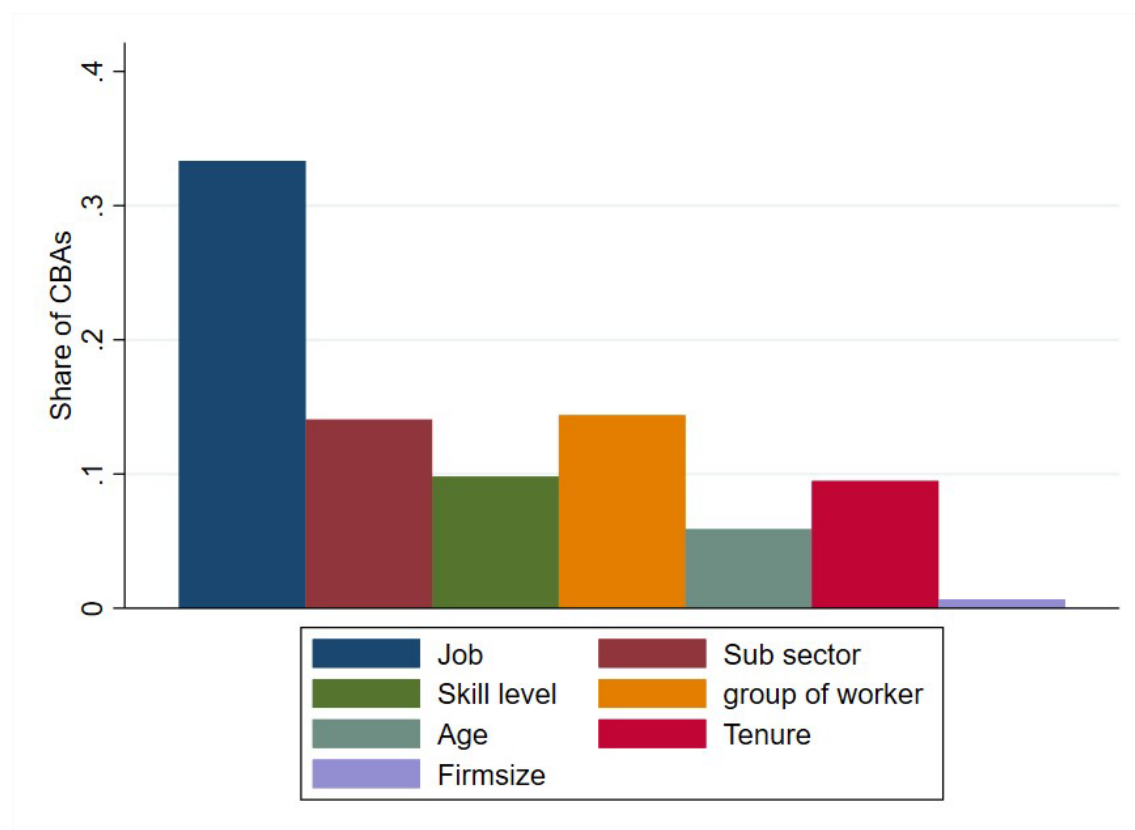
Further analyses show there are differences between sectors regarding the inclusion of pay scale tables in CBAs. Public Services has the highest percentage of CBAs without pay scales, reaching precisely one third of such industry. Considering all the ways in which CBAs determine wages by means of pay scales, when classifying by industry Leisure and other services, and Construction and Energy reach the highest percentages (>80%). Excepting Public services, the rest of the aggregate sectors mostly determines wages by means of one pay scale table. About bargaining level, 81% of multi-employer bargaining include pay scale tables, while only 64% of single employer CBAs does. This data is summarized in figure 4, while more details can be found in tables A12 and A13 in the appendix.

Figure 4 Share of CBAs containing pay scales, by sector and bargaining level (%)



The characteristic feature of pay scales in a CBA, compared to a single wage floor, is that pay scales contain multiple pay rates or pay ranges, that differentiate the level of pay to which specific groups of employees are entitled. As figure 5 shows, over a third of CBAs that include pay scale tables, fix different pay rates based on the job functions or job types employees perform. Other common differentiators include the sub-sector that employees work in (14%), and workers group (15%) (e.g., apprentices, disabled, and previously unemployed workers)

Figure 5 Share of CBAs according to pay scales' differentiation\* (%)

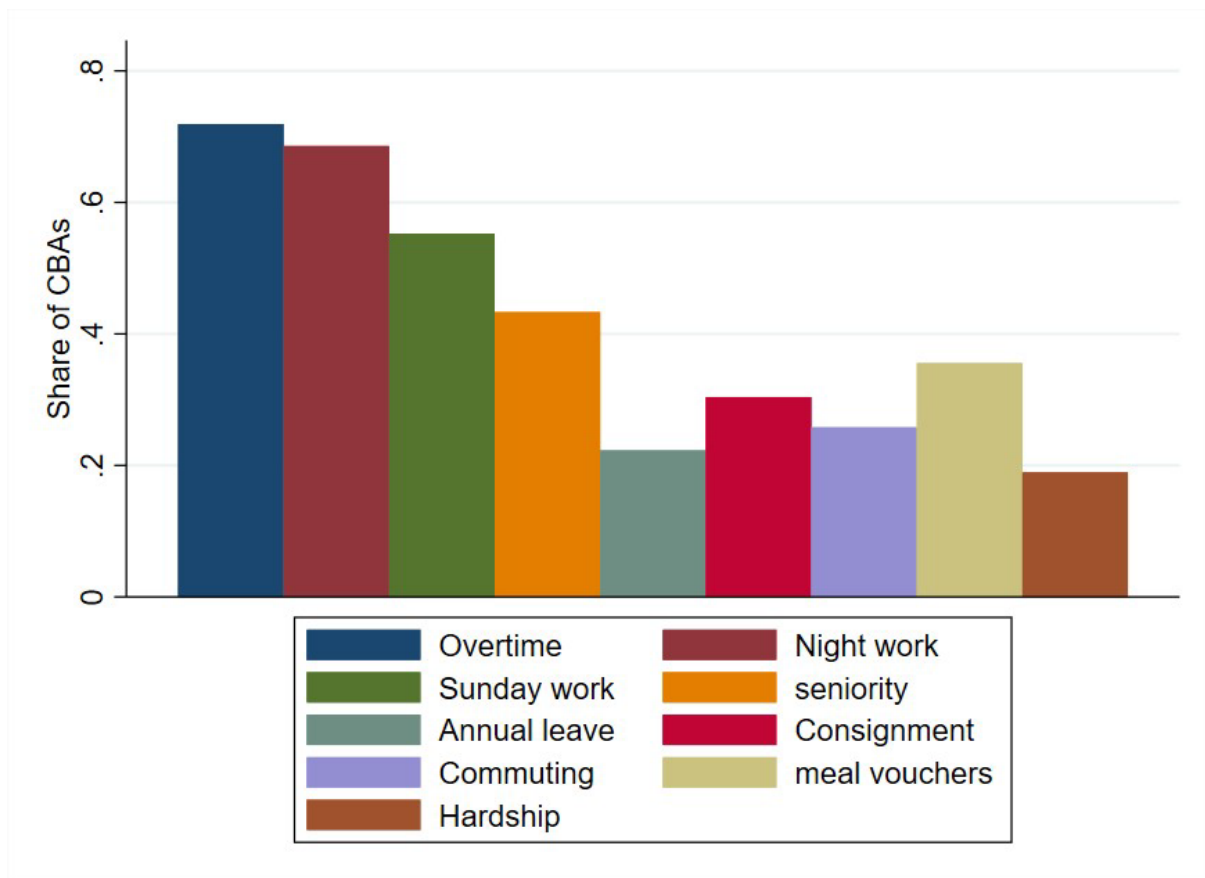


\* This plot only includes CBAs with pay scales. It is important to note the total number of observations of CBAs with pay scales (in any form) is 898. Out of those, only 306 have specific information on why the respective pay scales differ.

Next to basic pay rates contained in the abovementioned pay scales or wage floors, CBAs commonly include a range of premiums and allowances that complement basic pay. For example, CBAs often contain variable pay components, like higher pay rates for work performed during inconvenient hours. As displayed in Figure 6, premiums and allowances are most commonly negotiated for overtime and night work. As the following figure shows, other common premiums included in CBAs are premiums for Sunday work and allowances for seniority. In eight of the 10 selected countries, over 90% of CBAs contain provisions on premiums and allowances (see figure 7). Only in Bulgarian and Estonian are such provisions less common, with 69% and 56% respectively. Excepting professional, public and leisure services and others, the rest of the aggregated industries present proportions above 90% (see figure 8). No large differences were found across bargaining levels: 87% of single employer and 90% of multi-employer agreements include provisions on premiums and allowances (See details in tables A14, A15, and A16 in the appendix).

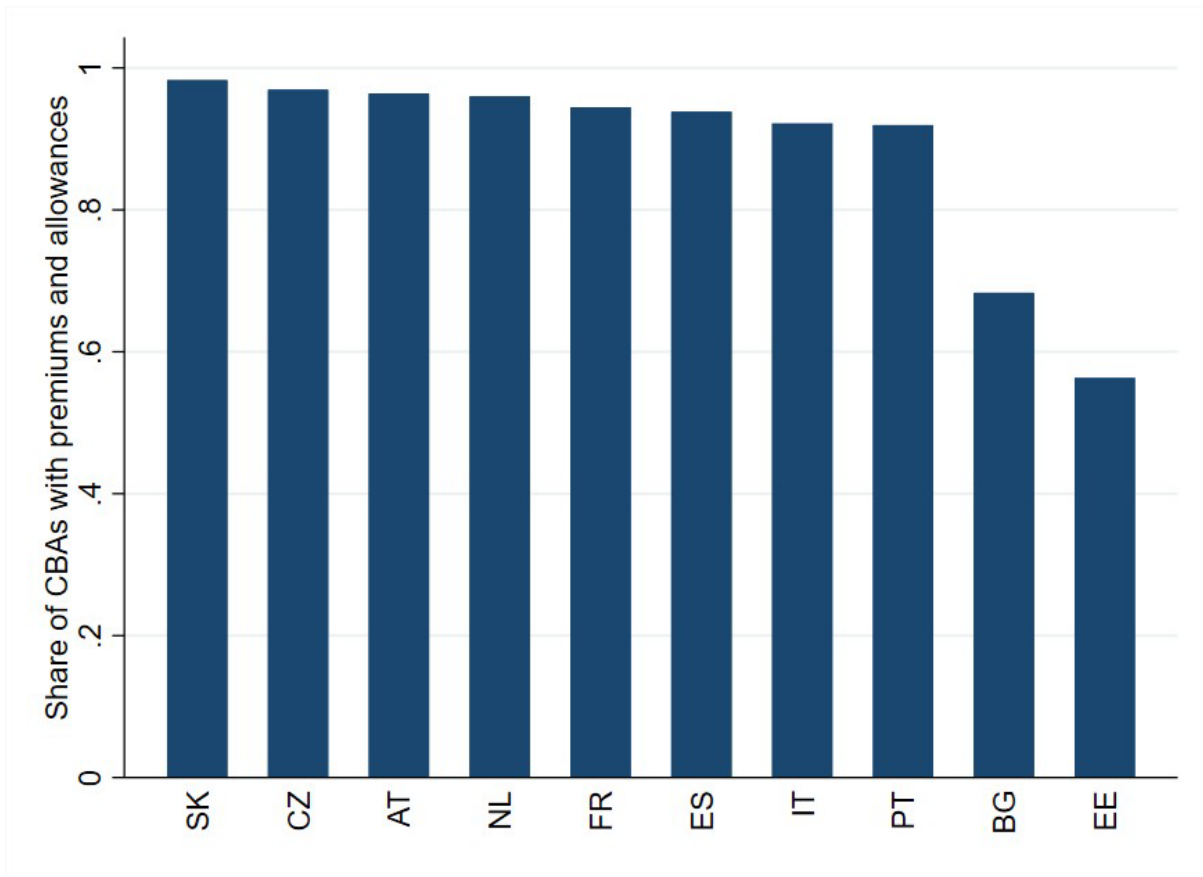


Figure 6 Share of CBAs according to content on premiums and allowances (%)

