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# COLBAR-EUROPE

EUROPE-wide analyses of COLlective BARgaining agreements

Supported by the European Commission - Industrial Relations and Social Dialogue Program (nr project grant number of COLBAR is VS/2019/0077)<sup>1</sup> April 2019 – March 2021

## DRAFT REPORT 7: COLLECTIVELY AGREED WAGES IN EUROPE

20 April 2021

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<sup>1</sup> Disclaimer: The information and views set out in this report are those of the author(s) and do not necessarily reflect the official opinion of the European Union. Neither the European Union institutions and bodies nor any person acting on their behalf may be held responsible for the use which may be made of the information contained therein.

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## Management Summary

COLBAR-EUROPE (VS/2019/0077) aimed to contribute to the objectives of the EU's Social Dialogue Program. This report addresses its Research Objective 2): Do agreements include wage clauses and pay scales, and how do pay scales compare within and across countries and sectors?

Collective bargaining is an important arena for wage setting in many European countries. Through collective agreements, workers' and employers' representatives can regulate the wages paid in specific sectors or firms, mostly by fixing pay scales or wage floors, as well as wage growth, when structural or incidental pay increases are negotiated. Surprisingly little is known about the wage levels that are negotiated in collective agreements. There is no country-comparative database of pay scales or even collectively bargained wage floors in Europe (Besamusca, Kahankova, et al., 2018; Besamusca, Tijdens, et al., 2018). The studies of pay scales that do exist are mostly country-specific (e.g. de Beer et al., 2017). This report aims to fill part of that gap in both data and knowledge by asking whether collective agreements in Europe contain wage clauses, pay scales and indexation clauses, as well as how pay scales compare within and across countries and sectors.

The WageIndicator CBA database contains coded collective agreements, allowing for comparisons across countries and sectors on ten topics, including pay clauses and premiums and allowances. Using the CBA Database (Ceccon & Medas, 2021), 602 collective agreements from 26 European countries were examined to determine whether and how they set wages and other forms of pay.

Virtually all agreements (97%) contained at least one clause on wages. 91% specify a which level wages are to be determined. In most cases this is either in individual contracts (28%), at the company level (24%), or at the sector level (40%). Just under half of the collective agreements in the study (47%) contained a clause on the lowest wage to be paid. About a third of all collective agreements (32%) explicitly fixed the lowest payable wage in the firm of sector covered by the agreement. Finally, only 14% contained clauses that said the minimum wage set by the government had to be respected.

Two thirds of collective agreements contained pay scales. The inclusion of pay scales in collective agreements was more common in manufacturing (81%) and construction (73%) than in commerce (68%) or the public sector (58%). In addition, collective agreements signed

by multiple employers or by employers' associations were more likely to contain pay scales than CBAs covering a single firm (74% compared to 63%). Most commonly, pay scales were differentiated by occupation or job type. Over 90% of the collective agreements included at least one premium or allowance for the workers covered. The most agreed arrangements were premiums for overtime (79%), night work (67%) and for working on Sundays (56%).

A structural wage increase was negotiated in 304 out of 602 collective agreements. Once-only extra payments were included in 64% of the collective agreements. Of the 395 collective agreements that contained a structural or incidental wage increase, two thirds (67%) contained only a percentage increase, 12% only an increase by a fixed amount, and 21% contained both. The largest group of collective agreements (37%) contained both a structural wage increase and a once-off payment. Once-only payments were found as the only agreed wage increase in just over a quarter of the collective agreements (27%). The third largest group of collective agreements did not contain any negotiated pay rise at all (23%). Collective agreements without pay increases were most common in Romania (83%), the UK (77%) and Slovenia (75%). The fourth and smallest group of collective agreements contained only a structural wage increase (13%).

Collective agreements from 19 countries fixed a lowest pay scale in the agreement. The highest wage floors were agreed in Switzerland, followed by Denmark, Austria, and the Netherlands. The lowest wages were agreed in Poland, Hungary, and Slovenia. Pay scales negotiated in sector level agreements on average contained lower wage floors than company CBAs. On average, the lowest pay scales found in European countries are negotiated above the poverty threshold for a single person household. However, the lowest pay scales in collective agreements were, on average, insufficient to keep a family out of poverty. Danish, Turkish, Swiss, and Belgian CBAs were the most equal in terms of negotiated pay. Portugal was the least equal, with the lowest pay scales amounting to only 25% of the highest.

# 1 Introduction

Collective bargaining is an important arena for wage setting in many European countries. Through collective agreements, workers' and employers' representatives can regulate the wages paid in specific sectors or firms, mostly by fixing pay scales or wage floors, as well as wage growth, when structural or incidental pay increases are negotiated. The extent to which collective agreements effectively determine employee wages differs across European countries. In Austria, 98% of workers are covered by collective bargaining on wages. In Lithuania, only 7% of workers are covered. The share of workers covered by collective bargaining in a country has been associated with the level of income inequality as well as the real value of wages (Eurofound, 2015; Garnero, 2020). Furthermore, collective agreements sometimes set sector specific wage floors that can be as efficient as statutory minimum wages (Garnero et al., 2015a, 2015b). Collectively bargained pay is therefore pivotal for wage developments in Europe.

However, evidence of the effectiveness of collective bargaining for pay on the country level is not matched on the micro level. Very little is known about the wage levels that are negotiated in collective agreements. There is no country-comparative database of pay scales or even collectively bargained wage floors in Europe (Besamusca, Kahankova, et al., 2018; Besamusca, Tijdens, et al., 2018). The studies of pay scales that do exist are mostly country-specific (e.g. de Beer et al., 2017). This report aims to fill part of that gap in both data and knowledge by asking whether collective agreements in Europe contain wage clauses and pay scales, as well as how pay scales compare within and across countries and sectors.

Using the WageIndicator CBA Database (Ceccon & Medas, 2021), 602 collective agreements from 26 European countries were examined to determine whether and how they set wages and other forms of pay. Following a brief overview of the literature on wage setting and collective bargaining, three sections of this report study wage fixing in collective agreements in Europe, the extent to which agreed wage levels constitute decent wages, and the level of wage inequality contained in pay scales. The research was conducted in the context of the COLBAR-EUROPE project, which aimed to contribute to the objective of the EU's Social Dialogue Program: "the functioning and effects of coordination of collective bargaining across different levels and territories".

## 2 Wage setting and collective bargaining

Bargaining over wages and working hours is often considered the bread and butter of collective bargaining (Freeman & Medoff, 1985). Collective bargaining affects the wages earned by negotiating wage floors for employees in countries, sectors and firms, often breaking down agreed wages by job titles, skill levels or tenure at the firm (Berg, 2015; OECD, 2018). Employers' and workers' representatives formulate wage growth offers and demands respectively, thus contributing to setting the pace of wage developments in the organized sector.

Collective wage bargaining has been associated with higher wages and lower wage inequality. On average, wages in firms covered by collective bargaining agreements were found to be higher than in firms not covered (Addison et al., 2014; Garnero et al., 2020; Magda et al., 2012). Collective bargaining is associated with lower wage dispersion, especially when wage bargaining is either centralized or co-ordinated (Canal Domínguez & Rodríguez Gutiérrez, 2016; Teulings & Hartog, 1998; Wallerstein, 1999). Although additional firm level bargaining may fix wages at higher level than the sectoral agreements indicate, dispersion is smaller than in contexts where wage bargaining predominantly takes place at the firm level or where bargaining is rare (Garnero, 2020; Janietz & Bol, 2020; OECD, 2018). Whether wage dispersion within firms is larger under firm-level or sector-level collective bargaining agreements remains under dispute (for an overview, see Canal Dominguez & Rodriguez Gutierrez, 2020)

Wage bargaining can take place at different levels, most commonly the sector or company level. In more centralized bargaining systems, in which wages are negotiated at higher levels, sector level bargaining on wages is regularly supplemented by firm level agreements. Legislation prescribes the extent to which these firm level agreements may deviate from the sector level agreement, crucially whether sector level clauses may be adjusted only to the advantage of workers or also to their disadvantage. In general, additional firm level bargaining in centralized systems has set higher wages than the sector level collective agreements, in part because firm level agreements are often allowed only to improve on the agreements negotiated for the sector and also because it tends to be associated with larger firms (OECD, 2018).

Wages agreed in collective agreement can affect workers outside organized labour and employers if agreements are extended, boosting coverage rates and reinforcing multi-

employer bargaining, which in turn have been associated with wage compression (Hayter & Visser, 2018). Furthermore, minimum wage policies are indexed or loosely linked to wage developments in several European countries (Eurofound, 2017). In countries where the coverage of collectively bargained wages is substantial, they thus potentially impact the development of statutory minimum wages.

## 2.1 The structure of negotiated pay

Although the developments of collectively bargained pay have been studied extensively, surprisingly little is known about the shape of the pay scales through which these wages are fixed (Besamusca, Kahankova, et al., 2018; Besamusca, Tjijdens, et al., 2018; Besamusca & Tjijdens, 2015). The comparative industrial relations literature has traditionally analysed country differences in the context of “bargaining systems”, referring to characteristics like the centralisation, co-ordination, and coverage of wage bargaining (Berg, 2015; Dahl et al., 2013; OECD, 2018). Evidence relies on analyses of legal frameworks, interviews with key actors and country-level outcomes. Rarely do country comparisons consider the contents of the agreements that effectively fix the collective bargained wages. In consequence, there is limited knowledge about the way collective agreements structure the negotiated pay scales.

## 3 Wages in the WageIndicator CBA Database

### 3.1 The CBA Database

For this study the WageIndicator CBA Database was used, which has been maintained by associate partner WageIndicator Foundation since 2013. COLBAR-EUROPE's predecessor BARCOM (VS/2016/0106) started to gather, code and compare the clauses of 120 CBAs from the commerce sector across 23 countries.<sup>2</sup> COLBAR-EUROPE extended that study to the construction, manufacturing and public sectors in more EU and EU Associate countries. By January 2021 the CBA Database contained 602 CBAs from 25 of the 28 EU countries, 2 of the 5 Associate countries to the EU and Switzerland. The CBA Database also included 40 Transnational Company Agreements, which were analysed separately in report 9 of the COLBAR project (van Klaveren & Tijdens, 2021). More information about the data collection and sampling strategies is found in COLBAR-EUROPE Report 2 through 6 (Cetrulo, 2021; Jansen, 2021; Medas & Ceccon, 2021; Szüdi, 2021; Tijdens, 2021). The data of the CBA Database can be downloaded from the ZENODO repository (10.5281/zenodo.4475583).

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, 2021). 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".

### 3.2 Measurement of pay

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

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<sup>2</sup> See <https://wageindicator.org/Wageindicatorfoundation/projects/barcom/barcom>

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 shows, this includes items on the level at which wages are determined, pay scales, wage floors, wage increases, and premiums and allowances.

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

<b>Wages (general)</b>	Inclusion of any clause on wages (1 'Yes' 0 'No')
<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

*Source: WageIndicator CBA Database codebook (Ceccon & Medas, 2021)*

The CBA database does not code the full pay scale tables of each collective agreement due to the lack of comparability across countries. The coding of pay scales was piloted in the BARCOM project, during which it transpired that the structure and differentiation of pay scales was too different to be able to make meaningful country comparisons. In consequence, only the lowest and highest adult pay scales were coded for the 602 COLBAR-EUROPE collective agreements. The variable measuring the lowest pay scale contains the agreed wage in the lowest step of the lowest pay scale that applies to regular adult workers. Youth scales and other rates aims to specifically exempt groups of workers from the regular pay rates (such as the long term unemployed), are disregarded when choosing the lowest wage because their inclusion would impede comparisons across CBAs. The variable

measuring the highest pay scale contains the agreed wage in the highest step of the highest pay scale that applies to regular adult workers. 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 that applied for each country in the year that the pay scales referred to.

