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Mind the gap between your collective agreement and your wages: assessing the importance of collective bargaining for wage setting in Europe

BARWAGE Report No. 16

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Abstract

The BARWAGE project studied the importance of collective bargaining for wage setting in the European Union Member States. The project investigated the extent to which collective bargaining contributes to the goal of fixing adequate wages in the EU, and subsequently explored the extent to which and way in which collectively bargained provisions leave a discretionary space for individual employers to make decisions on pay. This report summarizes the main findings of the project.

Keywords: collective wage bargaining, pay scales, wages, wage inequality, Europe

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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

The BARWAGE project, implemented between 1 September 2022 and 31 August 2024, studied the importance of collective bargaining for wage setting in the European Union Member States. In short, it asked *whether, how, and for whom* collective agreements effectively set wages. Reacting to the adoption of the EU Directive on Adequate Minimum Wages in Europe (European Parliament & Council of the European Union, 2022a), BARWAGE investigated the potential of collective bargaining as a tool for ensuring adequate minimum wages in the European Union by exploring the size of four wage-setting arenas: the national level, sector level collective bargaining, enterprise level collective bargaining, and individual (non-collective) wage setting.

BARWAGE was funded by the European Commission's Directorate General for Employment, Social Affairs and Inclusion under the Social Dialogue grant programme (SOCPL-2021-IND-REL - Project ID 101052319). The project was coordinated by Utrecht University (the Netherlands), and conducted in close cooperation with the Central European Labour Studies Institute in Bratislava, the Italian Fondazione Giuseppe di Vittorio, and the Amsterdam-based, globally active WageIndicator Foundation. The European Trade Union Institute (ETUI) and the Algemene Werkgeversvereniging Nederland (AWVN) acted as associate partners.

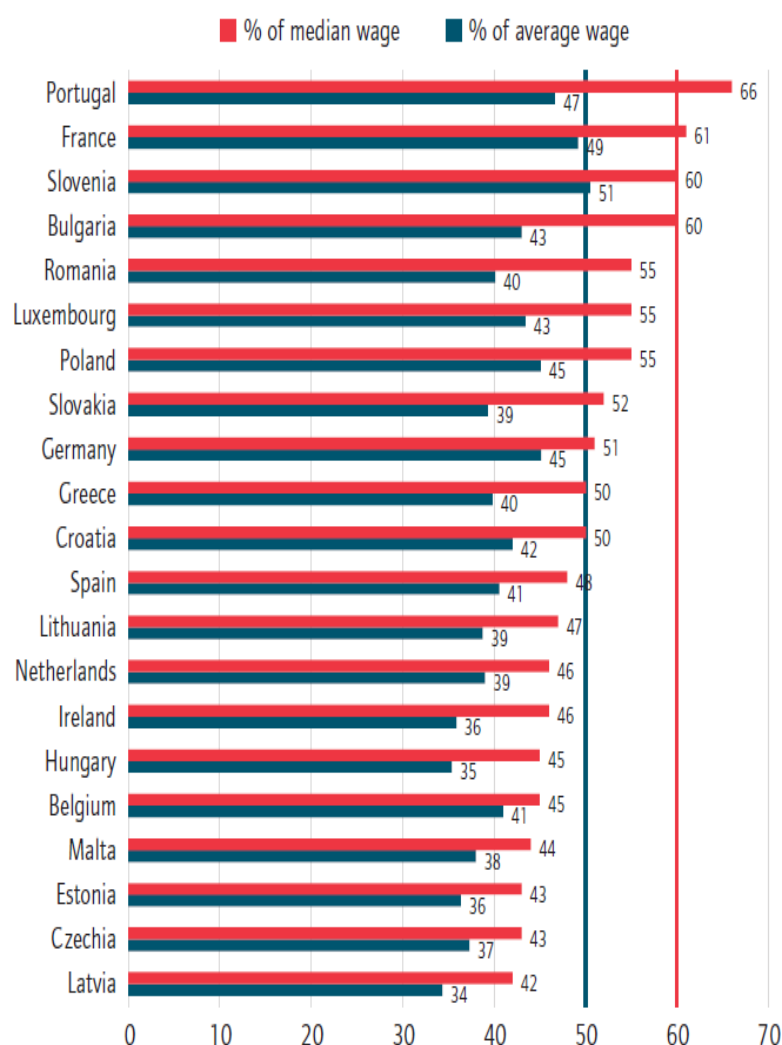
Over the course of two years, these project partners conducted four mixed-methods studies, including major data collection efforts (collective agreements and in-depth interviews) and coding efforts (of collective agreements, collectively bargained pay systems, and in-depth interviews). The studies in the four substantive work packages of the project investigated the extent to which collective bargaining contributes to the goal of fixing adequate wages in the EU (WP2-3) and subsequently explored the extent to which and way in which collectively bargained provisions leave a discretionary space for individual employers to make decisions on pay (WP4-5).