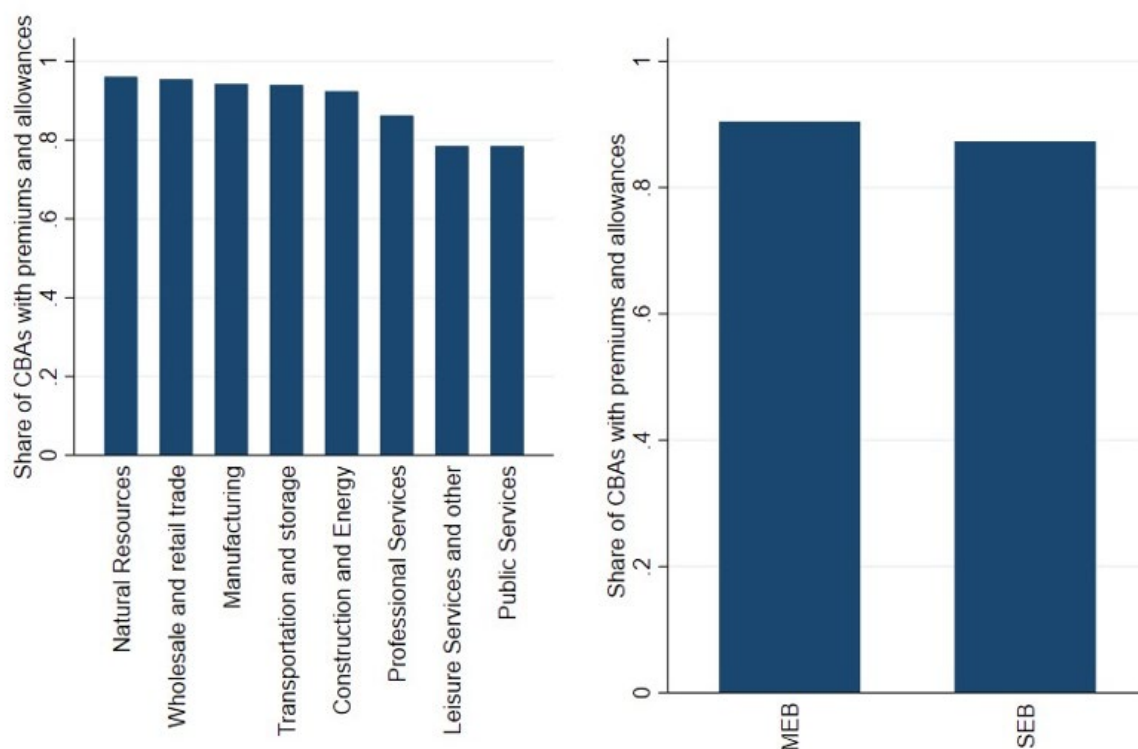


\* This plot only includes CBAs containing clauses on premiums and allowances, 1090 CBAs have specific information on such clauses.

Figure 7 Share of CBAs according to content on premiums and allowances, selected countries (%)



**Figure 8 Share of CBAs according to content on premiums and allowances, by industry and bargaining level (%)**



### Provisions on pay increases

Finally, CBAs commonly include negotiated pay increases. Pay increases raise the pay covered employees are entitled to, compared to the previous period. Pay increases can be negotiated with pay scales, meaning CBAs set out the level at which employees are paid and the increase in these pay levels. However, pay increases can also be negotiated in the absence of pay scales, leaving the determination of wage levels to individual employers or other bargaining levels while collectively negotiating the extent to which pay levels must rise.

Half of the CBAs in the sample include a structural wage increase, whereas the other half does not. As figures 9 and 10 show, however, there are substantial country differences in the extent to which CBAs include structural wage increases. The following figures show the distribution of CBAs on structural wage increases by country, aggregated industries, and bargaining level. Detailed content in the appendix's tables A17, A18, and A19.

Figure 9 shows that Italy, followed by Spain and the Netherlands, with 83, 78, and 74% of their corresponding CBAs having a structural wage increase, lead this category. On the opposite side, Estonia has the least CBAs containing a structural wage increase (1%), as all but one of its CBAs do not include such a clause. Portugal reaches 5%, while France and Slovakia have less than 30% of their CBAs with structural wage increases.

Figure 9 Share of CBAs with structural pay increase, selected countries (%)

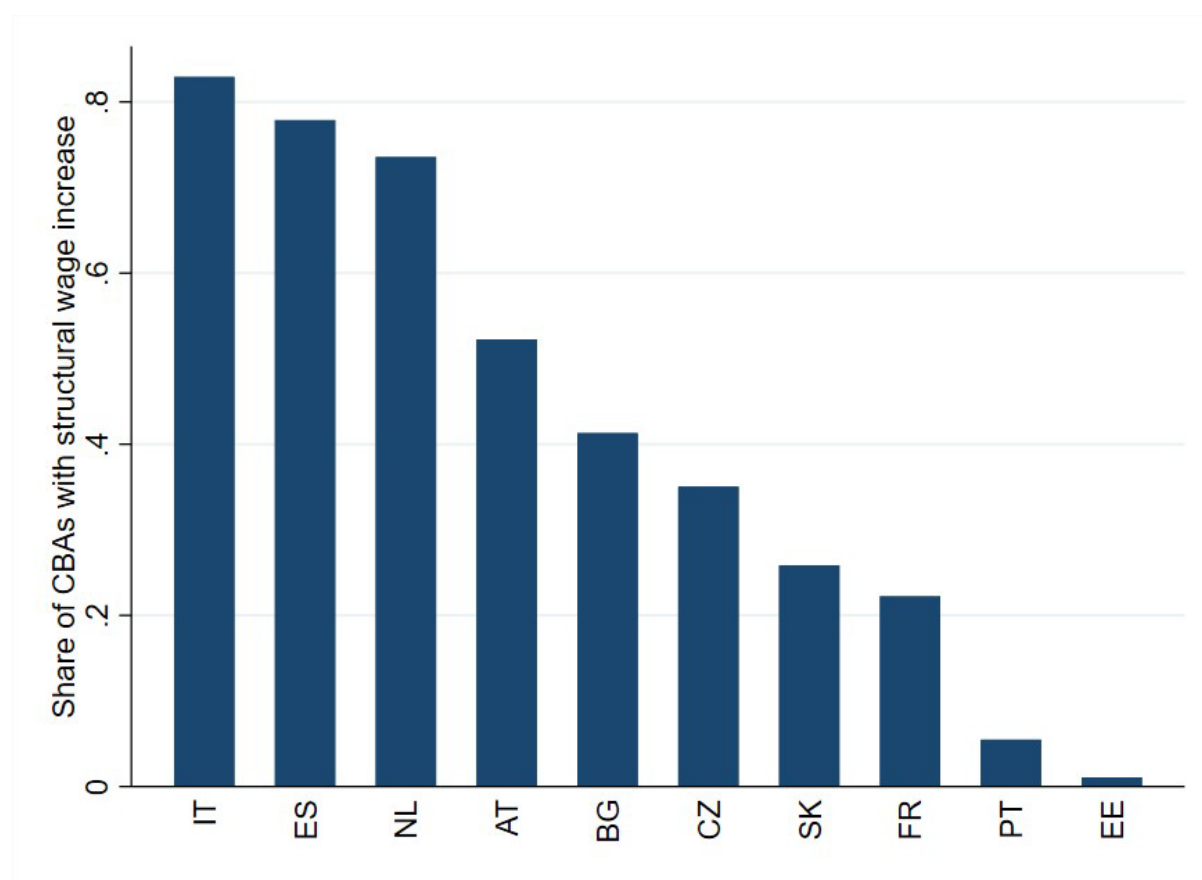
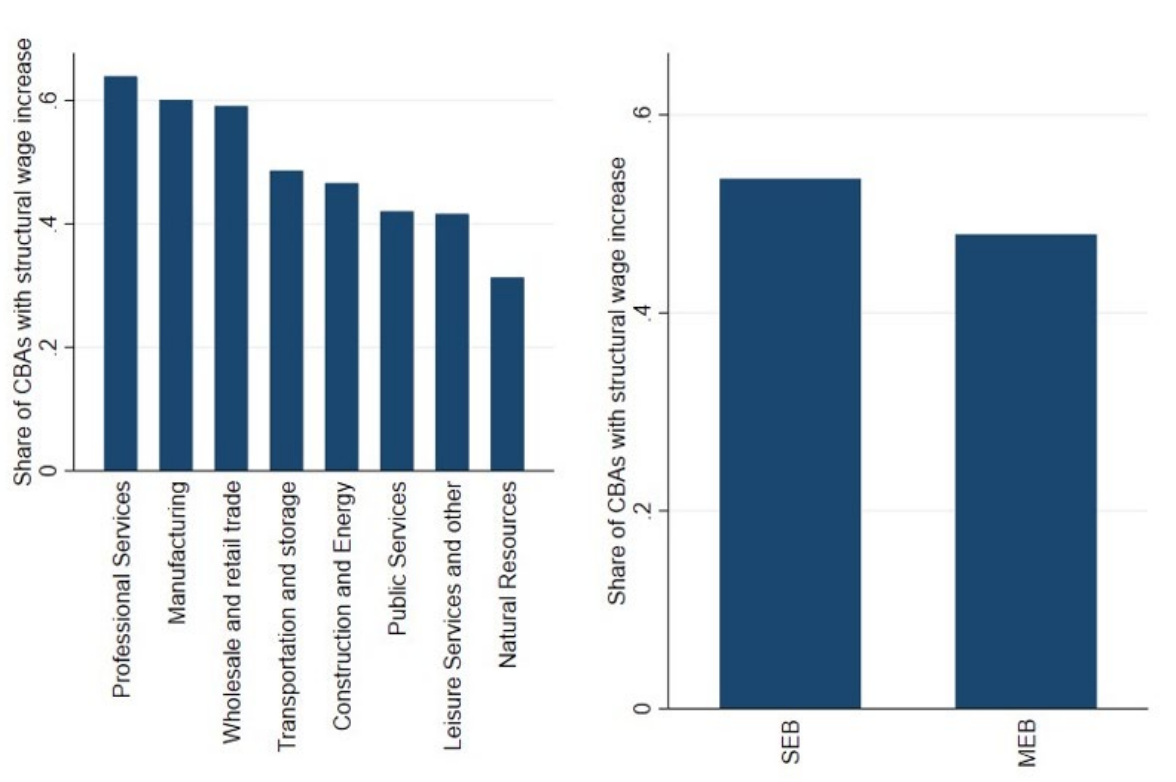