### 3.3 Measurement of other variables

In addition to the key variables included in the previous section, the analyses in this report made use of other indicators to facilitate comparisons between countries, sectors, and level of bargaining.

**Country** is measured as the country in which the CBA is or was in force. In the analyses in the next sections, countries with at least 5 CBAs are included individually. The seven countries with less than 5 CBAs were merged in one group. This applied to Bulgaria, Estonia, Finland, Germany, Ireland, Lithuania, and Malta. The analyses included 18 EU countries, 2 EU candidate countries Serbia and Turkey, 1 EU partner country Switzerland, and jointly 21 countries and 1 merged country.

**Sector** is measured as the sector of economic activity that the CBA covers. Sector is coded using the NACE industry classification and is split into four groups based on one-digit NACE codes: (1) manufacturing including mining and quarrying, (2) construction including water supply, sewerage and waste, (3) commerce including retail, hospitality and transport, and (4) public sector including education and health care. Our mapping into the four sectors does not include a classification of private versus public sector organisations, because across European countries the labelling of private or public sector organisations varies largely. Whereas in some countries all manufacturing factories are privately owned, in other countries some factories are wholly or partly publicly owned. Thus, the public-private labelling does not help to map the CBAs into the four broad sectors. A detailed breakdown of the sector codes can be found in the 2<sup>nd</sup> COLBAR-EUROPE report (Tijdens, 2021).

The **level of bargaining** is measured as a binary variable distinguishing between single-employer and multi-employer bargaining. Multi-employer bargaining included both sector-level agreements between trade unions, professional organisations and employers'

associations, as well as agreements covering multiple individual firms, although this latter type of bargaining is rare.

### 3.4 Methods

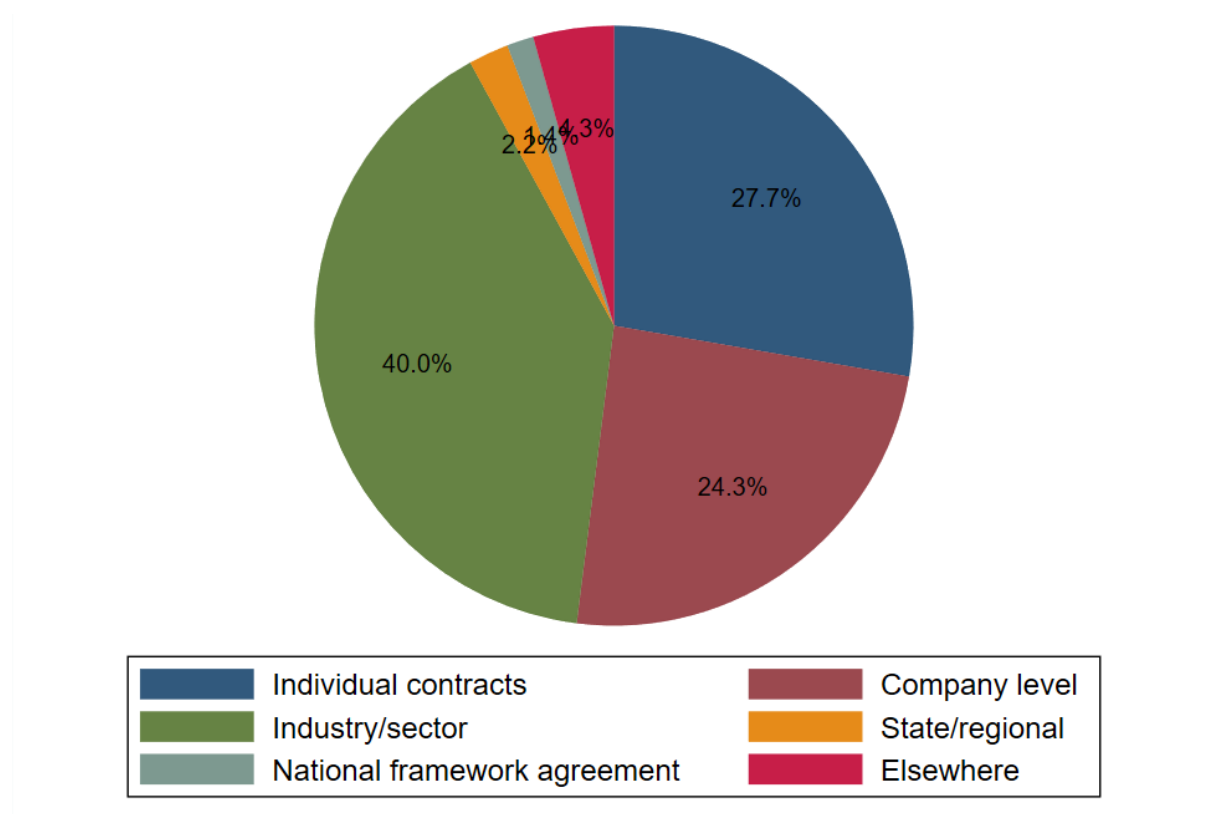
The analyses reported in this document are descriptive in nature. The aim of the paper is to shed light on the contents of collective agreements about wage fixing. The analytical strategy for the dataset includes descriptive analyses (frequency and cross tables with Chi-squares, T-tests, correlations) as well as 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.

## 4 Collectively agreed wages in Europe

### 4.1 Wages in collective agreements

Most collective agreements contain clauses on wages, indicating that this is a prominent issue on the bargaining agenda. An overwhelming 584 out of 602 agreements (97%) contain at least one clause on wages. Only in the United Kingdom did the number of agreements without (10) outnumber those with (3) wage clauses. In 15 countries, all collective agreements included in this study contain at least one clause regarding wages. These were Austria (26), Belgium (8), Croatia (7), Czech Republic (10), France (31), Hungary (10), the Netherlands (101), Poland (10), Romania (24), Serbia (10), Slovakia (10), Slovenia (8), Sweden (15), Switzerland (12), and Turkey (25). There were no large differences between sectors or between levels of bargaining.

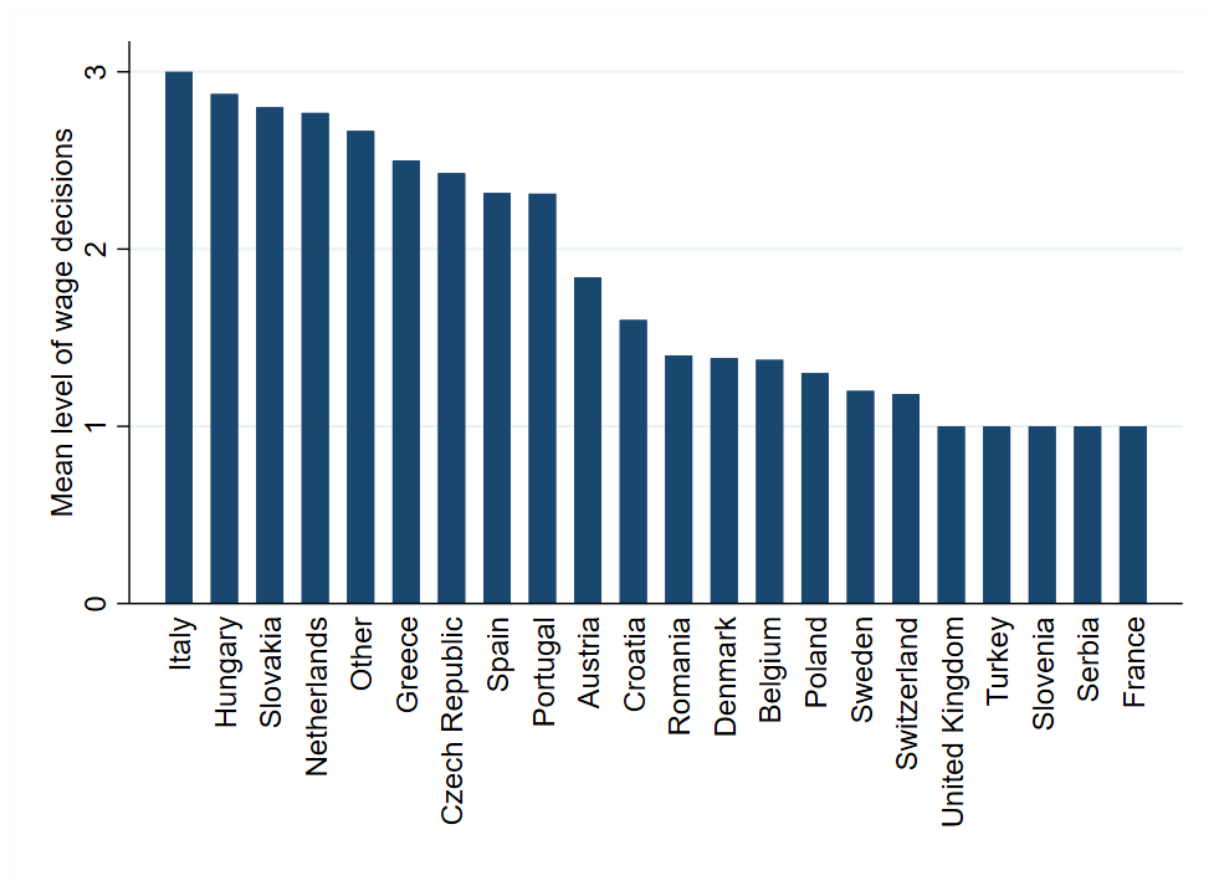
Figure 1 Level at which wages are determined according to CBAs



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=523

Among the 602 CBAs in the COLBAR study, 550 (91%) specify a which level wages are to be determined. Figure 1 shows that in most cases this is either in individual contracts (28%), at the company level (24%), or at the sector level (40%). As Figure 2 shows, there were country differences regarding the level at which wages were negotiated. On average, Italian collective agreements set wages at the highest level: at the industry level. On the other hand, collective agreements from Switzerland, France, Serbia, Slovenia, Turkey, and the UK were much more likely to contain clauses specifying that wages are set in individual contracts.

Figure 2 Level at which wages are determined according to CBAs by country



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=523

Collective agreements can set wage floors for the firm or sector they cover. Just under half of the collective agreements in the study (47%) contained a clause on the lowest wage to be paid. This was most common in Poland (90%), Italy (84%) and Sweden (80%) and least common in Romania (8%). About a third of all collective agreements (32%) explicitly fixed the lowest payable wage in the firm of sector covered by the agreement.