This 16th and final BARWAGE report summarizes the key findings of the project, based on the studies reported in the first fifteen reports. As such, this report does not add any new empirical data. Its aim is to present the project's main findings and connect the insights from the studies conducted in the work packages (WP2-WP5). In so doing, the report aims to answer the project's overall research question: to what extent are wages set through collective bargaining, broken down by country, industry and bargaining level? In the following sections, this discussed the key insights from the four studies, placing them in the context of the overarching research question.

Key results: The role of collective bargaining in reaching adequate wages

The first two studies of the BARWAGE project aimed to understand the extent to which collective agreements fix pay rates at adequate minimum levels, as defined in the EU Minimum Wage Directive, or the extent to which collective wage bargaining contributes to reaching these adequate wage levels. This question is all the more relevant as European minimum wages are expected to rise in the upcoming years in order to meet the adequate minimum wage targets set in the EU Minimum Wage Directive, which, as ETUI policy brief (Müller, 2023) points out, most Member States currently fall short of (see figure 1).

Figure 1 Statutory minimum wages in EU member states and adequate minimum wage targets in 2022



Source: ETUI Policy Brief 23/02 (Müller, 2023)

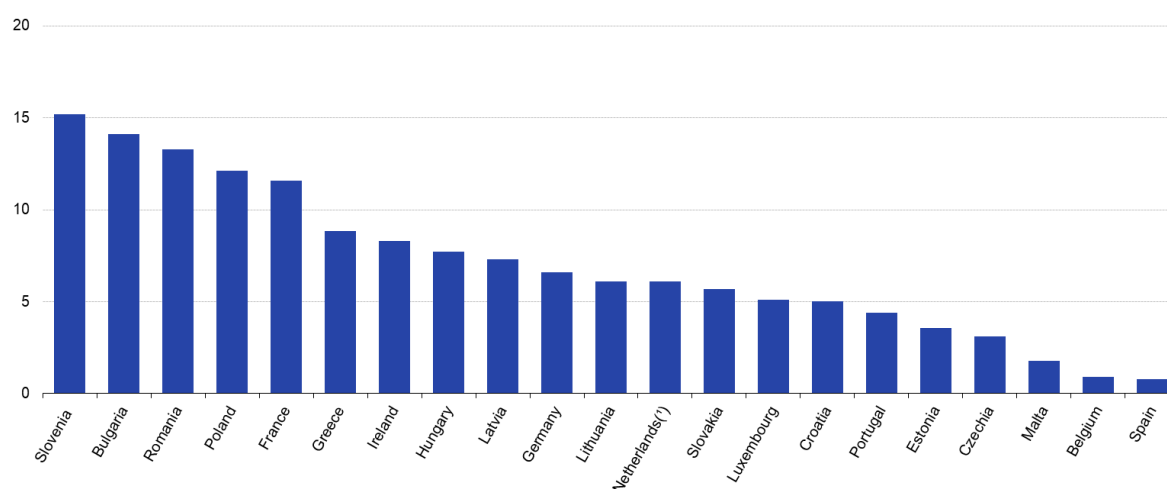
Collective bargaining as the 'bite' of the statutory minimum wage

To ensure adequate minimum wages, recent EU legislation, including the Directive on Adequate Minimum Wages in Europe, rely on a combination of statutory minimum wages, or intersectoral wage floors set in a different but equivalent manner, and collective bargaining on wages. This has rekindled the debate about the interplay of these two wage fixing institutions. The obvious policy intention is to let additional, firm or sector level collective bargaining help ensure that the wages of all workers keep increasing, with most workers' wages thus staying ahead of the rising statutory minimum wages.

Past research has shown this to be common in countries where the interplay between the SMW and bargaining has been characterized as related through 'direct interaction', where SMWs and very

similar bargained wage floors tend to rise in tandem, ‘distant coexistence’, where collectively bargained wages stay well above the SMW, or ‘autonomous’, where collective bargaining effectively sets the SMW (Dingeldey et al., 2021; Grimshaw, 2013; Grimshaw et al., 2014). However, in other country examples, stronger statutory minimum wages have taken over the role of sector level bargaining by making it hard to negotiate bargained pay rates above the statutory minimum (Kahancová & Martišková, 2022). This sparks fears that rising SMWs, in some countries, might lead to a further reduction of sector level collective bargaining and a growing group of minimum wage earners, especially in countries with relatively high proportion of workers have traditionally been paid at minimum wage level (see Figure 2).

