

European Economic, Employment and Social Developments

2024.03 | April

Lowering wage inequality through collectively negotiated minima

Wouter Zwysen

Wouter Zwysen

is a senior researcher at the European Trade Union Institute (ETUI) in Brussels, Belgium.

Introduction

Wage inequality, and particularly in-work poverty and inadequate incomes for those in work, are a pressing issue. The European Union's new Directive on adequate minimum wages addresses this issue in two ways, representing a substantial change in EU thinking about this. On one hand, it defines a set of criteria aimed at ensuring adequate statutory minimum wage floors; and on the other, it promotes broader collective bargaining coverage through various provisions aimed at strengthening the role of trade unions and obliging Member States with collective bargaining coverage below 80 per cent to implement measures to increase it (Müller and Schulten 2024). Both higher minimum wages and greater collective bargaining coverage are associated with lower wage inequality and less low-wage work (Haapanala et al. 2023; Zwysen 2024). Their relationship is debated, however. On one hand, collective bargaining on wages and statutory minimum wages could be seen as being in conflict, as higher statutory minimum wages may undermine free bargaining on wages between trade unions and employers (Haapanala et al. 2023). On the other hand, a statutory minimum wage may bolster wage bargaining and the trade union position¹). To understand this duality better, it is useful to consider in detail what is being negotiated and how this affects wage inequality. This brief makes use of newly available data from a Eurofound project on collectively negotiated minimum wages in low-paid sectors (Eurofound 2024b) to analyse directly how negotiated pay rates affect wages and the incidence of low-pay in the affected sectors, and how this compares with statutory minimum wages.

^{1.} For a more detailed discussion on the interplay between statutory minimum wages and collective bargaining see Grimshaw, Bosch and Rubery 2014; Bosch, Schulten and Weinkopf 2021.



Minimum pay in sectoral collective agreements

In a recent project, Eurofound (2024b) mapped the lowest minimum pay rates specified in 692 collective agreements, at company or sectoral level [regional or national], between 2015 and 2022 across the EU. This exercise focused on 11 specific low-pay sectors² covering a high proportion of the low-paid workforce in Europe, and coded agreements that were active in 2020.

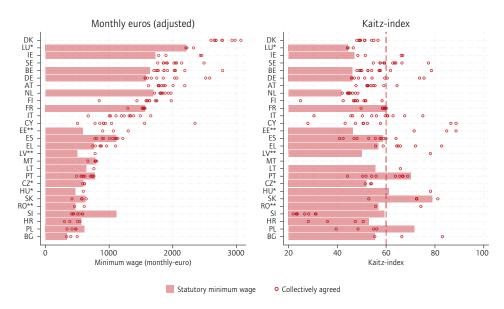


Figure 1 Description of sectoral minimum pay rates in 2021

Note: the figure shows (left) the average adjusted monthly value in euros of the collectively bargained sectoral minimum wages and statutory minimum wage, and (right) expressed relative to the median for a full-time worker aged 25–64 [Kaitz index], in 2021. * low degree of representativeness; ** small sample (Eurofound 2024b).

Source: Eurofound (2024a), EU-SILC.

Figure 1 provides a graphic depiction of this dataset. Generally, negotiated minimum wages tend to be substantially higher than statutory minimum wages, especially where the latter are rather high. Furthermore, countries without a statutory minimum wage (Denmark, Sweden, Austria, Finland, Italy) generally also have relatively higher collectively negotiated minimum wages. Expressing this relative to the median wage³ (right) shows that while most statutory minimum wages do not meet the adequacy threshold of 60 per cent, the collectively negotiated minima do somewhat better. Indeed, a sizeable group actually ensure a minimum wage at least 60 per cent of the median.⁴ Collectively agreed minimum wages may fall below statutory minimum wages generally because the

^{2.} These sectors were selected based mainly on the share of low-paid workers at the NACE 2-digit level, and were: Agriculture; Manufacture of food, leather, textiles and clothes; Construction, excluding civil engineering; Retail; Postal services and couriers, land transport and warehouses; Hospitality; Business support services; Residential and social care; Arts, gambling and sports; Personal services; Domestic personnel.