Table 2 Share of CBAs with clauses on wages, lowest wages, and the minimum wage by country

Country	Number of CBAs	Agreement has clause on lowest wage to be paid (% all)	Agreement sets lowest wage to be paid (% all)	Agreement clause mw set by govt (% all)
<b>Other</b>	17	47.06	23.53	11.76
<b>Austria</b>	26	38.46	19.23	3.85
<b>Belgium</b>	8	37.5	12.5	0
<b>Croatia</b>	7	71.43	57.14	14.29
<b>Czech Republic</b>	10	50	10	50
<b>Denmark</b>	15	46.67	40	13.33
<b>France</b>	31	74.19	32.26	32.26
<b>Greece</b>	8	62.5	37.5	12.5
<b>Hungary</b>	10	70	40	70
<b>Italy</b>	101	84.16	83.17	0.99
<b>Netherlands</b>	101	31.68	13.86	27.72
<b>Poland</b>	10	90	30	70
<b>Portugal</b>	33	21.21	18.18	3.03
<b>Romania</b>	24	8.33	0	8.33
<b>Serbia</b>	10	40	0	20
<b>Slovakia</b>	10	60	30	30
<b>Slovenia</b>	8	62.5	50	0
<b>Spain</b>	108	25	10.19	9.26
<b>Sweden</b>	15	80	80	0
<b>Switzerland</b>	12	58.33	50	16.67
<b>Turkey</b>	25	36	28	4
<b>United Kingdom</b>	13	23.08	15.38	0
<b>Manufacturing incl. mining and quarrying</b>	79	49.37	31.65	20.25
<b>Construction incl. water supply, sewerage, waste</b>	52	48.08	34.62	21.15
<b>Commerce incl. retail, hospitality and transport</b>	351	47.58	32.48	12.25
<b>Public sector incl. education and healthcare</b>	118	41.53	27.12	13.56
<b>SEB</b>	307	43.32	30.29	11.07
<b>MEB</b>	295	50.17	32.88	17.63
<b>Total</b>	602	46.68	31.56	14.29

Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021,

N=602

None of the agreements from Romania and Serbia did so, whereas 83% of Italian and 80% of Swedish agreements did. Finally, only 14% of the collective agreements contained clauses that said the minimum wage set by the government had to be respected. No references to the minimum wage were identified in Belgium, the UK, Slovenia, and Sweden (which does not set a minimum wage). The only countries where references to the minimum wage were common were the Czech Republic (50%), Poland (70%) and Hungary (70%). Collective agreements from the fourth member of the Visegrad region, Slovakia, were substantially less likely to contain references to the minimum wage (30%).

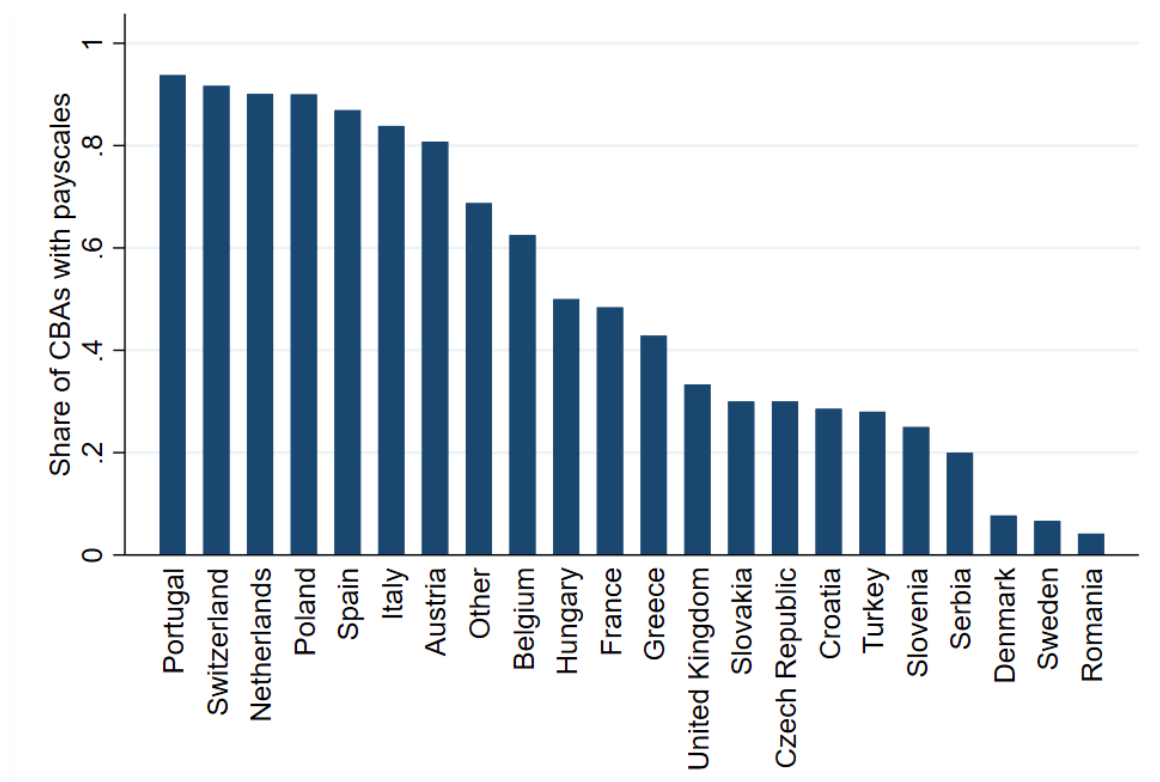
Overall, these results show two extremes between countries that almost always refer to a wage floor, which is set in the collective agreement itself – e.g. Sweden and Italy – and Romania, where only 2 out of 24 CBAs contained a clause on the statutory minimum wage and none effectively fixed a wage floor. Differences between sectors and between single-employer and multi-employer agreements were minor compared to the country differences.

## 4.2 Pay scales in collective agreements

The most well-known way in which collective agreements fix wages is through pay scales, which set out the payable wages, often differentiated by occupations, skill level or other distinctions, and include negotiated wage increases. In the COLBAR sample, two thirds of collective agreements contain pay scales. 42% contain one pay scale table, 24% have multiple tables and 3% contain only indices and no payable amounts. In Romania, where the previous analyses showed that collective agreements rarely set a wage floor, no pay scales were found in 23 out of 24 the collective agreements; the last CBA did refer to pay scales, but these were not included in the text of the agreement. On the other hand, over 80% of CBAs in Austria, Italy, and Spain, and over 90% of CBAs in the Netherlands, Poland, Portugal, and Switzerland contained pay scales.

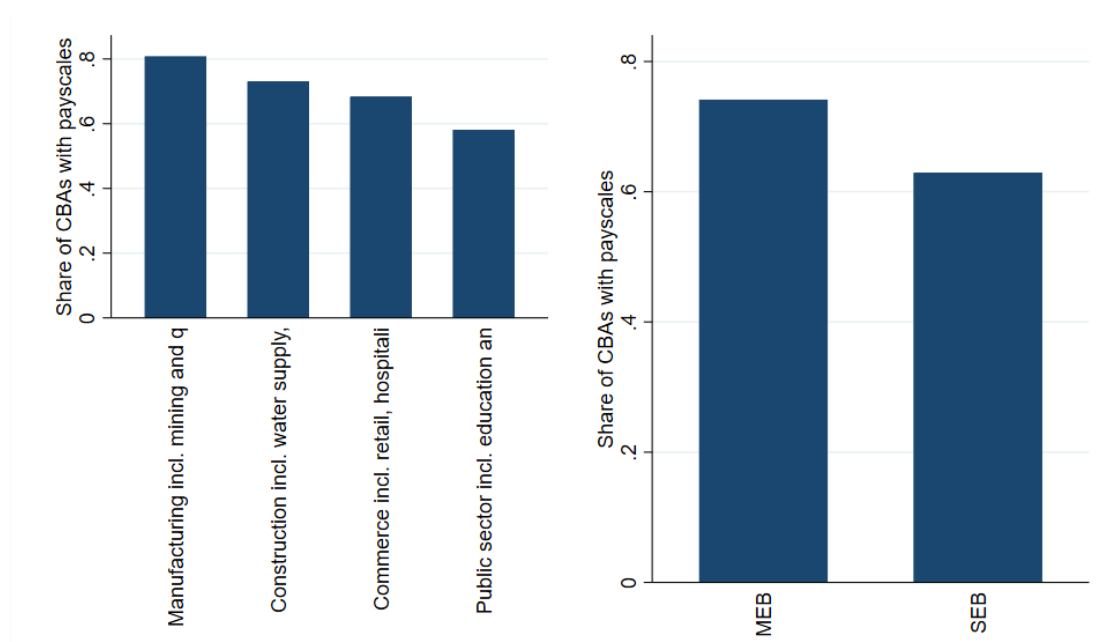
The inclusion of pay scales in collective agreements was more common in manufacturing (81%) and construction (73%) than in commerce (68%) or the public sector (58%). In addition, collective agreements signed by multiple employers or by employers' associations were more likely to contain pay scales than CBAs covering a single firm (74% compared to 63%).

Figure 3 Share of collective agreements with pay scales by country



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=584

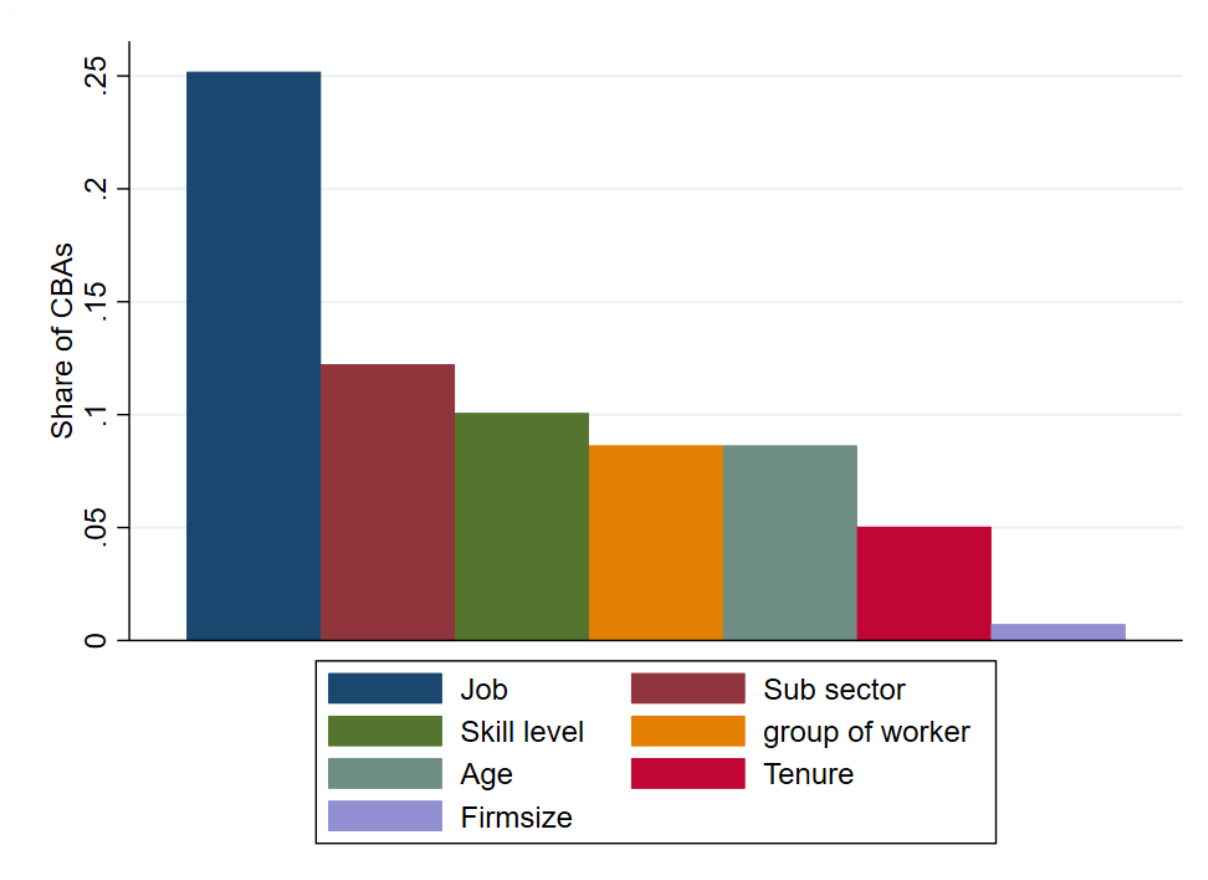
Figure 4 Share of collective agreements with pay scales by sector and level of bargaining



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=582

Of the 400 collective agreements that contained pay scales, 158 differentiated those pay scales by at least one characteristic, such as skill level or job type. Most commonly, pay scales were differentiated by occupation or job type – this was the case for a quarter of the 158 CBAs with differentiated pay scales. Other differentiations that were found regarded the age of workers (mostly setting out lower pay scales for youth), sub-sector of the operations covered by the collective agreement, skill level or educational qualifications, and tenure. One agreement differentiated wages by firm size.