Figure 2 Proportion of employees earning less than 105% of the minimum wage in October 2018



(*) In October 2018 the national minimum wage applies to employees aged 22 years or older.

Source: Eurostat, Structure of Earnings Survey 2018 and Minimum wages; special calculation made for the purpose of this publication; data are not available in Eurostat's online database

eurostat

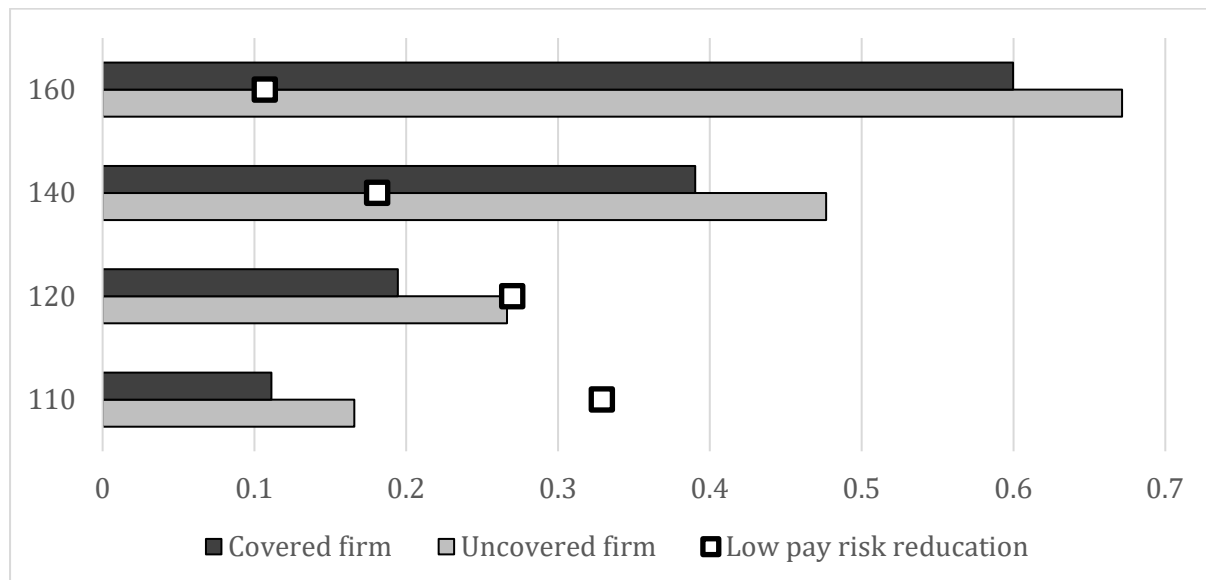
Source: (Eurostat, 2024)

Addressing this question, the first BARWAGE study explored the interplay between these two pivotal wage fixing institutions: statutory minimum wages and collective wage bargaining (Janna Besamusca et al., 2023). Using the WageIndicator Minimum Wage Database (WageIndicator, 2023) in combination with microdata on earned wages from the 2018 European Structure of Earnings Survey (Eurostat, 2021), Besamusca, Guzi and Tijdens (2023) explored the extent to which being employed in a firm that applies a collective agreement, is associated with earning wages that substantially exceed the statutory minimum wage. In other words, we asked whether collective bargaining exerts upward pressure on wages in countries that also fix statutory minimum wages, or whether the two wage fixing institutions effectively substitute each other.

The main conclusion from this study is that workers in firms that apply a collective agreement, are better protected from the risk of earning low pay: collective bargaining does increase the probability that a worker earns MORE than the statutory minimum wage. Figure two shows this for the probability of earning below 110%, 120%, 140% and 160% of the statutory minimum wage: the black bars, representing the share of workers earning wages below the threshold in a firm applying a collective agreement, are always shorter than the grey bars, representing the share of workers in firms that do not apply a collective agreement. For example, 11% of covered employees and 16% of non-covered employees earned wages below a 110% of the statutory minimum wage. Statistically, this implies that

working in a firm that is covered by collective bargaining reduced the risk of being paid below 110% of the SMW by 33% (figure 2, square). This risk reduction effect is replicated up to the 160% of SMW level.