Figure 10 shows that differences between sectors, while present, are less pronounced than between countries. The higher differences can be found between professional services and natural resources. Natural Resources sector displays only 30% of its CBAs with a structural wage increase. While on the other edge, the industry of Professional Services has almost 65% of CBAs containing a structural wage increase. The most even industry is Transportation and storage, as 49% of its CBAs considers a such an increase. Only small differences were found in the inclusion of structure wage increases between different bargaining levels: 54% of the single-employer CBAs and 48% of multi-employer CBAs includes a structural wage increase. Details in the appendix's tables A17, A18, and A19.

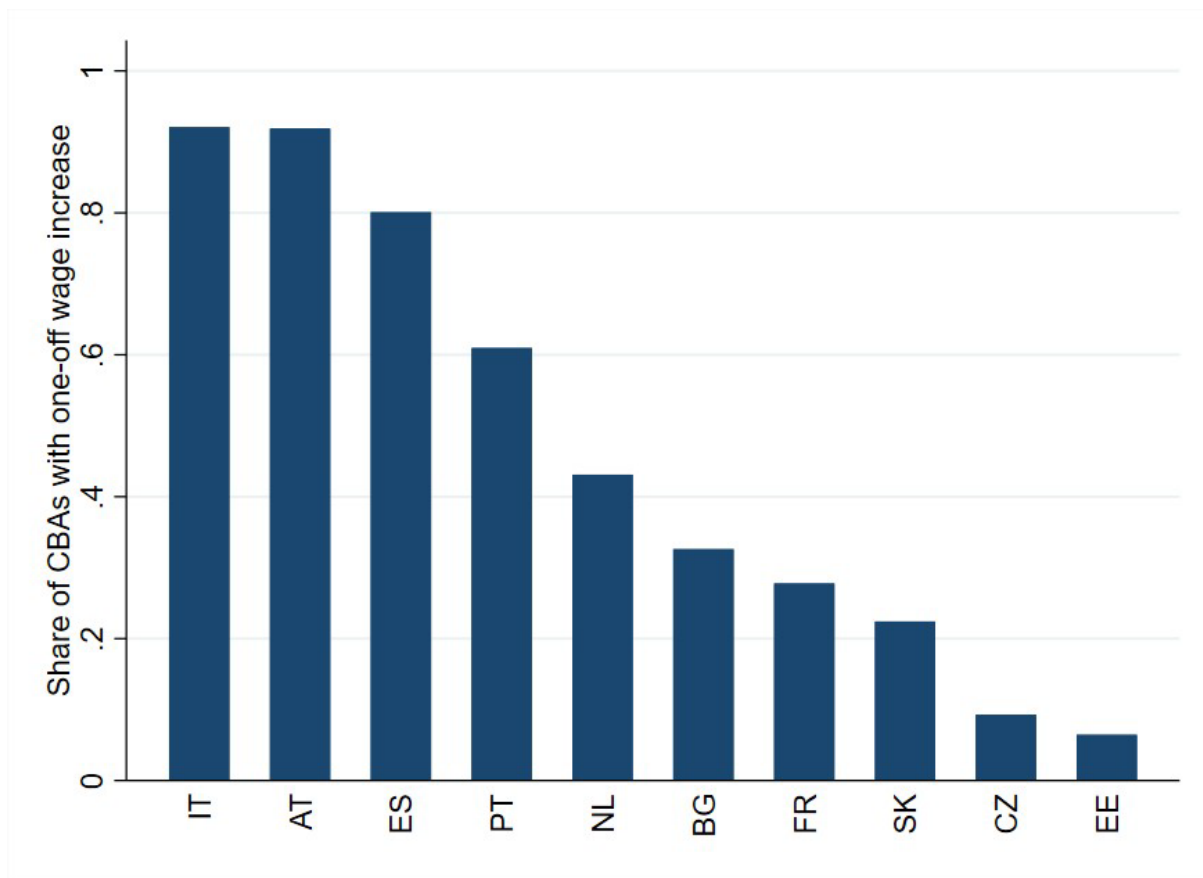
Figure 10 Share of CBAs with structural wage increase, by industry and bargaining level (%)



Instead of, or in addition to, structural wage increases, some CBAs contain a once-only wage increase. Most commonly, once-only pay rises constitute a lumpsum amount of money that workers receive following the negotiation of the CBA, but that does not alter the basic pay rate<sup>2</sup>. The following plot, Figure 11, show that about 56% of CBAs contain a once-only wage increase. Country differences in the inclusion of once-only wage increases are similar to those in structural wage increases: Italian and Austrian (92%) CBAs are most likely and Estonian CBAs least likely (6%) to include a once-only wage increase.

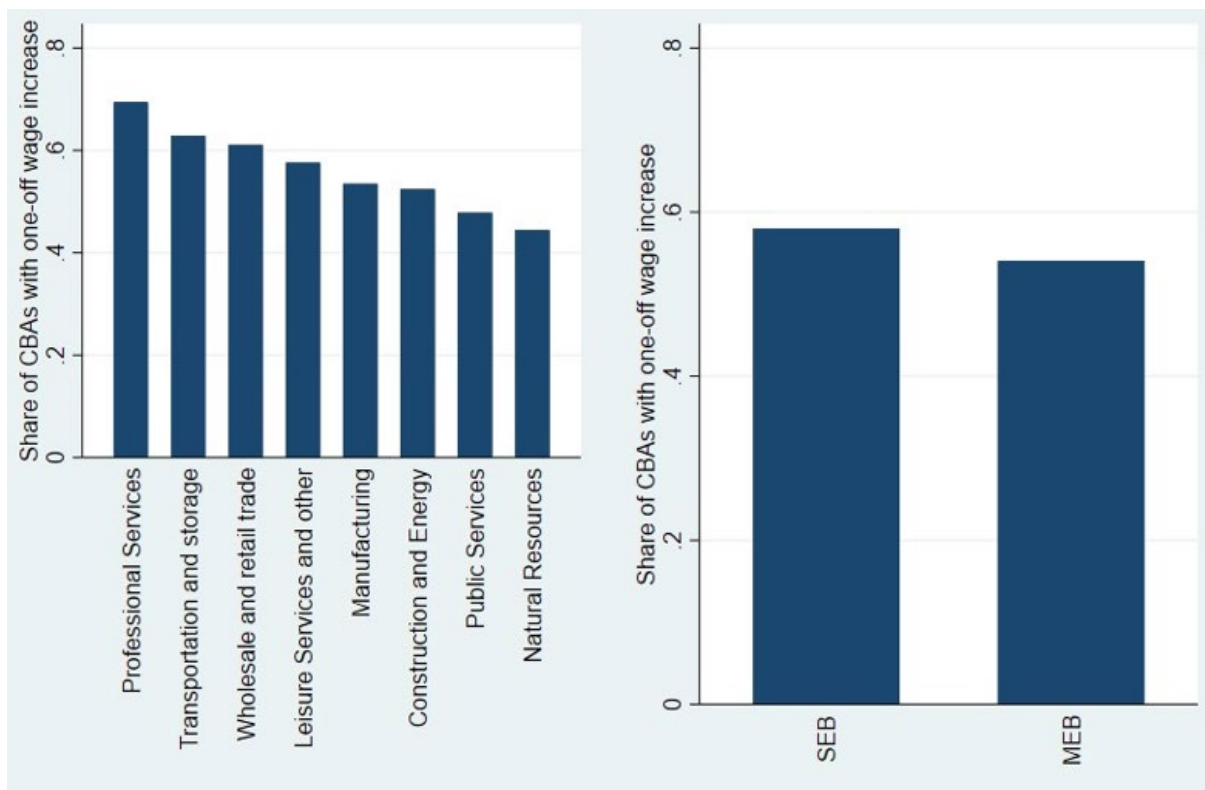
<sup>2</sup> The difference between a structural and a once-only pay increase is that the latter does not alter the basic pay rate. For instance, if an employee earns 1000 euro per month, a structure was increase of 100 euro implies that the employee will now earn 1100 per month. A once-only increase of 100 euro, on the other hand, implies the worker receives an extra payment of 100 euro once, but their monthly salary remains at 1000 euro.

Figure 11 Share of CBAs with only-once pay increase, selected countries (%)



The same CBAs content classified by industrial sector is presented in the figure 12. It shows that the highest proportion of CBAs containing a once-only wage increase are displayed by Professional Services and Transportation and Storage, and whole sale and retail trade (above 60%). Finally, regarding bargaining level, no major differences were found between single (58%) and multi-employer (54%) CBAs. Detailed breakdowns can be found in the appendix, tables A20, A21, and A22.

Figure 12 Share of CBAs with once-only wage increase, by industry and bargaining level (%)



The following figure (figure 13) depicts the median lowest wage per country found in the CBAs included in this study. There is a clear division showing a gap between those countries whose median lowest wage is above 1750 euros (Austria, Netherlands, Italy, France, and Spain) and those whose median lowest wage is neighboring 1000 euros per month (Slovakia, Portugal, Czechia, Bulgaria and Estonia). Therefore, the top and bottom limits correspond to Austria and Estonia respectively.

Figure 14 presents the same calculations per industry and bargaining level. Professional Services and Transportation and storage shows the highest median lowest wage bordering 2000 euros per month, while Leisure Services and other exhibit the lowest overpassing the 1500 euros per month. The second plot of this figure shows no significant difference between single and multi-employer, both around 1800 euros per month.