Figure 5 Differentiation in pay scales among CBAs with multiple pay scales



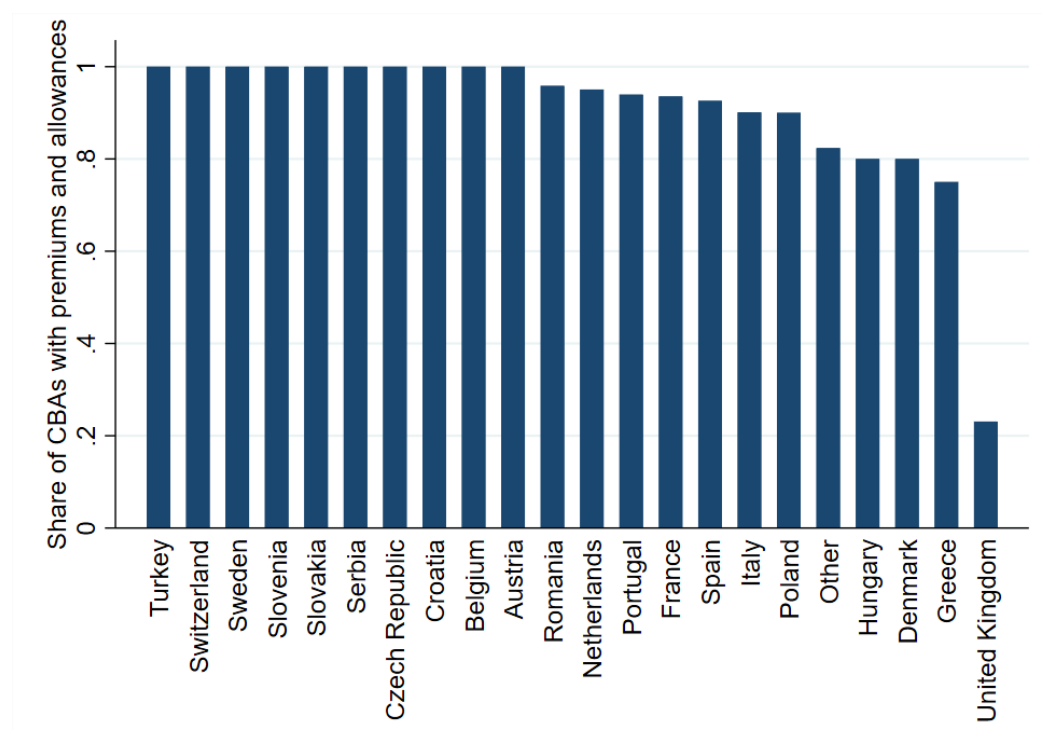
Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=139

### 4.3 Premiums and allowances

An important part of workers’ payment stems from premiums and allowances, which can top up regular wages by compensating for costs made by employees (allowances) or for disadvantageous working conditions (premiums). Over 90% of the collective agreements in the COLBAR-EUROPE project include at least one premium or allowance for the workers

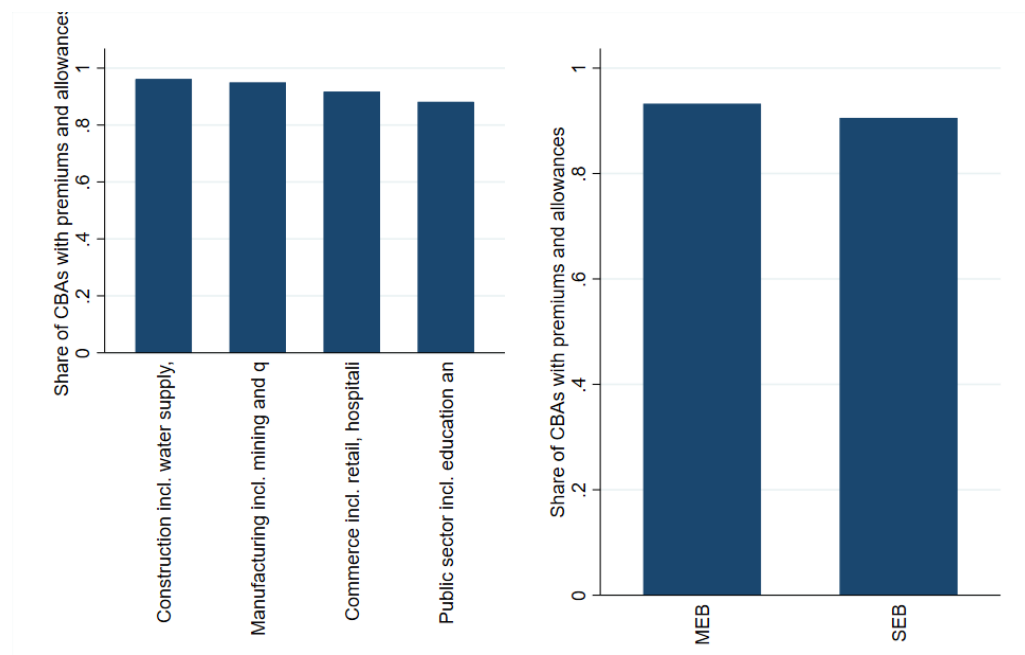
covered. This condition was met by all collective agreements from Austria, Belgium, the Czech Republic, Croatia, Czech Republic, Serbia, Slovakia, Slovenia, Sweden, Switzerland, and Turkey. The United Kingdom lagged far behind, with only 23% of its agreements containing at least one premium or allowance. No large differences were found between collective agreements negotiated with a single employer compared to multiple employers or an employers' association. Collective agreements covering the public domain, surprisingly, were less likely than those in the other sectors to contain premiums and allowances.

Figure 6 Share of CBAs with at least one premium or allowance agreed by country



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=602

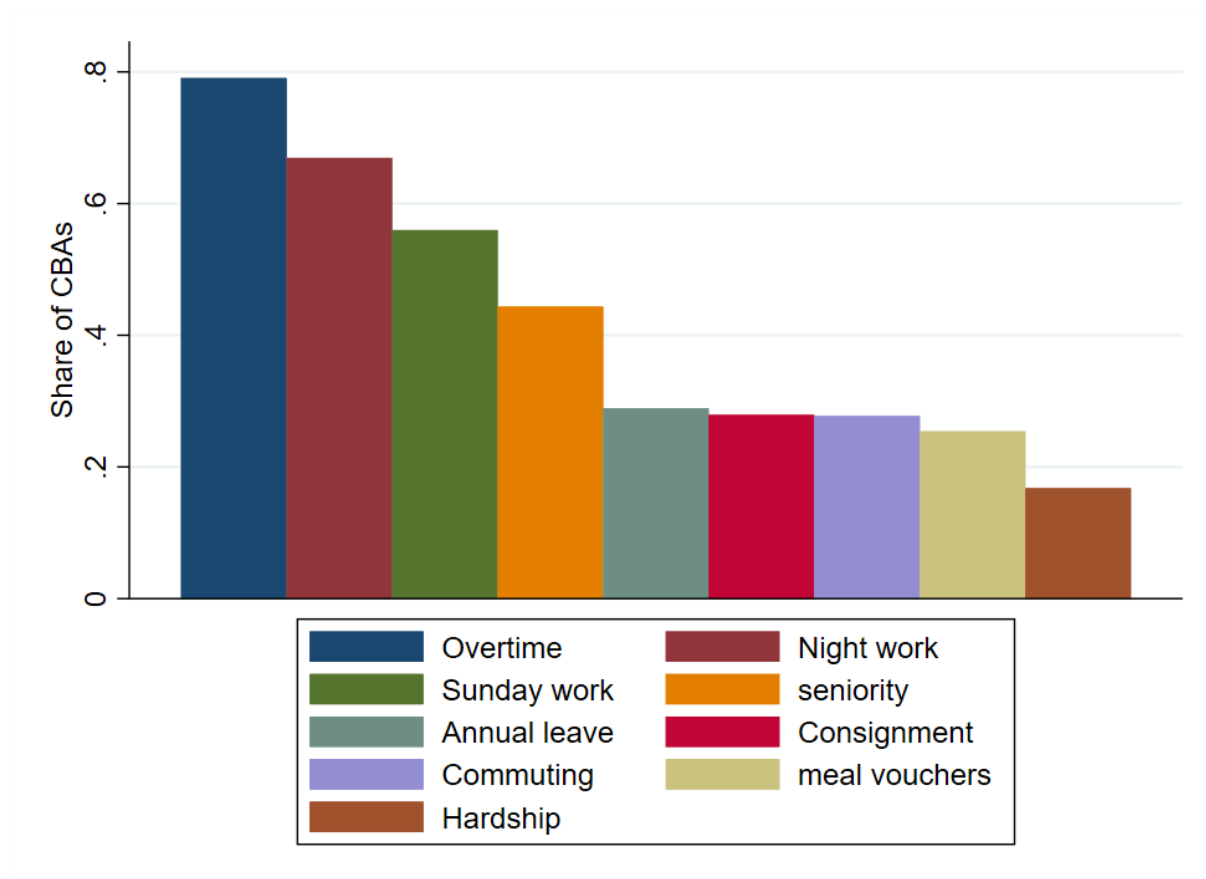
Figure 7 Share of CBAs with at least one premium or allowance agreed by sector and level of bargaining



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=600

The most agreed arrangements were premiums for overtime (79%), night work (67%) and for working on Sundays (56%). Of the allowances, seniority allowances were most common (44%), followed by extra payments for annual leave, on-call payments, commuting allowances and meal allowances (between 25% and 29%). Hardship premiums were substantially more often included in collective agreements in the construction sector (33% compared to 15% in the others).