Figure 3 Low pay risk for workers in covered and uncovered firms for different thresholds defining the low pay workers



Source: Own elaboration based on SES (2018), figure adapted from BARWAGE report 1 (Janna Besamusca et al., 2023)

Studying critical differences across countries and sectors, the analyses also showed that this risk reduction effect of collective bargaining on low pay, was stronger in countries that set SMWs at relatively high levels (i.e., at closer to the median wage). While this does not mean that raising the relative wage level of the SMW will improve the effectiveness of collective bargaining, it does negate the claim that a higher SMW must hollow out wage bargaining (Janna Besamusca et al., 2023). The risk reduction effect of collective bargaining was largest in sectors with lower collective bargaining coverage, suggesting that firms bargaining collectively despite their competitors failing to do so, offer relatively large wage premiums. More worryingly, collective bargaining was much less effective in reducing the risk of low pay in female-dominated than male-dominated sectors.

Negotiating adequate wage floors in collective agreements

The BARWAGE project's first study, thus suggested that employment in a firm that applies a collective agreement was associated with earning wages that exceed the SMW by a larger margin than employment in firms that do not apply collective agreements. One of the key ambitions of the BARWAGE project, however, was to not rely solely on microdata comparisons. In order to study the relation between collective bargaining as a wage fixing institutions, we aimed to connect earned wages in firms applying collective agreements, to wage provisions included in these same collective agreements.

To this end, the BARWAGE project partners coded 400 collective agreements from Bulgaria, Czechia, Estonia, Portugal and Slovakia; these were added previously collected and coded collective agreements from these same countries, as well as from Austria, Czech (sector level), France, Italy, the Netherlands and Spain. Gathering these collective agreements was a relatively straightforward process in Austria, Bulgaria, Italy (on the sector level), the Netherlands, Slovakia (public and semi-public sector) and Spain, where publicly accessible and reasonably complete archives of collective agreements were available. The collection of Portuguese agreements was complicated by poor search functions of the archive of collective agreement, despite its public accessibility. The collection of collective agreements in France is challenging due to the tradition of negotiating only amendments to existing provisions, in topic-specific negotiations, instead of negotiating full collective agreement texts, as is traditional in most EU member states. Finally, the collection of agreements from Estonia and firm level agreements from Czechia required major efforts due to the absence of (updated) archives of collective agreements and the general lack of public availability of negotiated collective agreements, where they exist. This required team members to conduct extensive desk research and approach each firm, trade union, and employers' association individually.

The resulting database (WageIndicator Foundation, 2024b) contained 1224 collective agreements, of which 98% included some provisions on wages and three quarters included pay scales (Medina Ojeda & Besamusca, 2024). The inclusion of pay scales was least common in Slovakia, with approximately 10% of collective agreements containing explicit information about pay scales. Under half of the collective agreements from Estonia (39%), France (44%), and Czechia (47%) included pay scales. On the other hand, more than 85% of Austrian, Dutch, Italian, Spanish and Portuguese collective agreements did. At just over 60%, Bulgarian collective agreements formed a middle group. These results also confirm earlier research on this question, which was conducted with the same aim, but relying on smaller samples or a more selective sectoral scope of collective agreements (Janna Besamusca et al., 2018; Janna Besamusca, 2021).

Using this sample of collective agreement, we asked at what level wage floors had been negotiated, and to what extent those levels meet different definitions of adequate wages, like those used in the EU Minimum Wage Directive (European Parliament & Council of the European Union, 2022a) and the EU Corporate Sustainability Reporting Directive (European Parliament & Council of the European Union, 2022b). In order to do so, the average bargained wage floors in the 10 countries from 2016 until 2023 were compared to three standards: statutory minimum wages (or imputed equivalents in Austria and Italy), 50% of mean wages, and the WageIndicator Living wage thresholds (WageIndicator, 2023; WageIndicator Foundation, 2024a).

Figure 4 Difference between the country average bargained wage floor and (imputed) statutory minimum wage, 2016-2023 (euros)