Figure 13 Median lowest wage, selected countries (PPP euros per month)

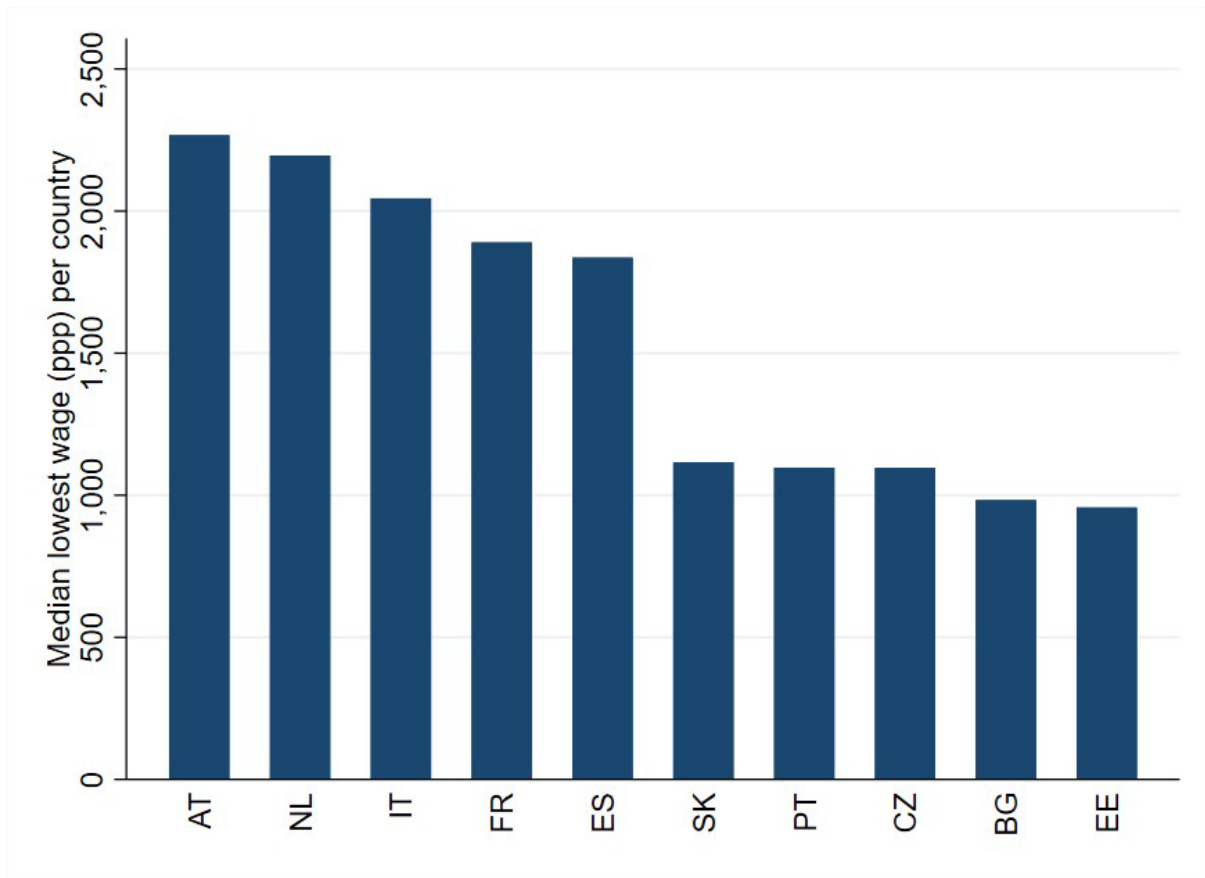
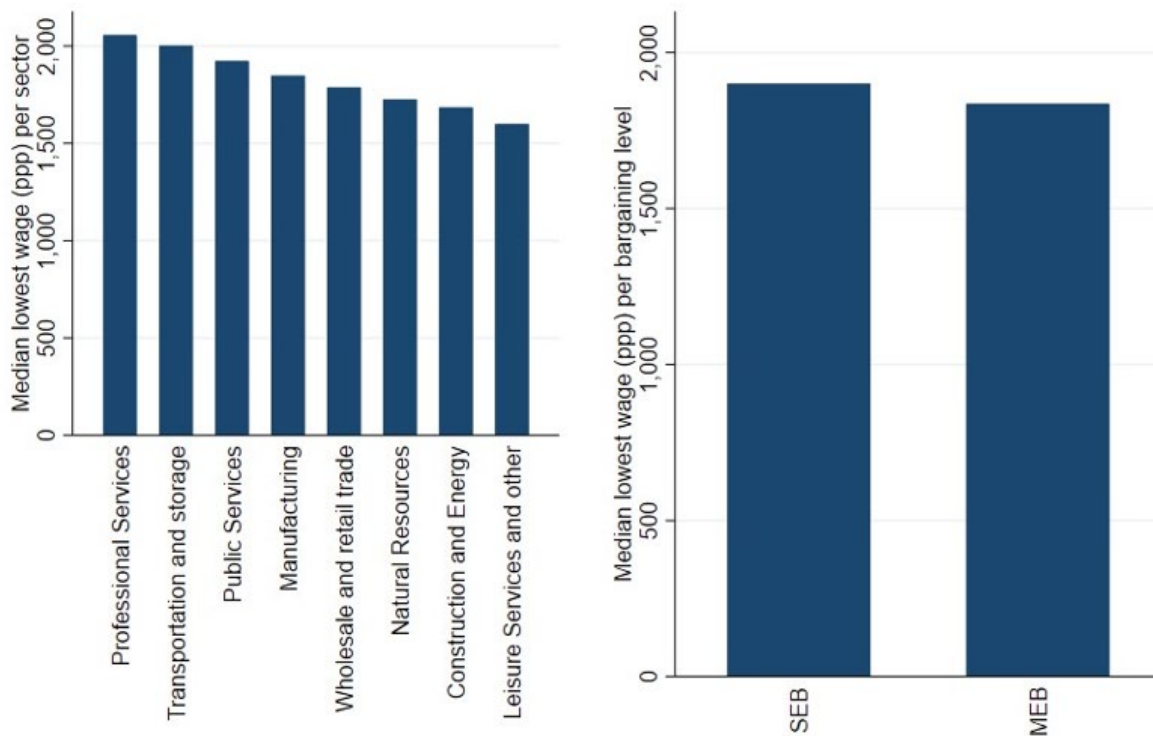


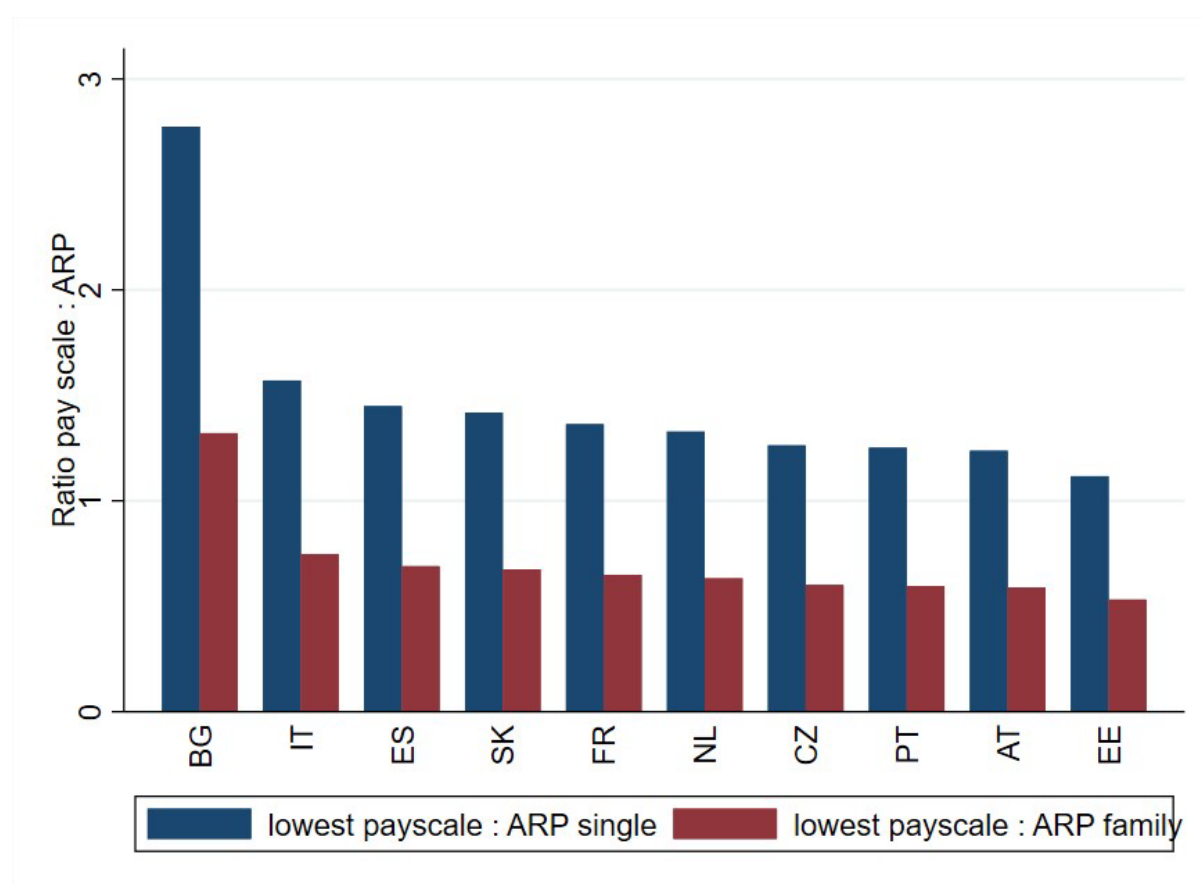
Figure 14 Median lowest wage, by industry and bargaining level (PPP euros per month)





The next two figures show the average ratio of the lowest and highest pay scales to the at-risk-of-poverty rate<sup>3</sup> (ARP) per country. In other words, the CBAs' negotiated pay scales are compared to poverty lines<sup>4</sup>. For both ratios, individual (in blue) and family thresholds (in red) are considered. Ratios that exceed the value one (y-axis) mean pay scales are higher than the poverty threshold; and below the value one means pay scales are below the poverty threshold. Figure 15 indicates that the highest average ratio of the lowest pay scale to ARP threshold at both individual and family levels are those of Bulgaria. The variation for the rest of the countries is of a small magnitude and around half those of Bulgaria. Figure 16 shows the same scheme concerning the edges of the distribution (Bulgaria and Estonia). The gaps look similar, but the difference is in the magnitude of the ratios. As expected (or according to the intuition), the ratios concerning the highest pay scale to ARP threshold are consistently higher than those concerning the lowest pay scale.