Figure 8 Share of CBAs with premiums and allowances



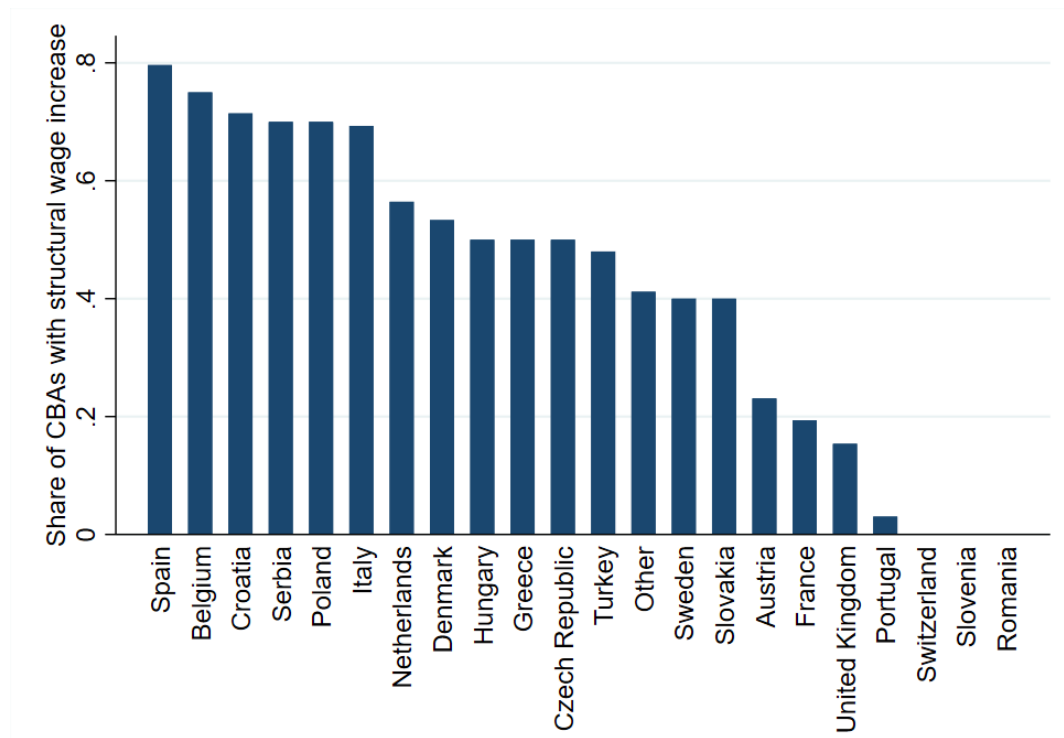
Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=602

#### 4.4 Negotiated wage increases

A structural wage increase was negotiated in 304 out of 602 collective agreements in the COLBAR project, representing just over half of the agreements. The wages increases were almost always (96% of the cases) negotiated for all workers covered by the CBA. Only 11 collective agreements contained wage increases that had been negotiated for a specific group of workers only.

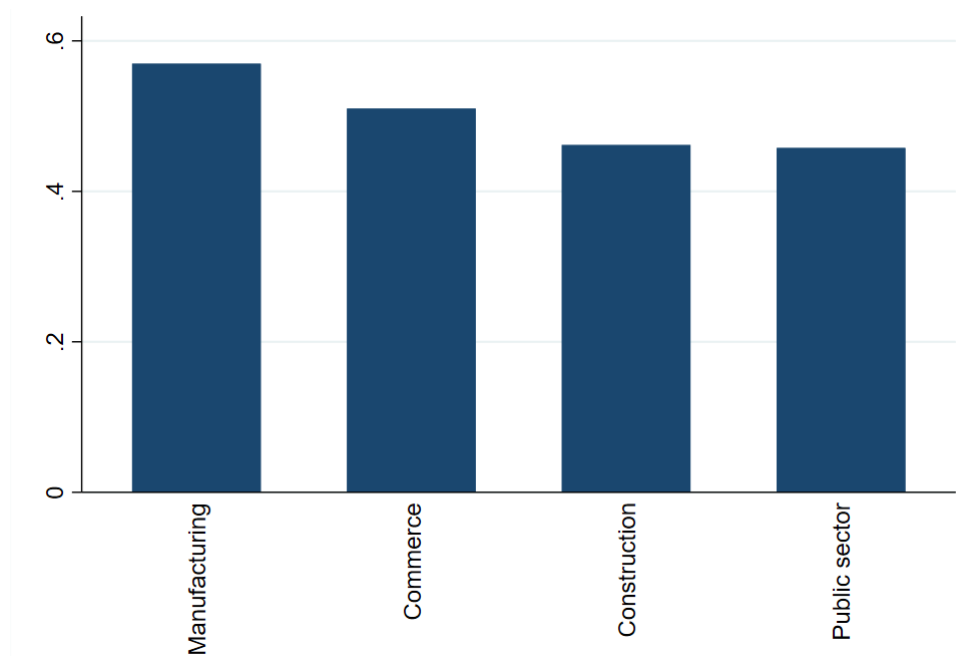
There were large country differences in the negotiation of structural wage increases in collective agreements. Most agreements in Spain (80%) contained such a structural increase, whereas none of the Swiss, Slovenian or Romanian collective agreements did. 57% of collective agreements in the manufacturing sector included a structural wage increase, whereas only 46% of agreements in construction and in the public sector did.

Figure 9 Share of CBAs with a structural wage increase by country



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=602

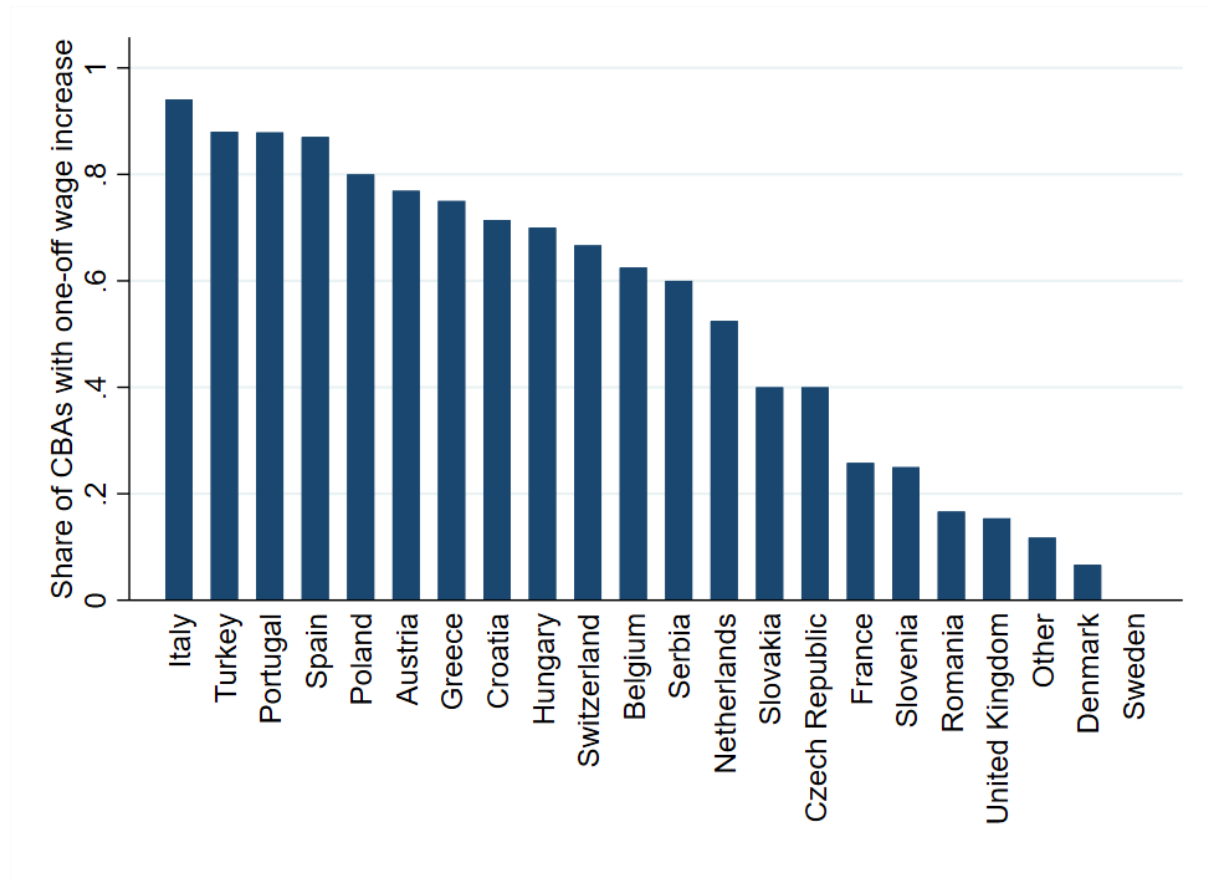
Figure 10 Share of CBAs with a structural wage increase by sector



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=573

Another way of raising wages is to negotiate once-only extra payments. These were more common than the structural increases and were included in 64% of the collective agreements in the COLBAR-EUROPE project. They were most common in Italy (94% of agreements containing a one-off pay payment) and were not found in any of the Swedish CBAs.

Figure 11 Share of CBAs with an incidental wage increase by country



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=602

Finally, we explore whether wage increases through structural or only-once pay rises tend to be negotiated as alternatives or may be combined. As Table 3 shows, the largest group of collective agreements (37%) effectively contained both a structural wage increase and a once-off payment. This was most common in Spain (71%), Italy (68%) and Poland (60%), while none of the agreements from Denmark, France, Romania, Slovenia, Sweden, or Switzerland contained both. Once-only payments were found as the only agreed wage increase in just over a quarter of the collective agreements (27%). Sweden was the only

country in which no once-only payments were found. These arrangements, on the contrary were popular in Portugal (85%), Switzerland (67%) and Austria (58%).

Table 3 Distribution of types of pay rises across European countries, sectors, and level of bargaining

Country	Pay rise included in CBA				n
	None	Structural	Once only	Both	
Other	47.06	41.18	11.76	0	17
Austria	19.23	3.85	57.69	19.23	26
Belgium	12.5	25	12.5	50	8
Croatia	0	28.57	28.57	42.86	7
Czech Republic	30	30	20	20	10
Denmark	40	53.33	6.67	0	15
France	54.84	19.35	25.81	0	31
Greece	25	0	25	50	8
Hungary	10	20	40	30	10
Italy	4.95	0.99	25.74	68.32	101
Netherlands	22.77	24.75	20.79	31.68	101
Poland	10	10	20	60	10
Portugal	12.12	0	84.85	3.03	33
Romania	83.33	0	16.67	0	24
Serbia	10	30	20	40	10
Slovakia	50	10	10	30	10
Slovenia	75	0	25	0	8
Spain	4.63	8.33	15.74	71.3	108
Sweden	60	40	0	0	15
Switzerland	33.33	0	66.67	0	12
Turkey	8	4	44	44	25
United Kingdom	76.92	7.69	7.69	7.69	13
Manufacturing	17.72	15.19	25.32	41.77	79
Construction	23.08	19.23	30.77	26.92	52
Commerce	20.8	12.25	28.21	38.75	351
Public sector	33.05	11.86	21.19	33.9	118
SEB	23.13	9.77	27.69	39.41	307
MEB	22.71	16.61	25.42	35.25	295
Average	22.92	13.12	26.58	37.38	602

Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021,

N=600

The third largest group of collective agreements did not contain any negotiated pay rise at all (23%). Collective agreements without pay increases were most common in Romania (83%), the UK (77%) and Slovenia (75%). Surprisingly, the smallest group of collective agreements contained only a structural wage increase (13%). This was the only type of wage increase found in Swedish collective agreements that included pay hikes and was also common in Denmark (53%). No collective agreements with only a structural wage increase were identified in Romania, Slovenia, Switzerland, Greece and Portugal. Collective agreements covering multiple employers were more likely to contain structural wage increases only than firm level agreements (17% compared to 10%), while they were less likely to contain both a structural increase and a once-only payment (35% compared to 40%).