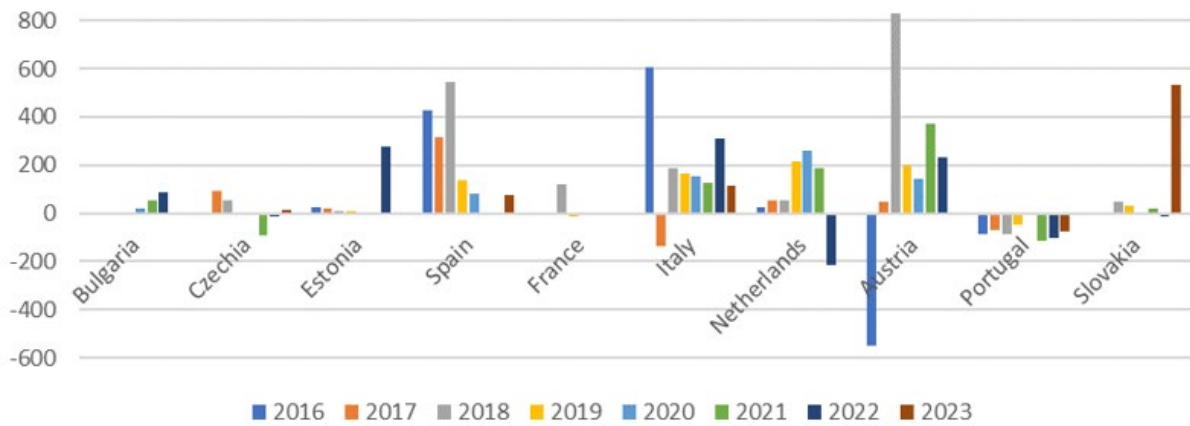


Figure 5 Difference between the country average bargained wage floor and EU Minimum Wage Directive target at 50% of mean wages, 2016-2022 (euros)

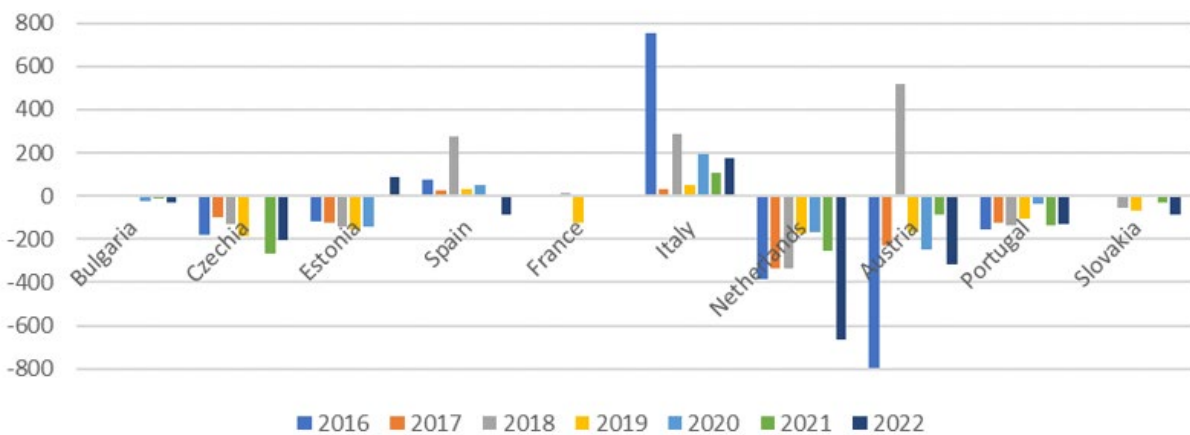
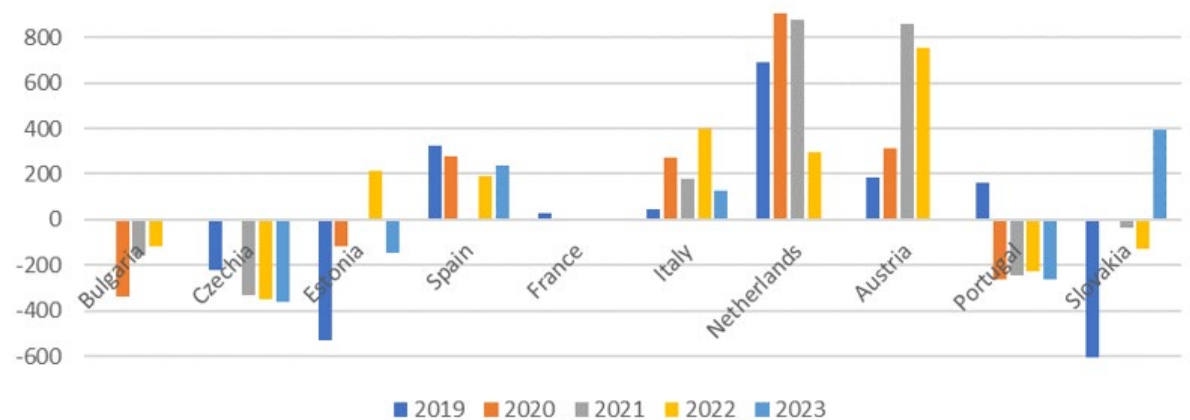


Figure 6 Difference between the country average bargained wage floor and WageIndicator living wage threshold, 2019-2022 (euros)



Source: figures 4-6 extracted from BARWAGE report 2 (Medina Ojeda & Besamusca, 2024).