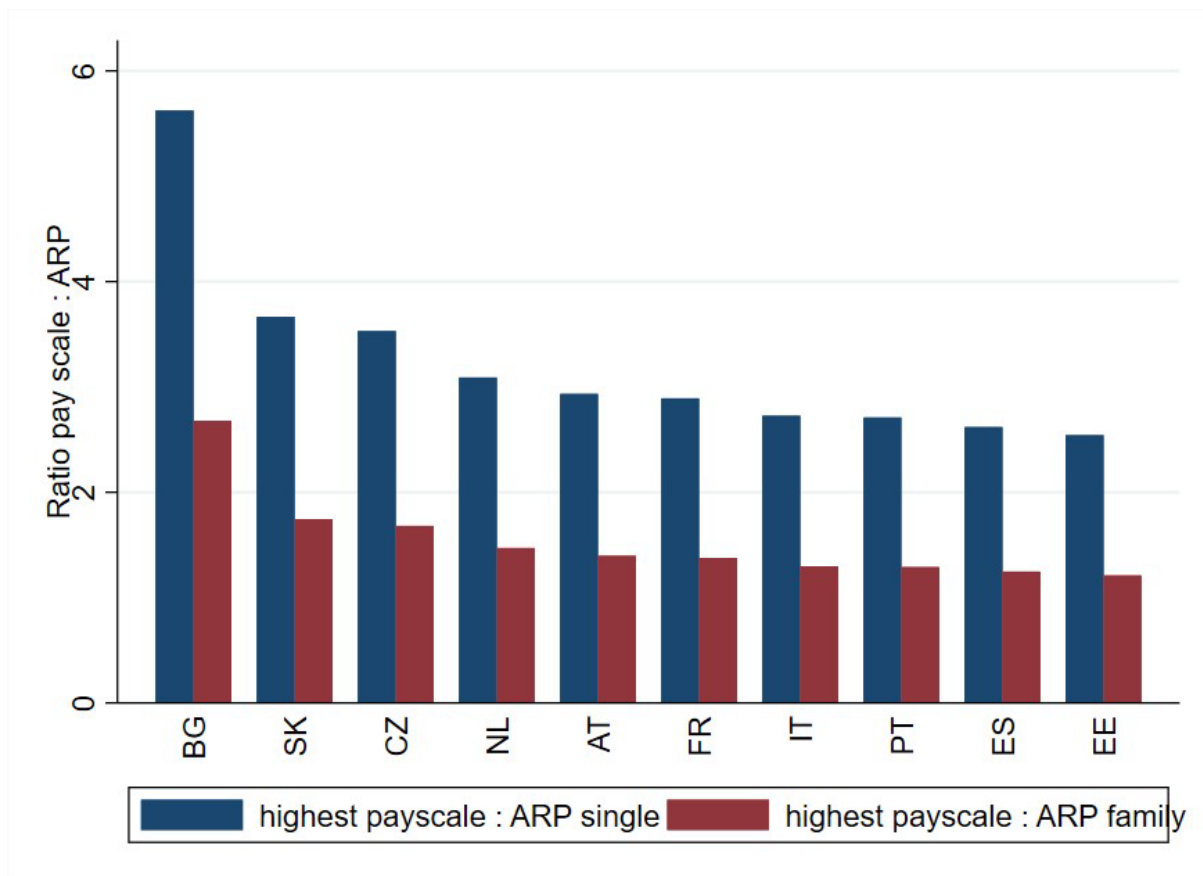
**Figure 15 Average Ratio of the lowest pay scale to at risk of poverty, selected countries.**



<sup>3</sup> Estimates of income thresholds below which people are “at risk of poverty”.

<sup>4</sup> Poverty thresholds for the selected countries are taken from Eurostat, including singles and family households of two adults and two children. Thresholds are set at 60% of the median wage in the respective country-year

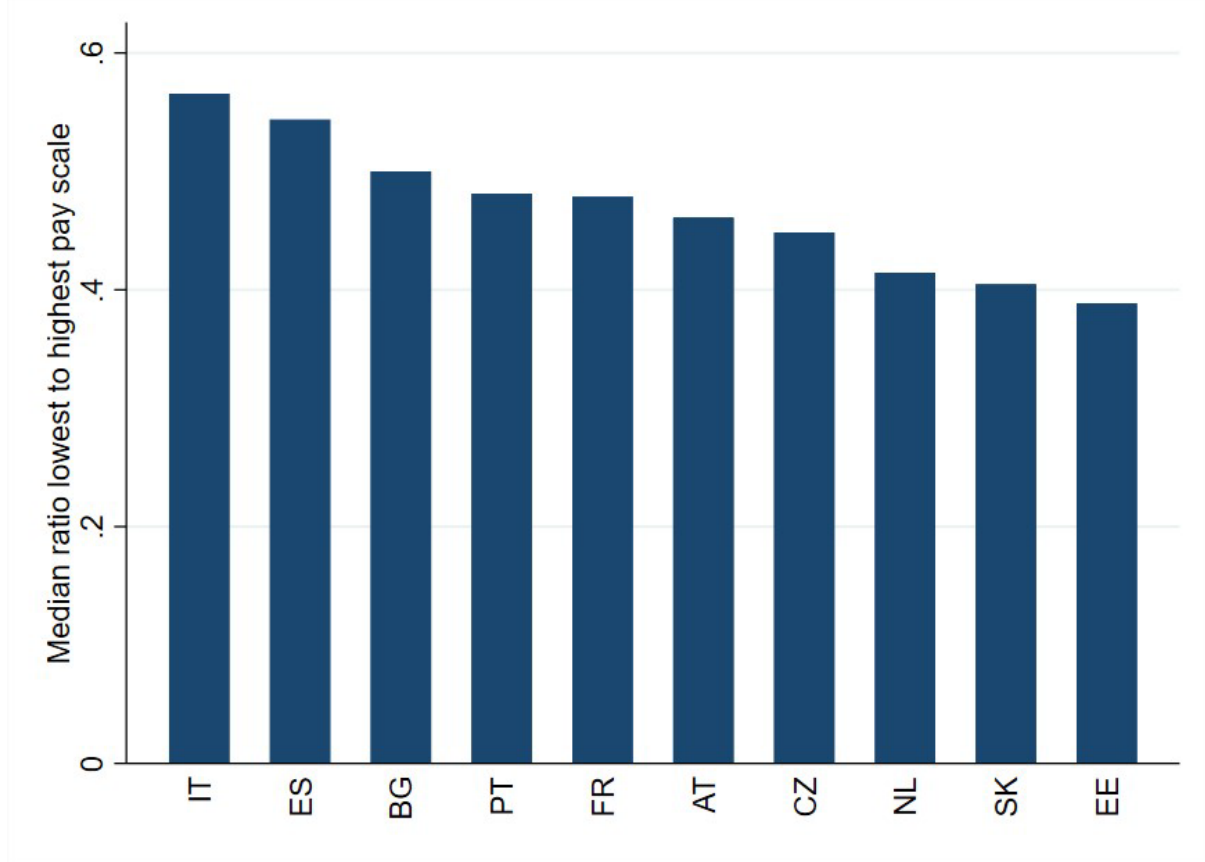
Figure 16 Average Ratio of the highest pay scale to at risk of poverty, selected countries.



Finally, the last 2 figures present the median ratio of the lowest to the highest pay scale classified by country, aggregated industry and bargaining level. This computation can be interpreted as an indication of negotiated wage inequality within each selected country.

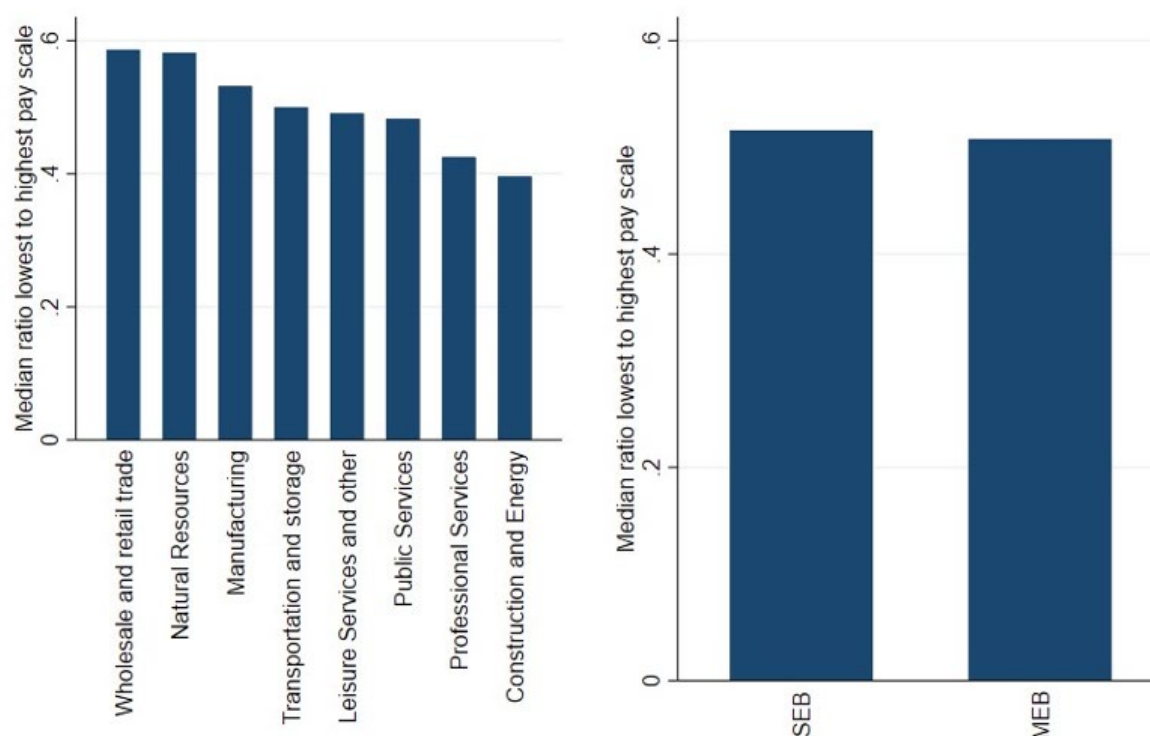
Figure 17 shows the median ratio of the lowest to the highest pay scale contained in CBAs for each country. A higher ratio indicates a shorter gap between the mentioned pay scale bottom and top limits, and therefore a more equal negotiated pay scheme. Following this logic, Italy has the most equal negotiated pay scales, and Estonia has the less equal ones.