## 5 Fighting poverty through collective bargaining

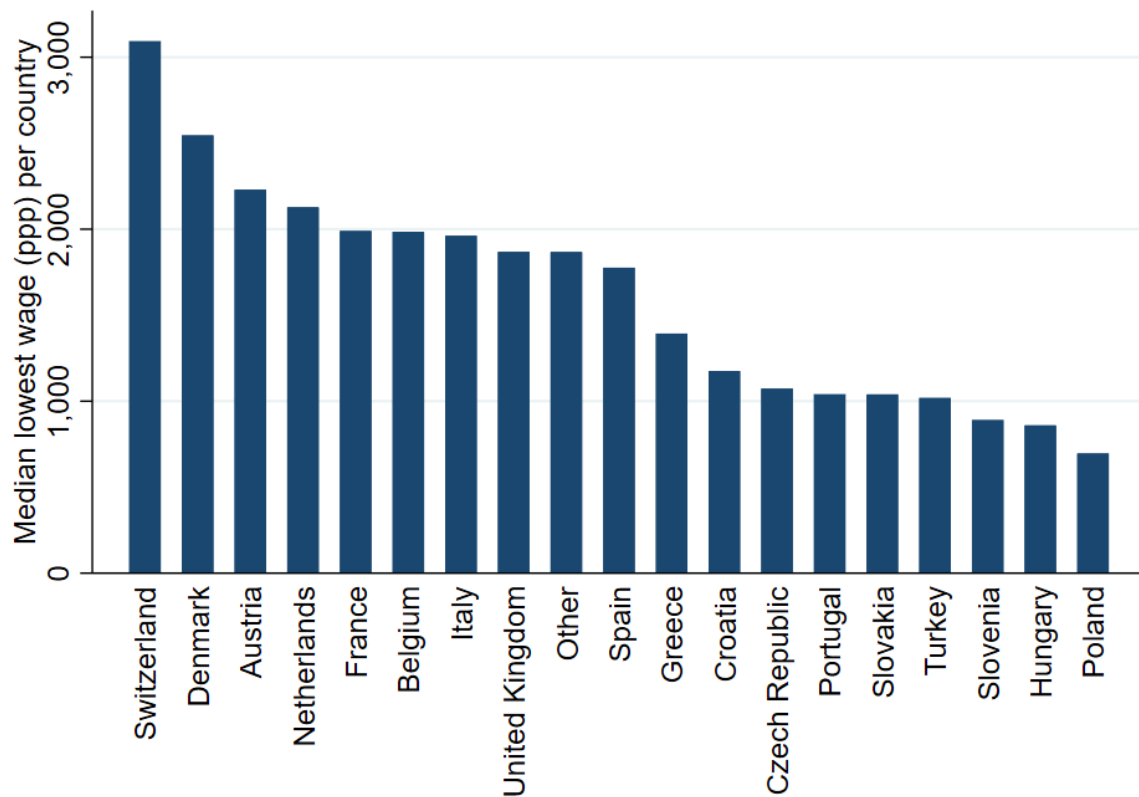
### 5.1 Collectively bargained wage floors

One major question about collectively bargained wages is whether they are decent wages. In this section, decent wages are interpreted as wages that are high enough to keep workers out of poverty. First, wages are shown by country, sector, and level of bargaining.

Subsequently, the lowest agreed pay scales were compared to at risk of poverty thresholds for individual workers and families that were retrieved from Eurostat.

Collective agreements from 19 countries fixed a lowest pay scale in the agreement: Austria, Belgium, Croatia, Czech Republic, Denmark, France, Greece, Hungary, Italy, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Switzerland, Turkey, and the UK. To compare these wages, which are set in collective agreements in different countries as well as in different years (between 1999 and 2020), the currency amounts from agreed pay scales were converted to purchasing power parity (ppp).

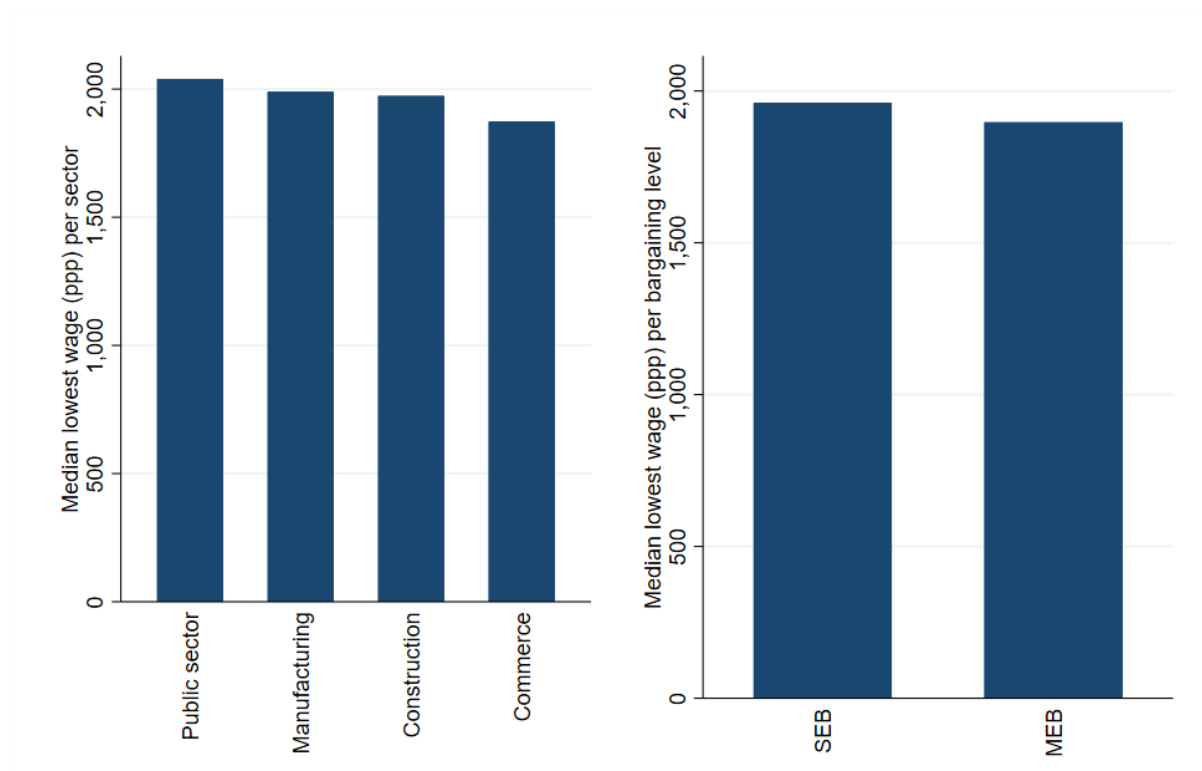
Figure 12 Median lowest wage (ppp) by country



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 20 Jan 2021, N=356

As figure 12 shows, the highest wage floor was agreed in Switzerland, followed by Denmark, Austria, and the Netherlands. The lowest wage floors were agreed in Poland, Hungary, and Slovenia. The public sector was the highest paid sector and commerce the lowest, although these differences were not statistically significant. Pay scales negotiated in sector level agreements on average contained lower wage floors than company CBAs. This is unsurprising due to favourability principles in force in many countries, which set out that company level agreements cannot fall below agreements set in a sector level agreement covering their sector.

Figure 13 Median lowest wage (ppp) by sector and level of bargaining



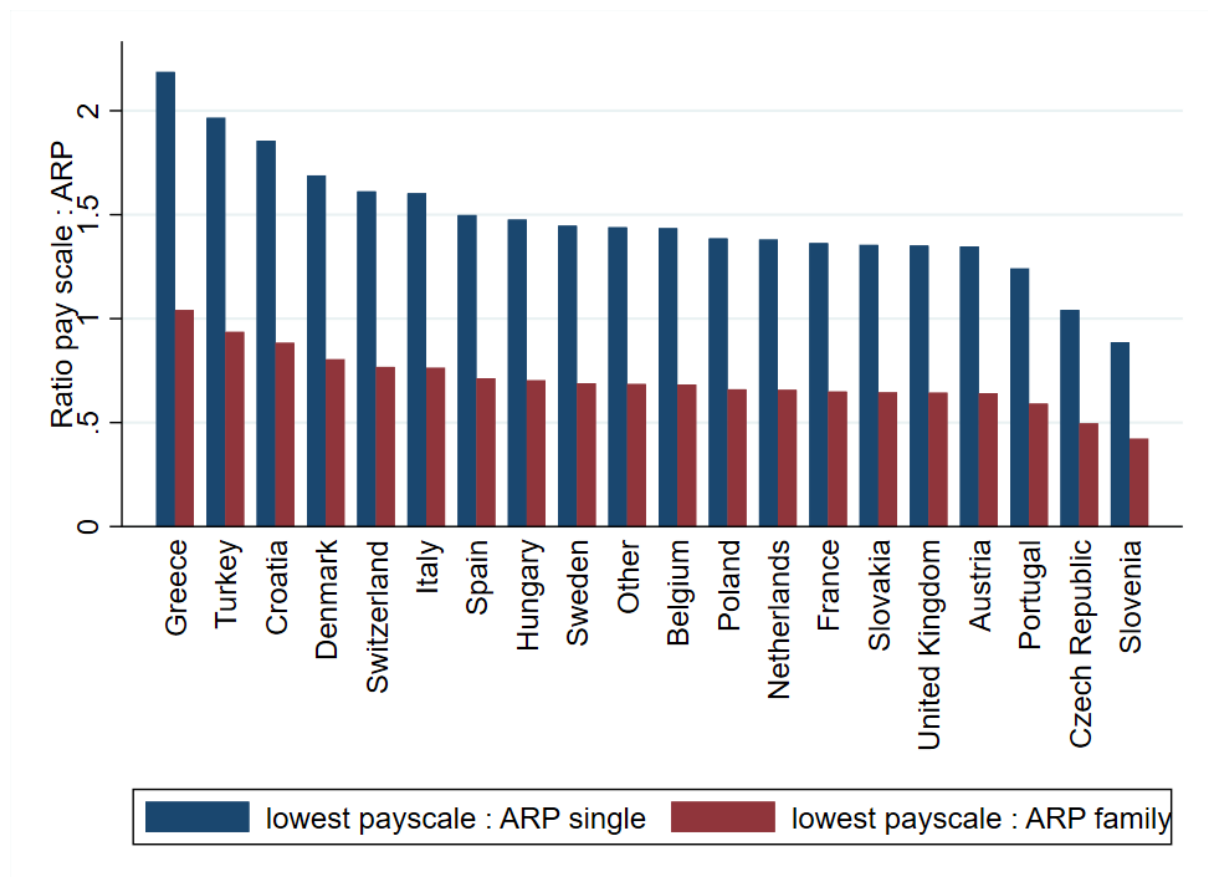
Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=328

## 5.2 Poverty

Pay scales negotiated in collective agreements can be compared to poverty line. Poverty thresholds are estimated by Eurostat for all countries in the study. Eurostat provides estimates of income thresholds below which people are “at risk of poverty”. Estimates are available for singles and for households of two adults and two children. Thresholds are set

at 60% of the median wage in the respective country-year. In figure 14, the lowest adult pay scales found in the collective agreements are compared to the poverty threshold in the country and year in which the pay scales were in force. Blue bars represent the ratio of the lowest pay scale to the poverty thresholds for individuals and red bars compare the pay scales to the poverty threshold for households of two adults and two children. If a pay scale is set at the same level as the threshold, a bar will reach the value one on the y-axis, like the red bar in Greece. Bars that exceed the value one represent pay scales that are higher than the poverty threshold; bars below the value one are pay scales that fall below the poverty threshold.