^{3.} In this analysis I estimate the median wage from reported annual earnings for full-time workers aged 25+ in the EU-SILC for the reference year 2021 rather than using official analyses. There may then be some deviations with other sources, but is closer to the remainder of the analysis in this paper.

^{4.} For a more in-depth discussion of minimum wages across the EU, please see Müller (2024), or Eurofound (2023b).

relevant agreements are outdated and not renewed, as indicated by Eurofound (2024b). Crucially, collectively agreed rates add information on actual minimum pay within a sector, which could not hitherto be considered fully.

Wage distributions affected by negotiated wages

The question then is to what extent do these minimum pay rates in the agreements push wages upwards over the distribution? This is analysed first by connecting the wage agreements at sectoral level to the distribution of wages in the European Structure of Earnings Survey, in 2018.⁵ Figure 2 shows how wages change across the distribution for similar workers in similar workplaces when the relative collectively agreed minimum wage increases by 10 percentage points. It differentiates between those covered by a sectoral or national agreement (central), a firm-level agreement, or with no collective pay agreement. Wages generally increase more at the bottom of the wage distribution when they fall under higher collectively agreed minimum wages, but the exact pattern and size of the relationship differ depending on coverage.

What we see is that, first, a higher negotiated minimum wage is associated with generally higher wages for everyone, regardless of collective bargaining coverage. There could then be some spillover or ripple effect of negotiated minimum pay rates on minimum wages overall. Higher wages may also necessitate higher collectively agreed wages. Second, as the association is generally higher at the lower end of the distribution, higher negotiated minimum wages are also associated with lower wage inequality overall. This is in line with findings for the statutory minimum wage overall, and for coverage by collective agreements (Zwysen 2024). Third, the pay premia associated with a higher negotiated minimum pay rate are larger for workers covered by collective agreements, and over the distribution, consistently positive and relatively high for those covered by sectoral rather than firm-level agreements.

Figure 2 shows that wages tend to be higher at the lower end of the distribution for those covered by a collective agreement with higher specified minimum pay. It is also important to consider how these wage floors directly affect low-paid work, and consider variation over time. To this end, Figure 3 shows the relationship between a change in either statutory or collectively agreed minimum wages over time and the incidence of low-paid work within a specific country and sector. The figure highlights differences between statutory and collectively agreed minima. First, in the period from 2017 to 2022 statutory minimum wages were not really associated with a reduction in low-paid work. Collectively agreed minima, however, are associated with a lower risk of being a low-paid worker. Second, the association differs by the share of workers covered by a collective agreement. Where more workers are covered by collective agreements, the negotiated minimum wages in collective agreements exert more influence over the incidence of low pay, as expected.

^{5.} This is a large-scale European dataset on workers' wages and earnings as well as characteristics of the workplace such as whether most workers are covered by a specific type of collective agreement regulating pay. The dataset does not cover smaller workplaces with fewer than 10 employees in all datasets, and does not cover public sector services in every country.

The relationship with the statutory minimum wage is somewhat reversed in that the association is stronger in the absence of high coverage. Importantly, as there is little variation in minimum wages over this short period the estimate is imprecise and not statistically significant, in the sense of different from zero.

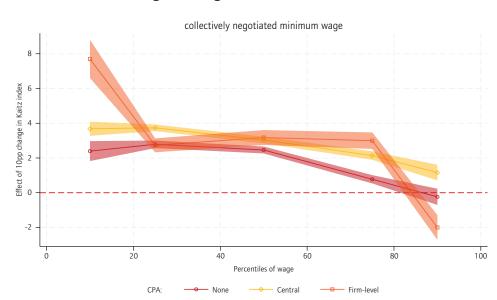


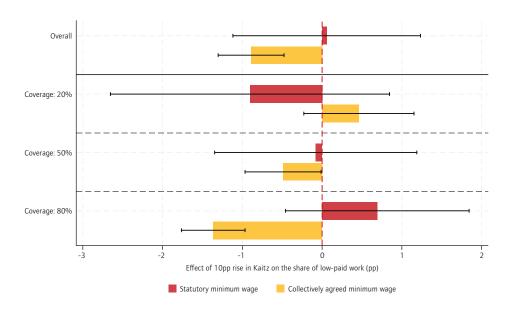
Figure 2 Relationship between the relative bite of the collectively negotiated minimum wage and wages over the distribution