Figure 17 Median ratio of the lowest to the highest pay scale contained in CBAs, selected countries



As it can be seen in figure 18, CBAs' negotiated pay scales are more equal in Wholesale and retail trade and Natural Resources and less equal in Construction and Energy. There is no significant difference by bargaining level.

**Figure 18 Median ratio of the lowest to the highest pay scale contained in CBAs, by sector and bargaining level**



## Floor Wages Gaps

### Minimum wage set by collective bargaining and how they compare to minimum statutory wages, European target minimum wages, and living wages

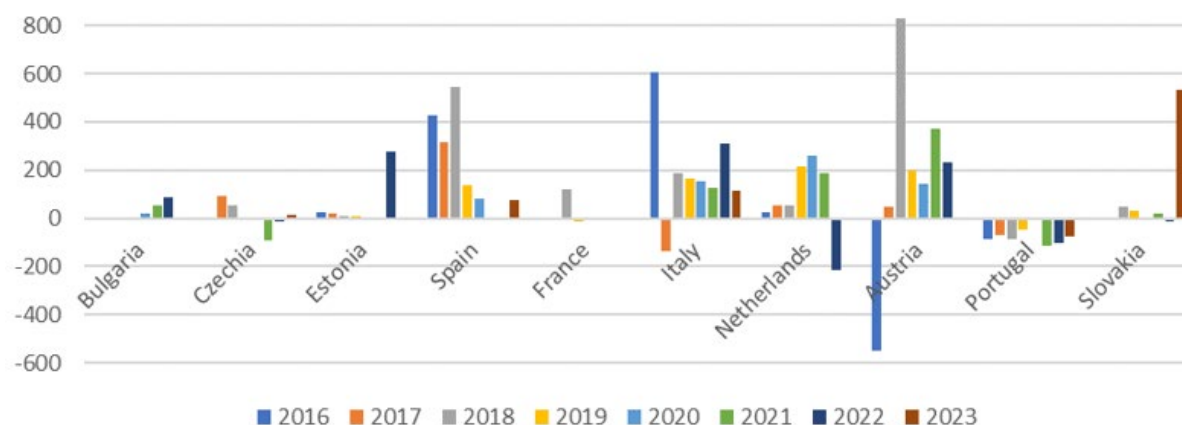
This section covers to what extent do wage floors fixed in CBAs in the 10 selected European countries meet decent wage standards, presenting the differences by country. To evaluate the extent to which the wages included in the CBAs should be considered decent wages, we compare them to different indicators for adequate wages: at risk of poverty thresholds, the target of the EU Minimum Wage Directive (50% of the mean) and WageIndicator’s living wages, which calculates living wages based on a food basket approach.

To do so, we calculate the average lowest step of the pay scales contained in the CBA database, converted to monthly payments, per country and year. With these inputs we create a short time series for the selected countries that allow us to compare them with the benchmarks mentioned. For the first two of these comparisons, the starting point is defined in 2016 as it is the year in which the European target rule (EU Minimum Wage Directive) started to be officially implemented. For the comparison with Living wages, the starting point is 2019.

The following figures present the corresponding differences. Figure 19 displays the difference, in euros, between the average lowest wage (ALW) and minimum wage set by the governments (SMW). Figure 20 presents the difference, in euros, between the average lowest wage (ALW) and EU Minimum Wage

Directive. Finally Figure 21 shows the difference, in euros, between the average lowest wage (ALW) and Living Wages.

**Figure 19 Difference between Average Lowest Wage (ALW, CBA database) and National Minimum Wage, selected countries, 2016-2023 (euros)**



\* Austria and Italy, as official minimum wages do not exist, an estimation was used for the purpose of this operation.

Sources for Italy estimation:

<https://www.eurofound.europa.eu/en/resources/article/2023/minimum-wage-debate-italy>

<https://tradingeconomics.com/italy/wages-low-skilled>

[https://moodle.adaptland.it/pluginfile.php/28229/mod\\_resource/content/2/newin\\_italy\\_FINAL\\_DEF.pdf](https://moodle.adaptland.it/pluginfile.php/28229/mod_resource/content/2/newin_italy_FINAL_DEF.pdf)

Sources for Austria estimation: (complete)

In the figure above, the bars above the zero-line represent case where the average wage floor in the CBAs of one country in a specific year exceeds the statutory minimum wage (e.g., the minimum wage is set at 1000 euro, while the average collectively negotiated wage floor is 1200 euro). The bars below the zero-line represent the opposite case: the average negotiated wage floor in the CBAs is lower than the statutory minimum wage. The plot shows that in the majority of cases, the average minimum wage of the CBAs collected per country compares to the minimum wage set by the respective governments within a range between -100, +200 euros. As can be seen in the plot, a more dense allocation can be found above the zero axis, meaning that the average of the lowest wages contained in the CBAs per country are generally above the respective minimum wages set at the corresponding national level.

The second comparison aims to provide a comparative measure of European countries' capacity to reach a common European target monthly minimum wage level, set at 50% of the mean wage per country. This proposed indicator will calculate the difference between the prevailing national monthly average lowest wage (ALW, calculated from the floor wages collected from the CBAs dataset) and the EU target for each country. Countries with minimum wages currently above such a target level will have a positive gap, while countries below this reference will have a negative gap. A larger negative gap implies a lower present capacity to meet the common EU minimum wage target. By benchmarking current national minimums against a standardized EU-level, this indicator can shed light on the existing variation in wage floors across member states. Mapping these gaps over time can also show convergence or divergence in minimum wage setting practices and capacities. The indicator provides a summary statistic to track a country's relative position in achieving potential future EU minimum wage targets within a social dimension index.

The European target rule is calculated (as indicated by its definition) as 50% of the average monthly wage for each country using data from UNECE. For the period covered, it is also possible to calculate

the difference between the ALW and European target (2016-2022). Except for Italy, during this period the European target is higher than the ALW. Therefore, and according to Figure 20, the gap between the average floor (obtained from the CBAs database) and the European target shows more negative figures than the first comparison of this section (figure 19). Only Italy shows a positive gap for the entire period. Spain also shows a positive difference until 2020.

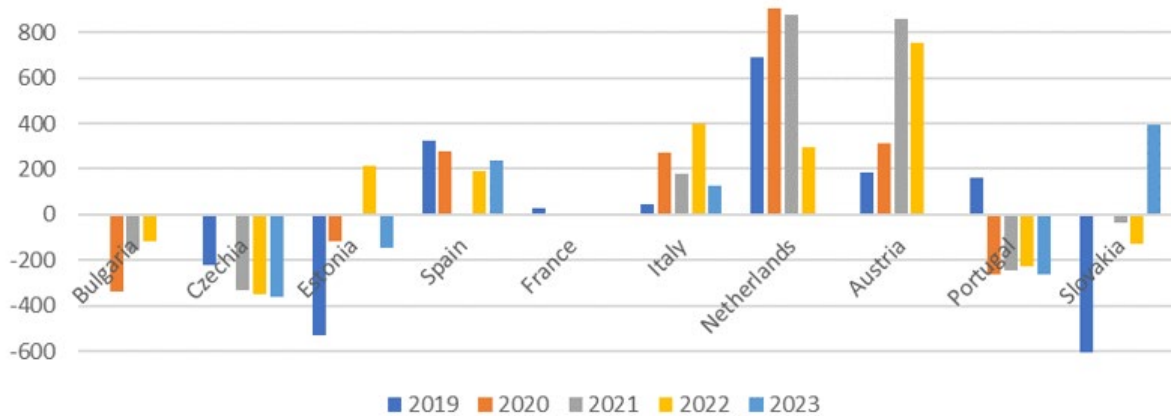
**Figure 20 Difference between Average Lowest Wage (ALW, CBA database) and EU Minimum Wage Directive, selected countries, 2016-2022 (euros)**



Source: Own elaboration using UNECE and BARWAGE data

Finally, the Minimum Lowest Wage - Living Wage Gap is presented in Figure 21. It aims to measure European countries' capacity to establish minimum wage levels that meet decent living wage standards. It will calculate the difference between the prevailing national monthly minimum wage and living wage estimates provided by the WageIndicator Foundation for each country. Countries where the minimum wage falls below the defined living wage will have a negative gap, indicating the degree of shortfall in providing an adequate income floor (Bulgaria, Czechia, Estonia, Portugal, and Slovakia). Countries with minimums above the living wage benchmark will have a positive gap (Spain, France, Italy, Netherlands, and Austria). This proposed indicator can shed light on whether existing legal minimums ensure a decent basic standard of living across different national contexts based on costs of essential needs. Tracking the living wage gap over time can show progress or deterioration in aligning wage floors with social requirements. The indicator provides a summary measure of the adequacy of minimum wage policies, complementing indicators focused on Kaitz ratios or proportions of the median/mean wage. It focuses policy attention on the social purpose of minimum wages to provide a livable income.

**Figure 21 Difference between Average Lowest Wage (ALW, CBAs database) and Living Wages, selected countries, 2019-2023 (euros)**



Source: Own elaboration using BARWAGE data, and WageIndicator's Living Wages data.

According to the definitions used to calculate the gaps presented in this section, it is possible to conclude that Spain and Italy are consistently capable of meeting decent wage standards for the period 2016-2023. On the other side Portugal, under any of the calculated differences presented in this section, runs short. This means that Portugal, for the period covered here (2016-2023) seems unable to meet any minimum wage standard (SMW, EU Minimum Wage Directive, nor Living Wages). The average wage floors collected from the CBAs of Austria and the Netherlands are successful in exceeding their corresponding Living Wages, though not the other two benchmarks. The average wage floors collected from the CBAs of Bulgaria and Czechia seem to be successful in exceeding their corresponding SMW, but fail against their corresponding European target rule and Living Wages.

## Conclusion and discussions

This report developed for the BARWAGE project (European Union social dialogue grant 101052319), aimed to describe and assess the wage (including wage floors and increases) specific content in CBAs and wage determination across sectors in ten selected European countries. In so doing, it contributes to an ongoing academic debate about the interplay between collective bargaining and wage determination.

Based on the collected sample of 1224 CBAs across 10 European countries, this analysis reveals several key insights into negotiated wage-setting processes. The vast majority of agreements (97%) contain explicit wage provisions, underscoring the centrality of bargaining in determining pay. Importantly, 94% of agreements specify the level at which wages are to be set – whether industry, company, or individual contract. The data show most agreements situate wage setting at the industry level, though substantial variation exists across countries. Italy, the Netherlands, and Portugal exhibit high industry-level determination, while firm-level predominates in Bulgaria and Slovakia. France is distinct with nearly all agreements placing wages at the individual contract level. This research maps heterogeneity in wage determination levels across Europe while confirming industry bargaining as the modal approach overall. The nuanced patterns uncovered provide critical empirical context for understanding and engaging with the wage-setting landscape across these national economies and labor relations systems. The analysis further reveals wage determination patterns across major economic sectors. All sectors demonstrate a strong preference for industry-level wage setting, from 65% in natural resources and manufacturing to 46% in transportation and storage. Company-level bargaining displays more convergence, ranging between 22-35% across sectors. Additionally, single-employer agreements favor company-level wage setting at 56%, while multi-employer agreements predominately rely on industry-level scales at 76%.