With some few exceptions, likely due to dyssynchronous uprating cycles of statutory minimum wages and collective wage bargaining, the average bargained wage floors exceeding the SMW in all countries. Confirming earlier findings in a study by Eurofound (2024), Portugal forms an exception to this pattern, with average bargained wage floors falling below the SMW in all years for which data are available. In all respects, Portugal presents the most worrying case, with average collectively bargained wage floors falling below the SMW, the 50% of the mean target, and the WageIndicator living wage thresholds in nearly all years.

The BARWAGE study finds a second group of four countries, where average bargained wage floors in most years were set above the level of the statutory minimum wage, but below both adequate wage targets: Bulgaria, Slovakia, Czechia, Estonia. In Austria, France and the Netherlands the average bargained wage floors exceeded the (imputed) SMW and the cost-of-living based living wage threshold of the WageIndicator Foundation, below fell below the EU Directive's target of 50% of the mean. Only in Italy and Spain did the average bargained wage floors fall above all three targets in most years.

We are cautious to generalize these conclusions for a number of reasons. First, the lack of representative sample and oversampling of some levels of bargaining (e.g., sector level bargaining in Italy, Portugal and Czechia) and sectors (e.g., public sector in Slovakia) might give a slight different picture from an analysis of all existing collective agreements. The findings, however, are generally in line with results from the European Foundation for the improvement of Living and Working Conditions, which are based on a different selection of collective agreements (Eurofound, 2024).

Crucially, the analyses in this study only considered the level of the bargained wage floors, i.e., the lowest pay rates associated with the lowest pay grade each collective agreement. These wage floors are important from a policy perspective, especially because they might be interpreted as the wage floor that employees are *entitled* to. However, the lowest pay rates are commonly intended as the starting salaries for the lowest skilled and least experienced employees, and are not usually the most populated pay grades (Armstrong, 2007; Janna Besamusca et al., 2022). In order to understand how the collectively bargained pay rates of more sizeable groups of employees are related to earned wages, we turn to the second set of studies in the BARWAGE project.

Collective wage bargaining institutions: regulation and discretion

Where the first set of BARWAGE studies aimed to understand the role of collective bargaining in ensuring adequate wages, the second set of studies focused on the question of wage bargaining as an institution. When collective bargaining is labelled a pivotal part of the European social model, and confidence is put in these processes to ensure fair wages and moderate levels of inequality, collective wage bargaining is presented as an institution (e.g., Streeck, 2011). If sufficiently strong as an institution, collective bargaining creates the framework for, or conditions under which, wages can be determined in the labour market, thus creating and re-creating inequalities (Berg, 2015; Moore & Tailby, 2015; Tomaskovic-Devey & Avent-Holt, 2019).

For a considerable time, these bargaining institutions have been theorized as mostly stable traditions, only rarely and incrementally subject to change, and associated with different welfare state models

(Esping-Andersen, 1990) or varieties of capitalism (Hall & Soskice, 2001). However, several industrial relation scholars have argued that European collective bargaining institutions have increasingly negotiated space for employer discretion in the determination of actual, earned wages within firms covered by collective bargaining (Baccaro & Howell, 2017; Haipeter, 2009; Ibsen & Keune, 2018).

In the third and fourth studies of the BARWAGE project, we explored the relation between bargained pay rates and earned wages. Using a qualitative approach, in-depth interviews with bargaining partners in nine EU member states explored the intentions of the signatory parties to European collective agreements – how strictly did they expect firms applying the collective agreement to adhere to its pay rates, and to what extent has that changed? Using a quantitative approach, three innovative pilot projects aimed to link pay rates to microdata on earned wage, in order to study how large the gap between bargained and earned wages is in practice.

Centralisation and decentralisation of the determination of pay

Work package of the BARWAGE project sheds light on the actual processes of wage setting across different industrial relations systems in Europe (Kahancová & Besamusca, 2024). If liberalization is indeed occurring, the aim is to empirically show how exactly it is occurring, which actors are involved, what is the starting point of this process and where does it lead to in terms of institutional stability or change. Besides providing a country-specific overview of wage setting, the focus is on a sectoral comparison across these countries. This is not only because of varying bargaining powers across sectors, but also because the relevance of sector-level bargaining, or at least multi-employer bargaining, has been stressed (Ceccon et al., 2023).

To operationalize this aim, the research started with an assumption that collective wage setting is important across European countries as one of the pillars of capitalist governance of political economy. Yet, it questions whether and how this collective wage setting is changing, or shifting, towards more individualized/discretionary wage setting mechanisms; how the collective and individual wage setting co-exist and interact with each other, and whether discretion over wage setting is undergoing a shift e.g., from collective to more individual discretion of employers and the worker in 9 studied countries (Austria, Bulgaria, Czechia, Estonia, France, Italy, the Netherlands, Portugal and Spain).