Note: association of a 10 percentage point increase in the bite of collectively agreed minimum wages relative to the median by type of collective agreement at the 10th, 25th, 50th, 75th, and 90th percentiles of the wage distribution, with 95% C.I. Estimated from simultaneous quantile regression at the individual level controlling for sex, age (in categories), highest qualification, hours worked, years of tenure at the firm, size of the firm, and week worked in the previous year, as well as country fixed effect. The negotiated Kaitz index is interacted with collective agreement type. The analysis is restricted to full-time employees who worked at least 46 weeks of the previous year, and weighted. Source: author's calculations based on EU Structure of Earnings Survey 2018; Eurofound (2024a).

This descriptive analysis seems to indicate that, indeed, wage floors set by collective agreements may key to reducing low-paid work if coverage is high. It also indicates somewhat of a trade-off between statutory and collectively agreed minimum wages. The former are particularly important when coverage is low, but they don't matter as much where there are strong collective agreements.

This is analysed through the EU Statistics on Income and Living Conditions for the years 2017 to 2022 (Figure 3) by showing the association between minimum wages – separately using the statutory minimum wage where it exists and the collectively bargained sectoral one – and an individual's risk of working in a low-paid job. The latter is defined as having an approximated hourly wage below 60 per cent of the median. The relevant sector is identified by the 1-digit NACE code in EU-SILC and this is linked to the appropriate average of collectively agreed and statutory minimum wages. To link with collective agreement coverage the coverage levels are obtained from the SES 2014 and 2018 and inter- and extrapolated over time.

Figure 3 Predicted share of low-wage workers with 95% confidence interval by type and level of minimum wage and by collective agreement coverage



Note: estimated relation and 95% C.I. between a 10pp increase in the Kaitz index on risk of low-paid work, estimated from binary logistic regression of being in low-pay work (under 60% of median hourly wage) on the Kaitz index of minimum wages, either collectively negotiated or statutory, as a share of the median wage in the country/year, controlling further for sex, age (squared), country of birth, highest level of qualification, cohabiting and presence of a child, work experience throughout the year, hours worked on average, and including controls for work experience, industry, country and year fixed effects. In a second model the Kaitz index is interacted with the share of workers covered by collective agreements, obtained from EU SES at the country/industry/year level. Analyses are weighted and standard errors clustered at country/sector/year level.

Source: author's calculations based on EU-SILC 2017–2022; Eurofound (2024a).

Limitations

While the Eurofound dataset is comprehensive, not all agreements could be included and there is country-variation in how representative the agreements are (Eurofound 2024b: 27). These agreements are linked at the sectoral level to data on workers' wages and working conditions. While there is no guarantee that all workers in these sectors are covered by the agreement, even in cases in which workers in a related sector in the same country are themselves not covered, it is plausible that agreed rates will have some spillover effect to other, comparable workers, as found in Zwysen and Drahokoupil (2023). Furthermore, wage floors may have a limited effect to the extent that employers may not comply. Indeed, non-compliance with statutory minimum wages is relatively common (Garnero 2018; Eurofound 2023a). The associations in this technical brief should thus be seen as a likely lower bound estimate, meaning that the actual association may be stronger.

These limitations notwithstanding, this is the first comprehensive dataset that provides an overview of the wage floors negotiated in different agreements, which allows for a much more detailed analysis of how wage floors are set through the interplay of social partners and the state, going beyond an analysis of statutory minimum wages.

Conclusion

This technical brief makes use of a novel dataset provided by Eurofound, covering the minimum wages negotiated collectively between 2015 and 2022. First, descriptively, such collectively negotiated minimum wages tend to provide somewhat better protection against low pay than statutory minima. Second, the statistical analysis shows that pay overall, and particularly at the lower end of the distribution, is higher where negotiated minimum pay rates are higher. This affects the workers specifically covered, but also those who are not, and results in lower wage inequality overall. Third, the combination of high collective bargaining coverage – which is achieved only through sectoral bargaining – with higher negotiated minimum pay rates results in the lowest incidence of low-wage workers.