With regards to wage floors, direct references to statutory minimum wages in collective agreements are relatively uncommon, appearing in just 8% of the sampled contracts. France shows the highest prevalence at 28%, versus less than 1% in Italy and Portugal. By sector, only professional services and retail trade exceed 10% incidence of minimum wage compliance clauses. Just 6% of single-employer and 9% of multi-employer agreements contain such references. Therefore, negotiated wage scales themselves, rather than explicit minimum wage clauses, tend to establish effective wage floors in most agreements. Industry-level wage determination dominates across sectors and contract types, yet country and sectoral differences in bargaining approaches persist. Compliance with SMW is not a predominant contract feature, indicating CBAs directly establish normative wage floors in most cases.

The analysis reveals 28% of collective agreements contain specific clauses on lowest wages to be paid, with substantial variation across countries. Italy (79%) and France (75%) exhibit high incidence, while Bulgaria (3%), Portugal (7%) and Czechia (11%) demonstrate low prevalence. By sector, professional services (40%) and wholesale and retail trade (38%) lead in including lowest wage clauses. Critically, 19% of agreements go beyond just mentioning to directly fixing concrete lowest wage amounts. Again, Italy (78%) and France (36%) are ahead, with Bulgaria and Czechia lagging at around 2%. By sector, wholesale and retail trade (26%) and professional services (23%) top in terms of direct lowest wage setting. No major differences emerge between single and multi-employer contracts. While explicit



lowest wage clauses are unevenly distributed, nearly one fifth of agreements leverage collective bargaining to concretely fix base wage floors. This suggests collective negotiation itself, beyond compliance with statutory minimums, plays a significant role in determining wage floors across Europe's diverse industrial relations systems.

Pay scale tables specifying wage rates are a central feature of collective bargaining, contained in 72% of the analyzed agreements overall. However, substantial national variation exists. Slovakia (10%), Estonia (39%), France (44%) and Czechia (47%) demonstrate lower pay scale incidence, while the Netherlands (89%), Portugal (98%), and Austria, Italy and Spain (>85%) exhibit extensive use. By sector, public services (33% without scales) lags behind construction/energy (>80% inclusion). Multi-employer contracts (81%) tend to prioritize scales over single-employer ones (64%). Pay scales commonly differentiate rates based on job function (35% of agreements), sub-sector (14%), and worker groups like apprentices (15%), going beyond just setting universal floors. Further, 90% of agreements incorporate premiums and allowances for things like overtime, nights, and seniority - essential complements to base pay rates. Nonetheless, Bulgaria (68%) and Estonia (56%) again fall behind in premiums provisions. While heterogeneous, pay scale tables are pivotal mechanisms for collective bargaining to systematically extend beyond minimum wage floors in order to structure compensation frameworks across employment categories and working conditions. Differentiated pay rates and premiums are key means by which CBAs shape wage formation.

Negotiated pay increases are another key mechanism by which collective bargaining shapes wage dynamics over time. Half of the analyzed agreements contain explicit clauses on structural wage increases, either linked to pay scales or as standalone provisions. Substantial country variation persists, with Italy (83%), Spain (78%), and the Netherlands (74%) exhibiting high prevalence versus Estonia (1%), Portugal (5%), and France and Slovakia (<30%) lagging behind. By sector, transportation/storage (37%) and public services (42%) have lower incidence of negotiated wage increases. The level of bargaining also matters, with 39% of single-employer but 61% of multi-employer agreements specifying increases. On average, when included, wage increases range from 2-3% annually. Collectively negotiated pay raises are unevenly distributed across countries but function as pivotal temporal mechanisms in about half of agreements to systematically progress wage levels beyond any initial bargained floors. As such, wage increases constitute important agenda items at the bargaining table with tangible impacts on pay trajectories.

In addition to structural increases, one-time lumpsum wage increases are negotiated in 56% of agreements. These once-only rises provide immediate pay supplements without altering underlying pay scales. Similar national disparities emerge, with Italy and Austria (92%) frequently utilizing such clauses versus just 6% in Estonia. By sector, professional services and transportation/storage lead in incidence of one-time increases (above 60%), compared to construction/energy lagging at 44%. Bargaining level differences are minor. On average, lumpsum amounts range from 1-2% of monthly pay when granted. In summary, alongside scheduled pay raises, temporary wage boosts are negotiated in over half of contracts as additional upfront compensation tools, demonstrating the multifaceted, flexible nature of collectively bargained pay determination over time. One-time and structural increases combined provide wage dynamism.

The analysis reveals a bifurcation in the median lowest monthly wages set by collective bargaining agreements across the sampled European countries. Austria, the Netherlands, Italy, France and Spain comprise a higher wage group with median floors exceeding €1750. Meanwhile, Slovakia, Portugal, Czechia, Bulgaria and Estonia form a lower wage cluster around €1000 per month. By sector, professional services and transportation/storage display the highest median lowest wages near €2000, while leisure services lag around €1500. No major differences emerge between single and multi-employer contracts, both centering on approximately €1800. The data demonstrate substantive national disparities in negotiated wage floors, with a divergence between higher-paying and lower-paying country clusters. Sectoral variation exists but is muted relative to national influences. The pan-European sample provides unique insight into the collectively bargained wage floor landscape's contours.

Comparing negotiated pay scales to poverty thresholds reveals Bulgaria's average lowest and highest rates substantially exceed both individual and household at-risk-of-poverty lines. Other countries show smaller positive ratios around 0.5. This indicates collectively bargained wages overall surpass poverty levels, but with lower margins outside Bulgaria. Further analysis of the ratio between lowest and highest pay scales provides insight into relative equality of negotiated wage structures. Italy displays the most equal ratios, with smaller gaps between floor and ceiling. Estonia shows the highest inequality. By sector, wholesale and retail trade and natural resources appear more equal than construction and energy. No major bargaining level differences emerge. The data largely validate collective bargaining as an institution that raises pay above poverty, enhancing adequacy. But negotiated wage inequality varies substantively across countries and industries, warranting continued attention to equity in bargaining processes and outcomes.

This analysis of collectively bargained wage floors and structures yields several key takeaways regarding the ability to meet decent wage standards. Spain and Italy consistently achieve adequacy across metrics like statutory minimum wages, EU directive targets, and living wages over 2016-2023. In contrast, Portugal falls short by all measures, signaling challenges in attaining negotiated living wages. Austria and the Netherlands surpass living wage thresholds through bargaining, but not other benchmarks. Bulgaria and Czechia exceed statutory minimums yet lag on EU-level standards and living wages. While substantial heterogeneity persists, collective bargaining largely functions to promote wage adequacy across Europe. However, shortfalls in some countries and sectors relative to key benchmarks highlight areas warranting attention to ensure broad access to decent wages. Ongoing progress in collectively negotiated pay scales will remain important for upholding income adequacy and social inclusion.

Among the sampled countries, it is worthy to highlight that Austria and Italy are unique in lacking statutory minimum wages. Yet both demonstrate extensive collective bargaining coverage, with negotiated agreements setting wage floors for nearly all workers. This provides a telling comparison of bargaining-based vs. legal wage floors. Italy's average collectively bargained wage floor consistently meets or exceeds benchmarks like estimated minimums, EU target, and living wages. Strong sectoral bargaining fills the gap left by absent minimum wage law. Meanwhile Austria presents a more mixed picture in achieving adequacy. In summary, Italy exemplifies potential for robust collective bargaining institutions to deliver equitable wage outcomes even without statutory wage minima. Sector-level agreements can substitute for national wage floors. However, Austria shows union strength alone may not guarantee adequacy. The comparison highlights important nuances in assessing bargaining's role in decent wage determination absent minimum wage regulations.

This comprehensive report charts new empirical terrain, providing unprecedented insight into the intricate landscape of remuneration provisions codified in collective labor contracts across Europe. The mapping of wage determination processes, negotiated wage supplements, and scheduled pay raises hold substantial value for researchers, policymakers, negotiators and stakeholders engaged with employment standards, remuneration, and industrial relations. Illuminating both heterogeneity and common patterns enhances understanding of collectively bargained wages in this complex domain.

Our study contributes makes both theoretical and empirical contributions to the debate about the interaction between wages and collective bargaining. Furthermore, we contribute to the EU policy agenda by providing quantitative evidence for the de-facto potential of collective bargaining as a policy instrument for achieving decent wages in Europe, as well as estimating its added value compared to SMW rates.

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## Appendix

**Table A1: Share of CBAs with clauses on wages, by sector**

Eight sectors	Does the agreement have clauses on wages?		
	No	Yes	Total
Natural Resources	2 2%	99 98%	101 100%
Manufacturing	2 1%	258 99%	260 100%
Construction and Energy	2 2%	103 98%	105 100%
Wholesale and retail trade	3 2%	149 98%	152 100%
Transportation and storage	1 1%	148 99%	149 100%
Professional Services	1 1%	108 99%	109 100%
Public Services	11 5%	207 95%	218 100%
Leisure Services and other	5 4%	125 96%	130 100%
Total	27 2%	1197 98%	1224 100%

**Table A2: Share of CBAs with clauses on wages, by level of bargaining**

Single vs multi-employer bargaining	Does the agreement have clauses on wages?		
	No	Yes	Total
SEB	18 4%	495 96%	513 100%
MEB	9 1%	701 99%	710 100%
Total	27 2%	1196 98%	1223 100%

**Table A3: Level at which wages are determined, by country**

	Level at which wages are determined						Total
	Individual contracts	Company level	Industry/sector	State/regional	National framework agreement	Elsewhere	
AT	61 56%	0 0%	35 32%	10 9%	3 3%	0 0%	109 100%
BG	1 1%	69 78%	19 21%	0 0%	0 0%	0 0%	89 100%
CZ	1 1%	20 22%	68 74%	3 3%	0 0%	0 0%	92 100%
EE	22 27%	30 37%	23 28%	7 9%	0 0%	0 0%	82 100%
ES	8 4%	85 40%	116 54%	3 1%	1 0.5%	1 0.5%	214 100%
FR	34 94%	0 0%	2 6%	0 0%	0 0%	0 0%	36 100%
IT	2 1%	3 2%	150 96%	0 0%	2 1%	0 0%	157 100%
NL	10 6%	30 18%	126 75%	0 0%	0 0%	2 1%	168 100%
PT	6 4%	34 24%	100 71%	0 0%	1 1%	0 0%	141 100%
SK	6 10%	38 66%	10 17%	3 5%	1 2%	0 0%	58 100%
Total	151 13%	309 27%	649 56.63	26 2%	8 0.7%	3 0.26%	1146 100%