The key takeaway from the cross-country comparisons is that while sector-level and company-level wage-setting arenas co-exist in most countries, there are situations when workers are covered by several agreements (e.g., a sector-level and a company-level agreement) simultaneously, as opposed to situations a worker can be covered only by a single agreement. For example, in Austria, Spain and Italy, multi-level collective bargaining agreements are structured in a nested manner, leading to simultaneous coverage by firm-level and sector-level agreements. In Spain and Italy, these agreements can contain different provisions, particularly regarding pay, with each level offering specific terms that complement or build upon the other. In contrast, in Austria these collective agreements are coordinated, the sector-level agreement setting a benchmark that can be further specified and improved if company-level bargaining occurs. In other cases, namely the Netherlands, the situation is somewhat different. Firms are typically covered either by a sector-level collective agreement or by a firm-level agreement, but not by both simultaneously. This means that the bargaining process in the

Netherlands is more segmented, with firms choosing the level at which they engage in collective negotiations, leading to distinct sets of terms depending on the level of coverage. In Central and Eastern European countries, there is a technical possibility of simultaneous coverage by the sectoral and firm-level agreement. However, due to the limited scope of sectoral agreement, or in case such an agreement is valid but its content is limited to low benchmarks close to those stipulated in legislation, it is practically rare to see collective agreements stipulating diverse provisions, or raising questions on which agreement applies.

Regarding the discretion in wage setting at the company level, even in countries and sectors with highly coordinated bargaining there is room for discretionary wage setting in a decentralized way, at the employer or even the workplace. The variety of sectoral insights suggests several explanations to the co-existence of employer discretion on wages to collective bargaining. The first one is the fragmented ownership structure of employers, e.g. in the public transport and waste management sectors. The second one is tipping and informal income in the hospitality sector, and bogus self-employment in the construction sector. Finally, the link of wage setting to statutory minimum wages is important, both in countries with and without established wage bargaining. If statutory or bargained (minimum) wages increase, these exert pressure on existing wage systems, potentially leading to adjustments in how wages are structured and negotiated. Such adjustments can be done via bargaining or via growing discretion of employers or individuals yet ensuring that (negotiated) wages remain relevant and competitive. Evidence collected in the BARWAGE project WP4 shows that in countries with sectoral wage bargaining, the increase in the statutory minimum wage fuels renegotiation of pay scales, mostly for the low-skilled workers (e.g. in the waste management sector). In countries with highly decentralized bargaining or lack of bargaining, the statutory minimum wage serves as a benchmark for individual discretionary wage setting for low-wage workers – mostly in the hospitality and waste management sectors – and in countries like Estonia, Bulgaria, France, Italy and Czechia. In sum, while collective bargaining is an important wage setting arena in most studied countries and has an equalizing effect on wages (e.g. across regions – as in Italy and Spain), even in a highly coordinated sectoral wage bargaining system (e.g., the Austrian construction sector), subsectors and individual employers enjoy discretionary maneuvering room for wage setting.

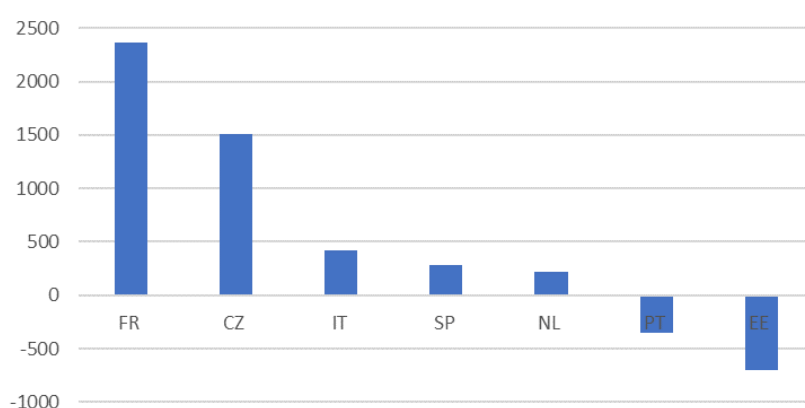
The bargained-earned wage gap

The fourth and final set of studies of the BARWAGE project aimed to compare the level of earned and bargained wages to understand the extent to which a gap between the two exists, and whether this varies across countries. Comparing the average mean bargained pay rate across all collective agreements in seven countries, and the average earned monthly wage per country, figure 7 shows large differences between countries in the earned-bargained wage gap. In France, Czechia, Italy, Spain and the Netherlands, earned wages exceeded bargained wages on average, in the first two countries by large margins too. In Portugal and Estonia, however, the opposite occurred.