The upshot is thus that minimum pay rates negotiated collectively are an effective way of limiting inequality and improving wages overall, and account for some differences between countries and also, within countries, between sectors. This policy brief also highlights the importance of both channels in setting adequate wage floors: strong collective bargaining with minimum pay rates, and a statutory minimum wage as an absolute wage floor.

Acknowledgements

The author would like to thank Torsten Müller (ETUI), as well as Carlos Vacas-Soriano and Christine Aumayr-Pintar (Eurofound) for their comments on an earlier version of this note, and Pierre Bérastégui and Sotiria Theodoropoulou for their comments while editing the technical brief.

References

- Bosch G., Schulten T. and Weinkopf C. (2021) The interplay of minimum wages and collective bargaining in Germany: how and why does it vary across sectors?, in Dingeldey I., Grimshaw D. and Schulten T. (eds.) Minimum wage regimes: statutory regulation, collective bargaining and adequate levels, Routledge.
- Eurofound (2023a) Measures to tackle labour shortages: lessons for future policy, Publications Office of the European Union.
- Eurofound (2023b) Minimum wages in 2023: annual review, Publications Office of the European Union.
- Eurofound (2024a) Eurofound Database on minimum wages for low-paid workers in collective agreements. https://apps.eurofound.europa.eu/minimumwagedatabase/index.html
- Eurofound (2024b) Minimum wages for low-paid workers in collective agreements, Publications Office of the European Union.
- Garnero A. (2018) The dog that barks doesn't bite: coverage and compliance of sectoral minimum wages in Italy, IZA Journal of Labor Policy, 7, 3. https://doi.org/10.1186/s40173-018-0096-6
- Garnero A. (2021) The impact of collective bargaining on employment and wage inequality: evidence from a new taxonomy of bargaining systems, European Journal of Industrial Relations, 27 (2), 185–202. https://doi.org/10.1177/0959680120920771
- Grimshaw D., Bosch G. and Rubery J. (2014) Minimum wages and collective bargaining: what types of pay bargaining can foster positive pay equity outcomes?, British Journal of Industrial Relations, 52 (3), 470–498. https://doi.org/10.1111/bjir.12021

- Haapanala H., Marx I. and Parolin Z. (2023) Decent wage floors in Europe: does the minimum wage Directive get it right?, Journal of European Social Policy, 33 (4), 421-435. https://doi.org/10.1177/09589287231176977
- Müller T. (2024) Dawn of a new era? The impact of the European Directive on Adequate Minimum Wages in 2024, Policy Brief 2024.02, ETUI.
- Müller T. and Schulten T. (2024) The European Directive on Adequate Minimum Wages: a milestone for EU social policymaking, in Vanhercke B., Sabato S. and Spasova S. (eds.) Social policy in the European Union: state of play 2023, ETUI.
- Schulten T. (2002) A European solidaristic wage policy?, European Journal of Industrial Relations, 8 (2), 173–196. https://doi.org/10.1177/095968010282004
- Zwysen W. (2024) Wage inequality in Europe: institutional and economic factors supporting workers, Working Paper 2024.05, ETUI.
- Zwysen W. and Drahokoupil J. (2023) Collective bargaining and power: wage premium of collective agreements in Europe 2002–2018, British Journal of Industrial Relations. https://doi.org/10.1111/bjir.12777

All links were checked on 19.04.2024.

Cite this publication: Zwysen W. (2024) Lowering wage inequality through collectively negotiated minima, Technical Brief 2024.03, ETUI.

The ETUI Technical Brief series is edited by Pierre Bérastégui, pberastegui@etui.org

This electronic publication, as well as previous issues of the ETUI Technical Briefs, is available at www.etui.org/publications. You may find further information on the ETUI at www.etui.org.

© ETUI aisbl, Brussels, April 2024. All rights reserved. ISSN 2984-0333



The ETUI is co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the ETUI. Neither the European Union nor the ETUI can be held responsible for them.