**Tables A4, A5, and A6 (Statutory Minimum Wages)****Table A4: Share of CBAs with clauses on the minimum wage by country**

	Agreement clause mw set by govt (% all)		
	No	Yes	Total
AT	92.79	7.21	100
BG	98.02	1.98	100
CZ	88.78	11.22	100
EE	92.23	7.77	100
ES	94.71	5.29	100
FR	72.22	27.78	100
IT	99.40	0.60	100
NL	78.86	21.14	100
PT	99.33	0.67	100
SK	87.93	12.07	100
Total	92.08	7.92	100

**Table A5: Share of CBAs with clauses on the minimum wage by sector**

Eight sectors	Agreement clause mw set by govt (% all)		
	No	Yes	Total
Natural Resources	96.04	3.96	100.00
Manufacturing	91.15	8.85	100.00
Construction and Energy	94.29	5.71	100.00
Wholesale and retail trade	87.50	12.50	100.00
Transportation and storage	91.95	8.05	100.00
Professional Services	89.91	10.09	100.00
Public Services	94.50	5.50	100.00
Leisure Services and other	92.31	7.69	100.00
Total	92.08	7.92	100.00

**Table A6: Share of CBAs with clauses on the minimum wage by level of bargaining**

Single vs multi-employer bargaining	Agreement clause mw set by govt (% all)		
	No	Yes	Total
SEB	93.96	6.04	100
MEB	90.70	9.30	100
Total	92.07	7.93	100

**Table A7: Share of CBAs with clauses on the lowest wages by level of bargaining**

Single vs multi-employer bargaining	Agreement has clause on lowest wage to be paid (% all)		
	No	Yes	Total
SEB	72	28	100
MEB	72	28	100
Total	72	28	100

**Tables A8, A9, and A10****Table A8: Share of CBAs with clauses fixing the lowest wages by country**

	Agreement sets lowest wage to be paid (% all)		
	No	Yes	Total
AT	86.49	13.51	100
BG	98.02	1.98	100
CZ	97.96	2.04	100
EE	83.50	16.50	100
ES	92.51	7.49	100
FR	63.89	36.11	100
IT	22.29	77.71	100
NL	87.43	12.57	100
PT	95.97	4.03	100
SK	91.38	8.62	100
Total	81.37	18.63	100



**Table A9: Share of CBAs with clauses fixing the lowest wages by sector**

Eight sectors	Agreement sets lowest wage to be paid (% all)		
	No	Yes	Total
Natural Resources	86.14	13.86	100
Manufacturing	86.92	13.08	100
Construction and Energy	80.95	19.05	100
Wholesale and retail trade	74.34	25.66	100
Transportation and storage	80.54	19.46	100
Professional Services	77.06	22.94	100
Public Services	79.82	20.18	100
Leisure Services and other	82.31	17.69	100
Total	81.37	18.63	100

**Table A10: Share of CBAs with clauses fixing the lowest wages by level of bargaining**

Single vs multi-employer bargaining	Agreement sets lowest wage to be paid (% all)		
	No	Yes	Total
SEB	82	18	100
MEB	81	19	100
Total	81	19	100

**Table A11: Share of CBAs containing pay scales by country**

Selected countries	Are wages determined in the CBA by means of pay scales?				Total
	No	Yes, in one table	Yes, in more than one table	Yes, but there are only indices (no wages)	
AT	15	45	51	0	111
	14%	41%	46%	0%	100%
BG	33	40	9	10	92
	36%	43%	10%	11%	100%
CZ	52	29	15	1	97
	54%	30%	15%	1%	100%
EE	57	34	2	0	93
	61%	37%	2%	0%	100%
ES	28	131	65	2	226
	12%	58%	29%	1%	100%
FR	20	7	3	6	36
	56%	19%	8%	17%	100%
IT	21	78	65	0	164
	13%	48%	40%	0%	100%
NL	18	97	58	1	174
	10%	56%	33%	1%	100%
PT	3	103	40	0	146
	2%	70%	27%	0%	100%
SK	52	5	1	0	58
	90%	8%	2%	0%	100%
Total	299	569	309	20	1197
	25%	48%	26%	2%	100%

**Table A12: Share of CBAs containing pay scales by sector**

Eight sectors	Are wages determined in the CBA by means of pay scales?				Total
	No	Yes, in one table	Yes, in more than one table	Yes, but there are only indices (no wages)	
Natural Resources	28 28%	46 46%	23 23%	2 2%	99 100%
Manufacturing	61 24%	122 47%	72 28%	3 1%	258 100%
Construction and Energy	20 19%	63 61%	19 18%	1 1%	103 100%
Wholesale and retail trade	35 23%	91 61%	22 15%	1 1%	149 100%
Transportation and storage	39 26%	64 43%	44 30%	1 1%	148 100%
Professional Services	25 23%	51 47%	31 29%	1 1%	108 100%
Public Services	69 33%	68 33%	64 31%	6 3%	207 100%
Leisure Services and other	22 18%	64 51%	34 27%	5 4%	125 100%
Total	299 25%	569 48%	309 26%	20 2%	1197 100%

**Table A13: Share of CBAs containing pay scales by level of bargaining**

Single vs multi-employer bargaining	Are wages determined in the CBA by means of pay scales?				Total
	No	Yes, in one table	Yes, in more than one table	Yes, but there are only indices (no wages)	
SEB	165 33%	219 44%	96 19%	15 3%	495 100%
MEB	133 19%	350 50%	213 30%	5 1%	701 100%
Total	298 25%	569 48%	309 26%	20 2%	1196 100%

**Table A14: Share of CBAs containing premiums and allowances by country**

Selected countries	anyprem_all		
	No	Yes	Total
AT	4 4%	107 96%	111 100%
BG	32 32%	69 68%	101 100%
CZ	3 3%	95 97%	98 100%
EE	45 44%	58 56%	103 100%
ES	14 6%	213 94%	227 100%
FR	2 6%	34 94%	36 100%
IT	13 8%	153 92%	166 100%
NL	7 4%	168 96%	175 100%
PT	12 8%	137 92%	149 100%
SK	1 2%	57 98%	58 100%
Total	133 11%	1091 89%	1224 100%

**Table A15: Share of CBAs containing premiums and allowances by sector**

Eight sectors	anyprem_all		
	No	Yes	Total
Natural Resources	4 4%	97 96%	101 100%
Manufacturing	15 6%	245 94%	260 100%
Construction and Energy	8 8%	97 92%	105 100%
Wholesale and retail trade	7 5%	145 95%	152 100%
Transportation and storage	9 6%	140 94%	149 100%
Professional Services	15 14%	94 86%	109 100%
Public Services	47 22%	171 78%	218 100%
Leisure Services and other	28 22%	102 78%	130 100%
Total	133 11%	1091 89%	1224 100%

**Table A16: Share of CBAs containing premiums and allowances by level of bargaining**

Single vs multi-employer bargaining	anyprem_all		
	No	Yes	Total
SEB	65 13%	448 87%	513 100%
MEB	68 10%	642 90%	710 100%
Total	133 11%	1090 89%	1223 100%

**Table A17: Share of CBAs containing a structural wage increase by country**

Selected countries	Is a structural wage increase agreed? (=an increase that increases the basic pay)		
	No	Yes	Total
AT	53 48%	58 52%	111 100%
BG	54 59%	38 41%	92 100%
CZ	63 65%	34 35%	97 100%
EE	92 99%	1 1%	93 100%
ES	50 22%	176 78%	226 100%
FR	28 78%	8 22%	36 100%
IT	28 17%	136 83%	164 100%
NL	46 26%	128 74%	174 100%
PT	138 95%	8 5%	146 100%
SK	43 74%	15 26%	58 100%
Total	595 50%	602 50%	1197 100%

**Table A18: Share of CBAs containing a structural wage increase by sector**

Eight sectors	Is a structural wage increase agreed? (=an increase that increases the basic pay)		
	No	Yes	Total
Natural Resources	68 69%	31 31%	99 100%
Manufacturing	103 40%	155 60%	258 100%
Construction and Energy	55 53%	48 47%	103 100%
Wholesale and retail trade	61 41%	88 59%	149 100%
Transportation and storage	76 51%	72 49%	148 100%
Professional Services	39 36%	69 64%	108 100%
Public Services	120 58%	87 42%	207 100%
Leisure Services and other	73 58%	52 42%	125 100%
Total	595 50%	602 50%	1197 100%

**Table A19: Share of CBAs containing a structural wage increase by level of bargaining**

Single vs multi-employer bargaining	Is a structural wage increase agreed? (=an increase that increases the basic pay)		
	No	Yes	Total
SEB	230 46%	265 54%	495 100%
MEB	365 52%	336 48%	701 100%
Total	595 50%	601 50%	1196 100%

**Table A20: Share of CBAs containing a once-only wage increase by country**

Selected countries	Is a once-only extra payment agreed?		
	No	Yes	Total
AT	9 8%	102 92%	111 100%
BG	62 67%	30 33%	92 100%
CZ	88 91%	9 9%	97 100%
EE	87 94%	6 6%	93 100%
ES	45 20%	181 80%	226 100%
FR	26 72%	10 28%	36 100%
IT	13 8%	151 92%	164 100%
NL	99 57%	75 43%	174 100%
PT	57 39%	89 61%	146 100%
SK	45 78%	13 22%	58 100%
Total	531 44%	666 56%	1197 100%

**Table A21: Share of CBAs containing a once-only wage increase by sector**

Eight sectors	Is a once-only extra payment agreed?		
	No	Yes	Total
Natural Resources	55 56%	44 44%	99 100%
Manufacturing	120 47%	138 53%	258 100%
Construction and Energy	49 48%	54 52%	103 100%
Wholesale and retail trade	58 39%	91 61%	149 100%
Transportation and storage	55 37%	93 63%	148 100%
Professional Services	33 31%	75 69%	108 100%
Public Services	108 52%	99 48%	207 100%
Leisure Services and other	53 42%	72 58%	125 100%
Total	531 44%	666 56%	1197 100%

**Table A22: Share of CBAs containing a once-only wage increase by level of bargaining**

Single vs multi-employer bargaining	Is a once-only extra payment agreed?		
	No	Yes	Total
SEB	208 42%	287 58%	495 100%
MEB	322 46%	379 54%	701 100%
Total	530 44%	666 56%	1196 100%