Further inquiries showed four different configurations of the relation between earned median wages and median bargained pay rates across the seven countries: (1) earned wages exceeded both bargained floors and medians in Czechia and France; (2) in Italy, the Netherlands and Spain, median bargained and median earned wages were found to be at very similar levels, and both substantially higher than bargained wage floors, showing plentiful opportunity for wage growth within the pay

scales; (3) median bargained and earned wages show similar levels, with earned wages falling below bargained medians in some sectors in Portugal, thus showing a much less problematic picture than the comparison of wage floors to adequate wage thresholds; and, finally (4), earned wages fell below both bargained wage floors and medians in Estonia, where up to 74% of employees earned wages below the bargained wage floor in some sectors. This, while Estonian wage floors were set at quite adequate levels (see section ‘negotiating adequate wages’), their wage setting capacity appears to be quite limited.

Figure 7 The earned-bargained wage gap



Source: Own elaboration using WI CBA database and SES

Wage growth and bargained pay rate developments in Italy

The Italian case study presents another, longitudinal example of earned wages outpacing bargained wages. In Italy, which has been a frontrunner in many of the comparative studies presented above, Irene Brunetti (2024) compares the growth of pay rates, earned wages, and inflation in the post-COVID years to explore the effectiveness of collective wage bargaining. In Italy, collective bargaining institutions specifically assume the presence of employer discretion through ‘second level bargaining’, which consists of firm level or regional collective agreements complementing the national, sector level collective agreements. However, low firm-level bargaining coverage has been associated with lower employer discretion, and bargained wages falling further behind developments of the consumer price index (Brunetti, 2024). Brunetti concludes that while sector level collectively bargained pay rates fell far behind inflation (increasing by 5.4% compared to 16.2% inflation between 2019 and 2023), about half of the gap created by lagging collectively bargained pay rate, was closed by the much steeper increase in earned wages in the same period (7.8%).

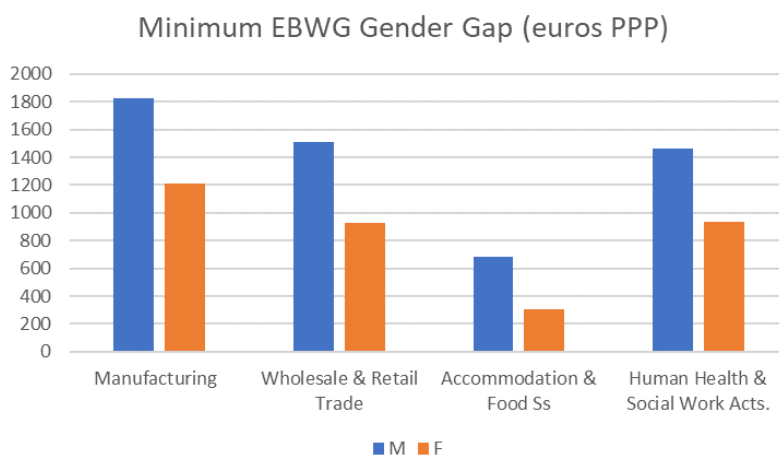
Beyond averages: matching individual pay rates and wages in the Netherlands

The final pilot project attempted to match individual employees’ earnings to the range of bargained pay rates corresponding to their occupation and sector. We use the Netherlands as a case for this study because, for several reasons, it is a country with optimal conditions for matching the two data sources. First, the Netherlands is a country with a relatively high collective bargaining coverage rate that predominantly bargains at the sector level, with additional enterprise bargaining being relatively

rate (OECD & AIAS, 2021). Secondly, Dutch collective agreements tend to include detailed pay systems including job classifications and stepped pay grades, which are required for assigning bargained pay rates to microdata observations on earned wages (Janna Besamusca, 2021; Medina Ojeda & Besamusca, 2024). Finally, it is a country where employers have traditionally been expected to closely follow bargained pay rates, but where a shift towards larger (upward) deviations from collective provisions has been observed over the last decades (Janna Besamusca, 2024; Boumans, 2022; Ibsen & Keune, 2018).

Across four sectors in the study, Besamusca and Medina Ojeda (2024) show that the average employee in all sectors in the study earns wages above the minimum bargained reference wage for their occupational group. However, the study revealed substantial differences across socio-demographic groups of employees, as well as firm characteristics. Most notably, perhaps, was a large gender gap in the earned-bargained wage gap, where men earned wages that exceeded bargained pay rates by substantially larger margins than women (figure 8). Smaller firms are associated with smaller gaps in most sectors, except in Wholesale and Retail Trade where larger firms show smaller gaps.

Figure 8 Gender differences in the earned-bargained wage gap



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