Figure 14 Median ratio of the lowest agreed pay scale to individual and family at risk of poverty thresholds by country



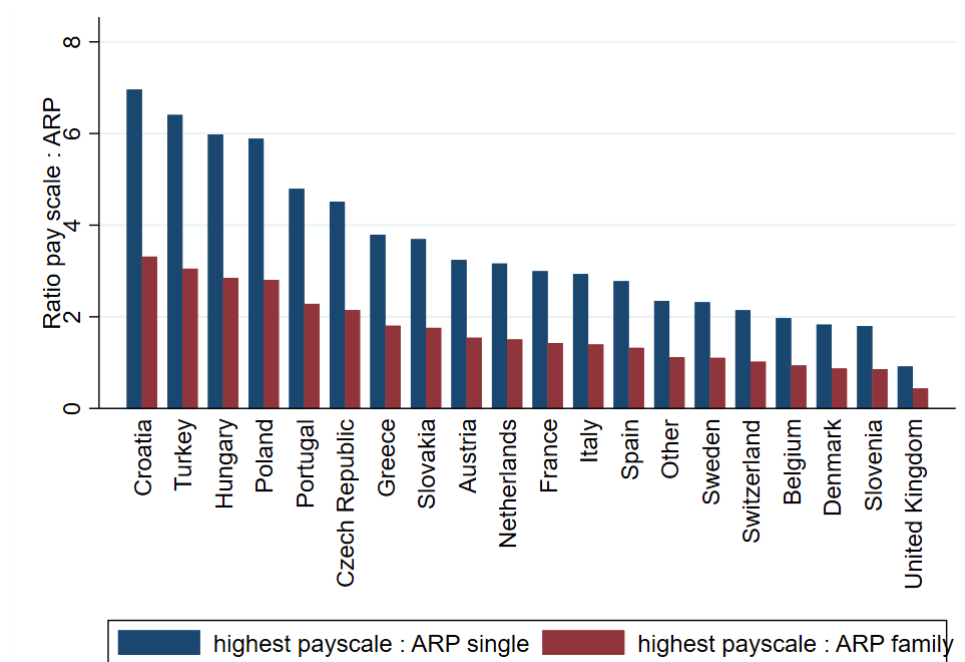
Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=355

Most of the blue bars in Figure 14 are above one, indicating the on average the lowest pay scales found in European countries are negotiated above the poverty threshold for a single

person household. Only in Slovenia was this not the case. In all countries except Greece, the red bars fall below one, indicating that the lowest pay scales in collective agreements are, on average, insufficient to keep a family out of poverty. In several countries, the average ratio of the lowest pay scales to the poverty threshold for a family is closer to .5 than to 1.

Comparing the highest pay scales in European collective agreements to the same at risk of poverty thresholds as above, suggests that workers in higher pay scales are not at risk of poverty (Figure 15). It is important to note that countries are less comparable as regards their highest than their lowest pay scales, since countries vary in the extent to which they negotiate pay scales for employees in leadership and management functions. Nevertheless, the figure can show that, on average, the upper pay scales exceeded both the single person and family poverty thresholds in most countries. Exceptions were the UK, Belgium, and Slovenia. In the UK, only one of the collective agreements in the study contained pay scales – this agreement set its highest pay scale at .91 of the poverty threshold for a single person household and .43 of the family threshold. The median highest pay scales of one Danish (.87), two Slovenian (.86) and five Belgian (.94) agreements in the study were set below the family threshold but above that for a single person household.

Figure 15 Median ratio of the highest agreed pay scale to individual and family at risk of poverty thresholds by country



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=336

## 6 Inequality in European CBAs

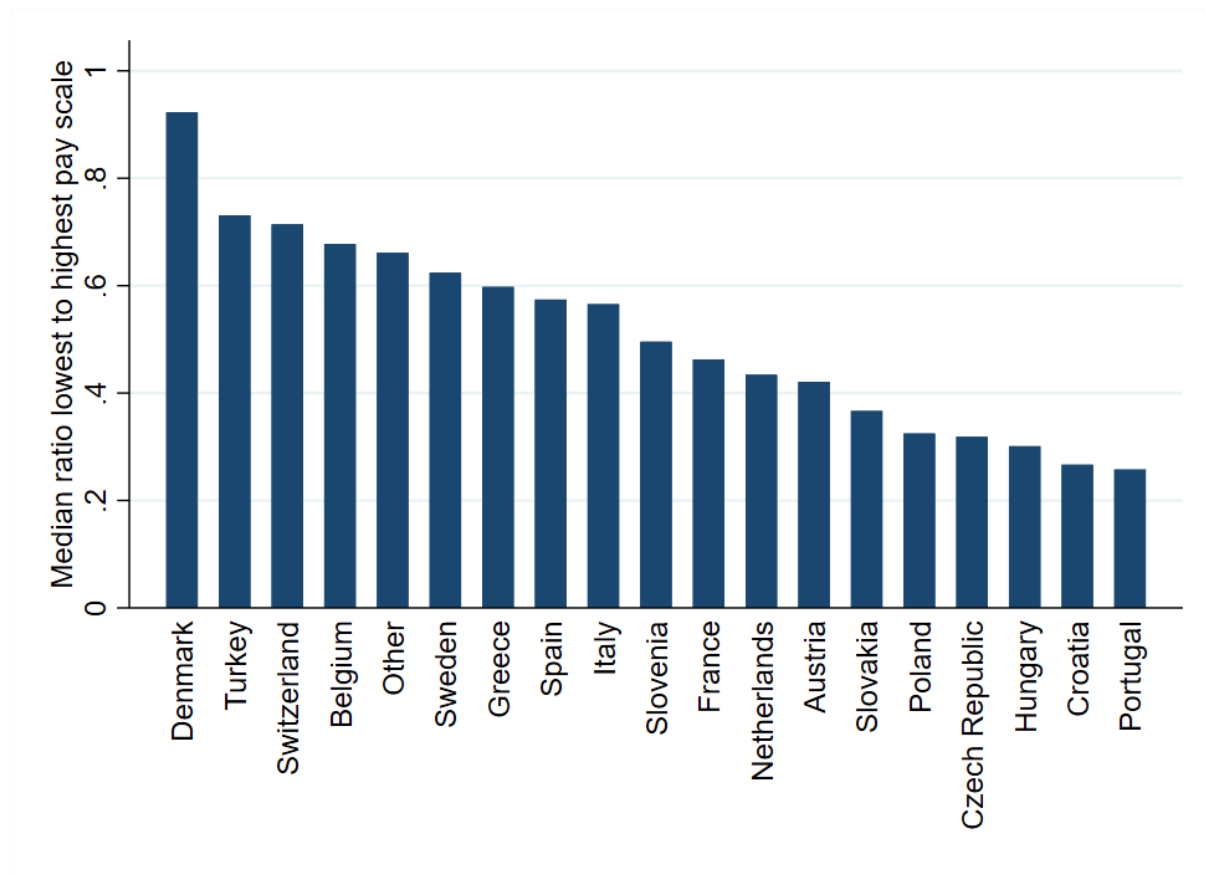
### 6.1 Inequality in pay scales

Collective bargaining on wage can be a way to curb income inequality. Collective bargaining coverage has frequently been associated with lower pay inequality on the country level.

However, there is little research into pay inequality *within* collective bargaining agreements.

In this report, we calculate the ratio of the bottom step on the lowest agreed pay scale to the highest step on the highest pay scale of a CBA. We do so for 381 out of 602 agreements, which included pay scales. Pay scales were available in CBAs from 19 countries: Austria, Belgium, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Hungary, Italy, Malta, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Switzerland, and Turkey.

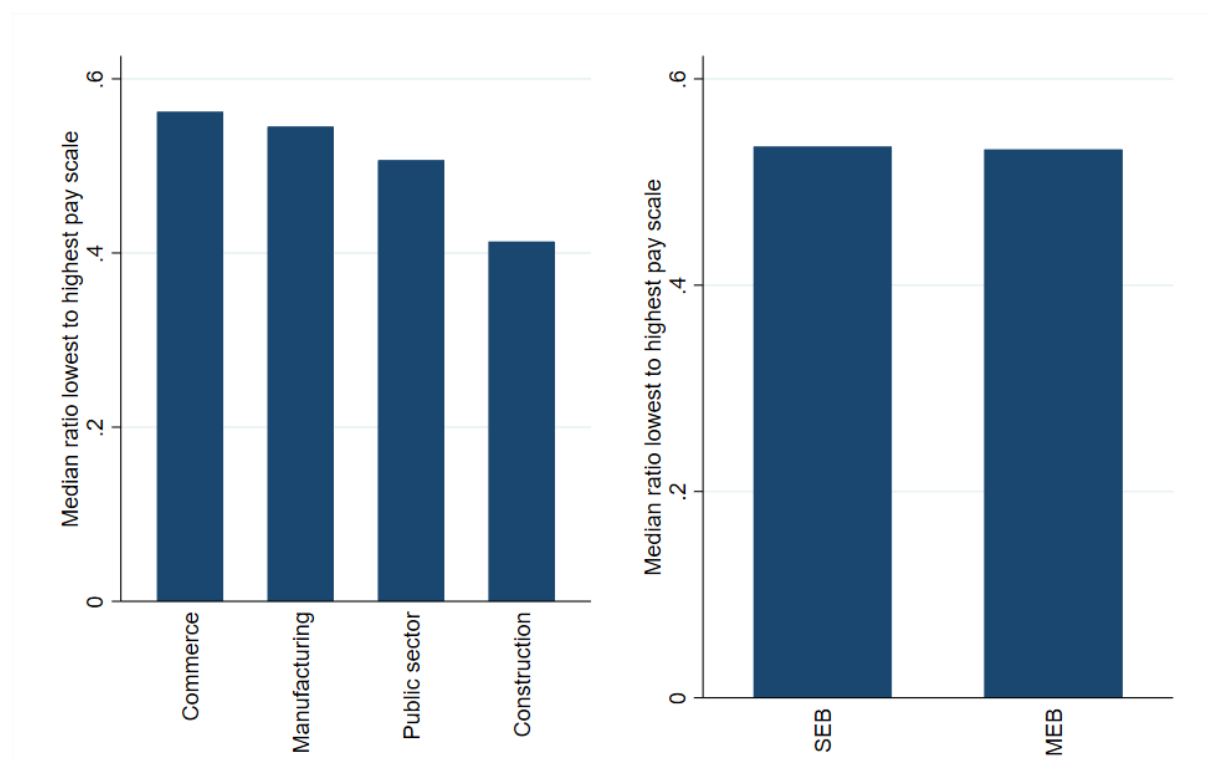
Figure 16 Median ratio of the lowest to highest agreed pay scale by country



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=333

Figure 16 shows the average ratio of the lowest to the highest pay scale found in CBAs in each country. The closer the lowest pay scale is to the highest, the more the values will approach one, which measures a situation in which the lowest and highest pay scale are the same. The one Danish CBA with pay scales in the sample is the most equal in terms of negotiated pay (the lowest pay scale is 92% of the highest pay scale). Negotiated wage floors and top pay scales are relatively equal in Turkey, Switzerland, and Belgium. Portugal is the least equal, with the lowest pay scales amounting to only 25% of the highest. Collective agreements in the construction sector were more unequal than the other sectors, as shown in Figure 17, but these results are not significant in multivariate analyses.

Figure 17 Median ratio of the lowest to highest agreed pay scale by sector and level of bargaining



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=307

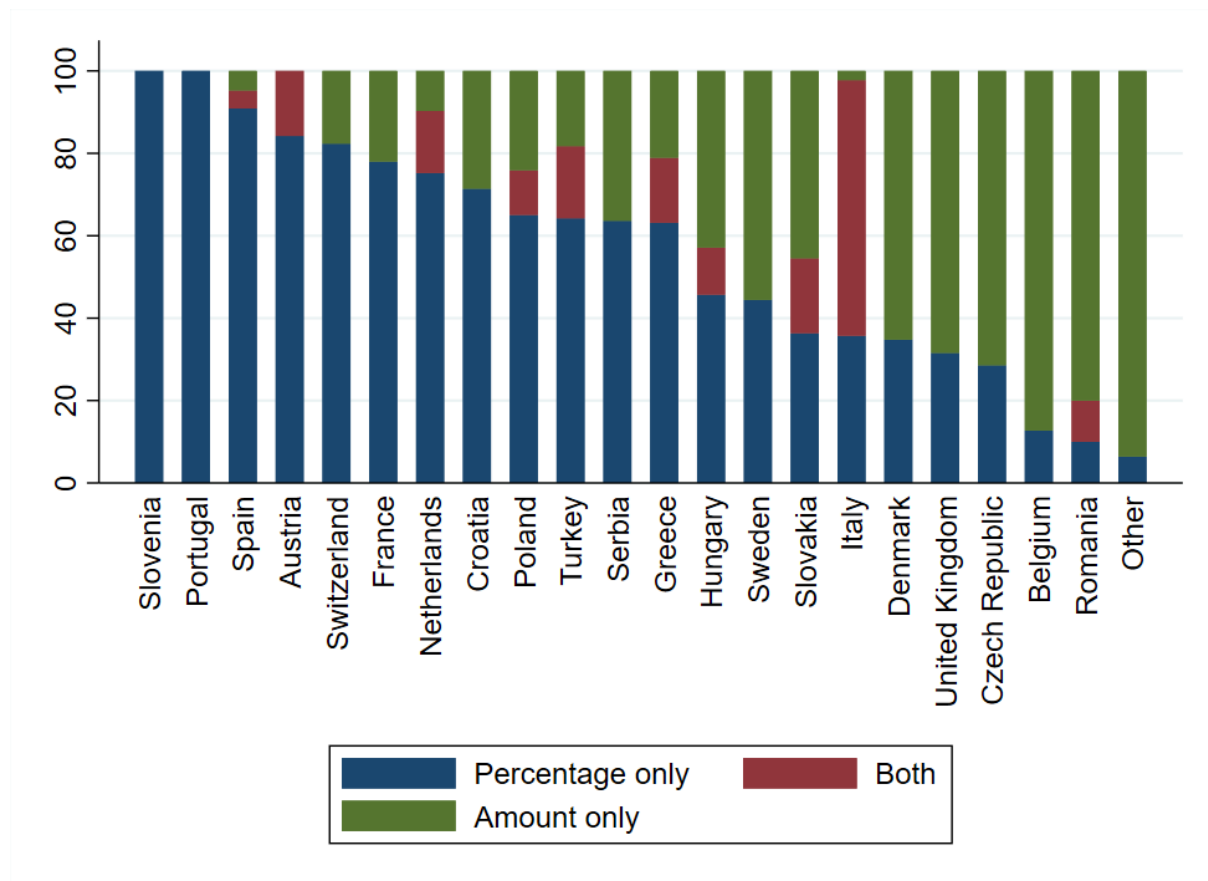
## 6.2 Wage increases & reducing inequality

Apart from setting the level of wages, collective agreements often contain negotiated wage increases, as was discussed in section 4.4. This constitutes another tool for social partners to decrease pay inequality within their sector or company. Specifically, wage increases can maintain the level of inequality if they negotiate wage increases as a percentage of current

wages, or they can curb it by negotiating fixed amounts, which will represent a large percentage-wise increase of wages at the bottom than at the top.

Of the 396 collective agreements that contained a structural or incidental wage increase, two thirds (67%) contained only a percentage increase, 12% only an increase by a fixed amount, and 21% contained both. In Slovenian and Portuguese collective agreements, only percentage increases were found. At least 75% of identified increases were also percentage increases in Austria, France, the Netherlands, Spain, and Switzerland. Italian collective agreements most often contained both a percentage increase and a fixed amount.

Figure 18 CBAs with increases implemented as a percentage increase or money amount as a share of CBAs with pay increases by country

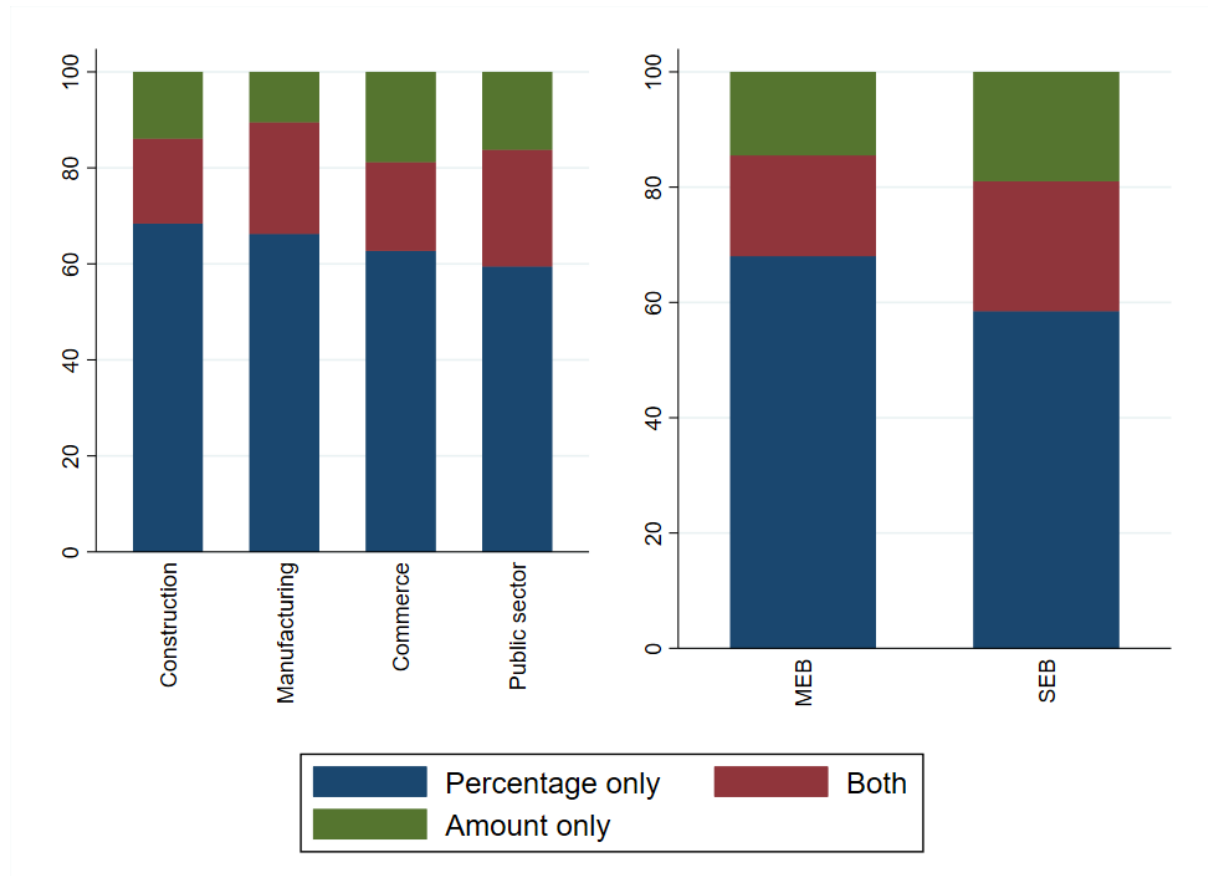


Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=376

Collective agreements in the construction sector more often included a percentage increase in wages only (71%) compared to manufacturing (68%), commerce (67%) and the public sector (64%), as shown in Figure 19. Single-employer agreements more often included both a

percentage increase and a lumpsum compared to multi-employer agreements (24% compared to 18%).

Figure 19 CBAs with increases implemented as a percentage increase or money amount as a share of CBAs with pay increases by sector and level of bargaining



Source: WageIndicator CBA Database, selection COLBAR-EUROPE countries CBAs, accessed 29 March 2021, N=394

## 7 Discussion and conclusions

Collective bargaining is an important instrument for wage setting in many European countries. Through collective agreements, workers' and employers' representatives can regulate the wages paid in specific sectors or firms, mostly by fixing pay scales or wage floors, as well as wage growth, when structural or incidental pay increases are negotiated. The share of workers covered by collective bargaining in a country has been associated with the level of income inequality as well as the real value of wages (Eurofound, 2015; Garnero, 2020). Furthermore, collective agreements sometimes set sector specific wage floors that can be as efficient as statutory minimum wages (Garnero et al., 2015a, 2015b). Despite the relevance of wage bargaining for inclusive growth, such as decent wages and reducing inequality, empirical knowledge of collectively bargained pay remains limited. Comparative studies have primarily addressed the macro level, whereas micro level studies are overwhelmingly country or even sector specific.

The COLBAR-EUROPE project aims to address this knowledge gap by providing comparable data on the contents of collective agreements. COLBAR-EUROPE (VS/2019/0077) aimed to contribute to the objectives of the EU's Social Dialogue Program. This report addressed its Research Objective 2): Do agreements include wage clauses, pay scales and indexation clauses and how do pay scales compare within and across countries and sectors? Using the WageIndicator CBA Database (Ceccon & Medas, 2021), 602 collective agreements from 26 European countries were examined to determine whether and how they fix wages and other forms of pay.

Examining the inclusion of clauses on pay in European collective agreements, results showed that clauses on wages were included on the bargaining agenda of nearly all CBAs (97%) and 91% specified the level at which wages are to be determined – mostly in individual contracts (28%), at the company level (24%), or at the sector level (40%). Just under half of the collective agreements in the study (47%) contained a clause on the lowest wage to be paid. About a third of all collective agreements (32%) explicitly fixed the lowest payable wage in the firm or sector covered by the agreement. Only 14% contained clauses that said the minimum wage set by the government had to be respected. Two thirds of collective agreements contained pay scales. Over 90% of the collective agreements included at least one premium or allowance for the workers covered. The most agreed arrangements were premiums for overtime (79%), night work (67%) and for working on Sundays (56%). A

structural wage increase was negotiated in 304 out of 602 collective agreements. Once-only extra payments were included in 64% of the collective agreements.

Country differences in pay scales and wage increases were clear. Overall, these results show two extremes between countries that almost always refer to a wage floor, which is set in the collective agreement itself along with pay scales- e.g. Sweden and Italy - and countries like Romania, where collective agreements rarely set a wage floor and no pay scales were found in the large majority of the collective agreements. There were large country differences in the negotiation of structural wage increases in collective agreements. Most agreements in Spain (80%) contained such a structural increase, whereas none of the Swiss or Romanian collective agreements did. The negotiation of both structural and incidental pay hikes was common in Spain (71%), Italy (68%) and Poland (60%), while none of the agreements from Denmark, France, Romania, Slovenia, Sweden, or Switzerland contained both. Once-only payments were popular in Portugal (85%), Switzerland (67%) and Austria (58%) and never found in CBAs from Sweden. All Swedish CBAs that negotiated a wage increase did so through a structural increase. Collective agreements without pay increases were most common in Romania (83%), the UK (77%) and Slovenia (75%).

Countries have different traditions with regard to the base for differentiation of wages in pay scales, which include occupation or job type, age, sub-sector of the operations covered by the collective agreement, skill level or educational qualifications, tenure, and firm size. This makes it hard to compare pay scales across countries. However, the lowest and highest agreed pay scales for adults can be compared - the former even more so than the latter, since management pay scales are included in some countries and excluded in others. Analyses of wage floors in collective agreements show that, on average, the lowest pay scales found in European countries are negotiated above the poverty threshold for a single person household. However, the lowest pay scales in collective agreements were, on average, insufficient to keep a family out of poverty. Danish, Turkish, Swiss, and Belgian CBAs were the most equal in terms of negotiated pay. Portugal is the least equal, with the lowest pay scales amounting to only 25% of the highest.

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